

DEPARTMENT OF

PUBLIC WORKS, ROADS & INFRASTRUCTURE

LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE

BID NUMBER: LDPWRI-B/20093

PROVISIONAL BILL OF QUANTITIES

For the

DEMOLITION OF PIT TOILET BLOCK AND BRICK AND MORTAR STRUCTURE WITH ELEVATED PVC TANK, RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS, CONSTRUCTION OF MEDIUM ADMIN BLOCK, 1 X 3 CLASSROOM BLOCK, MULTIPURPOSE CLASSROOM, 21-SEATS ENVIRO-LOO TOILETS AND EXTERNAL WORKS (SEPTIC TANK, WATER RETICULATIONS, WALKWAYS, PARKING BAYS AND FENCE) AT NAPSADI SECONDARY SCHOOL IN MAKGAUNG VILLAGE, MOETLADI IN MOPANI DISTRICT.

For the

DEPARTMENT OF EDUCATION, LIMPOPO PROVINCE

CIDB CLASS GRADING: 7GB 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



PUBLIC WORKS, ROADS & INFRASTRUCTURE

CIDB CLASS GRADING 7GB OR HIGHER

BID NUMBER: LDPWRI-B/20093

DEMOLITION OF PIT TOILET BLOCK AND BRICK AND MORTAR STRUCTURE WITH ELEVATED PVC TANK, RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS, CONSTRUCTION OF MEDIUM ADMIN BLOCK, 1 X 3 CLASSROOM BLOCK, MULTIPURPOSE CLASSROOM, 21-SEATS ENVIRO-LOO TOILETS AND EXTERNAL WORKS (SEPTIC TANK, WATER RETICULATIONS, WALKWAYS, PARKING BAYS AND FENCE) AT NAPSADI SECONDARY SCHOOL IN MAKGAUNG VILLAGE, MOETLADI IN MOPANI 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

CONTENTS

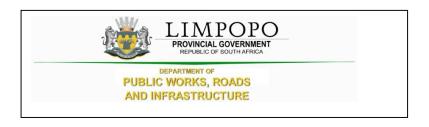
PART A:	SPEC	CIAL NOTES TO BIDDERS	1
PART T1	: TEN	DERING PROCEDURE	. 14
	T1.1	TENDER NOTICE AND INVITATION TO TENDER	14
	T1.2	TENDER DATA	15
	A.	BID EVALUATION STAGE 3 - FUNCTIONALITY	21
PART T2	: RET	URNABLE DOCUMENTS	. 29
	T2.1:	LIST of Returnable Documents	30
	T2.2:	RETURNABLE SCHEDULE	32
SBD1: IN	VITAT	TION TO BID	. 33
CERTIFIC	CATE	OF AUTHORITY	. 36
	A.	CERTIFICATE FOR COMPANY	36
	В.	CERTIFICATE OF PARTNERSHIP	36
	C.	CERTIFICATE FOR JOINT VENTURE	37
	D.	CERTIFICATE FOR THE SOLE PROPRIETOR	37
	E.	CERTIFICATE FOR CLOSE CORPORATION	37
	F.	BROAD-BASED BLACK ECONOMIC EMPOWERMENT	. 43
SBD 4: D	ECLA	RATION OF INTEREST	. 46
SBD 6.1:	REFE	RENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL	
	PRO	CUREMENT REGULATIONS 2017	. 49
SBD 6.2:	DECL	ARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT	. 55
	LOCA	AL CONTENT DECLARATION	58
	GUIDA	ANCE DOCUMENT FOR THE CALCULATION OF LOCAL CONTENT	. 60
	TREAS	SURY DESIGNATED SECTOR	63
	ANNE	X C: LOCAL CONTENT DECLARATION - SUMMARY SCHEDULE	77
	ANNE	X D: IMPORTED CONTENT DECLARATION - SUPPORTING SCHEDULE TO ANNEX C	78
SBD 8: D	ECLA	RATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	. 80
SBD 9: C	ERTIF	FICATE OF INDEPENDENT BID DETERMINATION	. 82

TABLE OF CONTENT

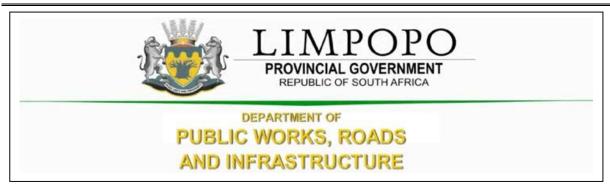
SAFCEC	JOIN	T VENTURE AGREEMENT	.85
	1.	FORMATION OF JOINT VENTURE	. 86
	2.	OBJECT AND MOTIVATION	. 86
	3.	PROFITS AND LOSSES	. 86
	4	DURATION	. 86
	5.	EXCLUSIVITY	. 87
	6.	PRE-CONTRACT COSTS	. 87
	7.	MANAGEMENT COMMITTEE	. 87
	8	POWERS OF THE MANAGEMENT COMMITTEE AND DIRECTION OF THE PROJECT MANAGER	. 88
	9	THE EXECUTIVE BOARD	. 89
	10	PERSONNEL	. 89
	11	FINANCING	. 90
	12.	ACCOUNTS	. 91
	14.	Breach	. 92
	15.	DISPUTES	. 93
	16	ARBITRATION	. 93
	17.	CONFIDENTIALITY	. 94
	18.	ASSIGNMENT	. 94
	19	GENERAL	. 94
THE CON	ITRAC	OT	. 97
PART C1	: AGR	EEMENT AND CONTRACT DATA	. 98
	C1.1.	FORM OF OFFER AND ACCEPTANCE	. 99
	C2	CONTRACT DATA	102
PART C3	: PRIC	CING DATA	103
	C3.1	PRICING INSTRUCTION	104
PART C4	: PRO	VISIONAL BILLS OF QUANTITIES	105
	C4.1	PRELIMINARIES	106
	C4.2	BUILDING WORKS	151
	C4.3	CIVIL WORKS	413
	C4.4	ELECTRICAL WORKS	361

TABLE OF CONTENT

PART C5: SCOPE OF WORKS	438
C5.1 Scope of Works	455
PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015	456
PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015	456
PART C6.1: Data Collection Tool	536
PART C7: SITE INFORMATION AND DRAWINGS	537
PART C7.1: SITE INFORMATION	538
PART C7.2: Drawings	539



PART A: SPECIAL NOTES TO BIDDERS



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: ilori1@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@ndidaligs.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 in Makgaung Village, Moetladi in Mopani 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.

SPECIAL NOTES TO TENDERERS

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 complied 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 filing 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 Pit Toilet Block and Brick and Mortar Structure with Elevated PVC Tank, Renovations of 4 x 3 Classroom Blocks, Construction of Medium Admin Block, 1 x 3 Classroom Block, Multipurpose Classroom and External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays and Fence) at Napsadi Secondary School in Makgaung Village, Moetladi in Mopani District.

It is estimated that tenderers should have a CIDB class grading of 7GB 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 Makgaung Village, Moetladi in Mopani 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.

14



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

T1.2TENDER DATA

F.1.2	For this contract, the following documents will be adopted:
	The single-volume procurement document issued by the employer comprises of the following:
	Part A1: Special Notes to Bidders
	The Tender Part T1: Tendering procedures T1.1 Tender notice and invitation to tender T1.2 Tender data
	Part T2: Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules
	The Contract PartC1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data
	The Contract PartC3: Pricing data C3.1 Pricing instructions
	The Contract PartC4: Provisional Bills of Quantities C4.1 Preliminaries C4.2 Building Works C4.3 Civil Works C4.5 Electrical Installation
	Part 5: Scope of work C5.1 Scope of work
	Part 6: EPWP Infrastructure Guideline 2015 C6.1 Data Collection Tool
	Part 7: Site information and drawings C7.1 Site information C7.2 Drawings
F.1.3	The employer's representative is:
	Name :Makape P. Address : Department of Public Works, Roads and Infrastructure. Works Towers, 43 Church Street. Tel :082 460 6271
F 4 4	Email: makapep@dpw.limpopo.gov.za
F.1.4	The language for communications is English
F.2.1	Only those Bidders who satisfy the following eligibility criteria are eligible to submit tenders: 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.
F.2.2	Compulsory site briefing
	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 Makgaung Village, Moetladi in Mopani District.

16 T1.2

T1.2TENDER 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)

17 T1.2

T1.2TENDER DATA

F.3.3 Scoring Financial Offer:

Tender offers will be scored using the following formula: $NFO = {Pm \choose P} \times 100$

Where

NFO = number of tender evaluation points awarded for the financial offer.

W1 = the percentage score given for financial offer as stated in the Notice and Invitation to Tender T1.1

Pm = the comparative offer of the most favourable tender offer. P = the comparative offer of the tender offer under consideration.

where

W1 = the number of tender evaluation points for the financial offer and equals:

- 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.

Scoring Preferences:

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

The Department is not obliged to award the tender to the bidder with the highest number of tender points.

18 T1.2

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/20093 will be evaluated in terms of minimum thresholds for local content stipulated in the LDPWRI-B/20093 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/20093**.

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.

A. BID EVALUATION STAGE 3 - FUNCTIONALITY

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

Functionality	Weighting
Current Workload of Bidder	15
 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 	
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.	
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.	
Misrepresentation of facts will render your bid non-responsive.	

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

22 EVALUATION CRITERIA

TENDER EVALUATION CRITERIA AND WEIGHTINGS

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.	Weighting
NB: List the details of key staff in Table 2. Completion of this table is mandatory for points	
to be allocated.	
Project Supervisor/Site Agent	
Qualification	
Registration as professional engineer, technologist, architect, construction	
manager or quantity surveyor = 5	
Degree in built environment = 3	
National Diploma in Built environment = 1	
Relevant experience in general building projects	
More than 5 years' experience = 5	
Between 2 and 5 years' experience = 3	
Less than 2 years = 1	
Construction Manager	
Qualification	
Registration as professional engineer, technologist, architect, construction	
manager or quantity surveyor = 5	
Degree in built environment = 3	
National Diploma in Built environment = 1	30
Relevant experience in general building projects	
More than 5 years' experience = 5	
Between 2 and 5 years' experience = 3	
Less than 2 years = 1	
Site Safety Officer	
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	
Relevant experience in general building projects	
More than 5 years' experience = 5	
Between 2 and 5 years' experience = 3	
• Less than 2 years = 1	
	l

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Table 2 Details of key staff.

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

Experience in similar projects in the last 10 years	Weighting
Number of projects completed within CIDB grade 7GB or higher. The grading applies	25
at the time of award of the project.	
Completed Projects must be classified as General Building (GB) works in terms of	
CIDB for points to be allocated.	
 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 	
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.	
attachmente to be on appropriate letternoad and dignod on by the orient	

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)

Proposal and methodology	Weighting
Project Proposal/Method Statement	
The Bidder does not cover any aspect of the scope of work or no information	
submitted/attached = 0	
The bidder does not deal with the critical aspects of the project associated	
with the scope of work =5	
The bidder addresses the scope of work, provides a methodology to deal with	
the critical aspects of the project associated with the works =10	
Project Schedule/programme (acceptable scheduling software)	
Programme not submitted =0	20
Programme not aligned to Bill of Quantities (BOQ) = 2	
Programme is aligned to the Bill of Quantities (BOQ) =5	
Cashflow projections	
Cashflow not submitted =0	
The cash flow projections not aligned to the programme and BOQ=2	
The cash flow projections, programme and BOQ are aligned=5	

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Safety, Health and Environmental Plan (SHEQ)	Weighting
The Bidder does not cover any aspect of the scope of work or no information submitted/attached = 0	
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	10
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	
Total	100
NB: To qualify for final evaluation the bidder must obtain a minimum scor functionality	

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.

30 T2.1B

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.

31 T2.1B

T2.2: RETURNABLE SCHEDULE

	shall indicate whether the list of returnables has been submitted together following completed documents or attachments (by indicating Yes or No)	Comp	olaint
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: 7GB or higher (CIDB Certificate)	Yes	No
24.	Preliminary Programme/schedule and cash flow	Yes	No
25.	Safety, Health and Environmental Plan (SHEQ)	Yes	No

PART T2: RETURNABLE DOCUMENTS

SBD1: INVITATION TO BID

PART A

YOU ARE HEREBY INVITED TO BID			F THE (NAME	OF DE	EPAR	TMENT/ PUBL	IC ENT	ITY)		
BID NUMBER:	CLOSING DA	ATE:				CLO	OSING 1	ΓIME:		
DESCRIPTION										
THE SUCCESSFUL BIDDER WILL BE				VRITT	EN C	ONTRACT FO	RM (SB	BD7).		
BID RESPONSE DOCUMENTS MAY	BE DEPOSITED	IN THE	BID BOX							
SITUATED AT (STREET ADDRESS)										
SUPPLIER INFORMATION										
NAME OF BIDDER										
-										
POSTAL ADDRESS										
STREET ADDRESS					I		1			
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	Yes					E STATUS	☐ Ye	S		
VERIFICATION CERTIFICATE						SWORN	,			
[TICK APPLICABLE BOX] IF YES, WHO WAS THE	☐ No			F	AFFID	AVII	☐ No	1		
CERTIFICATE ISSUED BY?										
		AN AC	COUNTING OF	FICE	R AS	CONTEMPLAT	TED IN	THE CLO	OSE COR	PORATION
AN ACCOUNTING OFFICER AS		ACT (C			11710	OOM EM EM		THE OE	JOE 0011	1 010111011
CONTEMPLATED IN THE CLOSE		A VE	RIFICATION	AGEN	NCY	ACCREDITE	D BY	THE	SOUTH	AFRICAN
CORPORATION ACT (CCA) AND NAME THE APPLICABLE IN THE			EDITATION SYS		(SAN	IAS)				
TICK BOX	 		ISTERED AUDI	ITOR						
	_	NAME:		. ==		- /=05			.= == ==	
[A B-BBEE STATUS LEVEL VERI IN ORDER TO QUALIFY FOR PRE				AFFID)A VIT	(FOR EMES	& QSE	s) MUS	ST BE S	JBMITTED
IN ORDER TO QUALIFT FOR PRE	I EKENCE PUI	113 F	JK D-DDEE]							

PART T2: RETURNABLE DOCUMENTS

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

PART T2: RETURNABLE DOCUMENTS

PART B: TERMS AND CONDITIONS FOR BIDDING

1.						
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)?					
3.2.	DOES THE BIDDER HAVE A BRANCH IN THE RSA?					
3.3.	DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO					
3.4.	DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA?					
IF TH TAX ABO	HE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN, IT IS NOT A REQUIREMENT TO OBTAIN A TAX COMPLIANCE STATUS / COMPLIANCE SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 VE.					

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

	A.	CERTIF	CATE FOR	COMP	ANY							
I,				,	chairperson	of	the	board	of	direc	ctors	of
				, he	ereby confirm	that by	resolut	ion of the	board	d (copy	attach	ned)
taken	on		20,	Mr/M	rs			acting	in	the	capa	acity
of				,	was authorize	ed to sig	gn all d	ocuments	in cor	nection	n with	this
tender	and any	contract re	esulting from	it on be	half of the cor	npany.						
As witr	ness											
1												
					Chairperso	n						
2					Date							
	В.	CERTIF	CATE OF F	PARTNI	ERSHIP							
We, th	e unders	signed, beir	ng the key pa	rtners ir	the business	trading	as					
hereby	auth	orize Mr	/Mrs					, acting	g in	the	capa	acity
of				to sign	all docun	nents i	n con	nection	with	the te	ender	for
Contra	ct					and an	y contra	ct resultin	g from	it on o	ur beha	alf.
NAM	E		ADDRESS	,	SIGNA	ATURE		DATI	E			

IOTE: 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

· ·			•	
				offer for
the attached power	of attorney signed	d by legally au	nthorized signa	atories of
ADDRESS				RE,
	Signature: Sole	owner	f the busines	s trading
_	-	in the	business	trading
	, to sign	all documents	in connectio	n with the
ADDRESS	SIGNATURE		DATE	
	authorized signatory sign all docum and any of the attached power e. ADDRESS FOR THE SOLE P	authorized signatory of the company sign all documents in connect and any other contract result the attached power of attorney signed as: ADDRESS FOR THE SOLE PROPRIETOR Signature: Sole Date FOR CLOSE CORPORATION being the key members hereby authorise Mr/Mrs. to sign and any contract and a	authorized signatory of the company	ADDRESS AUTHORIZING SIGNATU NAME & CAPACITY OR THE SOLE PROPRIETOR

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	<u> </u>	Date				
Name		Position				
Tende	rer					

Compulsory Declaration

each partner must be comple			e or a joint ventu	ire, a separate declaration in respect of
Section 1: Enterprise Detail	S			
Name of enterprise:				
Contact person:				
Email:				
Telephone:				
Cell no				
Fax:				
Physical address				
Postal address				
Section 2: Particulars of o	companies	s and close co	rporations	
Company / Close Corpora	tion regis	tration		
number	•			
Section 3: SARS Informat	ion			
Tax reference number				
VAT registration number:			State Not	Registered if not registered for VAT
Section 4: CIDB registrati	on numbe	er		
Section 5: National Treasu	ry Central	Supplier Data	abase	
Supplier number				
Unique registration refere number	nce			
Section 6: Particulars of pri	incipals	I		
	ompanies	Act of 2008 (A	ct No. 71 of 200	sole proprietor, a director of a compan 08) or a member of a close corporatio 1984).
Full name of the principal	Ide	entity number		Personal tax reference number
Attach a separate page if nec	essary			

PART T2: RETURNABLE DOCUMENTS

Section 7: Record in the	service of the state				
Indicate by marking the relemenths in the service of any		any principal	is currently or	has been within the last 12	2
municipal entity	ncial legislature tional Assembly or the ovince and of directors of any unicipality or municipal	public ent meaning of 1999 (Act a member of provincial an employed	ity or constitu If the Public F No. 1 of 1999) an accounting public entity	tment, national or provinci tional institution within the inance Management Act authority of any national tor a provincial legislature	ne of
if any of the above boxes	are marked, disclose the	, ronowing.	Ctatus of sam	nvia e	
	Name of institution, pu	blic office,	Status of ser		
Name of principal	board or organ of state position held	and	Current	Within the last 12 months	
*insert separate page if nec					
		the state			_
Section 8: Record of a family member: a person's somestic partner in a civil unicor adoption Indicate by marking the relevant or has been within the last 12 and a member of any municipal a member of any provincular a member of the National Action 2 and 2 an	ily member in the service of spouse, whether in a marriagon, or child, parent, brother, sint boxes with a cross, if any famonths been in the service of pal council	ge or in a cusister, whether samily member of any of the following an en provi	such a relationsh of a principal as o owing: nployee of any p ncial public en n the meaning of	defined in section 5 is currently brovincial department, national tity or constitutional institute the Public Finance Managem	y Il or tion
Section 8: Record of a family member: a person's section activity member and person's section activity member and person's section activity and person's section activity and person activity and person activity and person activity activity and person activity activ	ily member in the service of spouse, whether in a marriagon, or child, parent, brother, sint boxes with a cross, if any famonths been in the service of oal council ial legislature onal Assembly or the Natio	ge or in a cusister, whether samily member of any of the following an engrovional Act,	ouch a relationsh of a principal as o owing: nployee of any p ncial public en on the meaning of 1999 (Act 1 of 19	defined in section 5 is currently brovincial department, national tity or constitutional institute the Public Finance Managem	y Il or tion nent
Section 8: Record of a familiar family member: a person's section activity unicor adoption Indicate by marking the relevant or has been within the last 12 are a member of any municipal a member of any province a member of the Nation Council of Province a member of the board of	ily member in the service of spouse, whether in a marriagon, or child, parent, brother, sint boxes with a cross, if any famonths been in the service of pal councilial legislature onal Assembly or the Nation of directors of any municipal en	ge or in a cusister, whether some sixter, whether some sixter is any of the following and an entity are customers.	for a principal as conving: Inployee of any princial public en the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently or constitutional institutional institutional institutional institutional Endinger (1999) Sounting authority of any national institutional institutio	y Il or tion nent onal
Section 8: Record of a family member: a person's sedomestic partner in a civil unic or adoption Indicate by marking the releval or has been within the last 12 and a member of any municipal a member of any provincal a member of the Nation Council of Province	ily member in the service of spouse, whether in a marriagon, or child, parent, brother, sint boxes with a cross, if any famonths been in the service of pal councilial legislature onal Assembly or the Nation of directors of any municipal en	ge or in a cusister, whether some sixter, whether some sixter is any of the following and an entity are customers.	for a principal as conving: Inployee of any princial public en the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently brovincial department, national tity or constitutional institute the Public Finance Managem (1999)	y Il or tion nent onal
Section 8: Record of a family member: a person's section activity and the relevant or adoption Indicate by marking the relevant or has been within the last 12 and a member of any municipal and a member of any province and a member of the Nation Council of Province a member of the board of	ily member in the service of spouse, whether in a marriage on, or child, parent, brother, significant boxes with a cross, if any farmonths been in the service of oal council ial legislature onal Assembly or the Nation of directors of any municipal enality or municipal entity Name of institution, board or organ of st	ge or in a cusister, whether some starting member of any of the following an emprovement of a member of any of the following and emprovement of a member of properties and emprovement of the following and emprovement of the followin	of a principal as coving: Inployee of any princial public entry the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently or constitutional institutional institutional institutional epartment, national tity or constitutional institutional institutional institutional institutional institutional epartment of any national authority of any national epislature.	y Il or tion nent onal
Section 8: Record of a family member: a person's section activity member and person's section activity marking the relevant or has been within the last 12 and a member of any municipal and a member of any province and a member of the Nation Council of Province and an official of any municipal an official of any municipal and official of any municipal and an official and an	ily member in the service of spouse, whether in a marriage on, or child, parent, brother, significant boxes with a cross, if any farmonths been in the service of oal council ital legislature onal Assembly or the Nation of directors of any municipal enality or municipal entity Name of institution,	ge or in a cusister, whether some starting member of any of the following an engage of any of the following and an engage of any of the following and an engage of the following and a member of public office of the following and	of a principal as coving: Inployee of any princial public entry the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently brovincial department, national tity or constitutional institute the Public Finance Managem pounting authority of any national tity ament or a provincial legislature.	y y ll or tion nent ponal
Section 8: Record of a family member: a person's somestic partner in a civil unicor adoption Indicate by marking the relevance or has been within the last 12 and a member of any municipal a member of any province a member of the Nation Council of Province a member of the board of an official of any municipal	ily member in the service of spouse, whether in a marriage on, or child, parent, brother, significant boxes with a cross, if any farmonths been in the service of oal council ial legislature onal Assembly or the Nation of directors of any municipal enality or municipal entity Name of institution, board or organ of st	ge or in a cusister, whether some starting member of any of the following an engage of any of the following and an engage of any of the following and an engage of the following and a member of public office of the following and	such a relationsh of a principal as obving: Inployee of any princial public en the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently provincial department, national tity or constitutional institutional institution	y y ll or tion nent ponal
Section 8: Record of a family member: a person's sedomestic partner in a civil unicor adoption Indicate by marking the relevance or has been within the last 12 and a member of any municipal a member of any province a member of the Nation Council of Province a member of the board of an official of any municipal	ily member in the service of spouse, whether in a marriage on, or child, parent, brother, significant boxes with a cross, if any farmonths been in the service of oal council ial legislature onal Assembly or the Nation of directors of any municipal enality or municipal entity Name of institution, board or organ of st	ge or in a cusister, whether some starting member of any of the following an engage of any of the following and an engage of any of the following and an engage of the following and a member of public office of the following and	such a relationsh of a principal as obving: Inployee of any princial public en the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently provincial department, national tity or constitutional institutional institution	y y ll or tion nent ponal
Section 8: Record of a family member: a person's section activity member and person's section adoption Indicate by marking the relevance or has been within the last 12 and a member of any municipal and a member of any province and a member of the Nation Council of Province and an official of any municipal	ily member in the service of spouse, whether in a marriage on, or child, parent, brother, significant boxes with a cross, if any farmonths been in the service of oal council ial legislature onal Assembly or the Nation of directors of any municipal enality or municipal entity Name of institution, board or organ of st	ge or in a cusister, whether some starting member of any of the following an engage of any of the following and an engage of any of the following and an engage of the following and a member of public office of the following and	such a relationsh of a principal as obving: Inployee of any princial public en the meaning of 1999 (Act 1 of 1999) (Act 1 of	defined in section 5 is currently provincial department, national tity or constitutional institutional institution	y y ll or tion nent ponal

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 of 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		

- 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:

	Status level of	Number of preference points				
B-BBEE status level of contributor	a tenderer (tick relevant level)	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

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 con	mpleted and submitted with the bid.
2.1	Full Name of bidder or his or her representative:	
2.2	2 Identity Number	
2.3	The position occupied in the Company (director, trustee, shareho	older², member):
2.4	Registration number of company, enterprise, close corporation, p	partnership agreement or trust:
2.5	Tax Reference Number:	
2.6	S VAT Registration Number:	
2.6.	The names of all directors/trustees/shareholders/member numbers and, if applicable, employee / PERSAL numbers mu	
¹"Sta	(a) any national or provincial department, national or provincial public entity 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.	y or constitutional institution within the meaning of the
	nareholder" means a person who owns shares in the company and is actively involved xercises control over the enterprise.	d in the management of the enterprise or business and
2.7	Are you or any person connected with the bidder? Presently employed by the state?	YES / NO
2.7.	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:	

46

SBD 4

SBD 4: DECLARATION OF INTEREST

3BD 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	2 If no, furnish reasons for non-submission of such proof:	
2.8 D	id 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 D	o 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.	
awa any	re you, or any person connected with the bidder, are of any relationship (family, friend, other) between other bidder and any person employed by the state or may be involved with the evaluation and or adjudication of this	YES/NO s bid?
2.10.1 l	f so, furnish particulars.	
••••		

47 SBD 4

SBD 4: DECLARATION OF INTEREST

ustees / members / sh		
ustees / members / sh		
	areholders.	
Identity Number	Personal Income Tax Reference Number	State Employee Num Persal Number
E)		
	E)	

48

SBD 4

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:
 - "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

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

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

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.

BID	NUMBE	R: LDP	WRI-B	20093
------------	-------	--------	-------	-------

7. SUB-CONTRACTING

7.1	Will any portion of the contract be sub-contracted? (Tick applicable box)	
	YES NO	
7.1.1	If yes, indicate:	
	i) What percentage of the contract will be subcontracted	
	iv) Whether the sub-contractor is an EME or QSE (Tick applicable box) YES NO	
	 v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms Preferential Procurement Regulations, 2017: 	ms of
Desi	gnated Group: An EME or QSE which is at last 51% owned by:	

Designated Group: An EME or QSE which is at last 51% owned	EME	QSE
by:	$\sqrt{}$	$\sqrt{}$
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] 		

BID NUMBER: LDPWRI-B/20093 8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES COMPANY CLASSIFICATION 8.6 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, gualifies 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 disqualify the person from the bidding process; (a) (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct; cancel the contract and claim any damages which it has suffered as a result (c) 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		DATE:
		ADDRESS

510	GNATURE(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 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)

3.	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.

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)

RE:	CAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY SPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, RTNERSHIP OR INDIVIDUAL)
IN F	RESPECT OF BID NO.
ISS	SUED 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/industrial_development/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.
do l	ne undersigned,
Oi ,	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)T	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

Reinforce 20 4 20 5 20 6	Section rement (4 5	Bill No	Description	Unit	Qty	Local Content
Reinforce 20 4 20 5 20 6	Section rcement (Bill No Founda	Description ations)	Unit	Qty	
Reinforce 20 4 20 5 20 6 Reinforce 8 4 7 5	rcement (4 5	No Founda	ations)	Unit	Qty	
Reinforce 20 4 20 5 20 6 Reinforce 8 4 7 5	rcement (4 5	No Founda	ations)	Unit	Qty	
20 4 20 5 20 6 Reinforc 8 4 7 5	4 5	1			1	Threshold
20 4 20 5 20 6 Reinforc 8 4 7 5	4 5	1				
20 6 Reinford 8 4 7 5				t	7.68	100%
Reinford 8 4 7 5	6	1	12mm Diameter Bars	t	5.90	100%
8 4 7 5		'	12mm Diameter Bars	t	0.44	100%
7 5	rcement (C, F&R))			
	4	2	Ref. 617 fabric reinforcement	m ²	258	100%
6 6	5	2	Ref. 617 fabric reinforcement	m ²	253	100%
	6	2	Ref. 617 fabric reinforcement	m²	105	100%
Brick Re	Reinforcer	nent (F	oundations)			
0.1	_		150 Pil Pi (0.000	4000/
	4	1	150mm Brick Reinforcement	m	2 288	100%
	5	1	150mm Brick Reinforcement	m	1 181	100%
	6	1	150mm Brick Reinforcement	m	506	100%
	7	1	150mm Brick Reinforcement	m	1 476	100%
	Reinforcer					
	4	3	75mm Brick Reinforcement	m	1 572	100%
	4	3	150mm Brick Reinforcement	m	1 583	100%
	5	3	75mm Brick Reinforcement	m	86	100%
5 5	5	3	150mm Brick Reinforcement	m	1 301	100%
3 6	6	3	75mm Brick Reinforcement	m	62	100%
4 6	6	3	150mm Brick Reinforcement	m	1069	100%
4 7	7	3	75mm Brick Reinforcement	m	750	100%
5 7	7	3	150mm Brick Reinforcement	m	1 278	100%
	1				1	1.5070

Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
Fabricated Structural Steel (Ironmongery)						
2	5	8	Code 630 Padlock	No	3	100%

2	6	Ιο	Code 630 Padlock	Na	1	100%
		8		No	1	
2	7	8	Code 630 Padlock	No	6	100%
31	3	1	Door Stopper	No	12	100%
2	4	8	Door Stopper	No	14	100%
4	5	8	Door Stopper	No	3	100%
4	6	8	Door Stopper	No	1	100%
4	7	8	Door Stopper	No	30	100%
3	4	8	19mm Chromium Plated towel rail	No	4	100%
5	7	8	32mm Type 9 back grab rail 800mm long	No	3	100%
6	7	8	32mm Type 9 back grab rail 800mm long	No	3	100%
4	4	8	Pinning Boards	No	5	100%
5	5	8	Pinning Boards	No	6	100%
5	6	8	Pinning Boards	No	2	100%
11	7	12	Stainless steel SHE Bins	No	16	100%
Door	Frames					
1	4	9	Door Frames size 813 x 2032	No	14	100%
3	4	9	Door Frames size 1613 x 2032	No	1	100%
1	5	9	Door Frames size 813 x 2032	No	8	100%
6	5	9	Door Frames size 914 x 2032	No	3	100%
1	6	9	Door Frame size 914 x 2032	No	1	100%
2	7	7	Door Frames size 813 x 2032	No	8	100%
0-11-		·	- Land			
	rs, Downp					
42	3	1	125 x 100mm seamless eaves gutters	m	50	70%
43	3	1	Extra over eaves gutter for stopped ends	No	24	70%
44	3	1	Extra over eaves gutter for angle	No	24	70%
45	3	1	Extra over eave gutter for outlet for 100mm pipe	No	32	70%
46	3	1	100mm Diameter downpipe	m	83	70%
47	3	1	Extra over downpipe for eaves or plinths offset	No	32	70%
48	3	1	Extra over downpipe for Shoe	No	32	70%
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	75	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	5	70%

5	5	12	100mm Diameter downpipe	No	12	70%
6	5	12	Extra over downpipe for eaves or plinths offset	No	5	70%
7	5	12	Extra over downpipe for Shoe	No	5	70%
1	6	12	125 x 100mm seamless eaves gutters	No	44	70%
2	6	12	Extra over eaves gutter for stopped ends	No	4	70%
3	6	12	Extra over eaves gutter for angle	No	4	70%
4	6	12	Extra over eave gutter for outlet for 100mm pipe	No	8	70%
5	6	12	100mm Diameter downpipe	No	21	70%
6	6	12	Extra over downpipe for eaves or plinths offset	No	8	70%
7	6	12	Extra over downpipe for Shoe	No	8	70%
1	7	12			75	70%
			125 x 100mm seamless eaves gutters	No		
2	7	12	Extra over eaves gutter for stopped ends	No	4	70%
3	7	12	Extra over eaves gutter for angle	No	4	70%
4	7	12	Extra over eave gutter for outlet for 100mm pipe	No	5	70%
5	7	12	100mm Diameter downpipe	No	12	70%
6	7	12	Extra over downpipe for eaves or plinths offset	No	5	70%
7	7	12	Extra over downpipe for Shoe	No	5	70%
Valve	 s Products a	l and Acut	tors			
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 Pan connector	No	2	70%
13	4	12	Extra over uPVC pipe for 110mm double junction	No	2	70%
18	5	12	110mm uPVC pipe	m	25	70%
17	5	12	50mm uPVC pipe	m	50	70%
22	5	12	Extra over uPVC pipe for 50mm bend	No	8	70%
T	Value					
	, Valves	40	440mm COLTura way? yant yaka	No	25	700/
28		12	110mm "GI Two way" vent valve	No	25	70%
59	4	12	30m Plastic Hose reel	No	1	70%
60	4	12	9kg DCP Fire Extinguisher	No	2	70%
31	4	12	Bib tap	No	1	70%
15	5	12	Angle regulating Valve	No	10	70%
16	5	12	Star sink mixer	No	2	70%
8	5	12	30m Plastic Hose reel	No	1	70%
9	5	12	9kg DCP Fire Extinguisher	No	3	70%
9	6	12	30m Plastic Hose reel	No	1	70%
10	6	12	9kg DCP Fire Extinguisher	No	1	70%

Electrical (Cables				
PVC Cable	es es				
2.1	2	25mm ² x 4 Core Cu Cables	m	10	90%
2.2	2	16mm ² x 4 Core Cu Cables	m	50	90%
2.3	2	70mm Cable	m	150	90%
4.3	2	2,5mm ² x 4 Core Cu Cables	m	450	90%
4.4	2	4mm ² x 4 Core Cu Cables	m	600	90%
Cer	nent (Buidi	ng and Civil)			
		Cement	ton	59	100%
Treasury D	esignated Se	ector			

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 andD15. 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 columnD18. 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 asper 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.

SBD 6.2: DECLARATION OF LOCAL CONTENT

ANNEX C: LOCAL CONTENT DECLARATION - SUMMARY SCHEDULE

SATS 1286.2011 **Annex C: Local Content Decleration - Summary Schedule Local Content Declaration - Summary Schedule** LDPWRIT-B2009 Note: VAT to be excluded from all (C1) Tender No. Napsadi Secondary School calculations (C2) Tender description: (C3)Designated product(s) (C4) Tender Authority: (C5) Tendering Entity name: Napsadi Secondary School (C6) Tender Exchange Rate: Specified local content % **Calculation of local content** Tender summary Tender value Tender price -Exempted net of Local Tender item Imported **Total Imported** Tender Total exempted List of items Total tender value each imported exempted Local value content % Unit no's value imported content content (excl VAT) value imported (per item) content (C8) (C9) (C10) (C11) (C12) (C13) (C14) (C15) (C16) (C16) (C17) (C18) (C19) 20-4-1 12mm Diameter Bars 7,86 20-5-1 5,9 12mm Diameter Bars 20-6-1 12mm Diameter Bars 0,44 8-4-2 Ref. S617 Fabric Reinforcement 105 m2 Ref. S617 Fabric Reinforcement 7-5-2 m2 63 Ref. S617 Fabric Reinforcement 6-6-2 m2 338 30-4-1 2 288 150mm Bick Reinforcement m 23-5-1 150mm Bick Reinforcement m 1 181 25-6-1 150mm Bick Reinforcement 506 m 1 476 27-7-1 150mm Bick Reinforcement m 6-4-3 75mm Brick Reinforcement 1 572 7-4-3 150mm Brick Reinforcement m 1 583 4-5-3 75mm Brick Reinforcement 86 5-5-3 150mm Brick Reinforcement 1 301 m (C20) Total tender value Signature of tenderer from Annex B (C21) Total Exempt imported content

Date:

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content (C24) Total local content

(C25) Average local content % of tender

		Anne	x C: Local Conte	nt Decle	ration - S	Summary	Schedu	le						SATS 1286.201
			Local Content	Declaration	n - Summa	ry Schedule	2							
Designation (4) Designation (4)	r No. r descript rated proo r Authorit	duct(s) :y:	LDPWRIT-B2009 Napsadi Secondary School Napsadi Secondary School										Note: VAT to be exc calculations	luded from all
(5) Tender	r Exchang	e Rate:	Pula	э	EU		GBP		I					
7) Specific	ed local c	ontent %			_		_							
		1				Calculation of			Ter	der sumn	nary			
	ler item 10'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)
2	-6-3	75mm Brick Reint	orcement	+						m	62			
	-6-3	150mm Brick Rein		+						m	1 069			
	-7-3	75mm Brick Reinf								m	750			
	-7-3	150mm Brick Rei		1						m	1 278			
	-5-8	Code 630 Padlock								No	3			
2-	-6-8	Code 630 Padlock	,							No	1			
2-	-7-8	Code 630 Padlock								No	6			
31	1-3-1	Door Stopper								No	12			
2-	-4-8	Door Stopper								No	14			
	-5-8	Door Stopper								No	3			
	-6-8	Door Stopper								No	1			
	-7-8	Door Stopper								No	30			
	-4-8	19mm Chromim								No	4			
	-7-8		k grab rail 800mm long	1			1			No	3			
	-7-8		k grab rail 800mm long							No No	3			-
	-4-8 -5-8	Pinning Boards Pinning Boards		+						No No	5 6			
	-5-8 -6-8	Pinning Boards Pinning Boards		+		+	 	1		No	2	1		<u> </u>
	-7-12	Stainless steel SH	F hins	+		 		 		No	16	+		
	2-4-8	Door Stopper		+			 			No	40			
	-4-9	Door Frames size	813 x 2032	1				1		No	14	1		
	-4-9	Door Frames size		1				1		No	1	1		
1-	-5-9	Door Frames size	813 x 2032							No	8			
6-	-5-9	Door Frames size	914 x 2032							No	3			
1.	-6-0	Door Frames size	014 v 2022							No	1			

					(C20)	Total tende	r value			
Signature of ten	derer from Annex B					(C21) 1	Total Exemp	t imported content		1
				(C2	22) Total Ten	der value n	et of exemp	ot imported content		1
								<i>(C23)</i> Tot	al Imported content	
		_						(C24) Total local content	
Date:								(C25) Average local	content % of tender	

No

2-7-7

Door Frames size 813 x 2032

Annex C: Local Content Decleration - Summary Schedule

Local Content Declaration - Summary Schedule

(C1)	Tender No.	LDPWRIT-B2009	Note: VAT to be excluded from all
(C2)	Tender description:	Napsadi Secondary School	calculations
(C3)	Designated product(s)		
(C4)	Tender Authority:		
(C5)	Tendering Entity name:	Napsadi Secondary School	
(C6)	Tender Exchange Rate:	Pula EU GBP	
(C7)	Specified local content %		

				Calculation of I	ocal 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)
42-3-12	125 x 100mm seamless eaves gutters							m	500			
43-3-12	Extra over gutter for stopped end							No	24			
44-3-12	Extra over eaves gutter for angle							No	24			
45-3-12	Extra over eaves gutter for outlet for 100mm p	ipe						No	32			
46-3-12	100mm Diameter downpipe							m	83			
47-3-12	Extra over downpipe for stopped ends							No	32			
48-3-12	Extra over downpipe for shoe							No	32			
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 p	ipe						No	5			
5-4-12	100mm Diameter downpipe							m	12			
6-4-12	Extra over downpipe for stopped ends							No	5			
7-4-12	Extra over downpipe for shoe							No	5			
1-5-12	125 x 100mm seamless eaves gutters							m	75			
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 p	ipe						No	5			
5-5-12	100mm Diameter downpipe							m	12			
6-5-12	Extra over downpipe for stopped ends							No	5			
7-5-12	Extra over downpipe for shoe							No	5			
1-6-12	125 x 100mm seamless eaves gutters							m	44			
2-6-12	Extra over gutter for stopped end							No	4			
3-6-12	Extra over eaves gutter for angle							No	4			
4-6-12	Extra over eaves gutter for outlet for 100mm p	ipe						No	8			
5-6-12	100mm Diameter downpipe							m	21			
6-6-12	Extra over downpipe for stopped ends							No	8			
7-6-12	Extra over downpipe for shoe							No	8			

0-0-12	extra over downpipe for stopped ends					NO	٥			
7-6-12	Extra over downpipe for shoe					No	8			
					(C20)	Total tende	er value			
Signature of ten	derer from Annex B					(C21)	Total Exemp	ot imported content		
				(C2	22) Total Ten	der value n	et of exemp	ot imported content		
								(C23) Total	al Imported content	
		_						(C24)	Total local content	
Date:		<u>-</u> '						(C25) Average local	content % of tender	
		="							•	

SATS 1286,2011

													JA13 1200.2011
		Annex C: Local Conte	ent Decler	ration - S	Summary	Schedu	le						
		Local Content			-								
(C1)	Tender No.	LDPWRIT-B2009			•							Note: VAT to be exc	luded from all
(C2)	Tender descript	tion: Napsadi Secondary School										calculations	
(C3)	Designated pro	duct(s)											
(C4)	Tender Authorit	ty:											
(C5)	Tendering Entit	y name: Napsadi Secondary School											
(C6)	Tender Exchang	ge Rate: Pul	а	EU		GBP		Ī					
(C7)	Specified local of	content %						•					
		-			Calculation of I	ocal content		Ten	der summ	ary			
	Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported	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)
	1-7-12	125 x 100mm seamless eaves gutters							m	75			
	2-7-12	Extra over gutter for stopped end							No	4			
	3-7-12	Extra over gutter for stopped end							No	4			
	4-7-12	Extra over eaves gutter for outlet for 100mm	nine						No	5			

				imported								
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
4 7 42	125 100								75			
1-7-12	125 x 100mm seamless eaves gutters							m	75			
2-7-12	Extra over gutter for stopped end							No	4			
3-7-12	Extra over eaves gutter for angle							No	4			
4-7-12	Extra over eaves gutter for outlet for 100mm p	pipe						No	5			
5-7-12	100mm Diameter downpipe							m	12			
6-7-12	Extra over downpipe for stopped ends							No	5			
7-7-12	Extra over downpipe for shoe							No	5			
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 bend							No	2			
13-4-12	Extra over uPVC pipe for 110mm junction							No	2			
18-5-12	110mm uPVC pipe							m	25			
17-5-12	50mm uPVC pipe							m	50			
22-5-12	Extra over uPVC pipe for 50mm bend							No	8			
28-5-12	110mm "GI Two-way" vent valve							No	25			
59-4-12	30m Plastic hose reel							No	1			
60-4-12	9kg DCP fire extinguisher							No	2			
31-4-12	Bib Tap							No	1			
16-5-12	Star Sink Mixer							No	2			
8-5-12	30m Plastic hose reel							No	1			
9-5-12	9kg DCP fire extinguisher							No	3			
9-6-12	30m Plastic hose reel							No	1			
10-6-12	9kg DCP fire extinguisher							No	1			
2.1 - Bill 2	25mm2 x 4 Core Cu cables							m	100		1	
2.2 - Bill 2	16mm2 x 4 Core Cu cables							m	50			
2.3 - Bill 2	70mm x 4 Core Cu cables							m	150		1	
4.3 - Bill 2	2,5mm2 x 4 Core Cables							m	450			
4.4 - Bill 2	4mm2 x 4 Core Cables							m	600			†
	Cement							t	59			†
	1	1		1		1	(620)	Total tanda				

4.3 - Bill 2	2,5mm2 x 4 Core Cables						m	450			
4.4 - Bill 2	4mm2 x 4 Core Cables						m	600			
	Cement						t	59			
						(C20)	Total tende	r value			
ignature of ten	derer from Annex B						(C21) 1	Total Exemp	ot imported content		
					(C2	22) Total Ten	der value n	et of exemp	ot imported content		
									(C23) Total	al Imported content	
		_							(C24)	Total local content	
ate:		-'							(C25) Average local	content % of tender	
		•								•	
		•	•	•	•			·			

SBD 6.2: DECLARATION OF LOCAL CONTENT

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

				,	A	nnex D							SATS 1286.20
				Imported Co	ontent Declaratio	n - Suppoi	rting Schee	dule to Anr	ех С				
,	Tender No. Tender descripti Designated Prod Tender Authorit	lucts:							Note: VAT to be all calculations	excluded from			
,	Tendering Entity Tender Exchange	name:	Pula] EU	R 9.00] двр	R 12.00]				
	A. Exempte	d imported co	ntent					Calculation of	imported conter	nt			Summary
	Tender item no's	Description of in	ported content	Local supplier	Overseas Supplier	Forign 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 impor value
ļ	(D7)	(D.	3)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
						-							
)										(D15) Total exempt	This total m	ust correspond wit nex C - C 21
	B. Imported	directly by th	e Tenderer					Calculation of	imported conter	at			Summary
	Tender item no's	Description of in		Unit of measure	Overseas Supplier	Forign 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 va
	(D20)	(D2	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
			· .										
İ													
	C										tal imported va		
ſ	C. Imported	by a 3rd party	and supplied	to the Tend	lerer	Forign		Calculation of	imported conter				Summary
		f imported content	Unit of measure	Local supplier	Overseas Supplier	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 & dutles	Total landed cost excl VAT	Quantity	Total imported va
		(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
}						-							
ŀ													
L										(D45) To	tal imported val	ue by 3rd party	
					Calculation of foreig		ı			(= ,		,,	
	D. Other fo	reign currency			payment:								Summary of payments
	Туре	of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange							Local value of payments
ŀ		(D46)	(D47)	(D48)	(D49)	(D50)							(D51)
-													
Į			P				1	(D52) Total of 6	oreign currency pa	uments declar	d by tandars: 5	nd/or 3rd no-to-	
	Signature of tend	derer from Annex B											
							(DSS) Tota	i or imported co	entent & foreign cu	irrency paymer	rts - <i>(D32), (D45)</i>		ust correspond wit
				•								11118-1118	ust correspond wit 1ex C - C 23

78

SBD 6.2: DECLARATION OF LOCAL CONTENT

	***************************************	Annex E		SATS 1286.2011
	Local Co	ntent Declaration - Supporting	Schedule to Annex C	
(E1) (E2)	Tender No. Tender description:		Note: VAT to be excluded fro	m all calculations
(E3) (E4) (E5)	Designated products: Tender Authority:			
(E3)	Tendering Entity name:			
\supset	Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
		(E6)	(E7)	(E8)
	·			
		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		
		(E9) Total local produ	ucts (Goods, Services and Works)	
	(E10) Manpower costs (Ter	nderer's manpower cost)		
	(E11) Factory overheads (Ren	ital, depreciation & amortisation, utility costs	, consumables etc.)	
)	(E12) Administration overheads	and mark-up (Marketing, insurance, fina	ncing, interest etc.)	
			(E13) Total local content	
			This total must correspond w	vith Annex C - C24
	Signature of tenderer from Annex B			
	Date:			
	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.
- 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.
- To give effect to the above, the following questionnaire must be completed and submitted with the bid.

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

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)	HIS DECLARATION FORM IS TRUE AND CORRECT
ME SHOULD THIS DECLARATION PROVE TO BE FAI	•
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.
- Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe* se prohibition meaning that it cannot be justified under any grounds.
- 3 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.
- 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.
- 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 a	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.

JOINT VENTURE AGREEMENT made and entered into by and between:
of
of the first part;
and
of
of the second part;
<u>PREAMBLE</u>
WHEREAS the Parties have formed a Joint Venture in order to submit tenders to the
(hereafter referred to as the "works").

NOW THEREFORE. IT IS AGREED AS FOLLOWS:

1. FORMATION 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

4 DURATION

- 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

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.
- 7.4 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.

- 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:

- 8.2 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.

- 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.
- 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 a 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.

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 baking 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

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

SAFCEC JOINT VENTURE AGREEMENT

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.

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.

- 16.5 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

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 contact 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.

SAFCEC JOINT VENTURE AGREEMENT

- 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.

	DONE AND 20.	AT	Т	HIS	DAY	OF
			For and behalf of:			
AS WI	TNESS:					
1.		 				
2.		 				
	DONE AND 20.	ΑT	т	HIS	DAY	OF
			For and behalf of:			
AS WI	TNESS:					
1.		 				
2.		 				



THE CONTRACT

97 PART C



PART C.1: AGREMENT 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 for Demolition of Pit Toilet Block and Brick and Mortar Structure with Elevated PVC Tank, Renovations of 4 x 3 Classroom Blocks, Construction of Medium Admin Block, 1 x 3 Classroom Block, Multipurpose Classroom and External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays and Fence) at Napsadi Secondary School in Makgaung Village, Moetladi in Mopani District.

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of 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 word	ls)	
(in figures) R.		
and returning tender data, w	be accepted by the employer by signing the acce one copy of this document to the tenderer before whereupon the tenderer becomes the party named the contract data.	e the end of the period of validity stated in the
Signature(s)		
Name(s)		
Capacity		
For the tenderer:		
Name & signature of witness		Date

Contract 99 C1.1

PART C1.1: AGREMENT 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:

For the Employer

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Contract Data
Part C3	Pricing Data
Part C/	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.

Signature Name Capacity

Name and address of the organization Signature and Name of Witness Signature Name Capacity

PART C1.1: FORM OF OFFER AND ACCEPTANCE

Sched	ule of Deviations
1 Subject	
Details	
2 Subject	
Details	
3 Subject	
Details	
4 Subject	
Details	
agree to amenda returnab	duly authorized representatives signing this agreement, the <i>Employer</i> and the Tenderer or and accept the foregoing schedule of deviations as the only deviations from and ments to the documents listed in the Tender Data and addenda thereto as listed in the ole schedules, as well as any confirmation, clarification or changes to the terms of the reed by the Tenderer and the <i>Employer</i> during this process of offer and acceptance.
It is exp	ressly 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.

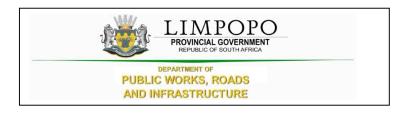


C2 CONTRACT DATA

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.

104



PART C4: PROVISIONAL BILLS OF QUANTITIES



C4.1 PRELIMINARIES



C4.2 BUILDING WORKS

		Quantity	Rate	Amount
SE	ECTION NO. 1			
<u>BI</u>	<u>LL NO. 1</u>			
<u>PF</u>	RELIMINARIES			
NC	<u>OTE</u>			
All	prices/rates to be net, excluding Value Added Tax			
Ge	<u>neral</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			
SE	CTION A: PRINCIPAL BUILDING AGREEMENT			
	Carried to Collection		R	
PR Bill	ction No. 1 ELIMINARIES No. 1 ELIMINARIES			

	Definitions (A1)			
1	Definitions and interpretation (clause 1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Objective (A2)			
2	Offer, acceptance and performance (clause 2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Preparation (A3-A14)			
3	Documents (clause 3)			
	Clause 3.1 shall be deemed to be omitted and replaced with the following:			
	No payment guarantee will be provided by the employer			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
4	Design responsibility (clause 4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
5	Employer's agents (clause 5)			
	Fixed	Item		
	Value Related	Item		
	Carried to Collection		R	
	Section No. 1 PRELIMINARIES BIII No. 1 PRELIMINARIES			

	Time Related	Item		
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	Itam		
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
11	Special insurances (clause 11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
				_
	Carried to Collection Section No. 1		R	
	PRELIMINARIES Bill No. 1			
	PRELIMINARIES			

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		
	Execution (A15-A23)			
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		
				—
	Section No. 1		R	_
	PRELIMINARIES Bill No. 1			
	PRELIMINARIES			

18	Setting out of the works (clause 18)			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
19	Temporary Works and Plant (clause 19)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
20	Nominated sub-contractors (clause 20)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
21	Selected sub-contractors (clause 21)			
	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			
	The selected sub-contractors shall be chosen, as far as possible, by the principal agent together with the contractor			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
				\vdash
	Carried to Collection Section No. 1		R	\vdash
	PRELIMINARIES Bill No. 1 PRELIMINARIES			

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		
	Completion (A24-A30)			
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		
				_
	Carried to Collection Section No. 1		R	\vdash
	PRELIMINARIES Bill No. 1			
	PRELIMINARIES			

28	Sectional completion (clause 28)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
29	Revision of date of practical completion (clause 29)			
	Clause 29.1.1 shall be deemed to be omitted and replaced by the following:			
	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			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
30	Penalty for non-completion (clause 30)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
				-
	Carried to Collection Section No. 1		R	
	PRELIMINARIES BIII No. 1 PRELIMINARIES			

	Decement (A24 A25)		I	1	
0.4	Payment (A31 - A35)				
31	Interim payment to the contractor (clause 31)				
	Notwithstanding this or any other clause, materials and goods stored off site shall not to be included in the amount authorized for payment				
	Clause 31.6.5 shall be deemed to be deleted				
	Clause 31.9:				
	The wording "seven (7)" be replaced with "thirty (30)"				
	Cause 31.11.1:				
	The wording "one hundred and sixty per cent (160%)" be replaced with "one hundred and ten per cent (110%)"				
	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			
					_
	Carried to Collection Section No. 1		R		=
	PRELIMINARIES				
	Bill No. 1 PRELIMINARIES				
		I I	II	I	

35	Payment to other parties (clause 35)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Termination (A36-A39)			
36	Termination by employer - contractor's default (clause 36)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
37	Termination by employer - loss and damage (clause 37)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
38	Termination by contractor - employer's default (clause 38)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
39	Termination - cessation of the works (clause 39)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Dispute (A40)			
40	Settlement of Disputes (clause 40)			
	Fixed	Item		
	Carried to Collection Section No. 1		R	
	PRELIMINARIES			
	Bill No. 1 PRELIMINARIES			

1			1 1	ı	1	ı
		Value Related	Item			
		Time Related	Item			
	Contra	ct Agreement (A41)				
41	The scl	hedule: Pre-tender information (clause 42)				
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
	42.1	CONTRACTING AND OTHER PARTIES				
	and	See "Notes to Tenderers" for all the relevant physical and postal addresses, telephone facsimile numbers				
	42.1.1	Employer: Limpopo Department of Education				
	42.1.2	Principal Agent: IDC Architects				
	42.1.3	Agent (1):IDC Architects				
		Agents service: <i>Architects</i>				
	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				
	_	Carried to Collection		R		
		MINARIES				
	Bill No. PRELIN	1 MINARIES				

42.1.6	Agent (4):Med-tech Engineers			
	Agents service: <i>Electrical Engineers</i>			
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:			
"Notes	The works shall be as described in the to Tenderers"			
42.2.2	Site Description:			
to	The site shall be as described in the "No Tenderers"	otes		
42.2.3	Work or installations by direct contractors:			
contra	Refer to notes to tenders: Item 2 Scope ct	of		
42.2.4 organ	Specific options that are applicable to a Sta	ate		
	(1) Interest rate legislation:	N/A		
	(2) Lateral support insurance to be effected	i by		
the	contractor:	N/A		
	(3) Payment will be made for materials and	I		
goods:		N/A		
06-41	Carried to Col	lection	R	
	MINARIES			
Bill No. PRELIN	1 MINARIES			

	(4) Dispute resolution by litigation: N/A		
the	(5) Extended defects liability period applicable to following elements: N/A		
42.2.5	Possession of the site is be given on:		
	Date to be determined		
42.2.6 the	Period for the commencement of the works after 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		
value	Penalty: 0,05% of the tendered amount, inclusive of		
74.40	added tax		
42.2.8	The date for practical completion and the penalty per calender day for the works in sections:		
	N/A		
42.2.9 that of:	Section 1: Date: N/A Penalty: RSection 2: Date: N/A Penalty: RSection 3: Date: N/A Penalty: RSection 4: Date: N/A Penalty: RSection 5: Date: N/A Penalty: RSection 6: Date:		
	Republic of south Africa		
	Carried to Collection	R	
Bill No.	IINARIES		

INSURANCES		
Contract works insuran	ce:	
To be effected by: For the sum of:	Contractor Tendered amount pli	ıs
That a addacable on	•	
Supplementary incures		
Supplementary insuran		lo
Public liability insurance		20
To be effected by:		
For the sum of: With a deductible of:	D F 000 000 00	
	contractor	
	e effected by the	
employer:	^	lo
DOCUMENTS		
	lien or right of continuir	ıg
possesion is required.	Y	es
		0
Three (3) copies of ea	nch	
Bills of quantities drawn	n up in accordance with	:
Standard System of M	leasuring Building	
On acceptance of the te ties is to be submitted:	ender the bills of	
Within seven (7) work	ing days	
	Comical to Callage	ion
n No. 1	Carried to Collect	ЮП
MINARIES . 1		
t	Contract works insurant To be effected by: For the sum of: With a deductible of: Supplementary insurant Public liability insurance To be effected by: For the sum of: With a deductible of: Support insurance to be employer: DOCUMENTS Waivers of contractor's possesion is required: Construction document contractor free of charge Three (3) copies of each of the substitute of the submitted: Within seven (7) works In No. 1 MINARIES	Contract works insurance: To be effected by: Contractor Tendered amount place. With a deductible of: to be determined by contractor. Supplementary insurance is required: Public liability insurance: Public liability insurance: You Contractor R 5 000 000-00 to be determined by contractor. Support insurance to be effected by the employer: DOCUMENTS Waivers of contractor's lien or right of continuing possesion is required: You Construction document copies to be supplied to contractor free of charge: Three (3) copies of each Bills of quantities drawn up in accordance with Standard System of Measuring Building On acceptance of the tender the bills of ties is to be submitted: Within seven (7) working days Carried to Collect on No. 1 MINARIES 1

4	2.4.5	JBCC Engineering General Conditions are to be included in the documents:			
	12.4.6 CPAP:	The contract value is to be adjusted using Yes			
		Base month of indexes: Tender closing date			
4	12.4.7	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			
4	2.5	CONTRACT DETAILS			
V	vill be	All post-tender information for this section determined once tender is awarded			
4	12.6	DOCUMENTS			
\ v	vill be	All post-tender information for this section determined once tender is awarded			
4	12.7	DISPUTE RESOLUTION			
V	vill be	All post-tender information for this section determined once tender is awarded			
	2.8 PARTII	SIGNATURES OF THE CONTRACTING ES			
V	vill be	All post-tender information for this section determined once tender is awarded			
5	SECT	ION B: PRELIMINARIES			
<u> </u>	Definiti	ion and interpretation (B1)			
	Definitio	on and interpretation (B1.1 - B1.6.5)			
		Fixed	Item		
		Opmital 4a Oallasticu			
F	PRELIN Bill No.	Carried to Collection No. 1 MINARIES 1 MINARIES		R	

42

		1	II	
	Value Related	Item		
	Time Related	Item		
	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		
				+
	Carried to Collection		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			
		1		1

	Time Related	Item			
46	Interests of agents (B2.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
47		item			
47	Priced documents (B2.5)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
48	Tender submission (B2.6)				
	Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	The site (B3)				
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			
					_
	Carried to Collection		R		
	Section No. 1 PRELIMINARIES				
	Bill No. 1 PRELIMINARIES				
			l		

Inspection of the site (B3.3)				
No claims for extras arising from the contractor having failed to comply with this clause will be entertained				
Fixed	Item			
Value Related	Item			
Time Related	Item			
Existing premises occupied (B3.4)				
Fixed	Item			
Value Related	Item			
Time Related	Item			
Previous work - dimensional accuracy (B3.5)				
Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site				
Fixed	Item			
Value Related	Item			
Time Related	Item			
Previous work - defects (B3.6)				
Fixed	Item			
Value Related	Item			
Time Related	Item			
Services - known (B3.7)				
Fixed	Item			
Value Related	Item			
Time Related	Item			
Carried to Collection		R		<u> </u>
PRELIMINARIES Bill No. 1 PRELIMINARIES				
	No claims for extras arising from the contractor having failed to comply with this clause will be entertained Fixed Value Related Time Related Existing premises occupied (B3.4) Fixed Value Related Time Related Previous work - dimensional accuracy (B3.5) Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site Fixed Value Related Time Related Previous work - defects (B3.6) Fixed Value Related Services - known (B3.7) Fixed Value Related Time Related Services - known (B3.7) Fixed Value Related Time Related Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1	No claims for extras arising from the contractor having failed to comply with this clause will be entertained Fixed Item Value Related Item Time Related Item Value Related Item Time Related Item Value Related Item	No claims for extras arising from the contractor having failed to comply with this clause will be entertained Fixed Item Value Related Item Time Related Item Time Related Item Value Related Item Value Related Item Time Related Item Time Related Item Time Related Item Time Related Item Previous work - dimensional accuracy (B3.5) Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site Fixed Item Value Related Item Time Rel	No claims for extras arising from the contractor having falled to comply with this clause will be entertained Fixed Fixed Value Related Item Time Related Item Value Related Item Value Related Item Value Related Item Time Related Item Previous work - dimensional accuracy (B3.5) Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site Fixed Value Related Item Value Related Item Previous work - defects (B3.6) Fixed Value Related Item Time Related Item Value Related Item Time Related Item Value Related

56	Services - unknown (B3.8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
57	Protection of trees, etc (B3.9)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
58	Articles of value (B3.10)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
59	Inspection of adjoining properties, etc (B3.11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Management of contract (B4)			
60	Management of the works (B4.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
61	Programming for the works (B4.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried to Collection		R	
	Section No. 1		K	
	PRELIMINARIES BIII No. 1			
	PRELIMINARIES			

62	Progress meetings (B4.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
63	Technical meetings (B4.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
64	Labour and plant records (B4.5)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Samples and shop drawings (B5)			
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		
	Carried to Collection		R	
	Section No. 1 PRELIMINARIES Bill No. 1		К	
	PRELIMINARIES			

68	Compliance with manufacturer's instructions (B5.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Temporary works and plant (B6)			
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		
				_
	Carried to Collection Section No. 1		R	<u></u>
	PRELIMINARIES			
	Bill No. 1 PRELIMINARIES			

74	Subcontractors notice board (B6.6)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Temporary services (B7)			
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		
	Carried to Collection Section No. 1		R	<u> </u>
	PRELIMINARIES			
	Bill No. 1 PRELIMINARIES			

	Prime cost amounts (B8)			
80	Responsibility for prime cost amounts (B8.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Attendance on nominated and selected subcontractors (B9)			
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		
	Financial aspects (B10)			
84	Statutory taxes, duties and levies (B10.1)			
	Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
			-	
	Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES		R	

85	Payment of preliminaries (B10.2)			ı
	Fixed	Item		ı
	Value Related	Item		l
	Time Related	Item		l
86	Adjustment of preliminaries (B10.3)			l
	Fixed	Item		l
	Value Related	Item		l
	Time Related	Item		l
87	Payment certificate cash flow (B10.4)			l
	Fixed	Item		l
	Value Related	Item		l
	Time Related	Item		l
	General (B11)			l
88	Protection of works (B11.1)			l
	Fixed	Item		l
	Value Related	Item		l
				l
	Time Related	Item		ı
89	Protection/isolation of existing/sectionally occupied work (B11.2)			l
	Fixed	Item		l
	Value Related	Item		l
	Time Related	Item		l
90	Site security (B11.3)			ı
	Fixed	Item		l
	Value Related	Item		l
	Time Related	Item		l
				<u> </u>
	Carried to Collection		R	ĺ
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			

91	Notice before covering work (B11.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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		
	Carried to Collection		R	
	Section No. 1			
	PRELIMINARIES BIII No. 1 PRELIMINARIES			
	TRELIMINATURE			

97	Instruction manuals and guarantees (B11.10)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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		
	Schedule of variables (B12)			
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)			
				<u> </u>
	Carried to Collection		R	
	Section No. 1 PRELIMINARIES Bill No. 1			
	PRELIMINARIES			

12.1.4 [Defined works area (B3.1)		
t t	The area of the works to be occupied by the contractor, any restriction on the area and he limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site		
12.1.5 (Geotechnical investigation (B3.2) N/A		
12.1.6 E	Existing premises occupied (B3.4) No		
12.1.7 Pr	evious work - Dimensional accuracy (B3.5) <i>No</i>		
12.1.8 Pr	revious work - Defects (B3.6)		
12.1.9	Services - known (B3.7)		
á	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 (B3.11)	Inspection of adjoining properties N/A		
12.1.12 notes to	Enclosure of the works (B6.2) (See tenders)		
	Carried to Collection	R	
Section N PRELIMI Bill No. 1 PRELIMI	NARIES		

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 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, clour 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 **Carried to Collection** R Section No. 1 **PRELIMINARIES** Bill No. 1 **PRELIMINARIES**

12.1.22 Protection of the works	No		
12.1.23 Disturbance (B11.5)	No		
12.1.24 Enviromental disturbance (B11.6)	No		
Carried to Colle	ection	R	
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			

101	Post-tender information (B12.2)			
	All post-tender information for this section will be determined once tender is awarded			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	SECTION C: SPECIFIC PRELIMINARIES			
102	Clause C1 - Proprietary branded products			
	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			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
103	Clause C2 - Overtime			
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
				_
	Carried to Collection		R	
	Section No. 1 PRELIMINARIES BIII No. 1 PRELIMINARIES			

The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records Fixed Item Value Related Item Value Related Item Value Related Item Item Value Related Item Valu	104	Clause C3 - As-built drawings			
Value Related Item Time Related Item Clause C4 - Site instructions 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 instructions on shall be kept on site at all times for the exclusive use of recording site instructions only Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Time Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Time Related Item Time Related Item Pixed Item Value Related Item Time Related Item Time Related Item Pixed Item Pix		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			
Time Related Item Clause C4 - Site instructions All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Time Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Value Related Item Time Related Item Time Related Item Prixed Item Time Related Item		Fixed	Item		
All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Value Related Item Time Related Item Time Related Item Prixed Item Carried to Collection R Section No. 1 PRELIMINARIES Bill No. 1		Value Related	Item		
All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection R Carried to Collection R PRELIMINARIES Bill No. 1		Time Related	Item		
writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Time Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Time Related Item Carried to Collection R PRELIMINARIES Bill No. 1	105	Clause C4 - Site instructions			
the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book Fixed Item Value Related Item Time Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Time Related Item Carried to Collection R Section No. 1 PRELIMINARIES Bill No. 1		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			
Value Related Item Time Related Item Time Related Item 106 Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1		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			
Time Related Item Clause C5 - Labour record At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1		Fixed	Item		
At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1		Value Related	Item		
At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1		Time Related	Item		
principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day Fixed Item Value Related Item Time Related Item Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1	106	Clause C5 - Labour record			
Value Related Item Time Related Item Carried to Collection R Section No. 1 PRELIMINARIES Bill No. 1		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			
Carried to Collection Section No. 1 PRELIMINARIES Bill No. 1		Fixed	Item		
Carried to Collection R Section No. 1 PRELIMINARIES Bill No. 1		Value Related	Item		
Section No. 1 PRELIMINARIES Bill No. 1		Time Related	Item		
Section No. 1 PRELIMINARIES Bill No. 1					
Section No. 1 PRELIMINARIES Bill No. 1					
Section No. 1 PRELIMINARIES Bill No. 1					
PRELIMINARIES Bill No. 1			1	R	
		PRELIMINARIES			
PRELIMINARIES		PRELIMINARIES			

107	Clause C6 - Plant record	1 1		 	I
107	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			
					_
	Carried to Collection		R		
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES				
	TALLIMITY WILLO				

PRELIMINARIES				
Bill No. 1				
PRELIMINARIES				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	117			
	118			-
	119			-
	120			-
	121			-
	122			-
	123			-
	124			-
	125			-
	126			-
	127			-
	128			-
	129			-
	130			-
	131			-
	132			-
	133			-
	134			-
	135			-
	136			-
	137			-
				_
Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES		R		

Section No. 1					
PRELIMINARIES					
Bill No. 1					
PRELIMINARIES					
COLLECTION					
		Page		Amount	
В	rought Forward	No	R		
Total Brought Forward from Page No.		138			-
		139			-
		140			-
		141			-
		142			-
		143			-
		144			-
		145			-
		146			-
		147			-
					-
					_
Carried to Section No. 1	Final Summary		R		_
PRELIMINARIES BIII No. 1 PRELIMINARIES					

Item No		Quantity	Rate	Amount
1	SECTION NO.2			
	BILL NO.1			
	<u>DEMOLITIONS</u>			
	REMOVAL OF EXISTING WORK			
	Note:			
	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			
	DEMOLITIONS, ETC.			
1	Break down and demolish existing building size approximately 5.3m 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 (Toilet block)	5		
2	Break down and demolish existing building size approximately 4m long x 4m wide x 1,66m 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 (Brick and mortar structure with elevated PVC tank)	1		
	Carried to Final Summary Section No. 2 DEMOLITIONS Bill No. 1 DEMOLITIONS		R	

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO.1				
	ALTERATIONS				
	REMOVAL OF EXISTING WORK				
	Note:				
	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				
	Removal of exsiting concrete				
1	Surface beds	m3	88		
	Breaking down and removing brickwork etc				
2	Half brick wall	m2	192		
	Taking out and removing doors, windows, etc				
3	Timber single door 813 x 2032mm high	No	12		
4	Door frames.	No	12		
	Taking down and removing roofs, floors, panelling, ceilings, partitions, etc				
5	Corrugated iron roof including roof covering, timber trusses and purlins, ceilings and cornices, eaves soffit				
	covering, fascias, barge boards, gutters and rainwater pipes	m2	1,100		
	Taking out and removing ironmongery				
6	Writing boards	No	12		
7	Pinning boards	No	24		
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1 RENOVATIONS				
	RENOVATIONS				

	Taking out and removal glass and mirrors				
8	Glass from steel window including cleaning out rebates and preparing for new glass	m2	150		
	Hacking up/off and removing granolithic, screed, plaster. ect from concrete or brickwork and preparing surface fpr new screed plaster				
9	Internal plaster	m2	809		
10	External plaster	m2	666		
	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				
	<u>Formwork</u>				
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse				
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS				
	Bill No. 1 RENOVATIONS				

	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise				
	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				
11	Surface beds	m3	132		
	TEST CUBES				
12	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	16		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
13	Surface beds, slabs, etc	m2	880		
	MOVEMENT JOINTS ETC (PROVISIONAL)				
	Expansion joints with bitumen impregnated softboard between concrete and brickwork				
14	10mm Joints not exceeding 300mm high along edges of surface beds	m	1,000		
	Carried to Callection			Ь	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1 RENOVATIONS			R	

	Saw cut joints	1	1		1
4 =			4.000		
15	3 x 30mm Saw cut joints in top of concrete	m	1,000		
	Frebric reinforcement				
16	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	880.00		
	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				
17	Half brick walls in beamfilling.	m2	384		
	ROOF COVERINGS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	Straight cutting				
	Descriptions of roof coverings are deemed to include for straight cutting				
	PROFILED METAL SHEETING AND ACCESSORIES				
					_
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1 RENOVATIONS				
	TENOVATIONS				

	0,6mm Thick galvanised corrugated sheet steel sheeting	1			1
	fixed to timber purlins all in accodance with materials supplied and methods employed by the manufacturer				
18	Roof coverings with pitches not exceeding 25 degrees	m2	1,100		
19	Ridge capping 550mm girth	m	72		
	Sundries				
20	12" Thermal resistance sisalition laid on purlins	m2	1,100		
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	ROOFS ETC				
	Plate nailed timber roof truss construction				
	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				
	Sawn softwood				
21	Roof construction to double pitched roof with two hipped ends 22.5 x 10.2m and 1.66m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (Three Classroom Block)	No	4		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
22	225mm x 12mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	256		
	DOORS, ETC				
	Carried to Collection			R	
	Section No. 3			ĸ	+
	RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1				
	RENOVATIONS				

		,				
	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					
23	Door 914 x 2032mm high	No	12			
	SCHOOL FURNITURE, ETC					
	Senior single combination school desk					
24	Sealed and varnished supawood top, mounted on a					
	frame manufactured using powdercoated round tubing.					
	Supplied in Knock Down Form 600mm x 400mm x 750mm					
		No	420			
	CELLING ETC					
	<u>CEILING</u> , <u>ETC</u> .					
	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					
	Hamas dasseibad on "plymorad" aball ba dassead to					
	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.					
	<u>Insulation</u>					
25	50mm glass fibre insulation blanket to manufacturer's					
	specification, laid on ceiling.	m2	880			
	Sawn softwood					
26	38 x 114mm Ceiling joists	m	260			
	Wrought softwood					
27	19 x 76mm Cornices nailed	m	683			
= 7						
				_		
	Carried to Collection			R		<u>_</u>
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS					
	Bill No. 1					
	RENOVATIONS					
					ii	

	NAILED UP AND SCREWED UP CEILINGS				
	6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints				
28	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	880		
29	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	12		
	IRONMONGERY				
	LOCKS				
	"Approved"				
30	Four lever lockset	No	12		
	SUNDRIES				
31	CZ8730SC Door stop or similar approved, to be plugged and screwed for wall or floor	No	12		
	STEEL CUPBOARDS				
	Aproved steel lockers with standard baked enamel finish				
32	Double door steel cupboard 914 x 457 x 1828mm high with five shelves on a one brick course platform and bolted to brickwork	No	12		
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC				
	"Vitrex"				
33	Pinning boards 2400 x 1200mm high fixed to brickwork	No	24		
34	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	12		
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1				
	RENOVATIONS				

METALWORK 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, **ALUMINIUM WINDOWS, DOORS, ETC** AAAMSA quide 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 **Carried to Collection** R Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1

RENOVATIONS

	<u>Drawings</u>				
	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				
35	"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	12		
	<u>PLASTERING</u>				
	SCREEDS				
	Screeds on concrete				
36	20mm Thick on floors	m2	880		
	INTERNAL PLASTER				
	Cement plaster on brickwork				
37	On walls	m2	727		
38	On narrow widths	m2	81		
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1 RENOVATIONS				

	EXTERNAL PLASTER				
	Cement plaster on brickwork				
39	On walls	m2	664		
	<u>TILING</u>				
	SUPPLEMENTARY PREAMBLES				
	<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				
	FLOOR TILING				
	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.				
40	On floors and landings	m2	704		
41	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.				
	· •	m	491		
	PLUMBING AND DRAINAGE				
	RAINWATER DISPOSAL				
	0,8mm Galvanised sheet iron with "Chromadek" finish on one side				
42	125 x 100mm Seamless eaves gutters with beaded front edge	m	500		
43	Extra over eaves gutter for stopped end	No	24		
44	Extra over eaves gutter for angle	No	24		
					_
	Carried to Collection Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1			R	
	RENOVATIONS				

45	Extra over eaves gutter for outlet for 100mm diameter pipe	No	32		
46	100mm Diameter rainwater pipes	m	83		
47	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	32		
48	Extra over rainwater pipe for shoe	No	32		
	FIRE APPLIANCES ETC				
	"Chubb"				
49	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	4		
50	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	12		
	RAINWATER HARVEST TANKS				
	"Jojo or similar"				
51	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	8		
	GLAZING				
	GLAZING TO STEEL WITH PUTTY				
	4mm Clear float glass				
52	Panes not exceeding 0,1 m2	m2	121		
	4mm Rough cast glass				
53	Panes not exceeding 0,1m2	m2	34		
	<u>PAINTWORK</u>				
	PREPARATORY WORK TO EXISTING WORK				
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1				
	RENOVATIONS				

	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				
	Prepare and apply one coat plaster primer, one filler coat and two coats Velvaglo paint on				
54	External walls	m2	664		
	Prepare and apply one coat plaster primer, one filler coat and two coats Velvaglo paint on				
55	Internal walls	m2	1,616		
	ON WOOD				
	Sand down and apply to coats of "WOODOC 30" varnish				
56	On doors	m2	44		
	ON METAL				
	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				
57	On windows with burglar bars	m2	19		
					_
	Carried to Collection			R	
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1 BENOVATIONS				
	RENOVATIONS				

	PAINTWORK ETC TO PREVIOUSLY PAINTED WORK				
	ON METAL				
	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				
58	On door frames	m2	13		
	APRONS AROUND BUILDINGS				
	Compaction of surfaces				
59	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	880		
	·	2			
60	15 MPa/20 mm concrete	m3	88		
60	Aprons cast in panels to falls	1113	00		
	Finishing top surfaces of concrete smooth with a wood float				
61	Aprons to falls	m2	880		
	Smooth formwork to sides				
62	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	880		
					+
	Carried to Collection			R	<u></u>
	Section No. 3 RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1				
	RENOVATIONS				

Section No. 3				
RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS				
Bill No. 1				
RENOVATIONS				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	151			L
	152			
	153			
	154			
	155			.
	156			+
	157			
	158			
	159		 	
	160			r
	161			
	162			·
	163			
Carried to Final Summary Section No. 3		R		<u></u>
RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS Bill No. 1				
RENOVATIONS				

Item No		Quantity	Rate	Amount
	SECTION NO.4			
	BILL NO.1			
	FOUNDATIONS			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	Soil poisoning			
	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			
	ALL IN RAFT FOUNDATION			
	Carried to Collection		R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1 FOUNDATIONS			

	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		
	<u>EARTHWORKS</u>				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	89		
	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		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	348		
	Keeping excavations free of water				
8	Keeping excavations free of water		Item		
	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		
				_	\dagger
	Section No. 4			R	+
	CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1				
	FOUNDATIONS				

	Earth filling supplied by the contractor compacted to 93% Mod AASHTO density				
11	Under floors, steps, paving etc.	m3	84		
	Compaction of surfaces				
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		
		1112	230		
	Prescribed density tests on filling				
13	"Modified AASHTO Density" test	No	4		
	SOIL POISONING				
	Weedkiller mixed in accordance to supplier's specifications				
14	Under paving etc	m2	258		
15	To bottoms and sides of trenches, etc.	m2	568		
	Soil insecticide				
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		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	20MPa/19mm concrete				
18	350 x 600 Reinforced concrete ground beam	m3	25		
19	250 x 600 Reinforced concrete ground beam	m3	14		
	REINFORCEMENT				
					\perp
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1			K	
	FOUNDATIONS				

		1	i		1	1
	High tensile steel reinforcement to structural concrete work					
20	12mm Diameter bars	t	7.86			
	TEST CUBES					
21	Allow for preparing a set of three concrete strength test cubes, each size $150 \times 150 \times 150$ mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	2.4			
	BRICKWORK					
	Brickwork of NFP bricks in class II mortar					
22	One brick walls	m2	196			
	BRICKWORK SUNDRIES					
	Joint forming material in movement joints:					
23	12mm Fibre board built in vertically between brick skins.	m2	0.4			
	Brickwork reinforcement					
24	150mm Wide reinforcement built in horizontally	m	2,288			
	FACE BRICKWORK					
	Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints					
25	Extra over brickwork for face brickwork	m2	35			
	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					
26	Coping on top of one brick wall	m	6			
	WATERPROOFING					
	JOINT SEALANTS ETC					
						_
	Carried to Collection	ı		R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 1 FOUNDATIONS					
	TOURDATIONS					

					_
	Silicone sealing compound including backing cord, bond				
	breaker, primer, etc:				
27	12 x 20mm In vertical expansion joints including raking		0		
	out expansion joint filler as necessary	m	3		
					_
	Carried to Collection	1		R	
	Section No. 4				
	CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				
	Bill No. 1				
	FOUNDATIONS				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 1				
FOUNDATIONS				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	165			
	166			
	167			
	168			
	169			
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				F
Bill No. 1 FOUNDATIONS				

Item No		Quantity	Rate	Amount
	SECTION NO.4			
	BILL NO.2			
	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 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			
	<u>Formwork</u>			
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse			
	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			
	Carried to Collection		R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT			

	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				
1	20MPa/19mm concrete	m3	50		
	Surface beds cast in panels on waterproofing.	1113	30		
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		
	SMOOTH FORMWORK (DEGREE OF ACCURACY II)				
	Smooth formwork to soffits				
4	Slabs	m2	2		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
5	Surface beds, slabs, etc	m2	258		
		1112	230		
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				+
	Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT				
	SS. S. C. L. C.				

	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			
	MOVEMENT JOINTS ETC					
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces					
7	15mm Joints exceeding 300mm high	m	358			
	DIVIDING STRIPS, ETC.					
	REINFORCEMENT					
	Fabric reinforcement					
8	Ref. 617 fabric reinforcement in concrete surface bed etc	m2	258			
	Carried to Collection			R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO					
	Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT					
'				'	•	

Section No. 4		
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK		
Bill No. 2		
CONCRETE, FORMWORK & REINFORCEMENT		
COLLECTION		
Total Brought Forward from Page No.	Page No 171 172 173	Amount
Carried Forward to Summary of Section No. 4 Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT		R

Item No		Quantity	Rate	Amount	
	SECTION NO.4				
	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				
	Carried to Collection		R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 3 MASONRY				

	SUPERSTRUCTURE				
	Brickwork 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 SUNDRIES				
	Joint forming material in movement joints:				
4	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	2		
	Steel bar reinforcement				
5	8mm Diameter mild steel bars built in horizontally	t	0.01		
	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		
	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		
	Carried to Collection			R	+
	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		
					_
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 3				
	MASONRY				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 3				
MASONRY				
COLLECTION				
Total Brought Forward from Page No.	Page No 175 176 177		Amount	
Carried Forward to Summary of Section No. 4 Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 3 MASONRY		R		

Item No		Quantity	Rate	Amount
	SECTION NO.4			
	BILL NO.4			
	WATERPROOFING			
	SUPPLEMENTARY PREAMBLES			
	<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			
	DAMP-PROOFING OF WALLS AND FLOORS			
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
1	In walls m	2 49		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
2	Under surface beds m.	2 246		
	JOINT SEALANTS ETC			
	Silicone sealing compound including backing cord, bond breaker, primer, etc			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	า 130		
	Carried Ferward to Summary of Section No. 4			
	Carried Forward to Summary of Section No. 4 Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO		R	
	Bill No. 4 WATERPROOFING			

Item No		Quantity	Rate	Amount
	SECTION NO.4			
	BILL NO.5			
	ROOF COVERINGS ETC			
	SUPPLEMENTARY PREAMBLES			
	<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			
	Flashings, trimming plates, etc.			
	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			
	PROFILED METAL SHEETING AND ACCESSORIES			
	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			
1	Roof covering with pitch not exceeding 50 degrees m2	309		
	Carried to Collection		R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 5 ROOF COVERINGS, ETC			

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

		1	1	1	1	1
2	Ridge capping 550mm girth	m	27			
3	Hip capping 550mm girth	m	20			
	Sundries					
4	12" Thermal resistance sisalition laid on purlins	m2	309			
						_
	Carried to Collection	n		R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO					
	Bill No. 5 ROOF COVERINGS, ETC					

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 5				
ROOF COVERINGS, ETC				
COLLECTION				
Total Brought Forward from Page No.	Page No 180 181		Amount	
Carried Forward to Summary of Section No. 4 Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 5 ROOF COVERINGS, ETC		R		

Item No		Quantity	Rate	Amount	
	SECTION NO.4				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	ROOFS ETC				
	PRE-FABRICATED TIMBER ROOF TRUSSES				
	Pre-fabricated metal connected timber roof trusses				
	All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction				
	<u>Timber</u>				
	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				
	Bolts				
	Bolts shall be in accordance with BS 4190 or SABS 135				
	Shear plates, tooth connectors and split rings				
	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"				
	<u>Washers</u>				
	Square or round washers of the following dimensions shall be used with all bolts:				
	Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness				
	Commissed to Collegation				_
	Carried to Collection Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 6 CARPENTRY AND JOINERY		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		
<u>Truss construction</u>		
Trusses shall be constructed in jigs specially designed to unsure 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		
<u>Truss design</u>		
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		
Carried to Collection	R	
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 6		
CARPENTRY AND JOINERY		

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		
<u>Dimensions</u>		
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		
<u>Erection</u>		
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		
<u>Design system</u>		
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		
Carried to Collection	R	
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 6		
CARPENTRY AND JOINERY		

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				
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				
38 x 114mm Wall plates	m	137		
				<u></u>
Carried to Collection			R	
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				Ħ
Bill No. 6 CARPENTRY AND JOINERY				

1

2

•	Sundries				
3	Two coats creosote on sawn timbers	m2	41		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
4	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	88		
	DOORS, ETC				
	Semi-solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame				
5	44mm Door 813 x 2032mm high	No	14		
					igdash
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				
	Bill No. 6 CARPENTRY AND JOINERY				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 6				
CARPENTRY AND JOINERY				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	183			ļ
	184			ļ
	185			
	186			
	187			
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				
Bill No. 6 CARPENTRY AND JOINERY				

Item No			Quantity	Rate	Amount	
	SECTION NO.4					
	BILL NO.7					
	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.					
	<u>Insulation</u>					
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	244			
	Sawn softwood					
2	38 x 114mm Ceiling joists	m	105			
	Wrought softwood					
3	19 x 76mm Cornices nailed	m	358			
	NAILED UP AND SCREWED UP CEILINGS					
	6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints					
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	256			
	Carried to Collection			R		
	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	10	2	
	Carried to Collection		R	
	Section No. 4			=
	CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 7 CEILINGS, ETC			

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 7				
CEILINGS, ETC				
COLLECTION				
Total Brought Forward from Page No.	Page No 189 190		Amount	
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 7 CEILINGS, ETC				

Item No		Quantity	Rate	Amount	
	SECTION NO.4				
	BILL NO.8				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	<u>Descriptions</u>				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs				
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	<u>LOCKS</u>				
	"Solid"				
1	"Code 460/313" Blesbok four lever lockset N	o 14			
	<u>SUNDRIES</u>				
	"Solid"				
2	CZ8730SC Door stop or similar approved plugged and screwed for wall or floor	o 14			
	"Solid"				
3	19mm Diameter chromium plated towel rail 600mm long incl. end brackets	o 4			
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC				
	_				_
	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	5		
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				_
	Bill No. 8 IRONMONGERY				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 8				
IRONMONGERY				
COLLECTION				
Total Brought Forward from Page No.	Page No 192 193		Amount	
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 8 IRONMONGERY				

Item No		Quantity	Rate	Amount	
	SECTION NO.4				
	BILL NO. 9				
	METALWORK				
	<u>Descriptions</u>				
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	<u>Drawings</u>				
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc				
	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)				
	<u>Finish</u>				
	The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407				
	Carried to Collection		R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9 METALWORK				=

	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				
	<u>Drawings</u>				
	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		
	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		
	STEEL WINDOWS, DOORS, ETC				
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9 METALWORK				

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

	Standard residential windows with burglar bars to all sashes				
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		
	Purpose made residential aluminium windows with type B2 burglar bars to opening sashes				
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			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9				
	METALWORK				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 9				
METALWORK				
COLLECTION				
Total Brought Forward from Page No.	Page No 195		Amount	
John Broad in Contains and a sign of the contains a	196			
	197			
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 9				
METALWORK				

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

Item No			Quantity	Rate	Amount	
	SECTION NO.4					
	BILL NO.11					
	TILING					
	SUPPLEMENTARY PREAMBLES					
	<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					
	WALL TILING					
	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					
1	On walls	m2	28			
2	On narrow widths	m2	23			
	FLOOR TILING					
	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.					
3	On floors and landings	m2	255			
4	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	378			
	TOILET PAPER HOLDERS ETC					
	"Vaal" white glazed ceramic					
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					=

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

	1	1 1	1	
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				
<u>Excavations</u>				
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		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12				
PLUMBING AND DRAINAGE				

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	R	_
CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12		
PLUMBING AND DRAINAGE		

	0,8mm Galvanised sheet iron with "Chromadek" finish				
1	on one side 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		
	SOIL DRAINAGE				
	uPVC pipes				
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		
	Extra over uPVC pipes for fittings				
10	110mm Bend	No	5		
11	110mm Junction	No	2		
12	110 x 50mm Reducing junction	No	2		
13	110mm Double junction	No	2		
	Pre-cast concrete gulleys				
14	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley sorround	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			R	\perp
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				
	Bill No. 12 PLUMBING AND DRAINAGE				

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		
	SANITARY FITTINGS				
	"Concor"				
	"Citimetal" stainless steel				
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		
	WASTE UNIONS ETC				
	"Cobra Watertech"				
23	38mm "Cobra 316" unslotted waste and plug with chain	No	1		
	TRAPS ETC				
	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		
	"Cobra Watertech"				
25	Ref. 323 shower trap with CP grating	No	1		
	"Cobra Watertech"				
26	"Cobra Ref. 365/40" CP bottle trap	No	5		
	TAPS, VALVES, ETC				
	"Cobra Watertech"				
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		
	SANITARY PLUMBING				
	uPVC pipes				
37	50mm Pipes	m	10		
					_
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO				
	Bill No. 12 PLUMBING AND DRAINAGE				

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

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		
	Extra over uPVC pipes for fittings				
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		
	<u>Sundries</u>				
49	Testing waste pipe system		Item		
	WATER SUPPLIES				
	D.P.I Plastics HDPE Poly piping with Plasson impression couplings				
50	50mm Pipes	m	26		
	Extra over piping for Plasson fittings				
51	50mm Elbow	No	6		
52	50mm Tee	No	4		
	Class 0 copper pipes				
53	15mm Pipes	m	13		
53 54	15mm Pipes 22mm Pipes	m m	13 23		
	22mm Pipes	m		R	
		m		R	

	Extra over class 0 copper pipes for capillary fittings				1
FF		No	44		
55	15mm Fittings	No	11		
56	22mm Fittings	No	7		
	ELECTRIC WATER HEATERS				
	"Kwikot"				
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		
	FIRE APPLIANCES ETC				
	'Chubb'				
59	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		
60	4,5kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	2		
	RAINWATER HARVEST TANKS				
	"Jojo or similar"				
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		
				_	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12 PLUMBING AND DRAINAGE			R	

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 12				
PLUMBING AND DRAINAGE				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	201			
	202			
	203			
	204			
	205			
	206			
	207			
	208			
	209			
		_		\vdash
Carried Forward to Summary of Section No. 4 Section No. 4		R		⊨
CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 12				
PLUMBING AND DRAINAGE				

Item No			Quantity	Rate	Amount
110	SECTION NO.4				
	BILL NO. 13				
	GLAZING				
	GLAZING TO STEEL WITH PUTTY				
	4mm Clear float glass				
1	Panes not exceeding 0,1 m2	12	25		
	4mm Rough cast glass				
2	Panes not exceeding 0,1m2	12	7		
	MIRRORS, ETC				
	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				
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	Ю	4		
	Carried Forward to Summary of Section No. 4 Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 13 GLAZING			R	

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO. 14				
	<u>PAINTWORK</u>				
	PAINTWORK ETC TO NEW WORK				
	ON FLOATED PLASTER				
	One coat universal undercoat and three coats super acrylic PVA_paint				
1	On internal walls	m2	1,049		
2	On ceilings and beams	m2	2		
	ON SMOOTH CONCRETE				
	One coat universal undercoat and three coats super acrylic PVA_paint				
3	On concrete columns	m2	5		
	ON FIBRE-CEMENT				
	One coat primer, one coat universal undercoat and two coats super acrylic PVA paint				
4	On ceilings	m2	256		
	Prepare and apply one universal undercoat and two coats gloss enamel paint				
5	On fascias and barge boards	m2	18		
	ON METAL				
	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				
6	On door frames	m2	23		
	Carried to Collection			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 14 PAINTWORK			``	

7	On windows with burglar bars	m2	68		
	ON WOOD				
	One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved				
8	On doors	m2	2		
	Section No. 4	ו		R	_
	CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 14				
	PAINTWORK				

Section No. 4				
CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK				
Bill No. 14				
PAINTWORK				
COLLECTION				
Total Brought Forward from Page No.	Page No 212 213		Amount	
Carried Forward to Summary of Section No. 4		R		
Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 14 PAINTWORK				

Item No		Qı	uantity	Rate	Amount
	SECTION NO.4				
	BILL NO.15				
	APRONS AROUND BUILDINGS				
	Compaction of surfaces				
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	n2	76		
	15 MPa/20 mm concrete				
2	Aprons cast in panels to falls	n3	8		
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	76		
	Finishing top surfaces of concrete smooth with a wood float				
4	Aprons to falls	n2	76		
	Smooth formwork to sides				
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	76		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 CONSTRUCTION OF MEDIUM ADMINISTRATION BLO Bill No. 15 CONCRETE APRONS				
	I	I	l		ıı I

Item No			Quantity	Rate	Amount
	SECTION NO 4	1			
	BILL NO 16				
	PROVISIONAL AMOUNTS ETC				
	PROVISIONAL SUMS FOR SELECTED SUB- CONTRACT WORKS				
	HOLES THROUGH WALLS				
	<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		
	SLEEVES				
	Plastic sleeves for pipes not exceeding 100mm diameter				
3	Sleeve not exceeding 250mm long	No	5		
4	Sleeve exceeding 250mm and not exceeding 500mm long	No	5		
	Plastic sleeves for pipes exceeding 100mm and not exceeding 200mm diameter				
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 ADMINISTR	ATION BL	<u>o</u>	
Bill No		Page No		Amount
1	FOUNDATIONS	170		
2	CONCRETE, FORMWORK & REINFORCEMENT	174		
3	MASONRY	178		
4	WATERPROOFING	179		
5	ROOF COVERINGS, ETC	182		
6	CARPENTRY AND JOINERY	188		
7	CEILINGS, ETC	191		
8	IRONMONGERY	194		
9	METALWORK	198		
10	PLASTERING	199		
11	TILING	200		
12	PLUMBING AND DRAINAGE	210		
13	GLAZING	211		
14	PAINTWORK	214		
15	CONCRETE APRONS	215		
16	BUILDER'S WORK	216		
	Carried to Final Summary		R	
	Section No. 4			
	CONSTRUCTION OF MEDIUM ADMINISTRATION BLO			

m o		Quantity	Rate	Amount
	SECTION NO.5			
	BILL NO.1			
	FOUNDATIONS			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	Soil poisoning			
	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			
	ALL IN RAFT FOUNDATION			
	Carried to Collection		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS			

	SITE CLEARANCE ETC				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	350		
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	350		
	<u>EARTHWORKS</u>				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	71		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	4		
5	Hard rock	m3	8		
	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	37		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	175		
	Keeping excavations free of water				
8	Keeping excavations free of water		Item		
	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	37		
10	Backfilling to trenches, holes, etc	m3	32		
	Counied to Collection			D	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS			R	

,		1			n	1
	Earth filling supplied by the contractor compacted to 93% Mod AASHTO density					
11	Under floors, steps, paving etc.	m3	68			
	Compaction of surfaces					
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	253			
	Prescribed density tests on filling					
13	"Modified AASHTO Density" test	No	9			
	SOIL POISONING					
	Weedkiller mixed in accordance to supplier's specifications					
14	Under paving etc	m2	253			
15	To bottoms and sides of trenches, etc.	m2	287			
	Soil insecticide					
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	253			
17	To bottoms and sides of trenches etc	m2	287			
	CONCRETE, FORMWORK AND REINFORCEMENT					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	20MPa/19mm concrete					
18	350 x 600 Reinforced concrete ground beam	m3	19			
19	250 x 600 Reinforced concrete ground beam	m3	11			
	REINFORCEMENT					
						_
	Carried to Collection			R		
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1					
	FOUNDATIONS					

	High tensile steel reinforcement to structural concrete work				
20	12mm Diameter bars	t	5.90		
	TEST CUBES				
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	3.0		
	BRICKWORK				
	Brickwork of NFP bricks in class II mortar				
22	One brick walls	m2	101		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints:				
23	12mm Fibre board built in vertically between brick skins.	m2	1		
	Brickwork reinforcement				
24	150mm Wide reinforcement built in horizontally	m	1,181		
	FACE BRICKWORK				
	Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints				
25	Extra over brickwork for face brickwork	m2	43		
	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				
26	Coping on top of one brick wall	m	31		
	WATERPROOFING				
	JOINT SEALANTS ETC				
	Carried to Collection	,		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1				
	FOUNDATIONS				

	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	6		
	out expansion joint liller as necessary	""			
	Section No. 5	n		R	
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS				
				l	

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 1				
FOUNDATIONS				
COLLECTION				
COLLECTION Total Brought Forward from Page No.	Page No 218 219 220 221 222		Amount	
Carried Forward to Summary of Section No. 5		R		_
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS				

Item No		Quantity	Rate	Amount
	SECTION NO.5			
	BILL NO.2			
	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 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			
	<u>Formwork</u>			
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse			
	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			
	Carried to Collection		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT			

·	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	41			
	CONCRETE SUNDRIES					
	Finishing top surfaces of concrete smooth with a steel trowel					
2	Surface beds, slabs, etc	m2	253			
	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	6.0			
	MOVEMENT JOINTS ETC					
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces					
4	15mm Joints exceeding 300mm high	m	94			
	Carried to Collection					
	Section No. 5			R		+
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 2					
	CONCRETE, FORMWORK & REINFORCEMENT					
			ii	ı	ii .	1

	Saw cut joints				
5	Saw cut joints in top of concrete	m	48		
	Horizontal joggle construction joints through concrete including thick cement slurry to one face				
	DIVIDING STRIPS, ETC.				
6	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	5		
	REINFORCEMENT				
	Fabric reinforcement				
7	Ref. 617 fabric reinforcement in concrete surface bed etc	m2	253		
	Carried to Collection	n		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
	Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT				

Section No. 5			
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS			
Bill No. 2			
CONCRETE, FORMWORK & REINFORCEMENT			
COLLECTION			
Total Brought Forward from Page No.	Page No 224 225 226		Amount
Carried Forward to Summary of Section No. 5 Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT		R	

	Quantity	Rate	Amount
SECTION NO.5			N.
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			
Carried to Collection		R	
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 3 MASONRY			

	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	Half brick walls in beamfilling.	m2	15		
2	One brick walls	m2	266		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints:				
3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	4		
	Steel bar reinforcement				
	Brickwork reinforcement				
4	75mm Wide reinforcement built in horizontally	m	86		
5	150mm Wide reinforcement built in horizontally	m	1,301		
	Turning pieces				
6	110mm Wide turning piece to lintels etc	m	78		
	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	48		
	FACE BRICKWORK				
	Face 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	420		
	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	39		
	Carried to Collection			R	\top
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 3 MASONRY			к	

	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	34		
11	220mm Wide sill set sloping and slightly protecting outside	m	34		
	Carried to Collection			R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
	Bill No. 3 MASONRY				
		ı			

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 3				
MASONRY				
COLLECTION				
Total Brought Forward from Page No.	Page No 228 229		Amount	
	230			
Comind Formund to Commence of Continue No. 5				
Carried Forward to Summary of Section No. 5 Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 3 MASONRY		R		

Item No			Quantity	Rate	Amount
	SECTION NO.5	1			
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	Waterproofing				
	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				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
1	In walls	m2	31		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	Under surface beds	m2	201		
	JOINT SEALANTS ETC				
	Silicone sealing compound including backing cord, bond breaker, primer, etc				
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	125		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 4 WATERPROOFING				

Item No		Quantity	Rate	Amount
	SECTION NO.5			
	BILL NO.5			
	ROOF COVERINGS ETC			
	SUPPLEMENTARY PREAMBLES			
	General			
	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			
	Flashings, trimming plates, etc.			
	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			
	PROFILED METAL SHEETING AND ACCESSORIES			
	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			
1	Roof covering with pitch not exceeding 50 degrees m2	319		
	Carried to Collection		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 5 ROOF COVERINGS, ETC		K	

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

		1	1		1	1
2	Ridge capping 550mm girth	m	39			
3	Hip capping 550mm girth	m	9			
4	Valley flashing 800mm girth	m	5			
	Sundries					
5	12" Thermal resistance sisalition laid on purlins	m2	319			
	• • • • •			_		
	Section No. 5	ion		R		
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 5					
	ROOF COVERINGS, ETC					

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 5				
ROOF COVERINGS, ETC				
COLLECTION				
Total Brought Forward from Page No.	Page No 233 234		Amount	
Carried Forward to Summary of Section No. 5		R		
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 5 ROOF COVERINGS, ETC				

Item No		Quantity	Rate	Amount	
	SECTION NO.5				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	ROOFS ETC				
	PRE-FABRICATED TIMBER ROOF TRUSSES				
	Pre-fabricated metal connected timber roof trusses				
	All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction				
	<u>Timber</u>				
	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				
	<u>Bolts</u>				
	Bolts shall be in accordance with BS 4190 or SABS 135				
	Shear plates, tooth connectors and split rings				
	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"				
	<u>Washers</u>				
	Square or round washers of the following dimensions shall be used with all bolts:				
	Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness				
	Carried to Collection		R		_
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 6 CARPENTRY AND JOINERY				=

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		
<u>Truss construction</u>		
Trusses shall be constructed in jigs specially designed to unsure 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		
<u>Truss design</u>		
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		
Carried to Collection	R	
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 6		
CARPENTRY AND JOINERY		

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 **Carried to Collection** R Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 6 **CARPENTRY AND JOINERY**

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			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	Item		
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		
	ileiii		
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:			
Carried to Collection Section No. 5		R	\vdash
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 6			
CARPENTRY AND JOINERY			

4	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 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		
	Sawn softwood				
5	38 x 114mm Wall plates	m	115		
	Wrought laminated timber				
6	50 x 228mm Bearers bolted	m	29		
	Sundries				
7	Two coats creosote on sawn timbers	m2	125		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
8	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	92		
	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				
9	Door size 914 x 2032mm high including weatherboard	No	3		
	SCHOOL FURNITURE, ETC				
	Carried to Collection Section No. 5			R	<u> </u>
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 6				
	CARPENTRY AND JOINERY				

	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	No	105		
					_
	Carried to Collection			R	<u> </u>
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
	Bill No. 6 CARPENTRY AND JOINERY				

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 6				
CARPENTRY AND JOINERY				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	236			
	237			
	238			
	239			
	240			
	241			
				_
Carried Forward to Summary of Section No. 5		R		L
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 6 CARPENTRY AND JOINERY				

Item No			Quantity	Rate	Amount	Ī
	SECTION NO.5					I
						l
	BILL NO.7					l
	CEILING, ETC.					l
	SUPPLEMENTARY PREAMBLES					l
	Descriptions:					l
	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.					ſ
	Insulation					l
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	201			ĺ
	Sawn softwood					ı
2	38 x 114mm Ceiling joists	m	66			l
	Wrought softwood					l
3	19 x 76mm Cornices nailed	m	94			l
	NAILED UP AND SCREWED UP CEILINGS					ı
	6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints					
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	253			
						ĺ
	Comical to Collection			Б		
	Carried to Collection Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 7 CEILINGS, ETC			R		<u> </u>

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	3		
	Carried to Collection		R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 7 CEILINGS, ETC			
	OLILINGO, LTO			

Section No. 5			
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS			
Bill No. 7			
CEILINGS, ETC			
COLLECTION			
Total Brought Forward from Page No.	Page No 243 244		Amount
Carried Forward to Summary of Section No. 5		R	
Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 7 CEILINGS, ETC			

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

	"Solid"	Ì			
4	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	3		
	"Vitrex" or equally approved				
5	Pinning boards 2400 x 1350mm high fixed to brickwork	No	6		
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				
	1200 X 1140mm mgm plagged	No	3		
	Carried to Collection			R	
	Section No. 5			IX.	\vdash
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 8				
	IRONMONGERY				

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 8				
IRONMONGERY				
COLLECTION				
Total Brought Forward from Page No.	Page No 246 247		Amount	
Carried Forward to Summary of Section No. 5 Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 8 IRONMONGERY		R		_

Item No		Quantity	Rate	Amount	
	SECTION NO.5				
	BILL NO. 9				
	METALWORK				
	<u>Descriptions</u>				
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	<u>Drawings</u>				
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc				
	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)				
	<u>Finish</u>				
	The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407				
	Carried to Collection		R		_
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 9 METALWORK				_

	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				
	<u>Drawings</u>				
	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				
	<u>General</u>				
	Workshop drawings to be approved by the architect before manufacture				
	SUNDRY METALWORK				
	The following in identical steel support columns				
1					
•	Bolts	kg	19		
2	10mm Diameter rawl bolts	kg No	19 39		
-					
2	10mm Diameter rawl bolts	No	39		
2	10mm Diameter rawl bolts 76 x 76 x 3mm Tubular section columns 2975mm high U-shaped bracket formed of 3mm flat section 300mm	No No	39 10		
2 3 4	10mm Diameter rawl bolts 76 x 76 x 3mm Tubular section columns 2975mm high U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on 200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section	No No No	39 10 10		
2 3 4	10mm Diameter rawl bolts 76 x 76 x 3mm Tubular section columns 2975mm high U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on 200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column PRESSED STEEL COMBINATION DOORS	No No No	39 10 10		
2 3 4	10mm Diameter rawl bolts 76 x 76 x 3mm Tubular section columns 2975mm high U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on 200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column PRESSED STEEL COMBINATION DOORS	No No No	39 10 10	R	
2 3 4	10mm Diameter rawl bolts 76 x 76 x 3mm Tubular section columns 2975mm high U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on 200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column PRESSED STEEL COMBINATION DOORS AND FRAMES	No No No	39 10 10	R	

		i	1	n	1
	"Nty" doors or equally appoved				
6	"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	3		
	STEEL WINDOWS, DOORS, ETC				
	Standard residential windows with burglar bars to all sashes				
7	Window code 6/3/9, size 1143 x 972mm high	No	27		
8	Window code 6, size 1143 x 972mm high	No	3		
	Carried to Collection			R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 9 METALWORK				

Section No. 5				
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 9				
METALWORK				
COLLECTION				
Total Brought Forward from Page No.	Page No 249 250 251		Amount	
Carried Forward to Summary of Section No. 5 Section No. 5		R		
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 9 METALWORK				

Item No			Quantity	Rate	Amount
	SECTION NO.5				
	BILL NO. 10				
	PLASTERING				
	SCREEDS				
	Screeds on concrete				
1	30mm Thick on floors	m2	255		
	GRANOLITHIC				
	Untinted granolithic on concrete				
	INTERNAL PLASTER				
	Cement plaster on brickwork				
2	On walls	m2	389		
3	On narrow widths	m2	3		
	Carried Forward to Summary of Section No. 5 Section No. 5			R	
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 10 PLASTERING				

Item No			Quantity	Rate	Amount	
	SECTION NO.5					
	BILL NO.11					
	TILING					
	SUPPLEMENTARY PREAMBLES					
	Descriptions					
	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					
	FLOOR TILING					
	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.					
1	On floors and landings	m2	253			
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	94			
	Carried Forward to Summary of Section No. 5			R		
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 11 TILING			, ,		

Item No		Quantity	Rate	Amount	
	SECTION NO.5				
	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 3 CLASSROOM BLOCKS 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		R		
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 12 PLUMBING AND DRAINAGE				
- 1		l .	1	a	1

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** R Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 12 PLUMBING AND DRAINAGE

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. 5	R	_
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 12		
PLUMBING AND DRAINAGE		

	0,8mm Galvanised sheet iron with "Chromadek" finish on one side				
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		
	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	3		
	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		
	Carried to Collection			R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 12 PLUMBING AND DRAINAGE			K	

Section No. 5				Ī
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS				
Bill No. 12				
PLUMBING AND DRAINAGE				
COLLECTION				
Total Brought Forward from Page No.	Page No 255 256 257 258 259		Amount	
Carried Forward to Summary of Section No. 5 Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 12 PLUMBING AND DRAINAGE		R		

Item No		Ī	Quantity	Rate	Amount	
	SECTION NO.5					
	BILL NO. 13					
	<u>GLAZING</u>					
	GLAZING TO STEEL WITH PUTTY					
	4mm Clear float glass					
1	Panes not exceeding 0,1 m2	n2	22			
	4mm Rough cast glass					
2	Panes not exceeding 0,1m2	n2	6			
	Carried Forward to Summary of Section No. 5 Section No. 5			R		:
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 13 GLAZING					
		ı			ı l	

Item No			Quantity	Rate	Amount	
	SECTION NO.5					
	BILL NO. 14					
	PAINTWORK					
	PAINTWORK ETC TO NEW WORK					
	ON FLOATED PLASTER					
	One coat universal undercoat and three coats super acrylic PVA paint					
1	On internal walls	m2	285			
	ON FIBRE-CEMENT					
	One coat primer, one coat universal undercoat and two coats super acrylic PVA paint					
2	On ceilings	m2	253			
	Prepare and apply one universal undercoat and two coats gloss enamel paint					
3	On fascias and barge boards	m2	18			
	ON METAL					
	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					
4	On door frames	m2	20			
5	On windows with burglar bars	m2	59			
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	21			
7	On rails, bars, pipes, etc	m2	9			
	ON WOOD					
						-
	Carried to Collection			R		_
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 14 PAINTWORK					-

	One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved				
8	On doors	m2	1		
	Three coats matt varnish				
9	On doors	m2	23		
10	On roof timbers (laminated beam)	m2	15		
	Carried to Collection			R	
	Section No. 5				
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 14				
	PAINTWORK				

Section No. 5			
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS			
Bill No. 14			
PAINTWORK			
COLLECTION			
Total Brought Forward from Page No.	Page No 262 263		Amount
Carried Forward to Summary of Section No. 5 Section No. 5		R	
CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 14 PAINTWORK			

Item No			Quantity	Rate	Amount
	SECTION NO.5				
	DU 1 NO 45				
	BILL NO.15				
	APRONS AROUND BUILDINGS				
	Compaction of surfaces				
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	69		
	15 MPa/20 mm concrete				
2	Aprons cast in panels to falls	m3	7		
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	69		
	Finishing top surfaces of concrete smooth with a wood float				
4	Aprons to falls	m2	69		
	Smooth formwork to sides				
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	69		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS Bill No. 15 CONCRETE APRONS				

	Section No. 5			
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS			
	SECTION SUMMARY - CONSTRUCTION OF 1 x 3 CLASSROOM E	LOCKS		
Bill No		Page No		Amount
1	FOUNDATIONS	223		
2	CONCRETE, FORMWORK & REINFORCEMENT	227		
3	MASONRY	231		
4	WATERPROOFING	232		
5	ROOF COVERINGS, ETC	235		
6	CARPENTRY AND JOINERY	242		
7	CEILINGS, ETC	245		
8	IRONMONGERY	248		
9	METALWORK	252		
10	PLASTERING	253		
11	TILING	254		
12	PLUMBING AND DRAINAGE	260		
13	GLAZING	261		
14	PAINTWORK	264		
15	CONCRETE APRONS	265		
	Carried to Final Summary Section No. 5		R	
	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS			

m o		Quantity	Rate	Amount
	SECTION NO.6			
	BILL NO.1			
	<u>FOUNDATIONS</u>			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	Soil poisoning			
	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 cerfificate to the Principal Agent			
	ALL IN RAFT FOUNDATION			
	Carried to Collection		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS			

	SITE CLEARANCE ETC				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	138		
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	138		
	<u>EARTHWORKS</u>				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	48		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	2		
5	Hard rock	m3	5		
	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	16		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	75		
	Keeping excavations free of water				
8	Keeping excavations free of water		Item		
	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	16		
10	Backfilling to trenches, holes, etc	m3	14		
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS			'`	<u></u>

		1	ĺ	ı	11	1
	Earth filling supplied by the contractor compacted to					
	93% Mod AASHTO density					
11	Under floors, steps, paving etc.	m3	31			
	Compaction of surfaces					
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	105			
	Prescribed density tests on filling					
13	"Modified AASHTO Density" test	No	4			
	SOIL POISONING					
	Weedkiller mixed in accordance to supplier's specifications					
14	Under paving etc	m2	105			
15	To bottoms and sides of trenches, etc.	m2	123			
	Soil insecticide					
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	105			
17	To bottoms and sides of trenches etc	m2	123			
	CONCRETE, FORMWORK AND REINFORCEMENT					
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	20MPa/19mm concrete					
18	350 x 600 Ground beams	m3	15			
19	250 x 600 Ground beams	m3	5			
	REINFORCEMENT					
						+
	Carried to Collection			R		
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM BIII No. 1					
	FOUNDATIONS					

	High tensile steel reinforcement to structural concrete				
20	work 12mm Diameter bars	t	0.44		
20	TEST CUBES		0.11		
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		
	BRICKWORK				
	Brickwork of NFP bricks in class II mortar				
22	One brick walls	m2	43		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints:				
	Brickwork reinforcement				
23	150mm Wide reinforcement built in horizontally	m	506		
	FACE BRICKWORK				
	Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints				
24	Extra over brickwork for face brickwork	m2	23		
	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				
25	Coping on top of one brick wall	m	12		
					_
	Carried to Collection	n		R	<u></u>
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1				
	FOUNDATIONS				

Section No. 6				Ī
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 1				
FOUNDATIONS				
COLLECTION				
Total Brought Forward from Page No.	Page No 267 268 269 270		Amount	
				\vdash
Carried Forward to Summary of Section No. 6 Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS		R		

Item No		Quantity	Rate	Amount
	SECTION NO.6			
	BILL NO.2			
	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 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			
	<u>Formwork</u>			
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before reuse			
	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			
	Carried to Collection		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT			

	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	28		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
2	Surface beds, slabs, etc	m2	105		
	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		
	MOVEMENT JOINTS ETC				
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces				
4	15mm Joints exceeding 300mm high	m	82		
	Couried to Callection			D	+
	Section No. 6			R	+
	CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 2				
	CONCRETE, FORMWORK & REINFORCEMENT				

		,			,
	Saw cut joints				
5	Saw cut joints in top of concrete	m	21		
	REINFORCEMENT				
	Fabric reinforcement				
6	Ref. 617 fabric reinforcement in concrete surface bed etc	m2	105		
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
	Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT				
	CONTONETE, I CHANTONIN & INCINI CHOCKINI				

Section No. 6				ĺ
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 2				
CONCRETE, FORMWORK & REINFORCEMENT				
COLLECTION				
Total Brought Forward from Page No.	Page No 272 273 274		Amount	
Carried Forward to Summary of Section No. 6		R		
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT				

Item No		Quantity	Rate	Amount	
	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				
	Carried to Collection Section No. 6		R		
	CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 3 MASONRY				

	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	Half brick walls in beamfilling.	m2	11		
2	One brick walls	m2	243		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints:				
	Brickwork reinforcement				
3	75mm Wide reinforcement built in horizontally	m	62		
4	150mm Wide reinforcement built in horizontally	m	1,069		
	Turning pieces				
5	110mm Wide turning piece to lintels etc	m	21		
	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				
6	Extra over brickwork for face brickwork	m2	360		
	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				
7	Extra over brickwork for brick-on-edge header course lintel	m	10		
	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				
8	110mm Wide sill set level and slightly projecting	m	10		
9	220mm Wide sill set sloping and slightly protecting outside	m	10		
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 3 MASONRY				

Section No. 6			
CONSTRUCTION OF MULTI PURPOSE CLASSROOM			
Bill No. 3			
MASONRY			
COLLECTION			
Total Brought Forward from Page No.	Page No 276 277		Amount
Carried Forward to Summary of Section No. 6 Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 3 MASONRY		R	

Item No			Quantity	Rate	Amount	
	SECTION NO.6					
	BILL NO.4					
	WATERPROOFING					
	SUPPLEMENTARY PREAMBLES					
	<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					
	DAMP-PROOFING OF WALLS AND FLOORS					
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course					
1	In walls	m2	22			
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"					
2	Under surface beds	m2	91			
	JOINT SEALANTS ETC					
	Silicone sealing compound including backing cord, bond breaker, primer, etc					
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	82			
	Carried Forward to Summary of Section No. 6			R		-
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 4					=
	WATERPROOFING					

Item No		Quantity	Rate	Amount
	SECTION NO.6			
	BILL NO.5			
	ROOF COVERINGS ETC			
	SUPPLEMENTARY PREAMBLES			
	<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			
	Flashings, trimming plates, etc.			
	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			
	PROFILED METAL SHEETING AND ACCESSORIES			
	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			
1	Roof covering with pitch not exceeding 50 degrees m2	131		
	Carried to Collection		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 5 ROOF COVERINGS, ETC			

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

2	Ridge capping 550mm girth	m	1		
3	Hip capping 550mm girth	m	4		
4	Valley flashing 800mm girth	m	12		
	Sundries				
5	12" Thermal resistance sisalition laid on purlins	m2	131		
	Carried to Collect	etion		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROO	PM			
	Bill No. 5 ROOF COVERINGS, ETC				
					 1

Section No. 6				
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 5				
ROOF COVERINGS, ETC				
COLLECTION				
Total Brought Forward from Page No.	Page No 280 281		Amount	
				_
Carried Forward to Summary of Section No. 6		R		
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 5 ROOF COVERINGS, ETC				=

Item No		Quantity	Rate	Amount	
	SECTION NO.6				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	ROOFS ETC				
	PRE-FABRICATED TIMBER ROOF TRUSSES				
	Pre-fabricated metal connected timber roof trusses				
	All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction				
	<u>Timber</u>				
	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				
	Bolts				
	Bolts shall be in accordance with BS 4190 or SABS 135				
	Shear plates, tooth connectors and split rings				
	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"				
	<u>Washers</u>				
	Square or round washers of the following dimensions shall be used with all bolts:				
	Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness				
	Carried to Collection		R		
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6 CARPENTRY AND JOINERY				

2 Bolts up to 12mm diameter:Washers shall be minimum 36mm wide of minimum4,00mm 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		
<u>Truss construction</u>		
Trusses shall be constructed in jigs specially designed to unsure 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		
<u>Truss pitch</u>		
The truss pitch shall be as described in this bill for each respective truss type		
Carried to Collection	R	
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6		
CARPENTRY AND JOINERY		

1	1	1	ı
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			
<u>Dimensions</u>			
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			
<u>Erection</u>			
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			
Section No. 6	R		<u> </u>
CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6			
CARPENTRY AND JOINERY			

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			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	Item		
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		
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:			
Carried to Collection		R	Г
Section No. 6			<u> </u>
CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6			
CARPENTRY AND JOINERY			

4	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 Roof construction to double pitched roof with two hipped ends 11.78 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) (Multi- Purpose Classroom)				
		No	1		
	Sawn softwood				
5	38 x 114mm Wall plates	m	82		
	Wrought laminated timber				
	Sundries				
6	Two coats creosote on sawn timbers	m2	27		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	44		
	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				
8	44mm Door 914 x 2032mm high	No	1		
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6 CARPENTRY AND JOINERY				

Section No. 6				ĺ
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 6				
CARPENTRY AND JOINERY				
COLLECTION				
Total Brought Forward from Page No.	Page No 283 284 285 286 287		Amount	
Carried Forward to Summary of Section No. 6		R		
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6 CARPENTRY AND JOINERY				

Item No			Quantity	Rate	Amount	
	SECTION NO.6					
	BILL NO.7					
	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.					
	<u>Insulation</u>					
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	91			
	Sawn softwood					
2	38 x 114mm Ceiling joists	m	60			
	Wrought softwood					
3	19 x 76mm Cornices nailed	m	82			
	NAILED UP AND SCREWED UP CEILINGS					
	6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints					
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	105			
	Carried to Collection			R		_
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM 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	1		
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 7 CEILINGS, ETC				_

Section No. 6				Ī
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 7				
CEILINGS, ETC				
COLLECTION				
Total Brought Forward from Page No.	Page No 289 290		Amount	
Carried Forward to Summary of Section No. 6		R		
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 7 CEILINGS, ETC				

Item No			Quantity	Rate	Amount	
	SECTION NO.6					
	BILL NO.8					
	IRONMONGERY					
	SUPPLEMENTARY PREAMBLES					
	<u>Descriptions</u>					
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs					
	Finishes to ironmongery					
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded					
	CATCHES, CABIN HOOKS, ETC					
	"Approved"					
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	1			
	<u>LOCKS</u>					
	"Solid"					
2	"Code 630" padlock	No	1			
3	"Code 460/313" Blesbok four lever lockset	No	1			
	SUNDRIES					
	Carried to Collection			R		_
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 8 IRONMONGERY					
	INDIVIDINGENT					

	"Solid"				
4	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	1		
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC				
	"Vitrex"				
5	Pinning boards 2400 x 1200mm high fixed to brickwork	No	2		
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				
	3 1 33	No	1		
					_
	Carried to Collection			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 8 IRONMONGERY				

Section No. 6				
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 8				
IRONMONGERY				
COLLECTION				
Total Brought Forward from Page No.	Page No 292 293		Amount	
Carried Forward to Summary of Section No. 6 Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 8 IRONMONGERY		R		_

Item No		Quantity	Rate	Amount
	SECTION NO.6			
	BILL NO. 9			
	METALWORK			
	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>Drawings</u>			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	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)			
	<u>Finish</u>			
	The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407			
	Carried to Collection		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 9 METALWORK			

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			
<u>Design indemnity</u>			
The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed			
<u>Drawings</u>			
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			
<u>General</u>			
Workshop drawings to be approved by the architect before manufacture			
PRESSED STEEL COMBINATION DOORS AND FRAMES			
"Nty" doors			
"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	1		
STEEL WINDOWS, DOORS, ETC			
Carried to Collection		R	
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM			-
Bill No. 9 METALWORK			

1

	Standard residential windows with burglar bars to all	1				
	sashes					
2	Window code 6/3/9, size 1143 x 972mm high	No	9			
	Carried to Collecti	on		R		
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM	1				
	Bill No. 9 METALWORK					
		l			1	

Section No. 6				
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 9				
METALWORK				
COLLECTION				
Total Brought Forward from Page No.	Page No 295 296 297		Amount	
Carried Forward to Summary of Section No. 6 Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 9 METALWORK		R		

Item No			Quantity	Rate	Amount
	SECTION NO.6				
	BUL NO 40				
	BILL NO. 10				
	PLASTERING				
	SCREEDS				
	Screeds on concrete				
1	20mm Thick on floors	m2	105		
	GRANOLITHIC				
	Untinted granolithic on concrete				
	INTERNAL PLASTER				
	Cement plaster on brickwork				
2	On walls	m2	240		
3	On narrow widths	m2	5		
	Carried Forward to Summary of Section No. 6 Section No. 6			R	
	CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 10 PLASTERING				
					I

Item No			Quantity	Rate	Amount	
1	SECTION NO.6					
	BILL NO.11					
	TILING					
	SUPPLEMENTARY PREAMBLES					
	<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					
	FLOOR TILING					
	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.					
1		n2	105			
2	Skirting formed of ceramic tile cut to 420 x 75mm high	m	82			
	Carried Forward to Summary of Section No. 6 Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 11 TILING			R		_

Item No		Quantity	Rate	Amount
	SECTION NO.6			
	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. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM 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	R	
Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 12 PLUMBING AND DRAINAGE		
FLUIDING AND DRAINAGE		

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** R Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 12 PLUMBING AND DRAINAGE

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		1
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings		
Steel sectional water tanks		1
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		
		<u></u>
Carried to Collection	R	_ _
Section No. 6		
CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 12		1
PLUMBING AND DRAINAGE		l

	0,8mm Galvanised sheet iron with "Chromadek" finish on one side				
1	125 x 100mm Seamless eaves gutters with beaded front edge	m	44		
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	8		
5	100mm Diameter rainwater pipes	m	21		
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8		
7	Extra over rainwater pipe for shoe	No	8		
	WATER TANKS, ETC				
	"Jojo or equally approved"				
8	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		
	FIRE APPLIANCES ETC				
	'Chubb'				
9	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		
10	9kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	1		
	Carried to Collection			R	T
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM			, in	+
	Bill No. 12 PLUMBING AND DRAINAGE				

Section No. 6				
CONSTRUCTION OF MULTI PURPOSE CLASSROOM				
Bill No. 12				
PLUMBING AND DRAINAGE				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	301			
	302			
	303			
	304			
	305			
				_
Carried Forward to Summary of Section No. 6 Section No. 6		R		<u> </u>
CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 12 PLUMBING AND DRAINAGE				

Item No			Quantity	Rate	Amount	
	SECTION NO.6					
	BILL NO. 13					
	<u>GLAZING</u>					
	GLAZING TO STEEL WITH PUTTY					
	4mm Clear float glass					
1	Panes not exceeding 0,1 m2	n2	7			
	4mm Rough cast glass					
2	Panes not exceeding 0,1m2	n2	2			
						•
	Carried Forward to Summary of Section No. 6 Section No. 6			R		z
	CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 13 GLAZING					
					l I	

SECTION NO.6	
BILL NO. 14	
PAINTWORK	
PAINTWORK ETC TO NEW WORK	
ON FLOATED PLASTER	
One coat universal undercoat and three coats super acrylic PVA paint	
1 On internal walls m2 245	
ON FIBRE-CEMENT	
One coat primer, one coat universal undercoat and two coats super acrylic PVA paint	
2 On ceilings m2 105	
Prepare and apply one universal undercoat and two coats gloss enamel paint	
3 On fascias and barge boards m2 11	
ON METAL	
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	
4 On door frames m2 2	
5 On windows with burglar bars m2 17	
ON WOOD	
Three coats matt varnish	
6 On doors m2 2	
Carried Forward to Summary of Section No. 6 Section No. 6	R
CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 14 PAINTWORK	

Item No			Quantity	Rate	Amount
	SECTION NO.6				
	DUL NO 45				
	BILL NO.15				
	APRONS AROUND BUILDINGS				
	Compaction of surfaces				
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	41		
	15 MPa/20 mm concrete				
2	Aprons cast in panels to falls	m3	4		
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	41		
	Finishing top surfaces of concrete smooth with a wood float				
4	Aprons to falls	m2	41		
	Smooth formwork to sides				
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	41		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 15 CONCRETE APRONS				
					l l

	Section No. 6			
	CONSTRUCTION OF MULTI PURPOSE CLASSROOM			
	SECTION SUMMARY - CONSTRUCTION OF MULTI PURPOSE CL	ASSROOM	<u> </u>	
Bill No		Page No		Amount
1	FOUNDATIONS	271		
2	CONCRETE, FORMWORK & REINFORCEMENT	275		
3	MASONRY	278		
4	WATERPROOFING	279		
5	ROOF COVERINGS, ETC	282		
6	CARPENTRY AND JOINERY	288		
7	CEILINGS, ETC	291		
8	IRONMONGERY	294		
9	METALWORK	298		
10	PLASTERING	299		
11	TILING	300		
12	PLUMBING AND DRAINAGE	306		
13	GLAZING	307		
14	PAINTWORK	308		
15	CONCRETE APRONS	309		
	Carried to Final Summary		R	
	Section No. 6 CONSTRUCTION OF MULTI PURPOSE CLASSROOM			

Item No		Quantity	Rate	Amount	
	SECTION NO. 8				
	BILL NO.1				
	PROVISIONAL SUMS				
	SUPPLEMENTARY PREAMBLES				
	NOTE: Tenderers are referred to the definition of general attendance on nominated sub-contractors given in Clause 9 of the Preliminaries				
	NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill				
					_
	Carried to Collection		R		_
	Section No. 7 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS				_

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 and contractor. Tenders shall be submitted to the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer and Contractor. Tenders shall be submitted to 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-Contractor aprehensing 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 shall not create any contractual relationship between the Client and the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor shall shall not create a	l	THE FOLLOWING PROVIDIONAL OUTLO ARE FOR	l	1	 1
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 and Contractor, and the Principal Agent/Engineer and the Contractor, and the Principal Agent/Engineer and the Contractor shall satisfy himself that such selected sub-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). Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists Item Profit Item Carried to Collection Section No. 7 PROVISIONAL SUMS Bill No. 1		WORK TO BE EXECUTED BY SELECTED			
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 all sits of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer and Contractor. Tenders shall be submitted to 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). Provide the amount of R500 000,00 (Five hundred thousand rands) for joinery fittings by Specialists Item Profit Item Attendance Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1		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			
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 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). Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists Item Profit Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1		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			
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). Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists Item Profit Item Attendance Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1		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			
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). Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists Item Profit Item Attendance Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1		Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected subcontractor can meet the requirements of the SubContract agreement and the Contractor shall inform the			
Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists Profit Item Attendance Item Carried to Collection Section No. 7 PROVISIONAL SUMS Bill No. 1		obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor shall not create any contractual relationship between the Client			
thousand rands) for joinery fittings by Specialists Item Profit Item Attendance Item Carried to Collection Section No. 7 PROVISIONAL SUMS Bill No. 1		Joinery Fittings (Fixed).			
Profit Item Attendance Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1	ı				
Attendance Item Carried to Collection R Section No. 7 PROVISIONAL SUMS Bill No. 1		thousand rands) for joinery littings by Specialists	Item		500,000.00
Carried to Collection Section No. 7 PROVISIONAL SUMS Bill No. 1	2	Profit	Item		
Section No. 7 PROVISIONAL SUMS Bill No. 1	3	Attendance	Item		
Section No. 7 PROVISIONAL SUMS Bill No. 1					
Section No. 7 PROVISIONAL SUMS Bill No. 1					
Section No. 7 PROVISIONAL SUMS Bill No. 1					
Section No. 7 PROVISIONAL SUMS Bill No. 1				_	
Bill No. 1				R	

		,		
	Joinery Fittings (Movable).			
4	Provide the amount of R300 000.00 (Three hundred thousand rands) for joinery fittings by Specialists			
		Item		300,000.00
5	Profit	Item		
6	Attendance	Item		
	Alluminium Doors, etc.			
7	Provide the amount of R25 000.00 (Twenty five thousand rand) for aluminium door installation to the buildings by Specialists			
	buildings by Opecialists	Item		25,000.00
8	Profit	Item		
9	Attendance	Item		
	Signage			
10	Provide the sum of R20 000,00 (Twenty thousand rand) for signage by Specialists	Item		20,000.00
11	Profit	Item		
12	Attendance	Item		
	Window Blinds, etc			
13	Provide the sum of R30 000,00 (Thirty thousand rand) for window blinds by Specialists	Item		30,000.00
14	Profit	Item		
15	Attendance	Item		
	Community Liaison Officer			
16	Provide the sum of R54 000,00 (Fifty four thousand rand) for community liaison officer	Item		54,000.00
17	Profit	Item		
18	Attendance	Item		
	Carried to Collection		R	
	Section No. 7 PROVISIONAL SUMS			
	Bill No. 1 PROVISIONAL SUMS			
	1 NOVIOIOIVAL OUIVIO			

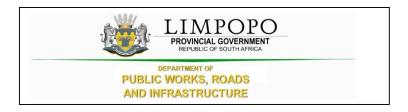
LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

		1]	1
	Occupational Health and Safety Consultant			
19	Provide the sum of R500 000,00 (Five hundred thousand rand) for Occupational Health and Safety Consultant	Item		500,000.00
20	Profit	Item		
21	Attendance	Item		
	Carried to Collection		R	
	Section No. 7 PROVISIONAL SUMS			
	Bill No. 1 PROVISIONAL SUMS			

LDPWRI-B/20093 - NAPSADI SECONDARY SCHOOL

Section No. 7				
PROVISIONAL SUMS				
Bill No. 1				
PROVISIONAL SUMS				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	311			
	312			-
	313			-
	314			_
Carried to Final Summary		R		
Section No. 7 PROVISIONAL SUMS		, ,		=
Bill No. 1 PROVISIONAL SUMS				

	FINAL SUMMARY]		1
Section No		Page No		Amount
1	PRELIMINARIES	149		
2	DEMOLITIONS	150		
3	RENOVATIONS OF 4 X 3 CLASSROOM BLOCKS	164		
4	CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK	217		
5	CONSTRUCTION OF 1 x 3 CLASSROOM BLOCKS	266		
6	CONSTRUCTION OF MULTI PURPOSE CLASSROOM	310		
7	PROVISIONAL SUMS	315		
	Sub -Total (PART A - MAIN BUILDING WORKS)		R	
	PART B - CIVIL WORKS			
	TENDER AMOUNT CARRIED OVER FROM PART B (CIVIL WORKS)	Item		
	PART C - ELECTRICAL WORKS			
	TENDER AMOUNT CARRIED OVER FROM PART C (ELECTRICAL WORKS)	Item		
	Sub Total - BUILDING COSTS		R	
	SPECIAL CONDITIONS			
	Provide the sum of R1 000 000.00 (One million rand) for fluctuations in cost	Item		1,000,000.00
	CONTINGENCIES			
	Contingencies:			
	Provide the sum of R1 000 000.00 for contingencies to be used at the discretion of the Representative / Agent and deducted in whole or in part if not required.	Item		1,000,000.00
	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		
110.	NEI EIN	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.	m²	525,00				
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.	m³	240,00				
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	m³	80,00				
1.2.2	8.3.3(b)	In-place treatment of road-bed in intermediate or hard material						
		Ripping	m ³	80,00				
1,3		EARTHWORKS						
1.3.1	8.3.4	Cut to fill						
		Compact to 90 % mod. AASHTO maximum density	m ³	80,00				
		Selected layer compacted to 93 % mod. AASHTO maximum density	m ³	80,00				
1.3.2	8.3.6	Extra-over items 1.3.1 inclusive for excavating and breaking down material in:						
		Intermediate excavation	m ³	50,00				
		Hard excavation	m ³	10,00				
	TOTAL CARRIED FORWARD							

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
110.	IXEI EK.					
				TOTAL BROUG	HT 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		
		i iaid excavation		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	240,00		
	8.3.11	Extra-over items 3.7 and 3.8 for temporary stockpiling of material	m³	30,00		
		Construction of storm water berm allong 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		
				0,00		
	8.3.5	Process material by means of:				
		Heavy grid rolling	m^3	0,00		
		Mechanical modification	m^3	0,00		
		<u>, </u>				
				TOTAL CARRI	ED FORWARD	

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
				TOTAL BROUG	HT 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	525,00		
	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 CARRI	ED 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	Sign faces with painted or galvanized (as stated) background. Symbols, characters, legend and borders in engineering grade, retroflective material with signboards constructed from:				
		c) Sheet steel (1.6 mm thick) of area Over Up to:				
		up to 2m² 2m² to 10m²	m² m²	0,00 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.	m²	Rate Only		

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.	m²	-				
1.21.5	1200 DK 8.2	Supply and install A7 Bidim Geosynthetic proetction layer to channel liner, as per drawings.	m²	-				
	SANS 1200 AH	CONCRETE						
1.21.7	8.4.3	Supply, place and shape 25MPa c oncrete in hyson cells on the A10 Bidim Geosynthetic proetction layer , as per drawings.	m³	-				
1.21.8	8.4.3	Supply, place and shape 25MPa concrete in hyson cells in the leachate outlet channel, as per drawings.	m³	-				
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.	m³	950,00				
		Disposal of unsuitable or surplus material off site	m³	950,00				
		Restricted excavation in all materials and use for backfill or dispose of unsuitable/ surplus material off site for:	m³	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	m³			
	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	m²	1 120,00		
	8.4.3	Strength concrete Grade 25 MPa/20 mm for:				
		Concrete Channels	m³	365,00		
	8.1.1	Formwork				
	8.2.5	Rough, vertical, circular, maximum height 300 mm.	m	3 120,00		
	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	m²	0,00		
	8,3	Reinforcement				
		High tensile steel bars for bars of diameter:				
		10 mm to 16 mm	t	0,65		
		Mild steel bars for bars of diameter:				
		8 mm to 16 mm	t	0,10		
		Welded mesh:				
		Ref 617	m²	3 120,00		
	-			TOTAL CARR	ED FORWARD	

Page 11

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 450mm diam. concrete stormwater pipes	m 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										
			TO	TAL CARRIED	TO SUMMARY	TOTAL CARRIED TO SUMMARY							

Page 12

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	930,00		
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 - TO	TAL CARR	IED TO SUMMARY				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
	SABS 1200DB	SCHEDULE 3 : WATRER SUPPLY PIPELINES AND WATER SOURCE EARTHWORKS : PIPE TRENCHES		¥II		
3,1		SITE CLEARANCE				
3.1.1	8.3.1(a)	Clear 3m wide vegetation and trees of girth up to 1m	m	286,00		
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	m³	115,00		
3.2.1.1	8.3.2(b)	Extra-over item 3.2.1 incl. for excavation (provisional) in :				
		a) Intermediate material b) Hard rock material	m³ m³	40,00 10,00		
3.2.1.2		Extra over Item 3.2.1				
3.2.1.3	8.3.2(c)	a) Backfill and compact by means of labour intensive construction methods in layers of 200mm compacted to 90% mod AASHTO Excavate unsuitable material from trench bottom and dispose thereof within the	m³	43,00		
		freehaul distance (Provisional)	m³	0,00		
TOTAL CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BR	ROUGHT FOR	WARD	
3.2.2		EXCAVATION ANCILLARIES				
3.2.2.1	8.3.3.1(a)	Imported backfill materials from designated borrow pits (Only if approved by Engineer)	m³	0,00		
3.2.2.2	8.3.3.2	Opening up and closing down of designated borrow bit	No.	-		
3.2.2.3	8.3.3.3	Compaction in road reserves	m³	0,00		
3.2.2.4	8.3.3.4	Overhaul :				
		a) Short haul b) Truck haul	m³ m³/km	- -		
3.2.3		FINISHING				
	8.3.6.1	Reinstate road surfaces complete with:				
		a) Gravel b) 30mm premix	m² m²	-		
3.2.4		PROVISION OF BEDDING (PIPES)				
3.2.4.1	B 8.2.1	Provision of bedding material from trench excavations				
		a) Selected granular material b) Selected fill material	m³ m³	43,00 43,00		
3.2.4.2		Provision of bedding material by importation from other necessary excavations (freehaul within the village				
		a) Selected granular material b) Selected fill material	m³ m³	43,00 43,00		
TOTAL CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
	TALL TALL		TOT	AL BROUGHT	FORWARD	
3.2.4.4	8.2.3	Concrete bedding	m³	0,00		
3.2.4.5	8.2.4	Encasing of pipes in Class 19/20 concrete	m³	0,00		
3.2.4.6	8.2.5	Overhaul of material for bedding cradle and selected fill blanket	m³km	0,00		
3.2.5	1200L	PIPEWORK				
	8.2.1	Supply, lay, joint, bed, test and disinfect the following pipes complete with couplings to the relevant SABS standards including short lengths (all uPVC pipes to comply with DWS1160)				
3.2.5.1		uPVC pipes				
		a) 75 Class 12 b) 75 Class 9	m m	- -		
3.2.5.2		HDPE pipes Type IV				
		a) 50 mm class 4 b) 50 mm class 6 c) 50 mm class 10	m m m	286,00 - -		
3.2.5.3		GMS pipes (medium duty)				
		a) 15 mm Ø b) 20 mm Ø c) 25 mm Ø	m m m	- - -		
TOTAL CA	ARRIED FOR	WARD	<u> </u>			

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOT	AL BROUGHT	FORWARD	
3.2.6		VALVES				
3.2.6.1		Line valve assemblies.				
		Extra over item F.6 for supplying, installing, bedding and testing line valve assemblies as per Drawing complete cutting of pipes and couplings included (all valves to comply with DWS 2510)				
		a) 50 mm b) 75 mm	No. No.	0,00 0,00		
3.2.6.2		Scour valve assemblies				
		Extra over item F.6 for supplying, installing, bedding and testing scour valve assemblies as per Drawing complete. Scour tee, cutting of pines and couplings				
		a) On 50 mm dia main	No.	5,00		
3.2.6.3		Ditto for 40 Ø and smaller pipes as detailed in Drawina for the followina diameters				
		a) 25 Ø b) 32 Ø c) 40 Ø	No. No. No.	- - -		
3.2.6.4		Air valve assemblies				
		Extra over item D.6 for supplying, installing and testing air valve assemblies as per Drawing complete				
		a) On 50 mm and 64 mm Ø main	No.	1,00		
TOTAL CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTA	AL 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 ii) 4 Taps	No. No.	4,00 0,00		
3.2.7.2		Complete supply, install and test multiple domestic draw off : standard type as detailed in Drawing	No.	1,00		
3.2.7.3		Complete supply, install and test garden standpipe as detailed in Drawing	No.	1,00		
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 pines 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 CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTA	AL BROUGHT	FORWARD	
		Tees				
		e) 75 x 75 mm	No.	-		
		Reducers				
		f) 90 x 75 mm g) 110 x 75 mm	No. No.	-		
		End caps				
		h) 63 mm Ø i) 75 mm Ø	No. No.	- -		
		Double Socket				
		j) 75 mm Ø	No.	-		
		Repair Coupling				
		k) 63 mm Ø I) 75 mm Ø	No. No.	-		
		Adaptor for steel (BSP) pipes				
		m) 75 x 50 mm BSP n) 75 x 80 mm BSP	No. No.	- -		
		Flanged adaptor				
		o) 75 mm Ø	No.	-		
		Saddle drilled 32 BSP				
		p) 75 mm Ø	No.	-		
TOTAL CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOT	AL BROUGHT	FORWARD	
3.2.9		FITTINGS FOR THREADED STEEL, MALLEABLE STEEL/IRON PIPE SPECIALS AND FITTINGS				
		Screwed flanges				
		a) 32 ND b) 40 ND	No. No.	-		
		Nipple				
		a) 15 ND b) 20 ND c) 25 ND	No. No. No.	- -		
		Tee				
		a) 15 x 15 ND b) 20 x 20 ND c) 25 x 25 ND d) 32 x 32 ND	No. No. No. No.	-		
		Socket Union				
		a) 15 ND b) 20 ND c) 25 ND d) 32 ND	No. No. No. No.	- - -		
		Reducing Bush				
		a) 20 x 15 ND b) 25 x 15 ND c) 25 x 20 ND	No. No. No.	- - -		
		Bend				
		a) 90° M/F : 15 Ø b) 90° M : 15 Ø c) 90° M/F : 20 Ø	No. No. No.	-		
TOTAL CA	ARRIED FOR		INU.	-		

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	Estimated	RATE	AMOUNT
	REFRES		T0T	QTY	50004400	
		d) 90° M : 20 Ø	No.	AL BROUGHT	FORWARD	
		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				
		Elbow for :				
		a) 50 mm Ø	No.	12,00		
		Equal Tees				
		a) 50 mm Ø	No.	10,00		
		Unequal tees				
		a) 32 x 25 ND	No.	1,00		
TOTAL CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	Estimated	RATE	AMOUNT
	REFRES			QTY		
				AL 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 d) 50 ND	No. No.	1,00 1,00		
		d) 50 ND	INO.	1,00		
3.2.11		SUNDRIES				
3.2.11.1		Encasing in Class 15/19 concrete	m³	2,00		
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	m³	2,00		
		b) Rough formwork	m²	2,00		
3.2.11.4		Stone pitching including supply and placing of stone and gravel backing				
		a) Grouted, minimum thickness 300mm	m²	0,00		
		b) Ungrouted, minimum thickness 300mm	m²	0,00		
TOTAL 6:	DDIED FAR	<u> </u>				
TOTAL CA	ARRIED FOR	WAKU				

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	Estimated	RATE	AMOUNT
	REFRES			QTY		
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 nines	m ³	AL BROUGHT 0,00	FORWARD	
3.2.13		Construction of manholes as per drawing	No.	0,00		
3.2.14		BOREHOLE DEVELOPMENT				
		Geohydrological Servies				
		Sitting of drilling sites. Alowance to be made for desk study, site assessment, drilling supervision, testing supervision, and reporting.	No	1,00		
		Borehole Drilling				
		Site Establishment/De-establishment				
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site of the drilling batch.	No	1,00		
		Drilling				
		Drilling of 165mm diameter borehole in non- collapsible material.	m	1,00		
		Odex drilling in collapsible material and where ordered by the Geohydrologist of 254mm diameter borehole. Rate to include supply, delivery and installation of at least				
		6mm sidewall Odex casing.	No	120,00		
TOTAL CA	ARRIED FOR	• WARD				

Steel casing (plain), 165 mm (state wall thickness here as 3 mm) Steel casing (slotted), 165 mm (state wall thickness here as 4 mm) Site finishing Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse Removal of existing pumphouse 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	ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
Steel casing (plain), 165 mm (state wall thickness here as 3 mm) Steel casing (slotted), 165 mm (state wall thickness here as 4 mm) Site finishing Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 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 fiftings		REFRES			-7		
thickness here as 3 mm) Steel casing (slotted), 165 mm (state wall thickness here as 4 mm) Site finishing Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No Removal of existing pumphouse No Removal of existing pumphouse No 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 fiftings			Steel casing (plain), 165 mm (state wall	TOTA	AL BROUGHT	FORWARD	
thickness here as 4 mm) Site finishing Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 Removal of existing pumphouse No 0,00 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 fiftings				m	1,00		
Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 Removal of existing pumphouse No 0,00 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				m	1,00		
disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. No 1,00 3.2.15 BOREHOLE REHABILITATION - (PROVISIONAL) Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 Removal of existing pumphouse No 0,00 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			Site finishing				
(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 0,00 Removal of existing pumphouse No 0,00 Removal of existing pump No 0,00 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			disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal,	No	1,00		
Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 Removal of existing pump No 0,00 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	3.2.15						
borehole. Rate to include inter-borehole moves and de-establishment from site No 0,00 Removal of existing pumphouse No 0,00 Removal of existing pump No 0,00 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			Site Establishment/De-establishment				
Removal of existing pumphouse No 0,00 Removal of existing pump No 0,00 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			borehole. Rate to include inter-borehole	No	0.00		
Removal of existing pump 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				INO	0,00		
Positive displacement pump Removal using cable-tool (jumper) drilling rig of columns instalations diameter, 25mm- 100mm upto 120m. Rate to include all pipe			Removal of existing pumphouse	No	0,00		
Removal using cable-tool (jumper) drilling rig of columns instalations diameter, 25mm- 100mm upto 120m. Rate to include all pipe			Removal of existing pump	No	0,00		
rig of columns instalations diameter, 25mm- 100mm upto 120m. Rate to include all pipe			Positive displacement pump				
			rig of columns instalations diameter, 25mm- 100mm upto 120m. Rate to include all pipe	No	0,00		
TOTAL CARRIED FORWARD	TOTAL CA	RRIED FOR	WARD				

	Site Establishment/De-establishment Mobilisation and set up of plant to/at first borehole. Rate to including inter-borehole	TOTA	AL BROUGHT	FORWARD	
	Mobilisation and set up of plant to/at first				
	moves and de-estalishment from Site, of the given drilling batch	No	1,00		
	Pump testing of borehole.				
	Rate to include the following:installation of pump testing equipment and remove after, calibration testing, 24hr constant testing, recovery measurements, data recording				
	and reporting.	No	1,00		
	Sampling for water quality testing	No	1,00		
	BOREHOLE PUMPS AND APPURTENANCES				
3.2.16	NEW BOREHOLE INSTALLATION				
	Allow an amount of R25,000.00 for complete erection of concrete pump house.	No	5,00		
	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	10,00		
TOTAL CAR					

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTA	AL 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, spacres, 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 m³/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 m³/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 CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTA	AL BROUGHT	FORWARD	
		7,5 kW	No	-		
		11 kW 15 kW	No	1,00		
			No	-		
		18,5 kW	No	-		
3.2.17		22 kW TESTING AND COMMISSIONING	No	-		
		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 m³/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 CA	ARRIED FOR	WARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTA	AL 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		
3.2.18		TESTING AND COMMISSIONING				
		Testing and commission borehole installation includibg pumps, motrs, control system and verify discharge and head characteristics	No	1,00		
		Eletricity Supply				
		Supply material and erect a three phase electricity power line to the new borehole	No	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 2 200mm 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)		10		
		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 renainting		-		
TOTAL CA	ARRIED TO S	UMMARY				

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	m³	140,00		
	b) Exceeding 1,0m but not exceeding 2.0m	m³	0,00		
4,2	Extra-over all excavations in pickable material irrespective of depth, for excavating in:-				
4.2.1	Intermediate excavation	m³	30,00		
4.2.2	Hard rock excavation	m³	10,00		
4,3	Excavation Ancilliaries				
4.3.1	Excavate and dispose of unsuitable material from trench bottom (provisional)	m³	0,00		
4.3.2	Make deficiency in backfill material (Provisional)				
	a) from other necessary excavation on Site	m³	0,00		
	b) by importation designated borrow pits	m³	0,00		
	c) Compaction in platform reserves	m³	0,00		
4,4	Existing services				
	a) Services that adjoin a trench	m	0,00		
	b) Services that intersect a trench	No	0,00		
	<u> </u>		Amoui	nt Carried Forward	

SCHEDULE 4: EXTERNAL SEWER RETICULATION

A.5. BEDDING (PIPES) 4.5.1 Provision of Bedding from Trench Excavation a) Selected granular material b) Selected fill material 4.5.2 Supply only of Bedding by Importation From Commercial Sources (provisional) a) Selected fill material m³ Selected granular material b) Selected fill material m³ 4.6. SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall bipe (conformina to SABS 891), complete with fittinas a) 110mm dia b) 150mm diameter c) 225mm diameter d) 375mm diameter m - c) 225mm diameter d) 375mm diameter m - d) 375mm diameter n - d) 375mm diameter d) 375mm diameter No 10,00 b) 110mm Access bends No 10,00 c) 160mm Bends d) 160mm Access bends No - e) 160mm Access Junctions No -	Item	Description	Unit	Qty	Rate	Amount
4.5.1 Provision of Bedding from Trench Excavation a) Selected granular material b) Selected fill material 4.5.2 Supply only of Bedding by Importation From Commercial Sources (provisional) a) Selected granular material b) Selected fill material 4.6.1 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter d) 375mm diameter m - d) 375mm diameter 4.6.2 Extra over items 11.3.1 for specials a) 110mm Access bends b) 110mm Access junctions c) 160mm Bends d) 160mm Access bends No l0,00 No l0				Amoun	t Brought Forward	
a) Selected granular material b) Selected fill material 4.5.2 Supply only of Bedding by Importation From Commercial Sources (provisional) a) Selected granular material b) Selected fill material 4.6 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891). complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter 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 c) 160mm Bends d) 160mm Access bends No -	4,5	BEDDING (PIPES)				
b) Selected fill material 4.5.2 Supply only of Bedding by Importation From Commercial Sources (provisional) a) Selected granular material b) Selected fill material 4.6 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891). complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter 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 c) 160mm Bends d) 160mm Access bends No -	4.5.1	Provision of Bedding from Trench Excavation				
4.5.2 Supply only of Bedding by Importation From Commercial Sources (provisional) a) Selected granular material b) Selected fill material 4.6 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter m - c) 225mm diameter 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 c) 160mm Bends d) 160mm Access bends No -		a) Selected granular material	m³	32,00		
Sources (provisional) a) Selected granular material b) Selected fill material 4.6 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter c) 225mm 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 c) 160mm Bends d) 160mm Access bends No -		b) Selected fill material	m³	32,00		
b) Selected fill material 4.6 SEWERS PIPELINES 4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter 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 C) 160mm Bends d) 160mm Access bends No -	4.5.2					
4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891). complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter d) 375mm diameter d) 375mm diameter Extra over items 11.3.1 for specials a) 110mm Access bends No 10,00 b) 110mm Access junctions c) 160mm Bends d) 160mm Access bends No -		a) Selected granular material	m³			
4.6.1 Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter c) 225mm diameter 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 c) 160mm Bends d) 160mm Access bends No -		b) Selected fill material	m³			
wall pipe (conforming to SABS 891), complete with fittings a) 110mm dia b) 150mm diameter 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 c) 160mm Bends d) 160mm Access bends No -	4,6	SEWERS PIPELINES				
b) 150mm diameter	4.6.1					
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 -		a) 110mm dia	m	300,00		
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 -		b) 150mm 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 No d) 160mm Access bends No -		c) 225mm diameter	m	-		
a) 110mm Access bends b) 110mm Access junctions c) 160mm Bends d) 160mm Access bends No No No To,00 No No No No No To,00		d) 375mm diameter	m	-		
b) 110mm Access junctions No 10,00 c) 160mm Bends d) 160mm Access bends No -	4.6.2	Extra over items 11.3.1 for specials				
c) 160mm Bends d) 160mm Access bends No -		a) 110mm Access bends	No	10,00		
d) 160mm Access bends No -		b) 110mm Access junctions	No	10,00		
		c) 160mm Bends	No			
e) 160mm Access Junctions No -		d) 160mm Access bends	No	-		
		e) 160mm Access Junctions	No	-		

SCHEDULE 4: EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
			Amoun	t 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				
4.9.1.2	formwork, reinforcement, reinforcement, etc. Anchor block size 600 x 600mm	No			
4.10	EXISTING SERVICES				
4.10.1	Connection to existing sewer				
1.10.1.1	200mm Diameter pipe to existing manhole	No			
1.10.2	Raising or lowering of existing manholes				
1.10.2.1	Remove cover and frame then lower the manhole to required level, complete with all necessary accessories.	No			

SCHEDULE 4: EXTERNAL SEWER RETICULATION

4,11 SEPTIC TANK 4.11.1 Construct Septic tank with all connections as per Engineers deign No 1,00	Item	Description	Unit	Qty	Rate	Amount
4.11.1 Construct Septic tank with all connections as per Engineers deign				Amoun	t Brought Forward	
deign deign	4,11	SEPTIC TANK				
	4.11.1	deign	No	1,00		
Amount Carried to Final Summary						

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 Colouring)	m²	0,00		
	8.2.2	60mm Type S-A 35mPa for roadway (Grev Colouring)	m^2	615,00		
	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	m²	615,00		
		Excavate to the line and level as shown on the drawings and place stockpile materials as directed by the Engineer. Compacted to 93% MOD AASHTO	m³	185,00		
		a) Selected granular material	m³	93,00		
		b) Selected fill material	m³	93,00		
		c) 20mm Thick bedding sand vibrated to	m³	15,00		
		Amount Ca	rried to Fi	nal Summary		

DEPARTMENT OF EDUCATION: LIMPOPO

NAPSADI SECONDARY SCHOOL

BOQ FOR CIVIL ENGINEERINGS SERVICES

SUMMARY OF BILL OF QUANTITIES

	11
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 Napsadi Secondary School
DISCIPLINE Electrical Works-P&G's

Page 1 of 1

Item	Description	Unit	Qty	Rate	Total
1.0	P&G's for Electrical Installation:				
	All overhead costs, for a contract period as per				
	Main Contractor's programme and appointed as a				
	Selected Sub-Contractor ; i.e.:				
	Site Establishment	Sum	1		
	Travelling	Sum	1		
	Transport and Off-loading	Sum	1		
	Insurances	Sum	1		
	Safety Requirements	Sum	1		
	Site Supervision	Sum	1		
	•				
		- P&G'S/ carried for			

S and I=Supply and Install

PROJECT Limpopo Storm Damaged Schools
SCHOOL Napsadi Secondary School
DISCIPLINE Electrical Works-Admin Block

ITEM	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>AMOUNT</u>
L.0	Power Supplies				
1.1	Supply and installation for 25KVA pole top transformer, 11KV/230kV, Single				
1.1	phase				
	Supply	No	1		
	Install	No	1		
1.2	Allow for modifications to the main distribution board for new				
	connections. Allow for the following:				
	New switchgear, 100A 1PH 230V, low voltage circuit breaker				
	Cleaning				
	Tightening all connections				
	Neaten existing wiring				
	Blank off spare spaces				
	Legend card				
	Close off unused spaces				
	Supply	Sum	1		
	Install	Sum	1		
1.2.1	Issue CoC for DB	Sum	1		ļ
1.3	Surface mounted electrical Main Distribution Board complete with				
	weatherproof enclosure and lockable doors (Refer to SLD)				
	Distribution Panel Low Voltage				
	Supply	Sum	1		
	Install	Sum	1		
1.4	Admin Block DB (Refer to SLD)				
	Supply	Sum	1		
	Install	Sum	1		
1.5	Issue Cocs	No	2		
	Barrant and Valtage California				
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	25mm² PVC 2 core + ECC				
	Supply	m	100		
	Install	m	100		
	2				
2.2	16mm² PVC 2 core + ECC				
	Supply	m	50		
	Install	m	50		
	Fire water 450 many wide w 600 many days as he had displayed				
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.				
	Install	m	150		
	<u></u>				
2.4	Terminations				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
2.4.1	Supply and Install				
	25mm ² PVC 2 core + ECC	No	2		
	16mm ² PVC 3 core + ECC	No	2		ļ
					ļ
					ļ
	1	1	l		1

	/Sub-Total b	prought for	ward fro	n previous page	
3	Lighting Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	Install" items shall include all work for a complete				
	working installation, switch with cover, conduits				
	conduits, wall box, etc.				
3.1	43W LED Surface Mount Light Fitting 1500mm, as desribed in the BoQ and signle line diagrams				
	Supply	No	45		
	Install	No	45		
	2X18W LED Round Bulkhead, Weatherproof, as desribed in the BoQ and				
3.2	signle line diagrams				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting, as desribed in the BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
2.4	26W LED Surface mount light fitting (Indoor Bulkhead), as desribed in the				
3.4	BoQ and signle line diagrams	No	4		
	Supply 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	No	_		
	Supply Install	No No	2		
3.7	Daylight Switch, 220V-240V single phase				
	Supply Install	No No	1		
	Ilistali	110	1		
3.8	6A Plugs for light fittings				
	Supply & Install	No	45		
4	Socket Outlets and Isolators				
•	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)				
	Power plug to comply to latest SANS: 164-2				
	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination				
4.1	Plug)				
	Supply	No	10		
	Install	No	10		
4.2	16A 3pin Double Socket Outlet complete with cover				
	Supply	No	20		
-	Install	No	20		
	DVC Conductors				
	PVC Conductors Supply and installation copper PVC insulated conductors in wire ways,	 			
4.3	including all necessary accessaries.				
	2,5mm ² 2 core				
	Supply	m	300		1
	Install	m	300		1

	4mm ² 2 core					
	Supply	m	400			
	Install	m	400			
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessaries					
	2,5mm ²					
	Supply	m	150			
	Install	m	150			
	4mm ²					
	Supply	No	200			
	Install	m	200			
4.5	P9000 Trunking					
	Supply	m	20			
	Install	m	20			
	Sub-Total carried forward to next page/					

	/Sub-	/Sub-Total brought forward from previous page				
4.6	2 Compartmental Power Skirting					
	Supply	m	40			
	Install	m	40			
5	General Items					
5.1	20mm PVC Conduit					
	Supply and Install	m	210			
5.2	25mm Galvanised Steel Conduit, provision for external electrical installations					
	Supply and Install	m	100			
6	Earthing and Lightning Protection	Sum	1			
7	Test Commission and Issue COC for Site	Sum	1			
	0	- 1	·	to Summary…/		

PROJECT Limpopo Storm Damaged Schools
SCHOOL Napsadi Secondary School
DISCIPLINE Electrical Works_Classrooms (New)

ITEM	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>AMOUNT</u>
.0	Power Supplies				
.1	Recessed mounted electrical distribution board complete with				
	lockable doors				
	DB-01				
	Supply	Sum	1		
	Install	Sum	1		
.2	Issue Cocs	No	1		
	Power Low Voltage Cables				<u> </u>
					+
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V),				
	cables to SANS 1507 laid in trenches and/or sleeves				
1	6mm ² PVC 2 core + ECC				
.1					
	Supply	m	105		
	Install	m	105		
	Excavate 450 mm wide x 600 mm deep cable trench, bedding of				
	70mm plus sand cover over cables to a depth of 75mm, backfilling				
.3	and compact in accordance with the specifications per linear meter.				
	Supply and Install	m	105		
.4	Terminations				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
.4.1	6mm ² PVC 2 core + ECC				
	Supply & Install	No	2		
	зарргу & пізсан				
	Lighting				
	Supply, deliver, install, test and commission SABS approved light fittings				
	complete with lamps.				
	Install" items shall include all work for a complete				
	working installation, switch with cover, conduits				
	conduits, wall box, etc.				
	43W LED Surface Mount Light Fitting 1500mm, as desribed in the BoQ and				
.1	signle line diagrams	NI-			
	Supply	No	30		
	Install	No	30		
	2X18W LED Round Bulkhead, Weatherproof, as desribed in the BoQ and				
.2	signle line diagrams				
	Supply	No	6		
	Install	No	6		
	100W LED linear surface mounted low bay light fitting, as desribed in the				
.3	BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
.4	BoQ and signle line diagrams				
	Supply	No	6		
	Install	No	6		
	IIIstaii	140	0		
			I	1	1

	-				
	/Sub-Total b	prought for	ward fro	m previous page	
3.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch	No	- 10		
	Supply	No	10		
	Install	No	10		
3.6	2 way Switch				
5.0		No	2		
	Supply Install	No	2		
	nistali	110			
3.7	Daylight Switch, 220V-240V single phase				
	Supply	No	2		
	Install	No	2		
3.8	6A Plugs for light fittings				
	Supply & Install	No	30		
1	Socket Outlets and Isolators				
	Note: "Install" items shall include <u>all</u> work for a complete				
	working installation, outlet boxes with	1			
	cover plates, outlet, conduit, chasing (unless otherwise stated)	 		+	
	Power plugs to comply to latest SANS: 164-2	1			
	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination			1	
4.1	Plug)				
	Supply	No	15		
	Install	No	15		
1.2	16A 3pin Double Socket Outlet complete with cover				
	Supply	No	5		
	Install	No	5		
	PVC Conductors				
	Supply and installation copper PVC insulated conductors in wire ways,				
4.3	including all necessary accessaries.				
	2,5mm ² 2 core				
	Supply	m	300		
	Install 4mm² 2 core	m	300		
		m	400		
	Supply Install	m	400		
		- ""	400		
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessaries				
	2,5mm ²	1			
	Supply	m	150		
	Install	m	150		
	4mm ²				
	Supply	No	200		
	Install	m	200		
					-
4.5	P9000 Trunking				
	Supply	m	10		
	Install	m	10		
1.6	2 Compartmental Power Skirting			ļ	
	Supply	m	20	ļ	
	Install	m	20		
	6 10	 			
5 - 1	General Items	 			
5.1	20mm PVC Conduit	m	150		
	Supply and Install	m	150	+	
	25mm Calvanicad Stool Conduit provision for outcome plactuin-1	1			
5.2	25mm Galvanised Steel Conduit, provision for external electrical installations				
,. <u>L</u>	Supply and Install	m	100		
	pappi, and motor		100	,	

6	Earthing and Lightning Protection	Sum	1		
7	Test Commission and Issue COC for Site	Sum	1		
		0.7.			
		Sub-Total carried	torward	to Summary/	

PROJECT Limpopo Storm Damaged Schools
SCHOOL Napsadi Secondary School

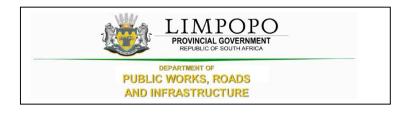
DISCIPLINE Electrical Works_Classrooms (Rennovated)

ITEM	DESCRIPTION	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	AMOUNT
0	Power Supplies				
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	4		
	Install	Sum	4		
4.4					
.1.1	Issue CoC for DB	Sum	4		
	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				
.1	Check and make good				
	Install	Sum	4		
	Lighting				
	Supply, deliver, install, test and commission SABS approved light fittings				
	complete with lamps.				
	Install" items shall include all work for a complete				
	working installation, switch with cover, conduits				
	conduits, wall box, etc.				
	43W LED Surface Mount Light Fitting 1500mm, as desribed in the BoQ and				
.1	signle line diagrams				
	Supply	No	60		
	Install	No	60		
	2X18W LED Round Bulkhead, Weatherproof, as desribed in the BoQ and				
.2	signle line diagrams				
	Supply	No	20		
	Install	No	20		
	100W LED linear surface mounted low bay light fitting, as desribed in the				
.3	BoQ and signle line diagrams				
	Supply	No	0		
	Install	No	0		
	26W LED Surface mount light fitting (Indoor Bulkhead), as desribed in the				
.4	BoQ and signle line diagrams				
	Supply	No	20		
	Install	No	20		
.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch				
	Supply	No	16		
	Install	No	16		
		1	1		

	/Sub-Total b	orought fo	l rward from	m previous page	
3.6	2 way Switch	NI -			
	Supply	No	4		
	Install	No	4		
2.7	Doublight Cuiteb 220V 240V single phase				
3.7	Daylight Switch, 220V-240V single phase	No			
	Supply	+	4		
	Install	No	4		
2.0	6A Plugs for light fittings				
3.8	Supply & Install	No	60		
	Supply & Ilistali	140	60		
4	Socket Outlets and Isolators				
4	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)				
	Power plugs to comply to latest SANS: 164-2				
	rower plays to comply to latest SANS. 104-2				
	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination				
4.1	Plug)			1	
	Supply	No	32		
	Install	No	32		
		T			
4.2	16A 3pin Double Socket Outlet complete with cover			1	
	Supply	No	8		
	Install	No	8		
	install				
	PVC Conductors				
	Supply and installation copper PVC insulated conductors in wire ways,				
4.3	including all necessary accessaries.				
	2,5mm ² 2 core				
	Supply	m	1200		
	Install	m	1200		
	4mm ² 2 core				
	Supply	m	1400		
	Install	m	1400		
	Supply and install bare copper earth conductors in wireways, including all				
4.4	necessary accessaries				
	2,5mm ²				
	Supply	m	600		
	Install	m	600		
	4mm ²				
	Supply	No	700		
	Install	m	700		
4.5	P9000 Trunking				
	Supply	m	40		
	Install	m	40		
4.6	2 Compartmental Power Skirting				
	Supply	m	60		
	Install	m	60		
5	General Items				
5.1	20mm PVC Conduit				
	Supply and Install	m	220		
	· · · ·	1		1	
	25mm Galvanised Steel Conduit, provision for external electrical				
5.2	installations			1	
J	Supply and Install	m	200	1	
	ouppry and motor	<u> </u>	200	1	
6	Rennovations .	1	1		
6.1	Gut, strip and make safe	Sum	4		
J.1	Out, strip and make saic	34111	-		
7	Earthing and Lightning Protection	Sum	4		
•		, ,,,,,,		L	1

8	Test Commission and Issue COC for Site	Sum	4				
Sub-Total carried forward to Summary/							

PROJECT	Limpopo Storm Damaged Schools					
SCHOOL	Napsadi Secondary School:					
DISCIPLINE	Electrical Works- Summary					
BILL	DESCRITPTION	AMOUNT				
1	PRELIMINARIES AND GENERAL					
1.1	LIAISON WITH MUNICIPALITY	R 50,000.00				
2	ADMIN BLOCK					
3	CLASSROOMS (NEW)					
4	CLASSROOMS (RENOVATED)					
	Installation and commissioning of					
5	CCTV	R 80,000.00				
	Total Excl VAT					



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 for Demolition of Pit Toilet Block and Brick and Mortar Structure with Elevated PVC Tank, Renovations of 4 x 3 Classroom Blocks, Construction of Medium Admin Block, 1 x 3 Classroom Block, Multipurpose Classroom and External Works (Septic Tank, Water Reticulations, Walkways, Parking Bays and Fence) at Napsadi Secondary School in Makgaung Village, Moetladi in Mopani 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

402

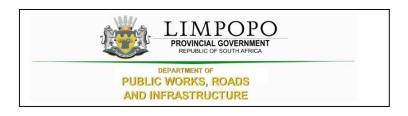
C6



PART C6.1: DATA COLLECTION TOOL

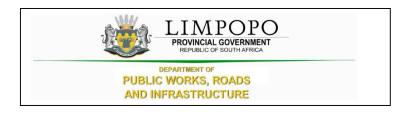


PART C7: SITE INFORMATION AND DRAWINGS

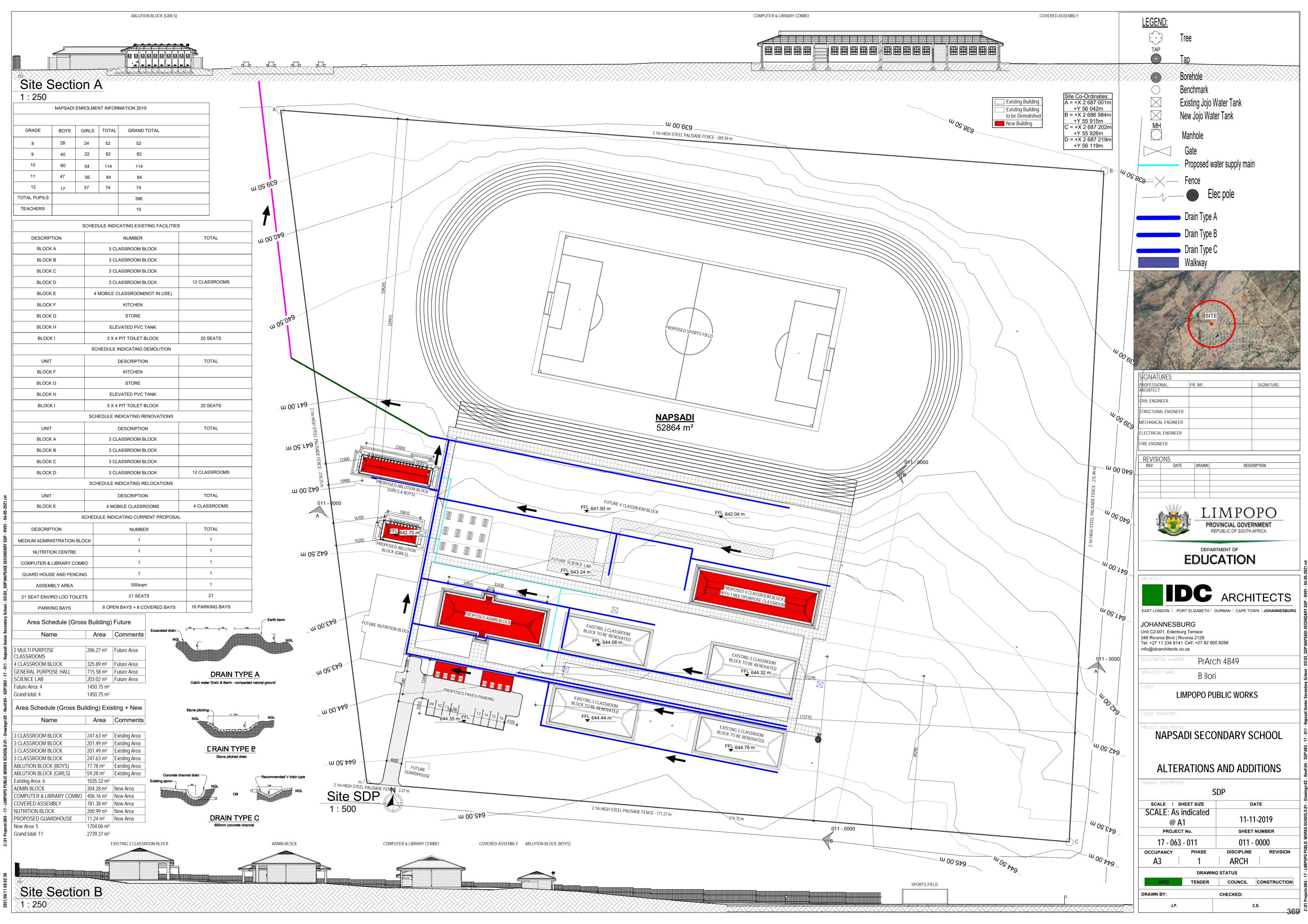


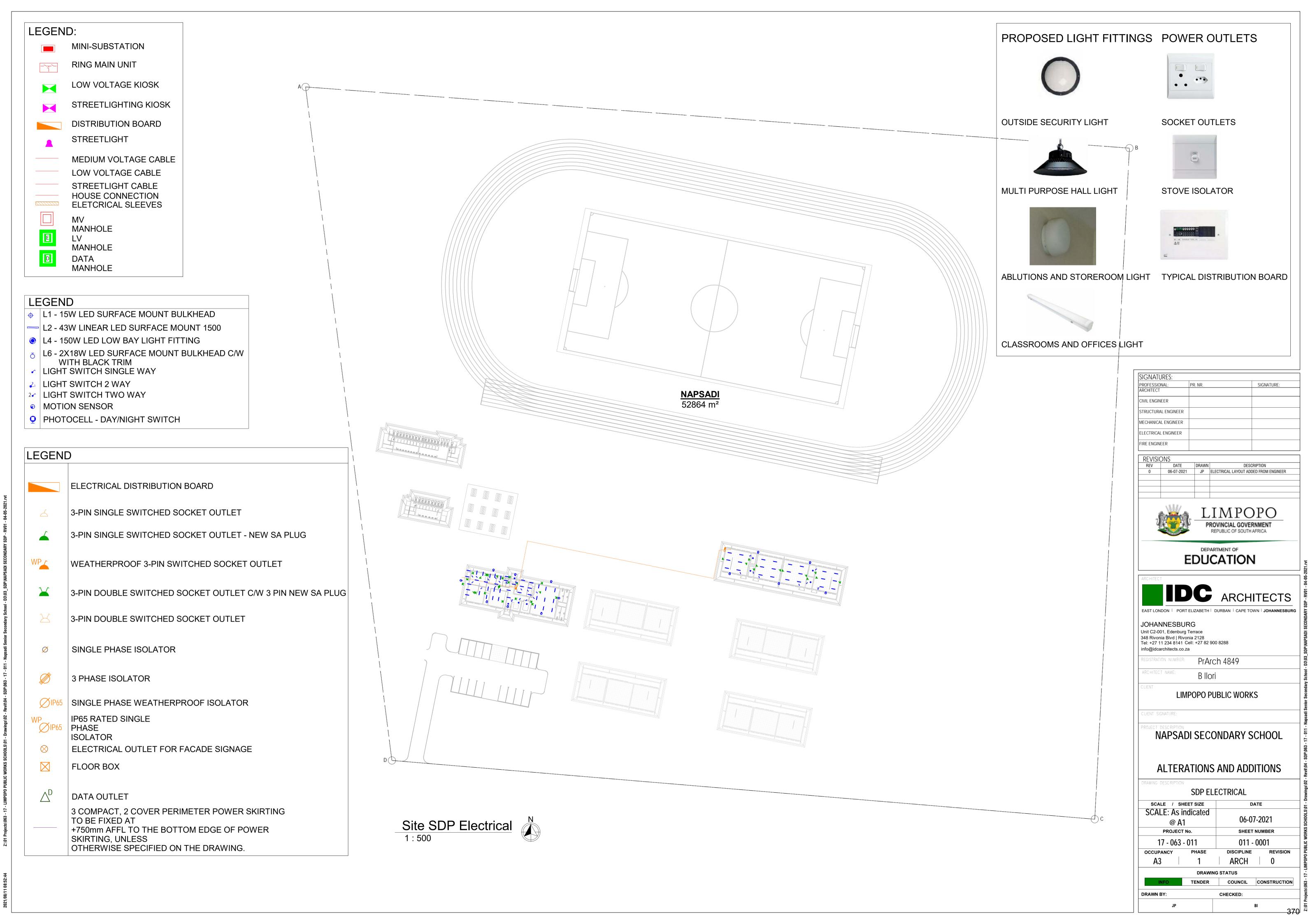
PART C7.1: SITE INFORMATION

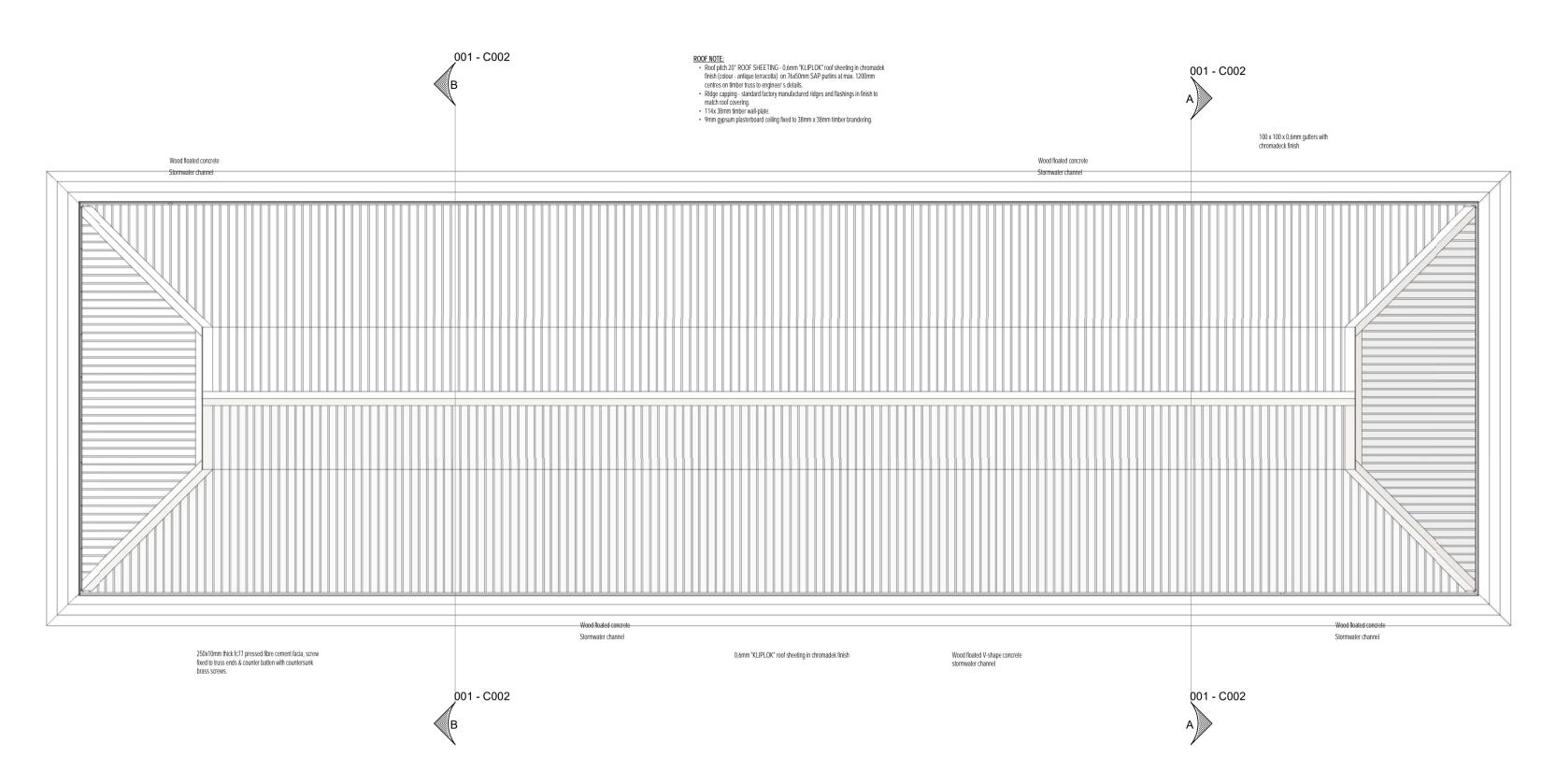
405



PART C7.2: DRAWINGS







	Wood floated concrete	8100	7 1143 410 1		1143 1063 2000 230 001 - C0		0 1145 40	07 1143 40 8100	9 1143 4		Wood floated concrete	1143	407 1143 40 8100	77 1143 41		1063 1143 230 2000		001 - 0		8100 Wood flo	07 1143 40	7 1143 50	30
	Stormwater channel				₩ B					444.0	Stormwater channel							A			ter channel		
IM Concrete drainag	age apron to slope away from building	WOI	WO1	<u> </u>	woo	WOT	WOI	WOI	W01		rainage apron to slope away	rom building W01	WO1	WO1	WO1	WOO		W01		nage apron to slope away	W01	WO1	
	05 06	W01 07	W01 08	V01 09	W02 37	W01 18	W01 17	W01 16	15	W01	32	33	W01 34	W01 35	W01 36	W02 39		27	W01 26	W01 25	24	W01 23	
	Internal walls: Approved facebrick walls in stretcherbond coarses from finished floor level . Ihereafte and paint upto ceiling		Particular and the second	002 05 STOR	REROOM		walls in stretcherbond u ed floor level . thereafter ng			The second of th	Internal walls Approved fac coarses from and paint upt	brick walls in stretcherbo inished floor level , there ceiling	ond uplo 12 after plaster			STORERO	002 07	Internal walls: Approved facebrick coarses from finishe and paint upto ceilir	k walls in stretcherbond u ed floor level . thereafter ng	upto 12 r plaster			
	ng board to back wall	CLASSROOM 01		rd fo front wall	Shelves			CLASSROOM	00	o back wall	ng board to back wall		CLACCDOMO	2	or produced to the control of the co	non-slip ceram 7 m² Shelves	rontwall			CLASSPOOM	04	o back wall	
	Omm pinnii	non-slip ceramic tiles 60 m²		Dmm black	Shelves			non-slip ceramic tiles 60 m²		ing board to	Jmm pinnir		CLASSROOM 03	3	200 H	Shelves	x board to f			CLASSROOM (non-slip ceramic tiles		ing board t	
	4000				REROOM slip ceramic					4000mm pinn	400				, and	STORERO non-slip ceram					Floor slab to be 8 Refer to engineer	9	01
	Floor slab to be 85mm thick Refer to engineer's drawings.		x walls in stretcherbond upto 12 ed floor level , thereafter plaster ng		D02 06				ck walls in stretcherbond hed floor level . thereafte ling					ck walls in stretcherbond u hed floor level , thereafter illing	pto 12 plaster	D02 08					ck walls in stretcherbond u hed floor level . thereafter lling		
	W01 01 W01 02	W01 03	_ /	Ramp COVER	W02 38 RED WALKWAY ano screed	D01 02 Ramp	W01 13	W01 12	W01 11	W01 10 Covered	W01 28	W01 29	W01 30	W01 31	D01 04 Ramp	COVERED WA	LKWAY	D01 03 Ramp	W01 22	W01 21	W01 20	W01 19	
1M Concr		330mm x 460mm scebrick column	15.82° UP 1:4	gre		ebrick Header Coarse Abo	230mm x 460mm facebrick column	8	1M C	Concrete drainage apron to slo	pe away from building		8	Facebrick Heade	r Coarse Above 230mm x facebrick o	460mm		001 - C	COO2 Increte drainage apron to	Facebrick o slope away from buildin	facebr	n x 460mm ick column	
<u>/</u>	Wood floated concrete Stormwater channel				В					Wood floated concrete S	ormwater channel							A	Wood floated concre	te Stormwater channel			
58	60 4205 80 1143 407 1143 4	07 1143 40	420 7 1143 657		460 1143 959	4205 1000 657	7 1143 40	460 07 1143 40	4205 07 1143 40	07 1143 1 1	930 170 1143 3250	4205 407 1143	460 407 1143 40) 7 1143 6	4205 57 1000	959 1143	959	4205 1000 657	7 1143 40	460 07 1143 4	4205 07 1143 40	46 7 1143 58	

Ground Floor Plan 1:100

Type Mark	Mark	Width	Height	Level	From Room Name
W01	01	1140	1011	Crayed Flags Diag	CL ACCDOOM O
W01 W01	01	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	02	1143	1311	Ground Floor Plan Ground Floor Plan	CLASSROOM 0
	03		1311	Ground Floor Plan	CLASSROOM 0 CLASSROOM 0
W01 W01	05	1143	1311 1311	Ground Floor Plan	
W01		1143		Ground Floor Plan	CLASSROOM 0 CLASSROOM 0
	06	1143	1311	Ground Floor Plan	
W01					CLASSROOM 0
W01	08	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	09	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	10	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	11	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	12	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	13	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	14	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	15	1143	1311	Ground Floor Plan	CLASSROOM 02
W01	16	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	17	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	18	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	19	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	20	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	21	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	22	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	23	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	24	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	25	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	26	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	27	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	28	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	29	1143	1311	Ground Floor Plan	CLASSROOM 03
W01	30	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	31	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	32	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	33	1143	1311	Ground Floor Plan	CLASSROOM 03
W01	34	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	35	1143	1311	Ground Floor Plan	CLASSROOM 0
W01	36	1143	1311	Ground Floor Plan	CLASSROOM 0
W02	37	1143	854	Ground Floor Plan	STOREROOM
W02	38	1143	854	Ground Floor Plan	STOREROOM
W02	39	1143	854	Ground Floor Plan	STOREROOM
W02	40	1143	854	Ground Floor Plan	STOREROOM

Grand total: 40

Grand total: 8

Door Schedule							
Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name	
D04		1000	0405	0 151			
D01	01	1000	2125	Ground Floor Plan	CLASSROOM 01		
D01	02	1000	2125	Ground Floor Plan	CLASSROOM 02		
D01	03	1000	2125	Ground Floor Plan	CLASSROOM 04		
D01	04	1000	2125	Ground Floor Plan	CLASSROOM 03		
D02	05	900	2125	Ground Floor Plan	STOREROOM	CLASSROOM 0	
D02	06	900	2125	Ground Floor Plan	CLASSROOM 02	STOREROOM	
D02	07	900	2125	Ground Floor Plan	CLASSROOM 04	STOREROOM	
D02	08	900	2125	Ground Floor Plan	STOREROOM	CLASSROOM 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 1400-H
All concrete foundations to be a minimum of 600mmx250mm. 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 or 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 interleads 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 snd 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

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

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 ballustrades 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-

the fire protection measure to be subject of a rational design or rational assessment.

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.

the means for the control and disposal in interconnected complexese subject of a rational design or rational assessment. or rational assessment.

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.

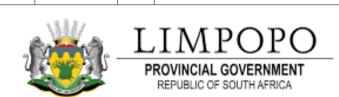
All habitable found to that 3 a minimum and the found of the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N the selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

 REV
 DATE
 DRAWN
 DESCRIPTION

 0
 29-10-2019
 HK
 ISSUED FOR CLIENT APPROVAL

 1
 09-06-2021
 HK
 ISSUED FOR CLIENT APPROVAL



DEPARTMENT OF **EDUCATION**

JOHANNESBURG

Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

PrArch 4849 B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

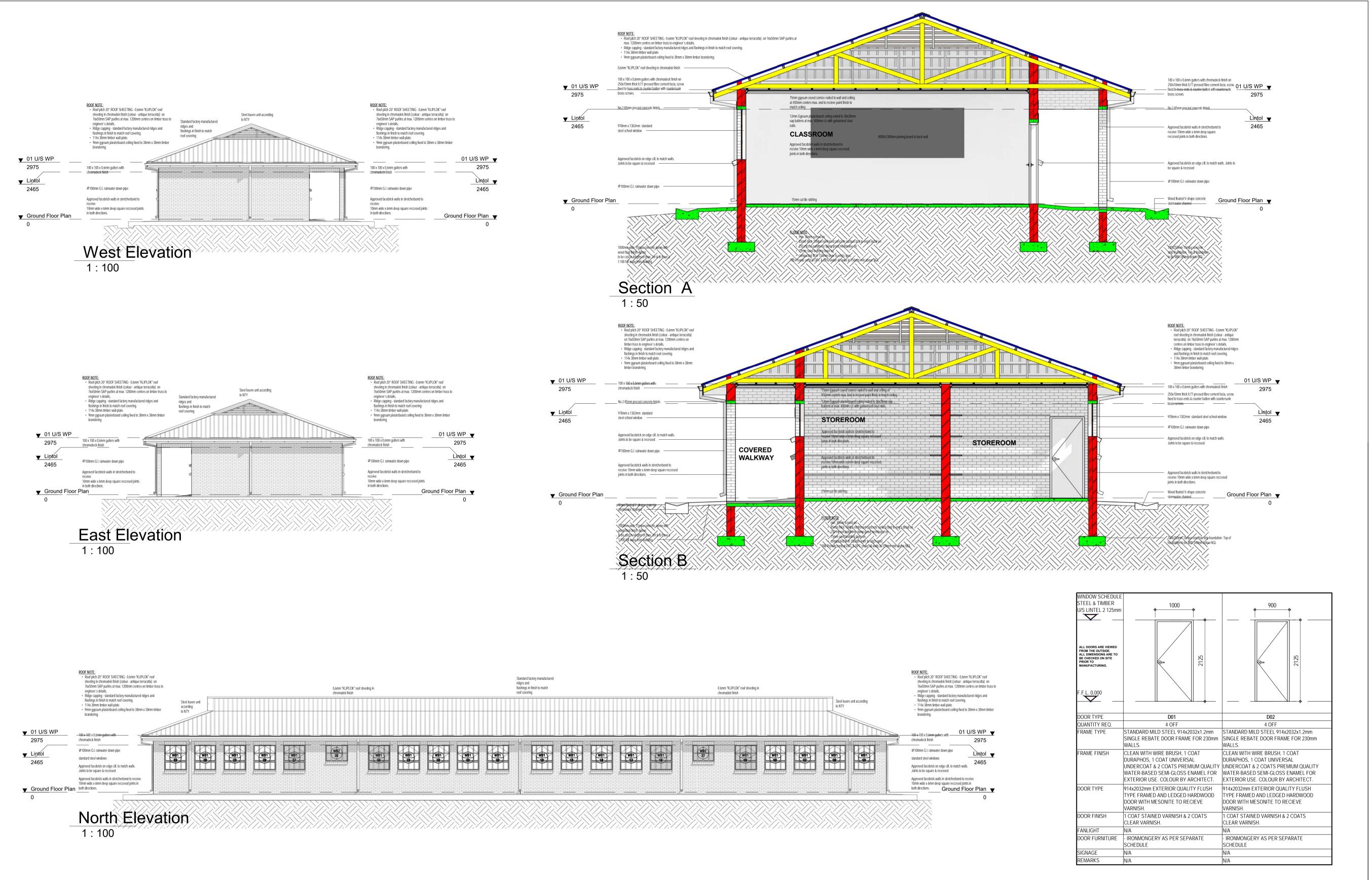
FOUR CLASSROOM BLOCK

FLOOR PLANS						
ALE / SHEET SIZE	DATE					
LE: 1:100@A1	29-10-2019					
PROJECT No.	SHEET NUMBER					

001 - C001 PHASE DISCIPLINE

DRAWING STATUS **TENDER** COUNCIL CONSTRUCTION

CHECKED: DRAWN BY:

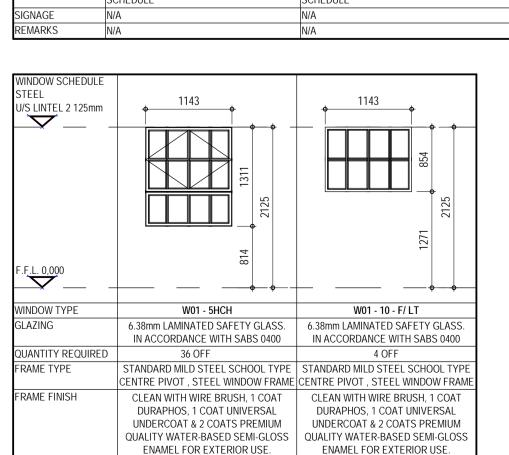


ROOF NOTE:

Roof pitch 20° ROOF SHEETING - 0,6mm "KLIPLOK" roof sheeling in chromadek finish (colour - anlique terracotta) on 76x50mm SAP purlins at max. 1200mm centres on timber truss to ridges and flashings in finish to match Roof pitch 20° ROOF SHEETING - 0,6mm "KLIPLOK" roof sheeting in chromadek finish (colour - antique terracotta) on 76x50mm SAP purlins at max. 1200mm centres on timber truss to 0.6mm "KLIPLOK" roof sheeting in 0.6mm "KLIPLOK" roof sheeting Rldge capping - standard factory manufactured ridges and Rldge capping - standard factory manufactured ridges and flashings in finish to match roof covering.

114x 38mm timber wall-plate. flashings in finish to match roof covering. 114x 38mm timber wall-plate. 9mm gypsum plasterboard ceiling fixed to 38mm x 38mm timber brandering. ▼ 01 U/S WP 01 U/S WP ▼ 100 x 100 x 0,6mm gutters with 100 x 100 x 0,6mm gutters with 2975 2975 chromadeck finish chromadeck finish Lintol \blacktriangledown standard steel windows 2465 Approved facebrick on edge cill, to match walls. Approved facebrick on edge cill, to match walls. Joints to be square & recessed Joints to be square & recessed Approved facebrick walls in stretcherbond to recei ▼ Ground Floor Plan Ground Floor Plan 10mm wide x 6mm deep square reccesed joints in

South Elevation



COLOUR BY ARCHITECT

AS PER MANUFACTURER

TO CLIENTS APPROVAL

COLOUR BY ARCHITECT

AS PER MANUFACTURER

TO CLIENTS APPROVAL

IRONMONGERY

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. <u>DIMENSIONS</u> 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 1400-H All concrete foundations to be a minimum of 600mmx250mm.

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 or otherwise

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 interleads 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 WALLS
Structural strength snd 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 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 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. TIRE PROTECTION
the fire protection measure to be in accordance with the detailed requirements of SANS 10400the 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 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.
the means for the control and disposal in interconnected complexese subject of a rational design

or rational assessment. 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 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		

 0
 29-10-2019
 HK
 ISSUED FOR CLIENT APPROVAL

 1
 09-06-2021
 HK
 ISSUED FOR CLIENT APPROVAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

> PrArch 4849 B Ilori

> > LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

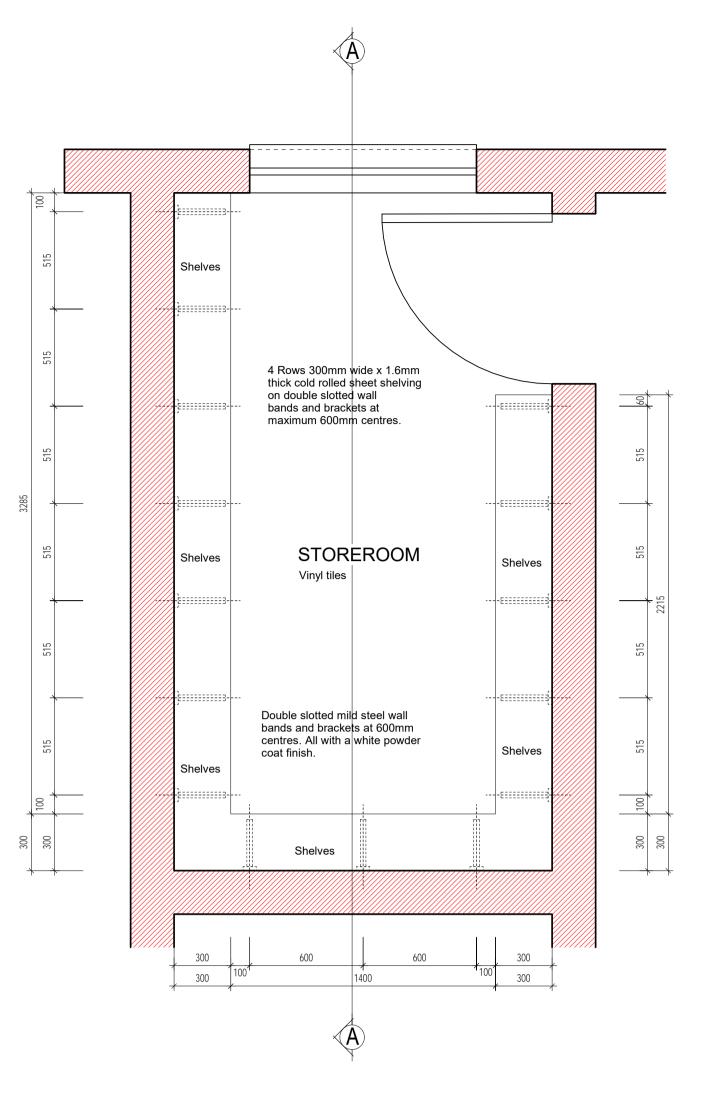
FOUR CLASSROOM BLOCK

SECTIONS & ELEVATIONS

SCALE / SI	HEET SIZE	DATI	E		
SCALE: As	indicated	4.040.0			
@ A	1	10/30/19			
PROJEC ⁻	Γ No.	SHEET NUMBER			
063	}	001 - C002			
OCCUPANCY	PHASE	DISCIPLINE	REVISION		
A3	1	ARCH	1		
DRAWING STATUS					

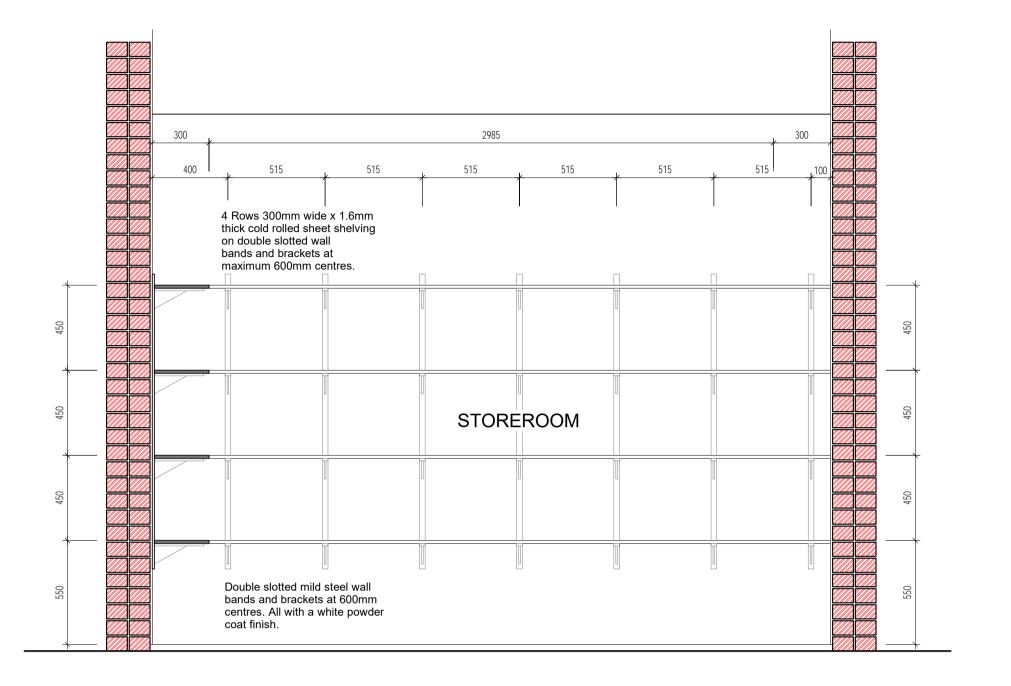
COUNCIL CONSTRUCTION

CHECKED: DRAWN BY:



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 1400-H
All concrete foundations to be a minimum of 600mmx250mm.

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 or 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 interleads 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 snd 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-

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.

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.
the means for the control and disposal in interconnected complexese subject of a rational design or rational assessment. or rational assessment.

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.

CLATING

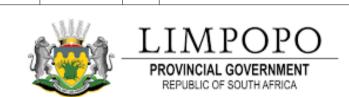
GLAZING
the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N
the selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

 REV
 DATE
 DRAWN
 DESCRIPTION

 0
 29-10-2019
 HK
 ISSUED FOR CLIENT APPROVAL

 1
 09-06-2021
 HK
 ISSUED FOR CLIENT APPROVAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG

Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288

info@idcarchitects.co.za PrArch 4849

B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

FOUR CLASSROOM BLOCK

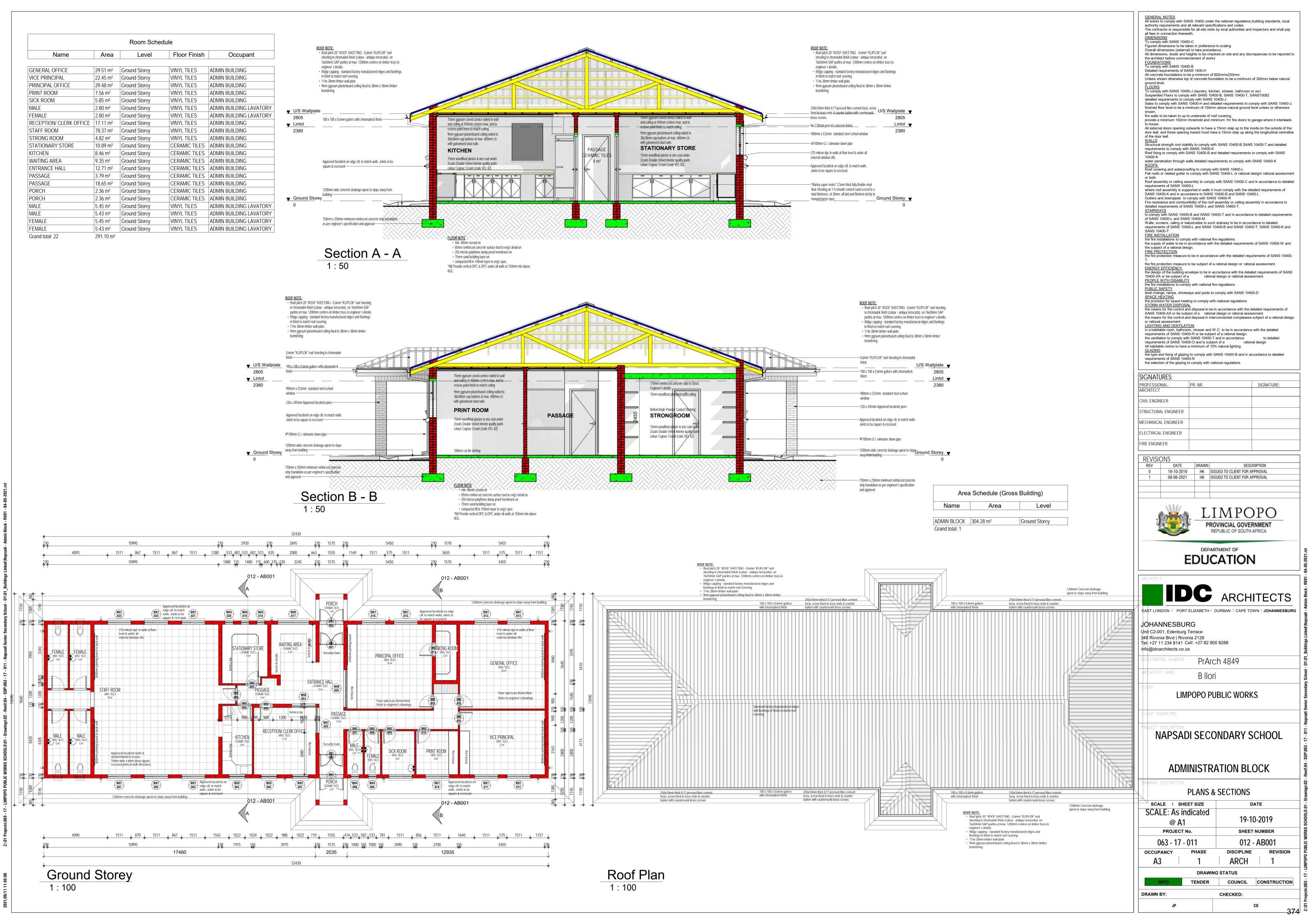
STOREROOM DETAIL

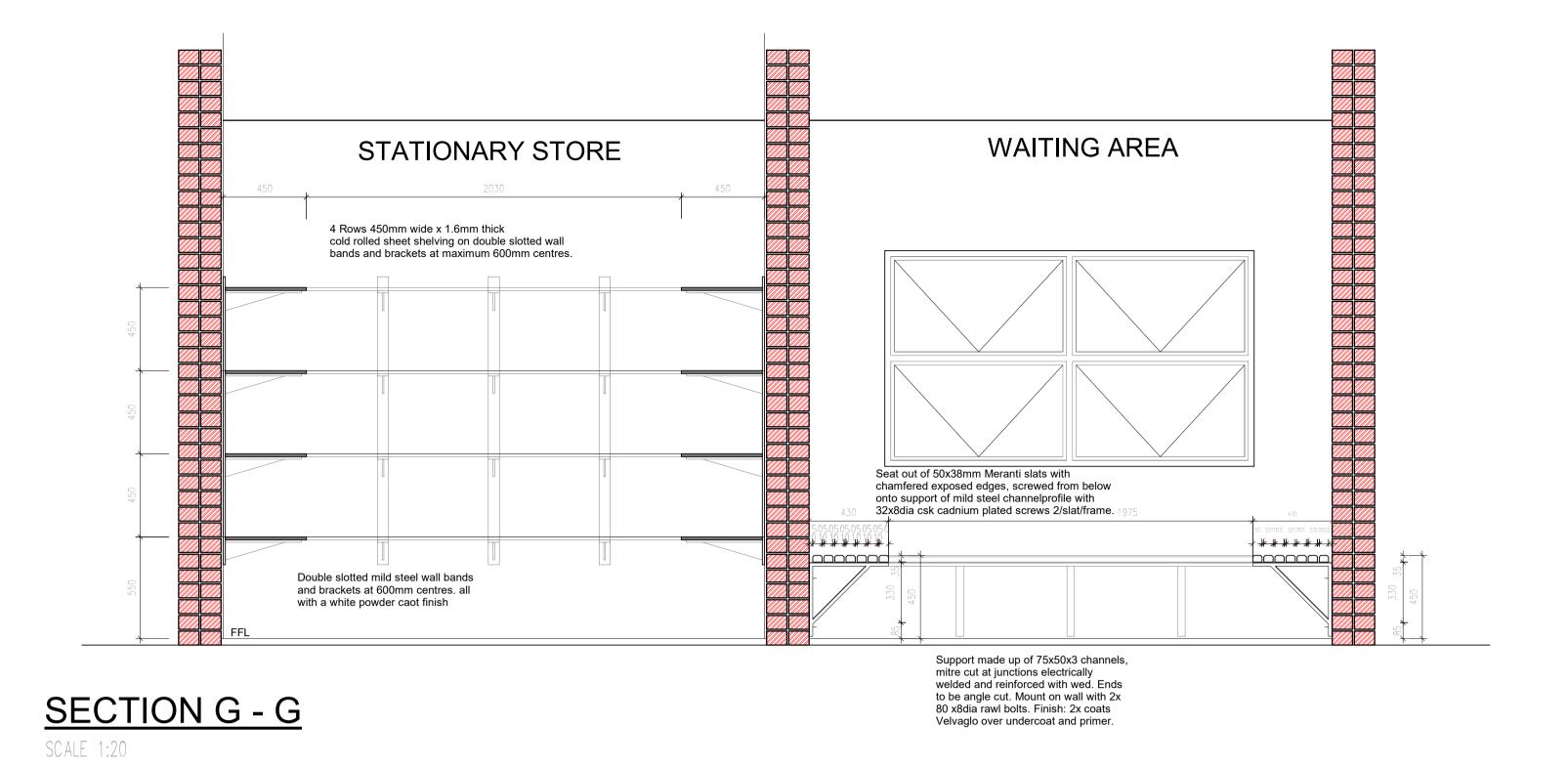
SCALE / SHEET SIZE DATE

SCALE: 1:20@A1 10/30/19 PROJECT No. SHEET NUMBER 001 - C003 063 DISCIPLINE REVISION PHASE ARCH

DRAWING STATUS COUNCIL CONSTRUCTION TENDER

DRAWN BY: CHECKED:

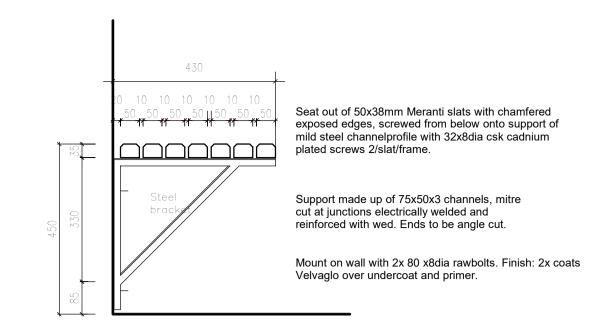




Seating Shelving 4 Rows 450mm wide x 1.6mm thick Seat out of 50x38mm Meranti slats with cold rolled sheet shelving on double slotted wall bands and brackets at maximum 600mm centres. chamfered exposed edges, screwed from below onto support of mild steel channelprofile with 32x8dia csk cadnium plated screws 2/slat/frame. **WAITING AREA** STATIONARY STORE Ceramic tiles Support made up of 75x50x3 channels, mitre cut Shelving Shelving at junctions electrically welded and reinforced with wed. Ends to be angle cut. Mount on wall with 2x 80 x8dia rawl bolts. Finish: 2x coats Velvaglo over undercoat and primer. -----Double slotted mild steel wall 600mm centres. all with a white powder caot finish **ENTRANCE HALL** Shelving **PASSAGE**

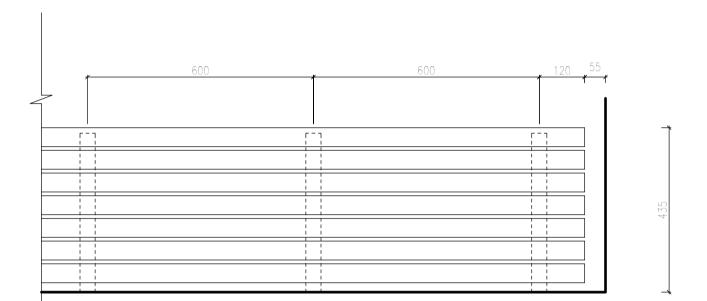
Ceramic tiles

JOINERY DETAILS 01



SEAT SECTION

SCALE 1:10



SEAT PLAN

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. <u>DIMENSIONS</u> 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 1400-H All concrete foundations to be a minimum of 600mmx250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural

ground level.

<u>FLOORS</u>
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 or otherwise

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 interleads

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 WALLS
Structural strength snd 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

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 10400the 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 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.
the means for the control and disposal in interconnected complexese subject of a rational design or rational assessment.

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.

GLATING

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: SIGNATURE: CIVIL ENGINEER STRUCTURAL ENGINEER MECHANICAL ENGINEER ELECTRICAL ENGINEER

 0
 19-10-2019
 HK
 ISSUED TO CLIENT FOR APPROVAL

 1
 08-06-2021
 HK
 ISSUED TO CLIENT FOR APPROVAL

FIRE ENGINEER



DEPARTMENT OF **EDUCATION**



JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

PrArch 4849 B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

ADMINISTRATION BLOCK

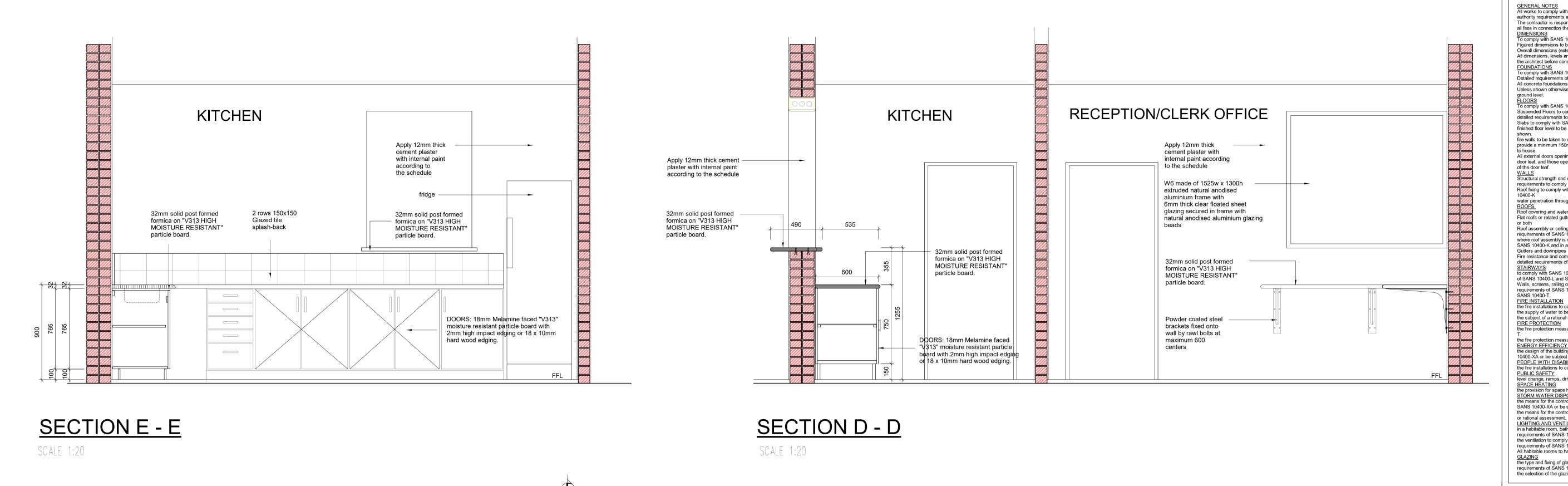
ENTRANCE HALL DETAIL

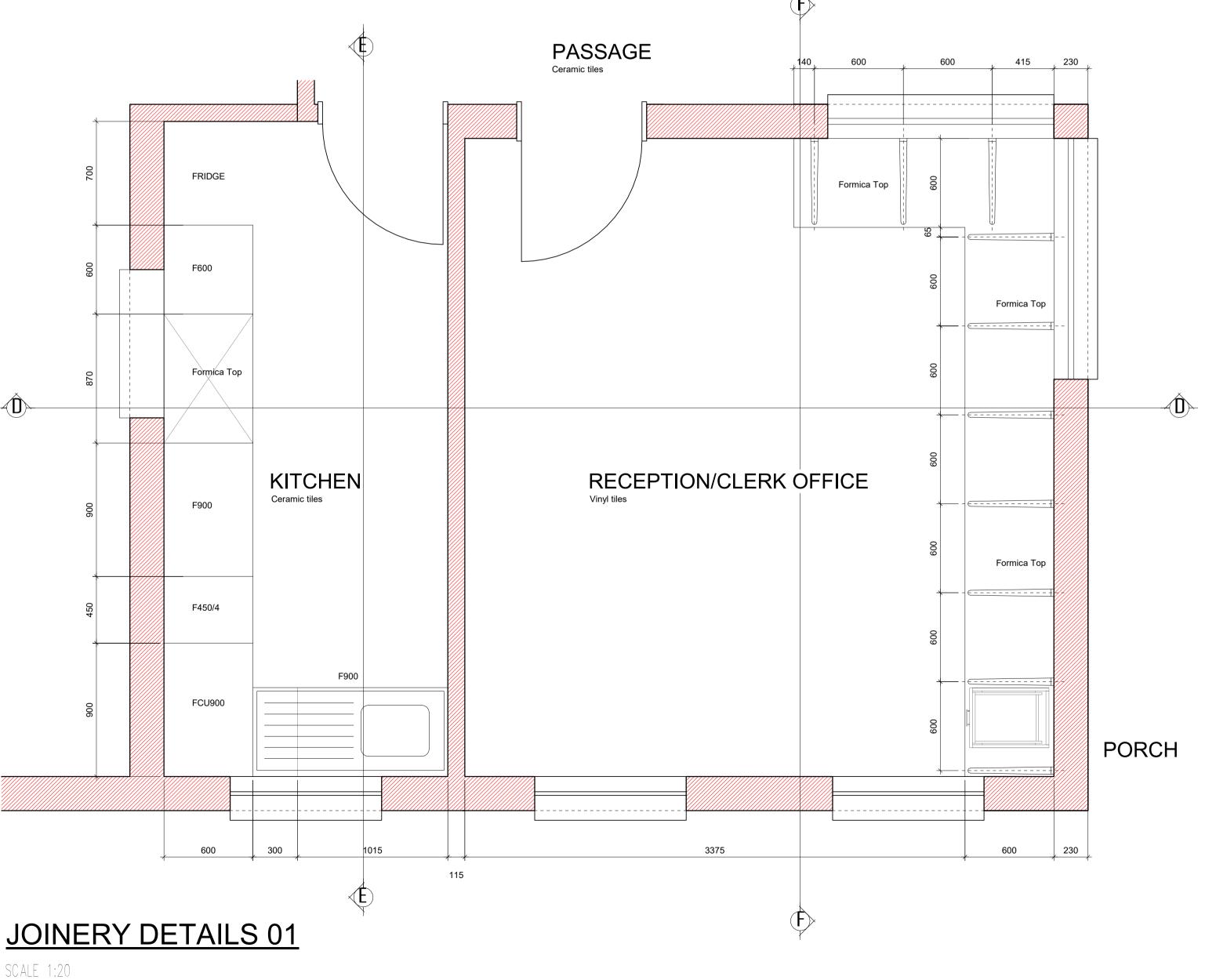
SCALE / SHEET SIZE SCALE: As indicated 19-10-2019 @ A1 PROJECT No. SHEET NUMBER 012 - AB002 063 - 17 - 011 DISCIPLINE OCCUPANCY **ARCH**

> DRAWING STATUS **TENDER**

DRAWN BY: CHECKED:

COUNCIL CONSTRUCTION





RECEPTION/ **CLERK OFFICE** Apply 12mm thick cement plaster with internal paint according to the schedule - W7 made of 1625w x 1300h extruded natural anodised aluminium frame with 6mm thick clear floated sheet glazing secured in frame with natural anodised aluminium glazing beads 32mm solid post formed formica on "V313 HIGH MOISTURE RESISTANT particle board. Powder coated steel brackets fixed onto wall by rawl bolts at maximum 600 centers

SECTION F - F

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 1400-H
All concrete foundations to be a minimum of 600mmx250mm.

Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

<u>FLOORS</u>
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 or otherwise

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 interleads 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

WALLS
Structural strength snd 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 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 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 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-

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 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.
the means for the control and disposal in interconnected complexese subject of a rational design

or rational assessment.

<u>LIGHTING AND VENTILATION</u>

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 rational design.

requirements of SANS 10400-O and is subject of a 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		

0 19-10-2019 HK ISSUED TO CLIENT FOR APPROVAL
1 08-06-2021 HK ISSUED TO CLIENT FOR APPROVAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za PrArch 4849

B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

ADMINISTRATION BLOCK

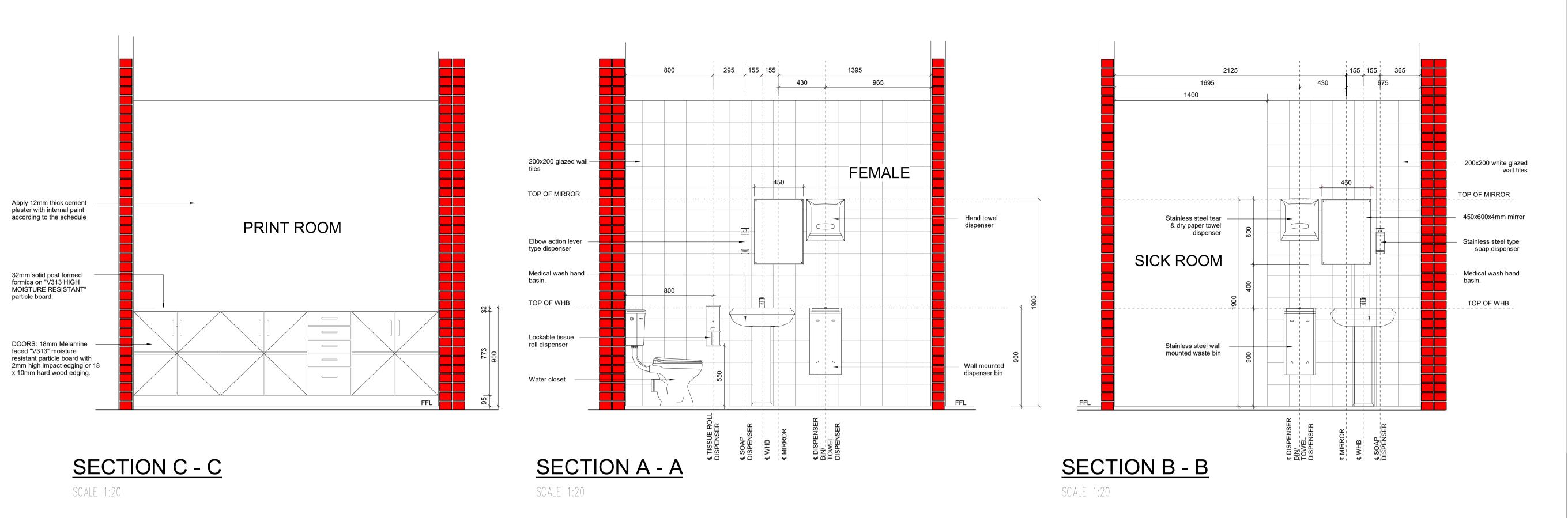
RECEPTION/ KITCHEN DETAILS

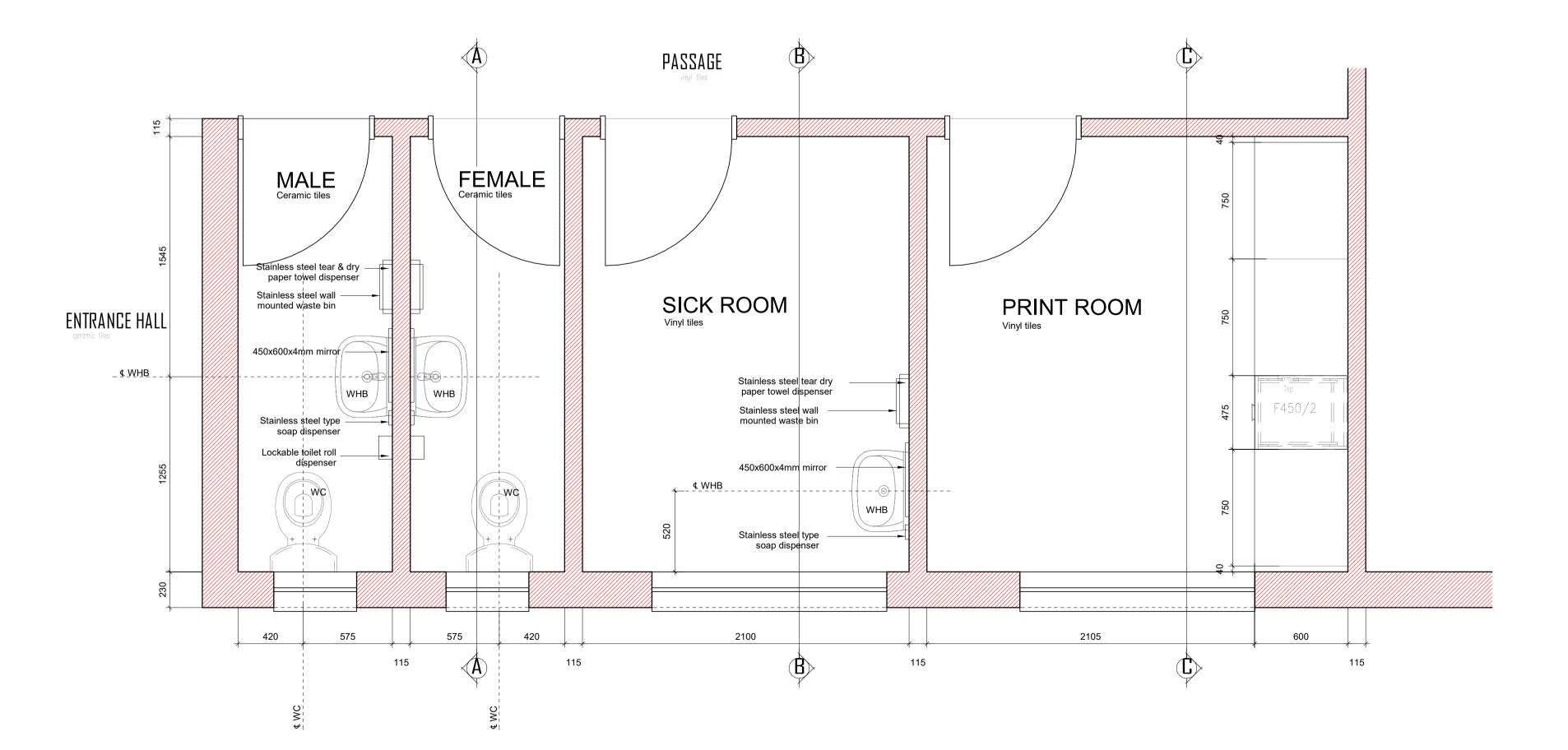
SCALE / SHEET SIZE DATE

SCALE: 1:20@A1 19-10-2019 PROJECT No. SHEET NUMBER 012 - AB003 063 - 17 - 011 DISCIPLINE PHASE OCCUPANCY **ARCH**

DRAWING STATUS **TENDER**

COUNCIL CONSTRUCTION DRAWN BY: CHECKED:





ROOM BLOW-UPS & JOINERY DETAILS 02

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.

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 1400-H
All concrete foundations to be a minimum of 600mmx250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

<u>FLOORS</u>
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-D. 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 or 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 interleads

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 to the longitudinal centreline of the door leaf. WALLS
Structural strength snd 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

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

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. TIRE 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-

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.

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.

The means for the control and disposal in interconnected complexese subject of a rational design or rational assessment.

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.

CLATING

PROFESSIONAL:	PR. NR.	SIGNATURE
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

 REV
 DATE
 DRAWN
 DESCRIPTION

 0
 19-10-2019
 HK
 ISSUED TO CLIENT FOR APPROVAL

 1
 08-06-2021
 HK
 ISSUED TO CLIENT FOR APPROVAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za PrArch 4849

B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

ADMINISTRATION BLOCK

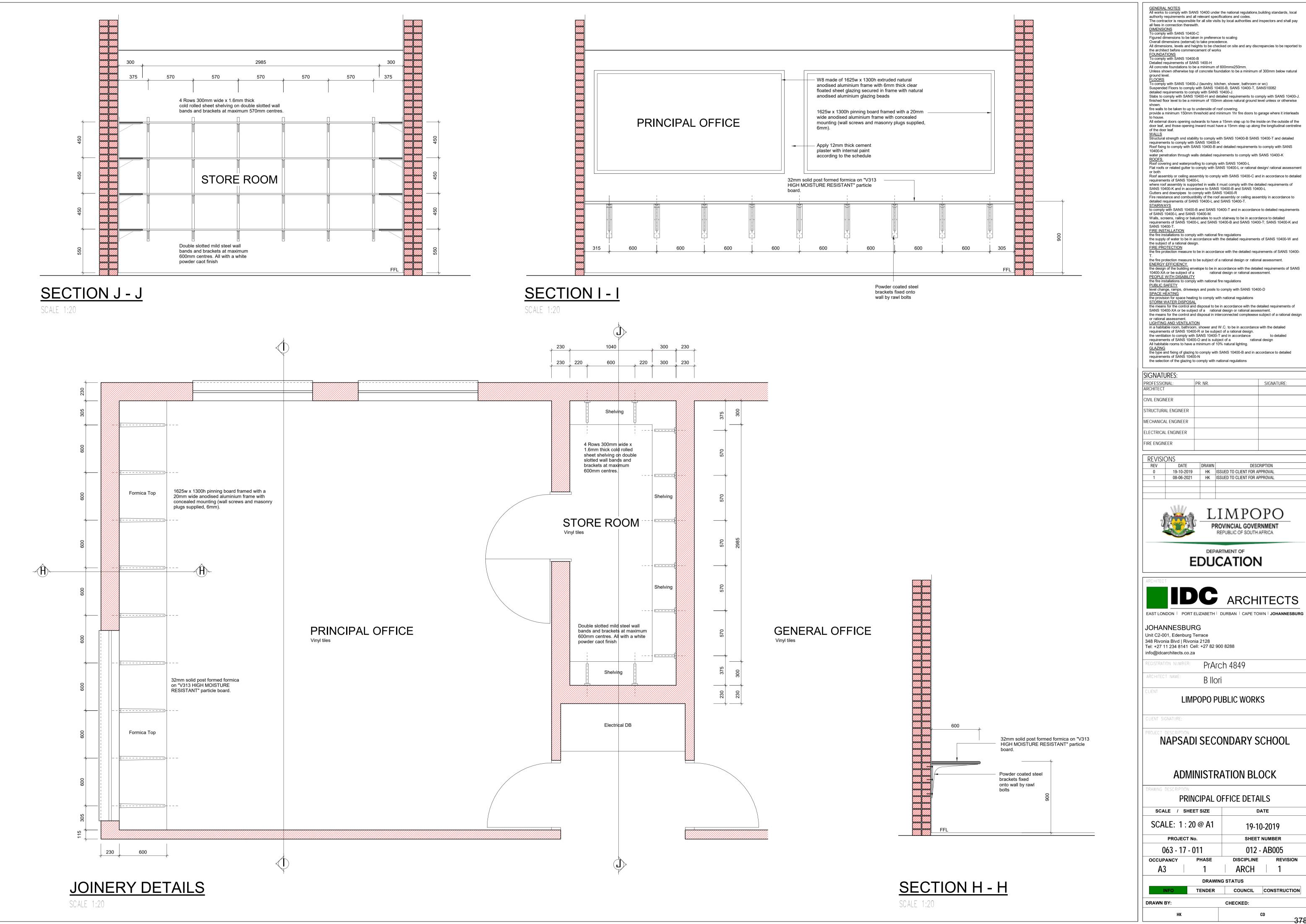
BATHROOM/ SICKROOM DETAILS

SCALE / SHEET SIZE	DATE
SCALE: 1:20@A1	19-10-2019
PROJECT No.	SHEET NUMBER

012 - AB004 DISCIPLINE

> DRAWING STATUS COUNCIL CONSTRUCTION

DRAWN BY: CHECKED:

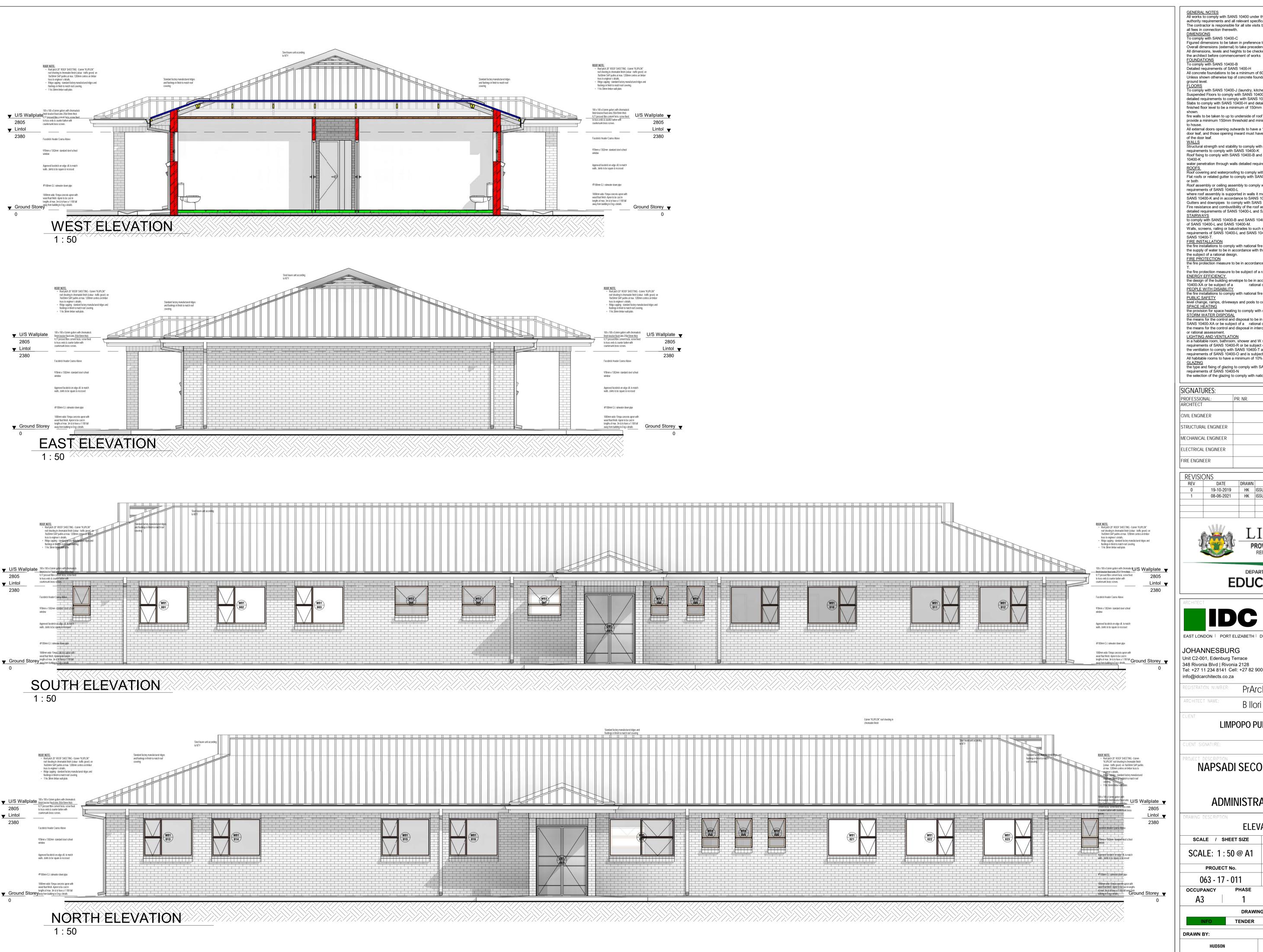


GENERAL NOTES
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.

The contractor is responsible for all site visits by local authorities and inspectors and shall pay

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		





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.

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

FOUNDATIONS
To comply with SANS 10400-B Detailed requirements of SANS 1400-H All concrete foundations to be a minimum of 600mmx250mm.

Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

<u>FLOORS</u>
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 or otherwise 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 interleads 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

WALLS
Structural strength snd 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

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-T

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

FIRE PROTECTION
the fire protection measure to be in accordance with the detailed requirements of SANS 10400the 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.

the means for the control and disposal in interconnected complexese subject of a rational design LIGHTING AND VENTILATION
in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed

in a habitable room, bathroom, shower and W.C. to be in accordance with the deti-requirements of SANS 10400-R or be subject of a rational design. the ventilation to comply with SANS 10400-T and in accordance to det 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

STRUCTURAL ENGINEER MECHANICAL ENGINEER ELECTRICAL ENGINEER

 0
 19-10-2019
 HK
 ISSUED TO CLIENT FOR APPROVAL

 1
 08-06-2021
 HK
 ISSUED TO CLIENT FOR APPROVAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288

PrArch 4849

B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

ADMINISTRATION BLOCK

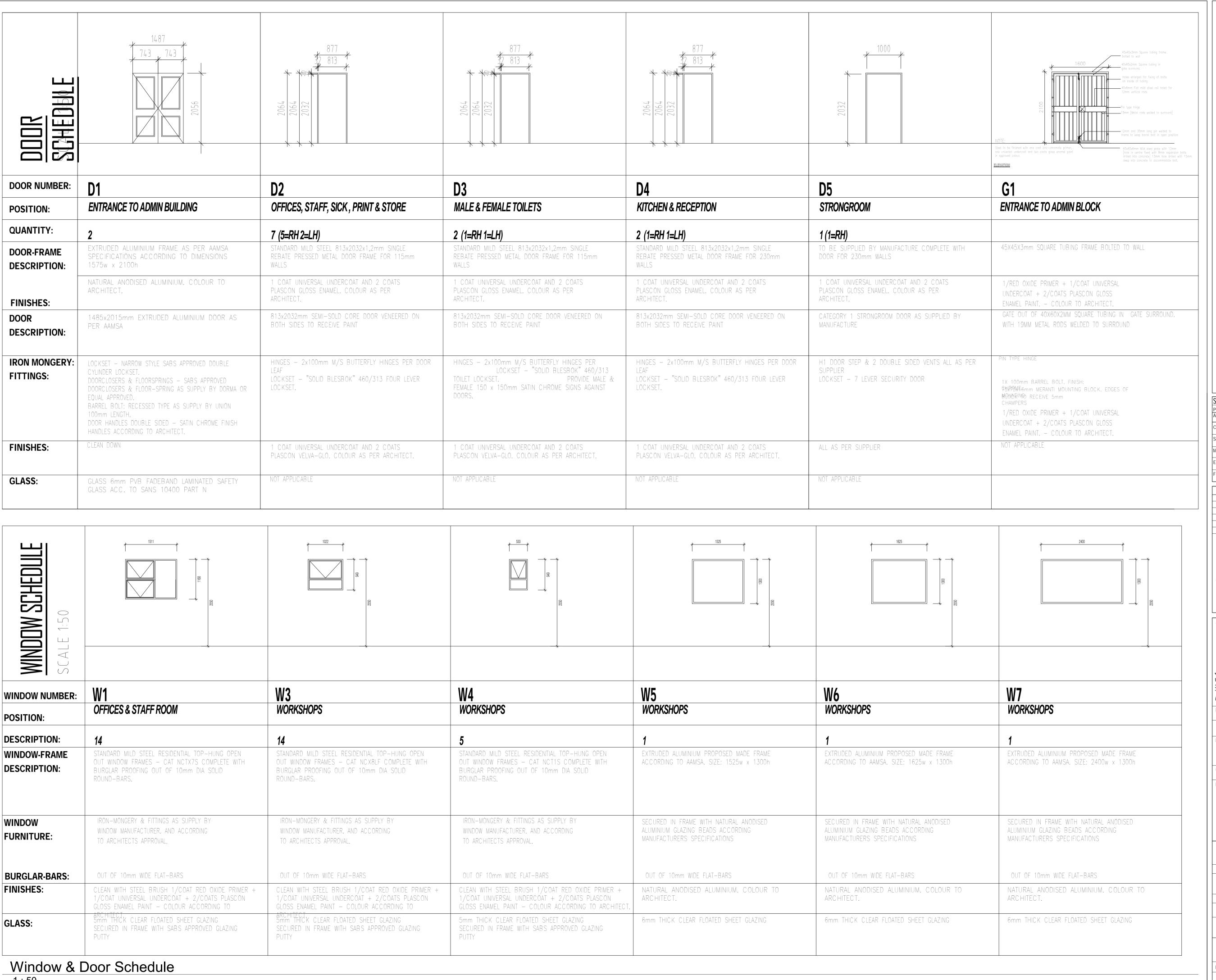
ELEVATIONS

SCALE / SHEET SIZE DATE SCALE: 1:50 @ A1 19-10-2019 PROJECT No. SHEET NUMBER 012 - AB006 DISCIPLINE

DRAWING STATUS TENDER

COUNCIL CONSTRUCTION CHECKED:

C. DYER



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 1400-H All concrete foundations to be a minimum of 600mmx250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

<u>FLOORS</u>
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 or otherwise 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 interleads

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 WALLS
Structural strength snd 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 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 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 10400the 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 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

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.
the means for the control and disposal in interconnected complexese subject of a rational design

or rational assessment. LIGHTING AND VENTILATION 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 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		

19-10-2019 HK ISSUED TO CLIENT FOR APPROVAL 08-06-2021 HK ISSUED TO CLIENT FOR APPROVAL



DEPARTMENT OF **EDUCATION**

JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

> PrArch 4849 B Ilori

> > LIMPOPO PUBLIC WORKS

Α3

NAPSADI SECONDARY SCHOOL

ADMINISTRATION BLOCK

DOOR & WINDOW SCHEDULE

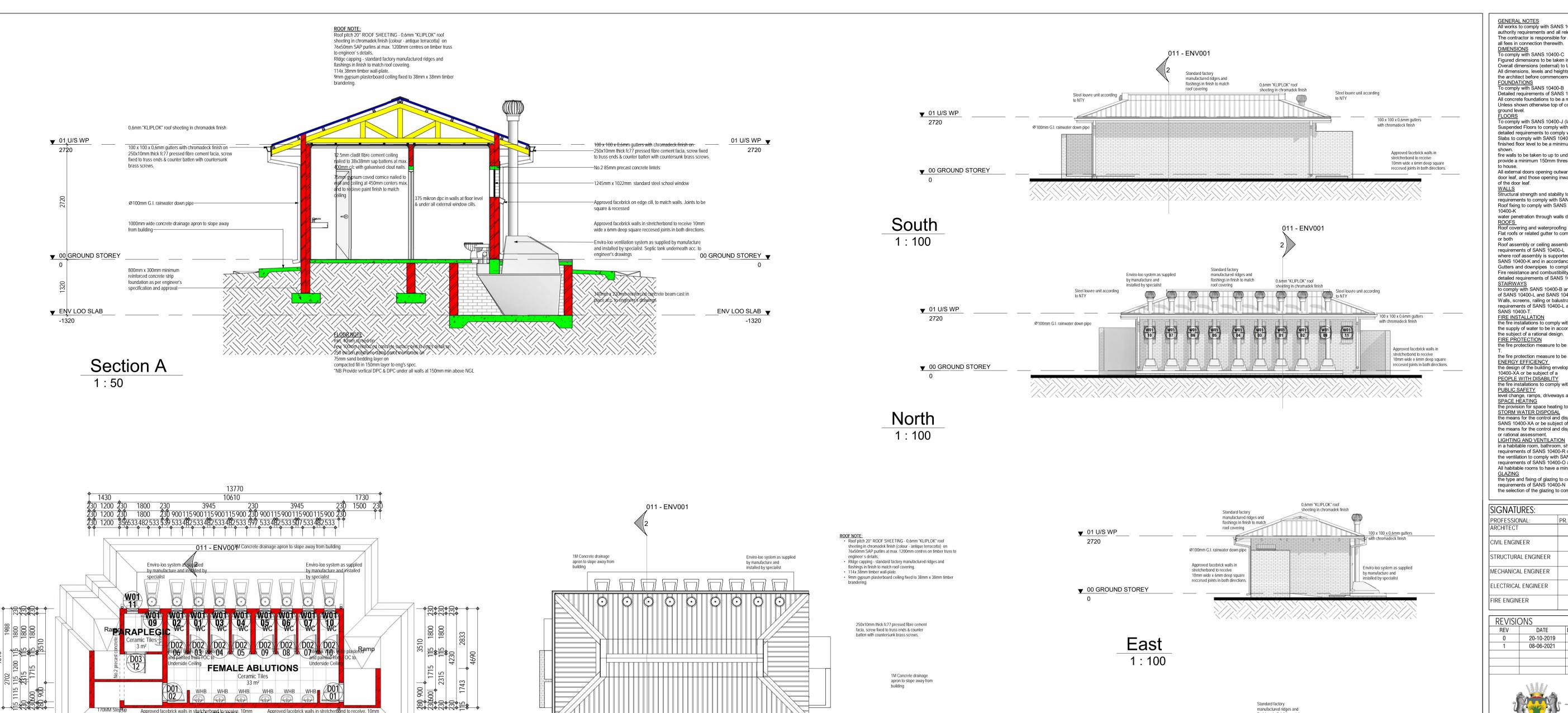
SCALE / S	HEET SIZE	DATE	=
SCALE: 1:	50 @ A1	19-10-2019	
PROJEC	T No.	SHEET NU	MBER
063 - 17 - 011		012 - A	B007
OCCUPANCY	PHASE	DISCIPLINE	REVISION

ARCH **DRAWING STATUS**

COUNCIL CONSTRUCTION **TENDER** DRAWN BY: CHECKED:

C. DYER

1:50



100 x 100 x 0.6mm gutters

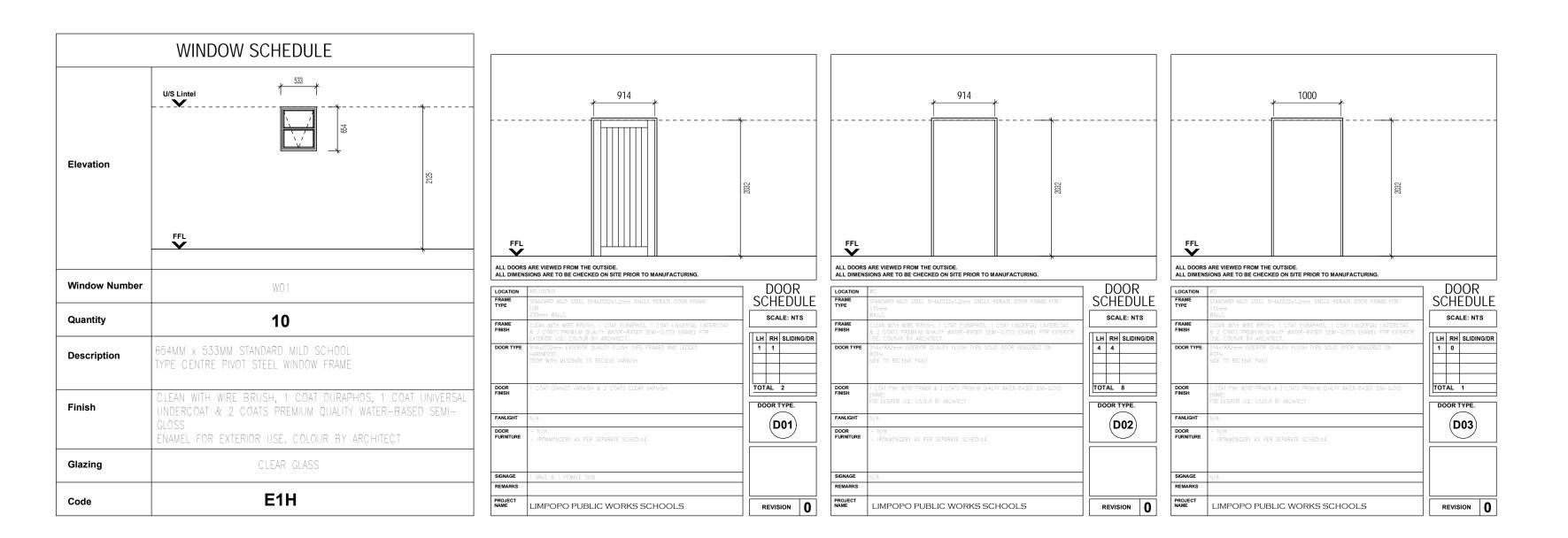
011 - ENV001

apron to slope away from

flashings in finish to match

Site

Ø100mm G.I. rainwater down pipe



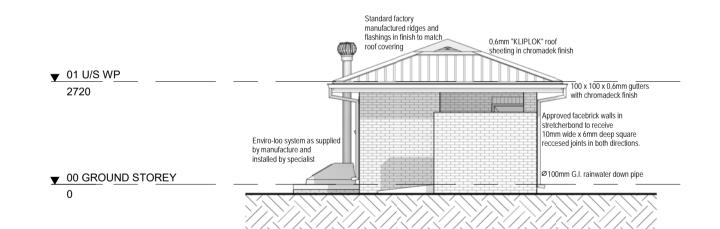
Ceramic Tiles 33 m²

230 1200 230 1800 230 9001||59001||59001||59001||59001||59001||59001||59001||5900230 1500 230 230 1200 230 1800 230 9311||5 6062 1||5897230 1500 230 230 1200 230 1800 230 8120 230 1500 230 1500 230 8580 1730

Approved facebrick walls in stretcherbond to receive. 10mm

wide x 6mm deep square reccesed joints in both directions.

1M Concrete drainage apron to slope away from building



West 1:100

				Door Schedule	•	
Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name
D01	01	900	2125	00 GROUND STOREY		FEMALE ABLUTIONS
D01	02	900	2125	00 GROUND STOREY		FEMALE ABLUTIONS
D02	03	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	04	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	05	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	06	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	07	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	08	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	09	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D02	10	900	2125	00 GROUND STOREY	FEMALE ABLUTIONS	FEMALE ABLUTIONS
D03	12	1000	2125	00 GROUND STOREY	PARAPLEGIC	

Window Schedule					
Type Mark	Mark	Width	Height	Level	From Room: Name
/01	01	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	02	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	03	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	04	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	05	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	06	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	07	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	09	533	654	00 GROUND STOREY	PARAPLEGIC
/01	10	533	654	00 GROUND STOREY	FEMALE ABLUTIONS
/01	11	533	654	00 GROUND STOREY	PARAPLEGIC
rand tota	l: 10				

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

Detailed requirements of SANS 1400-H All concrete foundations to be a minimum of 600mmx250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural

ground level.

<u>FLOORS</u>
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 or otherwise 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 interleads

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

WALLS
Structural strength snd 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 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 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-

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

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.

the means for the control and disposal in interconnected complexese 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 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

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

 20-10-2019
 HK
 ISSUED FOR CLIENT APPROCAL

 08-06-2021
 HK
 ISSUED FOR CLIENT APPROCAL



DEPARTMENT OF **EDUCATION**



JOHANNESBURG

Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

PrArch 4849 B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

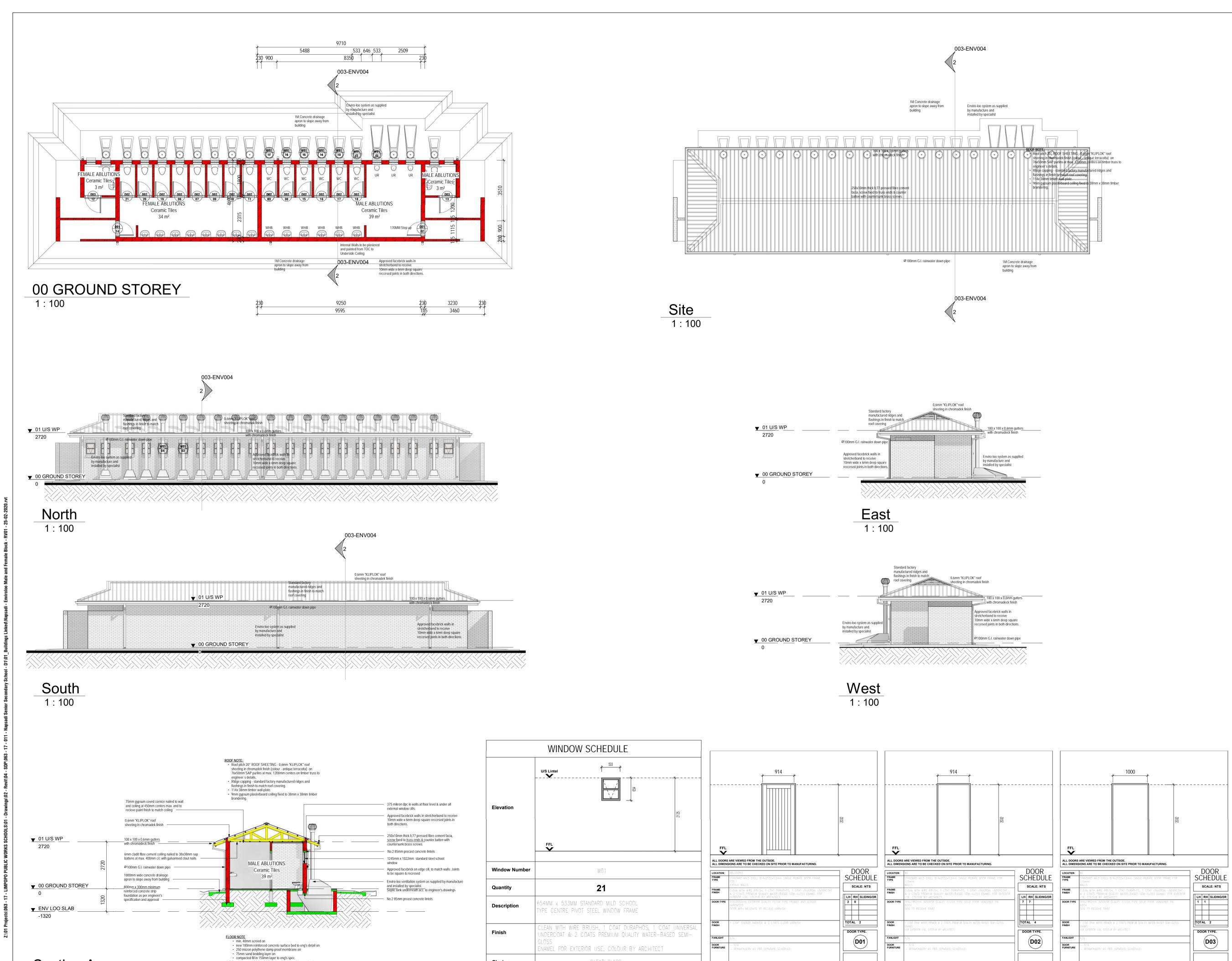
FEMALE ENVIROLOO BLOCK

PLANS, SECTIONS & ELEVATIONS

SCALE / SHEET SIZE	DATE
SCALE: As indicated @ A1	20-10-2019
PROJECT No.	SHEET NUMBER
063 - 17 - 011	011 - ENV001
BULGE	DIGGIDI IVIE - DEVIGUOVI

ARCH **DRAWING STATUS**

TENDER COUNCIL CONSTRUCTION CHECKED: DRAWN BY:



Glazing

Code

CLEAR GLASS

E1H

SIGNAGE REMARKS

LIMPOPO PUBLIC WORKS SCHOOLS

LIMPOPO PUBLIC WORKS SCHOOLS

REVISION 0

REVISION 0

LIMPOPO PUBLIC WORKS SCHOOLS

REVISION 0

Section A

1:100

*NB Provide vertical DPC & DPC under all walls at 150mm min above

all fees in connection therewith. DIMENSIONS
To comply with SANS 10400-C the architect before commencement of works FOUNDATIONS
To comply with SANS 10400-B 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 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. TIRE PROTECTION
the fire protection measure to be in accordance with the detailed requirements of SANS 10400the 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 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.

the means for the control and disposal in interconnected complexese subject of a rational design or rational assessment. 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 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: CIVIL ENGINEER STRUCTURAL ENGINEER MECHANICAL ENGINEER ELECTRICAL ENGINEER FIRE ENGINEER 0 20-10-2019 HK ISSUED FOR CLIENT APPROVAL
1 08-06-2021 HK ISSUED FOR CLIENT APPROVAL **EDUCATION** JOHANNESBURG Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za LIMPOPO PUBLIC WORKS NAPSADI SECONDARY SCHOOL **ENVIROLOO MALE & FEMALE BLOCK** PLANS, SECTIONS & ELEVATIONS SCALE / SHEET SIZE SCALE: As indicated @ A1 PROJECT No. 063 - 17 - 011 OCCUPANCY

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 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 Detailed requirements of SANS 1400-H All concrete foundations to be a minimum of 600mmx250mm. Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

<u>FLOORS</u>
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 or otherwise 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 interleads 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 WALLS
Structural strength snd 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

SIGNATURE:

PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF

PrArch 4849

DATE

20-10-2019

SHEET NUMBER

003-ENV004

DISCIPLINE REVISION

COUNCIL CONSTRUCTION

ARCH

CHECKED:

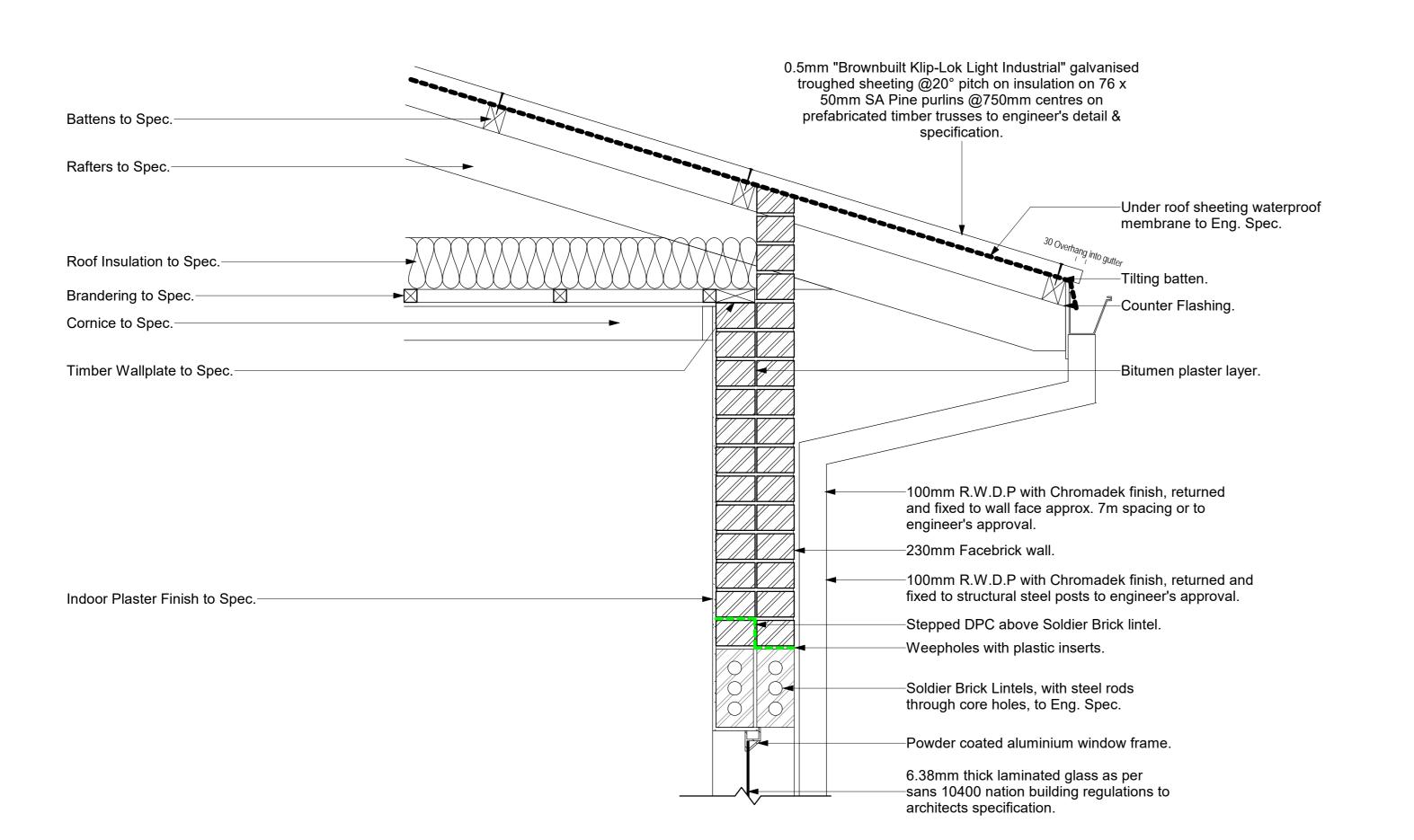
B Ilori

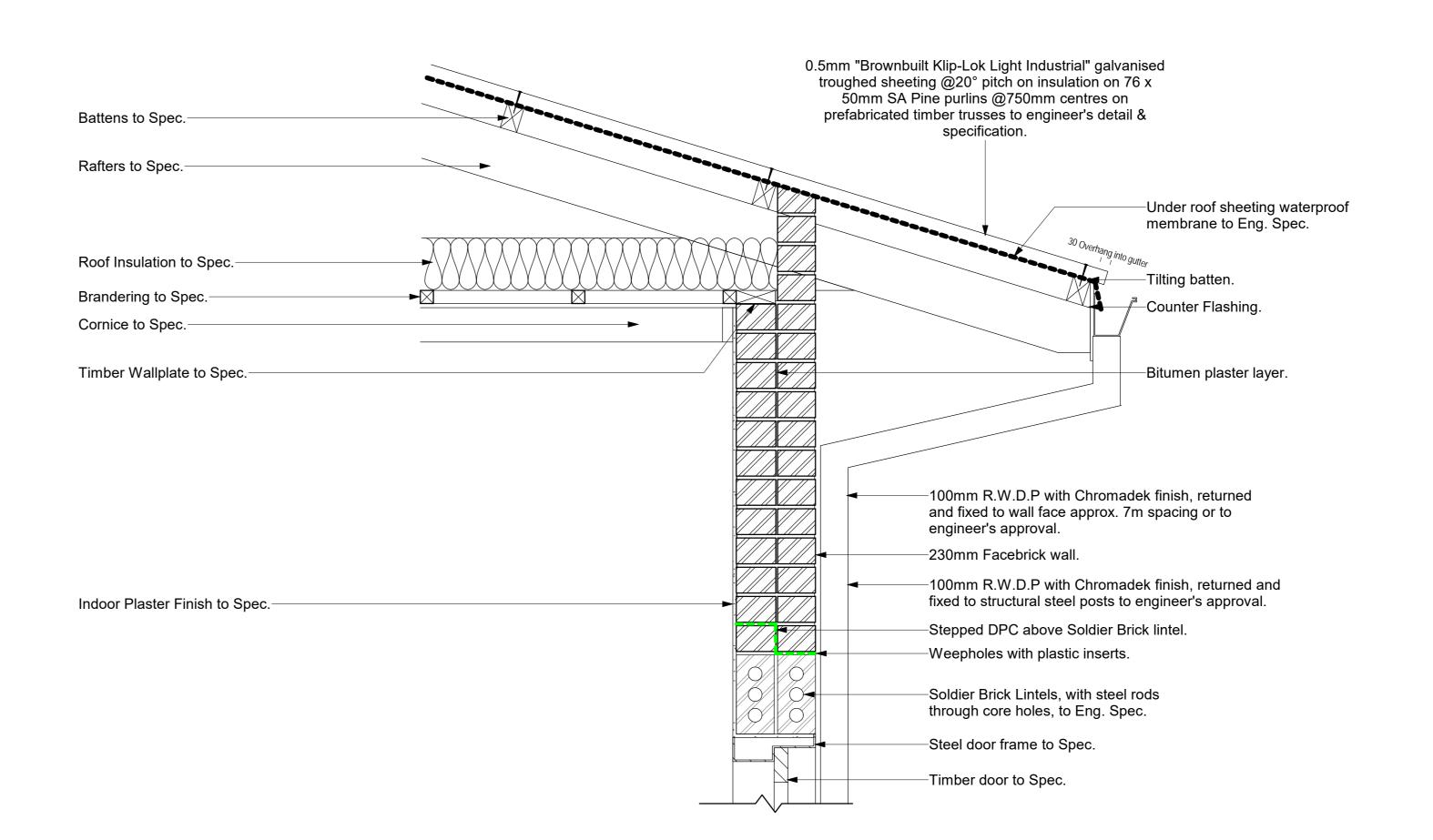
PHASE

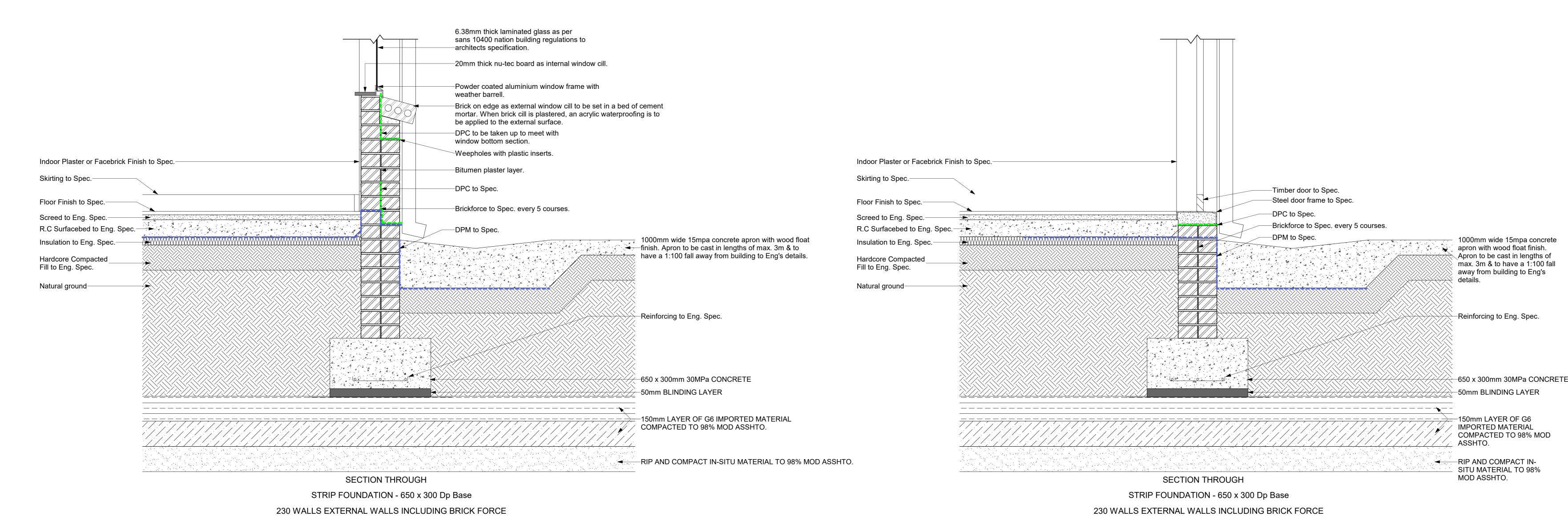
TENDER

DRAWN BY:

DRAWING STATUS







WALL WITH WINDOW DETAIL SECTION

Scale 1:10

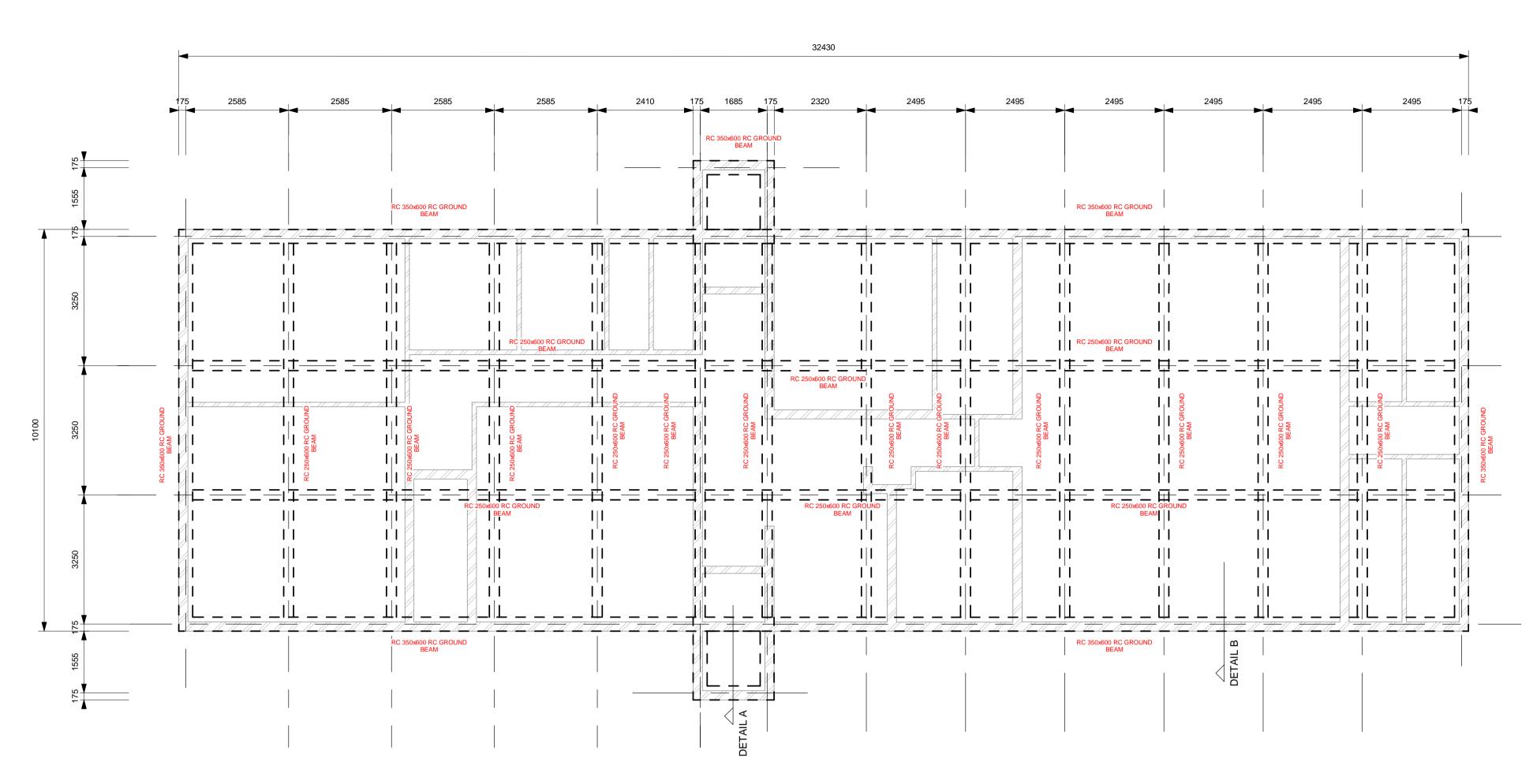
WALL WITH DOOR DETAIL SECTION

Scale 1:10

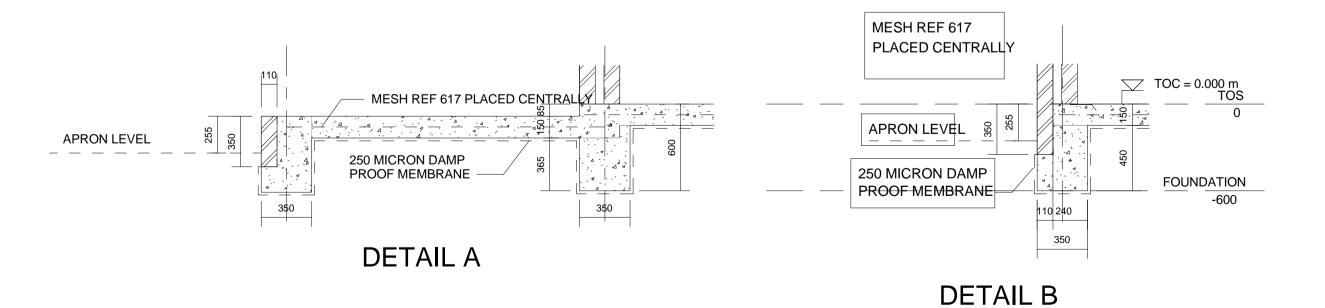
CIVIL ENGINEER STRUCTURAL ENGINEER MECHANICAL ENGINEER ELECTRICAL ENGINEER FIRE ENGINEER DATE DRAWN DESCRIPTION
11-08-2021 JP ISSUED FOR STAGE 4 APPROVAL REPUBLIC OF SOUTH AFRICA **EDUCATION** IDC ARCHITECTS EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG JOHANNESBURG Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za REGISTRATION NUMBER: PrArch 4849 B Ilori LIMPOPO PUBLIC WORKS NAPSADI SECONDARY SCHOOL TYPICAL DETAILS TYPICAL WALL SECTION DETAILS SCALE: 1:10@A0 11-08-2021 PROJECT No. SHEET NUMBER 063 - 17 - 011 CD001 ARCH **DRAWING STATUS** COUNCIL CONSTRUCTION DRAWN BY: CHECKED:

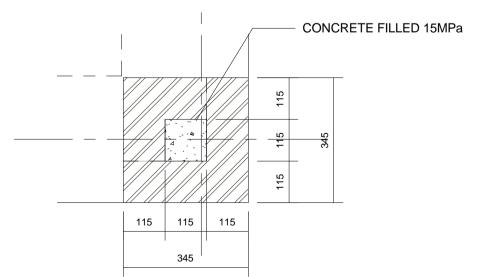
SIGNATURES

SIGNATURE:



ADMIN BLOCK FOUNDATION PLAN
1:75





PLAN ON 345x345 PIER (2 No. PLACES) DETAIL C

LEGEND:



BRICK WALL

PROFESSIO	NAL:	PR. NR.	SIGNATURE:	
ARCHITECT				
CIVIL ENGIN	EER			
STRUCTURAL ENGINEER				
MECHANICA	L ENGINEER			
ELECTRICAL	ENGINEER			
FIRE ENGIN	EER			
			-	
REVISIO	SNC			
REV	DATE	DRAWN	DESCRIPTION	
Α	2021.08.19	TL	ISSUED FOR INFORMATION	
В	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR	



EDUCATION



LIMPOPO PROVINCE

39 Grobler Street
Polokwane North | Polokwane 0699
Tel: +27 15 291 4065
mail@muteo.co.za



JOHANNESBURG
Unit C2-001, Edenburg Terrace
348 Rivonia Blvd | Rivonia 2128
Tel: +27 11 234 8141 Cell: +27 82 900 8288

registration number: PrArch 4849

LIENT SIGNATURE:

LIMPOPO PUBLIC WORKS

B Ilori

NAPSADI SECONDARY SCHOOL

ALTERATIONS AND ADDITIONS

ADMIN BLOCK FOUNDATION LAYOUT

SCALE / S	HEET SIZE	DATE	:
SCALE: As @ A		2021.08	3.19
PROJEC	T No.	SHEET NUMBER	
063-17	-003	2019-NPS	S-S-01
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRUC	В
	DRAWIN	IG STATUS	

DRAWING STATUS

TENDER COUNCIL CONSTRUCTION

DRAWN BY: CHECKED:

CONCRETE NOTES:

- ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
- 2. CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW ULNESS OTHERWISE NOTED.
 MASS CONCRETE GRADE 10/19
 BLINDING CONCRETE GRADE 10/19
- STRUCTURAL CONCRETE GRADE 25/19
 3. 250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS 952 -1985 TYPE C TO BE PROVIDED UNDER ALL GROUND SLABS.
- 4. EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT FINISH" UNLESS OTHERWISE NOTED.
- 5. THE MINIMUM DESIGN BEARING PRESSURE FOR FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED.
- 6. ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENFINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

- 1. CONSTRUCTION PROCEDURE, SEQUENCE AND POSITIONING OF COSTRUCTION JOINTS TO BE APPROVED
- BY THE ENGINEER PRIOR TO CASTING THE RAFT.

 2. 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.

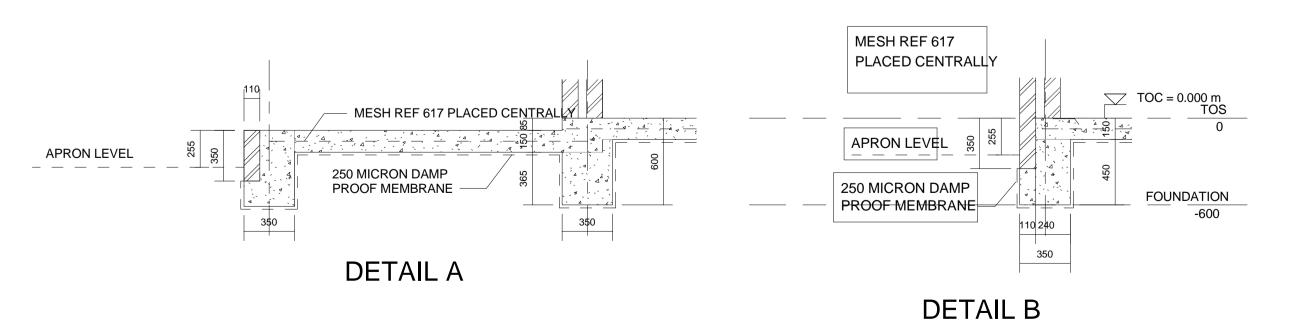
 3. RAFT TO BE POWER FLOATED TO JUST SHORT OF BEIG POLISHED. METHOD TO BER APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- 4. RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC MEMBRANE.

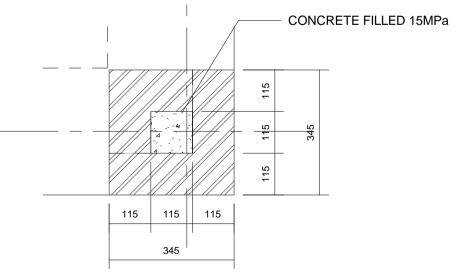
GEOTECHNICAL CONSIDERATIONS

- 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

4 CLASSROOM FOUNDATION PLAN

1:75





PLAN ON 345x345 PIER (2 No. PLACES) **DETAIL C**

CONCRETE NOTES:

- 1. ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200
- CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW ULNESS 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
- 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 ENFINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

- 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.
- 4. RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC

GEOTECHNICAL CONSIDERATIONS

- 1. 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



BRICK WALL

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER	₹	
MECHANICAL ENGINEER	2	
ELECTRICAL ENGINEER		

REVISIO	SNC		
REV	DATE	DRAWN	DESCRIPTION
Α	2021.08.19	TL	ISSUED FOR INFORMATION
В	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



EDUCATION



LIMPOPO PROVINCE

39 Grobler Street Polokwane North | Polokwane 0699 Tel: +27 15 291 4065 mail@muteo.co.za



JOHANNESBURG Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288

info@idcarchitects.co.za

PrArch 4849 B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

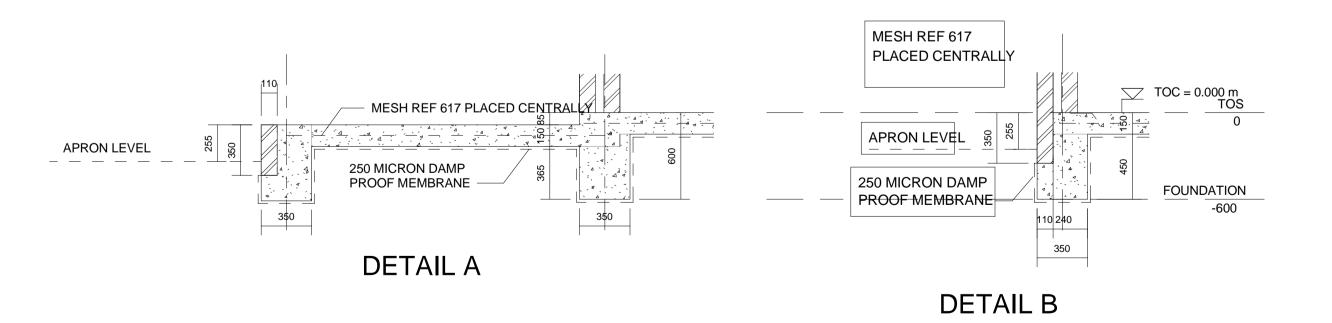
ALTERATIONS AND ADDITIONS

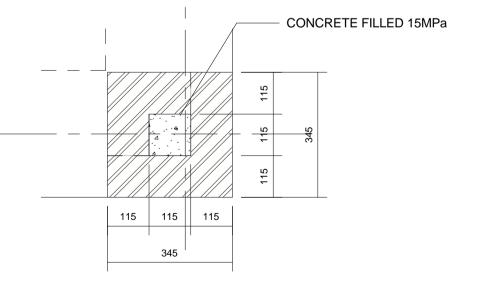
4 CLASSROOM BLOCK FOUNDATION LAYOUT

SCALE / SHEET SIZE DATE SCALE: As indicated 2021.08.19 PROJECT No. SHEET NUMBER 063-17-003 2019-NPSS-S-02 DISCIPLINE REVISION PHASE OCCUPANCY STRUC

DRAWING STATUS TENDER COUNCIL CONSTRUCTION DRAWN BY: CHECKED:

GIRSL WATER BORNE FOUNDATION PLAN 1:50





PLAN ON 345x345 PIER (2 No. PLACES) DETAIL C



BRICK WALL

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

	KEA1216	JN2		
	REV	DATE	DRAWN	DESCRIPTION
	Α	2021.08.19	TL	ISSUED FOR INFORMATION
	В	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION
- 1				



EDUCATION



LIMPOPO PROVINCE

39 Grobler Street Polokwane North | Polokwane 0699 Tel: +27 15 291 4065 mail@muteo.co.za



JOHANNESBURG Unit C2-001, Edenburg Terrace

348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8141 Cell: +27 82 900 8288 info@idcarchitects.co.za

> PrArch 4849 B Ilori

> > LIMPOPO PUBLIC WORKS

IENT SIGNATURE:

NAPSADI SECONDARY SCHOOL

ALTERATIONS AND ADDITIONS

FEMALE TOILET FOUNDATION LAYOUT

	DD 414//	IO OTATUO	
A3	1	STRUC	В
OCCUPANCY	PHASE	DISCIPLINE	REVISION
063-17	-003	2019-NPS	S-S-03
PROJEC	T No.	SHEET NU	MBER
SCALE: As @ A		2021.08	3.19
SCALE / S		DATE	

DRAWING STATUS COUNCIL CONSTRUCTION TENDER DRAWN BY: CHECKED:

ACCORDING TO THE FOLLOWING; DOLOMITE AREA DESIGNATION - D3 SINKHOLE MAXIMUM SIZE - 5M DIAMETER

CONCRETE NOTES:

ACCORDANCE WITH SABS 1200

MASS CONCRETE GRADE 10/19 BLINDING CONCRETE GRADE 10/19

BELOW ULNESS OTHERWISE NOTED.

STRUCTURAL CONCRETE GRADE 25/19

FINISH" UNLESS OTHERWISE NOTED.

1. CONSTRUCTION PROCEDURE, SEQUENCE AND

BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

1. ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN

CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED

250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS

EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT

FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED.

POSITIONING OF COSTRUCTION JOINTS TO BE APPROVED

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

RAFT TO BE POWER FLOATED TO JUST SHORT OF BEIG

BY THE ENGINEER PRIOR TO CASTING THE RAFT.

MAY BE FACILITATED BY THE USE OF A SUITABLE EXPANDED METAL OR PROPRIETARY STOP END

POLISHED. METHOD TO BER APPROVED BY THE

RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC

CONDITIONS AND THE FOUNDATIONS HAVE BEEN

ENGINEER PRIOR TO IMPLEMENTATION.

GEOTECHNICAL CONSIDERATIONS

MEMBRANE.

ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENFINEER PRIOR TO CASTING OF BLINDING AND TO

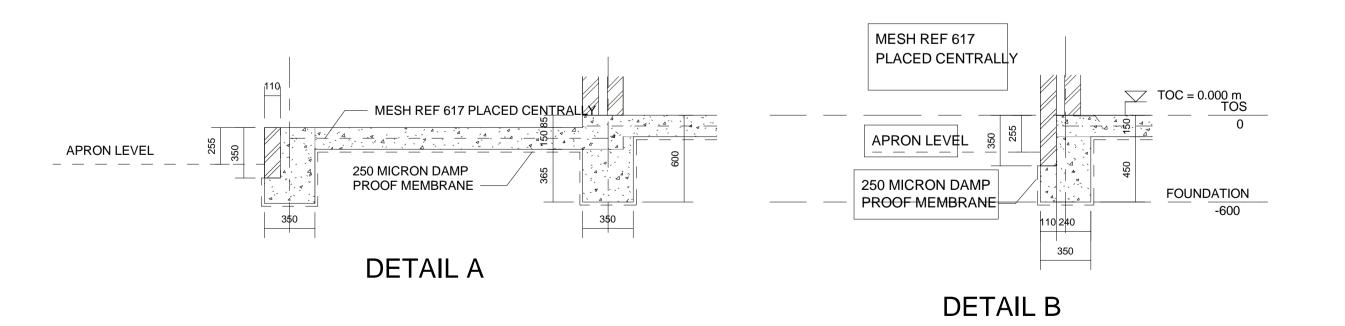
THE MINIMUM DESIGN BEARING PRESSURE FOR

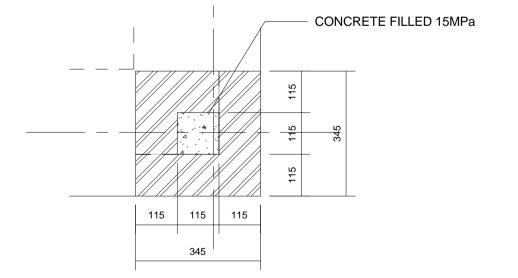
952 -1985 TYPE C TO BE PROVIDED UNDER ALL GROUND

1. COGNISANCE HAS BEEN TAKEN OF THE DOLOMITE

BOY AND GIRLS WATER BORNE TOILET FOUNDATION PLAN

1:50





PLAN ON 345x345 PIER (2 No. PLACES) DETAIL C

- CONCRETE NOTES:

 1. ALL CIVIL ENGINEERING WORK TO BE CARRIED OUT IN
- ACCORDANCE WITH SABS 1200
 2. CONCRETE TO BE "STRENGTH CONCRETE" AS SPECIFIED BELOW ULNESS OTHERWISE NOTED.

MASS CONCRETE GRADE 10/19

BLINDING CONCRETE GRADE 10/19

- STRUCTURAL CONCRETE GRADE 25/19
 3. 250 MICRON PVC SHEETING IN ACCORDANCE WITH SABS 952 -1985 TYPE C TO BE PROVIDED UNDER ALL GROUND
- 952 1985 TYPE C TO BE PROVIDED UNDER ALL GROUNL SLABS.

 4. EXPOSED UNFORMED SURFACES TO BE "STEEL FLOAT
- FINISH" UNLESS OTHERWISE NOTED.
 5. THE MINIMUM DESIGN BEARING PRESSURE FOR
- FOUNDATIONS IS 150MPa UNLESS OTHERWISE NOTED.

 6. ALL FOUNDATION EXCAVATIONS TO BE INSPECTED BY THE ENFINEER PRIOR TO CASTING OF BLINDING AND TO BE KEPT DRY AT ALL TIMES.

CONSTRUCTION NOTES:

- 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.
 3. RAFT TO BE POWER FLOATED TO JUST SHORT OF BEIG POLISHED. METHOD TO BER APPROVED BY THE
- ENGINEER PRIOR TO IMPLEMENTATION.

 4. RAFT TO BE CURED FOR 7 DAYS AFTER CONCRETE CASTING I.E KEEP WET OR COVER WITH PLASTIC

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 H 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



EDUCATION



LIMPOPO PROVINCE
39 Grobler Street

Polokwane North | Polokwane 0699 Tel: +27 15 291 4065 mail@muteo.co.za



JOHANNESBURG
Unit C2-001, Edenburg Terrace
348 Rivonia Blvd | Rivonia 2128
Tel: +27 11 234 8141 Cell: +27 82 900 8288
info@idcarchitects.co.za

PrArch 4849

ARCHITECT NAME:

B Ilori

LIMPOPO PUBLIC WORKS

NAPSADI SECONDARY SCHOOL

ALTERATIONS AND ADDITIONS

MALE AND FEMALE TOILET FOUNDATION

SCALE / SHEET SIZE LAYOUT DATE

SCALE: As indicated

@ A1

PROJECT No.

SHEET NUMBER

063-17-003

2019-NPSS-S-04

OCCUPANCY PHASE DISCIPLINE REVISION

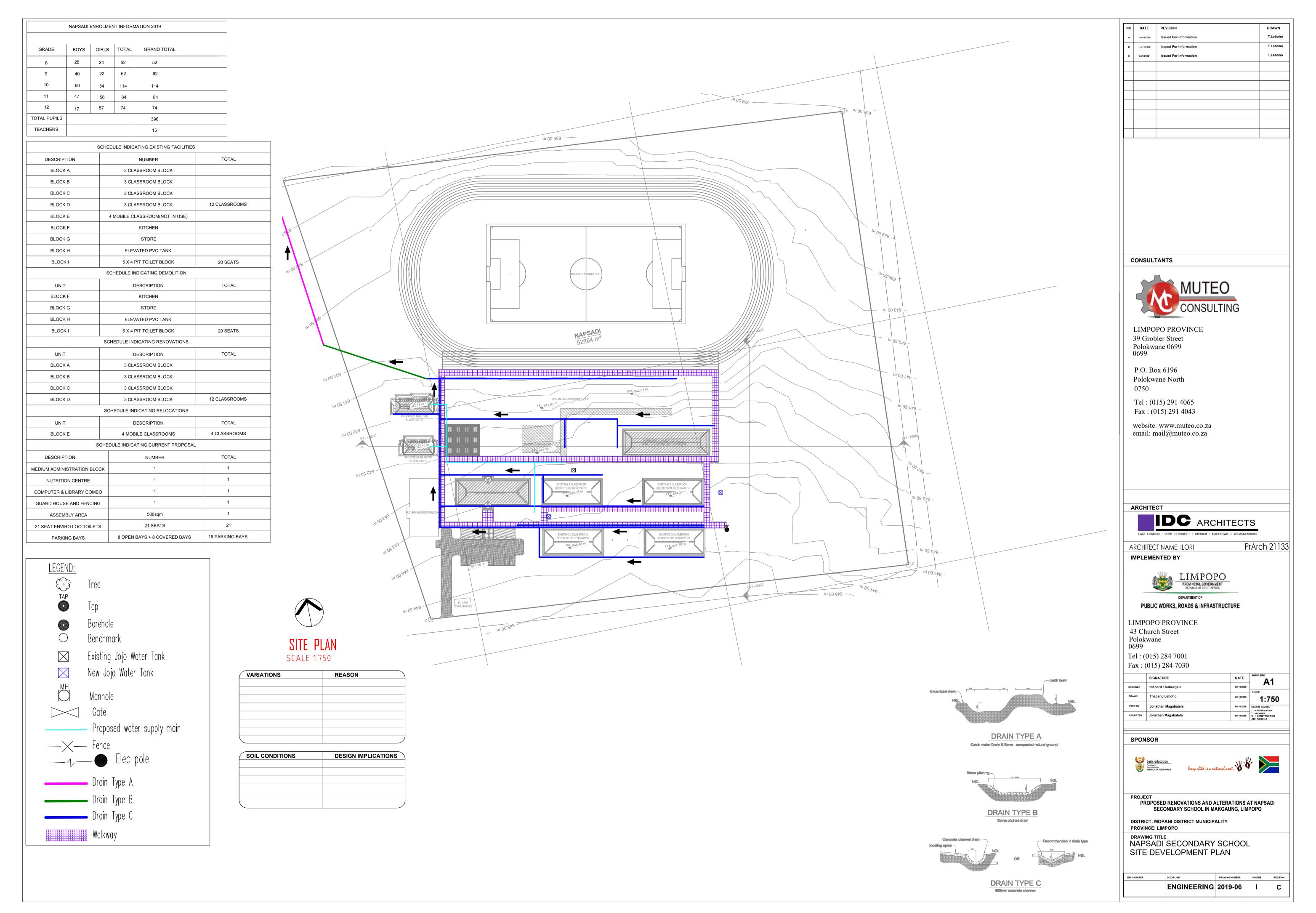
A3 | 1 STRUC | B

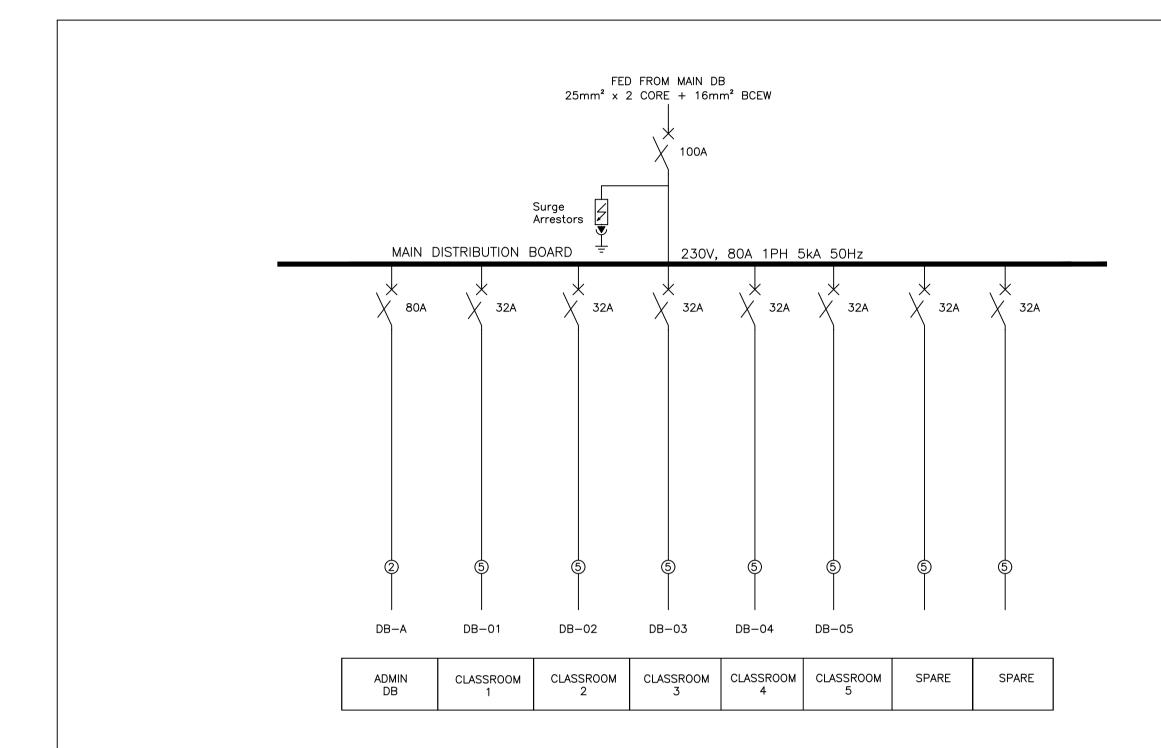
DRAWING STATUS

INFO TENDER COUNCIL CONSTRUCTION

DRAWN BY: CHECKED:

.



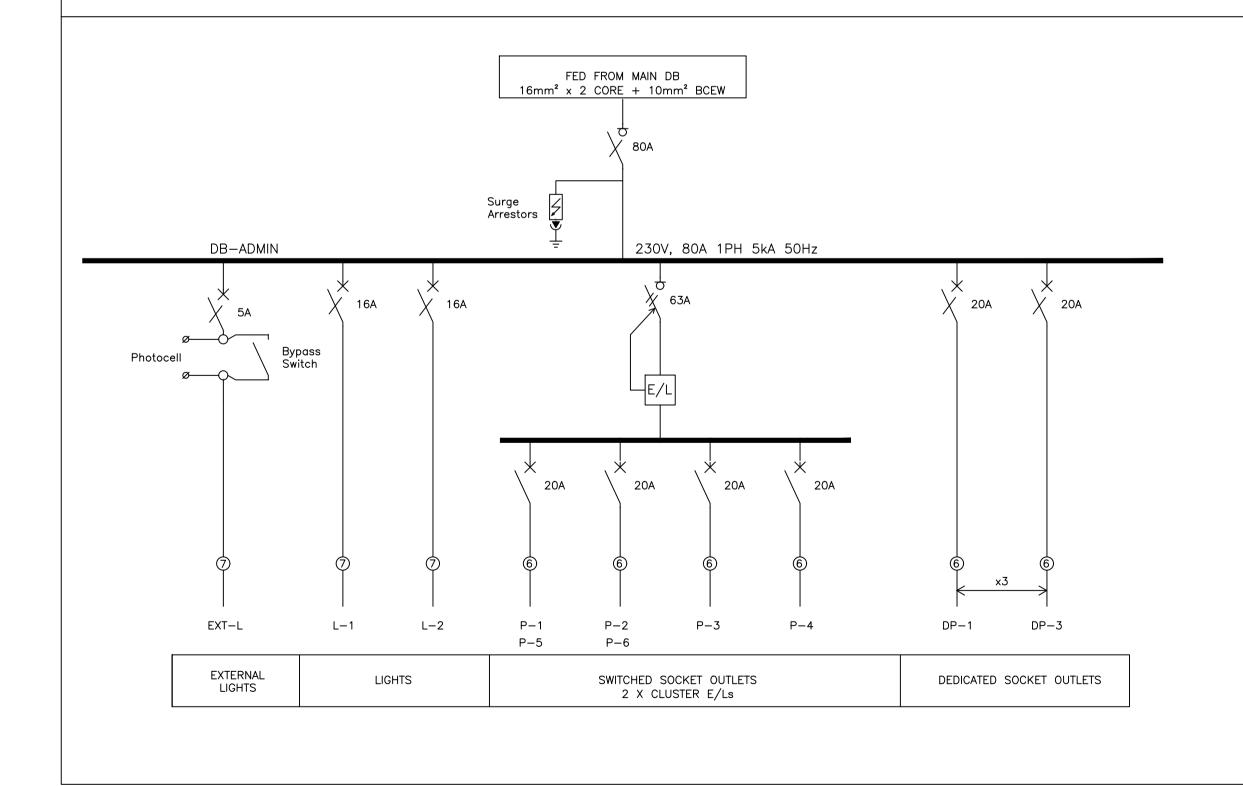


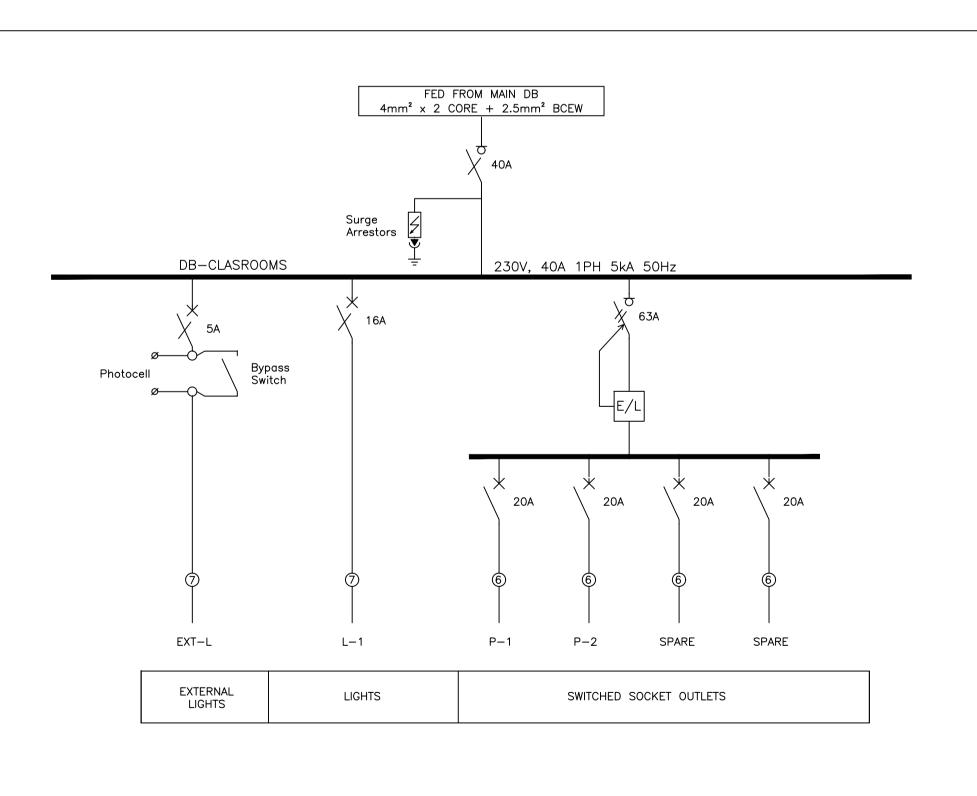
Symbol	QTY	LEGEND Description
		PHASE INDICATIONS: SINGLE PHASE DOUBLE POLE THREE PHASE
X ABC DEF		CIRCUIT BREAKER.
ABC DEF		ISOLATOR (ON LOAD).
Switch		GENERAL SYMBOL FOR SWITCH.
E/L		EARTH LEAKAGE.
<u></u>		CONTACTOR.

	SCHEDULE	
	1 25mm² x 2C + 16mm² BC	
	2	$16 \text{mm}^2 \times 2\text{C} + 10 \text{mm}^2 \text{ BCEW}$
	3	$10 \text{mm}^2 \times 2\text{C} + 6 \text{mm}^2 \text{ BCEW}$
	4 6mm² x 2C + 4mm² BCEV	
5 4mm² x 2C + 2.5mm² B		4mm² x 2C + 2.5mm² BCEW
	6	2.5mm² x 2C + 2.5mm² BCEW
	7	$1.5 \text{mm}^2 \times 2\text{C} + 1.5 \text{mm}^2 \text{ BCEW}$

MAIN DISTRIBUTION BOARD				
POSITIONING:	SURFACE MOUNTED			
DIMENSIONS:	SPECIFY			
PANEL COLOUR:	ORANGE			
CABLE ENTRY:	воттом			
CABLE EXIT:	TOP & BOTTOM			
DOORS:	LOCKABLE			
SPARE CAPACTY:	25%			
OTHER:	WEATHERPROOF			

DISTRIBUTION BOARDS	
POSITIONING:	RECESSED
DIMENSIONS:	SPECIFY
PANEL COLOUR:	WHITE
CABLE ENTRY:	воттом
CABLE EXIT:	TOP & BOTTOM
DOORS:	LOCKABLE
SPARE CAPACTY:	25%
OTHER:	SPECIFY



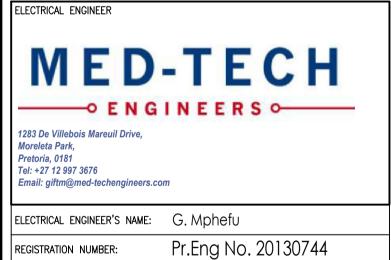


NOTES:

- 1. ALL FEEDER EQUIPMENT IS 1—PHASE, 2—WIRE UNLESS OTHERWISE INDICATED.
- 2. ELECTRICAL CONTRACTOR TO MEASURE ALL CABLES & BUSBARS PRIOR TO ORDERING.
- 3. EACH DB IS TO BE FITTED WITH A WARNING LABEL AS PER SANS 10142-1.
- 4. 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.
- 5. 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				
DATE	DESCRIPTION	BY			
10/08/21	ISSUED FOR TENDER	SM			
	DATE 10/08/21				

CLIENT	
ARCHITECT	
JOHANNESBURG	
Unit C2-001, Edenburg Terrace 348 Rivonia Blvd Rivonia 2128	



CLIENT'S SIGNATURE:

PROJECT DESCRIPTION

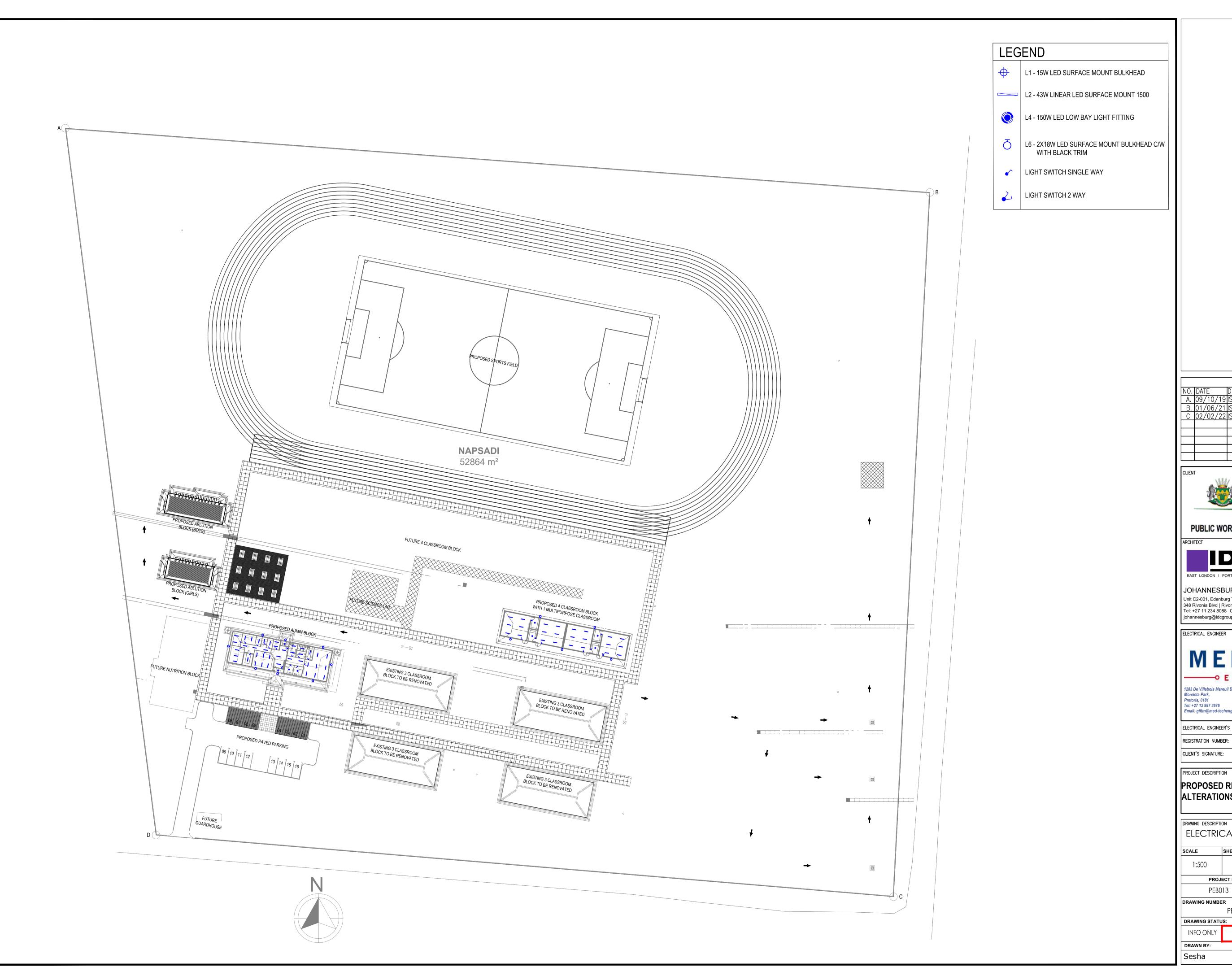
PROPOSED RENOVATIONS AND ALTERATIONS AT NAPSADI, LIMPOPO

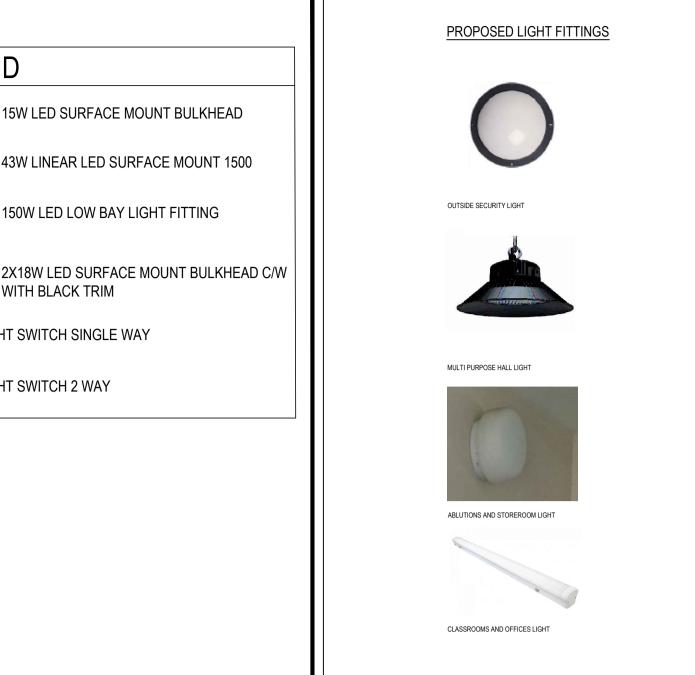
ELECTRICAL SINGLE LINE DIAGRAMS

SCALE	SHEET SIZE	DATE
N.T.S	A1	10 AUGUST 2021
PROJ	ECT No.	REVISION
PEBC	113	А

PEB013-SLD-003

DRAWING STATU	S:	_	
INFO ONLY	TENDER	COUNCIL	CONSTRUCTI
DRAWN BY:		CHECKED:	•
Sesha		Gift	





REVISIONS					
NO.	DATE	DESCRIPTION	BY		
Α.	09/10/19	ISSUED FOR INFORMATION	SM		
В.	01/06/21	ISSUED FOR INFORMATION	SM		
O	02/02/22	ISSUED FOR TENDER	SN		

DEPARTMENT OF

PUBLIC WORKS, ROADS & INFRASTRUCTURE

IDC ARCHITECTS

JOHANNESBURG Unit C2-001, Edenburg Terrace 348 Rivonia Blvd | Rivonia 2128 Tel: +27 11 234 8088 Cell: +27 72 068 0958

johannesburg@idcgroup.co.za

MED-TECH - ENGINEERS O-

1283 De Villebois Mareuil Drive, Moreleta Park, Pretoria, 0181 Tel: +27 12 997 3676 Email: giftm@med-techengineers.com

ELECTRICAL ENGINEER'S NAME: G. Mphefu Pr.Eng No. 20130744

CLIENT'S SIGNATURE:

PROJECT DESCRIPTION

PROPOSED RENOVATIONS AND ALTERATIONS AT NAPSADI, LIMPOPO

DRAWING DESCRIPTION

ELECTRICAL LIGHTING LAYOUT

SHEET SIZE DATE SCALE 01 JUNE 2021 1:500 REVISION PROJECT No. DRAWING NUMBER

PEB013-L-003

DRAWING STATUS: TENDER INFO ONLY DRAWN BY: Sesha

COUNCIL CONSTRUCTION CHECKED: Gift

