



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

**LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND
INFRASTRUCTURE**

BID NUMBER: LDPWRI-B/20115

**PROVISIONAL
BILL OF QUANTITIES**

For the

**DEMOLITION OF 1 X 4 CLASSROOM BLOCK, PIT TOILET BLOCK AND
WATERBORNE TOILET BLOCK, RENOVATIONS OF 2 X 4 CLASSROOM
BLOCKS, CONSTRUCTION OF MEDIUM ADMIN BLOCK, 1 X 4
CLASSROOM BLOCK, 4-SEATS WATER-BORNE TOILET BLOCK,
16-SEATS ENVIRO-LOOS AND EXTERNAL WORKS (SEPTIC TANK,
WATER RETICULATIONS, WALKWAYS, PARKING BAYS AND FENCE)
AT RASEMA SECONDARY SCHOOL IN RAMATJOWE VILLAGE,
BOTLOKWA IN CAPRICORN DISTRICT.**

For the

**DEPARTMENT OF EDUCATION,
LIMPOPO PROVINCE**

CIDB CLASS GRADING: 6GB OR HIGHER

43 Church Street. Polokwane, 0699, Private Bag X9490, POLOKWANE, 0700
Tel: (015) 284 7001, (015) 284 7030 website: <http://www.dpw.limpopo.gov.za>



CIDB CLASS GRADING 6GB OR HIGHER

BID NUMBER: LDPWRI-B/20115

DEMOLITION OF 1 X 4 CLASSROOM BLOCK, PIT TOILET BLOCK AND WATERBORNE TOILET BLOCK, RENOVATIONS OF 2 X 4 CLASSROOM BLOCKS, CONSTRUCTION OF MEDIUM ADMIN BLOCK, 1 X 4 CLASSROOM BLOCK, 4-SEATS WATER-BORNE TOILET BLOCK, 16-SEATS ENVIRO-LOOS AND EXTERNAL WORKS (SEPTIC TANK, WATER RETICULATIONS, WALKWAYS, PARKING BAYS AND FENCE) AT RASEMA SECONDARY SCHOOL IN RAMATJOWE VILLAGE, BOTLOKWA IN CAPRICORN DISTRICT.

PROCUREMENT DOCUMENT

Name of Tenderer:
CIDB CRS Number:
CSD Registration Number:
Tax Pin:
Tender Amount including Vat:
CLOSING DATE AND TIME:

ISSUED BY:

**DEPARTMENT OF PUBLIC WOKS, ROADS AND INFRASTRUCTURE
PRIVATE BAG X9491
POLOKWANE
0700
TEL: 015 284 7000/1**

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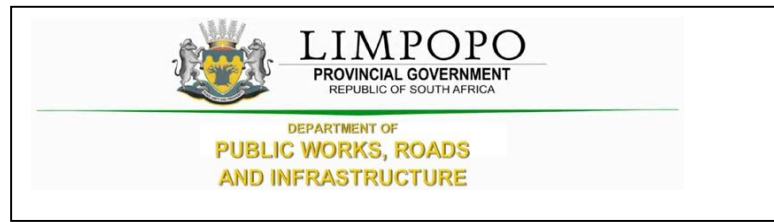
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PART A: SPECIAL NOTES TO BIDDERS



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
**PUBLIC WORKS, ROADS
AND INFRASTRUCTURE**

NOTES TO BIDDERS

1. NAME OF PARTIES

EMPLOYER

Limpopo Province Department of Roads & Infrastructure: Works Towers
43 Church Street
Tel: (015) 284 7000/1
Private BAG X9490
POLOKWANE
0700

Contact:

Makape P. @ 082 460 6271

Principal Agent:

IDC Architects

10th Floor, Suite 1002
Sandton Eye, Cnr. Rivonia Road & West Street
Sandton, Johannesburg, 2196
Tel: 011 234 8141 Fax: 086 515 2854

Contact:

Name: Mr. Bunmi Ilori– 082 900 8288
Email: ilor1@icloud.com

Quantity Surveyor:

NDIDALI Quantity Surveyors

Address: 79 Voortrekker Street, Polokwane, 0699
Tel: 015 297 0301 Fax: 015 297 0341

Contact:

Name: Mr. Emmanuel Nemamilwe– 082 458 9680
Email: manu@ndidaliqs.co.za

SPECIAL NOTES TO TENDERERS

Civil Engineers:

Muteo Consulting Engineers

39 Grobler Street

Polokwane

0699

Tel: 015 291 4065 Fax: 015 4043

Contact:

Name: Mr. Richard Thubakgale – 060 793 7514

Email: richardT@muteo.co.za

Electrical Engineers:

MED-TECH Engineers

1283 De VilleboisMareuil Drive

Morelela Park, Pretoria

0181

Tel: 012 997 3676 Fax: 086 403 3719

Contact:

Name: Gift Mphefu – 083 358 6522

Email: giftm@med-techengineers.com

2. SPECIAL CONTRACT DOCUMENTS

Note:

The clauses in these Special Contract Conditions form part of the contract requirements and shall have preference over any contradicting clauses in these Bills of Quantities, the preliminaries, and the Conditions of Contract.

2.1 CONTRACT DOCUMENTS

The Contract Document will consist of:

- I. The agreement shall be the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005 amended as hereinafter described.
- II. Documents to be provided by the Contractor in terms of the requirements of these Provisional Bills of Quantities. Where reference is made to the “subcontract agreement” this is deemed to mean the “JBCC Series 2000 Nominated /Selected Sub-Contract Agreement” (March 2005 Edition)
- III. The JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee (May 2005 edition) amended as hereinafter described, shall be deemed to be incorporated herein.
- IV. Tenderers are referred to the above -mentioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause numbers and headings only, for which, such allowance must be made as may be considered necessary.

SPECIAL NOTES TO TENDERERS

- V. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given as far as possible under each relevant clause. Where modifications or amendments as described are made, such modifications and/or amendments shall supersede any conflicting provision in the relevant clauses of the JBCC Series 2000 Preliminaries or the JBCC Series 2000 Principal Building Agreement and the tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.
- VI. Where any clause is not relevant to this specific contract such clause is marked N/A (signifying “not applicable”).
- VII. “The Model Preambles for Trades” as recommended and published by the Association of South Africa Quantity Surveyors -1999 edition, shall be deemed to form part of this contract documentation. Any amendments and/or additional information is listed under the supplementary preambles at the start of each trade in the bills of quantities.
- VIII. **Pricing of preliminaries - The relevant clause numbers of sections A and B of the preliminaries are listed at the end of the contract preliminaries section for pricing purposes.** if Alternative as set out in clause 10 of the preliminaries 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.
- IX. The **tenderer** shall allow opposite each of the items for whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions, and requirements set out therein.
- X. Only priced items will be considered in respect of any adjustments to this section. Any items left unpriced will be understood to be provided for in the rates given for other items and no claim for extras arising out of the tenderer’s omission to price any item will be entertained.
- XI. Notwithstanding the period stated in the JBCC form of tenders, tenderers shall hold good for a period of one hundred and eighty (180) calendars days from the date of closing of the tenderers and shall not be altered, amended, or withdrawn during that period.

2.2 QUERIES FROM BIDDERS

The pages of these bills of quantities are numbered consecutively as indexed on the first page.

The Bidder shall check the numbers of the pages and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any description or these bills of quantities contain any obvious errors, the Bidder shall notify the Accounting Officer/ Quantity surveyor at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any BID due to the abovementioned causes.

SPECIAL NOTES TO TENDERERS

On no account should these documents be used for placing orders for materials. Bidders do so at their own risk and shall not be reimbursed for additional costs so incurred.

2.3 ACQUAINTANCE WITH BID DOCUMENTS

By submission of a BID, the Bidder will be deemed to have acquainted himself/herself fully with the BID documents, local authority requirements and by-laws and all aspects of the work envisaged in the documents before pricing and submission of his/ her BID. The employer may appoint a principal Agent to act on his/ her behalf with full authority and obligations.

2.4 FORMS TO BE COMPLETED

The form of BID together with its appendices must be submitted with the BID.

2.5 SCOPE OF THE WORKS

The project comprises the as well as related services in accordance with the drawings and specifications that will be provided to the contractor.

The Contractor shall provide sufficient qualified technical staff, field staff, and safety personnel to ensure the Works under this contract be satisfactorily carried out safely and meeting the performance targets and programs. The Contractor shall also provide competent attendant(s) to monitor any works concerning the scope of works.

2.6 PROGRAMMING WITH DIRECT CONTRACTORS

Tenderers must take note that some work may be performed by independent/ direct contractors that will not form part of this contract. Tenderers, however, must make provision for these installations in their program and must provide all the necessary assistance to The **Limpopo Department of Public Works, Roads and Infrastructure in completion of the said contracts.**

- Any installations by specialists e.g., Security installation, loose furniture

2.7 SITE

The project is located at Ramatjowe Village, Botlokwa, Ga-Machaka in Capricorn District.

2.8 CONTRACT DOCUMENTS

The contract/agreement will be based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005.

Wherever reference is made to the terms "Client, Employer or Principal Agent) in the documents, it shall be deemed to mean. The Limpopo Department of Public Works, Roads, and Infrastructure or any person acting in such capacity as well as any officer to whom any power vested in terms of these conditions of the contract have been delegated to.

SPECIAL NOTES TO TENDERERS

2.9 CONFIDENTIALITY OF BID DOCUMENTS

All the recipients of BID documents shall be whether they submit a bid or not, treat the details of these documents as confidential and their general content shall not be disclosed or discussed with third parties without the prior approval of the **Limpopo Department of Public Works, Roads, and Infrastructure**.

2.10 BID ALL INCLUSIVE

The Bidder must allow in his/ her BID for all labour, material, transport, handling, construction plant, temporary works, or method of construction where the method of payment allows for various methods of construction, value-added tax and everything else necessary for the execution and completion of the works in accordance with the BID documents

2.11 BILLS OF QUANTITIES

This Bill of Quantities is provisional and subject to be re-measured.

The Contractor / Bidder is warned that if he/ she use any quantities or specifications appearing in these Bills of Quantities for ordering materials, he/ she does so at his/ her own and no liability whatsoever shall be admitted afterward by the **Employer / Limpopo Department of Public Works, Roads, and Infrastructure** for such correctness of such quantities or specifications.

2.12 STAMP DUTY

If applicable, all stamp duties in connection with the contract shall be paid by the Bidder.

2.13 SIGNING OF BIDDERS

The BID must be signed by a representative of the Bidder being duly authorized to do so and Bidders are to attach a company resolution.

2.14 LODGING AND SCRUTINY OF PRICED BILLS OF QUANTITIES

The Bidder's / Contactor's attention is specifically directed to the provision that, before the contract is signed, he/ she is to submit his/ her priced Bills of Quantities with conditions of contract and cast neatly in black ink for checking. The Accounting Officer / Quantity Surveyor will duly check the priced Bills of Quantities and shall make such adjustment of individual prices and rectify discrepancies as he may consider necessary. No artificial prices shall be acceptable.

2.15 ADDITIONAL INFORMATION REQUIRED

The **Employer / Limpopo Department of Public Works, Roads and Infrastructure** may ask any Bidder for a clarification/s of his / her BID. Nevertheless, no Bidder will be permitted to alter his / her BID sum after the BIDs have been opened and read to other bidders, although clarification which does not change the BID may be accepted.

The Employer reserves the right to appoint a firm of public accountants to report on the financial capacity of any Bidder. The Bidder shall provide all reasonable help and information in such an investigation.

SPECIAL NOTES TO TENDERERS

All written information submitted by the Bidder together with and in support of his / her BID shall be considered to form the basis on which the BID has been prepared and submitted.

2.16 ARITHMETICAL ERRORS

The Accounting Officer / Quantity Surveyor reserves the right to correct arithmetical or other errors in the bid document for reasons which the Accounting Officer / Quantity Surveyor will indicate, the Bidder will, in terms of Rule 14, be requested to make corrections.

2.17 IMBALANCE IN BIDDED/TENDERED RATES

In the event of there being any rate or rates which are declared to be unacceptable by the Accounting officer/Quantity Surveyor for reasons which the Accounting Officer / Quantity Surveyor will indicate, the Bidder will, in terms of Rule 14, be requested to:

- a) Either justify and specify rate or rates, i.e. to give a financial breakdown on how such rate or rates were obtained or calculated, or
- b) Consider amending and adjusting such rate while retaining the BID sum derived under Sub-rule 15.a unchanged and fixed.

If the Accounting Officer / Quantity Surveyor requests the Bidder to adjust any unacceptable rate or rates, the Accounting Officer / Quantity Surveyor may at his / her discretion limit any such adjustment to rates in specific sections of the bills of quantities. On no account will the Accounting Officer / Quantity Surveyor permit the Bidder to use such an opportunity to re-price extensive sections of the bills of quantities, even though the BID sum remains unchanged.

2.18 ALTERATIONS TO BID DOCUMENTS

No unauthorized alteration or addition shall be made to the form of BID, to the bills of quantities or any other portion of the BID documents. If any such alteration or additions is made and if the bills of quantities of not properly completed, the BID may be rejected, and the Employer will not be bound to by such alterations.

2.19 BID QUALIFICATIONS

BIDs must be submitted strictly in accordance with the BID documents, i.e. without qualifications. Qualifications like statements of interpretation of contract documents must be avoided and any point of doubt or difficulty should be cleared with the Accounting Officer / Quantity Surveyor as early as possible during the BID period. Should any query be found to be of any influence on the BID, all other Bidders shall immediately be informed of the particulars by the Accounting Officer / Quantity Surveyor.

2.20 COSTS INCURRED BY BIDDER

The Employer shall not be responsible to pay for the expenses or losses, which may be incurred by any Bidder in the preparation of the BID or in visiting the site in connection herewith.

SPECIAL NOTES TO TENDERERS

20.21 BID ACCEPTANCE

The Employer will not be bound to accept the lowest or any BID. No reason for the acceptance or rejection of any BID will be given.

20.22 WITHDRAWAL OF BID AFTER CLOSING DATE

The Bidder may not withdraw his BID after the time set for opening BIDs without any BID having been accepted.

Should a Bidder amend or withdraw his/her BID after the specified date and hour, but prior to his being notified of the acceptance thereof, or should a Bidder after having been notified that his/her BID has been accepted.

- (a) Give notice of his/her inability to execute the contract in terms of his BID; or
- (b) Fail to sign a contract or furnish the security within the period fixed in the BID Conditions reflected on the form of BID or any extended period fixed by the Employer; or
- (c) Fail to execute the contract;

He shall pay all additional expended, damages and/or losses which the Employer may incur in calling for fresh BIDs or by paying the difference between his/her BID and a less favourable BID accepted in terms of the provisions of the last paragraph of this term: Provided that the Employer may at its discretion exempt a Bidder from the provisions of this sub-rule if he believes that the circumstances justify the exemption.

When in circumstances mentioned in the second paragraph of this item, the Employer deems it not desirable to invite fresh BID; then the Employer may accept another BID from those already received. The provisions of **Rule 2.21 above, shall again apply.**

2.23 METHOD OF MEASUREMENT

The Bills of Quantities have been measured in accordance with the 6th Edition of the standard system of Measuring Builders Work.

2.24 AVAILABILITY AND SUBSTITUTION OF MATERIALS

Bidders are urged to make themselves, during BID stage, thoroughly acquainted with the availability of all materials for this project as no claim for non-availability or late delivery of materials will afterward be recognized/considered.

If materials specified are not available or it seems that there will be a delay of materials, then the Bidder must notify the **Employer** at once in writing who will, at his/her discretion, attend to the matter. Once the BIDs are handed in it will be taken that all materials specified in these Bills of Quantities are available and will be delivered on-site for completion of the project within the prescribed contract period.

The Substitution will be strictly subject to the **Employer's** approval.

SPECIAL NOTES TO TENDERERS

The **Contractor** must, as far as possible, purchase materials available in the Limpopo Province provided the quality is acceptable. Materials of inferior quality shall under no circumstances be accepted. If the **Contractor** cannot comply with these conditions, he/she must substantiate this in writing with documentary proof from suppliers.

2.25 PROPRIETARY TYPES AND TRADE NAMES

Where reference is made in these Bills of Quantities to proprietary types or names, the products, or materials, etc. referred to are to be exactly as described, the prior approval of the **Employer** must be obtained for any substitution and may be the subject to a variation order.

2.26 SABS SPECIFICATIONS

All references in these Bills of Quantities to Specifications of the Bureau of Standards shall be deemed to be a reference to the latest issues of such specifications, and any subsequent amendments thereto. All articles, materials or items described as to conform to the SABS Specification must bear the SABS mark where possible.

2.27 PERFORMANCE GUARANTEE

Where the project is over R 2 000 000.00 the Bidder must submit with this BID proof (using a letter of intent or otherwise) from his/her guarantor that his/her guarantor will issue the guarantee if the BID is accepted.

2.28 BID

While the Employer reserves the right to accept or not accept any BID, the intention is that a BID will be accepted. The successful Bidder will be appointed as the Main Contractor in terms of the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005. Any condition submitted by the Bidders which is a variance with the provisions of the main contract will not be accepted and may render the BID liable to disqualification.

The BID shall be sealed in an envelope and endorsed as per BID form and be deposited in the BID box as per BID advert.

On no account will BIDS received after the time and date for submission of BIDS be considered and Bidders are advised that postal delays will not constitute a claim for recognition of such BIDS.

Telegraphs or telefaxed BIDS will **NOT** be considered under any circumstances.

2.29 INSPECTION OF SITE

A Compulsory site inspection will not be conducted due to COVID-19 regulations. Tenderers are, however, urged to thoroughly inspect the site, acquaint themselves with the nature and extent of the works, the site conditions about power and water supply, transport facilities, conditions of adjacent existing buildings and also access to the site, availability of working space, etc.; before submitting their BIDs **as no extra cost arising out of their failure to price for the above mentioned shall be considered.**

2.30 SITE OFFICE

The Contractor shall erect, maintain, and takedown on completion of the work a building for site meetings with a concrete floor, suitable roof, suitable walls, door, and four windows, with tables and chairs (not benches), all suitable to accommodate 12 persons.

It is further a condition that all work or movement of vehicles in the vicinity of this office that creates noise or nuisance during site meetings must be suspended for the duration of the site meetings.

2.31 LOCAL LABOUR

As soon as the site is handed to the Contractor, he/she will be expected to form a joint committee with the local community. This committee will ensure that all unskilled and available semi-skilled labour are employed from the community.

All labour shall apply through the committee for employment on the project and the selection of these labourers shall be made by the Contractor from a list of applicants compiled by the community members on the committee.

On all labour-intensive projects, at least 10% of the labourers must be employed from the local community where the project will be executed.

Labourers should be paid in accordance with the provision of the Labour Relations Act, Act 23 of 1956 and the amended Basic Conditions of Employment of 1983, or any latest available Acts.

In accordance with Government Gazette No.16095 of 19 November 1994 wages differ for different areas.

2.32 PROCEDURE OF THE WORK

The Employer reserves the right to direct the order in which the various parts of the contract will be executed should circumstances warrant such action.

2.33 VARIATIONS

Where prices are submitted by the Contractor or Nominated Sub-Contractor during the progress of the works in respect of variations or regarding a claim under the terms of the contract and even though such prices may be used in an interim certificate, it is hereby agreed that there is to be no presumption of acceptance. Should the Employer wish to accept any such prices before the issue of the final certificate, he will do so in writing.

SPECIAL NOTES TO TENDERERS

2.34 PROVISIONAL WORK

Any increase or decrease of work measured provisionally will not be sufficient grounds for any adjustments in the tendered rates.

2.35 MONEY/BUDGET OR PROVISIONS

Whatever an amount for work is allowed in these Bills of Quantities under the term "Money/budgetary Provision" it shall be taken that such amount is for work to be carried out by Specialists, who will be ordinary domestic Sub-Contractors to the Main Contractor.

2.36 BORROW PITS

It is the responsibility of the Contractor to find the necessary borrow pits for imported filling and also to ascertain the suitability and acceptability of such filling, as no claims in this regard will be entertained afterward.

2.37 TESTS

It is the responsibility of the Contractor to carry out his/her tests during the execution of the contract to check the strength of concrete, mortar, the density of filling, etc., and only those tests as requested by the Employer will be paid for by the Client.

2.38 THE CONTRACT PERIOD

The contract period shall be 12 months (exclusive of builder's holiday) from the date of site handover.

2.39 COMPLETION OF BID DOCUMENTS

Bidders shall ensure that all documents requiring completion are duly completed in ink (black), signed, and witnessed in the spaces provided.

2.40 OCCUPATIONAL HEALTH AND SAFETY

2.40.1 General

In terms of the Occupational Health and Safety Regulations promulgated on 18 July 2003, Bidders are advised that they are required to comply fully with such regulations about this project as no claims in this regard will be entertained.

2.40.2 Covid-19 Related Requirements

- Contactor must have risk assessments and plans in place.
- Procedure on how to conduct worker education on Covid-19.
- Identification and protection of Vulnerable Employees (e.g. workers above 60 years)
- Safe transport of employees.
- Screening of employees on entering workplace.
- Prevention of viral spread in the workplace.
- Provision of hand sanitisers and face masks.

SPECIAL NOTES TO TENDERERS

- Cleaning of surfaces and shared Equipment's.
- Shift arrangements.
- Managing sick employees.
- Monitoring systems must be in place to ensure compliance with safety protocols.
- Contactor provide a Bi-Weekly confirmation of the status of each employee on site.

2.41 VALUE ADDED TAX

Value-added tax must be added to the contract amount in the Final Summary and all amounts, rates, etc. in the Bills of Quantities will, therefore, be exclusive of value-added tax.

2.42 PRICES ALL INCLUSIVE

The Bidder must allow in his/her BID for all labour, material, transport, handling, construction plant, temporary works, or method of constructions where the method of payment allows for various methods of construction, value-added tax and everything else necessary for the execution and completion of the works in accordance with the BID documents.

2.43 PROOF OF PAYMENT OF VALUE ADDED TAX OR ANY APPLICABLE IMPORT DUTY

The Bidder is to provide proof that he/she and all his Sub-Contractors are registered at the Receiver of Revenue for VAT or any applicable import duty purposes and will submit all names of Sub-Contractors to the Employer. The Employer may submit all this information to the Receiver of Revenue.

2.44 WORKMEN'S COMPENSATION

The Contractor must provide valid proof of active registration with the workmen's compensation fund (COIDA).

2.45 CONTRACT PRICE ADJUSTMENT

The BID will be subject to Escalation and the base month will be based on the date of tender closing.

2.46 GENERAL NOTES

Should the tender be awarded to the successful tenderer, the following is to be noted:

- No works shall commence until the Health and Safety Plan has been issued by the successful tenderer and has been approved by the Department of Public Works, Roads and Infrastructure representative.
- No work shall commence on site until all CAR and PL insurances are in place
- No payment shall be made until all guarantees are in place.
- Workers employed by the Contractor will not be allowed to be seen lingering around existing facilities or disturbing classes.
- The Contractor must not render any construction activities that will affect the Client operation before informing the Employer for approval thereof.
- The Contractor's workers should be noticeable by wearing proper clothing with the company logo.

SPECIAL NOTES TO TENDERERS

2.47 PAYMENT PROCEDURE

Payment procedure in terms of this contract shall be as follows:

- The Contractor to submit valuation by the 20th of the Month.
- The payment shall be issued to the Department of Education by the 7th of the following month, with payment being made by the 30th of that month.
- Every effort will be made to achieve payments earlier, but this cannot be guaranteed.
- Interest on late payments shall be charged at the prime rate.
- Payment for unfixed materials (Material on site) on-site shall be allowed.
- Payment for materials off-site shall only be allowed subject to written approval by the Employer, which will only be conditional upon the necessary cessions being in place and any other documentation which the Employer requests.

2.48 INFORMATION RELEVANT TO INSURANCES

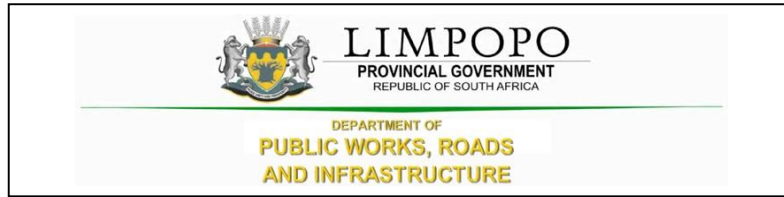
The Contractor will be expected to take the following insurance with a deductible to be determined by the Contractor. In addition to the above-mentioned, the Contractor should take any other insurances relevant to the proper execution of the works.

2.49.1 CONTRACT WORKS

– Estimated Contract Amount plus 20%

2.49.2 PUBLIC LIABILITY

– R 10 000 000.00



PART T1: TENDERING PROCEDURE

T1.1 TENDER NOTICE AND INVITATION TO TENDER

The Limpopo Department of Public Works, Roads and Infrastructure Invites Tenders for Demolition of 1 x 4 Classroom Block, Pit Toilet Block and Waterborne Toilet Block, Renovations of 2 x 4 Classroom Blocks, Construction of Medium Admin Block, 1 x 4 Classroom Block, 4-Seats Water-Borne Toilet Block, 16-Seats Enviro-Loos And External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays And Fence) At Rasema Secondary School In Ramatjowe Village, Botlokwa In Capricorn District

It is estimated that tenderers should have a CIDB class grading of 6GB or higher.

Only tenderers who meet the minimum requirements stated in the tender data are eligible to submit tenders.

A non-refundable tender deposit of **as per Tender Advert** payable in cash is required on collection of the tender documents.

Administrative queries relating to the issue of these documents may be addressed in writing to **Ms Moloto V**, Tel. No.015 284 7142; email: molotomv@dpw.limpopo.gov.za.

Technical queries relating to the issue of these documents may be addressed in writing to **Mr P. Makape**, Tel. No. 082 460 6271; email: makapep@dpw.limpopo.gov.za.

A compulsory briefing meeting with representatives of the Employer will not take place due to the Covid-19 Lockdown restrictions. However, tenderers are welcomed to make arrangements to visit the site on a non-compulsory basis at Rasema Secondary School In Ramatjowe Village, Botlokwa In Capricorn District.

The closing date and time for receipt of tenders are **as per Tender Advert**.

Telegraphic, telephonic, scanned documents, facsimile, e-mail, and late tenders will not be accepted.

Tenders must only be submitted on the tender documentation that is issued including priced bills of quantities.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tenders Data.

It remains the responsibility of the bidders that the bid document reaches the tender box by the stipulated closing date and time as advertised on the tender bulletin.

T1.2 TENDER DATA



T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 10 July 2015. (See www.cidb.org.za).

The Standard Conditions of Tender make several preferences 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.

Clause number	Tender Data
F.1.1	The Employer is the Limpopo Department of Public Works, Roads and Infrastructure

T1.2 TENDER DATA

<p>F.1.2</p>	<p>For this contract, the following documents will be adopted: The single-volume procurement document issued by the employer comprises of the following:</p> <p>Part A1: Special Notes to Bidders</p> <p>The Tender Part T1: Tendering procedures T1.1 Tender notice and invitation to tender T1.2 Tender data</p> <p>Part T2: Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules</p> <p>The Contract PartC1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data</p> <p>The Contract PartC3: Pricing data C3.1 Pricing instructions</p> <p>The Contract PartC4: Provisional Bills of Quantities C4.1 Preliminaries C4.2 Building Works C4.3 Civil Works C4.5 Electrical Installation</p> <p>Part 5: Scope of work C5.1 Scope of work</p> <p>Part 6: EPWP Infrastructure Guideline 2015 C6.1 Data Collection Tool</p> <p>Part 7: Site information and drawings C7.1 Site information C7.2 Drawings</p>
<p>F.1.3</p>	<p>The employer's representative is:</p> <p>Name : Makape P. Address : Department of Public Works, Roads and Infrastructure. Works Towers, 43 Church Street. Tel : 082 460 6271 Email: makapep@dpw.limpopo.gov.za</p>
<p>F.1.4</p>	<p>The language for communications is English</p>
<p>F.2.1</p>	<p>Only those Bidders who satisfy the following eligibility criteria are eligible to submit tenders:</p> <ol style="list-style-type: none"> 1. The Bidder is a Firm. 2. Bidders that satisfy the criteria stated in the tender data and the tenderer or any of his principles is not under any restriction to do business with the employer.
<p>F.2.2</p>	<p>A compulsory briefing meeting with representatives of the Employer will not take place due to the Covid-19 Lockdown restrictions. However, tenderers are welcomed to make arrangements to visit the site on a non-compulsory basis at Rasema Secondary School In Ramatjowe Village, Botlokwa In Capricorn District.</p>

T1.2 TENDER DATA

F.2.3	Tenderers may request clarification of the tender documents by notifying the employer at least five (5) working days before the closing time and date stated in the Tender Advert .
F.2.4	No alternative tender offers will be considered.
F.2.5	The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the "Offer" section in the "Form of Offer and Acceptance" and delivering the Returnable Documents back to the Department.
F.2.6	Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as consortiums shall state which of the signatories the lead is partner whom; the employer shall hold liable for the tender offer.
F.2.7	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:
F.2.8	Location of the tender box: Department of Public Works, Roads and Infrastructure, Physical Address: Corner River and Blaauwberg streets, Ladanna, 0699. Identification details: Tender reference number, Title of Tender and the closing date and time of the tender.
F.2.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.10	Tenderers are alerted that tender offers which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as non-responsive.
F.2.11	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.
F.2.12	The tender offer validity period is 180 Days .
F.3.1	Tenders will not be opened immediately after the closing time for tenders.
F.3.2	The tenderers will be evaluated in four stages (i) Compliance documents – refer to the list of returnable documents (Part T2) (ii) Local Content (SBD 6.2) (iii) Functionality (iv) Price and Preference (BBBEE)

T1.2TENDER DATA

<p>F.3.3</p>	<p>Scoring Financial Offer:</p> <p>Tender offers will be scored using the following formula: $NFO = \left(\frac{Pm}{P}\right) \times 100$</p> <p>Where</p> <p>NFO = number of tender evaluation points awarded for the financial offer.</p> <p>W1 = the percentage score given for financial offer as stated in the Notice and Invitation to Tender T1.1</p> <p>Pm = the comparative offer of the most favourable tender offer. P = the comparative offer of the tender offer under consideration.</p> <p>where</p> <p>W1 = the number of tender evaluation points for the financial offer and equals:</p> <ol style="list-style-type: none"> 1) 90 where the financial value inclusive of VAT of all responsive tenders received has a value above R 50 000 000; or 2) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals or is less than R 50 000 000. <p>Scoring Preferences:</p> <p>Up to 20 points will be awarded to the tenderer who completes the referencing schedule and who is found to be eligible for the preference claimed</p>
	<p><i>The Department is not obliged to award the tender to the bidder with the highest number of tender points.</i></p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

NOTES TO BIDDERS

1.1 CRITERIA USED FOR THE EVALUATION/ ADJUCATION OF INFRASTRUCTURE RELATED BIDS

1.1.1 The points are allocated as follows:

1.1.2 For projects above R500 000, the distribution of points is used as follows:

A. BID EVALUATION STAGE 2- LOCAL CONTENT (SBD 6.2)

1.2 A bid will be disqualified if the Local Content Declaration Certificate and the Annexure C (Local Content Declaration: Summary Schedule) are not submitted or fully completed and signed as part of the bid documentation.

1.3 This tender is subject to Regulation 8 “Local Production and Content” of the Preferential Procurement Policy Framework Act, 2017: Preferential Procurement Regulations, 2017 submitting of SBD 6.2 and its declarations is compulsory. Please note a minimum threshold of for local content and production in relation to this bid (refer to the list of Designated Items for Local Production and Content)

1.3.1 Evaluation in terms of the stipulated minimum threshold for local production and content. LDPWRI-B/20115 will be evaluated in terms of minimum thresholds for local content stipulated in the LDPWRI-B/20115 document. The declaration made by the BIDDER in the Declaration Certificate for Local Content and Annex C (Local Content Declaration: Summary Schedule) will be used for this purpose.

1.3.2 All responses that will not meet the required minimum threshold “Annexure 1 (SBD 6.2)” for local content as stipulated in the specifications will be disqualified and not evaluated further. Only Bidders that achieved the minimum threshold for local content and production will be evaluated further in terms of functionality and preference point system prescribed in the Preferential Procurement Regulations, 2017.

1.3.3 All Declarations for Local Content and Production must be fully completed and signed.

N.B Bidders will need to meet a minimum threshold percentage for local production and content as stipulated in the Bid Document (refer to the list of Designated Items for Local Production and Content) to be further evaluated in terms of the 80/20 preference point system prescribed in the Preferential Procurement Policy Framework Act, 5/2000 and preferential procurement regulations of 2017.

1.2.4 The exchange rate to be used for the calculation of Local Production and Content must be the exchange rate published by the South African Reserve Bank (SARB) during the advertisement period of this **LDPWRI-B/20115**.

TENDER EVALUATION CRITERIA AND WEIGHTINGS

1.2.5 Only the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 will be used to calculate local content.

2.6 The Local Content (LC) expressed, as a percentage of the bid price will be calculated in accordance with the following formula:

$$LC = (1 - x/y) * 100$$

Where

X is the imported content in Rand

Y is the quotation price in Rand excluding value added tax (VAT)

1. The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) at 11:00 on Friday, 21 February 2020.
2. Only the South African Bureau of Standards (SANS) approved technical specification number SATS 1286:2011 must be used to calculate local content.

TENDER EVALUATION CRITERIA AND WEIGHTINGS

A. BID EVALUATION STAGE 3 - FUNCTIONALITY

NOTE: Functionality -A bidder must obtain a minimum of 70%underfunctionality to qualify for final evaluation.

Functionality	Weighting
<p>Current Workload of Bidder</p> <ul style="list-style-type: none"> • Current value is equal or greater than twice the maximum value of the required CIDB grade = 0 • Current value is greater than the maximum value of the required CIDB grade but less than twice the maximum value of the required CIDB grade = 5 • Current value is within the required CIDB threshold = 10 • Current value is less than the minimum value of the required CIDB grade = 15 <p>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 Table 1.</p> <p>NB: Completion of this table is mandatory for points to be allocated. Do not refer to any attachment. If no projects at the moment the tender must indicate on this table. Appointment letters must be attached for current projects.</p> <p>Misrepresentation of facts will render your bid non-responsive.</p>	<p>15</p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Table 1 List of current projects executed by the bidder

1. Do you have the current projects being executed Yes/No?
2. If Yes, please indicate the details on the table below. Please note that it is compulsory to answer the question and if the answer is yes, complete the table. If the question is not answered or the table is not completed the points will not be allocated.

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

TENDER EVALUATION CRITERIA AND WEIGHTINGS

<p>Profile of key staff (the key staff must be linked to project-specific organogram). Organogram, CVs, certified copies of professional registration and certified copies of qualifications must be attached for points to be allocated. NB: List the details of key staff in Table 2. Completion of this table is mandatory for points to be allocated.</p>	<p>Weighting</p>
<p>Project Supervisor/Site Agent</p> <p>Qualification</p> <ul style="list-style-type: none"> • Registration as professional engineer, technologist, architect, construction manager or quantity surveyor = 5 • Degree in built environment = 3 • National Diploma in Built environment = 1 <p>Relevant experience in general building projects</p> <ul style="list-style-type: none"> • More than 5 years' experience = 5 • Between 2 and 5 years' experience = 3 • Less than 2 years = 1 <p>Construction Manager</p> <p>Qualification</p> <ul style="list-style-type: none"> • Registration as professional engineer, technologist, architect, construction manager or quantity surveyor = 5 • Degree in built environment = 3 • National Diploma in Built environment = 1 <p>Relevant experience in general building projects</p> <ul style="list-style-type: none"> • More than 5 years' experience = 5 • Between 2 and 5 years' experience = 3 • Less than 2 years = 1 <p>Site Safety Officer</p> <ul style="list-style-type: none"> • Registration with the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer / Construction Health and Safety Manager= 5 • Degree in built environment = 3 • National Diploma in Built environment=1 <p>Relevant experience in general building projects</p> <ul style="list-style-type: none"> • More than 5 years' experience = 5 • Between 2 and 5 years' experience = 3 • Less than 2 years = 1 	<p style="text-align: center;">30</p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Table 2 Details of key staff.

Name	Position	Qualifications	Professional Registration (if any)	Experience: Number of year(s)	Indicate whether full time or part-time on this project

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Experience in similar projects in the last 10 years	Weighting
<p>Number of projects completed within CIDB grade 6GB or higher. The grading applies at the time of award of the project.</p> <p>Completed Projects must be classified as General Building (GB) works in terms of CIDB for points to be allocated.</p> <ul style="list-style-type: none"> • Completed 5 or more projects = 25 • Completed 4 projects = 20 • Completed 3 projects = 15 • Completed 2 projects = 10 • Completed 1 project = 5 • Bidder submitted no project in CIDB Grade 6 or higher= 0 <p>NB: The details of completed projects must be entered in Table 3. Completion of this table is mandatory for points to be allocated. Appointment letters and completion certificates must be attached for points to be allocated. All attachments to be on appropriate letterhead and signed off by the client.</p>	<p>25</p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Table 3 Details of projects completed in the last 10 years

Project Description (include type of works- GB, etc.)	Project Value	Completion Certificate attached (Yes/No)	Client Name	Contact Person (Tel)

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Proposal and methodology	Weighting
<ul style="list-style-type: none"> <p>Project Proposal/Method Statement</p> <p>The Bidder does not cover any aspect of the scope of work or no information submitted/attached = 0</p> <p>The bidder does not deal with the critical aspects of the project associated with the scope of work =5</p> <p>The bidder addresses the scope of work, provides a methodology to deal with the critical aspects of the project associated with the works =10</p> <p>Project Schedule/programme (acceptable scheduling software)</p> <p>Programme not submitted =0</p> <p>Programme not aligned to Bill of Quantities (BOQ) = 2</p> <p>Programme is aligned to the Bill of Quantities (BOQ) =5</p> <p>Cashflow projections</p> <p>Cashflow not submitted =0</p> <p>The cash flow projections not aligned to the programme and BOQ=2</p> <p>The cash flow projections, programme and BOQ are aligned=5</p> 	<p>20</p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

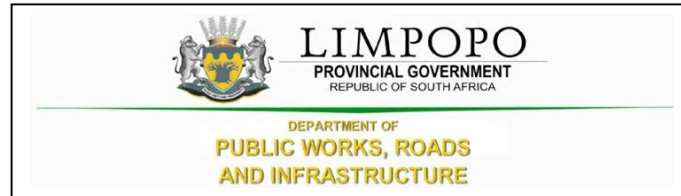
Safety, Health and Environmental Plan (SHEQ)	Weighting
<p>The Bidder does not cover any aspect of the scope of work or no information submitted/attached = 0</p>	
<p>The bidder does not address safety and health issues related to the works – i.e. there is no cognisance to the safety of the learners, teachers and workers and the impact of their work on the environment=5</p>	10
<p>The safety, health and environment approach provided deals with the critical aspects of the project. Cognisance is taken dealing with safety of the workers, learners and teachers when conducting their works such as barricading of the area, conducting safety talk with the affected parties=10</p>	
Total	100
<p>NB: To qualify for final evaluation the bidder must obtain a minimum score of 70% on functionality</p>	

NB: ADDITIONAL EVALUATION CRITERIA

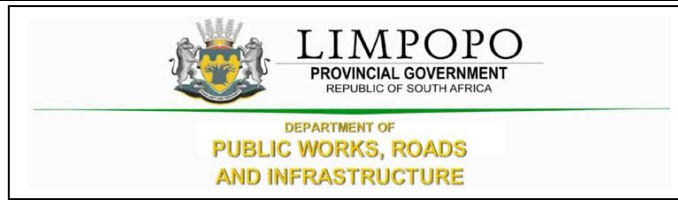
1. This project forms part of the Twenty-Five (25) schools programme (See table below)
2. Should one bidder score high points on more than three (3) projects, Bidders will be required to meet the minimum requirements as listed below to qualify for additional appointment:
 - 2.1 Bidder should have a minimum functionality score of 90 points.
 - 2.2 Bidder should have one CIDB grading level above the highest appointed level required grading.
3. The department reserves the right to negotiate prices in accordance with regulation **6 (80/20 preference point system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 million)** and/or **7 (90/10 preference point system for acquisition of goods or services with Rand value above R50 million)** of the Preferential Procurement Regulations of 2017.
4. Furthermore, the Department “LDPWR&I” is not obliged to award the tender to the bidder with the highest number of tender points.

Item No	Name of school	LDPW Contract Number
1	Diphuti Primary	LDPWRI-20091
2	Kgarahara Secondary	LDPWRI-20096
3	Masikhwa Primary	LDPWRI-20092
4	Napsadi Secondary	LDPWRI-20093
5	Ngwana Makhutswe Secondary	LDPWRI-20094
6	Rasema Secondary	LDPWRI-20115
7	Seale Secondary	LDPWRI-20095
8	Mmaphuti Manamela Secondary (New Site)	LDPWRI-B/20100
9	David Scara Kutumela Primary (Modimolle RDP Settlement)	LDPWRI-B/20102
10	Matsobane Primary	LDPWRI-B/20103
11	Rakgoatha Primary	LDPWRI-B/20099
12	Dikoloi Secondary	LDPWRI-B/20097
13	Matsibe Secondary	LDPWRI-B/20101
14	Sekete Secondary	LDPWRI-B/20104
15	Suswe Primary	LDPWRI-B/2098
16	Matsuokwane Secondary	LDPWRI-B/20106

17	Rebone Secondary	LDPWRI-B/20105
18	Dikgalaopeng Secondary	LDPWRI-B/20107
19	Seboeng Primary (New Site)	LDPWRI-B/20108
20	St. Paul Secondary	LDPWRI-B/20109
21	Chameti Secondary	LDPWRI-B/20110
22	Mphakani Primary	LDPWRI-B/20112
23	Ramatimana Primary School	LDPWRI-B/20111
24	Sehonwe Primary	LDPWRI-B/20114
25	Vutivi Primary (New Site)	LDPWRI-B/20113



PART T2: RETURNABLE DOCUMENTS



T2.1: LIST OF RETURNABLE DOCUMENTS

BID EVALUATION STAGE 1- MANDATORY REQUIREMENTS

1. The following returnable documents and mandatory requirements are compulsory, failure to comply will be considered non-responsive, and the bid will not be evaluated any further. All returnable documents are incorporated into the bid documents.
 - SBD1: Invitation to Bid (fully completed and signed)
 - Submit a power of attorney/Certificate of Authority (fully completed and signed)
 - Record of Addenda (where applicable)
 - SBD 4: Declaration of Interest
 - SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2017 or amended.
 - SBD 6.2 Declaration Certificate for Local Production and Content
 - SBD 8: Declaration of the bidder's past SCM practices
 - SBD 9: Certificate of Bid determination
 - C1.1: Form of the offer (PART C1)
 - Joint venture certificate (where applicable)
 - Bidding entity must not have any of their directors/shareholders listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
 - Bidding entity must not appear on the National Treasury's list of blacklisted entities
 - Completion of the Bid Document must be done with a non-erasable black pen
 - Submission of fully completed original tender document

2. The following returnable documents are **required for tender evaluation purposes**.
 - Curriculum Vitae of all key staff allocated to this project, indicating their experience and qualifications and professional registration with various councils.
 - Certified copies (not older than 6 months from the date of certifying) of all qualifications, professional registrations, and training.
 - Letters of completion for previous or current work on appropriate letterhead and signed off by the client must be attached. The letters must detail the scope of work undertaken, project value is undertaken, date of award and completion, and the location where work was carried out.
 - Proof of ownership of the plant or confirmation of rental agreement thereof.
 - Methodology documentation, detailing the bidder's approach to executing the scope of works, risk, and environmental impact.
 - Proof of Contractor Registration issued by the Construction Industry Development Board - Compulsory.
 - Signed Preferencing Schedule, including submitting the supporting documents
 - B-BBEE Verification Certificates issued by a verification agency accredited by the South African National Accreditation System "SANAS" (In the case of a consortium and Joint venture, a Joint BBBEE certificate is required, but where sub-contracting only the BBBEE of the bidding entity is required). Or in the case of an Exempted Micro Enterprise or a Qualifying Small Enterprise, if permitted in terms of the relevant code,
 - A duly completed and valid affidavit on the relevant form obtained from the DTI website (https://www.thedti.gov.za/economic_empowerment/bee_codes.jsp). Failure to submit these documents will result in no points allocated.

PART T2: RETURNABLE DOCUMENTS

- Copy of COIDA (Compensation for Occupational Injuries and Diseases) registration certificate, e.g. Letter of Good Standing
- A valid Tax Clearance, unique security Personal Identification Number(PIN) issued by the South African Revenue Services (where Consortium / Joint Venture / Sub- contractors / Sub-consultants are involved, each party to the association must submit a separate Valid Tax Clearance unique security personal Identification number)
- Certified copy of directors' identity documents not older than six months. No copy of a certified copy will be accepted.
- Joint Venture or Consortium submissions are eligible, Joint Venture Agreement must be notarized by the commissioner of oath.
- Submission of fully Completed and Priced Bill of Quantities

KINDLY NOTE THAT FAILURE TO SUBMIT AND OR COMPLETE THE REQUIRED DOCUMENTATION (AS PER MANDATORY REQUIREMENTS INCLUDING COMPLETION OF SBD 1, 4, 6.1, 6.2, 8 and 9) WITH THE TENDER WILL RESULT IN YOUR TENDER BEING REJECTED WITHOUT FURTHER CONSIDERATION.

PART T2: RETURNABLE DOCUMENTS

T2.2: RETURNABLE SCHEDULE

Bidders shall indicate whether the list of returnables has been submitted together with the following completed documents or attachments (by indicating Yes or No)		Complaint	
1.	SBD 1: Invitation to Bid	Yes	No
2.	Certificate of Authority	Yes	No
3.	Record of Addenda to the tender	Yes	No
4.	Compulsory Declaration	Yes	No
5.	Preferencing schedule: Broad-based Black Economic Empowerment status	Yes	No
6.	Proposed amendments and qualifications (if applicable)	Yes	No
7.	SBD 4: Declaration of Interest	Yes	No
8.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2017 or amended	Yes	No
9.	SBD 6.2 Declaration Certificate for Local Production and Content	Yes	No
10.	SBD 8: Declaration of the bidder's past SCM practices	Yes	No
11.	SBD 9: Certificate of Bid determination	Yes	No
12.	Form of offer	Yes	No
13.	CSD (Summary)	Yes	No
14.	COIDA	Yes	No
15.	Valid tax clearance or tax pin	Yes	No
16.	Certified copy of Contractor Registration for Incorporation or of Company Registration Document	Yes	No
17.	Joint venture certificate (where applicable)	Yes	No
18.	B-BBEE Verification Certificates issued by a verification agency accredited by the South African National Accreditation System (SANAS)	Yes	No
19.	Certified copies of Qualifications, Professional registration, and Training for Key persons	Yes	No
20.	Methodology/Method statement	Yes	No
21.	Certificates or letters of completed or current similar projects, with Contactable references and on the Client's letterhead	Yes	No
22.	Certified copy of directors' identity documents	Yes	No
23.	Minimum CIDB class grading: 6GB or higher (CIDB Certificate)	Yes	No
24.	Preliminary Programme/schedule and cash flow	Yes	No
25.	Safety, Health and Environmental Plan (SHEQ)	Yes	No

BID NUMBER: LDPWRI-B/20115

PART T2: RETURNABLE DOCUMENTS

SBD1: INVITATION TO BID

PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/PUBLIC ENTITY)					
BID NUMBER:		CLOSING DATE:		CLOSING TIME:	
DESCRIPTION					
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	<input type="checkbox"/> Yes	
	<input type="checkbox"/> No			<input type="checkbox"/> No	
IF YES, WHO WAS THE CERTIFICATE ISSUED BY?					
AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA) AND NAME THE APPLICABLE IN THE TICK BOX	<input type="checkbox"/>	AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)			
	<input type="checkbox"/>	A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS)			
	<input type="checkbox"/>	A REGISTERED AUDITOR			
		NAME:			
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/SWORN AFFIDAVIT (FOR EMEs& QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					

PART T2: RETURNABLE DOCUMENTS

<p>ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?</p>	<p><input type="checkbox"/>Yes <input type="checkbox"/>No</p> <p>[IF YES ENCLOSE PROOF]</p>	<p>ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?</p>	<p><input type="checkbox"/>Yes <input type="checkbox"/>No</p> <p>[IF YES ANSWER PART B:3 BELOW]</p>
<p>SIGNATURE OF BIDDER</p> <p>.....</p>	<p>DATE</p>		
<p>CAPACITY UNDER WHICH THIS BID IS SIGNED (Attach proof of authority to sign this bid; e.g. resolution of directors, etc.)</p>			
<p>TOTAL NUMBER OF ITEMS OFFERED</p>		<p>TOTAL BID PRICE (ALL INCLUSIVE)</p>	
<p>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:</p>		<p>TECHNICAL INFORMATION MAY BE DIRECTED TO:</p>	
<p>DEPARTMENT/ PUBLIC ENTITY</p>	<p>LDPWR&I</p>	<p>CONTACT PERSON</p>	<p>Mr. P. Makape</p>
<p>CONTACT PERSON</p>	<p>Ms Moloto V.</p>	<p>TELEPHONE NUMBER</p>	<p>082 460 6271</p>
<p>TELEPHONE NUMBER</p>	<p>015 284 7142</p>	<p>FACSIMILE NUMBER</p>	
<p>FACSIMILE NUMBER</p>		<p>E-MAIL ADDRESS</p>	<p>makapep@dpw.limpopo.gov.za</p>
<p>E-MAIL ADDRESS</p>	<p>molotomv@dpw.limpopo.gov.za</p>		

PART T2: RETURNABLE DOCUMENTS

PART B: TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:	
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.	
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED– (NOT TO BE RE-TYPED) OR ONLINE	
1.3. BIDDERS MUST REGISTER ON THE CENTRAL SUPPLIER DATABASE (CSD) TO UPLOAD MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS; AND BANKING INFORMATION FOR VERIFICATION PURPOSES). B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO BIDDING INSTITUTION.	
1.4. WHERE A BIDDER IS NOT REGISTERED ON THE CSD, MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS MAY NOT BE SUBMITTED WITH THE BID DOCUMENTATION. B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO BIDDING INSTITUTION.	
1.5. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER LEGISLATION OR SPECIAL CONDITIONS OF CONTRACT.	
2. TAX COMPLIANCE REQUIREMENTS	
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.	
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.	
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.	
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS TOGETHER WITH THE BID.	
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE PROOF OF TCS / PIN / CSD NUMBER.	
2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.	
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS	
3.1. IS THE BIDDER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.2. DOES THE BIDDER HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.3. DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.4. DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA?	<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 OBTAIN A TAX COMPLIANCE STATUS / TAX COMPLIANCE SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

CERTIFICATE OF AUTHORITY

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

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

A. CERTIFICATE FOR COMPANY

I,....., chairperson of the board of directors of hereby confirm that by resolution of the board (copy attached) taken on20..., Mr/Mrs.....acting in the capacity of.....,was authorized to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....
 . Chairperson
 2.....
 Date

B. CERTIFICATE OF PARTNERSHIP

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

NAME	ADDRESS	SIGNATURE	DATE

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

C. CERTIFICATE FOR JOINT VENTURE

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

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

NAME OF FIRM	ADDRESS	AUTHORIZING SIGNATURE, NAME & CAPACITY

D. CERTIFICATE FOR THE SOLE PROPRIETOR

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

As Witness:

1..... Signature: Sole owner
 2..... Date

E. CERTIFICATE FOR CLOSE CORPORATION

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

NAME	ADDRESS	SIGNATURE	DATE

PART T2: RETURNABLE DOCUMENTS

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

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

Compulsory Declaration

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

Section 1: Enterprise Details

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Particulars of companies and close corporations

Company / Close Corporation registration number	
--	--

Section 3: SARS Information

Tax reference number	
VAT registration number:	<i>State Not Registered if not registered for VAT</i>

Section 4: CIDB registration number

Section 5: National Treasury Central Supplier Database

Supplier number	
Unique registration reference number	

Section 6: Particulars of principals

principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of the principal	Identity number	Personal tax reference number

Attach a separate page if necessary

PART T2: RETURNABLE DOCUMENTS

Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- a member of any municipal council
- a member of any provincial legislature
- a member of the National Assembly or the National Council of Province
- a member of the board of directors of any municipal entity
- an official of any municipality or municipal entity
- an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999)
- a member of an accounting authority of any national or provincial public entity
- an employee of Parliament or a provincial legislature

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

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

*insert separate page if necessary

Section 8: Record of a family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, a domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

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

Name of a family member	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within the last 12 months

*insert separate page if necessary

PART T2: RETURNABLE DOCUMENTS

Section 9: Record of termination of previous contracts with an organ of state

Was any contract between the tendering entities including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer fails to make payment in terms of the contract.

Yes No (Tick appropriate box)

If yes, provide particulars (interest separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

- i) neither the name of the tendering entity or any of its principals appears on:
 - a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)
 - b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
- ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);
- iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
- iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers
- v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of the contract, etc.) or intention to not win a tender;
- vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;
- viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into more than the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed

Date

Name

Position

Enterprise
.....

PART T2: RETURNABLE DOCUMENTS

- NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of Schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offense for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also serious misconduct which may result in the termination of employment by the employer.
- NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.
- NOTE 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the particulars of the annual statement of any award made to a close family member in the service of the state.
- NOTE 5: Corrupt activities which give rise to an offense in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other amounts of money stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.
- NOTE 6: Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship that have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

F. BROAD-BASED BLACK ECONOMIC EMPOWERMENT

Preferencing schedule: Broad-Based Black Economic Empowerment Status

Preamble

Section 10(b) of the Broad-Based Black Economic Empowerment Act of 2003 (Act No. 53 of 2003) states that “Every organ of state and the public entity must take into account and, as far as is reasonably possible, apply any **relevant code of good practice** issued in terms of this Act in developing and implementing a preferential procurement policy.”

A number of codes of good practice have been issued in terms of Section 9(1) of the B-BBEE Act of 2003, including a generic code of good practice and various sector codes. The sector codes vary the metrics, weightings, and targets used in the generic code of good practice to establish the overall performance of an entity and its B-BBEE status. The B-BBEE status needs to be assessed in accordance with the applicable code.

1 Conditions associated with the granting of preferences

Tenderers who claim a preference shall provide proof of B-BBEE status level of contributor in accordance with the requirements of section 2 in respect of the applicable code as at the closing time for submissions, failing which their claims for preferences will be rejected.

1 Proof of B-BBEE status level of contributor

Proof of B-BBEE status level of contributor shall be by means of

- the B-BBEE status level certificate issued by an authorized body or person;
- an affidavit as prescribed by the B-BBEE Codes of Good Practice; or
- any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act

2 Tender preferences claimed

The scoring shall be as follows:

B-BBEE status level of contributor	Status level of a tenderer <i>(tick relevant level)</i>	Number of preference points	
		90/10 preference points system	80/20 preference points system
Form not completed or non-complaint contributor		0	0
Level 8 contributor		1	2
Level 7 contributor		2	4
Level 6 contributor		3	6
Level 5 contributor		4	8
Level 4 contributor		5	12
Level 3 contributor		6	14
Level 2 contributor		9	18
Level 1 contributor		10	20

4 Declaration

The tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted proof of B-BBEE status level of a contributor as at the closing date for submissions
- b) the tendering entity has been measured in terms of the following code (tick applicable box):

- Generic code of good practice

PART T2: RETURNABLE DOCUMENTS

Construction Sector Code

Other – specify

.....

.....

c) the tendering entity confirms that it will only enter into a subcontract with the Employer’s prior approval and is not permitted to subcontract more than 25% of the total of the prices of the contract to any other enterprise that does not have an equal or higher B-BBEE status level of contributor unless the contract is a subcontractor to an Exempted Micro Enterprises which has the capability to execute the contract.

d) the contents of the declarations made in terms of a) and b) above are within my knowledge and are to the best of my belief both true and correct

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the tenderer, confirms that he/she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions about the granting of tender preferences.

Signature:

Name:

Duly authorized to sign on behalf of:

Telephone:

Fax: Date:

Name of witness: Signature of witness:

Note: 1) Failure to complete the declaration will lead to the rejection of a claim for preference.
2) Supporting documentation of the abovementioned claim for preference must be submitted with the tender submission to be eligible for a preference

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 cover letter to his tender and reference such a 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 4: DECLARATION OF INTEREST

SBD 4: DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). Because of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorized representative declare his/her position concerning the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. To give effect to the above, the following questionnaire must be completed and submitted with the bid.

2.1 Full Name of bidder or his or her representative:

2.2 Identity Number.....

2.3 The position occupied in the Company (director, trustee, shareholder², member):
.....

2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:
.....

2.5 Tax Reference Number:

2.6 VAT Registration Number:

2.6.1 The names of all directors/trustees/shareholders/members, their identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3 below.

¹"State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

²"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder? YES / NO
Presently employed by the state?

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member:
Name of state institution at which you or the person connected to the bidder is employed:

SBD 4: DECLARATION OF INTEREST

The position occupied in the state institution:

Any other particulars:
.....
.....
.....

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? **YES / NO**

2.7.2.1 If yes, did you attach proof of such authority to the bid document? **YES / NO**

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:
.....
.....
.....

2.8 Did you or your spouse, or any of the company's directors / trustees/shareholders/members or their spouses conduct business with the state in the previous twelve months? **YES / NO**

2.8.1 If so, furnish particulars:
.....
.....
.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

2.9.1 If so, furnish particulars.
.....
.....
.....

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? **YES/NO**

2.10.1 If so, furnish particulars.
.....
.....
.....

SBD 4: DECLARATION OF INTEREST

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? **YES/NO**

2.11.1 If so, furnish particulars:

.....

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

Full Name	Identity Number	Personal Income Tax Reference Number	State Employee Number / Persal Number

4 DECLARATION

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
 Signature Date

.....
 Position Name of bidder

SBD 6.1: REFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

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

1.2

- a) The value of this bid is estimated to **exceed/not exceed** R50 000 000 (all applicable taxes included) and therefore the preference point system shall be applicable; or
- b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

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

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	
B-BBEE STATUS LEVEL OF CONTRIBUTOR	
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

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

A maximum of 80 or 90 points is allocated for price on the following basis: **80/20 or 90/10**

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

Where

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

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

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

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

5. BID DECLARATION

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

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

6.1 B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)
 (Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....

iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

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

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

8.6 COMPANY CLASSIFICATION

- Manufacturer
 - Supplier
 - Professional service provider
 - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business:.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we 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 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding 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 bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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.

WITNESSES

1.

2.

.....
SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS

.....

SBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

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

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

1. General Conditions

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

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

Where

x is the imported content in Rand

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

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

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

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

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows: (Refer to "Treasury Designated sector"- Page 64 to 66)

Description of services, works or goods	Stipulated minimum threshold
_____	_____ %
_____	_____ %
_____	_____ %

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

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

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

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

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

LOCAL CONTENT DECLARATION

(REFER TO ANNEX B OF SATS 1286:2011)

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

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Institution):

.....

NB

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

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder entity),
the following:

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

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

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

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

SIGNATURE: _____ **DATE:** _____

WITNESS No. 1 _____ **DATE:** _____

WITNESS No. 2 _____ **DATE:** _____

GUIDANCE DOCUMENT FOR THE CALCULATION OF LOCAL CONTENT

1. DEFINITIONS

Unless explicitly provided in this guideline, the definitions given in SATS 1286:2011 apply.

2. GENERAL

2.1. Introduction

This guideline provides tenderers with a detailed description of how to calculate local content of products (goods, services and works) by components/material/services and enables them to keep an updated record for verification requirements as per the SATS 1286:2011 Annexure A and B.

The guideline consists of two parts, namely:

- a written guideline; and
- three declarations that must be completed:
 - Declaration C: “Local Content Declaration – Summary Schedule” (see Annexure C);
 - Declaration D: “Imported Content Declaration – Supporting Schedule to Annex C” (see Annexure D); and
 - Declaration E: “Local Content Declaration – Supporting Schedule to Annex C” (see Annexure E).

The guidelines and declarations should be used by tenderers when preparing a tender. A tenderer must complete Declarations D and E, and consolidate the information on Declaration C.

Annexure C must be submitted with the tender by the closing date and time as determined by the Tender Authority. The Tender Authority reserves the right to request that Declarations D and E also be submitted.

If the tender is successful, the tenderer must continuously update Declarations C, D and E with actual values for the duration of the contract.

NOTE:

Annexure A is a note to the purchaser in SATS 1286:2011; and
Annexure B is the Local Content Declaration IN SATS 1286:2011.

2.2. What is local content?

According to SATS 1286:2011, the local content of a product is the tender price less the value of imported content, expressed as a percentage. It is, therefore, necessary to first compute the imported value of a product to determine the local content of a product.

2.3. Categories: Imported and Local Content

The tenderer must differentiate between imported content and local content. Imported content of a product by components/material/services is separated into two categories, namely:

- products imported directly by the tenderer; and
- products imported by a third party and supplied to the tenderer.

2.3.1. Imported Content

Identify the imported content, if any, by value for products by component/material/services. In the case of components/materials/services sourced from a South African manufacturer, agent, supplier or subcontractor (i.e. third party), obtain that information and Declaration D from the third party.

Calculate the imported content of components/materials/services to be used in the manufacture of the total quantity of the products for which the tender is to be submitted.

As stated in clause 3.2.4 of SATS 1286:2011: "If information on the origin of components, parts or materials is not available, it will be deemed to be imported content."

2.3.1.1. Imported directly by the tenderer:

When the tenderer import products directly, the onus is on the tenderer to provide evidence of any components/materials/services that were procured from a non-domestic source. The evidence should be verifiable and pertain to the tender as a whole. Typical evidence will include commercial invoices, bills of entry, etc.

When the tenderer procures imported services such as project management, design, testing, marketing, etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

2.3.1.2. Imported by a third party and supplied to the tenderer:

When the tenderer supplies components/material/services that are imported by any third party (for example, a domestic manufacturer, agent, supplier or subcontractor in the supply chain), the onus is on the tenderer to obtain verifiable evidence from the third party.

The tenderer must obtain Declaration D from all third parties for the related tender. The third party must be requested by the tenderer to continuously update Declaration D. Typical evidence of imported content will include commercial invoices, bills of entry etc.

When a third party procures imported services such as project management, design, testing, marketing etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

2.3.1.3. Exempt Imported Content:

Exemptions, if any, are granted by the Department of Trade and Industry(the dti). Evidence of the exemptions must be provided and included in Annexure D.

2.3.2. Local Content

Identify and calculate the local content, by value for products by components/materials/services to be used in the manufacture of the total quantity of the products.

TREASURY DESIGNATED SECTOR

TREASURY DESIGNATED SECTOR						
Steel Construction Material						
Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
Reinforcement (Foundations)						
20	4	1	12mm Diameter Bars	t	7.86	100%
20	5	1	12mm Diameter Bars	t	8.87	100%
18	6	1	12mm Diameter Bars	t	0.43	100%
Reinforcement (C, F&R)						
13	3	1	Ref. S245 fabric reinforcement	m ²	609	100%
8	4	2	Ref. 617 fabric reinforcement	m ²	258	100%
7	5	2	Ref. 617 fabric reinforcement	m ²	370	100%
7	6	2	Ref. 617 fabric reinforcement	m ²	12	100%
23	7	1	Ref. S395 fabric reinforcement	m ²	145	100%
7	7	2	Ref. S245 fabric reinforcement	m ²	112	100%
Brick Reinforcement (Foundations)						
24	4	1	150mm Brick Reinforcement	m	2 288	100%
24	5	1	150mm Brick Reinforcement	m	1 575	100%
21	6	1	150mm Brick Reinforcement	m	281	100%
27	7	1	150mm Brick Reinforcement	m	984	100%
Brick Reinforcement (Masonry)						
6	4	3	75mm Brick Reinforcement	m	1 572	100%
7	4	3	150mm Brick Reinforcement	m	1 583	100%
4	5	3	75mm Brick Reinforcement	m	115	100%
5	5	3	150mm Brick Reinforcement	m	1 735	100%
4	6	3	75mm Brick Reinforcement	m	143	100%
5	6	3	150mm Brick Reinforcement	m	244	100%
4	7	3	75mm Brick Reinforcement	m	500	100%
5	7	3	150mm Brick Reinforcement	m	852	100%

Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
Fabricated Structural Steel (Ironmongery)						
30	3	1	Door Stopper	No	8	100%
32	3	1	Pinning boards	No	16	100%
2	4	8	Door Stopper	No	14	100%
3	4	8	19mm Chromium Plated towel rail	No	4	100%
4	4	8	Pinning boards	No	5	100%
2	5	8	Code 630 Padlock	No	4	100%
4	5	8	Door Stopper	No	8	100%
5	5	8	Pinning Boards	No	8	100%
2	6	8	Code 630 Padlock	No	2	100%
4	6	8	Door Stopper	No	6	100%
5	6	8	19mm Chromium Plated towel rail	No	2	100%
2	7	8	Code 630 Padlock	No	4	100%
4	7	8	Door Stopper	No	20	100%
5	7	8	32mm Type 9 back grab rail 800mm long	No	3	100%
6	7	8	32mm Type 8 side grab rail 900mm long	No	3	100%
Door Frames						
1	4	9	Door Frames size 813 x 2032	No	14	100%
6	5	9	Door Frames size 914 x 2032	No	4	100%
1	6	9	Door Frames size 813 x 2032	No	4	100%
2	6	9	Door Frames size 914 x 2032	No	2	100%
2	7	9	Door Frame size 813 x 2032	No	16	100%
Gutters, Downpipe and Lauders						
1	4	12	125 x 100mm seamless eaves gutters	m	75	70%
2	4	12	Extra over eaves gutter for stopped ends	No	4	70%
3	4	12	Extra over eaves gutter for angle	No	4	70%
4	4	12	Extra over eave gutter for outlet for 100mm pipe	No	5	70%
5	4	12	100mm Diameter downpipe	m	12	70%
6	4	12	Extra over downpipe for eaves or plinths offset	No	5	70%
7	4	12	Extra over downpipe for Shoe	No	5	70%
1	5	12	125 x 100mm seamless eaves gutters	No	88	70%
2	5	12	Extra over eaves gutter for stopped ends	No	4	70%
3	5	12	Extra over eaves gutter for angle	No	4	70%
4	5	12	Extra over eave gutter for outlet for 100mm pipe	No	4	70%
5	5	12	100mm Diameter downpipe	No	50	70%
6	5	12	Extra over downpipe for eaves or plinths offset	No	6	70%

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7	5	12	Extra over downpipe for Shoe	No	6	70%
1	7	12	125 x 100mm seamless eaves gutters	No	150	70%
2	7	12	Extra over eaves gutter for stopped ends	No	8	70%
3	7	12	Extra over eaves gutter for angle	No	8	70%
4	7	12	Extra over eave gutter for outlet for 100mm pipe	No	10	70%
5	7	12	100mm Diameter downpipe	No	24	70%
6	7	12	Extra over downpipe for eaves or plinths offset	No	10	70%
7	7	12	Extra over downpipe for Shoe	No	10	70%
Valves Products and Acutors						
PVC Pipes, etc						
8	4	12	110mm uPVC pipe	m	21	70%
9	4	12	110mm uPVC pipe	m	26	70%
10	4	12	Extra over uPVC pipe for 110mm bend	No	5	70%
11	4	12	Extra over uPVC pipe for 110mm junction	No	2	70%
12	4	12	Extra over uPVC pipe for 110mm reducer	No	2	70%
13	4	12	Extra over uPVC pipe for 110mm double junction	No	2	70%
Taps, Valves						
38	3	1	30m Plastic Hose reel	No	2	70%
39	3	1	9kg DCP Fire Extinguisher	No	8	70%
59	4	12	30m Plastic Hose reel	No	1	70%
60	4	12	9kg DCP Fire Extinguisher	No	2	70%
8	5	12	30m Plastic Hose reel	No	1	70%
9	5	12	9kg DCP Fire Extinguisher	No	4	70%
8	6	12	Bib tap	No	1	70%
9	7	12	Elbow taps	No	8	70%
10	7	12	19mm chrome plated taps	No	8	70%
Electrical Cables						
PVC Cables						
3.1		2	25mm ² x 2 Core Cables	m	100	90%
3.2		2	16mm ² x 2 Core Cables	m	50	90%
4.4		2	2,5mm ² x 2 Core Cu Cables	m	300	90%
4.4		2	4mm ² x 2 Core Cu Cables	m	300	90%
2.1		3	6mm ² x 2 Core Cables	m	85	90%
4.3		3	2.5mm ² x 4 Core Cu Cables	m	200	90%
4.3		3	4mm ² x 4 Core Cu Cables	m	100	90%
Cement (Building and Civil)						
			Cement	ton	75	100%
Treasury Designated Sector						

3. ANNEXURE C

3.1. Guidelines for completing Annexure C: Local Content Declaration –Summary Schedule

Note: The paragraph numbers correspond to the numbers in Annexure C.

C1. Tender Number

Supply the tender number that is specified on the specific tender documentation.

C2. Tender description

Supply the tender description that is specified on the specific tender documentation.

C3. Designated products

Supply the details of the products that are designated in terms of this tender (i.e. buses).

C4. Tender Authority

Supply the name of the tender authority.

C5. Tendering Entity name

Provide the tendering entity name (for example, Unibody Bus Builders(Pty) Ltd).

C6. Tender Exchange Rate

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

C7. Specified local content %

Provide the specified minimum local content requirement for the tender(i.e. 80%), as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MDB) 6.2.

C8. Tender item number

Provide the tender item number(s) of the products that have a local content requirement as per the tender specification.

C9. List of items

Provide a list of the item(s) corresponding with the tender item number. This may be a short description or a brand name.

Calculation of local content

C10. Tender price

Provide the unit tender price of each item excluding VAT.

C11. Exempted imported content

Provide the ZAR value of the exempted imported content for each item, if applicable. These value(s) must correspond with the value(s) of column D16 on Annexure D.

C12. Tender value net of exempted imported content

Provide the net tender value of the item, if applicable, by deducting the exempted imported content (C11) from the tender price (C10).

C13. Imported value

Provide the ZAR value of the items' imported content.

C14. Local value

Provide the local value of the item by deducting the Imported value(C13) from the net tender value (C12).

C15. Local content percentage (per item)

Provide the local content percentage of the item(s) by dividing the local value (C14) by the net tender value (C12) as per the local content formula in SATS 1286.

Tender Summary

C16. Tender quantity

Provide the tender quantity for each item number as per the tender specification.

C17. Total tender value

Provide the total tender value by multiplying the tender quantity (C16)by the tender price (C10).

C18. Total exempted imported content

Provide the total exempted imported content by multiplying the tender quantity (C16) by the exempted imported content (C11). These values must correspond with the values of column D18 on Annexure D.

C19. Total imported content

Provide the total imported content of each item by multiplying the tender quantity (C16) by the imported value (C13).

C20. Total tender value

Total tender value is the sum of the values in column C17.

C21. Total exempted imported content

Total exempted imported content is the sum of the values in columnC18. This value must correspond with the value of D19 on Annexure D.

C22. Total tender value net of exempted imported content

The total tender value net of exempt imported content is the total tender value (C20) less the total exempted imported content (C21).

C23. Total imported content

Total imported content is the sum of the values in column C19. This value must correspond with the value of D53 on Annexure D.

C24. Total local content

Total local content is the total tender value net of exempted imported content (C22) less the total imported content (C23). This value must correspond with the value of E13 on Annexure E.

C25. Average local content percentage of tender

The average local content percentage of tender is calculated by dividing total local content (C24) by the total tender value net of exempted imported content (C22).

4. ANNEXURE D

4.1. Guidelines for completing Annexure D: “Imported Content Declaration –Supporting Schedule to Annexure C”

Note: The paragraph numbers correspond to the numbers in Annexure D.

D1. Tender number

Supply the tender number that is specified on the specific tender documentation.

D2. Tender description

Supply the tender description that is specified on the specific tender documentation.

D3. Designated products

Supply the details of the products that are designated in terms of this tender (i.e. buses).

D4. Tender authority

Supply the name of the tender authority.

D5. Tendering entity name

Provide the tendering entity name (i.e. Unibody Bus Builders (Pty) Ltd).

D6. Tender exchange rate

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

Table A. Exempted Imported Content

D7. Tender item number

Provide the tender item number(s) of the product(s) that have imported content.

D8. Description of imported content

Provide a list of the exempted imported product(s), if any, as specified in the tender.

D9. Local supplier

Provide the name of the local supplier(s) supplying the imported product(s).

D10. Overseas supplier

Provide the name(s) of the overseas supplier(s) supplying the exempted imported product(s).

D11. Imported value as per commercial invoice

Provide the foreign currency value of the exempted imported product(s) disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

D12. Tender exchange rate

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D13. Local value of imports

Convert the value of the exempted imported content as per commercial invoice (D11) into the ZAR value by using the tender exchange rate(D12) disclosed in the tender documentation.

D14. Freight costs to port of entry

Provide the freight costs to the South African Port of the exempted imported item.

D15. All locally incurred landing costs and duties

Provide all landing costs including customs and excise duty for the exempted imported product(s) as stipulated in the SATS 1286:2011.

D16. Total landed costs excluding VAT

Provide the total landed costs (excluding VAT) for each item imported by adding the corresponding item values in columns D13, D14 and D15. These values must be transferred to column C11 on Annexure C.

D17. Tender quantity

Provide the tender quantity of the exempted imported products as per the tender specification.

D18. Exempted imported value

Provide the imported value for each of the exempted imported product(s) by multiplying the total landed cost (excl. VAT) (D16) by the tender quantity (D17). The values in column D18 must correspond with the values of column C18 of Annexure C.

D19. Total exempted imported value

The total exempted imported value is the sum of the values in column D18. This total must correspond with the value of C21 on Annexure C.

Table B. Imported Directly By Tenderer

D20. Tender item numbers

Provide the tender item number(s) of the product(s) that have imported content.

D21. Description of imported content:

Provide a list of the product(s) imported directly by tender as specified in the tender documentation.

D22. Unit of measure

Provide the unit of measure for the product(s) imported directly by the tenderer.

D23. Overseas supplier

Provide the name(s) of the overseas supplier(s) supplying the imported product(s).

- D24. Imported value as per commercial Invoice**
Provide the foreign currency value of the product(s) imported directly by tenderer disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).
- D25. Tender rate of exchange**
Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.
- D26. Local value of imports**
Convert the value of the product(s) imported directly by the tenderer as per commercial invoice (D24) into the ZAR value by using the tender exchange rate (D25) disclosed in the tender documentation.
- D27. Freight costs to port of entry**
Provide the freight costs to the South African Port of the product(s) imported directly by the tenderer.
- D28. All locally incurred landing costs and duties**
Provide all landing costs including customs and excise duty for the product(s) imported directly by the tenderer as stipulated in the SATS1286:2011.
- D29. Total landed costs excluding VAT**
Provide the total landed costs (excluding VAT) for each item imported directly by the tenderer by adding the corresponding item values in columns D26, D27 and D28.
- D30. Tender quantity**
Provide the tender quantity of the product(s) imported directly by the tenderer as per the tender specification.
- D31. Total imported value**
Provide the total imported value for each of the product(s) imported directly by the tenderer by multiplying the total landed cost (excl. VAT)(D29) by the tender quantity (D30).
- D32. Total imported value by tenderer**
The total value of imports by the tenderer is the sum of the values in column D31.

Table C. Imported by Third Party and Supplied to the Tenderer

- D33. Description of imported content**
Provide a list of the product(s) imported by the third party and supplied to the tenderer as specified in the tender documentation.
- D34. Unit of measure**
Provide the unit of measure for the product(s) imported by the third party and supplied to tenderer as disclosed in the commercial invoice.

- D35. Local supplier**
Provide the name of the local supplier(s) supplying the imported product(s).
- D36. Overseas supplier**
Provide the name(s) of the overseas supplier(s) supplying the imported products.
- D37. Imported value as per commercial invoice**
Provide the foreign currency value of the product(s) imported by the third party and supplied to the tenderer disclosed in the commercial invoice accepted by SARS.
- D38. Tender rate of exchange**
Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.
- D39. Local value of imports**
Convert the value of the product(s) imported by the third party as precommercial invoice (D37) into the ZAR value by using the tender exchange rate (D38) disclosed in the tender documentation.
- D40. Freight costs to port of entry**
Provide the freight costs to the South African Port of the product(s) imported by third party and supplied to the tenderer.
- D41. All locally incurred landing costs and duties**
Provide all landing costs including customs and excise duty for the product(s) imported by third party and supplied to the tenderer as stipulated in the SATS 1286:2011.
- D42. Total landed costs excluding VAT**
Provide the total landed costs (excluding VAT) for each product imported by third party and supplied to the tenderer by adding the corresponding item values in columns D39, D40 and D41.
- D43. Quantity imported**
Provide the quantity of each product(s) imported by third party and supplied to the tenderer for the tender.
- D44. Total imported value**
Provide the total imported value of the product(s) imported by third party and supplied to the tenderer by multiplying the total landed cost(D42) by the quantity imported (D43).
- D45. Total imported value by third party**
The total imported value from the third party is the sum of the values in column D44.

Table D. Other Foreign Currency Payments

D46. Type of payment

Provide the type of foreign currency payment. (i.e. royalty payment for use of patent, annual licence fee, etc.).

D47. Local supplier making the payment

Provide the name of the local supplier making the payment.

D48. Overseas beneficiary

Provide the name of the overseas beneficiary.

D49. Foreign currency value paid

Provide the value of the listed payment(s) in their foreign currency.

D50. Tender rate of exchange

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D51. Local value of payments

Provide the local value of each payment by multiplying the foreign currency value paid (D49) by the tender rate of exchange (D50).

D52. Total of foreign currency payments declared by tenderer and/or third party

The total of foreign currency payments declared by tenderer and/or a third party is the sum of the values in column D51.

D53. Total of imported content and foreign currency payment

The total imported content and foreign currency payment is the sum of the values in column D32, D45 and D52. This value must correspond with the value of C23 on Annexure C.

5. ANNEXURE E

5.1. Guidelines to completing Annexure E: “Local Content Declaration-Supporting Schedule to Annexure C”

The paragraph numbers correspond to the numbers in Annexure E

- E1. Tender number**
Supply the tender number that is specified on the specific tender documentation.
- E2. Tender description**
Supply the tender description that is specified on the specific tender documentation.
- E3. Designated products**
Supply the details of the products that are designated in terms of this tender (for example, buses/canned vegetables).
- E4. Tender authority**
Supply the name of the tender authority.
- E5. Tendering entity name**
Provide the tendering entity name (for example, Unibody Bus Builders(Pty) Ltd) Ltd).

Local Goods, Services and Works

- E6. Description of items purchased**
Provide a description of the items purchased locally in the space provided.
- E7. Local supplier**
Provide the name of the local supplier that corresponds to the item listed in column E6.
- E8. Value**
Provide the total value of the item purchased in column E6.
- E9. Total local products (Goods, Services and Works)**
Total local products (goods, services and works) is the sum of the values in E8.
- E10. Manpower costs:**
Provide the total of all the labour costs accruing only to the tenderer(i.e. not the suppliers to tenderer).
- E11. Factory overheads:**
Provide the total of all the factory overheads including rental, depreciation and amortisation for local and imported capital goods, utility costs and consumables. (Consumables are goods used by individuals and businesses that must be replaced regularly because they wear out or are used up. Consumables can also be defined as

the components of an end product that are used up or permanently altered in the process of manufacturing, such as basic chemicals.)

E12. Administration overheads and mark-up:

Provide the total of all the administration overheads, including marketing, insurance, financing, interest and mark-up costs.

E13. Total local content:

The total local content is the sum of the values of E9, E10, E11 and E12. This total must correspond with C24 of Annexure C.

ANNEX C: LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE

Annex C: Local Content Declaration - Summary Schedule

Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20115
 (C2) **Tender description:** Rasema Secondary School
 (C3) **Designated product(s)**
 (C4) **Tender Authority:**
 (C5) **Tendering Entity name:** Rasema Secondary School
 (C6) **Tender Exchange Rate:** Pula EU GBP
 (C7) **Specified local content %**

Note: VAT to be excluded from all calculations

Tender item no's	List of items	Calculation of local content				Tender summary						
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
20-4-1	12mm Diameter Bars							t	7.86			
20-5-1	12mm Diameter Bars							t	8.78			
18-6-1	12mm Diameter Bars							t	0.43			
13-3-1	Ref. S245 Fabric Reinforcement							m2	609			
8-4-2	Ref. 617 Fabric Reinforcement							m2	258			
7-5-2	Ref. 617 Fabric Reinforcement							m2	370			
7-6-2	Ref. 617 Fabric Reinforcement							m2	12			
23-7-1	Ref. S395 Fabric Reinforcement							m2	145			
7-7-2	Ref. S245 Fabric Reinforcement							m2	112			
24-4-1	150mm Bick Reinforcement							m	2,288			
24-5-1	150mm Bick Reinforcement							m	1,575			
21-6-1	150mm Bick Reinforcement							m	281			
27-7-1	150mm Bick Reinforcement							m	984			
6-4-3	75mm Brick Reinforcement							m	1,572			
7-4-3	150mm Brick Reinforcement							m	1,583			
4-5-3	75mm Brick Reinforcement							m	115			
5-5-3	150mm Brick Reinforcement							m	1,735			
4-6-3	75mm Brick Reinforcement							m	143			
5-6-3	150mm Brick Reinforcement							m	244			
4-7-3	75mm Brick Reinforcement							m	500			
5-7-3	150mm Brick Reinforcement							m	852			

Signature of tenderer from Annex B _____

Date: _____

	(C20) Total tender value	
	(C21) Total Exempt imported content	
	(C22) Total Tender value net of exempt imported content	
	(C23) Total Imported content	
	(C24) Total local content	
	(C25) Average local content % of tender	

Annex C: Local Content Declaration - Summary Schedule

Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20115
 (C2) **Tender description:** Rasema Secondary School
 (C3) **Designated product(s)**
 (C4) **Tender Authority:**
 (C5) **Tendering Entity name:** Rasema Secondary School
 (C6) **Tender Exchange Rate:** Pula EU GBP
 (C7) **Specified local content %**

Note: VAT to be excluded from all calculations

		Calculation of local content				Tender summary						
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
30-3-1	Door Stopper							No	8			
32-3-1	Pinning Boards							No	16			
2-4-8	Door Stopper							No	14			
3-4-8	19mm Chromim plated towel rail							No	4			
4-4-8	Pinning Boards							No	5			
2-5-8	Code 630 Padlock							No	4			
4-5-8	Door Stopper							No	8			
5-5-8	Pinning Boards							No	8			
2-6-8	Code 630 Padlock							No	2			
4-6-8	Door Stopper							No	6			
5-6-8	19mm Chromim plated towel rail							No	2			
2-7-8	Code 630 Padlock							No	4			
4-7-8	Door Stopper							No	20			
5-7-8	32mm Type 9 back rail 800mm long							No	3			
6-7-8	32mm Type 8 side rail 900mm long							No	3			
1-4-9	Door Frames size 813 x 2032							No	14			
6-5-9	Door Frames size 914 x 2032							No	4			
1-6-9	Door Frames size 813 x 2032							No	4			
2-6-9	Door Frames size 914 x 2032							No	2			
2-7-9	Door Frames size 813 x 2032							No	16			
1-4-12	125 x 100mm seamless eaves gutters							m	75			
2-4-12	Extra over gutter for stopped end							No	4			
3-4-12	Extra over eaves gutter for angle							No	4			
4-4-12	Extra over eaves gutter for outlet for 100mm pipe							No	5			

Signature of tenderer from Annex B

Date: _____

(C20) Total tender value
 (C21) Total Exempt imported content
 (C22) Total Tender value net of exempt imported content
 (C23) Total Imported content
 (C24) Total local content
 (C25) Average local content % of tender

Annex C: Local Content Declaration - Summary Schedule

Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20115
 (C2) **Tender description:** Rasema Secondary School
 (C3) **Designated product(s)**
 (C4) **Tender Authority:**
 (C5) **Tendering Entity name:** Rasema Secondary School
 (C6) **Tender Exchange Rate:** Pula EU GBP
 (C7) **Specified local content %**

Note: VAT to be excluded from all calculations

		Calculation of local content				Tender summary						
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
5-4-12	100mm Diameter downpipe							m	12			
6-4-12	Extra over downpipe for eaves or plinths offset							No	5			
7-4-12	Extra over downpipe for shoe							No	5			
1-5-12	125 x 100mm seamless eaves gutters							m	88			
2-5-12	Extra over gutter for stopped end							No	4			
3-5-12	Extra over eaves gutter for angle							No	4			
4-5-12	Extra over eaves gutter for outlet for 100mm pipe							No	4			
5-5-12	100mm Diameter downpipe							m	50			
6-5-12	Extra over downpipe for eaves or plinths offset							No	6			
7-5-12	Extra over downpipe for shoe							No	6			
1-7-12	125 x 100mm seamless eaves gutters							m	150			
2-7-12	Extra over gutter for stopped end							No	8			
3-7-12	Extra over eaves gutter for angle							No	8			
4-7-12	Extra over eaves gutter for outlet for 100mm pipe							No	10			
5-7-12	100mm Diameter downpipe							m	24			
6-7-12	Extra over downpipe for eaves or plinths offset							No	10			
7-7-12	Extra over downpipe for shoe							No	10			
8-4-12	110mm uPVC pipe							m	21			
9-4-12	110mm uPVC pipe							m	26			
10-4-12	Extra over uPVC pipe for 110mm bend							No	5			
11-4-12	Extra over uPVC pipe for 110mm junction							No	2			
12-4-12	Extra over uPVC pipe for 110mm reducer							No	2			
13-4-12	Extra over uPVC pipe for 110mm double junction							No	2			

Signature of tenderer from Annex B

Date: _____

(C20) Total tender value				
(C21) Total Exempt imported content				
(C22) Total Tender value net of exempt imported content				
(C23) Total Imported content				
(C24) Total local content				
(C25) Average local content % of tender				

SBD 6.2: DECLARATION OF LOCAL CONTENT

ANNEX D: IMPORTED CONTENT DECLARATION – SUPPORTING SCHEDULE TO ANNEX C

SATS 1286.2011

Annex D

Imported Content Declaration - Supporting Schedule to Annex C

(D1) Tender No. _____
 (D2) Tender description: _____
 (D3) Designated Products: _____
 (D4) Tender Authority: _____
 (D5) Tendering Entity name: _____
 (D6) Tender Exchange Rate: _____ Pula _____

Note: VAT to be excluded from all calculations

EU R 9.00 GBP R 12.00

A. Exempted imported content

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

(D19) Total exempt imported value

This total must correspond with Annex C - C 21

B. Imported directly by the Tenderer

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

(D32) Total imported value by tenderer

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

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

(D45) Total imported value by 3rd party

D. Other foreign currency payments

Type of payment	Local supplier making the payment	Overseas beneficiary	Calculation of foreign currency payments		Summary of payments
			Foreign currency value paid	Tender Rate of Exchange	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above

This total must correspond with Annex C - C 23

Signature of tenderer from Annex B

Date: _____

SBD 6.2: DECLARATION OF LOCAL CONTENT

SATS 1286.2011

Annex E

Local Content Declaration - Supporting Schedule to Annex C

(E1)	Tender No.	
(E2)	Tender description:	
(E3)	Designated products:	
(E4)	Tender Authority:	
(E5)	Tendering Entity name:	

Note: VAT to be excluded from all calculations

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
	(E9) Total local products (Goods, Services and Works)		

(E10)	Manpower costs	(Tenderer's manpower cost)	
(E11)	Factory overheads	(Rental, depreciation & amortisation, utility costs, consumables etc.)	
(E12)	Administration overheads and mark-up	(Marketing, insurance, financing, interest etc.)	
	(E13) Total local content		
			This total must correspond with Annex C - C24

Signature of tenderer from Annex B

Date: _____

SBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT

SBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Standard Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be disregarded if that bidder or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct concerning such system; or
 - c. failed to perform on any previous contract.
- 4 **To give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		

CERTIFICATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct concerning such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

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

I certify, on behalf
of: _____ that:

(Name of Bidder)

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

SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, before the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition, and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

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

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

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

SAFCEC JOINT VENTURE AGREEMENT

JOINT VENTURE AGREEMENT made and entered into by and between:

.....of
..... (hereafter referred to as)

of the first part;

and

.....of
..... (hereafter referred to as)

of the second part;

PREAMBLE

WHEREAS the Parties have formed a Joint Venture in order to submit tenders to the

..... for the construction of
.....
(hereafter referred to as the "works").

SAFCEC JOINT VENTURE AGREEMENT

NOW THEREFORE, IT IS AGREED AS FOLLOWS:

1. FORMATION OF JOINT VENTURE

- 1.1 The Parties hereby associate themselves into and as a Joint Venture in accordance with the provisions of this Agreement under the style or firm name of JOINT VENTURE.
- 1.2 The Parties hereto agree and undertake that they will not disclose the contents of this Agreement to persons with whom they may have any dealings directly or indirectly arising from the conclusion of this Agreement and the operation and establishment of the Works.
- 1.3 Notwithstanding that the parties may be jointly and severally bound to the, should the Joint Venture be awarded the contract by the for the construction of the Works, nothing herein contained shall be interpreted as giving rise to a general partnership between the parties or limiting the rights or powers of either party to carry on its separate business for its sole benefit.

2. OBJECT AND MOTIVATION

The sole object for which this Joint Venture is established and the sole business of the Joint Venture is to negotiate for and conclude a contract for the execution of the Works and to carry out such Works to finality, all in accordance with the terms of this Agreement.

3. PROFITS AND LOSSES

- 3.1 The profits and losses of the Joint Venture shall be borne by and In the proportions% and% respectively (hereinafter referred to as "the Specified Proportions").
- 3.2 In addition to any other provisions contained in this Agreement, the functions, duties, obligations and responsibilities of and under this Joint Venture agreement and in the execution of the Works will be to provide all bridging finance, guarantees and resources necessary to successfully carry out the project in proportion to the specified proportions, in which proportions all profits, losses, costs, liabilities and assets and any other responsibilities, whether pecuniary or otherwise, shall be shared equally, as far as possible.

4 DURATION

The operation of this Agreement shall be deemed to have commenced on the Day of 200..., and shall terminate, except insofar as the provisions of Clauses 5 and 6 apply, upon the happening of any of the following events, whichever shall be earlier:

- 4.1 Award of the Contract by for the construction of the Works to an outside party or parties, or
- 4.2 In the case of contract award, at the time the contract is terminated and all rights and obligations of the parties in connection with such contract and in connection with this Agreement have ceased, but in no case before the conclusion of any maintenance period in the contract and the cancellation and/or refund of all guarantees and bonds. The Joint Venture existence shall also be deemed to continue insofar as the Joint Venture is responsible for latent defects under the contract.

SAFCEC JOINT VENTURE AGREEMENT

5. EXCLUSIVITY

The Parties agree and undertake in favour of each other that neither of them shall, except in accordance with the intention expressed in this agreement, be associated in any manner, either directly or indirectly, with any investigation, negotiation, tender or proposal for the performance of or incidental to the execution of the Works and including any variation by way of addition or omission from the scope of the Works or the extension to the Works, nor invest in any company, enterprise or partnership in any manner related thereto, either as previously agreed by the Management Committee in writing.

6. PRE-CONTRACT COSTS

- 6.1 All costs incurred by the Parties prior to the day of 200...., shall be for their own account.
- 6.2 Costs incurred by the Parties after the day of 200... and approved by the Management Committee, shall be borne by the Parties in the Specified Proportions.

7. MANAGEMENT COMMITTEE

- 7.1 The day-to-day affairs of the Joint Venture shall be under the control of a Management Committee which shall consist of one representative of each of the parties. Within the terms of this agreement and the contract, if awarded, each such member shall have full authority to bind the party and/or parties he represents in all matters relating to the affairs of the Joint Venture. No party to this agreement may bind the other party hereto without the prior consent of such other party, nor may the Management Committee bind the Joint Venture or any party beyond the terms of this agreement or the contract without the prior written consent of both parties. The parties hereto shall be obliged immediately upon signature of this Agreement, to appoint their representatives and the first meeting of the Management Committee will be held immediately thereafter. The parties shall be obliged at all times to maintain a representative on the Management Committee.
- 7.2 Each representative on the Management Committee shall be entitled to appoint, and from time to time remove and replace, an alternate who shall, at any meeting of the Management Committee at which the representative whom he represents is absent, be vested with all rights and powers and subject to all obligations of the representative whom he represents.
- 7.3 The Chairman at meetings of the Management Committee shall be a representative from and respectively on a six months rotation basis commencing with
- 7.4 Meetings of the Management Committee shall take place at such times and places as the Committee shall determine, provided that the Chairman shall be obliged to convene a meeting of the Management Committee not later than 10 days after being required to do so by any one of the parties to this agreement. Not less than five days' notice of any meeting of the Management Committee shall be given to the representatives thereof and their alternates.
- 7.5 Decisions of the Management Committee shall be unanimous, provided that If the representatives or the alternates fail to agree on any decision, the meeting at which that decision is sought shall be adjourned for a period of 24 hours and should the representatives then not agree on the course of action to be taken the matter shall be referred to the Executive Board for a decision. The decision of such Executive Board shall be placed before a further adjourned meeting, which shall take place no later than 72 hours after the initial adjourned meeting and shall bin the Management Committee which shall adopt such decision without variation.
- 7.6 Subject to 7.7 below, decisions on the Management Committee may be reached telephonically, telegraphically, by facsimile or in writing.
- 7.7 Decisions of the Management Committee, whether at a meeting or otherwise, shall be recorded in written minutes which shall be distributed by the Chairman, for the time being to the members of the Management Committee not later than seven days after those decisions have been taken.

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- Such minutes shall be deemed to have been affirmed unless dissented from not later than seven days after they are deemed to have been received by the dissenter.
- 7.8 The Management Committee may, as it wishes, decide to increase the number of its members for or invite other parties to attend any of its meetings. Such co-opted members or observers shall not have a vote.
 - 7.9 The Management Committee shall have the power to delegate such of its powers and duties as it may determine in the best interests of the parties.
 - 7.10 No remuneration shall be paid by the Joint Venture to the parties' representatives on the Management Committee in their capacities as such.
 - 7.11 The administrative function regarding the operation of the Management Committee shall be fulfilled by the Chairman.

8 POWERS OF THE MANAGEMENT COMMITTEE AND DIRECTION OF THE PROJECT MANAGER

The functions, responsibilities and powers of the Management Committee shall be:

- 8.1 To appoint the Project Manager who shall be nominated by and and who shall attend all meetings of the Management Committee for the implementation of its policies and act only in accordance with its directives and its established procedures. The Project Manager shall be removed in terms of 10 hereof and his successor(s) shall be nominated by and And approved by the Management Committee.
- 8.2 To formulate and dictate to the Project Manager overall policy regarding the following:
 - 8.2.1 The general day-to-day management of the affairs of the Joint Venture.
 - 8.2.2 Representation of the Joint Venture in dealing with the Resident Engineer/Engineer/Client and third parties on matters affecting the Joint Venture as a whole.
 - 8.2.3 Co-ordination of the activities of the parties.
 - 8.2.4 Preparation by agreement with the parties and supervision of the programme of the Works.
 - 8.2.5 Ensuring that the responsibility of each of the parties in regard to technical and contractual matters is preserved.
- 8.3 To make such provisions as are necessary to enable the Project Manager to perform his tasks.
- 8.4 To approve the balance sheets and accounts of the Joint Venture.
- 8.5 To approve the tender submitted by the Joint Venture and to approve or withhold approval for and amendment proposed thereto.
- 8.6 To approve the appointment of legal advisers and auditors where such appointments are necessary.
- 8.7 To determine the nature and extend of any additional duties and functions of each of the parties in relation to this Joint Venture.
- 8.8 To determine the terms and conditions of employment of personnel as well as emoluments seconded by the parties to the Joint Venture.
- 8.9 Subject to the terms and conditions of this agreement, to determine and approve:
 - 8.9.1 The amount and type of working capital requirements of the Joint Venture.
 - 8.9.2 All borrowings, guarantees and like obligations undertaken by the parties to the Joint Venture.

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8.9.3 The insurance to be taken out by the Joint Venture.

8.9.4 The nature, method and amount of all claims.

8.9.5 When and in what amount to distribute dividends to the parties hereto, save that any decision in terms of which the Joint Venture will undertake further work outside of the original scope of the contract or any variation or amendment of this agreement of the contract, shall require the unanimous agreement of the parties before becoming effective and binding the Joint Venture.

8.9.6 The approval and appointment of all sub-contractors.

9 THE EXECUTIVE BOARD

- 9.1 The Executive Board shall consist of one representative of each of the parties who shall be the Chief Executive Officer of each Joint Venture partner or their nominated deputy but shall not be the same representative as appointed to the Management Committee in terms of Clause 7.1 hereof. The Executive Board shall be the mediation authority of the Joint Venture which shall decide on all issues which are referred to it by the Management Committee as well as on all issues where the Management Committee is not unanimous.
- 9.2 Decisions of the Executive Board, whether original decisions or decisions taken after referral from the Management Committee shall be implemented by the Management Committee as per Clause 7.5.1.
- 9.3 Decisions of the Executive Board shall be unanimous.
- 9.4 Effect shall be given to a resolution arrived at unanimously.
- 9.5 In the event of the Executive Board not being unanimous in its decision the matter is to be referred to arbitration in terms of Clause 16 hereof.
- 9.6 Subject to 9.7 as read in conjunction with 7.7 and, provided that they are unanimous, decisions of the Executive Board may be reached telephonically, telegraphically or in writing. If reached telephonically or otherwise orally such decision must be confirmed in writing within 24 hours.
- 9.7 The Minutes of meetings of the Executive Board shall be handled mutatis mutandis in the manner per Clause 7.7.
- 9.8 The administrative functions regarding the operation of the Executive Board shall be fulfilled by the Chairman of the Management Committee, who shall not be entitled to a voice or a vote at Executive Board meetings.

10 PERSONNEL

- 10.1 The Project Manager shall be appointed as provided in Clause 8.1 hereof.
- 10.2 The person nominated to the office of Project Manager shall be subject to removal from such office by decision of the Management Committee.
- 10.3 All the remuneration and emoluments of employment of the Project Manager shall be an expense of and paid by the Joint Venture, provided that a party shall be entitled by notice in writing delivered to the other parties to elect that the person to be nominated by it to fill the offices of project Manager shall be seconded to the Joint Venture in which event the remuneration and emoluments which would otherwise have been paid to such persons while filling such offices shall be paid to the member responsible for their nomination or otherwise as such member shall direct and subject to such payment being duly and promptly paid to the member or its nominee, the member will hold harmless and keep indemnified the Joint Venture and the other members from all actions, proceedings, claims and demands by such persons or otherwise howsoever in respect of such remuneration and emoluments. The remuneration and

SAFCEC JOINT VENTURE AGREEMENT

emoluments to be paid and allowed by the Joint Venture to the Project Manager shall be determined from time to time by the Management Committee and borne by the parties hereto in the Specified Propositions.

- 10.4 The members of the Management Committee and Executive Board and their proxies and alternates shall not be employees of the Joint Venture and shall not be entitled to claim any salary or remuneration from the Joint Venture by virtue of such appointments unless the Management Committee shall otherwise decide in writing.
- 10.5 shall be appointed as Secretaries to the Joint Venture. Save for matters pertaining to the works and the contract, Shall be consulted on all matters of an administrative and financial nature arising in connection with the business of the Joint Venture where their particular experience, knowledge, facilities and skills in matters of this nature shall be considered to be of benefit to the Joint Venture.

11 FINANCING

11.1 Working Capital

11.1.1 Banking accounts shall be opened in the name of the Joint Venture with banks and at such places as may be determined by it, and the parties shall be responsible for the payment in the Specified Properties of such sums to the credit of such banking accounts as shall from time to time be required by way of working capital for the Joint Venture.

11.1.2 Any amounts from time to time advanced by the parties to the Joint Venture in terms of this agreement shall be placed to the credit of their respective capital accounts in the Joint Venture.

11.1.3 The banking accounts referred to in sub-clause 11.1.1 hereof shall be operated, and cheques thereon shall be drawn in accordance with the instructions to the bankers in question. Withdrawals from these banking accounts shall be effected on the authority of persons nominated thereto by the Management Committee.

11.1.4 Should any party fail to make payment to the Joint Venture of any amount which it is obliged to pay in terms of sub-clause 11.1.1 hereof, after the expiry of a period of seven days from the date of notice requiring it to make such payment, the party to default shall be liable for payment of interest to the other parties on the amount so withheld at the rate of Prime Bank rate charged by Joint Venture Bankers per annum should such other parties have advanced the aforesaid sum.

11.1.5 All revenue derived by the Joint Venture from the contract shall forthwith be deposited to the credit of the banking accounts referred to in sub-Clause 1.1.1 hereof.

11.1.6 The amount for the time being standing to the credit of the Joint Venture's banking accounts shall be applied:

11.1.6.1 In discharging the obligations of the Joint Venture in accordance with their tenor; provided that the Management Committee shall be entitled to require the payment of any liability prior to its due date if such anticipated payment will result in the allowance by the creditor in question of an advantageous discount to the Joint Venture for prompt payment;

11.1.6.2 As to any surplus of funds for the time being in the said banking account, subject to the agreement of the parties as payment to the parties in the

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Specified Proportions or in proportion to their participation of the time being in the Joint Venture, save that any such surplus shall first be utilised for the purpose of eliminating or reducing any disproportion in the ratios of the parties respective capital accounts.

11.2 Capital and Advances

11.2.1 The amount of capital required by the Joint Venture to attain its object (and which includes all loans, guarantees, indemnities, reserves) shall be determined from time to time by the Management Committee, and upon being so determined shall forthwith be contributed by the parties to the Joint Venture in the Specified Proportions.

11.2.2 If at any time any party to the Joint Venture shall, due to an emergency or with the consent in writing of the other parties advance any sum of money or to incur any liability on behalf of the Joint Venture over and above its due contribution to capital, then where money has been advanced, the same shall be a debt due from the Joint Venture to the party advancing the money, and shall be repayable on thirty days' notice and shall bear interest at Prime Bank rate as charged by Joint Venture's bankers per annum from date of advance to date of payment. Where a party has incurred a contingent liability on the above basis, the other parties shall, within thirty days of being requested to do so in writing, relieve such party of its obligations thereunder to the extent that the obligations of the parties are in the Specified Proportions.

12. ACCOUNTS

12.1 The Joint Venture shall cause proper books of account and complete records to be kept as are customary in the Republic of South Africa relating to all the assets and liabilities of the Joint Venture and expenses incurred or income received by the Joint Venture.

Such book and records shall not be related to the affairs of the parties individually. The said books of account and records, together with all letters, papers or writings concerning or belonging to the Joint Venture shall be kept at site and such other place from time to time as determined by the Management Committee, and each of the parties to the Joint Venture shall at all times have free access and the right to inspect and copy the same.

12.2 Within thirty days of the end of every quarter during the continuance of the Joint Venture, the Joint Venture shall furnish to the Management Committee all necessary documents such as balance sheets, profit and loss accounts, bank balances and comparisons with budget and forecasts of cash flow and profits as are necessary to keep the Management Committee informed of the financial affairs of the Joint Venture. Every such profit and loss account and balance sheet shall be agreed to and signed by the members of the Management Committee on behalf of the Joint Venture members, and when so signed, shall be binding on all the parties, except that if any manifest error therein be detected and pointed out by any party to the others at any time after such signature, such error shall forthwith be rectified.

12.3 After the completion of the contract and the release of all bonds, guarantees and obligations given for the performance of the parties in the Joint Venture, the joint Venture shall procure the preparation and auditing of a final balance sheet and profit and loss account, which shall be approved by the Management Committee, and from which the final profit and loss sustained by the Joint Venture shall be ascertained, and distributed to or contributed by the parties in proportion to their participation in the Joint Venture. This clause shall not be construed as

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prohibiting the interim distribution of profits or contribution towards losses in the discretion of the Management Committee.

13. WINDING UP

Upon the determination of the Joint Venture in accordance with the provisions of this agreement, a full and general account shall be taken of the assets and liabilities of the Joint Venture and of the transactions and dealings thereof, and with all convenient speed, such assets shall be sold and realised and the proceeds applied in paying and discharging such liabilities and the expenses of and incidental to the winding-up of the Joint Venture affairs and thereafter in paying to each Joint Venture member its share of such proceeds in the Specified Proportions. The Joint Venture members respectively undertake to do all such things as may be necessary so as to give effect to the above.

14. BREACH

- 14.1 If a party ("the guilty party") shall commit a breach of any material provision of this agreement, and fail to remedy the same within a period of thirty (30) days after the receipt by it of written notice requiring it to do so, or be placed in liquidation or under judicial management, whether provisionally or finally, or propose any compromise with its creditors, the other parties ("the aggrieved parties") shall have the right, without prejudice to any of its other remedies arising from such breach, forthwith to terminate this agreement, in which event:
- 14.2 The guilty party's interest in the joint venture shall be taken over by the remaining parties. The aggrieved parties shall, in addition, have the right, if it so requires, to take over the capital account of the party in default.
Such capital account shall be valued on the basis of the nett assets revealed in an audited balance sheet and profit and loss account prepared as at the end of the month in which the default or other breach occurred; provided that the profit and loss account shall take into account the Joint Venture's share in the valuation of the work in progress, as shown in the Joint Venture accounts, at the date of preparation of the balance sheet and profit and loss account, after providing for any known or contemplated future losses to be incurred on the work undertaken or to be undertaken by the Joint Venture and provided further that should upon the completion of the contract or contracts, the provision for losses made in the valuation or work in progress as aforesaid prove to be incorrect, such provisions shall be adjusted. Provided the aggrieved parties have proved that the tender rates as escalated from time to time were inadequate, the guilty party shall be liable to the extent of the participation of such party for all losses incurred on the whole of the contract, including any losses incurred subsequent to the termination of the agreement in accordance with these provisions, but such party shall not be entitled to share in any profits earned subsequent to such termination.
- 14.3 The aggrieved parties shall have the right to recruit in its employment personnel seconded to the Joint Venture by the guilty party and, as a stipulation in favour of such personnel, the guilty party waives any claims it might otherwise have had against such personnel arising from their summary termination of their employment with the guilty party.
- 14.3 All plant hired by the guilty party to the Joint Venture shall remain on hire to and under the control of the aggrieved parties until the completion of the contract, or until the aggrieved parties shall release such plant from the operation of this sub-clause. Payment shall be made thereof monthly.

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15. DISPUTES

- 15.1 Having regard to the high degree of good faith which must exist between the parties, the parties agree to do their utmost to ensure that the disputes between them are settled equitably and amicably and where possible without resort to arbitration.
- 15.2 In the event of any differences or dispute of whatever nature arising from this agreement (which shall include any failure to agree on any matter which requires the parties' agreement for the purposes of implementation of this agreement) or any other matter related thereto which cannot be settled by direct negotiation between the parties, such differences or dispute shall be referred to arbitration in terms of Clause 16 hereof.

16 ARBITRATION

- 16.1 Save as hereinafter provided, any dispute at any time between any of the parties hereto in regard to any matter arising out of this agreement or its interpretation or rectification shall be submitted to and decided by arbitration.
- 16.2 The arbitration referred to in 16.1 shall be held -
 - 16.2.1 At
 - 16.2.2 In a summary manner, i.e. on the basis that it shall not be necessary to observe or carry out either -
 - 16.2.2.1 the usual formalities or procedure (e.g. there shall not be any pleadings or discovery); or
 - 16.2.2.2 the strict rules of evidence.
 - 16.2.3 Immediately and with a view to its being completed within twenty-one business days after it is demanded;
 - 16.2.4 Otherwise (but subject to © (d) and (e) under the provisions of the Arbitration Act No. 42 of 1965 or the Republic of South Africa as amended from time to time).
- 16.3 The Arbitrator shall be, if the question in issue is -
 - 16.3.1 Primarily an accounting matter, an independent accountant;
 - 16.3.2 Primarily a legal matter, a practising Senior Counsel of not than five years standing as such;
 - 16.3.3 Any other matter, an independent person unanimously agreed upon between the parties and failing agreement appointed by the President for the time being of the South African Federation of Civil Engineering Contractors.
- 16.4 If agreement cannot be reached within seven business days after the arbitration has been demanded as to whether the question in issue falls under 16.3.1, 16.3.2 or 16.3.3, then a practising Senior Counsel of not less than five years' standing as such agreed upon between the parties, and failing agreement appointed by the President for the time being of the Society of Chartered Accountants as soon as possible, thereafter, shall determine whether the question in issue falls under 16.3.1, 16.3.2 or 16.3.3 so that an arbitrator can be appointed, and the arbitration can be held and concluded, if possible, within the prescribed period of twenty-one days.

SAFCEC JOINT VENTURE AGREEMENT

- 16.5 The arbitrator shall decide the matters submitted to him according to what he considers just and equitable in the circumstances and, therefore, the strict rules of law need not be observed or be taken into account by him in arriving at his decision.
- 16.6 The parties irrevocably agree that the decision in those arbitration proceedings -
- 16.6.1 shall be binding on them;
 - 16.6.2 shall be carried into effect;
 - 16.6.3 can be made an order of any court of competent jurisdiction.

17. CONFIDENTIALITY

- 17.1 All matters relating to this agreement, any negotiations and the contract for the construction of the Works resulting therefrom shall be regarded by the parties hereto as being highly confidential, and shall not be disclosed without prior written consent of the management Committee to any party, person or entity who or which is not a signatory to this Agreement, except where such disclosure is necessary for the fulfilment of this Agreement. No party shall at any time hereinafter use any technical information, save that in the public domain, acquired from the other parties hereto except for the purposes of fulfilment of the contract.
- 17.2 No party shall have the right to advertise, or otherwise permit, the dissemination of publicity concerning its participation in the Joint Venture unless:
- 17.2.1 the relevant material shall make due reference to and acknowledgement of the work of the other parties;
 - 17.2.2 the relevant material shall, for its dissemination is within the control of the party in question, have been approved by the other parties, which approval shall not be unreasonably withheld.

18. ASSIGNMENT

- 18.1 No party shall cede, assign or in any other way make over any of its rights or obligations under this agreement without the written consent of the other parties except insofar as such assignment or alienation is to any wholly-owned subsidiary company of that party.
- 18.2 In the event of such assignment or alienation taking place, the initial party shall jointly and severally and in solidum guarantee the obligations or the assignee towards the remaining parties.

19 GENERAL

- 19.1 No party shall have a claim against the other parties arising out of a failure to secure the contract, except insofar as the parties are liable to bear the joint venture expenses in the Specified Proportions.
- 19.2 Any changes and supplementary provisions concerning this agreement shall require the written approval of all the parties hereto.
- 19.3 Variations not effective unless in writing**
No variation, modification or waiver of any provision of this agreement, or consent to any departure therefrom, shall in any event be of any force or effect unless unanimous and confirmed in writing and signed by the parties; then such variation, modification, waiver or consent shall be

SAFCEC JOINT VENTURE AGREEMENT

effective only in the specific instance and for the purpose and to the extent for which made or given.

19.4 Additions to the Joint Venture

No additional parties shall be admitted to the Joint Venture unless the parties to this agreement unanimously agree and subject to the Conditions of Contract for the Works. All sub-contractors must be approved by the Management Committee in accordance with procedures to be established by the said Committee.

19.5 Company formation

Should the parties at any time unanimously agree to form a company to take over the interest of the Joint Venture in the contract and the assets of the joint Venture, the parties undertake to enter into a Shareholders Agreement embodying insofar as it is reasonably possible and practicable the terms hereof and, in addition, including therein a provision affording each party a right of pre-emption to any shares in the company which the other may from time to time wish to dispose of. For the Works the formation of a company shall be subject to the General Conditions of Contract for the Works.

19.6 Domicilium

19.6.1 The parties hereto respectively choose domiciliumcitandi et executandi for all purposes of and in connection with this agreement as follows:

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

19.6.2 The parties hereto shall be entitled to change their domicilium from time to time, and any such change shall only be effective upon receipt of notice in writing by the other parties of such change.

19.6.3 All payments to be made pursuant to this agreement, and all notices, demands or communications intended for any party, shall be made or given at such party's domicilium for the time being, and if forwarded by prepaid registered post, shall be deemed to have been made or given seven days after the date of posting unless proved to the contrary.

19.7 Currency

All amounts referred to in this agreement and all monies payable to or by the parties to the Joint Venture in connection with the Joint Venture shall be both calculated and paid in currencies from time to time and at places to be agreed by the Management Committee.

19.8 Governing Law

This agreement shall be construed in accordance with and governed by the laws of Republic of South Africa. The English language version of this agreement shall prevail.

19.9 All correspondence between the parties in regard to this agreement and the contract shall be in the English language.

19.10 Each party shall bear its own costs incurred in the preparation and negotiation of this agreement.

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19.11 This agreement over-rides any previous agreement or arrangements concluded between the parties in regard to the works and contract. Notwithstanding the provisions of Clause 19 hereof, the parties agree that any variations to the provision of this agreement and any decisions in terms of which this Joint Venture will undertake further work outside the original scope of the contract referred to earlier, shall require the unanimous agreement of the parties before becoming effective and binding on the parties.

19.12 In the interpretation of this agreement, works in the singular shall include the plural and vice versa as the context may require. The headings to clauses shall not be considered part thereof nor shall the words which they contain be taken into account in the interpretation of any clause.

THUS DONE AND SIGNED AT THISDAY OF 20....

For and behalf of:

.....

AS WITNESS:

1.

2.

THUS DONE AND SIGNED AT THISDAY OF 20...

For and behalf of:

.....

AS WITNESS:

1.

2.



THE CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

PART C.1: 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:

The Limpopo Department of Public Works, Roads and Infrastructure invites tenders Demolition of 1 x 4 Classroom Block, Pit Toilet Block and Waterborne Toilet Block, Renovations of 2 x 4 Classroom Blocks, Construction of Medium Admin Block, 1 x 4 Classroom Block, 4-Seats Water-Borne Toilet Block, 16-Seats Enviro-Loos and External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays and Fence) At Rasema Secondary School in Ramatjowe Village, Botlokwa in Capricorn 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 the 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)

.....

(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

PART C1.1: AGREEMENT AND CONTRACT DATA

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 Contract Data
- Part C3 Pricing Data
- Part C4 Scope of Work

Any 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 the organization

Signature and Name of Witness

Signature

Name

Capacity

Schedule of Deviations

- 1 Subject
- Details
-
-
-

- 2 Subject
- Details
-
-
-

- 3 Subject
- Details
-
-
-

- 4 Subject
- Details
-
-
-

By the duly authorized 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 CONTRACT DATA

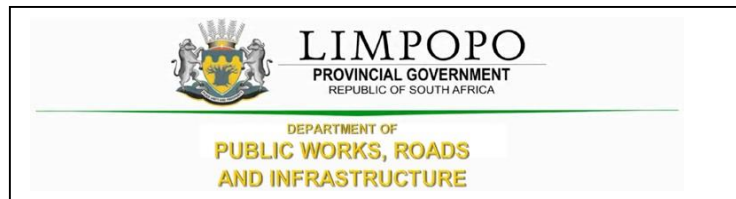
The Conditions of Contract are clauses 1 to 41 of the **JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005)** published by the Joint Building Contracts Committee.

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.



PART C3: PRICING DATA



C3.1 PRICING INSTRUCTION

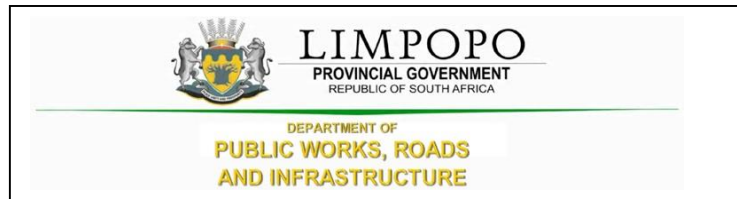
- The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work in accordance with the provisions of the Model Bills of Quantities or Electrical Work, published by the South African Association of Quantity Surveyors, (July 2005).
- The agreement is under 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 Works 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 the assessment of payment for additional work that may have to be carried out.
- The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the Main Contractor and can be viewed at any time during office hours up until the completion of the works.
- 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.



PART C4: PROVISIONAL BILLS OF QUANTITIES



C4.1 PRELIMINARIES



C4.2 BUILDING WORKS

Item No	Quantity	Rate	Amount
<u>SECTION NO. 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>NOTE</u>			
All prices/rates to be net, excluding Value Added Tax			
<u>General</u>			
i) The agreement is to be the JBCC Series 2000 Principal Building Agreement (Edition 5.0) prepared by the Joint Building Contracts Committee, July 2007			
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			
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			
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			
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			
SECTION A: PRINCIPAL BUILDING AGREEMENT			
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6	Contractor's site representative (clause 6)	Fixed	Item
		Value Related	Item
		Time Related	Item
7	Compliance with regulations (clause 7)	Fixed	Item
		Value Related	Item
		Time Related	Item
8	Works risk (clause 8)	Fixed	Item
		Value Related	Item
		Time Related	Item
9	Indemnities (clause 9)	Fixed	Item
		Value Related	Item
		Time Related	Item
10	General insurances (clause 10)	All insurances are to be taken by the Contractor	
		Fixed	Item
		Value Related	Item
11	Special insurances (clause 11)	Time Related	Item
		Fixed	Item
		Value Related	Item
		Time Related	Item

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12	Effecting insurance (clause 12)	Fixed	Item
		Value Related	Item
		Time Related	Item
13	Assignment (clause 13)	Fixed	Item
		Value Related	Item
		Time Related	Item
14	Security (clause 14)	Fixed	Item
		Value Related	Item
		Time Related	Item
<u>Execution (A15-A23)</u>			
15	Preparation for and execution of the works (clause 15)	Fixed	Item
		Value Related	Item
		Time Related	Item
16	Site and Access (clause 16)	Fixed	Item
		Value Related	Item
		Time Related	Item
17	Contract instructions (clause 17)	Fixed	Item
		Value Related	Item
		Time Related	Item

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18	<p>Setting out of the works (clause 18)</p> <p><i>The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments</i></p>	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
19	<p>Temporary Works and Plant (clause 19)</p>	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
20	<p>Nominated sub-contractors (clause 20)</p>	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
21	<p>Selected sub-contractors (clause 21)</p> <p><i>Notwithstanding the content of this clause, the contractor's attention is drawn to the fact that all the work provided for by means of the inclusion of provisional amounts elsewhere in these bills of quantities, is to be executed and installed in the works during the construction period by selected sub-contractors</i></p> <p><i>The selected sub-contractors shall be chosen, as far as possible, by the principal agent together with the contractor</i></p>	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
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22	Employer's direct contractors (clause 22)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
23	Contractor's domestic sub-contractors (Clause 23)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<u>Completion (A24-A30)</u>				
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	
		Time Related	Item	
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28	Sectional completion (clause 28)		
		Fixed	Item
		Value Related	Item
29	Revision of date of practical completion (clause 29)		
		Time Related	Item
	<p>Clause 29.1.1 shall be deemed to be omitted and replaced by the following:</p> <p><i>Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calender month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project</i></p> <p><i>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</i></p>		
30	Penalty for non-completion (clause 30)		
		Fixed	Item
		Value Related	Item
		Time Related	Item

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Payment (A31 - A35)

31	<p>Interim payment to the contractor (clause 31)</p> <p><i>Notwithstanding this or any other clause, materials and goods stored off site shall not to be included in the amount authorized for payment</i></p> <p><i>Clause 31.6.5 shall be deemed to be deleted</i></p> <p><i>Clause 31.9:</i></p> <p><i>The wording "seven (7)" be replaced with "thirty (30)"</i></p> <p><i>Cause 31.11.1:</i></p> <p><i>The wording "one hundred and sixty per cent (160%)" be replaced with "one hundred and ten per cent (110%)"</i></p>			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
32	Adjustment to the contract value (clause 32)			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
33	Recovery of expense and loss (clause 33)			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
34	Final account and final payment (clause 34)			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	

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	Value Related	Item	
	Time Related	Item	
	<u>Contract Agreement (A41)</u>		
41	The schedule: Pre-tender information (clause 42)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	<u>42.1 CONTRACTING AND OTHER PARTIES</u>		
	<i>See "Notes to Tenderers" for all the relevant physical and postal addresses, telephone and facsimile numbers</i>		
	42.1.1 Employer: Limpopo Department of Education		
	42.1.2 Principal Agent: IDC Architects		
	42.1.3 Agent (1): IDC Architects		
	Agents service: Architects		
	42.1.4 Agent (2):Ndidali Quantity Surveyors		
	Agents service: Quantity Surveyors		
	42.1.5 Agent (3):Muteo Consulting		
	Agents service: Structural and Civil Engineers		
	42.1.6 Agent (4):Med-Tech Engineers		
	Agents service: Electrical Engineers		
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42.1.6 Agent (5): **Not applicable**

Agents service: **Mechanical Engineers**

42.1.8 Agent (6):

Not applicable

42.1.9 Agent (7):

Not applicable

42.2 CONTRACT DETAILS

42.2.1 Works Description:

The works shall be as described in the "Notes to Tenderers"

42.2.2 Site Description:

The site shall be as described in the "Notes to Tenderers"

42.2.3 Work or installations by direct contractors:

Refer to notes to tenders: Item 2 Scope of contract

42.2.4 Specific options that are applicable to a State organ only:

(1) Interest rate legislation: **N/A**

the (2) Lateral support insurance to be effected by contractor: **N/A**

goods: (3) Payment will be made for materials and **N/A**

(4) Dispute resolution by litigation: **N/A**

the (5) Extended defects liability period applicable to following elements: **N/A**

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42.2.5 Possession of the site is be given on:

Date to be determined

42.2.6 Period for the commencement of the works after the contractor takes possession of the site:

Within seven (7) working days

42.2.7 The date for practical completion and the penalty per calendar day for the works as a whole:

Date:
Within twelve (12) calendar months, inclusive of builders' holidays, after the date of site handover

Penalty:
0,05% of the tendered amount, inclusive of value added tax

42.2.8 The date for practical completion and the penalty per calendar day for the works in sections:

N/A

Section 1: Date: N/A Penalty: R
 Section 2: Date: N/A
 Penalty: R Section 3: Date:
 N/A Penalty: R Section 4: Date:
 N/A Penalty: R Section 5: Date:
 N/A Penalty: R Section 6: Date:
 N/A Penalty: R

42.2.9 The law applicable to this agreement shall be that of:

Republic of south Africa

42.3 INSURANCES

42.3.1 Contract works insurance:

To be effected by: **Contractor**
 For the sum of: **Tendered amount plus 20%**
 With a deductible of: **to be determined by the contractor**

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42.3.2 Supplementary insurance is required:

No

42.3.3 Public liability insurance:

Yes

To be effected by: **Contractor**
 For the sum of: **R 5 000 000-00**
 With a deductible of: **to be determined by**

the contractor

42.3.4 Support insurance to be effected by the employer:

No

42.4 DOCUMENTS

41.4.1 Waivers of contractor's lien or right of continuing possession is required:

Yes

42.4.2 Construction document copies to be supplied to the contractor free of charge:

Three (3) copies of each

42.4.3 Bills of quantities drawn up in accordance with:

Standard System of Measuring Building Work

42.4.4 On acceptance of the tender the bills of quantities is to be submitted:

Within seven (7) working days

42.4.5 JBCC Engineering General Conditions are to be included in the documents:

No

42.4.6 The contract value is to be adjusted using CPAP:

Yes

Base month of indexes: **Tender closing date**

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42.4.7 Details of changes made to the provision of JBCC standard documentation:

- Clause 3 : See item 3, page 2*
- Clause 10 : See item 10, page 3*
- Clause 18 : See item 18, page 5*
- Clause 21 : See item 21, page 6*
- Clause 29 : See item 29, page 7*
- Clause 31 : See item 31, page 8*

42.5 CONTRACT DETAILS

All post-tender information for this section will be determined once tender is awarded

42.6 DOCUMENTS

All post-tender information for this section will be determined once tender is awarded

42.7 DISPUTE RESOLUTION

All post-tender information for this section will be determined once tender is awarded

42.8 SIGNATURES OF THE CONTRACTING PARTIES

All post-tender information for this section will be determined once tender is awarded

SECTION B: PRELIMINARIES

Definition and interpretation (B1)

42 Definition and interpretation (B1.1 - B1.6.5)

Fixed

Item

Value Related

Item

Time Related

Item

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Documents (B2)

43 Checking of documents (B2.1)

These bills of quantities:

(1) contain pages and annexes as indexed, and;

(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances

Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 1999 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained

Fixed

Item

Value Related

Item

Time Related

Item

44 Provisional bills of quantities (B2.2)

Fixed

Item

Value Related

Item

Time Related

Item

45 Availability of construction documentation (B2.3)

The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period

Fixed

Item

Value Related

Item

Time Related

Item

46 Interests of agents (B2.4)

Fixed

Item

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		Value Related	Item	
		Time Related	Item	
47	Priced documents (B2.5)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
48	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>			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
	<u>The site (B3)</u>			
49	Defined works area (B3.1)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
50	Geotechnical investigation (B3.2)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
51	Inspection of the site (B3.3)			
	<i>No claims for extras arising from the contractor having failed to comply with this clause will be entertained</i>			
		Fixed	Item	
		Value Related	Item	
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		Value Related	Item	
		Time Related	Item	
64	Labour and plant records (B4.5)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
		<u>Samples and shop drawings (B5)</u>		
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	
68	Compliance with manufacturer's instructions (B5.4)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
		Carried to Collection		
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<u>Temporary works and plant (B6)</u>						
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			
73	Main notice board (B6.5)	Fixed	Item			
		Value Related	Item			
		Time Related	Item			
74	Subcontractors notice board (B6.6)	Fixed	Item			
		Value Related	Item			
		Time Related	Item			
		Carried to Collection				
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<u>Temporary services (B7)</u>				
75	Location (B7.1)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
76	Water (B7.2)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
77	Electricity (B7.3)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
78	Telecommunication equipment (B7.4)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
79	Ablution facilities (B7.5)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<u>Prime cost amounts (B8)</u>				
80	Responsibility for prime cost amounts (B8.1)			
		Fixed	Item	
		Value Related	Item	
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		Time Related	Item			
	<u>Attendance on nominated and selected subcontractors (B9)</u>					
81	General attendance (B9.1)					
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
82	Special attendance (B9.2)					
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
83	Commissioning - Fuel, water and power (B9.3)					
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
	<u>Financial aspects (B10)</u>					
84	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			
85	Payment of preliminaries (B10.2)					
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
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86	Adjustment of preliminaries (B10.3)	Fixed	Item
		Value Related	Item
		Time Related	Item
87	Payment certificate cash flow (B10.4)	Fixed	Item
		Value Related	Item
		Time Related	Item
	General (B11)		
88	Protection of works (B11.1)	Fixed	Item
		Value Related	Item
		Time Related	Item
89	Protection/isolation of existing/sectionally occupied work (B11.2)	Fixed	Item
		Value Related	Item
		Time Related	Item
90	Site security (B11.3)	Fixed	Item
		Value Related	Item
		Time Related	Item
91	Notice before covering work (B11.4)	Fixed	Item
		Value Related	Item
		Time Related	Item

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92	Disturbance (B11.5)	Fixed	Item
		Value Related	Item
		Time Related	Item
93	Enviromental disturbance (B11.6)	Fixed	Item
		Time Related	Item
		Value Related	Item
94	Works cleaning and clearing (B11.7)	Fixed	Item
		Value Related	Item
		Time Related	Item
95	Vermin (B11.8)	Fixed	Item
		Value Related	Item
		Time Related	Item
96	Overhand work (B11.9)	Fixed	Item
		Value Related	Item
		Time Related	Item
97	Instruction manuals and guarantees (B11.10)	Fixed	Item
		Value Related	Item
		Time Related	Item

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98	As built information (B11.11)	Fixed	Item
		Value Related	Item
		Time Related	Item
99	Tenant installations (B11.12)	Fixed	Item
		Value Related	Item
		Time Related	Item
<u>Schedule of variables (B12)</u>			
100	Pre-tender information (B12.1)	Fixed	Item
		Value Related	Item
		Time Related	Item
12.1.1	Provisional bills of quantities (B2.2)	The quantities are provisional:	Yes
12.1.2	Availability of construction documentation (B2.3)	Construction documentation is not complete:	No
12.1.3	Interest of agents (B2.4)		No
12.1.4	Defined works area (B3.1)	<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	Geotechnical investigation (B3.2)		N/A

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- 12.1.6 Existing premises occupied (B3.4) **No**
- 12.1.7 Previous work - Dimensional accuracy (B3.5) **No**
- 12.1.8 Previous work - Defects (B3.6) **No**
- 12.1.9 Services - known (B3.7)

Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent
- 12.1.10 Protection of trees (B3.9) **N/A**
- 12.1.11 Inspection of adjoining properties (B3.11) **N/A**
- 12.1.12 Enclosure of the works (B6.2) (See notes to tenders)

12.1.13 Offices (B6.4.3)

The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use for meetings to be held on site. The minimum size of the office shall be 8 x 4 x 2,40m high internally with concrete floor, insulated ceiling and roof. The office shall be suitably ventilated, equiped with electric lighting and fitted with table, twelve (12) chairs, one (1) pining board 2,40 x 1,20m high, one (1) writing board 2,40 x 1,20m high and a set of ten (10) aluminium "Ozafile" drawing hangers complete with stand. The office shall be kept clean and fit for use at all times

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12.1.14 Main notice board (B6.5)

The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m high. The exact extent of the details, colour scheme and wording will be provided by the principal agent on the day of the site handover. The board shall be securely fixed to and including a suitable supporting structure of timber or tubular posts and braces

12.1.15 Sub-contractors notice board (B6.6)

A notice board is required: **No**

12.1.16 Water (B7.2)

Alternative selected: **A**

12.1.17 Electricity (B7.3)

Alternative selected: **A**

12.1.18 Telecommunications (B7.4)

Alternative selected: **A**

12.1.19 Ablution facilities (B7.5)

Alternative selected: **A**

12.1.20 Protection of existing/sectionally occupied works (B11.2)

No

12.1.22 Protection of the works

No

12.1.23 Disturbance (B11.5)

No

12.1.24 Environmental disturbance (B11.6)

No

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101	<p>Post-tender information (B12.2)</p> <p><i>All post-tender information for this section will be determined once tender is awarded</i></p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p> <p style="text-align: center;">-----</p>			
<u>SECTION C: SPECIFIC PRELIMINARIES</u>				
102	<p>Clause C1 - Proprietary branded products</p> <p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorized representative</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
103	<p>Clause C2 - Overtime</p> <p>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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			<p style="text-align: center;">Carried to Collection</p> <p style="text-align: center;">R</p>
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<p>104</p>	<p>Clause C3 - As-built drawings</p> <p>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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>105</p>	<p>Clause C4 - Site instructions</p> <p>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</p> <p>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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>106</p>	<p>Clause C5 - Labour record</p> <p>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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	<p style="text-align: center;">Carried to Collection</p> <p style="text-align: center;">R</p>
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Clause C6 - Plant record

At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works

Fixed

Item

Value Related

Item

Time Related

Item

108

Clause C7 - Non-cession of monies

The contractor shall not cede nor assign his rights or claims to any monies due or to become due to him under this contract

Fixed

Item

Value Related

Item

Time Related

Item

109

Clause C8 - Occupational Health and Safety Act

In terms of the Occupational Health and Safety Regulations promulgated on 18 July 2003, it will be expected from the contractor to comply fully with and adhere to all such regulations pertaining to this project as no claims in this regard will be entertained

Fixed

Item

Value Related

Item

Time Related

Item

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	<u>SECTION NO.2</u>			
	<u>BILL NO.1</u>			
	<u>DEMOLITIONS</u>			
	<u>REMOVAL OF EXISTING WORK</u>			
	<u>Note:</u>			
	Unless otherwise stated, all materials from the alterations and demolitions will belong to the builder.			
	The builder should allow for the removal of all debris from site and keep the site clean at all times			
	<u>DEMOLITIONS, ETC.</u>			
1	Break down and demolish existing building size approximately 35m long x 9.5m wide x 2,66m high, incl. cutting the foundation wall, strip footings, windows, roof covering, etc, removal of surface beds, backfilling, cart away etc. of all rubble and leaving no visible sign of the building (Four Classroom Block)	No	1	
2	Break down and demolish existing building size approximately 9m long x 5.5m wide x 2,66m high, incl. cutting the foundation wall, strip footings, windows, roof covering, etc, removal of surface beds, backfilling, cart away etc. of all rubble and leaving no visible sign of the building (Pit Toilet Block)	No	1	
3	Break down and demolish existing building size approximately 4.5m long x 3m wide x 1.95m high, incl. cutting the foundation wall, strip footings, windows, roof covering, etc, removal of surface beds, backfilling, cart away etc. of all rubble and leaving no visible sign of the building (Waterborne Toilet block)	No	1	
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	Section No. 2 DEMOLITIONS Bill No. 1 DEMOLITIONS		R	

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BILL NO.1</u>			
	<u>ALTERATIONS</u>			
	<u>REMOVAL OF EXISTING WORK</u>			
	<u>Note:</u>			
	Unless otherwise stated, all materials from the alterations and demolitions will belong to the builder.			
	The builder should allow for the removal of all debris from site and keep the site clean at all times			
	<u>Removal of existing concrete</u>			
1	Surface beds	m3	91	
	<u>Breaking down and removing brickwork etc</u>			
2	Half brick wall	m2	60	
	<u>Taking out and removing doors, windows, etc</u>			
3	Timber single door and frame 813 x 2032mm high	No	4	
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>			
4	Corrugated iron roof including roof covering, timber trusses and purlins, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	m2	761	
	<u>Taking out and removing ironmongery</u>			
5	Writing boards	No	8	
6	Pinning boards	No	16	
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7	<u>Taking out and removal glass and mirrors</u> Glass from steel window including cleaning out rebates and preparing for new glass	m2	72	
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CONCRETE, FORMWORK AND REINFORCEMENT

SUPPLEMENTARY PREAMBLES

Cost of tests

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

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

Formwork

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

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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"

REINFORCED CONCRETE

30MPa/19mm concrete

8	Surface beds	m3	91
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TEST CUBES

9	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	16
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a wood float/steel trowel

10	Surface beds, slabs, etc	m2	609
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MOVEMENT JOINTS ETC (PROVISIONAL)

Expansion joints with bitumen impregnated softboard between concrete and brickwork

11	10mm Joints not exceeding 300mm high along edges of surface beds	m	609
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Saw cut joints

12	3 x 30mm Saw cut joints in top of concrete	m	609
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Frebric reinforcement

13	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	609.00
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MASONRY

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Reinforced brick lintels

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

SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar

14	Half brick walls in beamfilling.	m2	60
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ROOF COVERINGS (PROVISIONAL)

SUPPLEMENTARY PREAMBLES

Straight cutting

Descriptions of roof coverings are deemed to include for straight cutting

PROFILED METAL SHEETING AND ACCESSORIES

0,6mm Thick galvanised corrugated sheet steel sheeting fixed to timber purlins all in accordance with materials supplied and methods employed by the manufacturer

15	Roof coverings with pitches not exceeding 25 degrees	m2	761
16	Ridge capping 550mm girth	m	16
17	Hip capping 550mm girth	m	36

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	<u>Sundries</u>			
18	12" Thermal resistance sisalation laid on purlins	m2	761	
<u>CARPENTRY AND JOINERY</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>ROOFS ETC</u>				
<u>Plate nailed timber roof truss construction</u>				
The following is applicable in respect of roof trusses:				
Trusses are at maximum 1100mm centres Roof covering is 0,6mm corrugated iron sheeting on purlins Ceilings are 4mm sheeting on 38 x 38mm brandering .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences				
<u>Sawn softwood</u>				
19	Roof construction to double pitched roof with two hipped ends 40.5 x 10.7m and 1.66m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (Four Classroom Block)	No	2	
<u>EAVES, VERGES, ETC</u>				
<u>"Everite FC77" pressed fibre-cement</u>				
20	225mm x 12mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	334	
<u>DOORS, ETC</u>				
<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>				
21	Door 914 x 2032mm high	No	8	
<u>SCHOOL FURNITURE, ETC</u>				
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22	<p><u>Senior single combination school desk</u></p> <p>Sealed and varnished supawood top, mounted on a frame manufactured using powdercoated round tubing. Supplied in Knock Down Form 600mm x 400mm x 750mm</p>	No	280
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CEILING , ETC.

SUPPLEMENTARY PREAMBLES

Descriptions:

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete

Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere

CEILING CONSTRUCTION, CORNICES, ETC.

Insulation

23	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	609
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Sawn softwood

24	38 x 114mm Ceiling joists	m	210
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Wrought softwood

25	19 x 76mm Cornices nailed	m	280
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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

26	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	609
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27	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		
<u>IRONMONGERY</u>					
<u>CATCHES, CABIN HOOKS, ETC</u>					
<u>"Approved"</u>					
28	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	8		
<u>LOCKS</u>					
<u>"Approved"</u>					
29	Four lever lockset	No	8		
<u>SUNDRIES</u>					
30	CZ8730SC Door stop or equally approved plugged and screwed for wall or floor	No	8		
<u>STEEL CUPBOARDS</u>					
<u>Approved steel lockers with standard baked enamel finish</u>					
31	Double door steel cupboard 914 x 457 x 1828mm high with five shelves on a one brick course platform and bolted to brickwork	No	8		
<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>					
<u>"Vitrex"</u>					
32	Pinning boards 2400 x 1200mm high fixed to brickwork	No	16		
33	Vitrex system 1 000 folding type white writing board, with wall mounted centre board 4800 x 1140mm high with one centre board 2400 x 1140m high, two side boards 1200 x 1140mm high and two swing leaves each 1200 x 1140mm high plugged	No	8		
<u>METALWORK</u>					
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SUPPLEMENTARY PREAMBLES

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described

Drawings

Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc

ALUMINIUM WINDOWS, DOORS, ETC

AAAMSA guide

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)

Finish

The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407

Glass

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

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

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Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

PRESSED STEEL COMBINATION DOORS AND FRAMES

"Nty" doors or equally approved

34 "Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame

No 8

PLASTERING

SCREEDS

Screeds on concrete

35 20mm Thick on floors

m2 609

TILING

SUPPLEMENTARY PREAMBLES

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 RENOVATION OF 2 X 4 CLASSROOM BLOCKS
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<u>Descriptions</u>					
<p>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</p>					
<u>FLOOR TILING</u>					
<p>420 x 420 11.5mm kilimanjaro 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.</p>					
36	On floors and landings	m2	609		
37	Skirting formed of ceramic tile cut to 420 x 75mm high	m	280		
<u>FIRE APPLIANCES ETC</u>					
<u>"Chubb"</u>					
38	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2		
39	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	8		
<u>RAINWATER HARVEST TANKS</u>					
<u>"Jojo or similar"</u>					
40	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	4		
<u>EXISTING ABLUTION</u>					
<u>Money Provision:</u>					
41	Provide the sum of R100 000,00 (One hundred thousand rand) for the provision of not clearly defined at the time of tender			Item	
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GLAZING

GLAZING TO STEEL WITH PUTTY

4mm Clear float glass

42	Panes not exceeding 0,1 m2	m2	65	
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4mm Rough cast glass

43	Panes not exceeding 0,1m2	m2	7	
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PAINTWORK

PREPARATORY WORK TO EXISTING WORK

Previously painted wood surfaces

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

Previously painted metal surfaces

Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal

Previously painted plastered surfaces

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

PAINTWORK ETC TO NEW WORK

FLOATED PLASTER SURFACES WITH

ON FIBRE-CEMENT

One coat primer, one coat universal undercoat and two coats super acrylic PVA paint

44	On ceilings	m2	609	
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	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
45	On fascias and barge boards	m2	10	
	<u>ON WOOD</u>			
	<u>Sand down and apply to coats of "WOODOC 30" varnish</u>			
46	On doors	m2	26	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat Dulux Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint DWI006" or similar approved on previously painted steel in good condition</u>			
47	On windows with burglar bars	m2	72	
	<u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u>			
	<u>ON METAL</u>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat Dulux Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint DWI006" or similar approved on previously painted steel in good condition</u>			
48	On door frames	m2	13	
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
49	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	167	
	<u>15 MPa/20 mm concrete</u>			
50	Aprons cast in panels to falls	m3	17	

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 RENOVATION OF 2 X 4 CLASSROOM BLOCKS
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	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
51	Aprons to falls	m2	167
	<u>Smooth formwork to sides</u>		
52	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	167

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<p><u>BILL NO.1</u></p>			
<p><u>FOUNDATIONS</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>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</p>			
<p><u>Carting away of excavated material</u></p>			
<p>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</p>			
<p><u>Filling</u></p>			
<p>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</p>			
<p><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><u>ALL IN RAFT FOUNDATION</u></p>			
<p>Carried to Collection</p>			
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1 FOUNDATIONS</p>			
		R	

SITE CLEARANCE ETC

Site clearance

1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	497
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	497

EARTHWORKS

EXCAVATION, FILLING, ETC

Excavation in earth not exceeding 2m deep

3	Trenches	m3	89
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Extra over trench and hole excavations in earth for excavation in

4	Soft rock	m3	4
5	Hard rock	m3	9

Extra over all excavations for carting away

6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	72
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Risk of collapse of excavations

7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	348
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Keeping excavations free of water

8	Keeping excavations free of water		Item
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Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density

9	Under floors, steps, paving, etc	m3	73
10	Backfilling to trenches, holes, etc	m3	64

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Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 1
 FOUNDATIONS

	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>		
11	Under floors, steps, paving etc.	m3	84
	<u>Compaction of surfaces</u>		
12	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	258
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	4
	<u>SOIL POISONING</u>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
14	Under paving etc	m2	258
15	To bottoms and sides of trenches, etc.	m2	568
	<u>Soil insecticide</u>		
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	258
17	To bottoms and sides of trenches etc	m2	568
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>20MPa/19mm concrete</u>		
18	350 x 600 Reinforced concrete ground beam	m3	25
19	250 x 600 Reinforced concrete ground beam	m3	14

REINFORCEMENT

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Section No. 4
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 Bill No. 1
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	<u>High tensile steel reinforcement to structural concrete work</u>		
20	12mm Diameter bars	t	7.86
	<u>TEST CUBES</u>		
21	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	2.4
	<u>BRICKWORK</u>		
	<u>Brickwork of NFP bricks in class II mortar</u>		
22	One brick walls	m2	196
	<u>BRICKWORK SUNDRIES</u>		
	<u>Joint forming material in movement joints:</u>		
23	12mm Fibre board built in vertically between brick skins.	m2	0.4
	<u>Brickwork reinforcement</u>		
24	150mm Wide reinforcement built in horizontally	m	2,288
	<u>FACE BRICKWORK</u>		
	<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>		
25	Extra over brickwork for face brickwork	m2	35
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>		
26	Coping on top of one brick wall	m	6
	<u>WATERPROOFING</u>		
	<u>JOINT SEALANTS ETC</u>		
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27	<p><u>Silicone sealing compound including backing cord, bond breaker, primer, etc:</u></p> <p>12 x 20mm In vertical expansion joints including raking out expansion joint filler as necessary</p>	m	3		
<p style="text-align: center;">Carried to Collection</p>					R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1 FOUNDATIONS</p>					

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	<p><u>SECTION NO.4</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Formwork</u></p> <p>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</p> <p>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</p> <p style="text-align: right;">Carried to Collection</p> <p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT</p>			
			R	

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"

ALL IN RAFT SURFACES

UNREINFORCED CONCRETE

20MPa/19mm concrete

1	Surface beds cast in panels on waterproofing.	m3	50
2	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	122

REINFORCED CONCRETE

25MPa/19mm concrete

3	Slabs including beams and inverted beams	m3	1
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SMOOTH FORMWORK (DEGREE OF ACCURACY II)

Smooth formwork to soffits

4	Slabs	m2	2
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a steel trowel

5	Surface beds, slabs, etc	m2	258
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 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
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 CONCRETE, FORMWORK & REINFORCEMENT

TEST CUBES

6	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	4.8
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MOVEMENT JOINTS ETC

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

7	15mm Joints exceeding 300mm high	m	358
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REINFORCEMENT

Fabric reinforcement

8	Ref. 617 fabric reinforcement in concrete surface bed etc	m2	258
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<p><u>SECTION NO.4</u></p>			
<p><u>BILL NO. 3</u></p>			
<p><u>MASONRY</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>BRICKWORK</u></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><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p>Carried to Collection</p>			
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 3 MASONRY</p>			
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SUPERSTRUCTUREBrickwork of NFP bricks in class II mortar

1	Half brick walls	m2	353
2	Half brick walls in beamfilling.	m2	18
3	One brick walls	m2	346

BRICKWORK SUNDRIESJoint forming material in movement joints:

4	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	2
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Steel bar reinforcement

5	8mm Diameter mild steel bars built in horizontally	t	0.01
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Brickwork reinforcement

6	75mm Wide reinforcement built in horizontally	m	1,572
7	150mm Wide reinforcement built in horizontally	m	1,583

Turning pieces

8	110mm Wide turning piece to lintels etc	m	74
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Galvanised wire ties etc**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

9	Extra over brickwork for face brickwork	m2	559
10	Fair raking cutting	m	49

Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

11	Extra over brickwork for brick-on-edge header course lintel	m	32
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Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 3
 MASONRY

Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

12	110mm Wide sill set level and slightly projecting	m	32
13	220mm Wide sill set sloping and slightly protecting outside	m	32

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 MASONRY

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Item No	<u>SECTION NO.4</u>	Quantity	Rate	Amount
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	49	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	246	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	130	
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	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 4 WATERPROOFING			R

Item No	<u>SECTION NO.4</u>	Quantity	Rate	Amount
	<p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><u>PROFILED METAL SHEETING AND ACCESSORIES</u></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" 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></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	309	
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2	Ridge capping 550mm girth	m	27
3	Hip capping 550mm girth	m	20
	<u>Sundries</u>		
4	12" Thermal resistance sisalation laid on purlins	m2	309

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<p><u>SECTION NO.4</u></p>			
<p><u>BILL NO.6</u></p>			
<p><u>CARPENTRY AND JOINERY</u></p>			
<p><u>ROOFS ETC</u></p>			
<p><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></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>			
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<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 6 CARPENTRY AND JOINERY</p>			
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2 Bolts up to 12mm diameter:
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

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

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

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

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

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

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CARPENTRY AND JOINERY

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Truss loading

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"

Shop drawings, design and erection guarantee certificates

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

Dimensions

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

Erection

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

Design system

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

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

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

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2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

ROOFS, ETC.

The following in roof trusses to various buildings

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins
 Ceilings are 6mm sheeting on 38 x 38mm brandering
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 47.019 x 13.56m and 1.90m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (administration block)

No 1

Sawn softwood

2 38 x 114mm Wall plates

m 137

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 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 6
 CARPENTRY AND JOINERY

<u>Sundries</u>		
3	Two coats creosote on sawn timbers	m2 41
<u>EAVES, VERGES, ETC</u>		
<u>"Everite FC77" pressed fibre-cement</u>		
4	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m 88
<u>DOORS, ETC</u>		
<u>Semi-solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>		
5	44mm Door 813 x 2032mm high	No 14

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CARPENTRY AND JOINERY

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	<u>SECTION NO.4</u>			
	<u>BILL NO.7</u>			
	<u>CEILING , ETC.</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	244	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists	m	105	
	<u>Wrought softwood</u>			
3	19 x 76mm Cornices nailed	m	358	
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	256	
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	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 7 CEILINGS, ETC			

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

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	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>LOCKS</u>			
	<u>"Solid"</u>			
1	"Code 460/313" Blesbok four lever lockset	No	14	
	<u>SUNDRIES</u>			
	<u>"Solid"</u>			
2	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	14	
	<u>"Solid"</u>			
3	19mm Diameter chromium plated towel rail 600mm long incl. end brackets	No	4	
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>			
	Carried to Collection			
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 8 IRONMONGERY			R

"Vitrex" or equally approved

4 Pinning boards 2400 x 1350mm high fixed to brickwork

No

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IRONMONGERY

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IRONMONGERY

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></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><u>ALUMINIUM WINDOWS, DOORS, ETC</u></p> <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><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>			
	Carried to Collection			
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9 METALWORK</p>		R	

Glass

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

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

PRESSED STEEL DOOR FRAMES

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

1	Frame for door 813 x 2032mm high	No	14
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STEEL STRONGROOM DOORS, VENTILATORS, ETC

"Mutual"strongroom doors etc. suitable for 230mm walls fixed to brickwork or concrete

2	Door size 1860 x 750 x 100mm thick door frame complete	No	1
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STEEL WINDOWS, DOORS, ETC

Carried to Collection

R

Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 9
 METALWORK

<u>Standard residential windows with burglar bars to all sashes</u>		
3	Window code SWE418, size 1022 x 1264mm high	No 16
4	Window code SWE37S, size 1022 x 949mm high	No 2
5	Window code SWE31S, size 949 x 533mm high	No 8
<u>Purpose made residential aluminium windows with type B2 burglar bars to opening sashes</u>		
6	Purpose made window size, 1575 x 1200mm high	No 1
7	Purpose made window size, 1525 x 1300mm high	No 1
8	Purpose made window 1625 x 1300mm high	No 1
Carried to Collection		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9 METALWORK		R

Section No. 4

CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK

Bill No. 9

METALWORK

COLLECTION

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CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
Bill No. 9
METALWORK

R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	256	
	<u>GRANOLITHIC</u>			
	<u>Untinted granolithic on concrete</u>			
2	30mm Thick on floors and landings	m2	5	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
3	On walls	m2	1,019	
4	On narrow widths	m2	30	
	Carried Forward to Summary of Section No. 4			
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 10 PLASTERING			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>WALL TILING</u>			
	<u>200 x 200mm x 5mm White glazed ceramic wall tiles (or similar approved) to be laid with manufactures approved tiling adhesive and white tiling grout. CTM code: WS10SH100L</u>			
1	On walls	m2	28	
2	On narrow widths	m2	23	
	<u>FLOOR TILING</u>			
	<u>420 x420 11.5mm kilimanjaro 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.</u>			
3	On floors and landings	m2	255	
4	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	378	
	<u>TOILET PAPER HOLDERS ETC</u>			
	<u>"Vaal" white glazed ceramic</u>			
5	180 x 180 x 120mm Toilet paper holder (Ref. 653110)	No	4	
	Carried Forward to Summary of Section No. 4			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 11 TILING			

Item
No

Quantity

Rate

Amount

SECTION NO.4

BILL NO.12

PLUMBING AND DRAINAGE

SUPPLEMENTARY PREAMBLES

"Polycop" polypropylene pipes:

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

"Polylink" polypropylene pipes:

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

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

All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions

Carried to Collection

R

Section No. 4
CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
Bill No. 12
PLUMBING AND DRAINAGE

All pipe diameters are nominal external

Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

Vitrified clay pipes:

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

Carried to Collection

Section No. 4
CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
Bill No. 12
PLUMBING AND DRAINAGE

R

Fixing of pipes

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

Lead pipes and fittings

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Wire gratings

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

Septic tanks

Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

Carried to Collection

Section No. 4
CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
Bill No. 12
PLUMBING AND DRAINAGE

R

Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with 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

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Stainless steelbasins, sinks, wash troughs, urinals, etc.

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

Steel sectional water tanks

Tanks shall comply with SABS CKS 114

"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.

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

RAINWATER DISPOSAL

Carried to Collection

Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 12
 PLUMBING AND DRAINAGE

R

	<u>0.8mm Galvanised sheet iron with "Chromadek" finish on one side</u>				
1	125 x 100mm Seamless eaves gutters with beaded front edge	m	75		
2	Extra over eaves gutter for stopped end	No	4		
3	Extra over eaves gutter for angle	No	4		
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	5		
5	100mm Diameter rainwater pipes	m	12		
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	5		
7	Extra over rainwater pipe for shoe	No	5		
	<u>SOIL DRAINAGE</u>				
	<u>uPVC pipes</u>				
8	110mm Pipes laid in and including trenches not exceeding 1m deep	m	21		
9	110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	26		
	<u>Extra over uPVC pipes for fittings</u>				
10	110mm Bend	No	5		
11	110mm Junction	No	2		
12	110 x 50mm Reducing junction	No	2		
13	110mm Double junction	No	2		
	<u>Pre-cast concrete gulleys</u>				
14	110mm Dished gully not exceeding 1m deep with 150mm steel grate and standard concrete gully surround	No	1		
	<u>Sundries</u>				
15	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	1		
	Carried to Collection				
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12 PLUMBING AND DRAINAGE				R

16	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	1	
17	100mm Cast iron "ABC" cleaning eye	No	2	
18	Testing drainage pipe system		Item	
<u>SANITARY FITTINGS</u>				
<u>"Concor"</u>				
<u>"Citimetal" stainless steel</u>				
19	Series 300 single end bowl overlay sink, size 1200 x 535mm fitted to top of cabinet (cabinet e/m)	No	1	
<u>"Vaal"</u>				
20	Vaal Sanitaryware vitreous china 510 x 405mm rounded "Hibiscus" (or similar approved) basin with three semi-punched tap holes (i.e. available in zero, one, two or three tap hole configurations), integrated overflow, and chain stay hole through the centre semi-punched tap hole. Available in standard colour range.	No	4	
21	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426) or back inlet (code 705427). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1) and back inlet fittings (code 7054Z2) include a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets.	No	1	
22	Vaal Sanitaryware vitreous china "Daisy" (or similar approved) semi-close coupled 90° outlet open rim wash-down pan (code 751400) and matching 9 litre cistern (code 7116SC) complete with lid, fitments and flush pipe elbow	No	4	
<u>WASTE UNIONS ETC</u>				
<u>"Cobra Watertech"</u>				
23	38mm "Cobra 316" unslotted waste and plug with chain	No	1	
<u>TRAPS ETC</u>				
Carried to Collection				R
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12 PLUMBING AND DRAINAGE				

	<u>"Marley"</u>				
24	40mm Flexi butyl rubber trap with reseal "P" trap	No	1		
	<u>"Cobra Watertech"</u>				
25	Ref. 323 shower trap with CP grating	No	1		
	<u>"Cobra Watertech"</u>				
26	"Cobra Ref. 365/40" CP bottle trap	No	5		
	<u>TAPS, VALVES, ETC</u>				
	<u>"Cobra Watertech"</u>				
27	WALCRO metering under tile stopcock with 150 n.h.s vandal proof shower rose	No	1		
28	15mm Code KP265 CP Shower rose including 027CP overhead shower arm	No	1		
29	15mm CP connectors	No	6		
30	25mm 1001/125RB fullway gate valve	No	1		
31	"Cobra ref. 206-20" bib tap	No	2		
32	Ref. 232-10 Angle regulating valve with connection pipes etc.	No	2		
33	"Cobra Ref. 111-15" pillar tap	No	4		
34	"Cobra Ref. 232/350" Angle regulating valve	No	8		
35	Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	2		
36	Cobra Ref. FJ6.000 "Flushmaster Junior" exposed top entry urinal flushvalve complete with Cobra Ref. FJT5.4 connector and spray rose	No	1		
	<u>SANITARY PLUMBING</u>				
	<u>uPVC pipes</u>				
37	50mm Pipes	m	10		
	Carried to Collection				
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12 PLUMBING AND DRAINAGE				R

38	110mm Pipes	m	10
39	50mm Pipes laid in and including trenches n.e 1m deep	m	10
40	110mm Pipes laid in and including trenches not exceeding 1m deep	m	13
<u>Extra over uPVC pipes for fittings</u>			
41	50mm Bend	No	10
42	100mm Bend	No	3
43	50mm Junction	No	10
44	110mm Junction	No	3
45	110mm Reducing junction	No	3
46	110mm Pan connector	No	4
47	110mm Double junction	No	3
48	110mm "GI Two-way" vent valve	No	3

Sundries

49	Testing waste pipe system		Item
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WATER SUPPLIES

D.P.I Plastics HDPE Poly piping with Plasson impression couplings

50	50mm Pipes	m	26
<u>Extra over piping for Plasson fittings</u>			
51	50mm Elbow	No	6
52	50mm Tee	No	4
<u>Class 0 copper pipes</u>			
53	15mm Pipes	m	13
54	22mm Pipes	m	23

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Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 12
 PLUMBING AND DRAINAGE

	<u>Extra over class 0 copper pipes for capillary fittings</u>			
55	15mm Fittings	No	11	
56	22mm Fittings	No	7	
	<u>ELECTRIC WATER HEATERS</u>			
	<u>"Kwikot"</u>			
57	Kwikot 250 Litre Megaflo "i" Dual electric water heater (Code : MF150-D2-2A-I) complying with SABS 151-2002, overall size 1075 x 530 x 530mm high fitted with isolator switch, operating at 600kPa with temperature and pressure control valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1560 x 560mm polyethylene drip tray (Code : GSTP-1650) and 22mm pipe work including two 22mm vacuum breakers (Code : KH4.200CX) installed on hot and cold water supply. Installation to include a 22mm 600kPa Kwikot Mono pressure control valve (Code : KH3.116), all in accordance with SANS 10254, connected to single phase electrical power supply.	No	1	
	<u>TESTING</u>			
58	Testing water pipe system		Item	
	<u>FIRE APPLIANCES ETC</u>			
	<u>'Chubb'</u>			
59	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1	
60	9kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	2	
	<u>RAINWATER HARVEST TANKS</u>			
	<u>"Jojo or similar"</u>			
61	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	2	
	Carried to Collection			
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12 PLUMBING AND DRAINAGE			R

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 CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK
 Bill No. 12
 PLUMBING AND DRAINAGE
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 Bill No. 12
 PLUMBING AND DRAINAGE

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes not exceeding 0,1 m2	m2	25	
	<u>4mm Rough cast glass</u>			
2	Panes not exceeding 0,1m2	m2	7	
	<u>MIRRORS, ETC</u>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	4	
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	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 13 GLAZING			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BILL NO. 14</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FLOATED PLASTER</u>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	1,049	
2	On ceilings and beams	m2	2	
	<u>ON SMOOTH CONCRETE</u>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
3	On concrete columns	m2	5	
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
4	On ceilings	m2	256	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
5	On fascias and barge boards	m2	18	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
6	On door frames	m2	23	
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	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 14 PAINTWORK			R

7	On windows with burglar bars	m2	68
<u>ON WOOD</u>			
<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
8	On doors	m2	2

Carried to Collection

Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 14
 PAINTWORK

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Section No. 4

CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK

Bill No. 14

PAINTWORK

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 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO
 Bill No. 14
 PAINTWORK

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Item No	<u>SECTION NO.4</u>	Quantity	Rate	Amount
	<u>BILL NO.15</u>			
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	76	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	8	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	76	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	76	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	76	
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	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 15 CONCRETE APRONS			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO 4</u>			
	<u>BILL NO 16</u>			
	<u>PROVISIONAL AMOUNTS ETC</u>			
	<u>PROVISIONAL SUMS FOR SELECTED SUB-CONTRACT WORKS</u>			
	<u>HOLES THROUGH WALLS</u>			
	<u>Holes</u>			
1	Leave or form opening through one brickwall for pipe n.e 100mm diameter	No	4	
2	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	7	
	<u>SLEEVES</u>			
	<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
3	Sleeve not exceeding 250mm long	No	5	
4	Sleeve exceeding 250mm and not exceeding 500mm long	No	5	
	<u>Plastic sleeves for pipes exceeding 100mm and not exceeding 200mm diameter</u>			
5	Sleeve not exceeding 250mm long	No	4	
6	Sleeve exceeding 250mm and not exceeding 500mm long	No	4	
	Carried Forward to Summary of Section No. 4			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 16 BUILDER'S WORK			

Section No. 4
 CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK

SECTION SUMMARY - CONSTRUCTION OF MEDIUM ADMINISTRATION BLO

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 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.5</u></p>			
<p><u>BILL NO.1</u></p>			
<p><u>FOUNDATIONS</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>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</p>			
<p><u>Carting away of excavated material</u></p>			
<p>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</p>			
<p><u>Filling</u></p>			
<p>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</p>			
<p><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><u>ALL IN RAFT FOUNDATION</u></p>			
<p>Carried to Collection</p>			
<p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 1 FOUNDATIONS</p>			
		R	

SITE CLEARANCE ETC

Site clearance

1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	466
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	466

EARTHWORKS

EXCAVATION, FILLING, ETC

Excavation in earth not exceeding 2m deep

3	Trenches	m3	95
<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	5
5	Hard rock	m3	10

Extra over all excavations for carting away

6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	50
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Risk of collapse of excavations

7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	233
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Keeping excavations free of water

8	Keeping excavations free of water		Item
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Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density

9	Under floors, steps, paving, etc	m3	50
10	Backfilling to trenches, holes, etc	m3	43

Carried to Collection

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Section No. 5
 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 1
 FOUNDATIONS

	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>		
11	Under floors, steps, paving etc.	m3	91
	<u>Compaction of surfaces</u>		
12	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	337
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	12
	<u>SOIL POISONING</u>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
14	Under paving etc	m2	337
15	To bottoms and sides of trenches, etc.	m2	382
	<u>Soil insecticide</u>		
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	337
17	To bottoms and sides of trenches etc	m2	382
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>20MPa/19mm concrete</u>		
18	350 x 600 Reinforced concrete beam	m3	27
19	250 x 600 Reinforced concrete beam	m3	12

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 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 1
 FOUNDATIONS

	<u>High tensile steel reinforcement to structural concrete work</u>			
20	12mm Diameter bars	t	8.87	
	<u>TEST CUBES</u>			
21	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	4.0	
	<u>BRICKWORK</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
22	One brick walls	m2	135	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints:</u>			
23	12mm Fibre board built in vertically between brick skins.	m2	1	
	<u>Brickwork reinforcement</u>			
24	150mm Wide reinforcement built in horizontally	m	1,575	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>			
25	Extra over brickwork for face brickwork	m2	57	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price RR4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>			
26	Coping on top of one brick wall	m	41	
	<u>WATERPROOFING</u>			
	<u>JOINT SEALANTS ETC</u>			
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Silicone sealing compound including backing cord, bond breaker, primer, etc:

27 12 x 20mm In vertical expansion joints including raking out expansion joint filler as necessary

m

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	<p><u>SECTION NO.5</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Formwork</u></p> <p>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</p> <p>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</p> <p style="text-align: right;">Carried to Collection</p> <p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT</p>			R

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"

ALL IN RAFT SURFACES

UNREINFORCED CONCRETE

20MPa/19mm concrete

1	Surface beds cast in panels on waterproofing.	m3	55
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a steel trowel

2	Surface beds, slabs, etc	m2	370
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TEST CUBES

3	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	8.0
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MOVEMENT JOINTS ETC

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

4	15mm Joints exceeding 300mm high	m	125
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 CONCRETE, FORMWORK & REINFORCEMENT

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<p><u>SECTION NO.5</u></p>			
<p><u>BILL NO. 3</u></p>			
<p><u>MASONRY</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>BRICKWORK</u></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><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p>Carried to Collection</p>			
<p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 3 MASONRY</p>			
		R	

SUPERSTRUCTUREBrickwork of NFP bricks in class II mortar

1	Half brick walls in beamfilling.	m2	20
2	One brick walls	m2	354

BRICKWORK SUNDRIESJoint forming material in movement joints:

3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	5
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Steel bar reinforcementBrickwork reinforcement

4	75mm Wide reinforcement built in horizontally	m	115
5	150mm Wide reinforcement built in horizontally	m	1,735

Turning pieces

6	110mm Wide turning piece to lintels etc	m	105
---	---	---	-----

Galvanised wire ties etc

7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	64
---	--	----	----

FACE BRICKWORKFace bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

8	Extra over brickwork for face brickwork	m2	559
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Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

9	Extra over brickwork for brick-on-edge header course lintel	m	52
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 Bill No. 3
 MASONRY

Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

10	110mm Wide sill set level and slightly projecting	m	46
11	220mm Wide sill set sloping and slightly protecting outside	m	46

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Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	42	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	370	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	167	
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 4 WATERPROOFING			R

Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><u>PROFILED METAL SHEETING AND ACCESSORIES</u></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" 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></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	425	
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	<p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 5 ROOF COVERINGS, ETC</p>			

2	Ridge capping 550mm girth	m	53
3	Hip capping 550mm girth	m	12
4	Valley flashing 800mm girth	m	7
<u>Sundries</u>			
5	12" Thermal resistance sisalition laid on purlins	m2	425

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<p><u>BILL NO.6</u></p>			
<p><u>CARPENTRY AND JOINERY</u></p>			
<p><u>ROOFS ETC</u></p>			
<p><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></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>			
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<p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 6 CARPENTRY AND JOINERY</p>			
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2 Bolts up to 12mm diameter:
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

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

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

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

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

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

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Truss loading

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"

Shop drawings, design and erection guarantee certificates

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

Dimensions

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

Erection

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

Design system

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

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

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

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2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

ROOFS, ETC.

The following in roof trusses to various buildings

Allow for the preparation and submission of the following documents in respect of all buildings

- | | | |
|---|--|------|
| 1 | Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication | Item |
| 2 | Design certificate indicating the licensed programme used, SABS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc. | Item |
| 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 Representative/Agent | Item |

The following is applicable in respect of roof trusses:

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	Trusses are at maximum 1100mm centres Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins Ceilings are 6mm sheeting on 38 x 38mm brandering .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences			
4	Roof construction to double pitched roof with two hipped ends 38.25 x 10.66m and 1.90m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Classrooms)	No	1	
	<u>Sawn softwood</u>			
5	38 x 114mm Wall plates	m	153	
	<u>Wrought laminated timber</u>			
6	50 x 228mm Bearers bolted	m	38	
	<u>Sundries</u>			
7	Two coats creosote on sawn timbers	m2	167	
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
8	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	95	
	<u>DOORS, ETC</u>			
	<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>			
9	Door size 914 x 2032mm high including weatherboard	No	4	
	<u>SCHOOL FURNITURE, ETC</u>			
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Senior single combination school desk

10 Sealed and varnished supawood top, mounted on a frame manufactured using powdercoated round tubing. Supplied in Knock Down Form 600mm x 400mm x 750mm

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	<u>BILL NO.7</u>			
	<u>CEILING , ETC.</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	268	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists	m	88	
	<u>Wrought softwood</u>			
3	19 x 76mm Cornices nailed	m	125	
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	337	
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 7 CEILINGS, ETC			R

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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Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	<u>LOCKS</u>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	4	
3	"Code 460/313" Blesbok four lever lockset	No	8	
	<u>SUNDRIES</u>			
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 8 IRONMONGERY			R

"Solid"

4 CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor

No

8

PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC

"Vitrex" or equally approved

5 Pinning boards 2400 x 1200mm high fixed to brickwork

No

8

6 Vitrex system 1 000 folding type white writing board, with wall mounted centre board 4800 x 1140mm high with one centre board 2400 x 1140m high, two side boards 1200 x 1140mm high and two swing leaves each 1200 x 1140mm high plugged

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 IRONMONGERY

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IRONMONGERY

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></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><u>ALUMINIUM WINDOWS, DOORS, ETC</u></p> <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><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>			
	Carried to Collection			
	<p>Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 9 METALWORK</p>		R	

Glass

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

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include aluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

SUNDRY METALWORK

The following in identical steel support columns

1	Bolts	kg	25
2	10mm Diameter rawl bolts	No	52
3	76 x 76 x 3mm Tubular section columns 2975mm high	No	13
4	U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on	No	13
5	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	13

PRESSED STEEL COMBINATION DOORS AND FRAMES

Carried to Collection

R

Section No. 5
 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 9
 METALWORK

6	<p><u>"Nty" doors or equally approved</u></p> <p>"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame</p>	No	4
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STEEL WINDOWS, DOORS, ETC

7	<p><u>Standard residential windows with burglar bars to all sashes</u></p> <p>Window code 6/3/9, size 1143 x 972mm high</p>	No	36
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Carried to Collection

Section No. 5
 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 9
 METALWORK

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Section No. 5

CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK

Bill No. 9

METALWORK

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Section No. 5
 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 9
 METALWORK

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Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>FLOOR TILING</u>			
	<u>420 x420 11.5mm kilimanjaro 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.</u>			
1	On floors and landings	m2	338	
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	125	
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 11 TILING			

Item
No

Quantity

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SECTION NO.2

BILL NO.12

PLUMBING AND DRAINAGE

SUPPLEMENTARY PREAMBLES

"Polycop" polypropylene pipes:

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

"Polylink" polypropylene pipes:

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

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

All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions

Carried to Collection

R

Section No. 5
CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
Bill No. 12
PLUMBING AND DRAINAGE

All pipe diameters are nominal external

Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

Vitrified clay pipes:

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

Carried to Collection

Section No. 5
CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
Bill No. 12
PLUMBING AND DRAINAGE

R

Fixing of pipes

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

Lead pipes and fittings

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Wire gratings

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

Septic tanks

Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

Carried to Collection

Section No. 5
CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
Bill No. 12
PLUMBING AND DRAINAGE

R

Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with 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

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Stainless steelbasins, sinks, wash troughs, urinals, etc.

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

Steel sectional water tanks

Tanks shall comply with SABS CKS 114

"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.

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

RAINWATER DISPOSAL

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Section No. 5
CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
Bill No. 12
PLUMBING AND DRAINAGE

R

0.8mm Galvanised sheet iron with "Chromadek" finish on one side

1	125 x 100mm Seamless eaves gutters with beaded front edge	m	88
2	Extra over eaves gutter for stopped end	No	4
3	Extra over eaves gutter for angle	No	4
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	4
5	100mm Diameter rainwater pipes	m	50
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	6
7	Extra over rainwater pipe for shoe	No	6

FIRE APPLIANCES ETC

'Chubb'

8	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1
9	9kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	4

RAINWATER HARVEST TANKS

"Jojo or similar"

10	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	2
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Section No. 5
 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 12
 PLUMBING AND DRAINAGE

Section No. 5

CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK

Bill No. 12

PLUMBING AND DRAINAGE

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 Bill No. 12
 PLUMBING AND DRAINAGE

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Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes not exceeding 0,1 m2	m2	30	
	<u>4mm Rough cast glass</u>			
2	Panes not exceeding 0,1m2	m2	8	
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 13 GLAZING			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO. 14</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FLOATED PLASTER</u>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	380	
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings	m2	337	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
3	On fascias and barge boards	m2	25	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
4	On door frames	m2	27	
5	On windows with burglar bars	m2	79	
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	28	
7	On rails, bars, pipes, etc	m2	12	
	<u>ON WOOD</u>			
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				R

	<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
8	On doors	m2	1	
	<u>Three coats matt varnish</u>			
9	On doors	m2	30	
10	On roof timbers (laminated beam)	m2	20	
Carried to Collection				
Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 14 PAINTWORK				R

Section No. 5

CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK

Bill No. 14

PAINTWORK

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 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK
 Bill No. 14
 PAINTWORK

R

Item No	<u>SECTION NO.5</u>	Quantity	Rate	Amount
	<u>BILL NO.15</u>			
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	92	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	9	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	92	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	92	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	92	
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	Section No. 5 CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK Bill No. 15 CONCRETE APRONS			

Section No. 5

CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK

SECTION SUMMARY - CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK

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Item No	Quantity	Rate	Amount
<p><u>SECTION NO.6</u></p>			
<p><u>BILL NO.1</u></p>			
<p><u>FOUNDATIONS</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>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</p>			
<p><u>Carting away of excavated material</u></p>			
<p>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</p>			
<p><u>Filling</u></p>			
<p>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</p>			
<p><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><u>ALL IN RAFT FOUNDATION</u></p>			
<p>Carried to Collection</p>			
<p>Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 1 FOUNDATIONS</p>			
		R	

SITE CLEARANCE ETC

Site clearance

1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	70
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	70

EARTHWORKS

EXCAVATION, FILLING, ETC

Excavation in earth not exceeding 2m deep

3	Trenches	m3	6
<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	1
5	Hard rock	m3	2

Extra over all excavations for carting away

6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	9
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Risk of collapse of excavations

7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	42
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Keeping excavations free of water

8	Keeping excavations free of water		Item
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Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density

9	Under floors, steps, paving, etc	m3	9
10	Backfilling to trenches, holes, etc	m3	8

Carried to Collection

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 1
 FOUNDATIONS

	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, paving etc.	m3	4	
	<u>Compaction of surfaces</u>			
12	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	12	
	<u>Prescribed density tests on filling</u>			
	<u>SOIL POISONING</u>			
	<u>Weedkiller mixed in accordance to supplier's specifications</u>			
13	Under paving etc	m2	12	
14	To bottoms and sides of trenches, etc.	m2	68	
	<u>Soil insecticide</u>			
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	12	
16	To bottoms and sides of trenches etc	m2	68	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>20MPa/19mm concrete</u>			
17	350 x 600 Reinforced ground beams	m3	3	
	<u>High tensile steel reinforcement to structural concrete work</u>			
18	12mm Diameter bars	t	0.43	
	Carried to Collection			R
	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 1 FOUNDATIONS			

TEST CUBES

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	4.0
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BRICKWORK

Brickwork of NFP bricks in class II mortar

20	One brick walls	m2	24
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BRICKWORK SUNDRIES

Brickwork reinforcement

21	150mm Wide reinforcement built in horizontally	m	281
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FACE BRICKWORK

Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

22	Extra over brickwork for face brickwork	m2	7
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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 1
 FOUNDATIONS

Section No. 6

CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

Bill No. 1

FOUNDATIONS

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Section No. 6
CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
Bill No. 1
FOUNDATIONS

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Formwork</u></p> <p>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</p> <p>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</p> <p style="text-align: right;">Carried to Collection</p> <p>Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT</p>			
			R	

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"

ALL IN RAFT SURFACES

UNREINFORCED CONCRETE

20MPa/19mm concrete

1	Surface beds cast in panels on waterproofing.	m3	4
2	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	11

CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a steel trowel

3	Surface beds, slabs, etc	m2	12
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TEST CUBES

4	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	4.0
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MOVEMENT JOINTS ETC

Carried to Collection

Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 2
 CONCRETE, FORMWORK & REINFORCEMENT

R

<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
5	15mm Joints exceeding 300mm high	m	42
<u>DIVIDING STRIPS, ETC.</u>			
6	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	1
<u>REINFORCEMENT</u>			
<u>Fabric reinforcement</u>			
7	Ref. 617 fabric reinforcement in concrete surface bed etc	m2	12

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 2
 CONCRETE, FORMWORK & REINFORCEMENT

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

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 Bill No. 2
 CONCRETE, FORMWORK & REINFORCEMENT

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SECTION NO.6

BILL NO. 3

MASONRY

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Linings to concrete

Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

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

Reinforced brick lintels

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

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

SUPERSTRUCTURE

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Section No. 6
CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
Bill No. 3
MASONRY

<u>Brickwork of NFP bricks in class II mortar</u>				
1	Half brick walls	m2	33	
2	Half brick walls in beamfilling.	m2	3	
3	One brick walls	m2	45	
<u>BRICKWORK SUNDRIES</u>				
<u>Brickwork reinforcement</u>				
4	75mm Wide reinforcement built in horizontally	m	143	
5	150mm Wide reinforcement built in horizontally	m	244	
<u>Turning pieces</u>				
6	110mm Wide turning piece to lintels etc	m	13	
<u>Galvanised wire ties etc</u>				
<u>FACE BRICKWORK</u>				
<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>				
7	Extra over brickwork for face brickwork	m2	109	
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces</u>				
8	Extra over brickwork for brick-on-edge header course lintel	m	5	
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>				
9	110mm Wide sill set level and slightly projecting	m	4	
10	220mm Wide sill set sloping and slightly protecting outside	m	4	
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Section No. 6

CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

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 Bill No. 3
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Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	6	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	12	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	21	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 4 WATERPROOFING			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS ETC</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" 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	32	
2	Ridge capping 550mm girth	m	4	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 5 ROOF COVERINGS, ETC			

3	Hip capping 550mm girth	m	8
4	Valley flashing 800mm girth	m	8
<u>Sundries</u>			
5	12" Thermal resistance sisalation laid on purlins	m2	32

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CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

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ROOF COVERINGS, ETC

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>ROOFS ETC</u></p> <p><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></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>			
	Carried to Collection			
	<p>Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 6 CARPENTRY AND JOINERY</p>		R	

2 Bolts up to 12mm diameter:
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

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

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

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

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

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

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Truss loading

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"

Shop drawings, design and erection guarantee certificates

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

Dimensions

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

Erection

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

Design system

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

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

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

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2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

ROOFS, ETC.

The following in roof trusses to various buildings

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins
 Ceilings are 6mm sheeting on 38 x 38mm brandering
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 9.78 x 5.38m and 0.839m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Enviroloo)

No 1

Sawn softwood

2 38 x 114mm Wall plates

m 20

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
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 CARPENTRY AND JOINERY

Sundries

3	Two coats creosote on sawn timbers	m2	6
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EAVES, VERGES, ETC

"Everite FC77" pressed fibre-cement

4	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	12
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DOORS, ETC

44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding

5	Door size 914 x 2032mm high including weatherboard	No	2
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Semi-solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame

6	44mm Door 813 x 2032mm high	No	4
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 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 6
 CARPENTRY AND JOINERY

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

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CARPENTRY AND JOINERY

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Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO.7</u>			
	<u>CEILING , ETC.</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	12	
	<u>Sawn softwood</u>			
	<u>Wrought softwood</u>			
2	19 x 76mm Cornices nailed	m	42	
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	12	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 7 CEILINGS, ETC			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<u>LOCKS</u>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	2	
3	"Code 460/313" Blesbok four lever lockset	No	6	
	<u>SUNDRIES</u>			
	<u>"Solid"</u>			
4	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	6	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 8 IRONMONGERY			

"Solid"

5 19mm Diameter chromium plated towel rail 600mm long
incl. end brackets

No

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CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
Bill No. 8
IRONMONGERY

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CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

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IRONMONGERY

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></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><u>ALUMINIUM WINDOWS, DOORS, ETC</u></p> <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><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>			
	Carried to Collection			
	<p>Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 9 METALWORK</p>		R	

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

SUNDRY METALWORK

PRESSED STEEL DOOR FRAMES

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

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

PRESSED STEEL COMBINATION DOORS AND FRAMES

"Nty" doors or equally approved

2	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	2	
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 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 9
 METALWORK

R

STEEL WINDOWS, DOORS, ETC

Standard residential windows with burglar bars to all sashes

3 Window code NCT1S, size 533 x 949mm high No

4

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METALWORK

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 METALWORK

Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	13	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 10 PLASTERING			

Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>FLOOR TILING</u>			
	<u>420 x420 11.5mm kilimanjaro 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.</u>			
1	On floors and landings	m2	12	
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	45	
	<u>TOILET PAPER HOLDERS ETC</u>			
	<u>"Vaal" white glazed ceramic</u>			
3	180 x 180 x 120mm Toilet paper holder (Ref. 653110)	No	4	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 11 TILING			

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.6</u></p>			
<p><u>BILL NO.12</u></p>			
<p><u>PLUMBING AND DRAINAGE</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></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><u>"Polylink" polypropylene pipes:</u></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<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>Carried to Collection</p>			
<p>Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	

All pipe diameters are nominal external

Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

Vitrified clay pipes:

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

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CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
Bill No. 12
PLUMBING AND DRAINAGE

R

Fixing of pipes

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

Lead pipes and fittings

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Wire gratings

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

Septic tanks

Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

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Section No. 6
CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
Bill No. 12
PLUMBING AND DRAINAGE

R

Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with 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

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Stainless steelbasins, sinks, wash troughs, urinals, etc.

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

Steel sectional water tanks

Tanks shall comply with SABS CKS 114

"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.

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

RAINWATER DISPOSAL

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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 12
 PLUMBING AND DRAINAGE

R

0.8mm Galvanised sheet iron with "Chromadek" finish on one side

SOIL DRAINAGE

uPVC pipes

Extra over uPVC pipes for fittings

1	110mm Junction	No	5
2	110 x 50mm Reducing junction	No	1

Pre-cast concrete gulleys

3	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley sorround	No	1
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SANITARY FITTINGS

"Vaal"

4	Vaal Sanitaryware vitreous china 510 x 405mm rounded "Hibiscus" (or similar approved) basin with three semi-punched tap holes (i.e. available in zero, one, two or three tap hole configurations), integrated overflow, and chain stay hole through the centre semi-punched tap hole. Available in standard colour range.	No	2
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5	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426) or back inlet (code 705427). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1) and back inlet fittings (code 7054Z2) include a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets.	No	2
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6	Vaal Sanitaryware vitreous china "Daisy" (or similar approved) semi-close coupled 90° outlet open rim wash-down pan (code 751400) and matching 9 litre cistern (code 7116SC) complete with lid, fitments and flush pipe elbow	No	4
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TRAPS ETC

"Cobra Watertech"

7	"Cobra Ref. 365/40" CP bottle trap	No	4
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Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 12
 PLUMBING AND DRAINAGE

TAPS, VALVES, ETC

"Cobra Watertech"

8	"Cobra ref. 206-20" bib tap	No	1
9	Ref. 232-10 Angle regulating valve with connection pipes etc.	No	1
10	"Cobra Ref. 111-15" pillar tap	No	2
11	"Cobra Ref. 232/350" Angle regulating valve	No	5
12	Cobra Ref. FJ6.000 "Flushmaster Junior" exposed top entry urinal flushvalve complete with Cobra Ref. FJT5.4 connector and spray rose	No	2

SANITARY PLUMBING

uPVC pipes

13	50mm Pipes laid in and including trenches n.e 1m deep	m	3
14	110mm Pipes laid in and including trenches not exceeding 1m deep	m	17

Extra over uPVC pipes for fittings

15	110mm Pan connector	No	4
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WATER SUPPLIES

Class 0 copper pipes

16	22mm Pipes	m	14
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Extra over class 0 copper pipes for capillary fittings

17	15mm Fittings	No	7
18	22mm Fittings	No	5

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 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 12
 PLUMBING AND DRAINAGE

Section No. 6
 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

Bill No. 12

PLUMBING AND DRAINAGE

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Rough cast glass</u>			
1	Panes not exceeding 0,1m2	m2	2	
	<u>MIRRORS, ETC</u>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
2	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	2	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 13 GLAZING			

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CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

Bill No. 14

PAINTWORK

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 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL
 Bill No. 14
 PAINTWORK

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Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO.15</u>			
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	17	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	2	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	17	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	17	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	17	
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	Section No. 6 CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOIL Bill No. 15 CONCRETE APRONS			

Section No. 6

CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK

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1	FOUNDATIONS	269	
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<p><u>SECTION NO.7</u></p>			
<p><u>BILL NO.1</u></p>			
<p><u>FOUNDATIONS</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>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</p>			
<p><u>Carting away of excavated material</u></p>			
<p>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</p>			
<p><u>Filling</u></p>			
<p>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</p>			
<p><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><u>SITE CLEARANCE ETC</u></p>			
<p>Carried to Collection</p>			
<p>Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 1 FOUNDATIONS</p>			
		R	

<u>Site clearance</u>		
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2 246
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2 246
<u>EARTHWORKS</u>		
<u>EXCAVATION, FILLING, ETC</u>		
<u>Excavation in earth not exceeding 2m deep</u>		
3	Trenches	m3 58
4	Pit	m3 76
<u>Extra over trench and hole excavations in earth for excavation in</u>		
5	Soft rock	m3 3
6	Hard rock	m3 6
<u>Extra over all excavations for carting away</u>		
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3 31
<u>Risk of collapse of excavations</u>		
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2 145
<u>Keeping excavations free of water</u>		
9	Keeping excavations free of water	Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
10	Under floors, steps, paving, etc	m3 31
11	Backfilling to trenches, holes, etc	m3 27

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Section No. 7
 CONSTRUCTION OF ENVIRO LOO (16 SEATS)
 Bill No. 1
 FOUNDATIONS

	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>		
12	Under floors, steps, paving etc.	m3	14
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	42
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" test	No	4
	<u>SOIL POISONING</u>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
15	Under paving etc	m2	42
16	To bottoms and sides of trenches, etc.	m2	239
	<u>Soil insecticide</u>		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	42
18	To bottoms and sides of trenches etc	m2	239
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>20MPa/19mm concrete</u>		
19	Strip footings	m3	18
20	Strip footings cast in pit latrines holes	m3	12
	<u>30Mpa/19mm concrete</u>		
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	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 1 FOUNDATIONS		

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ROUGH FORMWORK (DEGREE OF ACCURACY III)

Permanent formwork to soffits:

21	Slabs propped up not exceeding 1.5m high	m2	16
22	Form 500mm radius opening in floor slab	No	16

SMOOTH FORMWORK (DEGREE OF ACCURACY II)

Smooth formwork to circular columns

REINFORCEMENT

Fabric reinforcement

23	Ref. S395 fabric reinforcement in concrete footings etc	m2	145
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BRICKWORK

Brickwork of NFP bricks in class II mortar

24	One brick walls	m2	84
25	One brick walls - in holes	m2	160
26	115mm Brick corbelling in septic tank	m2	172

BRICKWORK SUNDRIES

Joint forming material in movement joints:

Brickwork reinforcement

27	150mm Wide reinforcement built in horizontally	m	984
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FACE BRICKWORK

Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

28	Extra over brickwork for face brickwork	m2	25
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Section No. 7
 CONSTRUCTION OF ENVIRO LOO (16 SEATS)
 Bill No. 1
 FOUNDATIONS

Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

INTERNAL PLASTER

Cement plaster on brickwork:

29	On walls in septic tank	m2	160	
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PAINTWORK

FLOOR AND WALLS SEALERS

Minimum two coats 'approved black epoxy coat:

30	On internal textured plaster walls	m2	160	
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 CONSTRUCTION OF ENVIRO LOO (16 SEATS)
 Bill No. 1
 FOUNDATIONS

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CONSTRUCTION OF ENVIRO LOO (16 SEATS)

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<p><u>BILL NO.2</u></p>			
<p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></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><u>Formwork</u></p>			
<p>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</p>			
<p>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</p>			
<p>Carried to Collection</p>			
<p>Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT</p>			
		R	

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"

UNREINFORCED CONCRETE

20MPa/19mm concrete

1	Surface beds cast in panels on waterproofing.	m3	4
2	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	38

CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a steel trowel

3	Surface beds, slabs, etc	m2	112
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TEST CUBES

4	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	12.0
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MOVEMENT JOINTS ETC

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

5	15mm Joints exceeding 300mm high	m	148
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 Bill No. 2
 CONCRETE, FORMWORK & REINFORCEMENT

R

DIVIDING STRIPS, ETC.

6 6 x 38mm Angle iron step guard cast into concrete with
3 x 6mm anchors

m

4

REINFORCEMENT

Fabric reinforcement

7 Ref. S245 fabric reinforcement in concrete surface bed
etc

m2

112

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CONCRETE, FORMWORK & REINFORCEMENT

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<p><u>BILL NO. 3</u></p>			
<p><u>MASONRY</u></p>			
<p><u>SUPPLEMENTARY PREAMBLES</u></p>			
<p><u>BRICKWORK</u></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><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p>Carried to Collection</p>			
<p>Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 3 MASONRY</p>			
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SUPERSTRUCTUREBrickwork of NFP bricks in class II mortar

1	Half brick walls	m2	115
2	Half brick walls in beamfilling.	m2	9
3	One brick walls	m2	159

BRICKWORK SUNDRIESJoint forming material in movement joints:Brickwork reinforcement

4	75mm Wide reinforcement built in horizontally	m	500
5	150mm Wide reinforcement built in horizontally	m	852

Turning pieces

6	110mm Wide turning piece to lintels etc	m	47
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Galvanised wire ties etc**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

7	Extra over brickwork for face brickwork	m2	380
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Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

8	Extra over brickwork for brick-on-edge header course lintel	m	18
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Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

9	110mm Wide sill set level and slightly projecting	m	15
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10	220mm Wide sill set sloping and slightly protecting outside	m	15
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CONSTRUCTION OF ENVIRO LOO (16 SEATS)

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	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	23	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	112	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	73	
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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><u>PROFILED METAL SHEETING AND ACCESSORIES</u></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" 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></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	111	
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			R	

2	Ridge capping 550mm girth	m	12
3	Hip capping 550mm girth	m	27
4	Valley flashing 800mm girth	m	27
	<u>Sundries</u>		
5	12" Thermal resistance sisalition laid on purlins	m2	111

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 CONSTRUCTION OF ENVIRO LOO (16 SEATS)
 Bill No. 5
 ROOF COVERINGS, ETC

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ROOF COVERINGS, ETC

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Bill No. 5

ROOF COVERINGS, ETC

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>ROOFS ETC</u></p> <p><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></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>			
	Carried to Collection			
	<p>Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 6 CARPENTRY AND JOINERY</p>		R	

2 Bolts up to 12mm diameter:
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

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

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

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

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

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

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Truss loading

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"

Shop drawings, design and erection guarantee certificates

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

Dimensions

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

Erection

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

Design system

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

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

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

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2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

ROOFS, ETC.

The following in roof trusses to various buildings

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins
 Ceilings are 6mm sheeting on 38 x 38mm brandering
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 9.78 x 5.38m and 0.839m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (waterborne)

No 2

Sawn softwood

2 38 x 114mm Wall plates

m 69

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Section No. 7

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Item No	<u>SECTION NO.2</u>	Quantity	Rate	Amount
	<u>BILL NO.7</u>			
	<u>CEILING , ETC.</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	112	
	<u>Sawn softwood</u>			
	<u>Wrought softwood</u>			
2	19 x 76mm Cornices nailed	m	148	
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	112	
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	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 7 CEILINGS, ETC			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CATCHES, CABIN HOOKS, ETC</u>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	<u>LOCKS</u>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	4	
3	"Code 460/313" Blesbok four lever lockset	No	20	
	<u>SUNDRIES</u>			
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	<u>"Solid"</u>		
4	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	20
	<u>"Vaal Paragon"</u>		
5	32mm Type 9 back grab rail 800mm long plugged	No	3
6	32mm Type 8 side grab rail 900mm girth plugged	No	3
	<u>BATHROOM FITTINGS</u>		
	<u>"Kimberley-Clark" or Simlilar</u>		
7	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	14

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 IRONMONGERY

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IRONMONGERY

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></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><u>ALUMINIUM WINDOWS, DOORS, ETC</u></p> <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><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>			
	Carried to Collection			
	<p>Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 9 METALWORK</p>		R	

Glass

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

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

WELDED SCREENS, GATES, ETC

Gates to external doors

1 Single gate and frame 813 x 2032mm high complete as per attached drawing

No 4

PRESSED STEEL DOOR FRAMES

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

2 Frame for door 813 x 2032mm high

No 16

STEEL WINDOWS, DOORS, ETC

Carried to Collection

R

Section No. 7
 CONSTRUCTION OF ENVIRO LOO (16 SEATS)
 Bill No. 9
 METALWORK

Standard residential windows with burglar bars to all sashes

3

Window code NCT1S, size 533 x 949mm high

No

16

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METALWORK

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METALWORK

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 METALWORK

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Item No	<u>SECTION NO.7</u>	Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	46	
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	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 10 PLASTERING			

Item No	<u>SECTION NO.7</u>	Quantity	Rate	Amount
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>FLOOR TILING</u>			
	<u>420 x420 11.5mm kilimanjaro 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.</u>			
1	On floors and landings	m2	43	
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	159	
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	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 11 TILING			

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SECTION NO.7

BILL NO.12

PLUMBING AND DRAINAGE

SUPPLEMENTARY PREAMBLES

"Polycop" polypropylene pipes:

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

"Polylink" polypropylene pipes:

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

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

All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions

Carried to Collection

R

Section No. 7
CONSTRUCTION OF ENVIRO LOO (16 SEATS)
Bill No. 12
PLUMBING AND DRAINAGE

All pipe diameters are nominal external

Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

Vitrified clay pipes:

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

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Section No. 7
CONSTRUCTION OF ENVIRO LOO (16 SEATS)
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PLUMBING AND DRAINAGE

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Fixing of pipes

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

Lead pipes and fittings

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Wire gratings

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

Septic tanks

Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

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Section No. 7
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Bill No. 12
PLUMBING AND DRAINAGE

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Laying, backfilling, bedding, etc. of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with 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

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Stainless steelbasins, sinks, wash troughs, urinals, etc.

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

Steel sectional water tanks

Tanks shall comply with SABS CKS 114

"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.

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

RAINWATER DISPOSAL

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	<u>0.8mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	125 x 100mm Seamless eaves gutters with beaded front edge	m	150	
2	Extra over eaves gutter for stopped end	No	8	
3	Extra over eaves gutter for angle	No	8	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	10	
5	100mm Diameter rainwater pipes	m	24	
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	10	
7	Extra over rainwater pipe for shoe	No	10	
	<u>SANITARY FITTINGS</u>			
	<u>White glazed fireclay or vitreous china coupling with SABS specification 497 in</u>			
8	"Vaal hibiscus" wash hand basin bolted to wall including all fittings and necessary pipework	No	8	
9	Elbow taps	No	8	
	<u>FITTINGS</u>			
10	19mm chrome plated push button taps to wash troughs	No	8	
	<u>Sundires</u>			
11	Stainless-steel SHE-BIN plugged to walls	No	8	
	<u>Plumbing and drainage</u>			
12	Enviro-loo 1040 industrial CER/ABS-V1 (Code FG-1040 STDCA/A)	No	16	
13	Enviro-Loo system: New Urinal complete including 3 pans (Code FG-862B)	No	1	
	<u>SUPERVISION OF INSTALLATION OF "ENVIRO LOO"</u>			
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The following nominated sub - contractor amounts are for work to be carried out by nominated sub-contractors:Supervision of installation of "enviro loo":

14 Two site visits to be made by the "Enviro loo" suppliers to assist/support the contractor in the installation of the "enviro loo" and a final inspection to be ascertain the enviro loo has been installed corretly at which time a Certificate of compliance should be issued between the Department of Public Works Limpopo and Enviro Loo Options Limpopo. (CONTRACTOR SHOULD NOT PRICE FOR THIS ITEM

Item 2,000.00

15 Profit and attendance for above

Item

WORK IN CONNECTION PLUMBING AND DRAINAGE BILL

BUILDER'S WORK

Builder

16 Leave or form opening through one brickwall for pipe n.e 100mm diameter

No 8

17 Leave or form opening through one brickwall for pipe exceeding 100 and not exceeding 200mm diameter

No 8

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Bill No. 12

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	<u>SECTION NO.7</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Rough cast glass</u>			
1	Panes not exceeding 0,1m2	m2	32	
	<u>MIRRORS, ETC</u>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
2	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	8	
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	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 13 GLAZING			

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	<u>SECTION NO.7</u>			
	<u>BILL NO. 14</u>			
	<u>PAINTWORK</u>			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON FLOATED PLASTER</u>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	418	
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings	m2	159	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
3	On fascias and barge boards	m2	15	
	<u>ON METAL</u>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
4	On door frames	m2	33	
5	On windows with burglar bars	m2	16	
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	13	
	<u>ON WOOD</u>			
	Carried to Collection			
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	PAINTWORK			
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	<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
7	On doors	m2	2	
	<u>Three coats matt varnish</u>			
8	On doors	m2	14	
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Section No. 7

CONSTRUCTION OF ENVIRO LOO (16 SEATS)

Bill No. 14

PAINTWORK

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 Bill No. 14
 PAINTWORK

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Item No	<u>SECTION NO.7</u>	Quantity	Rate	Amount
	<u>BILL NO.15</u>			
	<u>APRONS AROUND BUILDINGS</u>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	59	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	6	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	59	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	59	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	59	
	Carried Forward to Summary of Section No. 7			
	Section No. 7 CONSTRUCTION OF ENVIRO LOO (16 SEATS) Bill No. 15 CONCRETE APRONS			R

Section No. 7
 CONSTRUCTION OF ENVIRO LOO (16 SEATS)

SECTION SUMMARY - CONSTRUCTION OF ENVIRO LOO (16 SEATS)

Bill No		Page No	Amount
1	FOUNDATIONS	315	
2	CONCRETE, FORMWORK & REINFORCEMENT	319	
3	MASONRY	322	
4	WATERPROOFING	323	
5	ROOF COVERINGS, ETC	326	
6	CARPENTRY AND JOINERY	332	
7	CEILINGS, ETC	333	
8	IRONMONGERY	336	
9	METALWORK	340	
10	PLASTERING	341	
11	TILING	342	
12	PLUMBING AND DRAINAGE	349	
13	GLAZING	350	
14	PAINTWORK	353	
15	CONCRETE APRONS	354	

Carried to Final Summary

Section No. 7
 CONSTRUCTION OF ENVIRO LOO (16 SEATS)

R

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

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

Joinery Fittings (Fixed).

1 Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists

Item 500,000.00

2 Profit

Item

3 Attendance

Item

Joinery Fittings (Movable).

4 Provide the amount of R300 000.00 (Three hundred thousand rands) for joinery fittings by Specialists

Item 300,000.00

Carried to Collection

R

Section No. 8
PROVISIONAL SUMS
Bill No. 1
PROVISIONAL SUMS

Section No. 8

PROVISIONAL SUMS

Bill No. 1

PROVISIONAL SUMS

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

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357

358

Carried to Final Summary

R

Section No. 8
 PROVISIONAL SUMS
 Bill No. 1
 PROVISIONAL SUMS

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	147	
2	DEMOLITIONS	148	
3	RENOVATION OF 2 X 4 CLASSROOM BLOCKS	162	
4	CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK	215	
5	CONSTRUCTION OF 1 X 4 CLASSROOM BLOCK	264	
6	CONSTRUCTION OF 1 x 4 SEATS WATERBORNE TOILET BLOCK	309	
7	CONSTRUCTION OF ENVIRO LOO (16 SEATS)	355	
8	PROVISIONAL SUMS	359	
	Sub -Total (PART A - MAIN BUILDING WORKS)		R
	<u>PART B - CIVIL WORKS</u>		
	TENDER AMOUNT CARRIED OVER FROM PART B (CIVIL WORKS)	Item	
	<u>PART C - ELECTRICAL WORKS</u>		
	TENDER AMOUNT CARRIED OVER FROM PART C (ELECTRICAL WORKS)	Item	
	Sub Total - BUILDING COSTS		R
	<u>SPECIAL CONDITIONS</u>		
	Provide the sum of R800 000.00 (Eight hundred thousand rand) for fluctuations in cost	Item	800,000.00
	<u>CONTINGENCIES</u>		
	<u>Contingencies:</u>		
	Provide the sum of R800 000.00 (Eight hundred thousand rand) for contingencies to be used at the discretion of the Representative / Agent and deducted in whole or in part if not required.	Item	800,000.00
	Carried Forward		R

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
	Brought Forward		R
	Sub Total before VAT		R
	Value Added Tax		R
	Carried to Form of Tender		R



C4.3 CIVIL WORKS

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SCHEDULE 1: EARTHWORKS (ROADS AND SUBGRADE)				
1	SANS	EARTHWORKS				
1,1		CLEARING AND GRUBBING				
1.1.1	1200 D 8.3.3	Clear and grub to 100mm depth over the area. stockpile as topsoil berm as directed by the Engineer.	m ²	300,00		
1.1.2	1200 D 8.3.3	Excavate to the line and level as shown on the drawings and place stockpile materials as directed by the Engineer.	m ³	135,00		
1,2		TREATMENT OF ROAD-BED				
1.2.1	8.3.3(a)	Road-bed preparation and compaction of material compacted to 93% MOD AASHTO maximum density	m ³	21,00		
1.2.2	8.3.3(b)	In-place treatment of road-bed in intermediate or hard material				
		Ripping	m ³	21,00		
1,3		EARTHWORKS				
1.3.1	8.3.4	Cut to fill				
		Compact to 90 % mod. AASHTO maximum density	m ³	21,00		
		Selected layer compacted to 93 % mod. AASHTO maximum density	m ³	21,00		
1.3.2	8.3.6	Extra-over items 1.3.1 inclusive for excavating and breaking down material in:				
		Intermediate excavation	m ³	40,00		
		Hard excavation	m ³	10,00		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1.3.3	8.3.7	Cut to spoil from				
		Soft excavation	m ³	50,00		
		Intermediate excavation	m ³	20,00		
		Hard excavation	m ³	20,00		
1.3.4	8.3.8	Removal of oversize material	m ³	10,00		
1,4	SABS 1200 DM	SUNDRIES				
	8.3.10	Materials bladed to windrow	m ³	135,00		
	8.3.11	Extra-over items 3.7 and 3.8 for temporary stockpiling of material	m ³	30,00		
		Construction of storm water berm along the outside perimeter fence on the South Eastern side of the site	m ³	0,00		
1,5	SABS 1200 ME	SECTION : SUBBASE				
	8.3.1	Construct gravel wearing course with material from borrow pits in all materials				
		150mm to main carriageways	m ³	0,00		
		150mm to perimeter roads	m ³	0,00		
	8.3.4	Extra over items .1 to .2 inclusive for class of excavation				
		Intermediate excavation	m ³	0,00		
		Hard rock excavation	m ³	0,00		
	8.3.5	Process material by means of:				
		Heavy grid rolling	m ³	0,00		
		Mechanical modification	m ³	0,00		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1,6	SANS 1200 MFL	BASE				
	8.3.1	Construct base with material from borrow pit				
		Stabilized base using material from borrow 150mm to 95% mod AASHTO	m ³	0,00		
1,7	8.3.4	Stabilizing Agent				
		(b) Portland Cement	t	0,00		
1,8	SANS 1200 MJ	SEGMENTED BLOCK PAVING TO THE ACCESS ROAD				
	8.2.2	80mm Type S-A 35mPa for roadway (Grey Colouring)	m ²	0,00		
	8.2.2	60mm Type S-A 35mPa for roadway (Grey Colouring)	m ²	300,00		
	8.2.1	The construction of edge restraints	m	0,00		
1,8	SANS 1200 MK	KERBING AND CHANNELLING				
	8.2.2	Supply, bed, lay, & joint concrete sections:				
1.8.1		400X200 Concrete edge strip (Class 20/19 Concrete Strength).				
		a) 1m Length on straight	m	10,00		
		b) 330mm Length on curves	m	10,00		
1.8.2		300X150 Barrier Kerb (SABS 927 Fig 3).	m	80,00		
1.8.3		Mountable Kerb (SABS 927 Fig 3).	m	10,00		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1,9		EROSION PROTECTION (PROVISIONAL)				
		Top soiling from stockpile to a depth of 75mm	m	0,00		
		Planting of grass runners including spreading of	m	0,00		
1.20	SABS 1200	SECTION : ANCILLARY ROADWORKS				
1.20.1		Permanent road signs				
	8.3.1	<u>Sign faces with painted or galvanized (as stated) background. Symbols, characters, legend and borders in engineering grade, retroreflective material with signboards constructed from :</u>				
		c) Sheet steel (1.6 mm thick) of area Over Up to:				
		up to 2m ²	m ²	0,00		
		2m ² to 10m ²	m ²	0,00		
1.20.2	8.3.2	Extra-Over Item .2 for using				
		a) Engineering grade retroreflective background (Dwg ...) (Prov.)	m ²	0,00		
1.20.3	8.3.3	Sign Supports				
		c) Timber diameter 145 mm - 175 mm pine	m	0,00		
	8.1.1 & 8.3.4	Excavation for sign supports and backfilling with in-situ material	m ³	0,00		
	8.3.7	Statutory signs, street names, and the like, supplied and erected completely	No.	0,00		
1,21		SUBSOIL DRAINS				
1.21.1	1200 DK 8.2	Supply and install A4 Bidim Geosynthetic materials to the subsoil drains , as per drawings.	m ²	Rate Only		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1.21.2	1200 DK 8.2	Supply and install 110mm Class 6 HDPE perforated pipe to the subsoil drains outlet, as per drawings.	m	-		
1.21.4	1200 DK 8.2	Supply and install 1,5mm smooth HDPE Geomembrane as the liner to the channel, as per drawings.	m ²	-		
1.21.5	1200 DK 8.2	Supply and install A7 Bidim Geosynthetic proetction layer to channel liner, as per drawings.	m ²	-		
CONCRETE						
1.21.7	SANS 1200 AH 8.4.3	Supply, place and shape 25MPa concrete in hyson cells on the A10 Bidim Geosynthetic proetction layer , as per drawings.	m ³	-		
1.21.8	8.4.3	Supply, place and shape 25MPa concrete in hyson cells in the leachate outlet channel , as per drawings.	m ³	-		
1,22	STORMWATER MANAGEMENT					
1.22.1	SANS	EARTHWORKS				
1.22.2	EXCAVATIONS					
	1200 D 8.3.2	Excavate and prepare all cut off trenches and berms around the site as shown on the drawings and as directed by the Engineer.	m ³	350,00		
		Disposal of unsuitable or surplus material off site	m ³	350,00		
		Restricted excavation in all materials and use for backfill or dispose of unsuitable/ surplus material off site for:	m ³	55,00		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
	SANS 1200 G	Concrete				
	8.4.1	Mass concrete backfilling to replace unsuitable material, prescribed mix, Grade 10MPa/20 mm	m ³			
	8.4.2	Blinding layer, 50 mm minimum, prescribed mix, Grade 15MPa/20 mm to side channels, 1.5m x 1.2m below scour channel and pipe work	m ²	150,00		
	8.4.3	Strength concrete Grade 25 MPa/20 mm for:				
		Concrete Channels	m ³	140,00		
	8.1.1	Formwork				
	8.2.5	Rough, vertical, circular, maximum height 300 mm.	m	1 850,00		
	8.2.5	Smooth, circular, vertical, 175 mm high to outer edge of base footing, (including forming of drainage lips with 110 mm dia drips)	m	0,00 0,00		
	PSA8-11	Forming of drainage lips with 110 mm dia drips as per detail, Drawing	No	0,00		
	8.4.4	Unformed surface finishes				
		Steel float finish	m ²	0,00		
	8,3	Reinforcement				
		High tensile steel bars for bars of diameter:				
		10 mm to 16 mm	t	0,00		
		Mild steel bars for bars of diameter:				
		8 mm to 16 mm	t	0,00		
		Welded mesh:				
		Ref 617	m ²	1 150,00		
TOTAL CARRIED FORWARD						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
	8,5	Joints				
	SPEC RC 8.2.3.1	a) Vertical construction joints in walls complete with 10mm softboard to protect water proofing as per detail	m			
	8.2.5	Supply, Lay, Bed, and Backfill Stormwater Pipes				
		300mm diam. concrete stormwater pipes	m			
		450mm diam. concrete stormwater pipes	m			
	8.2.7	Draw Pit/Manholes Complete with TYPE 4 cover and frame				
		Draw pit 1500 mm x 1500 mm	No.			
		Covered Steel canopy	No			
TOTAL CARRIED TO SUMMARY						

SCHEDULE3: FENCING

Item No.	Payment Refers	Short Description	Unit	Quantity	Rate	Amount
2	SABS 1200A	SCHEDULE 2 -STEEL PALISADE FENCING				
2,1	PCC-4.1	Steel palisade fencingn 2,4m high according to specification including excavations, foundation concreting, posts, pales and ground beams. All as per drawing.	m	1 000,00		
2,2	PCC-4.1	Supply and install according to specification a 6m wide vehicular gate	No	1,00		
2,3	PCC-4.1	Supply and install according to specification 1.5m wide pedestrian gate as per drawing	No	1,00		
2,4	PCC-4.1	Repainting of the existing fence	m ²	0,00		
SUB - TOTAL CARRIED TO SUMMARY						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
		SCHEDULE 3 : WATER SUPPLY PIPELINES AND WATER SOURCE				
	SABS 1200DB	EARTHWORKS : PIPE TRENCHES				
3,1		SITE CLEARANCE				
3.1.1	8.3.1(a)	Clear 3m wide vegetation and trees of girth up to 1m	m	220,00		
3.1.2	8.3.1(b)	Remove trees over 1 m and up to 2 m girth	No.	10,00		
3,2	PSDB12	EXCAVATION				
3.2.1		Excavate in all materials for trenches for pipes with a diameter between 20 mm and 200 mm, backfill compact and dispose of surplus/unsuitable material				
		Up to 1,5m in depth	m ³	86,00		
3.2.1.1	8.3.2(b)	Extra-over item 3.2.1 incl. for excavation (provisional) in :				
		a) Intermediate material	m ³	40,00		
		b) Hard rock material	m ³	10,00		
3.2.1.2		Extra over Item 3.2.1				
		a) Backfill and compact by means of labour intensive construction methods in layers of 200mm compacted to 90% mod AASHTO	m ³	29,00		
3.2.1.3	8.3.2(c)	Excavate unsuitable material from trench bottom and dispose thereof within the freehaul distance (Provisional)	m ³	0,00		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
3.2.2		EXCAVATION ANCILLARIES	TOTAL BROUGHT FORWARD			
3.2.2.1	8.3.3.1(a)	Imported backfill materials from designated borrow pits (Only if approved by Engineer)	m ³	0,00		
3.2.2.2	8.3.3.2	Opening up and closing down of designated borrow pit	No.	-		
3.2.2.3	8.3.3.3	Compaction in road reserves	m ³	0,00		
3.2.2.4	8.3.3.4	Overhaul :				
		a) Short haul	m ³	-		
		b) Truck haul	m ³ /km	-		
3.2.3		FINISHING				
	8.3.6.1	Reinstate road surfaces complete with:				
		a) Gravel	m ²	-		
		b) 30mm premix	m ²	-		
3.2.4	SABS1200L B	PROVISION OF BEDDING (PIPES)				
3.2.4.1	8.2.1	Provision of bedding material from trench excavations				
		a) Selected granular material	m ³	36,00		
		b) Selected fill material	m ³	29,00		
3.2.4.2		Provision of bedding material by importation from other necessary excavations (freehaul within the village boundaries)				
		a) Selected granular material	m ³	36,00		
		b) Selected fill material	m ³	29,00		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
3.2.4.4	8.2.3	Concrete bedding	m ³	0,00		
3.2.4.5	8.2.4	Encasing of pipes in Class 19/20 concrete	m ³	0,00		
3.2.4.6	8.2.5	Overhaul of material for bedding cradle and selected fill blanket	m ³ km	0,00		
3.2.5	1200L	PIPEWORK				
	8.2.1	Supply, lay, joint, bed, test and disinfect the following pipes complete with couplings to the relevant SABS standards including short lengths (all uPVC pipes to comply with DWS1160)				
3.2.5.1		uPVC pipes				
		a) 75 Class 12	m	-		
		b) 75 Class 9	m	-		
3.2.5.2		HDPE pipes Type IV				
		a) 50 mm class 4	m	220,00		
		b) 50 mm class 6	m	-		
		c) 50 mm class 10	m	-		
3.2.5.3		GMS pipes (medium duty)				
		a) 15 mm Ø	m	-		
		b) 20 mm Ø	m	-		
		c) 25 mm Ø	m	-		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
3.2.6		VALVES	TOTAL BROUGHT FORWARD			
3.2.6.1		Line valve assemblies. Extra over item F.6 for supplying, installing, bedding and testing line valve assemblies as per Drawing complete cutting of pipes and couplings included (all valves to comply with DWS 2510)				
		a) 50 mm	No.	0,00		
		b) 75 mm	No.	0,00		
3.2.6.2		Scour valve assemblies Extra over item F.6 for supplying, installing, bedding and testing scour valve assemblies as per Drawing complete. Scour tee, cutting of pipes and couplings included				
		a) On 50 mm dia main	No.	10,00		
3.2.6.3		Ditto for 40 Ø and smaller pipes as detailed in Drawing for the following diameters				
		a) 25 Ø	No.	-		
		b) 32 Ø	No.	-		
		c) 40 Ø	No.	-		
3.2.6.4		Air valve assemblies Extra over item D.6 for supplying, installing and testing air valve assemblies as per Drawing complete				
		a) On 50 mm and 64 mm Ø main	No.	1,00		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
3.2.7		DRAW-OFFS				
3.2.7.1		Complete supply, install and test single rudimentary domestic drawoff standard type as detailed in Drawing with :				
		i) 2 Taps	No.	8,00		
		ii) 4 Taps	No.	0,00		
3.2.7.2		Complete supply, install and test multiple domestic draw off : standard type as detailed in Drawing	No.	4,00		
3.2.7.3		Complete supply, install and test garden standpipe as detailed in Drawing	No.	4,00		
3.2.8		FITTINGS AND SPECIALS				
		Extra over item F.6 for supplying, installing, bedding and testing in PVC mains the following fittings and specials complete. Cutting of pipes and couplings included				
3.2.8.1		Fittings of µPVC, cast iron or aluminium				
		Bends 90 °				
		a) 75 Ø	No.	-		
		Bends 45 °				
		b) 75 Ø	No.	-		
		Bends 22 °				
		c) 75 Ø	No.	-		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		Tees				
		e) 75 x 75 mm	No.	-		
		Reducers				
		f) 90 x 75 mm	No.	-		
		g) 110 x 75 mm	No.	-		
		End caps				
		h) 63 mm Ø	No.	-		
		i) 75 mm Ø	No.	-		
		Double Socket				
		j) 75 mm Ø	No.	-		
		Repair Coupling				
		k) 63 mm Ø	No.	-		
		l) 75 mm Ø	No.	-		
		Adaptor for steel (BSP) pipes				
		m) 75 x 50 mm BSP	No.	-		
		n) 75 x 80 mm BSP	No.	-		
		Flanged adaptor				
		o) 75 mm Ø	No.	-		
		Saddle drilled 32 BSP				
		p) 75 mm Ø	No.	-		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.9		FITTINGS FOR THREADED STEEL, MALLEABLE STEEL/IRON PIPE SPECIALS AND FITTINGS Screwed flanges a) 32 ND b) 40 ND Nipple a) 15 ND b) 20 ND c) 25 ND Tee a) 15 x 15 ND b) 20 x 20 ND c) 25 x 25 ND d) 32 x 32 ND Socket Union a) 15 ND b) 20 ND c) 25 ND d) 32 ND Reducing Bush a) 20 x 15 ND b) 25 x 15 ND c) 25 x 20 ND Bend a) 90° M/F : 15 Ø b) 90° M : 15 Ø c) 90° M/F : 20 Ø	TOTAL BROUGHT FORWARD				
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
			TOTAL BROUGHT FORWARD				
		d) 90° M : 20 Ø	No.	-			
		e) 90° M/F : 25 Ø	No.	-			
		f) 90° M : 25 Ø	No.	-			
		g) 90° M/F : 32 Ø	No.	-			
		h) 90° M : 32 Ø	No.	-			
		Cross, Flanged					
		a) 15 Ø	No.	1,00			
		Cross screwed					
		a) 15 Ø	No.	-			
		b) 20 Ø	No.	-			
		c) 25 Ø	No.	-			
		d) 32 Ø	No.	-			
		Sockets					
		a) 25 ND	No.	1,00			
		b) 32 ND	No.	1,00			
3.2.10		FITTINGS FOR HDPE PIPES					
		Plasson compression fittings to the relevant SANS specifications. or similar approved					
		Elbow for :					
		a) 50 mm Ø	No.	16,00			
		Equal Tees					
		a) 50 mm Ø	No.	15,00			
		Unequal tees					
		a) 32 x 25 ND	No.	5,00			
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
			TOTAL BROUGHT FORWARD				
		a) 50 x 32 ND	No.	1,00			
		Plugs					
		a) 32 mm Ø	No.	0,00			
		b) 50 mm Ø	No.	1,00			
		HDPE/BSP adaptor					
		a) 32 mm Ø	No.	0,00			
		b) 50 mm Ø	No.	1,00			
		Socket Adaptors					
		a) 20 ND	No.	1,00			
		b) 25 ND	No.	1,00			
		c) 32 ND	No.	1,00			
		d) 50 ND	No.	1,00			
3.2.11		SUNDRIES					
3.2.11.1		Encasing in Class 15/19 concrete	m ³	3,00			
3.2.11.2		Position markers as per specification Drawing and white washed each	No.	0,00			
3.2.11.3		Thrust blocks as per typical details on specification Drawing					
		a) Concrete Class 15/19	m ³	2,00			
		b) Rough formwork	m ²	2,00			
3.2.11.4		Stone pitching including supply and placing of stone and gravel backing					
		a) Grouted, minimum thickness 300mm	m ²	0,00			
		b) Ungouted, minimum thickness 300mm	m ²	0,00			
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
3.2.13	8.3.8.1	Excavate by hand in soft material to expose such as electrical cables, GPO cables, water. sewer and stormwater pipes	m ³	0,00		
		MANHOLES				
		Construction of manholes as per drawing	No.	0,00		
3.2.14		BOREHOLE DEVELOPMENT				
		Geohydrological Servies				
		Sitting of drilling sites. Allowance to be made for desk study, site assessment, drilling supervision, testing supervision, and reporting.	No	0,00		
		Borehole Drilling				
		Site Establishment/De-establishment				
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site of the drilling batch.	No	-		
		Drilling				
		Drilling of 165mm diameter borehole in non-collapsible material.	m	-		
		Odex drilling in collapsible material and where ordered by the Geohydrologist of 254mm diameter borehole. Rate to include supply, delivery and installation of at least 6mm sidewall Odex casing.	No	120,00		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.15			TOTAL BROUGHT FORWARD				
		Steel casing (plain), 165 mm (state wall thickness here as 3 mm)	m	0,00			
		Steel casing (slotted), 165 mm (state wall thickness here as 4 mm)	m	0,00			
		Site finishing					
		Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making.	No	0,00			
		BOREHOLE REHABILITATION - (PROVISIONAL)					
		Site Establishment/De-establishment					
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site	No	1,00			
		Removal of existing pumphouse	No	1,00			
		Removal of existing pump	No	1,00			
		Positive displacement pump					
		Removal using cable-tool (jumper) drilling rig of columns instalations diameter, 25mm-100mm upto 120m. Rate to include all pipe work and fittings	No	2,00			
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.16		Site Establishment/De-establishment	TOTAL BROUGHT FORWARD				
		Mobilisation and set up of plant to/at first borehole. Rate to including inter-borehole moves and de-establishment from Site, of the given drilling batch	No	1,00			
		Pump testing of borehole.					
		Rate to include the following:installation of pump testing equipment and remove after, calibration testing, 24hr constant testing, recovery measurements, data recording and reporting.	No	1,00			
		Sampling for water quality testing	No	1,00			
		BOREHOLE PUMPS AND APPURTENANCES					
		NEW BOREHOLE INSTALLATION					
		Allow an amount of R25,000.00 for complete erection of concrete pump house.	No	1,00			
		Electric Motor Control Panel					
		Supply and install control panel with all fittings required to operate pumps and motors efficiently, including 0-20 second delay timer and0-24 hour timer.	No	1,00			
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		Supply and install borehole discharge pipework complete with flow meter, non return and pressure valves on the following pipework.				
		50mm dia pipework	No	1,00		
		65mm dia pipework	No	-		
		80mm dia pipework	No	-		
		100mm dia pipework	No	-		
		Supply and install new positive displacement pump Mono pump or similar approved complete with columns (shafts, bobbins, spacers, sockets etc), discharge head (pulleys, V-belts guard, base plates,), motor mount bracket, bolts and nuts to run @ 922 RPM.				
		Head = 60 m & Flow = 1,0-3,6 m ³ /h for 30 m pump installation	No	1,00		
		Head = 60 m & Flow = 1,0-3,6 m ³ /h for 50 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m ³ /h for 30 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m ³ /h for 50 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m ³ /h for 80 m pump installation	No	-		
		Head = 110 m & Flow = 1,0-3,6 m ³ /h for 30 m pump installation	No	-		
TOTAL CARRIED FORWARD						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.17		7,5 kW					
		11 kW	No	-			
		15 kW	No	1,00			
		18,5 kW	No	-			
		22 kW	No	-			
		TESTING AND COMMISSIONING					
		Testing and commission borehole installation including pumps, motors, control system and verify discharge and head characteristics					
		Submersible Pumps					
		Supply and delivery of stainless steel centrifugal submersible borehole pumps and motors complete for the following duty points					
		Head = 60 m & Flow = 1,0-3,6 m ³ /h for 30 m pump installation	No	0,00			
		Head = 60 m & Flow = 1,0-3,6 m ³ /h for 50 m pump installation	No	-			
Head = 90 m & Flow = 1,0-3,6 m ³ /h for 30 m pump installation	No	-					
Head = 90 m & Flow = 1,0-3,6 m ³ /h for 50 m pump installation	No	-					
Head = 90 m & Flow = 1,0-3,6 m ³ /h for 80 m pump installation	No	1,00					
TOTAL BROUGHT FORWARD							
TOTAL CARRIED FORWARD							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.18		TOTAL BROUGHT FORWARD					
		Submersible pump steel cage					
		Allow an amount of R15,000.00 for supply and installation of new steel pump cage	No	1,00			
		TESTING AND COMMISSIONING					
		Testing and commission borehole installation including pumps, motors, control system and verify discharge and head characteristics	No	1,00			
		Electricity Supply					
		Supply material and erect a three phase electricity power line to the new borehole	No	0,00			
		Mark-up on item 4.2.1					
		Supply all material and install a 25kVa transformer	No	-			
		SUPPLY DELIVER AND INSTALL					
		10 000 Litre polyethylene water tank (Jo Jo make or equivalent). (2980mm high x 2200mm diameter). Tank complete with 50 x 40 DN nylon bushes sealed into all inlets and outlets. Include for anchorage onto tank stand platform with 4mm diameter galvanized steel wire (bloudraad). (2 Strands/Anchor)	No	3			
		Fabricated steel tank stand with 4,2m long legs, constructed complete as per details on drawing LDE01_DW_03_201, LDE01_DW_03_202 and LDE01_DW_03_203. (incl. excavations and concrete footings).	No	4			
		Tankstand Refurbishment including, modification to concrete foundations, pipe work, brackets, surface preparation and re-painting	No	-			
TOTAL CARRIED TO SUMMARY							

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
	SCHEDULE 4 : EXTERNAL SEWER RETICULATION - (PROVISIONAL)				
4,1	EARTHWORKS (PIPE TRENCHES)				
4.1.1	Excavation				
	Excavate in all material for trenches, backfill, compact and dispose of surplus material for pipes over 25mm dia up to 400mm dia for depths:				
	a) Exceeding 0,0m but not more than 1,0m	m ³	90,00		
	b) Exceeding 1,0m but not exceeding 2.0m	m ³	0,00		
4,2	Extra-over all excavations in pickable material irrespective of depth, for excavating in:-				
4.2.1	Intermediate excavation	m ³	30,00		
4.2.2	Hard rock excavation	m ³	10,00		
4,3	Excavation Ancilliaries				
4.3.1	Excavate and dispose of unsuitable material from trench bottom (provisional)	m ³	0,00		
4.3.2	Make deficiency in backfill material (Provisional)				
	a) from other necessary excavation on Site	m ³	0,00		
	b) by importation designated borrow pits	m ³	0,00		
	c) Compaction in platform reserves	m ³	0,00		
4,4	Existing services				
	a) Services that adjoin a trench	m	0,00		
	b) Services that intersect a trench	No	0,00		
Amount Carried Forward					

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
Amount Brought Forward					
4,5	BEDDING (PIPES)				
4.5.1	Provision of Bedding from Trench Excavation				
	a) Selected granular material	m ³	30,00		
	b) Selected fill material	m ³	25,00		
4.5.2	Supply only of Bedding by Importation From Commercial Sources (provisional)				
	a) Selected granular material	m ³			
	b) Selected fill material	m ³			
4,6	SEWERS PIPELINES				
4.6.1	Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conformind to SABS 891). complete with fittings				
	a) 110mm dia	m	170,00		
	b) 150mm diameter	m	-		
	c) 225mm diameter	m	-		
	d) 375mm diameter	m	-		
4.6.2	Extra over items 11.3.1 for specials				
	a) 110mm Access bends	No	10,00		
	b) 110mm Access junctions	No	10,00		
	c) 160mm Bends	No			
	d) 160mm Access bends	No	-		
	e) 160mm Access Junctions	No	-		
Amount Carried Forward					

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
Amount Brought Forward					
4,7	Sundries				
4.7.1	Breaking into and connecting into existing manhole	No			
4,8	MANHOLES				
4.8.1	Supply and install manholes & slabs (SABS 1294)				
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 750mm and not exceeding 1m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No	2,00		
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1000mm and not exceeding 1250m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No			
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1250mm and not exceeding 1500m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No			
4,9	PIPE ANCILLARIES				
4.9.1	Encasing around pipe				
4.9.1.1	Anchor blocks in strength concrete 25Mpa /19mm including all formwork, reinforcement, reinforcement. etc.	No			
4.9.1.2	Anchor block size 600 x 600mm	No			
4.10	EXISTING SERVICES				
4.10.1	Connection to existing sewer				
4.10.1.1	200mm Diameter pipe to existing manhole	No			
4.10.2	Raising or lowering of existing manholes				
4.10.2.1	Remove cover and frame then lower the manhole to required level, complete with all necessary accessories.	No			
4,11	SEPTIC TANK				
4.11.1	Construct Septic tank with all connections as per Engineers deian	No	1,00		
Amount Carried to Final Summary					

SCHEDULE 5 : WALKWAYS

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
1,8	SANS 1200 MJ	SEGMENTED BLOCK PAVING TO THE ACCESS ROAD				
	8.2.2	80mm Type S-A 35mPa for roadway (Grev Colourina)	m ²	0,00		
	8.2.2	60mm Type S-A 35mPa for roadway (Grev Colourina)	m ²	1 550,00		
	8.2.1	Installation of precast of edge restraints	m	1 000,00		
		CLEARING AND GRUBBING				
		Clear and grub to 100mm depth over the area. stockpile as topsoil berm as	m ²	1 550,00		
		Excavate to the line and level as shown on the drawings and place stockpile materials as directed by the Engineer.	m ³	460,00		
		Compacted to 93% MOD AASHTO				
		a) Selected granular material	m ³	230,00		
		b) Selected fill material	m ³	230,00		
		c) 20mm Thick bedding sand vibrated to	m ³	31,00		
TOTAL CARRIED TO SUMMARY						

DEPARTMENT OF EDUCATION : LIMPOPO

PUBLIC WORKS SCHOOL: RASEMA SECONDARY SCHOOL

BOQ FOR CIVIL ENGINEERINGS SERVICES

SUMMARY OF BILL OF QUANTITIES

SCHEDULE 1: EARTHWORKS (ROADS AND SUBGRADE)

SCHEDULE 2: STEEL PALISADE FENCE

SCHEDULE 3: WATER SUPPLY PIPELINES AND WATER SOURCE

SCHEDULE 4: EXTERNAL SEWER RETICULATION

SCHEDULE 5: WALKWAYS

TENDER (CONTRACT) SUM (CIVIL AND STRUCTURAL WORKS)



C4.4 ELECTRICAL WORKS

PROJECT Limpopo Storm Damaged Schools
SCHOOL Rasema Secondary School
DISCIPLINE Electrical Works: Summary

Item	Description	Unit	Qty	Rate	Total
1.0	P&G's for Electrical Installation: <i>All overhead costs, for a contract period as per Main Contractor's programme and appointed as a Selected Sub-Contractor ; i.e.:</i> Site Establishment Travelling Transport and Off-loading Insurances Safety Requirements Site Supervision	Sum	1		
		Sum	1		
		Sum	1		
		Sum	1		
		Sum	1		
		Sum	1		
		Sum	1		
Total for Bill 1- P&G'S.../ carried forward to Summary					

					.../Sub-Total brought forward from previous page
3	Lighting				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described on the BoQ and signle line diagrams				
	Supply	No	45		
	Install	No	45		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described on the BoQ and signle line diagrams				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting, as described on the BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described on the BoQ and signle line diagrams				
	Supply	No	4		
	Install	No	4		
3.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch				
	Supply	No	20		
	Install	No	20		
3.6	2 way Switch				
	Supply	No	2		
	Install	No	2		
3.7	Daylight Switch, 220V-240V single phase				
	Supply	No	1		
	Install	No	1		
3.8	6A Plugs for light fittings				
	Supply & Install	No	45		
4	Socket Outlets and Isolators				
	<i>Note: "Install" items shall include <u>all</u> work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated)</i>				
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Plug)				
	Supply	No	10		
	Install	No	10		
4.2	16A 3pin Double Socket Outlet complete with cover				
	Supply	No	20		
	Install	No	20		
4.3	P9000 Trunking				
	Supply	m	20		
	Install	m	20		
	PVC Conductors				
4.4	Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.				
	2,5mm ² 2 core				
	Supply	m	300		
	Install	m	300		

	4mm ² 2 core				
	Supply	m	300		
	Install	m	300		
4.5	Supply and install bare copper earth conductors in wireways, including all necessary accessories				
	2,5mm ²				
	Supply	m	150		
	Install	m	150		
	4mm ²				
	Supply	No	150		
	Install	m	150		
Sub-Total carried forward to next page.../					

PROJECT Limpopo Storm Damaged Schools
SCHOOL Rasema Secondary School
DISCIPLINE Electrical Works_Classrooms (New)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	Power Supplies				
1.1	Recessed mounted electrical distribution board complete with lockable doors				
	DB-01				
	Supply	Sum	1		
	Install	Sum	1		
1.2	Issue Cocs	No	1		
2	Power Low Voltage Cables				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	6mm ² PVC 2 core + ECC				
	Supply	m	85		
	Install	m	85		
2.3	Excavate 450 mm wide x 600 mm deep cable trench, bedding of 70mm plus sand cover over cables to a depth of 75mm, backfilling and compact in accordance with the specifications per linear meter.				
	Supply and Install	m	85		
2.4	Terminations				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
2.4.1	6mm ² PVC 2 core + ECC				
	Supply & Install	No	2		
3	Lighting				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described on the BoQ and signle line diagrams				
	Supply	No	26		
	Install	No	26		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described on the BoQ and signle line diagrams				
	Supply	No	6		
	Install	No	6		
3.3	100W LED linear surface mounted low bay light fitting, as described on the BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described on the BoQ and signle line diagrams				
	Supply	No	6		
	Install	No	6		

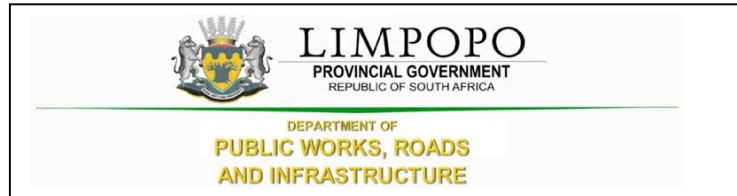
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3.5	Supply and install light switches complete with screwed metal cover plates in conduit boxes.		
	1way Switch		
	Supply	No	10
	Install	No	10
3.6	2 way Switch		
	Supply	No	2
	Install	No	2
3.7	Daylight Switch, 220V-240V single phase		
	Supply	No	2
	Install	No	2
3.8	6A Plugs for light fittings		
	Supply & Install	No	26
4	Socket Outlets and Isolators		
	<i>Note: "Install" items shall include <u>all</u> work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated)</i>		
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Plug)		
	Supply	No	15
	Install	No	15
4.2	16A 3pin Double Socket Outlet complete with cover		
	Supply	No	10
	Install	No	10
	PVC Conductors		
4.3	Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.		
	2,5mm ² 2 core		
	Supply	m	200
	Install	m	200
	4mm ² 2 core		
	Supply	m	100
	Install	m	100
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessories		
	2,5mm ²		
	Supply	m	100
	Install	m	100
	4mm ²		
	Supply	m	50
	Install	m	50
4.5	P9000 Trunking		
	Supply	m	10
	Install	m	10
4.6	2 Compartmental Power Skirting		
	Supply	m	20
	Install	m	20
5	General Items		
5.1	20mm PVC Conduit		
	Supply and Install	m	150
	25mm Galvanised Steel Conduit, provision for external electrical installations		
5.2	Supply and Install	m	100
6	Earthing and Lightning Protection	Sum	1

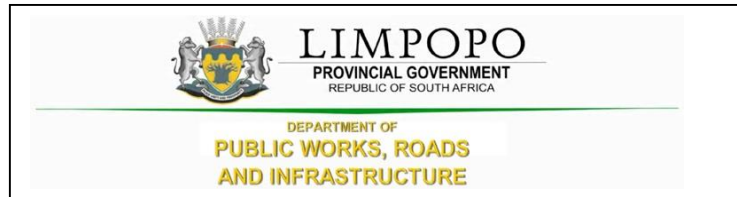
PROJECT Limpopo Storm Damaged Schools
SCHOOL Rasema Secondary School
DISCIPLINE Electrical Works_Classrooms (Rennovated)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	Power Supplies				
1.1	Allow for modifications to the main distribution board for new connections. Allow for the following:				
	• New switchgear				
	• Cleaning				
	• Tightening all connections				
	• Neaten existing wiring				
	• Blank off spare spaces				
	• Legend card				
	• Close off unused spaces				
	Supply	Sum	2		
	Install	Sum	2		
1.1.1	Issue CoC for DB	Sum	2		
2	Power Low Voltage Cables				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	Check and make good				
	Install	Sum	1		
3	Lighting				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described on the BoQ and signle line diagrams				
	Supply	No	48		
	Install	No	48		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described on the BoQ and signle line diagrams				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting, as described on the BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described on the BoQ and signle line diagrams				
	Supply	No	8		
	Install	No	8		
3.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch				
	Supply	No	16		
	Install	No	16		

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3.6	2 way Switch		
	Supply	No	2
	Install	No	2
3.7	Daylight Switch, 220V-240V single phase		
	Supply	No	2
	Install	No	2
3.8	6A Plugs for light fittings		
	Supply & Install	No	48
4	Socket Outlets and Isolators		
	<i>Note: "Install" items shall include <u>all</u> work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated)</i>		
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Plug)		
	Supply	No	24
	Install	No	24
4.2	16A 3pin Double Socket Outlet complete with cover		
	Supply	No	8
	Install	No	8
	PVC Conductors		
	Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.		
	2,5mm ² 2 core		
	Supply	m	600
	Install	m	600
	4mm ² 2 core		
	Supply	m	600
	Install	m	600
	Supply and install bare copper earth conductors in wireways, including all necessary accessories		
	2,5mm ²		
	Supply	m	300
	Install	m	300
	4mm ²		
	Supply	m	300
	Install	m	300
4.3	P9000 Trunking		
	Supply	m	10
	Install	m	10
4.4	2 Compartmental Power Skirting		
	Supply	m	40
	Install	m	40
5	General Items		
5.1	20mm PVC Conduit		
	Supply and Install	m	180
5.2	25mm Galvanised Steel Conduit, provision for external electrical installations		
	Supply and Install	m	200
6	<u>Renovations</u>		
6.1	Gut, strip and make safe	Sum	2
7	Earthing and Lightning Protection	Sum	2



PART C5: SCOPE OF WORKS



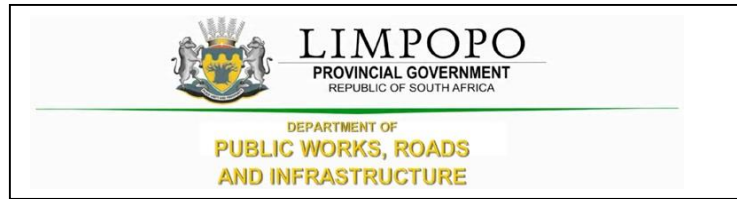
C5.1 SCOPE OF WORKS

Overview of the works

The project comprises the construction of the following:

The Limpopo Department of Public Works, Roads and Infrastructure invites tenders Demolition of 1 x 4 Classroom Block, Pit Toilet Block and Waterborne Toilet Block, Renovations of 2 x 4 Classroom Blocks, Construction of Medium Admin Block, 1 x 4 Classroom Block, 4-Seats Water-Borne Toilet Block, 16-Seats Enviro-Loos and External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays and Fence) At Rasema Secondary School in Ramatjowe Village, Botlokwa in Capricorn District, in accordance with the drawings and specifications that will be provided to the contractor.

The Contractor shall provide sufficient qualified technical staff, field staff, and safety personnel to ensure the Works under this contract be satisfactorily carried out safely and meeting the performance targets and programs. The Contractor shall also provide competent attendant(s) to monitor any works in relation to the scope of works.



PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015

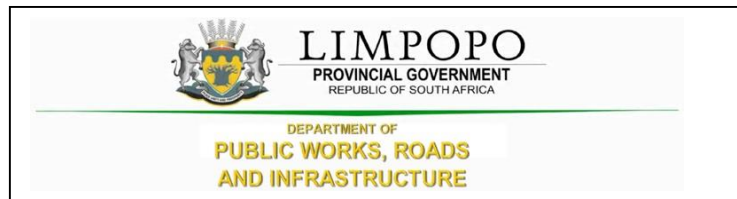
PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015



PART C6.1: DATA COLLECTION TOOL



PART C7: SITE INFORMATION AND DRAWINGS

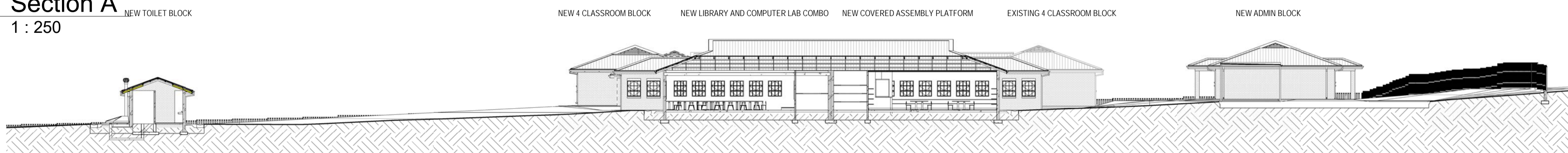


PART C7.1: SITE INFORMATION

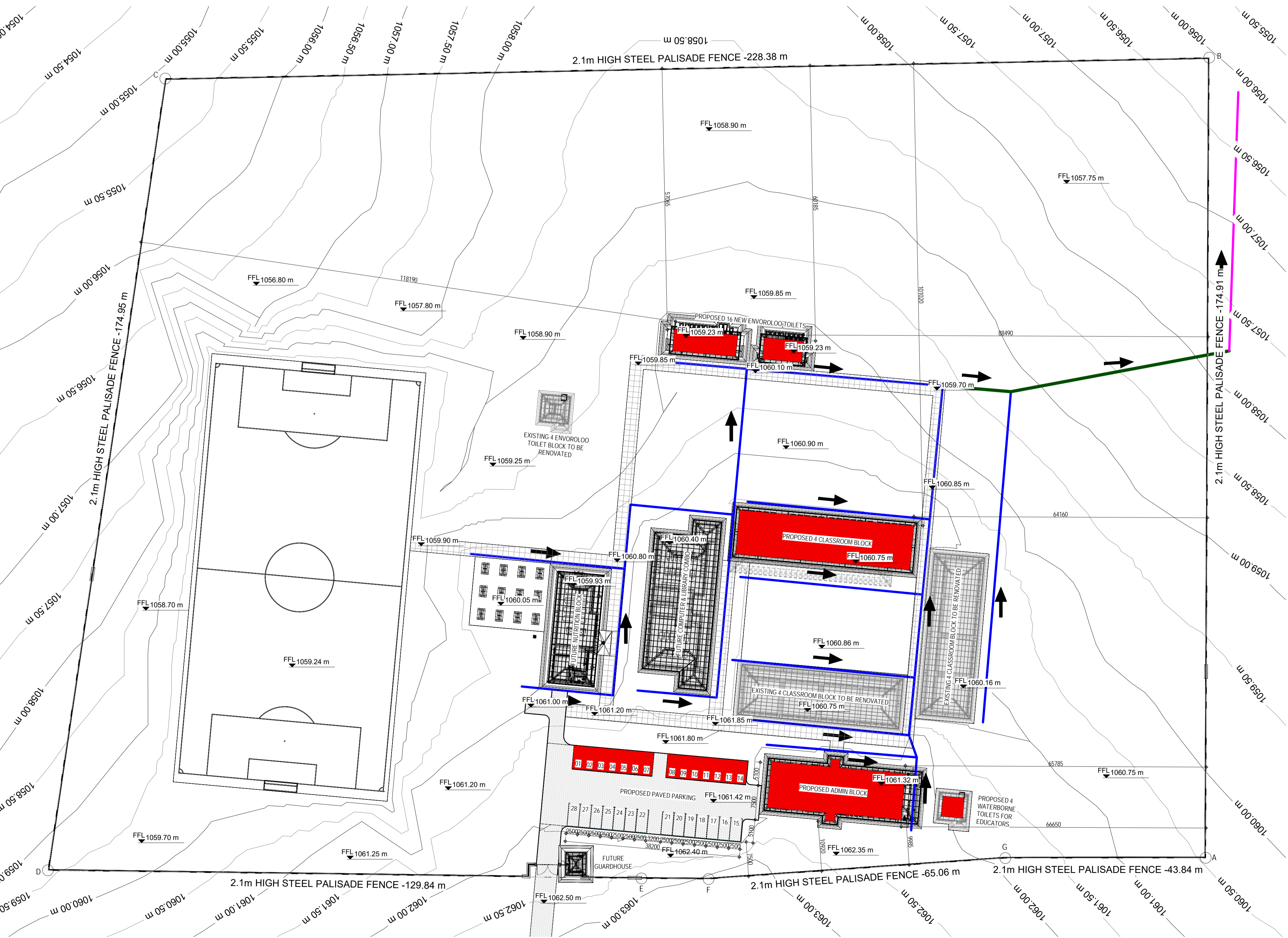


PART C7.2: DRAWINGS

Section A
1 : 250



Section B
1 : 250



LEGEND:

- Tree
- Tap
- Borehole
- Benchmark
- Existing Jojo Water Tank
- New Jojo Water Tank
- Manhole
- Gate
- Proposed water supply main
- Fence
- Elec pole
- Drain Type A
- Drain Type B
- Drain Type C
- Walkway

DRAIN TYPE A
Catch water Drain & Berm - compacted natural ground

DRAIN TYPE B
Stone pitched drain

DRAIN TYPE C
60mm concrete channel

Site Co-Ordinates:

A = +X 2 597 901m
-Y 77 291m
B = +X 2 597 728m
-Y 77 291m
C = +X 2 597 731m
-Y 77 063m
D = +X 2 597 904m
-Y 77 037m
E = +X 2 597 906m
-Y 77 167m
F = +X 2 597 906m
-Y 77 182m
G = +X 2 597 901m
-Y 77 247m

Name	Area	Comments
4 CLASSROOM BLOCK	328.63 m ²	Existing Area
4 CLASSROOM BLOCK	328.63 m ²	Existing Area
Existing Area: 2	657.27 m ²	
4 CLASSROOM BLOCK	369.49 m ²	New Area
ADMIN BLOCK	304.28 m ²	New Area
COMPUTER & LIBRARY COMBO	406.16 m ²	New Area
COVERED ASSEMBLY	781.41 m ²	New Area
COVERED PARKING	89.76 m ²	New Area
COVERED PARKING	89.76 m ²	New Area
GUARDHOUSE	11.24 m ²	New Area
NUTRITION BLOCK	200.99 m ²	New Area
TOILET BLOCKS	65.19 m ²	New Area
TOILET BLOCKS	40.24 m ²	New Area
New Area: 10	2358.53 m ²	
Grand total: 12	3015.79 m ²	



SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	03-07-2020	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

IDC ARCHITECTS
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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL

PROPOSED SITE DEVELOPMENT PLAN

DRAWING DESCRIPTION: SDP

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	03-07-2020		
PROJECT No.	SHEET NUMBER		
17 - 063 - 013	0000		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
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INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: J.P.	CHECKED:		C.D.

LEGEND:

	MINI-SUBSTATION
	RING MAIN UNIT
	LOW VOLTAGE KIOSK
	STREETLIGHTING KIOSK
	DISTRIBUTION BOARD
	STREETLIGHT
	MEDIUM VOLTAGE CABLE
	LOW VOLTAGE CABLE
	STREETLIGHT CABLE
	HOUSE CONNECTION
	ELECTRICAL SLEEVES
	MV MANHOLE
	LV MANHOLE
	DATA MANHOLE

LEGEND

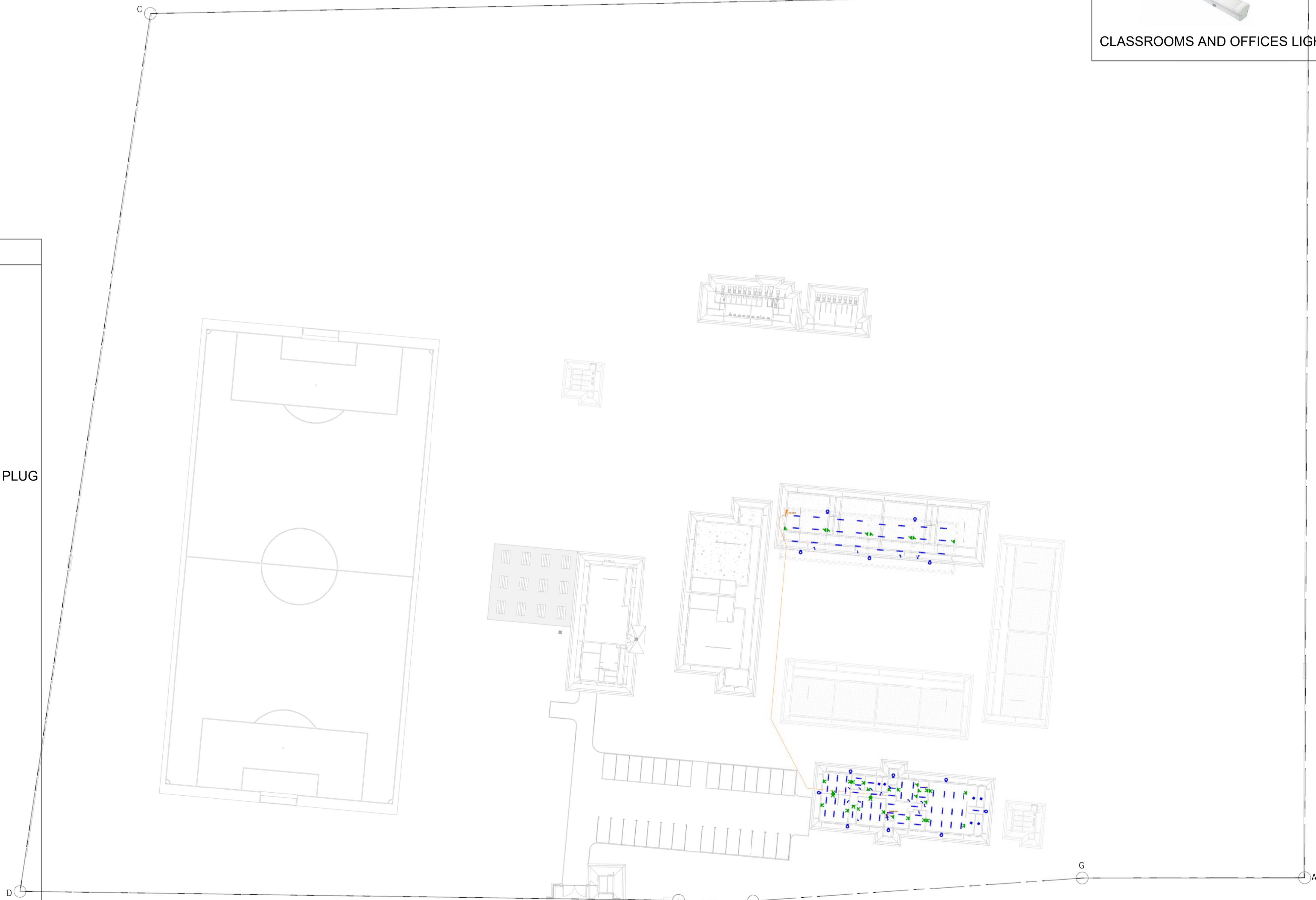
	L1 - 15W LED SURFACE MOUNT BULKHEAD
	L2 - 43W LINEAR LED SURFACE MOUNT 1500
	L4 - 150W LED LOW BAY LIGHT FITTING
	L6 - 2X18W LED SURFACE MOUNT BULKHEAD C/W WITH BLACK TRIM
	LIGHT SWITCH SINGLE WAY
	LIGHT SWITCH 2 WAY
	LIGHT SWITCH TWO WAY
	MOTION SENSOR
	PHOTOCELL - DAY/NIGHT SWITCH

LEGEND

	ELECTRICAL DISTRIBUTION BOARD
	3-PIN SINGLE SWITCHED SOCKET OUTLET
	3-PIN SINGLE SWITCHED SOCKET OUTLET - NEW SA PLUG
	WEATHERPROOF 3-PIN SWITCHED SOCKET OUTLET
	3-PIN DOUBLE SWITCHED SOCKET OUTLET C/W 3 PIN NEW SA PLUG
	3-PIN DOUBLE SWITCHED SOCKET OUTLET
	SINGLE PHASE ISOLATOR
	3 PHASE ISOLATOR
	SINGLE PHASE WEATHERPROOF ISOLATOR
	IP65 RATED SINGLE PHASE ISOLATOR
	ELECTRICAL OUTLET FOR FACADE SIGNAGE
	FLOOR BOX
	DATA OUTLET
	3 COMPACT, 2 COVER PERIMETER POWER SKIRTING TO BE FIXED AT +750mm AFFL TO THE BOTTOM EDGE OF POWER SKIRTING, UNLESS OTHERWISE SPECIFIED ON THE DRAWING.

PROPOSED LIGHT FITTINGS POWER OUTLETS

	OUTSIDE SECURITY LIGHT		SOCKET OUTLETS
	MULTI PURPOSE HALL LIGHT		STOVE ISOLATOR
	ABLUTIONS AND STOREROOM LIGHT		TYPICAL DISTRIBUTION BOARD
	CLASSROOMS AND OFFICES LIGHT		



Site SDP Electrical
1 : 500

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	06-07-2021	JP	ADDED ELECTRICAL LAYOUT FROM ENGINEER



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REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

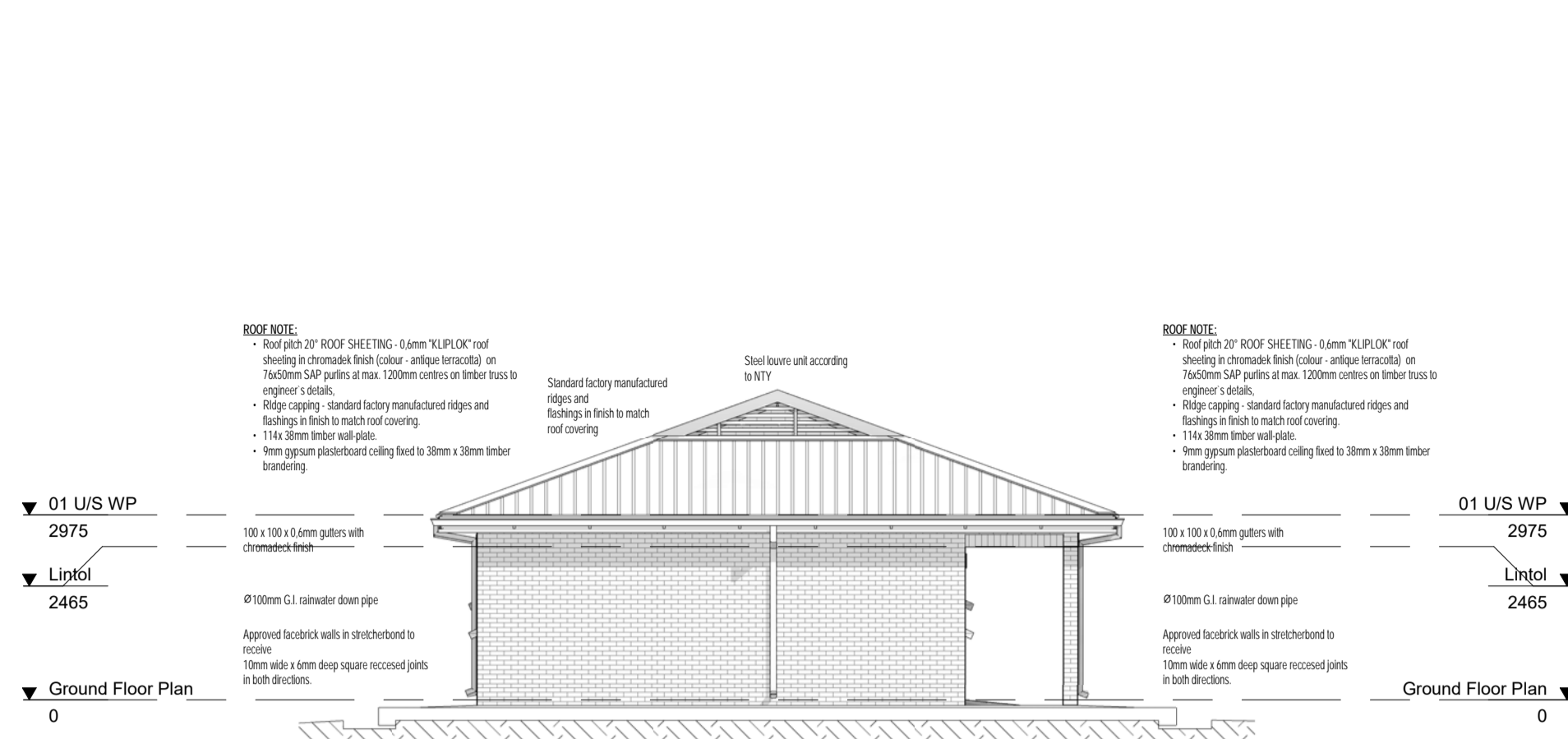
CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: RASEMA SECONDARY SCHOOL

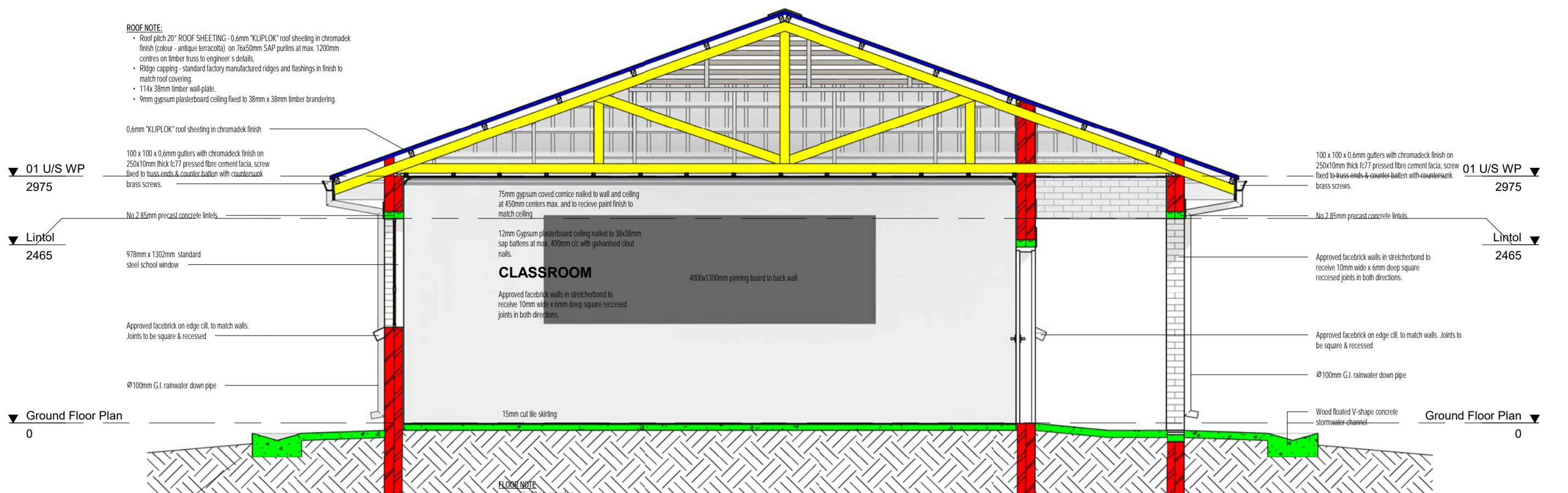
PROPOSED SITE DEVELOPMENT PLAN

DRAWING DESCRIPTION: SDP ELECTRICAL

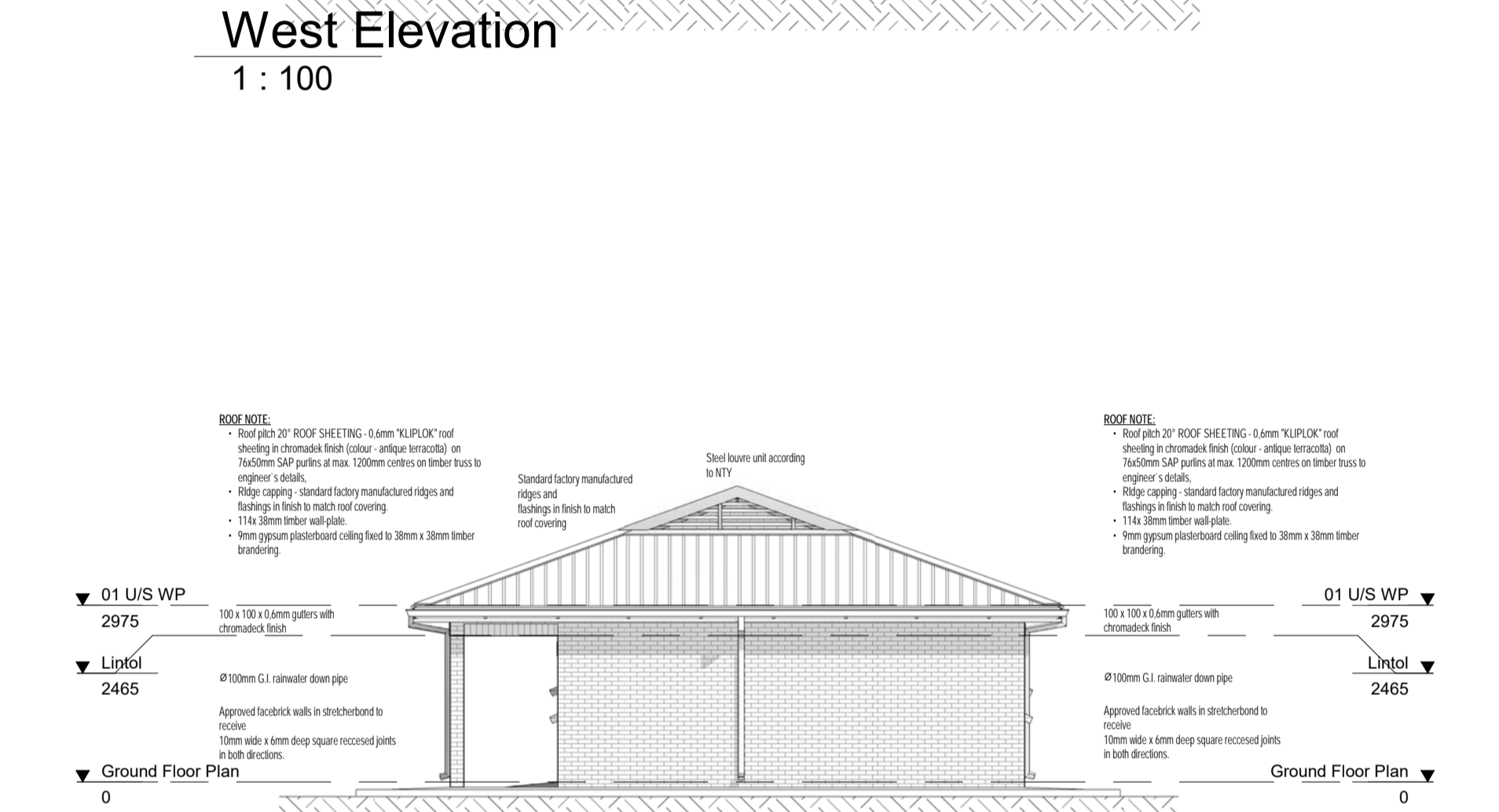
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DRAWING STATUS			
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DRAWN BY: JP		CHECKED: BI	



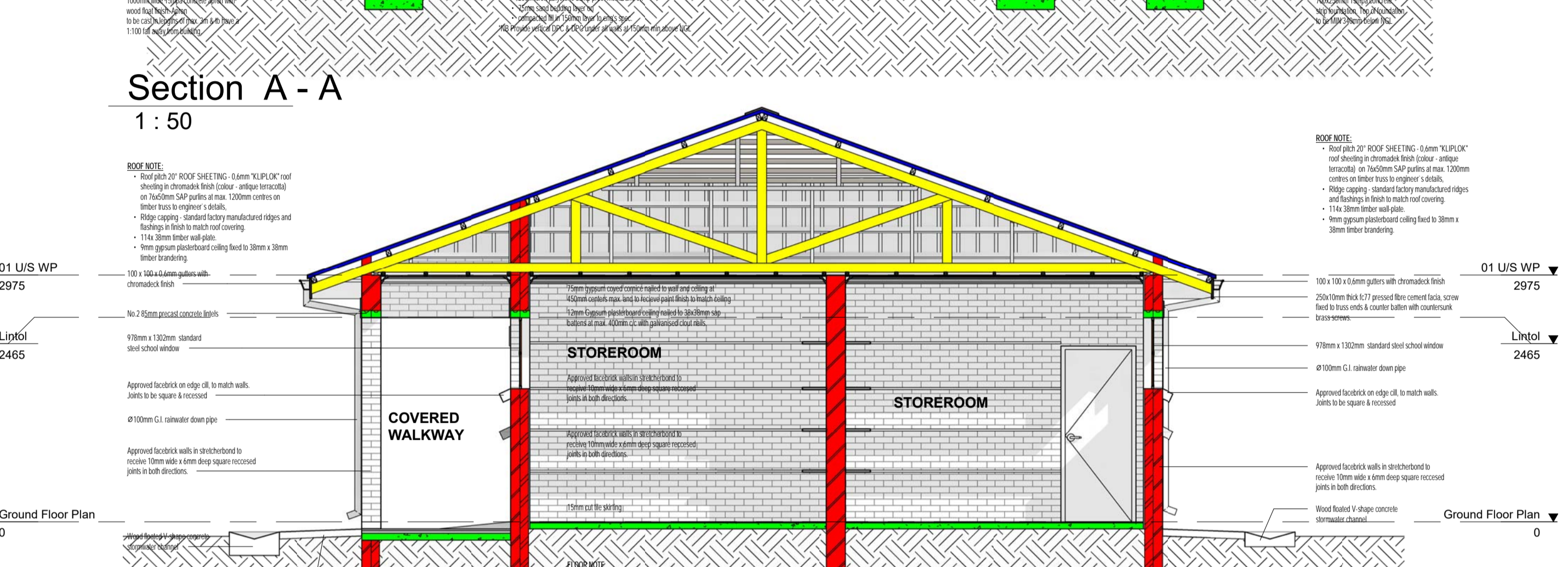
West Elevation
1 : 100



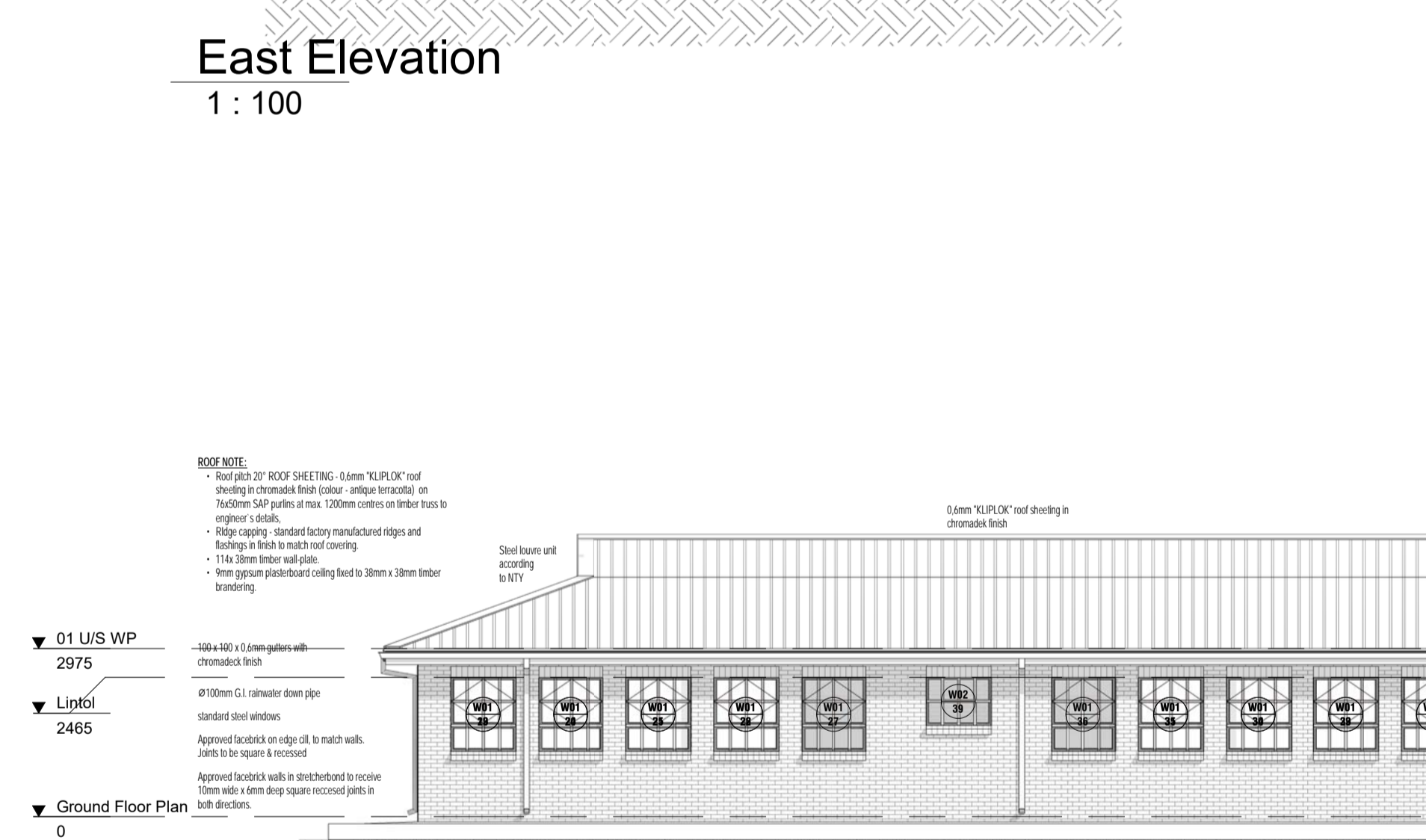
Section A - A
1 : 50



East Elevation
1 : 100

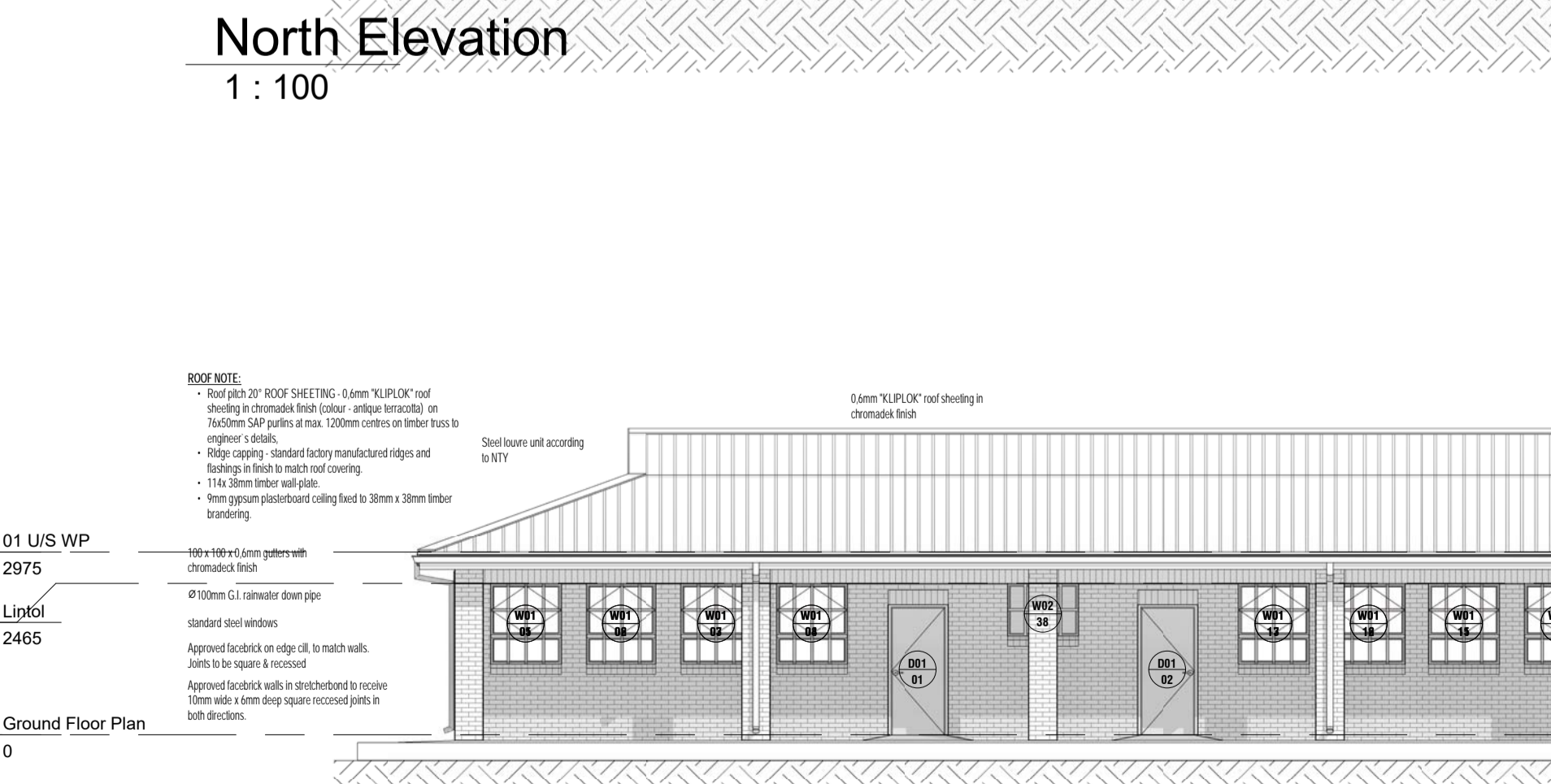


Section B - B
1 : 50



North Elevation
1 : 100

WINDOW SCHEDULE	STEEL & TIMBER	U/S LINTEL 2 125mm
DOOR TYPE	D01	D02
QUANTITY REQ.	4 OFF	4 OFF
FRAME TYPE	STANDARD MILD STEEL 914x2032x1.2mm SINGLE REBATE DOOR FRAME FOR 230mm WALLS.	STANDARD MILD STEEL 914x2032x1.2mm SINGLE REBATE DOOR FRAME FOR 230mm WALLS.
FRAME FINISH	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT.	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT.
DOOR TYPE	914x2032mm EXTERIOR QUALITY FLUSH TYPE FRAMED AND LEDGED HARDWOOD DOOR WITH MESONITE TO RECEIVE VARNISH.	914x2032mm EXTERIOR QUALITY FLUSH TYPE FRAMED AND LEDGED HARDWOOD DOOR WITH MESONITE TO RECEIVE VARNISH.
DOOR FINISH	1 COAT STAINED VARNISH & 2 COATS CLEAR VARNISH.	1 COAT STAINED VARNISH & 2 COATS CLEAR VARNISH.
FANLIGHT	N/A	N/A
DOOR FURNITURE	- IRONMONGERY AS PER SEPARATE SCHEDULE	- IRONMONGERY AS PER SEPARATE SCHEDULE
SIGNAGE	N/A	N/A
REMARKS	N/A	N/A



South Elevation
1 : 100

WINDOW SCHEDULE	STEEL & TIMBER	U/S LINTEL 2 125mm
WINDOW TYPE	W01 - SHCH	W01 - 10 - F/ILT
GLAZING	6.38mm LAMINATED SAFETY GLASS. IN ACCORDANCE WITH SABS 0400	6.38mm LAMINATED SAFETY GLASS. IN ACCORDANCE WITH SABS 0400
QUANTITY REQUIRED	36 OFF	4 OFF
FRAME TYPE	STANDARD MILD STEEL SCHOOL TYPE CENTRE PIVOT, STEEL WINDOW FRAME	STANDARD MILD STEEL SCHOOL TYPE CENTRE PIVOT, STEEL WINDOW FRAME
FRAME FINISH	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
IRONMONGERY	AS PER MANUFACTURER TO CLIENTS APPROVAL	AS PER MANUFACTURER TO CLIENTS APPROVAL

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence.
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements to comply with SANS 10400-H
Shale to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (kitchen, shower, bathroom or etc)
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J
Shale to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
fire walls to be taken up to underside of roof covering
provide a minimum 150mm threshold and minimum 170 fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
water penetration through walls detailed requirements to comply with SANS 10400-K
ROOFS
Roof covering and waterproofing to comply with SANS 10400-L
That roof or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L
Cutters and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T and SANS 10400-T, SANS 10400-K and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
the fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

PUBLIC SAFETY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-CA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-CA or be subject of a rational design or rational assessment.
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and SANS 10400-T.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and rating of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
the selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT:		
CIVIL ENGINEER:		
STRUCTURAL ENGINEER:		
MECHANICAL ENGINEER:		
ELECTRICAL ENGINEER:		
FIRE ENGINEER:		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	29-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS

EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

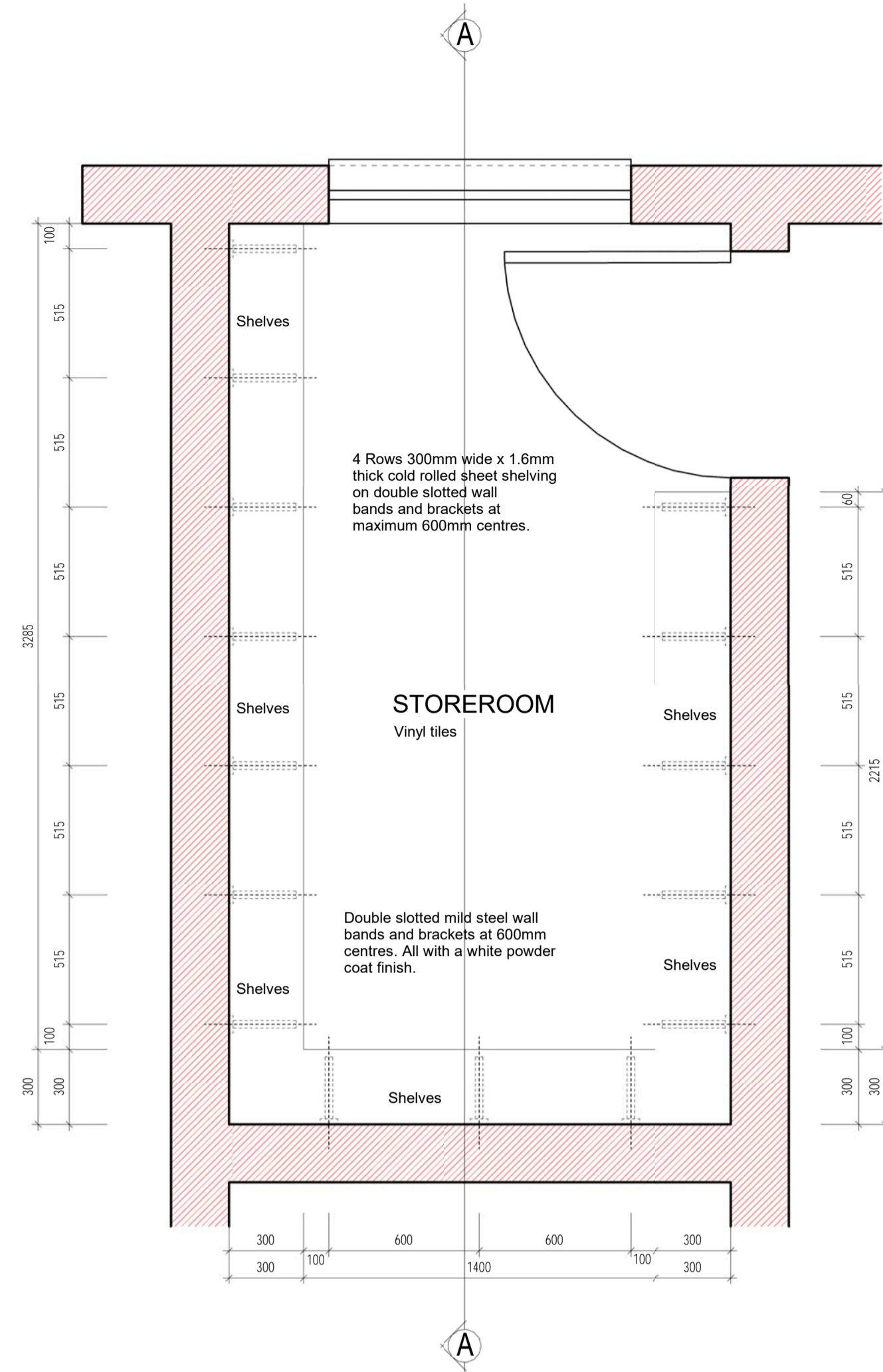
PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
FOUR CLASSROOM BLOCK

DRAWING DESCRIPTION:
SECTIONS & ELEVATIONS

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	30-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	013-C002		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
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DRAWN BY:		CHECKED:	
HK		CD	

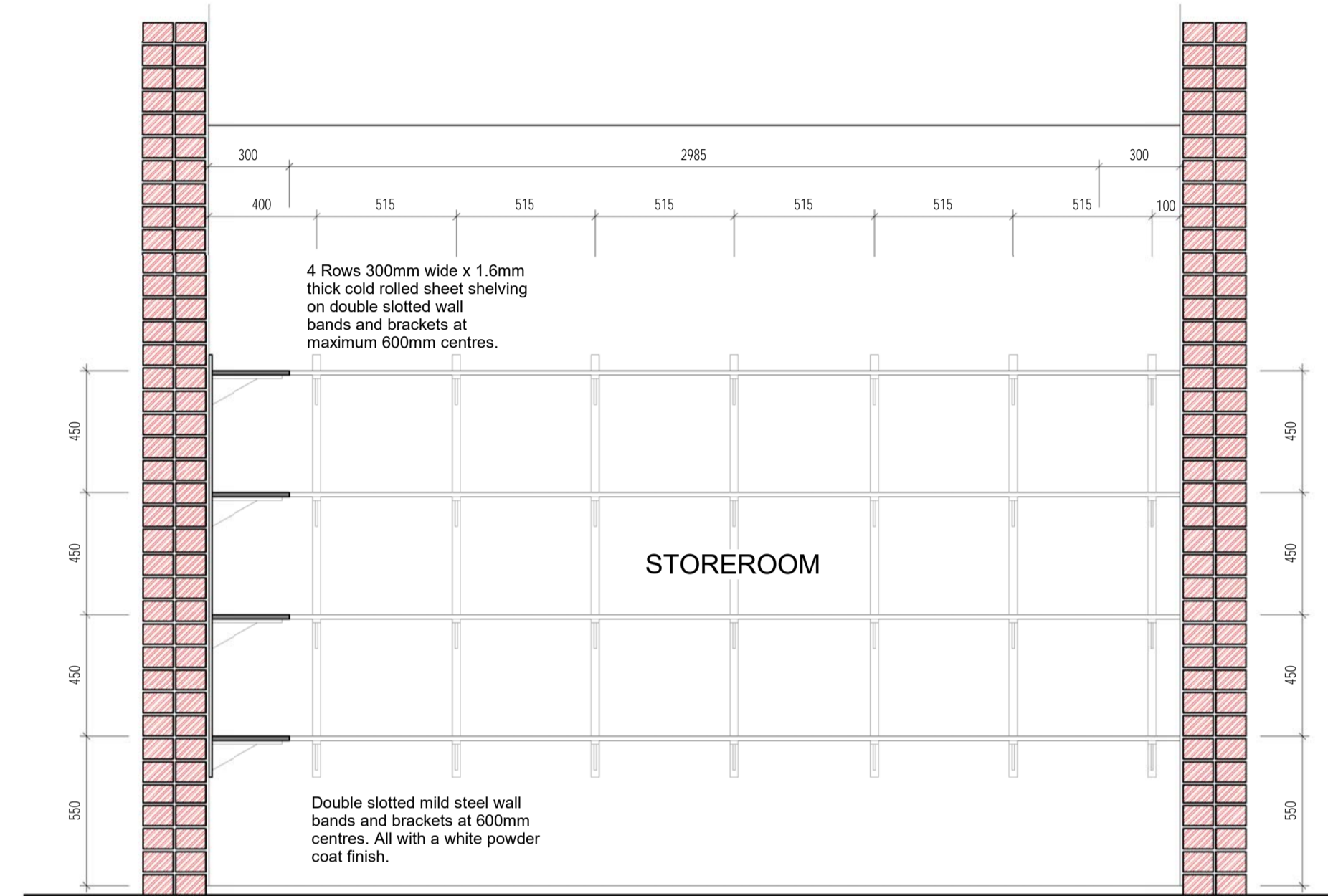
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JOINERY DETAILS

SCALE 1:20



SECTION A - A

SCALE 1:20

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm/250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 15mm fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
Roof covering and waterproofing to comply with SANS 10400-L
Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and detailed requirements to comply with SANS 10400-L
Outlets and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
the fire installations to comply with national fire regulations
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
the fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
the fire installations to comply with national fire regulations

PUBLIC SAFETY
level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
the provision for space heating to comply with national regulations

STORM WATER DISPOSAL
the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.
the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and is subject of a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
the selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	29-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



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REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
FOUR CLASSROOM BLOCK

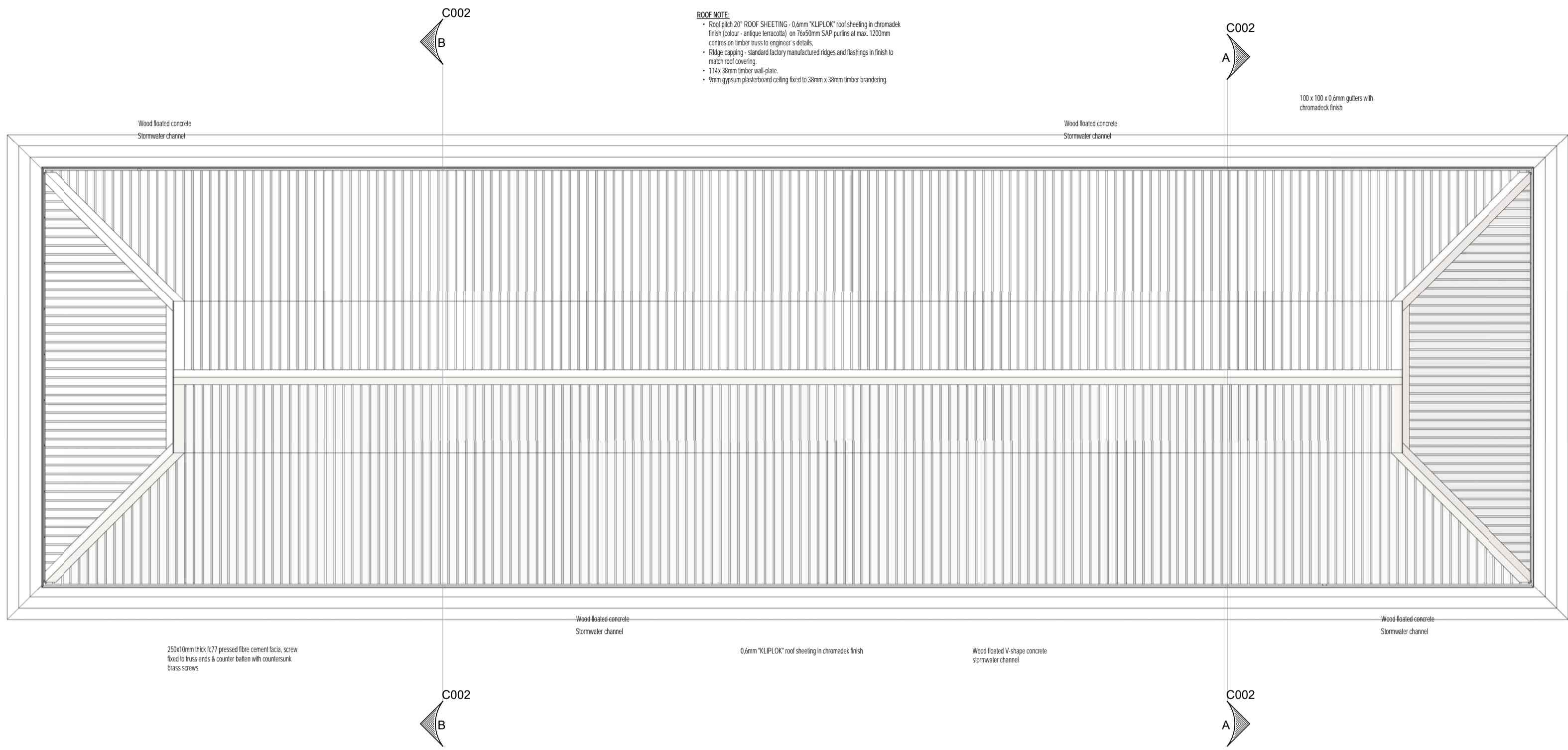
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DRAWING DESCRIPTION			
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 20 @ A1	30-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	013-C003		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY:		CHECKED:	
HK		CD	

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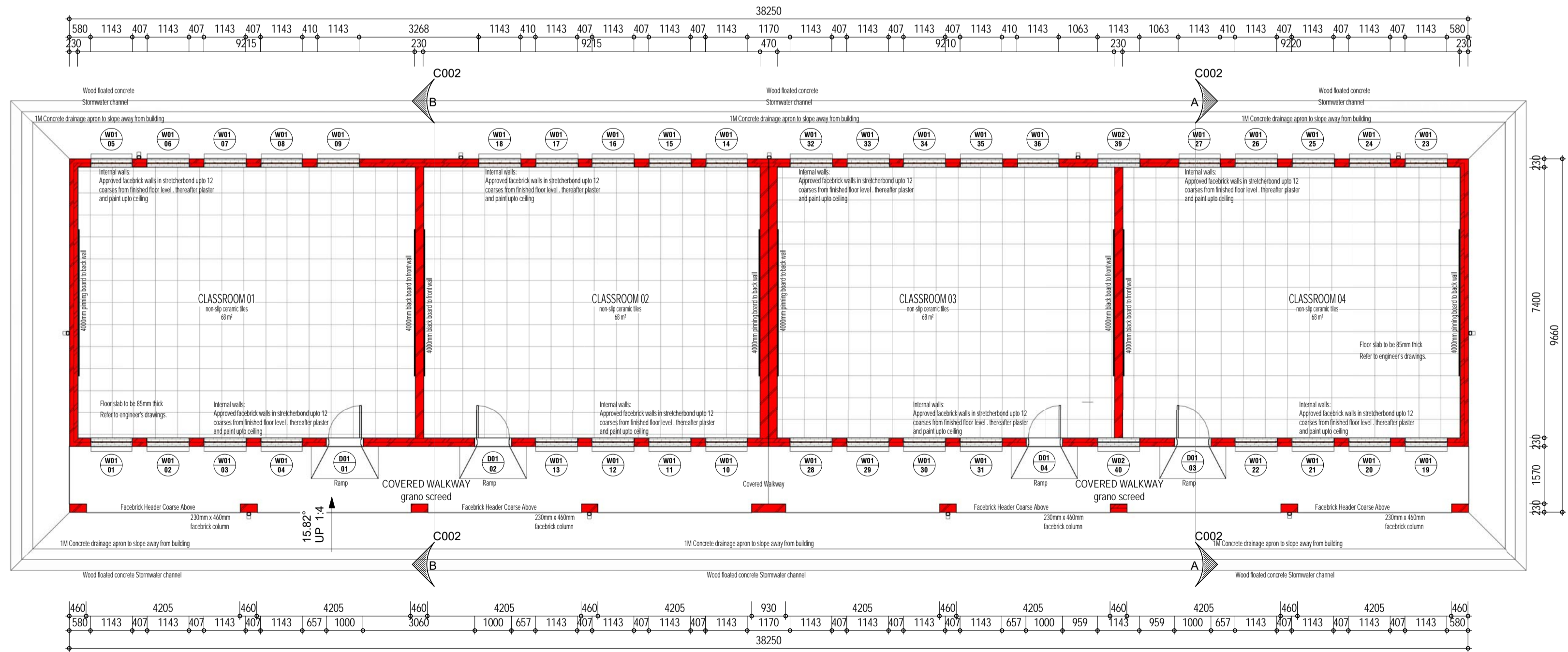
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GENERAL NOTES
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.
DIMENSIONS
 To comply with SANS 10400-C
 Figured dimensions to be taken in preference to scaling
 Overall dimensions (external) to take precedence
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works
FOUNDATIONS
 To comply with SANS 10400-B
 Detailed requirements of SANS 10400-H
 All concrete foundations to be a minimum of 600mm x 250mm.
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.
FLOORS
 To comply with SANS 10400-J (kitchen, shower, bathroom or wet)
 Suspended Floors to comply with SANS 10400-T, SANS 10400-U, SANS 10082
 Detailed requirements to comply with SANS 10400-J
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
 Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
 fire walls to be taken to up to underside of roof covering
 provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.
WALLS
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
 water penetration through walls detailed requirements to comply with SANS 10400-K
ROOFS
 Roof covering and waterproofing to comply with SANS 10400-L
 Flat roofs or related gutter to comply with SANS 10400-L or rational design/ rational assessment or both
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L
 Gutters and downpipes to comply with SANS 10400-R
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.
STAIRWAYS
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.
FIRE INSTALLATION
 the fire installations to comply with national fire regulations
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.
FIRE PROTECTION
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
 the fire protection measure to be subject of a rational design or rational assessment.
ENERGY EFFICIENCY
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.
PEOPLE WITH DISABILITIES
 the fire installations to comply with national fire regulations
PUBLIC SAFETY
 level change, ramps, driveways and pools to comply with SANS 10400-D
SPACE HEATING
 the provision for space heating to comply with national regulations
STORM WATER DISPOSAL
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.
 the means for the control and disposal in interconnected complex subject of a rational design or rational assessment.
LIGHTING AND VENTILATION
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-L and SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and is subject of a rational design.
 All habitable rooms to have a minimum of 10% natural lighting.
GLAZING
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
 the selection of the glazing to comply with national regulations



Window Schedule						
Type Mark	Mark	Width	Height	Level	From Room:	To Room:
					Name	Name
W01	01	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	02	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	03	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	04	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	05	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	06	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	07	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	08	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	09	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	10	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	11	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	12	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	13	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	14	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	15	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	16	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	17	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	18	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	19	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	20	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	21	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	22	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	23	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	24	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	25	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	26	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	27	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	28	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	29	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	30	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	31	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	32	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	33	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	34	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	35	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	36	1143	1311	Ground Floor Plan	CLASSROOM 03	
W02	39	1143	854	Ground Floor Plan		
W02	40	1143	854	Ground Floor Plan		
Grand total: 38						

Site
1 : 100



Ground Floor Plan
1 : 100

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS
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REGISTRATION NUMBER: PrArch 4849
 ARCHITECT NAME: B Ilori

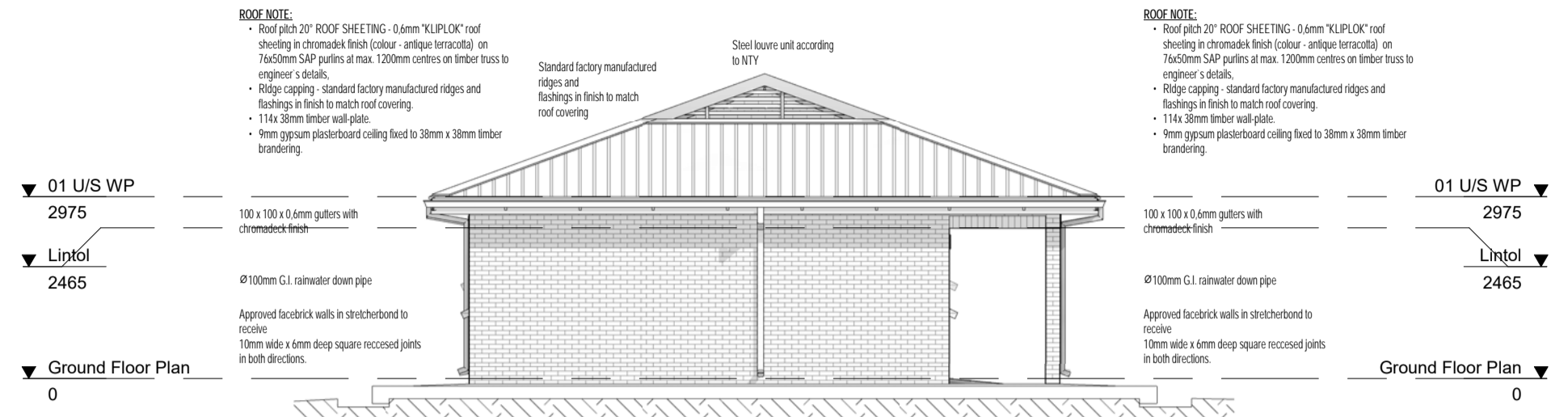
CLIENT: LIMPOPO PUBLIC WORKS
 CLIENT SIGNATURE:
 PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
FOUR CLASSROOM BLOCK WITHOUT STORAGE

DRAWING DESCRIPTION:
FOUR CLASSROOM BLOCK

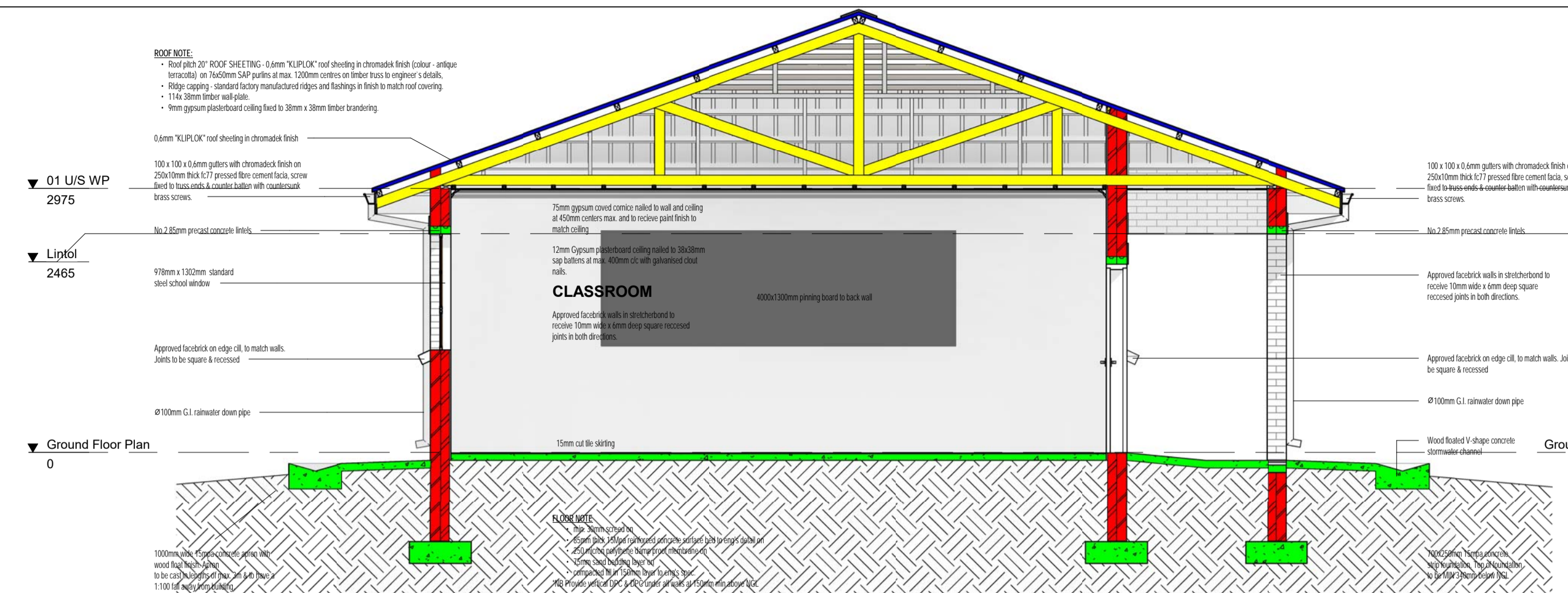
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PROJECT No.	SHEET NUMBER		
063 - 17 - 013	C001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
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DRAWN BY:		CHECKED:	
HK		CD	

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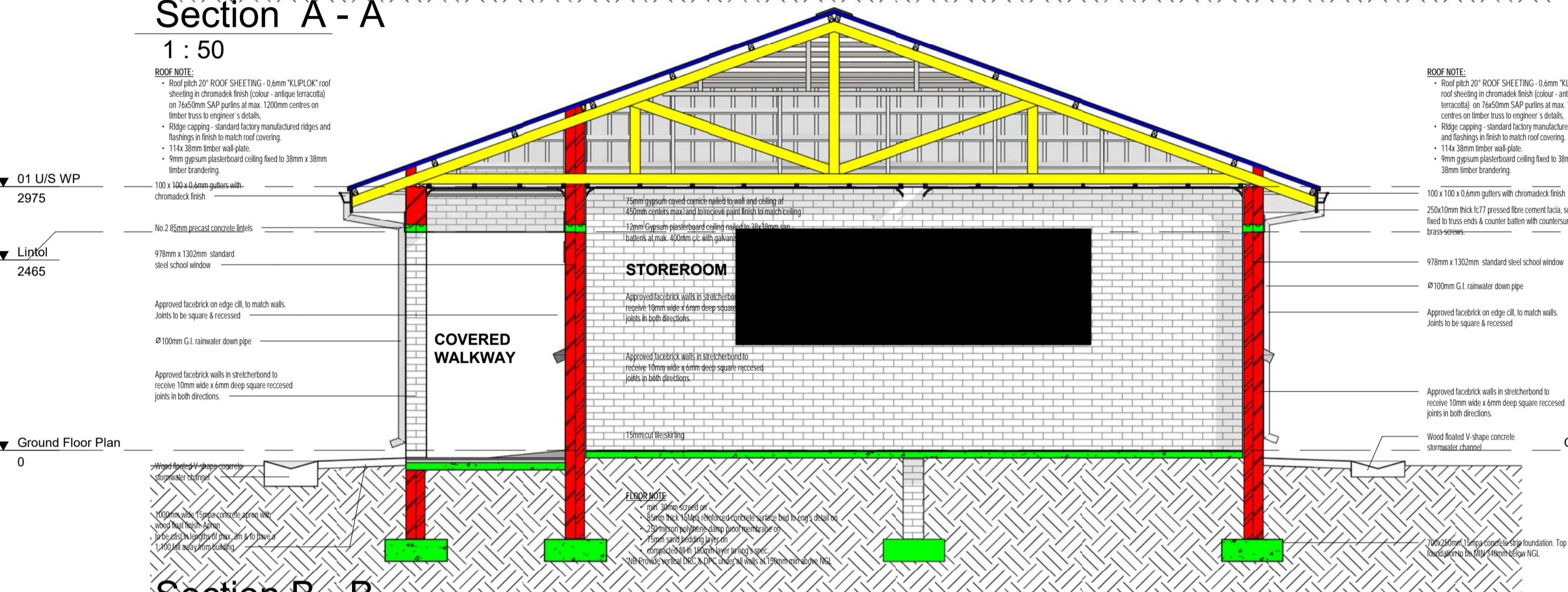
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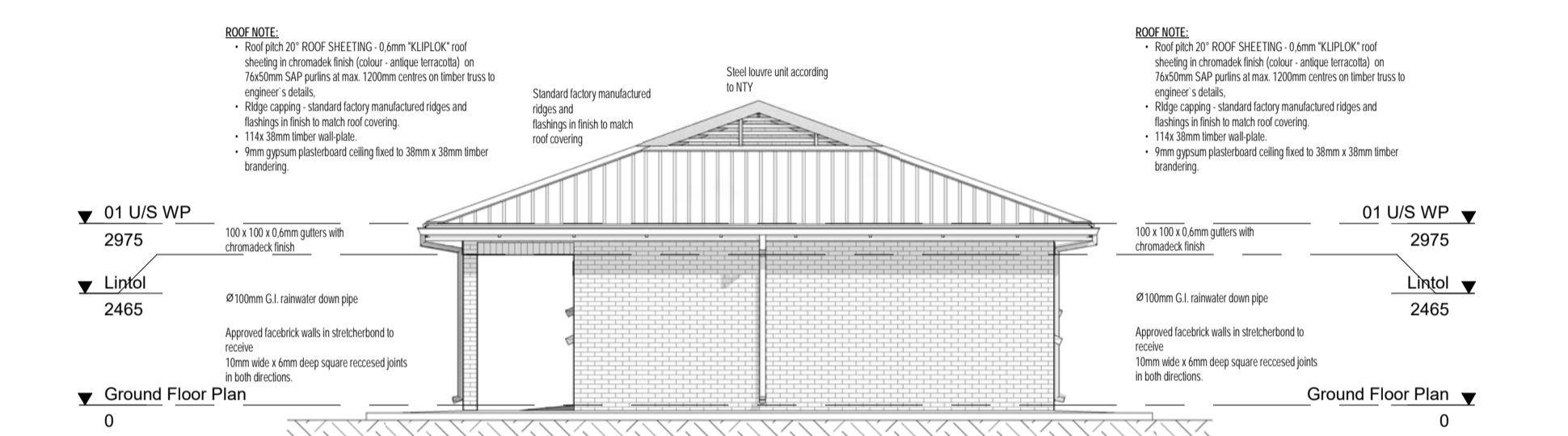
West Elevation
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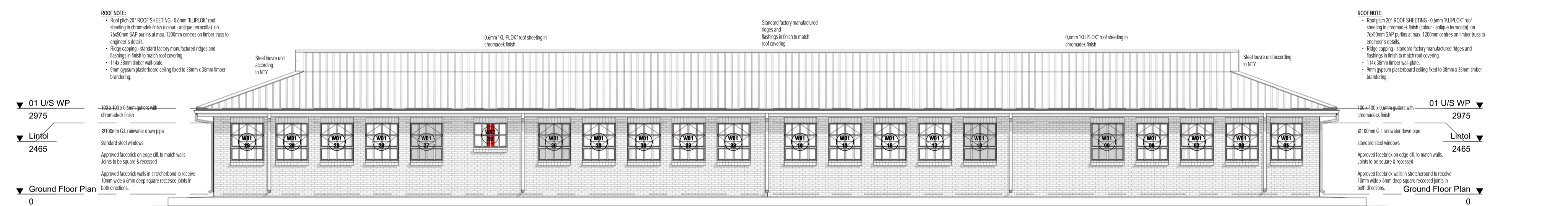
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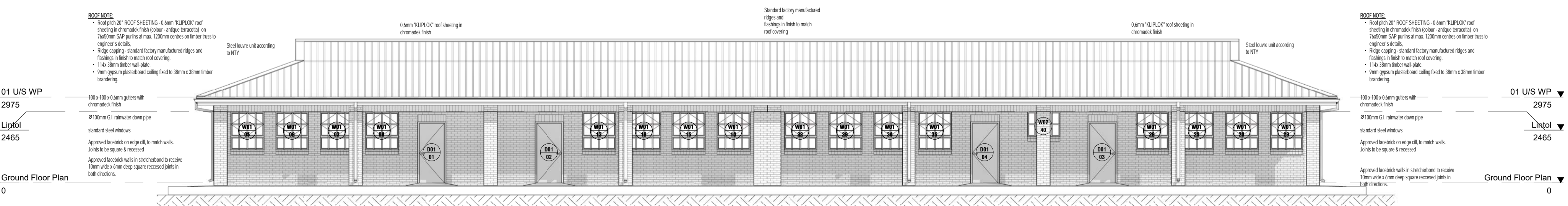
Section B - B
1 : 50



East Elevation
1 : 100



North Elevation
1 : 100



South Elevation
1 : 100

WINDOW SCHEDULE	
STEEL & TIMBER	U/S LINTEL 2 125mm
<p>ALL DOORS AND WINDOWS FROM THE OUTSIDE ARE TO BE CHECKED ON SITE PRIOR TO MANUFACTURING.</p>	
DOOR TYPE	D01
QUANTITY REQ.	4 OFF
FRAME TYPE	STANDARD MILD STEEL 914x2032x1.2mm SINGLE REBATE DOOR FRAME FOR 230mm WALLS.
FRAME FINISH	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT.
DOOR TYPE	914x2032mm EXTERIOR QUALITY FLUSH TYPE FRAMED AND LEDGED HARDWOOD DOOR WITH MESSONITE TO RECEIVE VARNISH.
DOOR FINISH	1 COAT STAINED VARNISH & 2 COATS CLEAR VARNISH.
FANLIGHT	N/A
DOOR FURNITURE	-IRONMONGERY AS PER SEPARATE SCHEDULE
SIGNAGE	N/A
REMARKS	N/A

WINDOW SCHEDULE	
STEEL	U/S LINTEL 2 125mm
<p>ALL DOORS AND WINDOWS FROM THE OUTSIDE ARE TO BE CHECKED ON SITE PRIOR TO MANUFACTURING.</p>	
WINDOW TYPE	W01 - SHCH
GLAZING	6.38mm LAMINATED SAFETY GLASS IN ACCORDANCE WITH SABS 0400
QUANTITY REQUIRED	36 OFF
FRAME TYPE	STANDARD MILD STEEL SCHOOL TYPE CENTRE PIVOT, STEEL WINDOW FRAME
FRAME FINISH	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
IRONMONGERY	AS PER MANUFACTURER TO CLIENTS APPROVAL

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence.
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
All concrete foundations to be a minimum of 600mm x 250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J.
Stable to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
Fire walls to be taken to top of underside of roof covering
provide a minimum 150mm threshold and minimum 75 fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
Water penetration through walls detailed requirements to comply with SANS 10400-K
Roofs
Roof covering and waterproofing to comply with SANS 10400-L
That roofs or related gutter to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L.
Outlets and downpipes to comply with SANS 10400-R.
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or national assessment.

PEOPLE WITH DISABILITIES
Detailed requirements to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or national assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R and in accordance to detailed requirements of SANS 10400-C and in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

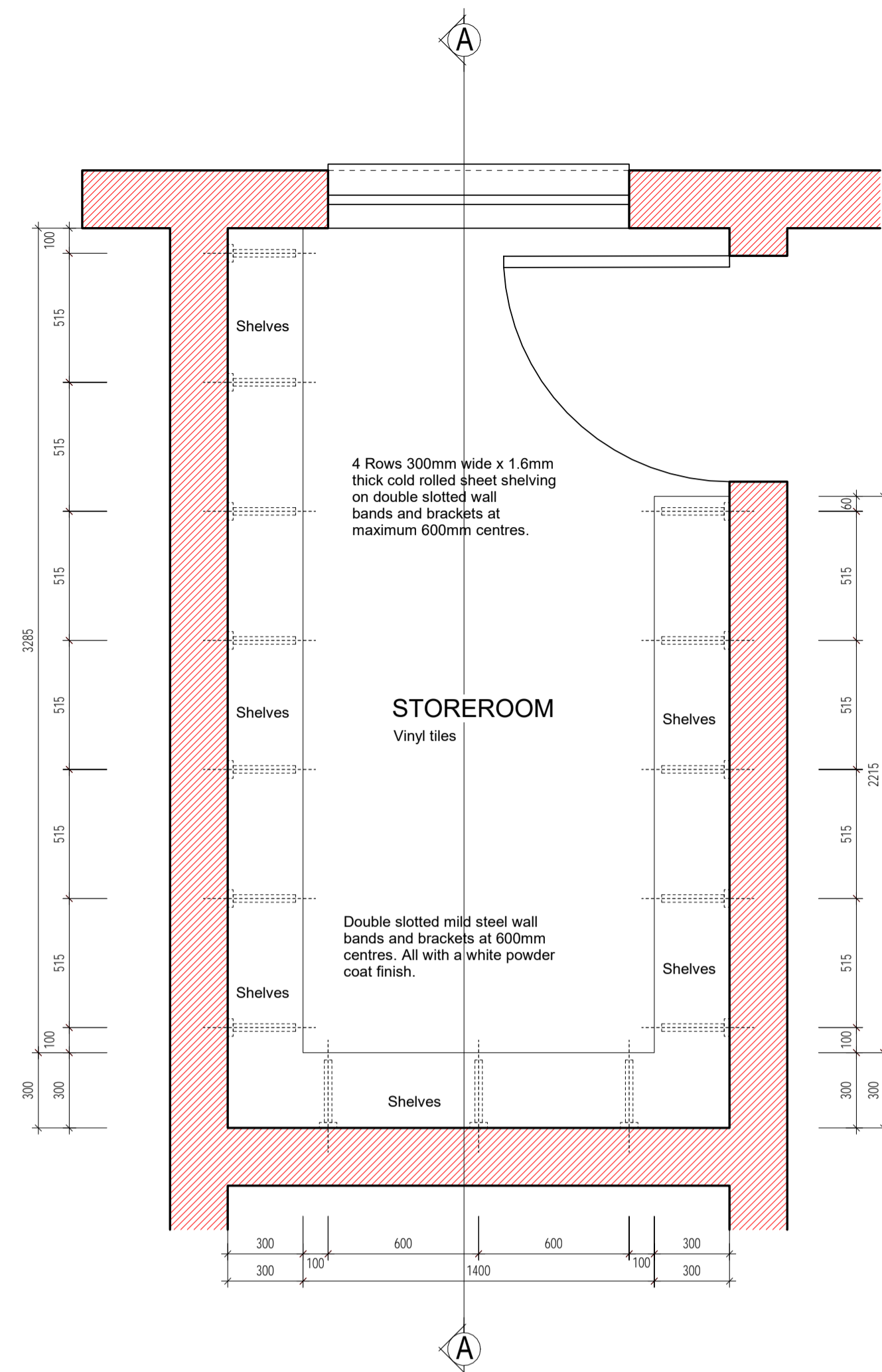
JOHANNESBURG
Unit C2-001, Edenburg Terrace
348 Rivonia Blvd | Rivonia 2128
Tel: +27 11 224 5141 | Cell: +27 82 900 8288
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION			
RASEMA SECONDARY SCHOOL			
FOUR CLASSROOM BLOCK WITHOUT STORAGE			
DRAWING DESCRIPTION			
FOUR CLASSROOM BLOCK			
SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	19-05-2021		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	C002		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
TENDER	COUNCIL	CONSTRUCTION	
DRAWN BY: HK		CHECKED: CD	

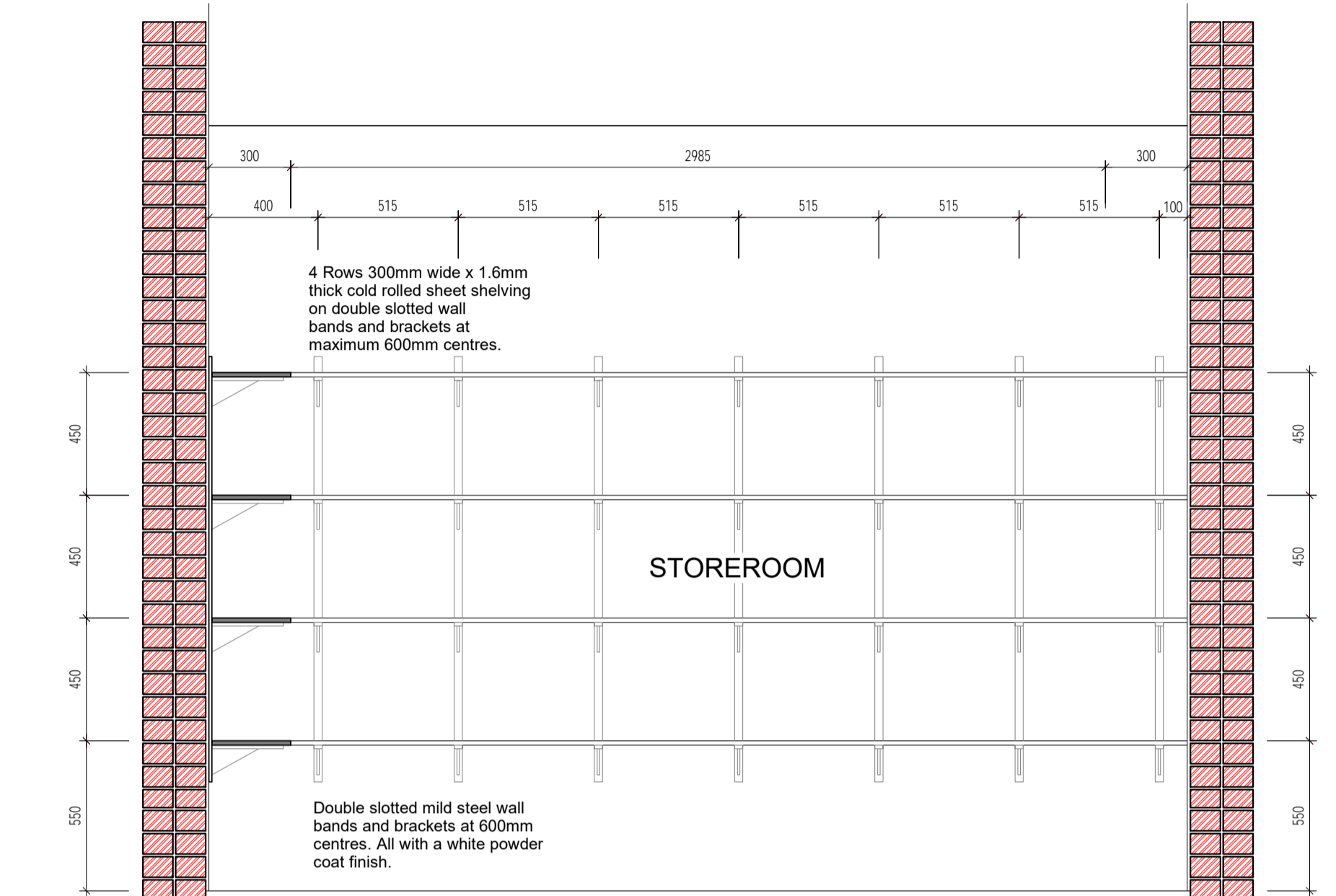
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JOINERY DETAILS

SCALE 1:20



SECTION A - A

SCALE 1:20

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm/250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wet)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
Fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 17m fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
Water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
Roof covering and waterproofing to comply with SANS 10400-L
Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and detailed requirements to comply with SANS 10400-L
Outlets and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
The fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
The fire installations to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and is subject of a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
FOUR CLASSROOM BLOCK WITHOUT STORAGE

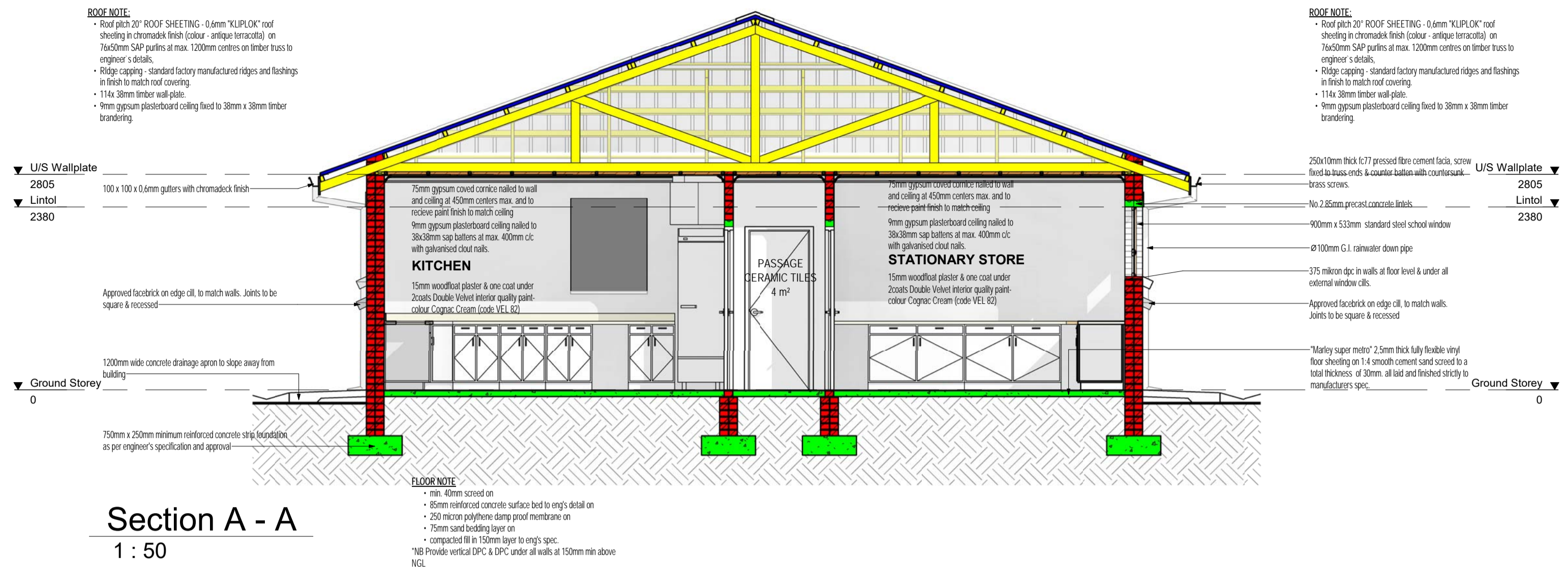
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SCALE / SHEET SIZE	DATE		
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PROJECT No.	SHEET NUMBER		
063 - 17 - 013	C003		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
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HK		CD	

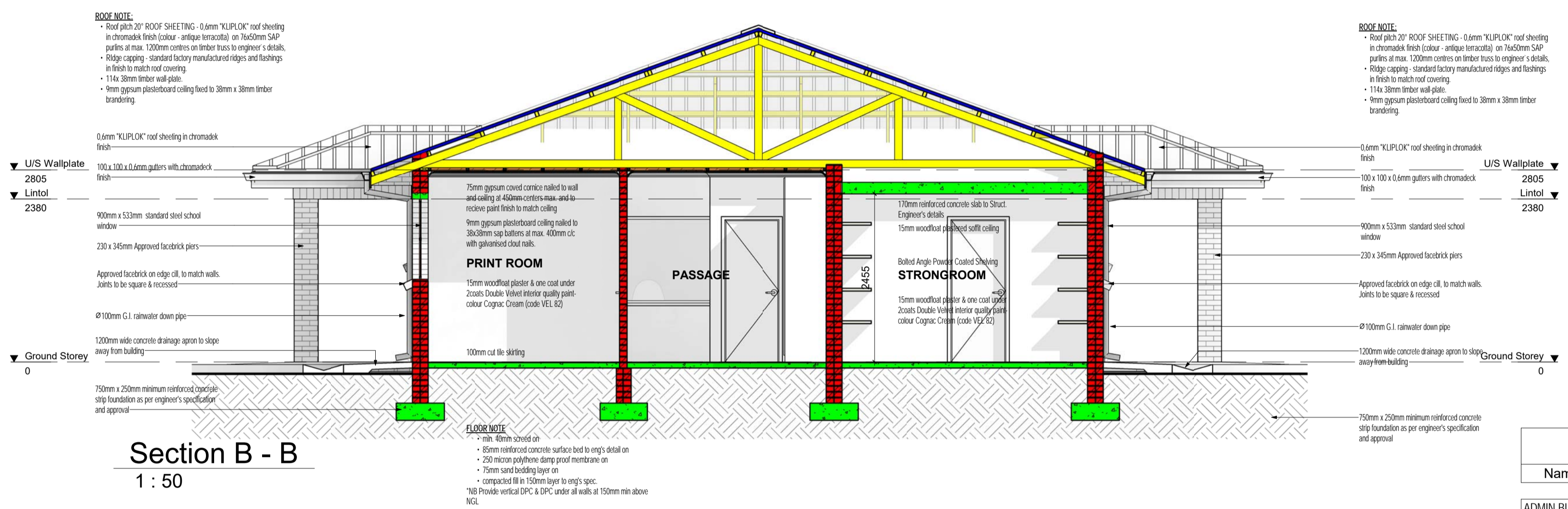
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Room Schedule				
Name	Area	Level	Floor Finish	Occupant
GENERAL OFFICE	29.51 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
VICE PRINCIPAL	22.45 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
PRINCIPAL OFFICE	29.48 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
PRINT ROOM	7.56 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
SICK ROOM	5.85 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
MALE	2.80 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
FEMALE	2.80 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
RECEPTION/ CLERK OFFICE	17.11 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
STAFF ROOM	78.37 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
STRONG ROOM	4.82 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING
STATIONARY STORE	10.89 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
KITCHEN	8.46 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
WAITING AREA	9.35 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
ENTRANCE HALL	12.71 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
PASSAGE	3.79 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
PASSAGE	18.65 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
PORCH	2.36 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
PORCH	2.36 m ²	Ground Storey	CERAMIC TILES	ADMIN BUILDING
MALE	5.45 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
MALE	5.43 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
FEMALE	5.45 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
FEMALE	5.43 m ²	Ground Storey	VINYL TILES	ADMIN BUILDING LAVATORY
Grand total: 22	291.10 m ²			

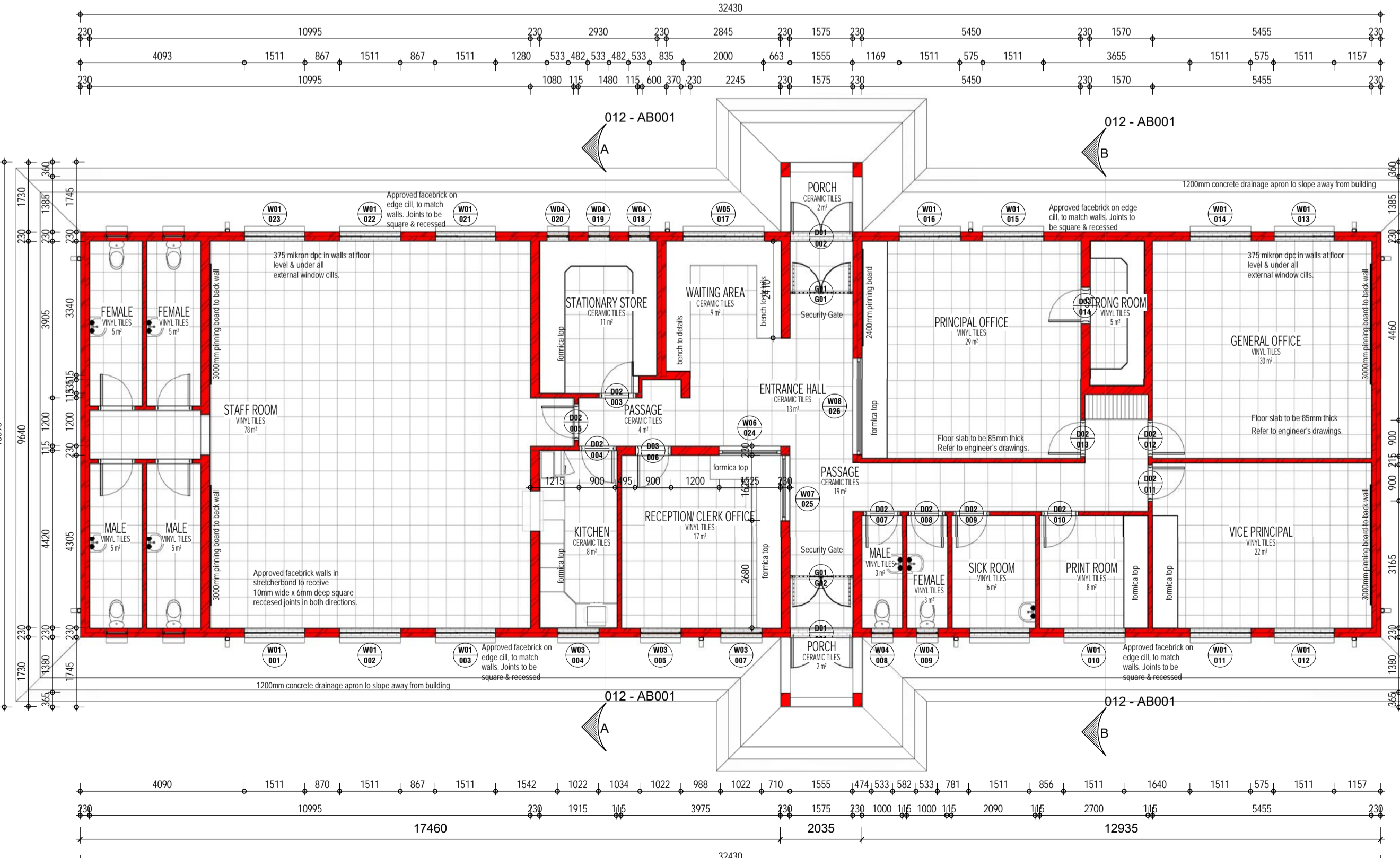


Section A - A
1 : 50

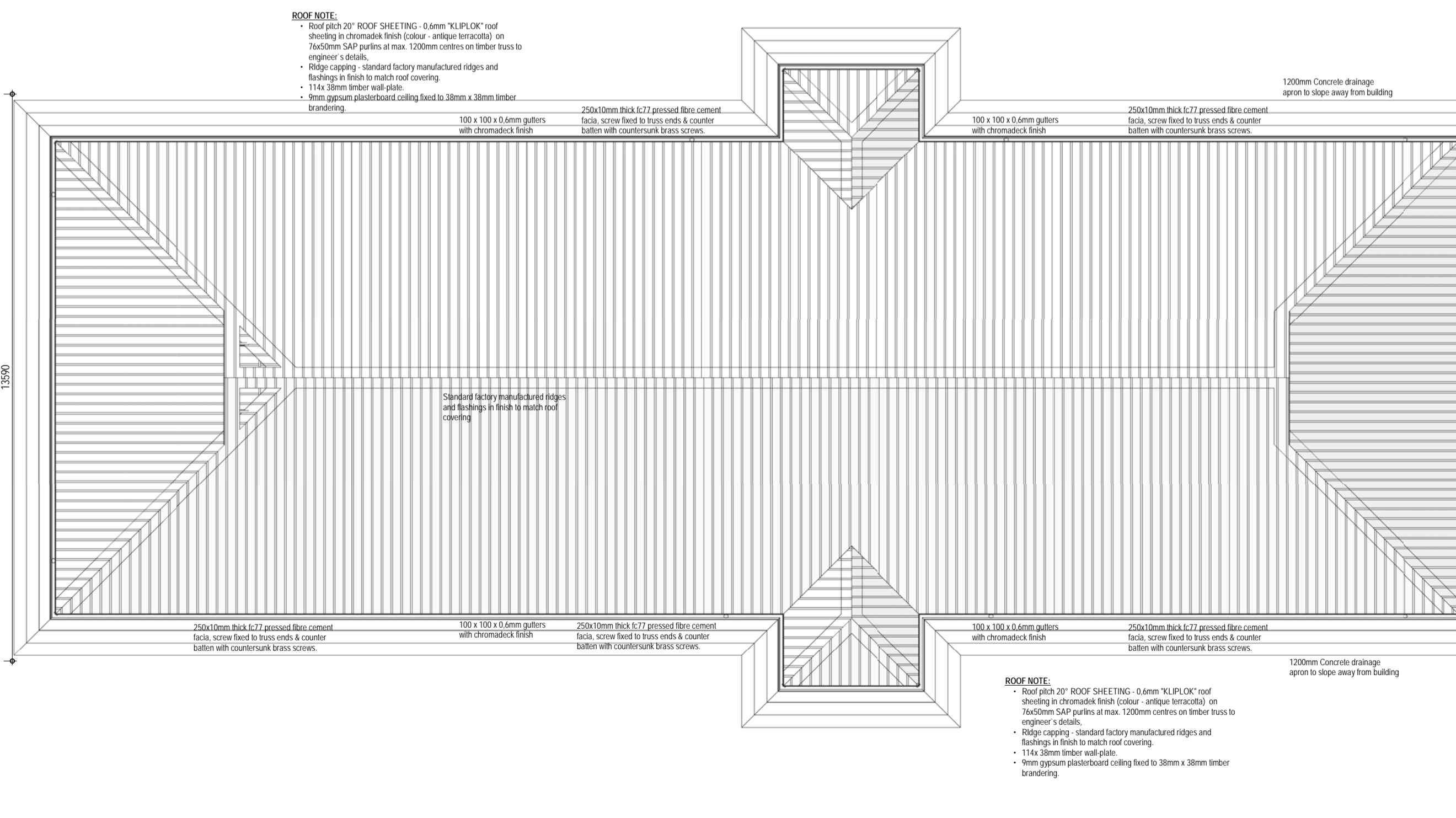


Section B - B
1 : 50

Area Schedule (Gross Building)		
Name	Area	Level
ADMIN BLOCK	304.28 m ²	Ground Storey
Grand total: 1		



Ground Storey
1 : 100



Roof Plan
1 : 100

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence.
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm x 250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082
Detailed requirements to comply with SANS 10400-J.
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

ROOFS
To comply with SANS 10400-I (laundry, kitchen, shower, bathroom or etc)
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082
Detailed requirements to comply with SANS 10400-J.
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

WALLS
Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-K.
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K.
Water penetration through walls detailed requirements to comply with SANS 10400-K.
Roof covering and waterproofing to comply with SANS 10400-L.
Flat roofs or related gables to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L.
Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L.
Outlets and downpipes to comply with SANS 10400-R.
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to each stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-L.
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
The installations to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and be subject of a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

DEPARTMENT OF
EDUCATION

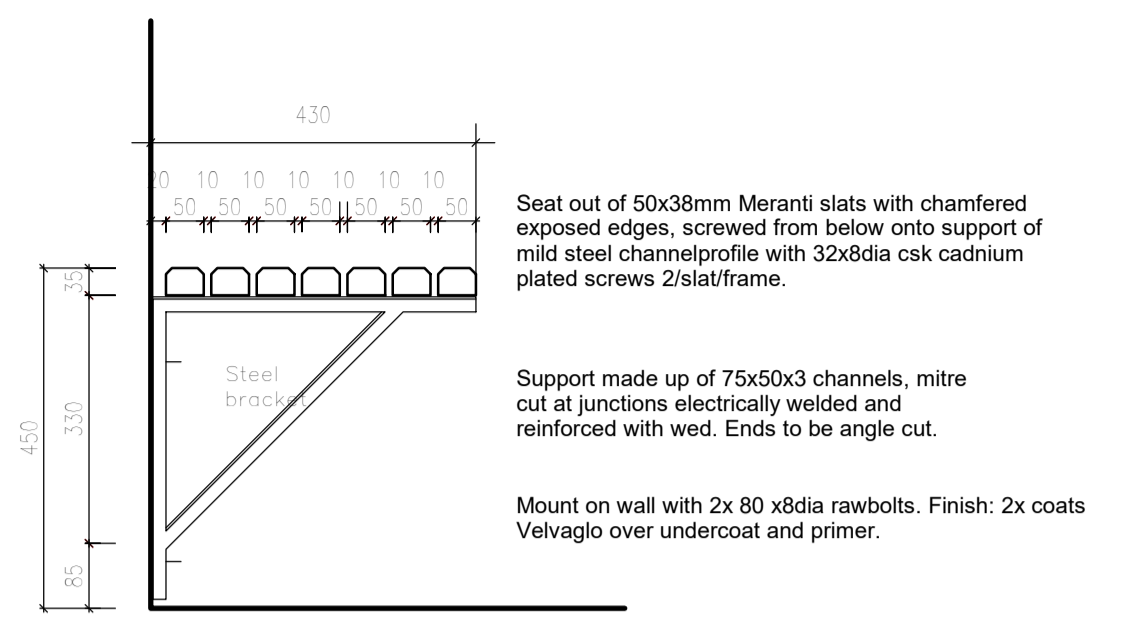
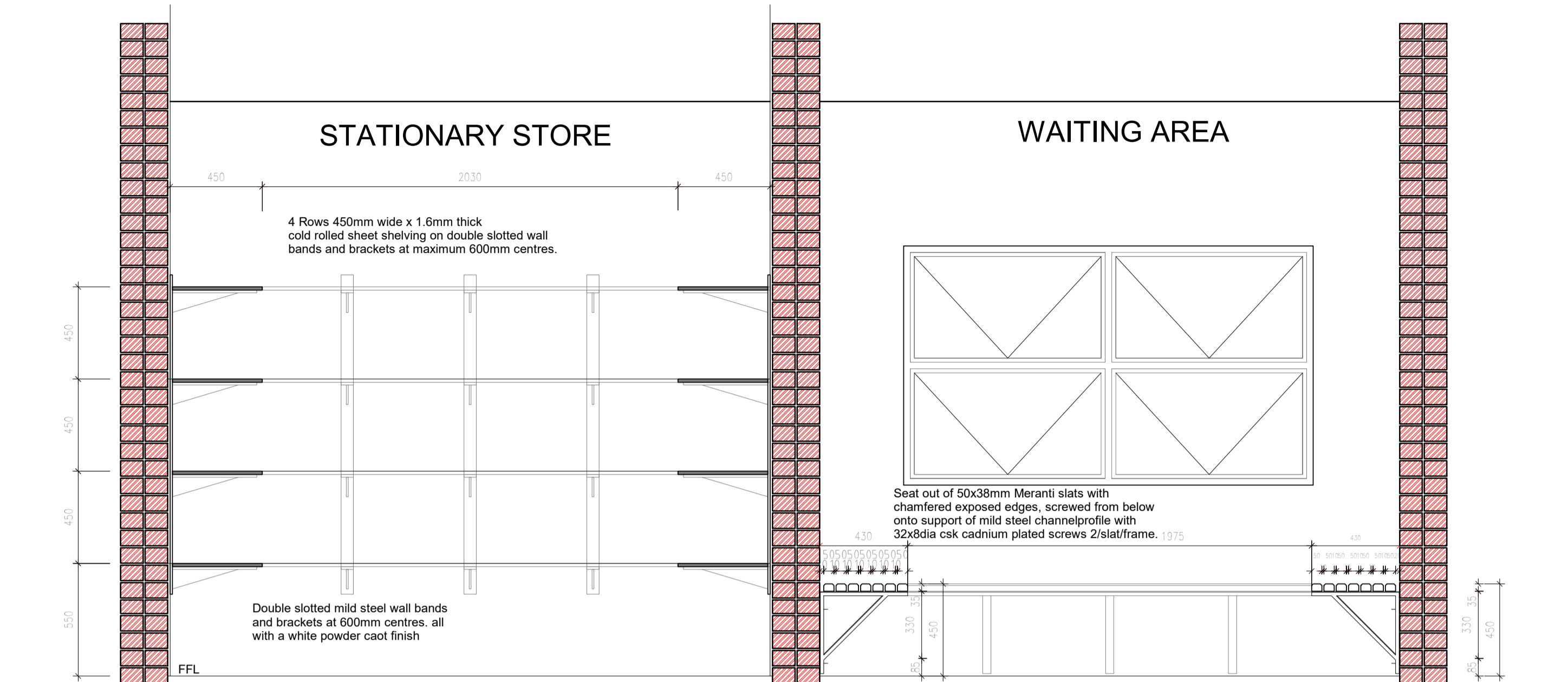
IDC ARCHITECTS
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG
JOHANNESBURG
Unit C2-001, Edenburg Terrace
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Tel: +27 11 234 5141 | Cell: +27 82 900 8288
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS
CLIENT SIGNATURE:
PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
ADMINISTRATION BLOCK

DRAWING DESCRIPTION			
SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	19-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	012 - AB001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
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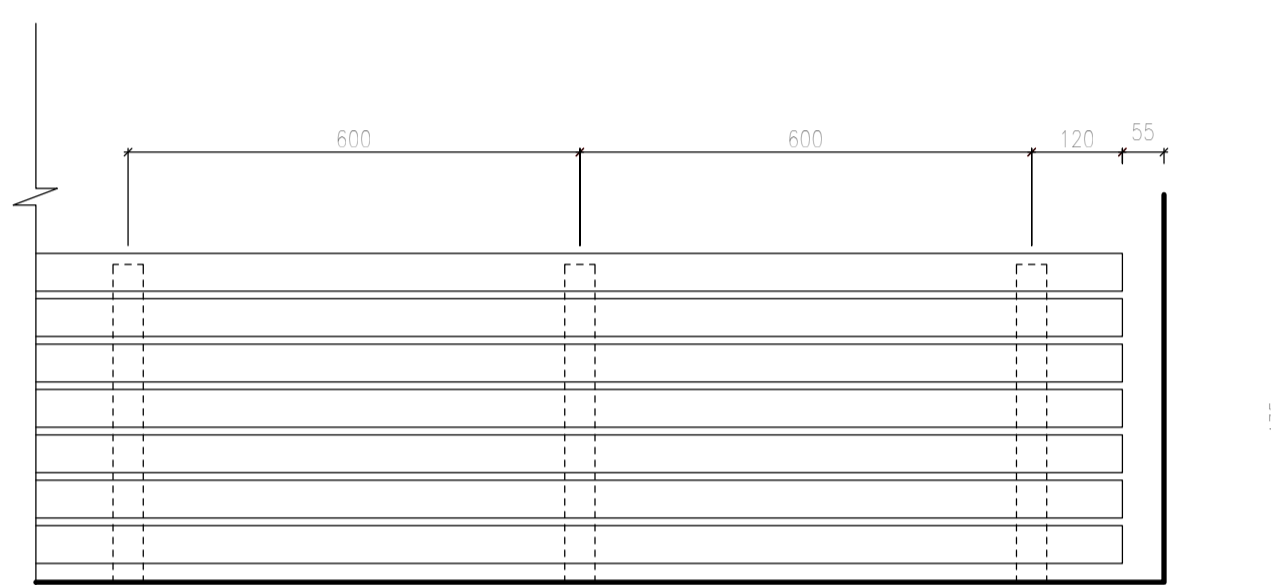
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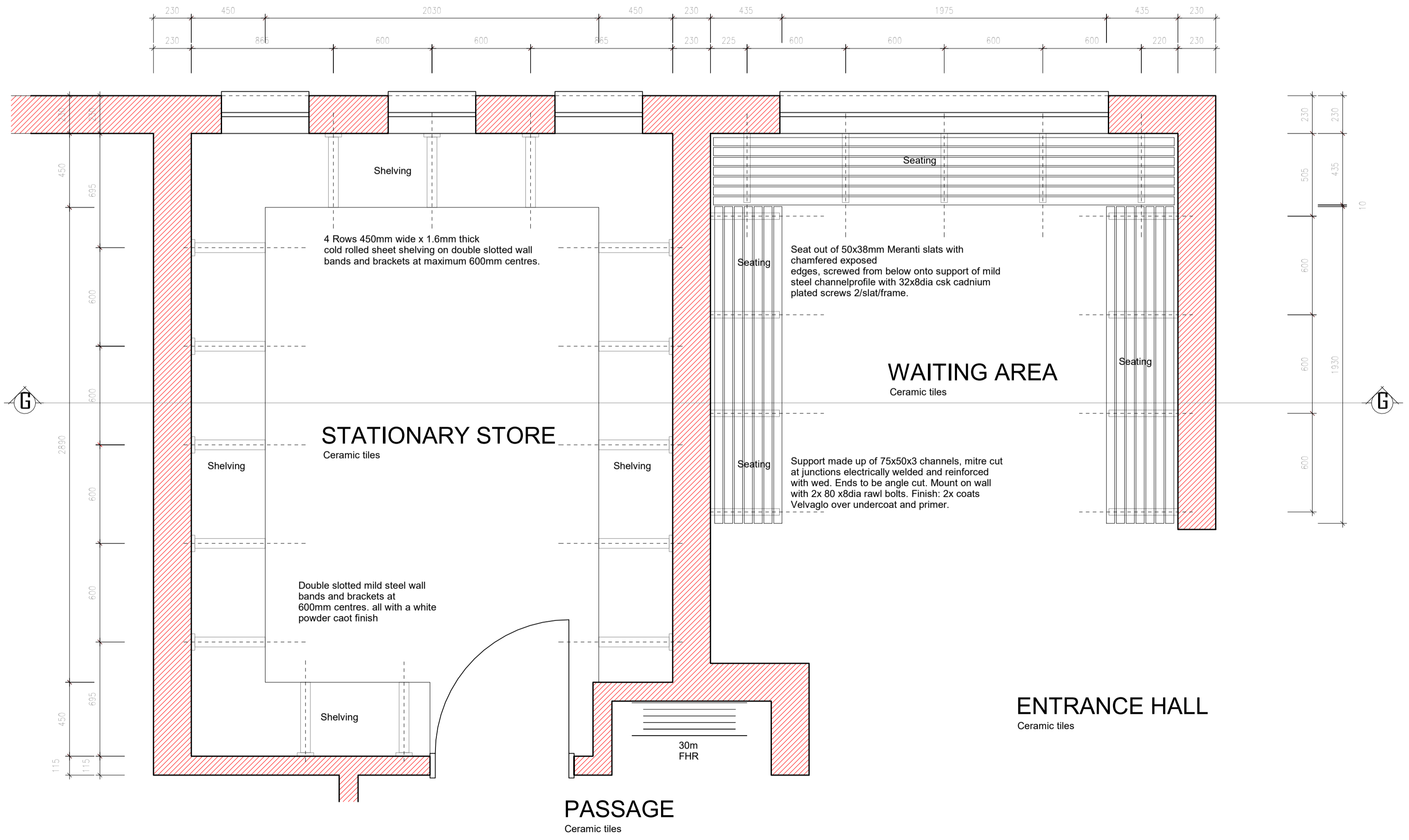
SEAT SECTION

SCALE 1:10



SEAT PLAN

SCALE 1:10



JOINERY DETAILS 01

SCALE 1:20

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence.
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm/250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J.
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
Fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1m fire doors to garage where it interlocks to hoist.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
Water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
Roof covering and waterproofing to comply with SANS 10400-L
Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L
Outlets and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-K and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
The fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
The fire installations to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and WC, to be in accordance with the detailed requirements of SANS 10400-D and be subject of a rational design.
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and be subject of a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	19-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: RASEMA SECONDARY SCHOOL

ADMINISTRATION BLOCK

ENTRANCE HALL DETAIL

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	19-10-2019		
PROJECT No. 063 - 17 - 013	SHEET NUMBER 012 - AB002		
OCCUPANCY A3	PHASE 1	DISCIPLINE ARCH	REVISION 1
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: HK		CHECKED: CD	

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GENERAL NOTES
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
 To comply with SANS 10400-C
 Figured dimensions to be taken in preference to scaling
 Overall dimensions (external) to take precedence
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
 To comply with SANS 10400-B
 Detailed requirements of SANS 10400-H
 All concrete foundations to be a minimum of 600mm/250mm.
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082
 detailed requirements to comply with SANS 10400-J.
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
 fire walls to be taken up to underside of roof covering
 provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to hoists.
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
 Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-K
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
 water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
 Roof covering and waterproofing to comply with SANS 10400-L
 Flat roofs or related gable to comply with SANS 10400-L or rational design/ rational assessment or both
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T

OUTLETS AND DOWNPIPES
 to comply with SANS 10400-R
 Gutters and downpipes to comply with SANS 10400-R
 fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
 to comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
 fire installations to comply with national fire regulations
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

ENERGY EFFICIENCY
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
 the design to comply with national fire regulations

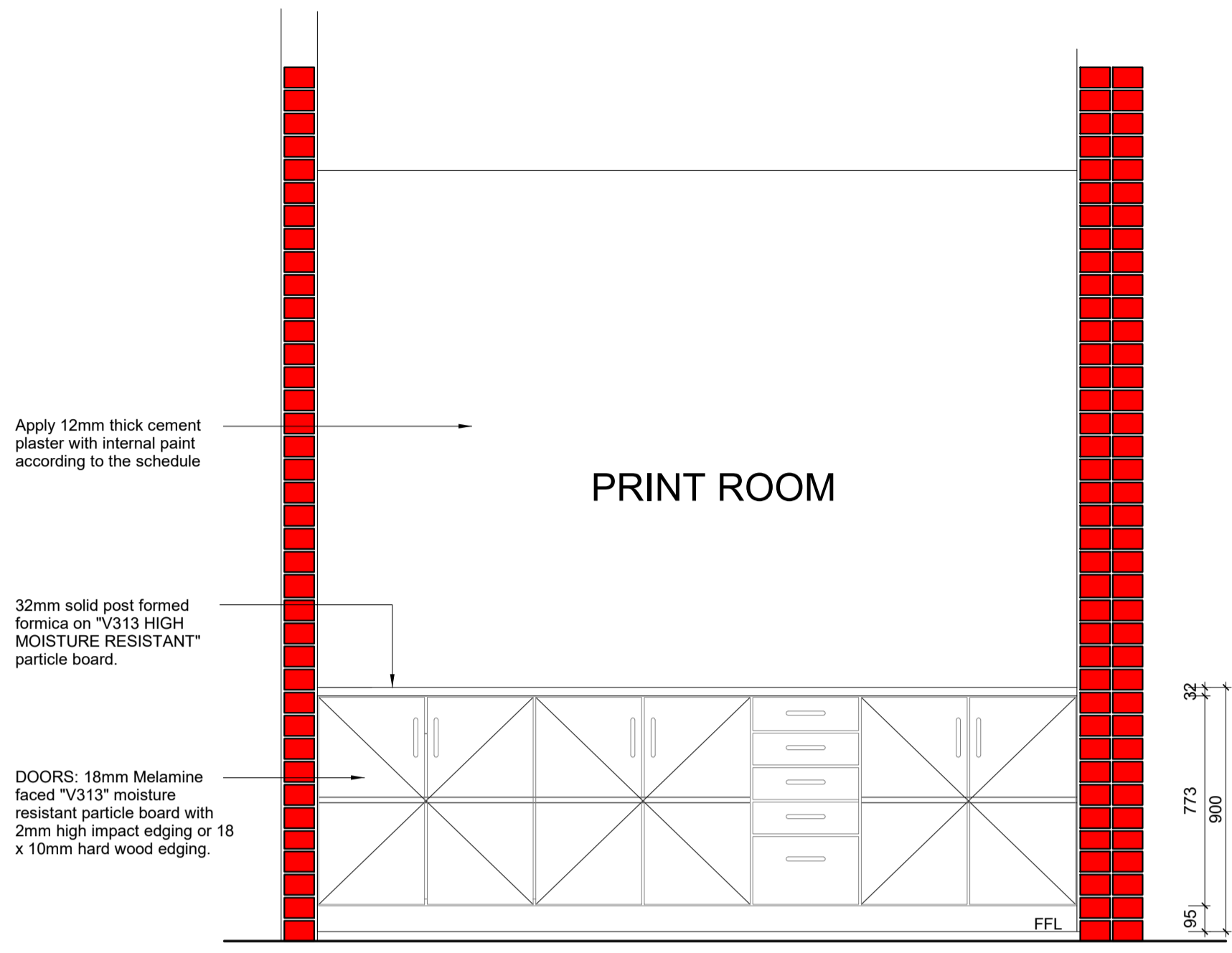
PUBLIC SAFETY
 level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
 the provision for space heating to comply with national regulations

STORM WATER DISPOSAL
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design.

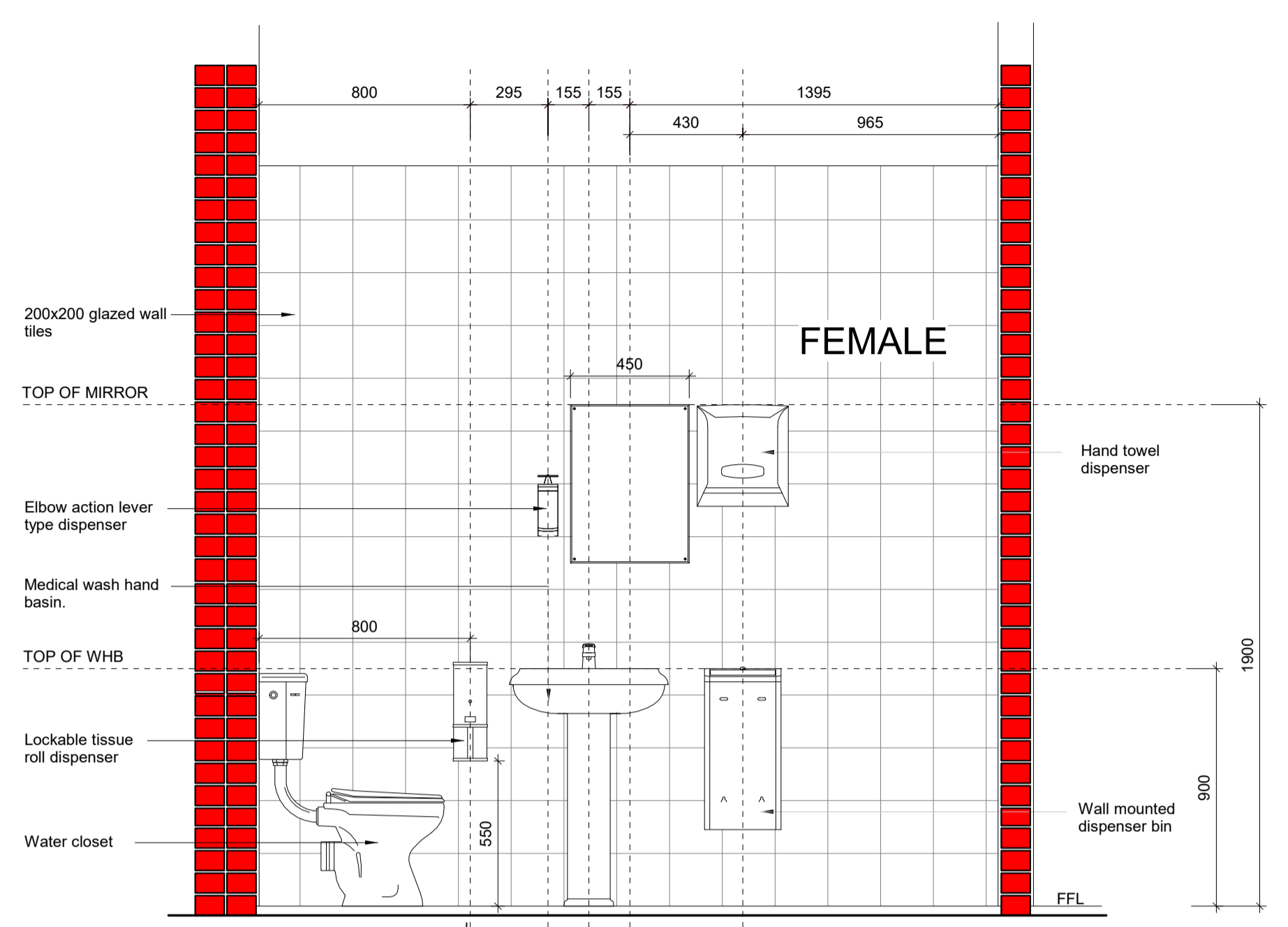
LIGHTING AND VENTILATION
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-O and is subject of a rational design.
 All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
 the selection of the glazing to comply with national regulations



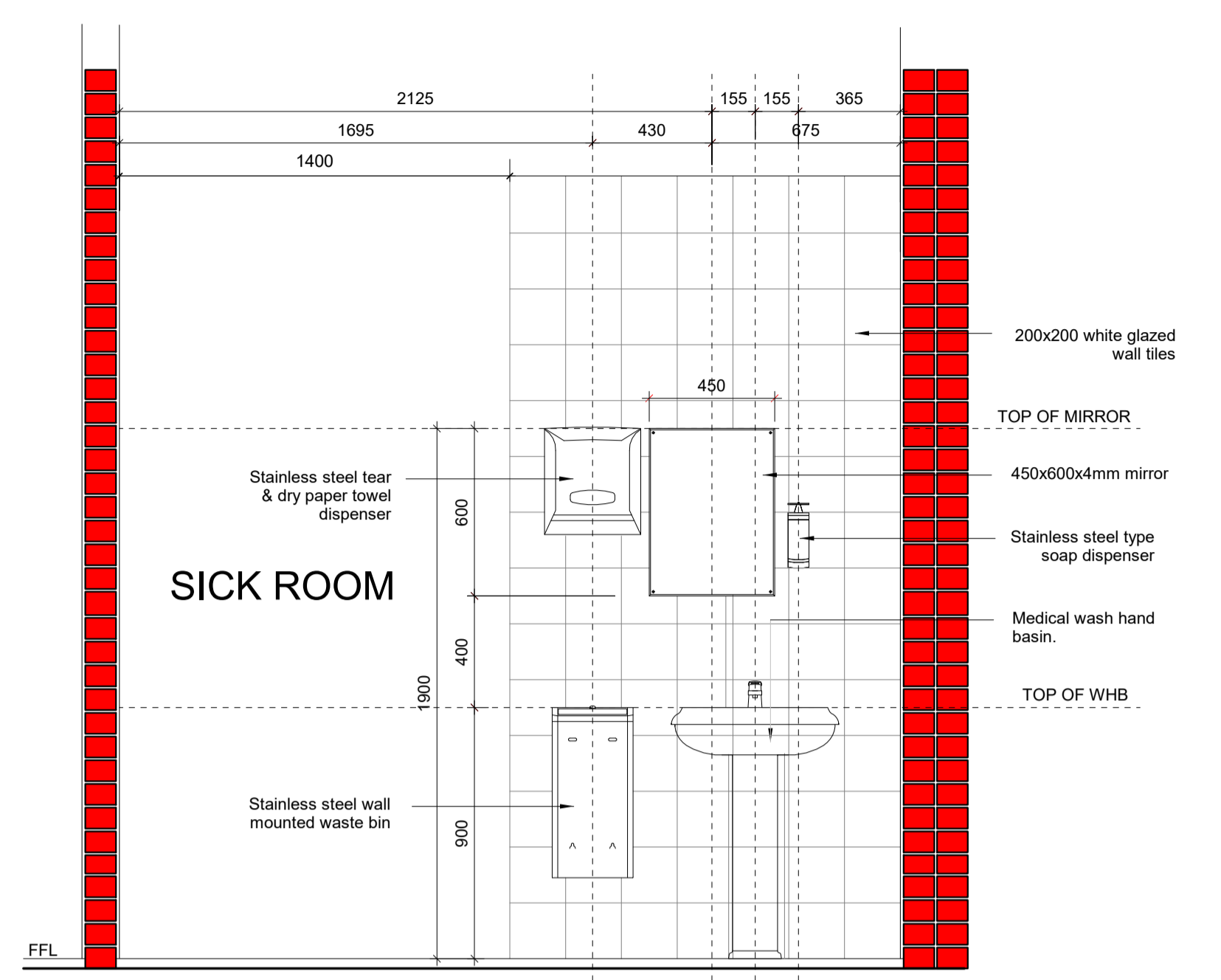
SECTION C - C

SCALE 1:20



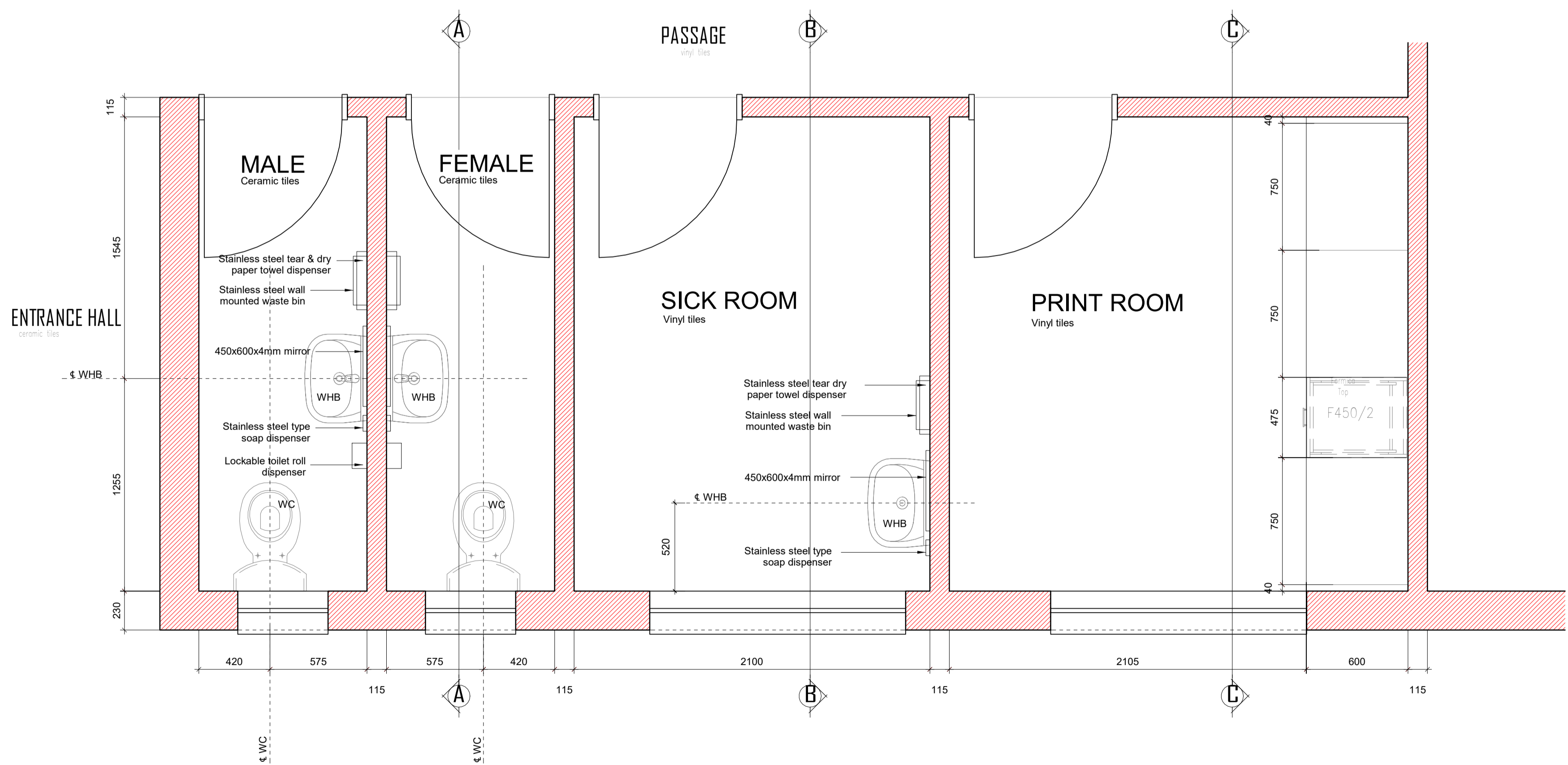
SECTION A - A

SCALE 1:20



SECTION B - B

SCALE 1:20



ROOM BLOW-UPS & JOINERY DETAILS 02

SCALE 1:20

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT:		
CIVIL ENGINEER:		
STRUCTURAL ENGINEER:		
MECHANICAL ENGINEER:		
ELECTRICAL ENGINEER:		
FIRE ENGINEER:		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	19-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS
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 Tel: +27 11 234 5141 | Cell: +27 82 900 8288
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
 ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

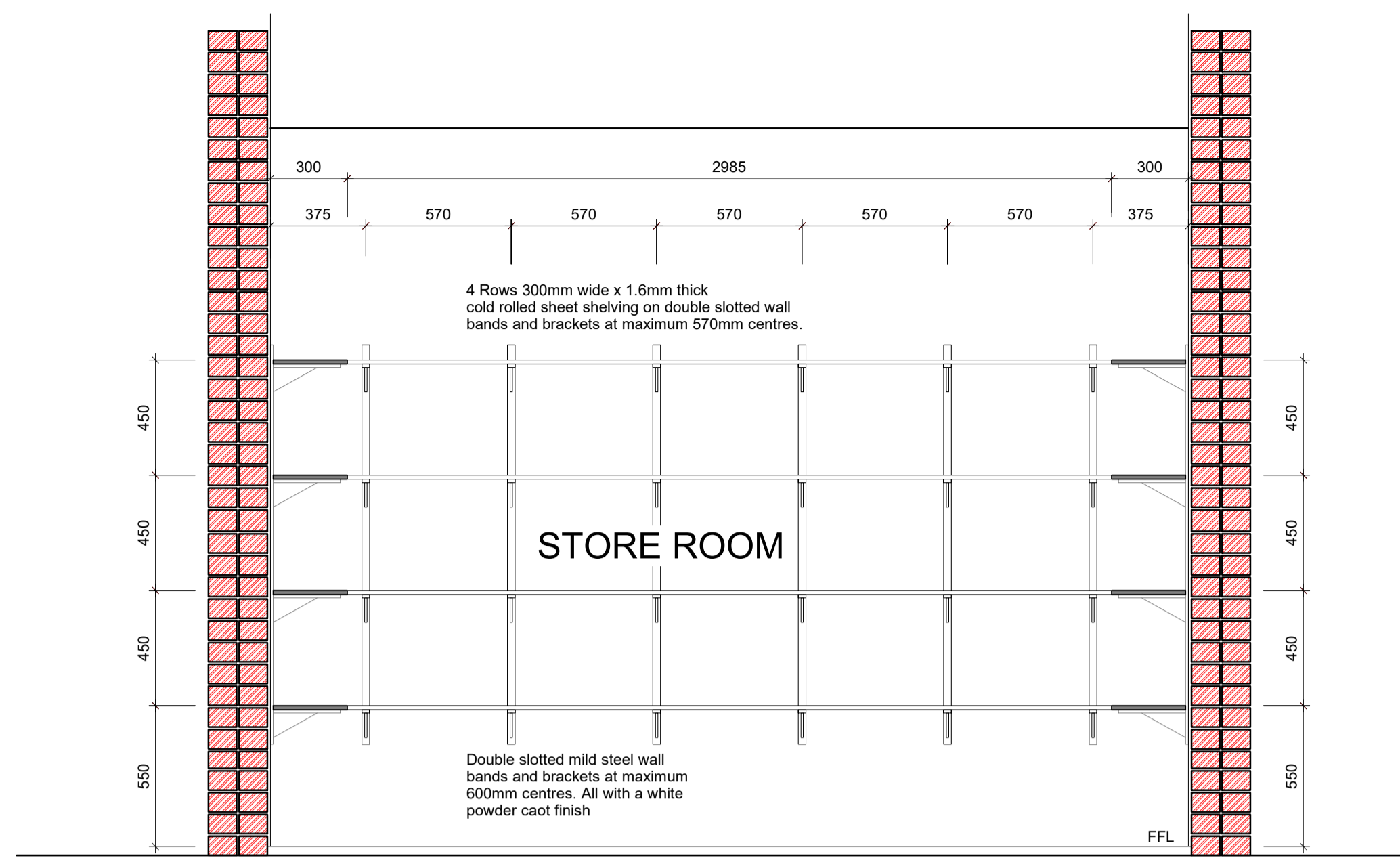
PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL

ADMINISTRATION BLOCK

DRAWING DESCRIPTION

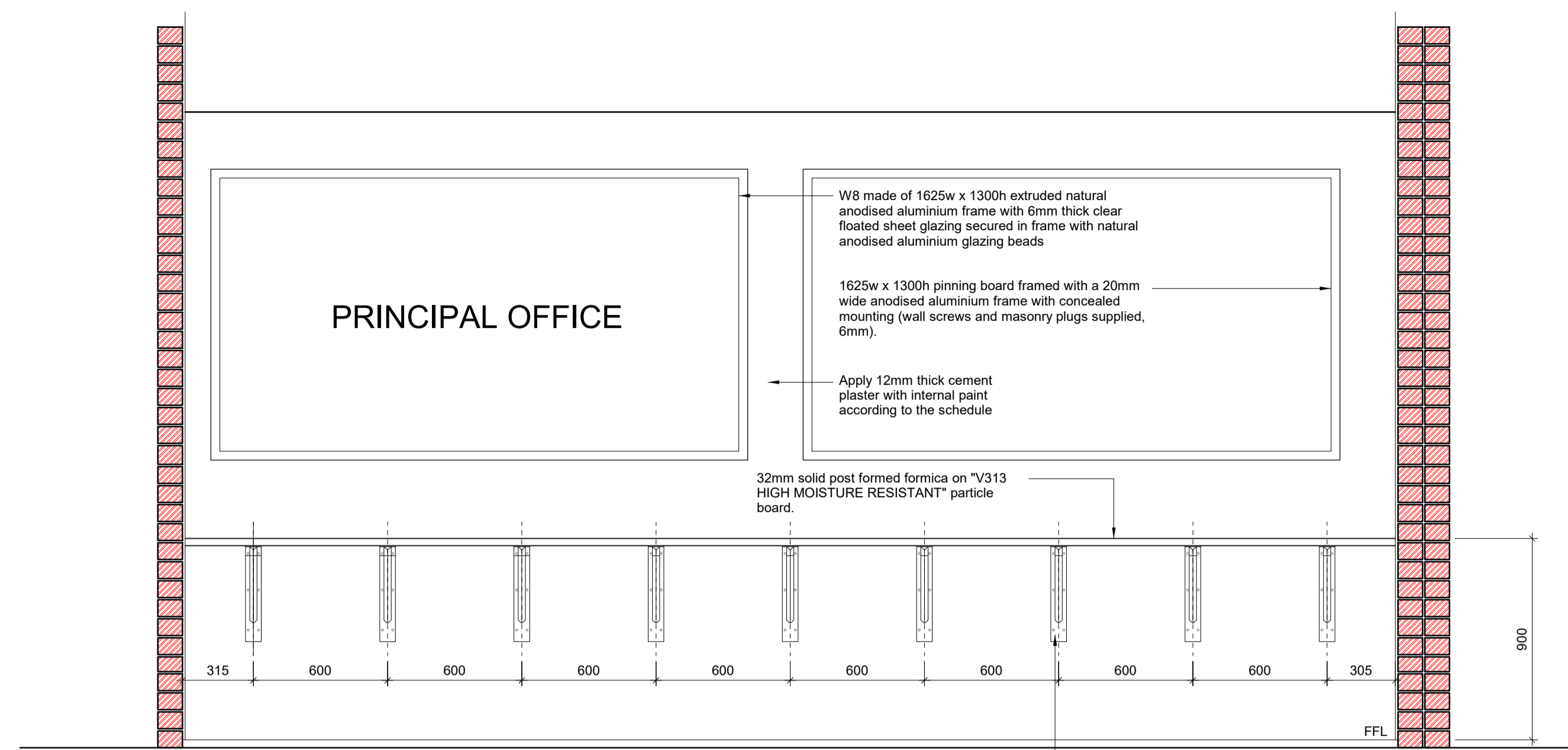
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 20 @ A1	19-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	012 - AB004		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY: HK		CHECKED: CD	

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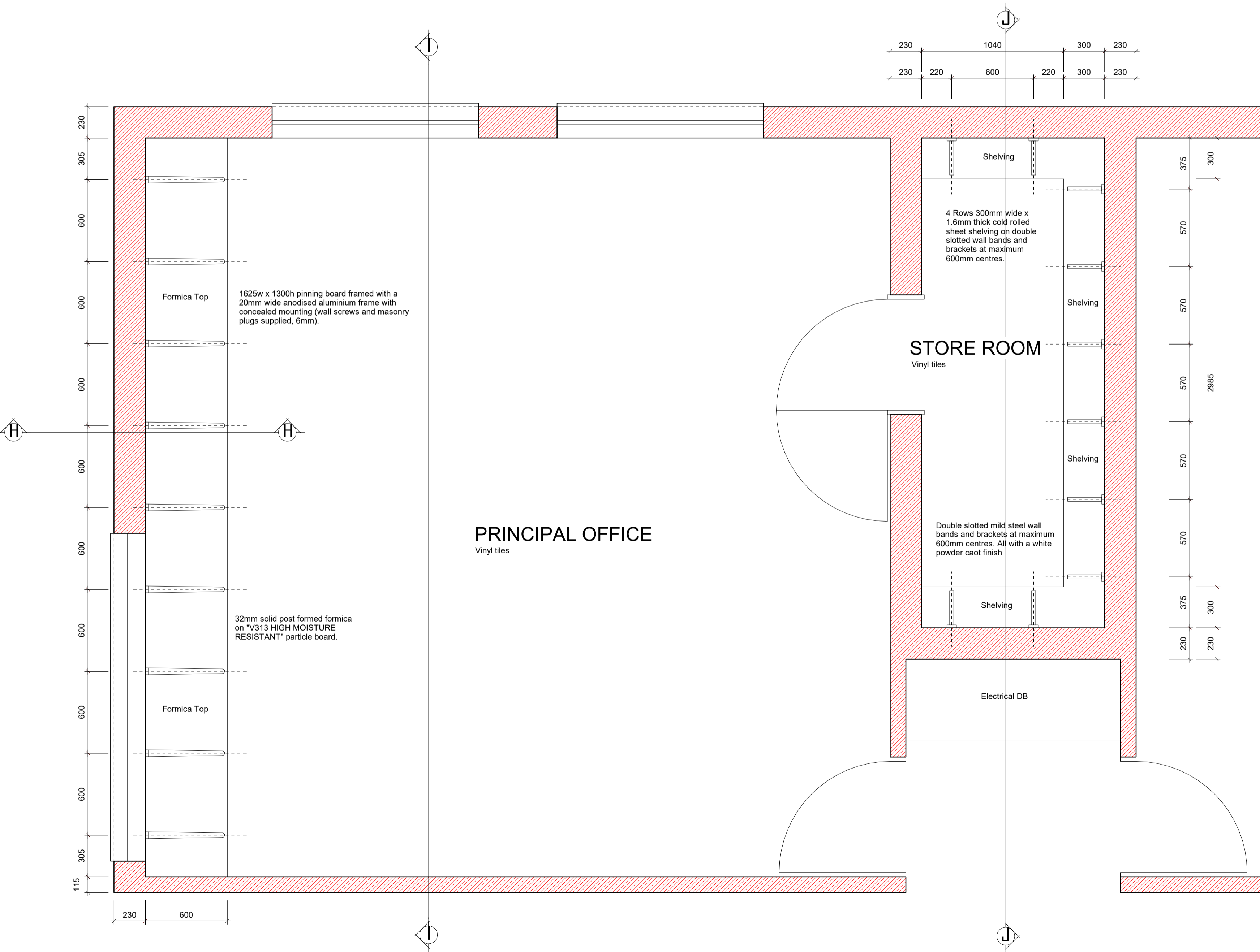
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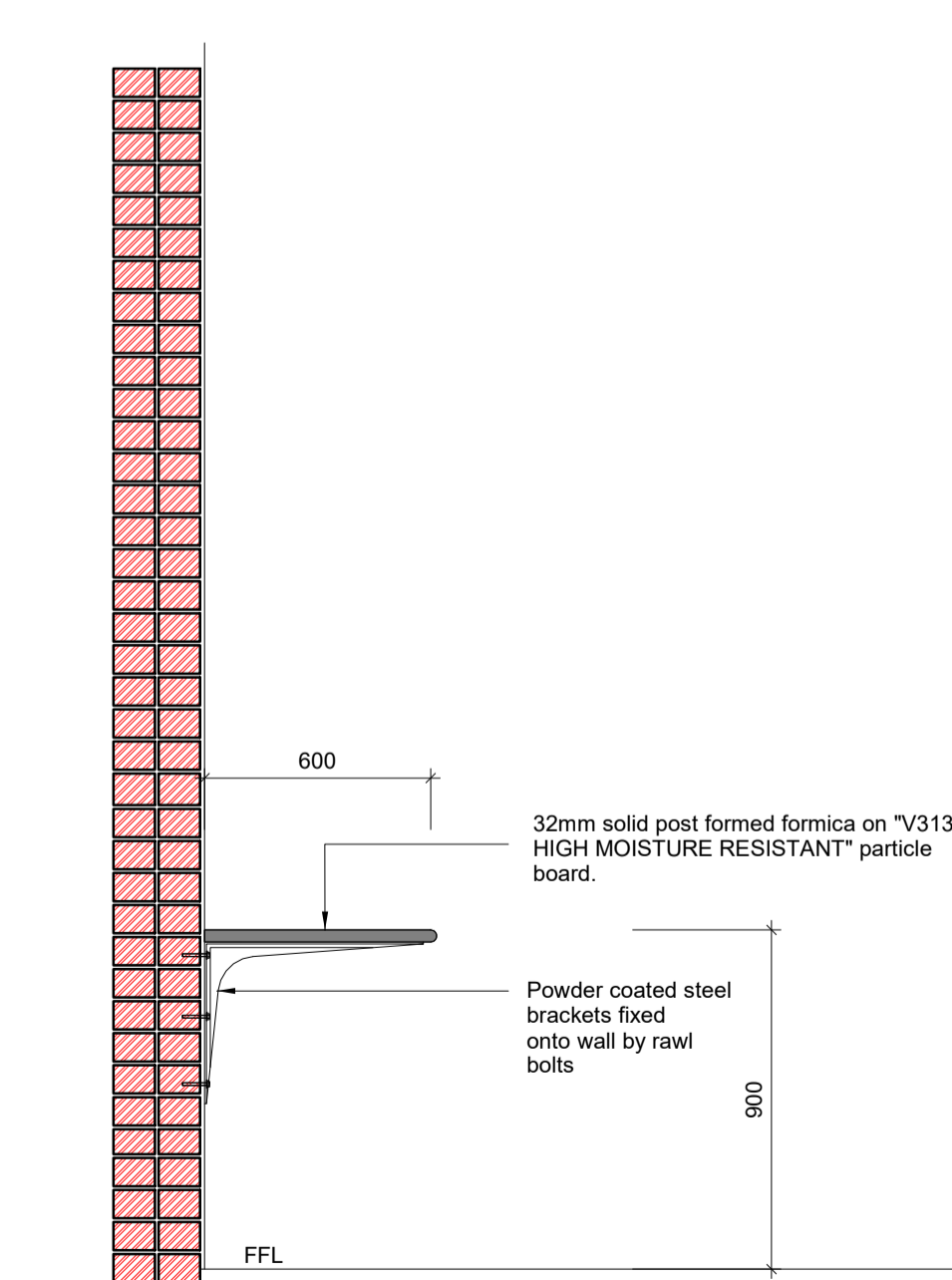
SECTION I - I

SCALE 1:20



JOINERY DETAILS

SCALE 1:20



SECTION H - H

SCALE 1:20

GENERAL NOTES
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
 To comply with SANS 10400-C
 Figured dimensions to be taken in preference to scaling
 Overall dimensions (external) to take precedence
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
 To comply with SANS 10400-B
 Detailed requirements of SANS 10400-H
 All concrete foundations to be a minimum of 600mm/250mm
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
 detailed requirements to comply with SANS 10400-J
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

WALLS
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
 Flat roofs or related gable to comply with SANS 10400-L and detailed requirements to comply with SANS 10400-K
 water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
 Roof covering and waterproofing to comply with SANS 10400-L
 Flat roofs or related gable to comply with SANS 10400-L and detailed requirements to comply with SANS 10400-L
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L
 Cutters and downpipes to comply with SANS 10400-R
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
 The fire installations to comply with national fire regulations
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
 The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
 the fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
 the fire installations to comply with national fire regulations

PUBLIC SAFETY
 level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
 the provision for space heating to comply with national regulations

STORM WATER DISPOSAL
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.
 the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-O and is subject of a rational design.
 All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
 the selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	19-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

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 346 Rivonia Blvd | Rivonia 2128
 Tel: +27 11 234 2141 | Cell: +27 82 900 8288
 info@idcarchitects.co.za

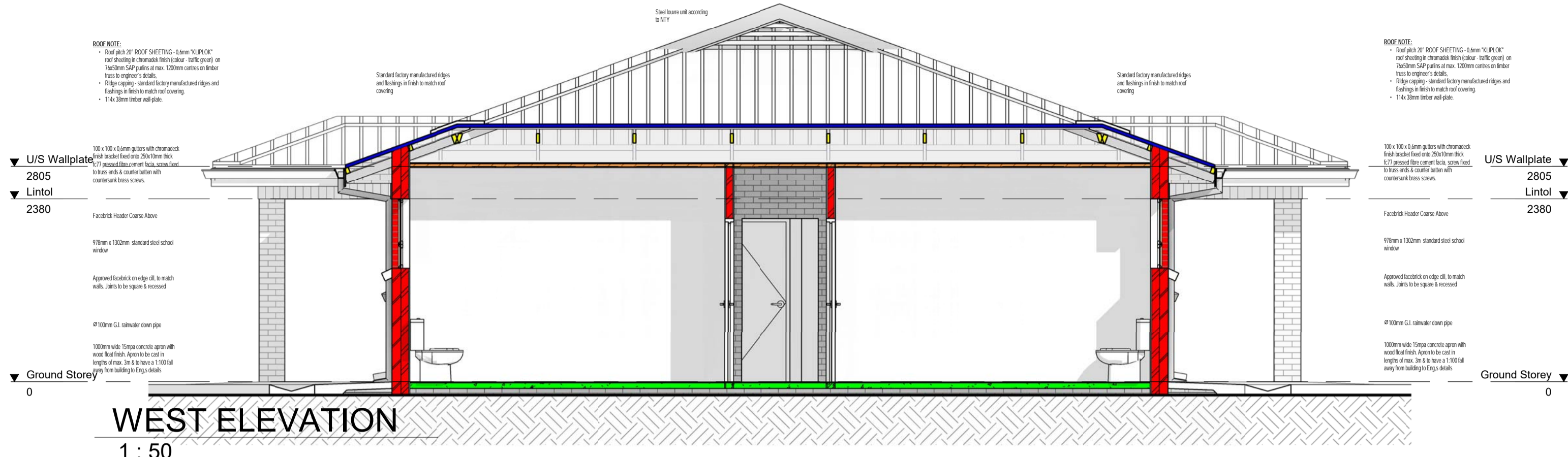
REGISTRATION NUMBER: PrArch 4849
 ARCHITECT NAME: B Ilori
 CLIENT: LIMPOPO PUBLIC WORKS
 CLIENT SIGNATURE:

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
ADMINISTRATION BLOCK

DRAWING DESCRIPTION:
PRINCIPAL OFFICE DETAILS

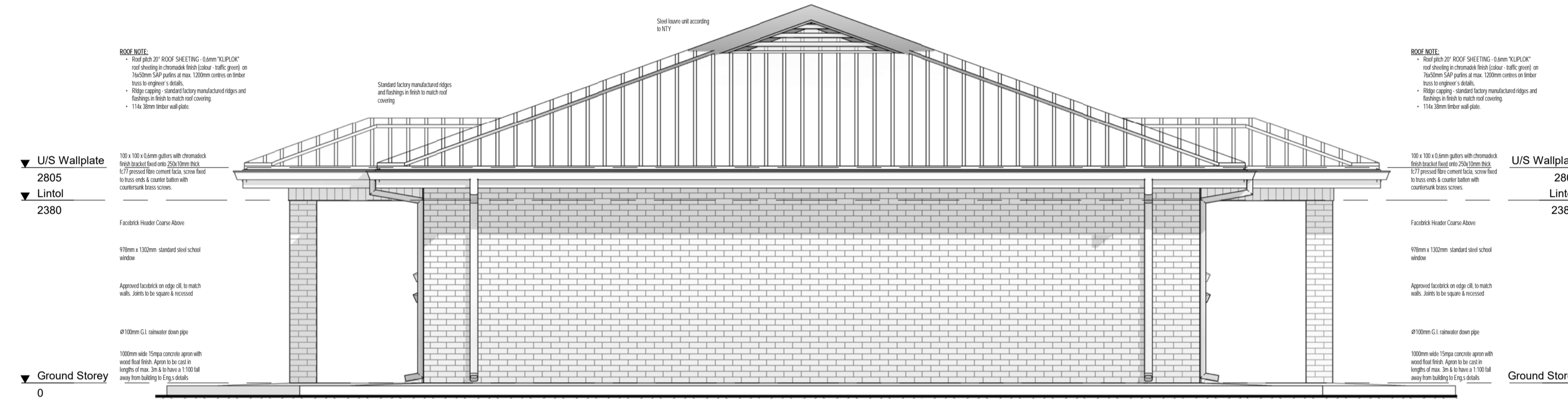
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SCALE: 1 : 20 @ A1	19-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	012 - AB005		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY: HK		CHECKED: CD	

Z:\01 Projects\063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\01 - Drawings\02 - Revit\04 - SDF\063 - 17 - 013 - Rasema Secondary School - Drawings\02 - Revit\04 - SDF\063 - 17 - 013 - Rasema Secondary School - Admin Block - RVI01 - 04-05-2021.rvt



WEST ELEVATION

1 : 50



EAST ELEVATION

1 : 50



SOUTH ELEVATION

1 : 50



NORTH ELEVATION

1 : 50

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm x 250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wet)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082
detailed requirements to comply with SANS 10400-J
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J. finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
fire walls to be taken to top underside of roof covering, provide a minimum 150mm threshold and minimum 150mm fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
Roof covering and waterproofing to comply with SANS 10400-L
Flat roofs or related gables to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-L and in accordance to SANS 10400-B and SANS 10400-T
Outlets and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
The fire installations to comply with national fire regulations
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
the fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITIES
The provisions to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and in accordance to a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
the selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	19-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



IDC ARCHITECTS
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:
PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
ADMINISTRATION BLOCK

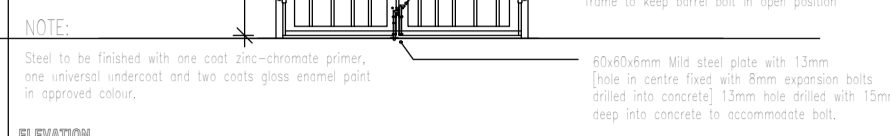
DRAWING DESCRIPTION

ELEVATIONS		DATE	
SCALE / SHEET SIZE		19-10-2019	
SCALE: 1 : 50 @ A1			
PROJECT No.		SHEET NUMBER	
063 - 17 - 013		012 - AB006	
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY:		CHECKED:	
HUDSON		C. DYER	

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Z:\01 Projects\063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\1 - Drawings\02 - Rev\04 - SJP\063 - 17 - 013 - Rasema Secondary School - Admin Block - RW01 - 04-05-2021.rvt

DOOR SCHEDULE	1487		877		877		877		1000		
	743	743	2064	2032	2064	2032	2064	2032	2064	2032	
DOOR NUMBER:	D1	D2	D3	D4	D5	G1					
POSITION:	ENTRANCE TO ADMIN BUILDING	OFFICES, STAFF, SICK, PRINT & STORE	MALE & FEMALE TOILETS	KITCHEN & RECEPTION	STRONGROOM	ENTRANCE TO ADMIN BLOCK					
QUANTITY:	2	7 (5=RH 2=LH)	2 (1=RH 1=LH)	2 (1=RH 1=LH)	1 (1=RH)						
DOOR-FRAME DESCRIPTION:	EXTRUDED ALUMINIUM FRAME AS PER AAMSA SPECIFICATIONS ACCORDING TO DIMENSIONS 1575w x 2100h	STANDARD MILD STEEL 813x2032x1,2mm SINGLE REBATE PRESSED METAL DOOR FRAME FOR 115mm WALLS	STANDARD MILD STEEL 813x2032x1,2mm SINGLE REBATE PRESSED METAL DOOR FRAME FOR 115mm WALLS	STANDARD MILD STEEL 813x2032x1,2mm SINGLE REBATE PRESSED METAL DOOR FRAME FOR 230mm WALLS	TO BE SUPPLIED BY MANUFACTURE COMPLETE WITH DOOR FOR 230mm WALLS	45X45X3mm SQUARE TUBING FRAME BOLTED TO WALL					
FINISHES:	NATURAL ANODISED ALUMINIUM. COLOUR TO ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON GLOSS ENAMEL. COLOUR AS PER ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON GLOSS ENAMEL. COLOUR AS PER ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON GLOSS ENAMEL. COLOUR AS PER ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON GLOSS ENAMEL. COLOUR AS PER ARCHITECT.	1/RED OXIDE PRIMER + 1/COAT UNIVERSAL UNDERCOAT + 2/COATS PLASCON GLOSS ENAMEL PAINT. - COLOUR TO ARCHITECT.					
DOOR DESCRIPTION:	1485x2015mm EXTRUDED ALUMINIUM DOOR AS PER AAMSA	813x2032mm SEMI-SOLD CORE DOOR VENEERED ON BOTH SIDES TO RECEIVE PAINT	813x2032mm SEMI-SOLD CORE DOOR VENEERED ON BOTH SIDES TO RECEIVE PAINT	813x2032mm SEMI-SOLD CORE DOOR VENEERED ON BOTH SIDES TO RECEIVE PAINT	CATEGORY 1 STRONGROOM DOOR AS SUPPLIED BY MANUFACTURE	GATE OUT OF 40X60X2MM SQUARE TUBING IN GATE SURROUND, WITH 19MM METAL RODS WELDED TO SURROUND					
IRON MONGERY & FITTINGS:	LOCKSET - NARROW STYLE SABS APPROVED DOUBLE CYLINDER LOCKSET. DOORCLOSERS & FLOORSPRINGS - SABS APPROVED DOORCLOSERS & FLOOR-SPRING AS SUPPLY BY DORMA OR EQUAL APPROVED. BARREL BOLT: RECESSED TYPE AS SUPPLY BY UNION 100mm LENGTH. DOOR HANDLES DOUBLE SIDED - SATIN CHROME FINISH HANDLES ACCORDING TO ARCHITECT.	HINGES - 2x100mm M/S BUTTERFLY HINGES PER DOOR LEAF. LOCKSET - "SOLID BLESBOK" 460/313 FOUR LEVER LOCKSET.	HINGES - 2x100mm M/S BUTTERFLY HINGES PER DOOR LEAF. LOCKSET - "SOLID BLESBOK" 460/313 PROVIDE MALE & FEMALE 150 x 150mm SATIN CHROME SIGNS AGAINST DOORS.	HINGES - 2x100mm M/S BUTTERFLY HINGES PER DOOR LEAF. LOCKSET - "SOLID BLESBOK" 460/313 FOUR LEVER LOCKSET.	H1 DOOR STEP & 2 DOUBLE SIDED VENTS ALL AS PER SUPPLIER. LOCKSET - 7 LEVER SECURITY DOOR	PIN TYPE HINGE 1x 100mm BARREL BOLT. FINISH: 90/90/90mm RECEIVE 5mm CHAMBERS 1/RED OXIDE PRIMER + 1/COAT UNIVERSAL UNDERCOAT + 2/COATS PLASCON GLOSS ENAMEL PAINT. - COLOUR TO ARCHITECT.					
FINISHES:	CLEAN DOWN	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON VELVA-GLO. COLOUR AS PER ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON VELVA-GLO. COLOUR AS PER ARCHITECT.	1 COAT UNIVERSAL UNDERCOAT AND 2 COATS PLASCON VELVA-GLO. COLOUR AS PER ARCHITECT.	ALL AS PER SUPPLIER	NOT APPLICABLE					
GLASS:	GLASS 6mm PVB FADEBAND LAMINATED SAFETY GLASS ACC. TO SANS 10400 PART N	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE						



GENERAL NOTES:
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS:
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS:
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm/250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS:
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J.
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J. finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

WALLS:
fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1m fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

ROOFS:
Roof covering and waterproofing to comply with SANS 10400-L.
Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both.
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L.
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-C and in accordance to SANS 10400-B and SANS 10400-L.
Outlets and downpipes to comply with SANS 10400-R.
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

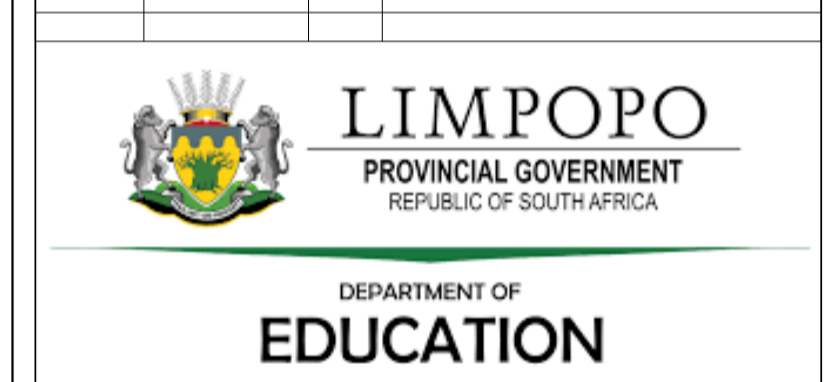
STAIRWAYS:
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION:
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.
FIRE PROTECTION:
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-C.
The fire protection measure to be subject of a rational design or rational assessment.
ENERGY EFFICIENCY:
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.
PEOPLE WITH DISABILITIES:
The fire installations to comply with national fire regulations
PUBLIC SAFETY:
Level change, ramps, driveways and pools to comply with SANS 10400-D
SPACE HEATING:
The provision for space heating to comply with national regulations
STORM WATER DISPOSAL:
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.
LIGHTING AND VENTILATION:
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-T and in accordance to rational design.
All habitable rooms to have a minimum of 10% natural lighting.
GLAZING:
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
0	19-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL

WINDOW SCHEDULE	1911		1022		932		1928		1925		2400	
	1188	2500	592	2500	592	2500	1000	2500	1000	2500	1000	2500
WINDOW NUMBER:	W1	W3	W4	W5	W6	W7						
POSITION:	OFFICES & STAFF ROOM	WORKSHOPS	WORKSHOPS	WORKSHOPS	WORKSHOPS	WORKSHOPS						
DESCRIPTION:	14	14	5	1	1	1						
WINDOW-FRAME DESCRIPTION:	STANDARD MILD STEEL RESIDENTIAL TOP-HUNG OPEN OUT WINDOW FRAMES - CAT NCTX7S COMPLETE WITH BURGLAR PROOFING OUT OF 10mm DIA SOLID ROUND-BARS.	STANDARD MILD STEEL RESIDENTIAL TOP-HUNG OPEN OUT WINDOW FRAMES - CAT NCTX7S COMPLETE WITH BURGLAR PROOFING OUT OF 10mm DIA SOLID ROUND-BARS.	STANDARD MILD STEEL RESIDENTIAL TOP-HUNG OPEN OUT WINDOW FRAMES - CAT NCT1S COMPLETE WITH BURGLAR PROOFING OUT OF 10mm DIA SOLID ROUND-BARS.	EXTRUDED ALUMINIUM PROPOSED MADE FRAME ACCORDING TO AAMSA. SIZE: 1525w x 1300h	EXTRUDED ALUMINIUM PROPOSED MADE FRAME ACCORDING TO AAMSA. SIZE: 1625w x 1300h	EXTRUDED ALUMINIUM PROPOSED MADE FRAME ACCORDING TO AAMSA. SIZE: 2400w x 1300h						
WINDOW FURNITURE:	IRON-MONGERY & FITTINGS AS SUPPLY BY WINDOW MANUFACTURER, AND ACCORDING TO ARCHITECTS APPROVAL.	IRON-MONGERY & FITTINGS AS SUPPLY BY WINDOW MANUFACTURER, AND ACCORDING TO ARCHITECTS APPROVAL.	IRON-MONGERY & FITTINGS AS SUPPLY BY WINDOW MANUFACTURER, AND ACCORDING TO ARCHITECTS APPROVAL.	SECURED IN FRAME WITH NATURAL ANODISED ALUMINIUM GLAZING BEADS ACCORDING MANUFACTURERS SPECIFICATIONS	SECURED IN FRAME WITH NATURAL ANODISED ALUMINIUM GLAZING BEADS ACCORDING MANUFACTURERS SPECIFICATIONS	SECURED IN FRAME WITH NATURAL ANODISED ALUMINIUM GLAZING BEADS ACCORDING MANUFACTURERS SPECIFICATIONS						
BURGLAR-BARS:	OUT OF 10mm WIDE FLAT-BARS	OUT OF 10mm WIDE FLAT-BARS	OUT OF 10mm WIDE FLAT-BARS	OUT OF 10mm WIDE FLAT-BARS	OUT OF 10mm WIDE FLAT-BARS	OUT OF 10mm WIDE FLAT-BARS						
FINISHES:	CLEAN WITH STEEL BRUSH 1/COAT RED OXIDE PRIMER + 1/COAT UNIVERSAL UNDERCOAT + 2/COATS PLASCON GLOSS ENAMEL PAINT - COLOUR ACCORDING TO ARCHITECT.	CLEAN WITH STEEL BRUSH 1/COAT RED OXIDE PRIMER + 1/COAT UNIVERSAL UNDERCOAT + 2/COATS PLASCON GLOSS ENAMEL PAINT - COLOUR ACCORDING TO ARCHITECT.	CLEAN WITH STEEL BRUSH 1/COAT RED OXIDE PRIMER + 1/COAT UNIVERSAL UNDERCOAT + 2/COATS PLASCON GLOSS ENAMEL PAINT - COLOUR ACCORDING TO ARCHITECT.	NATURAL ANODISED ALUMINIUM. COLOUR TO ARCHITECT.	NATURAL ANODISED ALUMINIUM. COLOUR TO ARCHITECT.	NATURAL ANODISED ALUMINIUM. COLOUR TO ARCHITECT.						
GLASS:	5mm THICK CLEAR FLOATED SHEET GLAZING SECURED IN FRAME WITH SABS APPROVED GLAZING PUTTY	5mm THICK CLEAR FLOATED SHEET GLAZING SECURED IN FRAME WITH SABS APPROVED GLAZING PUTTY	5mm THICK CLEAR FLOATED SHEET GLAZING SECURED IN FRAME WITH SABS APPROVED GLAZING PUTTY	6mm THICK CLEAR FLOATED SHEET GLAZING	6mm THICK CLEAR FLOATED SHEET GLAZING	6mm THICK CLEAR FLOATED SHEET GLAZING						

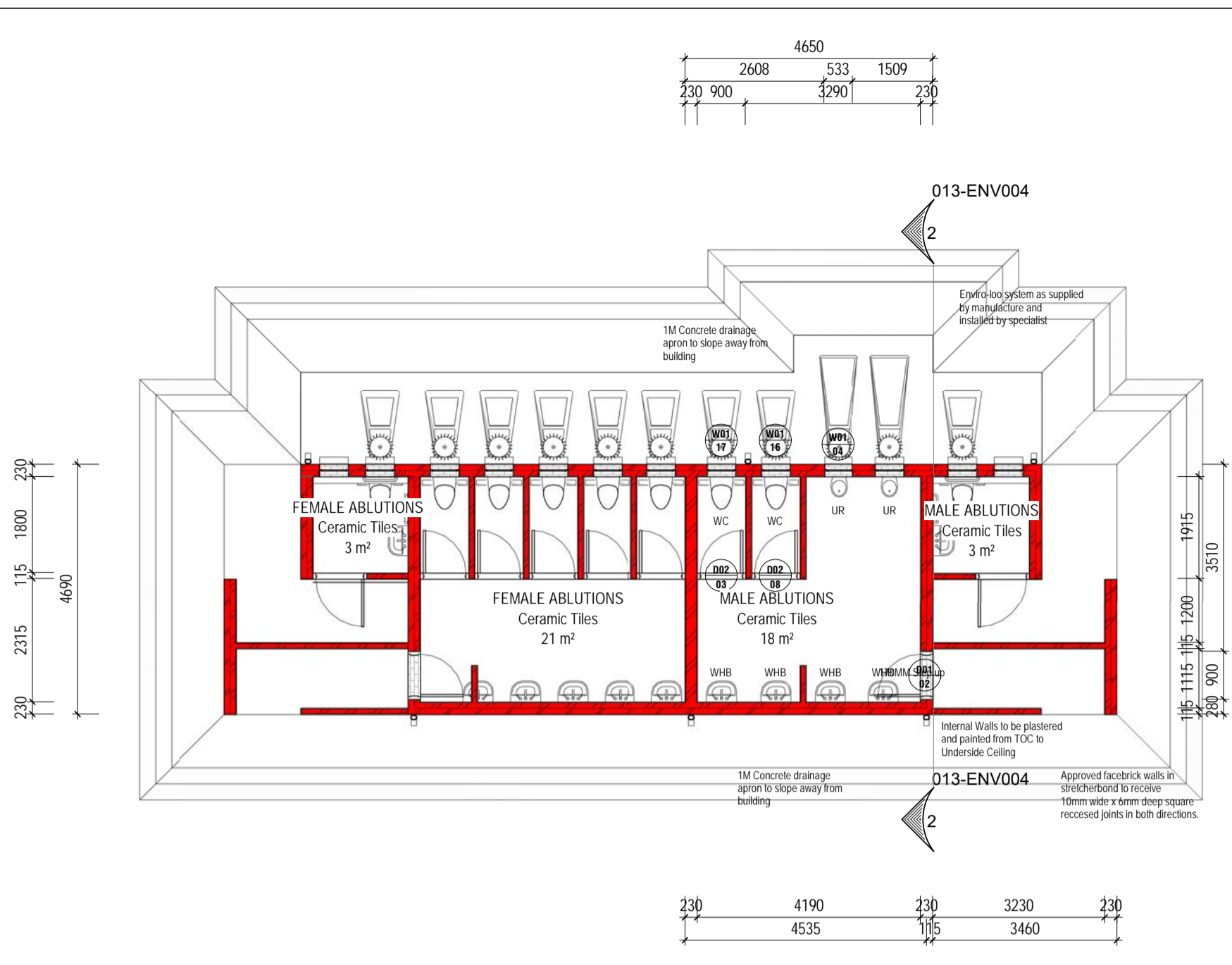


ARCHITECT: **IDC ARCHITECTS**
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

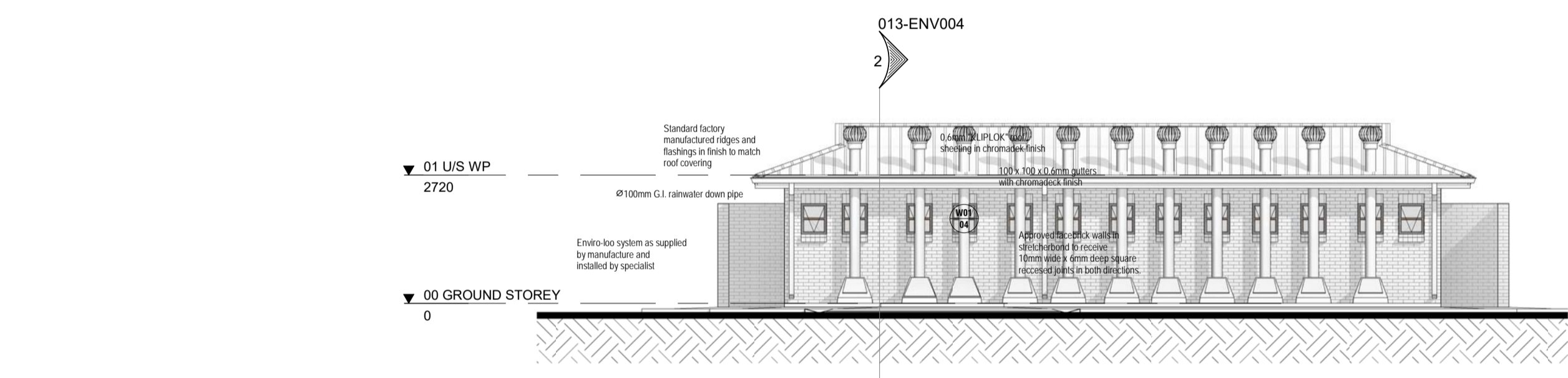
JOHANNESBURG
Unit C2-001, Edenburg Terrace
348 Rivonia Blvd | Rivonia 2128
Tel: +27 11 234 5141 | Cell: +27 82 900 8288
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori
CLIENT: LIMPOPO PUBLIC WORKS
CLIENT SIGNATURE: _____
PROJECT DESCRIPTION: **RASEMA SECONDARY SCHOOL**
ADMINISTRATION BLOCK
DRAWING DESCRIPTION: **DOOR & WINDOW SCHEDULE**

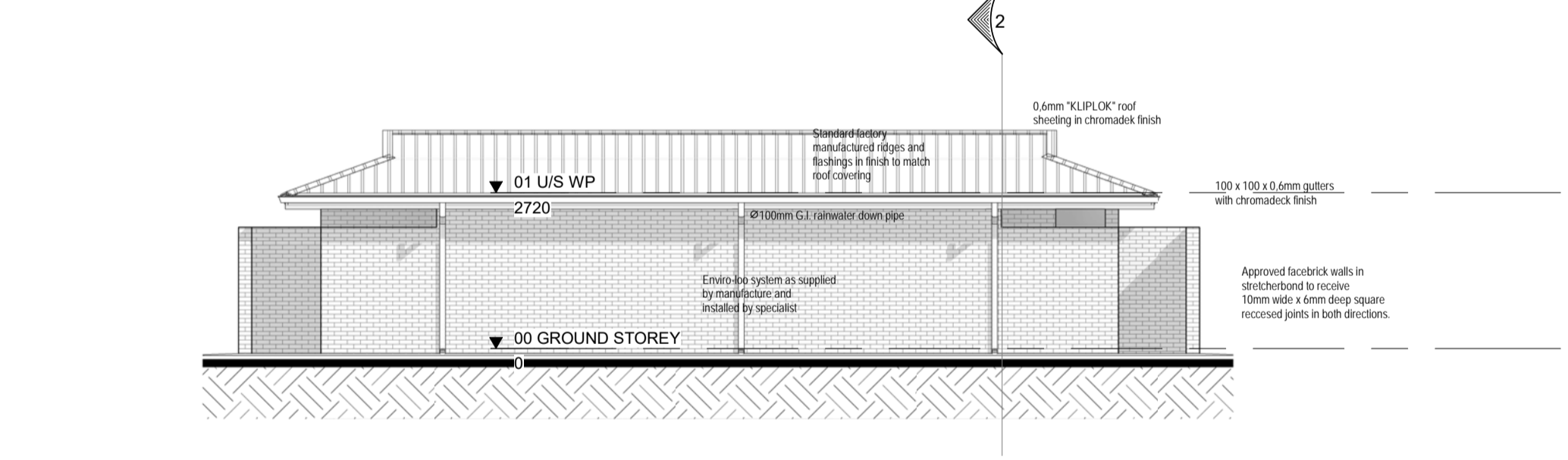
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 50 @ A1	19-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	012 - AB007		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
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DRAWN BY: HUDSON	CHECKED: C. DYER		



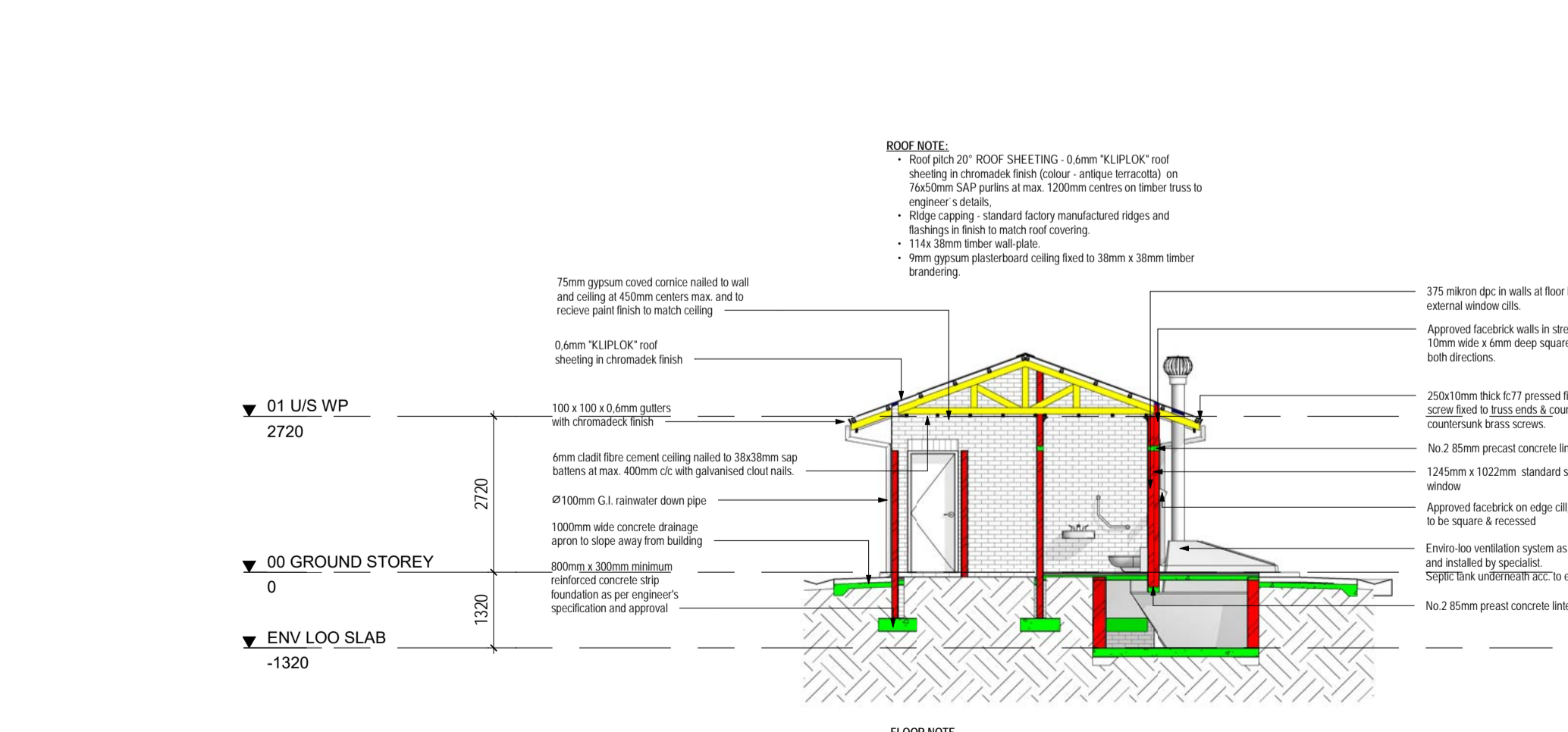
00 GROUND STOREY
1 : 100



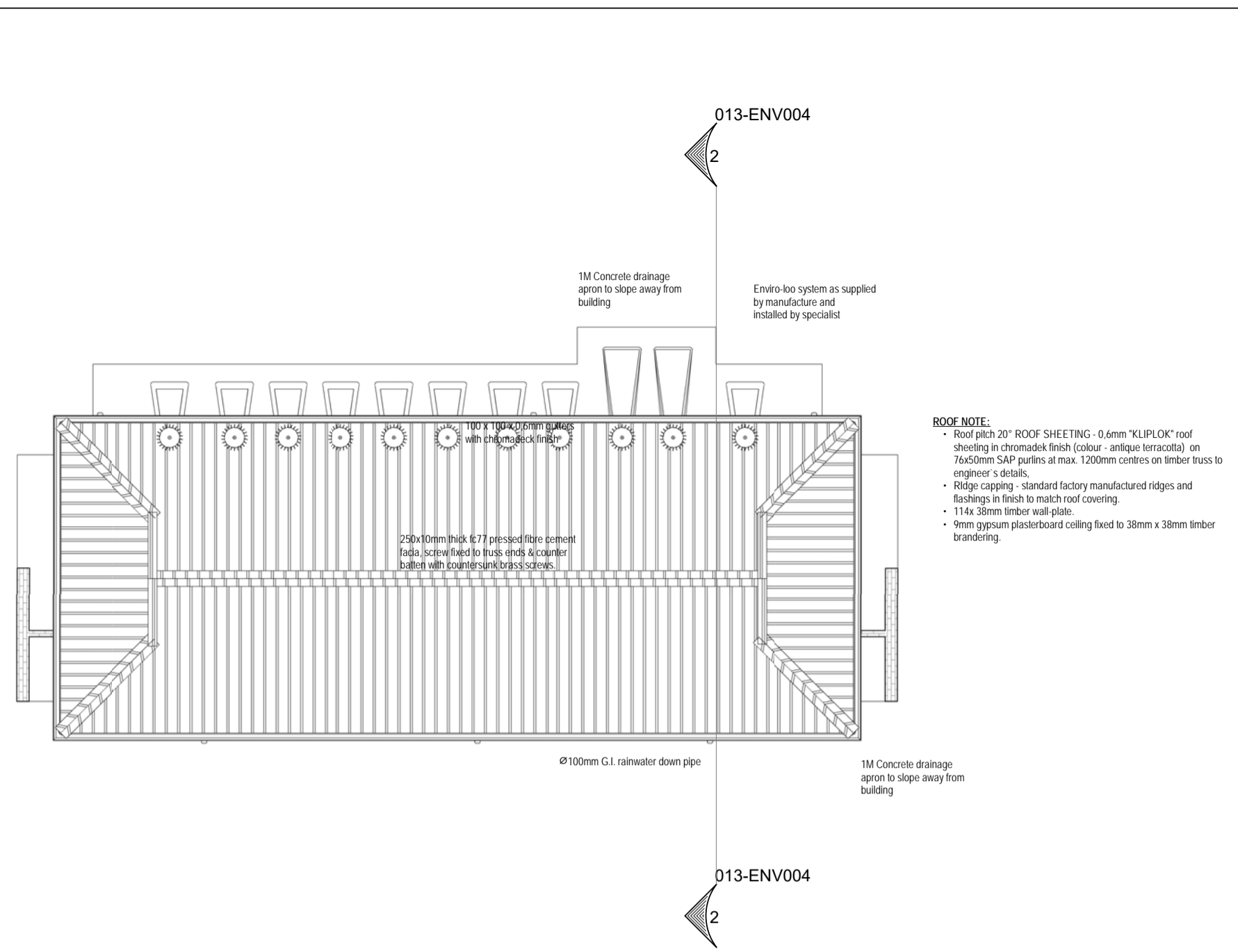
North
1 : 100



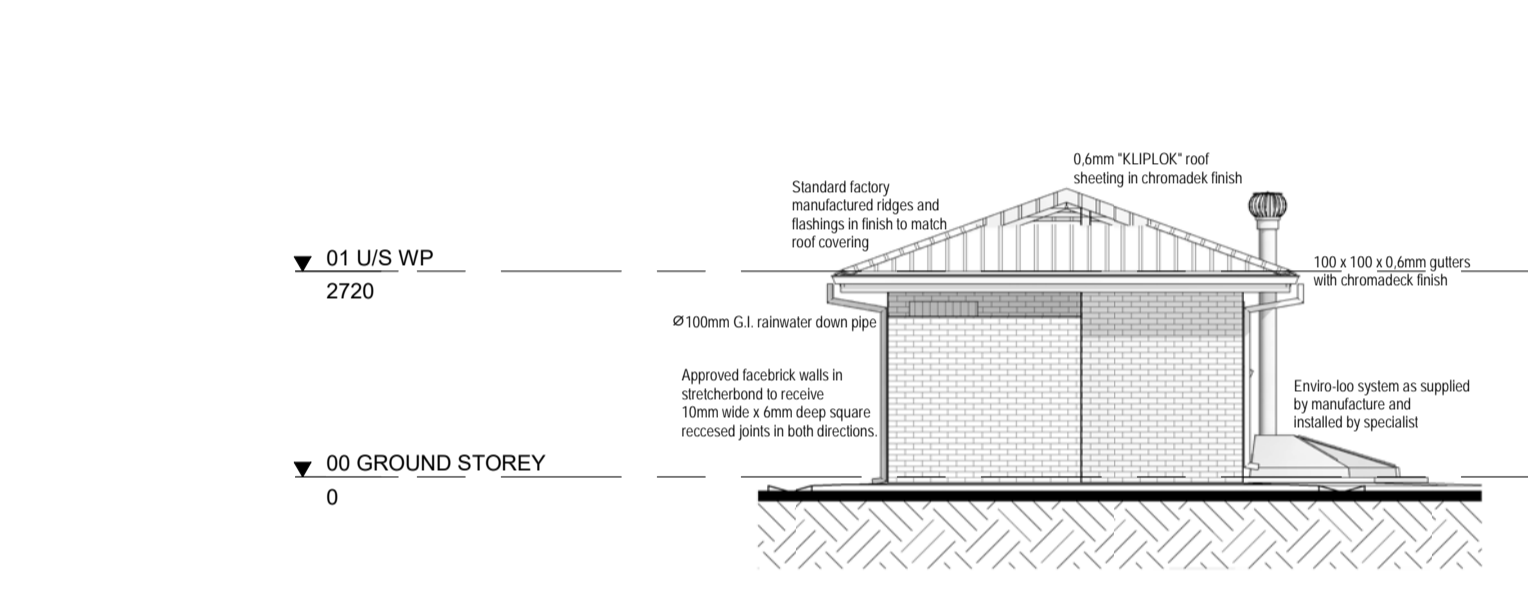
South
1 : 100



Section A
1 : 100



East
1 : 100



West
1 : 100

WINDOW SCHEDULE	
Elevation	U/S Level
Window Number	W01
Quantity	4
Description	654MM x 533MM STANDARD MILD SCHOOL TYPE CENTRE PIVOT STEEL WINDOW FRAME
Finish	CLEAN WITH WIRE BRUSH, 1 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
Glazing	CLEAR GLASS
Code	E1H

DOOR SCHEDULE	
LOCATION	ENTRANCE
FRAME TYPE	ALUMINIUM WITH STEEL SHUTTERING SMALL REAR DOOR FRAME
FRAME FINISH	PAINT TO MATCH
DOOR TYPE	INTERNAL DOOR WITH 2 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
DOOR FINISH	PAINT TO MATCH
FANSTY	AS PER SEPARATE SCHEDULE
DOOR FURNITURE	AS PER SEPARATE SCHEDULE
REVISION	0

DOOR SCHEDULE	
LOCATION	ENTRANCE
FRAME TYPE	ALUMINIUM WITH STEEL SHUTTERING SMALL REAR DOOR FRAME
FRAME FINISH	PAINT TO MATCH
DOOR TYPE	INTERNAL DOOR WITH 2 COAT DURAPHOS, 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
DOOR FINISH	PAINT TO MATCH
FANSTY	AS PER SEPARATE SCHEDULE
DOOR FURNITURE	AS PER SEPARATE SCHEDULE
REVISION	0

GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
To comply with SANS 10400-C
Figured dimensions to be taken in preference to scaling
Overall dimensions (external) to take precedence
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

FOUNDATIONS
To comply with SANS 10400-B
Detailed requirements of SANS 10400-H
All concrete foundations to be a minimum of 600mm/250mm.
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wet)
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
Detailed requirements to comply with SANS 10400-J
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
Fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
Water penetration through walls detailed requirements to comply with SANS 10400-K
Roofs
Roof covering and waterproofing to comply with SANS 10400-L
Flat roofs or related gables to comply with SANS 10400-L or rational design/ rational assessment or both
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T
Outlets and downpipes to comply with SANS 10400-R
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T
Stairwells
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T

FIRE INSTALLATION
The fire installations to comply with national fire regulations
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
The fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITIES
The fire installations to comply with national fire regulations

PUBLIC SAFETY
Level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
The provision for space heating to comply with national regulations

STORM WATER DISPOSAL
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.
The means for the control and disposal in interconnected complexes subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-L or be subject of a rational design.
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and is subject of a rational design.
All habitable rooms to have a minimum of 10% natural lighting.

GLAZING
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
The selection of the glazing to comply with national regulations

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	HK	ISSUED FOR CLIENT APPROVAL



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REGISTRATION NUMBER: PrArch 4849

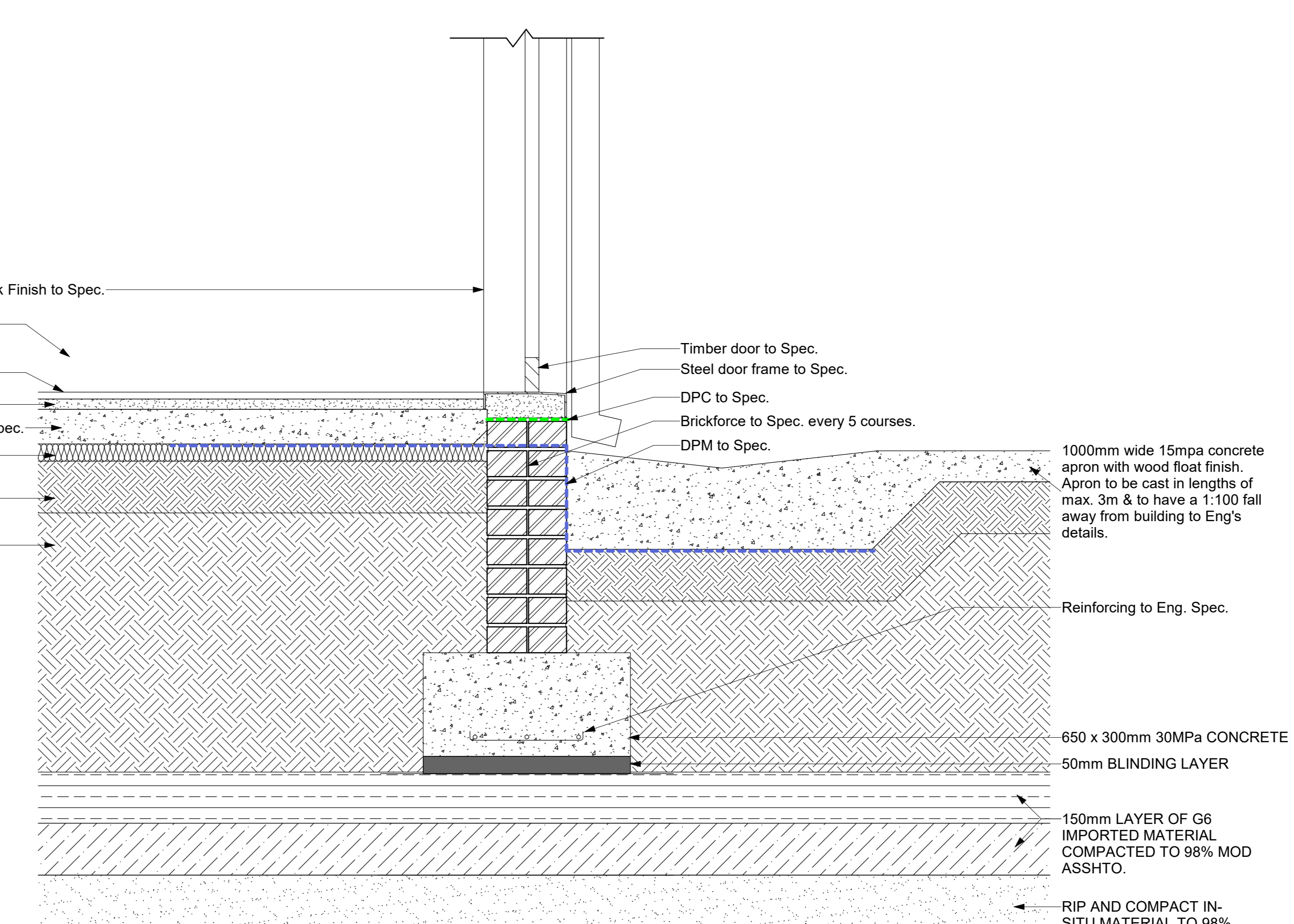
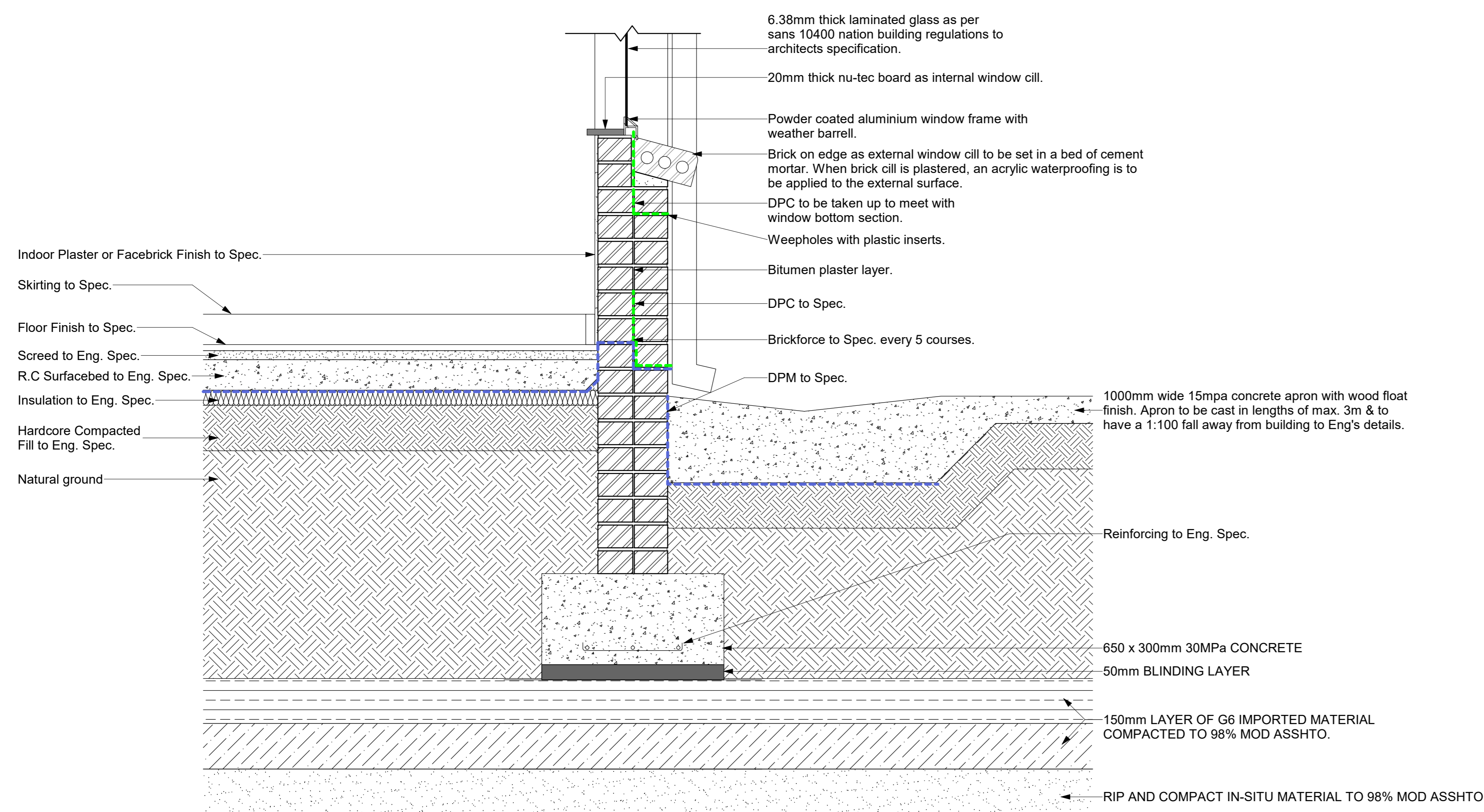
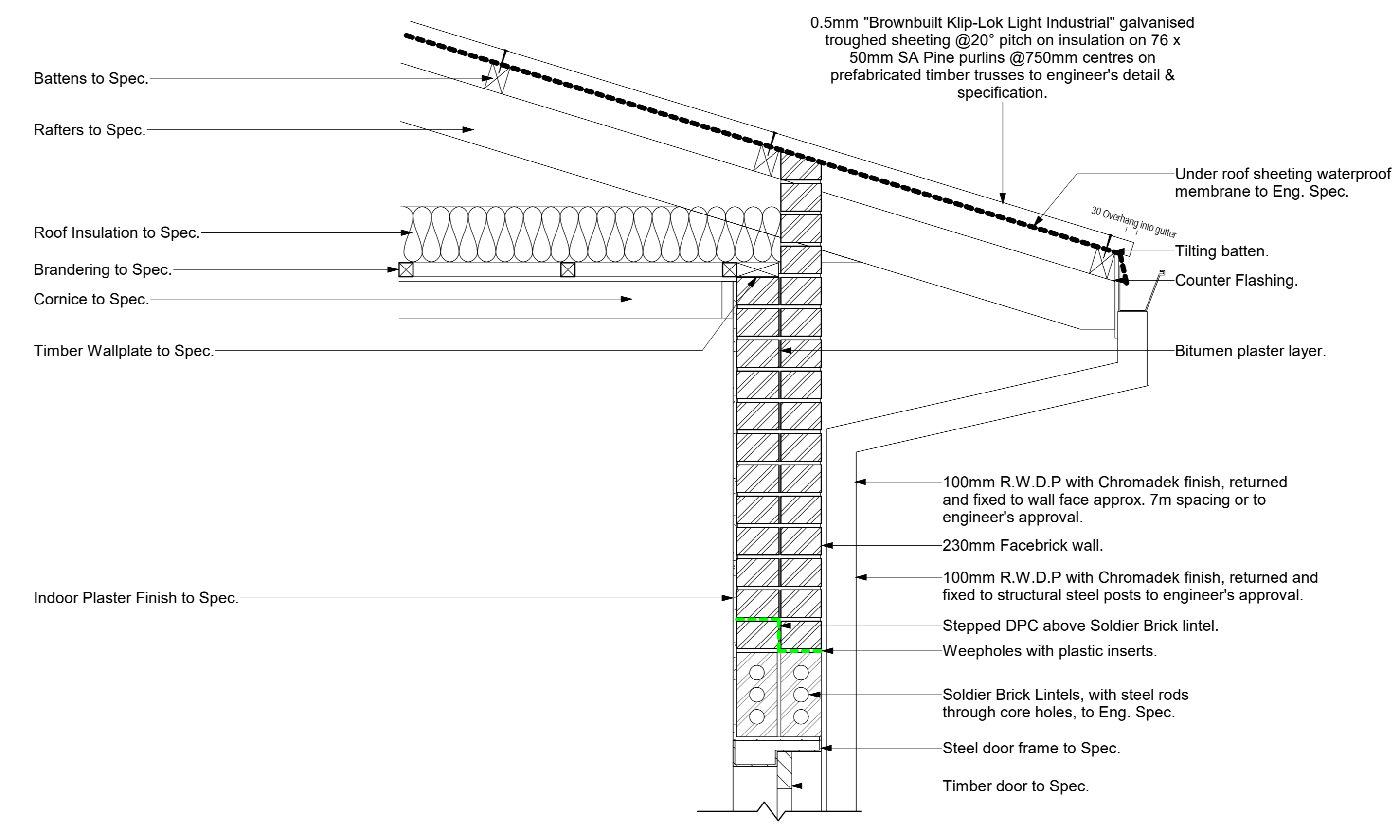
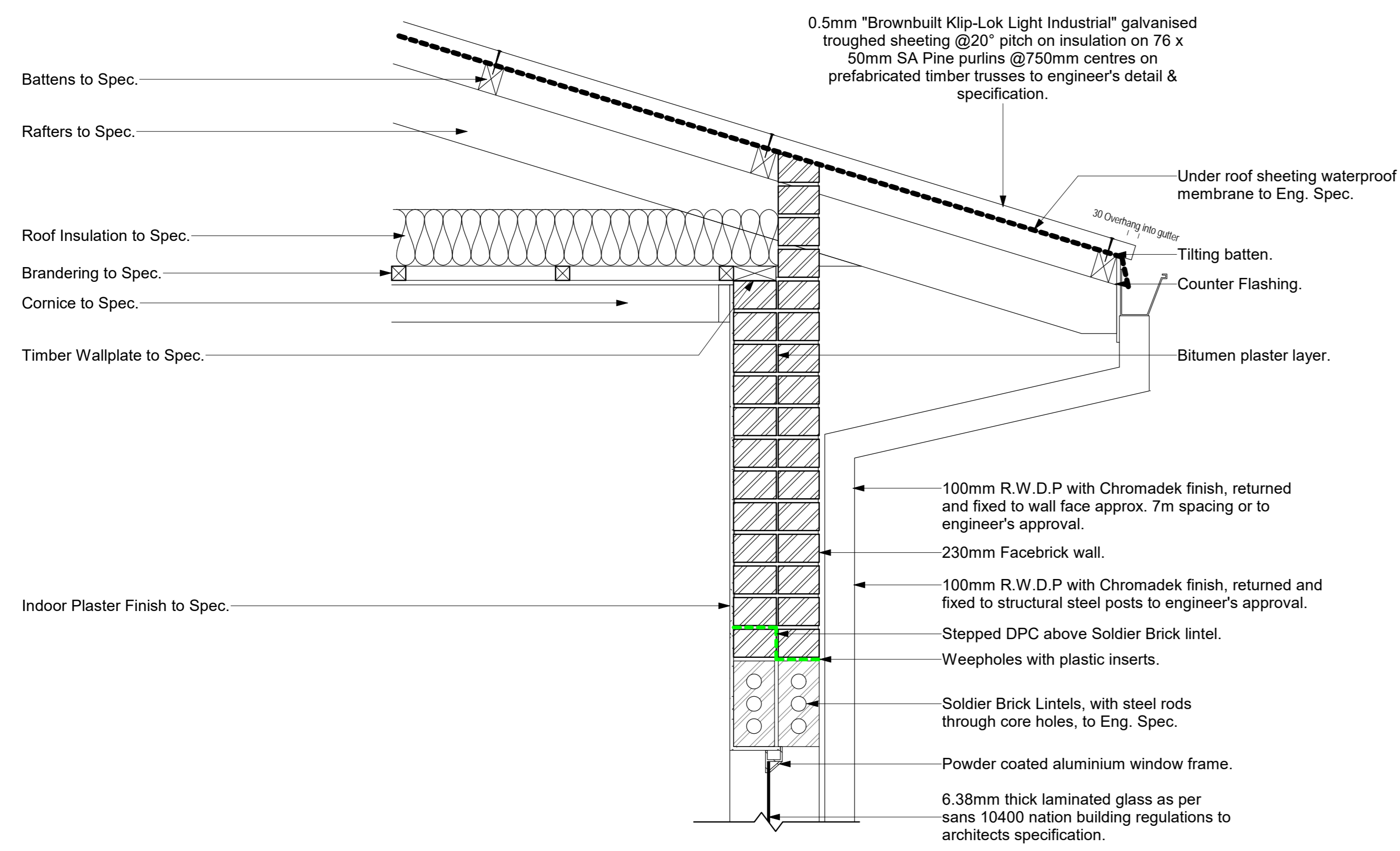
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: RASEMA SECONDARY SCHOOL

DRAWING DESCRIPTION: FOUR ENVIROLOO MALE BLOCK

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	013-ENV004		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: LW		CHECKED: CD	



WALL WITH WINDOW DETAIL SECTION

Scale 1:10

WALL WITH DOOR DETAIL SECTION

Scale 1:10

SIGNATURES:		
PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
1	11-08-2021	JP	ISSUED FOR STAGE 4 APPROVAL



IDC ARCHITECTS
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 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
 ARCHITECT NAME: B Ilori
 CLIENT: LIMPOPO PUBLIC WORKS

PROJECT NAME: RASEMA SECONDARY SCHOOL
 TYPICAL DETAILS

TYPICAL WALL SECTION DETAILS			
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 10 @ A0	11-08-2021		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	CD001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
TENDER	COUNCIL	CONSTRUCTION	
DRAWN BY: JP	CHECKED: BI		

GENERAL NOTES
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

DIMENSIONS
 To comply with SANS 10400-C
 Figured dimensions to be taken in preference to scaling
 Overall dimensions (external) to take precedence.
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

FOUNDATIONS
 To comply with SANS 10400-B
 Detailed requirements of SANS 10400-H
 All concrete foundations to be a minimum of 600mm/250mm.
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

FLOORS
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082
 detailed requirements to comply with SANS 10400-J.
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.
 fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

WALLS
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K
 water penetration through walls detailed requirements to comply with SANS 10400-K

ROOFS
 Roof covering and waterproofing to comply with SANS 10400-L
 Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L
 Outlets and downpipes to comply with SANS 10400-R
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

STAIRWAYS
 to comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

FIRE INSTALLATION
 the fire installations to comply with national fire regulations
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

FIRE PROTECTION
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T
 the fire protection measure to be subject of a rational design or rational assessment.

ENERGY EFFICIENCY
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

PEOPLE WITH DISABILITY
 the fire installations to comply with national fire regulations

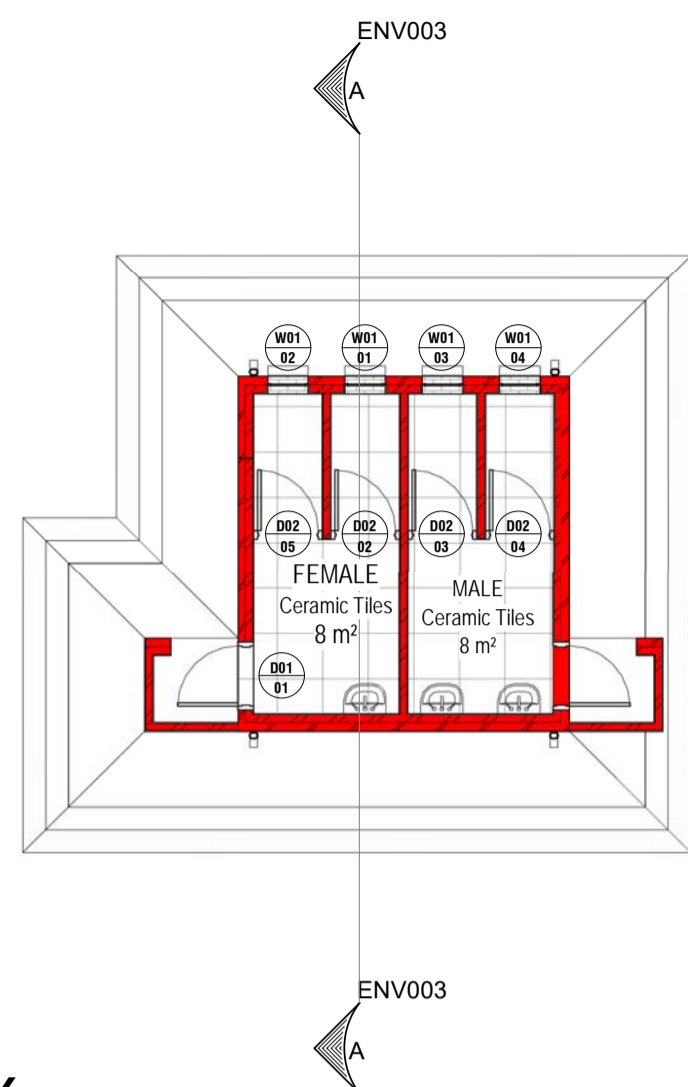
PUBLIC SAFETY
 level change, ramps, driveways and pools to comply with SANS 10400-D

SPACE HEATING
 the provision for space heating to comply with national regulations

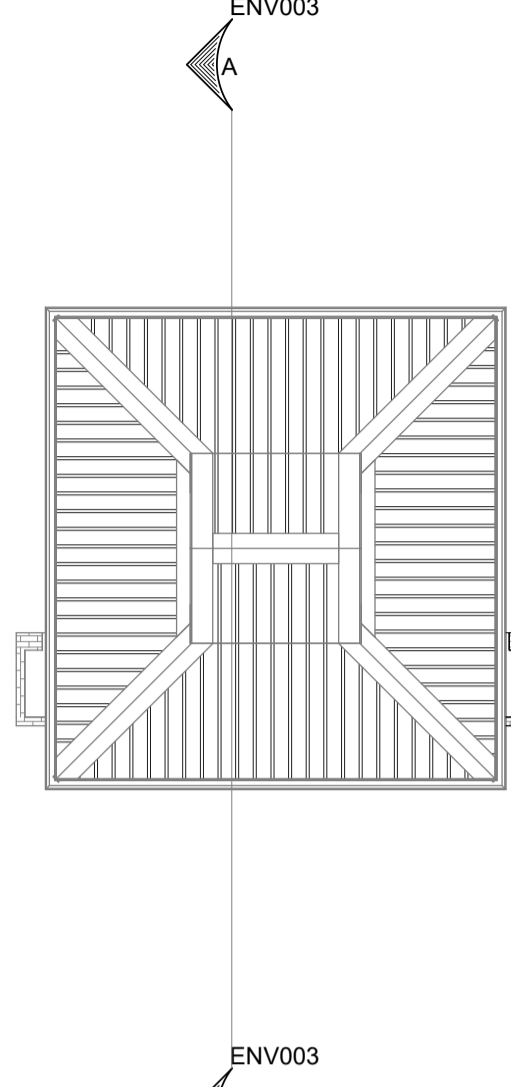
STORM WATER DISPOSAL
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

LIGHTING AND VENTILATION
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-D and be subject of a rational design.
 the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and be subject of a rational design.
 All habitable rooms to have a minimum of 10% natural lighting.

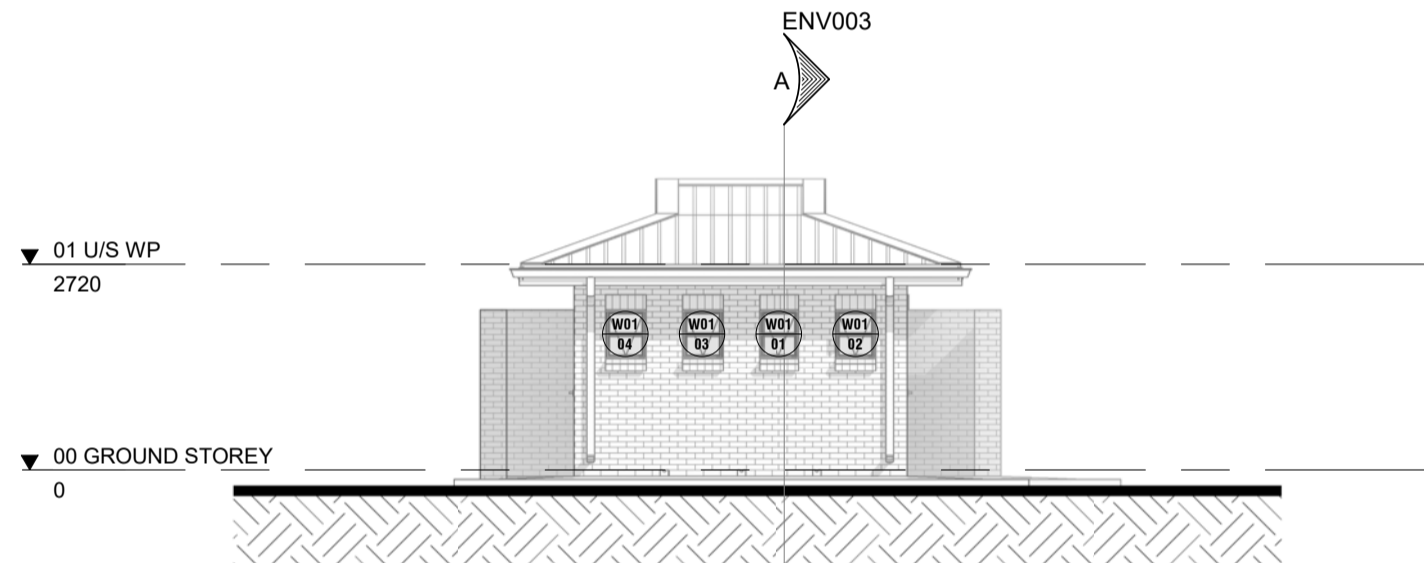
GLAZING
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
 the selection of the glazing to comply with national regulations



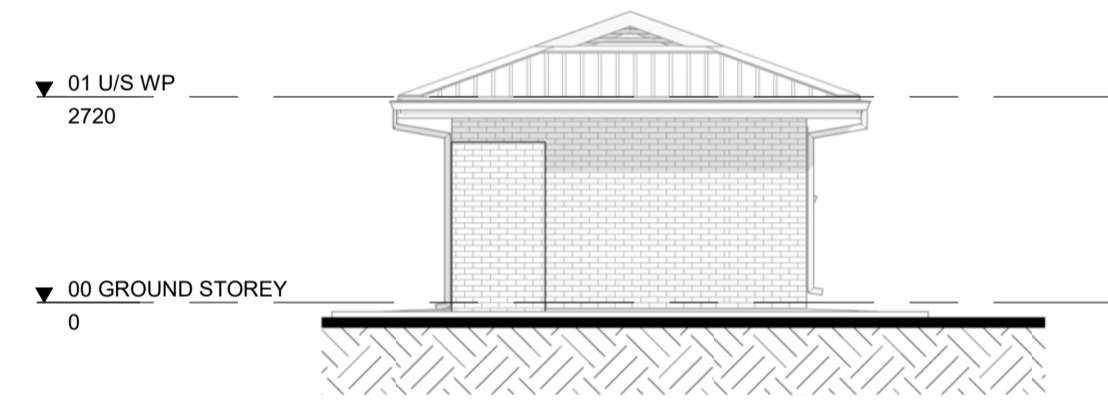
00 GROUND STOREY
 1 : 100



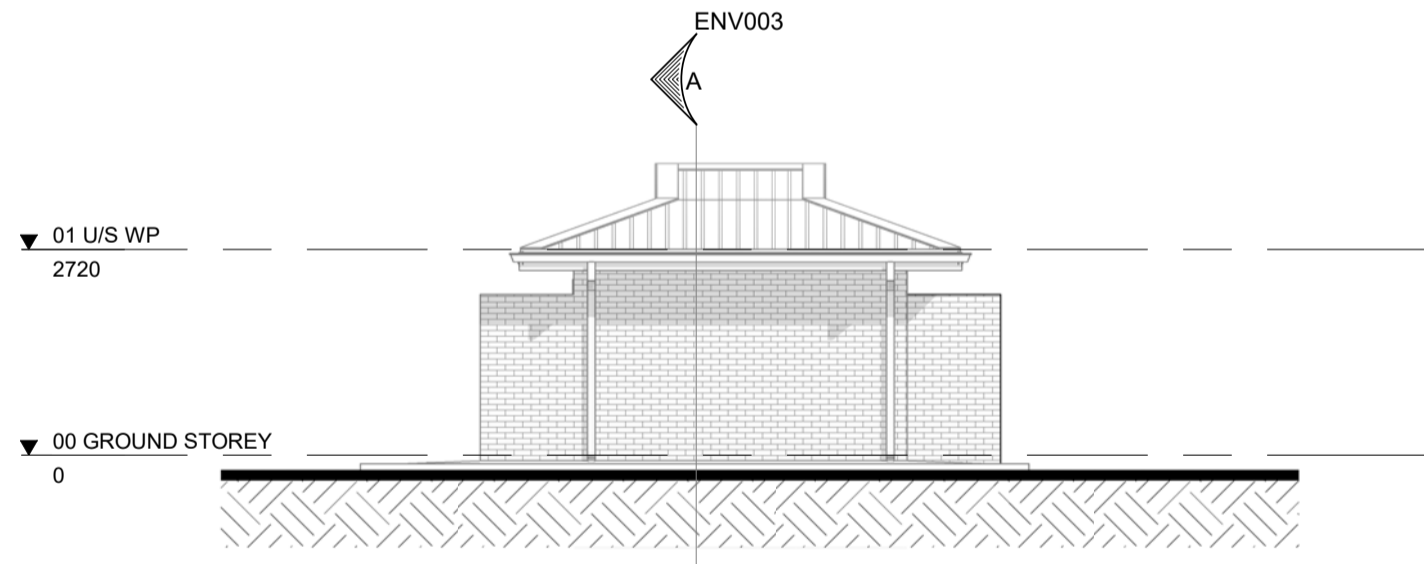
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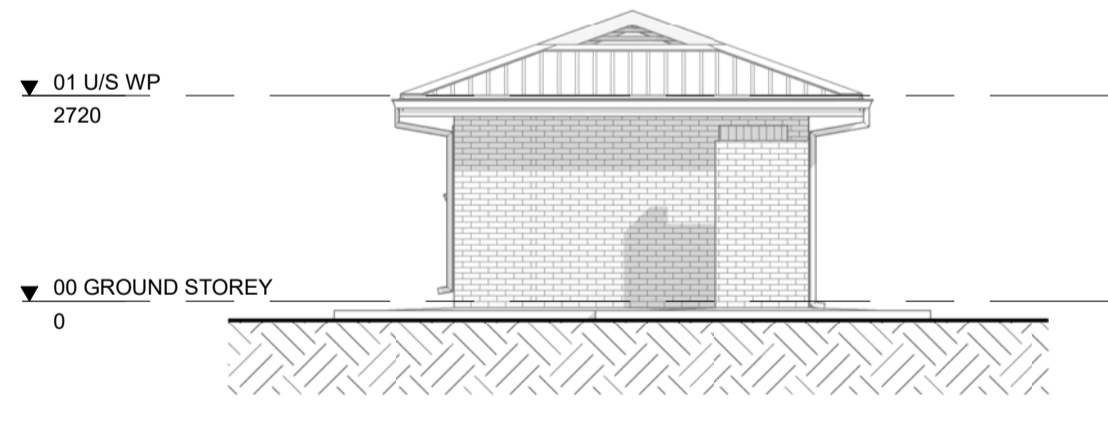
North
 1 : 100



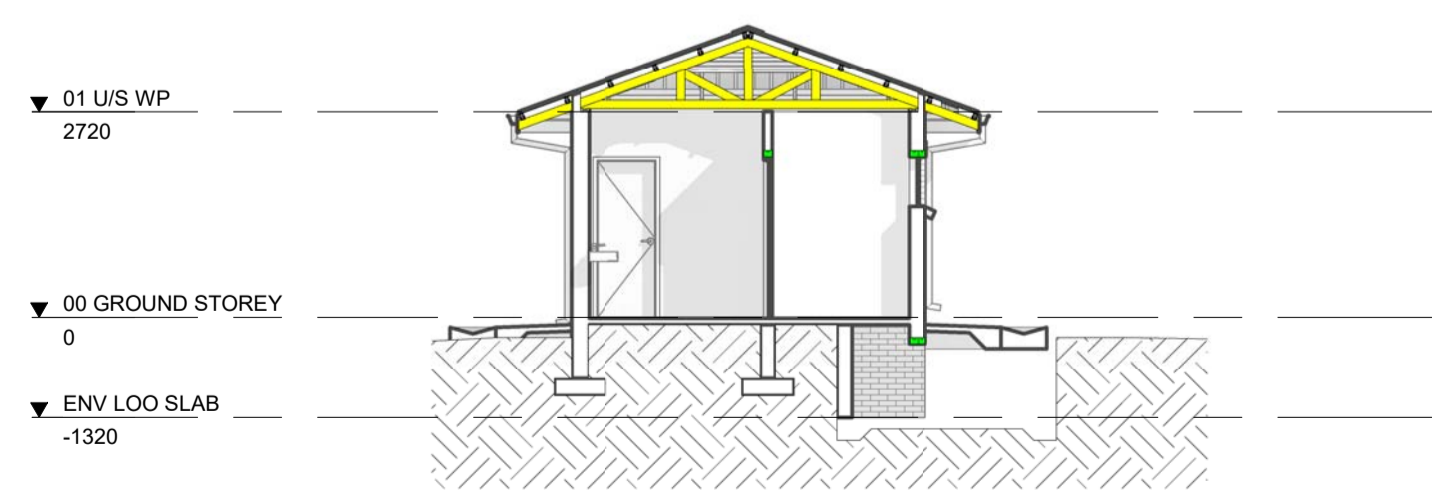
East
 1 : 100



South
 1 : 100



West
 1 : 100



Section A
 1 : 100

WINDOW SCHEDULE	STEEL & TIMBER	STEEL
STEEL & TIMBER U/S LINTEL 2 125mm		
ALL DOORS ARE VIEWED FROM THE OUTSIDE. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO MANUFACTURING.		
F.F.L. 0.000		
DOOR TYPE	D01	D02
QUANTITY REQ.	2 OFF	4 OFF
FRAME TYPE	STANDARD MILD STEEL 914x2032x1 2mm SINGLE REBATE DOOR FRAME FOR 230mm WALLS.	STANDARD MILD STEEL 914x2032x1 2mm SINGLE REBATE DOOR FRAME FOR 115mm WALLS.
FRAME FINISH	CLEAN WITH WIRE BRUSH. 1 COAT DURAPHOS. 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT.	CLEAN WITH WIRE BRUSH. 1 COAT DURAPHOS. 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT.
DOOR TYPE	914x2032mm EXTERIOR QUALITY FLUSH TYPE FRAMED AND LEDGED HARDWOOD DOOR WITH MESONITE TO RECEIVE VARNISH.	914x2032mm EXTERIOR QUALITY FLUSH TYPE FRAMED AND LEDGED HARDWOOD DOOR WITH MESONITE TO RECEIVE VARNISH.
DOOR FINISH	1 COAT STAINED VARNISH & 2 COATS CLEAR VARNISH.	1 COAT STAINED VARNISH & 2 COATS CLEAR VARNISH.
FANLIGHT	N/A	N/A
DOOR FURNITURE	- IRONMONGERY AS PER SEPARATE SCHEDULE	- IRONMONGERY AS PER SEPARATE SCHEDULE
SIGNAGE	N/A	N/A
REMARKS	N/A	N/A

WINDOW SCHEDULE	STEEL
STEEL U/S LINTEL 2 125mm	
F.F.L. 0.000	
WINDOW TYPE	W01 - E1H
GLAZING	6.38mm LAMINATED SAFETY GLASS. IN ACCORDANCE WITH SABS 0400
QUANTITY REQUIRED	4 OFF
FRAME TYPE	STANDARD MILD STEEL SCHOOL TYPE CENTRE PIVOT, STEEL WINDOW FRAME
FRAME FINISH	CLEAN WITH WIRE BRUSH. 1 COAT DURAPHOS. 1 COAT UNIVERSAL UNDERCOAT & 2 COATS PREMIUM QUALITY WATER-BASED SEMI-GLOSS ENAMEL FOR EXTERIOR USE. COLOUR BY ARCHITECT
IRONMONGERY	AS PER MANUFACTURER TO CLIENTS APPROVAL

Door Schedule						
Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name
D01	01	900	2125	00 GROUND STOREY		FEMALE
D01	06	900	2125	00 GROUND STOREY	MALE	FEMALE
D02	02	900	2125	00 GROUND STOREY	FEMALE	FEMALE
D02	03	900	2125	00 GROUND STOREY	MALE	MALE
D02	04	900	2125	00 GROUND STOREY	MALE	MALE
D02	05	900	2125	00 GROUND STOREY	FEMALE	FEMALE
Grand total: 6						

Window Schedule						
Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name
W01	01	533	654	00 GROUND STOREY		FEMALE
W01	02	533	654	00 GROUND STOREY		FEMALE
W01	03	533	654	00 GROUND STOREY		MALE
W01	04	533	654	00 GROUND STOREY		MALE
Grand total: 4						

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL

LIMPOPO
 PROVINCIAL GOVERNMENT
 REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

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 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
 ARCHITECT NAME: B Ilori

CLIENT:
LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

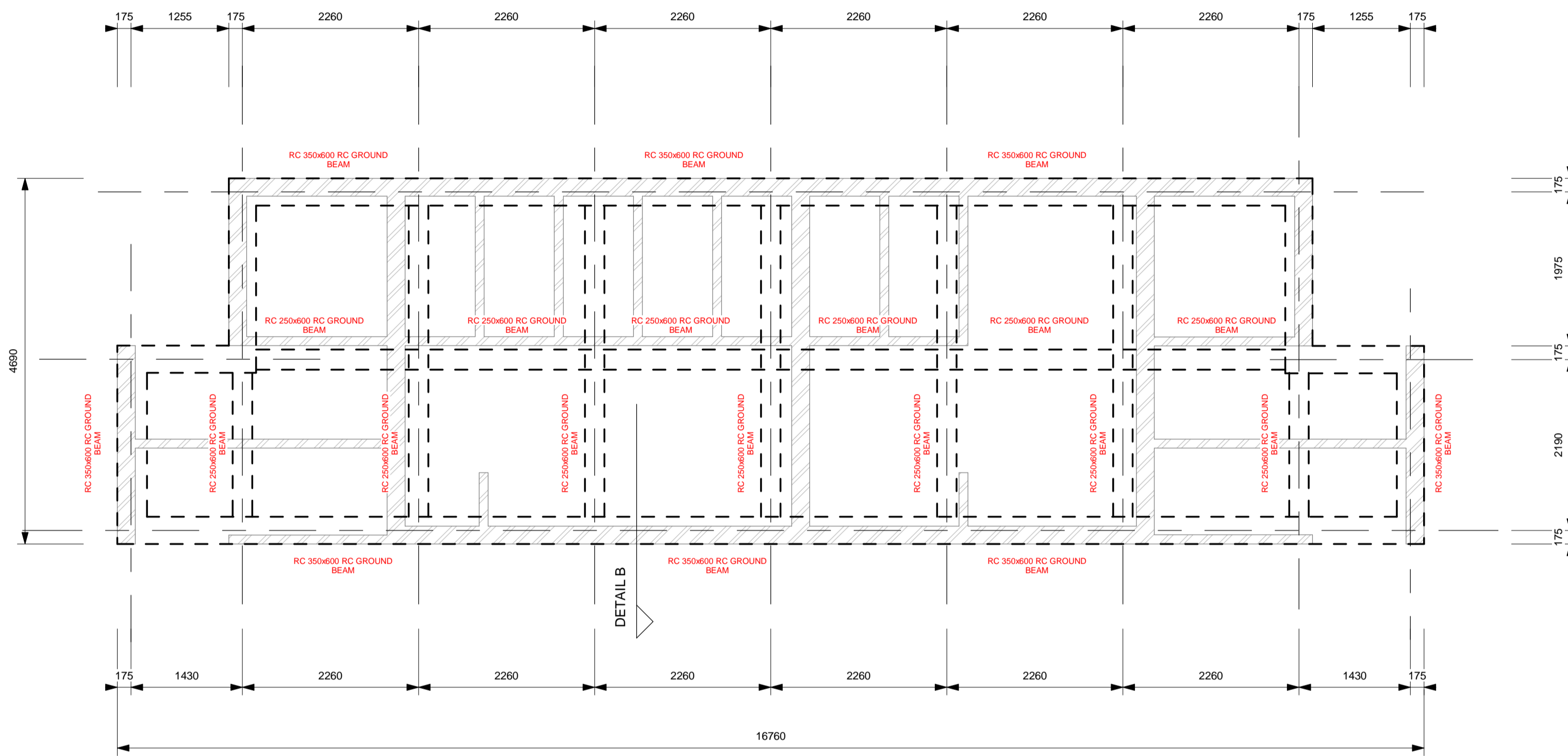
PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
TEACHER'S WATERBOURNE WC'S

DRAWING DESCRIPTION:
PLANS, SECTIONS & ELEVATIONS

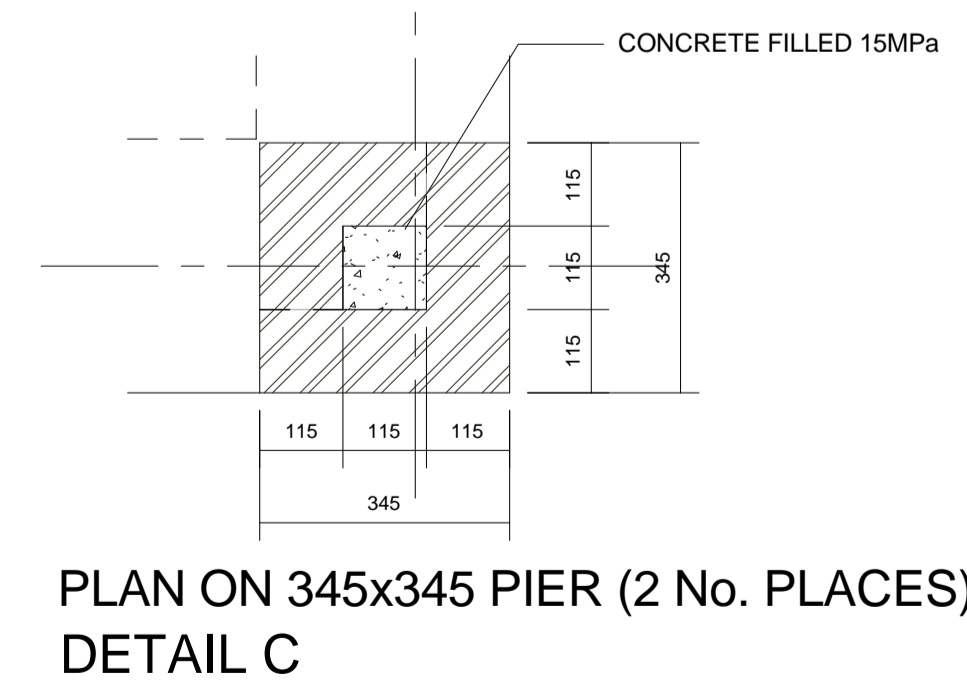
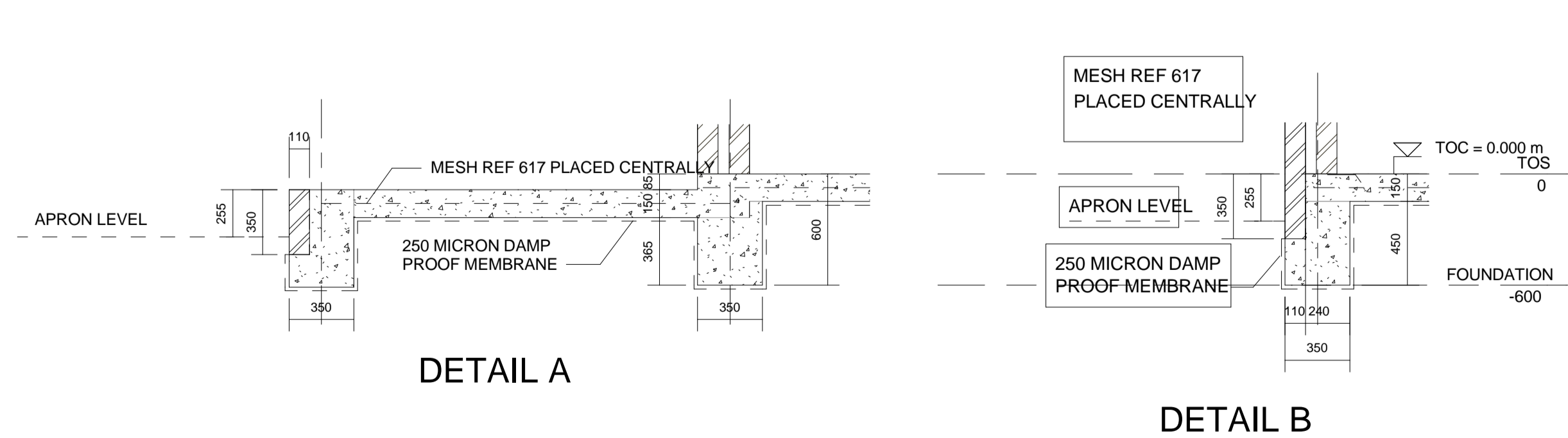
SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	19-05-2021		
PROJECT No.	SHEET NUMBER		
063 - 17 - 013	ENV003		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
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DRAWN BY: HK		CHECKED: CD	

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WATER BORNE TOILET BLOCK 1 FOUNDATION PLAN
1 : 50



LEGEND:

- 600mm WIDE * 300mm HIGH CONCRETE FOOTING
- BRICK WALL

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS

REV	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL

PROPOSED SITE DEVELOPMENT PLAN

DRAWING DESCRIPTION:
WATER BORNE TOILET 1 FOUNDATION LAYOUT

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	2021.08.19		
PROJECT No.	SHEET NUMBER		
063-17-003	2019-RSS-S-01		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRU	B
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY:		CHECKED:	
TL		RT	

CONCRETE NOTES:

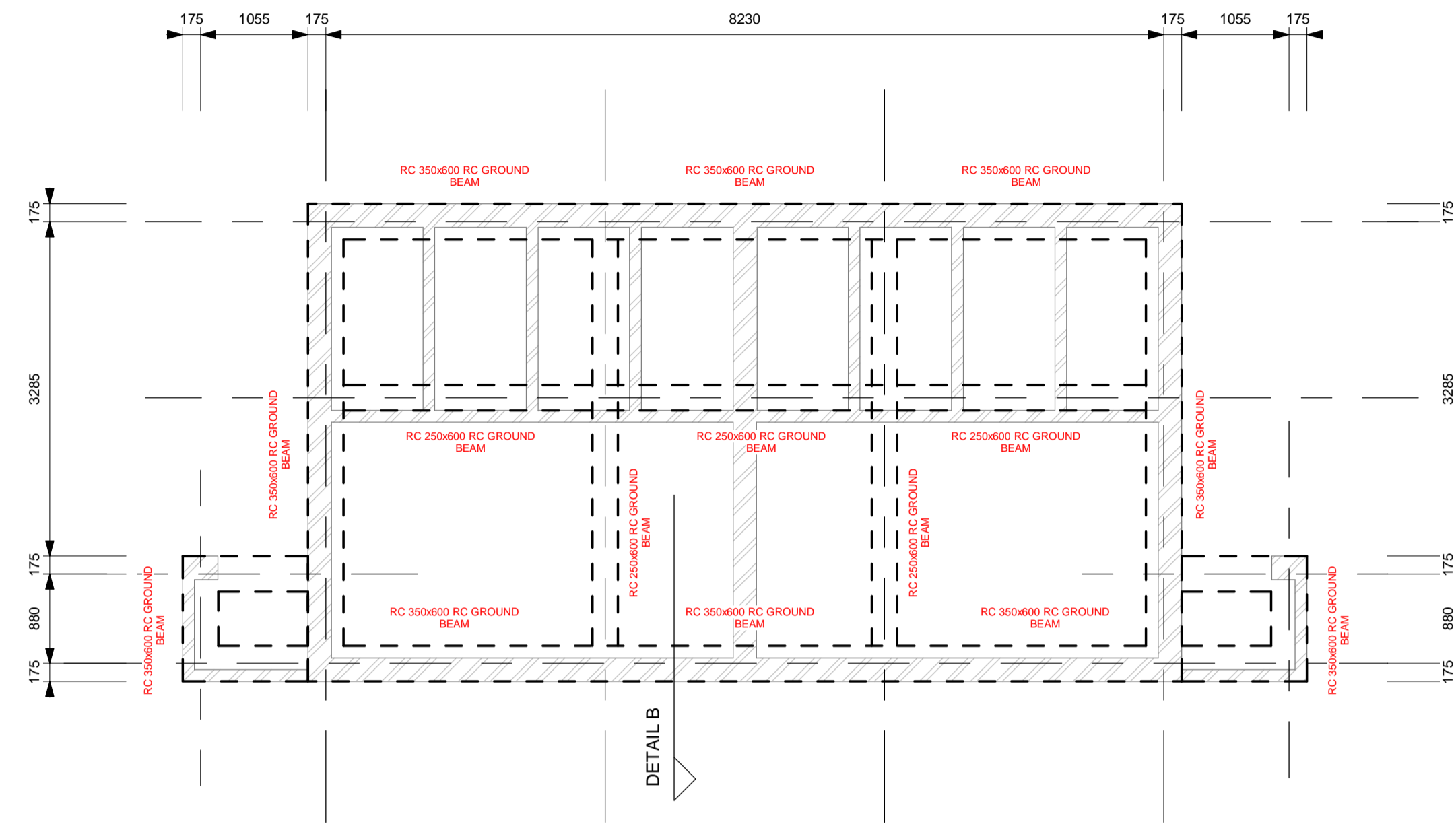
- ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
- CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW UNLESS OTHERWISE NOTED.
MASS CONCRETE GRADE 10/19
BLINDING CONCRETE GRADE 10/19
STRUCTURAL CONCRETE GRADE 25/19
- 250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS 952 -1985 TYPE C TO BE PROVIDED UNDER ALL GROUND SLABS.
- EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT FINISH" UNLESS OTHERWISE NOTED.
- THE MINIMUM DESIGN BEARING PRESSURE FOR FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED.
- ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

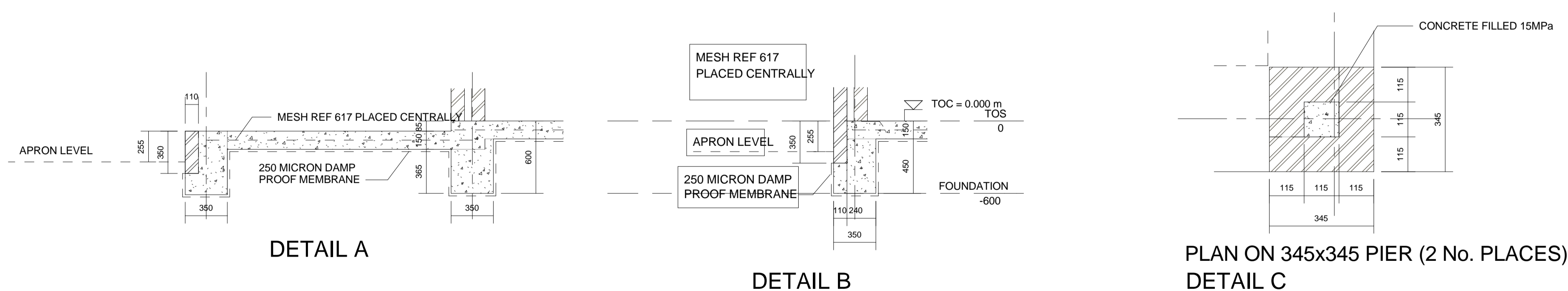
- CONSTRUCTION PROCEDURE, SEQUENCE AND POSITIONING OF CONSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER PRIOR TO CASTING THE RAFT
- CONSTRUCTION JOINT PREPARATION: THE SURFACE OF THE FIRST CAST CONCRETE FORMING A CONSTRUCTION JOINT SHALL HAVE A LAITANCE REMOVED TO EXPOSE THE COARSE AGGREGATE AND A SOLID SURFACE. THIS MAY BE FACILITATED BY THE USE OF A SUITABLE EXPANDED METAL OR PROPRIETARY STOP END SHUTTER.
- RAFT TO BE POWER FLOATED TO JUST SHORT OF BEING POLISHED. METHOD TO BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC MEMBRANE.

GEOTECHNICAL CONSIDERATIONS

- COGNISANCE HAS BEEN TAKEN OF THE DOLOMITE CONDITIONS AND THE FOUNDATIONS HAVE BEEN ACCORDING TO THE FOLLOWING:
- DOLOMITE AREA DESIGNATION - D3
- SINKHOLE MAXIMUM SIZE - 5M DIAMETER



WATER BORNE TOILET 2 FOUNDATION PLAN
1 : 50



CONCRETE NOTES:

- ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
- CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW UNLESS OTHERWISE NOTED. MASS CONCRETE GRADE 10/19 BLINDING CONCRETE GRADE 10/19 STRUCTURAL CONCRETE GRADE 25/19
- 250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS 952 -1985 TYPE C TO BE PROVIDED UNDER ALL GROUND SLABS.
- EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT FINISH" UNLESS OTHERWISE NOTED.
- THE MINIMUM DESIGN BEARING PRESSURE FOR FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED. ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

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- CONSTRUCTION JOINT PREPARATION: THE SURFACE OF THE FIRST CAST CONCRETE FORMING A CONSTRUCTION JOINT SHALL HAVE A LAITANCE REMOVED TO EXPOSE THE COARSE AGGREGATE AND A SOLID SURFACE. THIS MAY BE FACILITATED BY THE USE OF A SUITABLE EXPANDED METAL OR PROPRIETARY STOP END SHUTTER.
- RAFT TO BE POWER FLOATED TO JUST SHORT OF BEIG POLISHED. METHOD TO BER APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC MEMBRANE.

GEOTECHNICAL CONSIDERATIONS

- COGNISANCE HAS BEEN TAKEN OF THE DOLOMITE CONDITIONS AND THE FOUNDATIONS HAVE BEEN ACCORDING TO THE FOLLOWING:
- DOLOMITE AREA DESIGNATION - D3
- SINKHOLE MAXIMUM SIZE - 5M DIAMETER

LEGEND:

600mm WIDE * 300mm HIGH CONCRETE FOOTING

SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REV	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



DEPARTMENT OF EDUCATION



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REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

PROJECT DESCRIPTION: RASEMA SECONDARY SCHOOL

PROPOSED SITE DEVELOPMENT PLAN

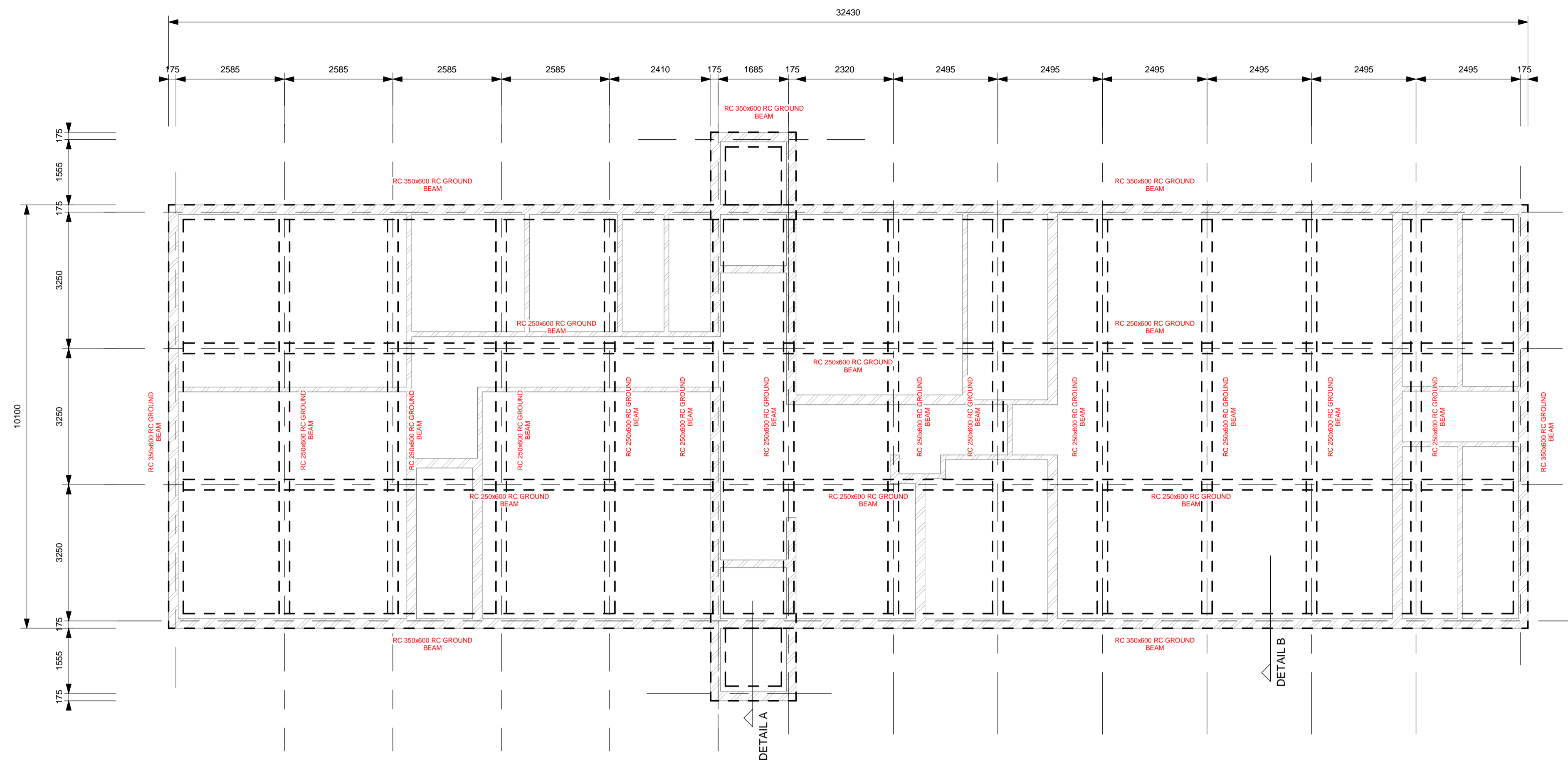
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SCALE / SHEET SIZE	LAYOUT	DATE
SCALE: As indicated @ A1		2021.08.19
PROJECT No.	SHEET NUMBER	
063-17-003	2019-RSS-S-02	

OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRU	B

DRAWING STATUS		
INFO	TENDER	CONSTRUCTION

DRAWN BY:	CHECKED:
TL	RT



ADMIN BLOCK FOUNDATION PLAN
1 : 75

LEGEND:

- 600mm WIDE * 300mm HIGH CONCRETE FOOTING
- BRICK WALL

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS				
REV	DATE	DRAWN	DESCRIPTION	
A	2021.08.19	TL	ISSUED FOR INFORMATION	
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION	



DEPARTMENT OF
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REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:
RASEMA SECONDARY SCHOOL
PROPOSED SITE DEVELOPMENT PLAN

DRAWING DESCRIPTION			
ADMIN BLOCK FOUNDATION LAYOUT			
SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	2021.08.19		
PROJECT No.	SHEET NUMBER		
063-17-003	2019-RSS-S-03		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRU	B
DRAWING STATUS			
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DRAWN BY: TL		CHECKED: RT	

CONCRETE NOTES:

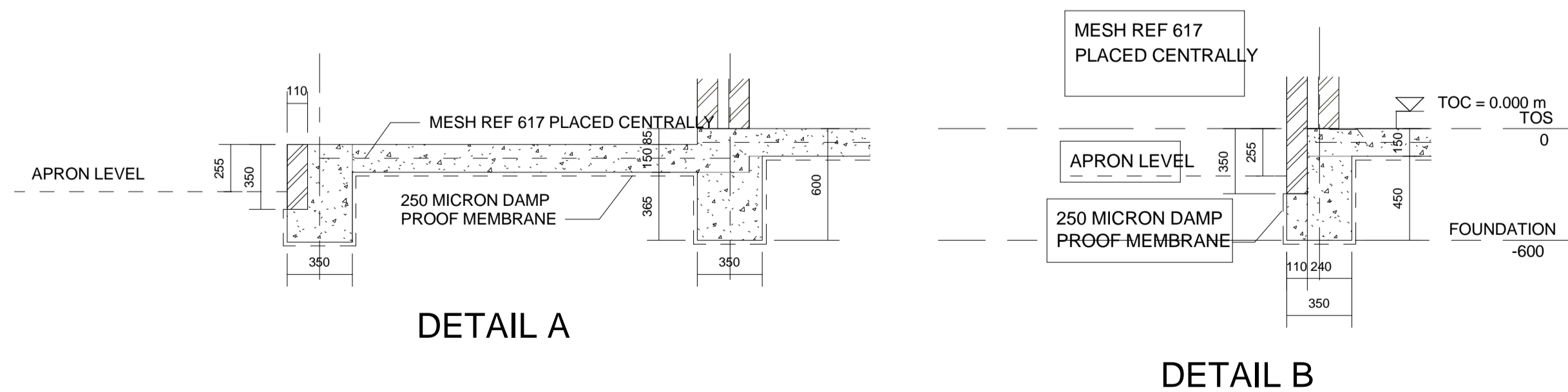
- ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
- CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW UNLESS OTHERWISE NOTED.
MASS CONCRETE GRADE 10/19
BLINDING CONCRETE GRADE 10/19
STRUCTURAL CONCRETE GRADE 25/19
250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS 952-1995 TYPE C TO BE PROVIDED UNDER ALL GROUND SLABS.
- EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT FINISH" UNLESS OTHERWISE NOTED.
THE MINIMUM DESIGN BEARING PRESSURE FOR FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED.
ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.
- CONSTRUCTION PROCEDURE, SEQUENCE AND POSITIONING OF COSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER PRIOR TO CASTING THE RAFT.
- CONSTRUCTION JOINT PREPARATION: THE SURFACE OF THE FIRST CAST CONCRETE FORMING A CONSTRUCTION JOINT SHALL HAVE A LAITANCE REMOVED TO EXPOSE THE COARSE AGGREGATE AND A SOLID SURFACE. THIS MAY BE FACILITATED BY THE USE OF A SUITABLE EXPANDED METAL OR PROPRIETARY STOP END SHUTTER.
- RAFT TO BE POWER FLOATED TO JUST SHORT OF BEIG POLISHED. METHOD TO BER APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC MEMBRANE.

CONSTRUCTION NOTES:

- CONSTRUCTION PROCEDURE, SEQUENCE AND POSITIONING OF COSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER PRIOR TO CASTING THE RAFT.
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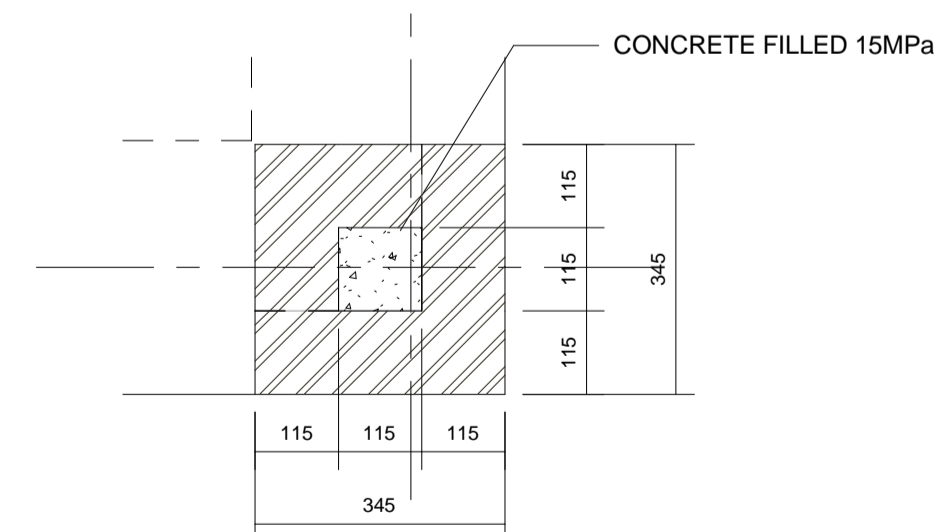
GEOTECHNICAL CONSIDERATIONS

- COGNISANCE HAS BEEN TAKEN OF THE DOLOMITE CONDITIONS AND THE FOUNDATIONS HAVE BEEN ACCORDING TO THE FOLLOWING:
DOLOMITE AREA DESIGNATION - D3
- SINKHOLE MAXIMUM SIZE - 5M DIAMETER



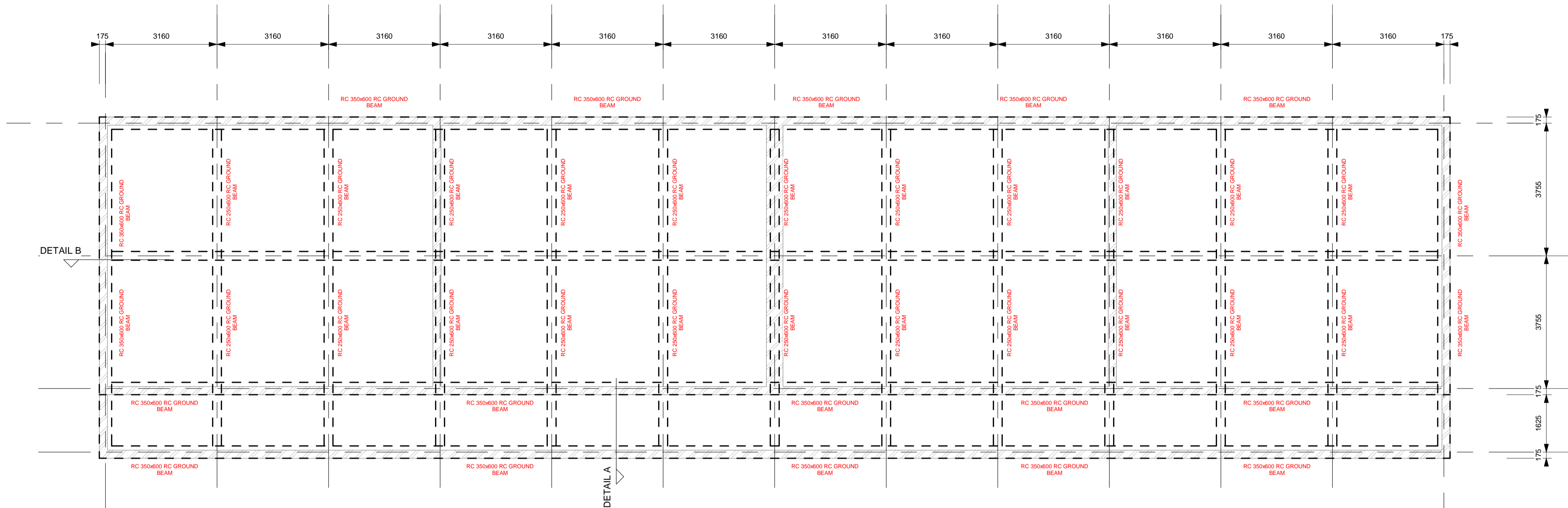
DETAIL A

DETAIL B



PLAN ON 345x345 PIER (2 No. PLACES)
DETAIL C

E:\projects\16033-A (Civil)\Drawings\Revit Model\BASEMA SECONDARY SCHOOL_SDP_chil_v21_021.rvt
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4 CLASSROOM FOUNDATION PLAN
1 : 75

LEGEND:

- 600mm WIDE * 300mm HIGH CONCRETE FOOTING
- BRICK WALL

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



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info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: RASEMA SECONDARY SCHOOL

PROPOSED SITE DEVELOPMENT PLAN

DRAWING DESCRIPTION: 4 CLASS ROOM BLOCK FOUNDATION LAYOUT

SCALE / SHEET SIZE		DATE	
SCALE: As indicated @ A1		2021.08.19	
PROJECT No.	SHEET NUMBER		
063-17-003	2019-RSS-S-04		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRU	B
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY:		CHECKED:	
TL		RT	

CONCRETE NOTES:

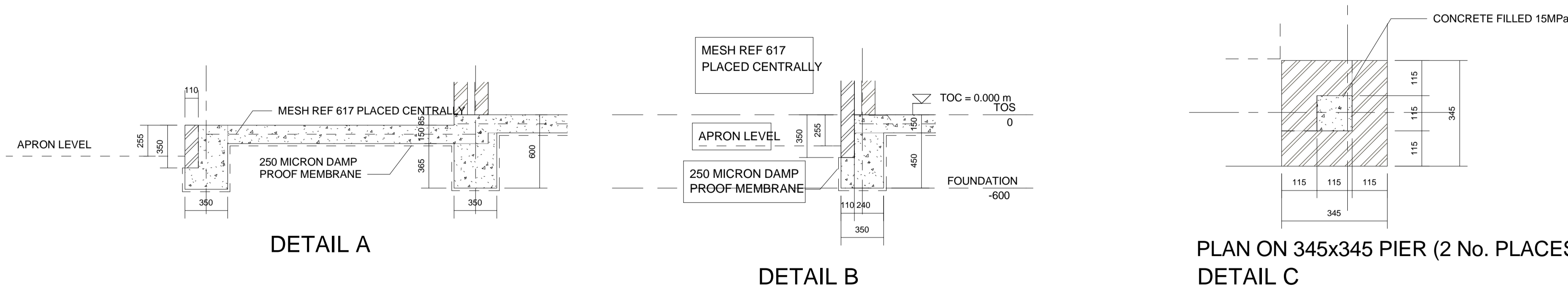
- ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
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GEOTECHNICAL CONSIDERATIONS

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DOLOMITE AREA DESIGNATION - D3
SINKHOLE MAXIMUM SIZE - 5M DIAMETER



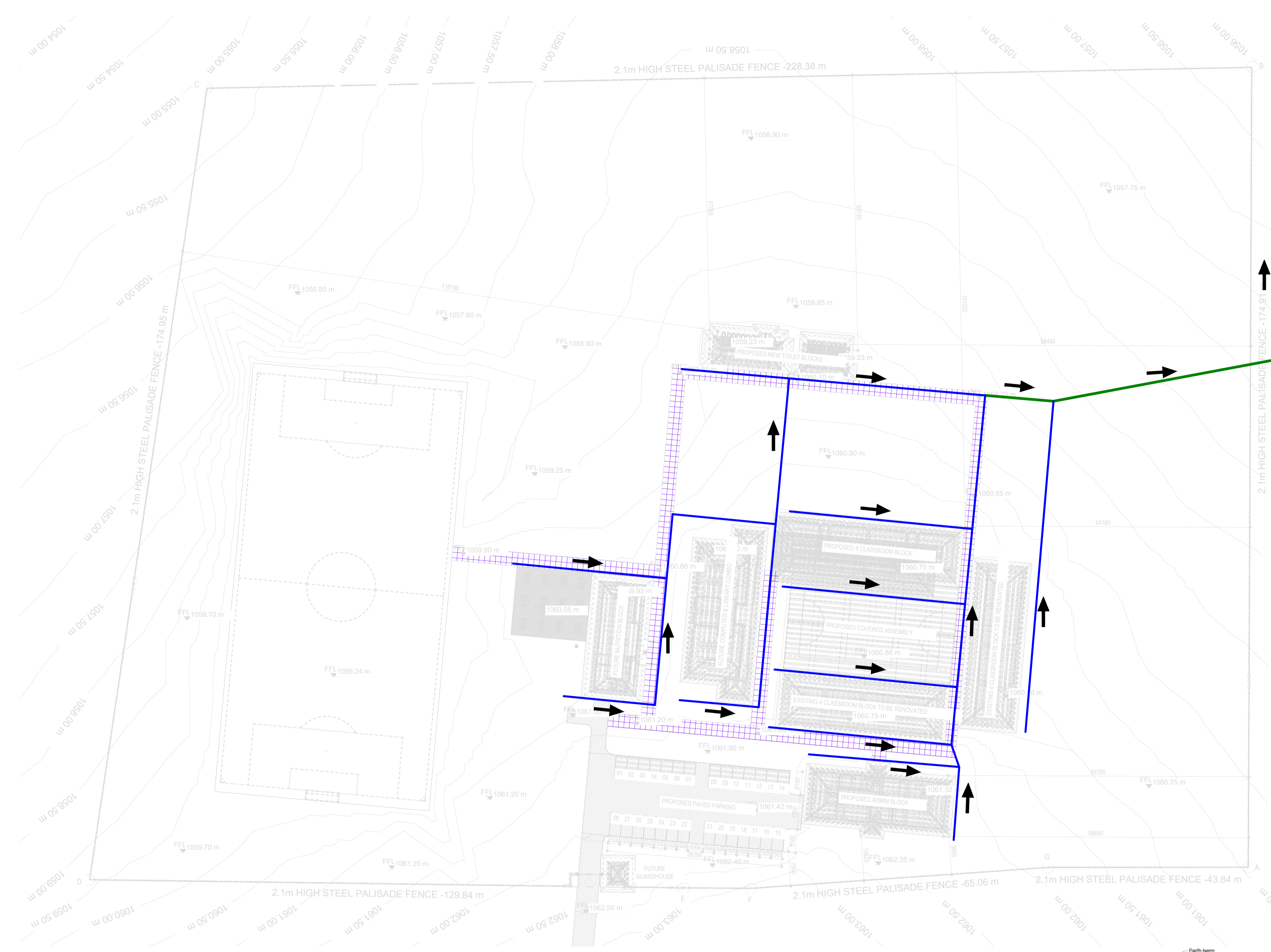
DETAIL A

DETAIL B

PLAN ON 345x345 PIER (2 No. PLACES)
DETAIL C

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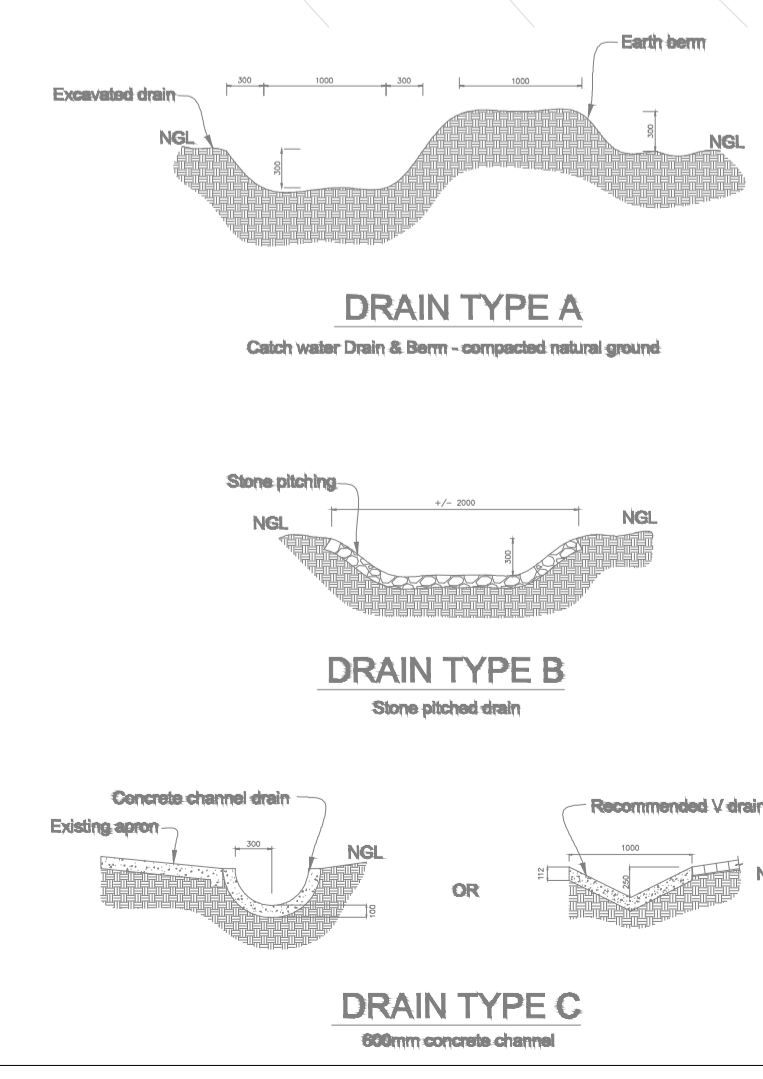
SITE PLAN
SCALE 1:500

LEGEND:

- Tree
- Tap
- Borehole
- Benchmark
- Existing Jojo Water Tank
- New Jojo Water Tank
- Manhole
- Gate
- Proposed water supply main
- Fence
- Elec pole
- Drain Type A
- Drain Type B
- Drain Type C
- Walkway

VARIATIONS	REASON

SOIL CONDITIONS	DESIGN IMPLICATIONS



NO.	DATE	REVISION	DRAWN
1	04/09/2019	Issued For Information	T.Loboho

CONSULTANTS

MUTEO CONSULTING

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39 Grobler Street
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Fax : (015) 291 4043

website: www.muteo.co.za
email: mail@muteo.co.za

ARCHITECT

IDC ARCHITECTS

EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

ARCHITECT NAME: ILORI PrArch 21133

IMPI FMFNTFD RY

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

LIMPOPO PROVINCE
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0699

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Fax : (015) 284 7030

SIGNATURE	DATE	SHEET NO.
Richard Thubakgale	09/10/2019	A1
Thabang Loboho	09/10/2019	1:500
Jonathan Magabalela	09/10/2019	STATUS LEGEND: 1 - INFORMATION 2 - TENDER 3 - FOR CONSTRUCTION AS-BUILT
Jonathan Magabalela	09/10/2019	

SPONSOR

PROJECT
PROPOSED RENOVATIONS AND ALTERATIONS AT
NGWANAMAKHUTSWE SECONDARY SCHOOL IN SOFAYA, LIMPOPO

DISTRICT: ALFRED NZO DISTRICT MUNICIPALITY
PROVINCE: LIMPOPO

DRAWING TITLE
RASEMA SECONDARY SCHOOL
SITE DEVELOPMENT PLAN

DISCIPLINE	DRAWING NUMBER	STATUS	REVISION
ENGINEERING	2019-07	I	A

Symbol	Qty	LEGEND Description
⎓		PHASE INDICATIONS: SINGLE PHASE DOUBLE POLE THREE PHASE
⌘		CIRCUIT BREAKER.
⌘		ISOLATOR (ON LOAD).
⌘		GENERAL SYMBOL FOR SWITCH.
⌘		EARTH LEAKAGE.
⌘		CONTACTOR.

CABLE SCHEDULE	
1	25mm ² x 2C + 16mm ² BCEW
2	16mm ² x 2C + 10mm ² BCEW
3	10mm ² x 2C + 6mm ² BCEW
4	6mm ² x 2C + 4mm ² BCEW
5	4mm ² x 2C + 2.5mm ² BCEW
6	2.5mm ² x 2C + 2.5mm ² BCEW
7	1.5mm ² x 2C + 1.5mm ² BCEW

MAIN DISTRIBUTION BOARD	
POSITIONING:	SURFACE MOUNTED
DIMENSIONS:	SPECIFY
PANEL COLOUR:	ORANGE
CABLE ENTRY:	BOTTOM
CABLE EXIT:	TOP & BOTTOM
DOORS:	LOCKABLE
SPARE CAPACITY:	25%
OTHER:	WEATHERPROOF

DISTRIBUTION BOARDS	
POSITIONING:	RECESSED
DIMENSIONS:	SPECIFY
PANEL COLOUR:	WHITE
CABLE ENTRY:	BOTTOM
CABLE EXIT:	TOP & BOTTOM
DOORS:	LOCKABLE
SPARE CAPACITY:	25%
OTHER:	SPECIFY

- NOTES:**
- ALL FEEDER EQUIPMENT IS 1-PHASE, 2-WIRE UNLESS OTHERWISE INDICATED.
 - ELECTRICAL CONTRACTOR TO MEASURE ALL CABLES & BUSBARS PRIOR TO ORDERING.
 - EACH DB IS TO BE FITTED WITH A WARNING LABEL AS PER SANS 10142-1.
 - EACH DB IS TO BE ALSO FITTED WITH A WARNING LABEL INDICATING THAT IT HAS BEEN DESIGNED FOR CASCADING, AND THAT ONLY CIRCUIT BREAKERS OF THE SAME TYPE & SAME MANUFACTURER AS THE EXISTING SHALL BE INSTALLED IN THIS DB.
 - THE DB MANUFACTURER IS TO CHECK, VERIFY & CONFIRM FAULT LEVELS OF ALL DB'S WITH CONSULTANT PRIOR TO MANUFACTURING OF DB. NO CLAIMS WILL BE ENTERTAINED IN THIS REGARD.

REVISIONS			
NO.	DATE	DESCRIPTION	BY
A.	10/08/21	ISSUED FOR TENDER	SM

CLIENT

ARCHITECT

JOHANNESBURG
Unit C2-001, Edenburg Terrace
348 Rivonia Blvd | Rivonia 2128
Tel: +27 11 234 8088 Cell: +27 72 068 0958
johannesburg@digroup.co.za

ELECTRICAL ENGINEER

MED-TECH ENGINEERS

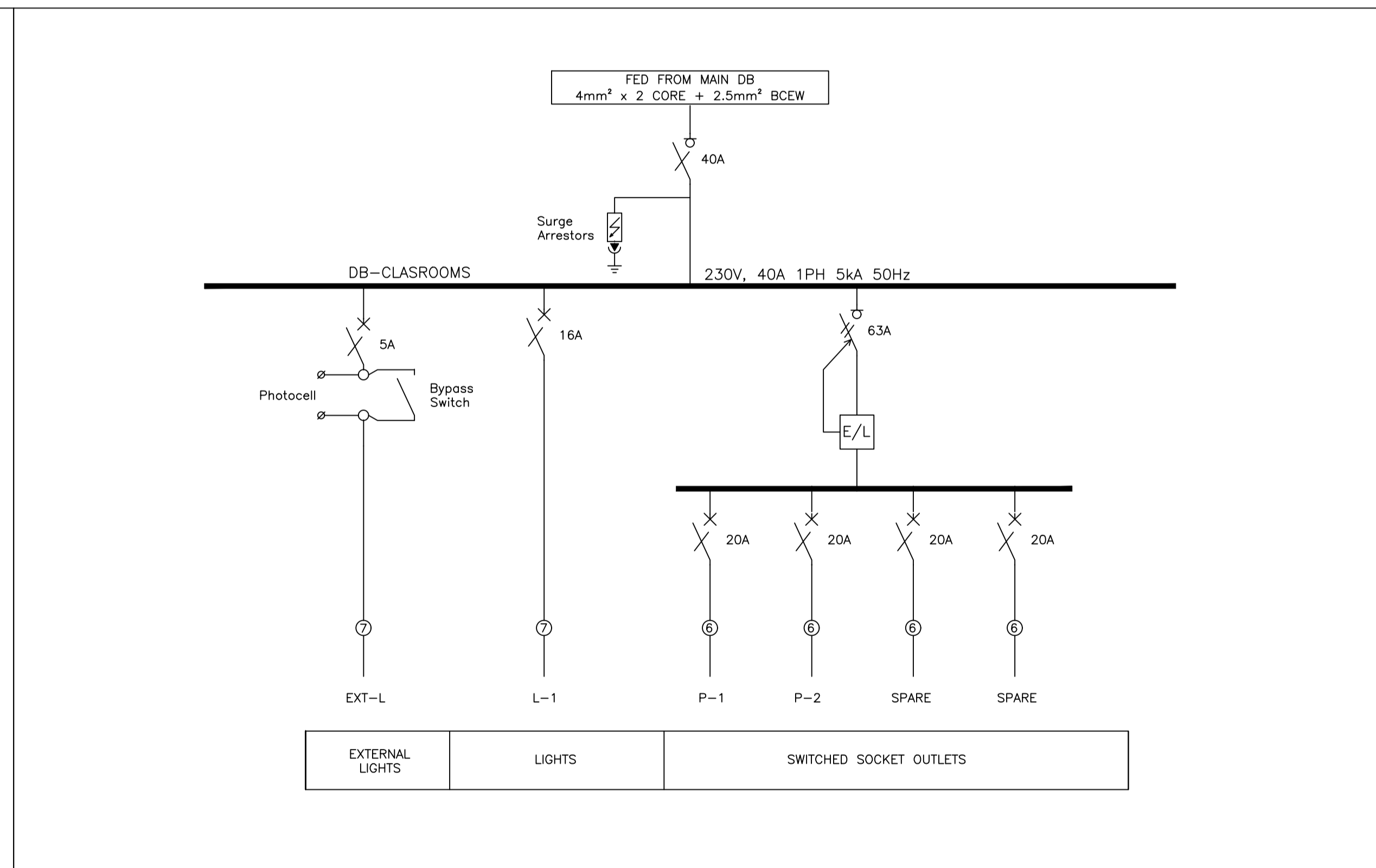
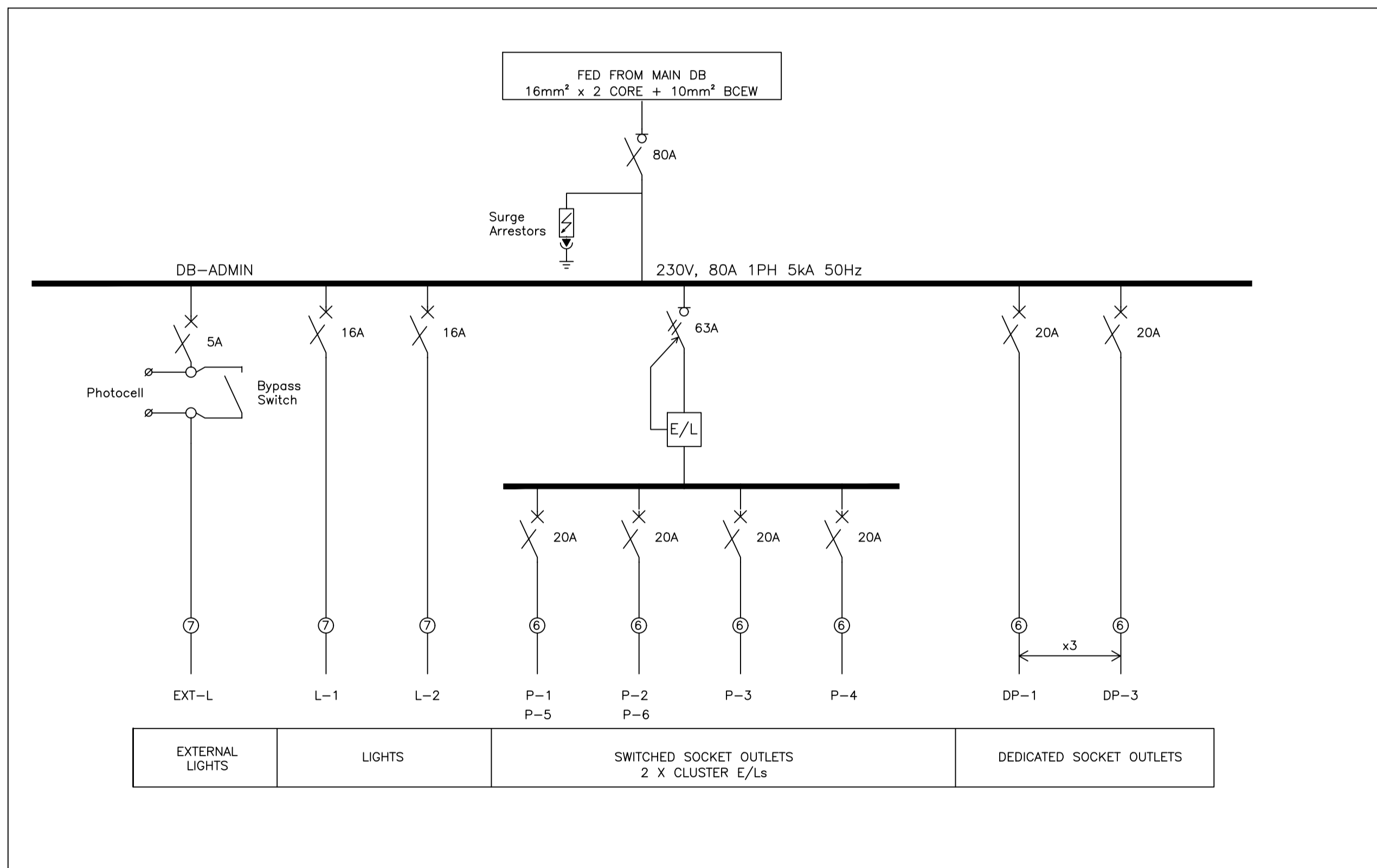
1283 De Villiers Maroull Drive,
Moreleta Park,
Pretoria, 0181
Tel: +27 12 997 3676
Email: gift@med-techengineers.com

ELECTRICAL ENGINEER'S NAME: G. Mphedu
REGISTRATION NUMBER: Pr.Eng No. 20130744
CLIENT'S SIGNATURE:

PROJECT DESCRIPTION

PROPOSED RENOVATIONS AND ALTERATIONS AT RASEMA SECONDARY, LIMPOPO


DRAWING DESCRIPTION		
SCALE	SHEET SIZE	DATE
N.T.S	A1	10 AUGUST 2021
PROJECT No.		REVISION
PEB013		A
DRAWING NUMBER		
PEB013-SLD-006		
DRAWING STATUS:		
INFO ONLY	TENDER	COUNCIL CONSTRUCTION
DRAWN BY:		CHECKED:
Sesha		Gift






LEGEND	
	L1 - 15W LED SURFACE MOUNT BULKHEAD
	L2 - 43W LINEAR LED SURFACE MOUNT 1500
	L4 - 150W LED LOW BAY LIGHT FITTING
	L6 - 2X18W LED SURFACE MOUNT BULKHEAD C/W WITH BLACK TRIM
	LIGHT SWITCH SINGLE WAY
	LIGHT SWITCH 2 WAY


PROPOSED LIGHT FITTINGS




OUTSIDE SECURITY LIGHT



MULTI-PURPOSE HALL LIGHT



ALLUCTIONS AND STOREROOM LIGHT



CLASSROOMS AND OFFICES LIGHT

REVISIONS			
NO.	DATE	DESCRIPTION	BY
A.	09/10/19	ISSUED FOR INFORMATION	SM
B.	01/06/21	ISSUED FOR INFORMATION	SM
C.	02/02/22	ISSUED FOR TENDER	SN

CLIENT



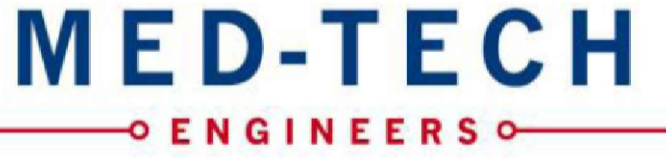
DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

ARCHITECT



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johannesburg@idcgroup.co.za

ELECTRICAL ENGINEER



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Email: giftm@med-techengineers.com

ELECTRICAL ENGINEER'S NAME: G. Mphedu
REGISTRATION NUMBER: Pr.Eng No. 20130744
CLIENT'S SIGNATURE:

PROJECT DESCRIPTION

PROPOSED RENOVATIONS AND ALTERATIONS AT RASEMA, LIMPOPO

DRAWING DESCRIPTION

ELECTRICAL LIGHTING LAYOUT

SCALE	SHEET SIZE	DATE	
1:500	A1	01 JUNE 2021	
PROJECT No.		REVISION	
PEB013		C	
DRAWING NUMBER			
PEB013-L-005			
DRAWING STATUS:			
INFO ONLY	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY:		CHECKED BY:	
Sesha		Gift	