# INDEPENDENT DEVELOPMENT TRUST

**TENDERING PROCEDURES, RETURNABLE DOCUMENTS, AGREEMENT AND CONTRACT DATA, SCOPE OF WORK AND SITE INFORMATION**

**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.**

**Bid No.: DOE13NWER014/CON14**

**CLOSING DATE AND TIME: *02 NOVEMBER 2026 @ 12H00***


**Independent Development Trust**

***SCM / Technical Enquiries***

E-mail: NWTenders@idt.org.za


**Bidder:**. . . . . .

**CIDB Registration Number:** .....

**CSD Registration Number:**. . . . . .

**COIDA / FEM / RMA Certificate Number:**. . . . . .

**CIPC Registration Number** . . . . . .

**Contact Person:** . . . . . .

**Contact Details:** . . . . . .

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**Part C3: Scope of Work**

**The scope of work entails additions, Additions and Renovations to Tlale Primary School, which will include the following:**

C3.1

- Construction of New:
    - [A] Block A - Admin Block
    - [CC] CL - 4 + HOD - D (4 Classroom + HOD)
    - [H] Block J - Guard House
    - [K] Nutrition - Block M
    - [L] Block L - Hall
    - [M] Block K - Refuse Area
    - [N] Block N - Pump Room
    - [Q] Block G - Science Laboratory + Ablutions
- Renovations and alterations of :
    - [RA] Admin Block Convert to LIB / MED / COMP
    - [RD] Classroom Block 4
    - [RF] Classroom Block 6
    - [RH] Ablution Block 1
- External works
    - Demolitions of existing structures
    - Soil drainage and Stormwater management
    - New Pavings to Parking and Assembly Areas
    - New Covered Walkways
    - Security Fencing (ClearVu)
    - Purchasing of Mobile Classrooms for Decanting Purposes
    - Covered Carports
    - Soccer Field and Combined Courts
    - Landscaping and Flag Poles)
- Electrical and Mechanical installations

**Part C4: Site Information**

C4.1 Site Information

# T1.1 BID NOTICE AND INVITATION TO BID

**INDEPENDENT DEVELOLPMENT TRUST**

# T1.1 Bid Notice and Invitation to Bid

## APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.

## BID NUMBER: DOE13NWER014/CON14

## CLOSING DATE AND TIME: *02 NOVEMBER 2026 @ 12H00*

North West Province, the Independent Development Trust, invites bidders for the **APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.**

Only tenders who have a CIDB contractor grading of **Grade 8GB (General Building) or higher; and comply with the tender conditions will be legible.**

Documents will be available from the **05 October *2026***

Tender documents must be downloaded from IDT website and National Treasury e-tender on the following link: http://www.idt.org.za/business opportunities/current-tenders ,and www.treasury.gov.za

BID enquiries relating to the issues of these documents may be addressed to:

**Bid Administration Enquiries**
E-mail: NWTenders@idt.org.za

**Technical Enquiries**
E-mail: NWTenders@idt.org.za
Technical Enquiries cut off date **– 26 October 2026**

Tender documents to be submitted at the tender box of the IDT office:

INDEPENDENT DEVELOPMENT TRUST (NORTH WEST OFFICES)
4071 Joules Street
Industrial Site
MAHIKENG
2745

A compulsory clarification meeting with representatives of the employer will take place on site at **TLALE PRIMARY SCHOOL in The Ngaka Modiri Molema District Of The North West Province on 13 October 2026 starting at 10h00**. The site is accessible from Motlhabeng Village. The central coordinates of the site are **Latitude 25°51'1.57"S Longitude 25°35'57.73"E**.

Note: As stated in the Bid Data, the Bidders representative must sign the attendance register in the name of the bidding entity on the Briefing Meeting Date. Failure of the bidder's representative to record attendance in the briefing meeting register, clearly identifying the bidding entity, will result in the conclusion that the bidding entity did not attend the compulsory briefing meeting. In the case of a Joint Venture (JV), at least one partner must attend the briefing meeting.

**PLEASE NOTE THE FOLLOWING IMPORTANT DATES**

- Compulsory Clarification Meeting (Site Briefing) Date**: 13 October 2026 @ 10H00**
- Bid Closing Date: **02 November 2026**
- Requirements for sealing, addressing, delivery and assessment of tenders are stated in the Tender Data.

The evaluation of the tender will be carried out in three (3) phases.

**Phase 1: Mandatory Requirements**

Only bidders who meet the following requirements will be eligible for further evaluation.

**1.1 MANDATORY ADMINSTRATIVE REQUIREMENTS/ DOCUMENTATION**

**1.1.1** Submission of fully completed and signed Invitation to Bid (SBD 1).
**1.1.2** Submission of fully completed and signed Bidder's Disclosure (SBD 4).
**1.1.3** Submission of fully completed and signed Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022 (SBD 6.1).

The IDT reserves the right to request information or documentation in accordance with the provisions of the Promotion of Administrative Justice Act (PAJA).

**1.2 MANDATORY COMPULSORY REQUIREMENTS/ DOCUMENTATION**

**1.2.1** Letter of Authority for signatory and / or Board / company resolution
**1.2.2** The bidder must be registered with CIDB and provide CIDB number – Grade 8GB or higher (JV's to hold a consolidated CIDB Grading, which equates to the required grading).
**1.2.3** The bidder must provide a valid letter of good standing from Department of Labour (COIDA) or FEM certificate. (If JV, all partners must submit COIDA or FEM Certificates)
**1.2.4** The bidder must be registered with CIPC Company Incorporation Property Commission and provide source of verification (in the case of JV each company must be registered with CIPC).
**1.2.5** The bidder must be registered on Central Supplier Database (CSD) and provide MAAA Number to verify registration) before submitting the bid.
**1.2.6** Attendance to the compulsory site briefing meeting - Briefing session attendance register must be signed at Briefing Meeting
**1.2.7** The Form of Offer must be fully completed, signed and witnessed in the tender document.
**1.2.8** The Bill of Quantities (BOQ) must be submitted in its entirety. All applicable items must be priced, and any non-applicable items must be clearly indicated as "Not Applicable (N/A)"
**1.2.9** Joint Venture (JV) agreement, if applicable, must be signed by all parties of the JV.
**1.2.10** The bidder must provide proof of active professional registration as PrCPM/PrCM with SACPCMP for the person that will be assigned to play a role of a construction manager for this project.
**1.2.11** The bidder must provide proof of active professional registration as professional occupational health and safety with SACPCMP as CHSO, CHSM or CHSA for the person that will be assigned to play the role of health and safety officer for this project.
**1.2.12** Confirmation of Receipt of Addenda to Bid Documents, if applicable

**Note:** (i) Failure to submit any of the above documents / requirements shall result in disqualification of the bid.

(i) If any of the Directors are in the Employment of the State, the Regulation 13(c) of the Public Service Regulations, 2016 provides that an employee shall not conduct business with any organ of state or be a director of a public or private company conducting business with an organ of state unless such employee is in an official capacity a director of a company listed in schedule 2 and 3 of the Public Finance Management Act. In alignment with Directive on conducting business with an organ of state issued by the minister of Public Service and Administration - 21 February 2024.

(ii) If the bidder is listed on National Treasury List of Restricted Suppliers shall result in disqualification of the bid.

(iii) If any of its Directors are Listed on the Register of Defaulters shall result in disqualification of the bid.

**Tax Compliance Status is a mandatory requirement if the bidder is recommended for award.**

- The bidder must provide its Tax Compliance Letter with the unique pin for verification.

In accordance with National Treasury Instruction No. 9 of 2017/18, the IDT will verify the tax compliance status of the recommended bidder prior to the award of the Bid.

Where the recommended bidder is found to be non-compliant with its tax obligations, the IDT will notify the bidder in writing of its non-compliant status and afford the bidder seven (7) working days to submit written proof from the South African Revenue Service (SARS) confirming its tax compliance status, or written proof that the bidder has made an arrangement with SARS to meet its outstanding tax obligations.

The bidder's tax compliance status or proof of such arrangement will be verified by the IDT through the applicable SARS/eFiling or Central Supplier Database (CSD) verification process.

**Should the recommended bidder fail to provide the required written proof within the stipulated seven (7) working days, the IDT will reject the Bid.**

Only bidders who met all mandatory requirements will be evaluated further on functionality.

**Phase 2: Functionality criteria**

Phase 2 entails the process of the evaluation of functionality, technical requirements. Only Bidders who meet the threshold of 70% (70 Points) or above the total functionality, quality points will be eligible to be evaluated under phase 3. The table below specifies in the functionality, technical criteria to be considered under the evaluation.

| Criteria | Maximum Points Allocation |
|---|---|
| Relevant Previous Experience on completed projects of a similar nature and value in the last ten (10) years (Refer to Form T2.2.2) | 35 points |
| Signed and stamped client references on the same projects listed above (both Client & Client Representative). OR Signed and Contactable reference letters from previous clients. | 15 points |
| Qualifications, Skills and Experience of project key resources | 35 points |
| Financial Viability | 15 points |
| Total | **100 points** |

**In Addition to achieving the overall minimum qualifying score for functionality, Bidders shall be required to achieve the minimum threshold stipulated for each critical evaluation criterion. Failure to achieve the minimum threshold in any criterion shall render the Bid non-responsive for functionality purposes.**

| Criteria | Maximum Points Allocation | Minimum Points |
|---|---|---|
| Relevant Previous Experience | 35 points | 17 points |
| Signed and stamped client references | 15 points | 6 points |
| Qualifications, Skills and Experience of project key resources | 35 points | 20 points |
| Financial Viability | 15 points | 10 points |

**Similar Nature of work for evaluation** Construction/renovation of Buildings (No points will be allocated for other nature and value of works like Civil Engineering projects, Water and sanitation projects, Transport Projects, Traffic Engineering Projects, and all Electrical & Mechanical Engineering projects, RDP)

**Supporting Documents Required**

- Particulars of Tender's Projects (Appointment letters and completion certificates)
- Schedule of Tenderer's References
- CV of Key Personnel including the OHS
- Copies of Certificates/qualifications (certified copies not older than 6 Months)
- Copies of all Professional Registrations of Staff.
  Recent annual financial statements Not older than 12 months signed by an accountant and company Director

Only bidders who are competent and who have achieved the minimum functionality threshold of 70 points or higher will be evaluated on 90/10 (Price / Specific Goals) points based on the Preferential Procurement Regulations of 2022.

**Phase 3: Preferential Point System**

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

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

The 90/10 Preferential Point System will be applied, where 90 points will be allocated for price and 10 points for specific goals. The 90/10 system will be used since the estimated value for this project is above the R50 000 000 (all applicable taxes included).

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system: or
(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both

the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

***Note to tenderers: The tenderer must indicate how they claim points for each preference point system.*)**

| The specific goals allocated points in terms of this tender | Number of points allocated (90/10 system) | Number of points claimed (90/10 system) (To be completed by the tenderer) |
|---|---|---|
| Women Ownership | 3 | |
| Youth Ownership | 3 | |
| People with Disabilities Ownership | 2 | |
| Black Ownership | 2 | |
| **Total points for Price and SPECIFIC GOALS** | **100** | |

**Source Documents to be submitted with the Tender:**

In order to claim and be awarded points, the following source documents must be submitted with the bid. Failure to submit any of the below source documents will lead to zero point allocation.

- CIPC Document (Company Registration Document will be required for verification (CIPC DOC) and share certificate if ownership certificate is not indicated on the CIPC)
- Woman (Originally Certified ID Document not older than 6 months)
- Youth (Originally Certified ID Document not older than 6 months)
- People with Disability (Letter from the Dr. Confirming the Disability signed with verifiable contact details)
- Black Ownership (Originally Certified ID Document not older than 6 months)

CSD full report will be used in support of the above mentioned documentation to verify specific goals

The IDT may conduct a risk assessment on recommended bidder/s. Bidders are requested to price each line item of the Bills of Quantities (BOQ) in black ink. Should the bidder/s be deemed too risky to complete the project based on the IDT's risk assessment report, they will be subjected for further clarification.

Tender Documents may be downloaded from the IDT's website following the link **http://www.idt.org.za/business-opportunities/current-tenders/** as well as on the e-tenders portal, **www.etenders.gov.za.** Tenders must only be submitted on the tender documentation that is downloaded from the stipulated websites. The retyping of the tender document is not permitted:

All SCM and Technical enquiries relating to this bid must be directed in writing to ***NWTenders@idt.org.za*** during office hours (08h30 – 17h00) weekdays.

Enquiries will be accepted until the ***26 October 2026.*** No Verbal or telephonic queries will be attended to. Any attempt to verbally contact the IDT's Agent or IDT's employee to influence outcome of this tender will lead to disqualification.

**On submission of Tender documents, the bidder must submit a signed original bid document in hard copy.**

Requirements for sealing, addressing, delivery, opening and assessment of bids are stated in the Tender Data. (Refer to Section T1.2)

The bid closing date is ***02 November 2026 @ 12h00*** and bids shall be submitted in the tender box at IDT's North West Regional Office;

**4071 Joules Street**
**Industrial Site**
**Mahikeng**
**2735**

Telegraphic, telephonic, telex, facsimile, e-mail and late bids **WILL NOT** be accepted.

The Independent Development Trust does not bind itself to accept the lowest or any particular bid.

# T1.2 BID DATA

**INDEPENDENT DEVELOPMENT TRUST**

**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.**

# T1.2 Bid 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. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annexure to this Tender Data.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

**The additional conditions of bid are:**

| Clause number | BID DATA FOR APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE..– BID NUMBER: DOE13NWER014/CON14 |
|---|---|
| F.1.1 | The employer is the **Independent Development Trust on behalf of the Department: Education, North West Province.** |
| F.1.2 | The bid documents issued by the employer comprises:<br><br>**THE BID**<br><br>**Part T1: Bidding procedures**<br>T1.1 Bid notice and invitation to bid<br>T1.2 Bid data<br><br>**Part T2: Returnable documents**<br>T2.1 List of returnable documents<br>T2.2 Returnable schedules<br><br>**THE CONTRACT**<br><br>**Part C1: Agreements and contract data**<br>C1.1 Form of offer and acceptance<br>C1.2 Contract data<br>C1.3 Form of Guarantee<br>C1.4 Adjudicator's agreement<br>C1.5 Agreement in terms of Occupational Health and Safety<br>C1.6 Waiver of Lien<br><br>**Part C2: Pricing data**<br>C2.1 Pricing instructions<br>C2.2 Bills of quantities<br><br>**Part C3: Scope of work**<br>C3 Scope of work |

| | |
|---|---|
| | **Part C4: Site Information**<br>C4 Site Information<br><br>This tender applies to both the (a) Skills Development Standard and the (b) Indirect Targeting Standard. Although in the case of these two standards there are no returnable documents, tenderers are sensitized that the proforma documents as listed below, shall be completed by the successful contractor after award of the contract within the stipulated period. (The proforma documents are provided in the tender data for information purposes only).<br><br>Form A 1 List of recognized Skills Development Agencies, Form A 2 Baseline Training Plan, Form A 3 Project Interim Report, Form A 4 Supervisor Agreement, Form A 5 Project Completion Report. (Skills Development Standards)<br>Project Interim Report, Project Completion Report and Declaration. (Indirect Targeting Standards)<br><br>**Addendum to the Contract**<br>**Annexures**<br>**Annexure A: Architectural Drawings**<br>**Annexure B: Mechanical and Electrical Specifications & Drawings**<br>**Annexure C: Civil and Structural Drawings** |
| F.1.4 | The employer's agent is: GUDUNKOMO INVESTMENTS & CONSULTING (PTY) LTD.<br><br>**Mr. X Nxumalo**<br><br>30150 Mmutla Street<br>Mosianeiew,<br>Mafikeng,<br>2745<br><br>Tel:<br>E- mail: xolani.nxumalo@gudunkomo.co.za |
| F.2.1<br><br>F.2.1.1<br><br><br>F.2.1.1.1 | **Eligibility**<br><br>Submit a tender offer only if the Tenderer satisfies the criteria stated hereunder and if the Tenderer, or any of his principals, is not under any restriction to do business with the employer (IDT) or the North West Department of Education<br><br>Only bidders, who meet the following requirements will be eligible for further evaluation.<br><br>**1.1. MANDATORY ADMINSTRATIVE REQUIREMENTS/ DOCUMENTATION**<br><br>1.1.1 Submission of fully completed and signed Invitation to Bid (SBD 1).<br>1.1.2 Submission of fully completed and signed Bidder's Disclosure (SBD 4).<br>1.1.3 Submission of fully completed and signed Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022 (SBD 6.1).<br><br>The IDT reserves the right to request information or documentation in accordance with the provisions of the Promotion of Administrative Justice Act (PAJA).<br><br>**1.2. MANDATORY COMPULSORY REQUIREMENTS/ DOCUMENTATION**<br>**1.2.1** Letter of Authority for signatory and / or Board / company resolution.<br>**1.2.2** The bidder must be registered with CIDB and provide CIDB number – Grade 8GB or higher (JV's to hold a consolidated CIDB Grading, which equates to the required grading).<br>**1.2.3** The bidder must provide a valid letter of good standing from Department of Labour (COIDA) or FEM certificate. (If JV, all partners must submit COIDA or FEM Certificates)<br>**1.2.4** The bidder must be registered with CIPC Company Incorporation Property Commission and provide source of verification (in the case of JV each company must be registered with CIPC).<br>**1.2.5** The bidder must be registered on Central Supplier Database (CSD) and provide MAAA Number to verify registration) before submitting the bid.<br>**1.2.6** Attendance to the compulsory site briefing meeting - Briefing session attendance register must be signed at Briefing Meeting. |

| | |
|---|---|
| | **1.2.7** The Form of Offer must be fully completed, signed and witnessed in the tender document.<br>**1.2.8** The Bill of Quantities must be completed and priced<br>**1.2.9** Joint Venture (JV) agreement, **if applicable,** must be signed by all parties of the JV<br>**1.2.10** Acknowledgement of Addenda to Tender Documents (if applicable) The bidder must provide proof of active professional registration as PrCPM/PrCM with SACPCMP for the person that will be assigned to play a role of a construction manager for this project.<br>**1.2.11** The bidder must provide proof of active professional registration as professional occupational health and safety with SACPCMP as CHSO, CHSM or CHSA for the person that will be assigned to play a role of health and safety officer for this project.<br>**1.2.12** Confirmation of Receipt of Addenda to Bid Documents, if applicable<br><br>**Notes:**<br><br>(i) Failure to submit any of the above documents / requirements shall result in disqualification of the bid.<br>(ii) If any of the Directors are in the Employment of the State, the Regulation 13(c) of the Public Service Regulations, 2016 provides that an employee shall not conduct business with any organ of state or be a director of a public or private company conducting business with an organ of state unless such employee is in an official capacity a director of a company listed in schedule 2 and 3 of the Public Finance Management Act. In alignment with Directive on conducting business with an organ of state issued by the minister of Public Service and Administration - 21 February 2024.<br>(iii) If the bidder is listed on National Treasury List of Restricted Suppliers shall result in disqualification of the bid.<br>(iv) If any of its Directors are Listed on the Register of Defaulters shall result in disqualification of the bid.<br><br>**Tax Compliance Status is a mandatory requirement if the bidder is recommended for award.**<br><br>• The bidder must provide it's Tax Compliance Letter with the unique pin for verification.<br><br>In accordance with National Treasury Instruction No. 9 of 2017/18, the IDT will verify the tax compliance status of the recommended bidder prior to the award of the Bid.<br><br>Where the recommended bidder is found to be non-compliant with its tax obligations, the IDT will notify the bidder in writing of its non-compliant status and afford the bidder seven (7) working days to submit written proof from the South African Revenue Service (SARS) confirming its tax compliance status, or written proof that the bidder has made an arrangement with SARS to meet its outstanding tax obligations.<br><br>The bidder's tax compliance status or proof of such arrangement will be verified by the IDT through the applicable SARS/eFiling or Central Supplier Database (CSD) verification process.<br><br>**Should the recommended bidder fail to provide the required written proof within the stipulated sever (7) working days, the IDT will reject the Bid.** |
| F.2.1.1.2 | **CIDB Grading**<br><br>In order to be considered for an appointment in terms of this bid, the bidder must be registered with the CIDB, in a contractor grading designation in accordance with the sum tendered for a **Grade 8GB** class of construction work.<br><br>Joint ventures are eligible and preferred with particular reference to local participation and as such submit tenders provided that:<br><br>1. every member of the joint venture is registered with the CIDB;<br>2. the lead partner has a contractor grading designation in the **Grade 8GB** or Higher class of construction work; and<br>3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to **8GB** contractor grading designation determined in accordance with the sum tendered for a **(GB) General Building** class of construction work |
| F.2.1.1.3 | |

| | |
|---|---|
| | **Key Personnel**<br>In order to be considered for an appointment in terms of this bid, the bidder must have the following key personnel in its permanent employment at the close of the bid. Alternatively, a signed undertaking from an organisation having the required personnel, stating that they will undertake the necessary work on behalf ofthe bidder in terms of a sub-consultant agreement, will be acceptable. Such undertaking must be attached to the "Key Personnel" schedule, Part T2.2: Returnable Schedules.<br><br>Individuals must be identified for each of the key personnel listed on the "Key Personnel" schedule, Part T2.2: Returnable Schedules.<br><br>Where the key personnel are no longer accessible to undertake the necessary work after the award of the tender, the contractor shall within a period of 5 working days replace the key personnel listed on the "Key Personnel" schedule, Part T2.2: Returnable Schedules with a person with equivalent competencies and subject to approval by the employer. |
| F.2.6 | **Acknowledge addenda**<br><br>Acknowledge receipt of addenda to the bid documents, which the employer may issue, and if necessary apply for an extension to the closing time. If the Addenda has financial implications, failure to acknowledge the addenda may eliminate your bid form evaluation. This is due to incomparability of offers with the rest of the bidders |
| F.2.7 | **Clarification Meeting**<br><br>A compulsory site briefing / clarification meeting will be held on **13 October 2026** starting at **10h00 at TLALE PRIMARY SCHOOL**. The GPS coordinates are latitude **- 25°51'01.6"S 25°35'57.7"E**.<br><br>The Bidders representative must sign the attendance register in the name of the bidding entity on the Briefing Meeting Date. Failure of the bidder's representative to record attendance in the briefing meeting register, clearly identifying the bidding entity, will result in the conclusion that the bidding entity did not attend the compulsory briefing meeting. In the case of a Joint Venture (JV), at least one partner must attend the briefing meeting.<br><br>**Note:** Bidders are advised to allow enough travelling time to the briefing meeting. |
| F.2.8 | **Seek clarification**<br>Bidders can request clarification of the bid documents, if necessary, by notifying the employer in writing to NWTenders@idt.org.za during office hours (08h30 – 17h00) weekdays at least 5 (five) working days before the closing time and date stated in F.2.15. |
| F2.9 | **Insurances**<br>Refer to contract data for insurance requirements. (Refer to Section C1.2) |
| F.2.11 | **Alterations to documents**<br><br>Do not make any alterations or additions to the bid documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the bidder.<br>All signatories to the bid offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited. |

| Clause number | BID DATA FOR APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE..– BID NUMBER: DOE13NWER014/CON14 |
|---|---|
| F.2.12 | **Alternative Bid Offers**<br><br>No alternative tender offers will be considered. |
| F.2.13 | **Submitting a Bid Offer** |
| F.2.13.4 | The bidder will sign the original of the bid offer. |
| F2.13.5 | The bidder must submit tender offer in a sealed envelope. (Clearly marked<br><br>**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE. – BID NUMBER: DOE13NWER014/CON14**<br><br>On submission of Tender documents, the bidder must submit a signed original bid document in hard copy and one softcopy of the bid document using USB-memory stick / Disc (read only).<br>The bid document softcopy on the USB-memory stick should be indexed the same way as the original bid hard copy document, which can be returned back to the bidder after the evaluation process is completed. |
| F.2.13.6 | Two-envelope system **–** not applicable |
| F.2.13.7 | 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:<br><br>Employer's address:<br>**North West Regional Office**<br>**4071 Joules Street**<br>**Industrial Site**<br>**Mahikeng**<br>**2735** |
| F.2.13.9 | Identification details:<br>**Tender No: DOE13NWER014/CON14**<br>**Description: APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE**<br><br>Tender offers submitted by facsimile, e-mail or reproduced will be rejected by the employer. Tender documents must be submitted in an original format as issued by the employer. |

| Clause number | BID DATA FOR APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE – BID NUMBER: DOE13NWER014/CON14 |
|---|---|
| F.2.15 | **Closing Time of Tender** |
| F.2.15.1 | The closing time for submission of tender offers is by no later than ***02 November 2026*** **at 12h00.**<br><br>**Location of tender box:**<br><br>**North West Regional Office**<br>**4071 Joules Street**<br>**Industrial Site**<br>**Mahikeng**<br>**2735**<br><br>Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted. |
| F.2.16 | **Tender Offer Validity** |
| F.2.16.1 | The bidder is required to hold the bid offer valid for a period of **120 calendar days** *(from the bid closingdate)* |
| F.2.19 | **Inspections, Tests and Analysis**<br><br>Access shall be provided for inspections, tests and analysis as may be required by the employer. |
| F.2.23 | **Certificates**<br><br>The bidder is required to submit with his tender a Contractor Registration number issued by the Construction Industry Development Board (CIDB).<br><br>The bidder is required to submit with his tender the MAAA Number to verify registration with the Central Supplier Database (CSD).<br><br>The bidder is required to submit with his tender professional registration certificates for the key personnel requested. |
| F3.5 | Two-envelope system **– not applicable** |
| F.3.1 | **Evaluation of Tender Offers**<br><br>The procedure for the evaluation of a responsive tender will be in terms of the Preferential Procurement Regulations 2022 on 80/20 or 90/10 preference point system. |
| F.3.11.3 | In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:<br>In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—<br>(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or<br><br>(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system. |

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|---|---|
| F.3.11.8 | **Scoring Preference**<br><br>**Table 1: Specific goals for the tender and points claimed are indicated per the table below**.<br><br>*(Note to organs of state: Where either the 90/10 preference point system is applicable, corresponding points must also be indicated as such.*<br><br>*Note to tenderers: The tenderer must indicate how they claim points for each preference point system.***)** |

| The specific goals allocated points in terms of this tender | Number of points allocated (90/10 system) (To be completed by the organ of state) | Number of points claimed (90/10 system) (To be completed by the tenderer) |
|---|---|---|
| Women Ownership | 3 | |
| Youth Ownership | 3 | |
| People with Disabilities Ownership | 2 | |
| Black Ownership | 2 | |

**Source Documents to be submitted with the Tender:**
In order to claim and be awarded points, the following source documents must be submitted with the bid. Failure to submit any of the below source documents will lead to zero point allocation.

- CIPC Document (Company Registration Document will be required for verification (CIPC DOC) and share certificate if ownership certificate is not indicated on the CIPC)
- Woman (Originally Certified ID Document not older than 6 months)
- Youth (Originally Certified ID Document not older than 6 months)
- People with Disability (Letter from the Dr. Confirming the Disability signed with verifiable contact details)
- Black Ownership (Originally Certified ID Document not older than 6 months)

CSD full report will be used in support of the above mentioned documentation to verify specific goals

F.3.11.9 The quality criteria and maximum score in respect of each of the criteria are as follows:

| Criteria | Maximum Points Allocation | Minimum Points |
|---|---|---|
| Relevant Previous Experience on completed projects of a similar nature and value in the last ten (10) years (Refer to Form T2.2.2) | 35 points | 17 points |
| Signed and stamped client references on the same projects listed above (both Client & Client Representative). OR Signed and Contactable reference letters from previous clients. | 15 points | 6 points |
| Qualifications, Skills and Experience of project key resources | 35 points | 20 points |
| Financial Viability | 15 points | 10 points |
| Total | **100 points** | |
| NB: Minimum qualifying functionality threshold is **70 points out 100** | | |

**A. RELEVANT PREVIOUS EXPERIENCE ON COMPLETED PROJECTS OF A SIMILAR NATURE AND VALUE IN THE LAST TEN (10) YEARS (35 POINTS):**

Points allocated for proven track record based on previous projects executed to completion by the bidder in consideration of similar kind and complexity. The similarity refers to the construction of building projects in the past 10 years. Buildings (No points will be allocated for other nature and value of works like Civil Engineering projects, Water and sanitation projects, Transport Projects, Traffic Engineering Projects and all Electrical & Mechanical Engineering projects, RDP)

The scoring on this item will be carried out as follows:

i. The bidder shall submit signed appointment letter(s) in the relevant official Client letterhead clearly showing the project value / amount
ii. The bidder shall submit signed proof of project completion (JBCC or other Completion Certificate or letter from the client (client letter head) confirming completion of such a project).
iii. For subcontracted work submit the appointment letter and completion certificate as stated in (i) & (ii) together with the appointment letter and completion certificate for the main contractor

**NOTE: Failure to submit any of the above requirements will result in no points being awarded to the bidder.**

Evaluation points will be awarded in terms of the following table below:

| | **Similar completed projects (as per CIDB level 8GB & above – Tender Value Limit between R 60 000 001 and above** | **Similar completed projects (as per CIDB level 7GB – Tender Value Limit between R 20 000 001 to R 60 000 000)** | **Similar Completed projects (as per CIDB level 6GB – Tender Value Limit between R 10 000 001 to R 20 000 000)** | **Non-Submission, Irrelevant Evidence, Incomplete Evidence** |
|---|---|---|---|---|
| Project A | 7 | 5 | 3 | 0 |
| Project B | 7 | 5 | 3 | 0 |
| Project C | 7 | 5 | 3 | 0 |
| Project D | 7 | 5 | 3 | 0 |
| Project E | 7 | 5 | 3 | 0 |
| **Points** | **35** | **25** | **15** | **0** |

The scoring on this item will be carried out as follows:

iv. The bidder shall submit signed appointment letter(s) in the relevant official Client letterhead clearly showing the project value / amount
v. The bidder shall submit signed proof of project completion

**NOTE: Failure to submit any of the above requirements will result in no points being awarded to the bidder.**

**B. SIGNED CLIENT REFERENCES ON THE SAME PROJECTS LISTED ABOVE (BOTH CLIENT & CLIENT REPRESENTATIVE).OR SIGNED WITH CONTACTABLE REFERENCE LETTERS FROM PREVIOUS CLIENTS (15 POINTS).**

Points allocated for client reference **(As per returnable schedule T 2.2.4)** based on previous completed projects as above executed by the bidder in consideration:

Points will be allocated based on:

i. Receipt of signed client references in the forms supplied in this document
or
ii. Favorable client reference letter on their letterhead

**NOTE: Failure to submit any of the above requirements will results in no points being awarded to the bidder.**

Evaluation points will be awarded in terms of the following table:

| Projects | Overall Assessment by Client | | | |
|---|---|---|---|---|
| | Poor | Average | Good | Excellent |
| Project 1 | 0 | 1 | 2 | 3 |
| Project 2 | 0 | 1 | 2 | 3 |
| Project 3 | 0 | 1 | 2 | 3 |
| Project 4 | 0 | 1 | 2 | 3 |
| Project 5 | 0 | 1 | 2 | 3 |
| **Total Number of Points** | **0** | **5** | **10** | **15** |

**C. QUALIFICATIONS, SKILLS AND EXPERIENCE OF PROJECT KEY RECOURCES (35 POINTS):**

Points allocated for required

i. competencies,
ii. qualifications (i.e degree or diploma)
iii. submission of CV's
iv. submission of relevant certified (not older than 6 months) evidence of qualifications and certificates of allocated Required Key Project Resources.
v. Professional registration within the built environment.

**NOTE:** Points allocation with submission of all required documentation will be rounded off to thenearest lowest number

**Evaluation points will be awarded in terms of the following table A (28 points):**

| Category | Professional Registration (7 points) | Qualification within the Built Environment (5 points) | | | Years of experience within the BuiltEnvironment (16 points) | | | |
|---|---|---|---|---|---|---|---|---|
| | (Related to Building works, SACPCMP, SACQSP, SACAP, ECSA | Degree or higher | Diploma | National Certificate or similar | 10 or above years | 5 - 9 years | 1 - 4 years | < 1 year |
| Project / Contract Manager | 7 | 2 | 1 | 1 | 7 | 5 | 3 | 1 |
| Site Agent | Not required | 2 | 2 | 1 | 5 | 4 | 3 | 1 |
| Foreman | Not required | 1 | 1 | 1 | 4 | 4 | 3 | 1 |
| Total Points | **7** | **5** | **4** | **3** | **16** | **13** | **9** | **3** |

**Evaluation points will be awarded in terms of the following table B (7 points):**

| Category | Description | Points |
|---|---|---|
| Health and Safety Resource | Professional Registration with SACPCMP (Mandatory) | 7 |
| | No submission | 0 |

Where the Health and Safety officer allocated to this project is no longer accessible to undertake the necessary work after the award of the tender, the contractor shall within a period of 5 working days replace the Construction Health and Safety Officer with a person with equivalent competencies subject to approval by the employer.

**D. FINANCIAL VIABILITY (15 POINTS):**

Points are allocated to contractors who provide at least one of the following verifiable documents:

| Description | Points |
|---|---|
| Recent annual financial statements Not older than 12 months with Cash & Cash Equivalent of R5 Million or above signed by an accountant and company Director | **15** |
| Recent annual financial statements Not older than 12 months with Cash & Cash Equivalent of R3 Million or above signed by an accountant and company Director | **10** |
| **Non-Submission:** thresholds lower than above | **0** |

**NOTE: 15 points will be scored if at least one of the required documents listed above . Failure to submit will result in zero points for these criteria.**

| | | | |
|---|---|---|---|
| **Quality Formula** | WQ=W2 x So/Ms | Formula used to calculate Functionality points | |
| | **W2** =Total evaluation points for functionality as per Scorecard | | |
| | **So = Functionality** points allocated to the bidder under consideration | | |
| | **Ms** =Maximum possible score for functionality in respect of a submission | | |
| **Minimum points to be scored for Functionality is 70%** | | | |
| **FINANCIAL OFFER/PRICE** | **80/90** | Formula 2 Option 1,A=(1- {p-pm/pm}) | Formula used to calculate Financial Offer/Price points |
| | | **pm** =The comparative Price offer of the mean/average qualifying tenderer | |
| | | **p** =The comparative offer of the tender under consideration | |
| | **80/90** | | |

**Notes:**
1. Bidders are required to score minimum points of 70% for Functionality as stated in the tender data
2. Bidders who fail to meet the required minimum number of points for functionality as stated in the tender data shall be disqualified
3. Bidders who fail to disclose mandatory required information as per the returnable schedules shall be disqualified

**4. Bidders to submit the following for means of verification:**
a) Project list of similar completed projects
b) Performance and quality reports from clients / consultants
c) Certified certificates of qualification of key staff and CV's including references
d) Traceable References for projects completed
e) Traceable references for suppliers

| Clause number | BID DATA FOR APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.– BID NUMBER: DOE13NWER014/CON14 |
|---|---|
| **F.3.13** | **Acceptance of Bid Offers** |
| F.3.13.1 | Bid offers will only be accepted if:<br><br>a) the bidder has submitted an original valid Tax Clearance Certificate issued by the South African Revenue Services;<br><br>b) the bidder is registered with the Construction Industry Development Board in an appropriate contractor grading designation;<br><br>c) the bidder or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;<br><br>d) the bidder has not:<br>i) abused the Employer's Supply Chain Management System; or<br>ii) failed to perform on any previous contract and has been given a written notice to this effect;<br><br>e) the bidder has completed the Declaration of Interest and there are no conflicts of interest which may impact on the bidder's ability to perform the contract in the best interests of the employer or potentially compromise the bid process and persons in the employ of the state are not permitted to submit tenders;<br><br>f) if there are no conflicts of interest which may impact on the bidder's ability to perform the contract in the best interests of the employer or potentially compromise the bid process<br>.<br>g) the bidder has submitted the CIPRO documentation and certified copies of ID's for all directors;<br><br>h) the bidder completed, signed and witnessed form of offer;<br><br>i) the bidder is in good standing with Compensation for Occupational Injuries and Disease Act (COIDA) / FEM<br><br>j) the bidder has submitted a fully priced Bill of Quantities;<br><br>k) The bidder attended a compulsory briefing session and completed attendance register or certificate of attendance is signed by the representative of the Employer.<br><br>l) The bidder is required to submit with his bid a Certificate of Contractor Registration issued by the Construction Industry Development Board and proof of Registration on the Central Supplier Database (CSD) with a Compliant Tax Status; copy of the tax clearance with Tax Compliance Pin issued by the South African Revenue Services.<br><br>M) The bidder and all its directors are South African Citizens **(For National Key Point Projects).** |

| | |
|---|---|
| F.3.14 | **Notice to Unsuccessful Bidders**<br><br>Should bidders not hear from the IDT within one hundred and twenty (120) calendar days of closure, they should consider their submission unsuccessful. Award will be posted on e-tender and CIDB website within 21 days of award. No written notification directed to each bidder will be issued by the Employer to unsuccessful bidders. |
| F.3.18 | **Provide Copies of the Contract**<br>The number of paper copies of the signed contract to be provided by the employer is one. |
| | **The additional conditions of bid are:**<br><br>1 The employer is not obliged to accept the lowest or any bid. |

# ANNEXURE F: STANDARD CONDITIONS OF BID

*(As contained in ADDENDUM F of the CIDB Standard for Uniformity in Construction Procurement)*

# Standard Conditions of Tender

## F.1 General

### F.1.1 Actions

**F.1.1.1** The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

**F.1.1.2** The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

**F.1.1.3** The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

### F.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

### F.1.3 Interpretation

**F.1.3.1** The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

**F.1.3.2** These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

**F.1.3.3** For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

a) **Conflict of interest** means any situation in which:
   i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
   ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
   iii) Incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

b) **Comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis

c) **Corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and

d) **Fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

### F.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only *(i.e post contract award and signing),* and in a form that can be read, copied and recorded. Writing shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

### F.1.5 Cancellation and Re-Invitation of Tenders

**F.1.5.1** An employer may, prior to the award of the tender, cancel a tender if-
a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;
b) funds are no longer available to cover the total envisaged expenditure; or
c) no acceptable tenders are received.
d) there is a material irregularity in the tender process.

**F.1.5.2** The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised.

**F.1.5.3** An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

### F.1.6 Procurement procedures

#### F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

#### F.1.6.2 Competitive negotiation procedure

**F.1.6.2.1** Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

**F.1.6.2.2** All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

**F.1.6.2.3** At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

**F.1.6.2.4** The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

#### F.1.6.3 Proposal procedure using the two stage-system (Not Applicable for this Bid)

#### F.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

**F.1.6.3.2 Option 2**

**F.1.6.3.2.1** Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

**F.1.6.3.2.2** The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

## F.2 Tenderer's obligations

### F.2.1 Eligibility

**F.2.1.1** Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer and/or 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;

**F.2.1.2** Notify the employer of any proposed material change in the capabilities or formation of the bidding entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

### F.2.2 Cost of tendering

**F.2.2.1**

Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

**F.2.2.2**

The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

### F.2.3 Check documents

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

### F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

### F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

### F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

### F.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

**F.2.8 Seek clarification**

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data. The tenderer is encouraged to go through all contents of the tender document as seek clarification where applicable. Any assumptions made by the bidder without prior confirmation by the Employer and his agent shall be at the tenderers own risk.

**F.2.9 Insurance**

Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

**F.2.10 Pricing the tender offer**

**F.2.10.1** Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

**F2.10.2** Show VAT payable by the employer separately as an addition to the tendered total of the prices.

**F.2.10.3** Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

**F.2.10.4** State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

**F.2.11 Alterations to documents**

Not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

**F.2.12 Alternative tender offers**

**F.2.12.1** Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

**F.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

**F.2.12.3** An alternative tender offer must only be considered if the main tender offer is the winning

**F.2.13 Submitting a bid offer**

**F.2.13.1** Submit one bid offer only, either as a single bidding entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

**F.2.13.2** Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.

**F.2.13.3** Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

**F.2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

**F.2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

**F.2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked “financial proposal” and place the remaining returnable documents in an envelope marked “technical proposal”. Each envelope shall state on the outside the employer’s address and identification details stated in the tender data, as well as the tenderer's name and contact address.

**F.2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

**F.2.13.8** Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

**F.2.13.9** Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

**F.2.14 Information and data to be completed in all respects**

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive and as such be disqualified.

Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proofof delivery.

**F.2.15 Closing time**

**F.2.15.1** Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

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

**F.2.16 Tender offer validity**

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

**F.2.16.2** If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

**F.2.16.3** Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer’s agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

**F.2.16.4** Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as “SUBSTITUTE”.

**F.2.17 Clarification of tender offer after submission**

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

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

**F.2.18 Provide other material**

**F.2.18.1** Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer’s commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer’s request, the employer may regard the tender offer as non-responsive.

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

**F.2.19 Inspections, tests and analysis**

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

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

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

**F.2.21 Check final draft**

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

**F.2.22 Return of other tender documents**

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

**F.2.23 Certificates**

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

## F.3 The employer's undertakings

**F.3.1 Respond to requests from the tenderer**

**F.3.1.1** Unless otherwise stated in the tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drewprocurement documents.

**F.3.1.2** Consider any request to make a material change in the capabilities or formation of the bidding entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

**F.3.2 Issue Addenda**

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.

**F.3.3 Return late tender offers**

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

**F.3.4 Opening of tender submissions**

**F.3.4.1** Unless the two-envelope system is to be followed, open valid tender submissions by the IDT's SCM Unit. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened publicly.

**F.3.4.2** Announce at the meeting held immediately after the opening of tender submissions the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices for the main tender offer only.

**F.3.4.3** Make available the record outlined in F.3.4.2 on the IDT's website.

**F.3.5 Two-envelope system (Not Applicable for this bid)**

**F.3.5.1** Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

**F.3.5.2** Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation more than the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.

**F.3.6 Non-disclosure**

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

**F.3.7 Grounds for rejection and disqualification**

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

**F.3.8 Test for responsiveness**

**F.3.8.1** Determine, after opening and before detailed evaluation, whether each tender offer properly received:

a) complies with the requirements of these Conditions of Tender,
b) has been properly and fully completed and signed, and
c) is responsive to the other requirements of the tender documents.

**F.3.8.2** A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer*'s* opinion, would:

*a)* detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
b) significantly change the Employer*'s* or the tenderer's risks and responsibilities under the contract, or
c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**F.3.9 Arithmetical errors, omissions and discrepancies**

**F.3.9.1** Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

**F.3.9.2** Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

a) the gross misplacement of the decimal point in any unit rate;
b) omissions made in completing the pricing schedule or bills of quantities; or
c) arithmetic errors in:
    i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or

ii) the summation of the prices.

**F.3.9.3** Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

**F.3.9.4** .

Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:
a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

**F.3.10 Clarification of a tender offer**

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

**F.3.11 Evaluation of tender offers**

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.
Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedure

**The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:**

| **Requirement** | **Qualitative interpretation of goal** |
|---|---|
| Fair | The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information. |
| Equitable | Terms and conditions for performing the work do not unfairly prejudice the interests of the parties. |
| Transparent | The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest. |
| Competitive | The system provides for appropriate levels of competition to ensure cost effective and best value outcomes. |

The activities associated with evaluating tender offers are as follows:
a) Open and record tender offers received
b) Determine whether or not tender offers are complete
c) Determine whether or not tender offers are responsive
d) Evaluate tender offers
e) Determine if there are any grounds for disqualification
f) Determine acceptability of preferred tenderer
g) Prepare a tender evaluation report
h) Confirm the recommendation contained in the tender evaluation report

**F3.11.1 General**

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data

### F.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

### F.3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
c) has the legal capacity to enter into the contract,
d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
e) complies with the legal requirements, if any, stated in the tender data, and
f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

### F.3.14 Prepare contract documents

**F.3.14.1** If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

a) addenda issued during the tender period,
b) inclusion of some of the returnable documents, and
c) other revisions agreed between the employer and the successful tenderer.

**F.3.14.2** Complete the schedule of deviations attached to the form of offer and acceptance, if any.

### F.3.15 Complete adjudicator's contract

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

### F.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects..

### F.3.17 Provide copies of the contracts

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

### F.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

# SPECIAL CONDITIONS OF TENDER

## F.4 Special Conditions of Tender

### F.4.1 General

The Special Conditions of Principal Contract Tender generally contain clauses that are either deemed to be additions, elaborations or variations to the Standard Conditions of Principal Contract Tender. Accordingly, the Special Conditions of Principal Contract Tender be read in conjunction with the Standard Conditions of Principal Contract Tender and it shall be deemed that the amended meanings and intentions of the clauses shall apply, if applicable.

### F.4.2 Tender Offers

Tenderers are advised that it is compulsory to submit offers for all Tender Options as set - out below and where indicated by a tick.

**Subject To Escalation Price Offer** | √

Tenderers are advised that this offer shall **be subject to Contract Price Adjustment Formulae based on the Haylett Formulae.**

**Fixed Price Offer** | **X**

Tenderers are advised that all rates, amounts, overhead and profit percentage mark-ups and amounts, profit and attendance amounts, prices, etc. submitted, shall **be subject to any form of Contract Price Adjustment Formulae e.g. Haylett Formulae.** In this regard, it is deemed that the Tenderer has allowed for any potential increases (except any variation in the rate of Value Added Tax) in cost of labour, materials, transport, etc. in the Tender amounts, rates, etc. submitted.

This will only be applicable to the measured work priced by the main contractor and will not apply to the provisional sums or budgetary allowances.

**Key: √ - Tender Option Applicable**
**X - Not Required For This Tender**

### F.4.3 Market Related Wage Rates

When pricing this document, respondents are to allow for wages, which are not less than the greater of:

The statutory wage rates in any labour category; and,
The SAFCEC recommended minimum rates applicable at any time during the duration of the contract.

In this regard, a Tenderer may be called upon to demonstrate the wage rates utilised in calculating its Tender price.

### F.4.4 Letter of Intent

Tenderers are required to furnish with their tender documents, a letter of intent from a Bank or approved Insurance Company, to indicate that in the event of their tender being successful that a surety / guarantee as required will be provided when asked to do so.

### F.4.5 Information to be Submitted by Tenderers

All Tenderers are instructed to acknowledge that the information to be submitted must be strictly in accordance with the requirements stipulated in 2.3. Therefore, separate brochures, information other than which is specified in 2.3 must not be incorporated in the submission documents. Failure to comply with this instruction may render the submission liable for disqualification.

If the spaces in the Tender Returnables are insufficient, the relevant particulars should be documented on a separate sheet (s) with proper reference to the specific information requested.

**F.4.6 Interviews**

All Tenderers are advised that they may be required to attend interviews and / or submit further information; including making their premises, plant, equipment and details of works in progress, available for inspection after the receipt of Tender submissions.

**F.4.7 Detailed Construction Programme**

The Principal Contract for the project Commencement and Completion dates and any other relevant dates for this contract are stated in the Preliminaries.

Time and quality are to be considered the essence of this Contract. Accordingly, it shall be deemed that the Project Programme detailing each activity and duration as well as a detailed Method Statement be submitted by the Tenderer as part of the Tender submission and shall be the basis of monitoring progress on the project.

The programme should be a detailed double-linked critical path programme preferably in CCS format in both hard copy and electronic format and take into consideration the following;

Dividing the programme into convenient construction zones both horizontally and vertically;
Linking all activities as 'open ended' or 'open start' activities are not acceptable;
Detailing all holidays, Christmas/New Year break, etc.;
Showing both the Date of Practical Completion and the Date of Works Completion given that the Employer will take Occupation of the facility once the Works Completion Certificate has been issued. Penalties will apply for Milestone, Practical and Works Completion dates not being achieved as detailed in the Preliminaries.

The programme must be a fully resourced "double linked" critical path programme clearly showing Start, Finish and any Interim completion dates as well as any Milestone dates for critical activities including;

- Dates for Practical Completion Inspections to be carried out;
- Date of Practical Completion
- Period required for attendance on and completion of the Completion List issued at Practical Completion
- Date of Works Completion ;

The successful tenderer's program is subject to review and mutual acceptance.

Any Queries / clarifications relative to the Programme can be directed to the Employer.

**F.4.8 Detailed Cash-flow**

Tenderers are advised that a fully detailed cash-flow based on the tenderers programme is required to be submitted together with their tender document. In this regard, tenderers are advised that the financial year start and end dates are 01 April to 31 March respectively and therefore tenderers are requested to keep sub-totals for each financial year during the duration of the construction programme.

Tenders are advised that the targeted annual maximum percentages per financial year end for the contract duration are as follows and are not to be exceeded:

| FINANCIAL YEAR |
|---|
| 01 APRIL 2026 TO 31 MARCH 2027 |
| 01 APRIL 2027 TO 31 MARCH 2028 |

**F.4.9 Detailed Resourcing Schedule**

Tenderers are advised that a detailed resourcing schedule including skilled, unskilled and sub-contractor's staffing histograms is required to be submitted together with their tender document.

### F.4.10 Proposed Domestic Sub-Contracts

The Tenderer shall submit in writing, when requested, a list of proposed domestic sub-contractors that is intended to be utilised on the project, should its offer be accepted.
Proposed domestic sub-contractors shall take part in the work set aside for 30% Local Participation if possible i

### F.4.11 Adjudication and Independent Development Trust's Rights

F.4.11.1 Independent Development Trust reserves the right to visit any Tenderer (without prior notice), to interview any shareholder of the Tenderer and to evaluate such Tenderer in accordance with the criteria as set out in the paragraph 1.11.3 below;

F.4.11.2 All information obtained at such evaluation shall at all times be treated as confidential by Independent Development Trust;

F.4.11.3 Adjudication of a Tender shall be in the discretion of Independent Development Trust and may take into account the following:

(i) Tender Price;
(ii) Ability to perform, which may take into account previous experience in the relevant industry;
(iii) Suitability of employees and suitability of equipment and materials to be used;
(iv) Black dep Empowerment;
(v) Financial viability of the Tenderer;
(vi) Ownership of the Tenderer;
(vii) Compliance with all relevant laws; and
(viii) SCM policy and procedures.

### F.4.12 Form of Contract

**The JBCC Series 2000 Principal Building Agreement (Edition 6.2 Reprint May 2018) as amended in the IDT's SPECIAL CONDITIONS OF PRINCIPAL CONTRACT, shall be applicable to this contract.**

### F.4.13 Specialist Selected Sub-contract Procurement Process

Due to the nature of the project, the procurement process of the following envisaged selected sub-contracts will be done upon appointment of the Principal Building Contractor:

- Clearing of site
- Excavation of footings and pipe trenches
- Painting
- Brickwork

Upon the appointment of a Principal Contractor, the Principal Contractor is to subsequently appoint the **selected** sub-contractors as instructed by the Principal Agent and The Employer.

This is a material condition of appointment and should the Tenderer have any objection to this condition the tenderer is to raise this in their tender submission. The appointment of the selected sub-contractor will be done in consultation with the appointed contractor.

### F.4.14 Damage to the Work

Care shall be taken not to cause any damage to any part of the existing or new work or any adjoining property, if applicable. The Contractor will be held responsible for damage caused to the works by his negligence and shall be liable for all costs incurred in making good any such damage to the satisfaction of the Principal Agent.

### F.4.15 Communication, Media Releases, Etc.

The Contractor shall not in any way communicate with the press, or any representative of the written or electronic media, on a question affecting this contract unless prior approval in writing is received from the **Principal Agent** as authorised by the **Employer**.

All rights of publication of articles in the media, together with any advertising relating to, or in any way concerned with this project shall vest in the Employer.

The Contractor shall not, without the written consent of the Employer, cause any statement or advertisement to be printed, screened or aired by the media.

### F.4.16 Copyright

No part of this document and any document forming part of the contract documents may be copied, photographed or repeated in any manner or by any process without the written consent of the **Principal Agent**. Copyright is reserved on all designs, specifications, patents and patentable designs, systems and processes contained in documents pertaining to this contract. The person, firm, body, supplier, contractor, sub-contractor and any other contracting party is to be responsible jointly and severally, in their personal and corporate capacities for any contravention of this requirement.

### F.4.17 Workmanship and Quality Control

The onus to produce work that conforms in quality and accuracy of detail, to the requirements of the specifications, rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide other technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the works at all times.

The cost of supervision and process control, including testing carried out by the Contractor shall be deemed to be included in the amount quoted for the works.

The Contractor's attention is drawn to the normal standards regarding the minimum frequency of testing required for materials. The Contractor shall, at his own discretion increase this frequency where necessary to ensure adequate control.

The Contractor shall remain solely responsible for the work as defined in this contract document, up to the end of the Defects Liability Period.

The Contractor needs to ensure that daily site diaries are kept on site at all times. These may be required for submission to the Employer as and when needed.

The end-user client and the IDT may from time to time inspect the quality / workmanship on site and make the necessary comments and/or requirements for correction.

### F.4.18 Occupational Health and Safety Act

The Contractor shall comply with the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

### F.4.19 Co-Operation of Contractor for Cost Control

It is deemed that the Contractor accepts the obligation of assisting the Professional Consultants in implementing proper cost control in ensuring that the final building cost does not exceed the budget.

### F.4.20 Application for Payment

The Contractor shall submit the following information on a monthly basis to the Quantity Surveyor in order to assist with the processing of the Payment Certificate and the preparation of the empowerment report:

- A detailed breakdown of the work done. (The work breakdown must be referenced strictly in

accordance with the Contract Document or the detailed priced bills of quantities, as applicable.)

- A detailed breakdown of all Variation Order costs claimed (With specific reference to work done by the Nominated/Selected Subcontractor) in the certificate concerned, together with copies of the relevant Contract instructions.
- An empowerment report which shall contain an affidavit certifying that all information contained in the report as being true and correct and must be authenticated by the sub-contractor and a commissioner of oaths
- EPWP Labour Report showing total work opportunities created on site
- Tax Invoice: The contractor shall attach a tax invoice as prescribed in the Value Added Tax legislation to each payment certificate when presenting the certificate to the Employer for payment. Such tax invoices shall correctly reflect the prescribed information and the amounts shall match precisely the amounts included in the Payment Certificate. Should the contractor fail to comply with these requirements, the date of presentation of the certificate shall be deemed to be delayed at the contractor's default until such time as the requirements are met.

Should anyone or any combination of the above requirements not be complied with, the Principal Agent and/or Contractor reserves the right to exclude any amounts that may have been due for certification from the Payment Certificate concerned and/or delay the issue of Payment Certificates and/or, revise the contractual payment date, as applicable, until such time compliance is achieved.

### F.4.21 Identification of Personnel

All permanent staff that are utilised on the project by the Contractor, Domestic and Selected Sub-contractors are at all times whilst on site, be clad with clothing that clearly identifies each staff member together with an identification document which includes, but not limited to the following:
A photograph of the staff member concerned;
The identification numbers of the staff member concerned; and,
The name of company concerned

In addition, to that stated above, the Contractor shall adhere to the premise's security rules and regulations.

No staff member will be permitted to execute the Works if this condition is not adhered to.

### F.4.22 Intervention at Manufacture and / or Supplier and / or Contract Level

The Employer and its Agents reserve the right to discuss and liaise on any issue pertaining to this Contract with the Contractor's service providers i.e. manufacturers and / or suppliers and / or sub-contractors concerned. This right shall not create privity of contract between the Employer and / or its Agents and the said manufacturer and / or supplier and / or sub-contractors.

### F.4.23 Cession of Materials Supplied to the Site

It shall be deemed that the Contractor and its service providers upon delivery of each batch of materials to site, has ceded the said materials to the Employer.

### F.4.24 Alterations in the Quantity and Value of Work

The Employer and / or its Agents shall be permitted to either increase or decrease the quantity and value of work contracted for. In this regard, the Contractor including its service providers shall not be entitled to claim for any additional expense incurred, or for any change in the rates for work done and / or any materials and services supplied. It shall be deemed that all costs associated with this item are included in the Tender Price.

### F.4.25 Change in the Scope of Work

The Contractor acknowledges that whilst drawings have been prepared for the Works, the scope of work and value of the Contract may be substantially altered and that no claims for loss and expense shall be due by the Employer for implementing any changes that may become necessary. It shall be deemed that the Tender Price includes for all costs that may arise due to compliance with this clause.

### F.4.26 Treasures, Relics, Etc.

Any relics, treasure, articles of value or of potential historical or archaeological interest found on the site must be brought to the attention of the Principal Agent. All work at the specific area of the discovery shall stop for a reasonable time period until such time that the Principal Agent instructs continuation of the Works.

Any relics, treasure, articles of value or of potential historical or archaeological interest found on the site shall remain the property of the Employer and shall be handed over to the Principal Agent who shall be the sole arbitrator of what is an article of value.

### F.4.27 Priced Bills of Quantities

The Tenderer shall submit a fully priced Bills of Quantities as well as a detailed breakdown and build-up of all items measured as lump sum items with the Tender Price. Lump sum items shall be measured in accordance with the Standard System of Measuring Building Work (Sixth Edition, including any subsequent amendments thereto), and shall form part of the Contract and shall be used for the purposes of preparing valuations, Payment Certificates, determining the value of Variation Orders, preparation of Final Accounts, etc.

Neither the Employer, not its Agents shall be liable for any cost incurred for the award and subsequent withdrawal of the award of the Tender in terms of this clause.

### F.4.28 Prices and Net Measurements

Prices throughout these Bills of Quantities shall be deemed to include for all obligations arising out of the Contract and unless otherwise specified, be held to include for making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates, plant, temporary works and return of packaging.

Prices for all items contained in these Bills of Quantities and any additional authorised variations, shall be deemed to exclude all amounts due in terms of the Value Added Taxation legislation. A provision for the addition of VAT shall be made on the Final Summary page of the Bills of Quantities and Final Statement of Accounts, as applicable.

### F.4.29 Value Added Tax (V.A.T)

All prices and or rates tendered shall be deemed to be **exclusive** of Value Added Tax.

Value Added Tax shall be added as a lump sum where provided on the Final Summary page of the Bills of Quantities, and the Tender Price **inclusive** of Value Added Tax will be shown on the Form of Tender.

Value Added Tax shall be calculated at the National going rate at the time of submission of bids.

### F.4.30 Site and Information

Tenderers must acquaint themselves with the conditions of the Site and generally obtain their own information on all matters affecting the submission of Tenders for the Works. Tenderers will be held responsible for any misunderstanding or incorrect information obtained, except information which may have been given in writing over the signature of the Principal Agent.

The contractor is expected to establish a construction camp, office and workshop facility, for the fulfilment of the contract. Site establishment facilities to be removed after the completion of the project.

The contractor must strictly use the working area provided by the Employer.

### F.4.31 Noise

Tenderers must take note that the site is within the Onkgopotse Tiro Comprehensive School Site. As such high noise level shall be restricted to times that will not disrupt the community. Tenderers are to ensure that they acquaint themselves with these conditions and adequately price for it accordingly as no additional time will be allowed for any delays that may be attributed to such.

The Contractor will be restricted from working evening shifts but may be allowed to work weekend shifts with prior 1 week's notice. Such shall be included in the contractor's pricing as no additional allowance for weekend shifts will be allowed for by the Employer, post tender award.

**F.4.32 Water and Electricity**

The contractor is expected to make means for the provision of water and electricity for construction purposes. The use of such services from the site shall be at the discretion and on agreement with the end user department.

**F.4.33 Preliminaries Costs**

The Tenderer must allow in his pricing, or where provided for in the Tender Document, for all preliminaries costs deemed necessary for the proper execution and completion of the Works, as no late claims whatsoever for additional costs in this respect will be considered.

**F.4.34 Protection of Existing Work**

The Tenderer shall allow for the protection of all existing work that is liable to be damaged during the execution of this Contract and work that is liable to be damaged once the Contractor completes its Section of the Works.

**F.4.35 Mock-Up / Samples, etc.**

Samples, mock-ups, etc. will be called for by the Principal Agent for approval and shall be provided at no extra cost as rates will be deemed to include for this.

**F.4.36 Substitution of Materials**

No substitution of the articles or materials specified in this Tender Document will be permitted unless the authority of the Principal Agent has been obtained, in writing, before Tender closing. The Tenderer will otherwise be required to provide / or use the specified articles or materials. Approval of any request for the substitution of any article or materials will only be considered when the Principal Agent is satisfied that if the substitution is approved, there is sufficient time remaining before Tender closing to advise all other Tenderers accordingly.

**F.4.37 Restriction on Site Access**

Tenderers are to price any items related to this under Clause 3.1 in the Preliminaries bill. The Principal Agent and /or the Compulsory Tender Briefing will provide further details of the restrictions, if any that will affect the Contractor.

**F.4.38 Security**

The Tenderers are to note that upon award of the contract, they are to furnish the Employer (within 21 days of award), the following:

Construction Guarantee equal in value to **10%** of the Contract Sum valid for the duration of the contract.

**F.4.39 Safety Requirements**

The Contractor is referred to the safety requirements associated with the project. It is of utmost importance that the successful contracting entity abides by the.

The Contractor will comply with all Health and Safety Regulations and the Health and Safety Plan.

Management of safety on site shall remain the sole responsibility of the Contractor.

Disposal of all rubble material and asbestos roof sheetings / materials, to suitable legal dump sites, shall be carried out on a weekly basis. All costs for this exercise shall be included in the bid price (for the duration of the project plus a further 6 months in the event of project overrunning its duration)

**The safety on site, agreement and general information forms included in the Tender Returnables must be agreed and fully completed and submitted with the Tender Submission.**

### F.4.40 Budgetary Allowances / Provisional Sums

Where applicable, these amounts have been included in the Tender Price where the work has not been defined at the date of Tender. It is intended that once the scope is defined, Tenders will be invited with a view to these Works being awarded as Nominated / Selected Subcontract works.

- The Specialist Consultant responsible for the specific work package will prepare documentation which is to include drawings, specification and schedule of quantities that define the scope of works all in accordance with the Nominated / Selected Subcontract Agreement.
- The Quantity Surveyor will prepare the necessary Tender documents.
- The Principal Agent will arrange for inviting / advertising of tenders subject to the payment of a non-refundable document fee, if applicable.
- The Employer will arrange to issue the tender documents from their offices and take receipt of amounts paid.
- The Tenders for the Works will be submitted to the Employer's office in terms of the tender closing times stipulated. Tenders will be opened and tender amounts read out at the time.
- The Quantity Surveyor will make copies of the returned Tender documents for distribution to the Principal Agent.
- The Quantity Surveyor will prepare an initial financial evaluation report of the Tenders, Principal Agent and Engineer will evaluate the Tenderer's technical compliance and capability and circulate to the Employer.
- The Principal Agent will prepare a draft report, discuss with the Contractor to get their approval and finally circulate the draft to the other Consultants for final comment. Thereafter the Tender Report with Recommendations will be finalised by the Principal Agent and circulated to the Employer for approval. On approval, the recommendation together with any instructions of award will be issued to the Contractor who will be responsible for appointing the relevant party as a Sub-contractor.

### F.4.41 Community Liaison Officer (CLO)

The Tenderer shall allow for a CLO who is to be appointed and remunerated by the Contractor following identification and selection by the Ward Councillor.

| | |
|---|---|
| Purpose of the Job: | The primary role of the CLO shall be liaison and facilitation of communication between the Contractor, the Local community and the Ward Councilor. |
| Job title: | Community Liaison Officer (CLO) |
| Reporting to: | The Contracts Manager or other delegated representative of the Contractor. The CLO must report to **the Contractor** and remain on site on a daily**.** |
| Experience: | Relevant experience and knowledge of building construction, community facilitation and relevant labour legislation. |
| Remuneration: | Rate payable for the CLO will be 100% of the Building Industry minimum wage for unskilled labour. |
| Minimum Skills: | 1. Ability to work with others;<br>2. Ability to communicate in local language of the project location and English;<br>3. Ability to communicate in writing;<br>4. Sound Interpretation skill. |

The Ward Councillor in whose wards work is to be done will collectively identify 3 (three) CLO candidates for the project and make such persons known to the Contractor within five days of being requested to do so. The Contractor will be required to enter a written contract with the CLO that specifies:

(a) The hours of work and the wage rate of the CLO which could include:
(b) The duration of the appointment
(c) The duties to be undertaken by the CLO which could include:

- Assisting in all respects relating to the recruitment of local labour and advising them of their rights
- Acting as a source of information for the community and councilors on issues related to the contract
- Keeping the contractor advised on community issues and issues pertaining to local security
- Assisting in setting up any meeting or negotiations with affected parties

- Keeping a written record of any labour or community issues that may arise
- The CLO needs to be seen to be neutral by all parties and therefore should endeavour not to take sides should conflict arise.
- Should the CLO function not involve a full days work, the CLO will be expected to undertake other work allocated by the Contractor for the balance of each day

Procedures for local labour recruitment:

- The Contractor submits a list of his/her requirements to the CLO, stating the numbers required in each labour category (general worker, bricklayer, etc.) and a programme that shows when these resources will be required.
- During the construction period, the CLO uses the list to identify candidates for employment, who are interviewed and if successful employed by the contractor.
- The Contractor keeps the CLO informed by providing him/her with employee's details at the start of their employment (name, residential address, ID number, wage, employment, start and finish date, task, etc.) and notify the CLO when their employment ends.

### F.4.42 Contract Skills Development Goal (CSDG)

The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (Government Gazette, Vol. 694, No. 48491, 28 April 2023), hereinafter referred to as the Standard.

# T2.1 LIST OF RETURNABLE DOCUMENTS

# T2.1 List of Returnable Documents

List of returnable documents are for ensuring that everything the employer requires a tenderer to submit with his tender is included in, or returned with, his tender submission. Tick below if returnable document is attached or completed properly.

| # | LIST OF RETURNABLE DOCUMENTS | TICK IF ATTACHED |
|---|---|---|
| T2.1.1 | Invitation to bid (SBD1) | |
| T2.1.2 | Preference Points Claim Form in Terms of PPPFA, Procurement Regulations 2022 (SBD 6.1) | |
| T2.1.3 | Central Supplier Database (CSD) and provide MAAA Number | |
| T2.1.4 | Tax Letter with unique PIN | |
| T2.1.5 | Joint Venture Agreement Between Parties | |
| T2.1.6 | Contractors copy of Company Registration Incorporation | |
| T2.1.7 | CIDB Registration Number | |
| T2.1.8 | Letter of Good standing with Compensation For OccupationalAnd Injuries Dieses Act (COIDA/FEM) Registration Number | |
| T2.1.9 | Company Compulsory Enterprise Questionnaire | |
| T2.1.10 | Bidders disclosure (SBD 4) | |
| T2.1.11 | Attendance at Compulsory Briefing | |
| T2.1.12 | Authority for signatory | |
| T2.1.13 | Addenda to The Tender Documents | |
| T2.1.14 | Tenderers financial standing | |
| T2.1.15 | Amendments, Qualifications and Ternatives | |
| T2.1.16 | Socio economic upliftment strategy | |
| T2.1.17 | Contractors health and safety declaration | |

# T2.2 RETURNABLE SCHEDULES (ALL COMPULSORY)

# T2.2 RETURNABLE SCHEDULES

Contains documents that the tenderer is required to complete for the purpose of evaluating tenders and other schedules which upon acceptance become part of the subsequent contract.

| # | QUALITY EVALUATION SCHEDULES |
|---|---|
| T2.2.1 | |
| T2.2.2 | Project Experience |
| T2.2.3 | Letters of Appointment, and Relevant Completion Certificates (Practical Completion, Work Completion & Final Completion) |
| T2.2.4 | Client references |
| T2.2.5 | Key Personnel |
| T2.2.6 | Financial Viability |

## RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT (to be attached with submission)

| |
|---|
| Record of Addenda to Tender Documents |
| Declaration Concerning Fulfillment of the Construction Regulations, 2003 |
| First Programme and Method Statement |
| Preliminary Health and Safety Plan for completion |
| Form of offer and acceptance |
| Contract data |
| Forms of securities |

## T2.1.1 INVITATION TO BID SBD1

| **YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (*North West Department of Education*)** | | | | | |
|---|---|---|---|---|---|
| BID NUMBER: | DOE13NWER014/CON14 | CLOSING DATE: | 02 NOVEMBER 2026 | CLOSING TIME: | 12H00 |
| DESCRIPTION | BID DATA FOR APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE. | | | | |

**BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT *(STREET ADDRESS)***

**IDT North West Regional Office**
**4071 Joules Street, Industrial Site**
**Mahikeng**
**2745**

| **BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO** | | **TECHNICAL ENQUIRIES MAY BE DIRECTED TO:** | |
|---|---|---|---|
| CONTACT PERSON | Andile Matladi | CONTACT PERSON | Wisdom Norgbey |
| TELEPHONE NUMBER | | TELEPHONE NUMBER | |
| FACSIMILE NUMBER | | FACSIMILE NUMBER | |
| E-MAIL ADDRESS | NWTenders@idt.org.za | E-MAIL ADDRESS | NWTenders@idt.org.za |

| **SUPPLIER INFORMATION** | | | | | |
|---|---|---|---|---|---|
| NAME OF BIDDER | | | | | |
| POSTAL ADDRESS | | | | | |
| STREET ADDRESS | | | | | |
| TELEPHONE NUMBER | CODE | | NUMBER | | |
| CELLPHONE NUMBER | | | | | |
| FACSIMILE NUMBER | CODE | | NUMBER | | |
| E-MAIL ADDRESS | | | | | |
| VAT REGISTRATION NUMBER | | | | | |
| SUPPLIER COMPLIANCE STATUS | TAX COMPLIANCE SYSTEM PIN: | | **OR** | CENTRAL SUPPLIER DATABASE No: | MAAA |
| B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE | TICK APPLICABLE BOX] ☐ Yes ☐ No | | B-BBEE STATUS LEVEL SWORN AFFIDAVIT | | [TICK APPLICABLE BOX] ☐ Yes ☐ No |

***[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]***

| | | | |
|---|---|---|---|
| ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED? | ☐Yes ☐No [IF YES ENCLOSE PROOF] | ARE YOU A FOREIGN BASED SUPPLIER FOR **THE GOODS /SERVICES /WORKS OFFERED?** | ☐Yes ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW ] |

**QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS**

| | |
|---|---|
| IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? | ☐ YES ☐ NO |
| DOES THE ENTITY HAVE A BRANCH IN THE RSA? | ☐ YES ☐ NO |
| DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? | ☐ YES ☐ NO |
| DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? | ☐ YES ☐ NO |
| IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? | ☐ YES ☐ NO |

**IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.**

# PART B
# TERMS AND CONDITIONS FOR BIDDING

| 1. BID SUBMISSION: |
|---|
| 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION. |
| 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.** |
| 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT. |
| 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).** |
| **2. TAX COMPLIANCE REQUIREMENTS** |
| 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS. |
| 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS. |
| 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA. |
| 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID. |
| 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER. |
| 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED. |
| 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE." |

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

SIGNATURE OF BIDDER: ……

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

DATE: ……...

## T2.1.2 PREFERENCE POINTS CLAIM FORM

**SBD 6.1**

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

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

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

---

**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to invitations to tender:

- the 90/10 system for requirements with a Rand value of above R50 000 000 (allapplicable taxes included)

**1.2 To be completed by the organ of state**

a) The applicable preference point system for this tender is the 90/10 preference point system.

b) The 90/10 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

**1.4 To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

| | POINTS |
|---|---|
| **PRICE** | **90** |
| **SPECIFIC GOALS** | **10** |
| **TARGETED GROUP** | |
| Women Ownership | 3 |
| Youth Ownership | 3 |
| People with Disabilities Ownership | 2 |
| Black Ownership | 2 |
| **Total points for Price and SPECIFIC GOALS** | **100** |

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

## 2. DEFINITIONS

(a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(b) **"price"** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

(c) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

(d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1. POINTS AWARDED FOR PRICE

### 3.1.1 THE 90/10 PREFERENCE POINT SYSTEMS

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

**80/20** **or** **90/10**

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

### 3.2.1. POINTS AWARDED FOR PRICE

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

**80/20**

$$Ps = 80\left(1 + \frac{Pt - P\,max}{P\,max}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

## 4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

(a) an invitation for tender for income-generating contracts, that either the 80/20 preference point system will apply and that the highest acceptable tenderwill be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

***(Note to organs of state: Where either the 80/20 preference point system isapplicable, corresponding points must also be indicated as such.***

***Note to tenderers: The tenderer must indicate how they claim points for each preference point system.*)**

| The specific goals allocated points in terms of this tender | Number ofpoints allocated(90/10 system) (To be completed by the organof state) | Number ofpoints claimed (90/10 system) (To be completed by the tenderer) |
|---|---|---|
| Women Ownership | 3 | |
| Youth Ownership | 3 | |
| People with Disabilities Ownership | 2 | |
| Black Ownership | 2 | |

**Source Documents to be submitted with the Bid or RFQ**

- CIPC Document - (Company Registration Document will be required for verification (CIPC DOC) and share certificate if ownership certificate is not indicated on the CIPC)
- Woman - (Originally Certified ID Document not older than 6 months)
- Youth - (Originally Certified ID Document not older than 6 months)
- People with Disability - (Letter from the Dr. Confirming the Disability signed with verifiable contact details)
- Black Ownership (Originally - Certified ID Document not older than 6 months)

CSD full report will be used in support of the above mentioned documentation to verify specific goals

## DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm…….

4.4. Company registration number: ……..

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certifythat the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in additionto any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered asa result of having to make less favourable arrangements due to suchcancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

| |
|---|
| ……. |
| **SIGNATURE(S) OF TENDERER(S)** |
| **SURNAME AND NAME**: ……. |
| **DATE:** …… |
| **ADDRESS**: …… |
| …… |
| …… |
| …… |

**Source Documents to be submitted with the Bid or RFQ**

- CIPC Document - (Company Registration Document will be required for verification (CIPC DOC) and share certificate if ownership certificate is not indicated on the CIPC)
- Woman - (Originally Certified ID Document not older than 6 months)
- Youth - (Originally Certified ID Document not older than 6 months)
- People with Disability - (Letter from the Dr. Confirming the Disability signed with verifiable contact details)
- Black Ownership (Originally - Certified ID Document not older than 6 months)

CSD full report will be used in support of the above mentioned documentation to verify specific goals

## T2.1.3 CENTRAL SUPPLIER DATABASE

***Attached hereto is my / our Central Supplier Database report.***

***IMPORTANT NOTES:***

***A full report of the CSD report is required showing all the company details such as, address, Tax Compliance, banking details etc.***

## T2.1.4 TAX CLEARANCE CERITFICATE

***Tax Clearance Certificate or Unique Pin obtained from SARS to be inserted here.***

***In accordance with National Treasury Instruction No. 9 of 2017/18, the IDT will verify the tax compliance status of the recommended bidder prior to the award of the Bid.***

***Where the recommended bidder is found to be non-compliant with its tax obligations, the IDT will notify the bidder in writing of its non-compliant status and afford the bidder within seven (7) working days to submit written proof from the South African Revenue Service (SARS) confirming its tax compliance status, or written proof that the bidder has made an arrangement with SARS to meet its outstanding tax obligations.***

***The bidder's tax compliance status or proof of such arrangement will be verified by the IDT through the applicable SARS/eFiling or Central Supplier Database (CSD) verification process.***

***Should the recommended bidder fail to provide the required written proof within the stipulated seven (7) working days, the IDT will reject the Bid.***

## T2.1.5 JOINT VENTURE AGREEMENT – IF APPLICABLE

***Attached hereto is our duly signed, Joint Venture Agreement. Our failure to submit the agreement with our tender document will lead to the conclusion that the joint venture has not been formally formed and all parties were not involved in the tender process.***

## T2.1.6 CONTRACTOR'S COPY OF REGISTRATION OF INCORPORATION

***Attached hereto is my / our copies of company registration of incorporation or company registration documents. My failure to submit the copy with my / our tender document will lead to the conclusion that I am / we are not registered as claimed.***

## T2.1.7 CIDB REGISTRATION CERTIFICATE

***Attached hereto is my / our registration certificate with the Construction Industry Development Board. My / our failure to submit the certificate with my / our tender document will lead to the conclusion that my / our company is not registered with CIDB.***

***NOTE: The CIDB can be contacted or visited on*** *www.cidb.org.za* ***for more information and registration. Obtain a "Code of Conduct for all parties engaged in construction procurement" for you information.***

## T2.1.8 COPY OF A LETTER OF GOODSTANDING WITH COMPANSATION FOR

## OCCUPATIONAL AND INJURIES DISEASES ACT (COIDA OR TENDER LETTER OBTAIN FROM DEPARTMENT OF LABOUR OR FEMA)REGISTRATION CERTIFICATE

***Attached hereto is my / our certified copy of A LETTER OF goodstanding with the Compensation for Occupational Injuries and Diseases, e.g. letter of good standing. My / our failure to submit the certificate with your tender offer will lead to the conclusion that your entity/ company is not registered with COIDA / FEMA. If Joint Venture (JV) attach one for every service provider.***

## T2.1.9 COMPULSORY ENTERPRISE QUESTIONNAIRE

**Note:** ***Compulsory Enterprise Questionnaire must be completed by each member of a JV or consortium***

**Section 3: CIDB registration number, if any:** . . . . . .

**Section 4: Particulars of sole proprietors and partners in partnerships**

| Name* | Identity number* | Personal income tax number* |
|---|---|---|
| | | |
| | | |
| | | |

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

**Section 5: Particulars of companies and close corporations**

Company registration number . . . . . .

Close corporation number . . . . . .

Tax reference number . . . . . .

**Section 6: Record in the service of the state**

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

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

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

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

*insert separate page if necessary

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

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

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

- a member of the board of directors of any municipal entity
- an official of any municipality or municipal entity
- a member of an accounting authority of any national or provincial public entity
- an employee of Parliament or a provincial legislature

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

*insert separate page if necessary

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

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

Signed ---------- Date ----------

Name ---------- Position ----------

*Enterprise name* ----------

## T2.1.10 BIDDER'S DISCLOSURE

### BIDDER'S DISCLOSURE

**1. PURPOSE OF THE FORM**

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

## 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

| **Full Name** | **Identity Number** | **Name of State institution** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

2.2 Do you,or anyperson connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:
……
……

**2.3** Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:
……
……

**the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding voteor power to influence or to direct the course and decisions of the enterprise.**

**3 DECLARATION**

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be trueand complete in every respect:

3.1 I have read and I understand the contents of this disclosure;

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be trueand complete in every respect;

3.3 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 consortium2 will not be construed as collusive bidding.

3.4 In addition, there have been no consultations, communications, agreements or arrangements withany competitor regarding the quality, quantity, specifications, prices, including methods, factors orformulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars ofthe products or services to which this bid invitation relates.

3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directlyor indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.6 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 Preventionand Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME INTERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAINMANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

…… ……..

Signature Date

…… ……

Position Name of bidder

## T2.1.11 ATTENDANCE AT COMPULSORY BRIEFING

***As stated in the Bid Data, the Bidders representative must sign the attendance register in the name of the bidding entity on the Briefing Meeting Date. Failure of the bidder's representative to record attendance in the briefing meeting register, clearly identifying the bidding entity, will result in the conclusion that the bidding entity did not attend the compulsory briefing meeting. In the case of a Joint Venture (JV), at least one partner must attend the briefing meeting.***

## T2.1.12 CERTIFICATE OF AUTHORITY FOR SIGNATORY

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category, **and attach their Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents to the page provided at the end of this form.**

| (I) COMPANY | (II) CLOSE CORPORATION | (III) PARTNERSHIP | (IV) JOINT VENTURE | (V) SOLE PROPRIETOR |
|---|---|---|---|---|
| | | | | |

### (I) CERTIFICATE FOR COMPANY

I, ……, Id number.....chairperson of the Board of Directors of.....hereby confirm that by resolution of the Board (copy attached) taken on ..... 20....., Mr/Ms.....acting in the capacity of..... , was authorised to sign all documents in connection with the tender for Contract No …… and any contract resulting from it, on behalf of the company.

**Chairman:** .....

**As Witnesses**: 1. .....

2. ..... **Date:** ……..

### (II) CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as …….

hereby authorise Mr/Ms ..……., acting in the capacity of.....,

to sign all documents in connection with the tender for Contract No ..... and any contract resulting from it, on our behalf.

| NAME | ADDRESS | SIGNATURE | DATE |
|---|---|---|---|
| ID No…….. | ..... | | |
| ID No……... | ..... | | |
| ID No…….. | ..... | | |
| ID No…….. | ..... | | |

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

**(III). CERTIFICATE FOR PARTNERSHIP**

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

..... hereby authorize Mr/Ms .....

acting in the capacity of ..... , to sign all

documents in connection with the tender for Contract No ..... and any contract resulting from it, on our behalf.

| NAME | ADDRESS | SIGNATURE | DATE |
|---|---|---|---|
| | ..... | | |
| | ..... | | |
| | ..... | | |
| | ..... | | |

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

**(IV) CERTIFICATE FOR JOINT VENTURE**

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms

……, authorized signatory of the company,.....

acting in the capacity of lead partner, to sign all documents in connection with the tender offer for

Contract No ..... and any contract resulting from it, on our behalf.

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

| NAME OF FIRM | ADDRESS | AUTHORISING SIGNATURE, NAME AND CAPACITY |
|---|---|---|
| **Lead partner** | ..... | |
| | ..... | |
| | ..... | |

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

**(V) CERTIFICATE FOR SOLE PROPRIETOR**

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

trading as …….

Signature of Sole owner: ……

As Witnesses:

1. ……

2. ……

Date: ……

## T2.1.13 RECORD OF ADDENDA TO THE 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.** | | |

Attach additional pages if more space is required.

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

Name .....

ID number ..... Position .....

Tenderer .....

## T2.1.14 TENDERER'S FINANCIAL STANDING

The Tenderer shall provide information about his commercial position, which includes information necessary for the Employer to evaluate the Tenderer's financial standing.

To that end the Tenderer must provide with his tender a bank rating, certified by his banker, to the effect that he will be able to successfully complete the contract at the tendered amount within the specified time for completion.

However, should the Tenderer be unable to provide a bank rating with his tender, he shall state the reasons as to why he is unable to do so, and in addition provide the following details of his banker and bank account that he intends to use for project:

Name of account holder: _____

Name of Bank :_____

Branch : _____

Account number : _____

Type of account : _____

Telephone number :_____

Facsimile number : _____

Name of contact person (at bank : _____

***Failure to provide either the required bank details or a certified bank rating with his tender, will lead to the conclusion that the Tenderer does not have the necessary financial resources at his disposal to complete the contract successfully within the specified time for completion.***

The Employer undertakes to treat the information thus obtained as confidential, strictly for the use of evaluation of the tender submitted by the Tenderer.

SIGNATURE: _____

IDENTITY NUMBER: _____

(of person authorised to sign on behalf of the Tenderer)

DATE:_____

## T2.1.15 AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

***(This is not an invitation for amendments, deviations or alternatives but should the Tenderer desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment, alternative offers or discounts unless forms (a), (b) and (c) have been completed to the satisfaction of the Employer).***

I / We herewith propose amendments, alternatives and discounts as set out in the tables below:

**(a) AMENDMENTS**

| PAGE, CLAUSE OR ITEM NO | PROPOSED AMENDMENT |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |

***[Notes: (1) Proposals for amendments to the General and Special Conditions of Contract are not acceptable, and will be ignored;***
***(2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.***

**(b) ALTERNATIVES**

| PROPOSED ALTERNATIVE | DESCRIPTION OF ALTERNATIVE |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |

***[Notes: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.***

*(2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.*

*(3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.]*

**(c) DISCOUNTS**

| ITEM ON WHICH DISCOUNT IS OFFERED | DESCRIPTION OF DISCOUNT OFFERED |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |

***[Note: The Tenderer must give full details of the discounts offered in a covering letter attachedto his tender, failing which, the offer for a discount may have to be disregarded. Only unconditional discounts will be considered]***

SIGNATURE: .....…… IDENTITY NUMBER: ……..

*(of person authorised to sign on behalf of the Tenderer)* DATE:……

## T2.1.16 SOCIO ECONOMIC UPLIFTMENT STRATEGY

***Attached hereto are my / our proposed socio economic upliftment strategy. The strategy will as a minimum address items such as skills upliftment, training, sub contracting, skilled and semi-skilled labour employment, procurement of local labour and materials, employment of woman, youth and disabled, etc.***

Notes:

a) The developer has a commitment to utilising the local community resources and labour, and as such preference will be shown to bidders who prioritise local employment.

b) As part of the tender documentation a methodology is to be submitted proposing as to how the main contractor will deal with the social economic expectations of the surrounding community.

The proposal is to allow for a suitable employment ratio of local community members and any additional measures that will enable future local community upliftment.

c) The main contractor is required to familiarise himself with the community and local authority to ascertain for himself the full extent of the community's requirements and minimum wages.

d) The contractor shall appoint a community liaison officer and shall be responsible for all community negotiations etc.

## T2.1.17 CONTRACTOR'S HEALTH AND SAFETY DECLARATION

In terms of Clause 5(1)(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.
To that effect a person duly authorized by the tenderer must complete and sign the declaration hereafter in detail.

**Declaration by Tenderer**

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
2. I hereby declare that my company / enterprise has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby undertake, if my tender is accepted, to provide a sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, approved by the Employer or his representative, before I could be allowed to commence with construction work under the contract. I hereby agree that my company/enterprise will not have a claim for compensation for delay or extension of time because of my failure to obtain the necessary approval for the said safety plan.
4. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
5. I hereby confirm that adequate provision has been made in my tendered rates and prices in the bill of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, including the cost for specific items that may be scheduled in the bill of quantities.
6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations for failure on my part to comply with the provisions of the Act and the Regulations as set out in Regulation 33 of the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.
8. I am aware of the fact that, should I be awarded the contract, I must submit the notification required in terms of Regulation 4 of the OHSA 1993 Construction Regulations 2014 *(example attached hereafter)* before I could be allowed to proceed with any work under the contract.

SIGNATURE: _____

IDENTITY NUMBER: _____

(of person authorised to sign on behalf of the Tenderer)

DATE: _____

## T2.2.1 EVALUATION SCHEDULE: SAFETY HEALTH ENVIRONMENTAL AND QUALITY MANAGEMENT SYSTEM (SHEQ) PLAN

Attached hereto are my / our SHEQ Plan, all in compliance with the Health and Safety Specification – Annexure A or Letter of Undertaking from a Qualified OHS Consultant.(do we need a CV or professional registration attached?)

**(PLEASE ATTACHED HERE)**

## T2.2.2 EVALUATION SCHEDULE: PROJECT EXPERIENCE

**The Tenderer shall provide details of his relevant experience on similar large-scale projects completed in the past 10 years. In support tenderers are to complete the "Project Experience" schedule below and attach thereto copies of (a) Letters of Appointment, and (b) all the relevant Completion Certificates (practical completion, work completion & final completion)**

| PROJECT NAME and CLIENT | BRIEF PROJECT DESCRIPTION | PROJECT VALUE (Incl VAT) | START DATE | COMPLETION DATE |
|---|---|---|---|---|
| A. | | | | |
| B. | | | | |
| C. | | | | |

| PROJECT NAME and CLIENT | BRIEF PROJECT DESCRIPTION | PROJECT VALUE (Incl VAT) | START DATE | COMPLETION DATE |
|---|---|---|---|---|
| D. | | | | |
| E. | | | | |

## T2.2.3 EVALUATION SCHEDULE: LETTERS OF APPOINTMENT, AND RELEVANT COMPLETION CERTIFICATES (PRACTICAL COMPLETION, WORK COMPLETION & FINAL COMPLETION)

Tenderer is to attach all letters of appointment and completion certificate corresponding to the projectlisted in T2.2.2

## T2.2.4 EVALUATION SCHEDULE: CLIENT REFERENCES

**EVALUATION SCHEDULE: EXPERIENCE ON BUILT ENVIRONMENT PROJECTS REFERENCES**

**The Bidder shall provide details of his performance on each of the previous projects listed in the "Relevant Experience" returnable schedule. "Employer Reference Scorecards" will be completed by each of the respective Employers for the projects listed in the "Relevant Experience" returnable schedule.** *(Bidder to make copies for each disciplines)*

**REPORT ON BIDDER'S COMPETENCE & PERFORMANCE ON A BUILT ENVIRONMENT PROJECTS FOR BID RECOMMENDATION PURPOSES**

The following are to be completed by the Employer or Employers Agent and is to be supported in each case accompanied by a Signed and Stamped Reference (in the form issued to the bidder)

*Note: Bidders are strongly encouraged to use the provided template to ensure a full and fair evaluation. Should bidders opt to submit their own format, they are advised that their Client Reference Letters will be evaluated to a maximum of 2 points for the five projects per discipline.*

**PROJECT A:**

**Type of Project, e.g. (new school, renovation of clinic):** ……

**Employer**:……

**Contract Amount**:……..

**Contract Duration**:……

**Actual Contract Duration**:……

**RATE SERVICE PROVIDER ON THEIR OVERALL PERFORMANCE**

| DESCRIPTION | SCORE | TICK APPROPRIATE SCORING |
|---|---|---|
| Excellent | 3 | |
| Good | 2 | |
| Average | 1 | |
| Poor | 0 | |

Any other remarks considered necessary to assist in evaluation of the Service Provider?

……

**Employer's contact person**: .....

**Telephone**: .....

**I hereby declare that to the best of my knowledge, information completed above is true and correct and I understand that I will be held responsible for any misrepresentation.**

**Employer Signature**:……. **Date**:……

**STAMP**

## T2.2.4 EVALUATION SCHEDULE: CLIENT REFERENCES

**EVALUATION SCHEDULE: EXPERIENCE ON BUILT ENVIRONMENT PROJECTS REFERENCES**

**The Bidder shall provide details of his performance on each of the previous projects listed in the "Relevant Experience" returnable schedule. "Employer Reference Scorecards" will be completed by each of the respective Employers for the projects listed in the "Relevant Experience" returnable schedule.** *(Bidder to make copies for each disciplines)*

**REPORT ON BIDDER'S COMPETENCE & PERFORMANCE ON A BUILT ENVIRONMENT PROJECTS FOR BID RECOMMENDATION PURPOSES**

The following are to be completed by the Employer or Employers Agent and is to be supported in each case accompanied by a Signed and Stamped Reference (in the form issued to the bidder)

*Note: Bidders are strongly encouraged to use the provided template to ensure a full and fair evaluation. Should bidders opt to submit their own format, they are advised that their Client Reference Letters will be evaluated to a maximum of 2 points for the five projects per discipline.*

**PROJECT B:**

**Type of Project, e.g. (new school, renovation of clinic):** ……

**Employer**:…….

**Contract Amount**:……..

**Contract Duration**:…….

**Actual Contract Duration**:…….

**RATE SERVICE PROVIDER ON THEIR OVERALL PERFORMANCE**

| DESCRIPTION | SCORE | TICK APPROPRIATE SCORING |
|---|---|---|
| Excellent | 3 | |
| Good | 2 | |
| Average | 1 | |
| Poor | 0 | |

Any other remarks considered necessary to assist in evaluation of the Service Provider?

…….

**Employer's contact person**: .....

**Telephone**: .....

**I hereby declare that to the best of my knowledge, information completed above is true and correct and I understand that I will be held responsible for any misrepresentation.**

**Employer Signature**:……. **Date**:……

**STAMP**

## T2.2.4 EVALUATION SCHEDULE: CLIENT REFERENCES

**EVALUATION SCHEDULE: EXPERIENCE ON BUILT ENVIRONMENT PROJECTS REFERENCES**

**The Bidder shall provide details of his performance on each of the previous projects listed in the "Relevant Experience" returnable schedule. "Employer Reference Scorecards" will be completed by each of the respective Employers for the projects listed in the "Relevant Experience" returnable schedule.** *(Bidder to make copies for each disciplines)*

**REPORT ON BIDDER'S COMPETENCE & PERFORMANCE ON A BUILT ENVIRONMENT PROJECTS FOR BID RECOMMENDATION PURPOSES**

The following are to be completed by the Employer or Employers Agent and is to be supported in each case accompanied by a Signed and Stamped Reference (in the form issued to the bidder)

*Note: Bidders are strongly encouraged to use the provided template to ensure a full and fair evaluation. Should bidders opt to submit their own format, they are advised that their Client Reference Letters will be evaluated to a maximum of 2 points for the five projects per discipline.*

**PROJECT C:**

**Type of Project, e.g. (new school, renovation of clinic):** ……

**Employer**:……

**Contract Amount**:……..

**Contract Duration**:……

**Actual Contract Duration**:……

**RATE SERVICE PROVIDER ON THEIR OVERALL PERFORMANCE**

| DESCRIPTION | SCORE | TICK APPROPRIATE SCORING |
|---|---|---|
| Excellent | 3 | |
| Good | 2 | |
| Average | 1 | |
| Poor | 0 | |

Any other remarks considered necessary to assist in evaluation of the Service Provider?

……

**Employer's contact person**: .....

**Telephone**: .....

**I hereby declare that to the best of my knowledge, information completed above is true and correct and I understand that I will be held responsible for any misrepresentation.**

**Employer Signature**:……. **Date**:……

**STAMP**

## T2.2.4 EVALUATION SCHEDULE: CLIENT REFERENCES

**EVALUATION SCHEDULE: EXPERIENCE ON BUILT ENVIRONMENT PROJECTS REFERENCES**

**The Bidder shall provide details of his performance on each of the previous projects listed in the "Relevant Experience" returnable schedule. "Employer Reference Scorecards" will be completed by each of the respective Employers for the projects listed in the "Relevant Experience" returnable schedule.** *(Bidder to make copies for each disciplines)*

**REPORT ON BIDDER'S COMPETENCE & PERFORMANCE ON A BUILT ENVIRONMENT PROJECTS FOR BID RECOMMENDATION PURPOSES**

The following are to be completed by the Employer or Employers Agent and is to be supported in each case accompanied by a Signed and Stamped Reference (in the form issued to the bidder)

*Note: Bidders are strongly encouraged to use the provided template to ensure a full and fair evaluation. Should bidders opt to submit their own format, they are advised that their Client Reference Letters will be evaluated to a maximum of 2 points for the five projects per discipline.*

**PROJECT D:**

**Type of Project, e.g. (new school, renovation of clinic):** ……

**Employer**:…….

**Contract Amount**:……..

**Contract Duration**:…….

**Actual Contract Duration**:…….

**RATE SERVICE PROVIDER ON THEIR OVERALL PERFORMANCE**

| DESCRIPTION | SCORE | TICK APPROPRIATE SCORING |
|---|---|---|
| Excellent | 3 | |
| Good | 2 | |
| Average | 1 | |
| Poor | 0 | |

Any other remarks considered necessary to assist in evaluation of the Service Provider?

…….

**Employer's contact person**: .....

**Telephone**: .....

**I hereby declare that to the best of my knowledge, information completed above is true and correct and I understand that I will be held responsible for any misrepresentation.**

**Employer Signature**:……. **Date**:……

**STAMP**

## T2.2.4 EVALUATION SCHEDULE: CLIENT REFERENCES

**EVALUATION SCHEDULE: EXPERIENCE ON BUILT ENVIRONMENT PROJECTS REFERENCES**

**The Bidder shall provide details of his performance on each of the previous projects listed in the "Relevant Experience" returnable schedule. "Employer Reference Scorecards" will be completed by each of the respective Employers for the projects listed in the "Relevant Experience" returnable schedule.** *(Bidder to make copies for each disciplines)*

**REPORT ON BIDDER'S COMPETENCE & PERFORMANCE ON A BUILT ENVIRONMENT PROJECTS FOR BID RECOMMENDATION PURPOSES**

The following are to be completed by the Employer or Employers Agent and is to be supported in each case accompanied by a Signed and Stamped Reference (in the form issued to the bidder)

*Note: Bidders are strongly encouraged to use the provided template to ensure a full and fair evaluation. Should bidders opt to submit their own format, they are advised that their Client Reference Letters will be evaluated to a maximum of 2 points for the five projects per discipline.*

**PROJECT E:**

**Type of Project, e.g. (new school, renovation of clinic):** ……

**Employer**:…….

**Contract Amount**:……..

**Contract Duration**:…….

**Actual Contract Duration**:…….

**RATE SERVICE PROVIDER ON THEIR OVERALL PERFORMANCE**

| DESCRIPTION | SCORE | TICK APPROPRIATE SCORING |
|---|---|---|
| Excellent | 3 | |
| Good | 2 | |
| Average | 1 | |
| Poor | 0 | |

Any other remarks considered necessary to assist in evaluation of the Service Provider?

…….

**Employer's contact person**: .....

**Telephone**: .....

**I hereby declare that to the best of my knowledge, information completed above is true and correct and I understand that I will be held responsible for any misrepresentation.**

**Employer Signature**:……. **Date**:……

**STAMP**

## T2.2.5 EVALUATION SCHEDULE: KEY PERSONNEL

In terms of the Project Specification and the Conditions of Tender, unskilled workers may only be brought in from outside the local community if such personnel are not available locally.

**The Tenderer shall list below the personnel that he intends to utilize on the Works. Only Key personnel listed below shall be considered for evaluation.**

| CATEGORY OF EMPLOYEE | ORGANOGRAM | | |
|---|---|---|---|
| | NAMES | QUALIFICATION | YEARS OF EXPERIENCE |
| Project / Contract Manager | | | |
| Site Agent | | | |
| Foreman | | | |
| OHS personnel registered with SACPCMP | | | |

The Tenderer is referred to Clause F.2.1.1.2 of the Tender Data and shall insert in the spaces provided on the following pages details of the key personnel required to be in the employment of the tenderer or other organization, in order for the tenderer to be eligible to submit a tender for this project. Proof of professional registration must be appended to these schedules, together with the Curriculum Vitae of each individual.

SIGNATURE: .....…… IDENTITY NUMBER: ……..

*(of person authorised to sign on behalf of the Tenderer)* DATE:……

## EVALUATION SCHEDULE: CURRICULUM VITAE OF KEY PERSONNEL (COMPULSORY)

***(CVs are required only for site agent, contract or project manager and technician and foreman)***

## CV FOR CONTRACTS OR PROJECT MANAGER

| | | |
|---|---|---|
| **Name:** | | **Date of birth:** |
| **Profession:** | | **Nationality:** |
| **Qualifications:** | | |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Name of Employer (firm):** | | |
| **Current position:** | | **Years of Experience:** |
| **Employment Record:** | | |
| **Experience Record Pertinent to Required Service:** | | |

**Certification:**

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

SIGNATURE: .....…… IDENTITY NUMBER: ……..

*(of person authorised to sign on behalf of the Tenderer)* DATE:……
**(OWNER OF THE CV)**

## EVALUATION SCHEDULE: CV FOR SITE AGENT

| | | |
|---|---|---|
| **Name:** | | **Date of birth:** |
| **Profession:** | | **Nationality:** |
| **Qualifications:** | | |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Name of Employer (firm):** | | |
| **Current position:** | | **Years of Experience:** |
| **Employment Record:** | | |
| **Experience Record Pertinent to Required Service:** | | |

**Certification:**

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

..... ……..…….

SIGNATURE OF THE INCUMBANT IN THE SCHEDULE DATE

…….

INCUMBANT'S IDENTITY NUMBER (why different from the above)

## EVALUATION SCHEDULE: CV FOR FOREMAN

| | | |
|---|---|---|
| **Name:** | | **Date of birth:** |
| **Profession:** | | **Nationality:** |
| **Qualifications:** | | |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Name of Employer (firm):** | | |
| **Current position:** | | **Years of Experience:** |
| **Employment Record:** | | |
| **Experience Record Pertinent to Required Service:** | | |

**Certification:**

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....  ……..…….

SIGNATURE OF THE INCUMBANT IN THE SCHEDULE  DATE

…….

INCUMBANT'S IDENTITY NUMBER

## EVALUATION SCHEDULE: CV FOR HEALTH AND SAFETY OFFICER

| | | |
|---|---|---|
| **Name:** | | **Date of birth:** |
| **Profession:** | | **Nationality:** |
| **Qualifications:** | | |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Professional Body:** | **Category of Registration:** | **Registration Number:** |
| **Name of Employer (firm):** | | |
| **Current position:** | | **Years of Experience:** |
| **Employment Record:** | | |
| **Experience Record Pertinent to Required Service:** | | |

**Certification:**

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....  ……..…….

SIGNATURE OF THE INCUMBANT IN THE SCHEDULE  DATE

…….

INCUMBANT'S IDENTITY NUMBER




# PART C1 : AGREEMENT AND CONTRACT DATA

## C1.1 Form of Offer and Acceptance

## C1.2 Contract Data

## C1.3 Form of Guarantee (Pro Forma as per specific contract)

## C.1.4 Adjudicators Agreement

# C1.1 FORM OF OFFER AND ACCEPTANCE

# C1.1 Form of Offer and Acceptance

## *A.* Offer *[Failure of a Tenderer to sign this form will invalidate the tender]*

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

**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.– BID NUMBER: DOE13NWER014/CON14**

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

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

**The offered total of the prices inclusive of Value Added Tax is:**……

**Amount in Words:**

……..…

……..

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and

| | |
|---|---|
| ……..<br>SIGNATURE(S) OF AUTHORISED BIDDERS(S)<br><br>NAME: ……..<br>CAPACITY: ……..<br>DATE: ……..<br>ADDRESS ……..<br>……..<br>……..<br><br>CONTACT:: ……..<br>…… | WITNESSES<br><br>3. ……..<br><br>4. …… |

Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

## B. ACCEPTANCE

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

The terms of the contract are contained in

Part C1 Agreements and Contract Data (which includes this Agreement)
Part C2 Pricing Data, including the Schedule of Quantities
Part C3 Scope of Work

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

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

The Tenderer shall deliver the Guarantee in terms of Clause 7 of the General Conditions of Contract 2004 within the period stated in the Contract Data, and he shall, immediately after 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 other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, within 14 days of the date on which this Agreement comes into effect. 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 Contractor) within five 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 . . . . . Date . . . . . .

Name . . . . . .

Capacity . . . . . .

**for the Employer** Independent Development trust
……
……
……
……..

Name and Signature Of witness . . . . . Date . . . . . .

## C. SCHEDULE OF DEVIATIONS

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

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

1 Subject . . . . . .

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Details . . . . . .

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.

2 Subject . . . . . .

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Details . . . . . .

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. . . . . .

.

3 Subject . . . . . .

.

Details . . . . . .

. .

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. . . . . .

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. . . . . .
.
4 Subject . . . . . .
.
Details . . . . . .
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. . . . . .
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. . . . . .
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5 Subject . . . . . .
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Details . . . . . .
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# C1.2 CONTRACT DATA

# C1.2 Contract Data for BID NO: DOE13NWER014/CON14

The Conditions of Contract are clauses of the **JBCC Series 2000 Principal Building Agreement (Edition 6.2)** published by the Joint Building Contracts Committee together with IDT's Special Conditions of Contract.

Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011 315-4140), Master Builders Association (011 205-9000; 057 352-6269) South African Association of Consulting Engineers (011 463-2022) or South African Institute of Architects (051 447- 4909; 011 486-0684; 053 831-2003;)

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. Should there be any contradictions between the **Contract Data** and the JBCC Principal Building Agreement, the Contract Data shall take precedence.

The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the CIDB Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No.48491 of 28 April 2023.

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

Each item of data given below is cross-referenced to the clause in the JBCC Principal Building Agreement to which it mainly applies.

# (EC): CONTRACT DATA: JBCC PRINCIPAL BUILDING AGREEMENT (Edition 6.2 of May 2018)

## PART 1: CONTRACT DATA COMPLETED BY THE EMPLOYER:

## A PROJECT INFORMATION

### A 1.0 Works [1.1]

| | |
|---|---|
| Works description | The scope of works comprises of the:<br>• **Construction of New:**<br>o [A] Block A - Admin Block<br>o [CC] CL - 4 + HOD - D (4 Classroom + HOD)<br>o [H] Block J - Guard House<br>o [K] Nutrition - Block M<br>o [L] Block L - Hall<br>o [M] Block K - Refuse Area<br>o [N] Block N - Pump Room<br>o [Q] Block G - Science Laboratory + Ablutions |
| | • **Renovations and alterations of :**<br>o [RA] Admin Block Convert to LIB / MED / COMP<br>o [RD] Classroom Block 4<br>o [RF] Classroom Block 6<br>o [RH] Ablution Block 1 |
| | • **External works**<br>o Demolitions of existing structures<br>o Soil drainage and Stormwater management<br>o New Pavings to Parking and Assembly Areas<br>o New Covered Walkways<br>o Security Fencing (ClearVu)<br>o Purchasing of Mobile Classrooms for Decanting Purposes<br>o Covered Carports |

| | |
|---|---|
| | ○ Soccer Field and Combined Courts<br>○ Landscaping and Flag Poles). |
| | • **Electrical and Mechanical installations.** |
| | The overview of the works for TLALE Primary School will consist of the construction of: Additions and renovations to TLALE Primary School |

## A 2.0 Site [1.1]

| | |
|---|---|
| Erf / stand number | |
| Site address | Motlhabeng Village |
| Township / Suburb | Motlhabeng |
| City / Town | Mahikeng |
| Province | North West Province |
| Local authority | Mahikeng Local Municipality |
| GPS Coordinates | Latitude 25°51'1.57"S Longitude 25°35'57.73"E |

## A 3.0 EMPLOYER AND ITS REPRESENTATIVE

### A 3.1 Employer:

| | | | |
|---|---|---|---|
| Official Name of Organ of State / Public Sector Body | Independent Development Trust | | |
| Business registration number | Not applicable | VAT number | 4580147876 |
| E-mail | molefic@idt.org.za | Telephone | (018) 381 0654 |
| Postal address | PO Box 7164<br>Mmabatho<br>2735 | | |

| | | | |
|---|---|---|---|
| Postal address | North West Regional Office<br>4071 Joules Street Industrial Site<br>Mahikeng 2735 | | |

**A 3.2 Employer's representative:**

| | | | |
|---|---|---|---|
| Name | Mr Molefi Chwene | Telephone number | |
| E-mail | molefic@idt.org.za | Mobile number | |
| Postal address | PO Box 7164<br>Mmabatho<br>2735 | | |
| Physical address | North West Regional Office<br>4071 Joules Street Industrial Site<br>Mahikeng 2735 | | |

| | | | |
|---|---|---|---|
| A 4.0 | **Principal Agent [1.1; 6.2]** | Discipline | Project Manager |

| | | | |
|---|---|---|---|
| Name | GUDUNKOMO INVESTMENTS & CONSULTING (PTY) LTD. | | |
| Legal entity of above | Gudunkomo Investments & Consulting (Pty) Ltd. | Contact person | Mr X Nxumalo |
| Practice number | | Telephone number | |
| Country | South Africa | Mobile number | |
| E-mail | xolani.nxumalo@gudunkomo.co.za | | |
| Postal address | 30150 Mmutla Street<br>Mosianeiew<br>Mafikeng<br>2745 | | |
| Physical address | 30150 Mmutla Street<br>Mosianeiew<br>Mafikeng<br>2745 | | |

| A 5.0 | **Agent [1.1; 6.2]** | **Discipline** | Architectural |
|---|---|---|---|

| Name | | | |
|---|---|---|---|
| Legal entity of above | | Contact person | |
| Practice number | | Telephone number | |
| Country | | Mobile number | |
| E-mail | | | |
| Postal address | | | |
| Physical address | | | |

| A 6.0 | **Agent [1.1;6.2]** | **Discipline** | Civil and Structural Engineers |
|---|---|---|---|

| Name | | | |
|---|---|---|---|
| Legal entity of above | | Contact person | |
| Practice number | | Telephone number | |
| Country | South Africa | Mobile number | |
| E-mail | | | |
| Postal address | | | |
| Physical address | | | |

| A 7.0 | **Agent [1.1;6.2]** | **Discipline** | Quantity Surveying |
|---|---|---|---|

| Name | | | |
|---|---|---|---|
| Legal entity of above | | Contact person | |
| Practice number | | Telephone number | |
| Country | South Africa | Mobile number | |
| E-mail | | | |
| Postal address | | | |
| Physical address | | | |

| A 8.0 | **Agent [1.1;6.2]** | **Discipline** | Electrical and Mechanical Engineers |
|---|---|---|---|

| Name | | | |
|---|---|---|---|
| Legal entity of above | | Contact person | |
| Practice number | | Telephone number | |
| Country | South Africa | Mobile number | |
| E-mail | | | |
| Postal address | | | |
| Physical address | | | |

## B CONTRACT INFORMATION

### B 1.0 Definitions [1.1]

| | |
|---|---|
| Bills of quantities: System/Method of measurement | Standard system of measurement of building works 7th edition |

### B 2.0 Law, regulations and notices [2.0]

| | |
|---|---|
| Law applicable to the works, state country [2.1] | Law of the Republic of South Africa |

### B 3.0 Offer and acceptance [3.0]

| | |
|---|---|
| Currency applicable to this agreement [3.2] | South African Rand |

### B 4.0 Documents [5.0]

| | |
|---|---|
| The original signed agreement is to be held by the principal agent ot, indicate by whom | Employer |
| Number of copies of construction information issued to the contractor at no cost [5.6] | 3 |

| Documents comprising the agreement | Page |
|---|---|
| The JBCC® Principal Building Agreement, Edition 6.2 May 2018 | 1 to 30 |
| The JBCC® General Preliminaries for use with the JBCC® Principal Building Agreement, Edition 6.2 May 2018 | |
| Drawings as per drawing register issued with the tender | |
| Specifications issued with the tender | |
| Schedules issued with the tender | |
| Bills of Quantities issued with the tender | |
| Addenda as issued during tender stage, if applicable | As issued |

## B 5.0 Employer's agents [6.0]

| | |
|---|---|
| Authority is delegated to the following agents to issue contract instructions and perform duties for specific aspects of the works [6.2] [6.7 [CD]] | Principal Agent |
| Principal agent's and agents' interest or involvement in the works other than a professional interest [6.3] | |

## B 6.0 Insurances [10.0]

| | | | |
|---|---|---|---|
| Insurances by contractor<br>NB: Insurances submitted must be issued by either an insurance company duly registered in terms of the Insurance Act [Long-Term Insurance Act, 1998 (Act 52 of 1998) or Short- Term Insurance Act, 1998 (Act 53 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990). Insured amounts to include VAT. | | | |
| | Works with alterations and additions [10.3] (reinstatement value of existing structures with or including new works) With a deductible not exceeding 5% of each and every claim | Contract sum plus 10% | Applicable |
| Supplementary insurance: Such insurance shall compromise a Coupon Policy for Special Risks issued by South African Special Risk Insurance | | Contract sum plus 10% | Applicable |
| Public liability insurance [10.1.3; 10.2] | | R 5 000 000 | Applicable |

## B 7.0 Obligations of the employer [12.1]

| | |
|---|---|
| Existing premises will be in use and occupied [12.1.2] | Applicable |
| The School will be in operation will construction | |
| Restriction of working hours [12.1.2] | Applicable |
| If applicable, description: Construction works not to interfere with daily School operations | |
| Natural features and known services to be preserved by the contractor [12.1.3] | Not applicable |
| If applicable, description: | |
| Restrictions to the site or areas that the contractor may not occupy [12.1.4] | Applicable |
| If applicable, description: Construction works not to interfere with daily School operations | |
| Supply of free issue of material and goods [12.1.10] | Not applicable |

## B 8.0 Appointment of Nominated Subcontractors [14.0]

| Select | If applicable, description of specialization |
|---|---|

| | |
|---|---|
| Specialisation 1 | |
| Specialisation 2 | |
| Specialisation 3 | |
| Specialisation 4 | |
| Specialisation 5 | |

## B 9.0 Appointment of Selected Subcontractors [15.0]

| Select | If applicable, description of specialization |
|---|---|

| | |
|---|---|
| Specialisation 1 | |
| Specialisation 2 | |
| Specialisation 3 | |
| Specialisation 4 | |
| Specialisation 5 | |

## B 10.0 Appointment of Direct Contractors [16.0]

| Select | If applicable, description of extent of work [12.1.11] |
|---|---|
| Extent of work | |
| Extent of work | |
| Extent of work | |
| Extent of work | |
| Extent of work | |

## B 12.0 Contract period [B18: 1.1], Construction period [B18: 1.1], Possession of site [12.1.5], Practical Completion [19.0], Works Completion [B18.0:19.A], Final Completion [21] and Penalties [24.0]

| | |
|---|---|
| Contract period [B18: 1.1]: Period in months as indicated, include time for submitting contractual obligatory documents, submission of Health & Safety Plan and approval, period for obtaining the Construction Permit (if applicable), the Construction Period and the Defect Liability Period up to and including Final Completion | |
| The contract period is determined as follows (Period/s indicated in months): | 12 Months |

| | |
|---|---|
| Period to submit contractual obligatory documents including submission and approval of health and safety plan by the appointed Health & Safety Agent | 14 Calendar days |
| The contractor must in 7 Calendar days (seven) before the construction works commences, notify the Department of Labour in writing on Annexure 2 form. | 7 Calendar days |
| Total construction period for the Works as a whole up to and including Practical Completion, as indicated below [24.1] | 12 Months |
| Period to achieve Works Completion Refer B18.0 [19.A] | 7 Calendar days |
| Defect liability period up to and including Final Completion | 3 Months |
| Total Contract period [B18: 1.1] | 12 Months |
| Penalty amount per calendar day for late submission of contractual obligatory documents: Ten percent (10%) of the penalty amount per calendar day for late Practical Completion, excluding VAT. [24.1] | R per Calendar day |
| Construction period [B18: 1.1] and Practical Completion for the Works as a whole [19.0] The time for achieving Practical Completion of the whole of the Works is measured from the date of possession of the site by the contractor inclusive of all public holidays, special non-working days and builders' holiday shut down periods. | Applicable |
| The date for practical completion for the works as a whole shall be the period in months as indicated, starting from the date of possession of the site by the contractor inclusive of all special non-working days and builders' holiday shut down periods [12.2.7; 24.1] | 12 Months |
| Period for inspection in working days by the principal agent [19.3] | 3 working days |
| Penalty amount per calendar day for late Practical Completion, excluding VAT. [24.1] | 2.75 Cents per R100 of Contract value (per calendar day) |
| Penalty amount per calendar day for late Works Completion Refer B18.0 [19A]: Thirty percent (30%) of penalty amount per calendar day for late Practical Completion, excluding VAT. | R Per Calendar day |
| Penalty amount per calendar day for late Works Completion Refer B18.0 [19A]: To be calculated at Thirty percent (30%) of penalty / calendar day to complete Select, excluding VAT | |
| Penalty amount per calendar day for late Final Completion [21]: To be calculated at Fifteen percent (15%) of penalty / calendar day to complete Select, excluding VAT | |

**B 13.0 Criteria to achieve Practical/Works Completion [19.0; 19A]** 20.0]

| Criteria to achieve Practical Completion not covered in the definition of practical completion | |
|---|---|
| 13.1 | All relevant CoCs |
| 13.2 | All material and workmanship guarantees (Painting and waterproofing) |
| 13.3 | Maintenance / operating manuals |

**B 14.0 Defects liability period [21.0]**

Extended defects liability period: Refer B18.0 [21.13]

| Select | If applicable, description of applicable elements |
|---|---|
| 14.2 | Air conditioning system and plant |

**B 15.0 Payment [25.0]**

| | |
|---|---|
| Date of month for issue of regular payment certificates Refer B18.0 [25.2] | |
| Contract price adjustment / Cost fluctuations Refer [25.3.4; 26.9.5] | Not applicable |
| If applicable, method to calculate | Not applicable |
| Employer shall pay the contractor within: Refer B18.0 [25.10] | Thirty (30) calendar days |

**B 16.0 Dispute resolution [30.0]**

| | |
|---|---|
| Mediation | Applicable |
| Name of nominating body | Association of Arbitrators (Southern Africa) |
| Appointment of Mediator | State Attorney |
| Litigation | Court with Jurisdiction |

## B 17.0 JBCC® General Preliminaries - selections

| | | |
|---|---|---|
| Provisional bills of quantities [P2.2] | | Applicable |
| Availability of construction information [P2.3] | | Applicable |
| Previous work - dimensional accuracy - details of previous contract(s) [P3.1] | | Not Applicable |
| Previous work - defects - details of previous contract(s) [P3.2] | | Not Applicable |
| Inspection of adjoining properties - details [P3.3] | | Not Applicable |
| Handover of site in stages - specific requirements [P4.1] | | Not Applicable |
| Enclosure of the works - specific requirements [P4.2] | | Applicable |
| Geotechnical and other investigations - specific requirements [P4.3] | | Applicable |
| Existing premises occupied - details [P4.5] | | Applicable |
| Services - known - specific requirements [P4.6] | | Applicable |
| Water [P8.1] | By contractor | Applicable |
| | By employer | N/A |
| | By employer – metered | N/A |
| Electricity [P8.2] | By contractor | Applicable |
| | By employer | N/A |
| | By employer – metered | N/A |
| Ablution and welfare facilities [P8.3] | By contractor | Applicable |
| | By employer | N/A |
| Communication facilities - specific requirements [P8.4] | | Applicable |
| Protection of the works - specific requirements [P11.1] | | Applicable |
| Protection / isolation of existing works and works occupied in sections - specific requirements [P11.2] | | Applicable |
| Disturbance - specific requirements [P11.5] | | Applicable |
| Environmental disturbance - specific requirements [P11.6] | | Applicable |

## B 18.0 SPECIFIC CHANGES MADE TO JBCC® DOCUMENTATION

**The additions, deletions and alterations to the JBCC Principal Agreement are:**

| Clause | Amendments |
|---|---|
| **1.0** | **DEFINITIONS AND INTERPRETATION**<br><br>Clause 1.1 is deemed to be amended by the addition and amendments of the following:<br><br>Change the Definition of "**AGREEMENT**" to read as follows:<br>This **JBCC** Principal Building Agreement, the **contractor's** tender document accepted by the **employer**, the form of offer signed by the **contractor, special conditions of contract, contract data** and other **contract documents**.<br><br>The completed **JBCC®** Principal Building Agreement and **JBCC® contract data**, the **contract drawings**, the **priced document** and any other documents reduced to writing and signed by the authorised representatives of the **parties**<br><br>Change the Definition of "**BILLS OF QUANTITES**" to read as follows:<br>The document drawn up in accordance with the pricing instructions contained in the pricing data.<br><br>Change the Definition of "**CONSTRUCTION PERIOD**" to read as follows:<br><br>The period commencing on the intended date [CD] of possession of the **site** by the **contractor** and ending on the date of **practical completion**<br><br>Change the Definition of "**CONTRACT DOCUMENTS**" to read as follows:<br>The **agreement** and all documents referenced therein. The **contract documents** shall be taken to be mutually explanatory of one another but in the event of ambiguity, discrepancy, divergence or inconsistency in or between them, the **Contract Data** shall prevail over all other **contract documents**<br>**The above has been removed from 6.2, due to the agreement definition which now includes contract document**<br><br>Change the definition of **"PAYMENT CERTIFICATE"** to read as follows:<br>A certificate prepared at regular agreed intervals by the principal agent to the contractor certifying the value of work done and verified by the employer for payment, delivered to the employer and properly recorded on |
| **Clause** | **Amendments** |
| | delivery, and the certificate will only become due and payable once the employer has verified and signed the certificate. Note: The employer reserves the right to withhold or reject the certificate within ten (10) working days should there be a reason to do so, and the contractor may resort to the dispute resolution process should the rejection fails to be resolved.<br><br>Change the Definition of "**PRACTICAL COMPLETION**" to read as follows:<br>The stage of completion where the **works** or a section thereof, in the opinion of the **principal agent**, has been reached in accordance with C28 & C29 this is a different clause of the specific preliminaries and where the work on the **practical completion** list (and patent's list if applicable) has been completed and free of latent defects other than minor defects identified in the list for completion and can be used for the intended purpose and certified as complete by the **principal agent**.<br><br>Change the Definition of "**CONTRACT DRAWINGS**" to read as follows:<br>The drawings listed in the Scope of Works. |

| | |
|---|---|
| | Change the Definition of "**CONTRACT SUM**" to read as follows:<br>The total of prices in the Form of Offer and Acceptance.<br><br>Change the Definition of "**INTEREST**" to read as follows:<br>The interest rates applicable to this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999).<br><br>A monetary guarantee [CD] provided by the **employer** to the **contractor**, or vice versa, in terms of this **agreement** from which either **party** may recover expense and loss in the event of default<br><br>Add the following to the list of definitions:<br><br>**SCHEDULE** means the variables listed in the Contract Data.<br><br>**DATE OF SITE HANDOVER** means the date the contractor is given possession of the site, which shall always be after the signing of the agreement and approval of the construction permits from the relevant authorities including Departments of Labour and Environmental Affairs and local municipality (where applicable).<br><br>**EXCEPTIONALLY INCLEMENT WEATHER** means weather which is not only extreme or severe but exceeding that which, on the evidence of the past ten years, could reasonably been expected.<br><br>**TENANT LIST** means a list compiled by the tenant or in his absence the **principal agent** defining the incomplete or defective work to be rectified to achieve **practical completion**. Such list shall be scrutinised and endorsed by the **principal agent** and shall not be unreasonable in the context of his contract.<br><br>**CORRUPT PRACTICE** means the offering, giving, receiving and soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution<br><br>**FRAUDULENT PRACTICE** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer, and includes collusive practice among tenderers (prior to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition. |
| **3.0** | **OFFER AND ACCEPTANCE**<br><br>Clause 3.3 deleted and replaced with the following:-<br><br>3.3 This **agreement** shall come into force on the date of signature of the contract by the **employer** and after all statutory requirements have been met, and continue to be of force and effect until the end of the **latent defects** liability period notwithstanding termination or the certification and final payment [22.0;29.0;25.0] |

| Clause | Amendments |
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| **4.0** | **CESSION AND ASSIGNMENT**<br><br>Clause 4.2 deleted and replaced with the following:-<br><br>**4.2.** The **Contractor** shall not consent to a nominated **Subcontractor** assigning or ceding rights or obligations in terms of this **agreement** without obtaining the prior written consent of the **Principal Agent** with written approval from the **Employer**<br><br>Clause 4.3 deleted and replaced with the following:-<br><br>4.3. Where the **Contractor** intend to cedes any right to monies due or to become due under this agreement as security in favour of a financial institution, a written consent in accordance with clause 4.1 , shall be obtained from the **Employer** prior to entering into such cession.<br><br>Clause 4.0 is amended by adding the following new clauses:<br><br>4.4 Any cession entered into without the necessary written consent from either party, shall be null and void.<br><br>4.5 The **Employer** shall not consent to a cession of monies due or to become due under this **agreement** as security in favour of a financial institution, unless such financial institution submitted to the IDT a Valid Tax Clearance Certificate, is registered as a credit provider in terms of the National Credit Act and as a vendor in the IDT's Vendor Management System and in line with the IDT's SCM processes.<br><br>4.6 The **contractor** shall adhere to the list of **subcontractors** indicated in the returnable schedules. Any changes to the **subcontractors** and their subcontract work shall be approved by the client in writing. The contractor shall not subcontract more than 25% of the works to **subcontractors** whose BEE status is less than his at the time of appointment. Failure to comply with this shall constitute a breach of contract. |
| **5.0** | **CONTRACT DOCUMENTS**<br><br>Clause 5.1 deleted and replaced with the following:-<br><br>5.1. The parties shall sign the original contract document and shall each be issued with the copy thereof. The original signed contract document shall be held by the ***Employer.***<br><br>Clause 5.6 deleted and replaced with the following:-<br><br>5.6. The contract documents shall be deemed to be mutually explanatory of one another. In the event of ambiguity, discrepancy, divergence or inconsistency in or between them, the **Contract Data** shall prevail over all other contract documents. |

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| **6.0** | **EMPLOYER'S AGENTS**<br><br>Clause 6.1 deleted and replaced with the following:-<br><br>6.1. The **Employer** warrants that the **Principal Agent** has authority and obligation to act and bind the **Employer** in terms of this agreement, subject to certain restrictions contained herein this document.<br><br>Clause 6.4 deleted and replaced with the following:-<br><br>6.4. Where any agent fails to act in terms of delegated authority, the **Contractor** shall give notice to the **Principal Agent** and the **Employer** to respond to such default within five (5) working days or any agreed period. Where such default has not been responded to within the specified or the agreed period, the **Contractor** may give not less than 10 working days' notice of intention to suspend the works [28.0].<br><br>Clause 6.5 deleted and replaced with the following:- |

| Clause | Amendments |
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| | 6.5 Where any agent fails to act or is unable to act, or ceases to be an agent, in terms of this agreement, the **Employer** shall appoint an interim agent within 10 working days from the date of the employer being aware of such event pending procurement of a replacement agent through normal employer's SCM processes. |
| **9.0** | **INDEMITIES**<br><br>Clause 9.0 is amended by the addition of the following clause:-<br><br>Clause 9.1.4. Physical loss or damage to an existing structure in the works that are the subject of the contract and to existing structures as well.<br><br>Delete 9.2.7.<br><br>Delete 9.2.10. |
| **10.0** | **INSURANCES**<br><br>Clause 10.0 is amended by the addition of the following clauses to the end thereof:<br><br>10.12 Damage to the works<br><br>(a) Without any way limiting the **contractor's** obligations in terms of the contract, the **contractor** shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the **employer** against any such damage. The **contractor** shall take such precautions and security measures and other steps for the protection and security of the **works** as the **contractor** may deem necessary.<br><br>(b) The **contractor** shall at all times proceed immediately to remove or dispose of any debris arising from damage or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**.<br>(c) Where the **employer** bears the risk in terms of this contract, the **contractor** shall, if requested to do so, reinstate any damage or destroyed portions of the **works** and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof.<br><br>10.13 Injury to Persons or loss of or damage to Properties<br><br>(a) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the **works** unless due to any act or negligence of any person for whose actions the **employer** is legally liable<br><br>(b) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding consequent upon loss of or damage or to any moveable, or immoveable property or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person, arising out of or in the course of or by reason of the execution of the **works** unless due to any act or negligence of any person for whose actions the **employer** is legally liable.<br><br>(c) The **contractor** shall upon receiving a **contract instruction** from the **principal agent** cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost therefore from the **contractor** or to deduct the same from amounts due to the **contractor**.<br><br>(d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**. |

| Clause | Amendments |
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| | (e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been completed.<br><br>(f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and / or repair such property and execute the **works**.<br><br>10.14 High Risk Insurance<br><br>In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions which might result in catastrophic ground movement evident by sinkhole or dolomite formation the following will apply:<br><br>10.14.1 Damage to the works<br><br>The **contractor** shall, from the **commencement date** of the **works** until the date of the **certificate of practical completion**, bear the full risk of and hereby indemnifies and hold harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security measures and other steps for the protection of the **works** as he may deem necessary.<br><br>When so instructed to do so by the **principal agent**, the **contractor** shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, replace and/or repair the **works**, at the **contractor's** own costs.<br><br>10.14.2 Injury to persons or loss of or damage to property<br><br>The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above.<br><br>The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of construction.<br><br>10.14.3 It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.14.1 and 10.14.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty one (21) **calendar days** of the **commencement date** but before commencement of the **works** submit to the **employer** proof of such insurance policy, if requested to do so.<br><br>10.14.4 The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred subsequent upon the **contractor's** default of his obligations as set out in 10.14.1, 10.14.2 and 10.14.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered on indivisible whole. |
| **11.0** | **SECURITY**<br><br>Delete clause 11.1.2. and replace with the following:- |

| Clause | Amendments |
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| | 11.1.2. The **contractor** shall furnish the **employer** with a fixed **construction guarantee** equal in value to ten per cent (10%) of the **contract sum** within fifteen (15) **working days** from the offer of appointment **date** and keep such **security** valid and enforceable until the **final payment certificate** has been issued to the **contractor).**<br><br>**Or**<br><br>Delete clause 11.1.3. and replace with the following:-<br><br>11.1.3 The **Contractor** shall furnish the **employer** with a fixed set of five per cent (5%) guarantee of the contract sum and a payment reduction of 5% of the value of each **payment certificate** up to a maximum of five per cent (5%) of the contract sum [25.3.3]. The **contractor** shall keep such **security** valid and enforceable until the **final payment certificate** has been issued. The **contractor** could release the retention at any stage of the contract by issuing a further construction guarantee of five percent (5%) of the **contract sum**.<br><br>Amend clause 11.3 to read as following:<br><br>11.3 Where a **contractor** fails to provide the **security** for projects of value less than R5 million, the **employer** may:<br><br>Amend clause 11.3.1 to read as follows:<br><br>11.3.1 Hand over the site to the **contractor** and withhold in interim **payment certificates** to the **contractor** an amount equal to ten percent (10%) of the **contract sum**. The amount withheld shall be reduced at **practical completion** [19.0] to five percent (5%) of the **contract sum** and to zero percent (0%) in the **final payment certificate** [25.6]<br><br>Delete Clauses 11.1.4, 11.1.5, 11.2; 11.4; 11.5<br><br>Delete 11.7 and replace with the following<br><br>11.7. A security held by the employer shall be for the due fulfillment of the **contractor**'s obligation in term of this **agreement**<br><br>Delete clause 11.10 and replace with the following<br><br>11.10 The **Contractor** hereby waives, in favour of the **Employer**, any lien or right of retention that is or may be held in respect of the **Works** to be executed on the Site.<br><br>Clause 11.0 is amended by adding the following new clauses:<br><br>11.12 Within fifteen (15) **working days** of the date of **final completion** of the **works** the **employer** shall release all **construction guarantees** to the **contractor**.<br><br>**11.13** Where the **employer** has a right of recovery against the **contractor,** the **employer** may issue a written demand in terms of the **construction guarantee.**<br><br>**11.14** C**onstruction guarantees** shall only expire at **final completion** date**.**<br><br>11.15 The **Employer**, as an Organ of State, shall not be required to provide payment guarantees |

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| **12.0** | **DUTIES OF THE PARTIES**<br><br>Delete clause 12.1.1<br><br>Delete clause 12.1.10<br><br>Clause 12.0 is further amended by adding the following clauses:<br><br>12.4 The **contractor** shall:<br><br>12.4.1 Immediately on award of the contract and prior to the commencement on **site**, the **contractor** shall prepare a working **programme** covering the first month of the construction period. This working **programme** shall be prepared in conjunction with the **principal agent** and shall be subject to his approval. |

| Clause | Amendments |
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| | During the first month of the construction period the **contractor** shall prepare and draw up the **programme** for the balance of the **works** for approval by the **principal agent**<br><br>12.4.2 This **programme** shall be drawn up in accordance with the dates in the **agreement** for possession, sectional completion and **practical completion** and shall be in sufficient and approved detailto ensure control over the **works**.<br><br>**12.4.3** The **programme** shall be compiled based on the Critical Path Method of Programming with the critical activities clearly highlighted. It shall be compiled in such a way that logic is not constrained by resource limitations unless specifically approved by the **principal agent.**<br><br>**12.4.4** Documentation will not be available in complete detail at the commencement stage. However the **contractor**, in conjunction with the **principal agent**, shall progressively plan the **works** on provisional information available and with sufficient scope to include future detail without disrupting the basic logic initially approved by the **principal agent.**<br><br>The quantities contained in these **bills of quantities** are provisional and shall be utilized as a guide only for the drawing up of the **programme.**<br><br>Where assumptions are made in regard to programming aspects, such assumptions shall be recorded in the **programme.**<br><br>12.4.5 The **programme** shall be updated and modified to accommodate a material change in circumstances or whenever reasonably required by the **principal agent**.<br><br>Any acceleration and/or special measures sanctioned by the **principal agent** together with associated effects shall be incorporated in a revision to the **programme.**<br><br>12.4.6 The **programme** (including each revision thereof) shall be prepared in conjunction with the **principal agent** and shall be subject to his approval. The approval of the **principal agent** shall be deemed to be given on the basis that the **contractor** represents that the **programme** complies with the requirements of this **agreement**.<br><br>The **contractor** shall be responsible at all times for maintaining the accuracy, validity and reasonableness of the **programme** and the implementation thereof. The fact that a **programme** has been prepared in conjunction with the **principal agent** or approved by him shall not release or relieve the **contractor** from any of his obligations or responsibilities under this **agreement**. Without derogating from the foregoing, the **contractor** shall at all times bear the onus to demonstrate that the **programme** complies with the requirement of this **agreement** and, where applicable constitute an appropriate baseline **programme** for any purpose in connection with this **agreement.**<br><br>12.4.7 The **contractor** and the **principal agent** shall, at regular intervals not exceeding one month, assess the state of progress of the **works** relative to the latest agreed revision of the **programme**. Such agreement shall include the recording of actual commencement and completion dates for each activity and shall constitute the official record of the progress at such point in time.<br><br>12.4.7 The contractor shall comply with his tendered subcontractors as stipulated in clause 4.6.<br><br>12.5 The contractor shall not remove, cut back or disturb trees and shrubs without a contract instruction from the principal agent. (Specific requirements of the employer must be described)<br><br>12.6 The contractor shall ensure that any relics, treasure or other articles of potential value found on the site remain the property of the employer and shall be handed over to the principal agent who shall be the sole arbiter of what is an article of value. |

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| **14.0** | **NOMINATED SUBCONTRACTORS**<br><br>Delete clause 14.1 and replace with the following<br><br>14.1 The **principal agent** and/or **agents**, on written instruction from the **employer**, shall:<br><br>Delete clause 14.1.5<br><br>Amend clause 14.3 to read as follows:- |
| **Clause** | **Amendments** |
| | 14.3 Where such **subcontracto**r is not appointed by the **contractor** for the reasons stated (14.2), or where the appointment of a **subcontracto**r has been terminated, another **subcontractor** shall be nominated and be appointed on instruction from the **principal agent** on written instruction from the **employer.**<br><br>Amend clause 14.7.1 to read as follows:-<br><br>The **principal agent,** on written instruction from the **employer**, shall instruct the **contractor** to appoint another nominated **subcontractor** (14.1.4) to complete the n/s subcontract works. |
| **15.0** | **SELECTED SUBCONTRACTORS**<br><br>Amend clause 15.1 to read as follows:-<br><br>The **principal agent** and/or agents, on written instruction from the **employer**, shall:<br><br>Clause 15.1.2 deleted and replaced with:<br><br>15.1.2. Call for tenders from a list of tenderers agreed between the **contractor**, the **principal agent** and the **employer**<br><br>15.1.5. Delete<br><br>Amend clause 15.4 to read as follows:-<br><br>15.4. Where such **subcontracto**r is not appointed by the **contractor** for the reasons stated (15.3), or where the appointment of a **subcontracto**r has been terminated, another **subcontractor** shall be chosen and be appointed on instruction from the **principal agent** on written instruction from the **employer.**<br><br>Amend clause 15.7.1 to read as follows:-<br><br>15.7.1 The **contractor** shall appoint another selected **subcontractor** (15.1.4) to complete the n/s subcontract **works** in consultation with **principal agent** and/**agents** on written instruction from the **employer** |
| **16.0** | Amend clause 16.1.1 by adding the following sub-clause:<br><br>6.1.1.1 The employer will appoint direct contractors for the following direct contract work and the contractor shall be expected to accommodate them in his planning and execution of work:<br>a) ……..<br>b) …… |

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| **17.0** | **CONTRACT INSTRUCTIONS**<br><br>Amend Clause 17.0 by adding the following sub clauses under clause 17.1.2<br><br>The word "substantially" in the main clause above is qualified by the following four sub clauses:<br><br>17.1.2.1 Quantity as per line item in fixed Bill of Quantity of more than 5%.<br><br>17.1.2.2. Variation in standards that result in rate adjustment within the BOQ of more than 5%<br><br>17.1.2.3. Variation in the design that varies the contract sum by more than 5%<br><br>17.1.2.4. Should any of the clauses 17.1.2.1-3 be triggered the employer must be notified within 24 hour of becoming aware of the change in writing. The 5% variance includes the exceeding or reduction of the amount as stated above.<br><br>Amend clause 17.1.13 to read as follow:<br><br>17.1.13 Expenditure of budgetary allowances, prime cost amount and provisional sums will only be allowed with the express, explicit and unique written consent of the employer. |
| **Clause** | **Amendments** |

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| **19.0** | **PRACTICAL COMPLETION**<br><br>Amend Clause 19.0 by adding the following clauses:<br><br>19.4.1. In the event of failure as contemplated in the main clause, The employer reserves the right to issue a practical completion list in excess of the principal agent list or in replacement thereof.<br><br>19.4.2. No default Practical completion will be deemed to be given, in light of sub clause 19.4.1<br><br>19.8 Without derogating from the generality of the requirements for **practical completion** the following specific requirements shall apply:<br><br>19.8.1 **Defects** occurring after the issue of the **practical completion** list requiring remedial work that will, in the opinion of the **principal agent,** cause disruption, will cause the issue of the certificate of **practical completion** to be withheld until such **defects** have been rectified to the satisfaction of the **principal agent**.<br><br>19.8.2 The following certificates of compliance shall be required (excluding others that may be required by the local/national authority) from the contractor to achieve **practical completion** and completion certificate shall be invalid if one of them is missing:<br><br>a) A certificate from the **contractor** that all aspects of the construction regulations of 2003 have been complied with.<br>b) A certificate from the **contractor** that the National Building Regulations have been complied with<br>c) An occupancy certificate<br>d) occupational Health and Safety certificate<br>e) A certificate of compliance with respect to plumbing and drainage<br>f) An electrical certificate of compliance<br>g) A certificate of compliance with respect to all glazing<br>h) A certificate of compliance and fire clearance certificate from the contractor and fire chief respectively.<br>i) A galvanizing and painting guarantee.<br>j) All mechanical certificate of compliance.<br>k) All structural certificate of compliance.<br>l) A palisade certificate of compliance.<br>m) A smoke extraction certificate of compliance.<br>n) A fire signage certificate of compliance.<br>o) A tiling certificate of compliance.<br>p) A waterproofing certificate of compliance.<br>q) A generator guarantee.<br>r) Commissioning reports<br>s) Maintenance and operational manuals<br>t) Training of end users on equipment, etc.<br>u) Any other applicable guarantees.<br><br>19.8.3 A complete set of maintenance and operating manuals together with all workmanship and material warranties and guarantees are to be compiled and issued to the **principal agent** prior to **practical completion** being granted. In addition to the abovementioned documentation, a formal "on site" handover will be required to be conducted with every discipline in the presence of the **contractor** as well as the applicable services subcontractor.<br><br>Delete Clause 19.6 and replace with the following clauses:<br><br>19.6 Notwithstanding anything to the contrary contained in the contract, should the **contractor** in the opinion of the **principal agent** not have achieved **practical completion** of any area of the **works**,the **employer** may, notwithstanding the **contractor's** ongoing responsibilities, take possession of any such area and such possession by the **employer** shall not in any way be construed that **practical completion** has been achieved.<br><br>In such event, the **principal agent** shall give written notice to the **contractor** that the **employer** is taking immediate possession of any particular area/s without **practical completion** having been achieved in order to mitigate the **employer's** damages and exposure to loss or expense. |

| Clause | Amendments |
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| | 19.6.1 In the event of the **Employer** taking occupation of the **works** or part thereof prior to **practical completion** being achieved, but on or after the date for **practical completion**, the e**mployer** shall:<br><br>(a) Have **the principal agent** issue a **practical completion** list(s) prior to such occupation<br><br>(b) Grant the **contractor** thereafter all reasonable access to expeditiously attend to the items on the **practical completion** list(s)<br><br>Add clause 19.9 to Clause 19.0 to read as follows:<br><br>19.8 After the issue of the **certificate of practical completion**, entry upon the **works** to make good **defects** shall be at such reasonable times as shall be agreed by the **principal agent.**<br><br>The **contractor** shall not receive any mark-up for overheads and profit on any omission of tenant installation work or tenant installation work by others. Claims of loss of profit shall not be entertained. |
| **22.0** | **LATENT DEFECT LIABILITY PERIOD**<br><br>Amend Clause 22.1 to read as follow:<br><br>22.1 The latent defect liability period for the works shall commence at the start of the construction period and end 10 years from the certified date of final completion.<br><br>Amend 22.2.1 to read as follow:<br><br>22.2.1 Where termination of this agreement occurs before the date of final completion, the latent defect liability period shall end 10 Years from the date of termination (29.10; 29.23) for the completed portion of the works only.<br><br>Delete clause 22.2 |
| **23.0** | **REVISION OF THE DATE FOR PRACTICAL COMPLETION**<br><br>Amend 23.2 to read as follow:<br><br>23.2 The **contractor** is entitled to a revision of the date for **practical completion** with an adjustment of the **contract value** (26.0) by the **principal agent** subject to a written approval from the **employer**, for a delay to **practical completion** caused by one or more of the following events:-<br><br>Amend 23.7 to read as follow:<br><br>23.7. The **principal agent** shall, within twenty (20) working days of receipt of the claim, with the written consent of the **employer**, grant in full, reduce, refuse the working days claimed, and: |

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| **25.0** | **PAYMENT**<br><br>Amend 25.1. to read as follow:<br>25.1 The **contractor** shall cooperate with and assists the **employer** and **Principal agent** in the preparation of the cash flow statement and payment valuation by providing all required document and quantified amount of work duly executed. Where the contractor has not provided such information the **principal agent** shall make a fair estimate of the work executed.<br><br>Amend Clause 25.0 by adding the following sub clauses under clause 25.1: |
| **Clause** | **Amendments** |
| | 25.1.1. The **principal agent** shall prepare in full the **payment certificate** for signature and effect by the employer as stipulated in the contract. No **payment certificate** will be concluded and effected without the employer's authorized signature on the certificate.<br><br>25.1.2. No **payment certificate** will be effected without the employer's authorized signature on the certificate.<br><br>25.1.3 The **Employer** reserves the right to demand a valid Tax Clearance Certificate prior to making any payment to the **Contractor**, should it become aware that the tax clearance certificate has expired.<br><br>25.1.4 The Contractor shall submit the valid Tax Clearance Certificate within fifteen (15) working days or any extended period, from the date of expiry of the Tax Clearance Certificate.<br><br>Amend clause 25.4.4 to read as follows:<br>25.4.4 Default interest, where applicable, shall only be effective after the 30 calendar days from the date of submission of undisputed **payment certificate and Contractor Invoice** to the **employer** at the rate of repo rate plus 3%.<br><br>25.4.5. Delete<br><br>Amend 25.7 to read as follow:<br><br>25.7 The **Employer** shall, in accordance with clause 8.2.3 of the treasury regulation of March 2005, pay to the **Contractor** the amount certified in an interim **payment certificate** within **thirty (30) calendar days** from the date of submission of undisputed **payment certificate**" to the **employer** after verification, unless there is an objection of the certificate by the employer. *The employer cannot reject a certificate once the employer signs it.*<br><br>Amend Clause 25.9 by adding the following sub clauses:<br><br>25.9.1 The **employer** shall only be liable for the payment for materials and/or goods on site if ownership is proven by the **contractor** (paid in full) and such ownership shall pass on to the **employer** upon payment.<br><br>25.9.2 The **employer** shall only be liable for the payment for materials and/or goods offsite if ownership is proven by the **contractor** (paid in full) and the **contractor** submits a bank guaranteed cheque of the value of materials and/or goods in favour of the client and such ownership shall pass on to the **employer** upon payment. |

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| **26.0** | **ADJUSTMENT OF THE CONTRACT VALUE AND FINAL ACCOUNT**<br><br>Add the followings sub clauses to clause 26.1.<br><br>26.1.1. Upon receipt of the change request, the **Principal Agent** must professionally consider the merits of the change request and make a recommendation to the **employer**.<br><br>26.1.2. The **Principal Agent** shall not have the power to approve any deviation or variation which has financial implications on the **Employer** without the necessary written approval of the **Employer**, except under emergency circumstances wherein failure to undertake the work may result in loss of life. |

| Clause | Amendments |
|---|---|
| | 26.1.3. The **Employer** must communicate the approval of the change request in writing to the **Principal Agent** and the **Principal Agent** shall, upon receipt of confirmation of the change request, issue the necessary **Contract Instruction** to the **contractor** to undertake the works.<br><br>26.1.4. The **Contractor** shall not commence with any change request Works without proof of the written approval of the Variation Order from the **Employer**, except under circumstances mentioned in paragraph 26.1.2 above.<br><br>26.1.5 Should the **Contracto**r undertakes the change request Works without the necessary written approval of the change request from the **Employer,** the **Contractor** shall be entirely liable for any financial and any related implications and hereby indemnify and hold harmless the **Employer** from and against any and all claims, actions, damages, liabilities, injuries, costs, fees, expenses, or losses, including and without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by, or for which liability may be asserted against, the **Employer** arising out of the Contractor's performance or non-performance of unauthorized works, but only to the extent caused by the negligent acts, errors or omissions of the **Contractor**.<br><br>26.1.6. The **Contractor** shall not accept any instructions from any party, including beneficiary Department, other than the **Principal Agent**.<br><br>Amend clause 26.7 to read as follow:<br>26.7 The **principal agent**, in consultation with the employer, shall assess the claim and on approval by the **employer**, shall adjust the contact value within twenty (20) working days of receipt of such details. |
| **27.0** | **RECOVERY OF EXPENSE AND/OR LOSS**<br><br>27.1.4. Delete |
| **28.0** | **SUSPENSION BY THE CONTRACTOR**<br><br>Amend clause 28.1. to read as follow:<br>28.1 The **contractor** may give fourteen (14) Working days' notice to the employer and the **principal agent** of the intention to suspend the works where the **employer** and the **principal agent** have failed to:<br><br>Add the followings clause to clause 28.0:<br>28.5. The date of resumption of works shall be the date on which the default has been remedied by the **employer**. |

| | |
|---|---|
| **29.0** | **TERMINATION**<br><br>Clause 29.1.1 is amended by the addition of the following sub-clauses:<br><br>29.1.1a The **contractor** refuses or neglects to comply strictly with any of the conditions of contract.<br><br>29.1.1b The **contractor's** estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force with the Republic of South Africa.<br><br>29.1.1c The **contractor**, in the judgment of the **employer**, has engaged in **corrupt** or **fraudulent practices** in competing for or in executing the contract. |
| **Clause** | **Amendments** |
| | 29.1.1d The **contractor** fails to perform in terms of the **agreement** or the **employer** on reasonable ground believe that the **contractor** may not be able to comply with his obligation.<br><br>Amend 29.10 to read as follow:<br>29.10 The latent defect liability period for the completed portion of the works shall end (22.2.1) 10 years from the date of termination.<br><br>Amend 29.23 to read as follow:<br>29.23 The latent defect liability period for the completed portion of works shall end 10 years from the date of termination (22.2.2). |
| **30.0** | **DISPUTE RESOLUTION**<br><br>Delete clauses 30.3, 30.4, 30.5 and 30.6 |

## Contract Agreement

| Clause Number | Contract Agreement |
|---|---|
| 41.0 | **41.0 POST TENDER PROVISIONS**<br><br>41.1 All information provided in this section requires consultation with the **parties** to the **agreement**.<br><br>41.2 The completed **Contract Data - Employer** and **Contractor data - Contractor** addenda and such other pertinent documents as listed below shall form part of this **agreement**:<br><br>41.3 The dispute resolution body selected by the **parties** is:<br><br>**THE ASSOCIATION OF SOUTH AFRICAN ARBITRATORS**<br><br>41.4 The **employer** shall provide a **Payment Guarantee** *(amount)* **N/A**<br><br>41.5 An annual building industry holiday period is applicable *(yes/no)* **YES**<br><br>41.6 Further provisions and information agreed by the parties:<br><br>_____<br><br>_____<br><br>_____<br><br>_____ |
| 42.0 | **42.0 CONTRACTUAL AGREEMENT**<br><br>42.1 This **agreement** is the entire (special conditions?) contract between the **parties** regarding the matters addressed herein. No representations, terms, conditions or warranties not contained in this **agreement** shall be binding on the **parties**. No agreement or addendum varying, adding to, deleting or terminating this **agreement** including this clause shall be effective unless reduced to writing and signed by the **parties.**<br><br>42.2 **Contracting Parties**<br><br>(1) **Employer** : **THE INDEPENDENT DEVELOPMENT TRUST**<br><br>Physical Address : North West Regional Office<br>4071 Joule Street<br>Industrial Site<br>Mmabatho,<br>2735<br><br>Telephone : (018) 381 0654<br>Fax :<br>E-mail : molefic@idt.org.za<br><br>TAX / Vat Registration no : 458 014 7876 |

| Clause Number | Contract Agreement |
|---|---|

(2) **Contractor** :

Physical Address :

Telephone :
Fax :
E-mail :

TAX / Vat Registration no :

42.3 The accepted contract sum (inclusive of tax)

*(amount)* _____

(In words) _____

_____

_____

42.4 Signature of the contracting **parties**:

Thus done and signed at_____on _____

_____ _____
Name of signatory For and on behalf of the **employer** who by signature hereof warrants authorisation hereto

_____ _____
Capacity of signatory As Witness (1)

Thus done and signed at_____on _____

_____ _____
Name of signatory For and on behalf of the **contractor** who by signature hereof warrants authorisation hereto

_____ _____
Capacity of signatory As Witness (2)

| Clause Number | Contract Agreement |
|---|---|
| | Details of Witness (1)<br><br>Name: _____<br>Address: _____<br>_____<br>_____ |
| | Details of Witness (2)<br><br>Name: _____<br>Address: _____<br>_____<br>_____ |

## C1.2.1 Special Conditions of Contract

INTRODUCTION

**WHEREAS**, the Independent Development Trust ("IDT") made an Offer of Appointment and the Contractor has accepted such appointment subject to the conditions stipulated in the aforesaid Offer of Appointment Letter, which conditions include signing of the JBCC Agreement, Edition 6.2 @ May 2018 (hereinafter referred to as "Main Agreement") and the Contract Data.

**AND WHEREAS**, this Special Condition of Contract shall form part of the Main Agreement between the Employer and the Contractor.

### a) ADDITIONS TO THE MAIN AGREEMENT AND THE CONTRACT DATA

### 1.1 JOINT VENTURE AGREEMENT

**1.1.1** Should the Joint Venture Agreement be dissolved or any of the JV partner pull out the JV Agreement for any reasons whatsoever, the Employer hereby reserve its right to terminate the contract with immediate effect.

**1.1.2** Should one JV partner pull out of the JV agreement and the replacement JV partner does not meet the BBBEE threshold stipulated in clause 5.4 of the Special Condition of the Principal Contract, the IDT shall be entitled to cancel the contract with immediate effect.

**1.1.3** Should the BBBEE status of the Joint Venture be changed to a lower rate than the bidding rate, based on legislation applicable at the time of tender closing, the IDT shall be entitled to cancel the contract.

### b) SUBCONTRACTING

**1.1** A service provider awarded the contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher BBBEE status level than the person (service provider) concerned, unless the contract is subcontracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

**1.2** Service provider awarded the project shall subcontract not less than 15% of the contract value to Black-owned local firms with preferably women, youth and people with disability

### c) LOCAL ENTERPRISE

Service provider awarded the project shall purchase at least 5% of the materials locally where available.

## d) TRAINING

Service provider awarded the project may train local labour on life skills, on the job and accredited certification in e.g. plumbing etc.

## e) INSURANCES

The contractor shall be responsible for effecting and maintaining the contract works insurance for the full duration of the contract period. The insured amount for the full scope of works shall be 100% of the contract amount. The insured amount shall include for alterations and renovations to existing buildings and shall not reduce in any way despite sectional; completion being taken.

## f) SITE AND ACCESS AND WORKING HOURS

Clauses 16.0, 16.1 and 16.6 amended to read as follows:

“the site of the works is live school environment within which the contractor shall have restricted access to the site on being given possession to fulfill his obligations. The contractor shall be briefed on the restrictions of movement, servitudes, access control, buildings in use, security requirements and security clearances, working hours due to the site being occupied and under the employers control at all times. The contractor shall not extend his operations into any restricted or undefined areas.

The contractor shall ensure that all personnel and subcontractors engaged on the contract and those visiting the site have the necessary security clearances prior to such persons being brought on to site. Any persons found to be non-compliant shall not be allowed entry to the site. All costs associated with the verification of personnel to meet this requirement shall be borne by the contractor.

The employer shall have unrestricted and continuous access to the works due to the statutory classification of the site and its operations. This arrangement shall be coordinated and agreed upon by all parties prior to the handover of the site to the contractor. A steering committee comprising representatives of the employer, the principal agent, the contractor and any other nominated or required party shall be set up to ensure that the contractors operations are unhindered.

Work shall be carried out during normal working hours. Any extended times or approval or overtime work shall be considered and approved by the steering committee.

The contractor shall comply with the employers’ rules for the control of delivery of materials and goods into the site and for the removal of such items from the site.”

## g) PAYMENT OF PRELIMINARY & GENERAL COSTS (P&G)

In the event that the contractor, due to causes of his own making, fails to achieve the targets set out in his construction programme and his performance is not in accordance with the contract, payment of the time related p&g will be paid in proportion to the value of the monthly progress payment and not in accordance with the projected cash flow for this item. The principal agent shall review the status quo and revert to paying the contractor in

accordance with the contract once the contractor has demonstrated improvement of their performance and the principal agent is satisfied that the contractor is performing diligently.

Similarly the full amount of the fixed portion of the p&g will be paid only once the successful contractor has fully complied with deliverables under this section.

**h) FINAL PAYMENT**

The employer shall pay to the contractor the amount certified in final payment certificate within thirty (30) calendar days of the date of issue of the payment certificate or the contractors tax invoice whichever is the later date.

**i) AMBIGUITY OR DISCREPANCY**

If any ambiguity or discrepancy in any of the documents forming part of the contract is found, then the contract data and or amendments herein shall prevail in cases of conflict between any of the documents.

all risks insurance - especially with the current weather conditions - we need to ensure that all contracts are insured.

**SIGNATURE OF THE PARTIES**

Signed at Pretoria on this the …… day of.....**2023**

**AS WITNESSES:**

1. _____
_____

For and on behalf of the **Employer:**

…….
in his/her capacity as Acting Regional General Manager

2. _____
_____

For and on behalf of the **Employer:**

…….
in his/her capacity as the Programme Manager.

Signed at Pretoria on this the …… day of.....**2023**

**AS WITNESSES:**

1. _____

3. _____

For and on behalf of the **Service provider:**

…….
in his/her capacity as Director, who hereby confirm that he/she is duly authorised hereto.

# C1.3 FORM OF GUARANTEE

## C1.3 FORM OF GUARANTEE

**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.– BID NUMBER: DOE13NWER014/CON14**

Contract No.: ……..

WHEREAS **INDEPENDENT DEVELOPMENT TRUST** (hereinafter referred to as "the Employer") entered into, a Contract with _____ (hereinafter called "the Contractor") on the_____day of _____ 20____for the construction of_____at

_____

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security byway of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;

AND WHEREAS

_____

has/have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE,

_____

do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-principal Debtors to the Employer under renunciation of the benefits of division and excussion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and/or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Completion Date which the Employer may make, give, concede or agree to under the said Contract.

2. This guarantee shall be limited to the payment of a sum of money

3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.

4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said

Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.

5. Our total liability hereunder shall not exceed the sum of (not exceeding 10% of the Contract Sum) in

_____ (R_____)

The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon the Guarantor's liability hereunder shall cease.

We hereby choose our address for the serving of all notices for all purposes arising here from as

_____

IN WITNESS WHEREOF this guarantee has been executed by us at
_____

on this_____day of_____20_____

As witnesses:

1. _____ Signature _____

2. _____ Signature _____

Duly authorized to sign on behalf of
_____

Address _____

_____

# C1.4 ADJUDICATOR'S AGREEMENT

## C1.4: Adjudicator's Agreement

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

*(name of company / organisation)* .....

of (*address)* .....

..... ..... and the Contractor

*(name of company / organisation)* .....of

*(address)* .....

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

**and**

*(name)* .....

*of (address)* .....

..... (hereinafter called **the Adjudicator**

Disputes or differences may arise/have arisen* between the Parties under a Contract No ....……..... for *(contract title)* ..... and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "**the Procedure**") and the Adjudicator may be or has been requested to act.
*(* Delete as necessary)*

**IT IS NOW AGREED** as follows:

1. The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.

2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.

3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.

4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.

5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of

either Party.

6. **SIGNED by**:

*(Signature):* .....*(Signature):* ..... *(Signature):* .....

**Name**:.....**Name***:*..... ***Name****:* .....

who warrants that he/ she is duly authorized to sign for and on behalf of the **First Party** in and on behalf of the presence of

who warrants that he/ she is duly authorized to sign for and on behalf of the **Second Party** presence of

the **Adjudicator** in the presence of

**Witness:** **Witness:** **Witness:**
*(Signature):* .....*(Signature):* ..... *(Signature):* .....

**Name**:.....**Name***:*..... ***Name****:* .....

Address: .....Address*:* ..... Address*:* .....

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

Date:..... Date:..... Date:

# C1.5: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

Refer Overleaf:

## C.1.5 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

THIS AGREEMENT is made between Independent Development trust represented by the Supply Chain Management.
(hereinafter called the EMPLOYER) of the one part, herein represented by:

..... .....

in his capacity as: .....
;

AND: ..... .....

(hereinafter called the CONTRACTOR) of the other part, herein represented by .....

..... .....

in his capacity as: .....

duly authorised to sign on behalf of the Contractor.

**WHEREAS** the CONTRACTOR is the Mandatary of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of:

**TENDER:**

**APPOINTMENT OF A CONTRACTOR FOR THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.– BID NUMBER: DOE13NWER014/CON14**

AND WHEREAS **the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHSA Amendment Act No 181/1993 (hereinafter referred to as the ACT);**

**NOW THEREFORE** the parties agree as follows:

1. **The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.**

2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.

3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.

4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2

above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps the EMPLOYER may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

**5.** The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at ..... for and on behalf of the **CONTRACTOR**

on this the …… day of ……..……..…… 20……

SIGNATURE: .....

NAME AND SURNAME: .....

CAPACITY: .....

WITNESSES: 1. .....

*2.* .....

Thus signed at .....for and on behalf of the **EMPLOYER** on this

the …….. day of ……..…… 20……

SIGNATURE: .....

NAME AND SURNAME: .....

CAPACITY: .....

*WITNESSES: 1.* .....

*2.* .....

## C1.6 Waiver of Lien

Refer Overleaf:

# Waiver of Contractor's Lien

**for use with the JBCC Principal Building**

**or JBCC Minor Works Agreements**

**DEFINITIONS**

Contractor_____

Employer_____

Agreement_____
*(Principal Building Agreement or Minor Works Agreement)*

Works *(description)*_____

Site

_____
*(property title deed description)*

**AGREEMENT**

The Contractor waives, in favour of the Employer, any lien or right of retention that is or may be held in respect of the Works to be executed on the Site

This waiver shall only come into effect on provision by the Employer of a Payment Guarantee for fulfilment of his obligations in terms of the identified Agreement

Thus done and signed at_____on

_____ _____
Name of signatory Capacity of signatory

_____ _____
As witness For and on behalf of the Contractor who by signature hereof warrants authorisation hereto

# C2: PRICING DATA

# C2.1 PRICING INSTRUCTIONS

## C2: PRICING DATA

# C2.1 Pricing Instructions

1 The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Seventh Edition, 2015. Where applicable the:

a) Civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardized Specifications for Civil Engineering Works.
b) Mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Refrigeration, Air-Conditioning and Ventilation Installations, published by the South African Association of Quantity Surveyors, July 1990).
c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).

2 The agreement is based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, **(Edition 6.2 Reprint May 2018) as amended in the IDT's SPECIAL CONDITIONS OF PRINCIPAL CONTRACT**. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables areas stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

3 Preliminary and general requirements are based on the various parts of the JBCC Series 2000 Preliminaries as prepared by the Joint Building Contracts Committee, **(Edition 6.2 Reprint May 2018) as amended in the IDT's SPECIAL CONDITIONS OF PRINCIPAL CONTRACT**. The additions, deletions and alterations to the various parts of the JBCC Series 2000 Preliminaries as well as the contract specific variables are as stated in the Specification Data in the Scope of Work. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

4 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. (Refer to www.stanza.org.za or www.iso.org for information on standards).

5 The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.

6 The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the quantity surveyor and can be viewed at any time during office hours up until the completion of the works.

7 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.

8 The rates contained in the Bills of Quantities will apply irrespective of the final quantities of the different classes and kinds of work actually executed.

9 Rates for work of similar description occurring in different sections of the Bills of Quantities shall be identical.

10 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.

11 Where any item is not relevant to this specific contract, such item is marked N/A (signifying "not applicable")

12 The Contract Data and the standard form of contract referenced therein must be studied for the fullextent and meaning of each and every clause set out in Section 1 (Preliminary and General) ofthe Bills of Quantities

13 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.

14 The amount of the Preliminary and General Section to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminary and General Section and any amount in respect of contract price adjustment provided for in the contract.

15 Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 14 but taking into account the revised period for completing the works.

16 The amount or items of the Preliminary and General Section shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:

a) an amount which is not to be varied, namely Fixed (F)
b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).

17 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 12apply or where no selection is made, the adjustments shall be based on the following breakdown:

a) 10 percent is Fixed;
b) 15 percent if Value Related
c) 75 percent is Time Related.

18 The adjustment of the Preliminary and General Section shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminary and General Section shall exclude any contingency sum, the amount

for the Preliminary and General Section and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.

19 Payment for items, which are designated to be constructed under labour-intensively, will not be made unless they are constructed using labor-intensive methods. Any unauthorized use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

20 The tenderer is to acquaint himself as to the specific requirements of this tender as contained in additional. clauses A1 to A6 to the JBCC Principal Agreement as incorporated in the Contract Data. These clauses may be priced under the relevant Preliminaries items in SECTION C: SPECIFIC PRELIMINARIES of the Preliminaries Bill. No claim will be entertained due to the failure of the tenderer to allow for these requirements

21 The contractor shall determine the contract skills participation goals, expressed in Rand, which shall not be less than the contract amount multiplied by a percentage factor given in Table 2 in the Standard for the applicable class of construction works. This is indicated by the percentage factor in the Final Tender Summary section. Minimum Contract Skills Development Goal (CSDG) sum = General Building GB (0.50%) x Subtotal of the tender amount

**Table 2: Contract skills development goals for different classes of engineering and construction works contracts**

| Class of construction works as identified in terms of Regulation 25(3) of the Construction Industry Regulations 2004 | | Construction skills development goal (CSDG) (%) |
|---|---|---|
| Designation | Description | |
| CE | Civil engineering | 0.25 |
| CE and GB | Civil engineering and General Building | 0.375 |
| EE | Electrical Engineering works (buildings) | 0.25 |
| EP | Electrical Engineering works (infrastructure) | 0.25 |
| GB | General Building | 0.5 |
| ME | Mechanical Engineering works | 0.25 |
| SB | Specialist | 0.25 |

**Example 1:** The contract amount for an engineering and construction works contract in the GB class of construction works is R65,7m. The contract skills development goal in Rands is R65,7m x 0.5% = R328 500.

22 The Employer shall determine the amount to be paid to the Enterprise Development Co-Ordinator for the Contract Participation Goal (CPG) on the contract and this amount shall be stated under the section Enterprise Development as a Provisional Sum in the Preliminaries and Generals (P&G's).

The contractor shall be paid as follows: These are recommended rates, client may change depending on the location of the project, complexity etc.). These rates must be stated by the client in the P&Gs so that all tenderers have the same rate and not result in a tenderer being disadvantaged.

Needs analysis and enterprise development plan per Targeted Enterprise – R5 000.00 (Ten thousand rands) per targeted enterprise.

Mentoring and interim reporting per Targeted Enterprise - R20 000.00 (twenty thousand rands) per quarter; and

Project completion report per Targeted Enterprise - R5 000.00 (five thousand rands) per targeted enterprise.

23 Provisional sums are provided for some items in the Schedule of Quantities. Work done under these items will be at the written direction of the Employer. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

24 The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Any authorized changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Bill of Quantities, will be treated as arithmetical errors.

25 **Payment to the contractor to accommodate Part/Full Occupational qualification and Tradequalifications**

The employer shall include the following statement in the pricing assumptions:
The contractor shall apportion the learners in the different construction activities based on the scope of work.
The cost of accommodating learners will be determined by using Table 3 in theStandard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill ofQuantities/Pricing schedules/Activity schedule.

26 **Payment to the contractor for supervision and mentoring Part/Full Occupational qualification and Trade qualifications learners**

The employer shall make no provision for an additional payment item for the payment of the supervisor and/or mentors for the provision of training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for the training of part/full time occupational learners and/or trade qualification learners.

# C2.2 BILL OF QUANTITIES

| Item No | | Quantity | Amount |
|---|---|---|---|

## SECTION NO. 1

## BILL NO. 1: PRELIMINARIES

### BUILDING AGREEMENT AND PRELIMINARIES

The **JBCC** Principal Building Agreement (May 2018 Edition 6.2) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described

The **JBCC** Principal Building Agreement **contract data** form an integral part of this **agreement**

The ASAQS Preliminaries (May 2018 edition) published by the Association of South African Quantity Surveyors for use with the **JBCC** Principal Building Agreement shall be deemed to be incorporated in these **bills of quantities**

The **contractor** is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause

The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this **agreement** such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents

Where any item is not relevant to this **agreement** such item is marked N/A (signifying "not applicable")

**Preambles for Trades**

The Model Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these **bills of quantities** and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained

Supplementary preambles are incorporated in these **bills of quantities** to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the Model Preambles

The **contractor's** prices for all items throughout these **bills of quantities** shall take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles

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**Pricing of Preliminaries**

Should the **contractor** select Option A in terms of clause 26.9.4 of the **contract data** for the purpose of adjustment of these **preliminaries**, the amount entered into the amount column in these **preliminaries** is to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)

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## SECTION A: PRINCIPAL BUILDING AGREEMENT

**Interpretation (A1-A7)**

1 Clause 1.0 - Definitions and interpretation

**Pricing of bills of quantities**

The **contractor** is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes, imposts, establishment charges, overheads, profit and all other obligations arising out of the **agreement**

Items left unpriced will be deemed to be covered in prices against other items throughout these **bills of quantities** and no claim for any extras arising out of the **contractor's** omission to price any item will be entertained

Prices for all plant, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary

**Legal status of contractor**

If the **contractor** constitutes a joint venture consortium or other unincorporated grouping of two or more persons then:

1. These persons are deemed to be jointly and severally liable to the **employer** for the performance of this agreement

2. These persons shall notify the **employer** of their leader who has authority to bind the **contractor** and each of these persons

3. The **contractor** shall not alter its composition or legal status without the prior written consent of the **employer**

F:..... V:..... T:..... Item

2 Clause 2.0 - Law, regulations and notices

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**Health and safety**

Without limiting the generality of the provisions of clause 2.0, the **contractor's** attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the **employer** shall prepare a documented health and safety specification for the **works** and that the **employer** shall ensure that the **contractor** has made provision for the cost of health and safety measures during the execution of the **works**. The **contractor** shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [2.1]

The **contractor** shall:

1. Comply with the health and safety specification for the **works**

2. Prepare and agree with the health and safety consultant the health and safety plan for the **works**

3. Co-operate with the health and safety consultant in all respects

4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification

5. Conform to the conditions contained in the **employer's** safety specification

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| | Additional Preliminary Items:<br><br>The Contractor must supply the owner with a complete and comprehensive Health and Safety plan in terms of the said latest acts of parliament and all relevant regulations and is responsible for all Health and Safety issues, procedures, processes, measures and responsibilities. In this regard the following must strictly be addressed but the onus and responsibility is not limited to this list:<br><br>1. Safety of all machinery<br>2. Hard hats by all people on site<br>3. Dust and fume masks<br>4. Safety belts and lines<br>5. Safety of scaffolding, hoarding, screens, fences, etc.<br>6. Safety of gangways, planks, etc.<br>7. Warning signs and safety barriers<br>8. Safety reports to the principal agent and the client<br>9. Traffic safety on site and to and from the site<br>10. Complete Health and Safety of the public<br>11. Ear plugs and sound protection<br>12. The Contractor must adhere to and manage all aspects specifically shown on the parties Health and Safety assessment and the general and specific Health and Safety specification. Should the specification be more than that is required by regulation a fair price for this extra work based on the contract terms shall be agreed upon and be payable<br>13. The Contractor must appoint a Health and Safety official as required by law<br>14. The Contractor shall keep an up to date Health and Safety file on site<br>15. All Sub-contractors must adhere to the above and their responsibilities must be co-ordinated and supervised by the Contractor<br>16. A continuous Health and Safety assessment must be carried out by the Contractor in consultation with the Principal Agent | | | |
| 3 | F:..... V:..... T:..... | | Item | |
| 4 | Clause 3.0 - Offer and acceptance<br><br>F:..... V:..... T:..... | | Item | |
| 5 | Clause 4.0 - Assignment and cession<br><br>F:..... V:..... T:..... | | Item | |
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| 6 | Clause 5.0 - **Contract documents**<br><br>**Value Added Tax**<br><br>Provision is made in the summary page of these **bills of quantities** for the inclusion of Value Added Tax (VAT)<br><br>**Contract drawings**<br><br>The **contract drawings** are as listed in the contract data<br><br>**Priced document as specification**<br><br>The **principal agent** shall decide which portion of the **priced document** may be used as a specification of **materials and goods** or methods, if any [5.3]<br><br>F:..... V:..... T:..... | Item | |
| 7 | Clause 6.0 - **Employer's agents**<br><br>**Delegated authority**<br><br>The authority of the **principal agent** to perform duties for specific aspects of the **works** is delegated to the **agents** as follows [6.2]:<br><br>1. <u>Architect</u><br><br>The architect is responsible for the architectural design, functional design and quality inspection. Without derogating from the generality thereof the architect will perform the following specific functions and duties:<br><br>1.1 Give opinion on aspects of the **works** which are not in accordance with the **agreement**<br><br>1.2 Supply the specified number of drawings<br><br>1.3 Issue instructions if **bills of quantities** is to be used as a specification<br><br>1.4 Be responsible for primary co-ordination of design elements<br><br>1.5 Receive through the **contractor** and accept design documentation undertaken by **subcontractors**<br><br>1.6 Issue instructions to the **contractor** regarding:<br><br>1.6.1 Alteration to design, quality or quantity of the **works** provided that such instructions shall not substantially change the scope of the **works** | | |
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| 1.6.2 | Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor | | |
| 1.6.3 | Removal or re-execution of any work | | |
| 1.6.4 | Opening up of work for inspection | | |
| 1.6.5 | Testing of work and **materials and goods** | | |
| 1.6.6 | Protection of the **works** | | |
| 1.6.7 | Making good physical loss and repairing damage to the **works** | | |
| 1.6.8 | Lists for **practical completion** and **final completion** | | |
| 1.6.9 | Compliance with Acts of Parliament, regulations and bylaws | | |
| 1.7 | Witness the handing over to the **contractor** of pegs, beacons and datum levels | | |
| 1.8 | Define levels and provide the **contractor** with the necessary information to set out the **works** | | |
| 1.9 | Acceptance of design by **subcontractors** | | |
| 1.10 | Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion** | | |
| 1.11 | Inspect the **works** for **practical completion** | | |
| 1.12 | Issue the **list for practical completion** and re-inspect upon request of the **contractor** | | |
| 1.13 | Issue the **certificate of practical completion** | | |
| 1.14 | Inspect the **works** at the end of the **defects** liability period | | |
| 1.15 | Issue the **list for final completion** and re-inspect upon request of the **contractor** | | |
| 1.16 | Issue the **certificate of final completion** | | |
| | **Carried to Collection** | R | |

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2. Quantity surveyor

The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions. Without derogating from the generality thereof, the quantity surveyor will perform the following specific functions and duties:

2.1 Consult with the **contractor** in correction of rates or errors and discrepancies

2.2 Complete the **contract data**

2.3 Supply the specified number of unpriced **bills of quantities**

2.4 Identify in the **contract data** any changes to the standard **JBCC** documentation and determine any loss and expense to the **contractor** caused by non-disclosure thereof

2.5 Deal with amounts paid by the **contractor** to authorities having jurisdiction over the **works**

2.6 Measure and value the making good of physical loss or damage

2.7 Issue instructions to the **contractor** regarding:

2.7.1 Rectification of discrepancies and errors in description or omissions in **contract documents**

2.7.2 Furnishing proof of payment to **subcontractors**

2.7.3 **Budgetary allowances** and work executed by the **contractor**

2.7.4 Contingency and other monetary provisions included in the **contract sum**

2.8 Prepare nominated and/or selected subcontract tender documents

2.9 Receive proof from the **contractor** that the **contractor's** payment obligations have been met in respect of **subcontractors**

2.10 Act on **employer's** instructions to pay **subcontractors** directly

2.11 Adjustment of the **contract value** in respect of a revision to the date of **practical completion**

2.12 Calculate **penalties** for non-completion upon receipt of the relevant information from the **principal agent**

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2.13 Valuation of payment claims for **payment certificates**

2.14 Calculate default and compensatory **interest** (if any) due to the **parties**

2.15 With each valuation for payment issue:

2.15.1 A statement to the **contractor** and each **subcontractor** showing the amount certified for the relevant **subcontractor**

2.15.2 A statement to the **employer** and **contractor** showing the total amount certified

2.15.3 A **recovery statement**

2.16 Determine the value of adjustments to the **contract value**

2.17 Receive from the **contractor** details of expense and loss claims and assess such claims

2.18 Prepare the **final account** and submit to the **contractor**

3. Civil and structural engineer

The civil and structural engineer is responsible for all aspects of civil and structural engineering design and quality inspection. Without derogating from the generality thereof, the civil and structural engineer will perform the following specific functions and duties in respect of the civil and structural engineering aspects of the **works**:

3.1 Give opinion on aspects of the **works** which are not in accordance with the **agreement**

3.2 Supply the specified number of drawings

3.3 Issue instructions if **bills of quantities** is to be used as a specification

3.4 Receive and accept design documentation undertaken by **subcontractors**

3.5 Issue instructions to the **contractor** regarding:

3.5.1 Alteration to design, quality or quantity of the **works** provided that such **i**nstructions shall not substantially change the scope of the **works**

3.5.2 Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor

3.5.3 Removal or re-execution of any work

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3.5.4 Opening up of work for inspection

3.5.5 Testing of work and **materials and goods**

3.5.6 Protection of the **works**

3.5.7 Making good physical loss and repairing damage to the **works**

3.5.8 Compliance with Acts of Parliament, regulations and bylaws

3.6 Define levels and provide the **contractor** with the necessary information to set out the **works**

3.7 Acceptance of design by **subcontractors**

3.8 Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion**

3.9 Inspect the **works** for **practical completion**

3.10 Issue the **list for practical completion** and re-inspect upon request of the **contractor**

3.11 Inspect the **works** at the end of the **defects** liability period

3.12 Issue the **list for final completion** and re-inspect upon request of the **contractor**

4. Mechanical engineer

The mechanical engineer is responsible for all the aspects of mechanical engineering design. Without derogating from the generality thereof the mechanical engineer will perform the following specific functions and duties in respect of the mechanical engineering aspects of the **works**:

4.1 Give opinion on aspects of the **works** which are not in accordance with the **agreement**

4.2 Supply the specified number of drawings

4.3 Issue instructions if **bills of quantities** is to be used as a specification

4.4 Receive and accept design documentation undertaken by **subcontractors**

4.5 Issue instructions to the **contractor** regarding:

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4.5.1 Alteration to design, quality or quantity of the **works** provided that such instructions shall not susbstantially change the scope of the **works**

4.5.2 Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor

4.5.3 Removal or re-execution of any work

4.5.4 Opening up of work for inspection

4.5.5 Testing of work and **materials and goods**

4.5.6 Protection of the **works**

4.5.7 Making good physical loss and repairing damage to the **works**

4.5.8 Compliance with Acts of Parliament, regulations and bylaws

4.6 Provide the **contractor** with the necessary information to set out the **works**

4.7 Acceptance of design by **subcontractors**

4.8 Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion**

4.9 Inspect the **works** for **practical completion**

4.10 Issue the **list for practical completion** and re-inspect upon request of the **contractor**

4.11 Inspect the **works** at the end of the **defects** liability period

4.12 Issue the **list for final completion** and re-inspect upon request of the **contractor**

5. Electrical engineer

The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection. Without derogating from the generality thereof the electrical engineer will perform the following specific functions and duties in respect of the electrical engineering aspects of the **works**:

5.1 Give opinion of aspects of the **works** which are not in accordance with the **agreement**

5.2 Supply the specified number of drawings

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5.3 Issue instructions if **bills of quantities** is to be used as a specification

5.4 Receive and accept design documentation undertaken by **subcontractors**

5.5 Issue instructions to the **contractor** regarding:

5.5.1 Alteration to design, quality or quantity of the **works** provided that such instructions shall not substantially change the scope of the **works**

5.5.2 Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor

5.5.3 Removal or re-execution of any work

5.5.4 Opening up of work for inspection

5.5.5 Testing of work and **materials and goods**

5.5.6 Protection of the **works**

5.5.7 Making good physical loss and repairing damage to the **works**

5.5.8 Compliance with Acts of Parliament, regulations and bylaws

5.6 Provide the **contractor** with the necessary information to set out the **works**

5.7 Acceptance of design by **subcontractors**

5.8 Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion**

5.9 Inspect the **works** for **practical completion**

5.10 Issue the **list for practical completion** and re-inspect upon request of the **contractor**

5.11 Inspect the **works** at the end of the **defects** liability period

5.12 Issue the **list for final completion** and re-inspect upon request of the **contractor**

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6. Wet services engineer

The wet services engineer is responsible for all the aspects of wet services engineering design and quality inspection. Without derogating from the generality thereof the wet services engineer will perform the following specific functions and duties in respect of the wet services aspects of the **works**:

6.1 Give opinion on aspects of the **works** which are not in accordance with the **agreement**

6.2 Supply the specified number of drawings

6.3 Issue instructions if **bills of quantities** is to be used as specification

6.4 Receive and accept design documentation undertaken by **subcontractors**

6.5 Issue instructions to the **contractor** regarding:

6.5.1 Alteration to design, quality or quantity of the **works** provided that such instructions shall not substantially change the scope of the **works**

6.5.2 Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor

6.5.3 Removal or re-execution of any work

6.5.4 Opening up of work for inspection

6.5.5 Testing of work and **materials and goods**

6.5.6 Protection of the **works**

6.5.7 Making good physical loss and repairing damage to the **works**

6.5.8 Compliance with Acts of Parliament, regulations and bylaws

6.6 Provide the **contractor** with the necessary information to set out the **works**

6.7 Acceptance of design by **subcontractors**

6.8 Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion**

6.9 Inspect the **works** for **practical completion**

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6.10 Issue the **list for practical completion** and re-inspect upon request of the **contractor**

6.11 Inspect the **works** at the end of the **defects** liability period

6.12 Issue the **list for final completion** and re-inspect upon request of the **contractor**

7. Fire consultant

The fire consultant is responsible for all the aspects of rational fire design and quality inspection. Without derogating from the generality thereof the fire consultant will perform the following specific functions and duties in respect of the rational fire design aspects of the **works**:

7.1 Give opinion on aspects of the **works** which are not in accordance with the **agreement**

7.2 Supply the specified number of drawings

7.3 Issue instructions if **bills of quantities** is to be used as specification

7.4 Receive and accept design documentation undertaken by **subcontractors**

7.5 Issue instructions to the **contractor** regarding:

7.5.1 Alteration to design, quality or quantity of the **works** provided that such instructions shall not substantially change the scope of the **works**

7.5.2 Removal of any **materials and goods** from the **site** and the substitution of any **materials and goods** therefor

7.5.3 Removal or re-execution of any work

7.5.4 Opening up of work for inspection

7.5.5 Testing of work and **materials and goods**

7.5.6 Protection of the **works**

7.5.7 Making good physical loss and repairing damage to the **works**

7.5.8 Compliance with Acts of Parliament, regulations and bylaws

7.6 Provide the **contractor** with the necessary information to set out the **works**

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7.7 Acceptance of design by **subcontractors**

7.8 Inspect the **works** from time to time and give the **contractor** interpretation and guidance on the standard and state of completion required for **practical completion**

7.9 Inspect the **works** for **practical completion**

7.10 Issue the **list for practical completion** and re-inspect upon request of the **contractor**

7.11 Inspect the **works** at the end of the **defects** liability period

7.12 Issue the **list for final completion** and re-inspect upon request of the **contractor**

8. Health and safety consultant

The health and safety consultant is responsible for all aspects of health and safety. Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the **works**:

8.1 Act as the client's (**employer's**) agent in terms of Construction Regulations issued in terms of the Occupational Health and Safety Act,1993

8.2 Prepare and update the health and safety specification for the **works**

8.3 Agree with the **contractor** the health and safety plan for the **works**

8.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the Act and Regulations

F:..... V:..... T:..... Item

8 Clause 7.0 - Design responsibility

F:..... V:..... T:..... Item

**Insurance and security (A8-A11)**

9 Clause 8.0 - **Works** risk

F:..... V:..... T:..... Item

10 Clause 9.0 - Indemnities

F:..... V:..... T:..... Item

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| 11 | Clause 10.0 - Insurances<br><br>F:..... V:..... T:..... | | Item | |
| 12 | Clause 11.0 - **Security**<br><br>**Security for payment**<br><br>The **employer** shall **not** provide to the **contractor** security for payment. [11.4.1,11.10]<br><br>The Employer shall not provide a payment guarantee however the Contractor shall waive his lien or right of continuous possession<br><br>**Extension of waiver of lien**<br><br>The contractor shall ensure that a waiver of lien is included in all subcontracts and that the **works** executed on the **site** are kept free of all liens and other encumbrances at all times [11.10]<br><br>F:..... V:..... T:..... | | Item | |
| | **<u>Execution (A12 - A17)</u>** | | | |
| 13 | Clause 12.0 - Duties of the **parties** | | | |
| 14 | Clause 12.1.2 - **Existing Premises (N/A)**<br><br>See Contract Data. Reference as [12.1.2]<br><br>Clause 12.1.3 - **Relevant natural features**<br><br>Trees may only be cut on approval by the Principal Agent<br><br>Clause 12.1.3 - **Known services**<br><br>Known services will be pointed out but the contractor must first contact the principal agent before any interference is allowed.<br><br>Clause 12.1.4 - **Site Restriction**<br><br>See Contract Data. Reference as [12.1.4]<br><br>Clause 12.1.5 - **Access to Services**<br><br>See Contract Data. Reference as [12.1.5] | | | |
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Clause 12.2.15 - **Enclosure of the works**

The contractor shall erect, maintain and remove at completion hoardings with gantries, fans, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof, all for the protection of the public and others [12.2.15]

Clause 12.2.18 - **Office accommodation**

The **contractor** shall erect, maintain and remove at completion airconditioned office accommodation with suitable tables and chairs for meetings to be held on the **site.** Such offices shall be kept clean and fit for use at all times [12.2.18]

Clause 12.2.18 - **Notice board**

The contractor shall erect in a position approved by the principal agent, maintain and remove at completion a notice board as recommended by the South African Institute of Architects listing the names and logos of the employer, the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected [12.2.18]

F:..... V:..... T:..... Item

15 Clause 13.0 - Setting out

**Encroachments**

The **contractor** shall notify the **principal agent** if any encroachment of adjoining foundations, buildings, structures, pavements, boundaries, services, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments [13.2.1]

F:..... V:..... T:..... Item

16 Clause 14.0 - Nominated **subcontractors**

F:..... V:..... T:..... Item

17 Clause 15.0 - Selected **subcontractors**

F:..... V:..... T:..... Item

18 Clause 16.0 - **Direct contractors**

**Attendance on direct contractors**

In respect of **direct contractors** the **contractor** shall:

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| | 1. Designate an area for the **direct contractor** to establish a temporary office and workshop and storage of equipment and materials<br><br>2. Allow the use of personnel welfare facilities, where provided<br><br>3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation<br><br>4. Permit the **direct contractor** to use erected scaffolding, hoisting facilities, etc provided by the **contractor**, in common with others having the like right while it remains erected on the **site** [16.1]<br><br>F:..... V:..... T:..... | Item | |
| 19 | Clause 17.0 - Contract instructions<br><br>Site instructions<br><br>Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor<br><br>F:..... V:..... T:..... | Item | |
| | **<u>Completion (A18 - A24)</u>** | | |
| 20 | Clause 18.0 - Interim completion<br><br>F:..... V:..... T:..... | Item | |
| 21 | Clause 19.0 - **Practical completion**<br><br>F:..... V:..... T:..... | Item | |
| 22 | Clause 20.0 - Sectional completion (N/A)<br><br>F:..... V:..... T:..... | Item | |
| 23 | Clause 21.0 - **Defects** liability period and **final completion**<br><br>F:..... V:..... T:..... | Item | |
| 24 | Clause 22.0 - **Latent defects** liability period<br><br>F:..... V:..... T:..... | Item | |
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| 25 | Clause 23.0 - Revision of date for **practical completion**<br><br>**Substitution of materials and goods**<br><br>The removal or substitution of any **materials and goods** which do not conform to the specification or the **contract drawings** shall not constitute grounds for the extension of the **construction period** nor for the adjustment of the **contract value** [17.1.8, 23.1 & 2]<br><br>F:..... V:..... T:..... | Item | | |
| 26 | Clause 24.0 - **Penalty** for late or non-completion<br><br>F:..... V:..... T:..... | Item | | |
| | **Payment (A25 - A27)** | | | |
| 27 | Clause 25.0 - Payment<br><br>**Payment Days**<br><br>The **Payment Certificates** will be paid within 21 days<br><br>**Materials and goods stored off site**<br><br>The inclusion of **materials and goods** stored off **site** in the amount authorised for payment shall be at the sole discretion of the **principal agent** and such inclusion shall only be considered upon the provision, by the **contractor**, of an approved **security** [25.3.2]<br><br>**Fluctuations in costs**<br><br>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the **contractor** [25.3.4]<br><br>**Prices submitted**<br><br>Where prices are submitted by the **contractor** or **subcontractor** during the progress of the **works** in respect of **contract instructions** or in regard to a claim under the terms of the **agreement** and notwithstanding the fact that such prices may be used in an interim **payment certificate**, there is to be no presumption of acceptance. Should the **principal agent** wish to accept any such prices prior to the issue of the **certificate of final completion**, it shall be in writing<br><br>F:..... V:..... T:..... | Item | | |
| 28 | Clause 26.0 - Adjustment of the **contract value** and **final account** | | | |
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**Tenant installations'/users' requirements delayed**

There is a possibility that certain works related to tenant installations'/users' requirements may have to be delayed and may consequently not be executed prior to **practical completion**

The **employer** reserves the right to omit such work without compensation to the **contractor** for loss of profit or any other loss which the **contractor** may suffer as a result of such omission

Should the **contractor** be instructed to do so he shall execute this work under the conditions pertaining to this **agreement** on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the **contractor** and the **principal agent** and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of **practical completion** of the **works**

**Cost of claims**

All costs incurred by the **contractor** in the preparation of claims shall be borne by the **contractor**

The **contractor** shall review, assess and adjudicate any claims received by him from any **subcontractor** and thereafter submit same to the **principal agent** with a recommendation to assist the **principal agent** in adjudicating the claim [26.6]

F:..... V:..... T:..... Item

29 Clause 27.0 - Recovery of expense and/or loss

F:..... V:..... T:..... Item

**Suspension and termination (A28 - A29)**

30 Clause 28.0 - Suspension by the **contractor**

F:..... V:..... T:..... Item

31 Clause 29.0 - Termination

F:..... V:..... T:..... Item

**Dispute resolution (A30)**

32 Clause 30.0 - Dispute resolution

F:..... V:..... T:..... Item

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33 **Agreement**

The required information of the **parties** and the amount of the **contract sum** shall be inserted in the **agreement** for signature of the **agreement** by the **parties**

F:..... V:..... T:..... Item

34 **Contract data**

Before submission of his tender the **contractor** is to complete the tenderer's selection in the **contract data**

**Substitute Provisions**

Refer to post tender Provisions

**Contract data - Principal Building Agreement**

35 The schedule: Information (Contract Data)

F:..... V:..... T:..... Item

Information necessary for completion of those clauses contained in the contract data which are necessary for tender purposes is given hereunder

1.1 **Employer** : Independent Development Trust

Postal address : 4071 Joules Street, Industrial Site
Mahikeng

Tel :

Fax :

E-mail :

Physical Address :

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| | | | |
|---|---|---|---|
| 1.2 Principal Agent (PTY) LTD. | : GUDUNKOMO INVESTMENTS & CONSULTING | | |
| Postal Address | : PO Box | | |
| Code | : | | |
| Tel | : | | |
| Fax | : | | |
| E-mail | : | | |
| 1.3 **Agents service** | **: Architect** | | |
| **Agent (1)** | **:** | | |
| **Postal Address** | **:** PO Box | | |
| **Code** | **:** | | |
| **Tel** | **:** | | |
| **Fax** | **:** | | |
| **E-mail** | **:** | | |
| 1.4 Agents service | : **Quantity Surveyor** | | |
| Agent (2) | : | | |
| Postal address | : PO Box | | |
| Code | : | | |
| Tel | : | | |
| Fax | : | | |
| E-mail | : | | |
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| | | | |
|---|---|---|---|
| 1.5 **Agents service** | **: Civil & Structural Engineers** | | |
| **Agent (3)** | : | | |
| **Postal address** | : PO Box ..... | | |
| **Code** | : | | |
| **Tel** | : | | |
| **Fax** | : | | |
| E-mail | : | | |
| 1.6 Agents service | | | |
| 1.7 **Agents service** | **: Electrical Engineers** | | |
| **Agent (5)** | : | | |
| **Postal address** | : PO Box | | |
| **Code** | : | | |
| **Tel** | : | | |
| **Fax** | : | | |
| E-mail | : | | |
| 1.8 **Agents service** | **: OHS Consultants** | | |
| **Agent (6)** | : | | |
| **Postal address** | : | | |
| **Code** | : | | |
| **Tel** | : | | |
| **Fax** | : | | |
| **E-mail** | : | | |
| | **Carried to Collection** | R | |

1.8 Interest of Principal Agent or other agents in the project
Where "yes" the specific requirements are described below or detailed in the **contract document**

*(yes/no)*

**[ NO ]**

Details where "yes" _____

**2. CONTRACT AND SITE INFORMATION**

2.1. The law applicable to agreement

*(Country/State)* **[ RSA]**

2.2. Works Identification:

The scope of works is Additions and Renovations to Thutong Primary School..

2.3 Site Description:

The site is situated in the Ngaka Modiri Molema District of the North West Province at Motlhabeng Village.

The central coordinates of the site are Latitude 25°51'1.57"S Longitude 25°35'57.73"E

2.4 Date on which possession of the site is intended to be given:

**Appointment of Contractor**
*To be detemined*

**Possession of site by Contractor**
*To be detemined*

2.5 Period for the commencement of the works after the Contractor takes possession of the site

*(working day)* **[5]**

2.6 Completion in sections is required:

*(yes/no)* **[ NO ]**
*(no of sections)* **[ 0]**

2.7 Waiver of contractors lien or right of continuing possession is required

*(yes/no)* **[ YES]**

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2.8 Defined restrictions to the **site** area. Where "yes" the specific requirements are described below or detailed in the **contract documents**

*(yes/no)* **[YES]**

2.9 Geotechnical investigation of the **site** has been undertaken. Where "yes" results are included in the **contract documents**

*(yes/no)* **[YES]**

2.10 Existing premises will be occupied. Where "yes" the specific requirements are described below or detailed in the contract document**.**

*(yes/no)* **[ YES ]**

2.11 Provision of temporary services is required. Where "yes" the specific requirements are described below or detailed in the **contract documents**

*(yes/no)* **[YES]**

2.11.1 **Water**
Option A **Contractor** - his cost
Option B **Employer** - free of charge
Option C **Employer** - metered (**contractor** cost)

*(A,B or C)* **[ A ]**

2.11.2 **Electricity**
Option A **Contractor** - his cost
Option B **Employer** - free of charge
Option C **Employer** - metered (**contractor** cost)

*(A,B or C)* **[ A ]**

2.11.3 **Telecom**
Option A **Contractor** - his cost
Option B **Employer** - free of charge
Option C **Employer** - metered (**contractor** cost)

*(A,B or C)* **[ A ]**

2.11.4 **Ablutions**
Option A **Contractor** - his cost
Option B **Employer** - Free of charge

*(A or B)* **[ A ]**

Place and position of ablutions must be done in accordance with the principal agent's instructions.

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2.12 Protection of existing trees and shrubs is required. Where "yes" the specific requirements are described below or detailed in the contract documents

Trees and plants that are to be removed will be pointed out by the Principal Agent (removal elsewhere included in these Bills of Quantities)

(yes/no) [ YES ]

**3. INSURANCES**

3.1 Contract works insurance to be effected by

*(Employer/Contractor)* **[ CONTRACTOR]**

For the sum of: **CONTRACT SUM PLUS 20%**
With a deductible of: **AS PER POLICY**

3.2 Supplementary/special insurance is required.
The Employer is responsible for effecting this insurance

*(Employer/Contractor)* **[Not Applicable]**

For the sum of:
With a deductible of:

3.3 Public liability insurance to be effected by

*(Employer/Contractor)* **[CONTRACTOR]**

For the sum of: **R5,000,000.00**
With a deductible of:

The Contractor is to effect this insurance. The Contractor must also taken by the Employer or anybody else for the negligent actions of works and interests of both parties

3.4 Support insurance to be effected by

*(Employer/Contactor)* **[NOT APPLICABLE]**

For the sum of **R**
With a deductible of **R**

3.5 Special insurance to be effected by

*(Employer/Contractor)* **[NOT APPLICABLE]**

For the sum of **R**
With a deductible of **R**

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## 4. PRACTICAL COMPLETION AND PENALTIES

4.1 Intended date of practical completion and the penalty per calender day for the works as a whole:

Date: 12 months

Penalty amount per calendar day: 2.75 Cents per R100 of Contract value

4.2 Intended date of practical completion and the penalty per calendar day for work in sections:

Section 1: NOT APPLICABLE
Penalty amount per calendar day: N/A

## 5. DOCUMENTS AND GENERAL

5.1 Number of construction document copies to be supplied free of charge

*(no of)* **[ 3]**

5.2 The **priced document** may be used as a specification of **materials and goods** and work methods

*(yes/no)*

**[ NO]**

5.3 The Contractor shall provide a schedule of rates

*(yes/no)* **[ NO ]**

*(Addendum No)*

[ ]

5.4 Details of changes made to the provisions of **JBCC** standard documentation as contained herein

*(yes/no)* **[ YES]**

*(Addendum No)* **[A]**

5.5 On acceptance of the Tender, the Bills of Quantities/lump sum document is to be submitted within the stated **working days - forms part of Tender**

*(No of)* **[ 0]**

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|---|---|---|---|
| 5.6 | Work to be undertaken by direct contractors<br><br>*(yes/no)* **[ NO ]**<br><br>*(Addendum No)* [ ] | | |
| 5.7 as the | Manuals related to the works must be submitted to the Principal Agent listed below: To be given during the construction period: Co-ordinated by Principal Agent | | |
| 5.8 | Interim **payment certificate** to be issued by<br><br>*(Date of month)* **[ 20 ]** | | |
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## SECTION B - PRELIMINARIES: MARCH 2018: PUBLISHED BY THE ASAQS

**Interpretation (B1)**

36 Clause 1.1 - Definitions

F:..... V:..... T:..... Item

37 Clause 1.2 - Interpretation

F:..... V:..... T:..... Item

**Documents (B2)**

38 Clause 2.1 - Checking of documents

F:..... V:..... T:..... Item

39 Clause 2.2 - Provisional **bills of quantities**

**Multiple procurement**

These **bills of quantities** are in multiple procurement format ie the "wet trades" - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally measured and the subsequent trades are **budgetary allowances** and/or **provisional sums**

F:..... V:..... T:..... Item

40 Clause 2.3 - Availability of **construction information**

**Budgetary allowances and provisional sums**

The **budgetary allowances** and/or **provisional sums** allocated for subsequent trades included in this **agreement** will be separately procured, based on multiple procurement of **subcontractors** during the **construction period**

F:..... V:..... T:..... Item

**Previous work and adjoining properties (B3)**

41 Clause 3.1 - Previous work - dimensional accuracy

F:..... V:..... T:..... Item

42 Clause 3.2 - Previous work - **defects**

F:..... V:..... T:..... Item

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| | | | |
|---|---|---|---|
| 43 | Clause 3.3 - Inspection of adjoining properties | | |
| | F:..... V:..... T:..... | Item | |
| | **Samples, shop drawings and manufacturer's instructions (B4)** | | |
| 44 | Clause 4.1 - Samples of materials | | |
| | F:..... V:..... T:..... | Item | |
| 45 | Clause 4.2 - Workmanship samples | | |
| | F:..... V:..... T:..... | Item | |
| 46 | Clause 4.3 - Shop drawings | | |
| | F:..... V:..... T:..... | Item | |
| 47 | Clause 4.4 - Compliance with manufacturer's instructions | | |
| | F:..... V:..... T:..... | Item | |
| | **Deposits and fees (B5)** | | |
| 48 | Clause 5.1 - Deposits and fees | | |
| | F:..... V:..... T:..... | Item | |
| | **Temporary services (B6): Clause 6.1, 6.2, 6.3 and 6.4: "Refer to Contract and Site Information" ((2.1 - 2.11) of this document (these Bills of Quantities)** | | |
| 49 | Clause 6.1 - Water | | |
| | F:..... V:..... T:..... | Item | |
| 50 | Clause 6.2 - Electricity | | |
| | F:..... V:..... T:..... | Item | |
| 51 | Clause 6.3 - Ablution and welfare facilities | | |
| | F:..... V:..... T:..... | Item | |
| 52 | Clause 6.4 - Communication facilities | | |
| | F:..... V:..... T:..... | Item | |
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| | **Prime cost amounts (B7)** | | |
| 53 | Clause 7.1 - Responsibility for **prime cost amounts** | | |
| | **Attendance on subcontractors (B8)** | | |
| 54 | Clause 8.1 - General attendance | | |
| | F:..... V:..... T:..... | Item | |
| 55 | Clause 8.1 - Special attendance | | |
| | Where provisional sums are stated any requirements for special attendance shall be inserted against the claims for each n/s Sub-contractor separately. Refer to provisional sums | | |
| | F:..... V:..... T:..... | Item | |
| | **General (B9)** | | |
| 56 | Clause 9.1 - Protection of the **works** | | |
| | F:..... V:..... T:..... | Item | |
| 57 | Clause 9.2 - Protection/isolation of existing/sectionally occupied **works** | | |
| 58 | Clause 9.3 - Security of the **works** | | |
| | F:..... V:..... T:..... | Item | |
| 59 | Clause 9.4 - **Notice** before covering work | | |
| | F:..... V:..... T:..... | Item | |
| 60 | Clause 9.5 - Disturbance | | |
| | F:..... V:..... T:..... | Item | |
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| 61 | Clause 9.6 - Environmental disturbance<br><br>**Controlling all forms of pollution**<br><br>The **contractor** shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution during the **construction period** due *inter alia* to noise, artificial light, wind-blown sand, dust, deposits of mud, etc<br><br>The **contractor** is to ensure that all roads which border the **site** and is used by the **contractor** during the execution of the **works** are kept clean and free of any dirt or debris caused by the execution of the **works**<br><br>F:..... V:..... T:..... | Item | |
| 62 | Clause 9.7 - **Works** cleaning and clearing<br><br>F:..... V:..... T:..... | Item | |
| 63 | Clause 9.8 - Vermin<br><br>F:..... V:..... T:..... | Item | |
| 64 | Clause 9.9 - Overhand work<br><br>F:..... V:..... T:..... | Item | |
| | **<u>Schedule (B10)</u>**<br><br>Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract<br><br>10.1 - Provisional Bills of Quantities **[clause 2.2]**<br><br>The quantities are provisional *(yes/no)* **[ YES ]**<br><br>10.2 - Availability of construction documentation **[clause 2.3]**<br><br>Construction documentation is complete<br><br>*(yes/no)* **[ YES ]**<br><br>10.3 - Previous work - dimensional accuracy [clause 3.1] **[ N/A]** | | |
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10.4 - Previous work - defects [clause 3.2]

**[ N/A ]**

10.5 - Inspection of adjoining properties [clause 3.3]

(yes/no) **[YES]**

10.6 - Water [6.1]

Option A (by **contractor**) Yes/No **[YES]**
Option B (by **employer** - free of charge) Yes/No
Option C (by **employer** - metered) Yes/No

10.7 - Electricity [6.2]

Option A (by **contractor**) Yes/No **[YES]**
Option B (by **employer** - free of charge) Yes/No
Option C (by **employer** - metered) Yes/No

10.8 - Ablution and welfare facilities [6.3]

Option A (by **contractor**) Yes/No **[YES]**
Option B (by **employer**) Yes/No

10.9 - Communication facilities [6.4]

10.10 - Protection of the **works** [9.1]

10.11 - Protection/isolation of existing/sectionally occupied **works** [9.2]

Protection/isolation is required Yes/No **[YES]**

10.12 - Disturbance [clause 9.5]

All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the **construction period** or **contract value** whatsoever

10.13 - Environmental disturbance [clause 9.6]

Extreme care must be taken not to disturb the direct environment, natural of otherwise

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## SECTION C - SPECIFIC PRELIMINARIES

65 **Contract instructions (clause C1)**

Instructions issued on site are to be recorded in triplicate in an instruction book which is to be maintained on site by the Contractor

F:..... V:..... T:..... Item

66 **Warranties for material and workmanship (clause C2)**

Where warranties for materials and/or workmanship are called for, the Contractor shall obtain a written warranty, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on the certified completion of the contract.

The warranty shall state that workmanship, materials and installation are warranteed for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so.

The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor

F:..... V:..... T:..... Item

67 **Co-operation of Contractor for cost management (clause C3)**

It is specifically agreed that the Contractor accepts the obligation of assisting the Principal Agent in implementing proper cost management. The Contractor will be advised by the Principal Agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The Principal Agent undertakes to make available to the Contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the Contractor shall attend all cost plan review and cost management meetings. The Contractor undertakes to extend these procedures, as necessary, to all Sub-contractors

F:..... V:..... T:..... Item

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| 68 | **Propping of floors below (clause C4)**<br><br>The Contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the Principal Agent and the cost thereof shall be borne by the Contractor. Design of temporary works and supports remains the responsibility of the Contractor<br><br>F:..... V:..... T:..... | Item | | |
| 69 | **Testing of windows for watertightness (clause C5)**<br><br>Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the Principal Agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means<br><br>F:..... V:..... T:..... | Item | | |
| 70 | **Testing of flat roof waterproofing for watertightness (clause C6)**<br><br>Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the Principal Agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing<br><br>F:..... V:..... T:..... | Item | | |
| 71 | **Proprietary branded products (clause C7)**<br><br>The Contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instruction after consultation with the manufacturer's authorized representative<br><br>F:..... V:..... T:..... | Item | | |
| 72 | **Overtime (clause C8)**<br><br>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 in writing, prior to the execution thereof, that costs for such overtime are to be borne by the Employer<br><br>F:..... V:..... T:..... | Item | | |
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| | | | |
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| 73 | **As built drawings (clause C9)**<br><br>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<br><br>F:..... V:..... T:..... | Item | |
| 74 | **Labour record (clause C10)**<br><br>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 Sub-contractors on the works each day<br><br>F:..... V:..... T:..... | Item | |
| 75 | **Plant record (clause C11)**<br><br>At the end of each 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<br><br>F:..... V:..... T:..... | Item | |
| 76 | **Non cession of monies (clause C12)**<br><br>The Contractor shall not cede nor assign his rights or claims to any monies due or to become due under this contract<br><br>F:..... V:..... T:..... | Item | |
| 77 | **Confidentiality (clause C13)**<br><br>The **Contractor** undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all **Sub-contractors** and suppliers. Such information shall not be used in any way except in connection with the execution of the **works**<br><br>No information regarding this project shall be published or disclosed without the prior written consent of the **Employer**<br><br>F:..... V:..... T:..... | Item | |
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78 **Control of sand, dust, mud light and noise pollution on site, public spaces, public roads, etc. (clause C14)**

The **Contractor** shall be responsible for and take all precautions in controlling all forms of pollution during the **contract period** due to noise, artificial light, wind-blown sand, dust, etc. in the dry season and deposits of mud, etc. in the wet season by whatever means necessary and daily removal of deposits, etc., all to the satisfaction of the **Principal Agent** and any costs, claims, etc. will be for the **Contractor's** account

F:..... V:..... T:..... Item

The **contractor** shall:

1. Comply with the health and safety specification for the **works**
2. Prepare and agree with the health and safety consultant the health and safety plan for the **works**
3. Cooperate with the health and safety consultant in all respects
4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification
5. Conform to the conditions contained in the **employer's** health and safety specification

79 **Health & Safety (clause C15)**

The Contractor shall allow for Health and Safety according to the Occupational Health and Safety Act, 1993, Construction Regulations 2014 as per Government Notice No. 37305 , dated 07 February 2014

F:..... V:..... T:..... Item

80 **C13.0 COMMUNITY DEVELOPMENT**

'IDT' has taken a strategic decision to promote community development in line with its SCM Policy. Based on the above tenderer must promote Supplier Development through involving Small Business Enterprises residing within the municipal ward. Special reference is made to the Contract Data section in terms of sub-contracting

F:..... V:..... T:..... Item

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|---|---|---|---|---|
| 81 | **C14.0 CONTRACT PARTICIPATION GOALS (CPG)**<br><br>Note to tenderers: As CPGs may not provide any bidder a competitive advantage. Provisional Amounts and fixed percentages for profit and attendance have been provided. Only the provisional amount will be adjusted once the awarded tender amount and/or the beneficiaries have been appointed, and the final values have been ascertained. | | | |
| 82 | **C14.1 CPG EXECUTION**<br><br>Provision is made for a minimum of 0.5% of the project value in the execution of this project as described in the C3.1 project Specifications.<br><br>The price is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises including monitoring and monthly reporting.<br><br>The Employer shall determine the amount to be paid to the Enterprise Development Co-Ordinator for the Contract Participation Goal (CPG) on the contract and this amount shall be stated under the section Enterprise Development | | | |
| 83 | **C14.2 CPG PAYMENTS**<br><br>The contractor shall be paid as follows: These are recommended rates, client may change depending on the location of the project, complexity etc. | | | |
| 84 | **C14.2.1 Needs analysis**<br><br>Needs analysis and enterprise development plan per Targeted Enterprise - R10 000.00 (Ten thousand rands) per targeted enterprise.<br><br>F:..... V:..... T:..... | Item | 30 000.00 | |
| 85 | **C14.2.2 Mentoring and interim reporting**<br><br>Mentoring and interim reporting per Targeted Enterprise - R20 000.00 (Twenty thousand rands) per quarter<br><br>F:..... V:..... T:..... | Item | 160 000.00 | |
| 86 | **C14.2.3 Project completion report**<br><br>Project completion report per Targeted Enterprise - R10 000.00 (Ten thousand rands) per targeted enterprise.<br><br>F:..... V:..... T:..... | Item | 30 000.00 | |
| 87 | Add for profit on 14.2 above | Item | | |
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|---|---|---|---|---|
| 88 | Allow for general attendance on sub-contractor on 14.2 above | Item | | |

## SUMMARY OF CATEGORIES

Category : Fixed R.....

Category : Value R.....

Category : Time R.....

| | | | |
|---|---|---|---|
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Section 1: Preliminaries

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Preliminaries

**COLLECTION**

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| | 152 | |
| | 153 | |
| | 154 | |
| | 155 | |
| | 156 | |
| | 157 | |
| | 158 | |
| | 159 | |
| | 160 | |
| | 161 | |
| | 162 | |
| | 163 | |
| | 164 | |
| | 165 | |
| | 166 | |
| | 167 | |
| | 168 | |
| | 169 | |
| | 170 | |
| **Carried Forward** | R | |

Section 1: Preliminaries

Bill No. 1

Preliminaries

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| **Brought Forward** | | R | |
| Total Brought Forward from Page No. | 171 | | |
| | 172 | | |
| | 173 | | |
| | 174 | | |
| | 175 | | |
| | 176 | | |
| | 177 | | |
| | 178 | | |
| | 179 | | |
| | 180 | | |
| | 181 | | |
| | 182 | | |
| | 183 | | |
| | 184 | | |
| | 185 | | |
| | 186 | | |
| | 187 | | |
| | 188 | | |
| **Carried to Final Summary** | | R | |

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 1: DECANTING AREA (PROVISIONAL)** | | | | |
| | *NOTE : Unless otherwise described, the full descriptions of items and Supplementary Preambles in the preceeding Sections and Bills shall equally apply to the items in this Bill* | | | | |
| | **SITE EXCAVATIONS (PROVISIONAL)** | | | | |
| | **EARTHWORKS** | | | | |
| | **Site Clearance** | | | | |
| 1 | Allow clearing the site of all shrubs and trees not exceeding 200mm girth, rubbish, debris, vegetation, drains, etc, that may be encountered and roughly level site | m2 | 5 000 | | |
| | **Excavations, Filling, etc** | | | | |
| 2 | Earthfilling, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 95% modified AASHTO density to platforms, etc | m3 | 750 | | |
| | **Testing** | | | | |
| 3 | Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed | No | 100 | | |
| | **ELECTRICAL WORKS** | | | | |
| | **Lower Ground** | | | | |
| | **LV Reticulation** | | | | |
| 4 | Supply the following Distribution Boards complete with all switchgear, accessories as specified on the schematic layouts, all fitted in the factory & tested, including delivery to site & off-loading in accordance with the single lines.: | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| | **Cables and LV Equipment** | | | | |
| | **Supply, install and connect reticulation cables installed in cable ladder, tray, trenching or sleeves.** | | | | |
| 5 | 10mm² 4 core | m | 600 | | |
| | **Sleeves** | | | | |
| 6 | Complete 110Ø cable sleeve | m | 280 | | |
| | **Trenching** | | | | |
| | **Trenching through pickable ground, backfilling with 150mm of clean sand, danger tape and then backfilling and compaction 150mm of clean sand, danger tape and then backfilling and compaction** | | | | |
| 7 | 600mm deep x 450mm wide | m | 550 | | |
| | **Warning Tape** | | | | |
| 8 | Cable warning tape placed 150mm above cable in excavations. | m | 500 | | |
| | **THE FOLLOWING IN 1.8M WELDED MESH HOARDING FENCE** | | | | |
| | **Clearing Of Site:** | | | | |
| 9 | Allow for clearing site for the width of 1,000 mm where fencing runs are to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling. | m | 300 | | |
| | **Metal Fencing** | | | | |
| 10 | 1800mm High welded mesh boundary fence, Posts, Stays, etc | m | 300 | | |
| 11 | 2.7 long x 101.3 x 3mm hot dipped tubular posts, pre drilled ;holes for fixing panels, including 2.3m x 70 x 6mm flat iron section pre drilled holes for fixing mesh to posts using stainless steel M8 x 40mm countersunk flush lock bolts 9 per cover plate (in accordance with ISO 1416) | No | 100 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| 12 | Intermediate, corner or gate post 1.8m high projecting 1.8m above ground with cap and other end with sole plate in and including concrete base | No | 6 | | |
| | **Galvanised mild steel gates** | | | | |
| 13 | Single pedestrian gate size 1500 x 2400mm High Density Mesh galvanised made up or wire apertures size 76,2 x 12,7mm c/c. Panel reinforced horizontal recessed band complete with rectangular hollow section framing all round neatly mitred and welded at angles; supported or fixed between two 100 x 100mm GMS posts on each side, with razor sharp tooth spike welded to top, complete with hinges, padlock plate, 5pin upright double throw security mortice deadlock in 3mm steel plate housing closed on all sides, with the barrel bolt inside of gate frame, all as Details 923-S2-101-wd.011 or 111 | No | 2 | | |
| | **Dismantling of Fence** | | | | |
| 14 | Carefully dismantle fence for re-use where specified | m | 300 | | |
| | **ROADWORKS, WALKWAYS AND PAVING** | | | | |
| | **Excavations, Filling,etc** | | | | |
| 15 | Clean, dry sand filling, (SANS 1200 MJ-1984) slected and supplied, deposited watered and consolidated in 20mm thick layers under paving | m3 | 150 | | |
| | **19mm crush stone filling supplied by the contractor** | | | | |
| 16 | In Pathways | m2 | 1 000 | | |
| | **Removal of temporary walkways and paving** | | | | |
| 17 | Carefully remove crush stone to be re-use where specified | m2 | 1 000 | | |
| | **MOBILE UNITS** | | | | |
| | **Supply and installation of mobile units for the establishment and dismantling of the units** | | | | |
| 18 | 7m x 7m Mobile classroom units including 1.5m wide verandah | No | 13 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 1

Section 2: Main Building

Bill No. 1

Decanting

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 191 | | |
| | 192 | | |
| | 193 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 1

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION NO. 2** | | | | |
| | **BILL No. 2: ALTERATIONS** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **REMOVAL OF EXISTING WORK** | | | | |
| | **Breaking up and removing mass concrete** | | | | |
| 1 | 100mm surface beds | m2 | 240 | | |
| | **Remove existing broken paving blocks and:** | | | | |
| 2 | Remove from the Site | m2 | 100 | | |
| | **Breaking down and removing brickwork etc** | | | | |
| 3 | Half brick wall | m2 | 34 | | |
| 4 | One brick wall | m2 | 31 | | |
| | **Taking out and removing doors, windows, etc from brickwork to be demolished** | | | | |
| 5 | Timber single door and steel frame not exceeding 2,5m2 | No | 5 | | |
| 6 | Glazed steel window not exceeding 2,5m2 | No | 4 | | |
| | **Taking out and removing doors from steel frames (frames to remain)** | | | | |
| 7 | Timber single door not exceeding 2,5m2 | No | 52 | | |
| 8 | Buglar door not exceeding 2,5m2 | No | 3 | | |
| | **Taking down and removing** | | | | |
| 9 | Palisade fence 1.8m high with steel posts and droppers including removing of concrete bases, backfilling and levelling (LI) | m | 25 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **Taking down and removing roofs, floors, panelling, ceilings, partitions, etc** | | | | |
| 10 | Corrugated iron roof covering and timber purlins | m2 | 1 686 | | |
| 11 | Taking out and removing Nutec cement fascias and barge boards not exceeding 300mm wide | m | 479 | | |
| 12 | Remove existing steel gutters | m | 336 | | |
| 13 | Remove existing steel downpipes | m | 120 | | |
| 14 | Gypsum plasterboard ceilings including cornices, timber brandering, etc | m2 | 2 278 | | |
| | **Taking up and removing vinyl floor coverings, carpeting, etc** | | | | |
| 15 | Vinyl tile floor covering including preparing screed for new vinyl floor covering | m2 | 1 116 | | |
| | **Taking out and removing sundry joinery work, fittings, etc** | | | | |
| 16 | Timber skirtings from brickwork | m | 584 | | |
| | **Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screeds, plaster, etc** | | | | |
| 17 | 40mm Screed from floors | m2 | 22 | | |
| | **Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes** | | | | |
| 18 | 150 x 150mm wall tiles | m2 | 359 | | |
| | **Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)** | | | | |
| 19 | Remove and make good stainless steel 1910mm wide urinal. | No | 1 | | |
| 20 | Remove and make good wash hand basin | No | 11 | | |
| 21 | Remove and make good Water closet | No | 13 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **Taking out and removing glass and mirrors** | | | | |
| 22 | Glass from steel windows, including cleaning out rebates and preparing for new safety glass | m2 | 8 | | |
| | **BUILDING UP OPENINGS** | | | | |
| | **Brickwork in NFP bricks in class II mortar in building up openings** | | | | |
| 23 | One brick walls | m2 | 12 | | |
| | **20-30mpa Country Classic Travertine Imperial FBX clay face brick pointed with recessed horizontal and vertical joints** | | | | |
| 24 | Extra over brickwork for face brickwork in patches | m2 | 12 | | |
| 25 | 110mm Wide brick-on-edge header course sill set sloping and slightly projecting | m | 6 | | |
| | **MAKING GOOD OF FINISHES ETC** | | | | |
| | **Making good broken aprons** | | | | |
| 26 | 100mm Thick aprons | m2 | 54 | | |
| | **Making good 300 x 300mm ceramic floor tiles** | | | | |
| 27 | Floors in patches | m2 | 66 | | |
| | **Pressure cleaning face brick** | | | | |
| 28 | Existing facebrick to be cleaned with solvent based face brick cleaning | m2 | 836 | | |
| | **Cleaning floor tiles** | | | | |
| 29 | Existing floor tiles to be stripped, cleaned and sealed in accordance with manufacture's specification using a water emulsion polish complying with SABS 1042 and detergents complying with SABS 825 | m2 | 330 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 2

## OPENINGS THROUGH EXISTING WALLS ETC

**Altering openings**

| | | | | | |
|---|---|---|---|---|---|
| 30 | Altering opening in 115mm brick wall where 1 020 x 1 400mm high steel window removed to form opening for new double door and frame 1 800 x 2 100mm high overall by breaking out brickwork on both sides and bottom including necessary precast concrete lintel and making good plaster on one side and into reveals and face brickwork on other side and into reveals and with ? concrete with quarry tile finish to threshold (new door and frame and making good paintwork elsewhere) | No | 2 | | |
| | **Breaking out for and forming plain openings through brick walls including necessary precast concrete lintels and making good plaster on both sides and into reveals and with ? concrete thresholds with steel trowelled finish (making good paintwork elsewhere)** | | | | |
| 31 | Opening 1 800 x 2 100mm high through 230mm brick wall | No | 2 | | |
| | **Breaking out for and forming openings through brick walls for new doors and frames including necessary precast concrete lintels and making good plaster on both sides and into reveals and with ? concrete thresholds with steel trowelled finish (new doors and frames and making good paintwork elsewhere)** | | | | |
| 32 | Opening for door with steel frame 900 x 2 100mm high overall through 115mm brick wall | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 2

Section 2: Main Building

Bill No. 2

Alterations

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 195 | | |
| | 196 | | |
| | 197 | | |
| | 198 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 2

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 3: EARTHWORKS (PROVISIONAL)

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

#### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

#### SOILS INVESTIGATION REPORT

A soils investigation has been carried out on site by the engineer and the report can be viewed at the Engineer's offices.

#### NATURE OF GROUND

Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above soil investigation report, and where conditions of a more difficult character are indicated, these are separately measured

#### EXCAVATIONS IN CONDITIONS OTHER THAN "EARTH"

Should the contractor consider that the excavation at any point are in "soft rock" or "hard rock", he must notify the Representative / Agent immediately in order that an inspection may be made and a decision arrived at by the Representative / Agent as to the category of such excavation. Should the contractor fail to give such notification, the excavation shall be deemed to be in earth and shall be valued accordingly

**Carried to Collection** R

Section No. 2
Bill No. 3

**SUBTERRANEAN WATER**

The information on subterranean water is included in the soils investigation report can be viewed at the Engineer's offices.

**WORKING SPACE**

Formwork and working space has been measured to the sides of concrete wall footings & bases and no formwork or additional backfilling necessary due to over excavations will be measured to wall footings. Backfilling to such over excavations areas must be compacted to the same degree and in the same manner as the backfilling to the remainder of such excavation, only required if specified by the Engineer.

**CART AWAY OF EXCAVATED MATERIAL**

Descriptions of cart away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or from stock piles situated on the building site

## EXCAVATION, FILLING, ETC

**Excavation in earth or compacted filling not exceeding 2m deep**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Trenches | m3 | 774 | | |
| 2 | Holes | m3 | 46 | | |

**Extra over excavations in earth for exacavation in:**

| | | | | | |
|---|---|---|---|---|---|
| 3 | Soft rock | m3 | 62 | | |
| 4 | Hard rock | m3 | 31 | | |

**Extra over all excavations for carting away**

| | | | | | |
|---|---|---|---|---|---|
| 5 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 262 | | |

**Carried to Collection** R

Section No. 2
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **Risk of collapse of excavations** | | | | |
| 6 | Sides of trench and hole excavations not exceeding 1,5mm deep | m2 | 1 752 | | |
| | **Keeping excavations free of water** | | | | |
| 7 | Keeping excavations free of water | | Item | | |
| | **FILLING, ETC** | | | | |
| | **Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 100% Mod AASHTO density** | | | | |
| 8 | Backfilling to trenches, holes, etc | m3 | 237 | | |
| | **Earth filling supplied by the contractor compacted to 95% Mod AASHTO density** | | | | |
| 9 | Under floors, steps, pavings, etc | m3 | 474 | | |
| | **Earth filling of G5 material supplied by the contractor compacted in 150mm layers compacted to 98% Mod AASHTO to density** | | | | |
| 10 | Under floors, steps, pavings, etc | m3 | 468 | | |
| | **32mm gravel filling supplied by the contractor** | | | | |
| 11 | In Ducts | m2 | 37 | | |
| | **Coarse river sand filling supplied by the contractor** | | | | |
| 12 | Under floors etc | m3 | 158 | | |
| | **Compaction of surfaces** | | | | |
| 13 | Compaction of ground surface under floors, etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 3 157 | | |
| | **Prescribed density tests on filling** | | | | |
| 14 | "Modified AASHTO Density" test | No | 79 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **SOIL POISONING AND PROTECTION AGAINST TERMITES** | | | | |
| | **Soil insecticide under a 10 year guarantee by firm of specialist** | | | | |
| 15 | Under floors, etc including forming and poisoning shallow furrows etc and filling in furrows and ramming | m2 | 3 157 | | |
| 16 | To bottoms and sides of trenches, etc | m2 | 2 603 | | |
| | **Carried to Collection** | | | R | |

Section 2: Main Building

Bill No. 3

Earthworks (Provisional)

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 200 | | |
| | 201 | | |
| | 202 | | |
| | 203 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 3

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 4: CONCRETE, FORMWORK AND REINFORCEMENT

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

## SUPPLEMENTARY PREAMBLES

### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

### FORMWORK TO BASES, PILE CAPS, ETC

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.

Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described

Formwork to sides of bases, pile caps, etc will only be measured where it is prescribed for design reasons

Formwork necessitated by irregularity or collapse of excavated surfaces 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"

**Carried to Collection** R

Section No. 2
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES** | | | | |
| | **15MPa/19mm Concrete in:** | | | | |
| 1 | Blinding under footings and bases | m3 | 43 | | |
| | **REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES** | | | | |
| | **25 MPa/19mm Concrete in:** | | | | |
| 2 | Plinth | m3 | 10 | | |
| 3 | Strip footings | m3 | 269 | | |
| | **REINFORCED CONCRETE** | | | | |
| | **25 MPa/19mm Concrete in:** | | | | |
| 4 | Surface beds cast in panels on waterproofing | m3 | 321 | | |
| 5 | Aprons, ramps and steps. | m3 | 68 | | |
| 6 | Vanity slabs, cupboard slabs, cover slabs, etc | m3 | 2 | | |
| 7 | Filling to cavity of hollow walls | m3 | 77 | | |
| 8 | Slabs including beams and inverted beams | m3 | 3 | | |
| 9 | Beams | m3 | 72 | | |
| 10 | Walls | m3 | 13 | | |
| | **30 MPa Concrete in:** | | | | |
| 11 | Bases | m3 | 9 | | |
| 12 | Columns | m3 | 69 | | |
| | **TEST BLOCKS** | | | | |
| 13 | Making and testing 150 x 150 x 150mm concrete strength test cube and submit report to the Representative / Agent (only successful tests will be paid for) | No | 163 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **MOVEMENT JOINTS, ETC** | | | | |
| | **Movement joints, etc** | | | | |
| 14 | 10mm Bitumen impregnated fibre board built in vertically between concrete and brick walls | m | 972 | | |
| 15 | 12mm Bitumen impregnated fibre board built in vertically between concrete surfaces | m | 945 | | |
| | **Saw cut joints** | | | | |
| 16 | 4 x 30mm Saw cuts in top of concrete | m | 3 200 | | |
| | **CONCRETE SUNDRIES** | | | | |
| | **Finishing top surfaces of concrete smooth with a power float** | | | | |
| 17 | Surface beds, slabs, etc | m2 | 184 | | |
| | **Finishing top surfaces of concrete smooth with a wood float** | | | | |
| 18 | Surface beds, slabs, etc | m2 | 3 167 | | |
| | **ROUGH FORMWORK (DEGREE OF ACCURACY III)** | | | | |
| | **Rough formwork to soffits and sides** | | | | |
| 19 | Walls | m2 | 130 | | |
| 20 | Slabs propped up exceeding 1500mm and not exceeding 3000mm high | m2 | 10 | | |
| 21 | Vanity slabs, cupboard slabs, cover slabs, etc propped up not exceeding 1500mm high | m2 | 16 | | |
| 22 | Edges, risers, ends and reveals not exceeding 300mm high or wide. | m | 958 | | |
| 23 | Rectangular columns | m2 | 601 | | |
| 24 | Sides of Beams | m2 | 312 | | |
| 25 | Soffits of Beams | m2 | 89 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **Rough formwork to form** | | | | |
| 26 | Opening not exceeding 1m girth through not exceeding 300mm slab | No | 28 | | |
| | **REINFORCEMENT** | | | | |
| | **Mild steel reinforcement to structural concrete work** | | | | |
| 27 | 10mm Diameter bars | t | 1.13 | | |
| | **High tensile steel reinforcement to structural concrete work** | | | | |
| 28 | 12mm Diameter bars | t | 31.71 | | |
| 29 | 16mm Diameter bars | t | 1.00 | | |
| 30 | 25mm Diameter bars | t | 8.29 | | |
| | **Fabric reinforcement** | | | | |
| 31 | Mesh reinforcement with mesh reference number 193 laid in concrete surface beds, slabs, etc with 300mm wide side and end laps (measured net) | m2 | 727 | | |
| 32 | Mesh reinforcement with mesh reference number 245 laid in concrete surface beds, slabs, etc with 300mm wide side and end laps (measured net) | m2 | 2 441 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 4

Section 2: Main Building

Bill No. 4

Concrete, Formwork and Reinforcement

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 205 | | |
| | 206 | | |
| | 207 | | |
| | 208 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 4

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 5: PRECAST CONCRETE** | | | | |
| | **PRECAST CONCRETE** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **SIZES** | | | | |
| | Blocks, sills, etc measured linear shall be made in suitable lengths. Large size setting out drawings shall be prepared where necessary and submitted to the architect for approval before moulds are made | | | | |
| | **GENERAL** | | | | |
| | Where kerbstones, blocks, etc are laid in ground descriptions shall be deemed to include necessary excavation, filling in and ramming | | | | |
| | **PRECAST CONCRETE** | | | | |
| 1 | 450mm Wide x 510mm High benches including building into position on brick wall | m | 29 | | |
| 2 | 1500mm Wide x 510mm High benches including building into position on brick wall | m | 11 | | |
| | **Carried Forward to Summary of Section No. 2** | | | R | |
| | Section No. 2<br>Bill No. 5 | | | | |

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 6: MASONRY

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

## 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

**Hollow walls etc**

Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.

Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.

**User note:**

The above preamble generally applies for works in hot and humid coastal areas

**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. 2
Bill No. 6

## BLOCKWORK

**Concrete masonry units**

Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7 MPa

**Wall ties for blockwork**

Wall ties shall be polypropylene "Permaties" complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other

**Blockwork**

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole

**Standard complementary blocks**

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary

## DECORATIVE BLOCKS

Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour

**Carried to Collection** R

Section No. 2
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **SAMPLES** | | | | |
| | Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site | | | | |
| | **FOUNDATIONS (PROVISIONAL)** | | | | |
| | **Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar** | | | | |
| 1 | One brick walls | m2 | 259 | | |
| 2 | 270mm cavity walls complete with cavity wall ties at vertical centres not exceeding 300mm | m2 | 389 | | |
| | **SUPERSTRUCTURE** | | | | |
| | **Brickwork in NFP clay bricks (7 Mpa nominal compressive strength) in Class II mortar** | | | | |
| 3 | Half brick walls | m2 | 444 | | |
| 4 | One brickwall in beamfilling | m2 | 137 | | |
| 5 | Half brick linings to concrete | m2 | 63 | | |
| 6 | One brick walls | m2 | 986 | | |
| 7 | One brickwall in beamfilling | m2 | 528 | | |
| 8 | One brickwall in firewalls | m2 | 450 | | |
| 9 | 270mm cavity walls complete with cavity wall ties at vertical centres not exceeding 300mm | m2 | 2 151 | | |
| 10 | Piers | m3 | 47 | | |
| | **BRICKWORK SUNDRIES** | | | | |
| | **Bagging of 3:1 sand and cement mixture** | | | | |
| 11 | On brick surfaces | m2 | 233 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **Joint forming material in movement joints** | | | | |
| 12 | Movement joint formed of 20mm softboard built in vertically between brickwork (Provisional) | m2 | 163 | | |
| | **Brickwork reinforcement** | | | | |
| 13 | 75mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) | m | 1 944 | | |
| 14 | 150mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) | m | 17 972 | | |
| | **Approved prestressed fabricated lintels** | | | | |
| 15 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 828 | | |
| 16 | 150 x 75mm Lintels in lengths not exceeding 3m | m | 92 | | |
| | **Turning pieces** | | | | |
| 17 | To flat brick lintels not exceeding 300mm wide | m | 819 | | |
| | **Galvanised hoop iron cramps, ties, etc** | | | | |
| 18 | 38 x 1,6mm Galvanised hoop iron roof tie with one end built six courses deep into top of brickwork and other end wrapped around and nailed to trusses (Provisional) | No | 657 | | |
| | **Air bricks etc** | | | | |
| 19 | 229 x 152mm Precast concrete vermin proof air bricks with gauze backing and building into brickwork in cement mortar | No | 224 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 6

## Polystyrene Cavity Wall Insulation

**40mm Medium Density (15 - 16 kg/m3) Expanded Polystyrene Cavity Wall Insulation with thermal insulation R-value of 1 for cavity wall insulation in new residential buildings**

| | | | | | |
|---|---|---|---|---|---|
| 20 | EPS boards fixed to the cavity face of the leading tier with wire ties which are additional to the cavity ties specified. These additional ties may be standard cavity ties or may be made from 2mm diameter L-shaped galvanized wire. They must be installed at the same height and mid-way between the specified cavity ties. The EPS boards must be held firmly in place while these additional ties are bent in position. Ties are bent up and down alternately to secure the lower and upper edges of the EPS boards. | m2 | 2 694 | | |

## FACE BRICKWORK

**20-30mpa Country Classic Travertine Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints.**

| | | | | | |
|---|---|---|---|---|---|
| 21 | Extra over ordinary brickwork for facing and pointing in stretcher bond in foundations (Provisional) | m2 | 522 | | |
| 22 | Extra over ordinary brickwork for facing and pointing in stretcher bond | m2 | 684 | | |
| 23 | Extra over ordinary brickwork in beamfilling for facing and pointing in stretcher bond | m2 | 137 | | |
| 24 | Extra over brickwork for face brickwork faced on both sides | m2 | 1 868 | | |
| 25 | Extra over brickwork in NFX bricks for face brickwork in piers | m2 | 519 | | |
| 26 | 80mm Cut linings to concrete | m2 | 63 | | |
| 27 | Face brick-on-edge flat lintel course in cement mortar 220mm wide on soffit and pointing on 110mm wide projecting soffit and one side | m | 294 | | |

**Carried to Collection** R

Section No. 2
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| 28 | Fair cutting and fitting around pipe not exceeding 100mm diameter | No | 41 | | |
| 29 | Fair cutting and fitting around pipe exceeding 100mm and not exceeding 200mm diameter | No | 35 | | |
| | **20-30mpa Golden Wheat Travertine Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints.** | | | | |
| 30 | Extra over ordinary brickwork for facing and pointing in stretcher bond | m2 | 528 | | |
| | **Brick-on-edge header course copings, sills, etc of ? face bricks pointed with recessed joints on all exposed faces** | | | | |
| 31 | Cut face brick-on-edge external window cill, 180mm wide, set sloping and slightly projecting in cement mortar and pointed on top, front edge and projecting soffit including all necessary fair raking cutting to facings under and fair and fitted ends | m | 131 | | |
| 32 | Coping on top of one brick wall | m | 246 | | |
| | **DECORATIVE SCREEN, DUCT WALLS AND GRILLES** | | | | |
| | **20-30mpa Country Classic Travertine Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints.** | | | | |
| 33 | One brick screen wall in face brick with 110mm vertical fins at 220mm centres and 110mm wide openings in between pointed on both sides and inner faces | m2 | 917 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 6

Section 2: Main Building

Bill No. 6

Masonry

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 211 | | |
| | 212 | | |
| | 213 | | |
| | 214 | | |
| | 215 | | |
| | 216 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 6

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 7: WATERPROOFING** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Waterproofing** | | | | |
| | Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. 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 | | | | |
| | **DAMPPROOFING OF WALLS AND FLOORS** | | | | |
| | **One layer approved 375 micron embossed black polyethylene damp proof course** | | | | |
| 1 | In walls | m2 | 175 | | |
| | **One layer 250 micron green polyethylene waterproof sheeting complying with SABS 952 Type C in widest practicable widths with all joints lapped and sealed with pressure sensitive tape all in strict accordance with the manufacturer's requirements** | | | | |
| 2 | Under surface beds | m2 | 3 157 | | |
| | **WATERPROOFING TO ROOFS, BASEMENTS, ETC** | | | | |
| | **Prepare and apply 'Sika Cemflex' waterproofing system all in accordance with the manufacturer's instructions** | | | | |
| 3 | On shower base | m2 | 8 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **JOINT SEALANTS, ETC** | | | | |
| | **Two-part grey polysulphide sealing compound applied with a caulking gun, including backing cord, bond breaker, primer, etc** | | | | |
| 4 | In joints between frames and walls | m | 327 | | |
| 5 | 3 x 30mm In saw cut joints in floors | m | 3 348 | | |
| | **Antifungal silicone sealing compound** | | | | |
| 6 | 10 x 10mm In vertical expansion joints, including raking out expansion joint filler as necessary | m | 4 346 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 7

Section 2: Main Building

Bill No. 7

Waterproofing

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 218 | | |
| | 219 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 7

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 8: ROOF COVERINGS, ETC** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **PROFILED METAL SHEETING AND ACCESSORIES** | | | | |
| | **"Chromadek" Pre-coated "Klip-Lok" profile 0.58mm thick roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified Zincalume AZ150 coated steel G550 with a Clean Colorbond colour coated finish to one side with a Mountain Mist backing coat fixed to timber or steel purlins using aluminium KL65 clips and class 3 fastners, in strict accordance with manufacturer's specifications at main building** | | | | |
| | Note | | | | |
| | The Contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied complies with the required thickness specified | | | | |
| 1 | Roof covering with pitch not exceeding 25 degrees | m2 | 4 254 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 8

| | | | | | |
|---|---|---|---|---|---|
| | **SHEET METAL FLASHINGS, LININGS, COPINGS, ETC** | | | | |
| | **"Chromadek" Pre-coated "Klip-Lok" profile 0.58mm thick roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified Zincalume AZ150 coated steel G550 with a Clean Colorbond colour coated finish to one side with a Mountain Mist backing coat fixed to timber or steel purlins using aluminium KL65 clips and class 3 fastners, in strict accordance with manufacturer's specifications at main building** | | | | |
| 2 | Ridge capping 462mm girth | m | 394 | | |
| 3 | Hip capping 462mm girth | m | 28 | | |
| 4 | Valley gutter 462mm girth four times bend | m | 55 | | |
| 5 | Expanded neoprene moulded narrow and broad rib closer raking at valleys or hips | m | 260 | | |
| | **ROOF AND WALL INSULATION** | | | | |
| | **High reflection double sided bubble foil laminated insulation membrane with 10 to 25mm airspace combined thickness, Complaint with SANS 428 in terms of fire retardant with no combustibility at 750 degree celsius. Insulation excluded on building external walkways.** | | | | |
| 6 | Insulation laid taut over timber or steel purlins (at maximum 1200mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 2 567 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 8

Section 2: Main Building

Bill No. 8

Roof Coverings, etc

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 221 | | |
| | 222 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 8

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 9: CARPENTRY AND JOINERY

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

## SUPPLEMENTARY PREAMBLES

**Treatment against insect pests**

Rates for all timber shall be deemed to include for treatment against insect pests

All softwood for this job shall be treated to combat and prevent the spread of certain insect pests in accordance with Government Gazette Notice No R451 of 28 March 1969 and any amendments thereto. Proof of treatment shall be lodged with the Employer prior to the use of any timber in the works.

**Mitres, intersections, etc**

Descriptions of timber which is given linear, angles, rebates, grooves, chamfers, moulded edges, etc . are to be deemed to include for mitres, intersections, splay cut ends, stops, etc

Descriptions of timber, etc shall be deemed to include for straight cutting and notching

**Fixing**

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

Items described as "plugged" shall be deemed to include for screwing to fibre, plastic or metal plugs at not exceeding 600mm centres or shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Descriptions are to be deemed to include for nails, screws, plugs, adhesives, holes, sin- kings, pelleting, etc

**Carried to Collection** R

**Structural timber**

Descriptions of structural timber are to be deemed to include for joints in the length, holes, splay cut ends and mitres

All softwood structural timber shall be of stress grade V5 or M5 in accordance with SWABS specification 563 unless otherwise stated

**Fascias, etc.**

Descriptions of fibre cement fascias and barge boards shall be deemed to include for mitres, end junctions, screws, bolts, wall anchors, holes, etc.

**Door frames**

Rates for timber door frames shall be deemed to include for approved mild steel stay pegs in floors and hoop-iron clamps to walls, including holes, building in, etc

**Particle board:**

Particle board shall comply with the following specifications:

a) SABS 1300 Particle board: exterior and flooring type

b) SABS 1301 Particle board: interior type

**Joinery:**

Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes

**Fixing**

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

**Carried to Collection** R

Section No. 2
Bill No. 9

**Decorative laminate finish:**

Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

## PREFABRICATED METAL CONNECTOR PLATE TIMBER ROOF TRUSSES

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a. All the roof trusses to be designed and constructed with softwood structural timber to include for live loads, wind loads and to take profiled metal roof covering, purlins and fibre cement or gypsum plasterboard ceilings with brandering. Each roof truss shall have all its members accurately cut and close butted together and rigidly fixed by CSIR approved patented galvanised metal spike connectors, fixed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions.

b. Unless otherwise described all rafter feet are to extend approximately 850mm beyond the length of the tie beam, with end splayed cut.

c. The design, manufacture and transportation of the roof trusses, bracing, etc. shall be under the control of a registered Engineer and it shall be required from the manufacturer of the trusses to lodge a written guarantee that his construction has been designed by a qualified Structural Engineer and that he is in possession of a capability certificate issued by the Institute for Timber Construction and approved by the Representitive/Agent

d. All timber shall be stress-graded pine or glued laminated timber for construction or engineering purposes in accordance with the specifications of SABS Specification No 563 or as defined in SABS Specification No.1245. Stress-grades shall be marked as specified, vix V4, M4, V6, M6, etc.

e. Erection must be carried out as described in "The Erection and Bracing of Timber Roof Trusses" published by the Truss Plate Association of South Africa Ltd. and the National Timber Research Institute, CSIR.

**Carried to Collection** R

Section No. 2
Bill No. 9

f. Descriptions of roof trusses shall be deemed to include for design, manufacture, supply, hoisting and fixing in position, trimming ends, notching, ALL TEMPORARY AND PERMANENT BRACING, fixing blocks, etc.

g. All timber must be Grade 7 as per table 3 of SABS 0163-2001

h. All timber screws bolts plate connnection or any other type of connector to be in accordance with Annexure 'A' of SABS 0163-2001

i. All workshop drawings must be provided to the engineer for approval before fabrication

j. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect drawings and/or the site before design or fabrication commences

k. All timber to be treated in accordance with SABS 05

l. All exposed timber to be treated with carbolineum

m. All roof timber to be treated with fire retardant paint

**Double Pitch Prefabricated Connector Plate Roof Trusses At 1000mm Maximum Centres With A Pitch Of 18 Degrees, Suitable For 0.55mm Thick Trapezoidal Rib Profile Roofing Sheets With 38 x 76mm Purlins At 1000mm Centres And Suspended Ceiling With Grid System, Gypsum Or Cladit Nailed Up Ceilings With 38 x 38mm Brandering**

| | | | | | |
|---|---|---|---|---|---|
| 1 | **Block A** - Complete roof truss construction of prefabricated trusses to Admin block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 10120 x 2200mm high | m2 | 398 | | |
| 2 | **Block B** - Complete roof truss construction of prefabricated trusses to NUTRITION block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 12,348 x 2200mm high | m2 | 210 | | |
| 3 | **Block C** - Complete roof truss construction of prefabricated trusses to 4CL + MPC block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 10120 x 2200mm high | m2 | 489 | | |
| | **Carried to Collection** | | | R | |

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| | | | | | |
|---|---|---|---|---|---|
| 4 | **Block D** - Complete roof truss construction of prefabricated trusses to SCi + Ablutions block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 10120 x 2200mm high | m2 | 258 | | |
| 5 | **Block E** - Complete roof truss construction of prefabricated trusses to GUARD HOUSE'S block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 4340 x 2200mm high | m2 | 19 | | |
| 6 | **Block H (Ex. Abl)** - Complete roof truss construction of prefabricated trusses to ABLUTION block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 4000 x 2200mm high | m2 | 69 | | |
| 7 | **Block I** - Complete roof truss construction of prefabricated trusses to Media Centre + Classroom block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 10120 x 2200mm high | m2 | 315 | | |
| 8 | **Block L & J** - Complete roof truss construction of prefabricated trusses to 6 Classroom block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 10120 x 2200mm high | m2 | 804 | | |
| 9 | **Block K** - Complete roof truss construction of prefabricated trusses to 4 Classroom block including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. Truss size 13100 x 2200mm high | m2 | 280 | | |
| 10 | **Pump Room** - Complete roof truss construction of prefabricated trusses including all necessary labour, timber for bracing, purlins, wall plates, gangboards, etc. | m2 | 36 | | |
| | **EAVES, VERGES, ETC** | | | | |
| | **Tempered fibre-cement** | | | | |
| 11 | Two coats wood preservative applied hot on wrought exposed roof timbers (provisional) | m2 | 788 | | |
| 12 | 12 x 225mm Fascia board countersunk screwed to roof timbers (elsewhere) with two brass screws at maximum 1200mm centres and jointed with and including standard aluminium halfround cover strips at all joints | m | 908 | | |
| | **Carried to Collection** | | | R | |

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| | | | | | |
|---|---|---|---|---|---|
| 13 | 12 x 220mm Barge board countersunk screwed to roof timbers (elsewhere) with two brass screws at maximum 1200mm centres and nailed with steel nails into mortar joints at maximum 750mm centres and jointed with and including standard aluminium halfround cover strips at all joints | m | 1 800 | | |
| 14 | Eaves soffit coverings 500mm wide of 4mm thick sheets, including 38 x 38mm sawn softwood brandering along edges, along centre and at 1,20m centres across sheets | m2 | 631 | | |
| 15 | Sloping eaves soffit lining in approximately 600mm widths fixed to and including 38 x 50mm sawn softwood brandering along both edges fixed to timber rafter feet at 1000mm centres with butt joints and 12 x 44mm wrot meranti cover strips along both edges and over joints fixed with 40mm wire nails at not exceeding 300mm centres. **(Provisional).** | m | 1 513 | | |
| | **SKIRTINGS** | | | | |
| | **Wrought Meranti** | | | | |
| 16 | 19 x 76mm Skirting with and including 19mm quarter round nailed to walls | m | 1 129 | | |
| | **DOORS** | | | | |
| | NOTE: | | | | |
| | All framed and ledged batten doors and combination doors, where battens are utilised, shall only be of construction acceptable to the Department, i.e. mortice and tenon where the tenon is exposed on the outside edges of styles and where the tenon is wedged to form a dove tailed shape. | | | | |
| | **Wrought meranti hardwood doors hung to steel frames** | | | | |
| 17 | 40mm Framed batten door 914 x 2032mm high of 40 x 150mm top rail and stiles, 18 x 150mm middle ledge and braces and 40 x 220mm bottom rail, filled in with 18mm V-jointed one side boarding and covered on other side with 4mm plywood with veneer to match door, let into and including rebates all round | No | 35 | | |
| | **Carried to Collection** | | | R | |

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Bill No. 9

| | | | | | |
|---|---|---|---|---|---|
| 18 | D01 - 44mm x 1613 x 2032mm high Meranti hardwood timber double door with 15 horizontal slates on both sides in two equal leaves. | No | 10 | | |
| 19 | Type D4 - 44mm Framed, ledged and braced batten double door with horizontal slats 1,630 x 2,032m high with rebated meeting stiles, each leaf of 44 x 144mm top rail and stiles, 22 x 144mm middle ledge and 22 x 19mm bottom ledge | No | 6 | | |
| | **Semi-solid core flush panel timber door with hardboard edging, face suitable for paint on both sides, hung to steel frames** | | | | |
| 20 | Type D12 - 44mm Door 813 x 2100mm high with and including 600 x 600mm natural anodised aluminium louvers | No | 49 | | |
| 21 | Type D10 BIC - 44mm x 1800 x 2032mm high with and including (2no) 600 x 600mm natural anodised aluminium louvers | No | 2 | | |
| 22 | Type D9- 44 x 762 x 1882mm high | No | 9 | | |
| 23 | Type D10 DB - 44mm x 1800 x 2032mm high | No | 1 | | |
| 24 | Type D11 - 40mm Door 743 x 2125mm high with a 620 x 925mm high view panel of 6mm thick glass with fire signage | No | 5 | | |
| 25 | Type D13 - 44 x 813 x 2032mm high with 350 x 600mm viewing safety glass panel | No | 10 | | |
| | **Hollow core flush doors with 3,2mm standard hardboard covering face suitable for paint on both sides, hung to steel frames** | | | | |
| 26 | 40mm Double door, size 1626 x 2032mm high in two equal leaves | No | 3 | | |
| | **Door Sundries** | | | | |
| 27 | Cut opening size 788 x 440mm in flush door for louvre unit (louvre unit elsewhere measured). | No | 47 | | |
| 28 | Cut opening size 200 x 900mm in flush door with and including glazing beads for viewing panel (glazing to viewing panel elsewhere measured). | No | 11 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 9

| | | | | | |
|---|---|---|---|---|---|
| 29 | Undercut 813m wide door by 150mm, including additional framing and laminating at bottom. | No | 9 | | |
| | **BEADS, ARCHITRAVES, ETC** | | | | |
| | **Wrought Saligna** | | | | |
| 30 | 12 x 25mm Glazing beads countersunk tapscrewed to pressed steel framing (elsewhere) | m | 20 | | |
| | **DUCT COVERS** | | | | |
| | **Laminated saligna** | | | | |
| 31 | 32mm Duct covers in 310mm widths including chromium plated dome headed screws in cup washers at 800mm centres along edges | m2 | 8 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 9

Section 2: Main Building

Bill No. 9

Carpentry and Joinery

**COLLECTION**

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| | 225 | | |
| | 226 | | |
| | 227 | | |
| | 228 | | |
| | 229 | | |
| | 230 | | |
| | 231 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 9

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 10: JOINERY FITTINGS

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

#### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

#### FITTINGS GENERAL

Where fittings have been measured as complete units i.e. the components of the units have not been separately measured, the descriptions of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc

Unless specifically stated, or where no finish is given, finishes to all joinery fittings shall be three coats polyurethane clear semi-gloss varnish to all exposed surfaces

#### DRAWINGS

The references given in the descriptions are to the respective fittings detailed on the drawings accompanying these bills of quantities for tender purposes

**Carried to Collection** R

Section No. 2
Bill No. 10

**PARTICLE BOARD**

Particle board shall comply with the following specifications:

a) SABS 1300 Particle board: exterior and flooring type

b) SABS 1301 Particle board: interior type

**DECORATIVE LAMINATE FINISH**

Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

**CONSTRUCTION**

Construction of fittings shall be generally of wood, screwed and glued with pelleted heads where visible. All materials used must be of the best quality fabricate approved by the Representative / Agent and all the units to be finished neat and true prior to installation and finishing

**DOORS TO FITTINGS**

Sizes of doors and drawers are approximate. Correct sizes must be taken from the fittings concerned

**THE FOLLOWING IN ADMIN**

**Fittings To Administration Office, Reception/Waiting Area, Strong Room And Accounting Office**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Five tier shelving unit type J02 size 900mm long x 400mm wide x 2000mm high overall. | No | 6 | | |
| 2 | Work station unit type J01 size 4400mm long x 600mm wide x 750mm high overall. | No | 2 | | |
| 3 | Saligna worktop with and including mounting brackets size 2100mm long x 510mm overall, mounted 658mm high from finish floor level. | No | 2 | | |
| 4 | Work station unit type J01 size 4180mm long x 600mm wide x 750mm high overall. | No | 1 | | |

**Carried to Collection** R

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| | **Fitting To Kitchenette** | | | | |
| 5 | Kitchen floor cupboards with draw section size 1894mm long x 605mm wide x 900mm high overall. | No | 1 | | |
| 6 | Kitchen floor cupboards with draw section size 2332mm long x 605mm wide x 900mm high overall. | No | 1 | | |
| 7 | Kitchen broom floor cupboards with draw section size 950mm long x 605mm wide x 1800mm high overall. | No | 1 | | |
| | **Fitting To Reception Or Waiting Area** | | | | |
| 8 | Set of eight hardwood timber slats, each slat size 50 x 40 fixed at 55mm centres and both top edges of each slat bull-nosed. | m | 5 | | |
| 9 | 6mm Thick mild steel triangular shaped bracket size 425 wide x 400mm high fixed to walls. | No | 9 | | |
| | **Fitting To Cleaners Room** | | | | |
| 10 | Set of eight hardwood timber slats, each slat size 50 x 40 fixed at 55mm centres and both top edges of each slat bull-nosed. | m | 2 | | |
| 11 | 6mm Thick mild steel triangular shaped bracket size 425 wide x 400mm high fixed to walls. | No | 3 | | |
| | **Purpose made 16mm thick moisture resistance melamine carcasses fixed together to form pigeon hopes with lockable doors, pigeon hole size 391 x 400 x 413mm** | | | | |
| 12 | 3535mm long x 400mm wide x 1800mm High pigeon holes complete with and including, sides, divisions, bottom, skirting, shelves, brackets, backing, doors, locks, hinges, etc, colour to Architect specification. | No | 1 | | |
| | **Purpose made Laminated Saligna Worktops supported by 50 x 50 x 3mm angle iron brackets welded together with 170 x 170 x 3mm gusset plates to shape as indicated and fixed securely to the wall with 8 x 70 masonry anchors @ 943c/c** | | | | |
| 13 | Accounting Office - 4090 x 600 x 32mm Laminated saligna worktops with 6mm bevelled edges screwed to support brackets from underneath. Fix 19mm quarter round saligna beading to worktops against the wall. Finish with 2 coats eggshell polyurethane varnish | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| 14 | Accounting Office - 2100 x 760 x 32mm Laminated saligna worktops with 6mm bevelled edges screwed to support brackets from underneath. Fix 19mm quarter round saligna beading to worktops against the wall. Finish with 2 coats eggshell polyurethane varnish | No | 1 | | |
| 15 | Reception/Admin Office - 4575 x 600 x 32mm Laminated saligna worktops with 6mm bevelled edges screwed to support brackets from underneath. Fix 19mm quarter round saligna beading to worktops against the wall. Finish with 2 coats eggshell polyurethane varnish | No | 1 | | |
| 16 | Reception/Admin Office - 2100 x 760 x 32mm Laminated saligna worktops with 6mm bevelled edges screwed to support brackets from underneath. Fix 19mm quarter round saligna beading to worktops against the wall. Finish with 2 coats eggshell polyurethane varnish | No | 1 | | |
| | **Purpose made Floor Cupboard** | | | | |
| 17 | Principal's Office - 3000 long x 500 wide x 875mm High Melamine floor cupboard comprising base structure, sides, adjustable shelving and skirting made from melamine chipboard complete with 32mm thick laminated saligna timber worktop including all brackets, ironmongery, doors, varnish etc | No | 1 | | |
| 18 | Vice - Principal's Office - 3000 long x 500 wide x 875mm high Melamine floor cupboard comprising base structure, sides, adjustable shelving and skirting made from melamine chipboard complete with 32mm thick laminated saligna timber worktop including all brackets, ironmongery, doors, varnish etc | No | 1 | | |
| | **Laminated Saligna Timber Worktop** | | | | |
| 19 | Print Room - 4090 x 600 x 32mm Worktop complete with and including rounded edges, screwed to steel supports, brackets, gusset plates, anchors, finished with 2 coats polyurethane eggshell varnish etc | m2 | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| | **Laminated Saligna Drawer Unit & Worktop** | | | | |
| 20 | Security Control Room - 2300 x 600 x 900mm high Laminated saligna 6no. drawer unit with hardwood base, smooth plained and sanded in friction face. Drawers comprises of 12mm thick S.A Pine side and back panel, 19 x 45mm S.A Pine vertical post. Drawers face to take 18mm chipboard with melamine veneer complete with handles. 32mm thick laminated saligna worktop screwed from under side to 32 x 32 x 3mm mild steel angle iron brackets and finish wood with 1 coat of 10% diluted 2 coats undiluted acid-resistance eggshell polyurethane varnish | No | 1 | | |
| | **Purpose made Trophy Cabinet, made of 22mm melamine carcasses with 22mm S.A Pine dividing horizontal shelves complete with (top-section) 500 x 1200mm high toughened safety glass doors with 3no. chrome plated hinges per door and (bottom section) to be 500 x 900mm high 16mm thick melamine doors. All doors complete with chrome plated handles.** | | | | |
| 21 | Reception - 3000 long x 450 wide x 2100mm High trophy display floor cupboard comprising base structure, sides, shelving, glazing and skirting complete including all brackets, ironmongery, doors, etc | No | 1 | | |
| | **Timber Benches** | | | | |
| 22 | 2000 x 425 x 450mm high bench complete and including 75 x 38mm thick Saligna rails @ 25mm c/c fixed to 75 x 50mm galvanised angle iron brackets bolted to wall with rawl bolts and anchored by 32 x 20mm mild steel angle iron expansion bolts, steel frame, paint etc | No | 2 | | |
| 23 | 4000 x 550 x 882mm high bench with backrest. 25mm thick laminated Saligna seat screwed to steel frame from the top complete with 19mm thick Saligna backrest screwed filling pieces top and bottom. Seat to be fixed on 50 x 50 x 5mm mild steel angle iron welded together to form support frame. Fix steel frame to wall with 3no. 8mm diameter expansion bolts and steel fixed @ max. 600mm c/c. Seat and Backrest to be neatly jointed and finished with 2 coats polyurethane eggshell varnish | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| 24 | 2000 x 550 x 882mm high bench with backrest. 25mm thick laminated Saligna seat screwed to steel frame from the top complete with 19mm thick Saligna backrest screwed filling pieces top and bottom. Seat to be fixed on 50 x 50 x 5mm mild steel angle iron welded together to form support frame. Fix steel frame to wall with 3no. 8mm diameter expansion bolts and steel fixed @ max. 600mm c/c. Seat and Backrest to be neatly jointed and finished with 2 coats polyurethane eggshell varnish | No | 1 | | |
| | **305 x 32mm thick Laminated Saligna Shelving @ 300mm c/c fixed to steel shelve brackets on double slot band wall upright fixed to the concrete or brick wall** | | | | |
| 25 | Strongroom - U-Shape open shelf storage at 2635mm high (7 shelves) | m | 8 | | |
| | **Laminated Saligna Timber Shelving** | | | | |
| 26 | Admin Audio Visual - 9153mm long x 500mm wide x 2166mm High shelving forming U shape along perimeter of wall complete with and including rail, back uprights, filler piece, frame, dividers, brackets, varnish etc | No | 1 | | |
| | **Purpose made Reception Counter** | | | | |
| 27 | 4575mm long x 900mm High Reception counter complete with and including worktop, ironmongery, doors, drawers, etc security grille and adjustable aluminium louvres (elsewhere); | No | 2 | | |
| | **Magazine Stand** | | | | |
| 28 | 924mm long x 458 x 1396mm high Magazine stand complete with and including framed frame, shelves, bottom, sides, divisions, bearers, sloping doors, ironmongery, etc | No | 3 | | |
| | **Safe** | | | | |
| 29 | 850 x 25 x 1750mm high complete and including 22mm thick hardwood veneer front, mirror screws, aluminium frame, fixings, varnish, etc. | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| | **Keyboard** | | | | |
| 30 | Admin-Cleaners Room - 850 x 1750mm high Keyboard with 96no. hooks on 22mm blockboard with hardwood veneer front taped around with 25 x 25 x 3mm natural colour aluminium strip, fixed to the wall and finished with 2 coats of polyurethane varnish | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| | **THE FOLLOWING IN CLASSROOMS** | | | | |
| | **Fittings To Store Room** | | | | |
| 31 | Five tier shelving unit type J07 size 900mm long x 400mm wide x 2000mm high overall. | No | 16 | | |
| | **Purpose made 22mm thick laminated timber open pigeon hole size 450 x 500 x 350mm** | | | | |
| 32 | 3326mm long x 450mm wide x 1166mm High pigeon holes complete with and including worktop, sides, divisions, bottom, skirting, shelves, brackets, backing, etc | No | 2 | | |
| 33 | 7000mm long x 450mm wide x 1166mm High pigeon holes complete with and including worktop, sides, divisions, bottom, skirting, shelves, brackets, backing, etc | No | 18 | | |
| | **THE FOLLOWING IN SPECIAL CLASSROOMS - LABORATORY** | | | | |
| | **Fittings To Multi-purpose Classroom, Store Room And Science Lab** | | | | |
| 34 | Worktop unit type J01 size 6500mm long x 600mm wide x 645mm high overall, including sink cut-out, electrical skirting, etc. | No | 1 | | |
| 35 | Five tier shelving unit type J06 size 878mm long x 343mm wide x 1321mm high overall. | No | 10 | | |
| 36 | Six tier shelving unit type J06 size 2070mm long x 320mm wide x 2160mm high overall. | No | 1 | | |
| | **Purpose made Display Shelving** | | | | |
| 37 | 6500mm long x 300mm wide x 750mm high Display shelves @ 1630mm high complete with and including sides, top, cleats, divisions, sliding guides or tracks, 6,5mm plate glass sliding doors with polished edges, chromium plated recessed handles, etc | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| 38 | 6353mm long x 450mm wide x 900mm High display wall cupboard fixed @ 1630mm high from the finished floor level. Cupboard complete with 18mm thick chipboard melamine shelves. Doors to be complete with 4mm toughened safety glazing and approved solid cupboard handles to be flange plates | No | 4 | | |
| | **Lab Stools** | | | | |
| 39 | Approved lab stool | No | 84 | | |
| | **Chemical Store - 305 x 32mm thick Laminated Saligna Shelving @ 300mm c/c fixed to steel shelve brackets on double slot band wall upright fixed to the concrete or brick wall** | | | | |
| 40 | U-Shape open shelf storage at 2166mm high (7 shelves) | No | 4 | | |
| | **Raised Podium** | | | | |
| 41 | 4500 x 1900 x 190mm high Raised podium complete with and including 32mm thick hardwood veneer floor panels fixed to pine bearers and including stair nosing, angle iron, varnish, etc | No | 1 | | |
| | **THE FOLLOWING IN LIBRARY** | | | | |
| | **Fittings To Library and Staffroom** | | | | |
| 42 | Worktop unit type size 3000mm long x 600mm wide x 645mm high overall, including sink cut-out, electrical skirting, etc. | No | 10 | | |
| | **38mm thick Laminated Saligna Worktop with 700 x 19mm saligna front and sides panel with 100 x 40mm fixed to steel 2-tier power trunking on the front panel . All fixed to framework made of 38 x 38 x 3mm galvanised square mild steel tubing. Approved 16mm thick melamine front panel extends over mullion to act as stopper complete with 480 x 345 deep fireclay anti-acid laboratory sink with drainer and 38mm anti-acid bottle trap and complete with chrome plated 'swan neck' swivel outlet with serrated nozzle (305mm long).** | | | | |
| 43 | 2490mm long x 900mm wide x 910mm high Teacher's worktop with 4no. drawer unit and 2no. 16mm thick melamine doors with handles | No | 4 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| 44 | 2850mm long x 900mm wide x 1100mm high Learner's worktop | No | 11 | | |
| 45 | 7270mm long x 600mm wide x 1100mm High 38mm thick Saligna worktop benches complete with and including top with bullnose edge, framework and cross bracing made of 38 x 38 x 3mm galvanised mild steel tubing, 18mm thick melamine removal panel to form ducting, ten base plates with four holes, necessary bolts, etc | No | 4 | | |
| | **Purpose made cupboards etc** | | | | |
| 46 | Resource Room - 5335mm long x 450mm wide x 900mm High display wall cupboard fixed @ 1630mm high from the finished floor level. Cupboard complete with 18mm thick chipboard melamine shelves. Doors to be complete with 4mm toughened safety glazing and approved solid cupboard handles to be flange plates etc | No | 4 | | |
| 47 | Resource Room - L-Shape 18mm White Melamine sink floor cupboard size (5335mm long x 600mm wide x 900mm high) and (1540mm long x 600mm wide x 900mm high) comprising of base structure, sides, adjustable shelving, drawers, cupboard doors, skirting made from melamine chipboard. Cupboard to be complete with 12 x 188mm stainless steel bar handles complete with 32mm thick laminated saligna worktop including all brackets, ironmongery, etc | No | 1 | | |
| | **Purpose made cupboards etc** | | | | |
| 48 | 7000mm long x 600 wide x 900mm high, 18mm thick Melamine chipboard floor cupboard complete with 4no x 2 overall drawer cabinets and storage section with doors comprising base structure, sides, back made from melamine chipboard, complete with 32mm Laminated Saligna Timber Top including all runners, saligna quartrant at wall interface, ironmongery, skirting, drawer and doors, etc | No | 2 | | |
| | **Purpose made 305 x 32mm thick Laminated Saligna Shelving @ 300mm c/c fixed to steel shelve brackets on double slot band wall upright fixed to the concrete or brick wall** | | | | |
| 49 | Multipurpose Storerooms - U-Shape open shelf storage at 2166mm high (7 shelves) | No | 16 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| 50 | Computer workstation desk unit size 1400mm long x 600mm wide x 1150mm high overall, including screens, electrical point cut-outs, etc. | No | 5 | | |
| 51 | Library - 1755 x 686 x 2184mm high with 300 x 22mm thick laminated timber with melamine veneer shelves and 32mm thick laminated timber with melamine veneer to form framework and to be spaced max @ 876c/c complete with and including back uprights, filler piece, frame, dividers, brackets, varnish etc as per 923-S2-105-BEP1-wd014 | No | 1 | | |
| 52 | Library - 3505 x 686 x 2185mm high with 300 x 22mm thick laminated timber with melamine veneer shelves and 32mm thick laminated timber with melamine veneer to form framework and to be spaced max @ 876c/c complete with and including back uprights, filler piece, frame, dividers, brackets, varnish etc as per 923-S2-105-BEP1-wd014 | No | 9 | | |
| | **Wrought Laminated SA Pine Shelves** | | | | |
| 53 | Library - 18035 x 600 x 900mm High shelving along perimeter of wall complete with and including rail, back uprights, filler piece, frame, dividers, brackets, varnish etc | No | 1 | | |
| 54 | Library - 7000 x 600 x 900mm High shelving along perimeter of wall complete with and shelving complete with and including rail, back uprights, filler piece, frame, dividers, brackets, varnish etc | No | 1 | | |
| | **THE FOLLOWING IN MULTIPURPOSE AND COMPUTER ROOM** | | | | |
| | **305 x 32mm thick Laminated Saligna Shelving @ 300mm c/c fixed to steel shelve brackets on double slot band wall upright fixed to the concrete or brick wall** | | | | |
| 55 | Server & Storeroom - U-Shape open shelf storage at 2166mm high (7 shelves) | m | 13 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

| | | | | | |
|---|---|---|---|---|---|
| | **Laminated Saligna Timber Work Station** | | | | |
| 56 | Computer Room - 8082 x 800 x 750mm high Work station comprising of 30 x 30 x 2,5mm thick galvanised steel tubing section legs and top member to be welded together to form a frame finished with "Hammerite complete with 32mm thick laminated saligna worktop with double rounded nosing fronts and 50 x 32mm thick laminated timber skirting and double compartment skirting to rear of worktop and to be fixed from the below finished with 2 coats of polyurethane eggshell varnished complete with and including back uprights, filler piece, frame, dividers, brackets, varnish etc | No | 4 | | |
| 57 | Computer Room - 6400 x 800 x 750mm high Work station comprising of 30 x 30 x 2,5mm thick galvanised steel tubing section legs and top member to be welded together to form a frame finished with "Hammerite" complete with 32mm thick laminated saligna worktop with double rounded nosing fronts and 50 x 32mm thick laminated timber skirting and double compartment skirting to rear of worktop and to be fixed from the below finished with 2 coats of polyurethane eggshell varnished complete with and including back uprights, cable hole, filler piece, frame, dividers, brackets, varnish etc | No | 4 | | |
| | **THE FOLLOWING IN GUARD HOUSE** | | | | |
| | **Fittings To Caretakers House** | | | | |
| 58 | Kitchen floor cupboards size 1090mm long x 605mm wide x 900mm high overall, including sink cut-out. | No | 1 | | |
| 59 | Cupboards with draw section size 800mm long x 605mm wide x 2100mm high overall. | No | 1 | | |
| | **Granite Counter Tops** | | | | |
| 60 | Guard House - L-Shape sink floor cupboard size (2000mm long x 600mm wide x 900mm high) and (2160mm long x 600mm wide x 900mm high) comprising base structure, sides, drawers and doors, adjustable shelving and skirting made from saligna. Cupboard to be complete with 12 x 188mm stainless steel bar handles complete with 30mm thick granite stone worktop including all brackets, ironmongery, etc | m2 | 3 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

## THE FOLLOWING IN SCHOOL HALL

### Fittings to Multimedia Room And Store Room

| | | | | | |
|---|---|---|---|---|---|
| 61 | Five tier shelving unit type J07 size 900mm long x 400mm wide x 2000mm high overall. | No | 8 | | |
| 62 | L-shaped kitchen floor cupboards with draw section size 5360mm extreme girth x 600mm wide x 900mm high overall, including sink cut-out. | No | 1 | | |
| 63 | Kitchen floor cupboards size 3780mm long x 600mm wide x 900mm high overall. | No | 1 | | |
| 64 | Kitchen wall cupboards size 1500mm long x 315mm wide x 700mm high overall, including microwave space. | No | 1 | | |
| 65 | Counter unit type J02 and including mounting bracket size 2000mm long x 1040mm wide overall, mounted 860mm high from finish floor level. | No | 1 | | |
| 66 | Counter unit type J03 and including mounting bracket size 2310mm long x 700mm wide overall, mounted 670mm high from finish floor level. | No | 1 | | |

### Timber Benches

| | | | | | |
|---|---|---|---|---|---|
| 67 | Changerooms - 1800 x 475 x 450mm high bench complete and including 75 x 38mm thick Saligna rails @ 25mm c/c fixed to 75 x 50mm galvanised angle iron brackets bolted to wall with rawl bolts and anchored by 32 x 20mm mild steel angle iron expansion bolts, steel frame, paint etc | No | 6 | | |
| 68 | Cleaners Room - 1800 x 475 x 450mm high bench complete and including 75 x 38mm thick Saligna rails @ 25mm c/c fixed to 75 x 50mm galvanised angle iron brackets bolted to wall with rawl bolts and anchored by 32 x 20mm mild steel angle iron expansion bolts, steel frame, paint etc. | No | 1 | | |
| 69 | Backstage - 1800 x 425 x 450mm high bench complete and including 75 x 38mm thick Saligna rails @ 25mm c/c fixed to 75 x 50mm galvanised angle iron brackets bolted to wall with rawl bolts and anchored by 32 x 20mm mild steel angle iron expansion bolts, steel frame, paint etc | No | 3 | | |

**Carried to Collection** R

Section No. 2
Bill No. 10

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|---|---|---|---|---|---|
| 70 | Backstage - 2400 x 425 x 450mm high bench complete and including 75 x 38mm thick Saligna rails @ 25mm c/c fixed to 75 x 50mm galvanised angle iron brackets bolted to wall with rawl bolts and anchored by 32 x 20mm mild steel angle iron expansion bolts, steel frame, paint etc | No | 3 | | |
| | **THE FOLLOWING IN NUTRITION** | | | | |
| | **Fittings To Clean Utensils/Plattery Area, Grocery Store Room, Cleaners Room, Serving Area And Washing Area** | | | | |
| 71 | Five tier shelving unit type J07 size 900mm long x 400mm wide x 2000mm high overall. | No | 6 | | |
| 72 | Set of two locker unit type J05 size 300mm long x 400mm wide x 2000mm high overall. | No | 4 | | |
| 73 | Kitchen floor cupboards size 900mm long x 598mm wide x 900mm high overall, including cut-out to top to receive bain marie unit to one side. | No | 1 | | |
| 74 | Kitchen floor cupboards size 1400mm long x 598mm wide x 900mm high overall, including cut-out to top to receive bain marie unit to one side. | No | 1 | | |
| 75 | L-shaped kitchen floor cupboards with draw section size 5047mm extreme girth x 600mm wide x 902mm high overall. | No | 1 | | |
| | **Pots rack** | | | | |
| 76 | Washing & Serving Areas - 1500 x 400mm racking wall mounted tubular pots rack installed just below granite worktop | No | 6 | | |
| | **Granite Counter Tops** | | | | |
| 77 | Washing & Serving Areas - 30mm Thick x 345mm Wide Counter Top fixed to GMS angle iron brackets at the bottom | m2 | 5 | | |
| 78 | Washing, Serving Areas - 30mm Thick x 600mm Wide Counter Top | m2 | 11 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 10

Section 2: Main Building

Bill No. 10

Joinery Fittings

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 233 | | |
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| | 242 | | |
| | 243 | | |
| | 244 | | |
| | 245 | | |
| | 246 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 10

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 11: CEILINGS, PARTITIONS AND ACCESS FLOORING** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **TIMBER** | | | | |
| | All softwood to be South African Pine | | | | |
| | **CEILINGS ETC** | | | | |
| | **Fibreglass insulation** | | | | |
| 1 | 125mm thick Aerolite Insulation closely fitted and laid on top of brandering between roof timbers, etc, all as per manufacturers instructions | m2 | 3 688 | | |
| | **NAILED UP CEILINGS** | | | | |
| | **6.4mm Gypsum Plasterboard ceilings** | | | | |
| 2 | 6,4mm thick Gypsum plasterboards with and including H-Profile jointing strip fixed on 38 x 38mm sawn softwood brandering at 400mm centres in one direction nailed with 25 x 3.5mm dry wood screws at 300mm centres and finished with a coat of "Rhinolite" or similar approved gypsum skim plaster trowelled to a smooth polished surface, all in strict accordance with the manufacturer's specifications | m2 | 2 052 | | |
| | **Carried to Collection** | | | R | |

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|---|---|---|---|---|---|
| 3 | Extra over gypsum plasterboard ceiling for hinged pressed metal trap door size 600 x 600mm including all necessary ironmongery | No | 39 | | |
| | **6mm "Everite Nutec" fibre-cement ceiling boards fixed to 38 x 38mm brandering with H-Profile Jointing Strip nailed with 25 x 3.5mm dry wood screws at 300mm centres and finished with a coat of "Rhinolite" or similar approved gypsum skim plaster trowelled to a smooth polished surface, all in strict accordance with the manufacturer's specifications** | | | | |
| 4 | Ceilings including 38 x 38mm sawn softwood brandering at 450mm centres | m2 | 1 316 | | |
| 5 | Extra over Nutec fibre cement ceiling boards for hinged pressed metal trap door size 600 x 600mm including all necessary ironmongery | No | 7 | | |
| | **Gypsum plasterboard cornices** | | | | |
| 6 | 19 x 76mm Gypsum cornice, laid flat to brandering | m | 1 835 | | |
| | **SUSPENDED CEILINGS** | | | | |
| | **1200mm x 600mm x 12mm Vinyl laminated gypsum board suspended ceiling tile into the ceiling pre-painted grid. Main Tees at 1200mm centres. Suspend main tees @ 1200mm c/c using Pre-stretched Galvanised Hanger wire 2.5mm thick or hanger strap 19mm at 1200mm centres. Cross Tees T(1200 long) at 600mm centres. 2 x Hold down clips per Cross Tee in areas susceptible to draught. Installation should be strictly in accordance with Manufacturer's Instructions.** | | | | |
| 7 | Ceilings suspended not exceeding 1m below timber/steel purlins | m2 | 322 | | |
| | **32mm thick Suspended Acoustic ceiling, 600 x 1200mm white boards and moisture resistance boards layed on pre-painted exposed Tees suspended system including galvanised main tees and cross tees. Installation should be strictly in accordance with Manufacturer's Instructions.** | | | | |
| 8 | Ceilings suspended not exceeding 1m below timber/steel purlins | m2 | 732 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 11

| | | | | | |
|---|---|---|---|---|---|
| | **Aluminium shadowline cornice** | | | | |
| 9 | 25mm Epoxy coated standard "DONN" white powder coated aluminium shadowline cornices | m | 2 526 | | |
| | **EXPANDED METAL CEILINGS** | | | | |
| | **Mild Steel Mesh** | | | | |
| 10 | Supply and install security grid above ceiling (VEM 320J) fixed to the bottom of trusses and ceiling boards. | m2 | 1 423 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 11

Section 2: Main Building

Bill No. 11

Ceilings, Partitions and Access Flooring

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 248 | | |
| | 249 | | |
| | 250 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 11

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 12: FLOOR COVERINGS, WALL LININGS, ETC** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **FIXING** | | | | |
| | Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc | | | | |
| | **FLOOR COVERINGS** | | | | |
| | **300 x 300 x 2,5mm Vinyl tiles on self levelled smooth screed (measured elsewhere) glued with adhesive recommended by Manufacturer, joints shall be welded as recommended by Manufacturer with no more than 2mm gaps (screed elsewhere)** | | | | |
| 1 | On floors | m2 | 1 242 | | |
| | **2mm Bi-directional Anti-Static vinyl floor finish on self levelled smooth screed (measured elsewhere) glued with adhesive recommended by Manufacturer, joints shall be welded as recommended by Manufacturer with no more than 2mm gaps** | | | | |
| 2 | On floors and in door openings | m2 | 35 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **LAMINATED TIMBER** | | | | |
| | **Hardwood Kiaat timber tounge and groove flooring in 16 x 106mm planks laid on and including an underlay foam cushioning layer** | | | | |
| 3 | On floors | m2 | 200 | | |
| 4 | Margins or borders not exceeding 500mm wide | m | 55 | | |
| | **POLISH, SEALERS, ETC** | | | | |
| | **Sweep, clean with detergent complying with SABS 825, rinse and apply three coats of water emulsion polish complying with SABS 1042, including buffing after application of each coat of polish** | | | | |
| 5 | On vinyl flooring | m2 | 184 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 12

Section 2: Main Building

Bill No. 12

Floor Coverings, Plastic linings, etc

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 252 | | |
| | 253 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 12

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 13: IRONMONGERY

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

#### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

#### FINISHES TO IRONMONGERY

Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list :

| | |
|---|---|
| CH | Chromium plated |
| SC | Satin chromium plated |
| PT | Epoxy coated |
| PB | Polished brass |
| PL | Polished and lacquered |
| BS | Satin bronze and lacquered |
| AS | Anodised silver |
| AB | Anodised bronze |
| AG | Anodised gold |
| ABL | Anodised black |
| GE | Grey enamelled |
| SE | Silver enamelled |
| SD | Sanded |

**Carried to Collection** R

Section No. 2
Bill No. 13

## THE FOLLOWING IRONMONGERY FIXED TO DOORS, ETC.

## IRONMONGERY TO TIMBER DOORS

Note:

Tenderers are referred to all the ironmongery schedules issued with these Bills of Quantities when pricing the following items.

---

**Hinges, Bolts, Etc.**

| | | | | | |
|---|---|---|---|---|---|
| 1 | 150mm Satin chrome flush bolt and keep | No | 24 | | |

**Locks, En-Suite Locks, Etc.**

| | | | | | |
|---|---|---|---|---|---|
| 2 | Handles & locks: 3 lever lockset LA952/3L with chrome 3 lever lockset LA952/3L with chrome plated finish chrome plated rebate conversion set 130-75satin chrome lever flush bolt 120-150. | No | 90 | | |

**Handles, Etc.**

| | | | | | |
|---|---|---|---|---|---|
| 3 | Push handle:stainless steel handle with a 18gauge plated mounted on stainless steel handle with a 18gauge plated mounted on the door. | No | 88 | | |
| 4 | CALINI product code IWFSBTB30 or other approved 30mm stainless steel pull handle back to back fixing set with rosette for IW1330 - 32mm diameter. | Sets | 78 | | |
| 5 | CALINI product code IWFSBTB25 or other approved 25mm stainless steel pull handle back to back fixing set with rosette for IW1315/IW1320 - 25mm diamteer. | Sets | 15 | | |

**Stops, Holders, Hooks, Etc.**

| | | | | | |
|---|---|---|---|---|---|
| 6 | 38mm Rubber door stop plugged and screwed to wall or floor | No | 98 | | |

**Push Plates And Kicking Plates**

| | | | | | |
|---|---|---|---|---|---|
| 7 | Kick plate:300mm width, 18gauge stainless steel kick plate | No | 55 | | |

**Carried to Collection** R

Section No. 2
Bill No. 13

| | | | | | |
|---|---|---|---|---|---|
| 8 | Push plate:300mm width, 18gauge stainless steel kick plate | No | 55 | | |
| | **Door Closers** | | | | |
| 9 | Overhead surface mounted type door closer with aluminium casing | No | 10 | | |
| | **Signage** | | | | |
| 10 | BLOCK - 450 x 60 x 3mm Thick plate with letters " CLASSROOM 1 or 2 " | No | 35 | | |
| 11 | BLOCK - 300 x 60 x 3mm Thick plate with letters plate with letters "HOD OFFICE " | No | 1 | | |
| 12 | BLOCK - 300 x 60 x 3mm Thick plate with letters plate with letters "MEDIA CENTRE " | No | 10 | | |
| 13 | BLOCK - 300 x 60 x 3mm Thick plate with letters plate with letters "STORE ROOM / WORK ROOM / SERVER ROOM " | No | 42 | | |
| 14 | Product code SS5066-06SSSE10 or other approved 150 x 150mm stainless steel male sign. | No | 10 | | |
| | **IRONMONGERY TO ALUMINIUM DOORS** | | | | |
| | Note: | | | | |
| | Tenderers are referred to all the ironmongery schedules issued with these Bills of Quantities when pricing the following items. | | | | |
| | --- | | | | |
| | **Locks, En-Suite Locks, Etc.** | | | | |
| 15 | IRONWARE product code IW2024SS or other approved 35mm cylinder stainless steel dead lock with adjustable roller catch. | No | 33 | | |
| 16 | IRONWARE product code IW2051NP or other approved 66mm double cylinder. | No | 33 | | |
| 17 | CALINI product code IW1903CYLSS or other approved stainless steel narrow style cylinder escutcheon. | Pairs | 33 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 13

| | | | | | |
|---|---|---|---|---|---|
| | **Handles, Etc.** | | | | |
| 18 | CALINI product code IW1331/32/600 or other approved 450 < 600mm RND O/S stainless steel pull handle. | No | 90 | | |
| 19 | CALINI product code IWFSBTB30 or other approved 30mm stainless steel pull handle back to back fixing set with rosette for IW1330 - 32mm diameter. | Sets | 24 | | |
| 20 | CALINI product code IWFSBTB30*30 or other approved 30 x 30mm stainless steel pull handle back to back fixing set with rosette for IW 1331/IW1303/IW1308. | Sets | 42 | | |
| | **Stops, Holders, Hooks, Etc.** | | | | |
| 21 | Product code IW5010SC or other approved SC floor mounted non trip adjustable door holder. | No | 30 | | |
| | **Door Closers** | | | | |
| 22 | Product code IW9110 or other approved EN3 S/channel cam action silver door closer. | No | 18 | | |
| | **SANITARY IRONMONGERY** | | | | |
| | **Rails, Etc.** | | | | |
| 23 | Franke or other approved 32mm diameter stainless steel Grade 304 grab rail for cistern type CNTX BR with satin finish to prevent slipping and installed in accordance with the manufacturer's instructions | No | 4 | | |
| 24 | 35mm Diameter stainless steel paraplegic grab rail size 300 x 96 x 300mm, fitted according to manufacturers specifications. | No | 4 | | |
| | **Toilet Roll Holders, Soap Dispensers, Bins, Etc.** | | | | |
| 25 | Volkem product code SA426135 or other approved 35 litre stainless steel reflex disposer bin. | No | 9 | | |
| 26 | Bidvest Steiner product code 7600001 or other approved 500ml stainless steel wall mounted press hand soap dispenser. | No | 9 | | |
| 27 | Volkem product code PH18 or other approved stainless steel folded towel dispenser. | No | 9 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 13

| | | | | | |
|---|---|---|---|---|---|
| 28 | Bidvest Steiner product code TR3 or other approved silver three roll toilet roll holder. | No | 22 | | |
| | **SIGNAGE** | | | | |
| | **THE FOLLOWING BUDGETARY ALLOWANCES ARE FOR WORK TO BE CARRIED OUT BY THE MAIN CONTRACTOR AND REMEASUED USING BILL RATES** | | | | |
| 29 | Provide the sum of R150.000,00 (One Hundred and Fifty Thousand Rand) for Signage supplied and installed complete. | | Item | | 150 000.00 |
| | **NOTICE BOARDS, PINNING BOARDS, MAGNETIC BOARDS, SMART SCREENS, ETC.** | | | | |
| | **Chalkboards** | | | | |
| 30 | "System 1000" enamelled green folding type writing board, with wall mounted centre board 4800 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high, plugged | No | 16 | | |
| | **Vitrex System 2000 Or Other Approved Pin Boards To Consist Of Carpet Surface In Approved Colour And Laminated To A Soft Board Core With And Including A Natural Anodised Aluminium Channel Surround Mitred At Corners And Fixed In Position In Accordance With The Manufacturer's Instructions** | | | | |
| 31 | Pin board size 1200mm wide x 1500mm high. | No | 17 | | |
| | **White Magnetic Board Wall Mounted Complete With Integrated Pen Tray And Installed In Accordance With Manufacturers Instructions** | | | | |
| 32 | Magnetic board size 2500mm wide x 1200mm high. | No | 17 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 13

| | | | | | |
|---|---|---|---|---|---|
| | **SCHOOL HALL STAGE CURTAINS** | | | | |
| | **Approved durable flame retardant curtains on rail manually operated comprising of back partitioning curtain screen for projection, sides curtains sets for blockouts (3no. on each side) and front with main valance and traveller curtains complete and including all the tracking system. Curtains to be hunged U/S of ceilings, Curtain fabric to conform to BS 5867 Part_Type B** | | | | |
| 33 | Stage Curtains | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 13

Section 2: Main Building

Bill No. 13

Ironmongery

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 255 | | |
| | 256 | | |
| | 257 | | |
| | 258 | | |
| | 259 | | |
| | 260 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 13

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|

## SECTION 2

## BILL NO. 14: STRUCTURAL STEELWORK

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

## SUPPLEMENTARY PREAMBLES

**Descriptions**

**Descriptions**

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

All bolts to be M16 electro-galvanised.

All steelwork to be hot dip galvanised to ISO 1461-1999

**General**

All dimensions are to be checked with engineer’s drawings and any discrepancies brought to the Principal's project manager's attention before any construction work commences

**Carried to Collection** R

Section No. 2
Bill No. 14

**Structural Steelwork**

All structural steelwork shall be fabricated and erected in accordance with the latest edition of SABS 1200H.

All dimensions shall be checked on site before shop drawings commence. Any discrepancies shall be brought to the attention of the Principal's project manager

A complete set of shop drawings shall be submitted to the engineer for approval before fabrication commences. The contractor shall allow one week for checking and approval by the Principal's project manager, and shall also allow for any possible changes to drawings

The contractor shall design all welds and, where necessary, gussets of sufficient strength, shall be approved to obtain the required weld strength

Setting out points (S.O.P's) at member centroids shall conform to those shown on general arrangement drawings. No eccentricities, except those shown on the engineer's drawings, shall be allowed

All structural steelwork shall be grade 300W except cold formed hollow sections which shall be commercial grade

A certificate from the steel manufacturer in which the grade of the structural steel is verified shall be handed to the Principal's project manager for approval

All structural bolts shall be grade 8.8 unless otherwise noted

The proposed method and sequence of erection of the structure shall be submitted to the Principal's Project Manager for written approval. Such submission is to take place at time of shop drawing submittal. The contractor shall indicate the proposed method of propping to ensure stability of the structure during erection. Such stability during erection remains the contractor's responsibility. Where temporary bracing and propping is necessary, the contractor shall be responsible for the design, erection, maintenance and removal (where necessary) of such supports. Proposal of such bracing or propping shall be submitted to the Principal's project manager at an early stage for written approval

**Carried to Collection** R

Section No. 2
Bill No. 14

| | | | | | |
|---|---|---|---|---|---|
| | Structural steel to be engineered to be smooth i.e. no welding spatter, sharp edges, slag etc. should be present prior to the application of the final painting coat<br><br>**Protective treatment of structural steelwork**<br><br>Structural steelwork described as "galvanised" hereunder shall be hot dip galvanised in accordance with SABS 763 and SABS 0214 after fabrication. Where on site welding is unavoidable, the resulting welded joints shall be thoroughly cleaned and cold galvanised to the approval of the Principal's project manager<br><br>Finishing coats are measured under "Paintwork" | | | | |
| | **DETAILING OF STEELWORK, SUPPLY AND FABRICATION OF STEELWORK INCLUDING TRANSPORTING TO SITE, OFFLOADING, SITE STORAGE AND ERECTION OF STEELWORK**<br><br>**The Following In Columns Hot Dip Galvanised After Manufacture Including Flat Section Base, Cap And Gusset Plates, Cleats, Connections, Bolts, Etc, Including Preparing Detail Drawings For Fabrication And Submit For Approval** | | | | |
| 1 | 100 x 100 x 4,5mm Hollow square section columns. | t | 5.97 | | |
| | **The Following In Beams Hot Dip Galvanised After Manufacture Including Flat Section Base, Cap And Gusset Plates, Cleats, Connections, Bolts, Etc, Including Preparing Detail Drawings For Fabrication And Submit For Approval** | | | | |
| 2 | 100 x 200 x 4,5mm Hollow rectangular section columns. | t | 8.36 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 14

| | | | | | |
|---|---|---|---|---|---|
| | **STEEL TRUSSES ETC** | | | | |
| | **Welded portal frames with flat section bearer, gusset and connection plates and L-section cleats bolted to concrete** | | | | |
| 3 | Fully designed steel roof structure to Block L - Hall Building complete with trusses, jack rafters, permanent bracing and purlins/battens as necessary all in accordance with the Architect's roof plan including provision of an Engineer's Approval Certificate on completion (area measured on plan over the roof line as per the Architect's drawings) | m2 | 972 | | |
| | **GALVANISED MILD STEEL ANGLE IRON, ETC** | | | | |
| | **Angle support bolted to steel** | | | | |
| 4 | 50 x 50 x 5mm Angle iron bolted to steel for purlin support | t | 1 | | |
| | **PAINTING OF STEELWORK IN WORKSHOP** | | | | |
| | **Prepare, Degrease And Clean Surfaces With Galvanised Iron Cleaner, One Coat Steel Primer And Two Coats Enamel Paint** | | | | |
| 5 | Surfaces of structural steel | t | 14.33 | | |
| | **PAINTING OF STEELWORK AFTER ERECTION** | | | | |
| | **Touch Up Where Damaged And Apply One Coat Enamel Paint** | | | | |
| 6 | Surfaces of structural steel | t | 14.33 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 14

Section 2: Main Building

Bill No. 14

Structural Steelwork (Provisional)

**COLLECTION**

| | Page No | Amount |
|---|---|---|
| Total Brought Forward from Page No. | 262 | |
| | 263 | |
| | 264 | |
| | 265 | |
| **Carried Forward to Summary of Section No. 2** | | R |

Section No. 2
Bill No. 14

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 14: METALWORK

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

NOTE:

Windows shall be provided with chromium plated brass fittings

All horizontal pivot windows to be fitted with cup keeps on pivot for maximum opening of 25 degrees

The given sizes are overall, approximate and in the order of width and height. The detailed drawings and building must be carefully checked for exact sizes before placing orders. Any errors in this respect will be at the Contractor's expense and no claims for any extras in this regard will be entertained

Where described windows shall be provided with burglar bars to opening and fixed sections, consisting of 20 x 5mm mild steel flat sections to standard NBP2 pattern welded at intersections and window frames

Bars in front of fixed sections to be bent 75mm away from the glass surface.

Details and specification of all windows shall be as per window schedule appended to the back of these bills of quantities

The given sizes are overall, approximate and in the order of width and height. The detailed drawings and building must be carefully checked for exact sizes before placing orders. Any errors in this respect will be at the Contractor's expense and no claims for any extras in this regard will be entertained

**Carried to Collection** R

Section No. 2
Bill No. 15

**TRADE NAMES**

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

**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 bolts" shall be deemed to include the bolts unless otherwise described

## STEEL HANDRAILS, BALUSTRADES, ETC

**Welded handrails to steel support**

| | | | | | |
|---|---|---|---|---|---|
| 1 | 50mm diameter Mild steel hand rail welded to steel support and finished with 1 universal undercoat and two coats velvaglo. | m | 52 | | |

**Welded balustrading to rail and cleats**

| | | | | | |
|---|---|---|---|---|---|
| 2 | 10mm Diameter Balustrade rails in short height of 1100mm, max gap between rails = 110mm, gap between rails to be equal | m | 52 | | |
| 3 | 40mm wide x 10mm thick Top and bottom mild steel flat bar welded to balustrade posts | m | 52 | | |

**Bolted handrails to walls**

| | | | | | |
|---|---|---|---|---|---|
| 4 | 51mm diameter stainless steel hand rail attached to vertical steel support by means of 12mm machined pin connector | m | 11 | | |

**Cleats, plates and brackets, etc**

| | | | | | |
|---|---|---|---|---|---|
| 5 | 100 x 100 x 10mm Mild steel base plate with two slotted bolts holes bolted to brickwork | No | 9 | | |

**Carried to Collection** R

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| 6 | M16 Bolts with nuts and washers | kg | 13 | | |
| 7 | 50mm Diameter mild steel posts welded to base plate | No | 9 | | |
| | **SUNDRY STEELWORK** | | | | |
| | **Bearers to brick linings, lintels, etc** | | | | |
| 8 | 100 x 100 x 8mm GMS Angle bearers supporting facebrick lining holed at 500mm centres for bolts | t | 1 | | |
| | **Cat Ladders, complete & installed** | | | | |
| 9 | 50mm tubular MS steel cat ladder complete 600 x 0.3 x 5648mm overall, 3548mm fixed and 2100mm lockable retractable ladder, including 1955mm high 50 x 6mm flat section fall protection cage and all other necessary steelwork, base plates, fixings etc. Fixed to wall with 50mm fixing leg welded to catladder and 50 x 200 x 6mm ms plate bolted to wall at 2500mm centres as per drawing number 923-S2-113_BL_wd.025 | No | 1 | | |
| | **Steel Square Post** | | | | |
| 10 | 127 x 127 x 12.7mm MS vertical tubular square posts fixed to MS steel base plate supporting the timber beam on top. | No | 33 | | |
| 11 | Steel base plate, etc | No | 33 | | |
| | **WELDED SCREENS, GATES, ETC** | | | | |
| | **The following in framed and welded mild steel security grille gates including fixing in position complete** | | | | |
| 12 | Type G01 - 900 x 2125mm high single grille gate complete with 50 x 50 x 3mm angle iron single door frame with 50 x 50 lugs welded, each leaf formed of 40 x 60 x 2mm mild steel rectangular tube gate surrounded section framing all round mitred and welded at angles with 20mm mild steel rods @ 110mm centres and 40 x 6mm horizontal supports with 20mm holes for vertical rods (hinges, locking devices, etc. elsewhere) | No | 14 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| 13 | Type G01 (J) - 1660 x 2125mm high single grille gate complete with 50 x 50 x 3mm angle iron single door frame with 50 x 50 lugs welded, each leaf formed of 40 x 60 x 2mm mild steel rectangular tube gate surrounded section framing all round mitred and welded at angles with 20mm mild steel rods @ 110mm centres and 40 x 6mm horizontal supports with 20mm holes for vertical rods (hinges, locking devices, etc. elsewhere) | No | 8 | | |
| | **Anti-climb and anti-cut mesh screen** | | | | |
| 14 | Heavy welded compact wire mesh, size 3805 x 1665mm high with rectangular apertures and horizontal reinforcement on square post frame. Aperture size 76,22mm x 12,7mm. Anti-climb and anti-cut features finished in Zincal coat as per detail 923-S2-102-BA-wd.010 | No | 1 | | |
| | **The following in framed and welded mild steel security grille to reception counter and fixing in position complete** | | | | |
| 15 | Fixed security screen formed of 30 x 30 x 2,5mm hollow section framing all round mitred and welded at angles filled in with 10mm diameter rods in soldier stretcher brick pattern with vertical bars at 150mm centres and horizontal bars at 300mm centres; the frame drilled for and bolted to brickwork on top and two sides with and including ten M8 x 70mm expansion bolts complete with 12mm long spacers between frame and wall; size 2053 x 1190mm high | No | 2 | | |
| | **ClearVu fencing or similar approved fixed from top of brickwork to underside of roof** | | | | |
| 16 | High density anti-climbing and anti-cut pressed mesh panel fencing 750mm high, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with Marine Fusion Bond coating colour Medium Grey with aperture size 76,2mm x 12,7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85 - 45mm Taper locking post 2,4m high including Locking Recess Mechanism at 3,382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts fixed from top of brickwork to underside of roof | m | 24 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| | **THE FOLLOWING IRONMONGERY FIXED TO GATES, ETC.** | | | | |
| 17 | Door holder formed of heavy duty spring loaded door holder and catch with holder welded and bolted to steel gate frame and catch riveted to and including 75 x 75 x 3mm flat section baseplate, the baseplate welded on to 25 x 25 x 3mm angle section spacer, 50mm long with spacer welded on to 100 x 100 x 3mm flat section backplate, the backplate four times holed for and bolted to wall with and including M6 x 70mm expansion bolts, as detail DT34 attached at the back of these Bills of Quantities | No | 5 | | |
| | **SUNDRY ALUMINIUM WORK** | | | | |
| | **Natural anodised aluminium sundries** | | | | |
| 18 | 25 x 25 x 3mm Angle section framing countersunk screwed to keyboard including mitres, etc | m | 5 | | |
| | **PRESSED STEEL DOOR FRAMES** | | | | |
| | **1,6mm Double rebated pressed steel door frame suitable for 110mm brick walls with 3PR , 100mm steel butt hinges per leaf** | | | | |
| 19 | Type D11 - Frame for single door size 813 x 2032mm high | No | 13 | | |
| 20 | Type D BIC - Frame for double door size 1800 x 2032mm high | No | 2 | | |
| 21 | Type D9 - Frame for single door size 762 x 1882mm high | No | 9 | | |
| 22 | Type D10 DB - Frame for double door size 1800 x 2032mm high | No | 1 | | |
| 23 | Type D12 - Frame for single door size 813 x 2032mm high | No | 4 | | |
| 24 | Type D13 - Frame for single door size 813 x 2032mm high | No | 10 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **1,6mm Double rebated pressed steel door frame suitable for 230mm brick walls with 3PR , 100mm steel butt hinges per leaf** | | | | |
| 25 | Type D11 - Frame for single door size 813 x 2032mm high | No | 7 | | |
| | **1,6mm Double rebated pressed steel door frame suitable for 270mm brick walls with 3PR , 100mm steel butt hinges per leaf** | | | | |
| 26 | Type D11 - Frame for single door size 813 x 2032mm high | No | 15 | | |
| 27 | Type D02 (Library) - Frame for double door size 1800 x 2032mm high | No | 8 | | |
| 28 | Type D4 - Frame for single door size 914 x 2032mm high | No | 6 | | |
| | **PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES** | | | | |
| 29 | Type M - Purpose made mild steel fully louvred standard transformer door size 813 x 2032mm high, complete with all fittings, etc., | No | 1 | | |
| 30 | Approved mild steel fully louvred standard transformer double door size 1829 x 2134mm high, complete with all fittings, etc., | No | 1 | | |
| | **STEEL WINDOWS, DOORS, ETC** | | | | |
| | **Standard SS School type steel windows with 20 x 4.5mm flat burglar bars to fixed and opening sections** | | | | |
| 31 | Window type W01 - size 890 x 1250mm high | No | 101 | | |
| 32 | Window type W01 LIB, size 890 x 455mm high | No | 13 | | |
| 33 | Window type W1, size 533 x 654mm high | No | 43 | | |
| 34 | Window type WX, size 889 x 845mm high | No | 3 | | |
| 35 | Window type W2, size 1022 x 654mm high | No | 3 | | |
| 36 | Window type W22 - Admin, size 600 x 1800mm high | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| 37 | Window type W5, size 1143 x 854mm high | No | 20 | | |
| 38 | Window type W6, size 1143 x 854mm high | No | 18 | | |
| 39 | Window type W3 Admin, size 2667 x 1232mm high | No | 6 | | |
| 40 | Window type W05 Hall, size 2500 x 520mm high | No | 15 | | |
| 41 | Window type W04 Hall, size 7200 x 1000mm high | No | 1 | | |
| | **STEEL LOUVRE PANELS** | | | | |
| 42 | W 4 - Purpose made mild steel louvre size 648 x 648mm high, complete with all fittings, etc., | No | 18 | | |
| 43 | Type 6 - Purpose made mild steel louvre size 1600 x 890mm high, complete with all fittings, etc., | No | 24 | | |
| | **NATURAL ANODISED ALUMINIUM LOUVRE UNITS** | | | | |
| 44 | Approved adjustable natural anodised aluminium louvre unit to fit opening in timber framing size 243 x 1190mm high, complete with all fittings, etc., and fitted with and including seven 6mm normal strength laminated safety glass louvres each 150mm wide with polished edges including screw fixing of louvre unit to and including timber surround | No | 16 | | |
| | **ALUMINIUM WINDOWS, DOORS, ETC** | | | | |
| | **Powder coated aluminium windows including intruderprufe HPR laminated safety glass complete with subframes, ironmongery, sealing, etc and fixing to brickwork or concrete** | | | | |
| 45 | 2000 x 1100mm high Extruded aluminium viewing panel frame in configuration as shown, and should be complete with intruderprufe HPR laminated safety glass to comply with ISO9001-2000, SABS-0137 and AAAMSA. Door to be provided with all fittings, Handles brushes, clip-on glazing bead with Neoprene seals, to be plugged and screwed to brickwork or concrete. | No | 3 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| | **Powder coated aluminium doors including intruderprufe HPR laminated safety glass complete with subframes, ironmongery, sealing, etc and fixing to brickwork or concrete** | | | | |
| 46 | 1700 x 2125mm high Extruded aluminium double door frame in configuration as shown, friction hinges to be used on opening sections and should be complete with intruderprufe HPR laminated safety glass to comply with ISO9001-2000, SABS-0137 and AAAMSA. Door to be provided with all fittings, Handles brushes, clip-on glazing bead with Neoprene seals, to be plugged and screwed to brickwork or concrete. | No | 2 | | |
| 47 | 3200 x 2125mm high Extruded aluminium double door frame in configuration as shown, friction hinges to be used on opening sections and should be complete with intruderprufe HPR laminated safety glass to comply with ISO9001-2000, SABS-0137 and AAAMSA. Door to be provided with all fittings, Handles brushes, clip-on glazing bead with Neoprene seals, to be plugged and screwed to brickwork or concrete. | No | 4 | | |
| | **CURTAIN WALLS, SHOPFRONTS, ETC** | | | | |
| | **Powder coated aluminium windows including intruderprufe HPR laminated safety glass complete with subframes, ironmongery, sealing, etc and fixing to brickwork or concrete (Dwg 141226 - S1- BLA - 700 - Rev A)** | | | | |
| 48 | Design and install curtain wall complete with frame and accessories (Hall W - 8) | m2 | 54 | | |
| | **HOT-DIPPED GALVANISED STEEL ROLLER SHUTTER DOORS FIXED COMPLETE TO BRICKWORK** | | | | |
| 49 | Type D32 - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 1776 x 2125mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| 50 | Type D31 - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 3251 x 1225mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 4 | | |
| 51 | Type D19(E) - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 3251 x 1225mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 2 | | |
| 52 | Type D16 - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 1500 x 2125mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 8 | | |
| 53 | Type D27 / 29 / 35 - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 2000 x 1225mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 4 | | |
| 54 | Type D27 - Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 3000 x 1225mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 3 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

| | | | | | |
|---|---|---|---|---|---|
| 55 | Type 38- Hot-dipped galvanized steel solid slatted push-up type roller shutter door black in colour suitable for opening size 3610 x 2125mm high with 46mm interlocking 11,5 kg/m2 slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys | No | 1 | | |
| | **STRONGROOM, RECORD ROOM DOORS, VENTILATORS, ETC** | | | | |
| | NOTE<br><br>The rates for strongroom doors, wall safes and ventilators shall include for fixing in position complete | | | | |
| 56 | Standard safe door doorstop fixed to wall | No | 2 | | |
| 57 | Double ended steel telescopic ventilator for wall opening size 185 x 185mm suitable for and built into 150mm thick wall, complete with face plates on both sides, drop shutter mechanism operating from fuseable metal plug, wire gauze and baffle plates | No | 3 | | |
| 58 | Phoenix door for wall opening size 850 x 1980mm high overall, with a mass of 125kg, steel plate, one seven key lock, etc. and fixed in position in opening in one brick wall | No | 1 | | |
| 59 | 190mm thick DS 50 heavy duty anti-explosive strongroom door and frame for wall opening size 950 x 1895mm high overall, with 50mm outer plate, two seven lever locks, etc. and fixed in position in opening in concrete wall | No | 3 | | |
| 60 | Category 2 heavy duty anti-explosive strongroom door and frame for wall opening size 944 x 1980mm high overall, with a mass of 380kg, 20mm steel plate, two seven lever locks and one relocker, etc. and fixed in position in opening in one brick wall | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 15

## SECURITY PAYROLL WINDOWS

### Glazed panels, fanlights, etc - Payroll Windows

| | | | | | |
|---|---|---|---|---|---|
| 61 | Security payroll windows 1510 x 1100mm high Level G3 bullet resistant natural anodised aluminium pay window with transfer tray (Type 2) with 200mm deep stainless steel bank type transfer tray (Code:G3-PW-T), overall size 600 x 950mm high glazed in 53mm thick clear glass with 32mm post formed Oak counter top and stainless steel exterior counter finish. | No | 1 | | |
| 62 | Security payroll windows 1860 x 1500mm high Level G3 bullet resistant natural anodised aluminium pay window with transfer tray (Type 2) with 200mm deep stainless steel bank type transfer tray (Code:G3-PW-T), overall size 600 x 950mm high glazed in 53mm thick clear glass with 32mm post formed Oak counter top and stainless steel exterior counter finish. | No | 2 | | |
| 63 | Security payroll windows 2000 x 1125mm high Level G3 bullet resistant natural anodised aluminium pay window with a talk- thru holes, glazed in 53mm thick clear glass with 32mm laminated saligna counter top on both side finished with 2 coats eggshell polyurethane varnish as per detail 923-S3-102-BA-wd. 010 - (Accounting Office). | No | 2 | | |

## WASHING LINE

| | | | | | |
|---|---|---|---|---|---|
| 64 | ø 3mm x 3801mm long plastic coated wire, or similar approved washing line fixed to wire hook welded to centre of 100 x 100 x 3mm thick GSM plate x 2, bolted to the wall. | No | 1 | | |

## SUNDRIES

| | | | | | |
|---|---|---|---|---|---|
| 65 | Admin - ø 100mm hinge based hot dip galvanised steel white powder coated flag poles 15000mm High, complete with all fittings including ropes, pulleys, cleats, galvanised foundation cages and concrete base, etc as per Architect detail - (**923-S2-101-wd.107**) | No | 2 | | |

**Carried to Collection** R

Section No. 2
Bill No. 15

Section 2: Main Building

Bill No. 15

Metalwork

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 267 | | |
| | 268 | | |
| | 269 | | |
| | 270 | | |
| | 271 | | |
| | 272 | | |
| | 273 | | |
| | 274 | | |
| | 275 | | |
| | 276 | | |
| | 277 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 15

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 15: PLASTERING** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **PLASTER ON CONCRETE** | | | | |
| | Plaster described as "on brickwork" shall be deemed to include for small portions of plaster on concrete flush with brickwork and prices should include for all the necessary preparatory work | | | | |
| | **SCREEDS** | | | | |
| | **3:1 Screeds steel trowelled on concrete** | | | | |
| 1 | 25mm Thick on floors and landings to receive ceramic tiles (elsewhere) | m2 | 2 795 | | |
| 2 | 25mm Thick on floors and landings to receive self levelled screed (elsewhere) | m2 | 1 277 | | |
| | **Self levelled smooth screeds steel on concrete** | | | | |
| 3 | 5mm Thick on floors and landings to receive vinyl floor sheeting (elsewhere) | m2 | 1 277 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 16

| | | | | | |
|---|---|---|---|---|---|
| | **GRANOLITHIC** | | | | |
| | **Untinted granolithic on concrete** | | | | |
| 4 | 30mm thick on floors to falls | m2 | 183 | | |
| 5 | 20mm thick grano skirting | m | 75 | | |
| | **INTERNAL PLASTER** | | | | |
| | **Cement plaster on brickwork with gypsum rhinolite coat** | | | | |
| 6 | On walls | m2 | 2 384 | | |
| 7 | On narrow widths | m2 | 121 | | |
| | **Cement plaster on concrete with gypsum rhinolite coat** | | | | |
| 8 | On walls | m2 | 51 | | |
| | **ENTRANCE MATTING** | | | | |
| | **Walk off Matt DM Aluminium with Woven brush Insectrs (9006WB)/Alubrush (9004) with matco mat well. Colour: Charcoal/Grey** | | | | |
| 9 | Office Entrance - 2000 x 3494mm | No | 2 | | |
| | **CORNER PROTECTORS, DIVIDING STRIPS, ETC.** | | | | |
| 10 | 2 x 30mm Flat section aluminium dividing strip between vinyl and tiled floor finishes | m | 23 | | |
| 11 | 2 x 30mm Flat section galvanised mild steel water bar embedded in floor finish | m | 49 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 16

Section 2: Main Building

Bill No. 16

Plastering

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 279 | | |
| | 280 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 16

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 16: TILING** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **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 4:1 cement plaster backing and descriptions of tiling on concrete floors, etc shall be deemed to include 3:1 cement mortar bedding | | | | |
| | **WALL TILING** | | | | |
| | **150 x 150 x 8mm gloss ceramic wall tiles fixed with an approved tile adhesive and water resistant grouting to plaster (elsewhere) and with jointing compound** | | | | |
| 1 | On walls | m2 | 473 | | |
| 2 | On walls in isolated panels, splash backs,etc | m2 | 48 | | |
| 3 | On narrow widths | m2 | 118 | | |
| 4 | Fair exposed cutting and fitting around pipe not exceeding 50mm internal diameter (Provisional) | No | 15 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| 5 | Fair exposed cutting and fitting around pipe exceeding 50 and not exceeding 100mm internal diameter (Provisional) | No | 28 | | |
| | **FLOOR TILING** | | | | |
| | **(PC Sum R 250.00/m2) 300 x 300mm Non-slip full body ceramic floor tiles fixed with an approved tile adhesive on cement screed (elsewhere) with and including grouted jointing** | | | | |
| 6 | On floors and landings | m2 | 1 377 | | |
| | **Ceramic cut tile skirting** | | | | |
| 7 | Skirting 100mm high | m | 534 | | |
| | **300 x 300mm Non-slip porcelain full bodied heavy duty floor tiles fixed with an approved tile adhesive on cement screed (elsewhere) with and including grouted jointing (Exact colour to colour schedule)** | | | | |
| 8 | On floors and door openings | m2 | 368 | | |
| 9 | Skirting 100mm high | m | 320 | | |
| | **Ceramic Anti-Slip Porcelain White Mosaic fixed with an approved tile adhesive on cement screed (elsewhere) with and including grouted jointing (Exact colour to colour schedule)** | | | | |
| 10 | On shower floors | m2 | 4 | | |
| | **EXTERNAL FLOOR TILING** | | | | |
| | **600 x 600 x 8mm terracotta quarry tiles fixed with tile adhesive on screed and pointed** | | | | |
| 11 | On floors and landings | m2 | 437 | | |
| 12 | Skirting 100mm high | m | 79 | | |
| | **SUNDRIES** | | | | |
| 13 | External PVC trimming to corners (Provisional) | m | 50 | | |
| 14 | Aluminium edge trim in door threshold (Provisional) | m | 6 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 17

| | | | | | |
|---|---|---|---|---|---|
| | **SOAP HOLDERS, ETC.** | | | | |
| 15 | 150 x 150mm White glazed single soap holder and building into tiled or plastered wall including forming recess in brickwork and making good | No | 55 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 17

Section 2: Main Building

Bill No. 17

Tiling

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 282 | | |
| | 283 | | |
| | 284 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 17

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 17: PLUMBING AND DRAINAGE (PROVISIONAL)

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

#### PREAMBLES

Tenderers are advised to study the Model Preambles for Trades (1995 edition) as recommended and published by the Association of South African Quantity Surveyors

#### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

#### DESCRIPTIONS AND PREAMBLES

Reference shall be made to other trades for preambles and full descriptions of items not fully described in this trade which shall apply equally to work in this trade, unless otherwise described

#### RATES

Rates for all piping, fittings, etc shall include for all fixing in position of fittings, cutting of chases in brickwork or concrete, excavation of trenches, backfilling, etc unless otherwise described

#### DIAMETER OF PIPES

Diameters stated for pipes, traps, valves, etc are internal diameters, except uPVC, polyethylene, stainless steel and copper pipes for which external diameters are stated

**Carried to Collection** R

Section No. 2
Bill No. 18

**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 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

**uPVC PIPES AND FITTINGS**

Sewer and drainage pipes and fittings shall be according to SABS 791, jointed and sealed with butyl rubber rings

Soil, waste and vent pipes and fittings shall be according to SABS 967 and solvent jointed

Cold water supply pressure pipes and fittings shall be according to SABS 966 and jointed by means of the "Lyng" type jointing system

Pipes shall be fixed and jointed according to SABS 0112

**COPPER PIPES**

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin wall 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 pipes, capillary soldier fittings and compression fittings shall be Cobra Watertech or other equal approved type. Capillary soldier fittings shall comply with ISO 2016

**HEAVY DUTY POLYETHYLENE PIPING (HDPE)**

HDPE pipes shall be according to SABS 533 and fittings shall be of plastic compression type jointing. Jointing and laying shall be in accordance with the manufacturer's instructions

**Carried to Collection** R

Section No. 2
Bill No. 18

**WIRE GRATINGS**

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

**GUTTERS, DOWNPIPES, ETC.**

**0,8mm Seamless Aluminium Rainwater Systems**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Ogee profile 125 x 75 x 0.8mm thick seamless aluminium gutter hanged on concealed internal clips on brackets at 600mm intervals. | m | 908 | | |
| 2 | Extra for stopped end | No | 72 | | |
| 3 | Extra for outlet with nozzle for and jointed to 75mm diameter galvanised sheet iron downpipe including galvanised wire balloon grating | No | 126 | | |
| 4 | Rectangular fluted profile 75 x 50 x 0.8mm rainwater downpipe fixed to brickwall or concrete with brackets. | m | 421 | | |
| 5 | Extra for shoe | No | 126 | | |
| 6 | Extra for eaves offset | No | 126 | | |

**SANITARY FITTINGS**

**Stainless steel**

Stainless steel for basins, washtorughs, bedpan, sinks, etc shall be type 304 (18/10)

| | | | | | |
|---|---|---|---|---|---|
| 7 | Single end bowl drop-on sink and drainer, size 1200 x 535mm with 32 x 7mm fascia complete with chromium plated waste, plug, and chain and fixing in top of timber cabinet (elsewhere) | No | 2 | | |
| 8 | 1500mm "Citimental" Ref: DT150C Double bowl stainless steel or similar approved sink in accordance with Architect's specification complete with mounting brackets, stopper and chain by Citimetal or similarly approved | No | 6 | | |

**Carried to Collection** R

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| 9 | 1910mm wide Grade 304 (18/10) Stainless Steel curved back trough automatic flushing urinal supplied with built-in tipping tank and a 12 mm adjustable drip cock (inlet) which controls the automatic flushing of the urinal at regular intervals. Outlet to be situated at the centre of the urinal with a 102 mm removable domical grating and to include a built in threaded plate. The urinal to be supplied with a tiling key to the sides and rear walls. The back to be fully sound deadened with vermin proof bitumastic material. | No | 1 | | |
| | **Approved** | | | | |
| 10 | Drop in white 595 x 455 x 205mm wash hand basin, 31mm chromuim plated outlet, with plug and chain, anchor & 32mm back nut complete | No | 26 | | |
| 11 | White C.I. porcelain wall hung enamelled wash hand basin, 31mm chromuim plated outlet, with plug and chain, anchor & 32mm back nut complete with and including two chromium plated pillar tap, one tap hole plug. | No | 2 | | |
| 12 | White C.I. porcelain wall hung enamelled disabled wash hand basin, 31mm chromuim plated outlet, with plug and chain, anchor & 32mm back nut complete with and including two chromium plated pillar tap, one tap hole plug and provide black soft rubber p-trap. | No | 6 | | |
| 13 | 480 x 345 x 220mm (internal dimension) White fireclay laboratory basin with centre outlet fixed with cleats (elsewhere) under worktop | No | 15 | | |
| 14 | 610 x 385mm White vitreous china wall urinal with top flush entry complete with and including concealed wall hangers, chromium plated waste outlet and grating, and 4,5 litre white vitreous china cistern complete with valveless syphonic fitting, ball valve, bracket, surface mounted chromium plated push button user control valve with plastic conduit pipe and chromium plated flush pipe with spreader | No | 7 | | |
| 15 | 460 x 360 x 390mm low level WC suite comprising white vitreous china pan with P trap, with back inlet complete matching flush pipe and heavy duty white single flap seat | No | 29 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| 16 | Wall hang paraplegic WC suite comprising white vitreous china pan with P trap, with back inlet complete matching flush pipe and heavy duty white single flap seat | No | 6 | | |
| | **Integrated Acrylic Counter Tops** | | | | |
| 17 | 600mm wide Integrated acrylic vanity top fixed to GMS angle iron brackets, etc | m | 27 | | |
| | **SUNDRY SANITARY FITTINGS** | | | | |
| 18 | Drinking fountain @ 1000mm high - 1000mm diameter precast pipe on 1400 x 1400 x 200mm thick 20MPa/19mm mass concrete footings including any necessary excavation, filling, reinforcement, top finished with 100mm thick 20MPa/19mm mass concrete slab graded to falls to 100mm dia upvc outlet (water outlet elsewhere), with wood float finish and fitted with and including 20mm diameter galvanised mild steel pipe 2,3m long including three bends, three tees, three reducers, four 22mm chromium plated Walcro 109 foundation demand tap for hold open application and one 20mm dia hose-bib-tap RB with lockshield and loose key and hose union complete with and including all plumbing work as per detail 923-S2-101-wd-106 | No | 6 | | |
| | **TRAPS, ETC INCLUDING JOINTS TO PIPES AND/OR FITTINGS UNLESS OTHERWISE DESCRIBED** | | | | |
| 19 | 32-40mm Butyl rubber deep seal P or S trap | No | 42 | | |
| 20 | 32-40mm Chromium plated bottle trap | No | 7 | | |
| 21 | 50mm Brass shower trap including waste with 75mm chromium plated flat grating cast into concrete and bedded in bitumen and jointed to steel pipe (elsewhere) | No | 4 | | |
| 22 | "Rofo R0200SV NW100" floor trap, square top cast in 230mm opening | No | 10 | | |
| 23 | "Rofo GTS 500" grease trap with single bowl wash up basin 500 x 500 x 400mm with one basket | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| | **TAPS, VALVES, ETC INCLUDING JOINTS TO COPPER PIPES AND/OR FITTINGS WITH CAPILLARY CONNECTIONS UNLESS OTHERWISE DESCRIBED** | | | | |
| 24 | 15mm Copper service pipe 350mm girth | No | 27 | | |
| 25 | 15mm Brass stopcock | No | 122 | | |
| 26 | 15mm Chromium plated wall flange and extension piece | No | 6 | | |
| 27 | 20mm Brass stopcock | No | 35 | | |
| 28 | 15mm Chromium plated ball joint angle shower connector with flange and brushed chrome vandal proof shower rose | No | 4 | | |
| 29 | 15mm Chromium plated full way ballcock shut-off control valve with screw type control | No | 2 | | |
| 30 | 15mm Chromium plated underwall pattern stopcock | No | 8 | | |
| 31 | 20mm diameter Bibtap RB with lockshield and loose key with 20mm diameter hose union. | No | 2 | | |
| 32 | 15mm Chromium plated hose bib tap without hose union | No | 5 | | |
| 33 | 15mm Chromium plated sink pillar tap with 305mm swanneck outlet with serrated nozzle | No | 23 | | |
| 34 | 35mm anti lime chrome kitchen sink mixer with flexible spray | No | 1 | | |
| 35 | "COB - 503 -21B" 15mm chromium plated elbow action "medical" pilar tap | No | 6 | | |
| 36 | Chrome "COB - KM2 -100" metering self closing non-hold open pillar tap with flow controller 1 - 20 seconds | No | 56 | | |
| 37 | 15mm Chromium plated sink wall type sink mixer | No | 8 | | |
| 38 | 20mm Brass vacuum breaker | No | 5 | | |
| 39 | 400KPa brass pressure reducing valve | No | 3 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| 40 | Standard flushmaster toilet flush valve, concealed type, chrome, including back entry, control stopper vertical and horizontal flush pipes, elbow connector, palm press button assembly with pushrod and rubber pan connector. SANS 1240. | No | 36 | | |
| 41 | Junior flushmaster toilet flush valve, concealed type, chrome, including back entry, control stopper vertical and horizontal flush pipes, elbow connector, palm press button assembly with pushrod and rubber pan connector. SANS 1240. | No | 6 | | |
| | **SANITARY PLUMBING** | | | | |
| | **uPVC class 34 pipes** | | | | |
| 42 | 40mm Pipes laid in /under floors or fixed to walls, slabs, roof timbers, etc | m | 108 | | |
| 43 | 50mm Pipes laid in /under floors or fixed to walls, slabs, roof timbers, etc | m | 234 | | |
| 44 | 75mm Pipes laid in /under floors or fixed to walls, slabs, roof timbers, etc | m | 20 | | |
| 45 | 110mm Pipes laid in /under floors or fixed to walls, slabs, roof timbers, etc | m | 70 | | |
| 46 | 150mm Pipes laid in /under floors or fixed to walls, slabs, roof timbers, etc | m | 175 | | |
| | **Extra over uPVC class 34 pipes for fittings** | | | | |
| 47 | 40mm PVC to steel adaptor | No | 8 | | |
| 48 | 50mm Reducer | No | 44 | | |
| 49 | 110mm Reducer | No | 10 | | |
| 50 | 110 x 75mm Reducer | No | 4 | | |
| 51 | 110mm ABC cleaning eye in end of pipe | No | 5 | | |
| 52 | 40mm Bend | No | 100 | | |
| 53 | 50mm Bend | No | 120 | | |
| 54 | 110mm Bend | No | 74 | | |
| | **Carried to Collection** | | | R | |

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| | | | | | |
|---|---|---|---|---|---|
| 55 | 50mm Access bend | No | 58 | | |
| 56 | 110mm Access bend | No | 5 | | |
| 57 | 110mm PVC access stop end | No | 2 | | |
| 58 | 50mm Junction | No | 84 | | |
| 59 | 110mm Junction | No | 6 | | |
| 60 | 110mm Access junction | No | 35 | | |
| 61 | 110 x 50mm Reducing junction | No | 16 | | |
| 62 | 110mm Pan connector | No | 35 | | |
| 63 | 110mm "GI Two-way" vent valve | No | 29 | | |
| | **Precast concrete gulleys** | | | | |
| 64 | Gulley not exceeding 1m deep to invert comprising 100mm diameter vitrified clay gulley trap and head, fitted with 190mm diameter cast iron grating, including excavating for, bedding on and encasing in 15MPa/19mm mass concrete and fitted with and including precast gulley top bedded in (3:1) cement mortar | No | 42 | | |
| | **LABORATORY PLUMBING** | | | | |
| | Acid and alkali resistant plumbing system in polypropylene pipes with mechanical joints and pipe couplings, wall clamps, etc at centres as prescribed by the manufacturer | | | | |
| | **Traps, etc** | | | | |
| 65 | 38mm Standing waste tube overflow 180mm long | No | 15 | | |
| 66 | 50mm Waste with plug and strainer | No | 15 | | |
| 67 | Anti-siphon bottle trap | No | 15 | | |
| | **Polypropylene pipes and fittings** | | | | |
| 68 | 38mm Pipe laid in/under floors or fixed to walls, slabs, roof timbers, etc | m | 30 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| 69 | 50mm Pipe laid in/under floors or fixed to walls, slabs, roof timbers, etc | m | 75 | | |
| | **Extra over polypropylene pipes for fittings** | | | | |
| 70 | 50mm Reducer | No | 15 | | |
| 71 | 38mm Elbow | No | 30 | | |
| 72 | 50mm Elbow | No | 30 | | |
| 73 | 50mm Bend | No | 60 | | |
| 74 | 50mm Junction | No | 15 | | |
| 75 | 50mm Reducing Junction | No | 15 | | |
| 76 | 50mm Blanking-off plug | No | 15 | | |
| 77 | 38mm Adaptor of polypropylene to mild steel pipe | No | 15 | | |
| | **Sundries** | | | | |
| 78 | Two way uPVC vent valve suitable for and connection to 51mm polypropylene pipe | No | 8 | | |
| | **WATER SUPPLIES** | | | | |
| | **PP-R piping completely installed on supports and including running joints as per specification** | | | | |
| 79 | ø 15mm | m | 180 | | |
| 80 | ø 22mm | m | 288 | | |
| 81 | ø 28mm | m | 63 | | |
| 82 | ø 25mm | m | 15 | | |
| | **PP-R piping chased in walls** | | | | |
| 83 | ø 15mm | m | 60 | | |
| | **Extra over PP-R pipes for capillary fittings** | | | | |
| 84 | ø 15mm Elbow | No | 62 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

| | | | | | |
|---|---|---|---|---|---|
| 85 | ø 15mm Tee | No | 37 | | |
| 86 | ø 22mm Elbow | No | 64 | | |
| 87 | ø 22mm Tee | No | 57 | | |
| 88 | ø 22mm - ø 15mm Reducer | No | 36 | | |
| 89 | ø 25mm Elbow | No | 1 | | |
| 90 | ø 28mm Elbow | No | 11 | | |
| 91 | ø 28mm Tee | No | 7 | | |
| 92 | ø 28mm - ø 15mm Reducer | No | 5 | | |
| 93 | ø 28mm - ø 22mm Reducer | No | 17 | | |
| | **Flexible connection** | | | | |
| 94 | ø 15mm flexible connector | m | 40 | | |
| | **LAGGING TO PIPES** | | | | |
| | **Thermal cross-linked polyethylene foam pipe insulation minimum 25mm thick** | | | | |
| 95 | Insulation to ø 15mm pipe, couplings and fittings | m | 15 | | |
| | **TAPS, VALVES, ETC., INCLUDING COUPLING TO PIPES AND/OR FITTINGS** | | | | |
| 96 | ø 15mm Angle Valve | No | 38 | | |
| 97 | ø 22mm Isolating Valve | No | 49 | | |
| 98 | ø 28mm Isolating Valve | No | 13 | | |
| 99 | Plumbing_Joints_Aquatechnik_Safety-Ball-valve-with-butterfly-handle | No | 57 | | |
| 100 | M_Globe Valve - 10-50 mm - Threaded | No | 6 | | |
| 101 | Vacuum Breaker Backflow Valve - 15-50 mm | No | 4 | | |
| 102 | Victaulic-IPS-Swinger Swing Check Valve Series 712 | No | 4 | | |
| 103 | Rodding Eye | No | 4 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 18

Section 2: Main Building

Bill No. 18

Plumbing and Drainage (Provisional)

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 286 | | |
| | 287 | | |
| | 288 | | |
| | 289 | | |
| | 290 | | |
| | 291 | | |
| | 292 | | |
| | 293 | | |
| | 294 | | |
| | 295 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 18

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 2** | | | | |
| | **BILL NO. 18: GLAZING** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **TRADE NAMES** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **GLAZING TO TIMBER, ALUMINIUM OR PRESSED STEEL FIXED WITH LOOSE BEADS (ELSEWHERE) WITH EDGES OF GLASS BEDDED IN APPROVED GLAZING GASKETS IN SILICONE SEALANT** | | | | |
| | **GLAZING TO STEEL WITH PUTTY** | | | | |
| | **4mm Thick Safety Obscure Glass** | | | | |
| 1 | Panes exceeding 0,1m² but not ne 0.5m² | m2 | 4 | | |
| | **6.38mm Thick Safety Clear Glass** | | | | |
| 2 | Panes exceeding 0,1m² and not exceeding 0,5m² | m2 | 172 | | |
| | **6.38mm Thick Safety Frosted Glass** | | | | |
| 3 | Panes exceeding 0.1m² but ne 0.5m² | m2 | 2 | | |
| | **6.38mm Obscure glass** | | | | |
| 4 | Panes exceeding 0,1m² but not ne 0.5m² | m2 | 15 | | |
| | **Carried to Collection** | | | R | |

**Carried to Collection** R

Section No. 2
Bill No. 19

## TOPS, SHELVES, DOORS, MIRRORS, ETC

**Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with foam backing strip all round to plugs in walls**

| | | | | | |
|---|---|---|---|---|---|
| 5 | 6mm "GG" quality polished glass mirror 450 x 800mm high with polished edges fixed to wall with four 35mm round nose chromium plated mirror screws | No | 34 | | |
| 6 | 6mm "GG" quality polished glass mirror 3000 x 1900mm high with polished edges fixed to wall with four 35mm round nose chromium plated mirror screws | No | 2 | | |
| 7 | 6mm "GG" quality polished glass mirror 3575 x 1900mm high with polished edges fixed to wall with four 35mm round nose chromium plated mirror screws | No | 1 | | |
| 8 | 6mm "GG" quality polished glass mirror 6280 x 1900mm high with polished edges fixed to wall with four 35mm round nose chromium plated mirror screws | No | 1 | | |

**Carried to Collection** R

Section No. 2
Bill No. 19

Section 2: Main Building

Bill No. 19

Glazing

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 297 | | |
| | 298 | | |
| | 299 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 19

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 19: PAINTWORK

NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill

### SUPPLEMENTARY PREAMBLES

#### TRADE NAMES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent

#### PAINT SPECIFICATION

All materials for paintwork for which South African Bureau of Standards specifications have been published shall comply the requirements of such specifications and shall bear the standardisation mark of the South African Bureau of Standards on the container or packing. Materials for paintwork for which no SABS specifications have been published shall be of a brand and manufacture approved by the Director-General prior to its use

**Carried to Collection** R

Section No. 2
Bill No. 20

**DISTINCTION FOR COLOUR**

Paintwork in different colours has not been measured separately, except for colours which have a value of 7 or less on the Munsell system as described above as well as for the following:

Paintwork on mouldings and bands picked out in colours differing from the surrounding paintwork of the same material

Paintwork on walls, ceilings, etc to patterns in more than one colour are described separately as "in patterned multi-colours"

Paint in dado's has not been measured separately, neither are cutting in of edges measured. Prices shall include for cutting in of contrasting colours or paints and masking as required.

**PROFILED SURFACES**

Painting of profiled surfaces are measured over the flat area, unless otherwise described

**PROTECTION AGAINST CORROSION**

Prices for painting structural steelwork are to include for corrosion protection as PW 371 clause 18.9.1 (c). See "Metalwork" for 18.9.1(a) (b) and (d)

**STRUCTURAL STEELWORK**

All damaged paint areas are to be repaired in accordance with the original specification after completion of erection

All paint to structural steelwork is to be sourced from an approved paint manufacturer and to be applied in accordance with the manufacturers specifications

All bolts are to be degreased prior to erection and painted after erection

**Carried to Collection** R

Section No. 2
Bill No. 20

## PAINTWORK, ETC TO NEW WORK

### ON FACEBRICK

**Two coats clear/transparent glossy varnish for interior use**

| | | | | | |
|---|---|---|---|---|---|
| 1 | On face brick walls internally | m2 | 3 034 | | |

### ON FLOATED PLASTER

**Prepare, stop and apply one coat masonry primer and two coats acrylic PVA paint**

| | | | | | |
|---|---|---|---|---|---|
| 2 | On internal plastered walls | m2 | 2 338 | | |

**Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint**

| | | | | | |
|---|---|---|---|---|---|
| 3 | On internal plastered walls | m2 | 51 | | |

**Prepare, stop and apply one coat universal undercoat and one coat acrylic PVA paint**

| | | | | | |
|---|---|---|---|---|---|
| 4 | On internal bagged walls | m2 | 233 | | |

### ON PLASTERBOARD

**Prepare, stop and apply two full coats semi-gloss PVA co-polymer paint to comply with SABS Specification No. 643**

| | | | | | |
|---|---|---|---|---|---|
| 5 | On internal plasterboard ceilings including priming steel joints and nail heads with one coat zinc phosphate alkyd resin primer | m2 | 2 052 | | |
| 6 | On cornices, etc. not exceeding 300mm girth | m | 1 835 | | |

### ON FIBRE-CEMENT

**Prepare, stop and apply two full coats semi-gloss PVA co-polymer paint to comply with SABS Specification No. 643**

| | | | | | |
|---|---|---|---|---|---|
| 7 | On fibre cement ceilings including priming steel joints and nail heads with one coat zinc phosphate alkyd resin primer | m2 | 1 316 | | |

**Carried to Collection** R

Section No. 2
Bill No. 20

| | | | | | |
|---|---|---|---|---|---|
| | **Prepare, stop and apply one coat alkali resistant primer and two full coats acrylic emulsion paint for exterior use** | | | | |
| 8 | On external fibre-cement fascias and bargeboards including priming metal cover strips and screw heads with one coat zinc phosphate alkyd resin primer | m2 | 382 | | |
| | **ON CONCRETE SURFACES** | | | | |
| | **Prepare and apply one coat solvent free epoxy polyamide sealer and three coats based epoxy polyamide paint** | | | | |
| 9 | On shower floors and kerbs | m2 | 183 | | |
| | **ON METAL** | | | | |
| | **Prepare and apply two coats bitumen paint** | | | | |
| 10 | On inside of 100 x 125mm galvanised sheet iron eaves gutter before fixing | m | 225 | | |
| | **Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint** | | | | |
| 11 | On pressed steel door frames | m2 | 109 | | |
| 12 | On strongroom doors and frames | m2 | 14 | | |
| 13 | On sashes, windows and frames with burglar bars (both sides measured) | m2 | 434 | | |
| | **Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint** | | | | |
| 14 | On grille gates and screens (both sides measured on flat) | m2 | 230 | | |
| 15 | Ons steel columns | m2 | 62 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 20

| | | | | | |
|---|---|---|---|---|---|
| | **Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high eggshell enamel paint** | | | | |
| 16 | On pressed steel trap door and frame | m2 | 7 | | |
| | **ON WOOD** | | | | |
| | **Prepare, stop and apply two full coats polyurethane clear eggshell varnish, lightly sanded down between coats** | | | | |
| 17 | On general surfaces of fittings | m2 | 108 | | |
| 18 | On general surfaces of fittings not exceeding 300mm girth | m | 65 | | |
| 19 | On skirtings, rails, etc. not exceeding 300mm girth | m | 1 129 | | |
| | **Prepare, stop and apply three full coats polyurethane clear eggshell varnish, lightly sanded down between coats** | | | | |
| 20 | On slated doors (measured on flat) | m2 | 948 | | |
| 21 | On general surfaces | m2 | 40 | | |
| | **PAINTWORK, ETC TO PREVIOUSLY PAINTED WORK** | | | | |
| | **ON FLOATED PLASTER SURFACES** | | | | |
| | **Plascon cashmere interior plush matt to new cement plaster (NW 201). Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Wall & All (WAA) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.** | | | | |
| 22 | On internal walls | m2 | 2 880 | | |
| | **Two coats acrylic PVA or similar approved paint, on work in sound condition** | | | | |
| 23 | On external walls | m2 | 911 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 20

| | | | | | |
|---|---|---|---|---|---|
| | **ON METAL SURFACES** | | | | |
| | **One coat of an approved undercoat and two coats of approved gloss enamel paint** | | | | |
| 24 | On door frames | m2 | 14 | | |
| 25 | On windows with burglar bars | m2 | 312 | | |
| 26 | On gates, grilles, burglar screens, balustrades, etc. (both sides measured over the full flat area) | m2 | 25 | | |
| 27 | Steel strongroom door and frame. | m2 | 4 | | |
| 28 | On steel columns | m2 | 52 | | |
| | **Carried to Collection** | | | R | |

Section No. 2
Bill No. 20

Section 2: Main Building

Bill No. 20

Paintwork

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 301 | | |
| | 302 | | |
| | 303 | | |
| | 304 | | |
| | 305 | | |
| | 306 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 20

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|

## SECTION 2

## BILL NO. 20: PROVISIONAL AMOUNTS

NOTE: The contractor advised to study the Model Preambles for Trades before pricing this bill

## SELECTED SUBCONTRACTORS

The following Provisional Amounts are for specialist 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 selected sub-contractor.

A selected sub-contractor shall be a contractor executing work for which a sum of money is provided for in the bills of quantities or a sub-contractor executing additional work specialist work which arises as a result of an instruction by the representative/agent.

Tender documents for such work shall be prepared by the representative/agent in consultation with and to the approval of the contractor. Tenders shall be called for from a list of tenderers agreed between the contractor and the Principal Agent. Tenders shall be submitted to the representative/agent for adjudication.

The selected sub-contractor shall be chosen by the representative/agent 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 representative/agent accordingly. The contractor shall appoint such selected sub-contractor and inform the principal agent 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 Department and the selected sub-contractor.

**Carried to Collection** R

Section No. 2
Bill No. 21

| | | | | |
|---|---|---|---|---|
| | All provisional amounts cover supply of material and equipment and installation where applicable by firms of specialists. Provisional amounts are nett and do not include builder's discount, but the tenderer may allow under "Profit" items for profit he considers necessary. | | | |
| | PROVISIONAL SUMS FOR NOMINATED/SELECTED SUBCONTRACT WORKS | | | |
| | **BUDGETARY ALLOWANCES** | | | |
| | **Community Liaison Officer** | | | |
| 1 | Provide an amount of R 210 000,00 (Two Hundred and Ten Thousand Rand) for Community Liaison Officer to be omitted in part or whole as instructed by Principal Agent | Item | | 210 000.00 |
| 2 | Add for profit | Item | | |
| 3 | Add for general attendance on sub-contractor | Item | | |
| | **Project Steering Commitee** | | | |
| 4 | Provide an amount of R 40 000,00 (Forty Thousand Rand) for PSC to be omitted in part or whole as instructed by Principal Agent | Item | | 40 000.00 |
| 5 | Add for profit | Item | | |
| 6 | Add for general attendance on sub-contractor | Item | | |
| | **EPWP Allowance** | | | |
| 7 | Provide an amount of R 500 000.00 (Five Hundred thousands Rand) for EPWP to be omitted in part or whole as instructed by Principal Agent | Item | | 500 000.00 |
| 8 | Add for profit | Item | | |
| 9 | Add for general attendance on sub-contractor | Item | | |
| | **Carried to Collection** | | R | |

Section No. 2
Bill No. 21

| | | | | |
|---|---|---|---|---|
| | **Contract Skills Development Goal (CSDG)** | | | |
| 10 | Training CSDG for the duration of the contract. | Item | | 2 000 000.00 |
| 11 | Allow for profit on the above | Item | | |
| 12 | Allow for general attendance on ditto | Item | | |
| | **Carried to Collection** | | R | |

Section No. 2
Bill No. 21

Section 2: Main Building

Bill No. 21

Provisional Amounts

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 308 | | |
| | 309 | | |
| | 310 | | |
| **Carried Forward to Summary of Section No. 2** | | R | |

Section No. 2
Bill No. 21

Section 2: Main Building

**SECTION SUMMARY - Section 2: Main Building**

| Bill No | | Page No | Amount |
|---|---|---|---|
| 1 | Decanting | 194 | |
| 2 | Alterations | 199 | |
| 3 | Earthworks (Provisional) | 204 | |
| 4 | Concrete, Formwork and Reinforcement | 209 | |
| 5 | Precast Concrete | 210 | |
| 6 | Masonry | 217 | |
| 7 | Waterproofing | 220 | |
| 8 | Roof Coverings, etc | 223 | |
| 9 | Carpentry and Joinery | 232 | |
| 10 | Joinery Fittings | 247 | |
| 11 | Ceilings, Partitions and Access Flooring | 251 | |
| 12 | Floor Coverings, Plastic linings, etc | 254 | |
| 13 | Ironmongery | 261 | |
| 14 | Structural Steelwork (Provisional) | 266 | |
| 15 | Metalwork | 278 | |
| 16 | Plastering | 281 | |
| 17 | Tiling | 285 | |
| 18 | Plumbing and Drainage (Provisional) | 296 | |
| 19 | Glazing | 300 | |
| 20 | Paintwork | 307 | |
| 21 | Provisional Amounts | 311 | |
| | **Carried to Final Summary** | | R |

Section No. 2

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 1: BULK EARTHWORKS** | | | | |
| | NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: All unit rates must take into account and will be assumed to include all applicable taxes. No additional claims relating to taxes will be entertained. | | | | |
| | **DEMOLITIONS ETC** | | | | |
| | **Demolitions of including disposal thereafter.** | | | | |
| 1 | Demolition Septic Tank comprising reinforced concrete surface beds, brick walls, and concrete roof structure. | m2 | 20 | | |
| 2 | Block Guard House - Single storey block with double pitch roof, approximately 3m average high at eaves, comprising reinforced concrete surface beds, brick walls, and timber roof structure. | m2 | 12 | | |
| 3 | Block Shed - Single storey block with double pitch roof, approximately 3m average high at eaves, comprising reinforced concrete surface beds, brick walls, and timber roof structure. | m2 | 81 | | |
| 4 | Block Shed - carports with mono pitch roof, approximately 3m average high at eaves, comprising reinforced concrete surface beds, brick walls, and timber roof structure. | m2 | 126 | | |
| | **SITE CLEARANCE ETC** | | | | |
| | **Site clearance** | | | | |
| 5 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 3 579 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| | **REMOVAL OF TREES ETC** | | | | |
| | **Cutting down, taking out and removing, grubbing up roots and filling in holes** | | | | |
| 6 | Tree stump exceeding 200mm and not exceeding 500mm girth | No | 8 | | |
| 7 | Tree stump exceeding 500mm and not exceeding 1000mm girth | No | 6 | | |
| | **BULK EXCAVATION, FILLING, ETC** | | | | |
| | **Approved natural gravel filling supplied by the contractor compacted to 98% Mod AASHTO density** | | | | |
| 8 | 150mm sub-base layer of selected G5 gravel material to comply with maximum CBR 45, imported from commercial sources and compacted to 95% modified AASHTO density including 63mm stone compacted to 93% modified AASHTO density | m3 | 2 624 | | |
| 9 | 150mm sub-base layer of selected G7 gravel material to comply with maximum PI 10, imported from commercial sources and compacted to 100% modified AASHTO density including 63mm stone compacted to 93% modified AASHTO density | m3 | 2 624 | | |
| | **Compaction of surfaces** | | | | |
| 10 | Compaction of ground surface under floors etc including scarifying for a depth of 100mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 3 579 | | |
| | **Prescribed density tests on filling** | | | | |
| 11 | "Modified AASHTO Density" test | No | 72 | | |
| | **Soil insecticide** | | | | |
| 12 | Under platforms, etc. including forming and poisoning shallow furrows, etc. filling in furrows and ramming | m2 | 3 579 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 1

Section 3: External Works (Provisional)

Bill No. 1

Bulk Earthworks

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 313 | | |
| | 314 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 1

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 2: EXTERNAL PLUMBING AND DRAINAGE** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Preambles** | | | | |
| | The Standard Preambles and the Notes in the Plumbing and Drainage trade bills are to, and do, apply equally to this section. | | | | |
| | **STORMWATER DRAINAGE** | | | | |
| | **Precast concrete channels** | | | | |
| 1 | Open surface stormwater concrete v-channel size 1000 x 100mm deep internally with 75 x 75mm triangular fillets in channels including all excavations, concreting, brickwork, reinforcement, formwork, plastering, etc | m | 650 | | |
| 2 | Concrete covered channel under walkways: size 400 x 400mm deep internally including all excavations, concreting, reinforcement, formwork, etc | m | 30 | | |
| 3 | Concrete covered channel under walkways: size 400 x 450mm deep internally including all excavations, concreting, reinforcement, formwork, etc | m | 178 | | |
| 4 | Concrete open channel: size 400 x 400mm deep internally including all excavations, concreting, reinforcement, formwork, etc | m | 160 | | |
| 5 | Concrete open channel: size 400 x 450mm deep internally including all excavations, concreting, reinforcement, formwork, etc | m | 734 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **Mild steel heavy duty grating as cover to rainwater channel, all primed before delivery** | | | | |
| 6 | Wecrolock AW 38 x 38 x 6mm heavy duty grating as cover to rainwater channel set into and including 60 x 60 x 6mm angle frame, size overall 1800 x 450mm wide | m | 15 | | |
| 7 | Extra over last for corner intersection | No | 16 | | |
| | **Two coats black epoxy paint on shop-primed steel (both sides measured)** | | | | |
| 8 | On Wecrolok heavy duty gratings | m2 | 9 | | |
| | **Water Storage Tanks** | | | | |
| 9 | 5 000L Jojo Water Storage Tanks | No | 6 | | |
| | **Municipal Connections** | | | | |
| 10 | Budget for connection into main | | Item | | 50 000.00 |
| | **SEWER RETICULATION** | | | | |
| | **Excavate in all materials for trenches, backfill, compact and dispose of surplus material** | | | | |
| 11 | Excavate for trench not exceeding 2m deep | m3 | 223 | | |
| 12 | Extra over excavations in earth for excavating in soft rock | m3 | 2 | | |
| 13 | Extra over excavations in earth for excavating in hard rock | m3 | 11 | | |
| 14 | Backfilling to drain trenches compacted to 93 % Modified AASHTO maximum dry density | m3 | 124 | | |
| 15 | Sub base material compacted to 95% Modified AASHTO maximum dry density | m3 | 50 | | |
| 16 | 19mm Crushed stone encasing to pipes | m3 | 50 | | |
| | **uPVC pipes** | | | | |
| 17 | 110mm Pipes laid in trenches (trenches elsewhere) | m | 177 | | |
| 18 | 160mm Pipes laid in trenches (trenches elsewhere) | m | 50 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **Extra over uPVC pipes for fittings** | | | | |
| 19 | 110mm End cap | No | 30 | | |
| 20 | 110mm Bend | No | 30 | | |
| 21 | 110mm Junction | No | 35 | | |
| 22 | 110mm Access pipe | No | 44 | | |
| 23 | 110mm Access bend | No | 44 | | |
| 24 | 110mm Access junction | No | 15 | | |
| 25 | 160 mm x 110 mm plain junctions | No | 15 | | |
| 26 | 110mm Access double junction | No | 12 | | |
| | **Manholes, inspection chambers, etc** | | | | |
| 27 | Manhole size 1000 x 1000 x 1500mm deep internally including all necessary excavation, carting away, etc, 230mm thick 20Mpa concrete walls and base slab and 230mm thick concrete roof slab reinforced with 12mm diameter high tensile steel rods at 150mm centres in both directions and cast iron manhole cover and frame type 8B and step irons cast into concrete in two staggered rows at 300mm centres. Prices shall include for all necessary formwork, holing of walls, sleeves, etc | No | 4 | | |
| 28 | Manhole size 1000 x 1000 x 2000mm deep internally including all necessary excavation, carting away, etc, 230mm thick 20Mpa concrete walls and base slab and 230mm thick concrete roof slab reinforced with 12mm diameter high tensile steel rods at 150mm centres in both directions and cast iron manhole cover and frame type 8B and step irons cast into concrete in two staggered rows at 300mm centres. Prices shall include for all necessary formwork, holing of walls, sleeves, etc | No | 3 | | |
| 29 | Manhole size 1000 x 1000 x 3000mm deep internally including all necessary excavation, carting away, etc, 230mm thick 20Mpa concrete walls and base slab and 230mm thick concrete roof slab reinforced with 12mm diameter high tensile steel rods at 150mm centres in both directions and cast iron manhole cover and frame type 8B and step irons cast into concrete in two staggered rows at 300mm centres. Prices shall include for all necessary formwork, holing of walls, sleeves, etc | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **Vitrified clay gulley traps,etc** | | | | |
| 30 | 190 x 190mm Gulley trap with foot and O, P, Q or S oulet, plain gulley head and 110mm PVC pipe including excavation for, bedding on and encasing in concrete and with precast or in-situ concrete gulley top finished in grey granolithic, not exceeding 750mm deep to invert level | No | 15 | | |
| | **CONSERVANCY TANK** | | | | |
| | **Excavate in all materials for trenches, backfill, compact and dispose of surplus material :** | | | | |
| 31 | Excavate in all materials for conservancy tank backfill, compact and dispose of surplus | m3 | 101 | | |
| 32 | Hard rock excavation | m3 | 5 | | |
| | **Importing of Materials** | | | | |
| 33 | From commercial sources G7 natural gravel compacted to 93% MOD AASHTO | m3 | 21 | | |
| | **Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar** | | | | |
| 34 | One brick walls in foundations | m2 | 70 | | |
| | **Brick reinforcement** | | | | |
| 35 | 150mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) | m | 204 | | |
| | **25 MPa/19 mm concrete in:** | | | | |
| 36 | Surface bed | m3 | 14 | | |
| 37 | Roof Slab | m3 | 10 | | |
| 38 | 250 Micron DPC | m2 | 56 | | |
| | **Unformed surface finishes - Wood-floated finishes to:** | | | | |
| 39 | Surface beds | m2 | 56 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **Box out holes/form voids:** | | | | |
| | **Large, other than circular, of area over 0,1 m² and up to and including 0,5 m², and in the following depth ranges:** | | | | |
| 40 | 0 m up to and including 0,5m | No | 2 | | |
| | **Rough formwork to soffits and sides** | | | | |
| 41 | Permanent formwork t0 slabs | m2 | 56 | | |
| 42 | Edges, risers, ends and reveals not exceeding 300mm high or wide. | m | 34 | | |
| | **High-tensile steel bars in the following:** | | | | |
| 43 | 12mm dia | kg | 1 | | |
| | **Fabric reinforcement** | | | | |
| 44 | Mesh reinforcement with mesh reference number 245 laid in concrete surface beds, slabs, etc with 300mm wide side and end laps (measured net) | m2 | 56 | | |
| | **3:1 Screeds steel trowelled on concrete** | | | | |
| 45 | 12mm Thick on floors | m2 | 56 | | |
| | **Epoxy 9mm thick epoxy floor coating laid to screed (screed elsewhere), all strictly in accordance with approved manufacturers instructions.** | | | | |
| 46 | On internal floors | m2 | 56 | | |
| | **Epoxy 4mm thick epoxy wall coating, all strictly in accordance with approved manufacturers instructions.** | | | | |
| 47 | On walls | m2 | 78 | | |
| | **uPVC pipes** | | | | |
| 48 | 100mm Pipes | m | 3 | | |
| 49 | 100mm perforated Pipes | m | 2 | | |
| 50 | 100mm End cap | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| 51 | 100mm T piece | No | 2 | | |
| | **Manholes** | | | | |
| 52 | 1000 mm nom dia heavy duty lockable lid complete with heavy duty lockable (with locking mechanism) and frame | No | 2 | | |
| | **WATER RETICULATION** | | | | |
| | **Excavations** | | | | |
| 53 | Excavation in earth not exceeding 1m deep for pipe trenches | m3 | 428 | | |
| 54 | Extra over excavations in earth for excavating in soft rock | m3 | 43 | | |
| 55 | Extra over excavations in earth for excavating in hard rock | m3 | 21 | | |
| 56 | Backfilling to pipe trenches compacted to 95% Mod AASHTO density | m3 | 248 | | |
| 57 | Selected granular filling in bedding under and filling around pipes | m3 | 90 | | |
| 58 | 19mm Crushed stone bedding under pipes | m3 | 45 | | |
| | **Medium Presure Pipelines** | | | | |
| 59 | 50 mm diameter uPVC class 12 including fittings | m | 900 | | |
| | **Valve and Hydrant Chambers etc.** | | | | |
| 60 | Isolating valve including valve box | No | 1 | | |
| 61 | Connection to existing supply pipe including all fittings | No | 1 | | |
| | **Supply, deliver, install, test and commission the following equipment, complete with all ancillary equipment, as per the mechanical equipment specification** | | | | |
| 62 | Complete borehole equipment. | | Item | | 280 000.00 |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **Supply, deliver, install, test and commission the following equipment, complete with all ancillary equipment, as per the mechanical equipment specification** | | | | |
| 63 | Allow the Amount of R 1 400 000.00( One Million Four Hundred Thousand Rand) NET for Elevated bulk potable and fire water storage tanks. to be executed by Specialist | | Item | | 1 400 000.00 |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 2

Section 3: External Works (Provisional)

Bill No. 2

External Plumbing and Drainage

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 316 | | |
| | 317 | | |
| | 318 | | |
| | 319 | | |
| | 320 | | |
| | 321 | | |
| | 322 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 2

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 3: ROAD WORKS, PAVINGS ETC.** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **ROADS-UPGRADE ON DRIVEWAYS, BUS STOP AND DROP-OFF** | | | | |
| | **Site clearance** | | | | |
| 1 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 150 | | |
| | **Open face excavation in earth over sloping site and depositing excavated material in prescribed stock piles on site** | | | | |
| 2 | Open face excavation | m3 | 23 | | |
| | **Extra over bulk excavation in earth for excavation in** | | | | |
| 3 | Soft rock | m3 | 2 | | |
| 4 | Hard rock | m3 | 1 | | |
| | **Extra over all excavations for carting away** | | | | |
| 5 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 23 | | |
| | **Keeping excavations free of water** | | | | |
| 6 | Keeping excavations free of water | | Item | | |
| | **Excavations, Filling, Etc** | | | | |
| 7 | Earth filling of G9 material supplied by the contractor compacted in 150mm layers compacted to 95% Mod AASHTO to density | m3 | 23 | | |
| | **Carried to Collection** | | | R | |
| | Section No. 3<br>Bill No. 3 | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 8 | Earth filling of G5 material supplied by the contractor compacted in 150mm layers compacted to 95% Mod AASHTO to density | m3 | 23 | | |
| 9 | C4 gravel material, selected and supplied by the Contractor, deposited, watered and consolidated to 95% modified AASHTO density in 125mm thick sub-base course under roads. | m3 | 23 | | |
| | **Coarse river sand filling supplied by the contractor** | | | | |
| 10 | Under floors etc | m3 | 8 | | |
| | **Soil insecticide under a 10 year guarantee by firm of specialist** | | | | |
| 11 | Approved soil herbicide weed killer at a rate of 50 gram/m² under paving etc. | m2 | 150 | | |
| | **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 100% Mod AASHTO density | m2 | 150 | | |
| | **Prescribed density tests on filling** | | | | |
| 13 | "Modified AASHTO Density" test | No | 3 | | |
| | **Paving of 200 x 150 x 80mm thick precast concrete paving blocks with butt joints on 50mm thick river sand bed on well compacted imported fill with sand-and-cement mixture swept into joints and hosed down, including preparation of ground or filling to engineer's detail** | | | | |
| 14 | Paving laid to interlocking pattern to falls | m2 | 150 | | |
| | **Precast concrete finished smooth on exposed surfaces including bedding, jointing, and pointing** | | | | |
| 15 | Kerb (SABS 927 fig 3)180 x 280mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint circular on plan not exceeding 4m radius formed with short lengths of straight kerb including excavation, backfilling, etc. | m | 95 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **PAVING ON PARKINGS AND DRIVEWAYS** | | | | |
| | **Excavations, Filling, Etc** | | | | |
| 16 | C4 gravel material, selected and supplied by the Contractor, deposited, watered and consolidated to 95% modified AASHTO density in 125mm thick sub-base course under roads. | m3 | 135 | | |
| | **Coarse river sand filling supplied by the contractor** | | | | |
| 17 | Under paving etc | m3 | 45 | | |
| | **Compaction of surfaces** | | | | |
| 18 | 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 100% Mod AASHTO density | m2 | 900 | | |
| | **Soil insecticide under a 10 year guarantee by firm of specialist** | | | | |
| 19 | Approved soil herbicide weed killer at a rate of 50 gram/m² under paving etc. | m2 | 900 | | |
| | **Paving of 200 x 150 x 80mm thick precast concrete paving blocks with butt joints on 50mm thick river sand bed on well compacted imported fill with sand-and-cement mixture swept into joints and hosed down, including preparation of ground or filling to engineer's detail** | | | | |
| 20 | Paving laid to interlocking pattern to falls | m2 | 900 | | |
| | **Precast concrete finished smooth on exposed surfaces including bedding, jointing, and pointing** | | | | |
| 21 | Kerb (SABS 927 fig 3)180 x 280mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint including excavation, backfilling,etc | m | 160 | | |
| 22 | Kerb (SABS 927 fig 3)180 x 280mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint circular on plan not exceeding 4m radius formed with short lengths of straight kerb including excavation, backfilling, etc. | m | 22 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **0,58mm concealed fix Klip-Lok 700 heavy indusrial Zincalume AZ150 spleter G550 steel sheeting with 25mm high performance general purpose compressible sealant on overlaps with Global coat finish to one side and half coat Global coat grey to other side and fixed to starter bars and each intermediate purlin with concealed clips secured with hex head 25mm self drilling tek screws for covered carports primed before delivery and fixed in position including foundations and roof coverings etc** | | | | |
| 23 | Carport size 5500 x 2500mm | No | 12 | | |
| | **Road marking paint on concrete** | | | | |
| 24 | Line 100mm wide | m | 50 | | |
| 25 | Line 300mm wide | m | 1 800 | | |
| 26 | Numeral or letter 300mm high | No | 120 | | |
| 27 | Traffic sign, numeral or letter 1,3m high | No | 50 | | |
| 28 | Traffic arrow straight 3,7m long | No | 35 | | |
| | **THE FOLLOWING IN COVERED AND UNCOVERED WALKWAYS** | | | | |
| | **Excavation in earth or compacted filling not exceeding 2m deep** | | | | |
| 29 | Trenches | m3 | 59 | | |
| 30 | Holes | m3 | 7 | | |
| | **Extra over excavations in earth for excavation in:** | | | | |
| 31 | Soft rock | m3 | 3 | | |
| 32 | Hard rock | m3 | 1 | | |
| | **Extra over all excavations for carting away** | | | | |
| 33 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 35 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **Risk of collapse of excavations** | | | | |
| 34 | Sides of trench and hole excavations not exceeding 1500mm deep | m2 | 470 | | |
| | **Keeping excavations free of water** | | | | |
| 35 | Keeping excavations free of water | | Item | | |
| | **Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 100% Mod AASHTO density** | | | | |
| 36 | Backfilling to trenches, holes, etc | m3 | 24 | | |
| | **Excavations, Filling, Etc** | | | | |
| 37 | Earth filling of G9 material supplied by the contractor compacted in 150mm layers compacted to 95% Mod AASHTO to density | m3 | 176 | | |
| 38 | C4 gravel material, selected and supplied by the Contractor, deposited, watered and consolidated to 95% modified AASHTO density in 125mm thick sub-base course under roads. | m3 | 176 | | |
| | **Coarse river sand filling supplied by the contractor** | | | | |
| 39 | Under floors etc | m3 | 59 | | |
| | **Compaction of surfaces** | | | | |
| 40 | 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 100% Mod AASHTO density | m2 | 1 175 | | |
| | **Prescribed density tests on filling** | | | | |
| 41 | "Modified AASHTO Density" test | No | 9 | | |
| | **Soil insecticide under a 10 year guarantee by firm of specialist** | | | | |
| 42 | Hyvar X or other approved soil herbicide weed killer at a rate of 50 gram/m² under paving etc. | m2 | 1 880 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **25 MPa concrete** | | | | |
| 43 | Column Bases & Stub Columns | m3 | 7 | | |
| | **Concrete tests** | | | | |
| 44 | Making and testing 150 x 150 x 150mm concrete strength test cube and submit report to the Representative / Agent (only successful tests will be paid for) | No | 18 | | |
| | **High tensile steel reinforcement to structural concrete work** | | | | |
| 45 | 16mm Diameter bars | t | 1.94 | | |
| | **Brickwork in NFX clay bricks (14 Mpa nominal compressive strength) in Class 2 mortar** | | | | |
| 46 | One brick walls | m2 | 235 | | |
| | **Brickwork reinforcement** | | | | |
| 47 | 150mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) | m | 1 382 | | |
| | **20-30mpa Country Classic Travertine Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints.** | | | | |
| 48 | Extra over ordinary brickwork for facing and pointing in stretcher bond | m2 | 235 | | |
| | **'Infraset Masonique' or Similar Approved to Covered and Uncovered Walkways & Perimeter Walkways - Paving of 200 x 150 x 60mm thick precast concrete paving blocks with butt joints on 50mm thick river sand bed on well compacted imported fill with sand-and-cement mixture swept into joints and hosed down, including preparation of ground or filling to engineer's detail** | | | | |
| 49 | Paving laid to herringbone pattern to falls | m2 | 1 175 | | |
| 50 | 200mm Wide brick-on-flat header course edging | m | 940 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **One layer approved 375 micron embossed black polyethylene damp proof course** | | | | |
| 51 | In walls | m2 | 207 | | |
| | **"Chromadek" double-interlocking concealed-fix "Klip-Lok 700" profile 0.58mm thick roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified Zincalume AZ150 coated steel G550 with a Clean Colorbond colour coated finish to one side with a Mountain Mist backing coat fixed to timber or steel purlins using aluminium KL65 clips and class 3 fasteners, in strict accordance with manufacturer's specifications at main building** | | | | |
| 52 | Roof covering with pitch | m2 | 625 | | |
| | **Walkway steel structure with factory applied red oxide coating.** | | | | |
| | Welded square tubing steel in single lengths with flat section bearer and connection plates, primed before delivery and placed in position bolted to brickwork/concrete | | | | |
| 53 | 100 x 50 x 4mm Thick x 8.977 kg/m MS square columns hot rolled to walkway frame | t | 5.17 | | |
| | Purlins and girts bolted to steel | | | | |
| 54 | 75 x 50 x 20 x 2,5mm Thick x 3,83kg/m MS Lipped channel tubing purlins | t | 2.85 | | |
| 55 | 60 x 6mm Thick x 2.83kg/m MS flat bar welded to either side of purlins to achieve a roof pitch | t | 1.40 | | |
| | Baseplate to columns, etc | | | | |
| 56 | 200 x 200 x 12mm baseplate welded to the columns & bolted to the stub column. | No | 167 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 3

Section 3: External Works (Provisional)

Bill No. 3

Road Works, Pavings, etc.

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 324 | | |
| | 325 | | |
| | 326 | | |
| | 327 | | |
| | 328 | | |
| | 329 | | |
| | 330 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 3

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 4: FENCING, BOUNDARY, SCREEN AND RETAINING WALLS, ETC (PROVISIONAL)** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **THE FOLLOWING IN BOUNDARY WALL AT MAIN GATE** | | | | |
| | **Excavation in earth or compacted filling not exceeding 2m deep** | | | | |
| 1 | Trenches | m3 | 14 | | |
| | **Extra over excavations in earth for excavation in:** | | | | |
| 2 | Soft rock | m3 | 1 | | |
| 3 | Hard rock | m3 | 1 | | |
| | **Extra over all excavations for carting away** | | | | |
| 4 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 9 | | |
| | **Risk of collapse of excavations** | | | | |
| 5 | Sides of trench and hole excavations not exceeding 1500mm deep | m2 | 40 | | |
| | **Keeping excavations free of water** | | | | |
| 6 | Keeping excavations free of water other than subterranean water | | Item | | |
| | **Earth filling obtained from the excavations (not compacted)** | | | | |
| 7 | In prescribed stock piles on site | m3 | 5 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **15 MPa/19mm Concrete in:** | | | | |
| 8 | Underground Beams | m3 | 4 | | |
| | **30 MPa/19mm Concrete in:** | | | | |
| 9 | Strip footings | m3 | 6 | | |
| | **Concrete test cubes** | | | | |
| 10 | Making and testing 150 x 150 x 150mm concrete strength test cube and submit report to the Representative / Agent (only successful tests will be paid for) | No | 7 | | |
| | **High tensile steel reinforcement to structural concrete work** | | | | |
| 11 | All Diameter bars | t | 1.54 | | |
| | **Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar** | | | | |
| 12 | One brick walls in foundations | m2 | 32 | | |
| | **Brickwork in NFP clay bricks (7 Mpa nominal compressive strength) in Class II mortar** | | | | |
| 13 | One brick walls | m2 | 72 | | |
| 14 | Piers | m3 | 2 | | |
| | **20-30mpa Country Classic Travertine Imperial FBX clay face brick, size 222 x 106 x 73mm, manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints.** | | | | |
| 15 | One brick wall face brick pointed on both sides | m2 | 144 | | |
| 16 | Face brick-on-edge coping on top of one brick wall in cement mortar and pointing on top and both sides | m | 40 | | |
| | **Brick reinforcement** | | | | |
| 17 | 150mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) | m | 408 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **One layer approved 375 micron embossed black polyethylene proof course** | | | | |
| 18 | In walls | m2 | 9 | | |
| | **THE FOLLOWING IN BOUNDARY FENCING** | | | | |
| | **Upgrading of existing** | | | | |
| 19 | Upgrading of existing security fencing and gates including replacement of poles, wiring, gates, etc as directed including painting and straightening and leave in a perfect working order, all to the satisfaction of the Principal Agent | m | 350 | | |
| | **Re-use Metal Fencing** | | | | |
| 20 | Fencing Palisade fencing 1.8m high fixed between steel columns (included) in panels not exceeding 4000mm wide | m | 310 | | |
| | **Metal Fencing** | | | | |
| 21 | Palisade fencing 1.8m high fixed between steel colums (included) in panels not exceeding 4000mm wide | m | 250 | | |
| 22 | Corner or gate post 2,1m high with sole plate in and including concrete base | No | 8 | | |
| | **Galvanised mild steel gates** | | | | |
| 23 | Single pedestrian gate size 2000 x 1800mm high formed of 50mm diameter x 2,8mm thick pipe framing all round complete with one 50mm diameter x 2,8mm thick pipe diagonal brace all neatly mitred and welded at intersections; the gate with two strands of 4mm thick galvanised mild steel straining wire mechanically strained between and securely fixed to gate styles and covered with and including 50mm mesh chain link netting of 3,15mm diameter galvanised mild steel wire securely fixed to straining wires and framing with and including 2mm galvanised binding wire, the one style fitted with and including two standard type pin and collar hinges bolted onto gate post (elsewhere) including drilling holes through gate post and other style prepared and drilled for barrel bolt (elsewhere) and hand-hole opening formed of 10mm diameter bar 320mm girth bent to semi-circular shape and welded on | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **ClearVu fencing or similar approved including site clearance and preparation of ground** | | | | |
| 24 | High density anti-climbing and anti-cut pressed mesh panel fencing 2,4m high, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with Marine Fusion Bond coating colour Medium Grey with aperture size 76,2mm x 12,7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85 - 45mm Taper locking post 2,4m high including Locking Recess Mechanism at 3,382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 500mm under dig. | m | 439 | | |
| | **Security spikes** | | | | |
| 25 | Cadmium plated steel security spikes plugged to top of wall as per manufacturer's instructions | m | 140 | | |
| | **The following in galvanised mild steel gates and fixing in position complete** | | | | |
| 26 | Single pedestrian gate size 1500 x 2400mm High Density Mesh galvanised made up or wire apertures size 76,2 x 12,7mm c/c. Panel reinforced horizontal recessed band complete with rectangular hollow section framing all round neatly mitred and welded at angles; supported or fixed between two 100 x 100mm GMS posts on each side, with razor sharp tooth spike welded to top, complete with hinges, padlock plate, 5pin upright double throw security mortice deadlock in 3mm steel plate housing closed on all sides, with the barrel bolt inside of gate frame, all as Details 923-S2-101-wd.011 or 111 | No | 4 | | |
| 27 | Automatic vehicle sliding gate size 3500 x 2400mm high Density Mesh galvanised made up or wire apertures size 76,2 x 12,7mm c/c. Panel reinforced horizontal recessed band complete with rectangular hollow section framing all round neatly mitred and welded at angles; supported or fixed between two 100 x 100mm GMS posts on each side, with razor sharp tooth spike welded to top, complete with the gate rail fixed on concrete beam, all as Details 923-S2-101-wd.114 | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| 28 | Vehicle double swing gate size 7000 x 2400mm High overall in two equal leaves, Density Mesh galvanised made up or wire apertures size 76,2 x 12,7mm c/c. Panel reinforced horizontal recessed band complete with rectangular hollow section framing all round neatly mitred and welded at angles; supported or fixed between two 100 x 100mm GMS posts on each side, with razor sharp tooth spike welded to top, complete with hinges, padlock plate, 5pin upright double throw security mortice deadlock in 3mm steel plate housing closed on all sides, with the barrel bolt inside of gate frame, all as Details 923-S2-101-wd.010 | No | 3 | | |
| 29 | Cadmium plated steel security spikes screwed to hollow section gate frame (elsewhere) with and including special unscrewable type self tapping screws in accordance with the manufacturer's instructions | m | 49 | | |
| | **Bolts and latches** | | | | |
| 30 | 200mm Galvanised heavy duty barrel bolt welded onto gate style | No | 13 | | |
| | **Locks** | | | | |
| 31 | 63mm Brass five pin tumbler padlock with two keys | No | 13 | | |
| | **Lettering** | | | | |
| 32 | 50mm Wide x 300mm high Helvetica Bold "upper case" lettering neatly cut out of 6mm mild steel plate each letter with three 10mm diameter x 275mm long mild steel fixing lugs with one end welded onto letter and other end threaded for and including nut and washer, each fixing lug fitted with 20mm diameter pipe alignment spacer including bolting on through one brick wall including mortice through brickwork | No | 25 | | |
| | **Sundries** | | | | |
| 33 | Locking chain 500mm long with 50 x 35 x 10mm diameter shackles with one shackle welded to gate frame or gate post | No | 13 | | |
| | **Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint** | | | | |
| 34 | On grille gates (both sides measured on flat) | m2 | 128 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 4

Section 3: External Works (Provisional)

Bill No. 4

Fencing, Boundary, Screen and Retaining Walls ect.

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 332 | | |
| | 333 | | |
| | 334 | | |
| | 335 | | |
| | 336 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 4

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 5: SOCCER / RUGBY FIELD** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **EARTHWORKS** | | | | |
| | **Excavation in earth or compacted filling not exceeding 2m deep** | | | | |
| 1 | Holes | m3 | 3 | | |
| | **Extra over excavations in earth for excavation in:** | | | | |
| 2 | Soft rock | m3 | 1 | | |
| 3 | Hard rock | m3 | 1 | | |
| | **Extra over all excavations for carting away** | | | | |
| 4 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 3 | | |
| | **Risk of collapse of excavations** | | | | |
| 5 | Sides of trench and hole excavations not exceeding 1,5mm deep | m2 | 16 | | |
| | **Excavations** | | | | |
| 6 | Open excavation to reducing levels | m3 | 430 | | |
| | **Sundries** | | | | |
| 7 | Extra over excavations in earth for trenches and holes for excavations in soft rock | m3 | 3 | | |
| 8 | Extra over excavations in earth for trenches and holes for excavations in hard rock | m3 | 1 | | |
| 9 | Allow for keeping excavations free of all water other than subterranean water | | Item | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **Filling, etc.** | | | | |
| 10 | Backfilling from the excavations to trenches and holes compacted to 93% modified AASHTO density | m3 | 1 | | |
| 11 | Imported top soil filling supplied by the Contractor, brought onto site and spread and levelled over sportsfield | m3 | 344 | | |
| 12 | Compaction of ground surface under athletic tracks area including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 93% modified AASHTO density | m2 | 4 300 | | |
| | **Tests** | | | | |
| 13 | Tests to determine the degree of compaction, etc. of ground or filling | No | 58 | | |
| | **UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES** | | | | |
| | **15MPa/19mm Concrete in:** | | | | |
| 14 | Blinding under footings and bases | m3 | 1 | | |
| | **30 MPa concrete** | | | | |
| 15 | Bases | m3 | 3 | | |
| | **GRASSING** | | | | |
| | **Grassing with weed free sods approximately 500 x 500 x 75mm thick and maintaining (elsewhere) to approval until date of first delivery** | | | | |
| 16 | Instant lawn: Supply and plant Pennisetum Clandestinum - Kikuyu Grass on Sportsfield | m2 | 4 300 | | |
| | **Fertilizing** | | | | |
| 17 | Fertilizing top soil with 2.3.2 fertilizer spread at a rate of 0,25kg/m2 including working evenly into top 150mm depth of soil | m2 | 4 300 | | |
| 18 | Fertilizing grassed areas with 2.3.2 fertilizer spread at a rate of 0,1 kg/m2 and well irrigated after completion of planting | m2 | 4 300 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 5

| | | | | | |
|---|---|---|---|---|---|
| | **Maintenance** | | | | |
| 19 | Maintenance of grassed areas until date of first delivery (approximately 11100m2) including regularly weeding, mowing and irrigating as necessary | | Item | | |
| | **SPORTS NETS AND CORNER FLAGS** | | | | |
| | **Standard sports nets including all fixing ropes, pegs, attachments, etc.(As per detail DT242)** | | | | |
| 20 | Soccer goal post net to fit frame with front size 7,52 x 2,54m high with hexagonal 4mm PP nets and handing over to the Representative/Agent | No | 2 | | |
| | **Sports field corner flags with poles constructed from flexible PVC pipe; Field flags constructed from polyester, Coil spring-mounted ground shafts on each post allow the post to bend on impact and return to its original position if accidentally knocked over during play** | | | | |
| 21 | Corner flags | No | 14 | | |
| | **GOAL POSTS** | | | | |
| | **Two framed and welded mild steel rugby goal post frames, with retractable soccer net support frames and net saddles. All with one coat primer and two coats enamel (As per detail DT241 and DT242)** | | | | |
| 22 | 16mm Diameter rod handle 600mm girth twice bent and welded to framing (In No 12) | kg | 16 | | |
| 23 | 8mm Diameter rod rope fastening eye bent semi-circular and welded to framing (In No 96) as 10/140 | kg | 8 | | |
| 24 | 102 x 3mm Circular Hollow section post | m | 35 | | |
| 25 | 114 x 3,5mm Circular Hollow section post | m | 29 | | |
| 26 | 38 x 2mm Circular Hollow section support frame | m | 28 | | |
| 27 | Extra for mitred and welded angle intersection | No | 4 | | |
| 28 | Extra for welded T-intersection | No | 6 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 5

Section 3: External Works (Provisional)

Bill No. 5

Soccer / Rugby Field (Provisional)

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 338 | | |
| | 339 | | |
| | 340 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 5

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL NO. 6: COMBI COURTS, ETC. (PROVISIONAL)** | | | | |
| | All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density | | | | |
| | Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation | | | | |
| | 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 and for bulking | | | | |
| | **EXCAVATIONS** | | | | |
| | **Excavate in earth not exceeding 2000mm deep below natural, elevated or reduced ground level for** | | | | |
| 1 | Reducing levels under combi court area | m3 | 344 | | |
| 2 | Holes | m3 | 3 | | |
| | **Sundries** | | | | |
| 3 | Extra over all excavations for carting away surplus material from excavations and/or from stockpiles on site to a dumping site to be located by the Contractor | m3 | 3 | | |
| 4 | Risk of collapse of sides of excavations for trenches and holes not exceeding 1500mm deep from natural, elevated or reduced ground level | m2 | 19 | | |
| 5 | Allow for keeping excavations free of all water other than subterranean water | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **Filling, etc.** | | | | |
| 6 | 150mm Layer of selected natural gravel material (G6 to TRH14), imported from commercial sources in filling under combi court area and compacted to 95% modified AASHTO density | m3 | 344 | | |
| 7 | Apply course of 13mm crusher stone, spray with bitumen SS60 | m2 | 1 944 | | |
| 8 | Apply a course of 6.7mm stone, spray with bitumen SS60 emulsion | m2 | 1 944 | | |
| 9 | Compaction of ground surface under combi court area including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 93% modified AASHTO density | m2 | 2 292 | | |
| | **Tests** | | | | |
| 10 | Tests to determine the degree of compaction, etc. of ground or filling | No | 46 | | |
| | **Protection against termites** | | | | |
| 11 | Poisoning surface of ground in bottoms of trenches, bases, etc. | m2 | 11 | | |
| 12 | Poisoning surface of ground or filling under floors, steps, etc. including raking out 75mm deep V-shaped channels against the walls, etc. treating with poison solution, backfilling and ramming | m2 | 2 292 | | |
| | **CONCRETE** | | | | |
| | **Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15MPa at 28 days** | | | | |
| 13 | In surface blinding under footings to walls cast against excavated surfaces, stepped and levelled | m3 | 2 | | |
| 14 | In pole and post bases cast against excavated surfaces | m3 | 11 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **Concrete test cubes** | | | | |
| 15 | Prepare set of three 150 x 150 x 150mm concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Representative/Agent. Only successful tests will be paid for | No | 2 | | |
| | **Mesh reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 20MPa at 28 days** | | | | |
| 16 | In footings to walls cast against excavated surfaces, stepped and levelled | m3 | 250 | | |
| | **REINFORCEMENT** | | | | |
| | **Mesh reinforcement** | | | | |
| 17 | Laying of a Bara-Mesh sheet all over the Court | m2 | 1 668 | | |
| | **PRECAST CONCRETE** | | | | |
| 18 | Precast concrete light duty garden kerb edging size 100mm wide at bottom tapering to 85mm wide at top x 150mm high with top edges rounded in 1000mm lengths with 10mm wide butt joints filled in with (2:1) cement mortar and pointed with grooved half round joints and 10mm wide open butt joints at 5000mm centres including any necessary excavation, formwork, etc. | m | 348 | | |
| | **CARPENTRY AND JOINERY** | | | | |
| 19 | 18mm Marine plywood with veneer suitable for paint in backboards bolted to steel framework (bolts and framework elsewhere) | m2 | 15 | | |
| | **IRONMONGERY** | | | | |
| | **Standard sports nets including all fixing ropes, attachments, etc.** | | | | |
| 20 | Netball net including fixing in position complete to netball ring (elsewhere) | No | 4 | | |
| 21 | Basketball net including fixing in position complete to basketball ring (elsewhere) | No | 4 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

## METALWORK HOT-DIPPED GALVANISED MILD STEEL

NOTE: The following are to be hot-dipped galvanised after fabrication of complete units

**Framed and welded hot-dipped double spelter galvanised mild steel poles, rings, etc. for sports equipment**

| | | | | | |
|---|---|---|---|---|---|
| 22 | Support for basketball net (elsewhere) formed of 16mm diameter rod ring to 450mm internal diameter with 60 x 10mm flat section L-shaped arm 300mm girth and with two 10mm diameter rod supporting arms each 500mm girth twice bent and welded onto ring and onto and including 450 x 350 x 6mm flat section backing plate four times holed for bolts (elsewhere) including bolting unit in position complete to steel framework | No | 4 | | |
| 23 | Sleeve for removable pole formed of 102mm diameter x 2,5mm thick hollow section 700mm long with 140 x 140 x 10mm flat section flange with machine bevelled and scribed opening to suit sleeve diameter welded onto top end and with 250 x 250 x 6mm flat section base plate welded onto bottom end including setting up and embedding in position complete in concrete base (elsewhere) | No | 4 | | |
| 24 | Permanent netball pole formed of 89mm diameter x 4mm thick hollow section 3900mm long with mushroom cap welded onto top, painted Antique green gloss enamel paint, the pole with and including support for netball net (elsewhere) formed of 16mm diameter rod ring to 380mm internal diameter with 16mm square section L-shaped arm 250mm girth welded onto pole and onto ring including setting up unit in position complete in sleeve (elsewhere) and later removing and handing over to the Representative/Agent | No | 4 | | |

**Carried to Collection** R

Section No. 3
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| 25 | Basketball pole formed of 127mm diameter x 4mm thick hollow section 3900mm long with mushroom cap welded onto top end and 250 x 250 x 6mm flat section base plate welded onto bottom end, the pole with and including support for netball net (elsewhere) formed of 16mm diameter rod ring to 380mm internal diameter with 16mm square section L-shaped arm 250mm girth welded onto pole and onto ring; L-shaped arm 2913mm girth formed of 102mm diameter x 2,8mm thick hollow section with one end welded onto pole and other end welded closed with 6mm flat section; stay formed of 102mm diameter x 2,8mm thick hollow section 1602mm long extreme with ends scribed and welded onto pole and arm; 1200 x 450 x 6mm flat section mounting plate eight times holed for bolts (elsewhere) and with three 450 x 60 x 6mm overall flat section flanges welded onto mounting plate and scribed as necessary and welded onto L-shaped arm including setting up unit and embedding in position complete in concrete base (elsewhere) | No | 4 | | |
| | **Framed and welded hot-dipped double spelter galvanised mild steel framing for two basketball backboards and fixing in position complete** | | | | |
| 26 | Screw bolts with nuts and washers | kg | 1 | | |
| 27 | 25 x 25 x 1,8mm Hollow section framing holed for and bolted to 18mm thick timber backboard (elsewhere) with and including 6mm diameter galvanised gutter bolts at 400mm centres | m | 18 | | |
| 28 | Extra for mitred and welded angle intersection | No | 8 | | |
| 29 | Extra for welded T-intersection | No | 16 | | |
| 30 | Hole through both 2,5mm thick walls of hollow section and 18mm thick timber backboard for 10mm diameter bolt (elsewhere) | No | 16 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **PLUMBING** | | | | |
| | **Sundries** | | | | |
| 31 | 150 x 150 x 100mm x 4,5kg Type 11A light duty cast iron hinged stopcock box embedded in concrete base (elsewhere) | No | 6 | | |
| | **PAINTWORK** | | | | |
| | **Paint on bituminous surfacing; Prepare and apply two full coats solvent based road and runway marking paint including silica sand sprinkled on before the paint has set to form slip-free surface** | | | | |
| 32 | Volleyball court marking lines 56mm wide WHITE | m | 144 | | |
| 33 | Netball court marking lines 56mm wide YELLOW | m | 163 | | |
| 34 | Tennis court marking lines 56mm wide GREY | m | 292 | | |
| 35 | Netball court marking lines 56mm wide set out circular YELLOW | m | 64 | | |
| | **Paint on wood: Prepare and apply one coat hardboard primer, one coat universal undercoat and two full coats high gloss enamel paint** | | | | |
| 36 | On general surfaces | m2 | 8 | | |
| | **Prepare and apply one coat universal undercoat and two full coats high gloss enamel paint in brilliant colour** | | | | |
| 37 | Backboard marking lines 50mm wide | m | 16 | | |
| | **SURFACING OF BITUMINOUS PREMIX CARPET** | | | | |
| | **Bituminous premix combi court surfacing** | | | | |
| 38 | Prime coat | m2 | 1 944 | | |
| 39 | 25mm Thick continuously graded premixed bituminous surfacing | m2 | 1 944 | | |
| 40 | Final course bitumen slurry seal | m2 | 1 944 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

## FENCING TO COMBI COURTS

### Bolts and latches

| | | | | | |
|---|---|---|---|---|---|
| 41 | 200mm Galvanised heavy duty barrel bolt welded onto gate style | No | 2 | | |

### Locks

| | | | | | |
|---|---|---|---|---|---|
| 42 | 63mm Brass five pin tumbler padlock with two keys | No | 2 | | |

### Metal Fencing

| | | | | | |
|---|---|---|---|---|---|
| 43 | Fencing 3600mm high Chain link galvanised diamond mesh, formed of three strands of 4mm thick galvanised mild steel straining wire mechanically strained between intermediate or gate and main posts at maximum 20m centres with one end passed through holes and securely tied to posts and other end securely tied to and including eye bolts bolted onto posts; each strand tied at maximum 4000mm centres to intermediate posts (elsewhere) with and including 2mm galvanised binding wire; the fence covered with and including 50mm mesh chain link netting of 2mm diameter galvanised mild steel wire strained and secured to top and bottom rails, posts and straining wires with and including 2mm galvanised binding wire | m | 348 | | |
| 44 | 38,1mm Diameter x 2mm thick galvanised mild steel top or bottom rails | m | 348 | | |
| 45 | Extra for scribed and welded T-intersection with post | No | 160 | | |
| 46 | 48,5mm Diameter x 3mm thick galvanised mild steel intermediate post 1400mm long with mushroom cap welded onto top and with 100 x 100 x 5mm galvanised mild steel base plate welded onto bottom end and four times holed for and bolted to top of wall with and including M10 x 95mm expansion bolts | No | 2 | | |
| 47 | 48,5mm Diameter x 3mm thick galvanised mild steel gate post and top rail 4000mm girth with one mitred and welded intersection, one end welded to side of main post and with 100 x 100 x 5mm galvanised mild steel base plate welded onto bottom end including setting up post and embedding in position in concrete base (elsewhere) | No | 2 | | |

**Carried to Collection** R

Section No. 3
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| 48 | 48,5mm Diameter x 3mm thick galvanised mild steel intermediate post 4600mm long with mushroom cap welded onto top and with 100 x 100 x 5mm galvanised mild steel base plate welded onto bottom end including setting up post and embedding in position in concrete base (elsewhere) | No | 30 | | |
| 49 | 76,2mm Diameter x 4mm thick galvanised mild steel main post 4600mm long with mushroom cap welded onto top and with 100 x 100 x 5mm galvanised mild steel base plate welded onto bottom end including setting up post and embedding in position in concrete base (elsewhere) | No | 8 | | |
| | **Galvanised mild steel gates** | | | | |
| 50 | Single pedestrian gate size 900 x 2100mm high formed of 50mm diameter x 2,8mm thick pipe framing all round complete with one 50mm diameter x 2,8mm thick pipe diagonal brace all neatly mitred and welded at intersections; the gate with two strands of 4mm thick galvanised mild steel straining wire mechanically strained between and securely fixed to gate styles and covered with and including 50mm mesh chain link netting of 3,15mm diameter galvanised mild steel wire securely fixed to straining wires and framing with and including 2mm galvanised binding wire, the one style fitted with and including two standard type pin and collar hinges bolted onto gate post (elsewhere) including drilling holes through gate post and other style prepared and drilled for barrel bolt (elsewhere) and hand-hole opening formed of 10mm diameter bar 320mm girth bent to semi-circular shape and welded on | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 6

Section 3: External Works (Provisional)

Bill No. 6

Combi Courts (Provisional)

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 342 | | |
| | 343 | | |
| | 344 | | |
| | 345 | | |
| | 346 | | |
| | 347 | | |
| | 348 | | |
| | 349 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 6

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 3** | | | | |
| | **BILL No. 7: LANDSCAPING (PROVISIONAL)** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **LANDSCAPING** | | | | |
| | **Maintenance period** | | | | |
| | Attention is drawn to the maintenance period prescribed in the specification | | | | |
| | **THE FOLLOWING IN LANDSCAPING - Landscape Development Plan** | | | | |
| | **GRASSING** | | | | |
| | **Topsoil, compost, lime and fertilizer** | | | | |
| 1 | Place topsoil fill material from site stockpile | m3 | 538 | | |
| | **Grassing, ground covers, etc** | | | | |
| 2 | Instant lawn: Supply and plant Pennisetum Clandestinum - Kikuyu Grass | m2 | 538 | | |
| | **Fertilizing** | | | | |
| 3 | Fertilizing grassed areas with 2.3.2 fertilizer spread at a rate of 0,1 kg/m2 and well irrigated after completion of planting | m2 | 538 | | |
| | **Maintenance** | | | | |
| 4 | Maintain all aspects of the landscape works from the date of practical completion of the landscape works, for a period of 3 months including the supply of fertiliser and all other materials required | | Item | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **Landscape Rocks** | | | | |
| 5 | Rock features: Supply and place landscape rocks features | No | 3 | | |
| | **PLANTING** | | | | |
| | **Acacia Robusta Trees: Supply and Planting** | | | | |
| 6 | 100 litre trees: Splendid Thorn | No | 25 | | |
| 7 | 100 litre trees: Dovyalis Caffra | No | 8 | | |
| | **Carried to Collection** | | | R | |

Section No. 3
Bill No. 7

Section 3: External Works (Provisional)

Bill No. 7

Landscaping

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 351 | | |
| | 352 | | |
| **Carried Forward to Summary of Section No. 3** | | R | |

Section No. 3
Bill No. 7

Section 3: External Works (Provisional)

**SECTION SUMMARY - Section 3: External Works (Provisional)**


| Bill No | | Page No | Amount |
|---|---|---|---|
| 1 | Bulk Earthworks | 315 | |
| 2 | External Plumbing and Drainage | 323 | |
| 3 | Road Works, Pavings, etc. | 331 | |
| 4 | Fencing, Boundary, Screen and Retaining Walls ect. | 337 | |
| 5 | Soccer / Rugby Field (Provisional) | 341 | |
| 6 | Combi Courts (Provisional) | 350 | |
| 7 | Landscaping | 353 | |


**Carried to Final Summary** R

Section No. 3

| Item No | | Quantity | Rate | Amount |
|---|---|---|---|---|
| | **SECTION 4** | | | |
| | **BILL NO. 1: LOWER GROUND** | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | |
| | NOTE: The complete installation must comply SANS 0142 specifications and the Quality specification in this document. Therefore Tenders are advised to study the specification and drawings before the Bill is to be price. | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | |
| | The Contractor is referred to relevant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | |
| | **Specification and drawings** | | | |
| | Tenderers are referred to the Electrical Specification and drawings annexed to these bills of quantities for full descriptions of the project specification, materials to be used, etc | | | |
| | **Carried to Collection** | | R | |

Section No. 4
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| | **LOWER GROUND** | | | | |
| | **LV Reticulation** | | | | |
| | Supply the following Distribution Boards complete with all switchgear, accessories as specified on the schematic layouts, all fitted in the factory & tested, including delivery to site & off-loading in accordance with the single lines.: | | | | |
| 1 | Supply Main Distribution Board 250A | | Item | | |
| 2 | Supply Sub Distribution Board 80A | No | 2 | | |
| | **CABLES AND LV EQUIPMENT** | | | | |
| | **Supply, install and connect reticulation cables installed in cable ladder, tray, trenching or sleeves. Including terminations** | | | | |
| | From Kiosk to MDB_M | | | | |
| 3 | 150mm² 4 core | m | 120 | | |
| 4 | 150mm² BCEW | m | 120 | | |
| 5 | 50 mm² 4 Core | m | 105 | | |
| 6 | 50 mm² BCEW | m | 105 | | |
| 7 | 10mm² 3 Core | m | 220 | | |
| 8 | 16mm² 4 Core | m | 200 | | |
| 9 | 16mm² 4 BCEW | m | 200 | | |
| 10 | 110mm dia Sleeves | m | 270 | | |
| 11 | Bulk Metering Kiosk | No | 1 | | |
| 12 | 60kVA Online UPS Complete with 30min Battery Back up Kit | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| | **CONDUIT** | | | | |
| | **Supply and install conduit complete with all accessories including couplings, bending and fixings as specified:** | | | | |
| 13 | 20mm conduit - cast in concrete or built in brickwork | m | 800 | | |
| | **WIRING AND CONDUCTORS** | | | | |
| | **Supply and install PVC insulated copper conductors in required colours, drawn into conduit or trunking:** | | | | |
| 14 | 2.5mm² | m | 2 000 | | |
| 15 | 4mm² Wiring | m | 800 | | |
| 16 | 2.5mm² B.C.E.W | m | 1 000 | | |
| | **LUMINAIRES** | | | | |
| | **Supply, install and connect luminaires mounted as specified, complete with lamps, control gear and all accessories:** | | | | |
| 17 | VLN LED 46W | No | 36 | | |
| 18 | Beka Series 30 LED 13W Bulkhead | No | 20 | | |
| 19 | Beka Zela Post Top Luminaire including 5 meter fibre glass pole | No | 11 | | |
| | **COUNCIL CONNECTION FEES** | | | | |
| 20 | Provide the Provisional Sum of R 480 000,00 for Electricity Connection Fees , in accordance with the specifications provided by the Representative/Agent and to be adjusted in accordance with schedule rates on completion | | Item | | |
| 21 | Add for profit | | Item | | |
| 22 | Add for general attendance on sub-contractor | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 1

Section 4 : Electrical Works

Bill No. 1

Lower Ground

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 355 | | |
| | 356 | | |
| | 357 | | |
| **Carried Forward to Summary of Section No. 4** | | R | |

Section No. 4
Bill No. 1

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 4** | | | | |
| | **BILL NO. 3: LIGHTING RETICULATION** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The complete installation must comply SANS 0142 specifications and the Quality specification in this document. Therefore Tenders are advised to study the specification and drawings before the Bill is to be price. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relavant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Specification and drawings** | | | | |
| | Tenderers are referred to the Electrical Specification and drawings annexed to these bills of quantities for full descriptions of the project specification, materials to be used, etc | | | | |
| | **EXISTING DISTRIBUTION BOARDS** | | | | |
| | **Service and maintain distribution board as follows;** | | | | |
| 1 | Refurbish & Additions to ex. Ablutions - Replace Wall Mounted Distribution Board 63A | No | 1 | | |
| 2 | Refurbish ex.Admin Block Convert - Replace Wall Mounted Distribution Board 80A | No | 1 | | |
| 3 | Refurbish ex.6 X Classroom - Block J - Replace Wall Mounted Distribution Board 63A | No | 2 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| 4 | Refurbish ex.4 X Classroom - Block K - Replace Wall Mounted Distribution Board 63A | No | 1 | | |
| | **DISTRIBUTION BOARDS** | | | | |
| | **Supply the following Distribution Boards complete with all switchgear, accessories as specified on the schematic layouts, all fitted in the factory & tested, including delivery to site & off-loading in accordance with the single lines.:** | | | | |
| 5 | 4 Classroom - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 6 | School Hall - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 7 | Guard House - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 8 | Media Centre - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 9 | Nutrition Block - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 10 | Science Block - Supply Wall Mounted Distribution Board 63A | No | 1 | | |
| 11 | Admin Block - Supply Wall Mounted Distribution Board 80A | No | 1 | | |
| | **CABLES AND CABLE TERMINATIONS** | | | | |
| | **Supply, install and connect reticulation cables installed in cable ladder, tray, trenching or sleeves. Including terminations** | | | | |
| 12 | 10 mm² 3 Core | m | 360 | | |
| 13 | 16 mm² 4 Core | m | 485 | | |
| 14 | 16mm² BCEW | m | 485 | | |
| 15 | 25mm² 4 Core | m | 150 | | |
| 16 | 25mm² 4 BCEW | m | 150 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **CONDUIT** | | | | |
| | **Supply and install conduit complete with all accessories including couplings, bending and fixings as specified:** | | | | |
| 17 | 20mm conduit - cast in concrete or built in brickwork | m | 5 102 | | |
| 18 | 20mm conduit - suspended in ceiling void | m | 645 | | |
| | **CONDUIT BOXES** | | | | |
| | **Supply and install conduit boxes complete with all accessories including conduit terminations** | | | | |
| 19 | 60mm round, 25mm deep for 20mm conduit mounted flush in wall or fixed to surface | No | 167 | | |
| | **OUTLET EXCLUDING BOX COVERS** | | | | |
| 20 | 100mm x 50mm x 50mm conduit box. | No | 130 | | |
| 21 | 100mm x 100mm x 50mm conduit box. | No | 117 | | |
| | **WIRING AND CONDUCTORS** | | | | |
| | **Supply and install PVC insulated copper conductors in required colours, drawn into conduit or trunking:** | | | | |
| 22 | 2.5mm² | m | 29 990 | | |
| 23 | 2.5mm² B.C.E.W | m | 15 500 | | |
| | **LIGHT SWITCHES** | | | | |
| | **Supply, install and connect light switch complete with cover plate and all accessories:** | | | | |
| 24 | 16A 1 lever 1 way light switch complete with cover plate | No | 88 | | |
| 25 | 16A 2 lever 1 way light switch complete with cover plate | No | 18 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| | **LUMINAIRES** | | | | |
| | **Supply, install and connect luminaires mounted as specified, complete with lamps, control gear and all accessories:** | | | | |
| 26 | VLN LED 43W | No | 35 | | |
| 27 | VLN LED 46W | No | 206 | | |
| 28 | Beka Rondo Midi 15W LED | No | 17 | | |
| 29 | Beka Rondo Midi 7W LED | No | 40 | | |
| 30 | Beka LED Panel 65W LED | No | 106 | | |
| | **SWITCHED SOCKET OUTLETS** | | | | |
| | **Supply, install and connect Switched socket outlets mounted flush in wall or in powerskirting as specified, complete with cover plates and all accessories** | | | | |
| 31 | 16A Single switch socket outlet. (White) | No | 73 | | |
| 32 | 16A Double switch socket outlet (White) | No | 85 | | |
| | **ISOLATORS** | | | | |
| | **Supply and install Isolators mounted as specified complete with cover plate and all accessories.** | | | | |
| 33 | 30A Single Phase Isolator | No | 24 | | |
| 34 | 20A Three Phase Isolator | No | 31 | | |
| | **POWERSKIRTING** | | | | |
| | **2 Compartment 2 cover steel type power-skirting as per specification and drawings complete with cover plates, splices, earthing, powder coating, etc.** | | | | |
| 35 | 3 Tier 2 Compartment Power Skirting | m | 230 | | |
| 36 | 3 Tier 2 End Caps | No | 32 | | |
| 37 | Telephone / Data Outlet | No | 50 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| 38 | 16A SSO in Powerskirting | No | 56 | | |
| 39 | 16A Dedicated SSO in Powerskirting | No | 56 | | |
| | **TRUNKING** | | | | |
| | **Supply and install trunking, cable tray, cable ladder and/or basket compete with covers and accessories, mounted along ceiling void at 3000mm height** | | | | |
| 40 | P8000 Trunking | m | 543 | | |
| 41 | P8000 Trunking - DB Entry | No | 14 | | |
| 42 | P8000 Trunking - End Caps | No | 53 | | |
| 43 | P8000 Trunking - 90 Deg bends | No | 38 | | |
| | **SECTION 2: ELECTRONIC SERVICES OUTLETS** | | | | |
| | **DATA AND TELEPHONE INSTALLATION** | | | | |
| | **CONDUIT** | | | | |
| | **Supply and install conduit complete with all accessories including couplings, bending and fixings as specified:** | | | | |
| 44 | 25mm conduit - cast in concrete or built in brickwork | m | 445 | | |
| 45 | 25mm conduit - suspended in ceiling void | m | 300 | | |
| | **DRAW-WIRE** | | | | |
| | **Supply and draw into conduit 1mm steel draw-wire** | | | | |
| 46 | Draw-wire | m | 2 940 | | |
| | **OUTLETS** | | | | |
| | **Supply, install blank cover plates and conduit boxes mounted as indicated** | | | | |
| 47 | 100mm x 100mm x 50mm conduit box | No | 100 | | |
| | **Carried to Collection** | | | R | |

Section 4 : Electrical Works

Bill No. 2

Light Reticulation

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 359 | | |
| | 360 | | |
| | 361 | | |
| | 362 | | |
| | 363 | | |
| **Carried Forward to Summary of Section No. 4** | | R | |

Section No. 4
Bill No. 2

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 4** | | | | |
| | **BILL NO. 5: INTERCOM PUBLIC ADDRESS SYSTEM** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The complete installation must comply SANS 0142 specifications and the Quality specification in this document. Therefore Tenders are advised to study the specification and drawings before the Bill is to be price. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relavant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Specification and drawings** | | | | |
| | Tenderers are referred to the Electrical Specification and drawings annexed to these bills of quantities for full descriptions of the project specification, materials to be used, etc | | | | |
| | **INTERCOM PUBLIC ADDRESS SYSTEM** | | | | |
| | Complete Supply and Installation of the following 2-way Intercom system with all control equipment including all connectors, professional, labeling , terminal screws: | | | | |
| | **Head End Equipment** | | | | |
| 1 | Supply ,install, and connect a control unit for the intercom system complete with cabinets, remote microphone, Player/recorder, Audio input system,etc | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **Supply and Connect Units** | | | | |
| 2 | Internal Wall mounted intercom unit | No | 70 | | |
| 3 | External Wall mounted intercom unit | No | 18 | | |
| 4 | Complete cabling for whole system | m | 3 400 | | |
| 5 | Testing, Commissioning & Handover | | Item | | |
| | **WiFi Installation** | | | | |
| 6 | Wired data points (incl wifi points) on power skirting or wall mounted as specified and as indicated on drawings. (Inclusive of boxes, RJ45 faceplates & Cat 6 termination) | No | 69 | | |
| 7 | Indoor Wireless Access Point Device. Features: 802.11ac MU-MIMO technology, 802.11i, WPA2, WPA, 802.1X , AES, PoE | No | 22 | | |
| 8 | Wireless LAN Controller with 50 AP License. Wireless intrusion prevention system (IPS) capabilities, RF management, QoS, and Layer 3 fast secure roaming. 2 x 10 GigE support, PoE | No | 1 | | |
| 9 | CAT6a UTP Cable (Colour: Grey) | m | 3 300 | | |
| 10 | 43U 19inch cabinet, integrated rack, incl cooling fans, rack shelves, rack rails. Rack must also come with a 230V, 16A, 3pin round (X 10 socket) outlets adapter, white in colour, suitable for mounting on the 19" rack | No | 1 | | |
| 11 | 12U fixed swing out cabinet, wall mount, lockable, incl cooling fans, rack shelves, rack rails. Rack must also come with a 230V, 16A, 3pin round (X 10 socket) outlets adapter, suitable for mounting on the 19" rack | No | 9 | | |
| 12 | 5kVA 3phase UPS system with 30 minutes autonomy: | No | 1 | | |
| 13 | 1.5kVA inline, rack mount, UPS system with 30 minutes autonomy: | No | 9 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| 14 | Field Access Switch. Layer 2, Managed, GigE - 48 x 10/100/1000 + 2 x 10 Gigabit SFP+, Spanning Tree Protocols: 802.1d/w/s (RSTP, MSTP & Rapid PVST+); IGMP Snooping: v1/v2/v3; PIM; VLANs - Port-based; Port Security; SSL/HTTP; SSH/Secure Shell ; RADIUS/ TACACS+ Client; - rack-mountable, PoE - IEEE 802.3af; [12NO instlled] (2 for admin block, 4 for block C, 4 for block D and 2 for block B) | No | 8 | | |
| 15 | Field Access Switch. Layer 2, Managed, GigE - 24 x 10/100/1000 + 2 x 10 Gigabit SFP+, Spanning Tree Protocols: 802.1d/w/s (RSTP, MSTP & Rapid PVST+); IGMP Snooping: v1/v2/v3; PIM; VLANs - Port-based; Port Security; SSL/HTTP; SSH/Secure Shell ; RADIUS/ TACACS+ Client; - rack-mountable, PoE - IEEE 802.3af; [1NO instlled] (1 for block L) | No | 4 | | |
| 16 | Core Switch -Multilayer (L2, L3, L4) - Managed - 24 x 10G SFP+; 4 x 10GbE; GigE port aggregation, IEEE 802.1q; VLANs - Port-based; Voice VLAN; Spanning Tree Protocols: 802.1d/w/s (RSTP, MSTP and Rapid PVST+); DHCP & DHCP Relay; Layer 3 Routing; IGMP v1/v2/v3; Protocol Independent Multicast (PIM); SNMP v1/v2/v3; Syslog; SMTP alert; ACLs; MAC filtering; DoS Control; Quality of service (QoS); IP ARP / RARP; Super-netting (CIDR), Port security; SSL/HTTP; SSH/Secure Shell ; RADIUS/ TACACS+ Client; IPv4 & IPv6; PoE - IEEE 802.3af; [2NO instlled] | No | 3 | | |
| 17 | Fibre Optic Cable, 4 Core SM | m | 1 100 | | |
| | **GENERAL** | | | | |
| 18 | Sundries (Small Materials) | | Item | | |
| 19 | As Built Drawings | | Item | | |
| 20 | Systems Manuals | | Item | | |
| 21 | Operator Training | | Item | | |
| | **CCTV AND ACCESS CONTROL** | | | | |
| 22 | Provide the Provisional Sum of R 310 000,00 for CCTV and Access Control, in accordance with the specifications provided by the Representative/Agent and to be adjusted in accordance with schedule rates on completion | | Item | | 310 000.00 |
| 23 | Add for profit | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 3

| | | | | |
|---|---|---|---|---|
| 24 | Add for general attendance on sub-contractor | Item | | |
| | **<u>META DETECTORS AND INTRUDER ALARM</u>** | | | |
| 25 | Provide the Provisional Sum of R 220 000,00 for Metal Detectors and Intruder Alarm, in accordance with the specifications provided by the Representative/Agent and to be adjusted in accordance with schedule rates on completion | Item | | 220 000.00 |
| 26 | Add for profit | Item | | |
| 27 | Add for general attendance on sub-contractor | Item | | |

**Carried to Collection** R

Section No. 4
Bill No. 3

Section 4 : Electrical Works

Bill No. 3

Intercom Public Address System

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 365 | | |
| | 366 | | |
| | 367 | | |
| | 368 | | |
| **Carried Forward to Summary of Section No. 4** | | R | |

Section No. 4
Bill No. 3

| Item No | | | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 4** | | | | |
| | **BILL NO. 4: EARTHING AND LIGHTNING PROTECTION** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The complete installation must comply SANS 0142 specifications and the Quality specification in this document. Therefore Tenders are advised to study the specification and drawings before the Bill is to be price. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relavant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Specification and drawings** | | | | |
| | Tenderers are referred to the Electrical Specification and drawings annexed to these bills of quantities for full descriptions of the project specification, materials to be used, etc | | | | |
| | **SUPPLY INSTALLATION OF THE LIGHTNING PROTECTION** | | | | |
| 1 | 50mm² Aluminium Conductor fixed to walls, roof, down pipes etc.. | m | 420 | | |
| 2 | Bonding joints, etc. complete for 50mm² conductor including lugs, nuts, bolts and washers. | No | 110 | | |
| 3 | 3m copper coated earth electrodes driven into ground complete with brass coupling between rods. | No | 29 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| 4 | Additional 1.5m copper coated earth electrodes driven into ground complete with brass coupling between rods with prior approval from the electrical engineer. | No | 32 | | |
| 5 | 35mm² Copper conductor jumpers between the earth electrodes and aluminium droppers Test Point. | m | 200 | | |
| 6 | Bonding joints, etc. complete for 35mm² conductor including lugs, nuts, bolts and washers. | No | 76 | | |
| 7 | Test Point Enclosure: Mount fibre Glass enclosure type "York" 300mm AFFL at each drop. Terminate Aluminium / copper conductors using 8mm Stainless steel bolts / washers & nuts | No | 70 | | |
| 8 | Aluminium alloy stand off guides seated onto structure on plastic or other insulating material. | No | 113 | | |
| 9 | Earthing / Bonding of water pipes DBs and Kiosks. | No | 1 | | |
| | **TESTING AND COMMISSIONING** | | | | |
| 10 | Allow for resistivity tests, reports and certificates for the ground conditions to be witnessed by the engineer. | No | 1 | | |
| 11 | Allow for the testing and commissioning of the lightning protection installation per building and witnessed by the engineer. | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 4
Bill No. 4

Section 4 : Electrical Works

Bill No. 4

Earthing and Lightning Protection

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 370 | | |
| | 371 | | |
| **Carried Forward to Summary of Section No. 4** | | R | |

Section No. 4
Bill No. 4

Section 4 : Electrical Works

**SECTION SUMMARY - Section 4 : Electrical Works**

| Bill No | | Page No | Amount |
|---|---|---|---|
| 1 | Lower Ground | 358 | |
| 2 | Light Reticulation | 364 | |
| 3 | Intercom Public Address System | 369 | |
| 4 | Earthing and Lightning Protection | 372 | |

**Carried to Final Summary** R

Section No. 4

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 1: HVAC** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The contractor is advised to study the Mechanical Engineer's drawings before pricing this bill. In the case of any discrepancies between the bill and the drawings the contractor must notify the Principal Agent. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relevant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **SPLIT SYSTEM** | | | | |
| | **Supply and install Split Indoor and Outdoor units complete with piping, fittings and fixtures such as refnet joints, power wiring, etc, (R410a) refrigerant gas for commisioning as specified and shown on the drawing including wired remote controllers.** | | | | |
| 1 | SHIU - Hideaway Indoor and Outdoor Unit, Nomial Cooling Capacity of 14 kW and Heating Capacity 15 kW,R410a | No | 4 | | |
| | **Carried to Collection** | | | | R |

| | | | | | |
|---|---|---|---|---|---|
| 2 | SHIU - Hideaway Indoor and Outdoor Unit, Nomial Cooling Capacity of 30 kW and Heating Capacity 30 kW,R410a | No | 1 | | |
| 3 | SCCIU - Ceiling Cassette Indoor and Outdoor Unit, Nomial Cooling Capacity of 3,52 kW and Heating Capacity 4 kW,R410a | No | 5 | | |
| 4 | SCCIU - Ceiling Cassette Indoor and Outdoor Unit, Nomial Cooling Capacity of 10,1 kW and Heating Capacity 11 kW,R410a | No | 1 | | |
| 5 | SCCIU - Ceiling Cassette Indoor and Outdoor Unit, Nomial Cooling Capacity of 13,4 kW and Heating Capacity 14,65 kW,R410a | No | 1 | | |
| 6 | SMIU - Midwall Indoor and Outdoor Unit, Nomial Cooling Capacity of 2,68 kW and Heating Capacity 2,81 kW,R410a | No | 4 | | |
| 7 | Rooftop Packaged Inverter Unit, together with vibration pads, Wall Mounted Wired Controller. Nominal Cooling Capacity of 97kW and 101 Heating Capacity, R410a or R32 refrigerant. | No | 2 | | |
| | **Air Terminals** | | | | |
| 8 | DG00 - 400 x 400mm Door Grille | No | 18 | | |
| 9 | DV00 - 150mm Extaction Disc Valve | No | 39 | | |
| 10 | RAG00 - 1200 x 600 Return Air Grille, spigot connection size varies | No | 5 | | |
| 11 | SAD00 - 600 x 600 CVV Supply Air Diffuser | No | 24 | | |
| 12 | SAG00 - 300 x 300 Fresh Air Grille, spigot connection size varies | No | 3 | | |
| 13 | WL00 - 250 x 250 Weather Louvre c/w wms | No | 1 | | |
| 14 | WL00 - 350 x 350 Weather Louvre c/w wms | No | 1 | | |
| 15 | WL00 - 400 x 400 Weather Louvre c/w wms | No | 1 | | |
| 16 | WL00 - 200 x 200 Weather Louvre c/w wms | No | 1 | | |
| 17 | WL00 - 300 x 300 Weather Louvre c/w wms | No | 2 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| 18 | WL00 - 600 x 400 Weather Louvre c/w wms | No | 1 | | |
| 19 | 600mm diameter Constant Volumes Diffusers | No | 12 | | |
| 20 | Stainless Steel Exhaust Canopy complete with lighting, 4 off inertia filters, drip channels and all duct and trunking connections as specified in the Standard and Detailed Specifications as well as shown on the drawings | No | 1 | | |
| | **Fresh Air Fans** | | | | |
| 21 | FAF00 - Main Axial Extractor Fan, 1,10kW Power Motor, Power/V/Ph/Hz (400/3/50), diamter 400 mm,VSD. c/w Sound Attenuators Round 1.5D and mounting accessories | No | 1 | | |
| 22 | FAF00 - Fresh Air Fan - Inline Duct - diameter 200mm. c/w Sound attenuator and mounting accessories | No | 1 | | |
| 23 | FAF00 - Fresh Air Fan - Inline Duct - diameter 250mm. c/w Sound attenuator and mounting accessories | No | 3 | | |
| 24 | FAF00 - Fresh Air Fan - Inline Duct - diameter 315mm. c/w Sound attenuator and mounting accessories | No | 1 | | |
| | **Extraction Air Fans** | | | | |
| 25 | EAF00 - Extraction Air Fan - Inline Duct - diameter 250mm. c/w Sound attenuator and mounting accessories | No | 3 | | |
| 26 | EAF00 - Extraction Air Fan - Inline Duct - diameter 315mm. c/w Sound attenuator and mounting accessories | No | 1 | | |
| 27 | EAF00 - Fan Wall Low Volume, min 50 l/s, c/w casing and installation accessories including controller | No | 3 | | |
| 28 | EAF00 - Main Axial Extractor Fan, 1,10kW Power Motor, Power/V/Ph/Hz (400/3/50), diamter 400 mm,VSD. c/w Sound Attenuators Round 1.5D and mounting accessories | No | 1 | | |
| 29 | EAF00 - Main Axial Extractor Fan, 1,10kW Power Motor, Power/V/Ph/Hz (400/3/50), diamter 500 mm,VSD. c/w Sound Attenuators Round 1.5D and mounting accessories | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| 30 | Extractor Fan HCT 35-2T -Inline Duct-diameter 395mm. Front and Back Sound attenuattors and mounting accessories. Power 0.37kW/ 230V. | No | 1 | | |
| | **Accessories** | | | | |
| 31 | FB00 - 200 x 200 Filter | No | 1 | | |
| 32 | FB00 - 250 x 250 Filter | No | 1 | | |
| 33 | FB00 - 300 x 300 Filter | No | 2 | | |
| 34 | FB00 - 400 x 400 Filter | No | 1 | | |
| 35 | BD00 - Balancing Damper Round ø100mm | No | 3 | | |
| 36 | BD00 - Balancing Damper Round ø125mm | No | 6 | | |
| 37 | BD00 - Balancing Damper Round ø150mm | No | 1 | | |
| 38 | BD00 - Balancing Damper Round ø200mm | No | 1 | | |
| 39 | BD00 - Balancing Damper Round ø250mm | No | 3 | | |
| | **DUCTING** | | | | |
| 40 | Flexible Duct ø100mm | m | 2 | | |
| 41 | Flexible Duct ø125mm | m | 5 | | |
| 42 | Flexible Duct ø150mm | m | 30 | | |
| 43 | Flexible Duct ø200mm | m | 15 | | |
| 44 | Flexible Duct ø250mm | m | 36 | | |
| 45 | Flexible Duct ø300mm | m | 5 | | |
| 46 | Flexible Duct ø400mm | m | 5 | | |
| 47 | 150 x 200mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 48 | ø150mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 45 | | |
| 49 | 175 x 175mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 18 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| 50 | 200 x 200mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 10 | | |
| 51 | 250 x 225mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 20 | | |
| 52 | 250 x 250mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 10 | | |
| 53 | 300 x 250mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 54 | 300 x 300mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 55 | 350 x 350mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 56 | 400 x 350mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 57 | 600 x 400mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 58 | ø450mm Duct for Extraction ducting, including Hangers, Brackets, Duct Fittings | m | 5 | | |
| 59 | ø100mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 8 | | |
| 60 | ø125mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 15 | | |
| 61 | 100 x 150mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 10 | | |
| 62 | 150 x 150mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 15 | | |
| 63 | ø150mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 6 | | |
| 64 | 200 x 200mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 18 | | |
| 65 | ø200mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 25 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| 66 | 225 x 275mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 10 | | |
| 67 | 250 x 250mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 5 | | |
| 68 | ø250mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 33 | | |
| 69 | 300 x 275mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 5 | | |
| 70 | 300 x 300mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 10 | | |
| 71 | 350 x 350mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 5 | | |
| 72 | 400 x 400mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 5 | | |
| 73 | 425 x 300mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 5 | | |
| 74 | 450 x 300mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 11 | | |
| 75 | 600 x 350mm Duct for Supply Air ducting, including Hangers, Brackets, Duct Fittings, Insulation | m | 10 | | |
| 76 | ø1m Galvanised Internally Insulated Spiral Ducting together with Hangers and silicon sealant on joints. | m | 10 | | |
| 77 | ø700mm Galvanised Internally Insulated Spiral Ducting together with Hangers and silicon sealant on joints. | m | 5 | | |
| 78 | ø600mm Galvanised Internally Insulated Spiral Ducting together with Hangers and silicon sealant on joints. | m | 5 | | |
| | **ELECTRICAL CONNECTION** | | | | |
| 79 | Electrical connection | No | 31 | | |
| | **CONDENSATE DRAINAGE** | | | | |
| 80 | 32mm PVC drain piping including running joints, fittings, clamps and support and fixing to roof trusses & trays | m | 35 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 1

| | | | | | |
|---|---|---|---|---|---|
| 81 | 50mm PVC drain piping including running joints, fittings, clamps and support and fixing to roof trusses & trays | m | 25 | | |
| | **TEST & COMMISSION** | | | | |
| 82 | Test and Commission the Entire Air conditioning system | | Item | | |
| 83 | Ditto but in the presence of and to the entire satisfaction of the Consulting Engineer. | | Item | | |
| 84 | Issuing of CoC | | Item | | |
| 85 | Asbuilts | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 1

Section 5: Mechanical Works

Bill No. 1

Airconditioning

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 374 | | |
| | 375 | | |
| | 376 | | |
| | 377 | | |
| | 378 | | |
| | 379 | | |
| | 380 | | |
| **Carried Forward to Summary of Section No. 5** | | R | |

Section No. 5
Bill No. 1

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 2: FIRE DETECTION AND SUPPRESSION** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The contractor is advised to study the Mechanical Engineer's drawings before pricing this bill. In the case of any discrepancies between the bill and the drawings the contractor must notify the Principal Agent. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relavant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| | **FIRE DETECTION** | | | | |
| | **Supply, delivery, installation, commissioning and testing of Fire Detection complete with all the Necessary fittings to make it fully operational** | | | | |
| 1 | Sub Analogue Addressable Fire Alarm Panel and Standby Batteries | No | 7 | | |
| | **Allow for the procurement, delivery, installation, connection, testing and commissioning of a two loop analogue addressable fire detection and alarm system control panel** | | | | |
| 2 | Main Analogue Addressable Fire Alarm Panel and Standby Batteries | No | 1 | | |
| | **Allow for the procurement, delivery, installation, connection, testing and commissioning of a two loop analogue addressable fire detection and alarm system control panel** | | | | |
| 3 | Lighting Protection Units | No | 8 | | |
| | **Allow for procurement and installation of lightning protection units on the mains power supply to the panels** | | | | |
| 4 | Logbook | No | 2 | | |
| | **A log book to be Installed in a holder and installed adjacent to master fire panel** | | | | |
| 5 | Block Plan | No | 2 | | |
| | **Provide zone diagram and associated signage, laminated and framed behind glass** | | | | |
| 6 | Ionized Smoke detectors with LED complete with base plates | No | 58 | | |
| 7 | Ionized Heat detectors with LED complete with base plates | No | 2 | | |
| 8 | Loop Siren/Strobe Units | No | 31 | | |
| 9 | Break glass at emergency escapes | No | 31 | | |
| 10 | PH30 cable tested to EN50200 for the fire detection system to specification | m | 718 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| 11 | Galvanized steel conduit (with necessary couplings, junction boxes, etc.) in terms of the specifications. | m | 718 | | |
| 12 | Junction boxes complete with relay, terminals, glands and labelled "fire system" for interface to lift and door hold open devices | No | 10 | | |
| 13 | The contractor shall allow for all items not specifically mentioned above in order to provide a complete working solution as per the specifications | | Item | | |
| 14 | Line isolators | m | 10 | | |
| | **FIRE SUPPRESSION** | | | | |
| | **FM 200 System** | | | | |
| 15 | 25bar, 45lit. Seamless Cylinder SABS Approved, complete with valve assembly arrangement for supervisory switch connection, 24 V solenoid valves, Gauge monitoring cylinder pressure, a pressure gauge with a safety burst disc & a safety cap. The vendor shall consider the necessary (if required) interface modules, integrators etc and all module necessary for successful operation. Cylinder Straps are made of Stainless Steel, M10 mild steel bolt and nut included for assembly. All mounting hardware is supplied by the system installer | No | 5 | | |
| 16 | FM - 200 Gas -45 KG | No | 5 | | |
| 17 | PH120 1mm 1 pair Fire resistant cable | m | 70 | | |
| 18 | 25 mm steel conduit | m | 70 | | |
| 19 | Optical Smoke Detector | No | 4 | | |
| 20 | Warning Signage | No | 2 | | |
| 21 | Fire Siren and Strobe | No | 2 | | |
| 22 | Break Glass Unit | No | 2 | | |
| 23 | Two Zone Convention Control Panel complete | No | 1 | | |
| 24 | Fire Suppression System Control Panel (Gas release) | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 2

| | | | | | |
|---|---|---|---|---|---|
| 25 | Master / Slave cylinder kit with all necessary accessories like electrical control head (solenoid valve), manual actuator, flexible discharge hose, master cylinder adapter, Manifold with check valve,Discharge Nozzles are designed to provide the proper flow rate & distribution of FM - 200 to total flood a hazard area: 180 deg. / 360 deg. Non Return Valve,Cylinder Straps, Discharge Pressure Switch ( Local) SEAMLESS PIPING: Supply and laying of High quality Seamless pipe schedule 40 with heavy duty socket type fittings and brackets of the following sizes. The Pipe will be duly painted with primer & enamel paint. etc. | m | 50 | | |
| 26 | 500mm High Pressure flexible discharge hose | No | 8 | | |
| 27 | Cylinder frame-unistrut | | Item | | |
| 28 | Conventional/Addressable Interface | No | 1 | | |
| 29 | Abort Switch | No | 2 | | |
| 30 | Release Switch | No | 2 | | |
| 31 | Discharge Nozzles | No | 8 | | |
| 32 | Pressure gauge capacity inline with the operating pressure of the system | No | 1 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 2

Section 5: Mechanical Works

Bill No. 2

Fire Detection & Suppression

**COLLECTION**

| | Page No | Amount |
|---|---|---|
| Total Brought Forward from Page No. | 382 | |
| | 383 | |
| | 384 | |
| | 385 | |
| **Carried Forward to Summary of Section No. 5** | | R |

Section No. 5
Bill No. 2

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 3: FIRE PROTECTION INSTALLATION** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: The contractor is advised to study the Mechanical Engineer's drawings before pricing this bill. In the case of any discrepancies between the bill and the drawings the contractor must notify the Principal Agent. | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relavant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **FIRE WATER SYSTEM** | | | | |
| | NOTE: Design, manufacture, works testing, supply and deliver to site, moving into position, erection, connecting up, site testing, witness testing, proving to insurance inspectors, demonstrating to the Employer, commissioning and maintenance of the complete mechanical systems and equipment as shown on the drawings and datasheets. | | | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **HYDRANT AND HOSE REEL SYSTEM** | | | | |
| 1 | Ø115mm Class 16 HDPE hydrant feed mains installations from Meter, including all fittings etc | m | 800 | | |
| 2 | Ø75mm Class 16 HDPE hydrant feed mains, including all fittings etc | m | 150 | | |
| 3 | Ø50mm Class 16 HDPE hydrant feed mains, including all fittings etc | m | 60 | | |
| 4 | Ø100mm stortz suction hydrant, hydrant booster and check valve | No | 1 | | |
| 5 | Ø65 Instantaneous Fire hydrant complete: Fire hydrant complete with footing, all to detail | No | 4 | | |
| 6 | External Hydrant cabinet and hose | No | 1 | | |
| 7 | Thrust blocks as required | | Item | | |
| | **Fire Hosereel main piping: including all fittings, hangers, supports, brackets, bracing, couplings and droppers to outlets** | | | | |
| 8 | Ø 50 galvanized Steel | m | 400 | | |
| 9 | Ø 32 galvanized Steel | m | 50 | | |
| 10 | Ø 25 galvanized Steel | m | 100 | | |
| 11 | Fire pump room piping: All piping from the water tanks to the fire pump delivery header including all valves, fittings excluding fire pumps. | | Item | | |
| 12 | Diesel pump and controller complete with all fittings and accessories | No | 1 | | |
| 13 | Electric fire pump and controller complete with all fittings and accessories | No | 1 | | |
| 14 | Jockey pump and controller complete with all fittings and accessories as required | No | 1 | | |
| 15 | Fire hose reel complete: Fire hose reel complete with mounting brackets, stands,valve and union and line pressure guage with proper vent cock | No | 16 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 3

| | | | | | |
|---|---|---|---|---|---|
| | **PORTABLE FIRE EXTINQUISHERS** | | | | |
| | **Supply and install fire extinguishers complete as specified** | | | | |
| 16 | 4,5 kg DCP fire extinguishers complete with backboard mounted as required | No | 50 | | |
| 17 | 5 kg CO2 fire extinguishers complete with backboard mounted as required | No | 6 | | |
| 18 | Bill No. 3 Classrooms | No | 2 | | |
| | **FIRE Extinguishers FIRE CABINETS** | | | | |
| 19 | Supply and install weather proof steel cabinets for fire extinguishers | No | 56 | | |
| | **STATUTORY FIRE SIGNAGE** | | | | |
| | Supply and install photo luminescent fire and evacuation signage as described below and as per the tender drawings: | | | | |
| | All signed to be framed in the natural anodized aluminium frame with mitred corner and concealed elbow joints. | | | | |
| | All wall mounted fire and evacuation signs to be fixed with concealed screws and no double sided tape will be permitted for the mounting of the signs. | | | | |
| | All suspended fire and evacuation signs to be hung from a steel cables or metal chains. | | | | |
| | All signage to be a minimum 190mm size. | | | | |
| | All fire and evacuation signs to be SANS 1186-1, 1186-3 and 1186-5 approved, and also to bear the SANS stamp of approval. | | | | |
| 20 | E1/E2 E2 | No | 12 | | |
| 21 | E2 | No | 12 | | |
| 22 | E3 | No | 12 | | |
| 23 | F15 | No | 12 | | |
| | **Carried to Collection** | | | R | |

| | | | | | |
|---|---|---|---|---|---|
| 24 | F45 | No | 12 | | |
| 25 | F4 | No | 12 | | |
| 26 | F5/F6 | No | 12 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 3

Section 5: Mechanical Works

Bill No. 3

Fire Protection Installation

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 387 | | |
| | 388 | | |
| | 389 | | |
| | 390 | | |
| **Carried Forward to Summary of Section No. 5** | | R | |

Section No. 5
Bill No. 3

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 4: WET SERVICES** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | NOTE: SANS 10252-2 AND SANS 10400 | | | | |
| | NOTE: The installation shall be carried out so as to conceal the drainage pipes where possible. Supply, install, test and commission all the Hot, Cold and Sanitary Drainage pipes installation to conform to SANS 10252 and SANS 10400 | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relevant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade Names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **Carried to Collection** | | | R | |

## SANITARY PLUMBING

**Marley PVC pipe or similar approved PVC soil, waste, and ventilating pipes with plain ended pipes and all fittings as per the manufactures specifications.**

| | | | | | |
|---|---|---|---|---|---|
| 1 | 50mm diameter pipes fixed to walls in chases, in ceilings, or roofs, in columns or slabs, etc. or laid in filling in ground including all necessary excavation back filling compaction etc. Including making good | m | 350 | | |
| 2 | 110mm diameter pipes fixed to walls in chases, in ceilings, or roofs, in columns or slabs, etc. or laid in filling in ground including all necessary excavation back filling compaction etc. Including making good | m | 220 | | |
| | **Extra Over 56mm, 75mm, 110mm, 160mm diameter pipe for:** | | | | |
| 3 | 50mm Bend (Refer to drawing for 45° or 90° long radius) | No | 340 | | |
| 4 | 110mm Bend (Refer to drawing for 45° or 90° long radius) | No | 150 | | |
| 5 | 110 x 50mm Eccentric Reducer | No | 25 | | |
| 6 | 50mm x 50mm x 50mm Y-Junction | No | 25 | | |
| 7 | 110mm x 110mm x 50mm Y-Junction | No | 25 | | |
| 8 | 110mm x 110mm x 110mm Y-Junction | No | 75 | | |
| 9 | 110mm x 110mm x 50mm Double Y-Junction | No | 15 | | |
| 10 | 50mm Cleaning Eye | No | 55 | | |
| 11 | 110mm Cleaning Eye | No | 39 | | |
| 12 | 110mm Rodding Eye | No | 16 | | |
| 13 | 50mm Air vent valve one-way | No | 10 | | |
| 14 | 110mm Air vent valve one-way | No | 29 | | |
| 15 | 110mm Pan Connectors | No | 45 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| 16 | 50mm Adapter Clamping Connector and Support Ring | No | 95 | | |
| 17 | 110mm Adapter Clamping Connector and Support Ring | No | 92 | | |
| | **DOMESTIC WATER SUPPLIES** | | | | |
| | **Class "0" hard drawn capillary type copper tubing, Straight couplers(equal) wether copper to copper or copper to iron are deemed to be running joints and therefore shall be included in the rates for pipes. Include Craft type or equal approved brown pipe wrapping for pipes in walls** | | | | |
| 18 | ø 15mm water pipes fixed to walls, ceilings, roofs, columns or slab, etc | m | 130 | | |
| 19 | ø 22mm water pipes fixed to walls, ceilings, roofs, columns or slab, etc | m | 105 | | |
| 20 | ø 28mm water pipes fixed to walls, ceilings, roofs, columns or slab, etc | m | 55 | | |
| 21 | ø 35mm water pipes fixed to walls, ceilings, roofs, columns or slab, etc | m | 22 | | |
| 22 | ø 42mm water pipes fixed to walls, ceilings, roofs, columns or slab, etc | m | 23 | | |
| | **Extra Over 15mm, 22mm, 28mm, 35mm, 42mm, 54mm, 67mm diameter pipe for :** | | | | |
| 23 | ø 15mm Bend | No | 104 | | |
| 24 | ø 22mm Bemd | No | 45 | | |
| 25 | ø 28mm Bend | No | 10 | | |
| 26 | ø 35mm Bend | No | 20 | | |
| 27 | ø 42mm Bend | No | 22 | | |
| 28 | ø 22mm - ø 15mm Reducer | No | 50 | | |
| 29 | ø 28mm - ø 15mm Reducer | No | 53 | | |
| 30 | ø 28mm - ø 22mm Reducer | No | 14 | | |
| 31 | ø 35mm - ø 15mm Reducer | No | 15 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| 32 | ø 35mm - ø 22mm Reducer | No | 15 | | |
| 33 | ø 35mm - ø 28mm Reducer | No | 16 | | |
| 34 | ø 42mm - ø 15mm Reducer | No | 6 | | |
| 35 | ø 42mm - ø 22mm Reducer | No | 12 | | |
| 36 | ø 42mm - ø 28mm Reducer | No | 12 | | |
| 37 | ø 42mm - ø 35mm Reducer | No | 12 | | |
| 38 | ø 15 x 15 x 15mm Tee | No | 8 | | |
| 39 | ø 22 x 22 x 22mm Tee | No | 36 | | |
| 40 | ø 28 x 28 x 28mm Tee | No | 44 | | |
| 41 | ø 35 x 35 x 35mm Tee | No | 77 | | |
| 42 | ø 22mm Solder Coupling | No | 65 | | |
| 43 | ø 28mm Solder Coupling | No | 53 | | |
| 44 | ø 35mm Solder Coupling | No | 28 | | |
| 45 | ø 42mm Solder Coupling | No | 11 | | |
| 46 | ø 54mm Solder Coupling | No | 12 | | |
| 47 | ø 15mm Bracket Type with rubber lining or similar approved | No | 87 | | |
| 48 | ø 22mm Bracket Type with rubber lining or similar approved | No | 70 | | |
| 49 | ø 28mm Bracket Type with rubber lining or similar approved | No | 37 | | |
| 50 | ø 35mm Bracket Type with rubber lining or similar approved | No | 25 | | |
| 51 | ø 42mm Bracket Type with rubber lining or similar approved | No | 15 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **Fibreglass wool with foil paper sectional insulation neetly cut as required dressed around pipes and pipe fittings and fixed with clips and foil tape** | | | | |
| 52 | ø 15mm | m | 38 | | |
| 53 | ø 22mm | m | 24 | | |
| 54 | ø 28mm | m | 9 | | |
| 55 | ø 35mm | m | 3 | | |
| 56 | ø 42mm | m | 9 | | |
| | **PLUMBING FIXTURES** | | | | |
| 57 | Gulley with P-Trap | No | 10 | | |
| 58 | 25L Hydroboil c/w accessories | No | 3 | | |
| 59 | GT 400 Herbish Under Counter Grease Trap | No | 1 | | |
| 60 | Herbish Floor Drain with 100mm Outlet | No | 4 | | |
| | **TAPS, VALVES, ETC., INCLUDING COUPLING TO PIPES AND/OR FITTINGS** | | | | |
| 61 | Angle Valve c/w flexible connector | No | 85 | | |
| 62 | ø 15mm Ball Valve c/w accessories | No | 15 | | |
| 63 | ø 22mm Ball Valve c/w accessories | No | 10 | | |
| 64 | ø 28mm Ball Valve c/w accessories | No | 4 | | |
| 65 | ø 35mm Ball Valve c/w accessories | No | 10 | | |
| 66 | ø 42mm Ball Valve c/w accessories | No | 10 | | |
| 67 | ø 40mm Non Return Valve c/w accessories | No | 12 | | |
| 68 | ø 40mm Pressure Reducer Valve c/w in & out pressure gauges and accessories | No | 6 | | |
| 69 | ø 40mm Strainer Valve c/w accessories | No | 6 | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 4

| | | | | | |
|---|---|---|---|---|---|
| | **WATER HEATING EQUIPMENT FOR THE FACILITIES** | | | | |
| | **Supply, deliver, install, test and commission the equipment for the water heating, complete with water storage and solar panels and all ancillary equipment, as per the mechanical equipment specification** | | | | |
| 70 | 150L Solar Geyser with Solar Panel c/w circulation pump and accessories | No | 2 | | |
| | **TEST & COMMISSION** | | | | |
| 71 | Testing And Commissioning of the whole buidling | | Item | | |
| 72 | Ditto but in the presence of and to the entire satisfaction of the Consulting Engineer. | | Item | | |
| 73 | Issuing of CoC | | Item | | |
| 74 | Asbuilts | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 4

Section 5: Mechanical Works

Bill No. 4

Wet services Installation

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 392 | | |
| | 393 | | |
| | 394 | | |
| | 395 | | |
| | 396 | | |
| | 397 | | |
| **Carried Forward to Summary of Section No. 5** | | R | |

Section No. 5
Bill No. 4

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 5: LAB & KITCHEN LP GAS INSTALLATION** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relevant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade Names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 5

## LP GAS INSTALLATION

**The supply, delivery, installation and commissioning of equipment as per the requirements of SANS 10087-1 for LPG gas installation**

### PIPEWORK & FITTINGS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Ø22mm | m | 60 | | |
| 2 | Ø15mm | m | 45 | | |

### MANIFOLD AND GAS BOTTLES

| | | | | | |
|---|---|---|---|---|---|
| 3 | LP Gas manifold | No | 2 | | |
| 4 | Supply, deliver, off-load and store on site a dual two bank automatic change-over panel with manifolds for 48 kg LP Gas Cylinders complete with supports and serpentine connectors to SANS 62 or BS 1387 Schedule 80 | No | 5 | | |
| 5 | Gas Cages | No | 2 | | |

### TEST & COMMISSION

| | | | | | |
|---|---|---|---|---|---|
| 6 | Testing And Commissioning of the whole buidling | | Item | | |
| 7 | Ditto but in the presence of and to the entire satisfaction of the Consulting Engineer. | | Item | | |
| 8 | Issuing of CoC | | Item | | |
| 9 | Asbuilts | | Item | | |

**Carried to Collection** R

Section No. 5
Bill No. 5

Section 5: Mechanical Works

Bill No. 5

LPG Installation

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 399 | | |
| | 400 | | |
| **Carried Forward to Summary of Section No. 5** | | R | |

Section No. 5
Bill No. 5

| Item No | | Unit | Quantity | Rate | Amount |
|---|---|---|---|---|---|
| | **SECTION 5** | | | | |
| | **BILL NO. 6: PURIFICATION PLANT** | | | | |
| | NOTE: The contractor is advised to study the Model Preambles for Trades before pricing this bill | | | | |
| | **SUPPLEMENTARY PREAMBLES** | | | | |
| | **Supplementary preambles and full descriptions of materials, items, work, etc. applicable to this Section** | | | | |
| | The Contractor is referred to relevant annexture for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this section, unless specifically otherwise described | | | | |
| | **Trade Names** | | | | |
| | Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior written approval from the Representative / Agent | | | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 6

| | | | | | |
|---|---|---|---|---|---|
| | **PURIFICATION PLANT** | | | | |
| | **PURIFICATION PLANT INSTALLATION: Supply and install complete with all necessary chemcial requirements to SANS standards, and water report. All necessary pumps with electrical wiring to nearest power source, fittings, 100lt Dosing tanks and pumps, antiscalents fo RO plant**<br><br>1 x Dosing Pump<br>1 x 20L Reverse Osmosis Membrane Cleaner Chemical<br>1 x Reverse Osmosis Membrane Cleaner Tank<br>1 x Automatic Filter Head<br>1 x Automatic Softener Head<br>2 x 1054 FRP Filter Vessels<br>2 x Riser Sets<br>1 x Quartz Sand 40kg<br>1 x 25 kg Coconut Based Granular Activated Carbon<br>1 x 25 L Cation Resin Bag<br>1 x Brine Tank Kit<br>2 x 0.75 KW Stainless Steel Booster Pumps<br>2 x Pump Controller Heads<br>1 x 8000 GPD Reverse Osmosis Machine<br>2 x 4040 Reverse Osmosis Membrane<br>1 x 20″ PP Sediment Filter<br>1 x Single BB Filter Housing<br>1 x 20″ Fat CTO Block Filter<br>1 x 25w Ultraviolet Sterilizer<br>1 x 3 Taps Manual Bottling Table | | | | |
| 1 | Water Purification System 1000litres per hour | No | 1 | | |
| | **TEST & COMMISSION** | | | | |
| 2 | 12 Month's Guarantee for Suppliers Commissioning and Testing travel, accommodation and hoisting. | | Item | | |
| 3 | Asbuilts | | Item | | |
| | **Carried to Collection** | | | R | |

Section No. 5
Bill No. 6

Section 5: Mechanical Works

Bill No. 6

Water Purification

**COLLECTION**

| | Page No | | Amount |
|---|---|---|---|
| Total Brought Forward from Page No. | 402 | | |
| | 403 | | |
| **Carried Forward to Summary of Section No. 5** | | R | |

Section No. 5
Bill No. 6

Section 5: Mechanical Works

**SECTION SUMMARY - Section 5: Mechanical Works**

| Bill No | | Page No | Amount |
|---|---|---|---|
| 1 | Airconditioning | 381 | |
| 2 | Fire Detection & Suppression | 386 | |
| 3 | Fire Protection Installation | 391 | |
| 4 | Wet services Installation | 398 | |
| 5 | LPG Installation | 401 | |
| 6 | Water Purification | 404 | |

**Carried to Final Summary** R

Section No. 5

## FINAL SUMMARY

| Section No | | Page No | | Amount |
|---|---|---|---|---|
| 1 | Section 1: Preliminaries | 190 | | |
| 2 | Section 2: Main Building | 312 | | |
| 3 | Section 3: External Works (Provisional) | 354 | | |
| 4 | Section 4 : Electrical Works | 373 | | |
| 5 | Section 5: Mechanical Works | 405 | | |
| | SUB-TOTAL | | R | |
| | Allow the sum of R 4 500 000.00 (Four Million Five Hundred Thousand Rand) for the contingencies to be used as directed by the Principal Agent and deducted in part or in whole if not required | | R | 4 500 000.00 |
| | **SUB TOTAL** | | R | |
| | Provision for Value-Added Tax (VAT) at 15 percent | | R | |
| | **Note:** | | | |
| | Tenderers must submit their tenders on the official form supplied for this purpose. | | | |
| | **Carried to Form of Tender** | | R | |

# C3 SCOPE OF WORKS

## C3.1 Scope of Work

# 1) DESCRIPTION OF THE WORKS

### 1.1 Employer's objectives

The scope of works is Additions and Renovations to Tlale Primary School.

The employer may include the following statement in the tender documents should the employer wish to have specific training carried out as an objective of the project: One of the objectives of the project is to training ether of the following: (occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates)

The objective of the project is to provide for a minimum contract participation goal (CPG) of 5% of the total project value and to develop targeted enterprise by the main or lead partner contractors.

**The Contractor shall:**

- Subcontract a minimum of 5% of the total project value to targeted enterprises;
- Perform needs analysis on the targeted enterprise to identify developmental goals;
- Provide internal mentorship support to improve the targeted enterprise/s performance;
- Develop a project specific enterprise development plan to improve the targeted enterprise/s performance in the identified developmental areas to the CIDB Competence Standard for Contractors Gazette No. 41237, 10 November 2017
- Monitor and report the progress of the agreed development areas with the targeted enterprise/s
- Submit a project completion report to the Employer's representative for each targeted enterprise.

The Contractor shall provide opportunities to learners requiring structured workplace learning using one or a combination of any of the Skills Methods as agreed: accommodate Part/Full Occupational qualification (Method 1), Trade qualifications learners (Method 2),train Work Integrated Learners – P1 and P2 Learners (Method 3) and/or Professional Candidates (Method 4) as indicated in the cidb Standard and as agreed to by the Employer on this project (Employer to stipulate)

The Contractor may only place 33% employees employed by him/her or that of his/her subcontractor contributing to the CSDG.

The Contractor shall achieve the measurable CSDG by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the Skills Methods as agreed: accommodate Part/Full Occupational qualification (Method 1), Trade qualifications learners (Method 2), Work Integrated Learners (Method 3) and/or Candidates (Method 4) as per the cidb Standard in relation to work directly related to the Contract as indicated under clause 4.2 and 4.3 in the cidb Standard. (Employer to stipulate).

The Contractor shall ensure that all beneficiaries of the Standard are registered with CIDB Skills Development Agency (SDA).

The Contractor shall be responsible for developing subcontractors in accordance with

the CIDB Standard for Indirect Targeting for Enterprise Development.

The Contractor shall be responsible for the appointment of the Enterprise Development Coordinator.

## 1.2 Overview of the works

The scope of works comprises of the:

- Construction of New:
  - [A] Block A - Admin Block
  - [CC] CL - 4 + HOD - D (4 Classroom + HOD)
  - [H] Block J - Guard House
  - [K] Nutrition - Block M
  - [L] Block L - Hall
  - [M] Block K - Refuse Area
  - [N] Block N - Pump Room
  - [Q] Block G - Science Laboratory + Ablutions
- Renovations and alterations of:
  - [RA] Admin Block Convert to LIB / MED / COMP
  - [RD] Classroom Block 4
  - [RF] Classroom Block 6
  - [RH] Ablution Block 1
- External works
  - Demolitions of existing structures
  - Soil drainage and Stormwater management
  - New Pavings to Parking and Assembly Areas
  - New Covered Walkways
  - Security Fencing (ClearVu)
  - Purchasing of Mobile Classrooms for Decanting Purposes
  - Covered Carports
  - Soccer Field and Combined Courts
  - Landscaping and Flag Poles)
- Electrical and Mechanical installations.

## 1.3 Labour-intensive works

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work

### 1.4 Extent of the works

The extent of the works shall comply with the Employer's requirements as outlined on the drawings listed on 2.4 below

### 1.5 Location of the works

Works will be executed in an approved stand/erf/portion as described in the tittle deed and delimited in the surveyor general diagram TLALE PRIMARY SCHOOL:

The project is located at **Motlhabeng Village in Mahikeng Local Municipality, North West Province. Site Coordinates: Latitude 25°51'1.57"S Longitude 25°35'57.73"E.Province**.

### 1.6 Temporary works

The Contractor shall provide, erect, maintain and remove on completion of the works, a temporary office to be used by Principal Agent when they are onsite and project meetings which should include ablution, parking, eating area, etc. as may be deemed necessary for project use. The location of the Contractor's facilities shall be pre approved by the Principal Agent before site establishment. In his office there must be kept a copy of all working drawings suitably mounted, a copy of the contract documents in a good and orderly condition, the site instruction and site diary books and any specification referred to in the contract documents.

## 2) ENGINEERING

### 2.1 Design services

The design responsibility shall be allocate as follows:

Works designed by ..... Employer

Temporary works ……..... Contractor

Preparation of as-built drawings ..... Contractor

### 2.2 Employer’s design

The Employer will be responsible for the design of the permanent works unless otherwise stated. The Contractor is responsible for the design of the temporary works and their compatibility with the permanent works.

### 2.3 Design brief

The Employer and the Employer's design agent will be responsible for the design of the permanent works unless otherwise stated. The Contractor will be required to submit as-built drawings.

- Construction breaks and the extent of individual concrete pours
- Routing of and junctions in all services
- Salient features for the operation and maintenance of services and to be submitted to the following employer's required format and manner:
- A paper copy complete with approval signatures of the agent/agents bound into the operating instruction manuals
- Tiff format scanned versions of the approved paper copy
- Electronic version of approved drawings on CD in either Caddie.drw or Autocad.dwg formats

## 2.4 Drawings

The following drawings are applicable to the contract:

### Drawing number

### Architectural

| DRAWING NO. | CATEGORY | DESCRIPTION |
|---|---|---|
| 9302 200 | Floor Plans | Admin Block |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | 4 Classroom + HOD |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans, Elevations & Sections | Guard House |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | Nutrition Block |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | School Hall |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | Science Block |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | Classroom Block 4 |
| 9302 300 | Elevations & Sections | |
| | | |
| 9302 200 | Floor Plans | Classroom Block 6 |
| 9302 300 | Elevations & Sections | |
| | | |
| 9302 200 | Floor Plans | Ablution Block 1 |
| 9302 300 | Elevations & Sections | |
| 9302 500 | Window & Door Schedule | |
| | | |
| 9302 200 | Floor Plans | Site Plan |

## Civil & Structural

| DRAWING NO. | CATEGORY | DESCRIPTION |
|---|---|---|
| GIC-TLALE-001 | Foundation Concrete Detailing | 4 Classroom & Multi-Purpose Block (Sheet 1) |
| | Foundation Reinforcing Detailing | 4 Classroom & Multi-Purpose Block (Sheet 2) |
| GIC-TLALE-002 | Foundation Concrete & Reinforcing | Ablutions Block |
| GIC-TLALE-003 | Foundation Concrete Detailing | Admin Block (Sheet 1) |
| | Foundation Reinforcing Detailing | Admin Block (Sheet 2) |
| GIC-TLALE-004 | Foundation Concrete & Reinforcing | Guard House |
| GIC-TLALE-005 | Foundation Concrete Detailing | Library & Computer Block (Sheet 1) |
| | Foundation Reinforcing Detailing | Library & Computer Block (Sheet 2) |
| GIC-TLALE-006 | Foundation Concrete & Reinforcing | Nutrition Block (Sheet 1) |
| | Foundation Reinforcing Detailing | Nutrition Block (Sheet 2) |
| GIC-TLALE-007 | Foundation Concrete Detailing | Science Block (Sheet 1) |
| | Foundation Reinforcing Detailing | Science Block (Sheet 2) |
| GIC-TLALE-008 | Foundation Concrete & Reinforcing | Pump House |
| GIC-TLALE-009 | Concrete & Steel Frames | Covered Walkway |
| GIC-TLALE-010 | Detailed Design | Water Reticulation Layout |
| GIC-TLALE-011 | Detailed Design | Sewer Layout |
| GIC-TLALE-012 | Concrete & Reinforcing | Septic Tank |
| GIC-TLALE-013 | Layout and Section | Combi Court and Netball Court |
| GIC-TLALE-014 | Layout and Section | Paving |
| GIC-TLALE-015 | Layout and Section | Stormwater Management |

## Electrical & Mechanical

| DRAWING NO. | CATEGORY | DESCRIPTION |
|---|---|---|
| EL-400-4CL2 | ELECTRICAL LAYOUT | EXISTING 4 CLASSROOM BLOCK |
| EL-400-6CL1-EL | ELECTRICAL LAYOUT | EXISTING 6 CLASSROOM BLOCK |
| EL-400-6CL3-EL | ELECTRICAL LAYOUT | EXISTING 6X CLASSROOM BLOCK |
| EL-400-ABL-EL | ELECTRICAL LAYOUT | ABLUTION BLOCK |
| EL-400-ADM-EL | ELECTRICAL LAYOUT | ADMINISTRATION & GUARD HOUSE BLOCK |
| EL-400-LCL-EL | ELECTRICAL LAYOUT | LIBRARY AND COMPUTER LAB |
| EL-400-SCL-EL | ELECTRICAL LAYOUT | SCIENCE LAB |
| EL-400-MC-EL | ELECTRICAL LAYOUT | 4x CLASSROOM & MULTI-PURPOSE BLOCK |
| EL-800-SLD-EL | DISTRIBUTION BOARD | TLALE DISTRIBUTION BOARD SLD |
| EL-400-NB-EL | ELECTRICAL LAYOUT | NUTRITION BLOCK |
| EL-S-001-EL | ELECTRICAL LAYOUT | SITE PLAN |
| | | |
| ME-001-FP | FIRE PROTECTION LAYOUT FIRE | SITE PLAN |
| ME-400-4CLB2-FP | FIRE PROTECTION LAYOUT | TLALE EXISTING 4x CLASSROOM BLOCK |

| | | |
|---|---|---|
| ME-400-6CLB1-FP | FIRE PROTECTION LAYOUT | E EXISTING 6 CLASSROOM BLOCK |
| ME-400-6CLB3-FP | FIRE PROTECTION LAYOUT | EXISTING 6 CLASSROOM BLOCK |
| ME-400-ABGH-FP | FIRE PROTECTION LAYOUT | ABLUTION BLOCK & GUARD HOUSE |
| ME-400-ADM-FP | FIRE PROTECTION LAYOUT | ADMINISTRATION BLOCK |
| ME-400-LBC-FP | FIRE PROTECTION LAYOUT | LIBRARY & COMPUTER BLOCK |
| ME-400-SCL-FP | FIRE PROTECTION LAYOUT | SCIENCE BLOCK |
| ME-400-NB-FP | FIRE PROTECTION LAYOUT | NUTRITION BLOCK |
| ME-400-NCMP-FP | FIRE PROTECTION LAYOUT | NEW CLASSROOM & MULTI-PURPOSE |
| | | |
| ME-400-4CL2-FD | FIRE DETECTION LAYOUT | 4 CLASSROOM BLOCK |
| ME-400-6CL1-FD | FIRE DETECTION LAYOUT | 6 CLASSROOM BLOCK |
| ME-400-6CL3-FD | FIRE DETECTION LAYOUT | 6 CLASSROOM BLOCK |
| ME-400-ADM-FD | FIRE DETECTION LAYOUT | ADMINISTRATION BLOCK |
| ME-400-LCL-FD | FIRE DETECTION LAYOUT | LIBRARY AND COMPUTER LAB BLOCK |
| ME-400-MC-FD | FIRE DETECTION LAYOUT | CLASSROOM & MULTI-PURPOSE CLASSROOM |
| ME-400-NB-FD | FIRE DETECTION LAYOUT | NUTRITION BLOCK |
| ME-400-SCL-FD | FIRE DETECTION LAYOUT | SCIENCE BLOCK |
| | | |
| ME-400-ABG-HVAC | HVAC LAYOUT | ABLUTION AND GUARD HOUSE BLOCK |
| ME-400-ADM-HVAC | HVAC LAYOUT | ADMINISTRATION BLOCK |
| ME-400-MC-HVAC | HVAC LAYOUT | CLASSROOMS & MULTI-PURPOSE |
| ME-400-MP-HVAC | HVAC LAYOUT | LIBRARY AND COMPUTER LAB |
| ME-400-NB-HVAC | HVAC LAYOUT | NUTRITION BLOCK |
| ME-400-SCL-HVAC | HVAC LAYOUT | SCIENCE BLOCK |
| | | |
| ME-400-AB-WS | WET SERVICES LAYOUT | ABLUTION BLOCK |
| ME-400-ADM-WS | WET SERVICES LAYOUT | ADMINISTRATION BLOCK |
| ME-400-GH-WS | WET SERVICES LAYOUT | GUARD HOUSE |
| ME-400-LCL-WS | WET SERVICES LAYOUT | LIBRARY AND COMPUTER LAB |
| ME-400-MPH-WS | WET SERVICES LAYOUT | MULTI-PURPOSE AND COMPUTER L AB BLOCK |
| ME-400-NB-WS | WET SERVICES LAYOUT | NUTRITION BLOCK |
| ME-400-SCL-WS | WET SERVICES LAYOUT | SCIENCE BLOCK |
| | | |
| ME-400-NB-LPG | LP GAS LAYOUT | NUTRITION BLOCK |
| ME-400-SCL-LPG | LP GAS LAYOUT | SCIENCE BLOCK |

## 3) PROCUREMENT

### 3.1 Subcontracting

#### 3.1.1 Scope of mandatory subcontract work

As per the mandatory sub-contracting clause, the Contractor must not sub-contract more than 30%, 10% of which should be allocated to the IDT CDP contractors between 1GB and 4GB (list per cluster will be provided upon appointment).

The Contractor shall without delay enter into contracts with the Domestic Subcontractors as submitted on the returnable schedule and forward a copy of these agreements to the Principal Agent. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.
The Contractor to take note of item 3.2.2 below

#### 3.1.2 Preferred subcontractors / suppliers

#### 3.1.3 Subcontracting procedures

See items 3.2.1 and 3.2.2 as well as BID data

#### 3.1.4 Attendance on subcontractors

Attendance to Domestic Sub-contractors as stated above should be priced under the relevant items in the Preliminaries section of the bills of quantities. Attendance to nominated sub-contractors should be priced under the relevant items in the Provisional Sums section of the bills of quantities.

### 3.2 CIDB B.U.I.L.D. Programme

The contractor must comply with the Department of Public Works and Infrastructure General Notice 1779 of 2023 as per Construction Industry Development Board (CIDB) for achieving the standards for delivery skills for infrastructure contracts 31 March 2023.

## 4) CONSTRUCTION

### 4.1 Works specification

The works specifications that are applicable to the works are attached to the bid document as well as other recognized specifications obtainable on request from the Employer:

- Applicable SANS 2001 standards
- Applicable national and international standards
- Particular / generic specifications

# 5) MANAGEMENT

## 5.1 Management of the works

### 5.1.1 Planning and programming

The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Principal Agent.

### 5.1.2 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs.

### 5.1.3 Unauthorized persons

The Contractor shall keep unauthorized persons from the works at all times. Under no circumstances may any person except guards be allowed to sleep on the building site.

### 5.1.4 Key personnel

The Contractor shall submit an organogram indicating all key personnel involved in this contract as well as their telephone or cell phone numbers. This information should be available within 2 (two) weeks after the award of the contract.

### 5.1.5 Management meetings

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

### 5.1.6 Forms for contract administration

All contract administration forms must be in the manner prescribed by the JBCC as well as the scope of work

The Contractor shall be required to submit an updated contractor monthly report during site meetings, which will be used by the consultant to update the client.

### 5.1.7 Payment certificates

The Contractor to ensure that the VAT invoice required with each certificate is delivered timeously. The date of the certificate will be that of the date when the certificate is received by the consultant.

The Contractor to ensure timeous submission of all required documentation for the expedient processing of payment certificates, as required by the client, eg BAS entity forms, company registration details, VAT clearance certificates, etc. The Contractor is responsible for such documentation submission.

### 5.1.8 Daily records

The Contractor shall provide an A4 triplicate book to be used as a Daily Diary book for the duration of the contract. The Principal Agent shall retain the original sheet and the Contractor shall retain the first copy of each sheet. The second copy of each completed sheet shall be left in the Daily Diary Book. The diary shall be completed on a daily basis.

In addition to this the Contractor shall provide an A4 size triplicate book to act as a Site Instruction book. The Principal Agent shall retain the original and the Contractor shall retain the first copy of each sheet. The second copy of each completed sheet shall be left in the Site instruction book. Only the Principal Agent and/or delegated representative will have the authority to issue Site Instruction to the Contractor.

## 5.2 Contract Skills Development Goal (CSDG)

The successful contractor must keep site records regarding the part/full occupational qualification learners', trade qualification learners', work integrated learners' or candidates' (delete that which is not applicable) progress, site attendance, hours worked and other relevant information as required by the Standard.

The successful contractor shall provide the required number of appropriately qualified mentors to the maximum number of part/full occupational qualification learners, trade qualification learners, work integrated learners in the proportion as specified in the Standard.

The successful contractor shall provide a supervisor to manage the training of the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates (delete that which is not applicable).

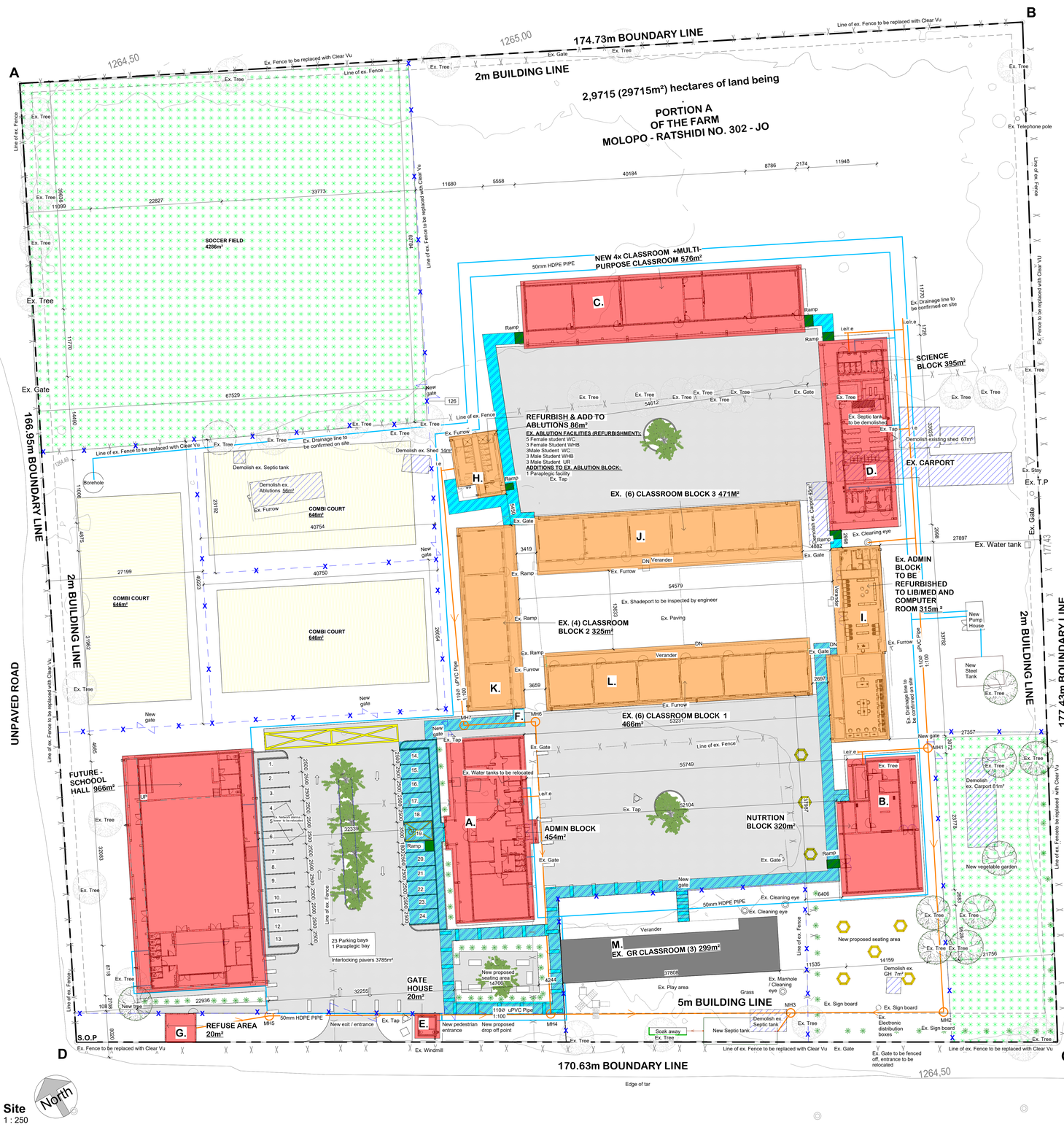
The successful contractor shall submit to the employer's representative a baseline training plan in the specified format (Pro-forma A2) for the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates (delete that which is not applicable) within 30 days of start of the contract.
The successful contractor shall submit to the employer's representative project interim report in the specified format (Pro-forma A3) on the progress of each of part/full occupational qualification learner, trade qualification learner, work integrated learner, candidate (delete that which is not applicable) every three months.
The successful contractor shall submit to the employer's representative the names and particulars in the specified format (Pro-forma A4) of the supervisor, mentors for the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) within 30 days of start of the contract.
The successful contractor shall keep a daily record of all the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates on site and their daily activities and shall be made available to the employer's representative on request.
The successful contractor shall submit to the employer's representative the reports on the progress and status of the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) with the monthly invoice for the payment certificate.

The successful contractor shall have health and safety inductions for all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable).
The successful contractor shall conduct entry and exit medical tests of all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable).
The successful contractor shall provide personal protective equipment (PPE) to all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) at the start of their employment on site.

**Annexes**
List by title
A1. List of cidb accredited SDAs
A2. Baseline training plan
A3. Project interim report
A4. Supervisor and / or mentor details
A5. Project completion report.

# ANNEXURE A

## ARCHITECTURAL DRAWINGS




## SCHOOL AREA SCHEDULE

| Department | Block | Area | Number | Totals |
|---|---|---|---|---|
| Admin Block | A. | 454m² | 1 | 454m² |
| Nutrition Block | B. | 320m² | 1 | 320m² |
| 4 Classroom & Multi Purpose Classroom | C. | 576m² | 1 | 576m² |
| Science Block | D. | 395m² | 1 | 395m² |
| Guard House | E. | 20m² | 1 | 20m² |
| Covered Walkway | F. | 400m² | 1 | 400m² |
| Refuse Area | G. | 20m² | 1 | 20m² |
| **NEW BUILDINGS** | | | | **2185m²** |
| Refurbish & Additions to ex. Ablutions | H. | 86m² | 1 | 86m² |
| Refurbish ex.Admin Block Convert into Library and Computer Room | I. | 315m² | 1 | 315m² |
| Existing Classroom Block 3 | J. | 471m² | 1 | 471m² |
| Existing Classroom Block 2 | K. | 325m² | 1 | 466m² |
| Existing Classroom Block 1 | L. | 466m² | 1 | 466m² |
| Existing ECD Classroom X3 | M. | 299m² | 1 | 299m² |
| **EXISTING/REFURBISHHMENT BUILDINGS** | | | | **1962m²** |
| **PROPOSED SCHOOL HALL** | | | | **966m²** |
| **SUM OF BUILDINGS:** | | | | **5113m²** |

NEW BUILDING

REFURBISH BUILDING

EXISTING BUILDING

NEW COVERED WALKWAY

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 126 | FENCING: 2m high, Galvanised unobstructed fencing to Engineers Details & Specifications. Manufacturer: Clearvu or similar. |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
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|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name : Xolani Nxumalo

Date : 05/16/2025

Registration No : 20080010

Signature :

**COVERAGE (%)**

| | |
|---|---|
| **Total Bulliding Footprint (m²)** | 5113m² |
| **Total lot area (m²)** | 29715m² |
| **Coverage (%)** | 17% |

**FAR**

2874.4m² / 29715m² = 0,0967

ISSUE FOR COUNCIL SUBMISSION

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TLALE PRIMARY SCHOOL

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Ondewys Departement
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NORTH WEST PROVINCE

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Site Plan

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 SITE 100**

Scale As indicated

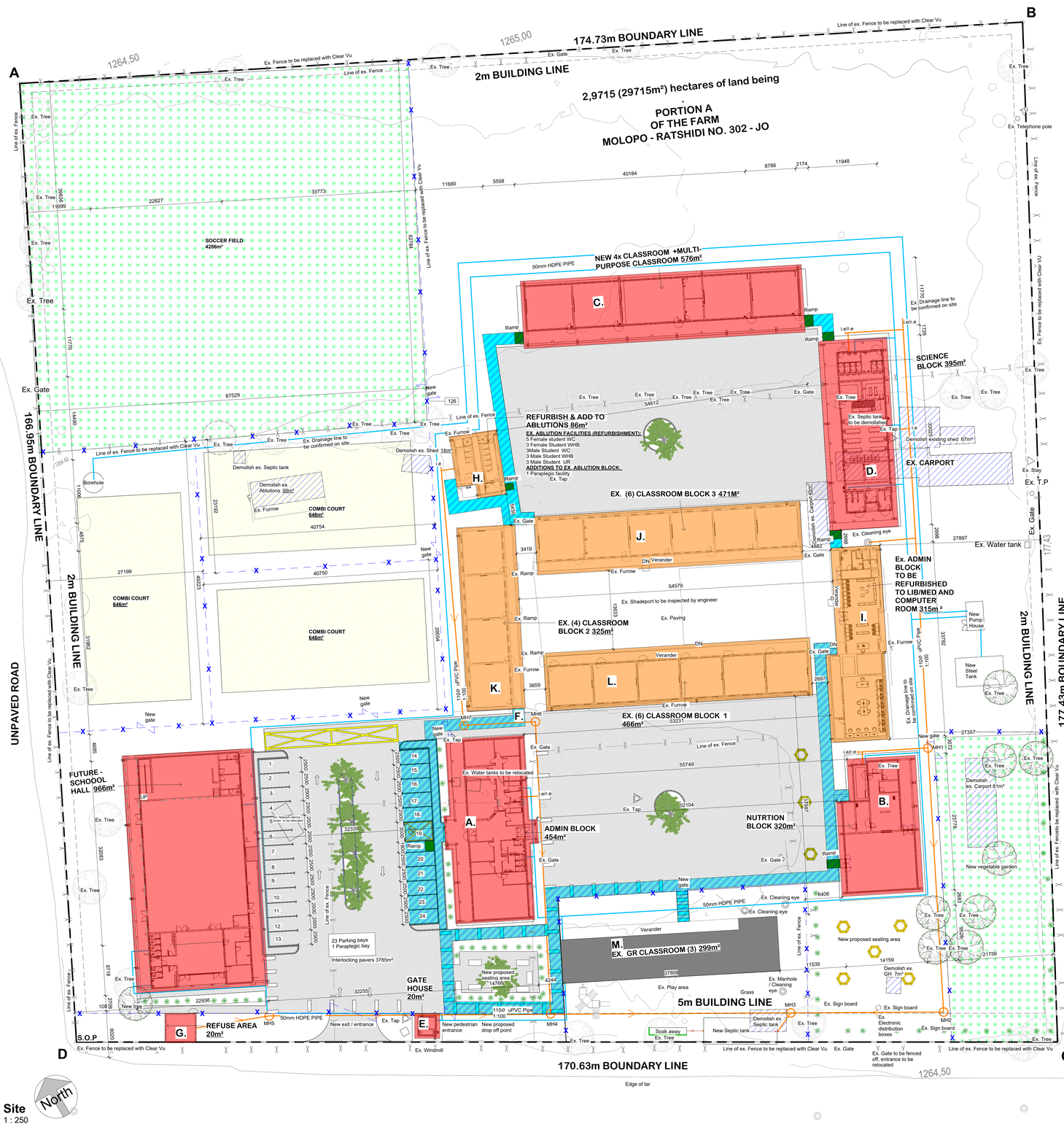

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Tel: 018 381 6762
Fax: 086 669 5095
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Riviera
Pretoria
0181
Tel: 011 463 7911
Fax: 086 552 3381


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## SCHOOL AREA SCHEDULE

| Department | Block | Area | Number | Totals |
|---|---|---|---|---|
| Admin Block | A. | 454m² | 1 | 454m² |
| Nutrition Block | B. | 320m² | 1 | 320m² |
| 4 Classroom & Multi Purpose Classroom | C. | 576m² | 1 | 576m² |
| Science Block | D. | 395m² | 1 | 395m² |
| Guard House | E. | 20m² | 1 | 20m² |
| Covered Walkway | F. | 400m² | 1 | 400m² |
| Refuse Area | G. | 20m² | 1 | 20m² |
| **NEW BUILDINGS** | | | | **2185m²** |
| Refurbish & Additions to ex. Ablutions | H. | 86m² | 1 | 86m² |
| Refurbish ex.Admin Block Convert into Library and Computer Room | I. | 315m² | 1 | 315m² |
| Existing Classroom Block 3 | J. | 471m² | 1 | 471m² |
| Existing Classroom Block 2 | K. | 325m² | 1 | 466m² |
| Existing Classroom Block 1 | L. | 466m² | 1 | 466m² |
| Existing ECD Classroom X3 | M. | 299m² | 1 | 299m² |
| **EXISTING/REFURBISHHMENT BUILDINGS** | | | | **1962m²** |
| **PROPOSED SCHOOL HALL** | | | | **966m²** |
| **SUM OF BUILDINGS:** | | | | **5113m²** |

NEW BUILDING

REFURBISH BUILDING

EXISTING BUILDING

NEW COVERED WALKWAY

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 126 | FENCING: 2m high, Galvanised unobstructed fencing to Engineers Details & Specifications. Manufacturer: Clearvu or similar. |

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**9303 SITE 100**

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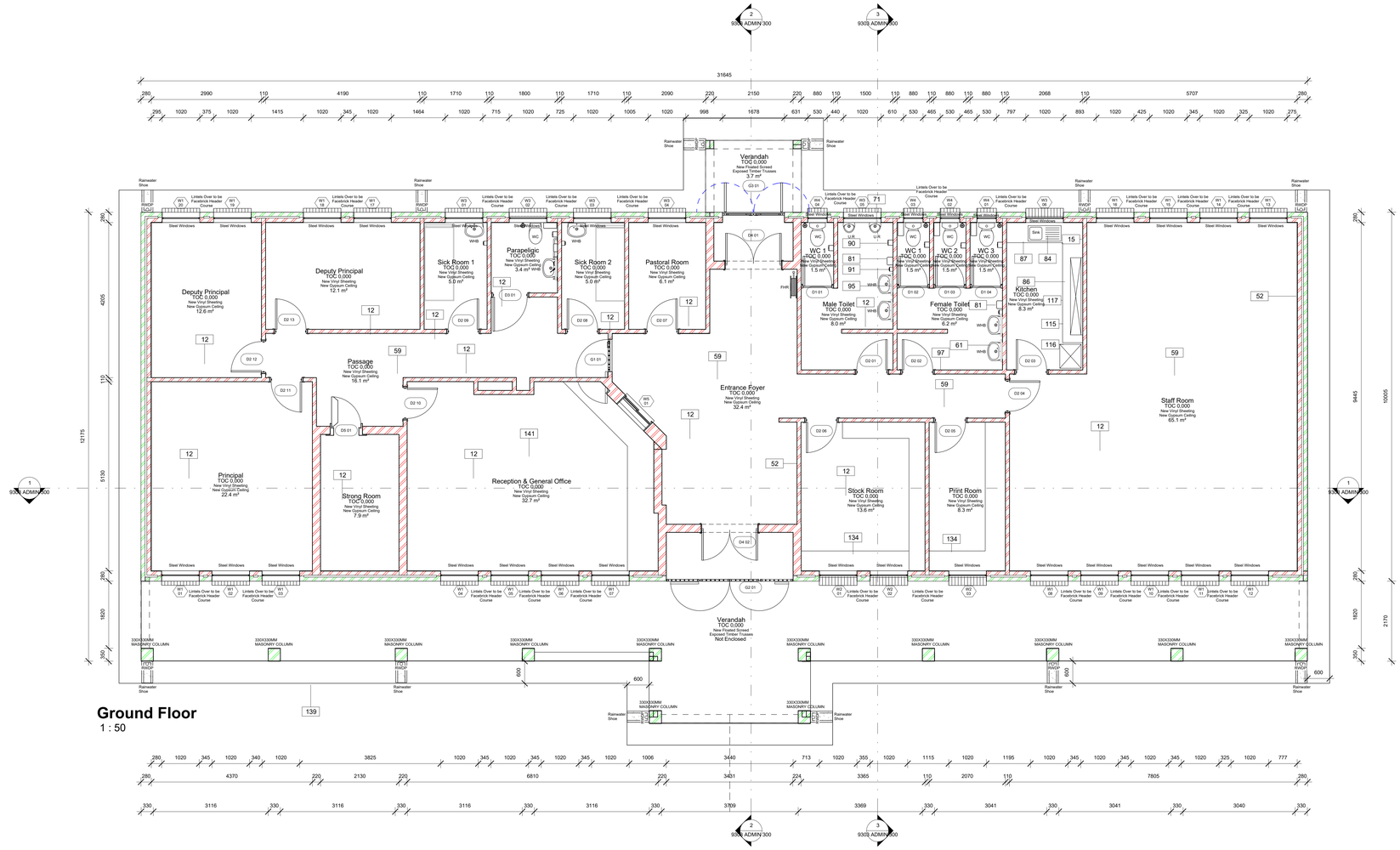

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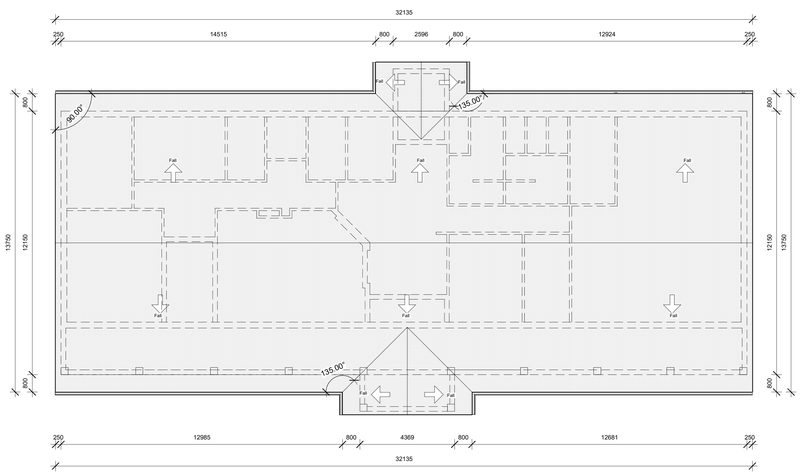

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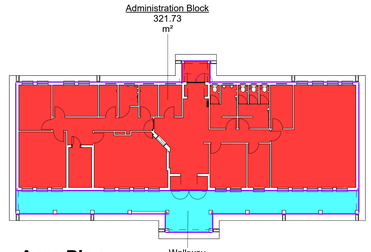

## Ground Floor

1 : 50




## Roof Plan

1 : 100




## Area Plan

1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Administration Block | 322 m² |
| Walkway | 76 m² |
| | 397 m² |

## Keynote Legend

| Key Value | Keynote Text |
|---|---|
| 01 | TERMITE POISON: Treat ground under all internal & external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification DDG-001E with 50mm sand over poison. |
| 02 | CONCRETE SLAB: Minimum 75mm Cast on 250 micron polythene damp proof membrane (as per clause 7.2 of specification DDG-001E), all side overlaps sealed with approved contact adhesive on 50mm sand on approved filling, 15MPA. |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 04 | INSULATION TO CONCRETE SLAB: 500mm edge of concrete slab to be insulated with 40mm XPS polystyrene board. 500mm under slab edge and 500mm in wall cavity to detail. |
| 05 | COMPACTED FILL: minimum 3 layers fill compacted to Engineers specifications. Lay 50mm sand blinding before laying concrete pavers. |
| 07 | PRECAST CONCRETE PAVING BLOCKS(EXISTING): Parking Area: To be inspected and replaced accordingly. |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 10 | PLASTER & PAINT WALLS (NEW/EXTERNAL): 1 Coat plaster and 2 coats acrylic PVA suitable for washing with a mild detergent and with a matt finish. Apply at 10m square per litre spread rate. Undercoat: Provide 1 coat alkaline resistant 100% pure acrylic filler coat. Spread rate 6m square per litre. Specification of Paint: Plascon Micatex Colour: Moist Sand |
| 11 | PLASTER & PAINT WALLS (EXISTING/EXTERNAL): To be inspected and repainted to match the existing. |
| 12 | INTERNAL WALLS (PVA): to be finished with 1 x coat 15mm cement plaster and primed with 1 x coat Plascon Plaster primer.All other rooms to be painted with 2 x coats Plascon Super Acrylic Polvin Colour: Molucca EPL175. |
| 13 | INTERNAL WALLS (ENAMEL)All walls finished with one coat plaster and painted with one coat alkaline resistant primer, one universal undercoat and two coats eggshell enamel paint. Bathrooms & Kitchen plastered areas to be painted with 2 x coats Plascon Velveglo Colour: VLO 10 Tequila. |
| 14 | INTERNAL WALLS (EXISTING/ENAMEL):All walls to be inspected plaster and paint to match existing. |
| 15 | TILE SPLASHBACKS: Johnson White Glazed Tiles - 3 rows above units and returns where applicable. |
| 16 | EXISTING WALL TILES: Existing wall tiles to be stripped and removed. Walls to plastered and made good for paint to Architect Spec.New tiles to Architects Details & Specifications. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 18 | FABRICATED ROOF TRUSS(EXISTING):Roof to be inspected by a qualified structural engineer. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 22 | ROOF FASCIA BOARDS (EXISTING): Fascia boards to be inspected and replaced accordingly to match existing. |
| 23 | INSULATION FOIL: Under Roof Sheeting: SANS 1381-4:2009 Sisalation Reinforced Aluminium Foil Insulation. |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 28 | RAINWATER DOWNPIPES: to be inspected and replaced if faulty |
| 29 | CONCRETE DRAINAGE APRON: to be 1200mm wide to Engineer's design, specification and approval. |
| 30 | WINDOW CILLS (INTERNAL): 12mm THICK Plastered Cill Brick On End and Painted to match Wall Colour, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 31 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 32 | BRICK-ON-EDGE LINTEL (NEW): Brick on Edge Lintels to be supported by Steel Equal Leg Angle to Engineers Details & Specifications. Steel Angle Weatherdrip, to be welded to equal leg steel angle. |
| 33 | BRICK-ON-EDGE LINTEL (EXISTING): All lintels to be inspected by structural engineer. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 41 | BLINDS: Block Out Blinds to all windows in the Science Laboratory. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 43 | WINDOWS: Existing steel frames (School type) as per window schedule. All windows to inspected and replaced - to match existing |
| 46 | CEILINGS: Existing ceilings to be inspected and replaced if necessary |
| 48 | CEILINGS: HALL-BUILDING to be sloped Isopine Isoboard 50mm to same pitch as roof & fitted between steel structural members. Finished with Plascon Velveglo VL01. |
| 51 | SECURITY: Mantis Grating Structure to underside of Trusses to Engineer's Secification & Architects Approval. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 61 | TRANSITION STRIP: Aluminium 40mm built into screed between Vinyl tiles and carpet / tiles. |
| 64 | BALUSTRADE: all balustrades on site to be inspected and to comply with SANS10400 |
| 67 | VANITY SLAB & WHB: White Porcelain Drop in basin 31mm chromium plated outlet with plug, chain, anchor & 32mm back nut complete. Provide 2 taps (hot & cold). Provide black soft rubber P trap. Disable WHB fixed to wall. WHB Specification: Vaal Sanitary Ware Cameo 7028. Disabled WHB Specification: Vaal Sanitary Ware Springbok basin 7031. Laboratory basin: Vaal Sanitary Ware Lab Sink 234500 to be fitted with acid resistant waste code: 8790Z0, fixed underneath slab using two adjustable underslung brackets code: 8109Z0. Vanity Counter Top to be 30mm THICK Rustenburg Granite. |
| 70 | WC SUITE: Ex. WC suite to be inspected and replaced if necessary. |
| 71 | WC DISABLED: Vaal Sanitaryware Orchid Wall Hung toilet (Code: VAA-439016WH) with Vaal Sanitaryware Buxton Sta-Tite Seat (code: VAA-8515Z100), White. Size: 583mmX355mm. Notes- Orchid back inlet 90Aº wall hung open rim pan, with a 6 litre cistern complete with lid, fitments, extended handle flush valve, chrome (code: COB-C-FM8-80). includes 1 Rear grab rail. |
| 78 | URINAL: 610X385mm White vitreous China wash down wall urinal with wall hangers, strainer waste, top inlet spreader and chrome platted flush pipes. 45l cistern with back inlet and PC push button. Specification: Vaal Sanitaryware Lavatera TI Wall Hung Urinal (code: VAA-705426WH). White. Notes- Wall Hung urinal with top inlet, supplied with a 38mm chrome plated domical grating, a spreader (with a 20mm diameter thread), including flush pipe and two hanger brackets. Size: 385mmX380mmX600mm. |
| 81 | HAND DRYER: Ticra Ssteel hand dryer, energy saving. Code: S0013594 |
| 84 | STAINLESS STEEL SINK: drop-in one piece pressed sink in Formica Counter 0.9mm stainless steel, with tiled splash back, tiling key, tap hole, mild steel gallow brackets & legs with soft black rubber P-trap. Provide one chromium plated basin pillar tap and mixer per sink. Specification: Franke Trendline 1000mm Inset. |
| 86 | COUNTER TOP: Colour Granite, Formica Standard width 600mm x 40mm thick fitted over cupboard units or to wall as per manufacturer's specifications. |
| 87 | SINK TAP: Cobra Medical Pillar Tap (Code: 504-21B) Hot & Cold Only |
| 90 | TOILET PAPER HOLDERS: All toilet paper holders to be inspected and replaced if necessary |
| 91 | SOAP DISPENSER: Golden Touch Soap Dispenser Lockable 1200ml â€“ Stainless Steel |
| 95 | GLASS MIRROR:(500x1000x6mm) "GG" Quality Polished fixed to wall position as shown on site with round nose chromium plated mirror screws. 1 mirror per basin, 4 screws per mirror |
| 97 | WHITE GLAZED TILES SPLASHBACK: Three rows of tiles above unit, with returns where applicable. |
| 107 | AIR BLOCK: Terracotta Air Block 190mm x 190mm. |
| 115 | KITCHEN EXTRACTION UNIT: to be industrial size stainless steel extraction hood & fittings to Mechanical Engineers Spec. |
| 116 | KITCHEN STOVE & APPLIANCES: to be Industrial Grade Stainless Steel Catering Units to later Spec. |
| 117 | KITCHEN CUPBOARDS: Fitted where shown, standard pre- made white melamine with kick plate and 2 shelves to manufacturer's specifications. Refer to later Architects Details. |
| 134 | SHELVES: White Melamine as per later Architects details. |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |
| 141 | |

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ADMIN - Plans

| | |
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| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | M Zwane |
| Revision | 0 |

**9303 ADMIN 200**

Scale: As indicated


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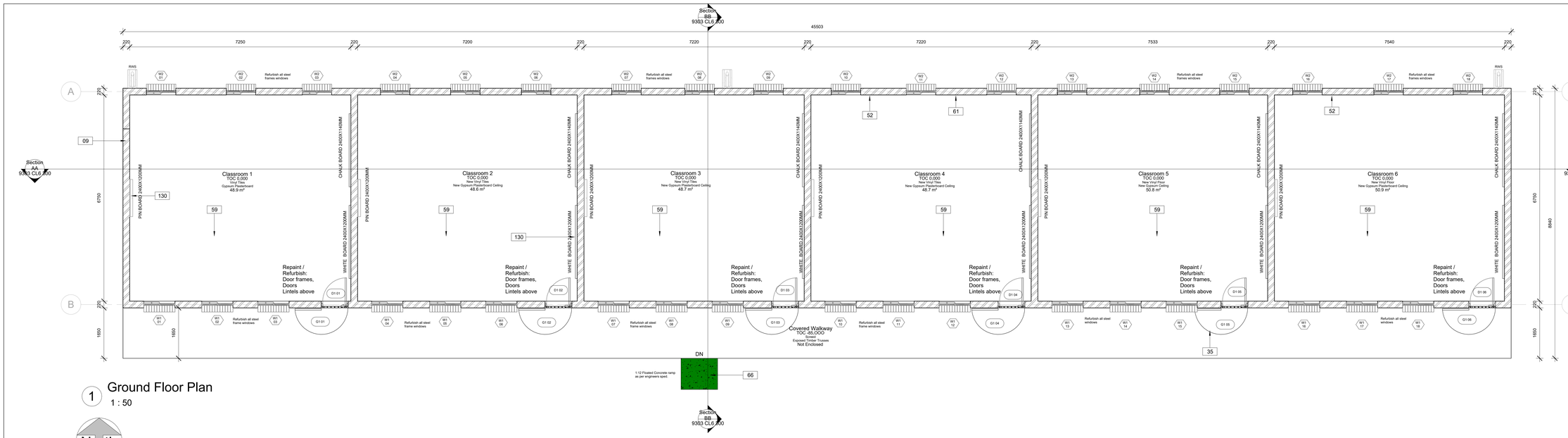
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Tel: 011 663 7911
Fax: 086 552 5381

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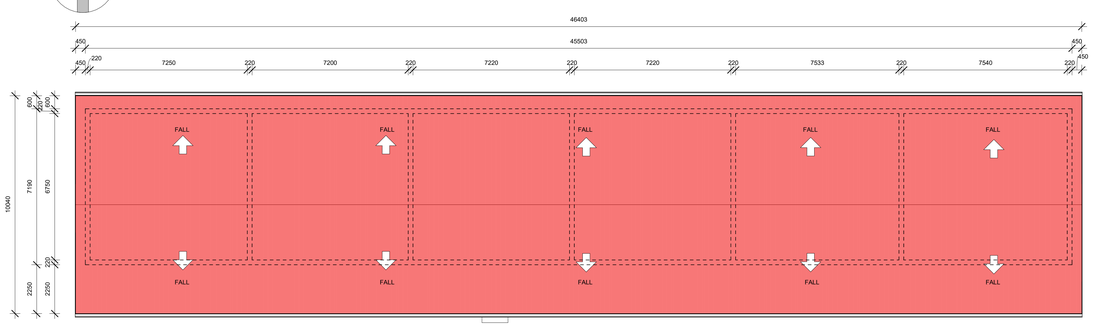
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## 1 Ground Floor Plan

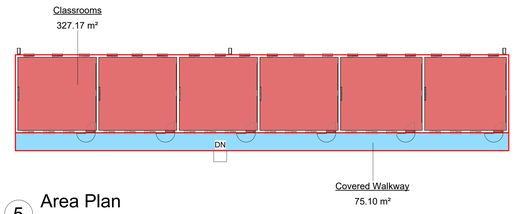
1 : 50

North




## 2 Roof Plan

1 : 100




## 5 Area Plan

1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Classrooms | 327.17 m² |
| Covered Walkway | 75.10 m² |
| | 402.27 m² |

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 04 | INSULATION TO CONCRETE SLAB: 500mm edge of concrete slab to be insulated with 40mm XPS polystyrene board. 500mm under slab edge and 500mm in wall cavity to detail. |
| 09 | FACE BRICK WALLS (EXISTING/EXTERNAL): To be inspected by a qualified structural engineer |
| 11 | PLASTER & PAINT WALLS (EXISTING/EXTERNAL): To be inspected and repainted to match the existing. |
| 14 | INTERNAL WALLS (EXISTING/ENAMEL):All walls to be inspected plaster and paint to match existing. |
| 16 | EXISTING WALL TILES: Existing wall tiles to be stripped and removed. Walls to plastered and made good for paint to Architect Spec.New tiles to Architects Details & Specifications. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 26 | GUTTERS: to be inspected and replaced if faulty - to match existing. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 28 | RAINWATER DOWNPIPES: to be inspected and replaced if faulty |
| 35 | INTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 37 | EXTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 46 | CEILINGS: Existing ceilings to be inspected and replaced if necessary |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 61 | TRANSITION STRIP: Aluminium 40mm built into screed between Vinyl tiles and carpet / tiles. |
| 65 | RAMPS: to be 1500mm wide, 1:12 slope to Engineer's specification and approval. |
| 66 | RAMPS: All ramps to be inspected and to be compliant with SANS10400 |
| 129 | WHITE BOARD: (2400mm x 1200mm) Marker board surface, wall mounted, complete with integrated pen tray. Quantity to be confirmed. |
| 130 | CARPET PINNING BOARDS: All board to comply to South African Standards in terms of CKS 36;2004 edition 4. 3000mm x 1200mm Aluminium frame, carpet pin board complete with concealed mounting accessories. Frame to be Anodised Aluminium, carpet Colour to be Laurel / Equal and Approved. Quantity = 1 per classroom. Pen tray, and fixing components included with round plastic corners. Fitted according to manufacturer's instructions. Install 1 per CLASSROOM. BUILDING B-ADMIN BLOCK include, 1 per: Deputy Principal Office, Principal Office, Secretary Office, Entrance Hall, Staff Room. |
| 131 | GREEN CHALK BOARD:(2400x1140) To comply with CKS-36-1980 or equivalent code of practice, complete with chalk rail as one unit. Strictly according to manufactures instructions. Bottom of board to be 900mm from finished floor level. |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ON HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Dikolanyo le Tshwetsompe
Department of Education
NORTH WEST PROVINCE

# Ex. 6 Classroom Buildings - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | N.SEDIBE |
| Revision | 0 |
| **9303 CL6 200** | |
| Scale | As indicated |


isagoarchitecture

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Fax: 086 669 5095

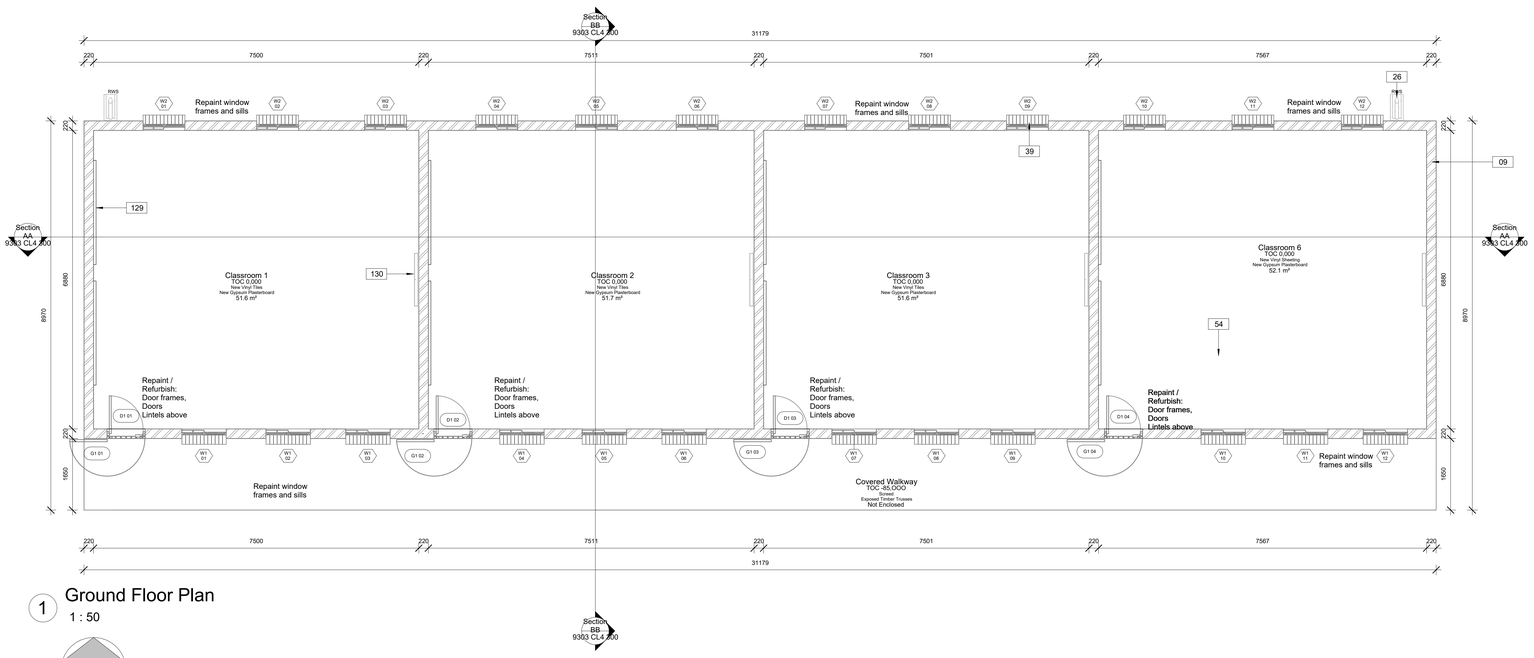
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Contact Person: Natalie Gettliffe
Email: natalie@isago.co.za
Mobile: 083 565 1641

200 Cumberland Ave
Bryanston
2021

Tel: 011 463 7911
Fax: 086 552 3381


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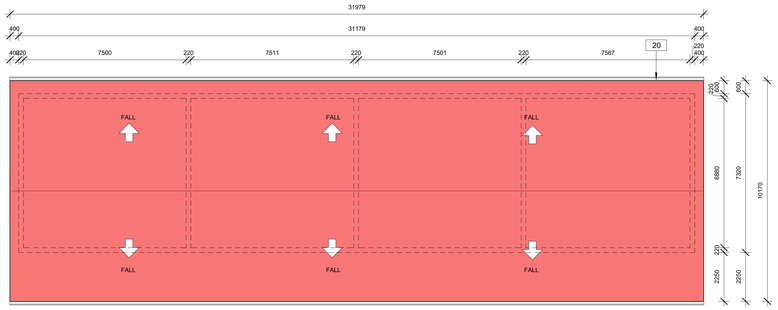
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## 1 Ground Floor Plan

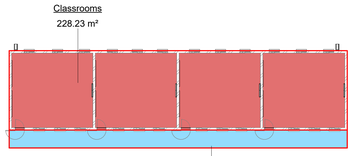
1 : 50

North




## 2 Roof Plan

1 : 100




## 5 Area Plan

1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Classrooms | 228.23 m² |
| Covered Walkway | 51.46 m² |
| | 279.69 m² |

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 04 | INSULATION TO CONCRETE SLAB: 500mm edge of concrete slab to be insulated with 40mm XPS polystyrene board. 500mm under slab edge and 500mm in wall cavity to detail. |
| 09 | FACE BRICK WALLS (EXISTING/EXTERNAL): To be inspected by a qualified structural engineer |
| 11 | PLASTER & PAINT WALLS (EXISTING/EXTERNAL): To be inspected and repainted to match the existing. |
| 14 | INTERNAL WALLS (EXISTING/ENAMEL):All walls to be inspected plaster and paint to match existing. |
| 16 | EXISTING WALL TILES: Existing wall tiles to be stripped and removed. Walls to plastered and made good for paint to Architect Spec.New tiles to Architects Details & Specifications. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÃ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 26 | GUTTERS: to be inspected and replaced if faulty - to match existing. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 37 | EXTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 39 | ROLLER SHUTTER DOORS: Standard RSD. Powder coated Colour: White. See Door Schedule for Sizes |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 43 | WINDOWS: Existing steel frames (School type) as per window schedule. All windows to inspected and replaced - to match existing |
| 46 | CEILINGS: Existing ceilings to be inspected and replaced if necessary |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 129 | WHITE BOARD: (2400mm x 1200mm) Marker board surface, wall mounted, complete with integrated pen tray. Quantity to be confirmed. |
| 130 | CARPET PINNING BOARDS: All board to comply to South African Standards in terms of CKS 36:2004 edition 4. 3000mm x 1200mm Aluminium frame, carpet pin board complete with concealed mounting accessories. Frame to be Anodised Aluminium, carpet Colour to be Laurel / Equal and Approved. Quantity = 1 per classroom. Pen tray, and fixing components included with round plastic corners. Fitted according to manufacturer's instructions. Install 1 per CLASSROOM. BUILDING B-ADMIN BLOCK include, 1 per: Deputy Principal Office, Principal Office, Secretary Office, Entrance Hall, Staff Room. |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ON HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
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4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
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8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

Ex. 4 Classroom Buildings - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | B. Chinyuku |
| Revision | 0 |
| **9303 CL4 200** | |
| Scale | As indicated |

isagoarchitecture

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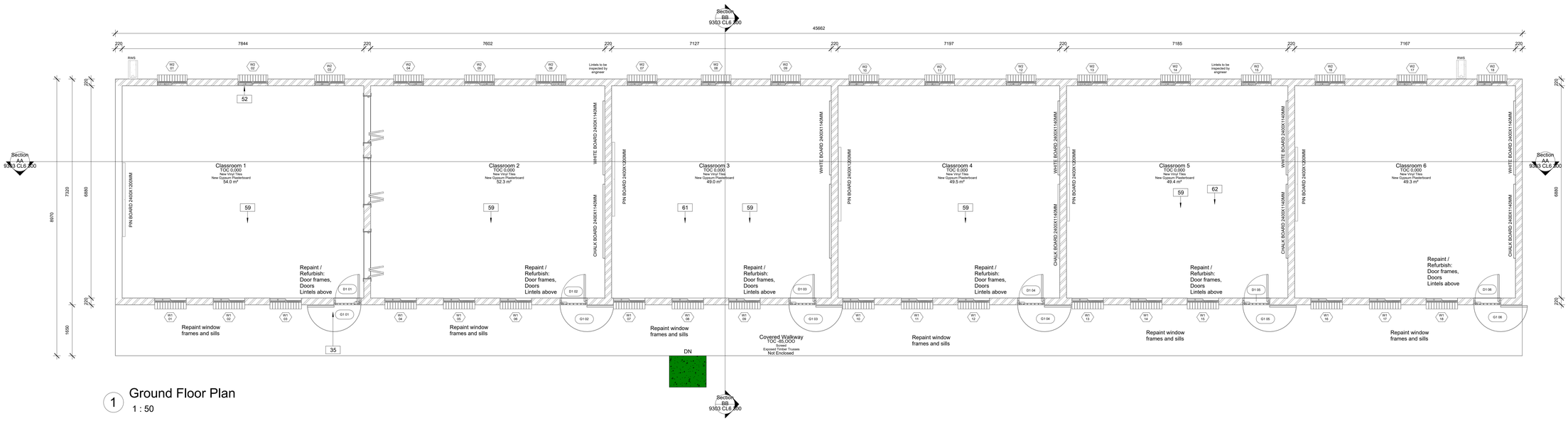
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2021

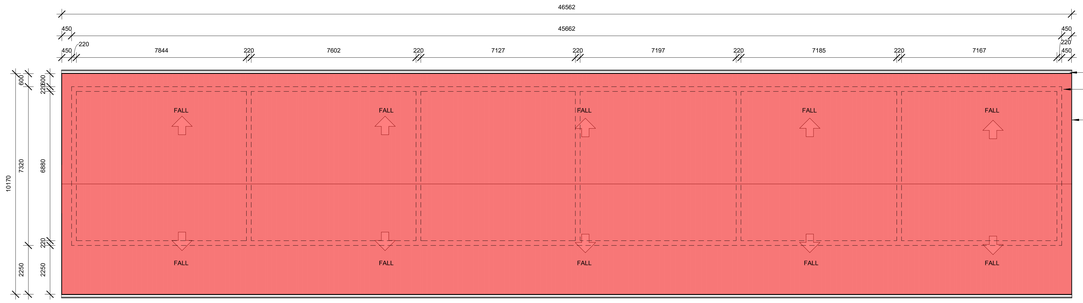
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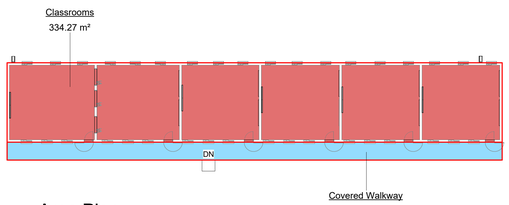

# 1 Ground Floor Plan

1 : 50




# 2 Roof Plan

1 : 100




# 5 Area Plan

1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Classrooms | 334.27 m² |
| Covered Walkway | 75.34 m² |
| | 409.61 m² |

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 04 | INSULATION TO CONCRETE SLAB: 500mm edge of concrete slab to be insulated with 40mm XPS polystyrene board. 500mm under slab edge and 500mm in wall cavity to detail. |
| 09 | FACE BRICK WALLS (EXISTING/EXTERNAL): To be inspected by a qualified structural engineer |
| 11 | PLASTER & PAINT WALLS (EXISTING/EXTERNAL): To be inspected and repainted to match the existing. |
| 12 | INTERNAL WALLS (PVA): to be finished with 1 x coat 15mm cement plaster and primed with 1 x coat Plascon Plaster primer.All other rooms to be painted with 2 x coats Plascon Super Acrylic Polvin Colour: Molucca EPL175. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 35 | INTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 37 | EXTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 43 | WINDOWS: Existing steel frames (School type) as per window schedule. All windows to inspected and replaced - to match existing |
| 46 | CEILINGS: Existing ceilings to be inspected and replaced if necessary |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 61 | TRANSITION STRIP: Aluminium 40mm built into screed between Vinyl tiles and carpet / tiles. |
| 62 | WATERPROOFING: New acrylstic waterproofing or equal & approved, laid in accordance with manufacturer's spec. on screeds laid to fall to outlets. To carry 10 year guarantee. |
| 65 | RAMPS: to be 1500mm wide, 1:12 slope to Engineer's specification and approval. |
| 130 | CARPET PINNING BOARDS: All board to comply to South African Standards in terms of CKS 36;2004 edition 4. 3000mm x 1200mm Aluminium frame, carpet pin board complete with concealed mounting accessories. Frame to be Anodised Aluminium, carpet Colour to be Laurel / Equal and Approved. Quantity = 1 per classroom. Pen tray, and fixing components included with round plastic corners. Fitted according to manufacturer's instructions. Install 1 per CLASSROOM. BUILDING B-ADMIN BLOCK include, 1 per: Deputy Principal Office, Principal Office, Secretary Office, Entrance Hall, Staff Room. |
| 131 | GREEN CHALK BOARD:(2400x1140) To comply with CKS-36-1980 or equivalent code of practice, complete with chalk rail as one unit. Strictly according to manufactures instructions. Bottom of board to be 900mm from finished floor level. |

**GENERAL NOTES:**
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7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN T/O BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lifapha le Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

# Ex. 6 Classroom Buildings - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | PN.SEDIBE |
| Revision | 0 |
| **9303 CL6 200** | |
| Scale | As indicated |

isagoarchitecture

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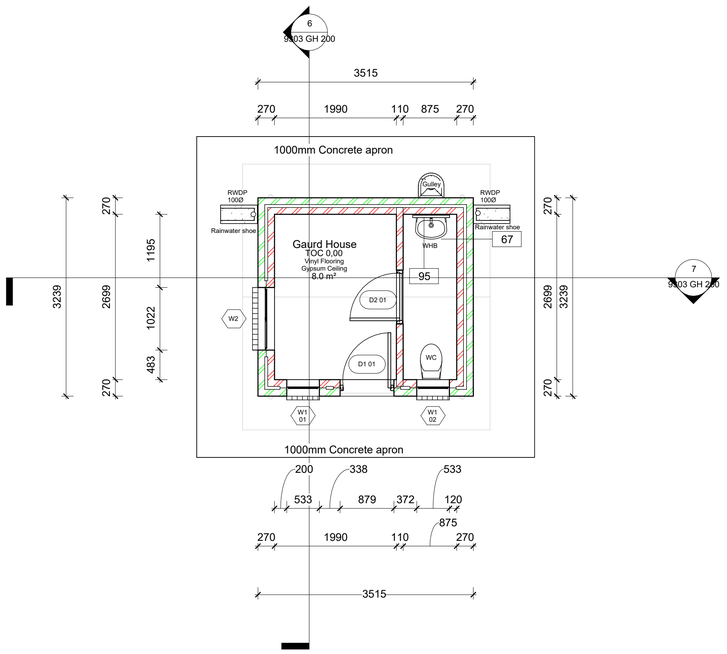
JOHANNESBURG:
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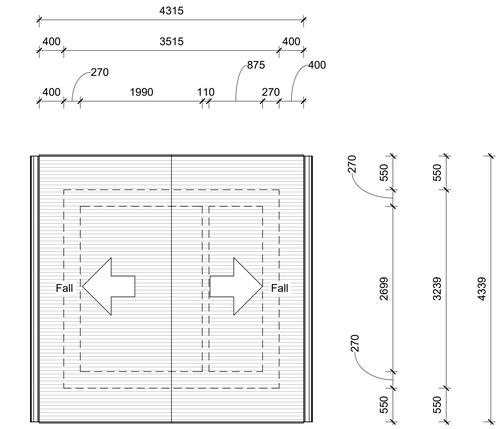
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Bryanston
2021

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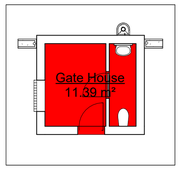
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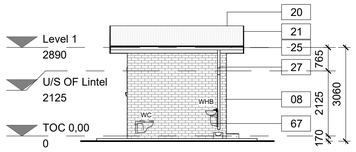

## Ground Floor Plan
1 : 50



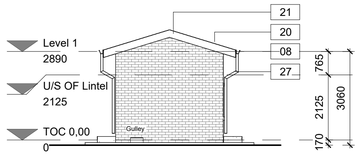

## Roof Plan
1 : 50



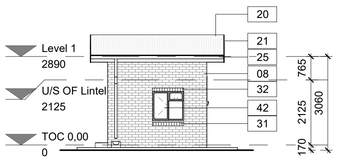

## Area Plan
1 : 100




## East Elevation
1 : 100



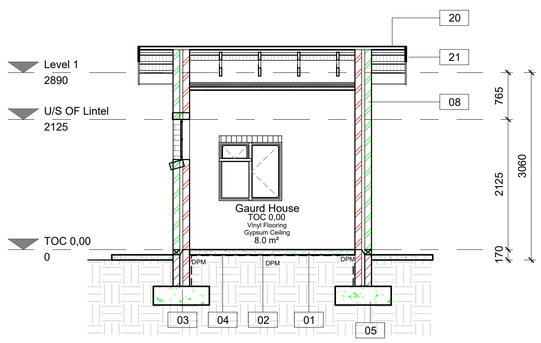

## North Elevation
1 : 100



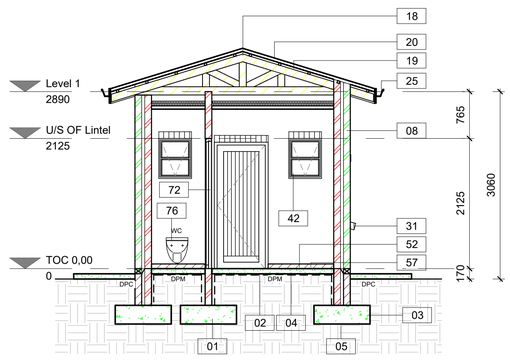

## West Elevation
1 : 100




## South Elevation
1 : 100




## Section AA
1 : 50




## Section BB
1 : 50

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 01 | TERMITE POISON: Treat ground under all internal & external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification DDG-001E with 50mm sand over poison. |
| 02 | CONCRETE SLAB: Minimum 75mm Cast on 250 micron polythene damp proof membrane (as per clause 7.2 of specification DDG-001E), all side overlaps sealed with approved contact adhesive on 50mm sand on approved filling, 15MPA. |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 04 | INSULATION TO CONCRETE SLAB: 500mm edge of concrete slab to be insulated with 40mm XPS polystyrene board. 500mm under slab edge and 500mm in wall cavity to detail. |
| 05 | COMPACTED FILL: minimum 3 layers fill compacted to Engineers specifications. Lay 50mm sand blinding before laying concrete pavers. |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 18 | FABRICATED ROOF TRUSS(EXISTING):Roof to be inspected by a qualified structural engineer. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 31 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 32 | BRICK-ON-EDGE LINTEL (NEW): Brick on Edge Lintels to be supported by Steel Equal Leg Angle to Engineers Details & Specifications. Steel Angle Weatherdrip, to be welded to equal leg steel angle. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 57 | CERAMIC/PORCELAIN TILES: New Non-slip on screed to Architect's approval, all grouting joints to be continuous in both directions, Lay expansion joints to manufactures recommendations and instructions. To Architect's Specification. |
| 67 | VANITY SLAB & WHB: White Porcelain Drop in basin 31mm chromium plated outlet with plug, chain, anchor & 32mm back nut complete. Provide 2 taps (hot & cold). Provide black soft rubber P trap. Disable WHB fixed to wall. WHB Specification: Vaal Sanitary Ware Cameo 7028. Disabled WHB Specification: Vaal Sanitary Ware Springbok basin 7031. Laboratory basin: Vaal Sanitary Ware Lab Sink 234500 to be fitted with acid resistant waste code: 8790Z0, fixed underneath slab using two adjustable underslung brackets code: 8109Z0. Vanity Counter Top to be 30mm THICK Rustenburg Granite. |
| 72 | WC SIGNAGE from Design Hardware: Male Code:B3344 x 2, Female: Code:B3345 x 2, Physically Impaired Code:B3346 x1. |
| 76 | WC: Vaal Sanitaryware Hibiscus Elite Close-Coupled toilet suite (code: VAA-772404WH). White. Notes- Vitreous china vandal proof close-coupled toilet suite complete with pan, front push button, lid & fitments. Size: 643mmX355mmX830mm. |
| 95 | GLASS MIRROR:(500x1000x6mm) "GG" Quality Polished fixed to wall position as shown on site with round nose chromium plated mirror screws. 1 mirror per basin, 4 screws per mirror |

**GENERAL NOTES:**
1: DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

Issue For Council Submission

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

Gaurd House

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 GH 200**

Scale: As indicated

PLANS AUTHORIZATIONS

| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
|---|---|---|---|
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

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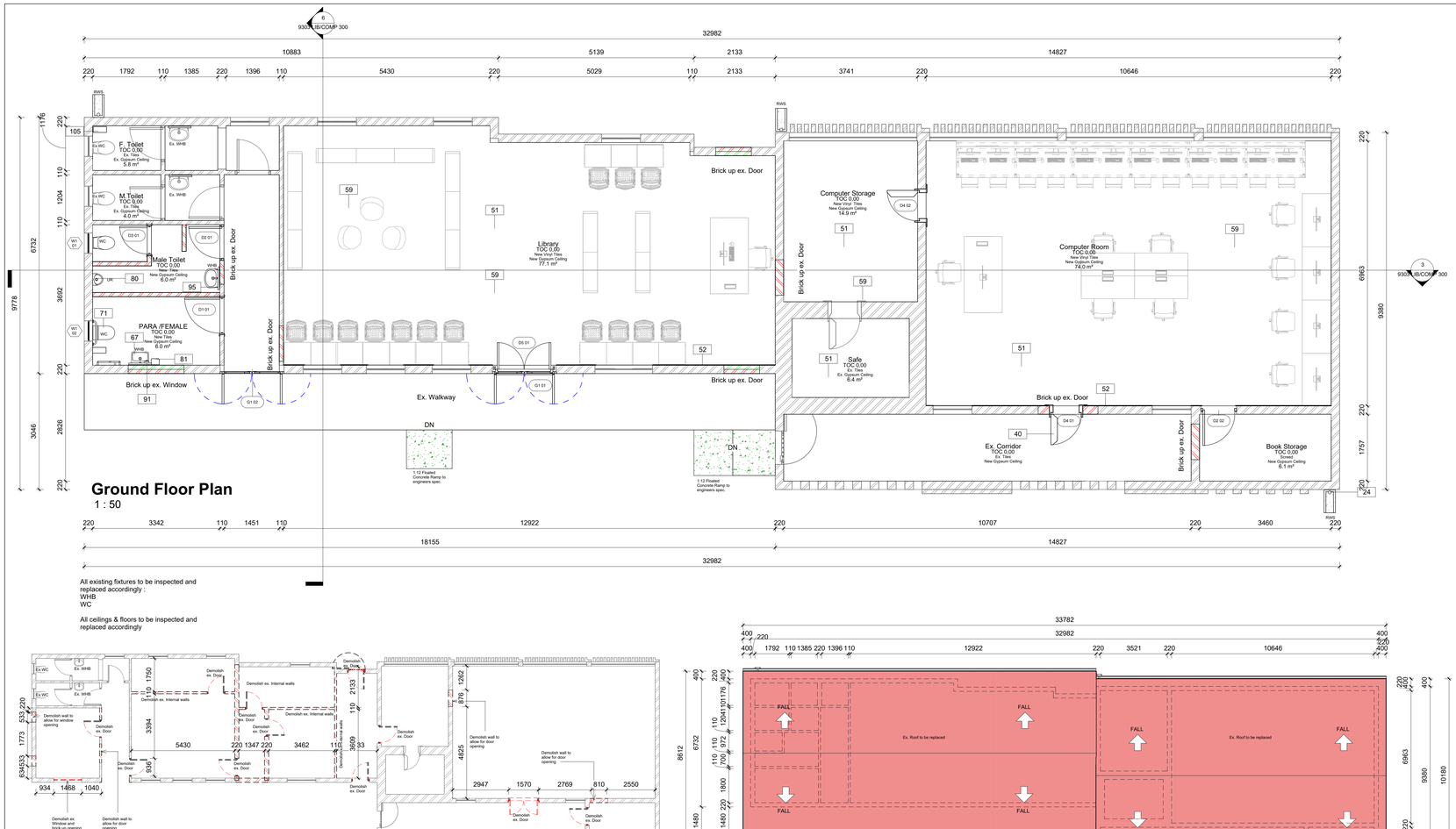
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200 Cumberland Ave
Bryanston
2021

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## Ground Floor Plan
1 : 50

All existing fixtures to be inspected and replaced accordingly :
WHB
WC

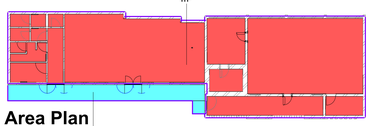
All ceilings & floors to be inspected and replaced accordingly







## Demolition Plan
1 : 100




## Area Plan
1 : 200

Walkway
30.61 m²

## Roof Plan
1 : 100

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 09 | FACE BRICK WALLS (EXISTING/EXTERNAL): To be inspected by a qualified structural engineer |
| 11 | PLASTER & PAINT WALLS (EXISTING/EXTERNAL): To be inspected and repainted to match the existing. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÃ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 37 | EXTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 40 | STRONGROOM DOOR: Sanderson Security: saundersonsecurity.co.za mutual record room door ref: MRRD opening 180degrees, thickness 120mm, outer plate 6mm and weight 230kg. |
| 43 | WINDOWS: Existing steel frames (School type) as per window schedule. All windows to inspected and replaced - to match existing |
| 44 | GATES (NEW): mild Steel as per door schedule. Finish: Primed & Painted with Plascon Velveglo Colour: Battleship Grey G13. |
| 47 | CEILINGS: New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat. 38mm x 38mm brandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 51 | SECURITY: Mantis Grating Structure to underside of Trusses to Engineer's Secification & Architects Approval. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 67 | VANITY SLAB & WHB: White Porcelain Drop in basin 31mm chromium plated outlet with plug, chain, anchor & 32mm back nut complete. Provide 2 taps (hot & cold). Provide black soft rubber P trap. Disable WHB fixed to wall. WHB Specification: Vaal Sanitary Ware Cameo 7028. Disabled WHB Specification: Vaal Sanitary Ware Springbok basin 7031. Laboratory basin: Vaal Sanitary Ware Lab Sink 234500 to be fitted with acid resistant waste code: 8790Z0, fixed underneath slab using two adjustable underslung brackets code: 8109Z0. Vanity Counter Top to be 30mm THICK Rustenburg Granite. |
| 71 | WC DISABLED: Vaal Sanitaryware Orchid Wall Hung toilet (Code: VAA-439016WH) with Vaal Sanitaryware Buxton Sta-Tite Seat (code: VAA-8515Z100). White. Size: 583mmX355mm. Notes- Orchid back inlet 90Aº wall hung open rim pan, with a 6 litre cistern complete with lid, fitments, extended handle flush valve, chrome (code: COB-C-FM8-80). includes 1 Rear grab rail. |
| 80 | URINALS JUNIOR: Vaal Sanitaryware Flat back TI Wall Hung Bowl Urinal (code: VAA-705326WH). White. Notes- Vitreous china wall hung urinal, supplied with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets. Size: 275mmX315mmX415mm. |
| 81 | HAND DRYER: Ticra Ssteel hand dryer, energy saving. Code: S0013594 |
| 91 | SOAP DISPENSER: Golden Touch Soap Dispenser Lockable 1200ml â€“ Stainless Steel |
| 95 | GLASS MIRROR:(500x1000x6mm) "GG" Quality Polished fixed to wall position as shown on site with round nose chromium plated mirror screws. 1 mirror per basin, 4 screws per mirror |
| 105 | SANITARY BIN: Wall mounted 20lt capacity |

**GENERAL NOTES:**
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6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N Sedibe |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

PRINCIPAL AGENT
Name : Jabulani
Date : 2023-08-28
Registration No : N/A
Signature :

ARCHITECT
Name : Natalie Gettliffe
Date : 2023-08-28
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

Issue for Council Submission

IDT

Tlale Primary School

Mothabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# Ex. Admin Block Reconstrcution

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |
| **9303 LIB/COMP 200** | |
| Scale | As indicated |


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Fax: 086 669 5095

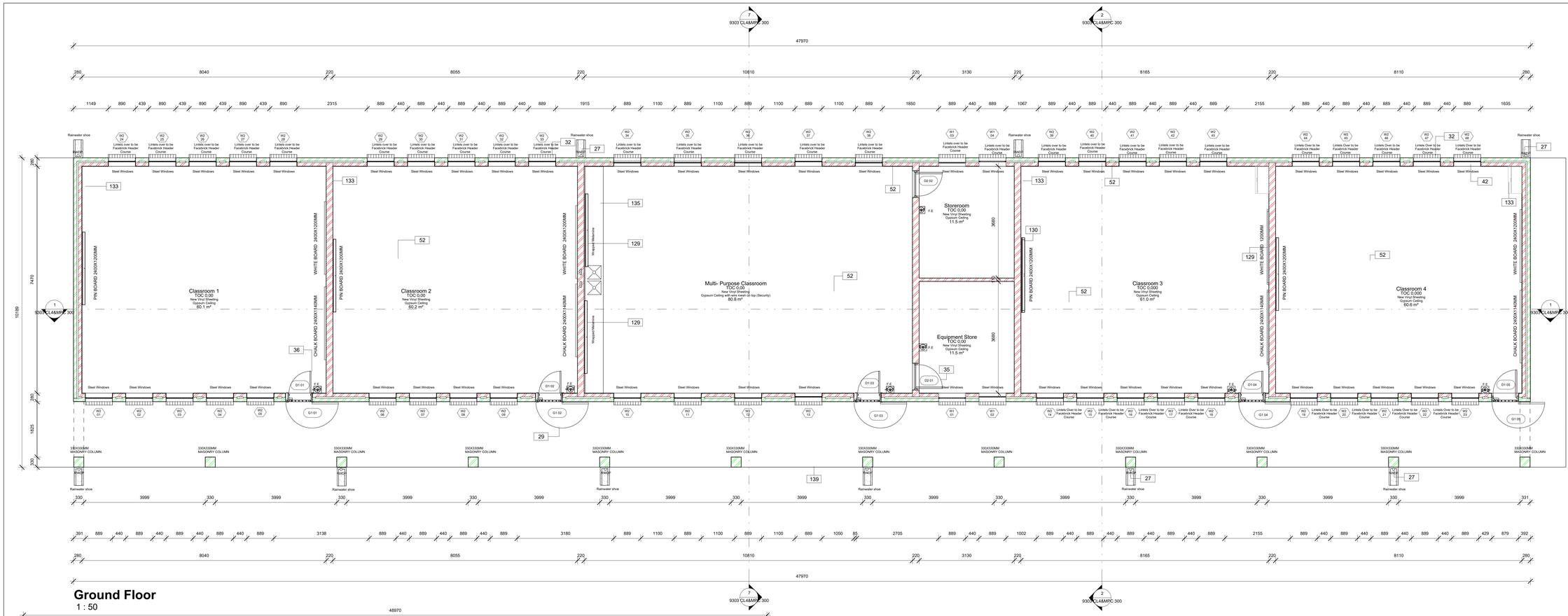
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Contact Person: Natalie Gettliffe
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Tel: 011 463 7911
Fax: 086 552 3381

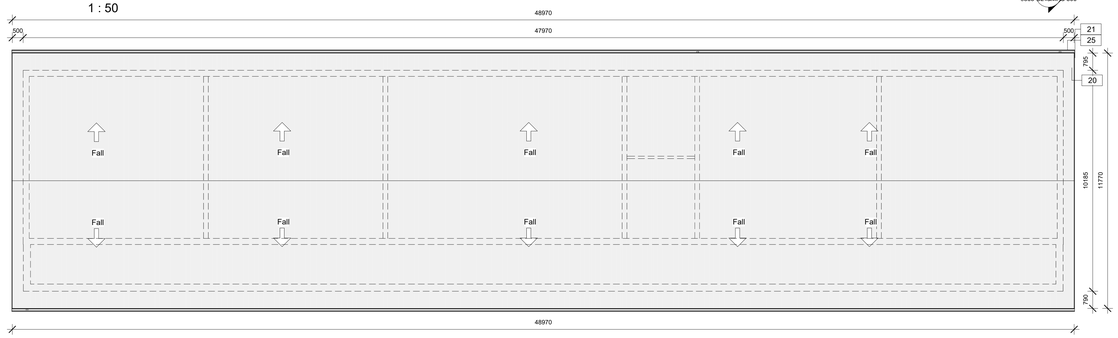
200 Cumberland Ave
Bryanston
2021


2025/05/21 16:12:20

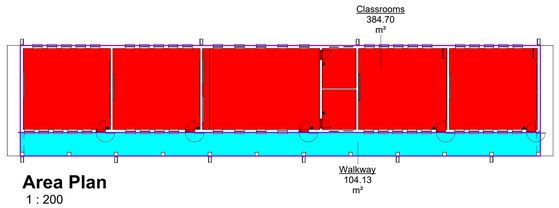
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## Ground Floor
1 : 50




## Roof Plan
1 : 100




## Area Plan
1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Classrooms | 385 m² |
| Walkway | 104 m² |
| | 489 m² |

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 29 | CONCRETE DRAINAGE APRON: to be 1200mm wide to Engineer's design, specification and approval. |
| 32 | BRICK-ON-EDGE LINTEL (NEW): Brick on Edge Lintels to be supported by Steel Equal Leg Angle to Engineers Details & Specifications. Steel Angle Weatherdrip, to be welded to equal leg steel angle. |
| 35 | INTERNAL DOORS: As per door schedule. All doors to be inspected and replaced accordingly. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 47 | CEILINGS: New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat, 38mm x 38mm brandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 51 | SECURITY: Mantis Grating Structure to underside of Trusses to Engineer's Secification & Architects Approval. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 112 | FIRE EXTINGUISHERS: Quantity, Position & Specification to fire specialist design & SABS /NBR approval. 4.5kg CO2: dry powder chemical fire extinguisher with hook made of 120x20x2mm mild steel strip bent to form hook for extinguisher screwed twice to 520x100x22mm hardwood. Hardwood screwed and plugged with 6 screws and plugs. Positioned as shown on Plan. Provide 190x190mm ABS plastic symbol safety signs - type FB2. Plugged and screwed to the wall at all fire extinguishers |
| 129 | WHITE BOARD: (2400mm x 1200mm) Marker board surface, wall mounted, complete with integrated pen tray. Quantity to be confirmed. |
| 130 | CARPET PINNING BOARDS: All board to comply to South African Standards in terms of CKS 36;2004 edition 4. 3000mm x 1200mm Aluminium frame, carpet pin board complete with concealed mounting accessories. Frame to be Anodised Aluminium, carpet Colour to be Laurel / Equal and Approved. Quantity = 1 per classroom. Pen tray, and fixing components included with round plastic corners. Fitted according to manufacturer's instructions. Install 1 per CLASSROOM. BUILDING B-ADMIN BLOCK include, 1 per: Deputy Principal Office, Principal Office, Secretary Office, Entrance Hall, Staff Room. |
| 133 | TEACHERS STEEL CABINET: Each Classroom to have 1 Teachers Cabinet, 1800 high x 900mm/1200mm/1800mm wide x 450mm deep standard steel cabinet bolted to wall to manufacturer's spec. |
| 135 | SHELVING: Econorack 2400 (h) x 914 (w) x wide x 610mm deep. |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |

**GENERAL NOTES:**
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8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 120mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Dikolweyo Tsa Thuto
Department of Education
NORTH WEST PROVINCE

# 4 CLASSROOM BLOCK - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | M. ZWANE |
| Revision | 0 |

**9303 CL4&MPC 200**

Scale: As indicated

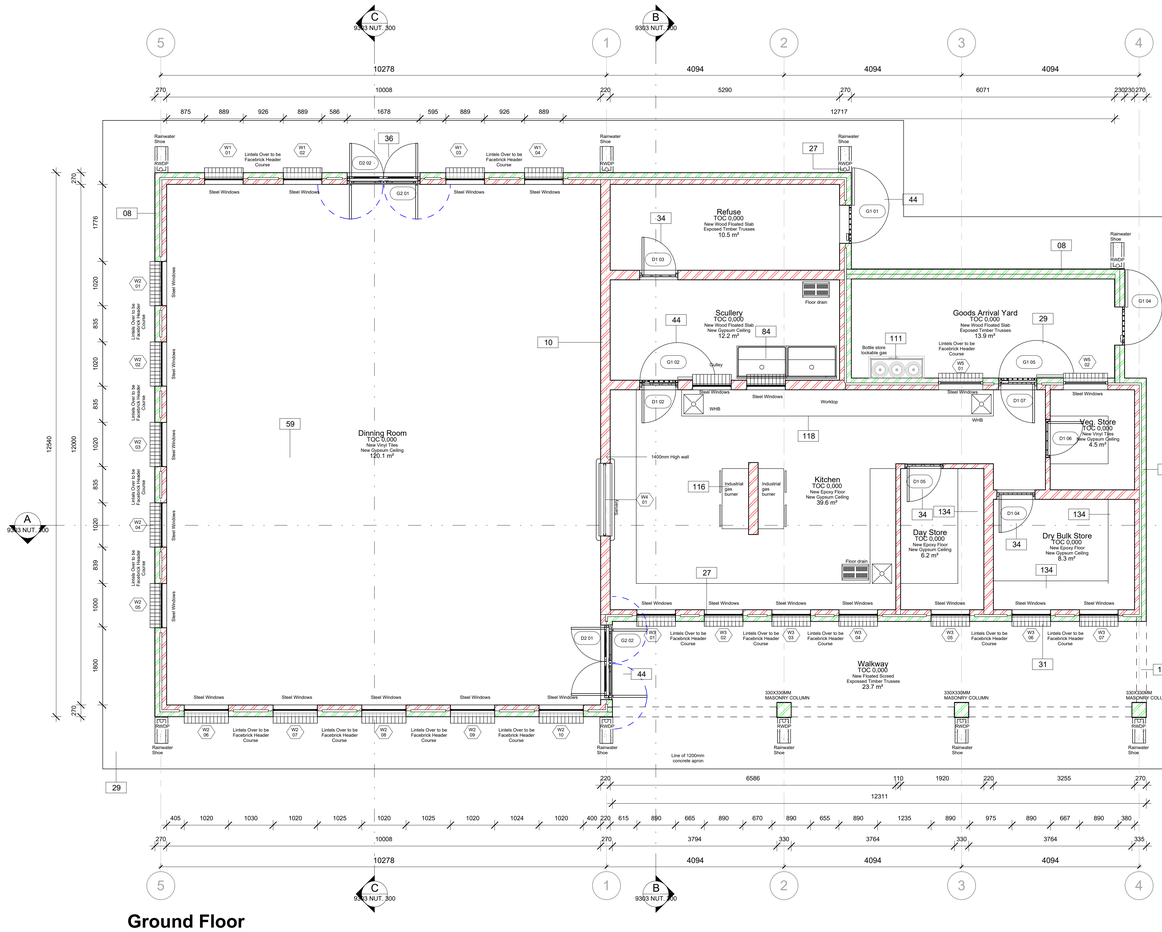
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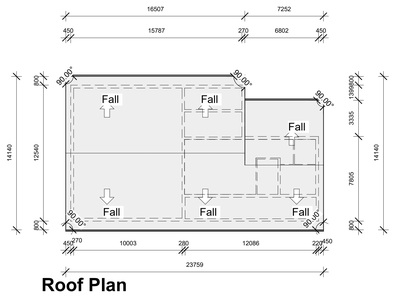
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2021


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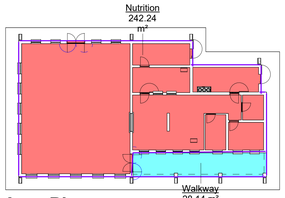
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## Ground Floor
1 : 50




## Roof Plan
1 : 200




## Area Plan
1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Nutrition | 242 m² |
| Walkway | 28 m² |
| | 270 m² |

**GENERAL NOTES:**
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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# NUTRITION BLOCK - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | M.ZWANE |
| Revision | 0 |

**9303 NUT 200**

Scale: As indicated

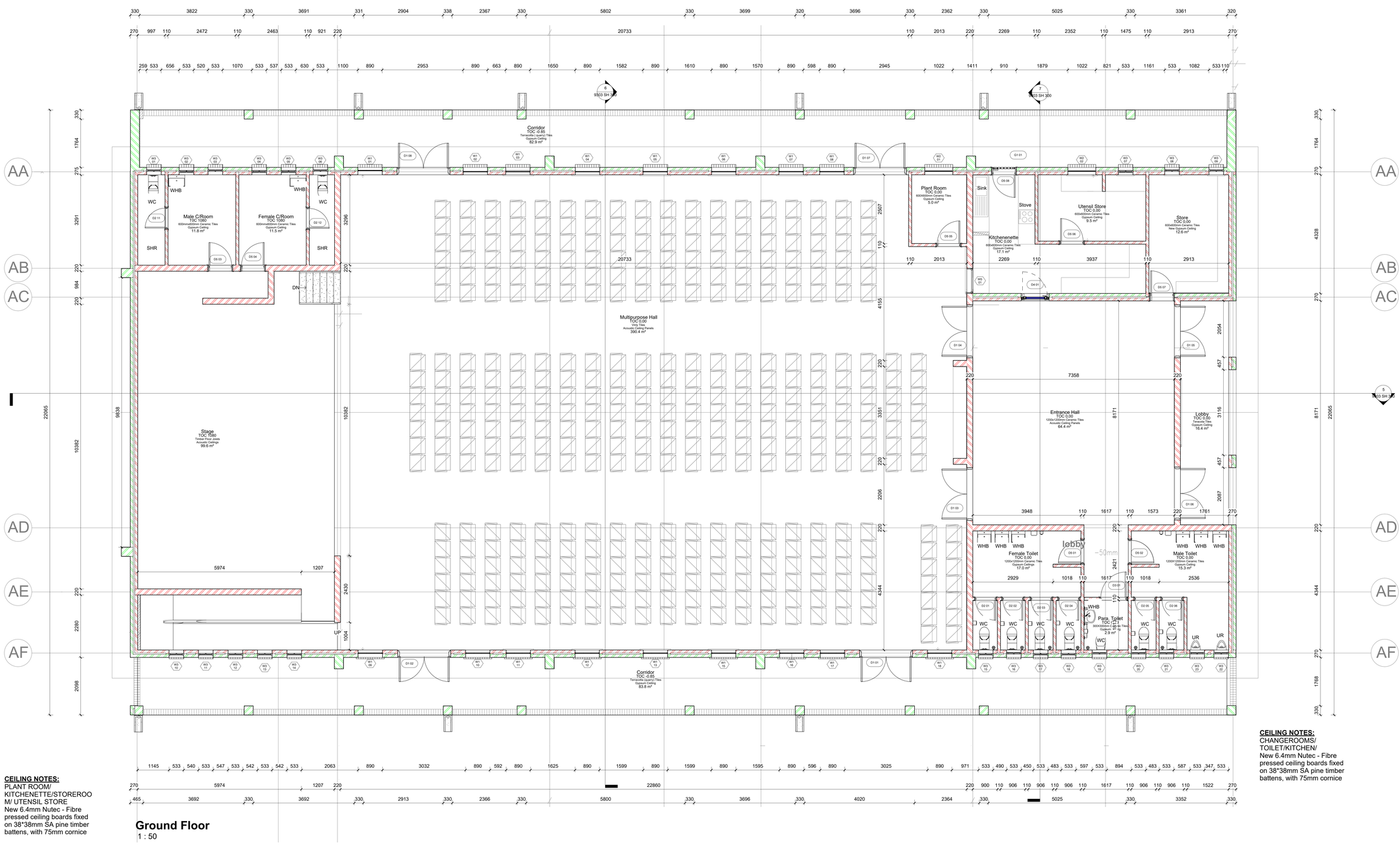
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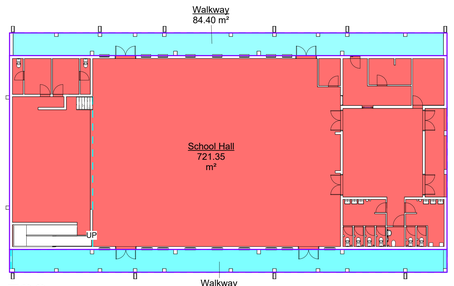
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**CEILING NOTES:**
PLANT ROOM/
KITCHENETTE/STOREROO
M/ UTENSIL STORE
New 6.4mm Nutec - Fibre pressed ceiling boards fixed on 38*38mm SA pine timber battens, with 75mm cornice

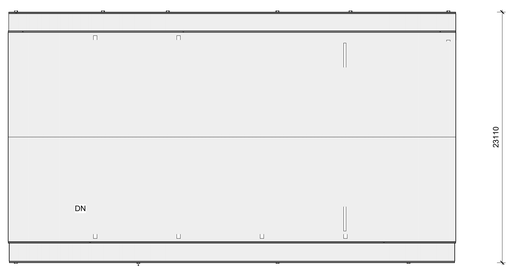
## Ground Floor
1 : 50

**CEILING NOTES:**
CHANGEROOMS/
TOILET/KITCHEN/
New 6.4mm Nutec - Fibre pressed ceiling boards fixed on 38*38mm SA pine timber battens, with 75mm cornice




## TOC
1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| School Hall | 721 m² |
| Walkway | 85 m² |
| Walkway | 84 m² |
| | 890 m² |




## Roof Plan
1 : 200

**GENERAL NOTES:**
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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 19/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

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TLALE PRIMARY SCHOOL
Mothabeng, Mafikeng, Mmabatho, 1747

education
Lefapha le Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

School Hall

| | |
|---|---|
| Project number | 9303 |
| Date | 19/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |
| **9303 SH 200** | |
| Scale | As indicated |

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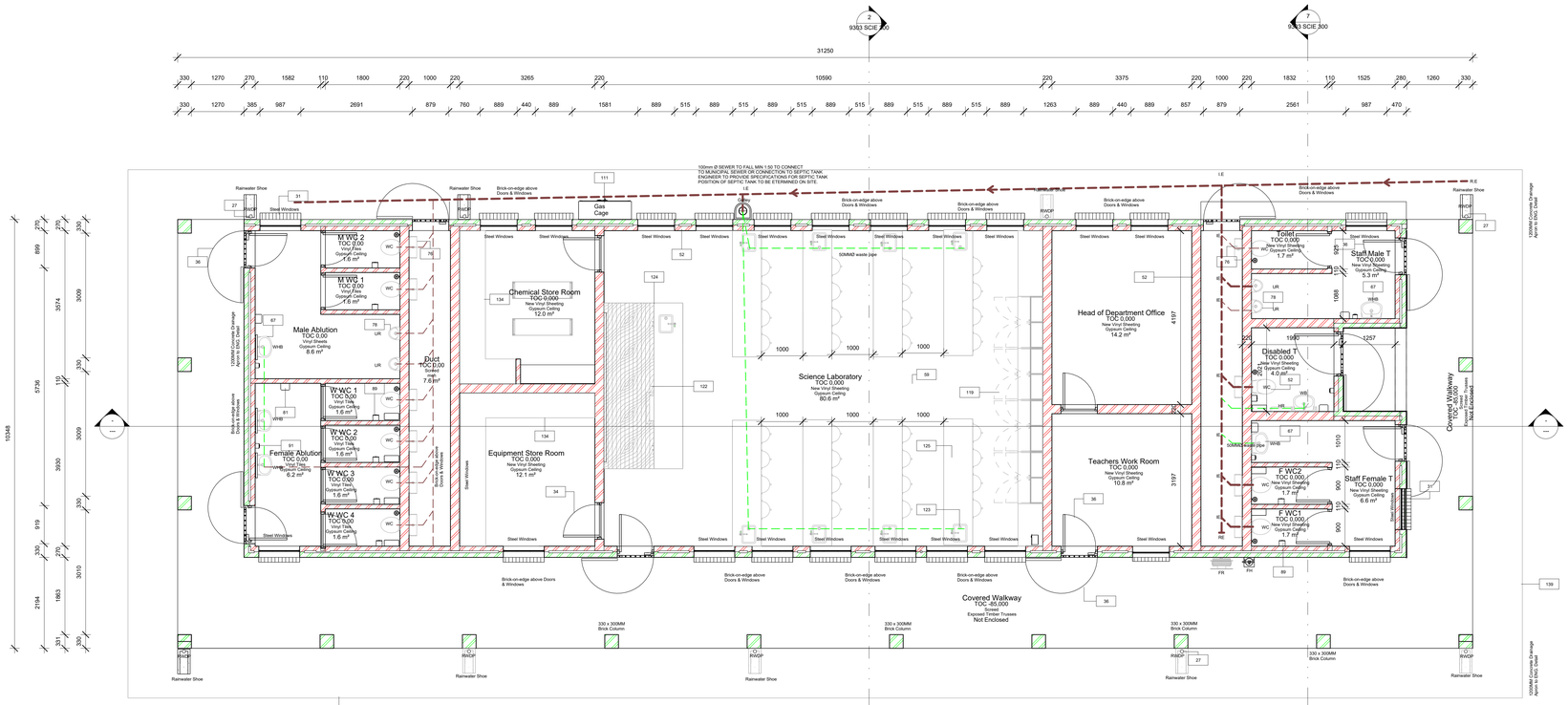
Tel: 018 381 6762
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2021

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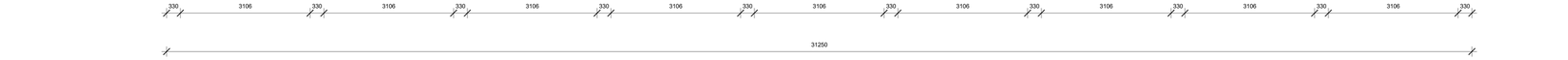
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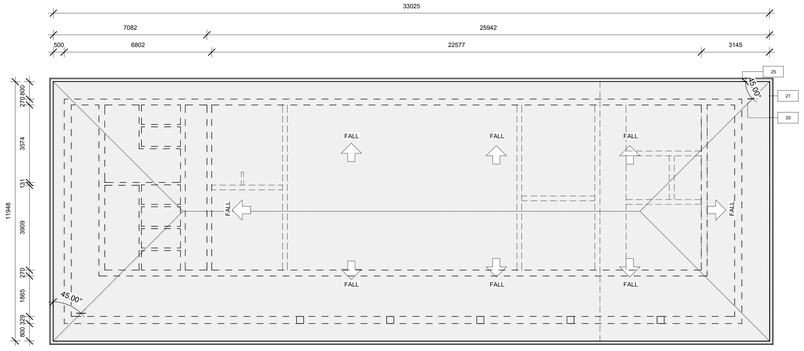
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# GROUND FLOOR PLAN

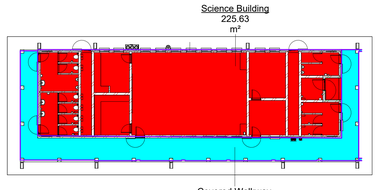
1 : 50




# ROOF PLAN

1 : 100




# AREA PLAN

1 : 200

| Area Schedule (Gross Building) | |
|---|---|
| Name | Area |
| Covered Walkway | 93 m² |
| Science Building | 226 m² |
| | 319 m² |

| Keynote Legend Copy 1 | |
|---|---|
| Key Value | Keynote Text |
| 01 | TERMITE POISON: Treat ground under all internal & external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification DDG-001E with 50mm sand over poison. |
| 02 | CONCRETE SLAB: Minimum 75mm Cast on 250 micron polythene damp proof membrane (as per clause 7.2 of specification DDG-001E), all side overlaps sealed with approved contact adhesive on 50mm sand on approved filling, 15MPA. |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 12 | INTERNAL WALLS (PVA): to be finished with 1 x coat 15mm cement plaster and primed with 1 x coat Plascon Plaster primer.All other rooms to be painted with 2 x coats Plascon Super Acrylic Polvin Colour: Molucca EPL175. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 31 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 34 | INTERNAL DOORS: As per door schedule. Steel door frames with Semi Solid wood doors or equal and approved to Architect's spec. Door Frame Finish: Primed & Painted on steel with Plascon Velveglo Colour: White. Door Finish: Primed & Painted with Plascon Velveglo Colour: Tequila VLO 10. Refer to Door & Window Schedule. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
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| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 67 | VANITY SLAB & WHB: White Porcelain Drop in basin 31mm chromium plated outlet with plug, chain, anchor & 32mm back nut complete. Provide 2 taps (hot & cold). Provide black soft rubber P trap. Disable WHB fixed to wall. WHB Specification: Vaal Sanitary Ware Cameo 7028. Disabled WHB Specification: Vaal Sanitary Ware Springbok basin 7031. Laboratory basin: Vaal Sanitary Ware Lab Sink 234500 to be fitted with acid resistant waste code: 8790Z0, fixed underneath slab using two adjustable underslung brackets code: 8109Z0. Vanity Counter Top to be 30mm THICK Rustenburg Granite. |
| 71 | WC DISABLED: Vaal Sanitaryware Orchid Wall Hung toilet (Code: VAA-439016WH) with Vaal Sanitaryware Buxton Sta-Tite Seat (code: VAA-8515Z100). White. Size: 583mmX355mm. Notes- Orchid back inlet 90Â° wall hung open rim pan, with a 6 litre cistern complete with lid, fitments, extended handle flush valve, chrome (code: COB-C-FM6-80). includes 1 Rear grab rail. |
| 76 | WC: Vaal Sanitaryware Hibiscus Elite Close-Coupled toilet suite (code: VAA-772404WH). White. Notes- Vitreous china vandal proof close-coupled toilet suite complete with pan, front push button, lid & fitments. Size: 643mmX355mmX830mm. |
| 78 | URINAL: 610X385mm White vitreous China wash down wall urinal with wall hangers, strainer waste, top inlet spreader and chrome platted flush pipes. 45l cistern with back inlet and PC push button. Specification: Vaal Sanitaryware Lavatera TI Wall Hung Urinal (code: VAA-705426WH). White. Notes- Wall Hung urinal with top inlet, supplied with a 38mm chrome plated domical grating, a spreader (with a 20mm diameter thread), including flush pipe and two hanger brackets. Size: 385mmX380mmX600mm. |
| 81 | HAND DRYER: Tica Ssteel hand dryer, energy saving. Code: S0013594 |
| 89 | TOILET PAPER HOLDERS: Stainless Steel Toilet Roll Holder. Specification: Sanitech Sanicare Toilet Roll Holder - Holds 3 rolls (stainless steel) to be fitted to each WC. |
| 90 | TOILET PAPER HOLDERS: All toilet paper holders to be inspected and replaced if necessary |
| 91 | SOAP DISPENSER: Golden Touch Soap Dispenser Lockable 1200ml â€˜ Stainless Steel |
| 111 | GAS RETICULATION: To be installed by specialist to SABS 10400 and SANS204 standards. COC for gas installation to be provided. |
| 112 | FIRE EXTINGUISHERS: Quantity, Position & Specification to fire specialist design & SABS /NBR approval. 4.5kg CO2: dry powder chemical fire extinguisher with hook made of 120x20x2mm mild steel strip bent to form hook for extinguisher screwed twice to 520x100x22mm hardwood. Hardwood screwed and plugged with 6 screws and plugs. Positioned as shown on Plan. Provide 190x190mm ABS plastic symbol safety signs - type FB2. Plugged and screwed to the wall at all fire extinguishers |
| 113 | FIRE HOSE REELS: To fire specialist specification & SABS approval & NBR. |
| 119 | SHELVES: Fitted, standard white melamine shelves to Architects details and specifications. |
| 122 | LABORATORY TABLE: Laminated Saligna Counter Top to Teachers & Student Tables, Refer to later Architects Details. Teachers Desk to be fitted with lab gas. Spec: Brown all XL 1355-4 Burning gas. |
| 123 | LAB SINK & SINK TAP: Lab Sink: to be Vaal Sanitaryware Lab Sink 600 (Code: 236100) without overflow with centre back waste outlet with 38mm acid resistant waste (code 8791Z0) to be fixed underneath countertop with 2 adjustable underslung brackets (code8109Z0). Brown all Lab tap XL 1204-0 Bench mounted with swivel swan neck fitting and removable nozzle. |
| 124 | WHIRLY BIRD EXTRACTOR UNIT: to be fitted in roof above teacherâ€™s lab bench in science laboratory. |
| 125 | LABORATORY TABLE: Standard as detailed by GED Including Teachers Desk and Students Table. |
| 134 | ~~SHELVES: White Melamine as per later Architects details.~~ |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |

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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issued for Council Submission | 23/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
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education
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idt

# SCIE. Building - Plans

| | |
|---|---|
| Project number | 9303 |
| Date | 23/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |
| **9303 SCIE 200** | |
| Scale | As indicated |


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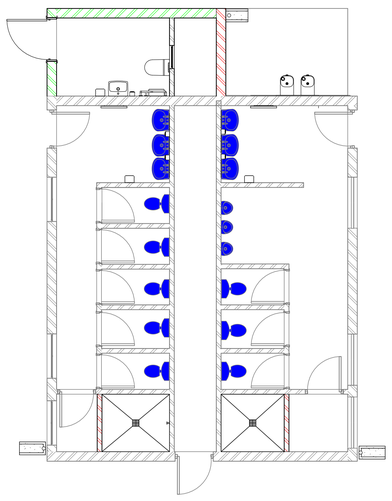
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Amalgam Park Mafikeng
2745
Tel: 018 391 6762
Fax: 086 669 5395

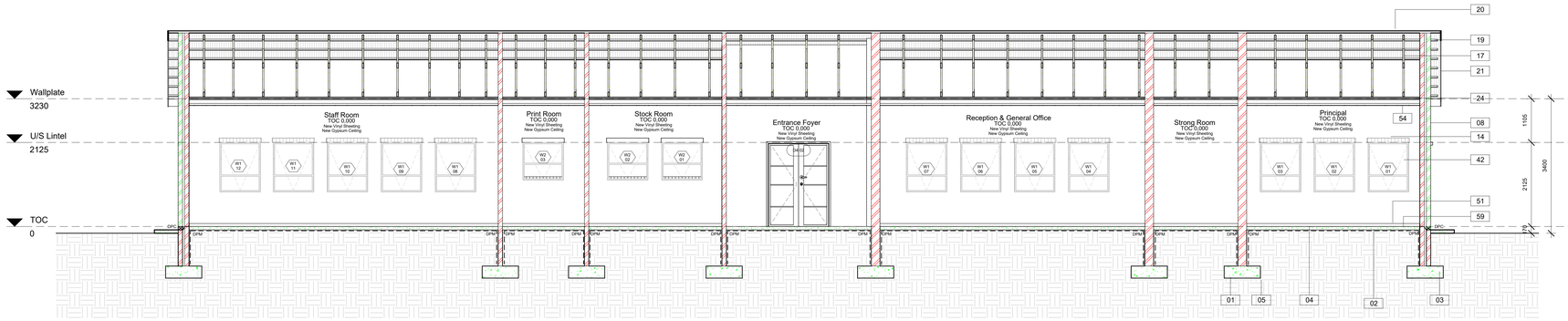
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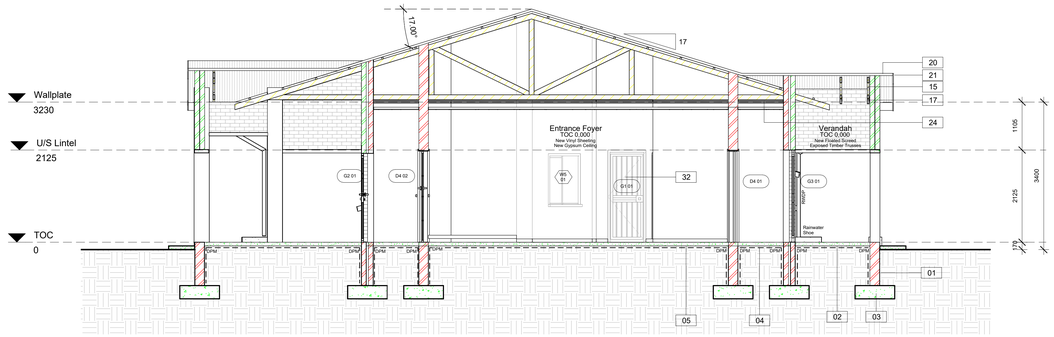

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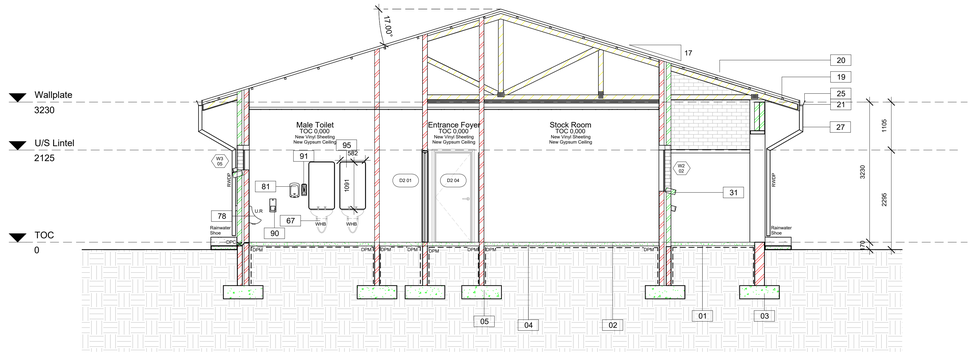





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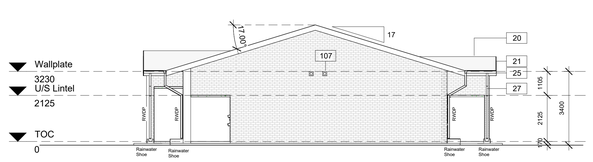

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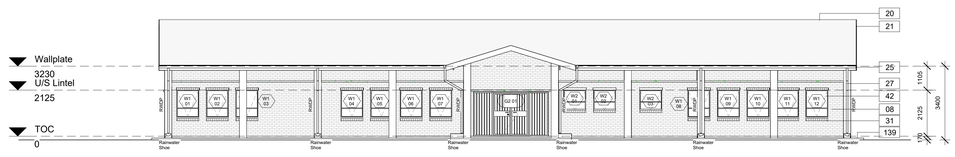

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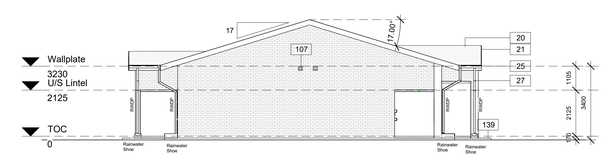

## North Elevation
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## East Elevation
1 : 100




## South Elevation
1 : 100




## West Elevation
1 : 100

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|---|---|---|---|
| 0 | Issue For Council Submission | 2025/05/21 | P.N SEDIBE |

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# ADMIN - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N Sedibe |
| Revision | 0 |
| **9303 ADMIN 300** | |
| Scale | As indicated |


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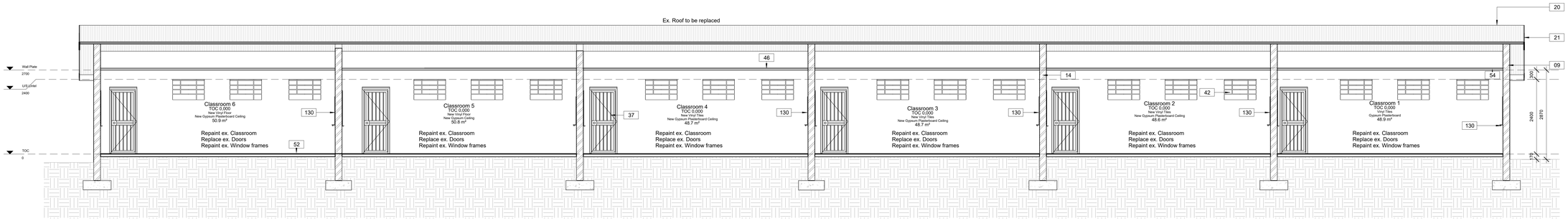
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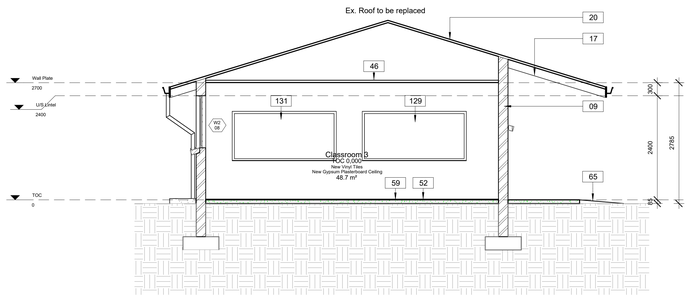
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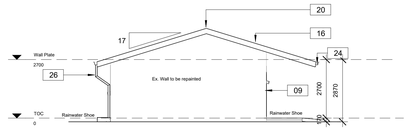
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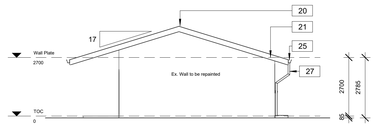

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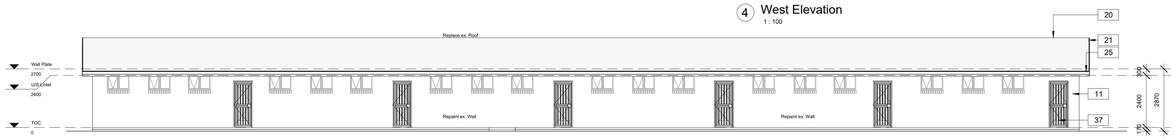




3 East Elevation
1 : 100

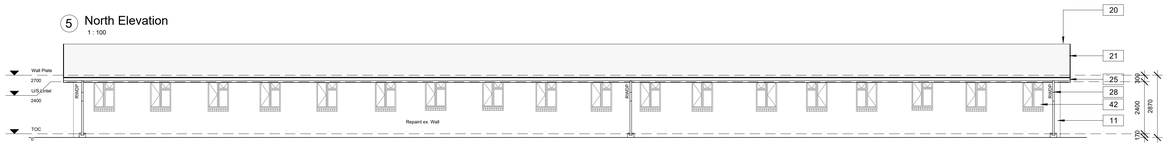



4 West Elevation
1 : 100




5 North Elevation
1 : 100




6 South Elevation
1 : 100



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| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

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Department of Education
NORTH WEST PROVINCE

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# Ex. 6 Classroom Building - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | N.SEDIBE |
| Revision | 0 |
| **9303 CL6 300** | |
| Scale | As indicated |


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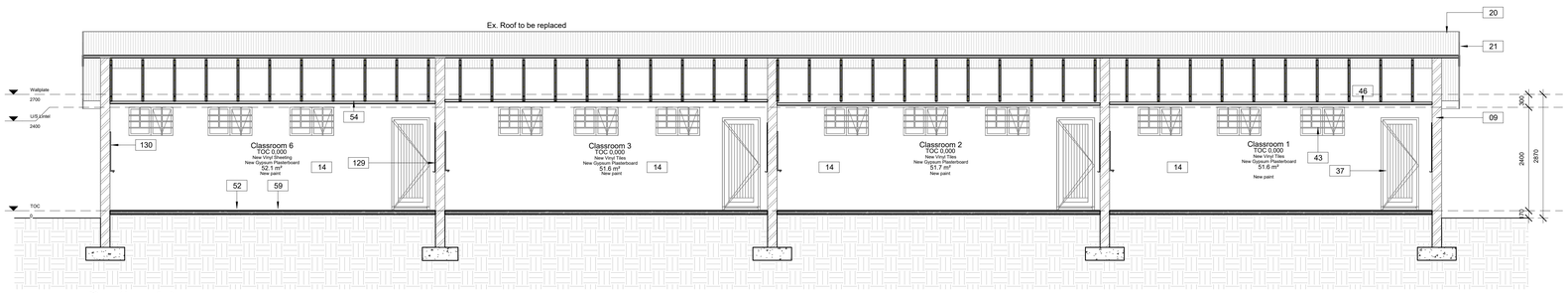
JOHANNESBURG
Contact Person: Natalie Gottliffe
Email: natalie@isago.co.za
Mobile: 083 565 1641

Tel: 011 463 7911
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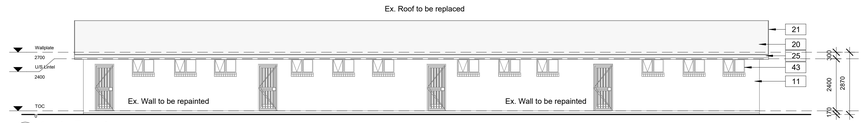
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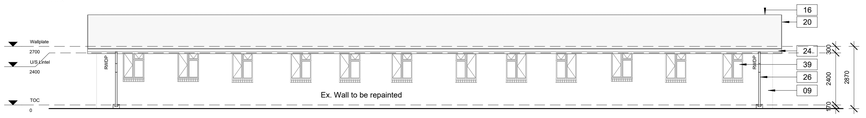
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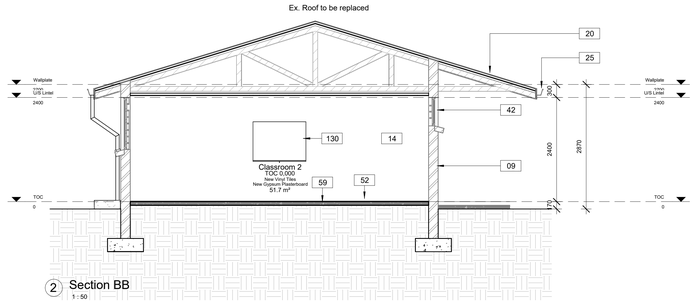

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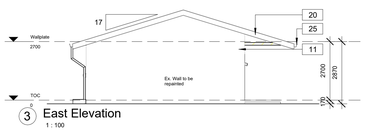

## 5 North Elevation
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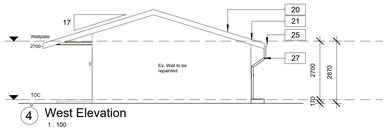

## 6 South Elevation
1 : 100




## 2 Section BB
1 : 50




## 3 East Elevation
1 : 100




## 4 West Elevation
1 : 100



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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Umnyango wezeMfundo
Department of Education
NORTH WEST PROVINCE

idt

# Ex. 4 Classroom Building - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | B. CHINYUKU |
| Revision | 0 |

**9303 CL4 300**

Scale: As indicated

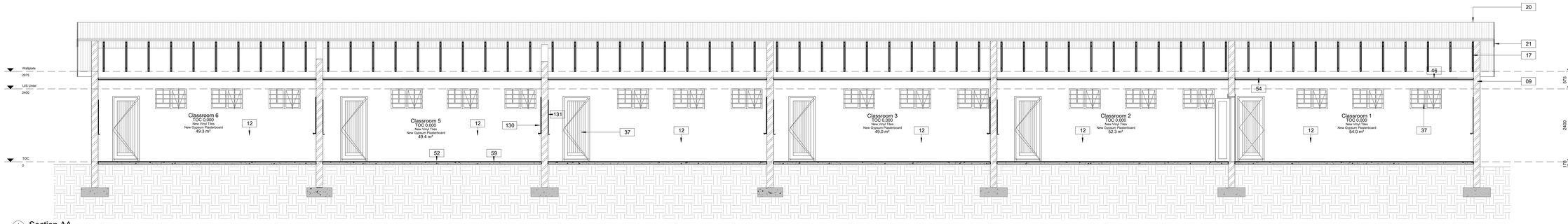

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21 Emerald Street
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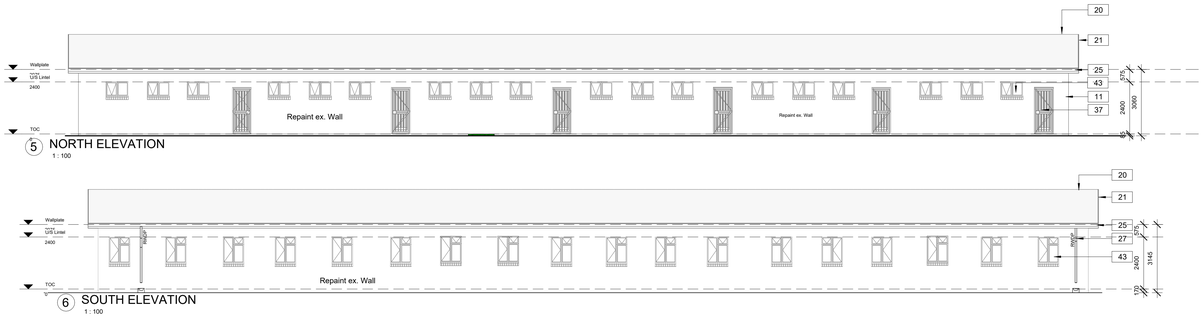
CHANGES/ISSUES:
Contact Person: Natalie Gottliffe
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Mobile: 083 563 1641
200 Cumberland Ave
Bryanston
2021
Tel: 011 463 7911
Fax: 086 552 5381


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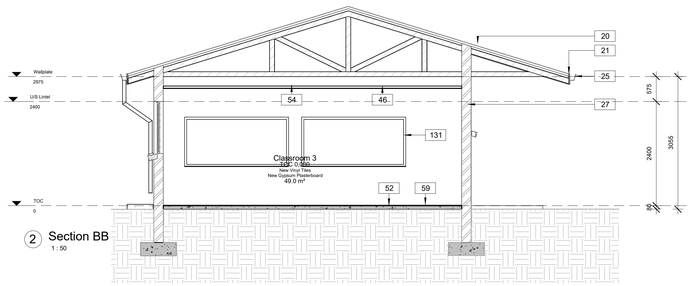

1 Section AA
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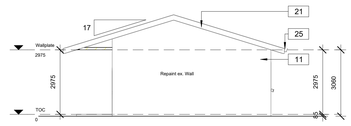

5 NORTH ELEVATION
1 : 100



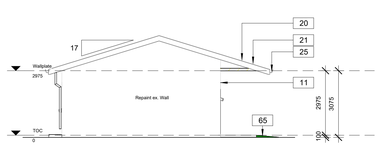

6 SOUTH ELEVATION
1 : 100




2 Section BB
1 : 50




4 WEST ELEVATION
1 : 100




3 EAST ELEVATION
1 : 100



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|---|---|---|---|
| 0 | Issue for Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
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ARCHITECT
Name :
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Signature :

STRUCTURAL ENGINEER
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Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Mothabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

# Ex. 6 Classroom Building - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | B. CHINYUKU |
| Revision | 0 |

**9303 CL6 300**

Scale: As indicated

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21 Emerald Street
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2745

JOHANNESBURG:
Contact Person: Natalie Gettliffe
Email: natalie@isago.co.za
Mobile: 082 565 3341

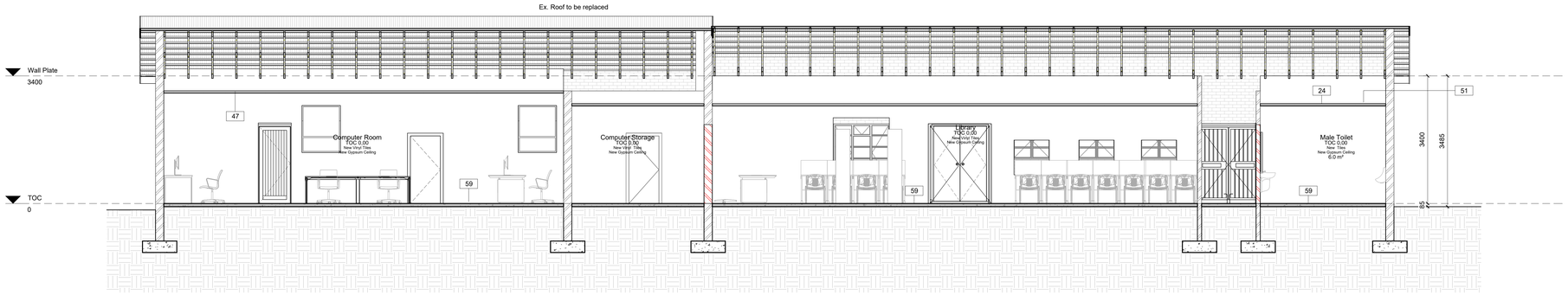
Tel: 018 381 6762
Fax: 086 669 5095

Tel: 011 463 7911
Fax: 086 552 3381

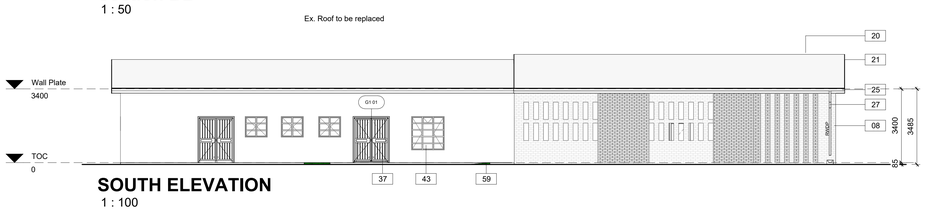
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Bryanston
2021

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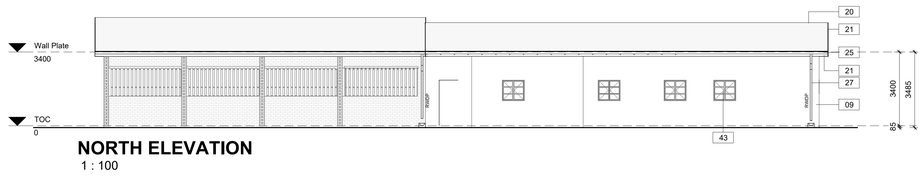
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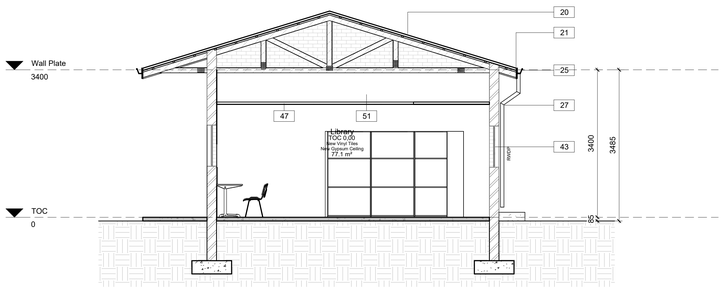

## Section BB
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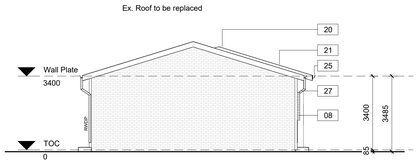

## SOUTH ELEVATION
1 : 100



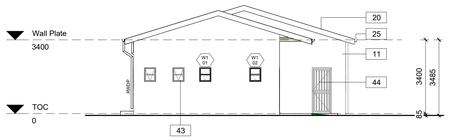

## NORTH ELEVATION
1 : 100




## Section AA
1 : 50




## EAST ELEVATION
1 : 100




## WEST ELEVATION
1 : 100

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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N Sedibe |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
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ARCHITECT
Name :
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Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

Issue for Council Submission

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

# Ex. Revamped Admin Block -Library & Computer Room

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 LIB/COMP 300**

Scale: As indicated


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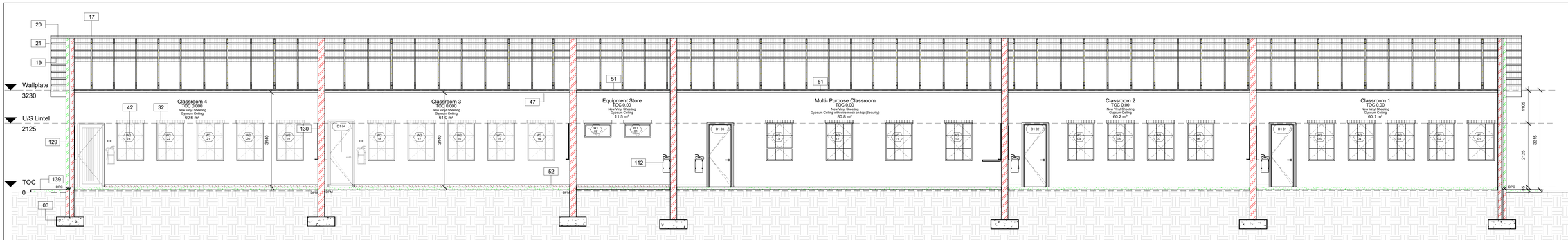
JOHANNESBURG
Contact Person: Natalie Gottliffe
Email: natalie@isago.co.za
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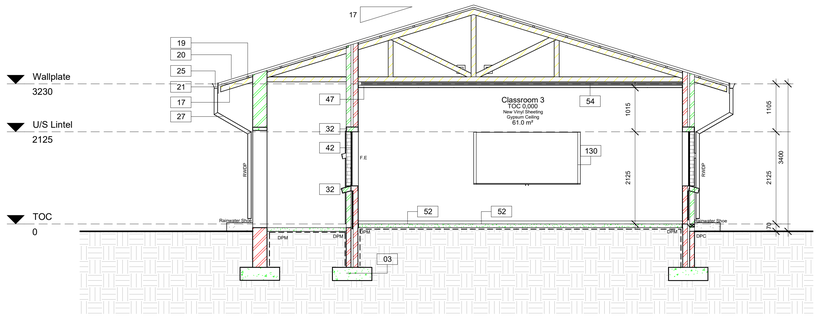
200 Cumberland Ave
Bryanston
2021


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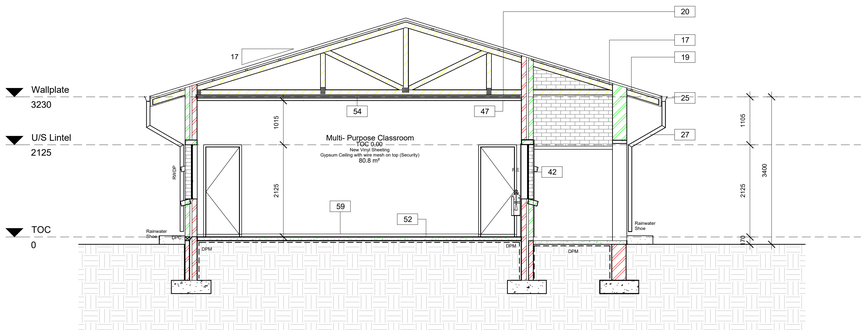
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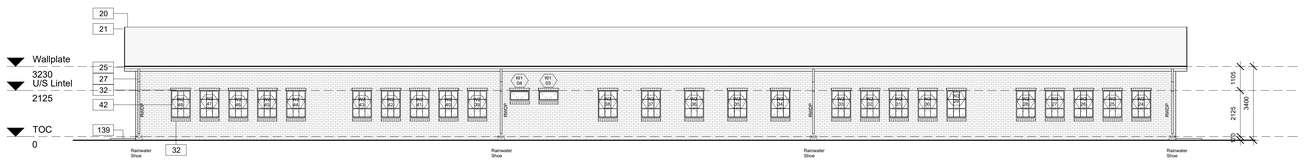

## Section AA
1 : 50




## Section BB
1 : 50




## Section CC
1 : 50




## North Elevation
1 : 100




## East Elevation
1 : 100




## South Elevation
1 : 100




## West Elevation
1 : 100

**GENERAL NOTES:**
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| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

| Legend | |
|---|---|
| Key Value | Keynote Text |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate, Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekA® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 32 | BRICK-ON-EDGE LINTEL (NEW): Brick on Edge Lintels to be supported by Steel Equal Leg Angle to Engineers Details & Specifications. Steel Angle Weatherdrip, to be welded to equal leg steel angle. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 47 | CEILINGS: New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat. 38mm x 38mm brandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 51 | SECURITY: Mantis Grating Structure to underside of Trusses to Engineer's Secification & Architects Approval. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2.5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 112 | FIRE EXTINGUISHERS: Quantity, Position & Specification to fire specialist design & SABS /NBR approval. 4.5kg CO2: dry powder chemical fire extinguisher with hook made of 120x20x2mm mild steel strip bent to form hook for extinguisher screwed twice to 520x100x22mm hardwood. Hardwood screwed and plugged with 6 screws and plugs. Positioned as shown on Plan. Provide 190x190mm ABS plastic symbol safety signs - type FB2. Plugged and screwed to the wall at all fire extinguishers |
| 129 | WHITE BOARD: (2400mm x 1200mm) Marker board surface, wall mounted, complete with integrated pen tray. Quantity to be confirmed. |
| 130 | CARPET PINNING BOARDS: All board to comply to South African Standards in terms of CKS 36:2004 edition 4. 3000mm x 1200mm Aluminium frame, carpet pin board complete with concealed mounting accessories. Frame to be Anodised Aluminium, carpet Colour to be Laurel / Equal and Approved. Quantity = 1 per classroom. Pen tray, and fixing components included with round plastic corners. Fitted according to manufacturer's instructions. Install 1 per CLASSROOM. BUILDING B-ADMIN BLOCK include, 1 per: Deputy Principal Office, Principal Office, Secretary Office, Entrance Hall, Staff Room. |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

4 CLASSROOM BLOCK - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |
| **9303 CL4&MPC 300** | |
| Scale | As indicated |


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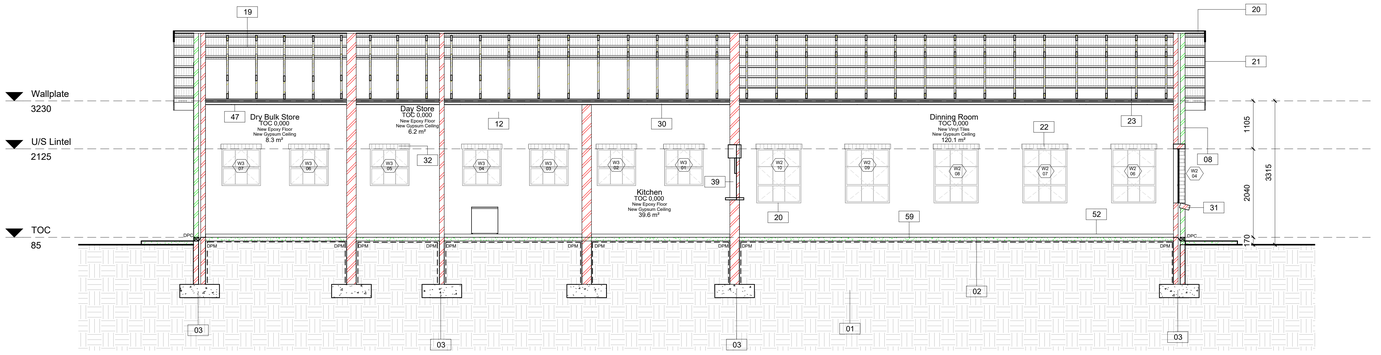
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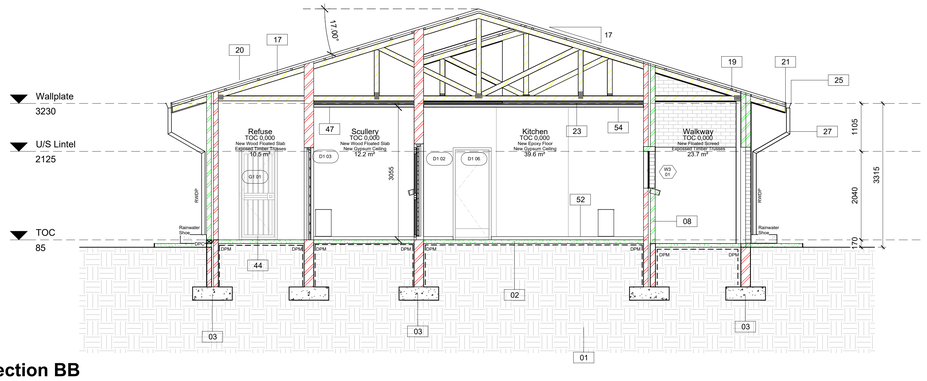
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2021


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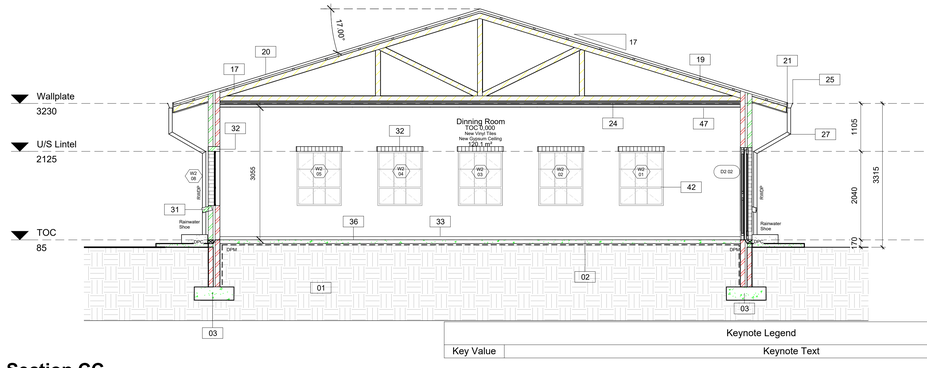
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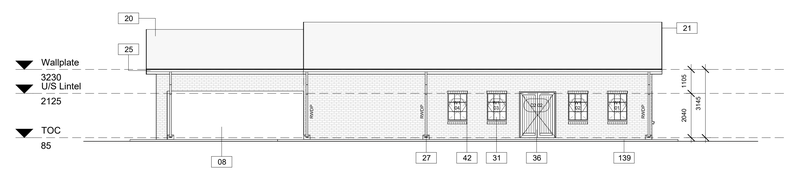

## Section AA
1 : 50



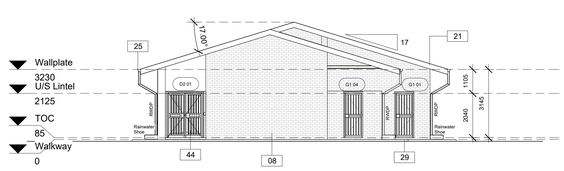

## Section BB
1 : 50



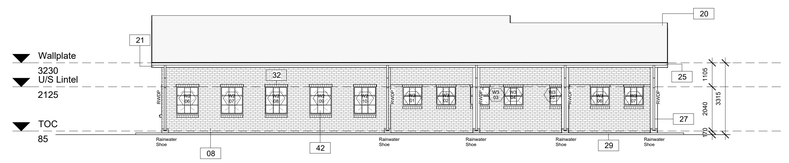

## Section CC
1 : 50




## North Elevation
1 : 100




## East Elevation
1 : 100




## South Elevation
1 : 100




## West Elevation
1 : 100

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 01 | TERMITE POISON: Treat ground under all internal & external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification DDG-001E with 50mm sand over poison. |
| 02 | CONCRETE SLAB: Minimum 75mm Cast on 250 micron polythene damp proof membrane (as per clause 7.2 of specification DDG-001E), all side overlaps sealed with approved contact adhesive on 50mm sand on approved filling, 15MPA. |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 10 | PLASTER & PAINT WALLS (NEW/EXTERNAL): 1 Coat plaster and 2 coats acrylic PVA suitable for washing with a mild detergent and with a matt finish. Apply at 10m square per litre spread rate. Undercoat: Provide 1 coat alkaline resistant 100% pure acrylic filler coat. Spread rate 6m square per litre. Specification of Paint: Plascon Micatex Colour: Moist Sand |
| 12 | INTERNAL WALLS (PVA): to be finished with 1 x coat 15mm cement plaster and primed with 1 x coat Plascon Plaster primer.All other rooms to be painted with 2 x coats Plascon Super Acrylic Polvin Colour: Molucca EPL175. |
| 13 | INTERNAL WALLS (ENAMEL)All walls finished with one coat plaster and painted with one coat alkaline resistant primer, one universal undercoat and two coats eggshell enamel paint. Bathrooms & Kitchen plastered areas to be painted with 2 x coats Plascon Velveglo Colour: VLO 10 Tequila. |
| 14 | INTERNAL WALLS (EXISTING/ENAMEL);All walls to be inspected plaster and paint to match existing. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 22 | ROOF FASCIA BOARDS (EXISTING): Fascia boards to be inspected and replaced accordingly to match existing. |
| 23 | INSULATION FOIL: Under Roof Sheeting: SANS 1381-4:2009 Sisalation Reinforced Aluminium Foil Insulation. |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 29 | CONCRETE DRAINAGE APRON: to be 1200mm wide to Engineer's design, specification and approval. |
| 30 | WINDOW CILLS (INTERNAL): 12mm THICK Plastered Cill Brick On End and Painted to match Wall Colour, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 31 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 32 | BRICK-ON-EDGE LINTEL (NEW): Brick on Edge Lintels to be supported by Steel Equal Leg Angle to Engineers Details & Specifications. Steel Angle Weatherdrip, to be welded to equal leg steel angle. |
| 33 | BRICK-ON-EDGE LINTEL (EXISTING): All lintels to be inspected by structural engineer. |
| 34 | INTERNAL DOORS: As per door schedule. Steel door frames with Semi Solid wood doors or equal and approved to Architect's spec. Door Frame Finish: Primed & Painted on steel with Plascon Velveglo Colour: White. Door Finish: Primed & Painted with Plascon Velveglo Colour: Tequila VLO 10. Refer to Door & Window Schedule. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 39 | ROLLER SHUTTER DOORS: Standard RSD. Powder coated Colour: White. See Door Schedule for Sizes |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 44 | GATES (NEW): mild Steel as per door schedule. Finish: Primed & Painted with Plascon Velveglo Colour: Battleship Grey G13. |
| 47 | CEILINGS: New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat. 38mm x 38mm brandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 54 | CORNICE: New 75mm Fibre Cement Cornice, nailed and filled with white acrylic filler. Painted and primed same as ceiling. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 84 | STAINLESS STEEL SINK: drop-in one piece pressed sink in Formica Counter 0.9mm stainless steel, with tiled splash back, tiling key, tap hole, mild steel gallow brackets & legs with soft black rubber P-trap. Provide one chromium plated basin pillar tap and mixer per sink. Specification: Franke Trendline 1000mm Inset. |
| 111 | GAS RETICULATION: To be installed by specialist to SABS 10400 and SANS204 standards. COC for gas installation to be provided. |
| 116 | KITCHEN STOVE & APPLIANCES: to be Industrial Grade Stainless Steel Catering Units to later Spec. |
| 118 | FORMICA COUNTER TOP: Standard 600mm Wide x 40mm Thick Formica taps fitted over cupboard units or to wall as per manufactures recommendations Standard pre-made |
| 134 | SHELVES: White Melamine as per later Architects details. |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN T'O BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No : N/A
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt
Infrastructure Delivery Unit

# NUTRITION BLOCK - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | M.ZWANE |
| Revision | 0 |

**9303 NUT. 300**

Scale As indicated


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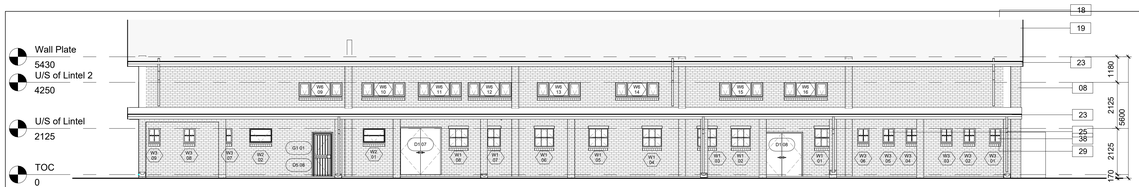
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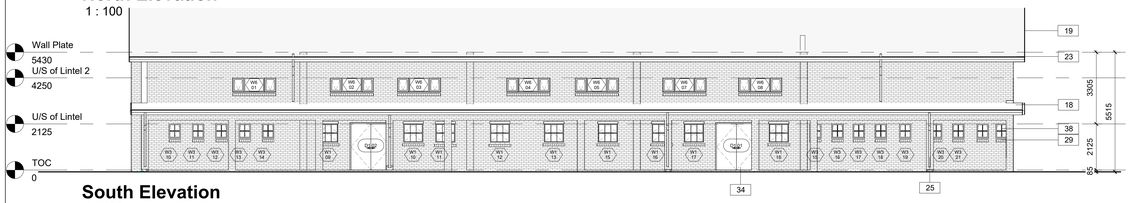
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2021


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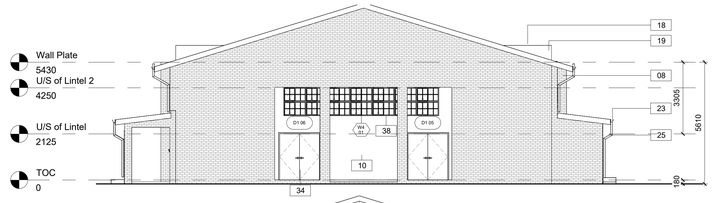
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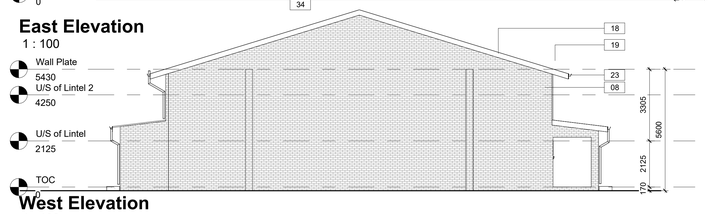

## North Elevation
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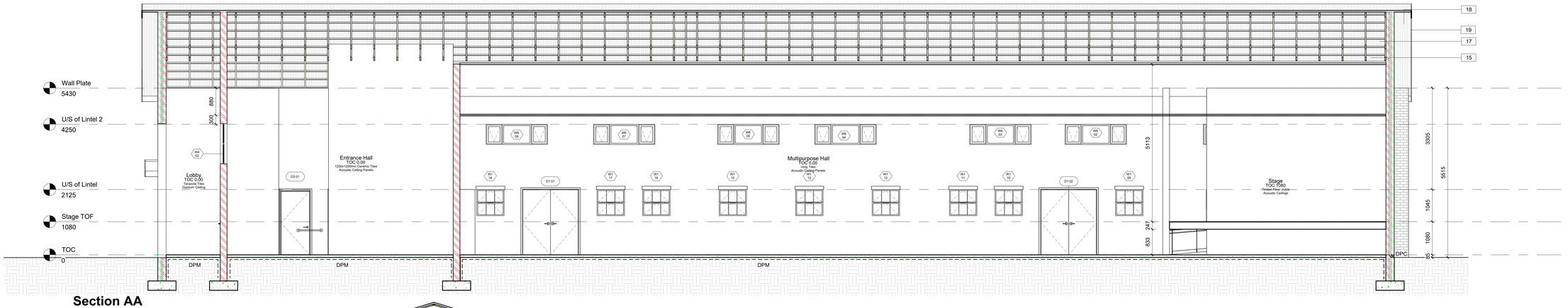

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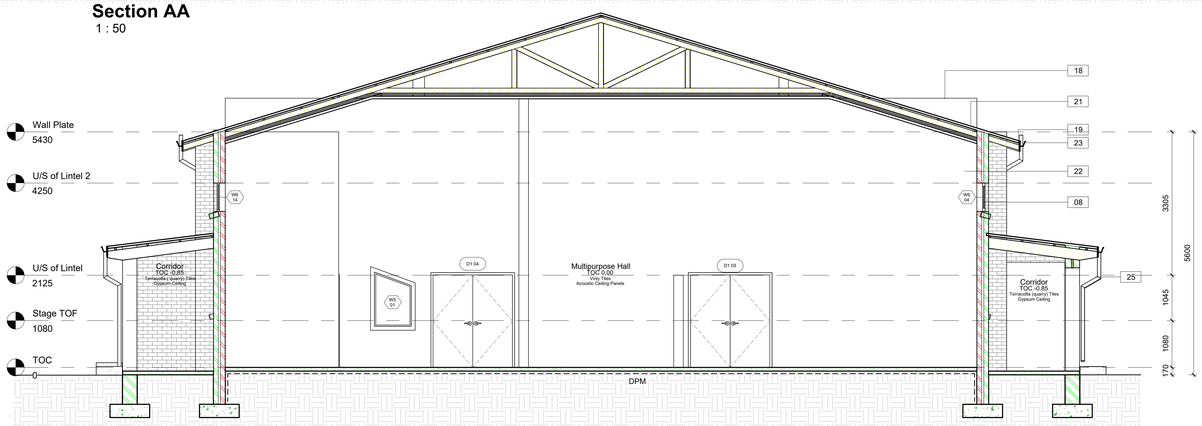

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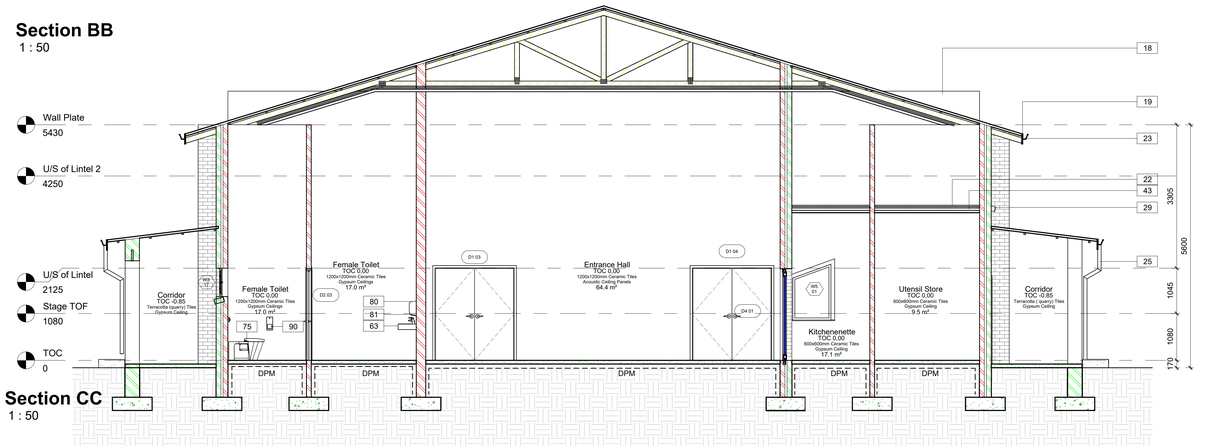

## West Elevation
1 : 100




## Section AA
1 : 50




## Section BB
1 : 50




## Section CC
1 : 50

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 10 | PLASTER & PAINT WALLS (NEW/EXTERNAL): 1 Coat plaster and 2 coats acrylic PVA suitable for washing with a mild detergent and with a matt finish. Apply at 10m square per litre spread rate. Undercoat: Provide 1 coat alkaline resistant 100% pure acrylic filler coat. Spread rate 6m square per litre. Specification of Paint: Plascon Micatex Colour: Moist Sand |
| 15 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 17 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 18 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 19 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: Battleship Grey G13. |
| 21 | INSULATION FOIL: Under Roof Sheeting: SANS 1381-4:2009 Sisalation Reinforced Aluminium Foil Insulation. |
| 22 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 23 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 25 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 29 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 34 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: Battleship Grey G13. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 38 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: Battleship Grey G13. |
| 43 | CEILINGS:New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat. 38mm x 38mm bandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 63 | WHB IN VANITY SLAB: Drop In Enamel Basin 31mm chromium platted outlet, with plug, chain, anchor & 32mm back nut complete. Provide one chromium plated pillar tap as approved except in Admin Block & Grade R's Sick room - provide two taps (hot & cold). Provide black soft rubber P-trap. Specification: Vaal Concorde drop In Basin. |
| 75 | WHB DISABLED:Vaal Sanitaryware Hibiscus Basin (Code: VAA-702303WH). White. Notes- Rounded wall-hung basin with 3 semi-punched tapholes, intergrated overflow and chain stay hole through the centre semi-punched hole. Size 510mmX405mmX130mm. To be fitted with universal half pedestal with two 6mm fixing screws (code:715222). |
| 80 | HAND DRYER: Ticra Ssteel hand dryer, energy saving. Code: S0013594 |
| 81 | MIXER: Cobra Latis basin mixer. Code: S0012928 |
| 90 | TOILET PAPER HOLDERS: All toilet paper holders to be inspected and replaced if necessary |

**GENERAL NOTES:**
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2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ON HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
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7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 19/05/2025 | P.N SEDIBE |

CLIENT
Name :
Date :
Registration No : N/A
Signature :

IDT
Name :
Date :
Registration No :
Signature :

ARCHITECT
Name :
Date :
Registration No :
Signature :

STRUCTURAL ENGINEER
Name :
Date :
Registration No :
Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT
TLALE PRIMARY SCHOOL
Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 19/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |
| **9303 SH 300** | |
| Scale | As indicated |


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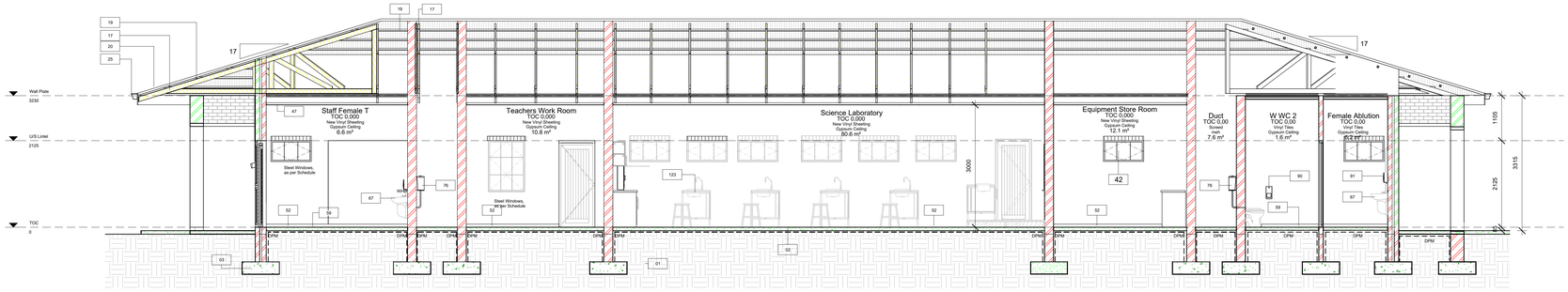
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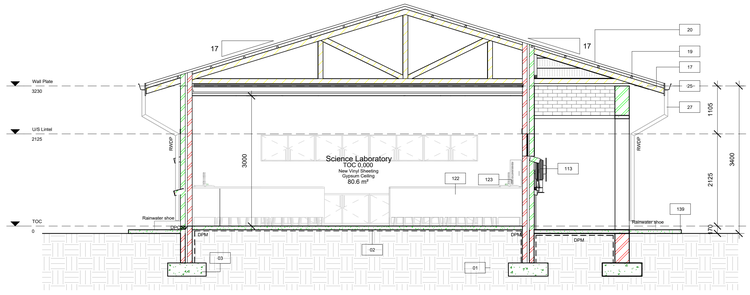
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2021


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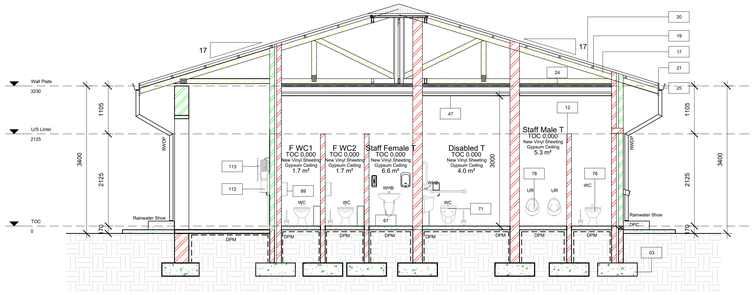
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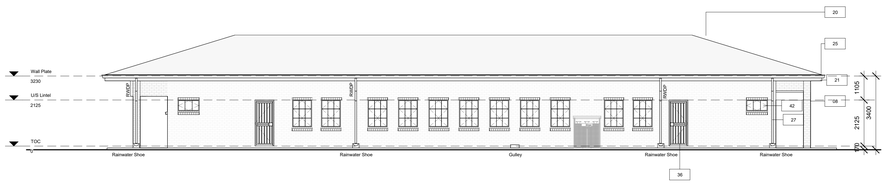

## SECTION AA
1 : 50




## SECTION BB
1 : 50



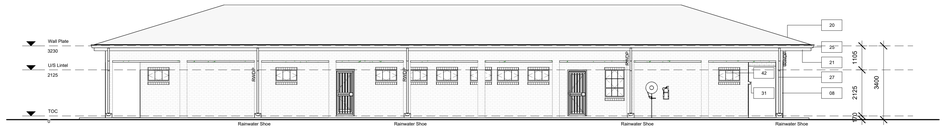

## SECTION CC
1 : 50




## NORTH ELEVATION
1 : 100




## EAST ELEVATION
1 : 100




## SOUTH ELEVATION
1 : 100




## WEST ELEVATION
1 : 100

**GENERAL NOTES:**
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7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issued for Council Submission | 23/05/2025 | P.N SEDIBE |

| Keynote Legend | |
|---|---|
| Key Value | Keynote Text |
| 01 | TERMITE POISON: Treat ground under all internal & external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification DDG-001E with 50mm sand over poison. |
| 02 | CONCRETE SLAB: Minimum 75mm Cast on 250 micron polythene damp proof membrane (as per clause 7.2 of specification DDG-001E), all side overlaps sealed with approved contact adhesive on 50mm sand on approved filling, 15MPA. |
| 03 | FOUNDATION: 800mmx300mm minimum concrete foundation as per engineers specification , design & approval. |
| 08 | FACE BRICK WALLS (NEW/EXTERNAL): In stretcher bond with all joints and perpends to be 6mm square deep recessed. Face brick specification to Architect's Specification. |
| 12 | INTERNAL WALLS (PVA): to be finished with 1 x coat 15mm cement plaster and primed with 1 x coat Plascon Plaster primer.All other rooms to be painted with 2 x coats Plascon Super Acrylic Polvin Colour: Molucca EPL175. |
| 17 | FABRICATED ROOF TRUSS: to be made up of treated SA Pine of grade 4 spaced at max. 750mm centres to rest on 38mmx114mm wallplate. Design, supply & installation by approved subcontractor to Engineer's spec., design & approval. |
| 19 | PURLINS: to be made up of treated SA Pine of grade 4 spaced at max. 1500mm centres to rest on roof trusses and attach to roof sheeting to Engineer's Spec, Design & Approval. |
| 20 | ROOF SHEETING: 0.58mm thick Galvanized steel Z200 complying with ISQ 550 (3T) with a ChromadekÂ® finish to one side and standard backing coat. Colour: Pebble Grey. |
| 21 | ROOF FASCIA BOARDS (NEW): to be fibre cement board painted with Plascon Velveglo Colour: White |
| 24 | ROOF INSULATION: SANS 438: 135mm Isotherm Thermal Insulation or equal and approved. |
| 25 | GUTTERS: to be 150 x 1000mm industrial Chromadek Aluminium gutter to match roof colour. |
| 27 | RAINWATER DOWNPIPES: to be 125 x 100mm Chromadek Aluminium industrial RWDP to match roof colour. |
| 31 | WINDOW CILL (EXTERNAL): Brick on Edge, built in soldier course flush with dado wall. All joints to be flush half round painted joints. Refer to Detail. |
| 34 | INTERNAL DOORS: As per door schedule. Steel door frames with Semi Solid wood doors or equal and approved to Architect's spec. Door Frame Finish: Primed & Painted on steel with Plascon Velveglo Colour: White. Door Finish: Primed & Painted with Plascon Velveglo Colour: Tequila VLO 10. Refer to Door & Window Schedule. |
| 36 | EXTERNAL DOORS: As per door schedule. Steel door frames with Solid Meranti timber doors to Architect's spec. Door Frame Finish: Primed & Painted with Plascon Velveglo Colour: White. Door Finish: Sanded, Sealed with Plascon Exterior Wood Preservative. Colour: Clear. Refer to Door & Window Schedule. |
| 42 | WINDOWS: New steel frames (School type) as per window schedule. All windows to have factory fitted burglar bars. Finish: Primed & Painted with Plascon Velveglo Colour: White .GLAZING: Allowance to be made for Low E Glass and safety laminate glass as per NBR. Refer to Door & Window Schedule |
| 47 | CEILINGS: New 6mm Fibre Cement board as described on roof plan. Finish: two coats PVA of approved colour to comply with SABS 634 "Co-polymer" or equivalent standard. Treat all nails & joints with one primer coat. 38mm x 38mm brandering by ceiling subcontractor. Paint Specification: Primed with Plascon Universal Primer & Painted with 2 coats Plascon Wall & All Colour: White WAA1. |
| 52 | SKIRTING: Solid Hardwood (19 x 76mm) with 19mm quarter round nailed to wall. All nails to be punched and filled. Finish with 2 coats clear eggshell polyurethane varnish. |
| 59 | SEMI FLEXIBLE VINYL FLOOR TILES: (300x300x2,5mm) Allow for two colour pattern on 3:1 cement screed with total thickness of 35mm in admin block and 25mm in classroom blocks, laid according to manufactures spec and architects approval. Apply 2 coats approved floor dressing. To Architect's Specification. |
| 67 | VANITY SLAB & WHB: White Porcelain Drop in basin 31mm chromium plated outlet with plug, chain, anchor & 32mm back nut complete. Provide 2 taps (hot & cold). Provide black soft rubber P trap. Disable WHB fixed to wall. WHB Specification: Vaal Sanitary Ware Cameo 7028. Disabled WHB Specification: Vaal Sanitary Ware Springbok basin 7031. Laboratory basin: Vaal Sanitary Ware Lab Sink 234500 to be fitted with acid resistant waste code: 8790Z0, fixed underneath slab using two adjustable underslung brackets code: 8109Z0. Vanity Counter Top to be 30mm THICK Rustenburg Granite. |
| 71 | WC DISABLED: Vaal Sanitaryware Orchid Wall Hung toilet (Code: VAA-439016WH) with Vaal Sanitaryware Buxton Sta-Tite Seat (code: VAA-8515Z100). White. Size: 583mmX355mm. Notes- Orchid back inlet 90Â° wall hung open rim pan, with a 6 litre cistern complete with lid, fitments, extended handle flush valve, chrome (code: COB-C-FM8-80). includes 1 Rear grab rail. |
| 76 | WC: Vaal Sanitaryware Hibiscus Elite Close-Coupled toilet suite (code: VAA-772404WH). White. Notes- Vitreous china vandal proof close-coupled toilet suite complete with pan, front push button, lid & fitments. Size: 643mmX355mmX830mm. |
| 78 | URINAL: 610X385mm White vitreous China wash down wall urinal with wall hangers, strainer waste, top inlet spreader and chrome platted flush pipes. 45l cistern with back inlet and PC push button. Specification: Vaal Sanitaryware Lavatera TI Wall Hung Urinal (code: VAA-705426WH). White. Notes- Wall Hung urinal with top inlet, supplied with a 38mm chrome plated domical grating, a spreader (with a 20mm diameter thread), including flush pipe and two hanger brackets. Size: 385mmX380mmX600mm. |
| 81 | HAND DRYER: Ticra Steel hand dryer, energy saving. Code: S0013594 |
| 89 | TOILET PAPER HOLDERS: Stainless Steel Toilet Roll Holder. Specification: Sanitech Sanicare Toilet Roll Holder - Holds 3 rolls (stainless steel) to be fitted to each WC. |
| 90 | TOILET PAPER HOLDERS: All toilet paper holders to be inspected and replaced if necessary |
| 91 | SOAP DISPENSER: Golden Touch Soap Dispenser Lockable 1200ml â€“ Stainless Steel |
| 111 | GAS RETICULATION: To be installed by specialist to SABS 10400 and SANS204 standards. COC for gas installation to be provided. |
| 112 | FIRE EXTINGUISHERS: Quantity, Position & Specification to fire specialist design & SABS /NBR approval. 4.5kg CO2: dry powder chemical fire extinguisher with hook made of 120x20x2mm mild steel strip bent to form hook for extinguisher screwed twice to 520x100x22mm hardwood. Hardwood screwed and plugged with 6 screws and plugs. Positioned as shown on Plan. Provide 190x190mm ABS plastic symbol safety signs - type FB2. Plugged and screwed to the wall at all fire extinguishers |
| 113 | FIRE HOSE REELS: To fire specialist specification & SABS approval & NBR. |
| 119 | SHELVES: Fitted, standard white melamine shelves to Architects details and specifications. |
| 122 | LABORATORY TABLE: Laminated Saligna Counter Top to Teachers & Student Tables, Refer to later Architects Details. Teachers Desk to be fitted with lab gas. Spec: Brown all XL 1355-4 Burning gas. |
| 123 | LAB SINK & SINK TAP: Lab Sink: to be Vaal Sanitaryware Lab Sink 600 (Code: 236100) without overflow with centre back waste outlet with 38mm acid resistant waste (code 8791Z0) to be fixed underneath countertop with 2 adjustable underslung brackets (code8109Z0). Brown all Lab tap XL 1204-0 Bench mounted with swivel swan neck fitting and removable nozzle. |
| 124 | WHIRLY BIRD EXTRACTOR UNIT: to be fitted in roof above teacherâ€™s lab bench in science laboratory. |
| 125 | LABORATORY TABLE: Standard as detailed by GED Including Teachers Desk and Students Table. |
| 134 | SHELVES: White Melamine as per later Architects details. |
| 139 | WALKWAYS: Steel Floated Concrete. Facebrick headercourse to Edge of Walkways. |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

SCIE. Building - Sections & Elevations

| | |
|---|---|
| Project number | 9303 |
| Date | 23/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 SCIE 300**

Scale: As indicated

isagoarchitecture

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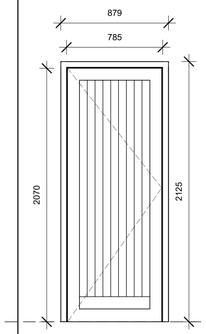
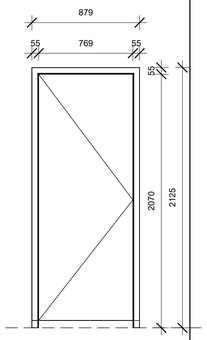
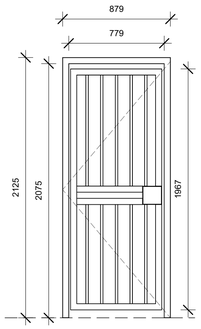
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Contact Person: Nyalala Gwitlhe
Email: nyalala@isago.co.za
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Tel: 011 463 7911
Fax: 086 552 3381

200 Cumberland Ave
Bryanston
2021

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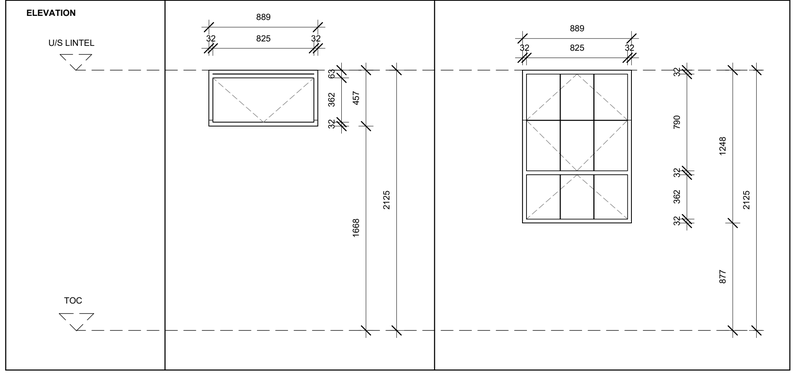
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|---|---|---|---|
| QUANTITY | 4 | 2 | 4 |
| ELEVATION |  |  |  |
| | As viewed from outside | As viewed from outside | As viewed from outside |



# Door Legend

1 : 25

| Door Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Family and Type | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
| D1 | Doors_IntSgl: 810x2110mm | 810 | 2110 | 2203 | Classroom 3 | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| D2 | Swartland Winsters Single Commercial Veneer Flush Hollowcore VNCOMLIO1: 813w x 2092h | 813 | 2092 | 2092 | Equipment Store | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| G1 | Horizontal Single Gate 813mm: 813 x 2092 | 879 | 2092 | 2092 | Classroom 1 | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & Painted with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | N/A | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |

| TYPE | W1 | W2 |
|---|---|---|
| QUANTITY | 04 | 48 |
| ELEVATION |  | |



# Window Legend

1 : 25

| Window Schedule | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| No. | Family | Width | Height | Sill Height | Head Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
| W1 | 6-4 Half Duro Pressings Steel School Type Window | 889 | 457 | 1668 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Equipment Store | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W2 | 6-4 Duro Pressings Steel School Type Window | 889 | 1248 | 877 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Classroom 1 | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |

## PLANS AUTHORIZATIONS

| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
|---|---|---|---|
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

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| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

DOOR & WINDOW SCHEDULE

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | T Kuzipa |
| Revision | 0 |

**9303 CL4&MPC 500**

Scale 1 : 25

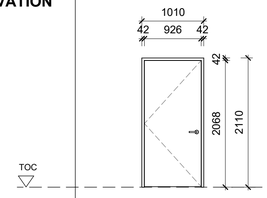
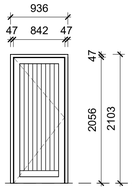
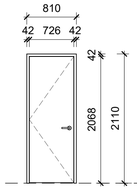
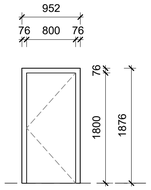
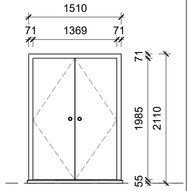
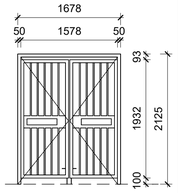
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Bryanston
2021

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2025/05/21 10:21:35

| TYPE | D1 | D2 | D3 | D4 | D5 | G1 01 |
|---|---|---|---|---|---|---|
| QUANTITY | 01 | 02 | 01 | 02 | 01 | 02 |
| ELEVATION |  |  |  |  |  |  |
| | As viewed from outside | As viewed from outside | As viewed from outside | As viewed from outside | As viewed from outside | As viewed from outside |







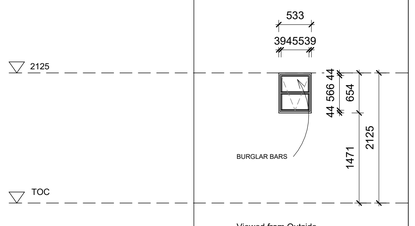






| Door Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Family and Type | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
| D1 | Doors_IntSgl: 1010x2110mm | 1010 | 2110 | 2110 | PARA /FEMALE | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D2 | Swartland Winsters Single PD1: D2 870 X 2070 | 870 | 2070 | 2070 | Male Toilet | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D3 | Doors_IntSgl: 810x2110mm | 810 | 2110 | 2110 | Male Toilet | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D4 | Vault Door: 800w x 1800h | 800 | 1800 | 1800 | Computer Room | N/A | N/A | To be Brushed Aluminium to Architects Spec |
| D5 | Doors_ExtDbl_Flush: 1510x2110mm | 1510 | 2110 | 2110 | Library | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| G1 | Double Metal Gate: 1678 x 2092 | 1678 | 2092 | 2092 | Library | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | N/A | To be Brushed Aluminium to Architects Spec |

## Door Legend
1 : 50

| TYPE | W1 |
|---|---|
| QUANTITY | 01 |
| ELEVATION |  |
| | Viewed from Outside |



| Window Schedule | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| No. | Family | Width | Height | Sill Height | Head Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
| W1 | Durowin 654 x 533 E1H | 533 | 654 | 1471 | 2125 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Male Toilet | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |

## Window
1 : 50

| PLANS AUTHORIZATIONS | | | |
|---|---|---|---|
| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N Sedibe |

Issue for Council Submission

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# Window & Door Schedule

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 LIB/COMP 500**

Scale 1 : 50

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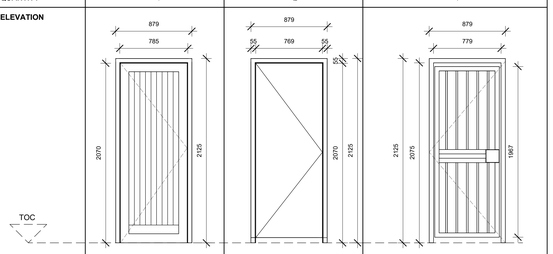
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Bryanston
2021

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| TYPE | D1 | D2 | G1 |
|---|---|---|---|
| QUANTITY | 4 | 2 | 4 |
| ELEVATION |  |  |  |
| | As viewed from outside | As viewed from outside | As viewed from outside |







| TYPE | W1 | W2 |
|---|---|---|
| QUANTITY | 04 | 48 |
| ELEVATION |  |  |





**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
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4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
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10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 19/05/2025 | P.N SEDIBE |

CLIENT

Name :

Date :

Registration No : N/A

Signature :

IDT

Name :

Date :

Registration No : N/A

Signature :

ARCHITECT

Name :

Date :

Registration No :

Signature :

STRUCTURAL ENGINEER

Name :

Date :

Registration No :

Signature :

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

# DOOR & WINDOW SCHEDULE

| | |
|---|---|
| Project number | 9303 |
| Date | 19/05/2025 |
| Drawn by | T Kuzipa |
| Revision | 0 |
| **9302 CL4&MPC 500** | |
| Scale | 1 : 25 |

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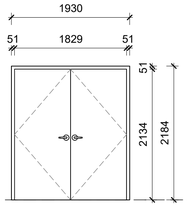
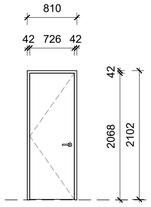
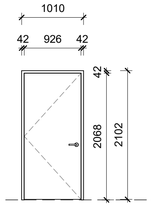
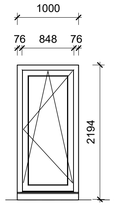
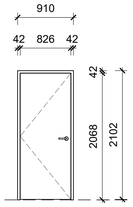
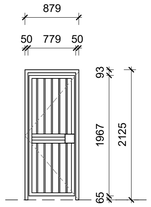
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2021

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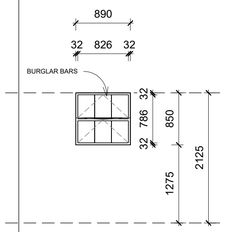
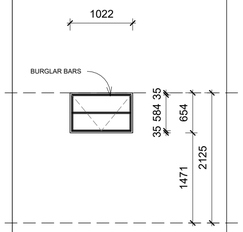
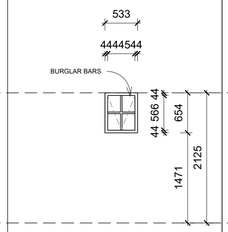
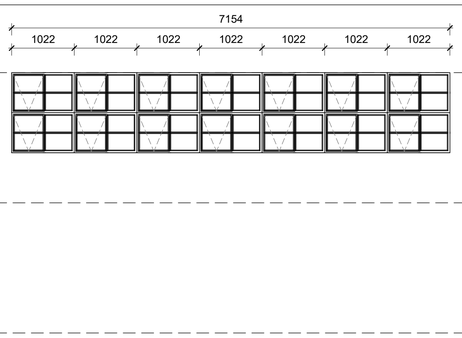
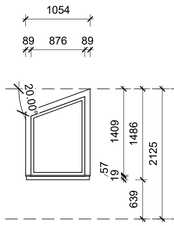
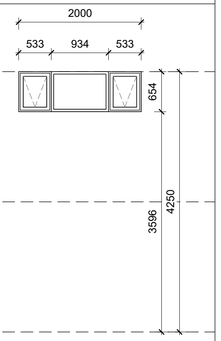
| TYPE | D1 | D2 | D3 | D4 | D5 | G1 |
|---|---|---|---|---|---|---|
| QUANTITY | 08 | 08 | 01 | 01 | 08 | 01 |
| ELEVATION |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |

Door Schedule

| No. | Mark | Family | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
|---|---|---|---|---|---|---|---|---|---|
| D1 | D1 01 | HM_Frame_Door_-_Interior_Double_3898 | 1829 | 2134 | 2134 | Multipurpose Hall | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D2 | D2 01 | Doors_IntSgl | 810 | 2110 | 2110 | Female Toilet | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D3 | D3 01 | Doors_IntSgl | 1010 | 2110 | 2110 | Para. Toilet | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D4 | D4 01 | Doors_GEALAN_S9000_Front-Door | 1020 | 2110 | 2110 | Entrance Hall | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| D5 | D5 01 | Doors_IntSgl | 910 | 2110 | 2110 | Entrance Hall | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed With Plascon Exterior Preservative Colour: Clear. | To be Brushed Aluminium to Architects Spec |
| G1 | G1 01 | Horizontal Single Gate 813mm | 879 | 2092 | 1922 | | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | N/A | To be Brushed Aluminium to Architects Spec |

## Door Legend

1 : 50

| TYPE | W1 | W2 | W3 | W4 | W5 | W6 |
|---|---|---|---|---|---|---|
| QUANTITY | 18 | 02 | 23 | 01 | 01 | 16 |
| ELEVATION |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |  As viewed from outside |

Window Schedule

| No | Mark | Family | Width | Head Height | Sill Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
|---|---|---|---|---|---|---|---|---|---|---|
| W1 | W1 01 | 6-4 Duro Pressings Steel School Type Window | 890 | 2125 | 1275 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Multipurpose Hall | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |
| W2 | W2 01 | Durowin 654 x 1022 EX7H | 1022 | 2125 | 1471 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Corridor | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |
| W3 | W3 01 | E1 | 533 | 2125 | 1471 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Male C/Room | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |
| W4 | W4 01 | Durowin 654 x 1022 E2 | 1022 | 3616 | 2962 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Entrance Hall | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |
| W5 | W5 01 | Fixed_Window_with_Trim_-_Angle_top_7307 | 914 | 2134 | 914 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Multipurpose Hall | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |
| W6 | W6 01 | NE11 | 2000 | 4250 | 3596 | Steel Framed windows to be painted with 1 coat Plascon Metalcare Steel Primer & 2 coats Plascon Super Universal Enamel Paint Colour: Battleship Grey | Stage | Low E Glass to SABS 10400 approval & later Architects Energy Analysis Specifications 6mm Safety glass to be installed where necessary as per NBR, Steel window putty to be used. | Standard Brass Per Manufacturers Spec. | Factory Fitted |

## Window Legend

1 : 50

PLANS AUTHORIZATIONS

| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
|---|---|---|---|
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

**GENERAL NOTES:**
1: DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 19/05/2025 | P.N SEDIBE |

ISSUE FOR COUNCIL SUBMISSION

IDT

TLALE PRIMARY SCHOOL

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# Window & Door Schedule

| | |
|---|---|
| Project number | 9303 |
| Date | 19/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 SH 500**

Scale 1 : 50

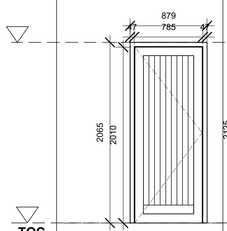
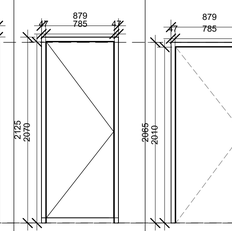
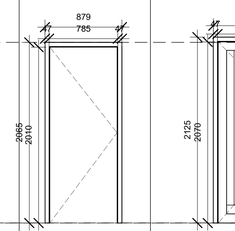
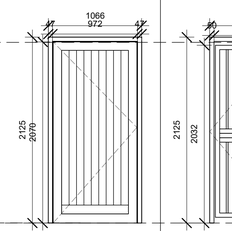
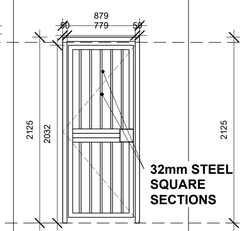
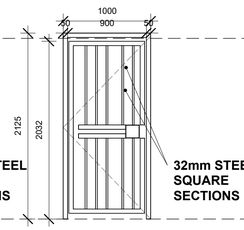

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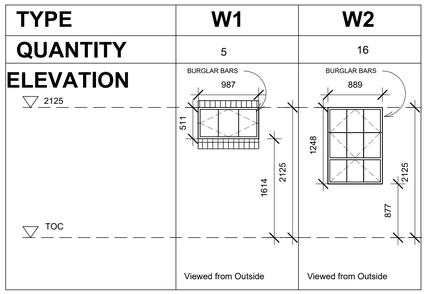

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| TYPE | D1 | D2 | D3 | D4 | G1 | G2 |
|---|---|---|---|---|---|---|
| QAUNTITY | 4 | 3 | 3 | 1 | 5 | 1 |
| ELEVATION |  Viewed from Outside |  Viewed from Outside |  Viewed from Outside |  Viewed from Outside |  Viewed from Outside |  Viewed from Outside |

| Door Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Family | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
| D1 | Swartland Winsters Single PD1 | 813 | 2032 | 2125 | Science Laboratory | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| D2 | Swartland Winsters Single Commercial Veneer Flush Hollowcore VNCOMLIO1 | 813 | 2092 | 2092 | Equipment Store Room | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| D3 | Swartland Winsters Single Commercial Veneer Flush Hollowcore VNCOMLIO | 813 | 2032 | 2032 | F WC1 | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| D4 | Swartland Winsters Single PD2 | 1000 | 2092 | 2092 | Disabled T | 1,2mm Steel Double Rebated Frame suitable for 230mm wall to accommodate 813 x 2032 door leaf. Steel Door Frame Primed with Plascon Steel Primer & Painted with Plascon Super Universal Enamel Colour: Battleship Grey G13 | Sanded & Sealed with 3 Coats of Plascon Exterior Woodcare Preservative Colour: Mahogany FPR 21 | 4 Lever Security Lockset & Satin Chrome Handles to Architect's Spec. |
| G1 | Horizontal Single Gate 813mm | 879 | 2092 | 2092 | Science Laboratory | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & Painted with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | Primed with Plascon Metalcare Primer & Painted with 2 Coats Plascon Uiversal Enamel Colour: Battleship Grey G13 | To be Brushed Aluminium to Architects Spec |
| G2 | Horizontal Single Gate 813mm | 1000 | 2092 | 2092 | Disabled T | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & Painted with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | Primed with Plascon Metalcare Primer & Painted with 2 Coats Plascon Uiversal Enamel Colour: Battleship Grey G13 | To be Brushed Aluminium to Architects Spec |

## Door Legend
1 : 35

| TYPE | W1 | W2 |
|---|---|---|
| QUANTITY | 5 | 16 |
| ELEVATION |  Viewed from Outside / Viewed from Outside | |

| Window Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Family | Width | Head Height | Sill Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
| W1 | SS31 - Cill | 987 | 2125 | 1614 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Staff Female T | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W2 | SS31 | 987 | 2126 | 1615 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Science Laboratory | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W3 | 6-4 Duro Pressings Steel School Type Window | 889 | 2125 | 877 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Teachers Work Room | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |

## Window Legend
1 : 50

PLANS AUTHORIZATIONS

| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
|---|---|---|---|
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

**GENERAL NOTES:**
1: DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
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5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
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8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
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**DRAINAGE RETICULATION NOTES:**
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5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
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8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issued for Council Submission | 23/05/2025 | P.N SEDIBE |

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# Door & Window Schedule

| | |
|---|---|
| Project number | 9303 |
| Date | 23/05/2025 |
| Drawn by | T.KUZIPA |
| Revision | 0 |

**9303 SCIE 500**

Scale: As indicated

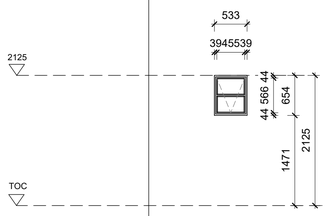
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Bryanston
2021

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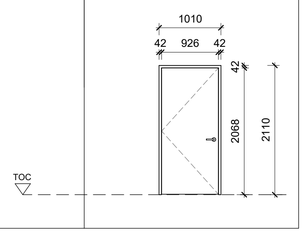
| TYPE | W1 |
|---|---|
| QUANTITY | 01 |
| ELEVATION |  |



| Door Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Family and Type | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
| D1 | Doors_IntSgl: 1010x2110mm | 1010 | 2110 | 2110 | PARA. TOILET | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and Paint with 2 caots Velvaglo Colour: Battleship Grey G13 | Primed with Plascon Metalcare Primer & Painted with 2 Coats Plascon Uiversal Enamel Colour: Battleship Grey G13 | To be Brushed Aluminium to Architects Spec |

## Window Legend

1 : 50

| TYPE | D1 |
|---|---|
| QUANTITY | 01 |
| ELEVATION |  |



| Window Schedule | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Mark | Family | Width | Height | Sill Height | Head Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
| W1 | W1 01 | Durowin 654 x 533 E1H | 533 | 654 | 1471 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | PARA. TOILET | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |

## Door Legend

1 : 50

| PLANS AUTHORIZATIONS | | | |
|---|---|---|---|
| CLIENT<br>Name :<br>Date :<br>Registration No : N/A<br>Signature : | IDT<br>Name :<br>Date :<br>Registration No : N/A<br>Signature : | ARCHITECT<br>Name :<br>Date :<br>Registration No :<br>Signature : | STRUCTURAL ENGINEER<br>Name :<br>Date :<br>Registration No :<br>Signature : |

**GENERAL NOTES:**
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8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
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11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N Sedibe |

Issue For Council Submission

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

# Window & Door Schedules

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 ABL 500**

Scale 1 : 50

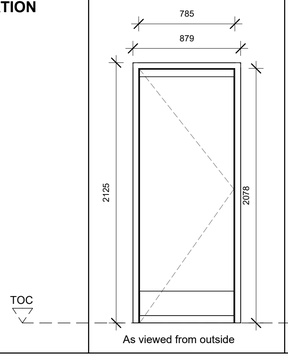
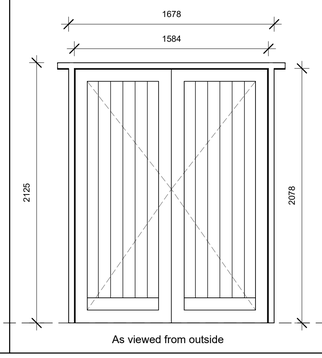
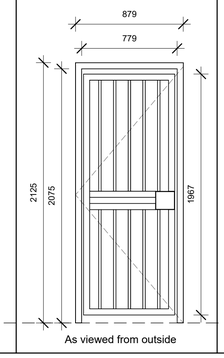
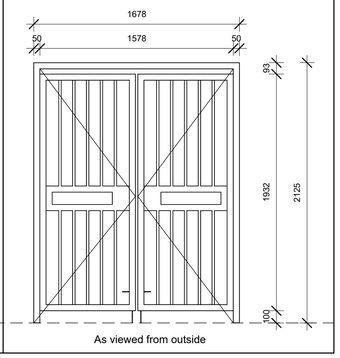
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Mobile: 083 565 1641
Tel: 011 463 7911
Fax: 086 552 3381
200 Cumberland Ave
Bryanston
2021

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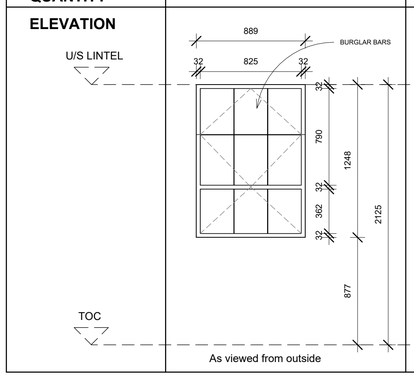
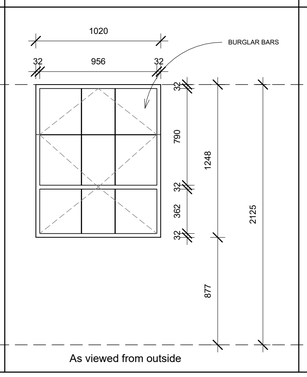
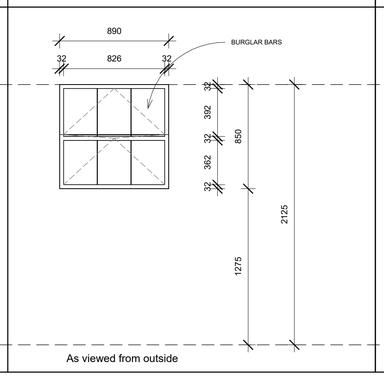
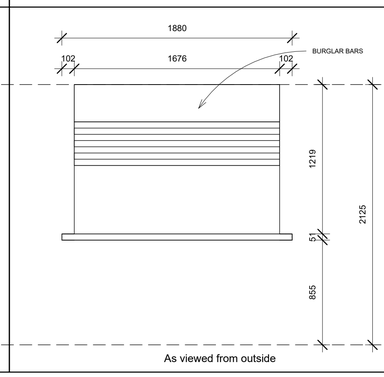
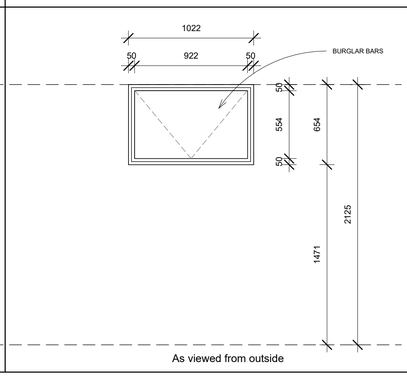
| TYPE | D1 | D2 | G1 | G2 |
|---|---|---|---|---|
| QUANTITY | 06 | 02 | 05 | 02 |
| ELEVATION |  |  |  |  |



| Door Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Family and Type | Width | Height | Head Height | From Room: Name | Frame Finish. | Door Finish. | Ironmongery. |
| D1 | Swartland Winsters Single Commercial Hollowcore VNCOMLIO KICKPLATE: 813w x 2032h | 813 | 2092 | 2177 | Scullery | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and paint with 2 coats Vevaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed with Plascon Exterior Preservative Colour: Clear | To be Brushed Aluminiun to Architects spec |
| D2 | Swartland Cape Culture SD2 Hardwood Door: 1612w X 2032h | 1612 | 2092 | 2092 | Walkway | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and paint with 2 coats Vevaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed with Plascon Exterior Preservative Colour: Clear | To be Brushed Aluminiun to Architects spec |
| G1 | Horizontal Single Gate 813mm: 813 x 2032 | 879 | 2092 | 2092 | Kitchen | Single Door Frame 813x2032 primed with 1 coat Plascon Metalcare Primer and paint with 2 coats Vevaglo Colour: Battleship Grey G13 | Solid Hardwood Sanded & Sealed with Plascon Exterior Preservative Colour: Clear | To be Brushed Aluminiun to Architects spec |
| G2 | Double Metal Gate: 1678 x 2092 | 1678 | 2092 | 2092 | Dinning Room | Square Steel Sections primed with 1coat Plascon Metalcare Metal WB Primer & Painted with 2 coats Plascon Universal Enamel Coulour: Battleship Gery | N/A | To be Brushed Aluminiun to Architects spec |

## Door Legend

1 : 25

| TYPE | W1 | W2 | W3 | W4 | W5 |
|---|---|---|---|---|---|
| QUANTITY | 4 | 10 | 10 | 01 | 02 |
| ELEVATION |  |  |  |  |  |



| Window Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Family | Width | Height | Sill Height | Head Height | Frame Finish . | From Room: Name | Glazing. | Ironmongery. | Burglar Bars. |
| W1 | 6-4 Duro Pressings Steel School Type Window | 889 | 1248 | 877 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Dinning Room | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W2 | 6-4 Duro Pressings Steel School Type Window | 1020 | 1248 | 877 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Dinning Room | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W3 | 6-4 Duro Pressings Steel School Type Window | 890 | 850 | 1275 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Kitchen | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W4 | window_opening_with_roll_up_shutter_and_countertop_6503 | | | 864 | 864 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Dinning Room | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |
| W5 | NEX7 | 1022 | 654 | 1471 | 2125 | 1 coat Plasson Steel Primer 1 Coat Plascon Super Universal Enamel Paint Colour: Battleship Grey G13 | Kitchen | 4mm Clear Glass to SABS 10400 approval & specifications. Steel Window Putty to be used | Standard Brass as per Manufacturer's Spec. | Factory Fitted |

## Window Legend

1 : 25

| PLANS AUTHORIZATIONS | | | |
|---|---|---|---|
| CLIENT | IDT | ARCHITECT | STRUCTURAL ENGINEER |
| Name : | Name : | Name : | Name : |
| Date : | Date : | Date : | Date : |
| Registration No : N/A | Registration No : N/A | Registration No : | Registration No : |
| Signature : | Signature : | Signature : | Signature : |

**GENERAL NOTES:**
1: DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

ISSUE FOR COUNCIL SUBMISSION

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

# DOOR & WINDOW SCHEDULE

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | T Kuzipa |
| Revision | 0 |

**9303 NUT. 500**

Scale 1 : 25

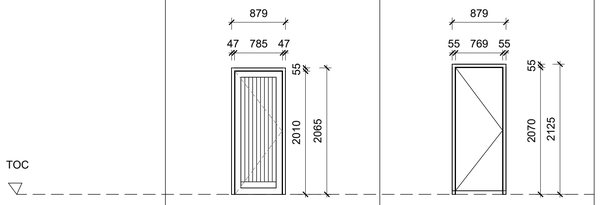
isagoarchitecture

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Email: natalie@isago.co.za
Mobile: 083 565 1641
Tel: 011 463 7911
Fax: 086 552 3381
200 Cumberland Ave
Bryanston
2021

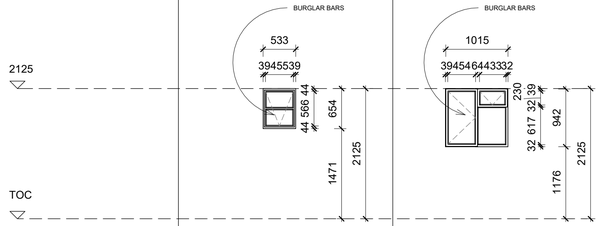
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2025/05/21 10:59:01

| TYPE | D1 | D2 |
|---|---|---|
| QUANTITY | 01 | 01 |
| ELEVATION |  |  |



## Door Legend
1 : 50

| TYPE | W1 | W2 |
|---|---|---|
| QUANTITY | 02 | 01 |
| ELEVATION |  |  |



## Window Legend
1 : 50

| PLANS AUTHORIZATIONS | | | |
|---|---|---|---|
| CLIENT<br>Name :<br>Date :<br>Registration No : N/A<br>Signature : | IDT<br>Name :<br>Date :<br>Registration No : N/A<br>Signature : | ARCHITECT<br>Name :<br>Date :<br>Registration No :<br>Signature : | STRUCTURAL ENGINEER<br>Name :<br>Date :<br>Registration No :<br>Signature : |

**GENERAL NOTES:**
1. DIMENSIONS TO BE USED IN PREFERENCE TO SCALING.
2. ALL LEVELS & DIMENSIONS TO BE CHECKED PRIOR TO WORK BEING PUT ION HAND. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
3. ALL LEVELS SHOWNS ARE STRUCTURAL LEVELS.
4. ALL STRUCTURAL WORK IS TO BE CHECKED & APPROVED BY THE APPOINTED STRUCTURAL ENGINEER.
5. COPYWRITE OF THIS DRAWING IS ALWAYS TO REMAIN WITH ISAGO ARCHITECTURE CC.
6. THE CONTRACTOR IS TO CHECK ALL SCHEDULES AN DRAWINGS BEFORE PLACING ORDERS.
7. ALL BUILDING WORK AND BUILDING REQUIREMENTS ARE TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS, SANS10 400 & SANS204.
8. ALL PARTITIONING TO HAVE ADEQUATE FIRE RATING AND RODENT PROOFING.
9. LIGHTING AND VENTILATION TO COMPLY WITH PART "O" OF THE NATIONAL BUILDING REGULATIONS.
10. ALL BALUSTRADES TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (I.E. 1000mm HIGH AND BALUSTERS AT MAXIMUM 100mm CENTRE TO CENTRE.
11. ALL SPECIFICATIONS AND WORK TO BE IN ACCORDANCE WITH SABS 0400, SANS10400, SANS 204 & NBR.

**DRAINAGE RETICULATION NOTES:**
1. ALL PLUMBING TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS.
2. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THEIR ENTIRE LENGTH.
3. VENT PIPES TO BE CARRIED UP TO 2m ABOVE ANY WINDOW OR DOOR OPENING IN THE BUILDING OR ANY OTHER BUILDING WITHIN A DISTANCE OF 6m.
4. INSPECTIONS EYES (I.E'S) TO BE PROVIDED AT ALL BENDS AND JUNCTIONS OF SOIL AND WASTE WATE PIPES.
5. RODDING EYES (R.E'S) TO BE PROVIDED AT HEADS OF DRAINS AND AT A MAXIMUM OF 25m SPACING ALONG RUNS OF DRAINS.
6. MARKED COVERS TO BE PROVIDED AT GROUND LEVEL FOR ALL INSPECTION EYES (I.E'S).
7. RESEAL TRAPS TO BE FITTED TO ALL WASTE FITTINGS.
8. SOIL DRAINS UNDER BUILDINGS TO BE PROTECTED FROM ALL VERTICAL SETTLEMENT LOADS WITH RODDING EYES (R.E'S) AS CLOSE AS POSSIBLE TO THE BUILDING AT BOTH ENDS.
9. SOIL WATER PIIPES HAVING A VERTICAL DROP EXCEEDING 1200mm TO THE MAIN DRAIN TO BE ANTI-SYPHONED.
10. ALL BRANCH DRAINS EXCEEDING 6m IN LENGTH TO BE VENTED.
11. ALL MATERIALS USED ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S TECHNICAL SPECIFICATIONS.

| No. | Description | Date | Issued by |
|---|---|---|---|
| 0 | Issue For Council Submission | 21/05/2025 | P.N SEDIBE |

Issue For Council Submission

IDT

Tlale Primary School

Motlhabeng, Mafikeng, Mmabatho, 1747

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

Window & Door Schedule

| | |
|---|---|
| Project number | 9303 |
| Date | 21/05/2025 |
| Drawn by | P.N SEDIBE |
| Revision | 0 |

**9303 GH 500**

Scale 1 : 50

isagoarchitecture

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2745
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Fax: 086 669 5095

JOHANNESBURG:
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Email: natalie@isago.co.za
Mobile: 083 565 1641
Tel: 011 463 7911
Fax: 086 552 3381
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Bryanston
2021

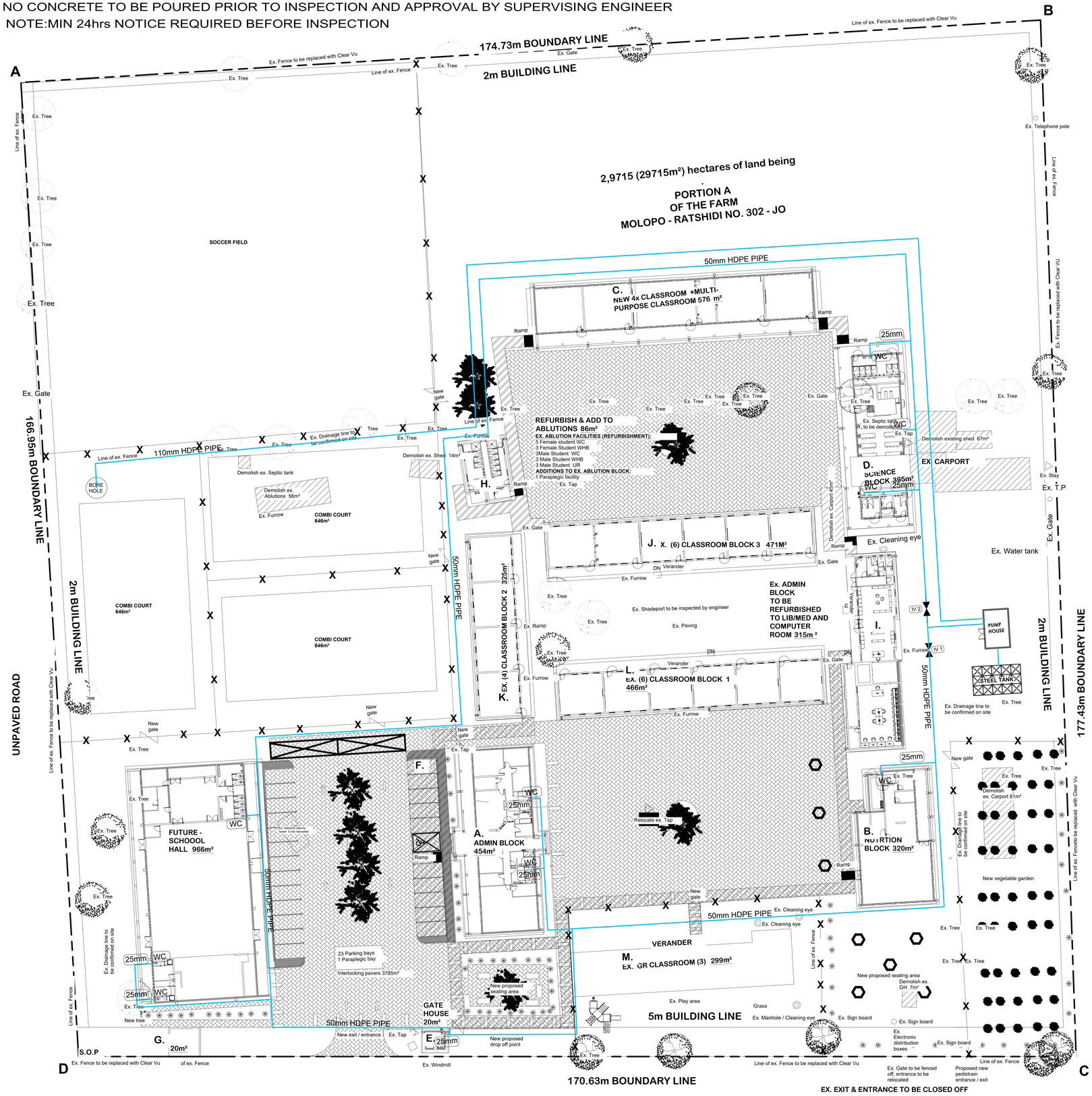
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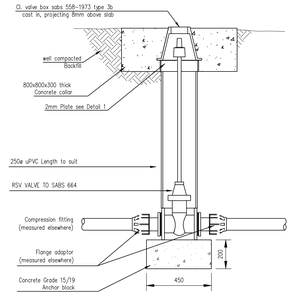
# ANNEXURE B

## CIVIL AND STRUCTURAL DRAWINGS

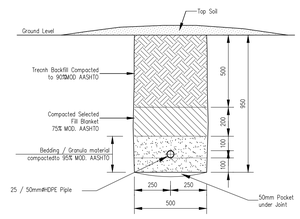
NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION




WATER RETICULATION LAYOUT
SCALE 1 : 350




ISOLATING VALVE DETAIL
FOR HDPE PIPES
CROSS SECTION
SCALE 1:15




TYPICAL CROSS SECTION
BOTH 25 & 50dia WATER PIPE
BEDDING
SCALE 1 : 15

NOTES:

1. EXCAVATION & FILL
- PREPARATION OF THE BULK EARTHWORKS ARE TO BE AS STIPULATED IN THE GEOTECHNICAL REPORT.
- ALL EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY A COMPETENT PERSONS BEFORE LAYING OF PIPE / CASTING OF CONCRETE.
- COMPACTION TEST ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE ENGINEERS SPECIFICATIONS FOR ALL AREAS.

2. ALL TRENCHING TO COMPLY WITH SANS 1200 IN PARTICULAR :
- SANS 1200 DB (TRENCH EXCAVATION)
- SANS 1200 L (MEDIUM PRESSURE PIPELINES)
- SANS 1200 LB (BEDDING)

3. PIPE COVER :
- PIPES LAID UNDER A ROAD ARE TO HAVE A COVER OF 1200mm.
- PIPES LAID IN ROAD RESERVES ARE TO HAVE A COVER OF 1000mm AND TO BE CONSIDERED AS "TRAFFICKED".
- ALL OTHER PIPE ARE TO HAVE A MINIMUM COVER OF 600mm UNLESS OTHERWISE SPECIFIED IN THE DRAWING.

4. PIPES MUST BE BACKFILLED IMMEDIATELY AFTER LAYING, WITH JOINTS LEFT OPEN FOR TESTING

5. TRENCHING :
- THE WIDTH OF THE TRENCH SHALL BE 500mm (225mm EITHER SIDE) GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE WITH A MINIMUM WIDTH OF 600mm
- THE TRENCH SHALL NOT BE EXCAVATED TOO FAR IN ADVANCE OF THE PIPE LAYING
- THE BOTTOM OF THE TRENCH SHALL BE FREE FROM STONES, PROJECTIONS, SOFT SPOTS AND SHALL BE UNIFORM

6. SELECTED BEDDING – BELOW PIPE :
- THE BEDDING FREE OF STONES.
- THE BEDDING SHALL BE A MINIMUM OF 100mm
- GRANULAR MATERIAL – GRADE 0.6mm TO 19mm NON–COHESIVE, FREE DRAIN MATERIAL (SANS 1200 LB 3.1) COMPACTED TO 90% MOD ASSHTO (SANS 1200 LB 5.14) UNLESS OTHER WISE STATED IN THE PROJECT SPECIFICATIONS

7. SELECTED BEDDING – SIDE FILL :
- SELECTED BACKFILL MATERIAL SHALL BE PLACES IN EVEN LAYERS OF 150mm OVER THE ENTIRE WIDTH OF THE TRENCH TO A HEIGHT OF 340mm ABOVE THE CROWN OF THE PIPE
- ALL LAYERS TO BE FIRMLY TAMPED BY HAND
- GRANULAR MATERIAL – GRADE 0.6mm TO 19mm NON–COHESIVE, FREE DRAIN MATERIAL (SANS 1200 LB 3.2) COMPACTED TO 90% MOD ASSHTO (SANS 1200 LB 5.14) UNLESS OTHER WISE STATED IN THE PROJECT SPECIFICATIONS

8. FILL BLANKET :
- 400mm THICK
- "in" NOT GREATER THAN 6
- STONES NOT GRATER THAN 30mm (SANS 1200 LB 3.2)
- COMPACTED TO 93% MOD. AASHTO DENSITY (SANS 1200 LB 5.1.4)

9. BACKFILL :
- BACKFILL SHALL BE UNIFORM READILY COMPACTED MATERIAL FREE FROM TREE ROOTS, VEGETABLE MATTER AND BUILDERS RUBBLE
- BACKFILL SHALL NOT CONTAIN MORE THAN 10% ROCK AND STONE GRATER THAN 50mm (SANS 1200 DB 3.5)
- COMPACTED IN LAYERS OF 150mm IN ROAD RESERVES AND OTHER AREAS CONSIDERED AS TRAFFICKED
- AREAS NOT SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS NOT EXCEEDING 300mm TO A COMPACTION OF 90% MOD AASHTO DENSITY (SANS 1200 DB 5.7.1)
- AREAS SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS OF 150mm TO A COMPACTION OF 93% MOD AASHTO DENSITY (SANS DB 5.7.2)

LEGEND

| | |
|---|---|
| | WATER PIPELINE |
| | ISOLATING VALVE |
| | STANDPIPE / DRINKING FOUNTAIN |
| WC | WATER CONNECTION |
| BH | BOREHOLE (NEW / REFURBISHED) |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 27/03/2025

GUDUNKOMO
INVESTMENTS AND CONSULTING

..\..\..\..\..\..\EXTRACT PROJECTS\IDT LOGO.jpg

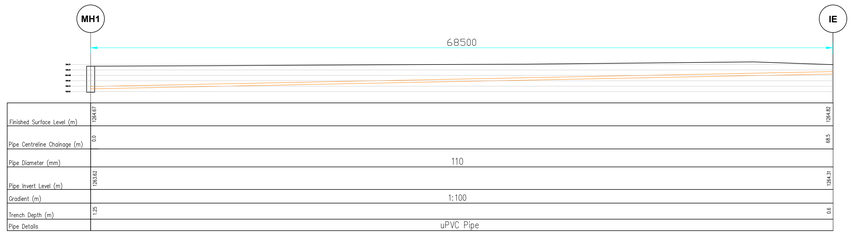
PROJECT
TLALE PRIMARY SCHOOL

WATER RETICULATION LAYOUT

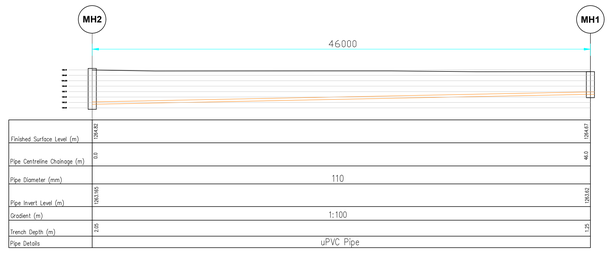
PLAN VIEW & SECTIONS

DRAWN: P. ZUMA DATE: 27/03/2025
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/010 REVISION
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STAMPED BY PLANS APPROVAL COMMITEE

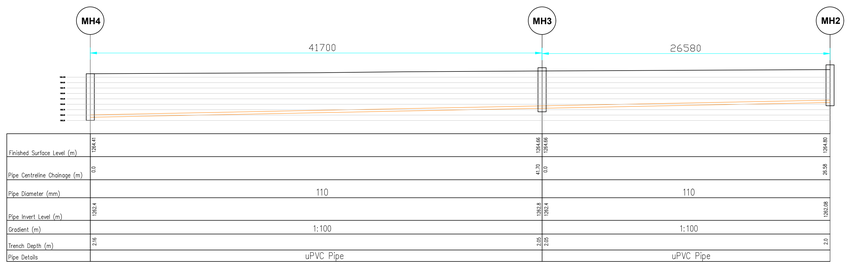
NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION



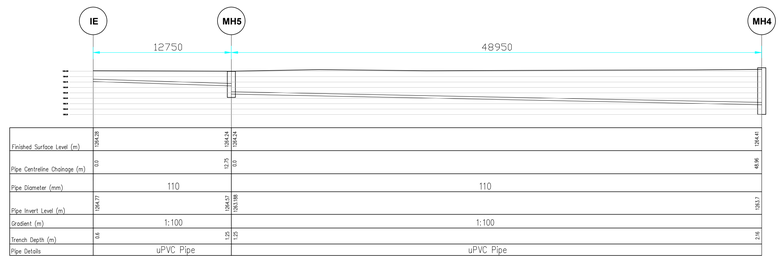

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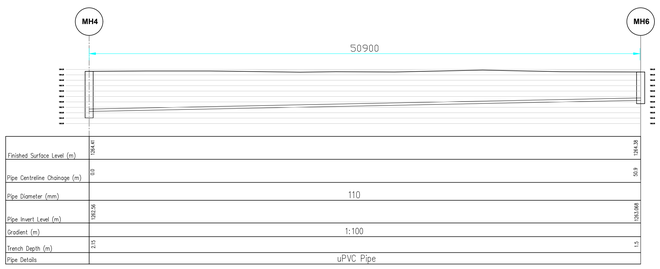

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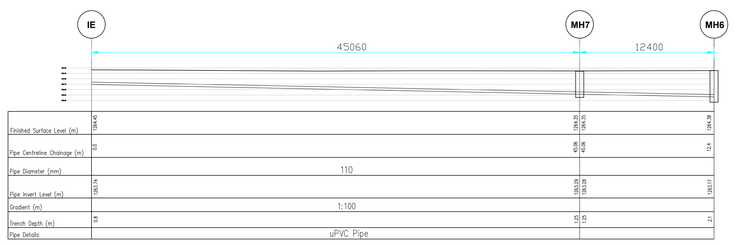

SEWER LINE 4 NOT TO SCALE SEWER LINE 3




SEWER LINE 5 – NOT TO SCALE




SEWER LINE 6 – NOT TO SCALE




SEWER LINE 7 – NOT TO SCALE

# SEWER NETWORK LAYOUT

SCALE 1 : 250

NOTES:

1. EXCAVATION & FILL
   - PREPARATION OF THE BULK EARTHWORKS ARE TO BE AS STIPULATED IN THE GEOTECHNICAL REPORT.
   - ALL EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY A COMPETENT PERSONS BEFORE LAYING OF PIPE / CASTING OF CONCRETE.
   - COMPACTION TEST ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE ENGINEERS SPECIFICATIONS FOR ALL AREAS.
2. ALL TRENCHING TO COMPLY WITH SANS 1200 IN PARTICULAR :
   - SANS 1200 DB (TRENCH EXCAVATION)
   - SANS 1200 L (MEDIUM PRESSURE PIPELINES)
   - SANS 1200 LB (BEDDING)
3. PIPE COVER :
   - PIPES LAID UNDER A ROAD ARE TO HAVE A COVER OF 1200mm.
   - PIPES LAID IN ROAD RESERVES ARE TO HAVE A COVER OF 1000mm AND TO BE CONSIDERED AS "TRAFFICKED".
   - ALL OTHER PIPE ARE TO HAVE A MINIMUM COVER OF 600mm UNLESS OTHERWISE SPECIFIED IN THE DRAWING.
4. PIPES MUST BE BACKFILLED IMMEDIATELY AFTER LAYING, WITH JOINTS LEFT OPEN FOR TESTING
5. TRENCHING :
   - THE WIDTH OF THE TRENCH SHALL BE 700mm (295mm EITHER SIDE) GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE WITH A MINIMUM WIDTH OF 600mm
   - THE TRENCH SHALL NOT BE EXCAVATED TOO FAR IN ADVANCE OF THE PIPE LAYING
   - THE BOTTOM OF THE TRENCH SHALL BE FREE FROM STONES, PROJECTIONS, SOFT SPOTS AND SHALL BE UNIFORM
6. SELECTED BEDDING – BELOW PIPE :
   - THE BEDDING FREE OF STONES.
   - THE BEDDING SHALL BE A MINIMUM OF 100mm
   - GRANULAR MATERIAL – GRADE 0.6mm TO 19mm NON–COHESIVE, FREE DRAIN MATERIAL (SANS 1200 LB 3.1) COMPACTED TO 90% MOD ASSHTO (SANS 1200 LB 5.14) UNLESS OTHER WISE STATED IN THE PROJECT SPECIFICATIONS
7. SELECTED BEDDING – SIDE FILL :
   - SELECTED BACKFILL MATERIAL SHALL BE PLACES IN EVEN LAYERS OF 150mm OVER THE ENTIRE WIDTH OF THE TRENCH TO A HEIGHT OF 340mm ABOVE THE CROWN OF THE PIPE
   - ALL LAYERS TO BE FIRMLY TAMPED BY HAND
   - GRANULAR MATERIAL – GRADE 0.6mm TO 19mm NON–COHESIVE, FREE DRAIN MATERIAL (SANS 1200 LB 3.2) COMPACTED TO 90% MOD ASSHTO (SANS 1200 LB 5.14) UNLESS OTHER WISE STATED IN THE PROJECT SPECIFICATIONS
8. FILL BLANKET :
   - 400mm THICK
   - "PI" NOT GREATER THAN 6
   - STONES NOT GRATER THAN 30mm (SANS 1200 LB 3.2)
   - COMPACTED TO 93% MOD. AASHTO DENSITY (SANS 1200 LB 5.1.4)
9. BACKFILL :
   - BACKFILL SHALL BE UNIFORM READILY COMPACTED MATERIAL FREE FROM TREE ROOTS, VEGETABLE MATTER AND BUILDERS RUBBLE
   - BACKFILL SHALL NOT CONTAIN MORE THAN 10% ROCK AND STONE GRATER THAN 50mm (SANS 1200 DB 3.5)
   - COMPACTED IN LAYERS OF 150mm IN ROAD RESERVES AND OTHER AREAS CONSIDERED AS TRAFFICKED
   - AREAS NOT SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS NOT EXCEEDING 300mm TO A COMPACTION OF 90% MOD AASHTO DENSITY (SANS 1200 DB 5.7.1)
   - AREAS SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS OF 150mm TO A COMPACTION OF 93% MOD AASHTO DENSITY (SANS DB 5.7.2)

| LEGEND | |
|---|---|
| | SEWER PIPELINE 110mm Ø PVC |
| | SEWER MANHOLE 1000mm Ø |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 25/02/2025

GUDUNKOMO
INVESTMENTS AND CONSULTING

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PROJECT TLALE PRIMARY SCHOOL

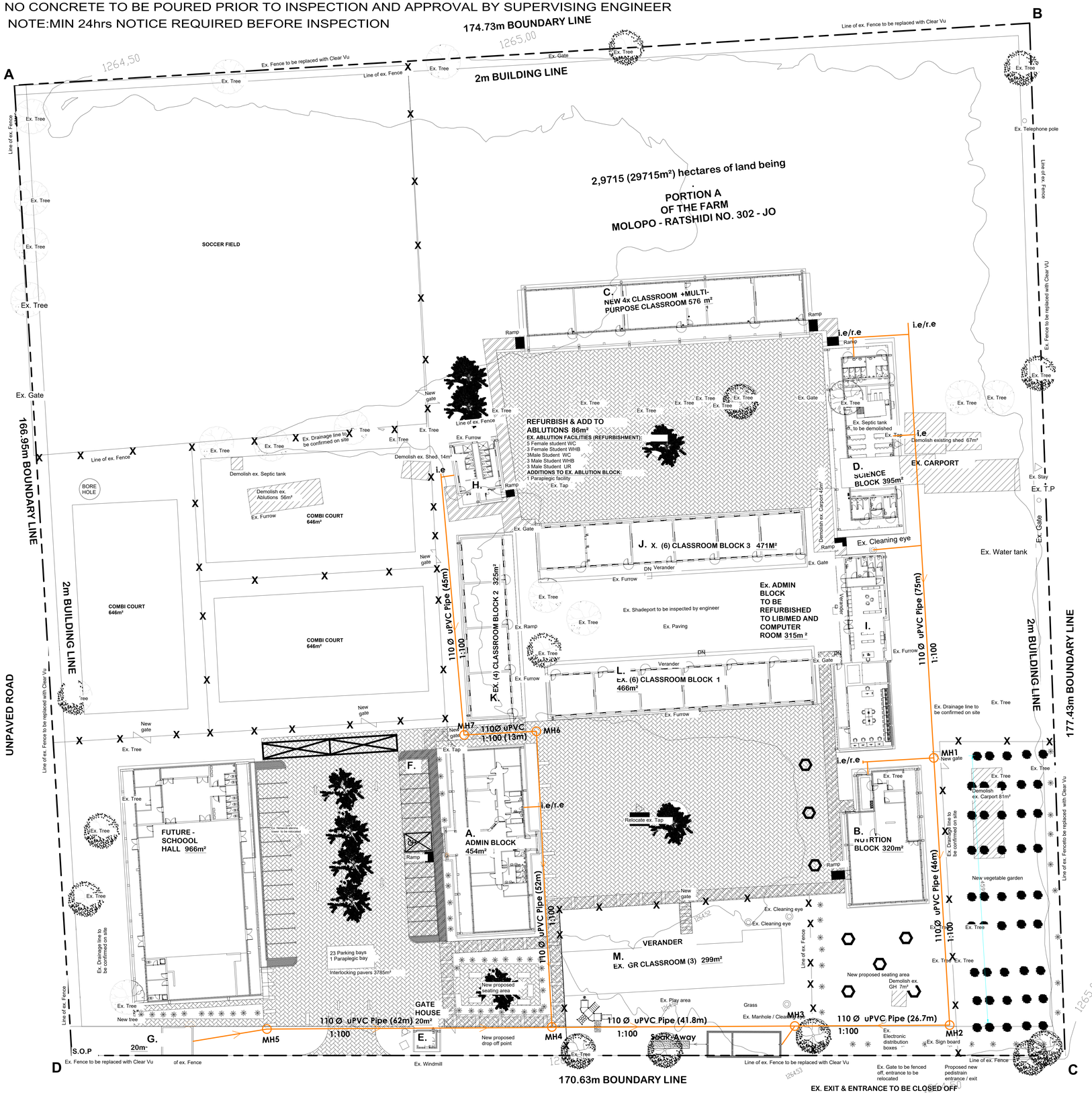
SEWER NETWORK

LONGITUDINAL SECTIONS

DRAWN: P. ZUMA DATE: 25/02/2025
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/011 REVISION A
SHEET
STAMPED BY PLANS APPROVAL COMMITEE

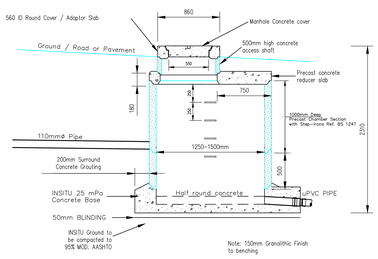
NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER

NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION



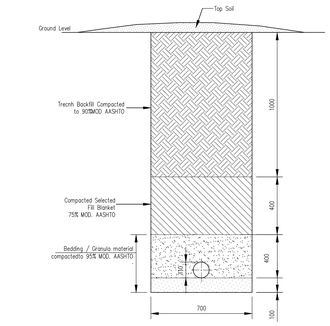

SEWER NETWORK LAYOUT

SCALE 1 : 250




LONG SECTION THROUGH MANHOLE LESS 2.3m

SCALE 1 : 20




TYPICAL CROSS SECTION – SEWER PIPE BEDDING

SCALE 1 : 10

NOTES:

1. EXCAVATION & FILL
   - PREPARATION OF THE BULK EARTHWORKS ARE TO BE AS STIPULATED IN THE GEOTECHNICAL REPORT.
   - ALL EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY A COMPETENT PERSONS BEFORE LAYING OF PIPE / CASTING OF CONCRETE.
   - COMPACTION TEST ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE ENGINEER'S SPECIFICATIONS FOR ALL AREAS.
2. ALL TRENCHING TO COMPLY WITH SANS 1200 IN PARTICULAR :
   - SANS 1200 DB (TRENCH EXCAVATION)
   - SANS 1200 L (MEDIUM PRESSURE PIPELINES)
   - SANS 1200 LB (BEDDING)
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   - SELECTED BACKFILL MATERIAL SHALL BE PLACES IN EVEN LAYERS OF 150mm OVER THE ENTIRE WIDTH OF THE TRENCH TO A HEIGHT OF 340mm ABOVE THE CROWN OF THE PIPE
   - ALL LAYERS TO BE FIRMLY TAMPED BY HAND
   - GRANULAR MATERIAL – GRADE 0.6mm TO 19mm NON–COHESIVE, FREE DRAIN MATERIAL (SANS 1200 LB 3.2) COMPACTED TO 90% MOD ASSHTO (SANS 1200 LB 5.14) UNLESS OTHER WISE STATED IN THE PROJECT SPECIFICATIONS
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   - AREAS NOT SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS NOT EXCEEDING 300mm TO A COMPACTION OF 90% MOD AASHTO DENSITY (SANS 1200 DB 5.7.1)
   - AREAS SUBJECTED TO TRAFFIC LOADS :– COMPACTED IN LAYERS OF 150mm TO A COMPACTION OF 93% MOD AASHTO DENSITY (SANS DB 5.7.2)

LEGEND

| | |
|---|---|
| | SEWER PIPELINE 110mm Ø PVC |
| | SEWER MANHOLE 1000mm Ø |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 27/03/2025

GUDUNKOMO
INVESTMENTS AND CONSULTING

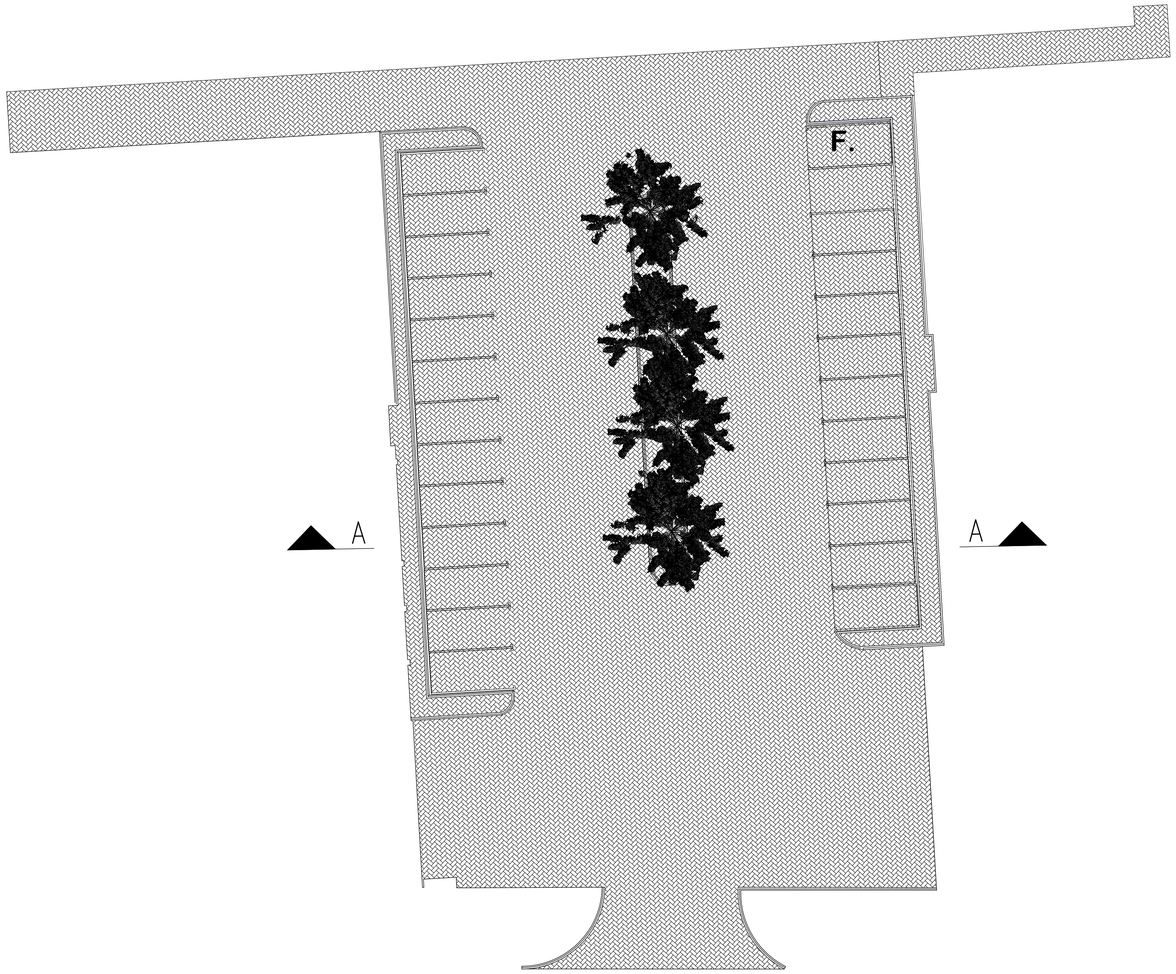
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PROJECT TLALE PRIMARY SCHOOL

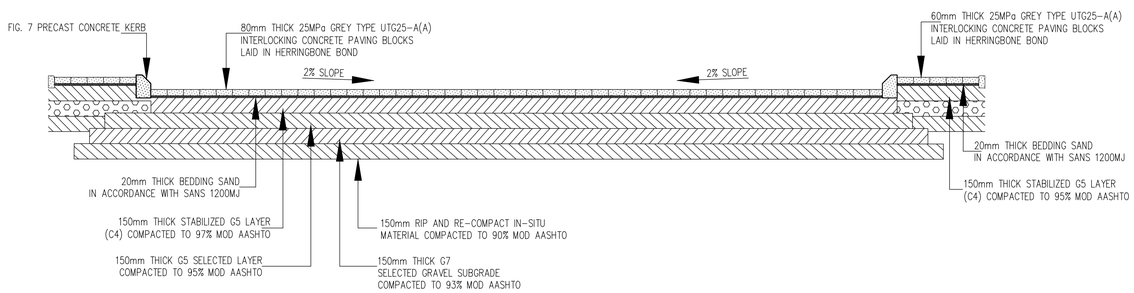
SEWER NETWORK

DETAILED LAYOUT AND SECTIONS

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| DRAWN: P. ZUMA | DATE: 27/03/2025 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/011 | REVISION |
| | A |
| | SHEET |
| STAMPED BY PLANS APPROVAL COMMITEE | |




PARKING PAVING – LEGEND




PARKING PAVING – TYPICAL SECTION A – A

NOT TO SCALE

| REV | DATE | DESCRIPTION |
|---|---|---|
| A | 16/11/2024 | ISSUED FOR APPROVAL |
| | | |
| | | |
| | | |
| | | |
| | | |

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 16/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

idt
independent development trust

PROJECT TLALE PRIMARY SCHOOL

PARKING PAVING

PLAN VIEW & SECTIONS DETAILS

DRAWN: P. ZUMA DATE: 16/11/2024

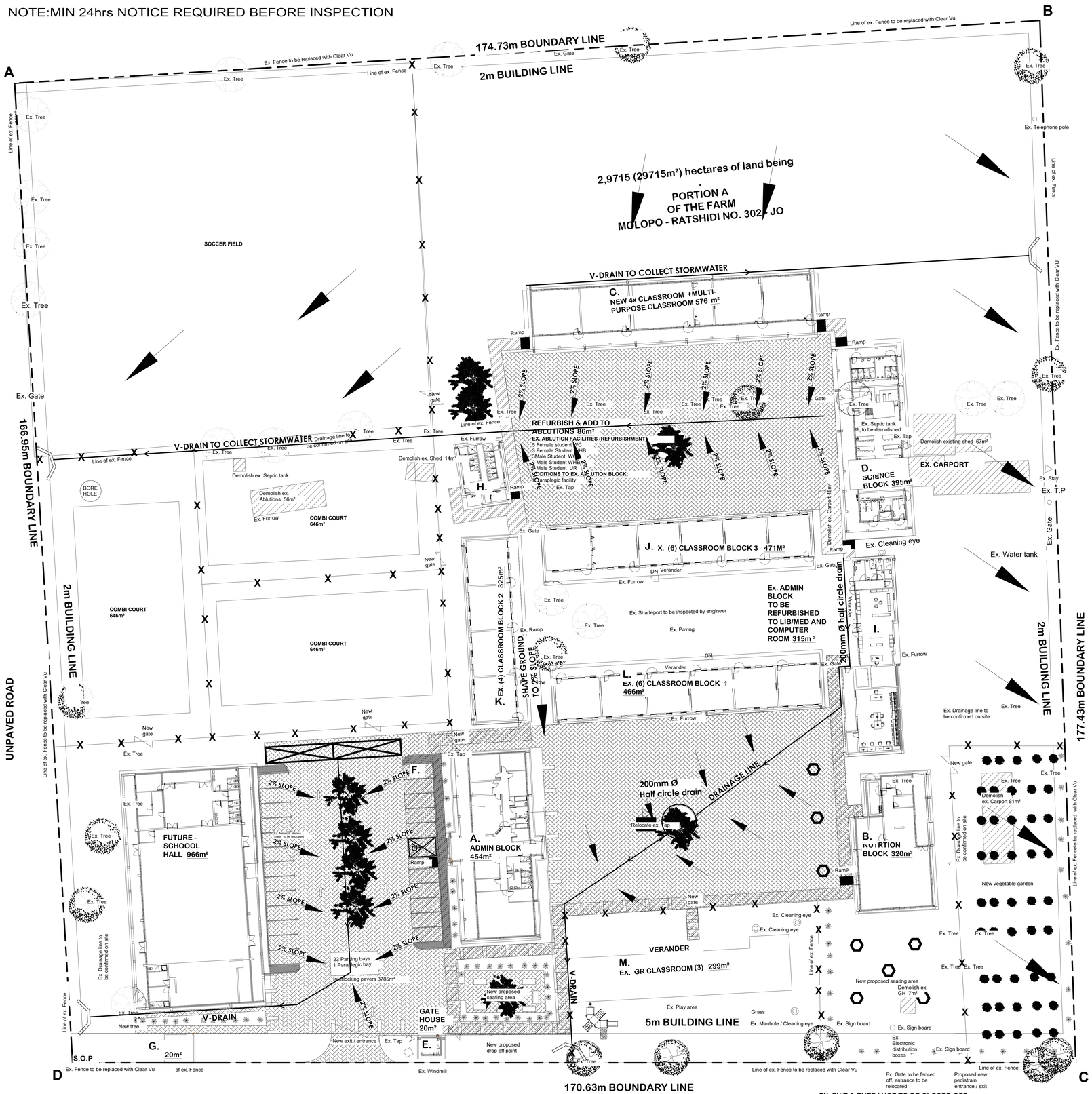
SCALE/S: AS SHOWN

CONSULTANT DRAWING NO: GIC/TLALE/019 REVISION A

SHEET

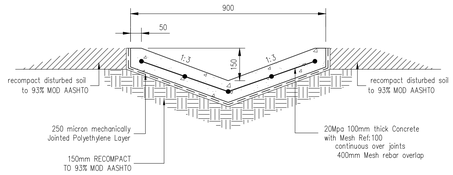
STAMPED BY PLANS APPROVAL COMMITEE

NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION




# STORMWATER MANAGEMENT

SCALE 1 : 250




CROSS SECTION ON
CAST INSITU CONCRETE V-DRAIN

SCALE 1:10

LEGEND

STORM V-DRAIN CAST IN SITU CONC

STORMWATER DRAIN DIRECTION

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 27/03/2025

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INVESTMENTS AND CONSULTING

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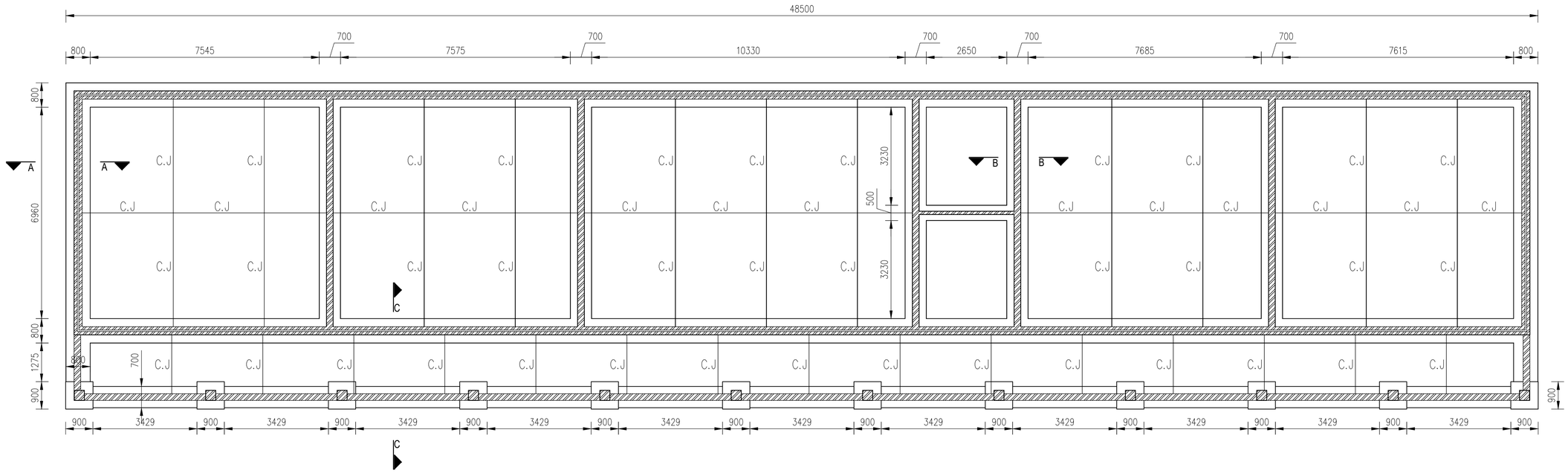
PROJECT TLALE PRIMARY SCHOOL

STORMWATER MANAGEMENT

DETAILED LAYOUT AND SECTIONS

| | |
|---|---|
| DRAWN: P. ZUMA | DATE: 27/03/2025 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/015 | REVISION A |
| | SHEET |

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## STRIP FOUNDATION LAYOUT – CONCRETE

SCALE 1 : 75

**PROJECT CONSTRUCTION NOTES**

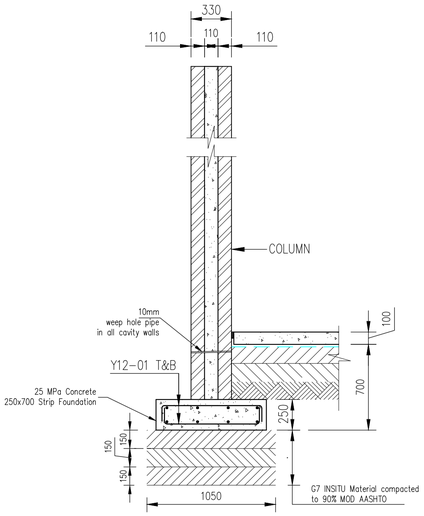
1. ALL STRUCTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, ENGINEERS AND SERVICES DRAWINGS AS WELL AS THE SPECIFICATIONS.
2. ANY DISCREPANCIES AND AMBIGUITIES ON THE ENGINEERS DRAWINGS TO BE REPORTED TO ENGINEERS IMMEDIATELY BY MEANS OF AN RFI (REQUEST FOR INFORMATION).
3. OBTAIN THE ENGINEER'S WRITTEN AUTHORISATION FOR ALL AMENDMENTS PRIOR TO COMMENCEMENT OF WORK.
3. LEVELS AND DIMENSIONS TO BE CHECKED BEFORE ANY WORK COMMENCES. DIMENSIONS ARE NOT TO BE SCALED BESIDES IF THE SCALE IS SPECIFIED IN THE DRAWING.
4. GENERALLY ALL CONCRETE WORK IS TO BE IN ACCORDANCE WITH EITHER THE CONTRACT SPECIFICATIONS, SANS 1200 STANDARD SPECIFICATIONS.
5. THE CONTRACTOR IS TO LOCATE AND IDENTIFY EXISTING SERVICES ON SITE AND TO PROTECT THEM THROUGHOUT THE DURATION OF THE WORKS.
6. THE CONTRACTOR SHALL OBSERVE PROPER AND ADEQUATE SITE SAFETY PRECAUTIONS ALWAYS.
7. ALL WATERPROOFING DETAILS TO ARCHITECT'S SPECIFICATIONS.

**EARTHWORKS**

1. EARTHWORKS TO BE IN ACCORDANCE WITH SANS 2001–BE1
2. STOCKPILE MATERIAL ONLY IN APPROVED LOCATIONS ON SITE OR AS INDICATED ON THE RELEVANT DRAWINGS.
3. APPROVED SELECTED COHESIONLESS BACKFILL AROUND COLUMNS AND WALLS, ABOVE BASES AND BENEATH SURFACE BEDS, MUST BE COMPACTED TO A MINIMUM DENSITY OF 98% MOD. AASHTO IN LAYERS NOT EXCEEDING 150mm THICK UNLESS NOTED OTHERWISE.

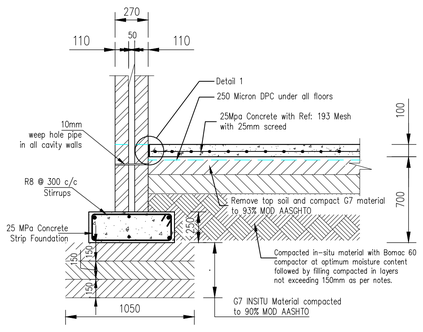
**CONCRETE**

1. CONCRETE, FORMWORK & REINFORCEMENT TO BE IN ACCORDANCE WITH SANS 2001 CC1 & 2
2. CEMENT TO COMPLY WITH THE REQUIREMENTS OF SANS 50197–1. USE CEM1 42.5.
3. THE REQUIRED MINIMUM CHARACTERISTIC CONCRETE STRENGTH AT 28 DAYS (UNLESS NOTED OTHERWISE):
   - R.C. REINFORCED STRIP FOUNDATION 25 MPa
   - R.C. BASE 25 MPa
   - R.C. SLABS 25 MPa
5. THE CONTRACTOR IS TO SUBMIT HIS PROPOSED MIX DESIGNS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION COMMENCEMENT.
6. UN–REINFORCED SLABS TO BE CAST IN APPROX. SQUARE PANELS WITH MAXIMUM SIDE LENGTH NOT EXCEEDING 30 TIMES THE SLAB THICKNESS U.O.N.
7. ALL MOVEMENT JOINTS ON SURFACE BEDS TO BE 12MM WIDE, FORMED BY GLUING AN APPROVED CLOSED CELL EXPANDED POLYETHYLENE JOINT FILLER TO 1ST CAST CONCRETE. JOINT SEALING TO ARCHITECT'S SPECS.
9. ALL BASES ARE LOCATED CENTRALLY UNDERNEATH COLUMNS UNLESS OTHERWISE SHOWN.
10. FINAL FOUNDING LEVELS OF STRIP FOOTINGS & BASES BE CONFIRMED ON SITE BY ENGINEER.
11. MINIMUM CONCRETE COVER TO ANY REINFORCING BAR, INCLUDING LINKS, TO BE AS TABULATED BELOW UNLESS NOTED OTHERWISE:
    - CONCRETE IN CONTACT WITH THE GROUND 50mm
    - SLAB SURFACES: EXTERNAL, UNSCREEDED 30mm
12. PROVIDE 25x25mm CHAMFERS TO EXPOSED CONCRETE CORNERS UNLESS OTHERWISE NOTED.
14. STANDARD OF CONCRETE FINISH TO BE TO ARCHITECT'S SPECIFICATIONS.
8. NO CONDUITS, PIPES OR ELECTRICAL OR MECHANICAL EQUIPMENT SHALL BE CAST INTO CONCRETE UNLESS INDICATED ON DRAWINGS, DETAILED IN SPECIFICATIONS OR APPROVED BY THE ENGINEER.
9. ALL CONCRETE TO BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS AFTER FINAL SET OF CONCRETE. THE ENGINEER MAY ADJUST THE CURING PERIOD SUBJECT TO WEATHER.
10. SHUTTER REMOVAL & PROPPING PROCEDURES MAY BE SUBJECT TO APPROVAL BY ENGINEER. STRIPPING OF SHUTTERING CAN TAKE PLACE AFTER 14 DAYS, UNLESS OTHERWISE INDICATED. BACK PROP TO BE IN PLACE FOR A MINIMUM OF 28 DAYS.



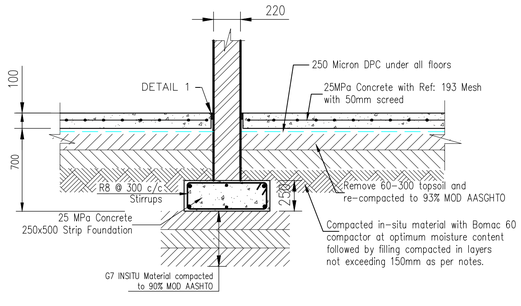

## TYPICAL COLUMN (12 NO. OFF)

SCALE 1 : 25



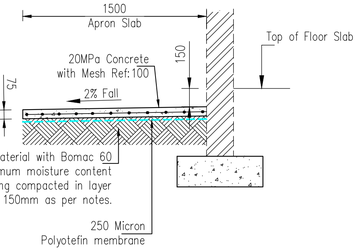

## SECTION A – A

SCALE 1 : 25



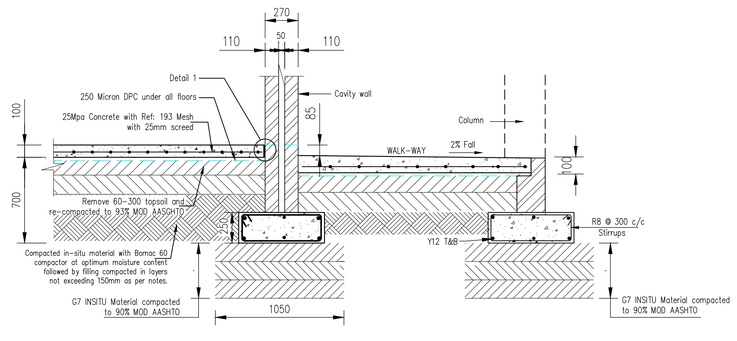

## SECTION B – B

SCALE 1 : 25



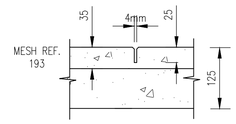

## TYPICAL SECTION APRON CONCRETE SLAB

SCALE 1:25



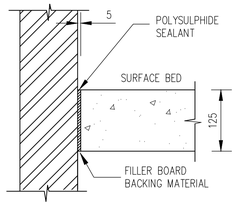

## SECTION C – C

SCALE 1 : 25




## SAW CUT JOINT DETAIL

SCALE 1 : 5




## DETAIL 1 ISOLATION JOINT

SCALE 1 : 5

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 20/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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PROJECT TLALE PRIMARY SCHOOL

4x MULTI-PURPOSE CLASSROOMS

STRIP FOUNDATION LAYOUT
CONCRETE DETAILING
PLAN VIEW, SECTIONS & DETAILS

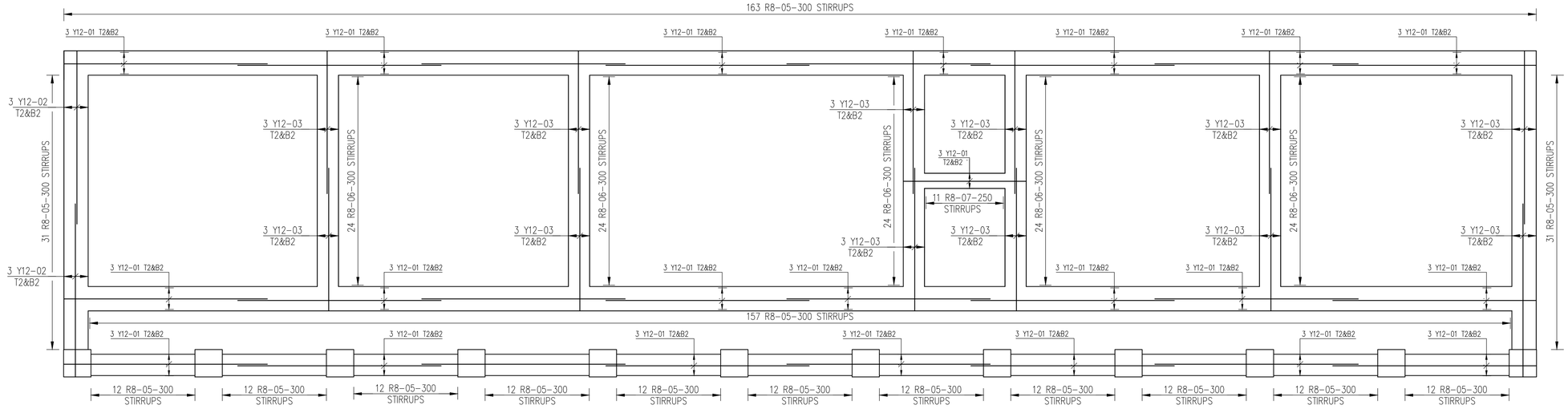
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| DRAWN: P. ZUMA | DATE: 20/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/001 | REVISION A |
| | SHEET 1 OF 2 |

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NOTES: REINFORCING

1. REINFORCEMENT SHALL BE CHECKED BY THE ENGINEER ONLY AFTER IT HAS BEEN COMPLETELY FIXED IN POSITION, FORMWORK IS CLEAN, SPACERS ARE PLACED IN POSITION AND AFTER THE CONTRACTOR HAS CERTIFIED IT CORRECT.
2. THE MINIMUM CONCRETE COVER TO MAIN REINFORCEMENT SHALL BE:
   - R.C. SLABS 30mm
   - R.C. FOUNDATION 50mm
3. WELDING OF REINFORCEMENT IS NOT ALLOWED, UNLESS APPROVED BY THE ENGINEER IN WRITING.

| | |
|---|---|
| T | TOP STEEL |
| T1 | 1st LAYER OF STEEL FROM THE TOP |
| B | BOTTOM STEEL |
| B1 | 1st LAYER OF STEEL FROM THE BOTTOM |
| B2 | 2nd LAYER OF STEEL FROM THE BOTTOM |
| T2 | 2ND LAYER OF STEEL FROM THE TOP |
| E.S | EACH SIDE |




## STRIP FOUNDATION LAYOUT – REINFORCING

SCALE 1 : 75

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 20/11/2024

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INVESTMENTS AND CONSULTING

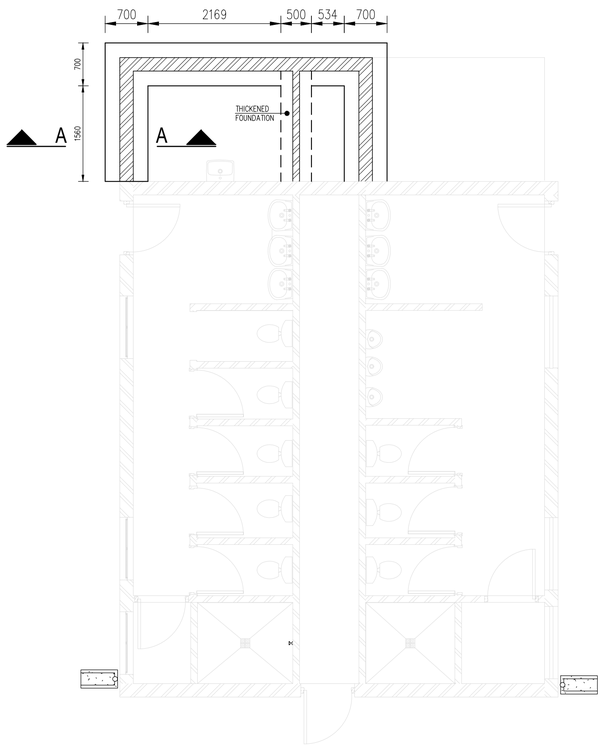
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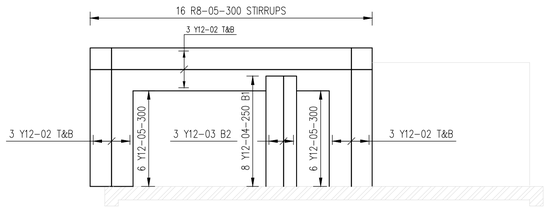
PROJECT TLALE PRIMARY SCHOOL

4x MULTI-PURPOSE CLASSROOMS

STRIP FOUNDATION LAYOUT
REINFORCING DETAILING
PLAN VIEW

DRAWN: P. ZUMA DATE: 20/11/2024
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/001 REVISION A
SHEET 2 OF 2
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# STRIP FOUNDATION LAYOUT – REINFORCING

SCALE 1 : 50

# STRIP FOUNDATION LAYOUT – CONCRETE

SCALE 1 : 50

MASONRY WALLING

1. REFER TO RELEVANT ARCHITECT'S DRAWINGS FOR SETTING OUT OF ALL MASONRY WALLS.
2. MASONRY WALL TO BE LAID TO STANDARDS AND TOLERANCES IN COMPLIANCE WITH SANS 10164 AND SANS 10145
3. MASONRY CEMENT TO COMPLY WITH THE REQUIREMENTS OF SANS 50413–1 TYPE MC 5.
4. ALL MASONRY WALLS TO BE CONSTRUCTED USING MORTAR CLASS II TO SANS 10164 (1 PART CEMENT: 1 PART LIME: 6 PARTS SAND).
5. CLAY BRICKS TO COMPLY WITH SANS 227, AND TO HAVE MOISTURE EXPANSION PROPERTIES NOT EXCEEDING CATEGORY II LIMITATIONS.
6. CLAY BRICKS MUST NOT BE LAID EARLIER THAN SIX WEEKS AFTER REMOVAL FROM THE KILN.
7. CONCRETE MASONRY UNITS TO COMPLY WITH SANS 1215. THESE UNITS SHALL NOT BE WETTED PRIOR TO LAYING. ALL UNFINISHED WALLS SHALL BE PROTECTED AGAINST MOISTURE ENTRY DURING CONSTRUCTION INTERRUPTIONS BY PROVIDING EFFECTIVE COVERS OVER THE TOPS OF SUCH WALLS.
8. THE ENGINEER MAY REQUIRE BRICK SAMPLES TO BE SUBMITTED FOR LABORATORY TESTING IN ACCORDANCE WITH SANS 10164.
9. ALL HOOP IRON TIES AND STRAPS, CRIMPED AND BUTTERFLY WIRE TIES, VERTICAL TWIST TYPE TIES AND BRICK REINFORCEMENT TO BE GALVANIZED.
10. UNLESS OTHERWISE SPECIFIED, GALVANIZED BRICK REINFORCEMENT (3.15MM DIAMETER LONGITUDINAL WIRES) IS TO BE PROVIDED IN EVERY 3RD COURSE OF ALL WALLS CONSTRUCTED IN IMPERIAL SIZED UNITS (COURSE HEIGHT APPROX. = 85mm). BRICK REINFORCEMENT TO BE INSTALLED WITH MINIMUM OVERLAP LENGTHS OF 250mm AND TO BE PROPERLY TIED IN AT CORNERS AND WALL JUNCTIONS IN WALLS WITH DOOR/WINDOW HEAD & WINDOW CILL LEVELS.
11. PROVIDE GALVANIZED BUTTERFLY TIES (5 NO. PER SQUARE METER) IN ALL CAVITY WALLS WITH CAVITY WIDTHS NOT EXCEEDING 75MM. USE VERTICAL TWIST TYPE TIES TO SANS 10164 FOR CAVITY WIDTHS IN EXCESS OF 75mm.
12. PROVIDE HOOP IRON TIES (1.6MM X 38MM WIDE) BETWEEN REINFORCED CONCRETE COLUMNS AND MASONRY WALLS–ONE TIE PER SKIN EVERY 2ND, 3RD OR 4TH COURSE HEIGHTS OF 200mm, 125mm AND 85mm RESPECTIVELY. PROVIDE 10MM THICK CLOSED CELL EXPANDED POLYETHYLENE (E.G. 'SONDOR JOINTEX') JOINT FORMER ON ONE SIDE OF EACH WALL PANEL.
13. REFER TO ENGINEER'S DETAILS FOR JOINTS IN DIFFERENT STRUCTURAL ELEMENTS.
14. DPC USED IN MASONRY WALLS TO BE ROUGH–SURFACED, E.G. 'BRICKGRIP'.
15. REQUIRED CHARACTERISTIC COMPRESSIVE STRENGTH OF LOAD–BEARING MASONRY WALL UNITS UP TO 3–STOREY BUILDINGS IS 7.0 MPa.
16. LOAD BEARING MASONRY MUST NOT BE CHASED EITHER VERTICALLY OR HORIZONTALLY WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

PROJECT CONSTRUCTION NOTES

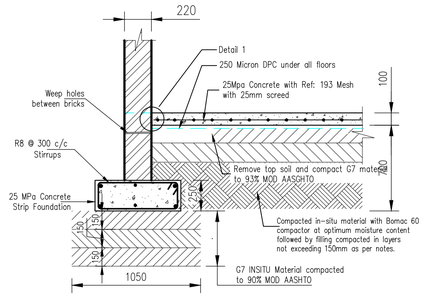
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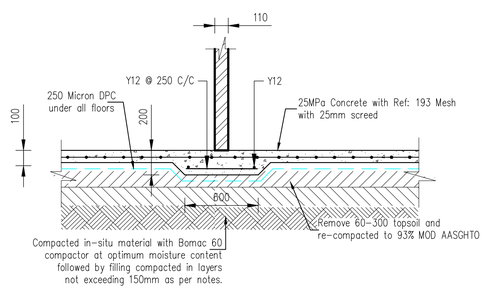
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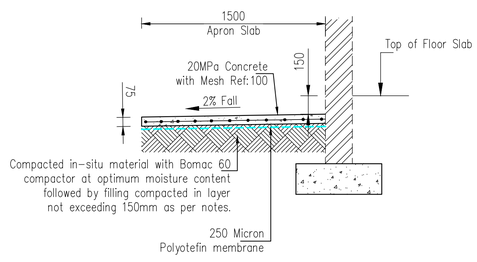

## SECTION A – A

SCALE 1 : 25




## TYPICAL THICKENED CONCRETE

SCALE 1 : 25




## TYPICAL SECTION APRON CONCRETE SLAB

SCALE 1:25

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 20/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

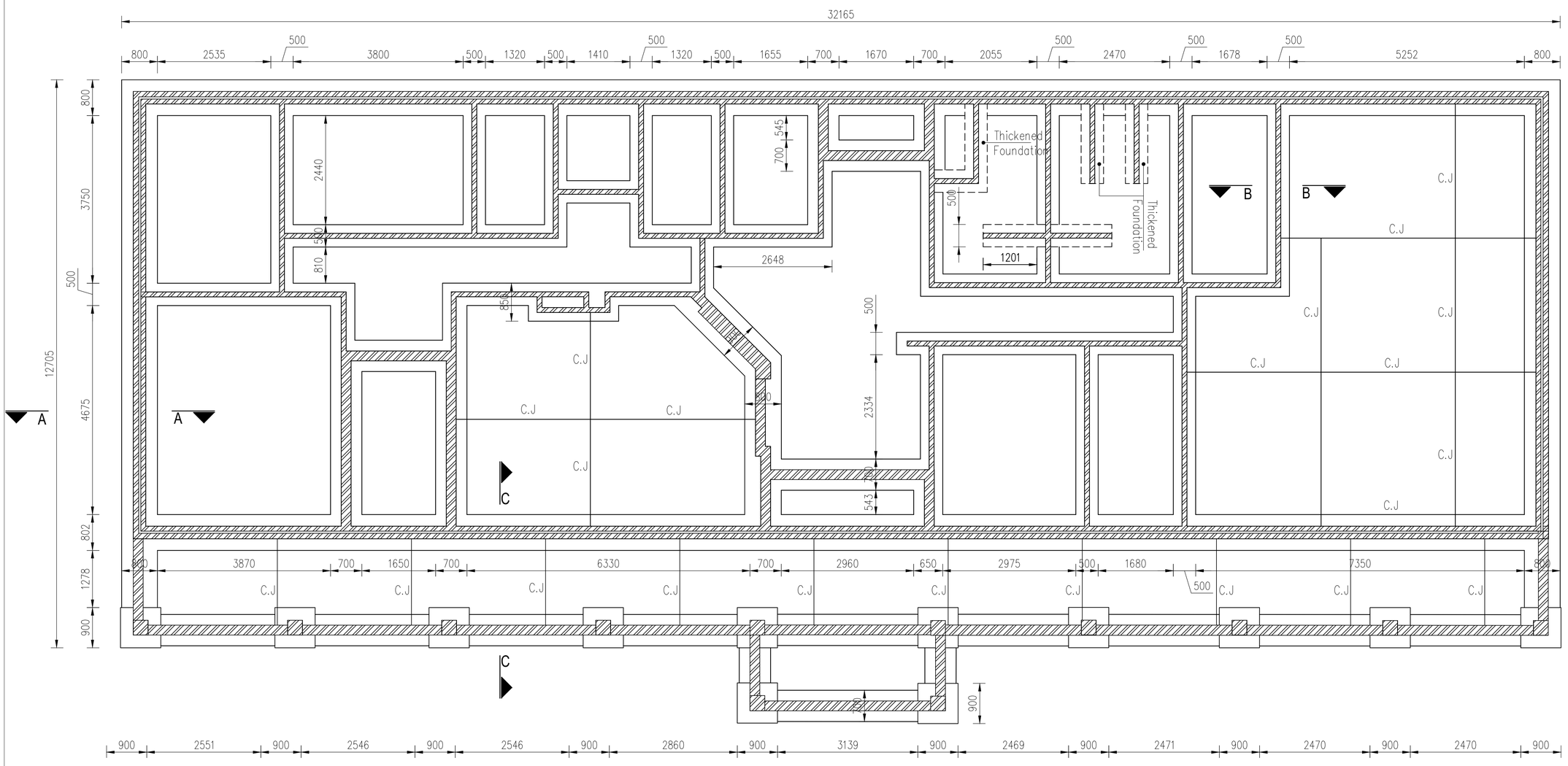
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PROJECT TLALE PRIMARY SCHOOL

ABLUTION BLOCK

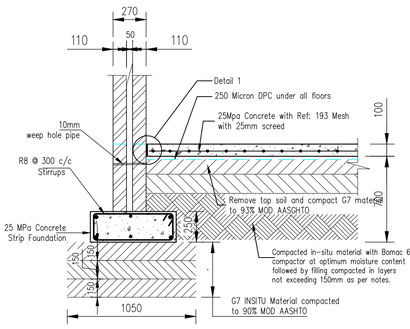
STRIP FOUNDATION LAYOUT
CONCRETE DETAILING
PLAN VIEW, SECTIONS & DETAILS

| | |
|---|---|
| DRAWN: P. ZUMA | DATE: 20/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/002 | REVISION A |
| | SHEET |
| STAMPED BY PLANS APPROVAL COMMITEE | |



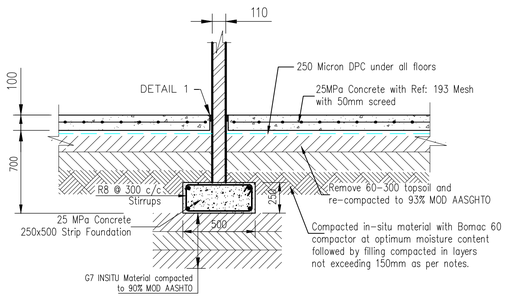

## STRIP FOUNDATION LAYOUT – CONCRETE

SCALE 1 : 50



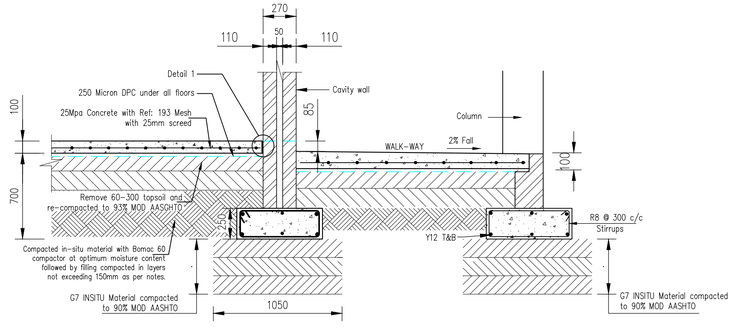

## SECTION A – A

SCALE 1 : 25



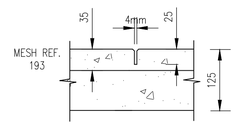

## SECTION B – B

SCALE 1 : 25



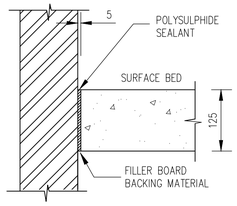

## SECTION C – C

SCALE 1 : 25




## SAW CUT JOINT DETAIL

SCALE 1 : 5




## DETAIL 1 ISOLATION JOINT

SCALE 1 : 5

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CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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PROJECT TLALE PRIMARY SCHOOL

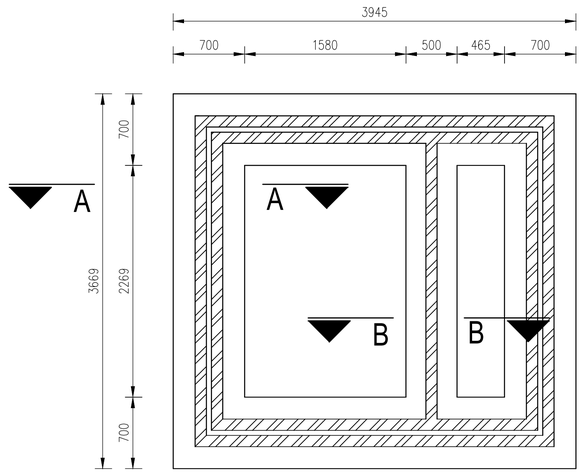
ADMIN BLOCK

STRIP FOUNDATION LAYOUT
CONCRETE DETAILING
PLAN VIEW, SECTIONS & DETAILS

| | |
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| DRAWN: P. ZUMA | DATE: 19/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/003 | REVISION A |
| | SHEET 1 OF 2 |

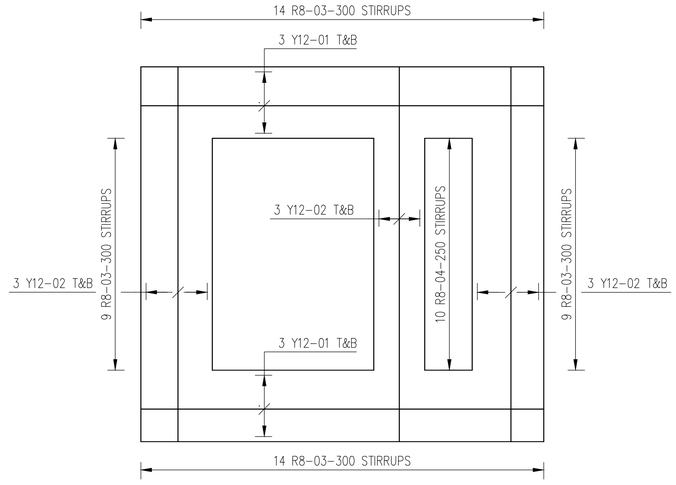
STAMPED BY PLANS APPROVAL COMMITEE

NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION




## STRIP FOUNDATION – CONCRETE LAYOUT

SCALE 1 : 30




NOTE:
1. Bar mark "05" to be cut on site for 3x 170mm length for stools at every corner.

## STRIP FOUNDATION – REINFORCING LAYOUT

SCALE 1 : 30

PROJECT CONSTRUCTION NOTES

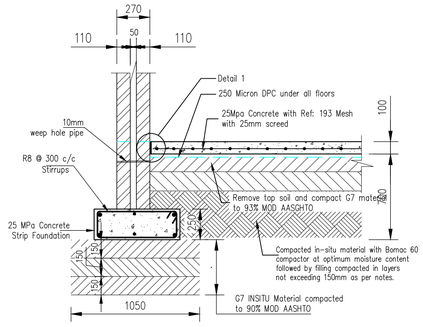
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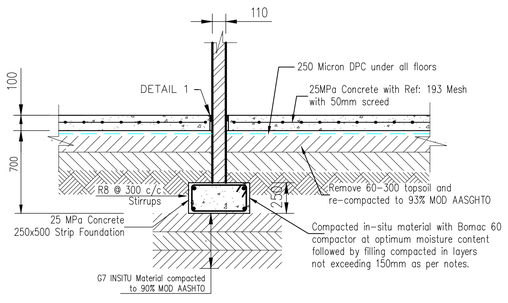
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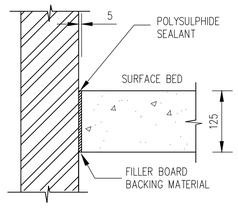

## SECTION A – A

SCALE 1 : 25



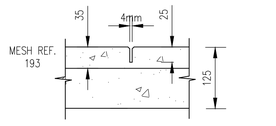

## SECTION B – B

SCALE 1 : 25




## DETAIL 1 ISOLATION JOINT

SCALE 1 : 5




## SAW CUT JOINT DETAIL

SCALE 1 : 5

NOTES: REINFORCING

1. REINFORCEMENT SHALL BE CHECKED BY THE ENGINEER ONLY AFTER IT HAS BEEN COMPLETELY FIXED IN POSITION, FORMWORK IS CLEAN, SPACERS ARE PLACED IN POSITION AND AFTER THE CONTRACTOR HAS CERTIFIED IT CORRECT.
2. THE MINIMUM CONCRETE COVER TO MAIN REINFORCEMENT SHALL BE:
   R.C. SLABS 30mm
   R.C. FOUNDATION 50mm
3. WELDING OF REINFORCEMENT IS NOT ALLOWED, UNLESS APPROVED BY THE ENGINEER IN WRITING.

| | |
|---|---|
| T | TOP STEEL |
| T1 | 1st LAYER OF STEEL FROM THE TOP |
| B | BOTTOM STEEL |
| B1 | 1st LAYER OF STEEL FROM THE BOTTOM |
| B2 | 2nd LAYER OF STEEL FROM THE BOTTOM |
| T2 | 2ND LAYER OF STEEL FROM THE TOP |
| E.S | EACH SIDE |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT
Name: X NXUMALO, Pr Eng
Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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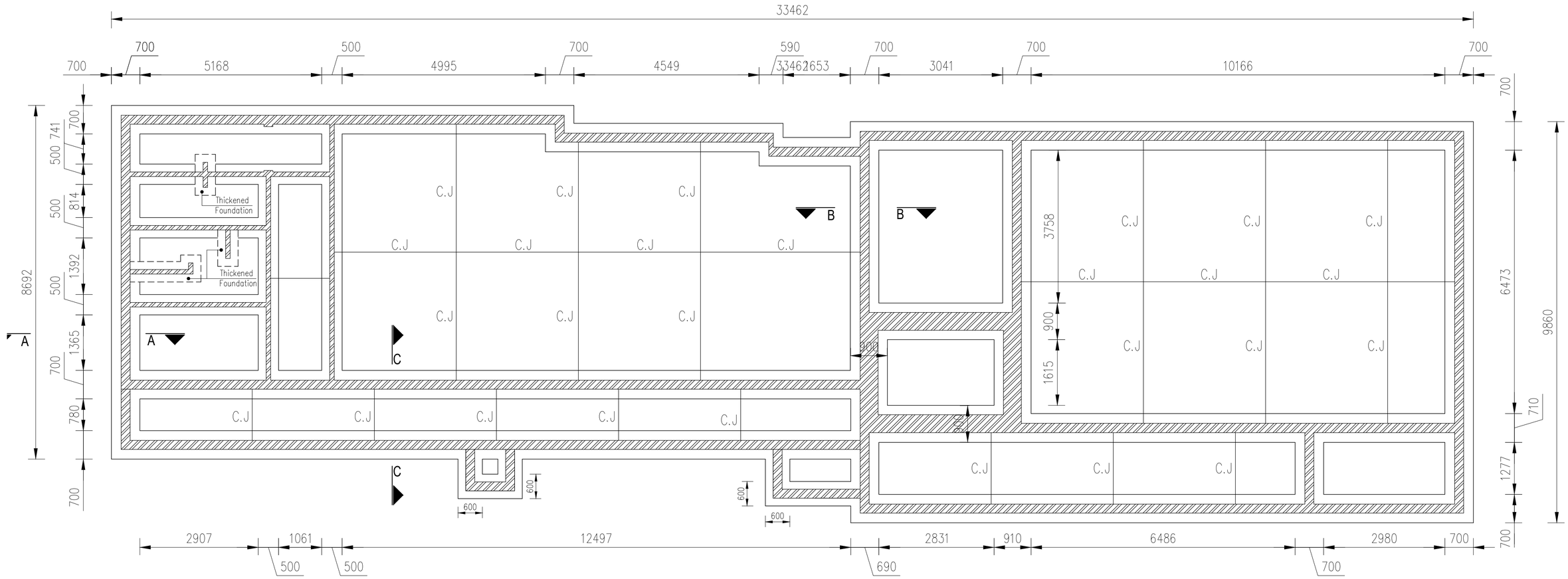
PROJECT TLALE PRIMARY SCHOOL

GUARD HOUSE

STRIP FOUNDATION LAYOUT
CONCRETE & REINFORCING DETAILING
PLAN VIEW, SECTIONS & DETAILS

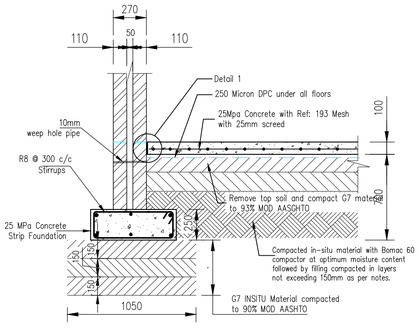
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|---|---|
| DRAWN: P. ZUMA | DATE: 19/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/004 | REVISION A |
| | SHEET 1 |

STAMPED BY PLANS APPROVAL COMMITEE



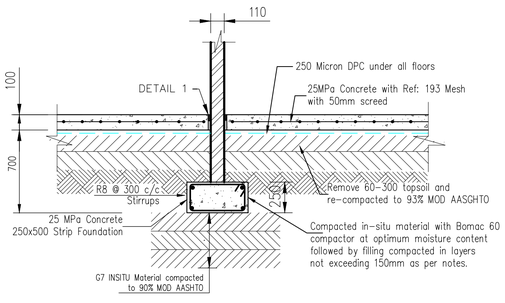

## STRIP FOUNDATION – CONCRETE LAYOUT

SCALE 1 : 50



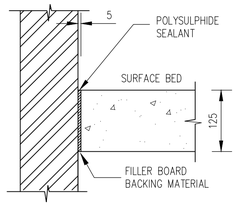

## SECTION A – A

SCALE 1 : 25



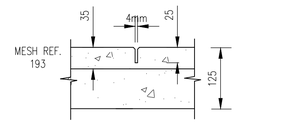

## SECTION B – B

SCALE 1 : 25




## DETAIL 1 ISOLATION JOINT

SCALE 1 : 5




## SAW CUT JOINT DETAIL

SCALE 1 : 5

PROJECT CONSTRUCTION NOTES

1. ALL STRUCTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, ENGINEERS AND SERVICES DRAWINGS AS WELL AS THE SPECIFICATIONS.
2. ANY DISCREPANCIES AND AMBIGUITIES ON THE ENGINEERS DRAWINGS TO BE REPORTED TO ENGINEERS IMMEDIATELY BY MEANS OF AN RFI (REQUEST FOR INFORMATION).
3. OBTAIN THE ENGINEER'S WRITTEN AUTHORISATION FOR ALL AMENDMENTS PRIOR TO COMMENCEMENT OF WORK.
3. LEVELS AND DIMENSIONS TO BE CHECKED BEFORE ANY WORK COMMENCES. DIMENSIONS ARE NOT TO BE SCALED BESIDES IF THE SCALE IS SPECIFIED IN THE DRAWING.
4. GENERALLY ALL CONCRETE WORK IS TO BE IN ACCORDANCE WITH EITHER THE CONTRACT SPECIFICATIONS, SANS 1200 STANDARD SPECIFICATIONS.
5. THE CONTRACTOR IS TO LOCATE AND IDENTIFY EXISTING SERVICES ON SITE AND TO PROTECT THEM THROUGHOUT THE DURATION OF THE WORKS.
6. THE CONTRACTOR SHALL OBSERVE PROPER AND ADEQUATE SITE SAFETY PRECAUTIONS ALWAYS.
7. ALL WATERPROOFING DETAILS TO ARCHITECT'S SPECIFICATIONS.

EARTHWORKS

1. EARTHWORKS TO BE IN ACCORDANCE WITH SANS 2001–BE1
2. STOCKPILE MATERIAL ONLY IN APPROVED LOCATIONS ON SITE OR AS INDICATED ON THE RELEVANT DRAWINGS.
3. APPROVED SELECTED COHESIONLESS BACKFILL AROUND COLUMNS AND WALLS, ABOVE BASES AND BENEATH SURFACE BEDS, MUST BE COMPACTED TO A MINIMUM DENSITY OF 98% MOD. AASHTO IN LAYERS NOT EXCEEDING 150mm THICK UNLESS NOTED OTHERWISE.

CONCRETE

1. CONCRETE, FORMWORK & REINFORCEMENT TO BE IN ACCORDANCE WITH SANS 2001 CC1 & 2
2. CEMENT TO COMPLY WITH THE REQUIREMENTS OF SANS 50197–1. USE CEM1 42.5.
3. THE REQUIRED MINIMUM CHARACTERISTIC CONCRETE STRENGTH AT 28 DAYS (UNLESS NOTED OTHERWISE):
   - R.C. REINFORCED STRIP FOUNDATION 25 MPa
   - R.C. BASE 25 MPa
   - R.C. SLABS 25 MPa
5. THE CONTRACTOR IS TO SUBMIT HIS PROPOSED MIX DESIGNS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION COMMENCEMENT.
6. UN–REINFORCED SLABS TO BE CAST IN APPROX. SQUARE PANELS WITH MAXIMUM SIDE LENGTH NOT EXCEEDING 30 TIMES THE SLAB THICKNESS U.O.N.
7. ALL MOVEMENT JOINTS ON SURFACE BEDS TO BE 12MM WIDE, FORMED BY GLUING AN APPROVED CLOSED CELL EXPANDED POLYETHYLENE JOINT FILLER TO 1ST CAST CONCRETE. JOINT SEALING TO ARCHITECT'S SPECS.
9. ALL BASES ARE LOCATED CENTRALLY UNDERNEATH COLUMNS UNLESS OTHERWISE SHOWN.
10. FINAL FOUNDING LEVELS OF STRIP FOOTINGS & BASES BE CONFIRMED ON SITE BY ENGINEER.
11. MINIMUM CONCRETE COVER TO ANY REINFORCING BAR, INCLUDING LINKS, TO BE AS TABULATED BELOW UNLESS NOTED OTHERWISE:
    - CONCRETE IN CONTACT WITH THE GROUND 50mm
    - SLAB SURFACES: EXTERNAL, UNSCREEDED 30mm
12. PROVIDE 25x25mm CHAMFERS TO EXPOSED CONCRETE CORNERS UNLESS OTHERWISE NOTED.
14. STANDARD OF CONCRETE FINISH TO BE TO ARCHITECT'S SPECIFICATIONS.
8. NO CONDUITS, PIPES OR ELECTRICAL OR MECHANICAL EQUIPMENT SHALL BE CAST INTO CONCRETE UNLESS INDICATED ON DRAWINGS, DETAILED IN SPECIFICATIONS OR APPROVED BY THE ENGINEER.
9. ALL CONCRETE TO BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS AFTER FINAL SET OF CONCRETE. THE ENGINEER MAY ADJUST THE CURING PERIOD SUBJECT TO WEATHER.
10. SHUTTER REMOVAL & PROPPING PROCEDURES MAY BE SUBJECT TO APPROVAL BY ENGINEER. STRIPPING OF SHUTTERING CAN TAKE PLACE AFTER 14 DAYS, UNLESS OTHERWISE INDICATED. BACK PROP TO BE IN PLACE FOR A MINIMUM OF 28 DAYS.

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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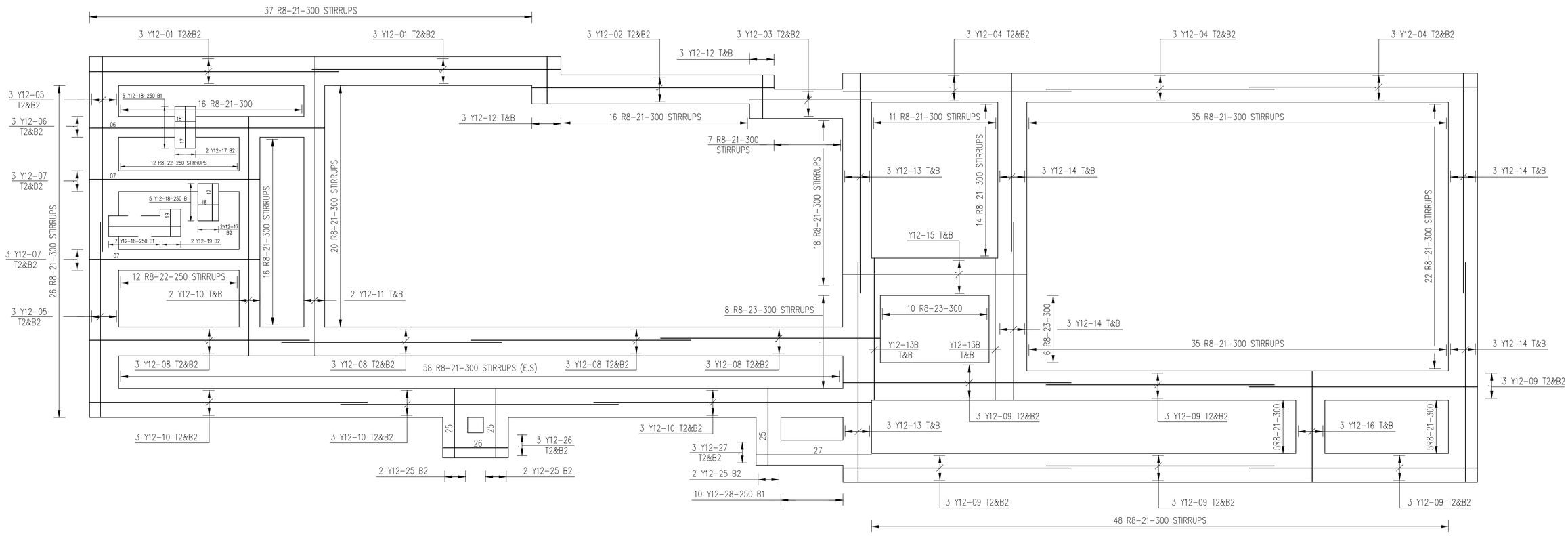
PROJECT TLALE PRIMARY SCHOOL

LIBRARY & COMPUTER BLOCK

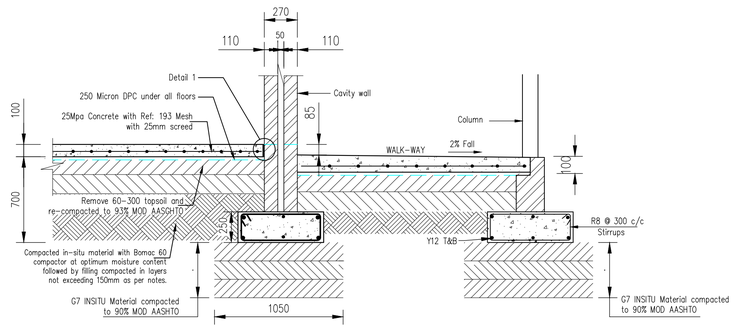
STRIP FOUNDATION
CONCRETE LAYOUT
PLAN VIEW, SECTIONS & DETAILS

DRAWN: P. ZUMA DATE: 19/11/2024
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/005 REVISION A
SHEET 1
STAMPED BY PLANS APPROVAL COMMITEE

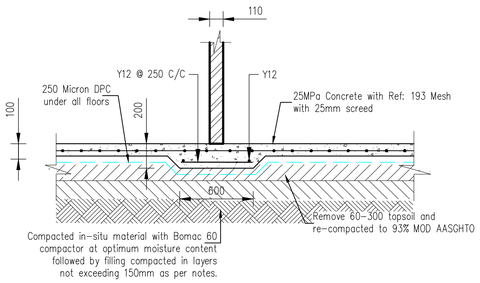
NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION



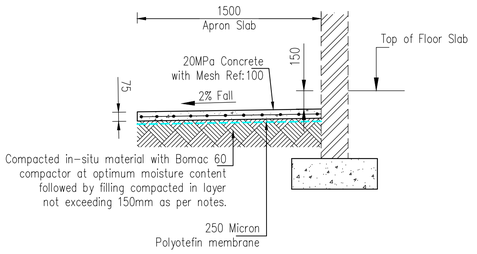

## STRIP FOUNDATION – REINFORCING LAYOUT
SCALE 1 : 50




## SECTION C – C
SCALE 1 : 25




## TYPICAL THICKENED CONCRETE
SCALE 1 : 25




## TYPICAL SECTION APRON CONCRETE SLAB

NOTES: REINFORCING

1. REINFORCEMENT SHALL BE CHECKED BY THE ENGINEER ONLY AFTER IT HAS BEEN COMPLETELY FIXED IN POSITION, FORMWORK IS CLEAN, SPACERS ARE PLACED IN POSITION AND AFTER THE CONTRACTOR HAS CERTIFIED IT CORRECT.
2. THE MINIMUM CONCRETE COVER TO MAIN REINFORCEMENT SHALL BE:

| | |
|---|---|
| R.C. SLABS | 30mm |
| R.C. FOUNDATION | 50mm |

3. WELDING OF REINFORCEMENT IS NOT ALLOWED, UNLESS APPROVED BY THE ENGINEER IN WRITING.

| | |
|---|---|
| T | TOP STEEL |
| T1 | 1st LAYER OF STEEL FROM THE TOP |
| B | BOTTOM STEEL |
| B1 | 1st LAYER OF STEEL FROM THE BOTTOM |
| B2 | 2nd LAYER OF STEEL FROM THE BOTTOM |
| T2 | 2ND LAYER OF STEEL FROM THE TOP |
| E.S | EACH SIDE |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT
Name: X NXUMALO, Pr Eng
Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

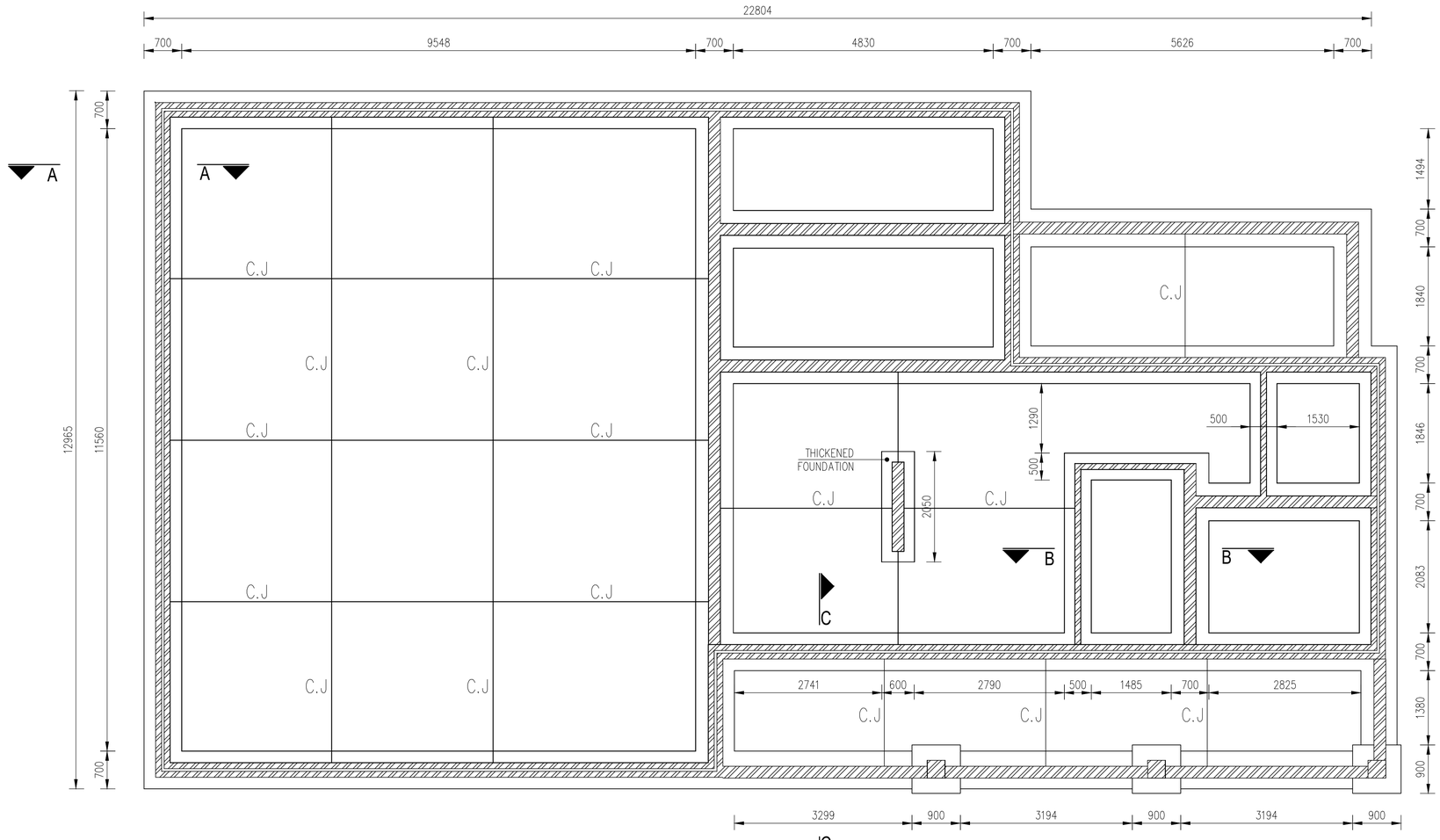
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PROJECT TLALE PRIMARY SCHOOL

LIBRARY & COMPUTER BLOCK

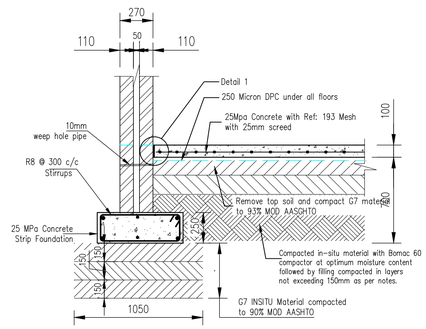
STRIP FOUNDATION LAYOUT
CONCRETE & REINFORCING DETAILING
PLAN VIEW, SECTIONS & DETAILS

| | |
|---|---|
| DRAWN: P. ZUMA | DATE: 19/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/005 | REVISION A |
| | SHEET 2 of 2 |
| STAMPED BY PLANS APPROVAL COMMITEE | |



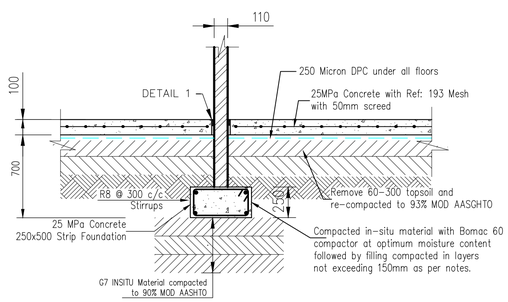

## STRIP FOUNDATION – CONCRETE LAYOUT

SCALE 1 : 50



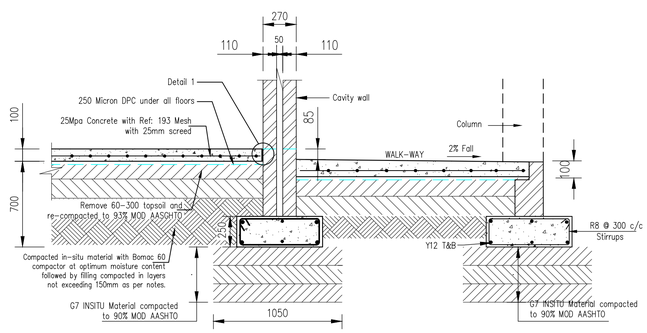

## SECTION A – A

SCALE 1 : 25



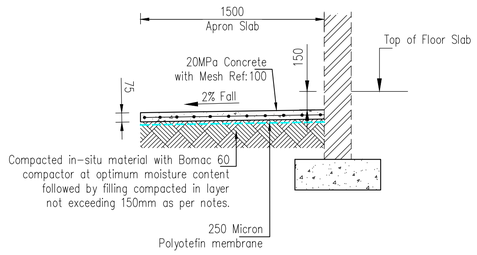

## SECTION B – B

SCALE 1 : 25

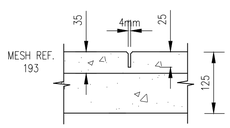



## SECTION C – C

SCALE 1 : 25

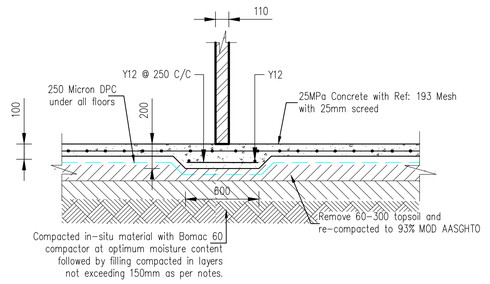



## TYPICAL SECTION APRON CONCRETE SLAB




## SAW CUT JOINT DETAIL

SCALE 1 : 5




## TYPICAL THICKENED CONCRETE

SCALE 1 : 25

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### CONCRETE

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CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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PROJECT TLALE PRIMARY SCHOOL

NUTRITION BLOCK

STRIP FOUNDATION
REINFORCING LAYOUT
PLAN VIEW, SECTIONS & DETAILS

| | |
|---|---|
| DRAWN: P. ZUMA | DATE: 19/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/006 | REVISION |
| | A |
| | SHEET 1 |

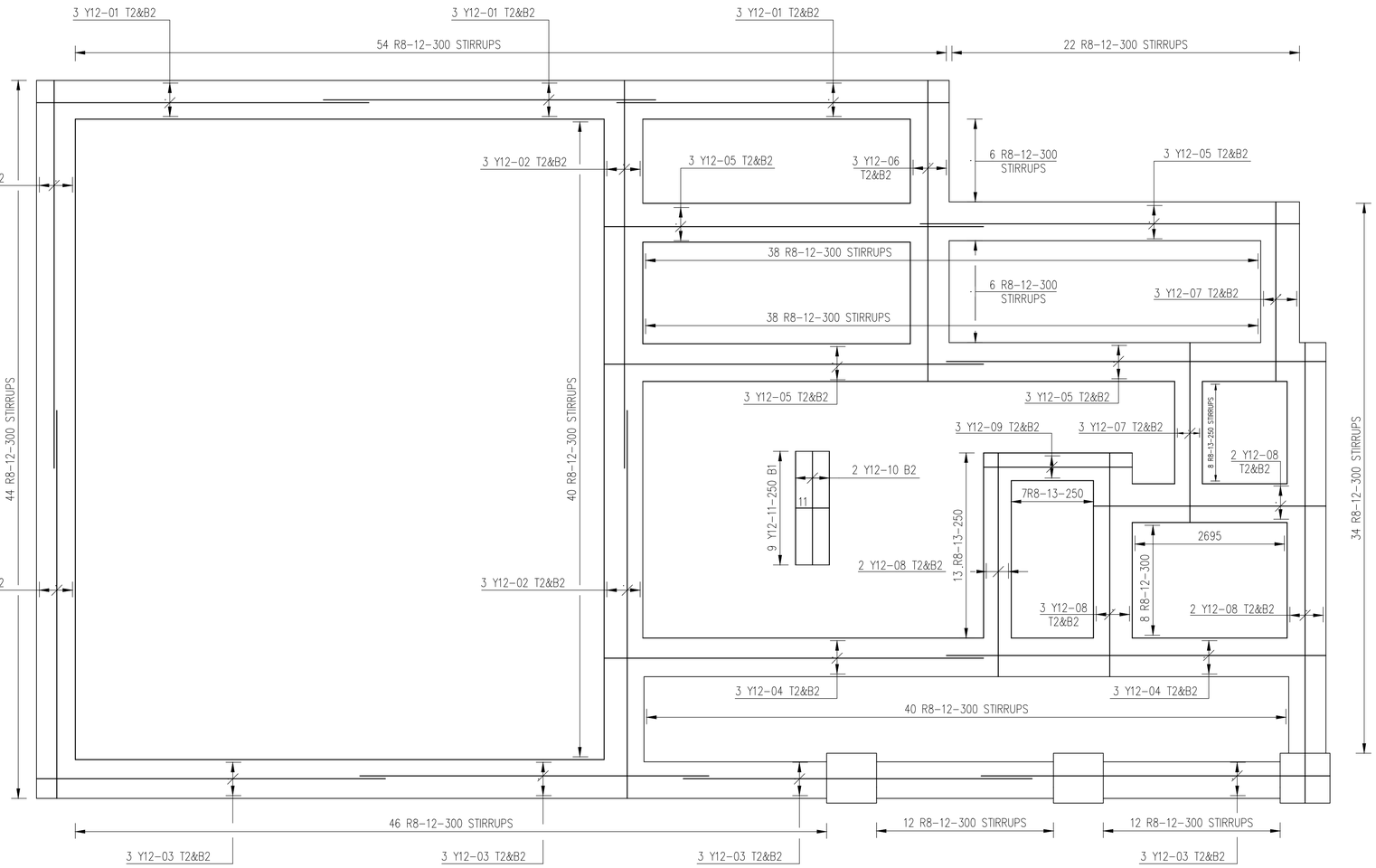
STAMPED BY PLANS APPROVAL COMMITEE

NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION

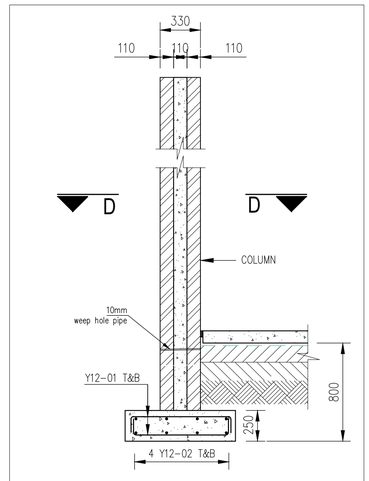
NOTES: REINFORCING

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   R.C. SLABS 30mm
   R.C. FOUNDATION 50mm
3. WELDING OF REINFORCEMENT IS NOT ALLOWED, UNLESS APPROVED BY THE ENGINEER IN WRITING.

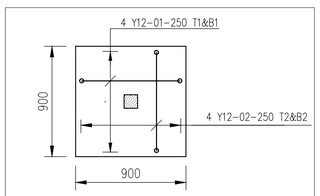
| | |
|---|---|
| T | TOP STEEL |
| T1 | 1st LAYER OF STEEL FROM THE TOP |
| B | BOTTOM STEEL |
| B1 | 1st LAYER OF STEEL FROM THE BOTTOM |
| B2 | 2nd LAYER OF STEEL FROM THE BOTTOM |
| T2 | 2ND LAYER OF STEEL FROM THE TOP |
| E.S | EACH SIDE |




STRIP FOUNDATION – REINFORCING LAYOUT
SCALE 1 : 50




TYPICAL COLUMN (3 NO. OFF)
SCALE 1 : 25




SECTION D – D
SCALE 1 : 25

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT
Name: X NXUMALO, Pr Eng
Signature: Date: 19/11/2024

GUDUNKOMO
INVESTMENTS AND CONSULTING

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PROJECT TLALE PRIMARY SCHOOL

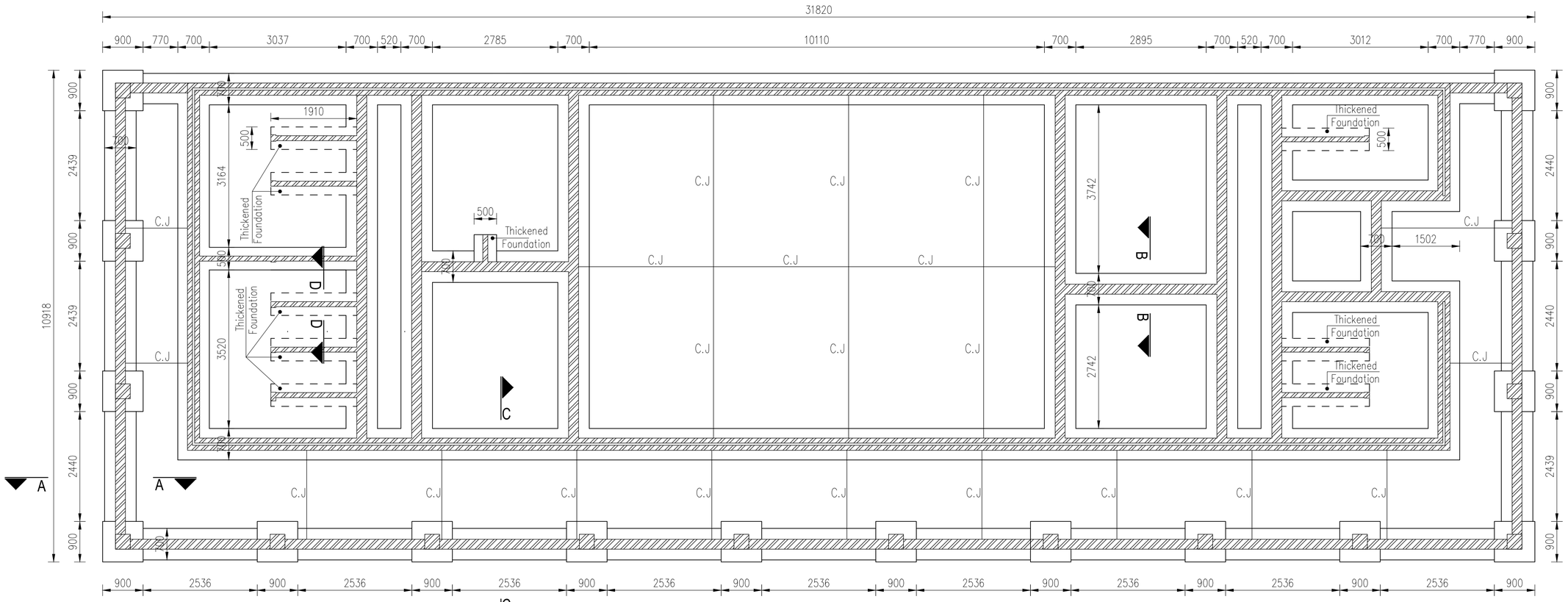
NUTRITION BLOCK

STRIP FOUNDATION LAYOUT
REINFORCING DETAILING
PLAN VIEW, SECTIONS & DETAILS

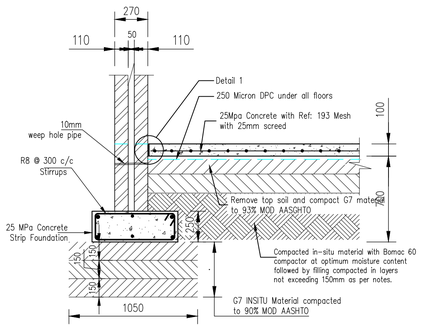
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| DRAWN: P. ZUMA | DATE: 19/11/2024 |
| SCALE/S: AS SHOWN | |
| CONSULTANT DRAWING NO: GIC/TLALE/006 | REVISION |
| | A |
| | SHEET 2 of 2 |

STAMPED BY PLANS APPROVAL COMMITEE

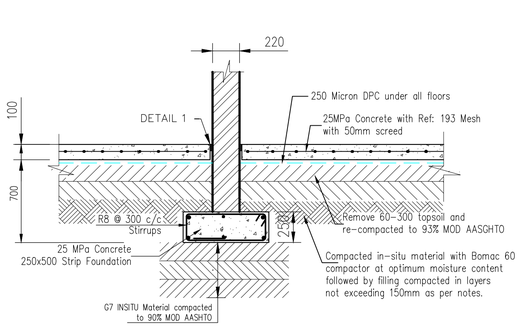
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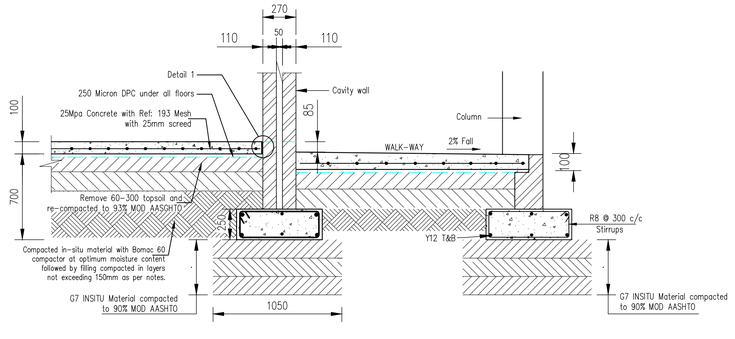

## CONCRETE FOUNDATION LAYOUT
SCALE 1 : 50



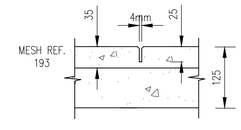

## SECTION A – A
SCALE 1 : 25



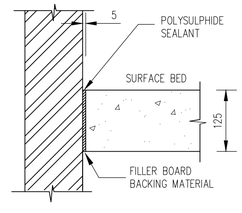

## SECTION B – B
SCALE 1 : 25




## SECTION C – C
SCALE 1 : 25




## SAW CUT JOINT DETAIL
SCALE 1 : 5




## DETAIL 1 ISOLATION JOINT
SCALE 1 : 5

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1. EARTHWORKS TO BE IN ACCORDANCE WITH SANS 2001-BE1
2. STOCKPILE MATERIAL ONLY IN APPROVED LOCATIONS ON SITE OR AS INDICATED ON THE RELEVANT DRAWINGS.
3. APPROVED SELECTED COHESIONLESS BACKFILL AROUND COLUMNS AND WALLS, ABOVE BASES AND BENEATH SURFACE BEDS, MUST BE COMPACTED TO A MINIMUM DENSITY OF 98% MOD. AASHTO IN LAYERS NOT EXCEEDING 150mm THICK UNLESS NOTED OTHERWISE.

**CONCRETE**

1. CONCRETE, FORMWORK & REINFORCEMENT TO BE IN ACCORDANCE WITH SANS 2001 CC1 & 2
2. CEMENT TO COMPLY WITH THE REQUIREMENTS OF SANS 50197-1. USE CEM1 42.5.
3. THE REQUIRED MINIMUM CHARACTERISTIC CONCRETE STRENGTH AT 28 DAYS (UNLESS NOTED OTHERWISE):
   - R.C. REINFORCED STRIP FOUNDATION 25 MPa
   - R.C. BASE 25 MPa
   - R.C. SLABS 25 MPa
5. THE CONTRACTOR IS TO SUBMIT HIS PROPOSED MIX DESIGNS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION COMMENCEMENT.
6. UN-REINFORCED SLABS TO BE CAST IN APPROX. SQUARE PANELS WITH MAXIMUM SIDE LENGTH NOT EXCEEDING 30 TIMES THE SLAB THICKNESS U.O.N.
7. ALL MOVEMENT JOINTS ON SURFACE BEDS TO BE 12MM WIDE, FORMED BY GLUING AN APPROVED CLOSED CELL EXPANDED POLYETHYLENE JOINT FILLER TO 1ST CAST CONCRETE. JOINT SEALING TO ARCHITECT'S SPECS.
9. ALL BASES ARE LOCATED CENTRALLY UNDERNEATH COLUMNS UNLESS OTHERWISE SHOWN.
10. FINAL FOUNDING LEVELS OF STRIP FOOTINGS & BASES BE CONFIRMED ON SITE BY ENGINEER.
11. MINIMUM CONCRETE COVER TO ANY REINFORCING BAR, INCLUDING LINKS, TO BE AS TABULATED BELOW UNLESS NOTED OTHERWISE:
    - CONCRETE IN CONTACT WITH THE GROUND 50mm
    - SLAB SURFACES: EXTERNAL, UNSCREEDED 30mm
12. PROVIDE 25x25mm CHAMFERS TO EXPOSED CONCRETE CORNERS UNLESS OTHERWISE NOTED.
14. STANDARD OF CONCRETE FINISH TO BE TO ARCHITECT'S SPECIFICATIONS.
8. NO CONDUITS, PIPES OR ELECTRICAL OR MECHANICAL EQUIPMENT SHALL BE CAST INTO CONCRETE UNLESS INDICATED ON DRAWINGS, DETAILED IN SPECIFICATIONS OR APPROVED BY THE ENGINEER.
9. ALL CONCRETE TO BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS AFTER FINAL SET OF CONCRETE. THE ENGINEER MAY ADJUST THE CURING PERIOD SUBJECT TO WEATHER.
10. SHUTTER REMOVAL & PROPPING PROCEDURES MAY BE SUBJECT TO APPROVAL BY ENGINEER. STRIPPING OF SHUTTERING CAN TAKE PLACE AFTER 14 DAYS, UNLESS OTHERWISE INDICATED. BACK PROP TO BE IN PLACE FOR A MINIMUM OF 28 DAYS.

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT
Name: X NXUMALO, Pr Eng
Signature: Date: 19/11/2024

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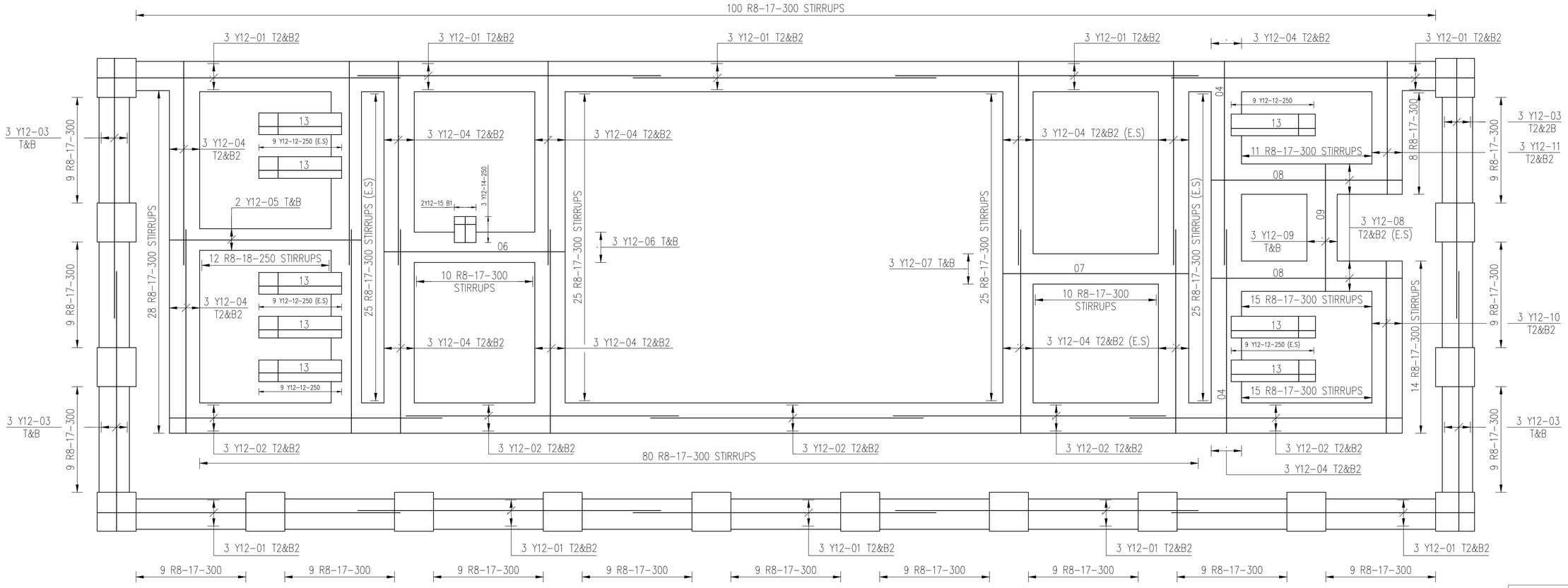
PROJECT TLALE PRIMARY SCHOOL

SCIENCE BLOCK

STRIP FOUNDATION LAYOUT
CONCRETE DETAILING
PLAN VIEW, SECTIONS & DETAILS

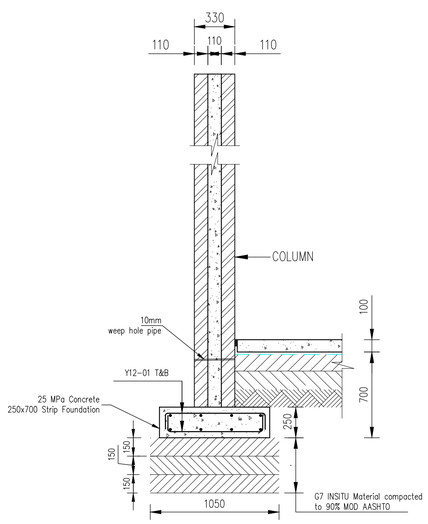
DRAWN: P. ZUMA DATE: 19/11/2024
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/007 REVISION A
SHEET 1 OF 2
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NO CONCRETE TO BE POURED PRIOR TO INSPECTION AND APPROVAL BY SUPERVISING ENGINEER
NOTE:MIN 24hrs NOTICE REQUIRED BEFORE INSPECTION



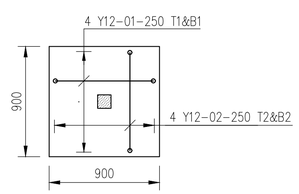

# REINFORCING FOUNDATION LAYOUT

SCALE 1 : 50




# TYPICAL COLUMN (16 NO. OFF)

SCALE 1 : 25




# PLAN VIEW ON BASE

SCALE 1 : 25

NOTES: REINFORCING

1. REINFORCEMENT SHALL BE CHECKED BY THE ENGINEER ONLY AFTER IT HAS BEEN COMPLETELY FIXED IN POSITION, FORMWORK IS CLEAN, SPACERS ARE PLACED IN POSITION AND AFTER THE CONTRACTOR HAS CERTIFIED IT CORRECT.
2. THE MINIMUM CONCRETE COVER TO MAIN REINFORCEMENT SHALL BE:
   R.C. SLABS 30mm
   R.C. FOUNDATION 50mm
3. WELDING OF REINFORCEMENT IS NOT ALLOWED, UNLESS APPROVED BY THE ENGINEER IN WRITING.

| | |
|---|---|
| T | TOP STEEL |
| T1 | 1st LAYER OF STEEL FROM THE TOP |
| B | BOTTOM STEEL |
| B1 | 1st LAYER OF STEEL FROM THE BOTTOM |
| B2 | 2nd LAYER OF STEEL FROM THE BOTTOM |
| T2 | 2ND LAYER OF STEEL FROM THE TOP |
| E.S | EACH SIDE |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

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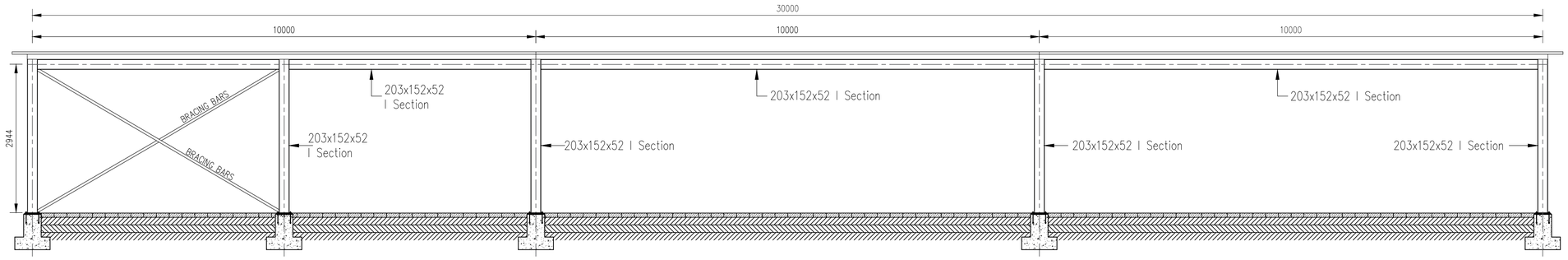
SCIENCE BLOCK

STRIP FOUNDATION LAYOUT
REINFORCING DETAILING
PLAN VIEW & SECTIONS

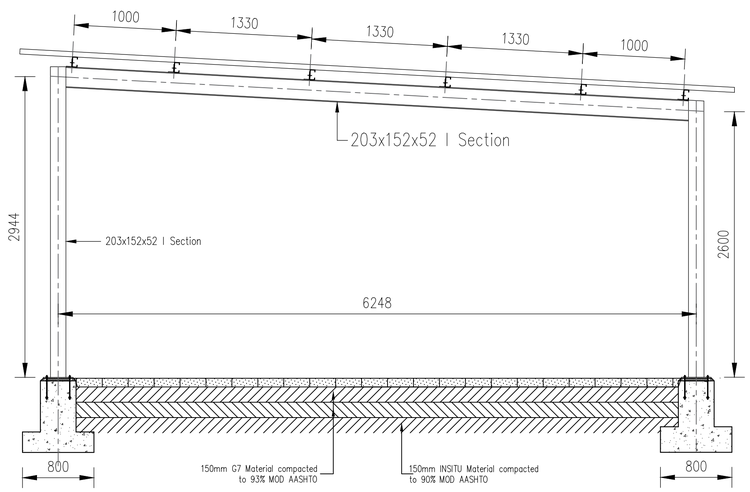
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SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/007 REVISION A
SHEET 2 OF 2
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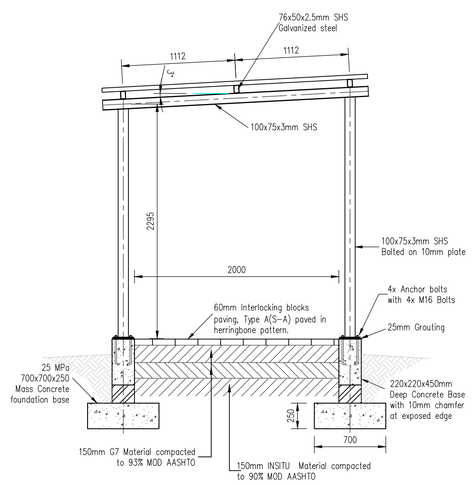

## COVERED CAR PARKING
SCALE 1 : 50




## SOUTH ELEVATION
SCALE 1 : 50




## SECTION A – A
SCALE 1 : 25




## TYPICAL SECTION – COVERED WALKWAY
SCALE 1 : 25

| REV | DATE | DESCRIPTION |
|---|---|---|
| A | 19/11/2024 | ISSUED FOR APPROVAL |
| | | |
| | | |
| | | |

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

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PROJECT TLALE PRIMARY SCHOOL

COVERED WALK-WAY

STEEL STRUCTURAL FRAME
PLAN VIEW, SECTIONS & DETAILS

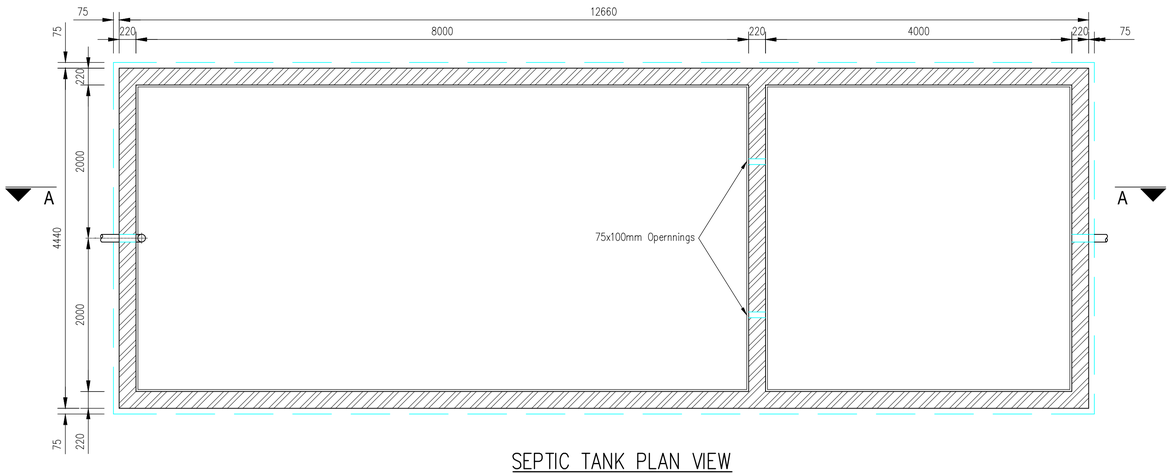
DRAWN: P. ZUMA DATE: 19/11/2024

SCALE/S: AS SHOWN

CONSULTANT DRAWING NO: GIC/TLALE/009 REVISION A

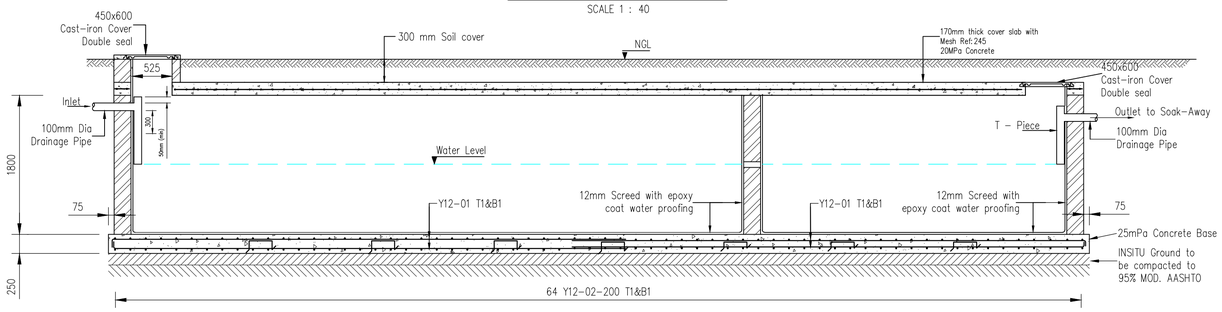
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STAMPED BY PLANS APPROVAL COMMITEE



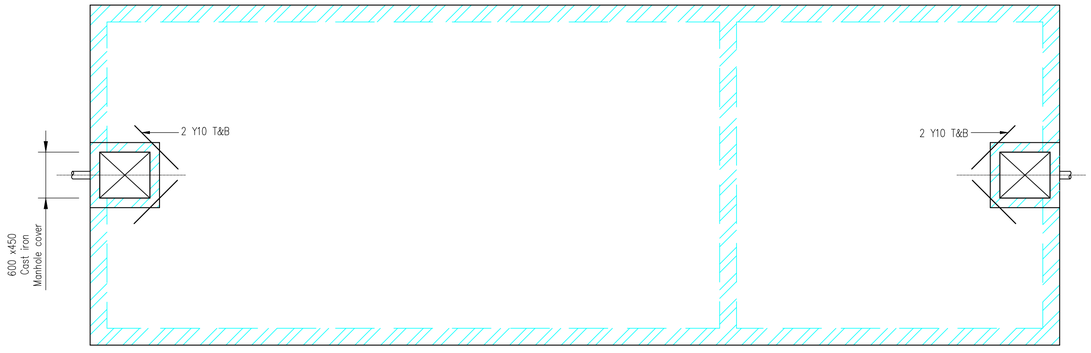

SEPTIC TANK PLAN VIEW

SCALE 1 : 40



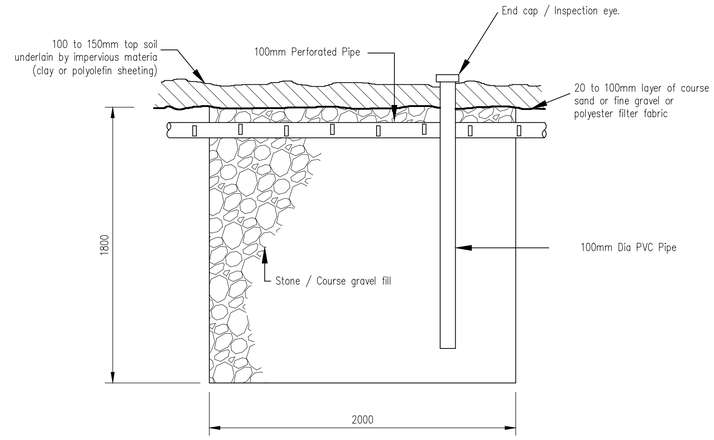

SECTION A - A

SCALE 1 : 40



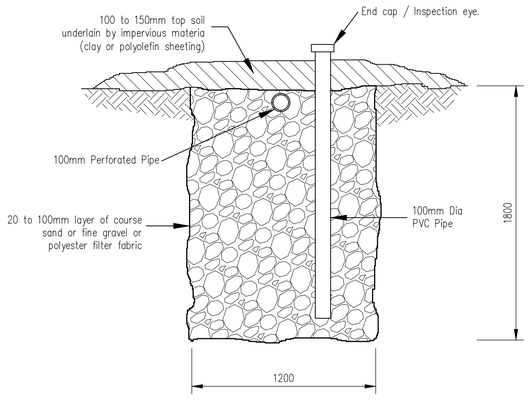

CONCRETE COVER SLAB - PLAN VIEW

SCALE 1 : 40



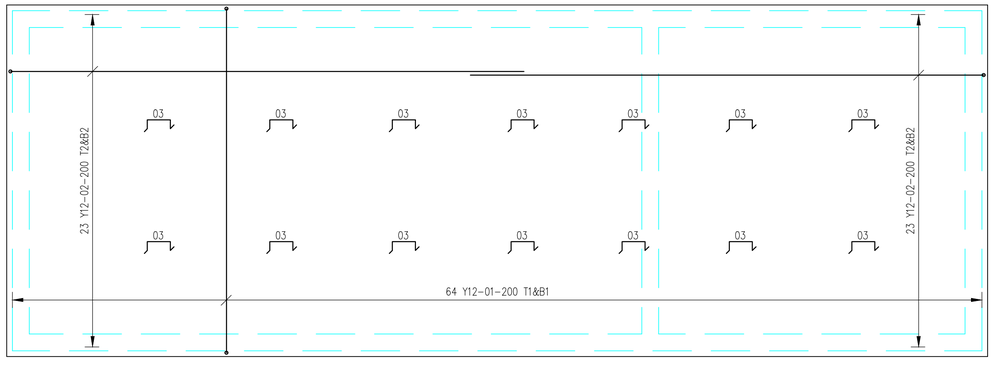

LONGITUDINAL SECTION - SOAK-AWAY TANK

SCALE 1 : 20




CROSS SECTION - SOAK-AWAY TANK

SCALE 1 : 20




FLOOR SLAB PLAN VIEW - REINFORCING

SCALE 1 : 40

| PROJECT NAME | THUTONG PRIMARY SCHOOL | | | | | | | | | | | | REVISON | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRG NO. | GIC-TNG-0010 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| STRUCTURAL MEMBER | BAR MARK | REBAR SIZE | No. OF MEMBERS | No. IN EACH | TOTAL NUMBER | CUT LENGTH mm | SHAPE CODE | DIMENSIONS A mm | B mm | C mm | D mm | E mm | SHAPE CODE | TOTAL LENGTH m |
| SEPTIC TANK | 1 | Y12 | 1 | 128 | 128 | 4800 | 35 | 4500 | | | | | | 614.4 |
| | 2 | Y12 | 1 | 92 | 92 | 6850 | 34 | 6700 | | | | | | 630.2 |
| | 3 | Y12 | 1 | 14 | 14 | 650 | 83 | 250 | 125 | 250 | | | | 9.1 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

CLIENT DEPARTMENT SIGNATURES
CLIENT DEPARTMENT STAMP

PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 16/11/2024

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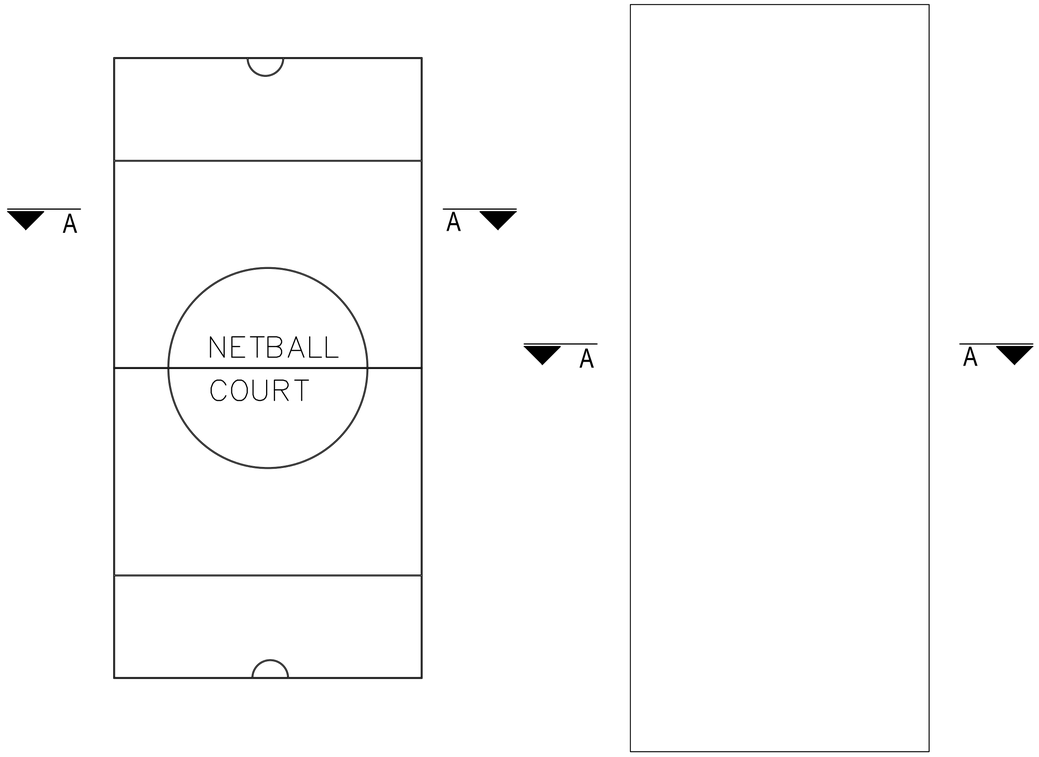
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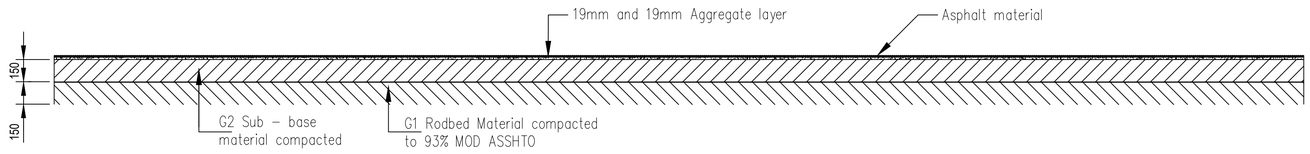
PROJECT TLALE PRIMARY SCHOOL

SEPTIC TANK

CONCRETE & REINFORCING DETAILING
PLAN VIEW, SECTIONS & DETAILS

DRAWN: P. ZUMA DATE: 19/11/2024
SCALE/S: AS SHOWN
CONSULTANT DRAWING NO: GIC/TLALE/012 REVISION A
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## COMBI COURT – CROSS SECTION A – A

NOT TO SCALE

| REV | DATE | DESCRIPTION |
|---|---|---|
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PROFESSIONAL CONSULTANT

Name: X NXUMALO, Pr Eng

Signature: Date: 19/11/2024

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PROJECT TLALE PRIMARY SCHOOL

NETBALL & COMBI COURT

CROSS SECTION

DRAWN: P. ZUMA DATE: 19/11/2024

SCALE/S: AS SHOWN

CONSULTANT DRAWING NO: GIC/TLALE/013 REVISION A

SHEET

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# ANNEXURE C

## ELECTRICAL AND MECHANICAL DRAWINGS

# TLALE PRIMARY SCHOOL

# ELECTRICAL INSTALLATION

## DETAILED TECHNICAL SPECIFICATION

# INDEX


| CLAUSE NUMBER | DESCRIPTION |
|---|---|
| | **Scope of Work** |
| 1. | General |
| 2. | Included in this sub-contract are the following: |
| 3. | Not included in this sub-contract are the following: |
| | |
| | **Detailed Technical Specification** |
| 1. | General |
| 2. | Standards |
| 3. | Operation manuals, Wiring Diagrams, Test Certificates, Catalogues of spare parts and Maintenance Instructions. |
| 4. | General Description of Building and Location |
| 5. | Design Conditions |
| 6. | Specification of Equipment |
| 7. | Commissioning |
| 8. | Maintenance |
| 9. | Schedule of Omissions and Variations |
| 10. | Sub-Letting |

**SCOPE OF WORK**

## 1.0 GENERAL

This sub-contract covers the supply, installation, testing, commissioning, and free maintenance during the guarantee period of the electrical installation as detailed in this specification and on accompanying drawings.

The Electrical Sub-contractor shall provide all materials, equipment, labour, and services necessary for the complete and efficient operation of the Electrical Installation in accordance with the intent of the specification.

The work shall be carried out in accordance with the Occupational Health and Safety Act 85 (1993) as amended, SANS Code 01420, Municipal By-Laws and Regulations and/or requirements of the Supply Authorities.

## 2.0 INCLUDED IN THIS SCOPE OF WORKS ARE THE FOLLOWING:

- The provision of the complete electrical installation, for the entire area that comprises this contract.
- Supply and installation of all cable reticulation including connection to distribution boards.
- Relocation and modification of existing distribution boards.
- Supply and installation of sub-circuit cabling and equipment where specified.
- Supply and installation of telephone conduit/trunking system including draw-wires were specified.
- Supply and installation of data conduit/trunking system including draw-wires were specified.
- Supply and installation of access control conduit/trunking including draw-wires were specified.
- Supply and install Perimeter Lighting.
- Supply and installation of Wi-Fi
- Supply and installation of Intercom Systems
- Supply and install power supply points.

## 3.0 NOT INCLUDED IN THIS SUB-CONTRACT ARE THE FOLLOWING:

- Provision of electric drive motors which form part of the supply of mechanical equipment.
- Provision of instrumentation and control equipment pertinent to the air conditioning.
- Provision of sensors and measuring equipment pertinent to the air conditioning and fire alarm systems.
- Access doors to electrical rooms and in ceilings and other concealed areas to electrical equipment.
- Grouting and patching of beams, walls, floors, and masonry work as required including repairs to plaster.
- All required openings through floors, walls, ceilings and partitions for conduits, trunkings, cables etc.

- Electrical rooms and compartments.
- Ventilation of substations and equipment rooms.
- Concrete bases and plinths for machines and equipment.
- Crawl beams.
- Supplying and installing motors.
- Guarding and protecting floor openings during time equipment is being installed.
- Supplying and installing motor starters, motor control centres, control, actuating, indicating and alarm devices and associated wiring.
- Supplying and installing electric boilers and domestic hot water heaters.
- Public and private telephone system cables, wires, connections, and instruments.
- Supply and installation of Audio-visual equipment.
- Access Control System
- Security System

**DETAILED TECHNICAL SPECIFICATION:**

**1.0 GENERAL**

1.1 All details, dimensions and instructions shown on any drawings, diagrams and specifications quoted herein shall form part of this specification.

1.2 Dimensions and design data shown on the drawings are for tendering purposes only. The drawings are not suitable for manufacturing purposes. The responsibility for dimensional accuracy remains with the sub-contractor.

1.3 Any work done by the sub-contractor without approved drawings or site instructions shall be at the sub-contractor's own risk and any changes required to conform with the contract documents shall be for the account of the sub-contractor.

**2.0 STANDARDS**

The plant must in all respects conform to the following regulations:

a) Occupational Health and Safety Act, Act 85 of 1993.
b) National Building regulations, SANS Code 0400.
c) Local municipal by-laws and regulations & regulations of the local electrical supply authority.
d) All applicable SANS specifications, or BS specifications where no SABS specification exists.
e) Mine and Industrial Regulations, Government notices.
f) Local Municipal Regulations and Ordinances.
g) Fire Department Regulations.

h) All special conditions, specifications or codes of practice specified hereinafter.

The materials and equipment covered in this Specification shall be manufactured and tested in accordance with the latest revisions of the Code of Practice for the Wiring of Premises and the relevant South African, German and International Standards and shall include some of the following standards of which reference has been made in the test:

| | | | |
|---|---|---|---|
| SANS - 55 | BS – 159 | BS - 2941 | VDE - 0660 |
| SANS - 625 | BS - 162 | BS - 3940 | IEC - 51 |
| SANS - 780 | BS - 171 | BS - 4608 | IEC - 85 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SANS | - | 784 | BS - 1433 | BS | - | 4752 | IEC - 158 |
| SANS | - | 1092 | BS - 1977 | BS | - | 5311 | IEC - 185 |
| SANS | - | 1180 | BS - 2692 | BS | - | 5419 | IEC - 186 |
| BS | - | 88 | BS - 2897 | BS | - | 5424 | IEC - 358 |
| BS | - | 89 | BS - 2898 | BS | - | 5462 | IEC - 157 |
| BS | - | 142 | BS - 3871 | DIN | - | 43700 | |
| BS | - | 158 | BS - 3938 | VDE | - | 0410 | |

Where trade names and references to catalogues are found in the specification, the intention is to set a particular standard of equipment. Where other approved equipment is specified, the sub-contractor shall obtain written approval from the Consultant or Project Manager before he / she may deviate from the specified equipment. The sub-contractor must work strictly according to this specification and shall ensure that only the best quality material is used, and that the installation is handed over as a complete working system.

COMPLIANCE WITH SPECIFICATION

The Tenderer shall provide the manufacturer with all such relevant information to enable the manufacturer to ensure that the equipment quoted is, in all respects, in accordance with the specifications and drawings.

The Engineer may, upon receipt of a direct request by a specialist manufacturer, provide the manufacturer with copies of the relevant portions of the Specification and/or drawings but this service is only in the interest of more accurate tendering, clarification of requirements and general savings in time and materials and does not relieve the Tenderer, in any way, of the responsibility for the sufficiency of the Tender.

As it is impractical to avoid all direct communication between the Engineer and specialist manufacturers it is essential that any clarification of requirements given by the Engineer that may be construed as a concession and thereby effect a reduction in cost of the equipment should be obtained from the Engineer in writing. Failure to do so could lead the Tenderer to unexpected but irrecoverable additional costs due to the strict enforcement of the Specification.

## 3.0 OPERATION MANUALS, WIRING DIAGRAMS, TEST CERTIFICATES, CATALOGUES OF SPARE PARTS AND MAINTENANCE INSTRUCTIONS.

Three copies of operation manuals, wiring diagrams, test certificates, catalogues of spare parts and maintenance instructions and a list of agents and/or suppliers must be supplied and forwarded to the Consultant or Project Manager.

The operation and maintenance manuals must adhere to the requirements as detailed in this specification.

The operation manuals must be sturdily bound in a strong hard cover. Material in the manual must be clear, legible, and well-arranged and provided with an index.

A draft copy of the above manuals must be available two weeks before first handover (practical completion) of the installation and no handover shall be considered without this copy of the manuals. The final set of complete updated manuals shall be delivered to the offices of the engineer no later than 4 weeks (1 month) after first handover.

A complete set of ‘as built’ (record drawings) shall be compiled by the sub-contractor and shall form part of the operation and maintenance manuals. The drawings shall be submitted in hard copy and electronic copy format.

## 4.0 GENERAL DESCRIPTION OF BUILDING AND LOCATION

The development is an addition of new buildings to existing Tlale Primary School in Ngaka Modiri Molema District, Northwest Province. The proposed development is the construction of new classrooms.

## 5.0 DESIGN CONDITIONS

SITE CONDITIONS AND OPERATING ENVIRONMENT

| | |
|---|---|
| Altitude above sea level | 1700m |
| Peak temperature in 24 hours | 50 C |
| Average maximum temperature in 24 hours, | 40 C |
| Minimum temperature | -5 C |
| Humidity at average maximum temperature | 40% |
| Lightning conditions | Severe - |
| Vermin | All equipment to be Vermin proof. |

## 6.0 SPECIFICATION OF EQUIPMENT

### 6.1 CONSUMER'S SAFETY EQUIPMENT

6.1.1 NOTICES:

6.1.1.1 The Sub-contractor shall supply and fit all official notices, which are to comply with the FACTORIES, MACHINERY AND BUILDING WORK ACT 1941, Regulations Part 3 Paragraph 71 and as amended up to date.

### 6.2 ELECTRICITY SERVICE CONNECTION

6.2.1 WORK BY SUPPLY AUTHORITY

6.2.1.1 No power application is required.

### 6.3 EARTHING OF BUILDING COMPLEX

The installation shall be earthed in full accordance with the South African Bureau of Standards, Code of Practice for the Wiring of Premises, SANS 0142-1, and the requirements of the local supply authority.

All hot and cold water and waste pipes are to be effectively bonded by means of copper tapes (not wire).

All light circuits shall include a 2,5mm² earth conductor run from the earth bar of the relative distribution board.

Metal lamp holders installed above wash hand basins or concrete and earth floors are to be effectively earthed.

Earthed connections from the sub-boards to the building main boards shall be as specified under "Sub Mains Runs".

Armouring of all cables shall be earthed by means of the relative cable glands and gland plates.

## 6.4 LUMINAIRES

### SUPPLY OF LUMINAIRES

6.4.1 GENERAL

All the luminaires have been indicated in the bills of quantities and their price should cover the supply and delivery to site of all luminaires which are described as accurately as possible in the schedule of luminaires and lamps. Tenderers shall also allow in the main price for taking delivery, checking, off loading, storing, assembling, installing, testing, and connecting of all luminaires.

6.4.1.1 Provide luminaires lighting equipment, components, and lamps for all lighting outlets.

6.4.1.2 Type of luminaires shall be as indicated alphanumerically on drawings herein specified.

6.4.1.3 Locations of luminaires on Electrical Drawings are diagrammatic. Verify location and spacing with Architectural Reflected Ceiling Plans and other reference data before installation. Co-ordinate space conditions with other trades before installation of fittings. Pendant mount, as approved, surface type fittings where required to meet space conditions for variance from drawings and specifications.

6.4.1.4 Refer to Architectural Finish Schedules and Details for ceiling construction and furnish accessories to suit. Luminaire catalogue numbers do not necessarily denote specific mounting accessories for type of ceilings in which fittings may be installed.

6.4.1.5 Where plaster ceilings occur, supply plaster frames for setting under work of another Contract. Direct settings and be responsible for correct location, make sure the bottom of frame is flush with finished ceiling, forming screed edge for finished plaster. Luminaires and supports shall have channel cross-section of approved gauge and shall support fixture by means of not less than two bolts each. Submit sample if directed.

6.4.1.6 Lighting in Machine Room, Duct Voids, Roof Voids, Mechanical Equipment Room, and Fan Rooms is diagrammatic, indicating type quantity and general circuiting of luminaires. Modify locations, mounting and where necessary, type to suit conditions as approved or directed.

6.4.1.7 Install all rows of luminaires accurately on straight lines unless otherwise indicated on drawings.

6.4.1.8 For weatherproof and vapour-tight installation, painted finishes of fittings and accessories shall be weatherproof enamel or galvanised and bonderized epoxy. Hangers shall be galvanised conduit with chemically resistant, weatherproof baked enamel finish.

6.4.1.9 Luminaires shall be designed to provide sufficient ventilation of the lamps and ballasts. Outdoor luminaires with vent holes shall have wire mesh screens in the vent holes and preferably filter breathers to prevent ingress of dust and dirt.

6.4.1.10 Provide approved support for each luminaire outlet.

6.4.1.11 Pendant-mounted luminaires shall be supported by framework of ceiling or form inserts in slab.

6.4.1.12 For each wall bracket type luminaire provide flanged metal stem attached to outlet box, with threaded end suitable for holding luminaire. Flanged part of luminaire stud shall be of broad base type and secured to outlet box at not less than three points.

Lamp holders shall hold lamps securely against normal vibration and maintenance handling. Provide silver plated contracts in lamp holders for the following type of lamps:

Edison- base incandescent lamps.

Lamps in all outdoor luminaires.

Quartz iodine lamps.

Reflector cones, baffles, aperture plates, diffusers and decorative elements of luminaires shall not be installed until completion of plastering, ceiling tile work, painting and the area has been cleaned.

6.4.1.13 Blemished, damaged or unsatisfactory luminaires shall be replaced in a manner satisfactory to the Architect.

6.4.1.14 Provide labour and materials if necessary for final aiming of all adjustable luminaires under the Architect's supervision. Aiming shall take place immediately before building is handed over to the Client, after regular working hours where required.

6.4.1.15 In adjustable luminaires, indicate aiming and locking devices.

6.4.1.16 In luminaires using lamps with asymmetrical beams, indicate lamp adjustment devices to assure permanent orientation of light beam unaffected by re-lamping.

6.4.1.17 All luminaires and lamps supplied under this sub-contract will be new and unused when delivered to site.

6.4.1.18 **LUMINAIRE SCHEDULE**

| Symbol | Description |
|---|---|
| A | Beka Vapourline VLN Standard Version 46W LED 4000K Neutral White |
| B | Bekarondo midi 7W LED Decorative Down Light, Specular with white trim |
| C | Bekarondo midi 15W LED Decorative Down Light, Specular with white trim |
| D | LED Panel 1200 x 600 65W LED Recessed 4000K Neutral White |
| E | Series 300 Bulkhead 21W LED 4000K |
| F | Zela Decorative Postop Luminaire 46W LED mounted on a 5m Steel Pole |

6.4.1.19 FLUSH MOUNTED FITTINGS IN SUSPENDED CEILINGS

6.4.1.19.1 LAY-IN INSERTION TYPE FLUORESCENT LIGHT FITTINGS.

Openings for light fittings will be allowed in the ceiling structure by the builder.

The electrical sub-contractor shall ensure that all luminaires are suitable for the ceiling into which they will be installed. Liaise with ceiling sub-contractor to ensure compatibility.

6.4.1.20 WALL MOUNTED LIGHT FITTINGS

The heights of the wall-mounted light fittings are given on the plans, elevations and section drawings. Where no height is shown, the outlet point shall be 2100mm above finished floor level.

## 6.5 ELECTRICAL DISTRIBUTION BOARDS

6.5.1 Doors

All distribution boards shall be supplied with lockable doors.

6.5.2 Fault Level

All sub-distribution boards to be braced to withstand symmetrical short circuit currents as indicated on the single-line diagrams. No board shall have a rating less than 5kA.

6.5.3 Labelling

All circuit breakers are to be labelled in accordance with the single line diagrams, i.e., L1, L2, P1 etc. Spareways are to be numbered.

Labelling shall be on the board cover plate directly below the circuit breakers using engraved trafolite type labels.

All distribution boards shall be provided with a typed, clearly descriptive legend card placed in protective transparent holders inside the doors. The legend card shall provide the circuit numbers in accordance with the single line diagram, and the area that the circuit feeds, eg – L1 – Office.

Provide a trafolite label on each Distribution Board indicating where it is supplied.

6.5.4 Switchgear

The switchgear design, co-ordination, discrimination, and cascading are based on the products supplied by CBI.

Tenderers are to base the tender main offer on this product as described in the distribution board schematics.

6.5.5 Spare Capacity

All distribution boards shall be loaded to not more than 70% of capacity and shall be capable of accommodating 30% additional switchgear.

## 6.6 EQUIPMENT NOT INCLUDED WITHIN THE ELECTRICAL CONTRACT

Specialist firms will be appointed as sub-contractors to the principal contractor for the supply, installation and testing of the following equipment:

- Data and Telephone Cabling
- Earthing and Lightning Protection

## 6.8 SLEEVES

All sleeves as shown and specified on the layout drawings shall be supplied and installed by others. The electrical sub-contractor shall liase with the (sub) Contractor concerned to ensure the sleeves are placed correctly. Sleeve entries into the distribution boards shall be by the electrical sub-contractor.

## 6.9 ISOLATORS

Isolators shall be of the flush and surface mounting type rating as shown on the relevant drawings.

## 6.10 GEYSERS

The electrical sub-contractor shall allow for final connection to geysers including commissioning.

## 6.11 16 AMP, 3-PIN, 250 VOLT SWITCH-SOCKET CIRCUITS

Wiring shall consist of 2 x 4,0mm² PVC conductors and 1 x 2,5mm² earth wire in 20mm diameter conduit.

Outlet boxes for switch-socket outlets shall be installed at the following height above finished floor level, measured to underside, unless otherwise specified:

a) Kitchen : 1200 mm

b) Generally, otherwise : 300mm

6.12 **CONDUITS**

All conduiting shall be PVC unless otherwise specified.

6.13 **LIGHTING CIRCUITS**

Lighting circuits shall be wired using 2 x 2.5mm² PVC Conductors and 2,5mm earth wire in 20mm diameter conduit. Wiring shall be installed neatly in trunking in the ceiling void and installed in 20mm diameter PVC conduit where light fittings are to be installed in walls or brickwork. 5A unswitched socket outlets shall be provided in the ceiling void to allow fluorescent light fittings to be plugged in. All other light fittings shall be hardwired.

6.14 **POWERSKIRTING**

Power skirting shall be 2-compartment sheet-steel and installed in the positions indicated on the layout drawings. The colour shall be to the Architect's choice. Power skirting shall be complete with separate covers, end caps, corner pieces and all other accessories. The power skirting shall be installed at floor level.

6.15 **OUTLETS FOR ELECTRONIC SERVICES INSTALLATIONS**

The Electronic Services required in this project include:

- Data and Telephone cabling,

The Electrical contactor is required to install wireways (trunking and/or conduit as specified on layout drawings) to facilitate the installation of these services. The Electrical Sub-contractor is required to provide conduit boxes with blank cover plates where outlets for these services are indicated on the electrical layout drawings. Where outlets are in powerskirting, the electrical sub-contractor shall provide blank cover plates in the powerskirting. The electrical contractor will also supply the necessary power outlets for electronic services.

6.16 **CONDUITS FOR ELECTRONIC SERVICES**

Supply and install 25mm diameter conduits complete with galvanised draw-wire positions as shown on the relevant layout drawings. Assist and point out where necessary the various conduits and draw boxes when wiring is taking place by others.

6.17 **PROVISIONAL SUMS**

Several provisional sums have been allowed in the tender summary for expenditure later at the discretion of the Engineer. The electrical sub-contractor will be required to price for items in the Provisional Sums based on rates submitted in the Schedule of Rates.

6.18 **AS-BUILT DRAWINGS**

As-built drawings shall be marked up by the electrical sub-contractor on a set of prints provided by the Electrical Consultant. The electrical sub-contractor shall also provide three maintenance manuals for the following:

(i) The entire electrical installation including full details of all luminaires, outlets, light switches, and distribution boards.

(ii) A brief description of how the electrical system operates.

6.19 **WORKS GUARANTEE**

The entire electrical installation shall be guaranteed by the electrical sub-contractor for a period of 12 months from the date of practical completion.

6.20 **BALANCING**

The entire installation shall be balanced to the satisfaction of the Supply Authority and the Consulting Engineer.

## 7.0 COMMISSIONING

### TEST DATA

For each item of plant and equipment installed within the building and contained in the list of services covered by the Operational & Maintenance Manual, copies of the following documents shall also be provided, where applicable".

- Test certificates
- Manufacturer's guarantees and warranties
- Insurance inspection reports
- Safety and fire certificates

### COMMISSIONING DATA

The results of all commissioning work and associated tests shall be given. This shall include:

- Measured data
- Measured points
- Test equipment used.
- Calibration certificate details a statement of whether design requirements were achieved.
- Tabulated data with a column for design values and another column for actual commissioned values

## 8.0 MAINTENANCE

### MAINTENANCE INSTRUCTIONS

- The manufacturer's recommendations and instructions for maintenance shall be detailed for each item of plant and equipment installed.
- Clear distinction shall be made between planned tasks (preventative maintenance) and work done on a corrective basis.
- Instructions shall be given on each of the following, as appropriate:
  - The isolation and return to service of plant and equipment.
  - Adjustments, calibration, and testing
  - Dismantling and re-assembly
  - The exchange of components and assemblies
  - Dealing with hazards which may arise during maintenance.
  - The nature of deterioration and the defects to be looked for.
  - Special tools, test equipment and ancillary services

  - Where relevant, information shall be provided detailing:
  - Any known dangers likely to arise during the disposal of specific items of plant or equipment together with the necessary precautions and safety measures.
  - Methods for safely disposing of or destroying the equipment and safety measures thereof, including packaging, insulating and fluids.
  - Sources from which further advice can be obtained.

### MAINTENANCE SCHEDULES

Maintenance Schedules shall be provided for all preventative maintenance tasks identified above. These shall be based on both manufacturers' recommendations and other authoritative sources and should include:

- Inspections
- Examinations
- Tests
- Adjustments
- Calibration
- Periodic overhaul
- Fault finding/trouble shooting – procedures for the logical diagnosis and correction of faults.
- Lubrication – a schedule of al plant requiring lubrication together with manufacturer's recommendations on the type of lubricant and the method and frequency of application. Information shall also be provided on special requirements for the handling and storage of lubricants.

Collectively, the schedules shall form a complete maintenance cycle, repeated throughout the working life of the installation.

Necessary periodic inspections and tests for insurance, local authority or supply authority purposes shall be separately identified.

# ANNEXURE A

- **ELECTRICAL DRAWINGS**

# ANNEXURE B

# - ELECTRICAL PRICED BOQ

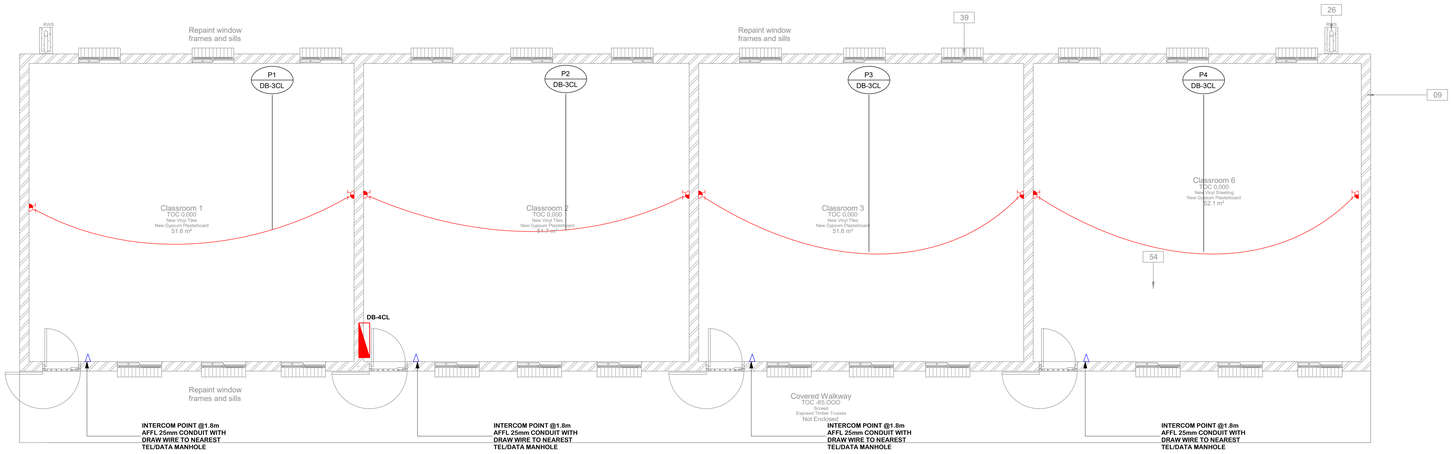
**Luminaire Schedule**
**Project Number:** **Thutong Primary School**

FOR INFORMATION PURPOSES

| Luminaire Type | Description | Possible Supplier | Position | Product Name/Code | Image | QTY Ground Floor | | | Comment |
|---|---|---|---|---|---|---|---|---|---|
| B1 | BEKA SERIES 30 BLACK 4000K 15W-FP | Beka- Schreder | Bulkhead, Outside lighting, wall mount | S31B03004150000P |  SERIES 300 LED bulkhead IP 65 21W 2,670lm | | | | |
| DL | BEKA RONDO MIDI **RECESSED** D/L 7W 4000K-FP | Beka- Schreder | entrance alley, toilets | RNMD000710001P |  BEKARONDO-MIDI Circular aluminium reflector LED downlight IP 20 Max. 15W Up to 2,100lm | | | | |
| F2 | BEKA VAPOURLINE 4FT 43WATT 4000K-FP **EMERGENCY** | Beka- Schreder | Classrooms,Offices, Store Rooms | VLNL090110000000 0P |  BEKA VAPOURLINE Industrial LED luminaire IP 65 Max. 49W Up to 8,170lm | | | | |
| G | BEKA Zela Post Top Decorative Luninaire | Beka- Schreder | Parking | |  | | | | |

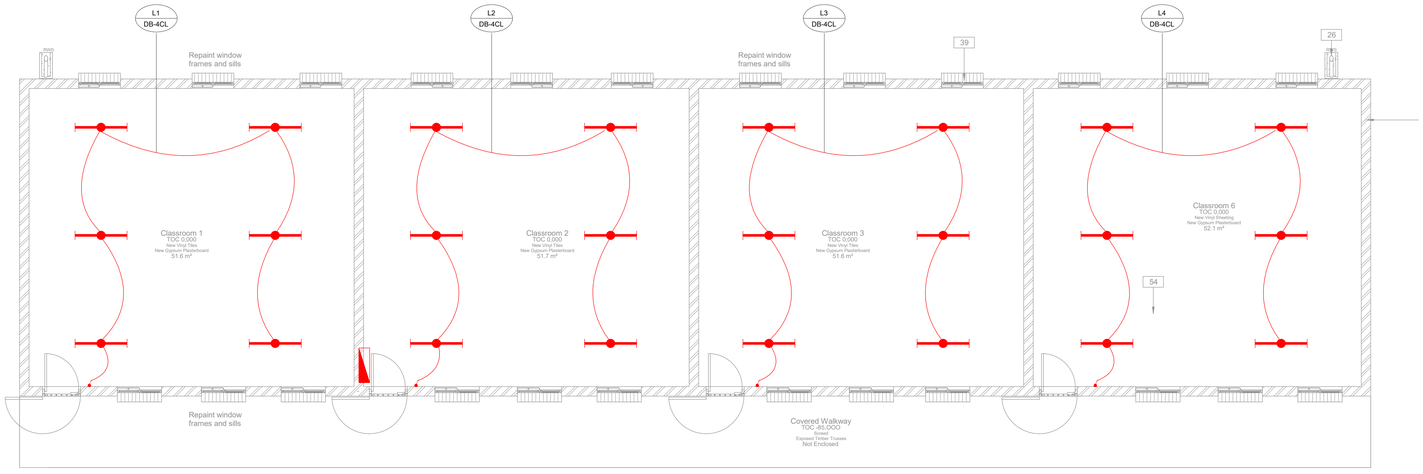
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2. WHERE DISCREPANCIES OCCUR BETWEEN THE PROJECT DRAWINGS OR SPECIFICATIONS, THESE SHOULD BE REPORTED IMMEDIATELY TO THE PRINCIPAL AGENT.
3. ALL EQUIPMENTS AND INSTALLATIONS TO COMPLY WITH SANS 10142.
4. INSTALLATION ON LIGHTNING PROTECTION TO COMPLY WITH SANS 10313 IN CONJUNCTION WITH SANS62305-1.
5. DB FLUSH MOUNTED WITH POWER SUPPLY CABLE BOTTOM ENTRY AND 20% SPARE CAPACITY, CONDUITS AND WIRES BOTTOM AND TOP EXIT.




## TLALE EXISTING 4x CLASSROOM BLOCK 2 SMALL POWER FLOOR PLAN

1 : 50




## TLALE EXISTING 4x CLASSROOM BLOCK 2 LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

- VLH LED 46W @2600mm AFF
- ADMIRAL 2X28W - MIRO 4 1200X600
- A — BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- TWO LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- 2W — SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
- O/S — OCCUPANCY SENSOR
- WALL MOUNTED LIGHT
- DISTRIBUTION BOARD

- DEDICATED DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
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- DEDICATED 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- INTERCOM POINT
- TV POINT
- DATA POINT
- HAND DRYER OUTLET
- HYDROBOIL OUTLET
- FLOOR BOX - TYPE A
- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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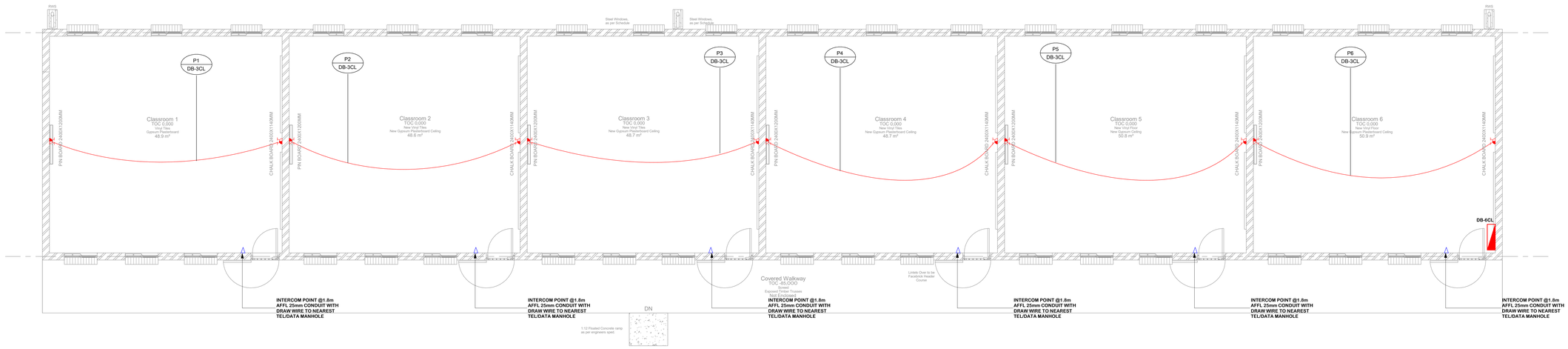
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EXISTING 4 CLASSROOM BLOCK ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE | SCALE | CHECKED BY | |
| 2024.11.15 | As indicated | S.KGOBUDI | |
| DRAWING NUMBER | EL-400-4CL2 | | |

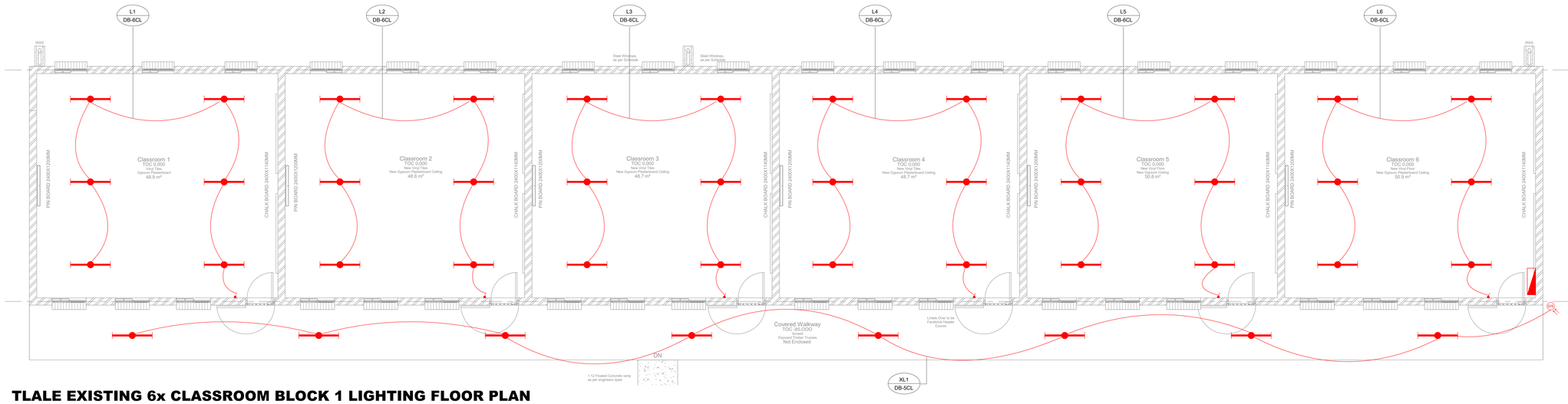
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## TLALE EXISTING 6x CLASSROOM BLOCK 1 SMALL POWER FLOOR PLAN

1 : 50




## TLALE EXISTING 6x CLASSROOM BLOCK 1 LIGHTING FLOOR PLAN

1 : 50

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- VLN LED 46W @2600mm AFI
- ADMIRAL 2X28W - MIRO 4 1200X600
- A — BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- TWO LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- 2W — SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
- OCS — OCCUPANCY SENSOR
- WALL MOUNTED LIGHT
- DISTRIBUTION BOARD

- DEDICATED DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
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- DATA POINT
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- HYDROBOIL OUTLET
- FLOOR BOX - TYPE A
- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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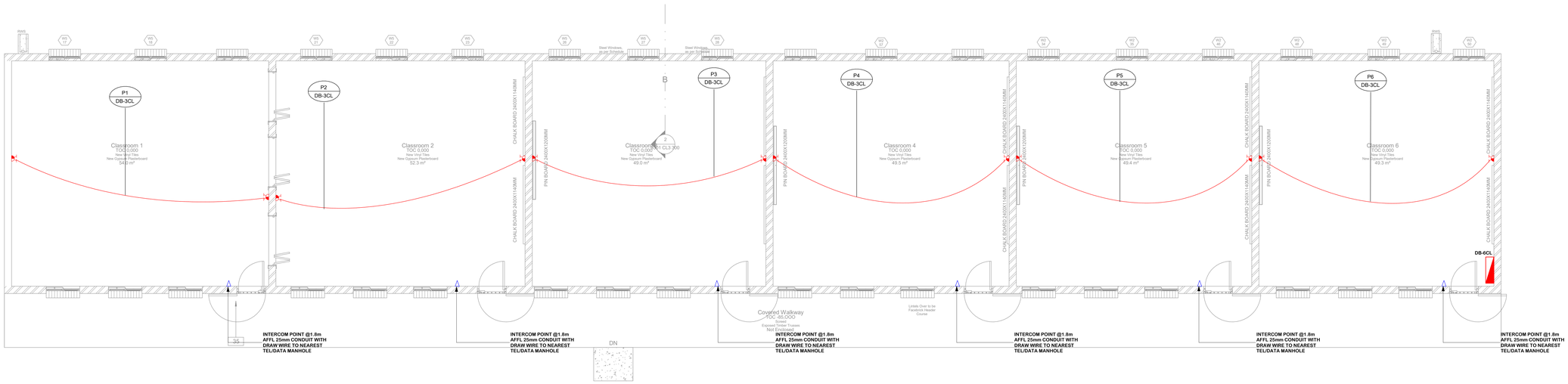
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BLOCK 1 ELECTRICAL LAYOUT

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| DESIGNED BY: S.KGOBUDI | DRAWN BY: M.LEBOHO | APPROVED BY: S.KGOBUDI | SHEET SIZE: A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
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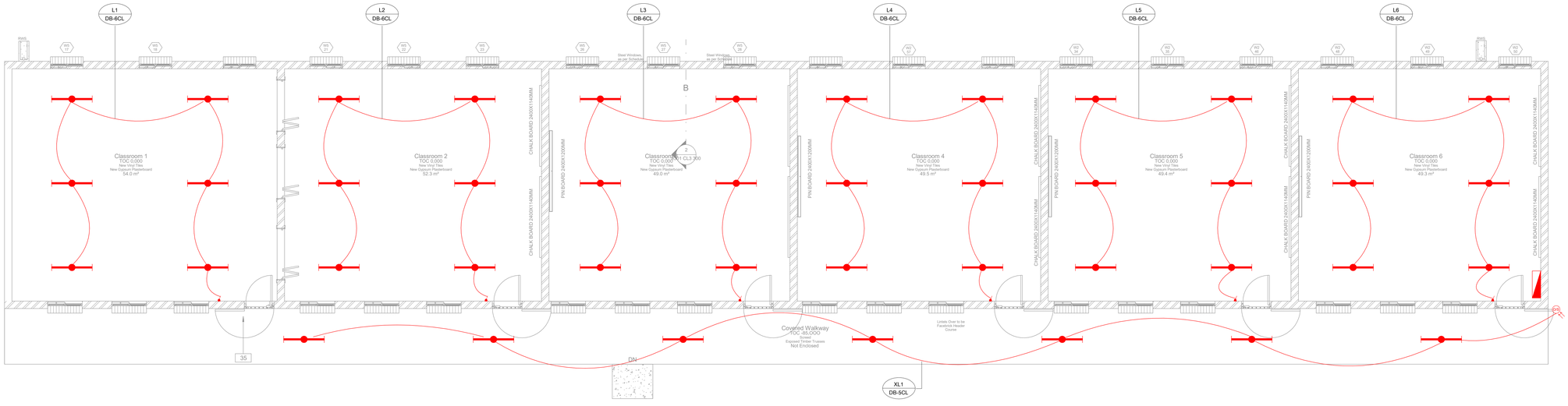
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## TLALE EXISTING 6x CLASSROOM BLOCK 3 SMALL POWER FLOOR PLAN

1 : 50




## TLALE EXISTING 6x CLASSROOM BLOCK 3 LIGHTING FLOOR PLAN

1 : 50

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- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
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- 2W SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
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- WALL MOUNTED LIGHT
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- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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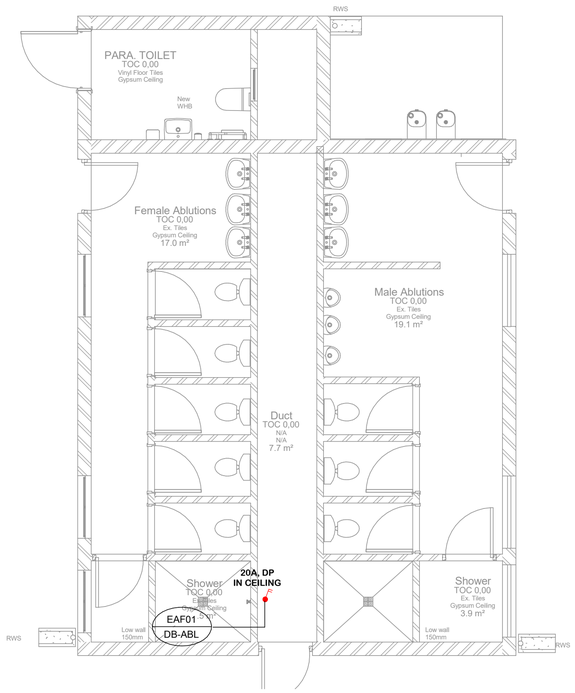
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BLOCK 3 ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
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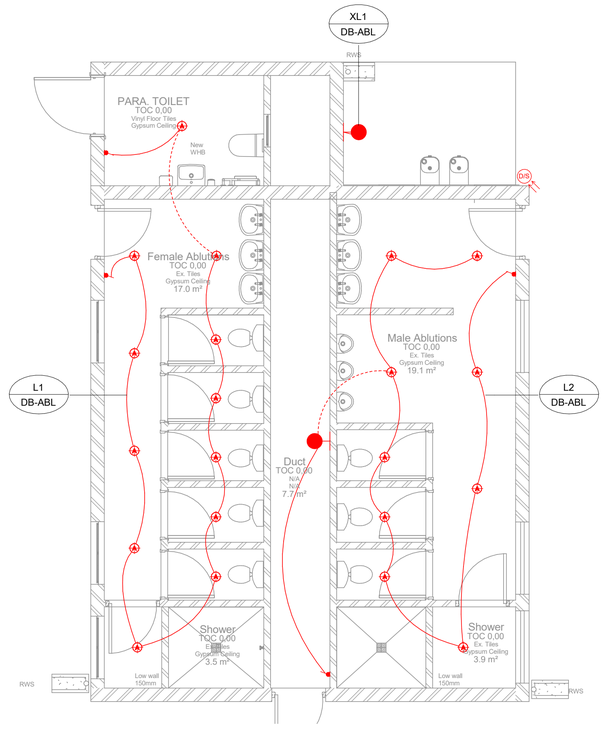
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## TLALE ABLUTION BLOCK SMALL POWER FLOOR PLAN

1 : 50




## TLALE ABLUTION BLOCK LIGHTING FLOOR PLAN

1 : 50

- VLN LED 46W @2600mm Affl
- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
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- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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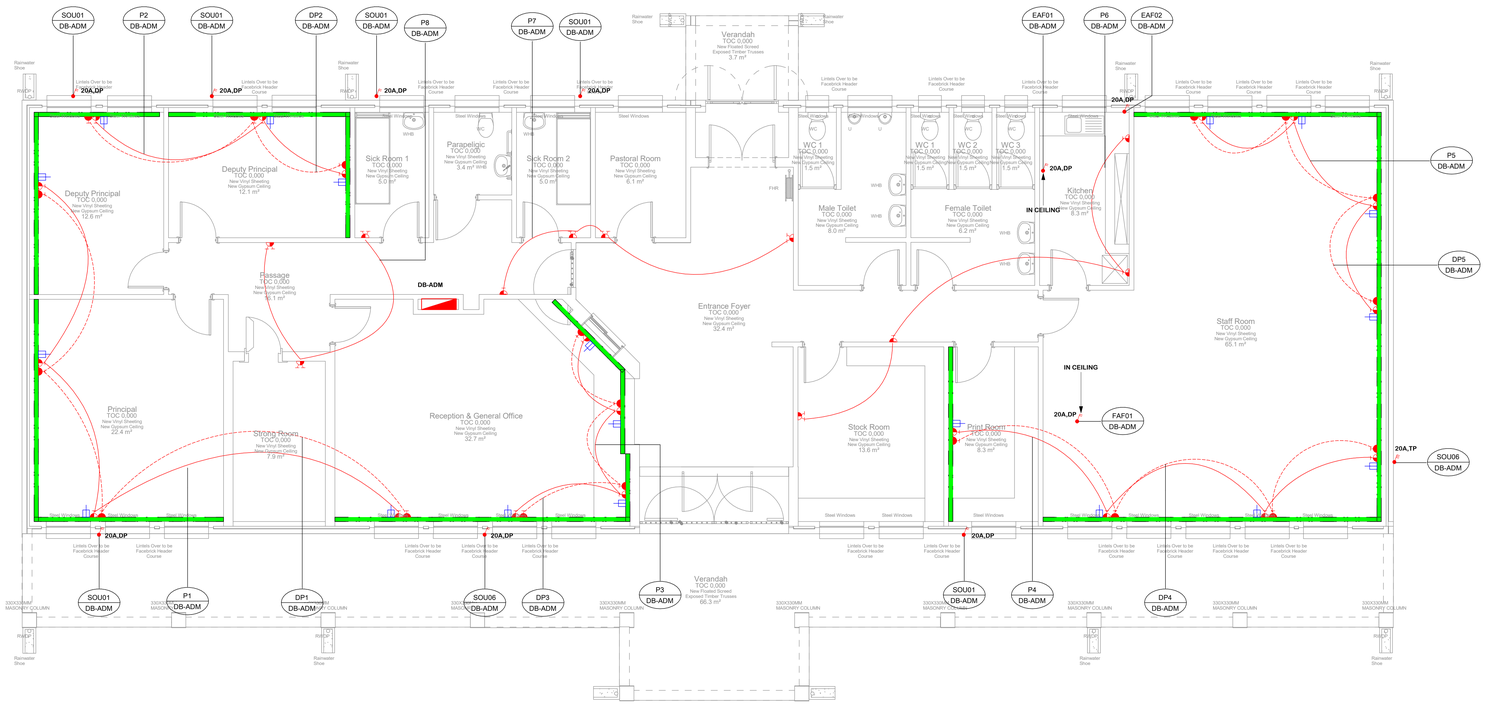
DRAWING DESCRIPTION

ABLUTION BLOCK ELECTRICAL LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **S.KGOBUDI** | DRAWN BY **M.LEBOHO** | APPROVED BY **S.KGOBUDI** | SHEET SIZE A1 |
| DATE **2024.11.15** | SCALE **As indicated** | CHECKED BY **S.KGOBUDI** | |
| DRAWING NUMBER | **EL-400-ABL-EL** | | |

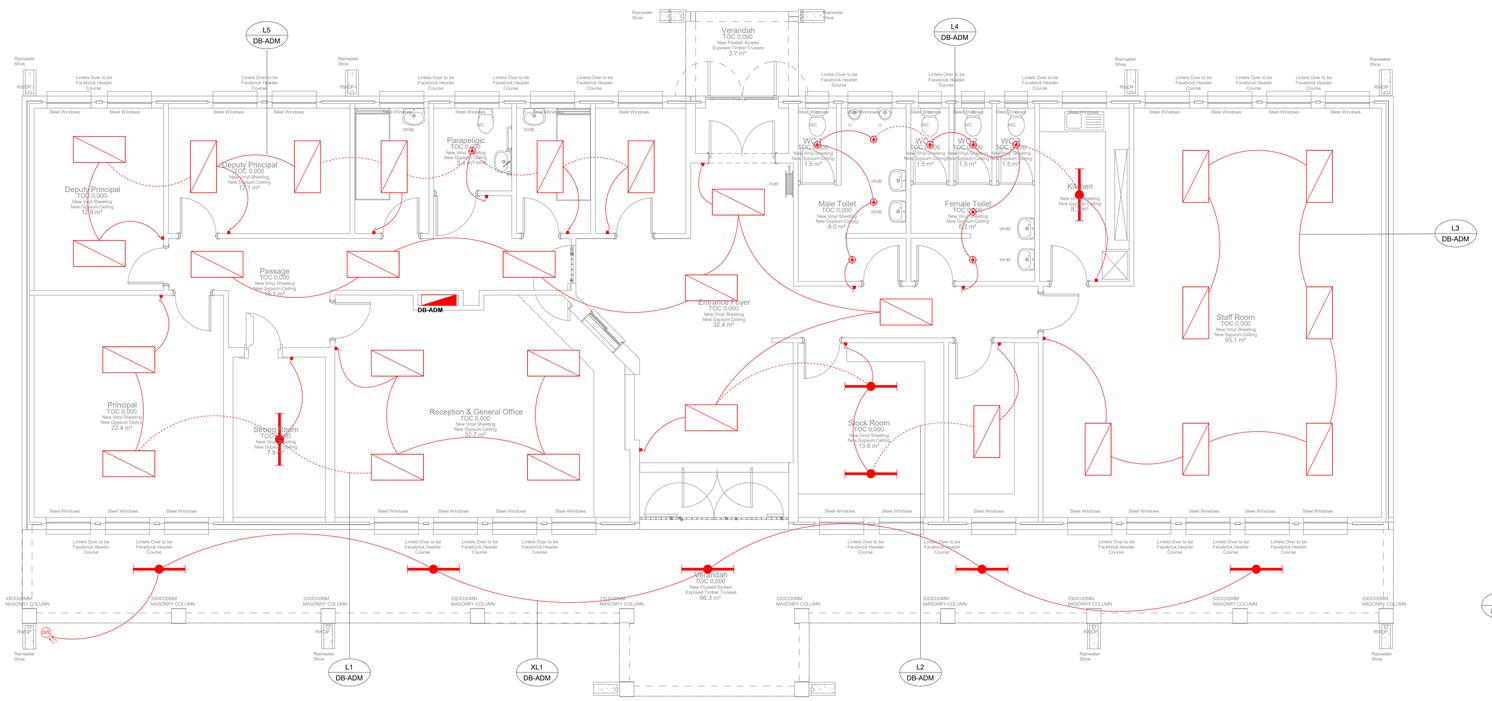
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4. INSTALLATION ON LIGHTNING PROTECTION TO COMPLY WITH SANS 10313 IN CONJUNCTION WITH SANS62305-1.
5. DB FLUSH MOUNTED WITH POWER SUPPLY CABLE BOTTOM ENTRY AND 20% SPARE CAPACITY, CONDUITS AND WIRES BOTTOM AND TOP EXIT.



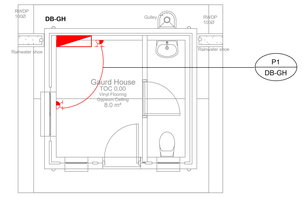

## TLALE ADMINISTRATION BLOCK SMALL POWER FLOOR PLAN

1 : 50



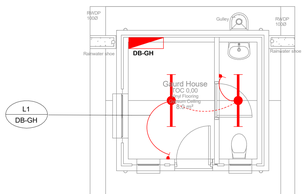

## TLALE ADMINISTRATION BLOCK LIGHTING FLOOR PLAN

1 : 50




## TLALE GUARD HOUSE SMALL POWER FLOOR PLAN

1 : 50




## TLALE GUARD HOUSE LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

- VLH LED 46W @2600mm Aff
- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- TWO LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- 2W SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
- OS OCCUPANCY SENSOR
- WALL MOUNTED LIGHT
- DISTRIBUTION BOARD

- DEDICATED DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- DEDICATED 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- INTERCOM POINT
- TV POINT
- DATA POINT
- HAND DRYER OUTLET
- HYDROBOIL OUTLET
- FLOOR BOX - TYPE A
- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.15 | M.L | ISSUED FOR INFORMATION |

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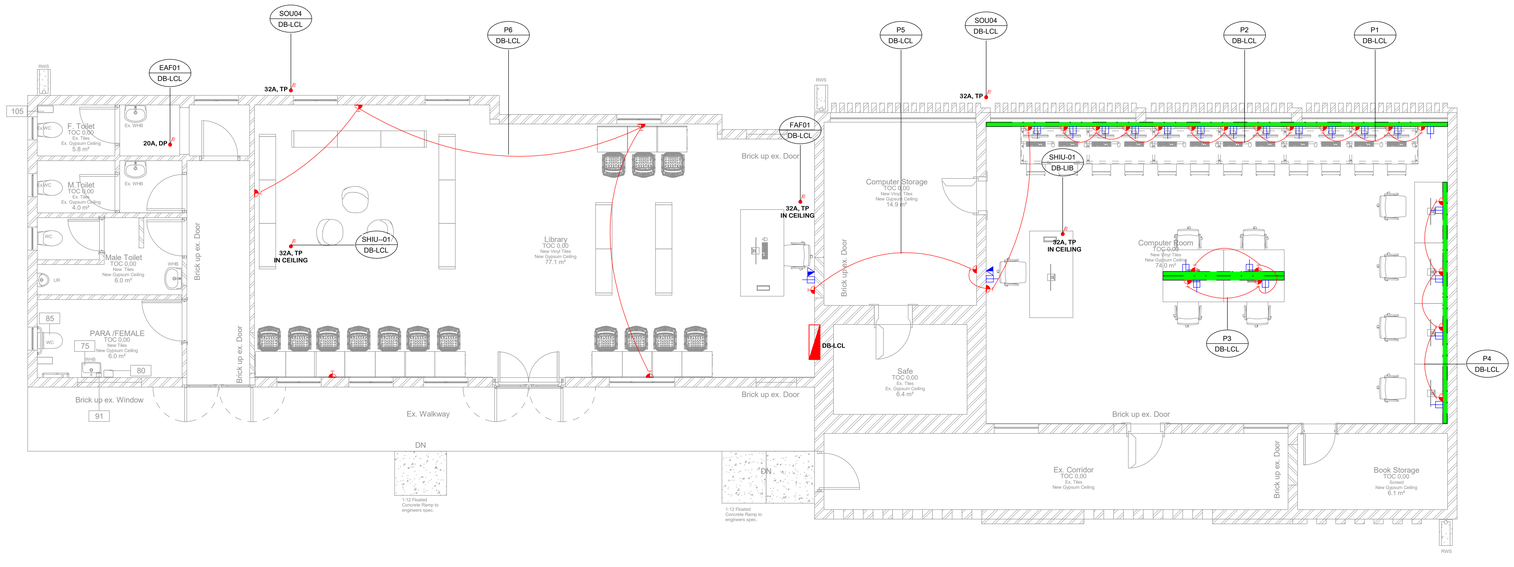
DRAWING DESCRIPTION

ADMINISTRATION & GUARD HOUSE BLOCK ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER | EL-400-ADM-EL | | |

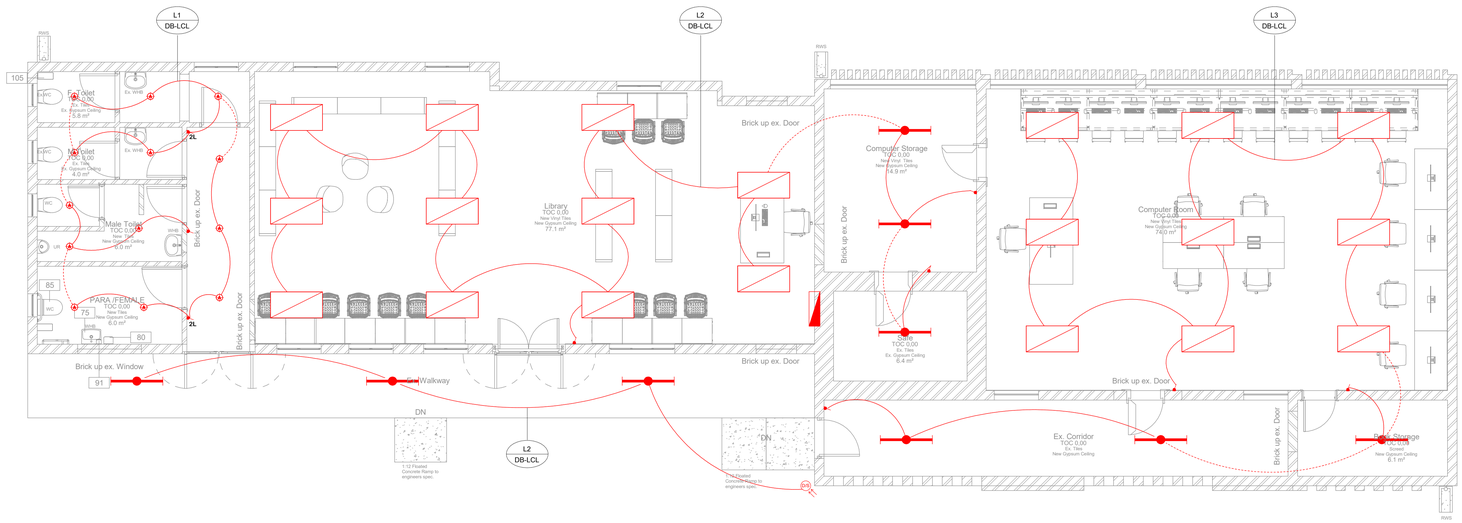
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5. DB FLUSH MOUNTED WITH POWER SUPPLY CABLE BOTTOM ENTRY AND 20% SPARE CAPACITY, CONDUITS AND WIRES BOTTOM AND TOP EXIT.




## LIBRARY AND COMPUTER LAB SMALL POWER FLOOR PLAN

1 : 50




## LIBRARY AND COMPUTER LAB LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

- VLH LED 46W @2600mm Aff
- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- TWO LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- 2W SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
- OCCUPANCY SENSOR
- WALL MOUNTED LIGHT
- DISTRIBUTION BOARD

- DEDICATED DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
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- DATA POINT
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- HYDROBOIL OUTLET
- FLOOR BOX - TYPE A
- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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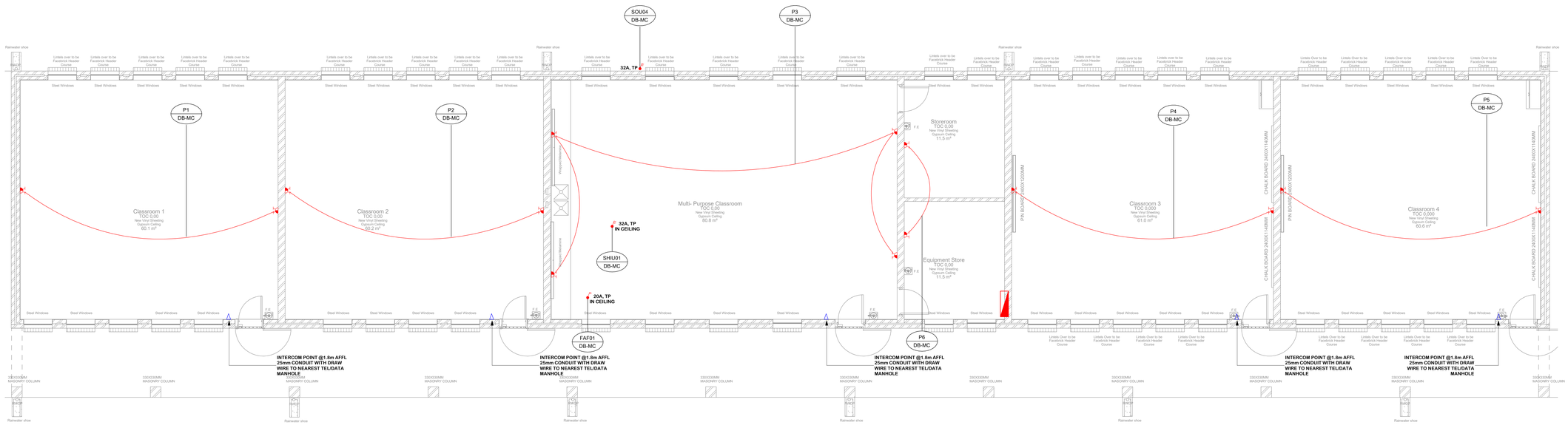
DRAWING DESCRIPTION

LIBRARY AND COMPUTER LAB
ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
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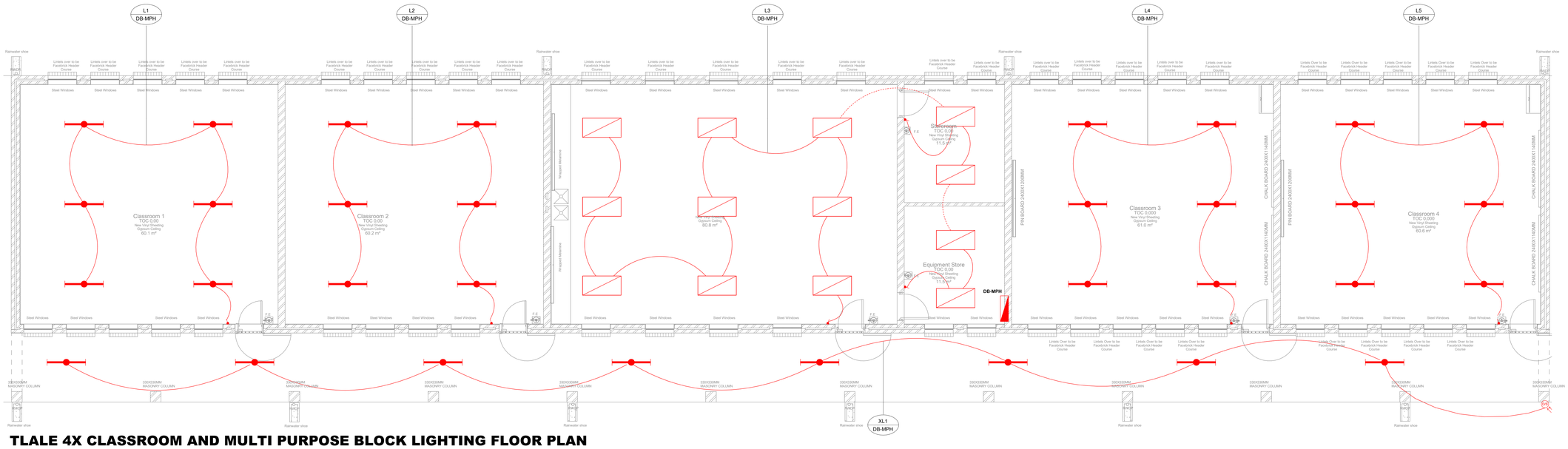
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## TLALE 4X CLASSROOM AND MULTI-PURPOSE SMALL POWER FLOOR PLAN

1 : 50




## TLALE 4X CLASSROOM AND MULTI PURPOSE BLOCK LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

- VLN LED 46W @2600mm AffI
- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
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- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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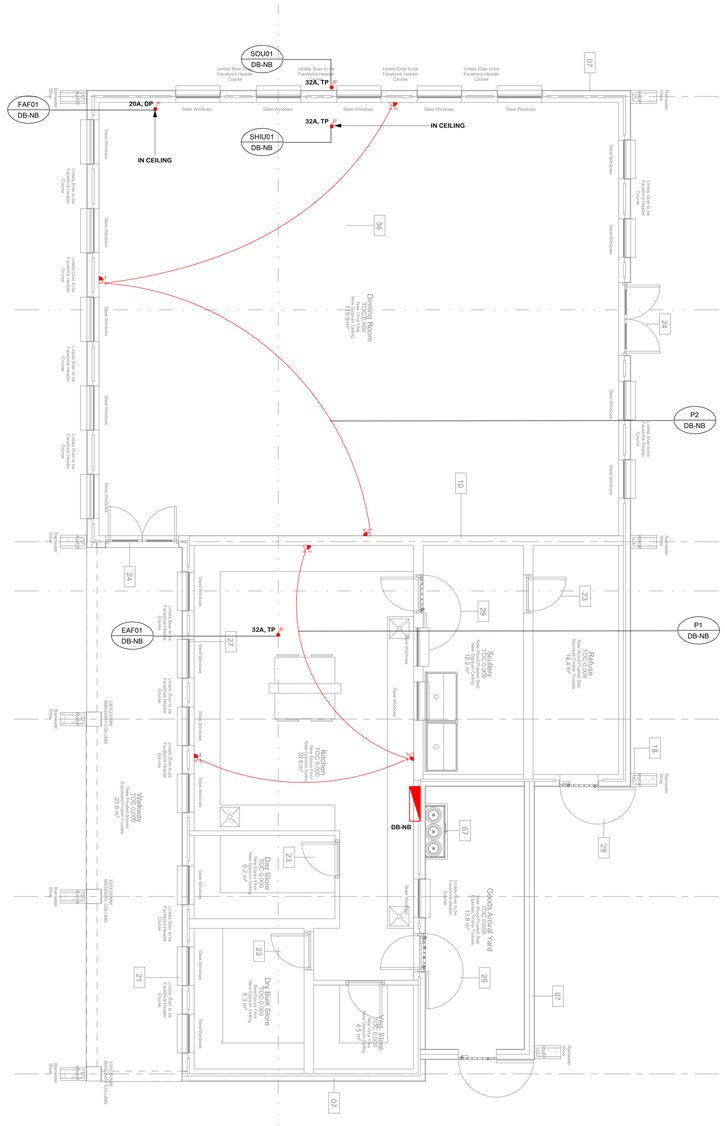
DRAWING DESCRIPTION

4x CLASSROOM &
MULTI-PURPOSE BLOCK
ELECTRICAL LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: S.KGOBUDI | DRAWN BY: M.LEBOHO | APPROVED BY: S.KGOBUDI | SHEET SIZE: A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER: EL-400-MC-EL | | | |

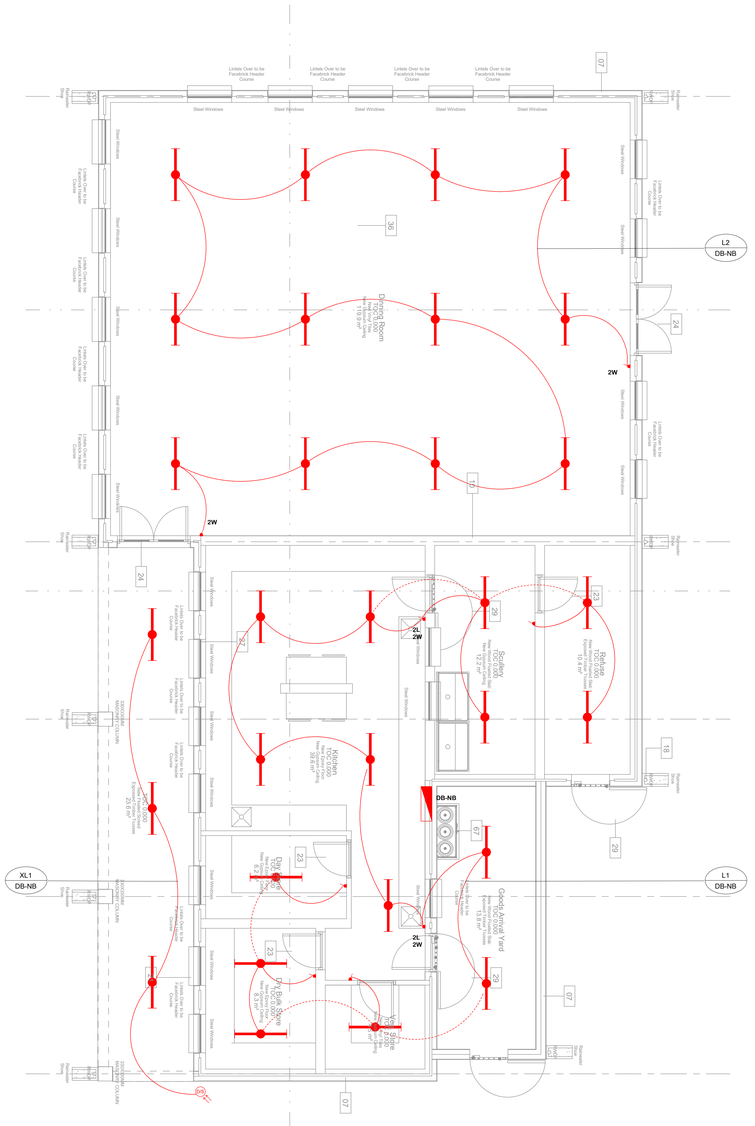
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## TLALE NUTRITION BLOCK SMALL POWER FLOOR PLAN

1 : 50




## TLALE NUTRITION BLOCK LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

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- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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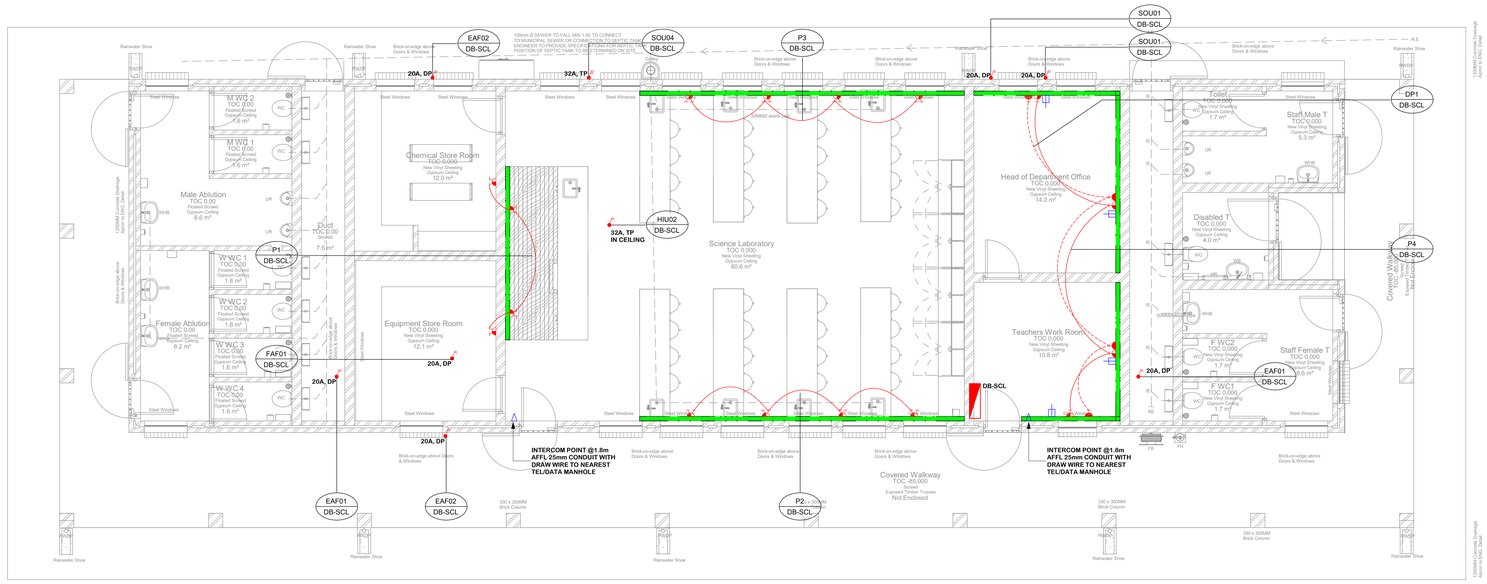
DRAWING DESCRIPTION

NUTRITION BLOCK ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.10.08 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER: EL-400-NB-EL | | | |

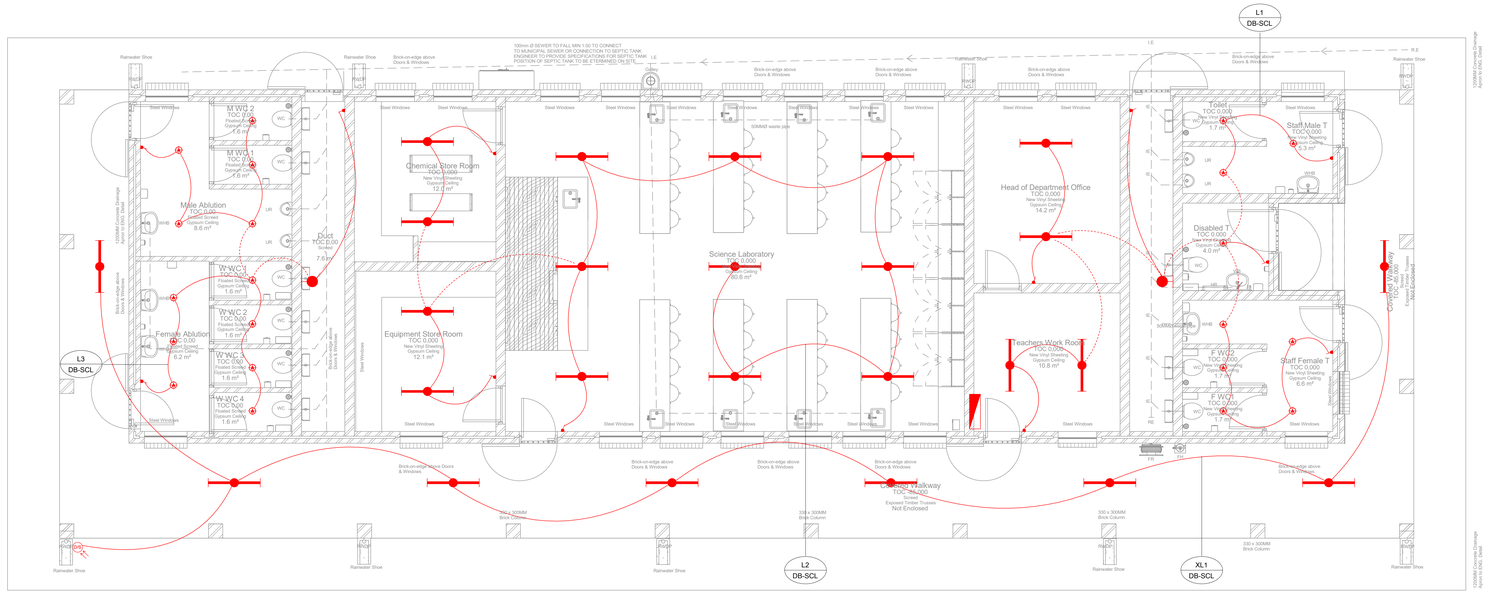
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## TLALE SCIENCE LAB BLOCK SMALL POWER FLOOR PLAN

1 : 50




## TLALE SCIENCE LAB BLOCK LIGHTING FLOOR PLAN

1 : 50

COPY RIGHT RESERVED

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- ADMIRAL 2X28W - MIRO 4 1200X600
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- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
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- 2W SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
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- WALL MOUNTED LIGHT
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- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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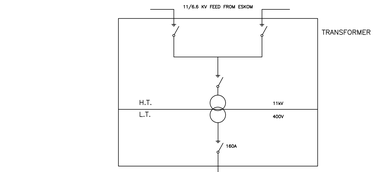
PROJECT

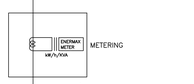
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

SCIENCE LAB ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.10.08 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER | EL-400-SCL-EL | | |

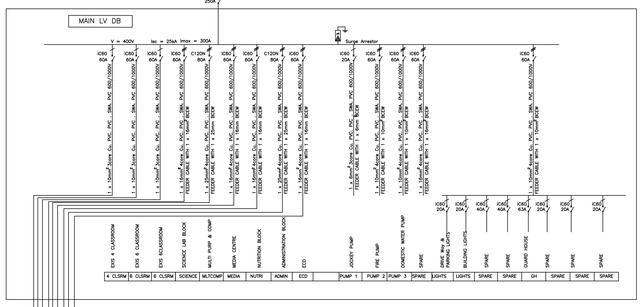


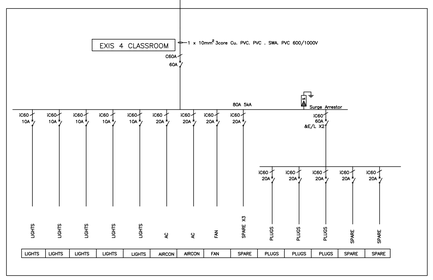

FROM TRANSFORMER 200kVA

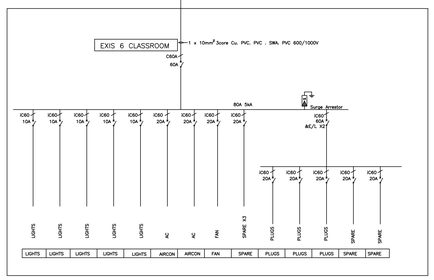
1 x 150mm² 4core Cu. PVC. PVC . SWA. PVC 600/1000V FEEDER CABLE WITH 1 x 150mm² BCEW

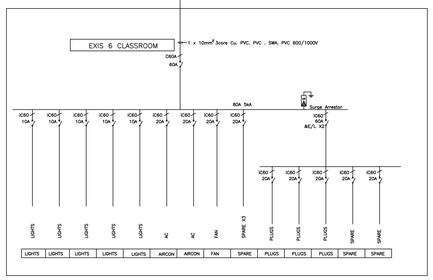
NS1400 250A

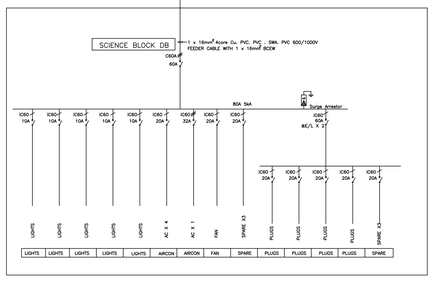


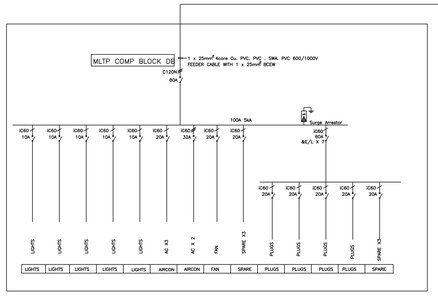

Notes for DB-Main
1. Free standing distribution board with lockable doors
2. Allow 30% spare space for future expansion
3. Colour: Frame = White
   Normal section = Traffic orange
   Emergency section = Blood red
   Lighting section = Purple
4. Maximum width = 800mm
5. Minimum depth = 400mm
6. Maximum height = 1900mm
7. Incoming and outgoing cables = Top & bottom entry
8. Equipment = Schneider

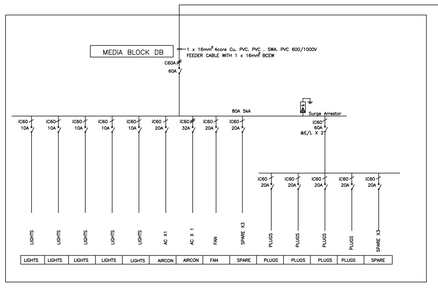


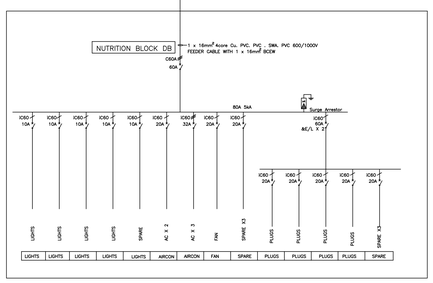



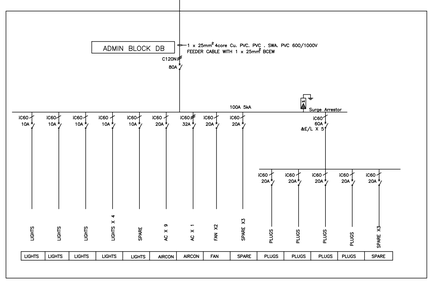



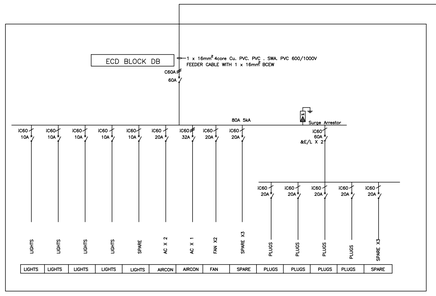




# TLALE DISTRIBUTION BOARD SINGLE LINE DIAGRAM

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Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.15 | M.L | ISSUED FOR INFORMATION |

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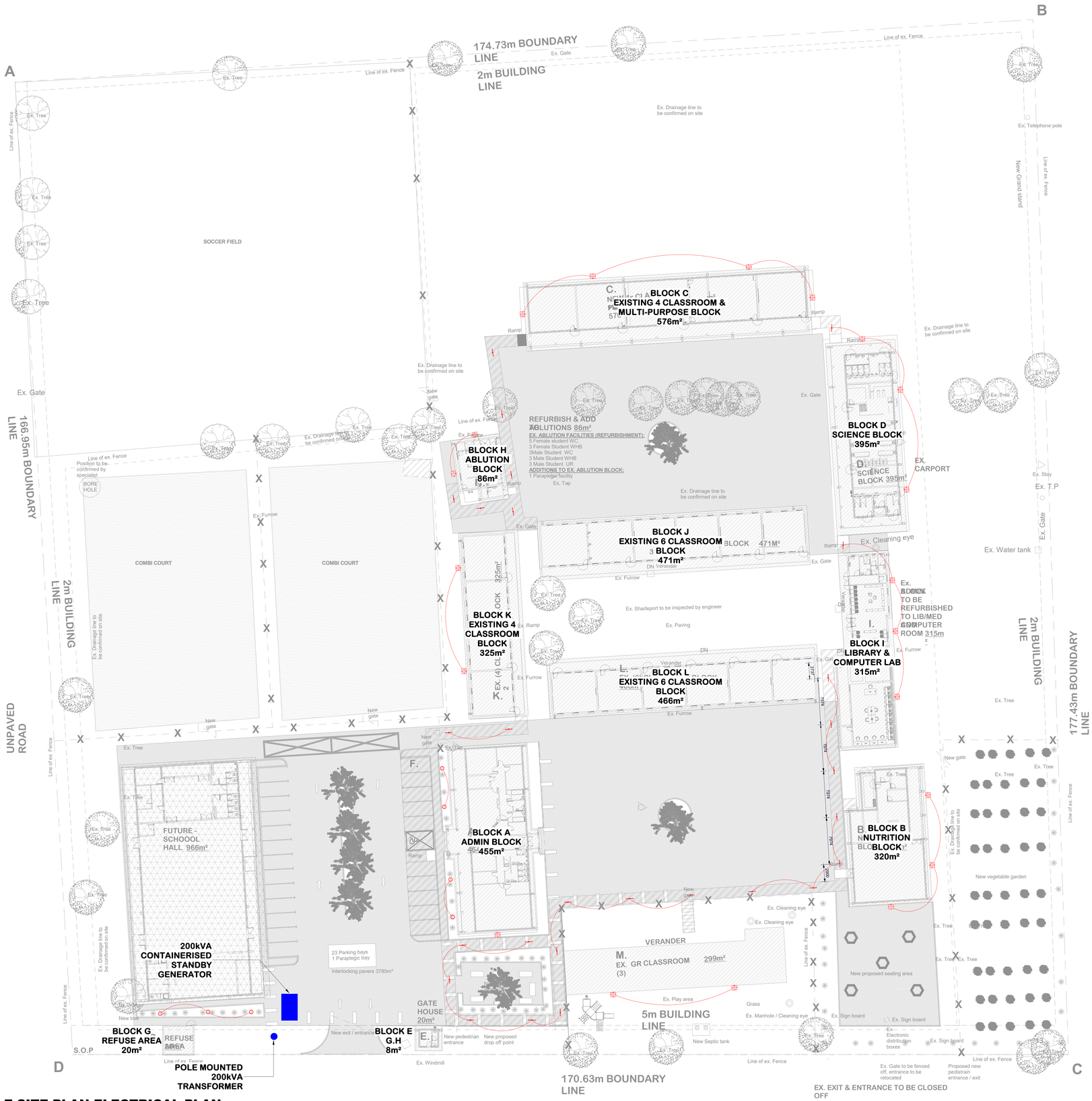
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE DISTRIBUTION BOARD
SINGLE LINE DIAGRAM LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER | EL-800-SLD-EL | | |

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**TLALE SITE PLAN ELECTRICAL PLAN**

1 : 250

- VLN LED 46W @2600mm Affl
- ADMIRAL 2X28W - MIRO 4 1200X600
- BEKARONDO MIDI 7W
- BEKA SERIES 30 LED BULKHEAD 13W
- SINGLE LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- TWO LEVER 1 WAY LIGHT SWITCH @1200mm AFFL
- 2W SINGLE LEVER 2 WAY LIGHT SWITCH @1200mm AFFL
- OS OCCUPANCY SENSOR
- WALL MOUNTED LIGHT
- DISTRIBUTION BOARD

- DEDICATED DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @600mm AFFL
- DOUBLE 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- DEDICATED 16A 3PIN SWITCHSOCKET OUTLET WITH 3PIN SLIM LINE EURO SOCKET COMBINATION @500mm AFFL
- INTERCOM POINT
- TV POINT
- DATA POINT
- HAND DRYER OUTLET
- HYDROBOIL OUTLET
- FLOOR BOX - TYPE A
- FLOOR BOX - TYPE B
- SINGLE PHASE ISOLATOR
- THREE PHASE ISOLATOR
- THREE CHANNEL TWO COVER POWER SKIRTING
- 300mm WIDE HEAVY DUTY CABLE TRAY
- 300mm WIDE WIRE BASKET
- DISTRIBUTION BOARD

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TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

SITE PLAN ELECTRICAL LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| S.KGOBUDI | M.LEBOHO | S.KGOBUDI | A0 |
| DATE: 2024.11.15 | SCALE: As indicated | CHECKED BY: S.KGOBUDI | |
| DRAWING NUMBER | EL-S-001-EL | | |



200kVA POLE MOUNTED TRANSFORMER



200kVA CONTAINERISED GENERATOR

# TLALE PRIMARY SCHOOL, HEATING VENTILATION AND AIR CONDITIONING SPECIFICATION

## PREPARED BY:

GUDUNKOMO
INVESTMENTS AND CONSULTING

## DATE:

## 11 OCTOBER 2024

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# 1 OBJECTIVES AND SCOPE OF CONTRACT

The scope of work comprises Heating, Ventilation and Air conditioning (HVAC) systems for Tlale Primary School. The works encompass the supply, delivery, off-loading, installation, testing, balancing, and commissioning into service, training of personnel, as well as one-year guarantee and maintenance, of school air conditioning units, fresh air and extraction system.

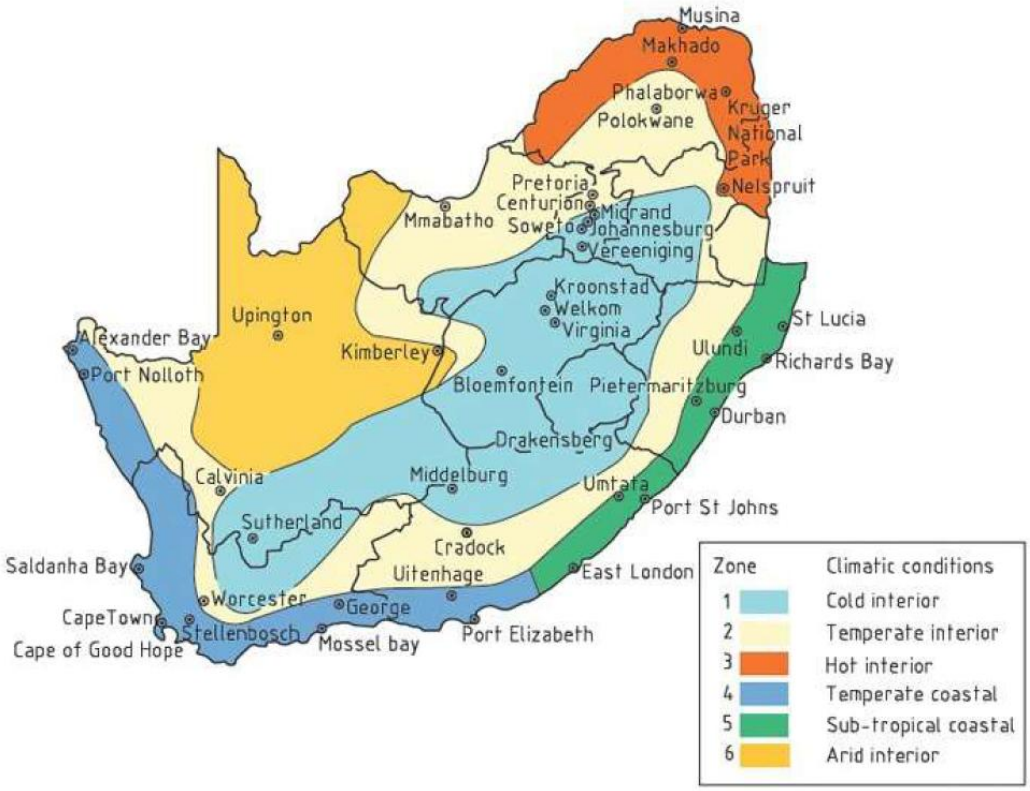
# 2 DESIGN PARAMETERS

Air-conditioned rooms shall be maintained at 23 ºC and a relative humidity of 50% during summer and winter conditions. High workmanship standards shall be attained with all finishes, colour selection and painting that shall blend with architectural requirements, as well as the rest of the specification (this document).

All exposed refrigerant piping and power cables shall be covered by steel galvanised trunking that shall be painted to blend in with other background colours as required by architectural design and the rest of the specification (this document).

**Performance parameters of air-conditioning units shall be derated for specified conditions.**

# 3 SITE DETAILS



The site is located at Tlale, North West.

| | | |
|---|---|---|
| Summer outside conditions: | : | 33.0 ºC |
| Winter outside Conditions | : | 2 ºC |
| Site Altitude | : | 1500 m |
| Site Climatic Zone | : | Zone 2 (Temperate interior) |

# 4 APPLICABLE REGULATIONS AND STANDARDS

| ID | Standard | Description |
|---|---|---|
| 1 | ASHRAE Standard 90.1-2007 | Energy Standard for Buildings Except Low-Rise Residential Buildings |
| 2 | SANS 10400-XA | Energy usage in buildings |
| 3 | SANS 10400-O | The application of National Building Regulations, Lighting and Ventilation |
| 4 | SABS 1125-1977 | Room air conditioners |
| 5 | SABS 1424-1987 | Filters for air-conditioning and general ventilation |
| 6 | SABS 0173-1980 | The installation, testing and balancing of air conditioning duct work |
| 7 | SABS 193-1972 | Fire dampers |
| 8 | SABS 1238-1979 | Air-conditioning ductwork |

**Table 1 Applicable Standards**

# 5 SITE VISIT

Bidders are advised to visit the site before bidding, to acquaint themselves with prevailing conditions and dimensions, as no extras will be considered at a later stage resulting from misinterpretation of the specification.

## 5.1 SITE FACILITIES

### 5.1.1 SOURCE OF WATER AND POWER SUPPLY

- The sub-contractor shall arrange for his/her own water supply.
- In the event of electrical power being required by the Sub-Contractor for construction and equipment installation, he shall provide his/her own power generators, except for commissioning purposes where Eskom or municipality's power supply shall be available for use.

### 5.1.2 LOCATION OF CAMP AND DEPOT

- Sites will be provided in consultation with the Engineer. The sites will be pointed out to the Bidders during the official site inspection.

### 5.1.3 HOUSING

- No housing is available for the Sub-Contractor's employees. It is the sole responsibility of the Sub-Contractor at his/her own cost to house his/her employees and transport them to and from the site.

### 5.1.4 SANITARY FACILITIES

- The Sub-Contractor shall provide at his/her cost, enough chemical toilets for all his/her staff including the Engineer and his/her staff. These shall be provided on the following basis:
  a) One per 20 workers of the Sub-Contractor's staff
- The Sub-Contractor shall plan for proper maintenance of these facilities.

### 5.1.5 TEMPORARY OFFICES

- The Sub-Contractor need not provide offices for the Resident Engineer. In the absence of any specific requirements, the Engineer requires merely that the Sub-Contractor have suitable offices on site in which site meetings may be held.

### 5.1.6 TELEPHONE FACILITIES

- Telephone facilities for the use of the Engineer are not required however the Sub-Contractor shall ensure that a communication system is available for the transmission of information within a reasonable time. The Sub-Contractor will also be required to have a cell phone for his/her own use. The area is well covered by the cell phone network.

## 5.2 AREAS REQUIRING SPECIAL ATTENTION

### 5.2.1 AS-BUILT DATA

- The Sub-Contractor will be given a complete set of prints of the drawings upon which he shall, as the work progresses, record all amendments to and deviations from the drawings as issued to him

at the start of the contract and the actual positions and levels of all services shall be recorded on these as-built drawings.

- No additional payment for recording as-built data will be made, the costs related thereto shall be deemed to be included in the tendered rates for the related items.

### 5.2.2 EXISTING SERVICES

- Known services were indicated on the plans, but the exact position must be investigated on-site and must be considered. However, this shall not relieve the Sub-Contractor of his/her duty to take due care, when working in the vicinity of houses. The Sub-Contractor shall ascertain if there are any services in the area.

### 5.2.3 FINISHING & TIDYING

- Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily and in the event of this occurring the Engineer shall have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

### 5.2.4 CONSTRUCTION METHODS

- Construction shall be carried out in accordance with the Expanded Public Works Programme (EPWP) guidelines that are aimed at infrastructure and services development coupled with creation of employment and skills training.
- Labour-based or labour-intensive construction may be defined as the economically efficient employment of as much labour as is technically feasible to produce as high a standard of construction as demanded by the specification and allowed by the funding available. In other words, projects based on labour-intensive principles aim at devoting the highest feasible proportion of projects costs to unskilled, semi-skilled and skilled labour without jeopardizing the technical quality of the product demanded by the specification.
- Labour-based methods of construction result in the creation of a significant increase in employment opportunities per unit of expenditure. The intensive employment of labour achieves value for money through innovative techniques of work and management. In particular (i) as far as possible, payment of wages for labour is related to production output: a reasonable “task” is set, upon completion of which the labourer may go home and (ii) employment is either on a daily/casual/temporary basis or in the form of a short-term monthly contract. It is useful to think of labour-based methods as the effective substitution of labour for equipment in construction. This is done in such a way that there is neither an increase in economic cost nor a decrease in quality.
- The following regulations must be adhered to ensure that the construction methods used are labour-intensive.

- The remuneration to local labour for hourly-rated employees and/or daily, based work shall be in accordance with the prevailing gazetted rates.
- The name, identification number, task performed, and hours worked per day for each labourer shall be recorded by the Sub-Contractor. These records shall be submitted to the Engineer together with each payment certificate.

- Bidders are encouraged to utilise the services of locally based sub-contractors.

## 5.3 DRAWINGS

Drawings are attached on Annexure A

## 5.4 DUCTING

### 5.4.1 GENERAL

Air conditioned and fresh air ducting will be internally lined with a sonic liner or equivalent material for noise reduction purposes.

Except as noted, ducts and other sheet metal work for air distribution shall be constructed and installed in accordance with:

- Latest edition: "Low Velocity and Duct Construction Standards" by SMACNA or SANS 1238-2005 and 10173- 2003.
- Latest edition "High Velocity Duct Construction Standards" by SMACNA or SANS 1238-2005 and SANS 10173-2003.

Except where noted ducts and sheet metal work shall be constructed of galvanised sheet steel.

Bracing angles shall be compatible with the duct material.

Changes in dimensions, shape and direction of ducting shall be gradual, complying with SANS 1238-2005, Sections 5.4.

Elbows shall be of the standard radius (R=W) type. Short radius (R=1/3W) and vaned square elbows shall be used only where required to fit restricted space.

Air turns shall be installed in all non-standard radius elbows and shall consist of 'double-thickness' type vanes, arranged to permit the air to make the turns without appreciable turbulence.

### 5.4.2 BRANCHES AND TAKE-OFFS

Throat velocities in branch connections shall not exceed main duct velocity.

### 5.4.3 FLEXIBLE DUCTING

Ductwork shall be connected to fans, air handling units or other vibration inducing equipment by flexible connections suitable for the pressure at the point of installation. Such flexible connections shall consist of fireproof fabric reinforced airtight material. Flexible connections will also be required at expansion joints in the building structure unless sufficient flexibility is provided in the adjacent ducting.

Connections shall be attached at both ends by approved metal collars or frames. The openings being connected shall be of equal size, aligned and parallel.

### 5.4.4 SEALANTS

All joints shall be sealed using an approved sealant.

### 5.4.5 INSTALLATION AND TESTING

Ducts shall be securely attached to building construction in an approved manner. All duct work shall be leak tested and made airtight before ducts are insulated or concealed.

Calibrated equipment for leak testing shall include rotary blower, orifice section and U-type gauge board complete with cocks, rubber tubing and other appurtenances required for conducting tests, generally as described in the SMACNA "High Velocity Duct Construction Standards".

As installation progresses, suitable and approved sections of ducting including spigots for flexible ducts shall be temporarily sealed for testing.

Test pressure shall be:

During the test period, the entire section of ducting tested shall be examined for leaks and noise. Leaks and noisy conditions shall be marked, repaired and re-tested. Noisy leaks shall be repaired under all conditions, even when leakage is within acceptable limits.

Test holes for instruments shall be 25 mm diameter and provided with an effective seal.

Reports on leak testing shall be submitted in a bound folder with all accompanying sketches and shall indicate that the total of "operating" leakages inferred from tests on all sections of the system does not exceed the specified maximum of 4% of the (maximum) design air quantity for said system. (Note: Actual leakage quantities found in each test may be reduced in the ratio /Pt/Po where Po equals design operation pressure and Pt the test pressure employed, to calculate the "operating" leakage).

The Sub-Contractor shall provide all facilities for measuring and testing.

## 5.5 SOUND ATTENUATOR

Sound attenuators shall be manufactured by a reputable manufacturer regularly engaged in the manufacturing and testing of sound attenuators.

The sound attenuators shall be tested to BS 4718 as amended and test data shall be available for both static and dynamic insertion losses in octave frequency bands from 63 to 8000 Hz.

The sound attenuator shall be tested for pressure drops and tables of airflow vs pressure drop shall be available.

Sound attenuator dimensions shall be verified with site measurements where space is constrained, specifically where fitted between structural elements.

Installation methodology in confined spaces shall be submitted for approval by the engineer and main contractor.

Sound attenuators used for grease laden air shall be lined with a non-absorbent material The attenuators shall be leak proof.

The attenuators shall have a Class 1 rating for surface spread of flame as measured to BS 476 Part 7.

The casing shall be manufactured from galvanised mild steel.

## 5.6 WASHABLE AIR FILTERS

The filter bank shall be so constructed and installed, and necessary access provided to make it possible to change one filter element in five minutes.

Filter material shall be fire resistant.

Filters shall be adequately protected against dirt during construction and shall not be operated until system is thoroughly cleaned.

After all the adjustments, etc. are completed and before the filters are accepted for regular operation, these shall be cleaned.

## 5.7 LOUVRES AND GRILLES

The weather louver shall be sized for 100% supply air

The face velocity shall be 1.5m/s or lower at 50% free area.

Supply and install as shown on drawings, outside air/exhaust air louvres for the air quantity at the static pressures.

The outside air/exhaust air louvres shall be fully catalogued documentation shall include performance curves or selection tables.

Certified detailed selection shown on these performance curves or tables shall be submitted.

Special care shall be taken in transport, delivery, storage on site and installation to ensure that the outside air/exhaust air louvres are in "as new" condition at start-up of the installation.

The outside air/exhaust air louvres shall be installed as shown in principle on the drawings.

The louvres shall be finished in baked enamel to an approved colour or epoxy powder coated.

All outside air/exhaust air louvres shall be complete with mounting frames suitable to be built into the brick walls by the builder. All outside air/exhaust air louvres shall be vermin proofed.

Unless otherwise indicated, the grille shall be complete with an air quantity adjustment device.

The grille shall be a fully catalogued product and the documentation shall include selection tables.

Submit certified detailed selection shown on these tables.

Special care shall be taken in transport, delivery, storage on site and installation to ensure that the grilles are installed and maintained in "as new" condition at start-up of the installation.

The grille shall be epoxy powder coated to an approved colour.

## 5.8 AUTOMATICALLY CONTROLLED DAMPERS

Supply and install the dampers of the opposed blade, 100% shut-off type suitable for the capacity listed in the schedule.

The damper, complete with frame and linkage, shall be a fully catalogued product of a manufacturer regularly engaged in the production of high-quality dampers.

Damper with frame may be made up in one section up to 1200 mm in width and 2400 mm in height. Larger sizes shall be made up in sections for easy handling.

Special care shall be taken in transport, delivery, storage on site etc, to ensure that the dampers are installed and maintained in 'as new' condition at start-up of the installation.

The damper and damper frame shall be installed level in both directions. There shall be no torsion or twist in the frame to prevent smooth operation of the damper. The blades shall not touch any adjacent material throughout the full travel of the blades and shall be capable of opening to a full 90 degrees.

Linkages shall incorporate a positive 90 degrees opening stop.

The drive shaft for the linkages shall be suitable for automatic operation.

The dampers and linkage shall be cleaned of any debris or dirt that may cause binding.

Damper blades shall rotate on pivot assembly in permanently lubricated oil bearings.

Pressure drop through the damper shall not exceed 50 Pa at 5 m/s velocity over the face area.

Damper frame and blades shall be manufactured of galvanised sheet steel.

Damper motors shall be of the electric type and shall be sized to suit the damper areas.

## 5.9 CONSTANT VOLUME TERMINALS

Supply and install air terminals delivering the air quantities as shown on the drawings.

Unless otherwise indicated, the air terminal shall be complete with air quantity adjustment device accessible from the terminal face.

The air terminals shall be a fully catalogued product and the documentation shall include performance curves or selection tables.

Submit certified detailed selection shown on these performance curves or tables.

Special care shall be taken in transport, delivery, storage on site and installation to ensure that the air terminals are installed and maintained in "as new" condition at start-up of the installation.

The air terminals shall be epoxy powder coated or anodised aluminium, to an approved colour.

The Sub Contractor shall supply a portable air measuring device, specified and calibrated by the air terminal manufacturer, to check the air delivery of the air terminals. The air measuring device shall work in conjunction with a commercially available meter. The combined assembly shall permit the operator to use the device and meter from floor level without the need for a ladder for terminals up to 4m above floor level.

Grilles shall be of double deflection construction as shown on the drawings.

# 6 COMPLIANCE WITH GENERAL TECHNICAL SPECIFICATIONS

- All clauses of the General Technical Specifications shall apply.
- This specification has preference over any additional documentation submitted by the Bidder. Deviations from this specification (this document) will only be considered if indicated as such in this document.
- If the Bidder wishes to clarify certain aspects of his/her offer, he/she may do so in an additional document, which shall be subject to the abovementioned preference. These items will be subject to written approval of the Engineer.
- Where possible the tenderer shall install the indoor and the outdoor units in a back-to-back format. Where the indoor and the outdoor units are not installed in the back-to-back format, the tenderer shall provide trunking or other approved method of covering to cover the refrigerant piping.

# 7 ANNEXURE A - DRAWINGS

# TLALE PRIMARY SCHOOL WET SERVICES SPECIFICATION

## PREPARED BY:

GUDUNKOMO
INVESTMENTS AND CONSULTING

## DATE:

## 11 OCTOBER 2024

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# 1. General

This document is the works information document. It is prepared for Zeerust Primary School for wet services in the building. All Wet Services such as plumbing, and drainage works shall be included in this Sub-contract and the Main contractor shall be the responsible person to install in compliance with the SANS standard and as per rational design.

On-site coordination of all overall plumbing system of both buildings will be the Main Contractor's responsibility. The Main Contractor shall render a complete operating system that performs to the required criteria. The works information document together with the drawings will be submitted by the Engineer to facilitate this process.

All work shall be carried out strictly according to the relevant SANS Specifications, Codes of practice and standards and all other applicable relevant standards.

The engineering, quality control and inspections, selection of equipment and materials, preparation of workshop drawings, drawings, testing, adjusting, commissioning and preparation of operation and maintenance manuals, are to be executed in a systematic manner and programmed, under the Main Contractor's general supervision and direction.

The plumbing Sub-Contractor is to ensure that the pipe manufacturer signs-off the installation, with certificate of approval from the pipe manufacturer at 25%, 50%, 75% and 100% of the installation. Underground drainage is to be inspected and signed-off by the pipe manufacturer with a certificate of approval.

# 2. Pricing Data

## 2.1. Pricing assumptions

This contract is a re-measurable price tender based on a bill of quantities, tenderers are to note that a lump sum tender will not be accepted, tenderers must provide the employer as part of their tender with a detailed breakdown of their tender price.

Preference will be given to tenders submitting maximising the use of locally manufactured goods for incorporation in the works, inclusive of items to be used in the maintenance of the works.

The tenderer must supply the employer with a payment schedule, clearly indicating key milestones at which payment will be requested against specific deliverables. Key milestones must be indicated clearly on the project program to be submitted as part of the tender submission.

Tenderers must allow in their pricing of the works for the production and delivery of a complete operation and maintenance manual, which must be submitted before completion will be certified.

- If the Contractor is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

- If the Contractor is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

- All prices include for supply, making, conveyance and delivery, offloading, storing, unpacking, hoisting, to all levels, labour setting, fitting, and fixing in position, cutting and waste, patterns, models and templates, plant, transport, temporary works, return of packings, establishment charges, scaffolding, overheads and profit and all other obligations.

## 3. Bill of Quantities Final Summary

The bill of quantities is attached separately from the specifications.

## 4. Design Information

The following documents shall outline the technical specifications and performance requirements for the design and installation of the Building Wet Services systems for the Existing Orthopaedic Wards Building-Witbank Hospital.

This document includes:

- Internal sanitary soil and waste drainage system
- Internal domestic water system (hot and cold water)
- Domestic hot water generation system.

The design is based on the basic engineering's criteria of the following SANS documents:

- SANS 10400-A: 2010: General principles and requirements
- SANS 10400-P:2010: Drainage
- SANS 10400-Q:2010: non-water-borne means of sanitary disposal
- SANS 10400-XA: Energy usage in buildings
- SANS 10252-1: Water supply installation for buildings
- SANS 10252-2: Drainage installation for buildings
- SANS 10254:2004: The installation, maintenance, replacement, and repair of fixed electric storage water heating systems.
- SANS 204: Energy Efficiency in buildings
- SANS 460:2011: Plain-ended solid drawn copper tubes for potable water

The domestic water piping system is designed in accordance with **SANS 10252-1:2010**. The domestic water system is designed on the basis that there is:

- No guaranteed water supply from the Municipality.
- No guaranteed water pressure from the Municipality.
- No guaranteed water quality from the Municipality.

The plumbing and drainage works is engineered, specified, and shown on drawings and set out in this works information document and should be strictly adhered to. The list of drawings is shown on ***section 16*** below. It however remains the responsibility of the main contractor to carry out the construction engineering of the works and ensure the installation complies with standard best practice plumbing and engineering principles.

The proposed materials of pipes fittings and plant shall be of a high quality, durable and require low maintenance.

## 5. Domestic Water (Hot and Cold Water) Calculations

Domestic cold and hot water will be supplied to the building. The daily water usage will be calculated for L/Bed/Day which is close to 200 based on SANS 10252-1 Table 1.

### 5.1. Domestic Hot Water System

The hot water system that is proposed is 11000 Litres heat accumulator tank with 2 x 55kW heat pump.

## 6. Water Pipe Parameters

### 6.1. Pipe Flow Velocity

The pipe flow velocity is designed with a minimum of **1.0 m/s** and shall not exceed **1.5 m/s** inside the building and **2.0 m/s** outside the building i.e. underground piping. This will assist in reduction of noise transmission and water hammer.

### 6.2. Operating Pressures

To ensure compliance with the operator's requirements, the operating pressures are as follows: Pressure at each point of use shall be a minimum of **250 kPa** and a maximum of **350 kPa**.

### 6.3. Insulation

The hot water piping shall be insulated with a suitable non-combustible insulation material and cladded with aluminium or galvanized sheet metal cladding, according to SANS 10252-1; SANS 10400-XA and SANS 204. All insulation will have an Ozone Depletion Potential (ODP) of zero.

#### 6.3.1. Insulation Specification

**Table 1: Insulation Specification**

| Internal diameter of pipe | Minimum insulation thickness |
|---|---|
| • 40mm and less | 25mm |
| • Exceeding 40mm but not exceeding 80mm | 40mm |
| • Exceeding 80mm | 60mm |
| Note: Minimum thickness of insulation shall have a thermal conductivity coefficient which does not exceed 0.04 W/m².°C | |

#### 6.3.2. Minimum R-values

**Table 2: Minimum R-Values**

| Internal diameter of pipe | Minimum R-Value |
|---|---|
| • ≤ 80mm | 1 |
| • > 80mm | 1.5 |

### 6.4. Water Quality Testing

It is essential that the Main Contractor ensures the selected piping system supplier/manufacturer test the water quality. This is to ensure the piping is compatible with the domestic water and will have no adverse effect on the piping material.

The Main Contractor shall ensure the piping manufacturer confirms in writing the compatibility of water with piping and fittings with the water supplied to the piping system. The contractor shall also perform a water analysis as per SANS 241 prior to construction and after commissioning to ensure water supply is fit for use.

### 6.5. Flow Rate to Fixtures

The pipes are designed in accordance with SANS 10252-1 and the manufacturer's technical information. Pipes are also be sized to match the operational requirements of the sanitary ware fixtures. As stated under section **5.4** above, the flow velocity is designed with a minimum of 1.0 m/s and shall not exceed **1.5 m/s** inside the building and **2.0 m/s** outside the building i.e., underground piping. This will assist in reduction of noise transmission and water hammer. The contractor shall strictly adhere to the diameters indicated on drawings to achieve the desired flow rates.

## 7. Preferred Suppliers for Hot Water Plant

**Note:** The following suppliers will be referred for supply, install, commissioning and testing of the hot water plant including all connections.

- Thermowise
- Sirac
- Solar Heat Exchangers
- SA Heat Pumps

## 8. Sanitary Drainage System

The drainage system is designed in accordance with **SANS 10252-2:2010**. The drainage system shall be in accordance with the drawings and BOQ. The various types of fitting such as WCs, WHBs, Baths and Sinks, etc., shall all discharge into the 110mm diameter horizontal branch pipes by means of 110mm diameter branch pipes.

All underground piping is to be accessible via an access fitting via an accessible duct and via “floor stub-stacks” underneath false tiles, etc. Access into these ducts is to be as per the architect’s specifications. All soil ventilation pipes are to discharge to atmosphere, as indicated on the drawings.

### 8.1. Grease Trapping

All grease trapping shall be installed in the behind to the kitchen. All grease traps and grease sources such as pot-sinks and floor drains shall be dosed on a regular basis with enzymes to clear the system of any grease. Where there are underground grease traps are required, the plumbing contractor is to ensure that the grease trap is installed as per the manufacture’s specifications.

### 8.2. Floor Drains

Floor drains shall be installed in all showers, ablution facilities, plant rooms and in kitchen and other areas. The floor drains positions will be shown on the drawings and shall have 50mm diameter to 100mm diameter outlets as shown on the drawings and have removable covers to provide direct access into the drainpipes.

### 8.3. Acoustic Treatment

All drainage piping in the ceiling voids in sensitive areas of ground

## 9. Material Specifications

The proposed materials of pipes fittings and storage tank shall be of a high quality, durable and require low maintenance and be safe to use and operate and be compatible with the specific water quality of the project.

The pipe manufacturer shall train all plumbers of the plumbing contractor to carry out the pipe installation and these approved trained plumbers shall carry suitable identification to prove that they are trained and can be identified on site where the work is carried out. No other untrained plumber shall be allowed to work on the installation of piping on the project. The pipe inspection in the ceiling should be done by plumbing contractor before the ceiling is closed.

Completed sections of the piping systems shall be tested and the testing shall not be postponed until the final completion of the systems as per the Commissioning procedures outlined in the Commissioning guide specifications documents.

The piping shall be ‘pressure’ tested as per the pipe manufactures requirements and the pressure testing required as per SANS 10252-1 whichever is greater.

## 10. Commissioning and Testing of Systems

The plumbing system shall be commissioned in accordance with the independent commissioning agent’s requirements and specifications. The sub-contractor is to ensure that all systems are to be installed, tested, calibrated, and commissioned in accordance with these requirements which include the following:

### 10.1. Visual procedure for testing

The installation shall be inspected by the main contractor:

- Visually, to detect faults in construction or materials, and
- For compliance with drawings, specifications, and requirements.

Particular attention should be paid to the pipe beds, levels of pipes, irregularities at joints, the installation of fittings and components (especially the correct fitting and installation of safety devices), protective coatings, and the supporting and fixing of pipes, fittings, and components (especially for storage tanks and heaters), and to verifying that the appropriate backflow prevention devices have been selected and are installed correctly.

### 10.2. Procedure for pressure testing:

- The installation shall be slowly filled with water, with the highest draw-off point open, to allow air to be expelled from the system.
- Each terminal fitting shall be checked for rate of flow against the specified requirements.
- any water installation other than a fire installation or a combined installation shall be subjected to a test pressure of at least 1 500 kPa, but not less than 1,5 times the maximum working pressure of the installation, and such test pressure shall be maintained for at least 1 hour, and there shall be no loss of water and no visual evidence of leakage anywhere in the installation for the test to be accepted. The contractor shall submit a programme indicating dates of the testing procedure.

### 10.3. Disinfection of Domestic Cold-Water Installation:

The domestic water installation, immediately before being taken into use, be thoroughly flushed with fresh water drawn direct from the mains.

## 11. Operation and Maintenance (O & M) Manuals

The Operating and Maintenance manuals shall consist of the following:

- List of Contents (Index)
- Introduction
- General description of the functions of each of the systems of the plumbing and drainage works, i.e.:
    - Sanitary drainage systems.
    - Cold water system
- Detailed description of each element of each system, how it functions, how it operates and how to maintain it and what attic stock or tools to carry.
- Full as-built drawings and detailed drawings, brochures and catalogues for each system and each element of each system.
- The format of the O & M documentation shall be A4 and shall be a specially bound document with hard cover and with metal ring binding. (All drawings and details shall be reduced to A3 format and folded into A4 format.)

- The names, addresses and tell/fax numbers of all responsible persons and manufacturers/suppliers shall be listed in the O& M document.
- A full list with reference numbers shall be included to enable the facilities Operating and Maintenance staff to order materials and equipment.
- Colour diagrams shall be provided to illustrate the operation and function of each system with reference to the relevant as-built drawings (floor plans and process and instrumentation diagrams) and brochures of equipment.
- Full Commissioning Data.

## 12. Training of Facilities Staff

The Contractor shall provide proof that building management staff has all the information and understanding needed to operate and maintain the commissioned features and systems of the building.

## 13. Quality Assurance (QA) and Quality Control (QC) Process

The importance of the QA checklists is to check what has been done, that it was done correctly, but also to find out what was not done and left out by mistake. Drawings and the works information document are part and parcel of the QA process and should be methodically checked against the work done.

The checklists and checking of the work, is not "an activity" that must be carried out once the work has been completed but is a "process" to be followed from the planning of the construction work right up to the completion and handing over of the project.

The duty and role of the design engineer is to carry out spot checks, monitoring, and quality audits and to ensure that the Main contractor is carrying out a quality assurance system.

The results of spot checks will indicate the effectiveness of the QA process and if not satisfactory, the engineer could require more detail or in-depth auditing from the Main Contractor or his representative.

The checklists should have space next to each item for signature by the plumber, the QA supervisor of the plumber, the Main contractor, and the Engineer.

## 14. Scope

This section covers the activities to be carried out by the contractor both on and off the construction site to provide and install all systems under the Wet Services scope of works. The various activities shall be inspected and approved step by step and final approval shall only be given by Engineer. The Contractor shall notify the Engineer or his representative when each activity is completed and ready for inspection. No work shall be covered before inspection and approval in terms of the approved QA system. All work shall be carried out strictly in accordance with the requirement of the specifications and as shown on the drawings and detail drawings.

All details shall be strictly adhered to, and no deviations shall be allowed unless prior approval has been obtained in writing from the Engineer. All relevant statutory requirements and regulations shall be adhered to.

Only competent artisans shall be employed to carry out the construction and installation work. The construction and installation procedures and activities shall be discussed at the start of the contract at a "kick-off" meeting and shall be mutually agreed upon by all relevant parties.

The Sub Contractor shall produce and submit a construction programme for approval before commencing with work on the site.

All requests for inspections, approvals and information shall be in writing.

For further details of contractual obligations, specifications and other requirements refer to the contract documentation.
The Main Contractor is responsible for all safety measures and procedures.

### 14.1. SANITARY DRAINAGE – WORK TO BE DONE BY THE PLUMBING SUB–CONTRACTOR

- Produce and submit a Safety Plan to the Main Contractor
- Produce and submit to the Engineer Quality Assurance document.
- Produce and submit a plumbing construction programme for to meet the Main Contract program for approval.
- Produce workshop drawings where necessary or required by the engineer.
- Samples of all equipment, material and fittings shall be submitted for approval before ordering and delivery to site.
- Constantly inspect all materials and installation for compliance and conformance with the manufacturers, institutional specifications and keep record in an approved manner.
- The sub-contractor shall do on site coordination with all other services (before installation of any pipes, fittings, or equipment. (Kick off meeting & QA documents).
- The required inspections and tests shall be carried out on sections of completed work. Underground drainage to be inspected by the Engineer prior to closing of trenches. The sections and method of testing shall be discussed and approved by the Engineer.
- The Contractor shall carry out inspections and tests according to his own internal QA system and provide proof of it to the Engineer.
- The Engineer will only inspect the works after the sub-contractor's QA has given written no-tice that his quality checks are completed. A copy of the checklists must be submitted to the Engineer.
- The Contractor shall submit all 'As-built drawings' and maintenance and operation manuals as required by the Engineer.
- Checklists for each area must be submitted on a monthly basis with the plumbing claim.
- The Contractor shall provide all certificates of compliance to statutory or other regulations prior to procurement.
- After installation of works all guaranties must be provided.
- It is the duty of the Contractor to keep all the Quality Assurance records up to date and to provide copies to the Engineer when he requires it.
- All Quality Assurance records shall be kept on site and shall be made available for review up-on request by the Engineer.
- The plumber must mark all pipe penetrations on concrete structures. Approval from the structural Engineer must be obtained prior to core drills.
- All drainage pipes and fittings shall be installed strictly to the manufacturer’s specifications, SABS Codes, and other relevant requirements.
- All underground drainage shall be installed according to SANS 1200 / SANS 2001.
- All pipe diameters shown on drawings are the MINIMUM INTERNAL diameter required for hydraulic flow in the pipes.
- The plumber shall consult and co-ordinate with the air-conditioning contractor with regards condensate piping.

**NOTE:**

The plumber shall locate/set out positions of sleeve pipes on site according to the Engineers.

Before concrete is placed the plumber shall confirm in writing that all sleeve pipes have been placed.

### 14.2. PLUMBING HOT & COLD WATER – WORK TO BE DONE BY THE SPECIALIST/PLUMBING SUB-CONTRACTOR

- Water testing to be done for water compatibility with the specified water piping and water hardness.

- Produce a construction programme for approval.
- Produce workshop drawings for approval for all equipment, which is to be fabricated prior to delivery to site or where required by the Engineer.
- Arrange for inspections of equipment at the place of fabrication before it is delivered and for formal approval. This includes for electrical control boards, etc.
- Samples of all equipment, material and fittings shall be submitted for approval before ordering and delivery to site.
- Constantly inspect all materials for compliance and conformance with the relevant specifications.
- Install the hot and cold-water pipes with all fittings, supports, etc. complete.
- Pressure testing of the pipe system.
- Install the pipe insulation on hot water, paint and finish off.
- Each completed section shall be inspected, tested, and approved by the Engineer or his representative before proceeding to the following activity.
- Produce a snag list and commence immediately with all remedial or outstanding work. Put all systems in operation and demonstrate to and train client's maintenance staff.
- Submit as built drawings and maintenance and operation manuals.
- Provide all guarantees.
- The Quantity Surveyor shall be informed of each step to make the necessary measurements for payment.
- List all other relevant activities as provided for in the construction programme.

Proposed variations, revisions and discrepancies of the designs shall be referred to the Engineer for approval. It is not the duty of the QA Supervisor to do any redesign on site. He shall keep the Engineer fully informed of all his activities as well as those of the Contractor on a monthly basis. Formal meetings will be scheduled as per the Engineer's discretion and request.

All his records shall be in writing and shall be submitted to the Engineer on a monthly basis. The QA Supervisor should never instruct work to be carried out, which is not specified or called for in the contract documents or drawings.

## 15. Coordination with other trades

The contractor will plan his work in advance and will coordinate all space requirements during construction. Where conflicts occur, the contractor will request clarification from the Engineer.
All work shall be performed at times acceptable to the Engineer/Construction Manager. **Provide work schedule at the start of the job for the approval of the Engineer/Construction Manager.** Schedule shall show when all staff and sub-contractors shall be on-site.

## 16. Piping System Requirements

### 16.1. Domestic Water System

The piping for all water shall be SABS approved Copper, Multi-layer or HDPE with suitable flow and pressure rating. All small Diameter lines that are 50mm and below shall also be SABS approved Copper, HDPE or Multi-layer pipes with suitable flow and pressure rating. We propose a manifold system in the rooms for maintenance purposes.

All brass fitting shall be DZR brass.

Selection of the pipe material shall be approved by the engineer and Client. The piping material shall carry all the necessary guarantees and certifications as required by the client and engineer. All bracketing, fixing and installation methods shall be as per the manufacturer's specification.

All hot water piping shall be insulated as per SANS 10252-1 to prevent excessive heat loss. All insulation is to have a minimum R-value of 1 if the piping is below 80mm in diameter and an R-value of 1.5 if the piping is above 80mm in diameter.

### 16.2. Sanitary (Soil and Waste)

The material of choice is HDPE piping and fittings for above ground and underground drainage. HDPE pipes shall be heat tempered after the production process to ensure a neat installation and all pipes and fittings shall be of the same grade HDPE to ensure sound fusion welds. All pipes shall be installed according to the

**Manufacturer's specification.**

All underground HDPE piping shall be electro-fusion welding, by a plumber that has been trained by the pipe manufacturer's specification. Aboveground HDPE piping is to be butt-welded, trained by the pipe manufacturer's specification.

All materials shall carry the necessary guarantees and comply with the local applicable SABS standards. Pipes to be laid and backfilled according to SANS 10400.

## 17. Drawings

The drawings are attached on Annexure A.

## 18. Submission by Contractor

The contractor will take note that all equipment selections approved by the Engineer will not relieve the contractor of his obligations to comply with the specification.

The following information about specified equipment will be submitted to the Engineer:

- Manufacturer, name, and model
- Applicable pamphlets or catalogue information
- Name and address of manufacturer and/or distributor

Number of years that equipment has been available in RSA Any other relevant information required by the Engineer.

The above submissions are required after the appointment of the Contractor and in accordance with the requirements of the main contract programme.

## 19. Supports

No supports for the piping etc. are shown on the drawings. The Contractor will allow for sufficient supports as specified in the Standard Specification for Plumbing & Water installations.

## 20. Performance of Systems and Equipment

The systems and equipment layout designed by the Engineer will conform to the requirements about installation and system performance. This suggests that the performance of the equipment in the system supplied and installed by the contractor, will be in accordance with the design and performance figures as published by the manufacturers and/or suppliers.

The efficiency of the design of the specified system is not the responsibility of the contractor. It is, however, the responsibility of the contractor to ensure that the quality of the workmanship and the installation of the equipment will conform to the requirements of the Engineer and to the supplier/manufacturer.
It is furthermore accepted that the contractor has assured himself that all equipment supplied and installed under the contract will perform within the given limits, as stated by the supplier/manufacturer, conforming to the specification.

## 21. Painting

All equipment, where required, will be painted.

The colour of the materials and equipment will be painted in accordance with SANS 10400: Part III, 1987 as amended.

## 22. Construction and Investigation

The construction will include the production of workshop drawings complete with pipe configuration, where the Engineer deems it necessary, for approval by the Engineer.

The Sub-Contractor shall be responsible for all elements of the systems and the integration into the complete specified system according to the required performance. The Sub-Contractor shall provide the total overall guarantee of the complete works.

The Sub-Contractor shall carry out on-site investigations to obtain the "as-built" situation before construction of any system. The Sub-Contractor shall be responsible to ensure that all necessary sleeves in concrete slabs and beams are installed before concrete is poured.

## 23. PLUMBERS CERTIFICATE

Once works completion are complete for all the above-mentioned services, the plumber shall issue the following certificate.

Date: _____

Project name: _____

Subject: PLUMBING INSTALLATION COMPLETION CERTIFICATE

FOR INSTALLATION: _____

RESPONSIBLE PLUMBER: _____

REGISTRATION NO: _____

We hereby declare that the above-mentioned installation was carried out under the control of the

Undersigned registered plumber who complies with the requirement of SABS 0400, AIS, and the manpower Training ACT. 1931 (Act no 56 of 1981).

The work was inspected and tested by the responsible plumber in compliance with SABS PP2, SABS P7 (1) (2) (P7 (3) is not applicable due to the rational design) and SABS PP26/PP27.

The workmanship and installation were carried out in general compliance of SABS 0252. Inspected, tested, and disinfected according to SABS 0252 9.2.

The workmanship and the installation are guaranteed for a period of _____ from the completion date as on _____.

A complete set of AS-BUILT drawings is herewith submitted for record purposes, stamped, and signed by the responsible plumber. (The set consists of one coloured set and two plain sets.)

Signed by:

_____

(PIRB Registered responsible plumber)

_____

REGISTRATION NUMBER

## 24. ANNEXURE A -DRAWINGS

# FIRE WATER AND EXTINGUISHERS

# SPECIFICATION

# FOR THE

# TLALE PRIMARY SCHOOL

**Date 2025/05/20**

## 1. PORTABLE FIRE EXTINGUISHERS

All extinguishers shall comply with S.A.N.S 1910 and S.A.N.S 1567.
Portable fire extinguishers shall be provided to the types specified, and at locations as shown on the drawings. Standard portable fire extinguishers are 4.5 kg ABC dry chemical units. 5kg Carbon dioxide extinguishers shall be provided for all electrical equipment areas.

Portable extinguishers shall be located within combined hose reel cabinets where shown, or attached to walls with purpose made brackets. Extinguishers with a gross weight of 18 kilograms or less, may be installed in a position where the top of the extinguisher is no more than 1.5 metres above the floor. Extinguishers with a gross weight in excess of 18 kilograms shall be installed such that the top of the extinguisher is no more than 1000mm above the floor.

## 2. FIRE HOSE REELS

Fire hose reel and hydrants shall be installed in accordance with S.A.N.S 543, S.A.N.S 1128 and S.A.N.S 1475. Hand held hoses shall be 25.4mm diameter, 30 metre length hoses mounted on hose reels, which shall be connected to the standpipe systems in locations shown on the drawings. The hose shall be two braid red rubber non- collapsible hose, coiled onto a steel drum, attached to a sidewall mounting bracket, with supply and hose connections. The hose nozzle shall be a three (3) way nozzle, providing shut off, full jet, and variable spray settings and shall be manufactured from either aluminium or brass. The hose reel assembly shall be provided with a 25mm isolating valve. A 100 mm pressure gauge with proper venting brass pet cock shall be installed at every hose reel on the supply side before the shut off valve

## 3. FIRE HYDRANTS

Fire Hydrants are as indicated on the drawings and consist of 65 mm instantaneous units, mounted at approximately 1.0 meters above ground. Outlets shall wherever possible be horizontal. Hydrant inlet pipe shall be a minimum of 100 mm. The hydrant if it is a 90 Degree unit shall be installed at 45 degrees to avoid the hose kink if mounted facing directly down.

The twin booster connection must be of Brass and Stainless-Steel Thread: -80mm nominal bore pipe thread (tapered 3" B.S.P. to BS 21.173) House Coupling: Male, instantaneous.

## 4. ABOVE GROUND PIPING

All above ground hydrant and hose reel pipe work installed up to and including 150mm diameter shall be of Medium Grade galvanized to SANS 62. Where above-ground pipe work exceeds 150 mm diameter, this shall be of Medium Quality galvanized Piping to SANS 719 having a wall thickness of at least 6mm.

Pipes 150 mm and above shall be flanged.

All pipe work both vertical and horizontal shall be supported along its length with

brackets capable of carrying the combined mass of the pipe and water and shall be spaced at the following maximum centres:
Pipe hangars are to consist of galvanised or stainless-steel chain and copper pipe rings. Holder batts are to be brass or gunmetal with wall screw mountings and screwed on covers.
N.B: No plastic batts will be permitted.
Galvanised Steel Tubes

| Diameter of pipe (mm) | 15 – 22 | 28 – 35 | 42 – 54 | 76 – 108 |
|---|---|---|---|---|
| Centres to Centre dimensions for brackets/hangers/ holderbats (mm) | 1200 | 2000 | 2500 | 3000 |
| Dia. of galvanised hangers, Rods (mm) | 8 | 8 | 8 | 12 |

## 5. UNDERGROUND PIPING

5.1. General.

All piping below ground level smaller than 150 mm is to be of heavy grade back piping to SANS 62 (black steel for sprinklers, and galvanized for firewater) suitably protected against corrosion with two layers of fully overlapping Denso wrap or equally approved, or Class 16 HDPE may be used for pipes always under pressure as per SANS 4427 Code of Practice.

Pipes in excess of 150 mm diameter shall be heavy grade quality black piping (6 mm minimum wall thickness) to SANS 719 (Black steel for sprinklers and galvanized for fire water) with two layers of fully overlapping Denso wrap or equally approved or HDPE piping to SANS 4427 as above.

Pipes shall have a soil cover and the outside, of at least:

(a) 450mm for any pipe of nominal diameter less then 75mm, or

(b) 750mm for any pipe of nominal diameter exceeding 75mm,

Keeping in mind that, if the soil cover is less than that required, appropriate steps shall be taken to protect any such pipes against the transmission of excessive superimposed loads direct to the pipe.

Unless otherwise approved, pipes shall have a soil cover of not more than 1m over the outside.

Where a sanitary drain pipe and a pipe that conveys potable water are laid underground horizontally next to each other, they shall be laid at least 500mm apart.

Trench excavations, bedding and backfilling shall be carried out in accordance with SANS

1200-LB and pipes shall be so laid that

(a) they are evenly supported throughout their lengths; and

(b) no pipes rest on their sockets, or on bricks, tiles or other makeshift supports.

In the case of pipework with flexible or lead caulked joints, adequate measures shall be taken to prevent movement of the pipework due to water pressure effects. Thrust blocks shall be designed and installed in accordance with SANS 1200-L.

The following precautions shall be taken to minimize the effects of ground movement on pipes and fittings:

(a) suitable types of pipework and fittings shall be used where ground is liable to move; and

continuous longitudinal support shall be provided where the pipes or the joints are not sufficiently flexible to accommodate movement of the pipeline.

Pipes laid under walls or under surface slabs.

Where any portion of a pipe passes under a building or under a surface slab, and unless otherwise approved, the following shall apply;

Such portion shall be installed inside a sleeve of internal diameter at least 15mm plus the outside nominal diameter of such portion;

such portion shall be protected against the transmission of any load to it;

such portion shall be laid without any change of direction, and without any junctions; and

the trench in which such portion is laid shall in no way impair the stability of any building, or interfere with, or affect, any existing services.

Pipes laid in or through floors, concrete slabs or walls.

Where any portion of a pipe is concealed in a floor, concrete slab or wall, the following shall apply:

(a) Adequate measures shall be taken to protect such portion from external pressure or from the transmission of any load to it:

(b) should a leak develop in such portion, the installation shall be such that the portion of the pipe can be removed without danger to the building structure; and

(c) plastic pipes shall not be rigidly encased in floors, concrete slabs or walls.

Where any portion of a pipe passes through a wall or under a floor, such portion should preferably be installed inside a sleeve of internal diameter at least 15mm plus the outside

nominal diameter of such portion.

No pipe shall be installed within the cavity of any cavity wall, nor shall any pipe pass through concrete expansion or contraction joins.

Concealed piping in reinforced concrete structures shall be:

(a) housed in properly constructed builders' work ducts, or wall chases, and

(b) laid in continuous lengths without joints or fittings except where such joints or fittings are located within access ports of sufficient size to permit maintenance and inspection.

Where penetrated, compartment walls, floors and fire barriers shall be fire-stopped to prevent the passage of smoke and flame.

HDPE underground pipe installations.

Unless otherwise specified all underground pipework > 50mmø shall be Class 16 HDPE to SANS 4427.

All pipes shall be laid on a 100mm sand bedding cradle and covered with 300mm sand before backfilling.

Pipe trenching and bedding:

| AREA | MINIMUM COVER | BEDDING TYPE | MAIN FILL |
|---|---|---|---|
| Vehicle traffic | 1100 | Flexible pipe Bedding as per SANS 1200 LB | Soilcrete |
| Under surface bed | 600 | | Soilcrete |
| Other area | 900 | | 90% MOD AASHTO |

All thrust blocks shall be cast between the pipe and the undisturbed trench material.

All pipe crossing under traffic areas shall be backfilled with soilcrete and compacted as specified.

All pipework shall be pressure tested with all joints uncovered to the satisfaction of the Engineer.

Suitably sized air release valves built into valve chambers shall be installed at all high points of the pipeline.

**5.2. Surface preparation.**

All sharp edges, burrs, rags and weld splatter shall be removed and weld areas shall be abraded and/or ground. The surface shall be degreased and rinsed with solutions supplied by the coating manufacturer prior to mechanical cleaning (Section 4.4 of SANS 10064 Code of Practice). Surface preparation shall be in accordance with ISO 8501-1 and SANS 10064 and shall be conducted before erection of pipes.

Priming **of** new pipework.

All concealed and exposed piping shall have a red oxide prime coat which is factory applied. All damaged areas are to be wire-brushed and re-primed where necessary. No unprimed pipes will be allowed on site. All pipework shall be primed in the workshop before being sent to site.

Use of **denso** type.

Where Denso protection is required, the following specifications must be adhered to:

- Piping to be prepared using Denso Primer, Denso HT Inner Wrap and Denso PVC Outer Wrap;
- Fittings and pipe work other than cast iron must be hot dip galvanized prior to wrapping;
- Denso HT shall be applied by hand and wrapped in a clockwise direction with a minimum 55% overlap; Two layers shall be applied.
- Denso PVC Outer Wrap must be wrapped in an anti-clockwise direction with a minimum 25% overlap, over the second denso layer;
- Buried flanges are to be encapsulated in Denso Mastic prior to the application of the Denso HT tape; and
- The wrapping of pipework must extend at least 150mm above finished ground level and be secured with bandit strapping. In such cases, the PVC tape must be painted with an appropriately compatible ultraviolet resistant paint.

Alternative products

Should the applicator or manufacturer wish to propose alternative products or coating materials, he shall submit a detailed motivation to the Fire consultants.

The motivation shall include, but not be limited to the following:

- Benefit to the Client;
- Product licensor and technical back-up available;
- Location, experience and ISO quality rating of the production facility;
- Detailed case histories;
- Performance guarantee offered; and
- Manufacturer's data sheets for each product.

Finishing off of coating of pipework.

All exposed pipework is to be coated with two coats of high-quality gloss enamel red coloured paint of an exact specification acceptable to the Engineer. Piping in ceiling voids shall be primed only. It is preferred that all exposed piping be painted in the workshop and only touched up on site

**5.3. Coating application.**

The sub-contractor shall submit a quality plan to ensure that the application work is carried out in strict accordance with the most recent Product Data Sheet from the coating manufacturer. The product data sheet shall be deemed to be part of this specification.

Coatings shall not be applied when surface may become damaged due to rain, dust,

condensation, surface temp or excessive humidity (>85%).

All surfaces shall be coated as specified. Successive coats shall be of distinctly different colour to the previous coat to ensure correct inter-coat coverage.

Special attention shall be given to cracks, crevices and edges to ensure complete coverage and paint thickness.

The primer shall be applied as soon as possible after the surface preparation operation, but within 4 hours.

Concealed surfaces shall be completely coated. All edges, corners, bolt holes and cut ends shall be stripe coated by brush application, prior to the application of the second coat.

No coating shall be applied to any surface containing traces of grit, grease, soil, loose rust, surface contaminants (i.e. dust) or loose corrosion product of any kind.

Surface rust on steelwork shall not exceed Grade B of ISO 8501-1.

**5.4. Fasteners**

All nuts and bolts shall be either hot dip galvanized or stainless steel unless otherwise specified. All galvanized nuts and bolts shall be de greased, patch primed and finish coated in accordance with the specification for the respective area of the plant.

**5.5. Prevention of galvanic corrosion.**

Care must be taken to prevent or mitigate the corrosion caused by dissimilar metal contact on cooling coils, tubes and tube plates, pipes, flanges, frames etc.

Typical metals encountered would be copper, aluminium, zinc, mild steel and stainless steel. The junctions between dissimilar metals must be electrically insulated where possible.

Pipe flanges between dissimilar metals must be insulated using insulating gaskets for the flange faces and insulating sleeves and washers for all nuts and bolts.

Where the insulation of the junction between dissimilar metals is not practical, the cathode surface on the electrolyte or “wet” side must be coated for a minimum distance of 100 mm from the junction. The applied coating must effectively isolate the coated surface from the electrolyte.

Corrosion - inspection and testing.

The following inspections and tests shall be performed by the sub-contractor and witnessed by the design team in accordance with the approved Quality Plan on corrosion protection.

Visual inspection for paint film defects shall be performed after each coat is applied. All defects including pinholes, sags and runs shall be corrected before the next full coat is applied. Dry film thickness shall be measured in accordance with SABS Method 141

Clause 3.3 (smooth disc). The required dry film thickness given in “windows” for each coat in the relevant coating specification, i.e. required minimum and acceptable maximum.

Any reading outside this range is cause for rejection and may require the removal of the entire coating and reapplication thereof. Actual readings and not averages shall be recorded.

**5.6. Quality assurance.**

Sub-Contractor Qualification

The design team may, at its discretion, require a Quality Audit of the painting sub-contractor to ensure that he has the management, facilities, skilled staff and quality control facilities and staff, to carry out quality control during application of coatings to ensure compliance with specification. The sub-contractor shall accept full responsibility for the quality of his work and of materials used, irrespective of any quality surveillance that may be carried out by the design team.

<u>The sub-contractor shall keep at least the following records:</u>

- Material batch records
- Psychometric records
- Records of surface preparation
- Dry film thickness measurements per coat

Guarantees.

Performance guarantees for the applied coating systems shall be offered jointly by the coating manufacturer and coating applicator. Whilst the period of guarantee will vary from situation to situation, the criteria for failure will not exceed Re2 on the European Scale of Degrees of Rusting. All guarantees in the terms of protection against corrosion shall be ceded to the client.

PROTECTION

Special care shall be taken in transport, delivery, storage on site and installation to ensure that equipment and/or components are protected, installed and cleaned to ensure that the entire system is in 'as new' condition at start-up.

The Subcontractor shall be responsible for all hoisting and rigging of equipment/material into its final position in the building. Equipment enclosed packaging shall be of sufficient strength and/or temporarily reinforced during transport to - and handling on site, until installed in its final position, to ensure that it retains its structural and dimensional integrity during these phases of the contract.

No "repaired" equipment/components (after damage by either own or other parties/construction trades either prior to, during or after installation) will be accepted at handover.

Subcontractor shall remain responsible for equipment in 'as new condition' and is not allowed to install equipment in areas or spaces where it can be subjected to damage

through weather or trades for which it has not been designed.

FITTINGS

**General**

Materials, components, fittings and fixtures shall be so selected that they are suitable for the expected conditions of use.

All materials, components, fittings and fixtures in every part of a water installation shall operate effectively under all normal conditions likely to be experienced when the water installation is in service, and

The use of dissimilar metals in below-ground installations shall be avoided wherever practicable, or special measures shall be taken to prevent corrosion where pipes, pipe joints or connected fittings are of dissimilar metals.

**Iron** and steel

The following shall be deemed to be acceptable:

a) Malleable cast-iron pipe fittings that comply with the requirements of SANS 14;
b) steel pipes and pipe fittings with a nominal bore up to 150mm that are suitable for screwing to SANS 1109-1 pipe threads, and that comply with the requirements of SANS 62-2;
c) galvanized steel tubes, tubulars and fittings that have been galvanized in accordance with the requirements of SANS 763; and
d) galvanized iron pipes and fittings that comply with the requirements of SANS 62-1 for medium sized pipes.

Where buried galvanized steel tubes and fittings can suffer rapid corrosion in acidic soils, special precautions shall be taken to protect such pipes and fittings against external corrosion.

All pipe fittings must be listed by a nationally recognized testing agency, and in full compliance to the appropriate standard. No Eastern Block fittings shall be allowed.

Only Tupy or Crane fittings, or FM approved Mech fittings, or BS kite marked Mech Fittings are allowed. The tender is given timeously and thus if import of fittings is required, there shall be no excuse for late delivery

NO imported piping shall be allowed.

WELDED PIPES

Sections of shop-welded piping shall be joined on site by approved fittings. All welding (off site) is to be SANS 10044.

No welding will be allowed to take place on site. Welding shall be subject to X ray testing, at the expense of the contractor.

One out of every 10 welds shall be examined by X ray. Should any weld prove unsatisfactorily, the total installation shall be X rayed.

Only coded welders shall be allowed to weld sprinkler pipe work, and welder's certification shall be submitted prior to commencing the installation.

When welding sprinkler piping special attention shall be given to the following:

- Holes in pipe for outlets shall be cut to the full inner diameter of the fitting prior to welding the fitting in place.
- Cut-out pieces shall be retrieved and stored for verification.
- There shall be no penetrations that will reduce the inner diameter of the pipe.
- Torch cutting and welding shall not be permitted as a means of modifying and repairing fire suppression system piping.
- Qualification of the welding procedure to be used and the performance of the welders shall meet or exceed the requirements of the welding standards required by the appropriate Standards.
- A welding procedure shall be prepared and qualified by the contractor or fabricator before any welding is done. Qualifications of the welding procedure to be used and the performance of all welders and welding operators is required and shall meet or exceed the requirements of American Welding Society Standards AWS DIO.9, Level AR-3.
- Contractors or fabricators shall be responsible for all welding they produce. Each contractor or fabricator shall have an established written quality assurance procedure ensuring compliance with the required standards.

## 6. JOINTS TO SERVICE OUTLETS– DOLOMITIC SOIL CONDITIONS

HDPE supplies to hose reels must rise to 200mm above finished skirt or paving level on the outside of the building footprint complete with 400mm offset prior to connection to galvanized mild steel supply pipe running in ceiling space to hose reel. Continue supply to hose reels in close proximity. See Fig 1 below for detail.

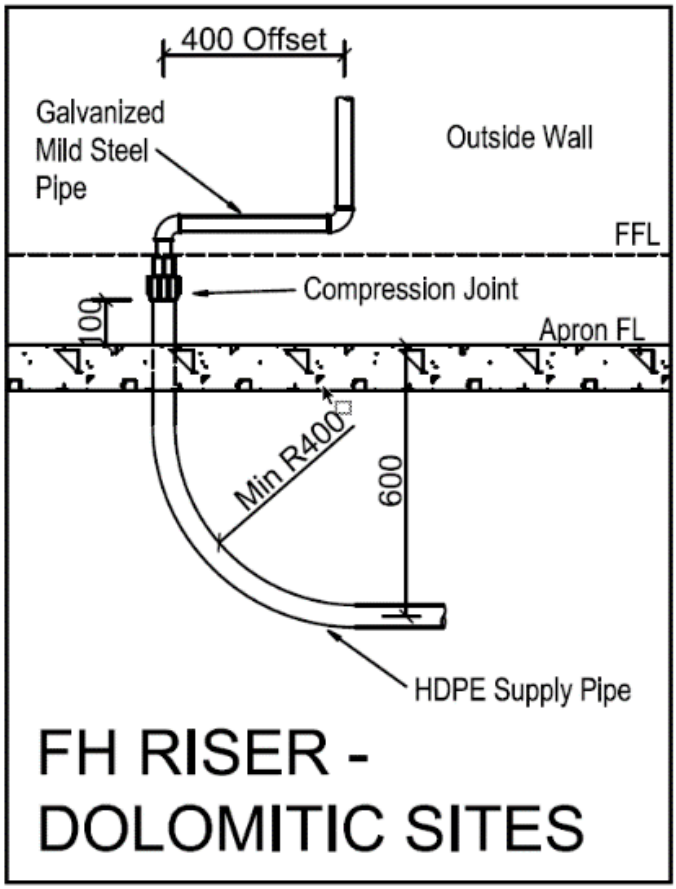
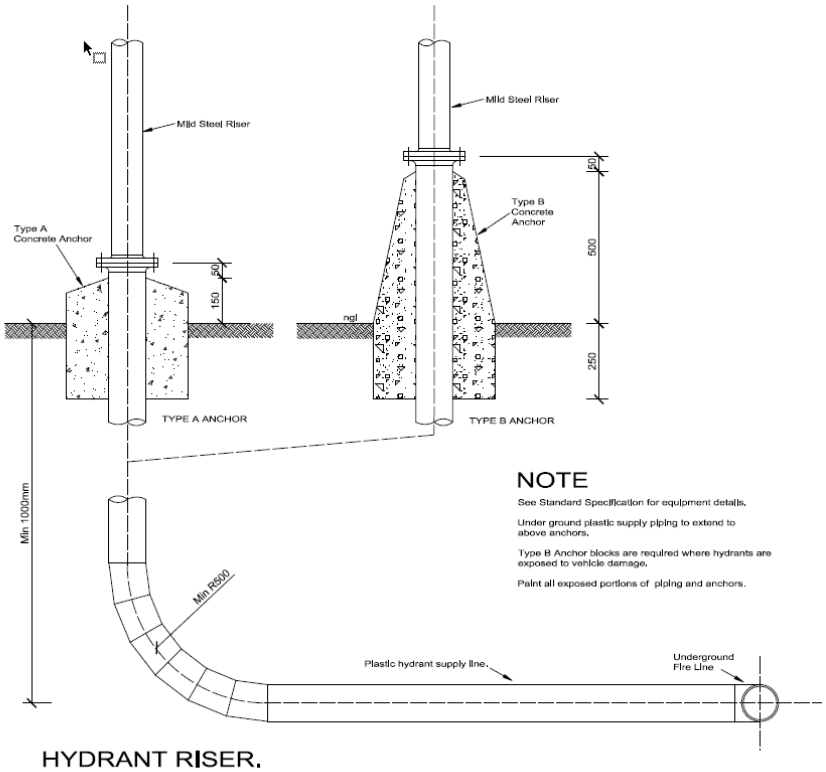



**Fig.1 FH Riser – Dolomitic Sites**

Hydrant valve risers must be plastic to above the concrete anchors to which mild steel risers must be connected. See Fig 2. below for detail.




HYDRANT RISER.
DOLOMITIC CONDITIONS.
NTS

Plant room feed and supply underground piping must rise to at least 500mm above finished skirt or paving level on the outside of the building footprint and offset 2m horizontally prior to penetration trough wall to inside.

## 7. WATER STORAGE TANKS AND APPURTENANCES.

**Construction type**
The tank shall be made up of pre-manufactured galvanized steel sections and is described as follows

**Materials**
The material, as specified, shall be without defects that affect its strength or service. The workmanship shall be of such quality that defects or injuries are not produced during manufacture or erection. Specified unit stresses shall not be exceeded. The structure and its details shall possess the requisite strength and rigidity.

**Construction**
A suction tank shall be fitted with a roof, a contents gauge, overflow pipe(s) and drainage facilities. The tank shall be mounted on a stand, 0.5 meter high and constructed of concrete up-stands cast in position by the builder. Foot plates shall be of sufficient size to distribute the tank weight evenly without damage to the footings.

Automatic float valves shall be readily accessible for testing and maintenance.

Provision shall be made for the tank to be isolated for cleaning and maintenance purposes.

**Joints**
All joints and plates or sheets shall be field bolted. Bolt holes shall be shop-punched or drilled for field assembly. Joints that are in contact with water and weather-tight joints shall be sealed. Bolts, anchor bolts, and nuts shall conform to AWWA D103, Factory-Coated Bolted Steel Tanks for Water Storage.

**Gaskets**
Gasket material shall be of adequate tensile strength and resilience to obtain a leak proof seal at all seams and joints. Gasket material shall be resistant to weather and ozone exposure. In addition, gasket material shall be capable of resisting chlorination exposure.

**Sealant**
The tank manufacturer shall supply sealants. Sealants shall remain flexible over a temperature range of -40ºC to 75ºC. Resistance to hardening and cracking shall be required.

The sealant shall be solid with no plasticisers or extenders to cause shrinkage. The sealant shall resist ozone and ultraviolet light and shall not swell or degrade under normal water storage conditions. In addition, the sealant shall be capable of resisting chlorination.

**Welding**
Welding shall be limited to the shop installation of nozzles, vents, manway connections, and subassemblies. Field welding shall not be permitted.

All coated parts shall be protected from damage during transport.

**Baffles, screens and strainers.**
Baffles shall be provided at the point of entry of supply-water to suction tanks or pits to prevent the pump from entraining air.

**Roof hatch**
A safe means of access shall be provided to equipment such as float-valve assemblies and feed pipes.

An easily accessible roof hatch or roof door having a minimum opening dimension of 650 mm shall be provided in the roof. The hatch cover shall be built of steel plate with a minimum thickness of 4.8 mm. The opening shall have a curb that is a minimum of 100 mm high, and the cover shall have a minimum downward overlap of 50 mm. A substantial catch shall be provided to keep the cover closed.

**Erection**
Experienced contractors shall handle any necessary work. Careful workmanship and expert supervision shall be employed.

Bolted tanks shall be erected in accordance with the manufacturers' drawings and

instructions.
The erector shall exercise care to properly install all parts of the tank including, but not limited to, gaskets and sealants.

Care in handling coated parts shall be exercised. Any sections that experience damage to the factory-applied coatings shall be repaired or replaced in accordance with the manufacturer's instructions. Excessively damaged parts shall be replaced.

**Workmanship**
In addition to complying with the requirements of this specification, it is expected that the contractor will also follow the spirit of the standard, by using their experience and ability to create structures that shall prove reliable under all specified conditions.

The contractor's representatives shall provide careful inspection during shop fabrication and field erection.

The inspection shall include, but shall not be limited to, a check of the following:

(a) The thickness of butt-welded plates in tanks and tubular columns
(b) The appearance of welding in tank plates where a balcony is omitted and in tubular columns and at struts, except near the ladder and base of the structure
(c) The extent of inaccessible dents and out-of-roundness of tubular columns and struts

**Corrosion protection**
Parts that are inaccessible after fabrication, but that are subject to corrosion, shall be protected by paint before assembly. Surfaces in watertight joints shall be coated with clear oil or lacquer.

The tank shall be galvanized and bolted together on site. No site welding is permitted.

## 8. FIREWATER PUMP

**General**

The performance characteristics of the pump sets shall be such that the pressure drops progressively with the rate of demand, so that while being capable of providing the rate of flow and pressure required at the highest and most remote parts of the building, the output will be such as to provide for the excessive rate of discharge at the lowest level in the areas closest to the pump set.

**Cooling**

Means shall be provided to allow a continuous flow of water through a pump at a rate sufficient to prevent overheating of the pump when it is churning. Provision shall be made for the disposal of any cooling water to tank.

**Pump and Motor Labelling**

The pump and motor shall be labelled for duties and capacities.

**Materials for Pumps**

Any pump that is constructed from materials other than those specified in this subclause shall have its design features approved by the engineer.

Cast iron shall not be used for any wetted rotating component or for any stationary component that is in close running contact with the rotating member.

Where the following pump parts are used for standard pumps, the following materials shall be deemed acceptable:

| | | |
|---|---|---|
| a) | bearing | ball /roller |
| b) | casing | cast iron |
| c) | case wear ring | bronze |
| d) | gland | bronze |
| e) | gland packing | high-grade graphite cotton |
| f) | impeller | bronze |
| g) | lantern ring | hi-dur |
| h) | mechanical seal | carbon ceramic |
| i) | shaft | EN 8 steel |
| j) | shaft sleeve | bronze |
| k) | stuffing box brush | bronze |

**Pump Drives**

The pumps shall be driven direct by electric motors. The coupling between the driver and the pump shall be such that either unit can be removed without disturbing the other.

**Output Power**

The rated output power of the electric motors used to drive the pumps shall be at least 10% more than the full load demand of the pump at any flow rate up to the design pressure and 1,1 times the design flow rate.

**Electric Motor Requirements**

Electric motors shall:

a) be of squirrel-cage type rotor design,

b) be continuously maximum rated, and have a temperature rise not exceeding 75°C above a maximum ambient temperature of 40°C, when measured by the resistance method.

c) conform to the dimensions given in SANS 1804-2,

d) have three-phase or single-phase windings suitable for a 50 Hz electrical supply,

e) be accommodated in a totally enclosed fan-cooled enclosure,

f) be cooled by methods complying with the requirements of SANS 1804-2,

g) have starting devices housed in an enclosure that complies with the requirements of SANS 1222,

h) produce sufficient starting torque to accelerate to full operating speed within 10 seconds,

i) have a starting torque sufficient to accelerate the motor up to 75 % of full load speed within 5 seconds,

j) these accelerating times shall be achieved under open-valve conditions against the necessary motion and delivery conditions,

k) have starting resistors so designed as to permit 15 seconds starting operation during each period of 80 seconds, for a period of at least 1 hour,

**Starting of Pumps**

Starters of the electric motors shall be suitable for fire hose reel use and shall be of the AC automatic type housed in enclosures that comply with the requirements of SANS 1222.

Direct on-line starting is not preferred, but star / delta, auto-transformer or stator and rotor type starters may be used only with the express permission of the engineer.

**Wiring**

Motors of power exceeding 3 kW shall have the ends of each winding brought out to six terminals in the terminal box, in accordance with SANS 1804-2, so that the motor can be star/delta started if desired. Motors of power less than 3 kW shall have the ends of three windings brought out to three terminals.

**Operation**

**The pump installation shall be:**

(a) Packaged unit suitable for hose reel boosting

(b) fitted with a suitable pressure gauge on the delivery side of the pump.

The pumps shall be fitted with an automatic control starting mechanism that shall start a booster pump automatically as soon as any single fire hydrant or any single hose reels are brought into operation, causing a lowering of the static pressure in the fire installation. A standard sprinkler type pump start arrangement shall be installed

A surge or bladder tank shall also be incorporated. A drop in pressure shall automatically

start the pump and simultaneously raise an alarm on the panel and relay the alarm with a buzzer to security, and main fire alarm panel.

The pump control shall be such that the pump will have a timer to prevent the pump from surging between on and off. Once the pump starts the timer shall activate. After the pressure has risen to activate the pressure switch to switch the pump off, the delay timer shall start a three-minute cycle, after which the pump shall switch off.

Should the pressure fall in this period, the cycle shall again commence as stated above.

The system shall be driven by one pump.

**Layout**

The layout of the pump station shall be such that maintenance on any part of it can be carried out without impediment, and that another motor can be so installed during the servicing of the relevant motor or pump that the water supply system will remain operative.

The installation and specifically the discharge pipeline should further also be protected against dynamic pressures that can develop after the pump has been switched on and off, or as any other cause. Backflow shall be avoided by the use of one-way control valves.

**Inlet to pumps**

The pump inlets are to be protected by strainers placed in front of the inlet openings to prevent the ingress of foreign material without causing unacceptable loss of energy.

**Protection of Motors**

The following equipment shall be installed on the control panel as standard equipment for the pump installation:

a. main isolating switch;

b. circuit-breaker protection for each motor;

c. contactors for each motor;

d. thermal over current protection for each motor;

e. under voltage and over voltage protection in accordance with SANS standards;

f. phase-failure and rotation protection (three-phase motors);

g. low water level protection;

h. short-circuit protection

## 9. FLOW AND PRESSURE REQUIREMENTS

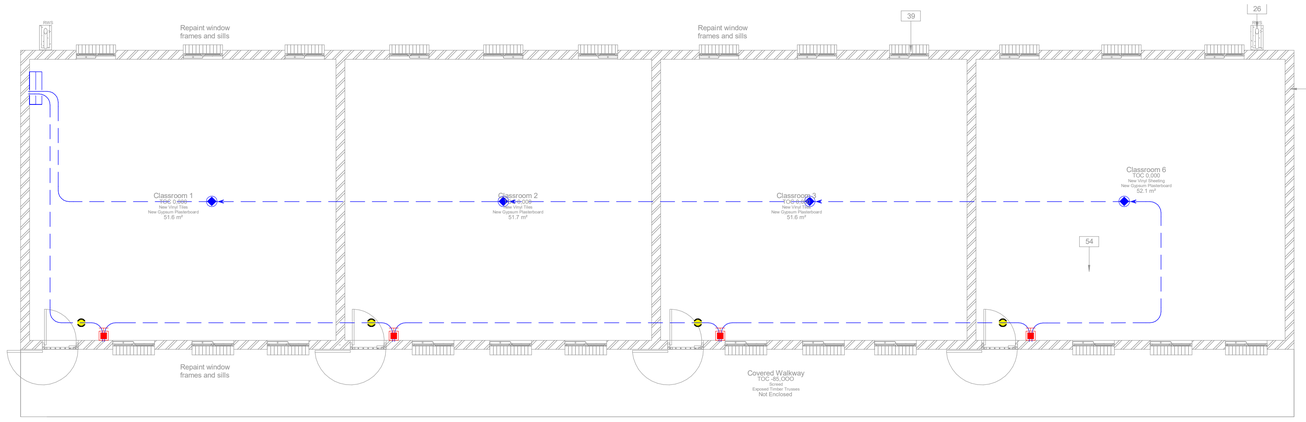
For the purposes of this project, pumps are required as follows:

| **Description** | **Value** |
|---|---|
| Number of pumps | 2 |
| Arrangement of pump control | Automatic/Manual |
| Duty point | 25 l/sec at 420kPa |
| Power source to pumps | 1 Electrical and 1 diesel |
| Tank minimum capacity | 130 000 Litres |
| Number of Jockey pumps | 1 |
| Duty point for Jockey pump | 1 l/sec at 620kPa |

Note: Pump set shall be supplied by a reputable fire pump supplier such as Davron Equipment, Emelpee, Natal Pump Supplies or approved equal.

**End of document**

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE 4x CLASSROOM BLOCK 2 FIRE DETECTION PLAN

1 : 75

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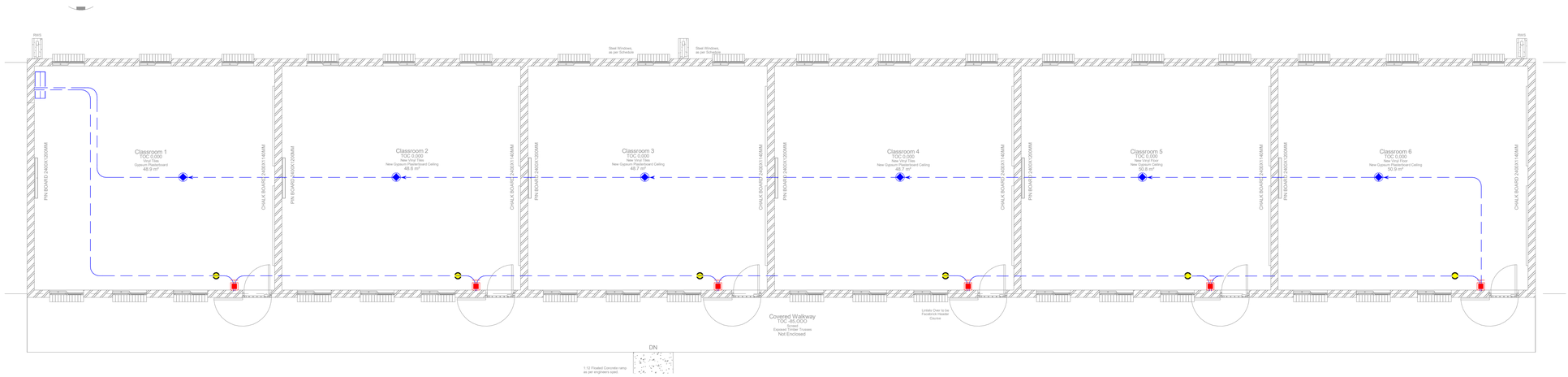
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DRAWING DESCRIPTION

4 CLASSROOM BLOCK 2 FIRE DETECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-4CL2-FD** | | |

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE 6x CLASSROOM BLOCK 1 FIRE DETECTION PLAN

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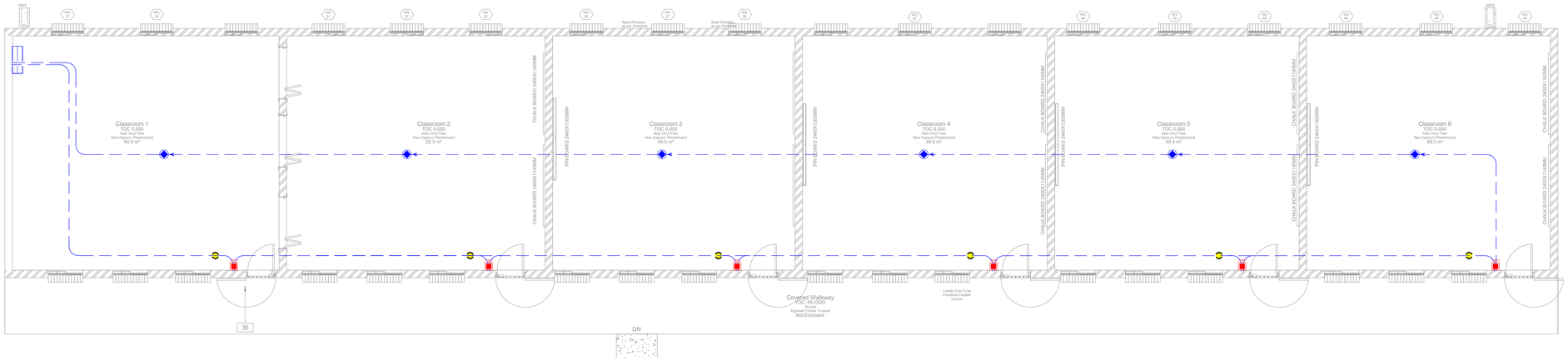
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DRAWING DESCRIPTION

6 CLASSROOM BLOCK 1 FIRE DETECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-6CL1-FD** | | |

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE 6x CLASSROOM BLOCK 3 FIRE DETECTION PLAN

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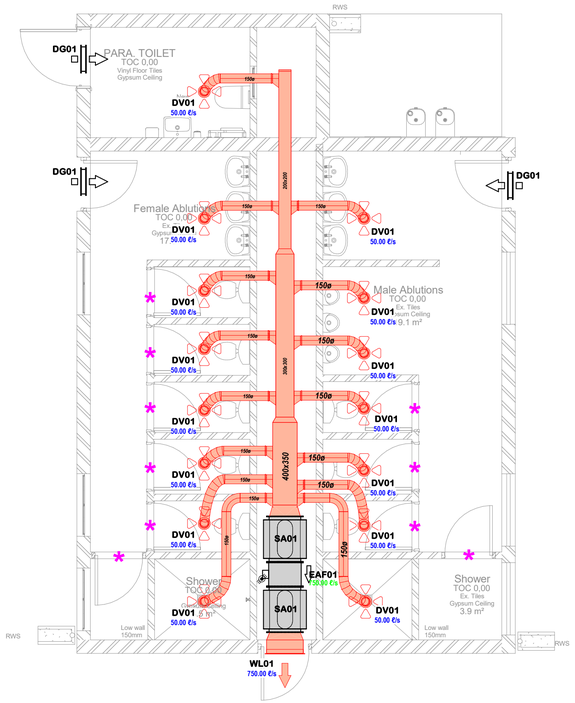
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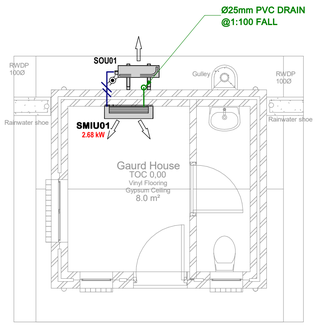
6 CLASSROOM BLOCK 3 FIRE DETECTION LAYOUT

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| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-6CL3-FD** | | |




## TLALE ABLUTION BLOCK HVAC FLOOR PLAN

1 : 50




## TLALE GUARD HOUSE HVAC FLOOR PLAN

1 : 50

## HVAC LEGEND

- Fresh Air Duct
- Externally Insulated Supply Air Duct
- Return Air Duct
- Extract Air Duct
- 600 x 600 supply air diffuser
- disc valve
- Return air grille/Extract grille
- Weather Louvre/Side Grille
- Sound Attenuator
- Wall Mounted Fan
- Washable filter
- Mix Vent Fan
- Axial Fan
- Midwall Indoor Unit
- Fan Coil Unit/Air Handling Unit
- 4 Way Cassette Indoor Unit
- Door grille
- Single Phase Isolator
- Three Phase Isolator
- Chilled Water Supply
- Chilled Water Return
- Controller
  * 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN

### Tlale Ablution Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| DG01 | Door Grille | 0.00 | | 400 | 400 | | 3 | |
| DV01 | Extract Disc Valve | 50.00 | 150 | | | 150 | 15 | |
| WL01 | Weather Louvre Extract Air | 750.00 | | 600 | 400 | | 1 | |

### Tlale Ablution Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| FB01 | Filter | | | | 200 | 200 | 1 | |
| SA01 | Sound Attenuator Small | 200 | 200 | 600 | | | 2 | |

### Tlale Ablution Block Axial Fan Schedule Copy 1

| Code | Description | Air Flow (l/s) | Inlet Diameter (mm) | Power Absorbed (kW) | Power Motor(kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| EAF01 | Axial Fan | 750.00 | 500 | 0.21 kW | 0.40 kW | 400/3/50 | 1 | |

### Tlale Guard House Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SMIU01 | Wall Mounted Split Unit | 2.68 kW | 2.81 kW | 275 | 790 | 200 | 0.825 | 230/1/50 | 1 | |

## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
8. A/C equipment to be fitted with anti-vibration mountings as per the specification.
9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
12. All refrigerant piping, electrical and control wiring between indoor and outdoor split type units shall run in trunking with cover plate / Wire basket / tray and adequately strapped.
13. All supply air ducting to be externally insulated & treated as per specification, unless otherwise stated.
14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.

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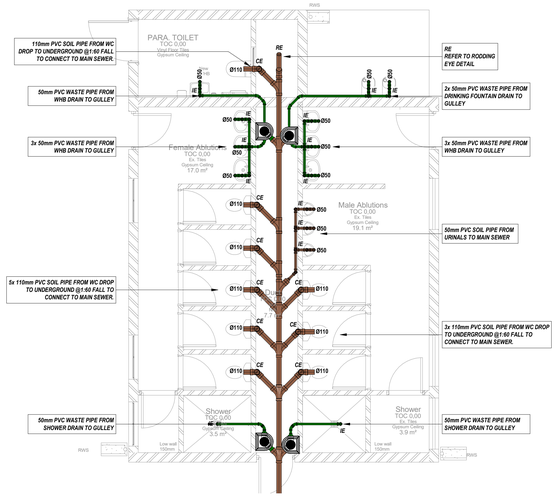
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

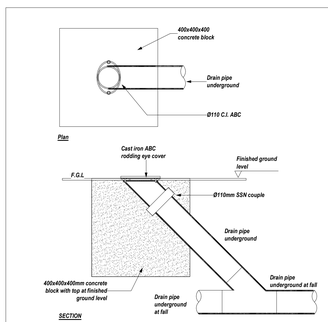
ABLUTION AND GUARD HOUSE BLOCK HVAC LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY B.MAHLAELA | DRAWN BY M.LEBOHO | APPROVED BY B.MAHLAELA | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY B.MAHLAELA | |
| DRAWING NUMBER | ME-400-ABG-HVAC | | |



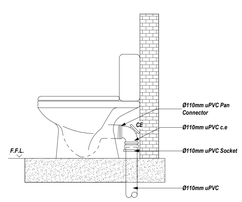

## TLALE ABLUTION BLOCK DRAINAGE FLOOR PLAN

1 : 50



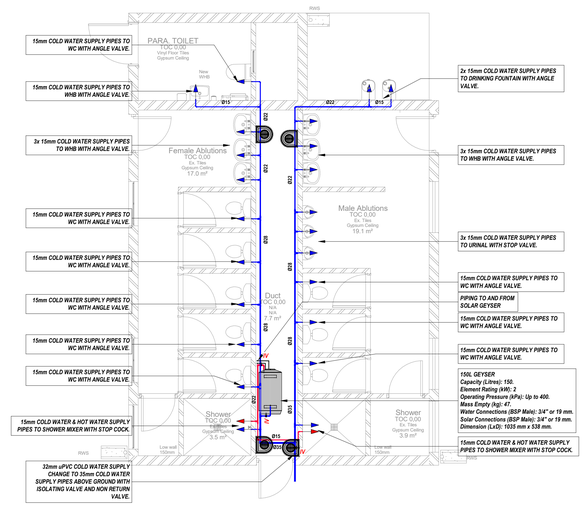

## RODDING EYE DETAIL

NTS



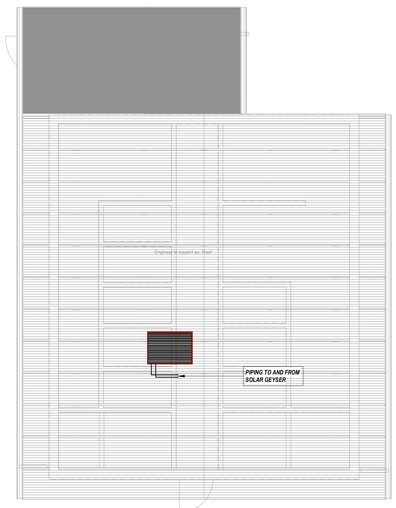

## WC WITH PAN CONNECTOR DETAIL

NTS




## TLALE ABLUTION BLOCK CENTRE BLOCK WATER RETICULATION FLOOR PLAN

1 : 50




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### Pipe Legend

- COLD WATER COPPER SUPPLY PIPE
- HOT WATER COPPER SUPPLY PIPE
- BALL VALVE
- uPVC Soil Pipe
- uPVC Waste Pipe
- uPVC Vent Pipe

### Installation Notes

- All Drainage in coordance with SANS10400 (Part P) - 2010
- All subsurface (underground) drainage shall be Ø110mm. Pipes shall be installed at an invert level of 450mm below TOC unless otherwise noted.
- No 90° junctions in any horizontal line. All junctions in the horizontal plane shall be 45 Y junctions. No T junctions or swept entry junctions allowed.
- All soil and drain pipes shall be installed at a minimum fall of 1:60 unless otherwise noted.
- All soil stack or waste stack shall have long radius bends or 2x45° bends at bottom of stack.
- Stacks higher than 10m shall be enlarged at the stack foot to 160mm and reduce back to 110mm after 2.5m
- A rodding eye/inspection eye shall be fitted 1000mm AFFL on each stack and be accessible for rodding from a service duct.

### Abbreviations

| | |
|---|---|
| Cast iron pipe | CI |
| Galvanized mild steel pipe | GMS |
| Copper pipe | Cu |
| High Density Polyethylene Pipe | HDPE |
| Concrete pipe | Conc |
| Unplasticised Polyvinyl chloride Pipe | uPVC |
| Bath | Bath |
| Shower | SHR |
| Wash hand basin | WHB |
| Sink | S |
| Wash trough | WT |
| Drip sink | DS |
| Water closet | WC |
| Urinal | Ur |
| Floor Drain | FD |
| Inspection chamber | IC |
| Inspection eye | IE |
| Rodding Eye | RE |
| Cleaning eye | CE |
| Dished gulley | DG |
| Grease trap | GT |
| Gully | GD |
| Waste pipe | WP |
| Vent pipe | VP |
| Vent Valve | VV |
| Waste and vent pipe | WVP |
| Soil and vent pipe | SVP |
| Ramp | RAMP |
| Rain water pipe | RW |
| Storm water pipe | SW |
| Catchpit | CP |
| Soil pipe | SP |
| Expansion pipe | Exp. P |
| Top of Concrete | TOC |
| Above finished floor level | AFFL |
| Under Slab Soffit | USS |
| Above Slab Soffit | ASS |
| From Above | FA |
| From Below | FB |
| To Above | TA |
| To Below | TB |
| On Wall | OW |
| In Wall | IW |
| In Surface Bed | ISB |
| Under Surface Bed | USB |
| Stub Stack | SS |
| Branchball Fitting Geberit | BF |
| Shower Trap and Outlet | SPO |
| Wet Services | WS |
| Hot water | HW |
| Hot water return | HWR |
| Cold Water | CW |
| Non Portable water | NoPo |
| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |

NOTE
1. Label Material to be made from trafflolyte and be white with black engraving.
2. The Double sided tape to be used shall be of the Automative tape 3M type.
3. It can be purchased from any Automative paint supply shop.
4. Label to be fitted against the Ceiling Strip below the Valves above
5. All valves to be labelled
6. Locations of valves in ceiling void to be labelled with engraved labels on ceiling tee strip




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### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

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PROJECT

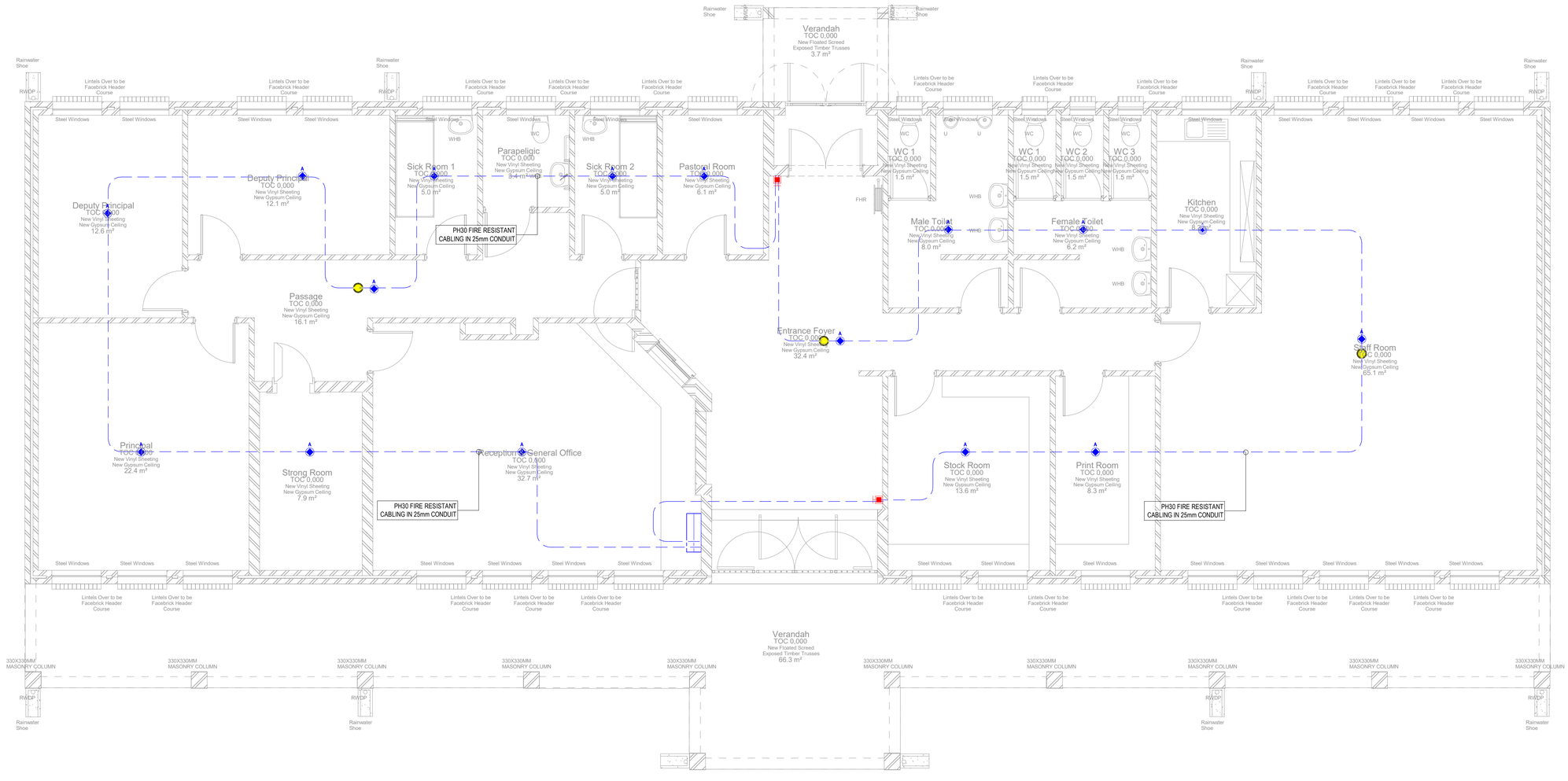
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

ABLUTION BLOCK WET SERVICES LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: B.MAHLAELA | DRAWN BY: M.LEBOHO | APPROVED BY: B.MAHLAELA | SHEET SIZE: A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER: | ME-400-AB-WS | | |

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE ADMINISTRATION BLOCK FIRE DETECTION PLAN

1 : 50

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Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
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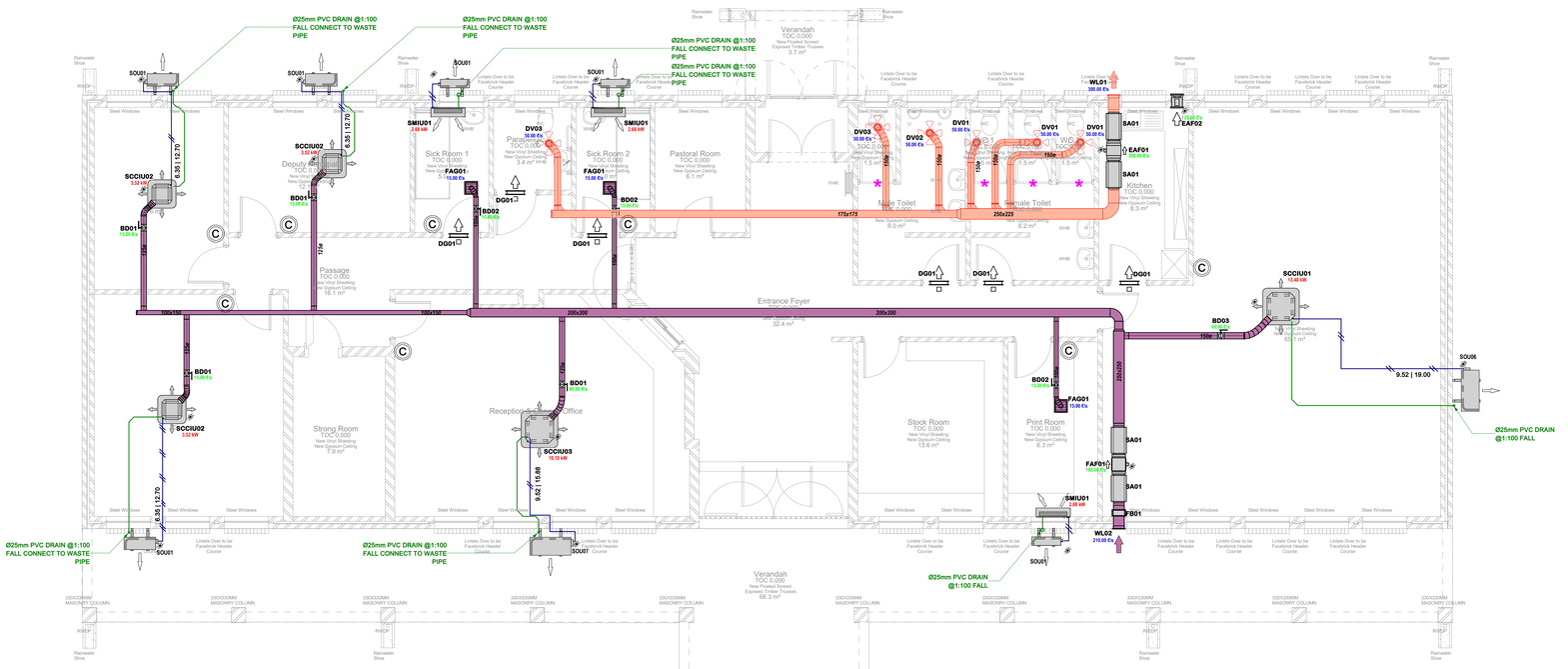
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

ADMINISTRATION BLOCK FIRE DETECTION LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A1 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER | ME-400-ADM-FD | | |




# TLALE ADMINISTRATION BLOCK HVAC FLOOR PLAN

1 : 50

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## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
8. A/C equipment to be fitted with anti-vibration mountings as per the specification.
9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
12. All refrigerant piping, electrical and control wiring between indoor and outdoor split type units shall run in trunking with cover plate / Wire basket / tray and adequately strapped.
13. All supply air ducting to be externally insulated & treated as per specification, unless otherwise stated.
14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.

## HVAC LEGEND

- *Fresh Air Duct*
- *Externally Insulated Supply Air Duct*
- *Return Air Duct*
- *Extract Air Duct*
- *600 x 600 supply air diffuser*
- *disc valve*
- *Return air grille/Extract grille*
- *Weather Louvre/Side Grille*
- *Sound Attenuator*
- *Wall Mounted Fan*
- *Washable filter*
- *Mix Vent Fan*
- *Axial Fan*
- *Midwall Indoor Unit*
- *Fan Coil Unit/Air Handling Unit*
- *4 Way Cassette Indoor Unit*
- *Door grille*
- *Single Phase Isolator*
- *Three Phase Isolator*
- *Chilled Water Supply*
- *Chilled Water Return*
- *Controller*
- ** 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN*

## Tlale Administration Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| DG01 | Door Grille | 0.00 | | 400 | 400 | | 6 | |
| DV01 | Extract Disc Valve | 50.00 | 150 | | | 150 | 3 | |
| DV02 | Extract Disc Valve | 50.00 | 150 | | | 150 | 1 | |
| DV03 | Extract Disc Valve | 50.00 | 150 | | | 150 | 2 | |
| FAG01 | Supply Air Grille | 15.00 | | 300 | 300 | 100 | 3 | |
| WL01 | Weather Louvre Extract Air | 300.00 | | 250 | 250 | | 1 | |
| WL02 | Weather Louvre Supply Air | 210.00 | | 250 | 250 | | 1 | |

## Tlale Administration Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| BD01 | Balancing Damper Round | 125 | | | | | 4 | |
| BD02 | Balancing Damper Round | 100 | | | | | 3 | |
| BD03 | Balancing Damper Round | 150 | | | | | 1 | |
| FB01 | Filter | | | | 250 | 250 | 1 | |
| SA01 | Sound Attenuator Small | 250 | 250 | 600 | | | 4 | |

## Tlale Administration Block Axial Fan Schedule

| Code | Description | Air Flow (l/s) | Inlet Diameter (mm) | Power Absorbed (kW) | Power Motor(kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| EAF01 | Inline Fan | 300.00 | 250 | 0.11 kW | 0.11 kW | 230/1/50 | 1 | |
| EAF02 | Wall Mounted Fan | 125.80 | 200 | 0.03 kW | 0.03 kW | 230/1/50 | 1 | |
| FAF01 | Inline Fan | 180.00 | 250 | 0.11 kW | 0.15 kW | 230/1/50 | 1 | |

## Tlale Administration Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SCCIU01 | 4-Way Blower Ceiling Cassette Split Unit | 13.40 kW | 14.65 kW | 245 | 845 | 845 | 5.336 | 230/1/50 | 1 | |
| SCCIU02 | 4-Way Blower Ceiling Cassette Split Unit | 3.52 kW | 4.00 kW | 260 | 655 | 655 | 1.160 | 230/1/50 | 3 | |
| SCCIU03 | 4-Way Blower Ceiling Cassette Split Unit | 10.10 kW | 11.00 kW | 245 | 845 | 845 | 3.700 | 230/1/50 | 1 | |
| SMIU01 | Wall Mounted Split Unit | 2.68 kW | 2.81 kW | 275 | 790 | 200 | 0.825 | 230/1/50 | 3 | |

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## Revision Schedule

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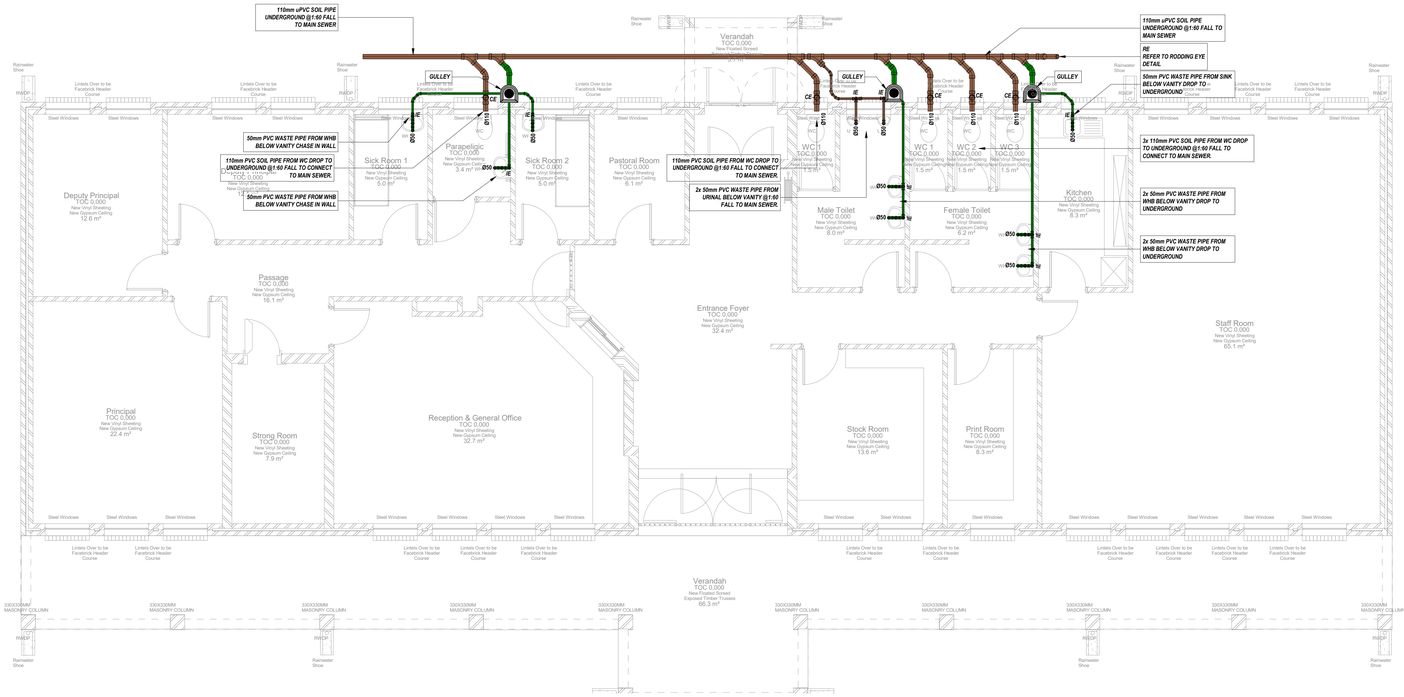
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

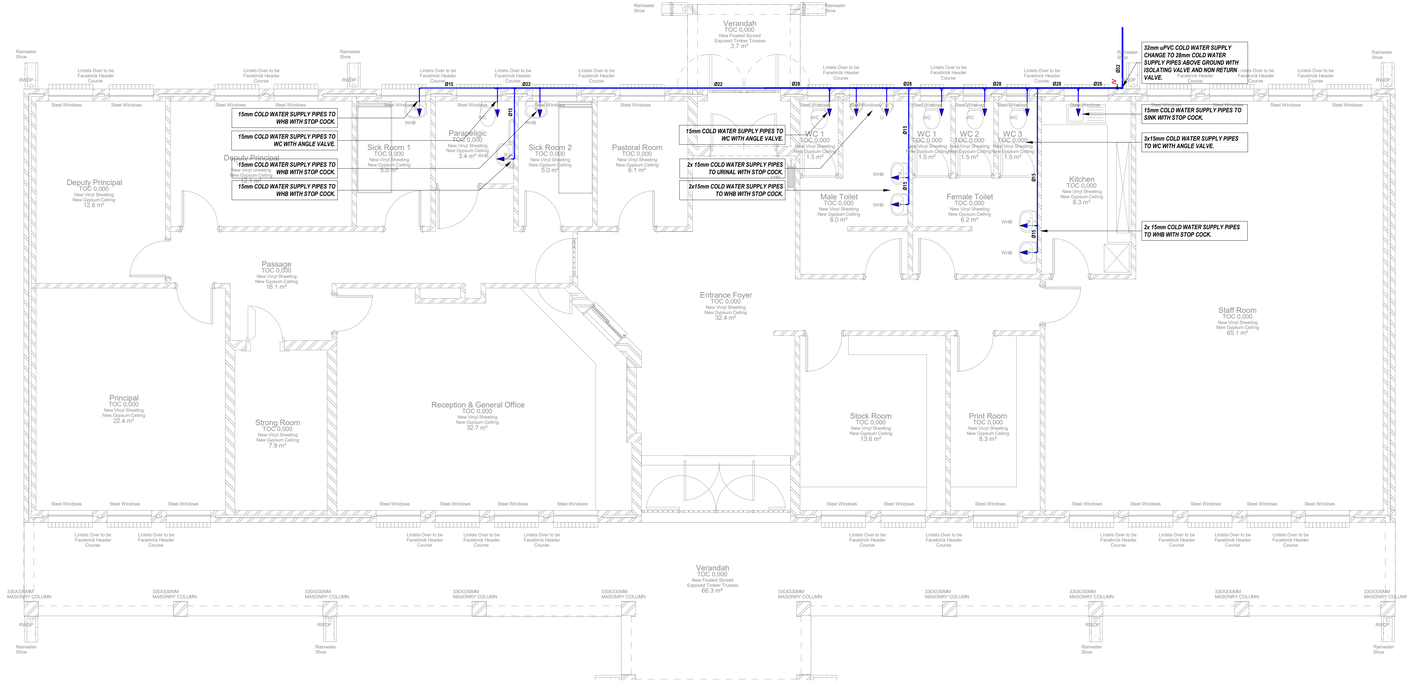
ADMINISTRATION BLOCK HVAC LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A0 |
| DATE | SCALE | CHECKED BY | |
| 2024.11.08 | As indicated | B.MAHLAELA | |
| DRAWING NUMBER | ME-400-ADM-HVAC | | |



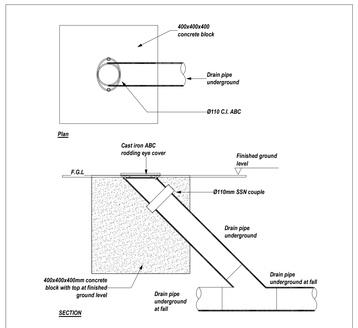

## TLALE ADMINISTRATION BLOCK DRAINAGE FLOOR PLAN

1 : 50



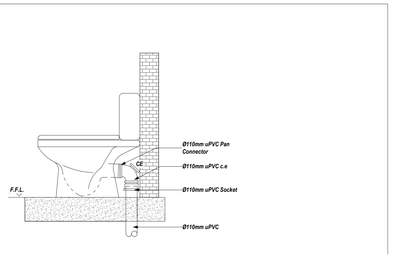

## TLALE ADMINISTRATION BLOCK WATER RETICULATION FLOOR PLAN

1 : 50




## RODDING EYE DETAIL

NTS




## WC WITH PAN CONNECTOR DETAIL

NTS

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### Pipe Legend

- COLD WATER COPPER SUPPLY PIPE
- HOT WATER COPPER SUPPLY PIPE
- BALL VALVE
- uPVC Soil Pipe
- uPVC Waste Pipe
- uPVC Vent Pipe

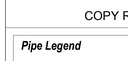
### Installation Notes

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| Gully | GD |
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| Vent Valve | VV |
| Waste and vent pipe | WVP |
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| Ramp | RAMP |
| Rain water pipe | RW |
| Storm water pipe | SW |
| Catchpit | CP |
| Soil pipe | SP |
| Expansion pipe | Exp. P |
| Top of Concrete | TOC |
| Above finished floor level | AFFL |
| Under Slab Soffit | USS |
| Above Slab Soffit | ASS |
| From Above | FA |
| From Below | FB |
| To Above | TA |
| To Below | TB |
| On Wall | OW |
| In Wall | IW |
| In Surface Bed | ISB |
| Under Surface Bed | USB |
| Stub Stack | SS |
| Branchsall Fitting Geberit | BF |
| Shower Trap and Outlet | SPO |
| Wet Services | WS |
| Hot water | HW |
| Hot water return | HWR |
| Cold Water | CW |
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| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |

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PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

ADMINISTRATION BLOCK WET SERVICES LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: B.MAHLAELA | DRAWN BY: M.LEBOHO | APPROVED BY: B.MAHLAELA | SHEET SIZE: A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER: ME-400-ADM-WS | | | |

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## Pipe Legend

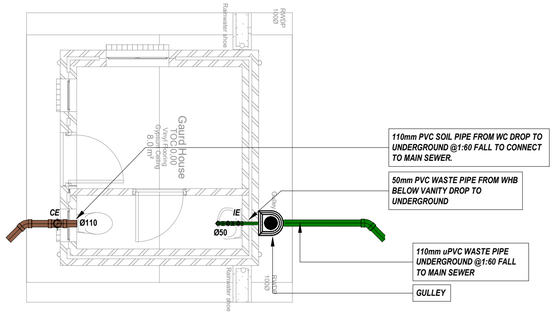
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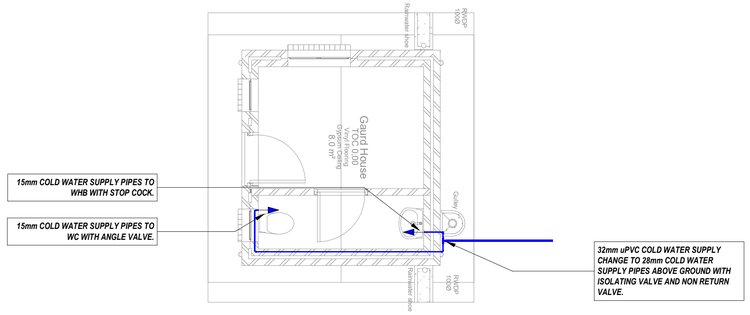
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| Non Portable water | NoPo |
| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |



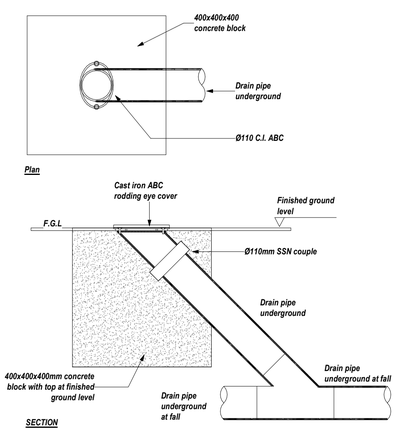

## TLALE GUARD HOUSE DRAINAGE FLOOR PLAN

1 : 50



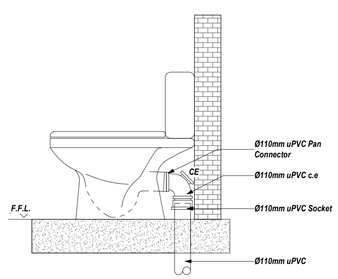

## TLALE GUARD HOUSE WATER RETICULATION FLOOR PLAN

1 : 50




## RODDING EYE DETAIL

NTS




## WC WITH PAN CONNECTOR DETAIL

NTS

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### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
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DRAWING DESCRIPTION

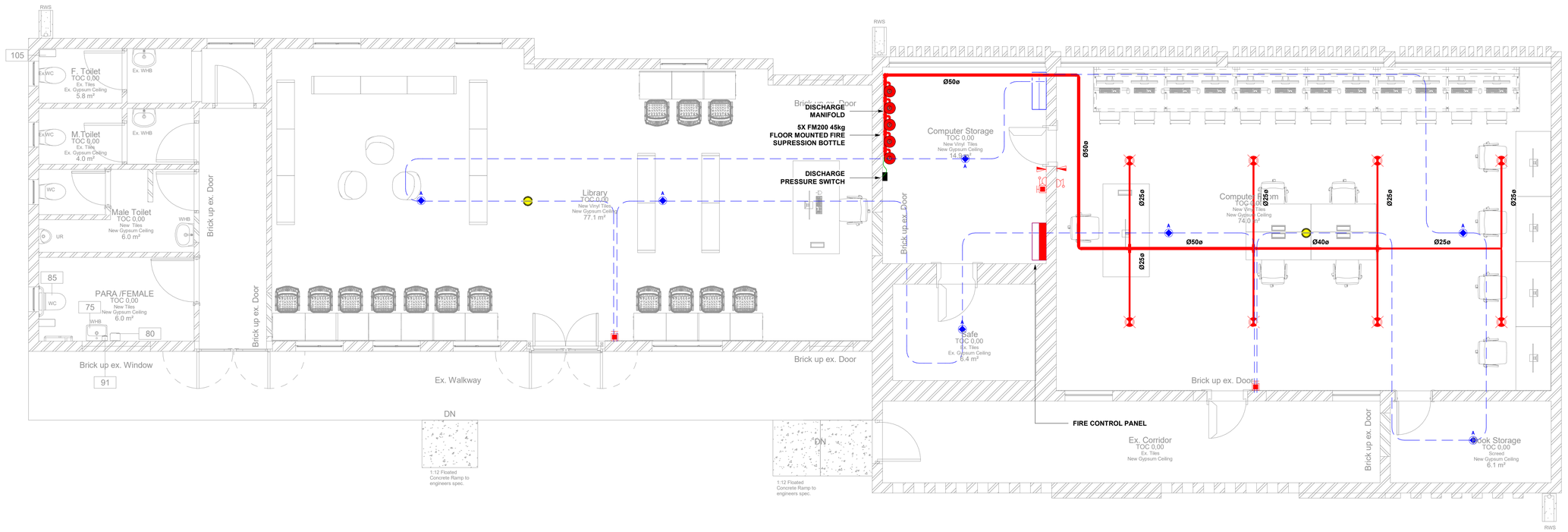
GUARD HOUSE WET SERVICES LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY B.MAHLAELA | DRAWN BY M.LEBOHO | APPROVED BY B.MAHLAELA | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY B.MAHLAELA | |
| DRAWING NUMBER | ME-400-GH-WS | | |

**FIRE LEGEND**

- FIRE CONTROL PANEL
- FIRE ALARM BELL
- OPTICAL SMOKE DETECTOR
- SIREN/STROBE WALL MOUNTED
- GAS DISCHARGE NOZZLE

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE LIBRARY AND COMPUTER LAB FIRE DETECTION PLAN

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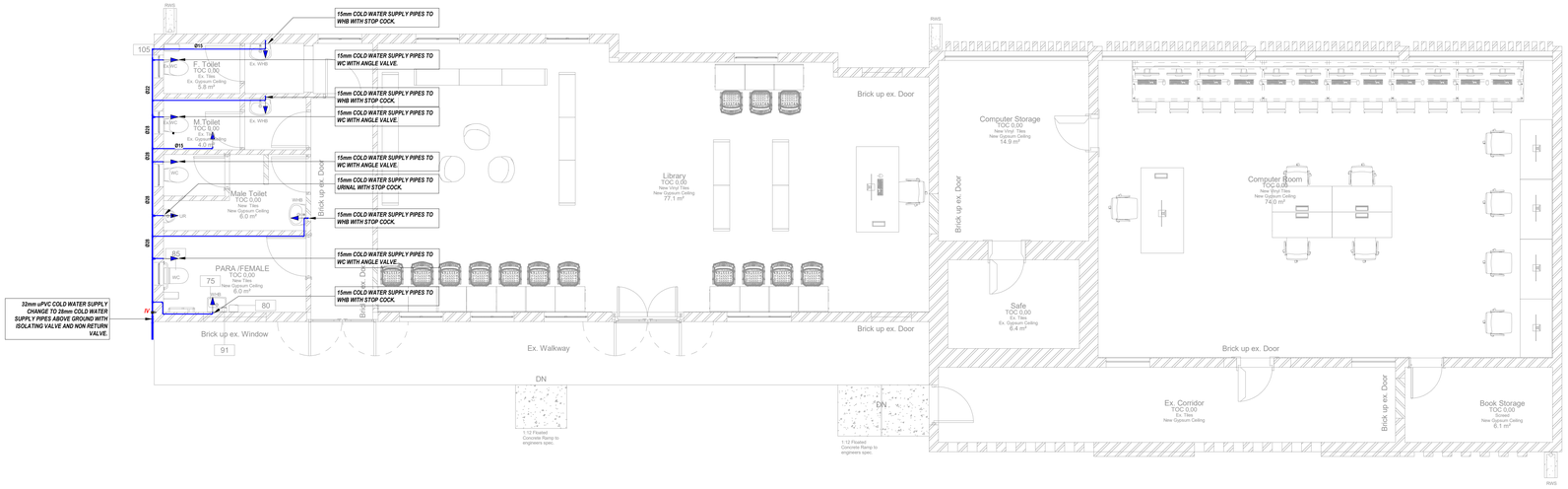
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

LIBRARY AND COMPUTER LAB BLOCK
FIRE DETECTION LAYOUT

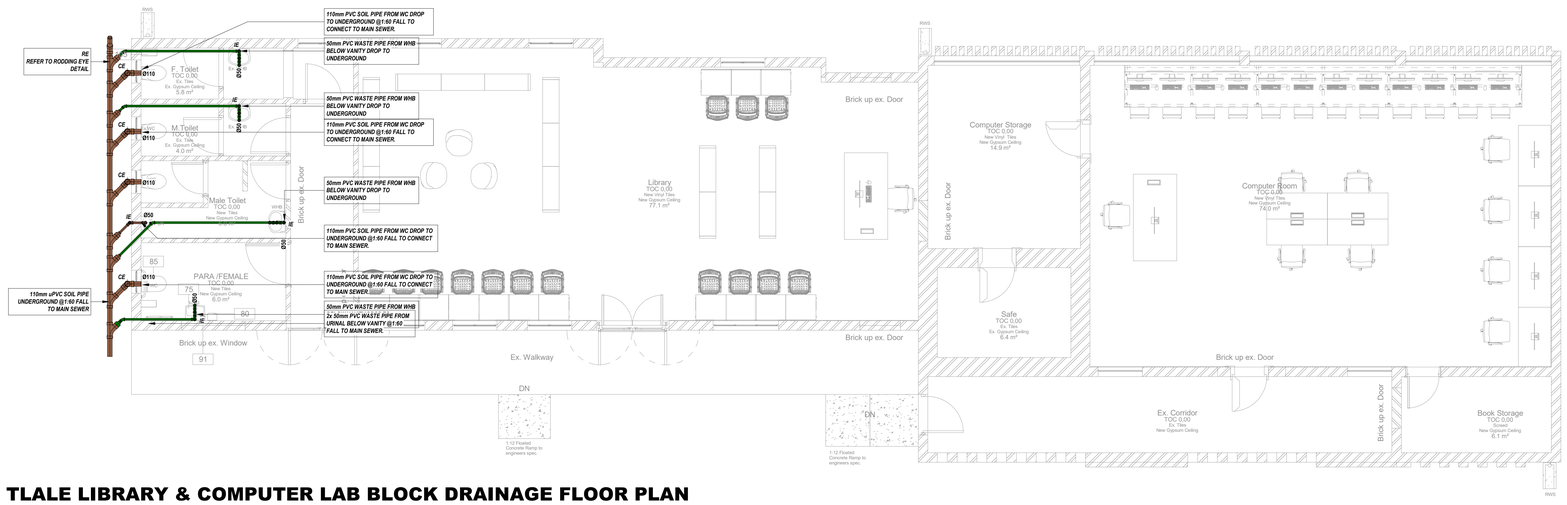
| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-LCL-FD** | | |

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# TLALE LIBRARY & COMPUTER CENTRE BLOCK WATER RETICULATION FLOOR PLAN

1 : 50




# TLALE LIBRARY & COMPUTER LAB BLOCK DRAINAGE FLOOR PLAN

1 : 50

## Pipe Legend

- COLD WATER COPPER SUPPLY PIPE
- HOT WATER COPPER SUPPLY PIPE
- BALL VALVE
- uPVC Soil Pipe
- uPVC Waste Pipe
- uPVC Vent Pipe

## Installation Notes

- *All Drainage in coordance with SANS10400 (Part P) - 2010*
- *All subsurface (underground) drainage shall be Ø110mm. Pipes shall be installed at an invert level of 450mm below TOC unless otherwise noted.*
- *No 90° junctions in any horizontal line. All junctions in the horizontal plane shall be 45 'Y' junctions. No 'T' junctions or swept entry junctions allowed.*
- *All soil and drain pipes shall be installed at a minimum fall of 1:60 unless otherwise noted.*
- *All soil stack or waste stack shall have long radius bends or 2x45° bends at bottom of stack.*
- *Stacks higher than 10m shall be enlarged at the stack foot to 160mm and reduce back to 110mm after 2.5m*
- *A rodding eye/inspection eye shall be fitted 1000mm AFFL on each stack and be accesable for rodding from a service duct.*

## Abbreviations

| | |
|---|---|
| Cast iron pipe | CI |
| Galvanized mild steel pipe | GMS |
| Copper pipe | Cu |
| High Density Polyethylene Pipe | HDPE |
| Concrete pipe | Conc |
| Unplasticised Polyvinyl chloride Pipe | uPVC |
| Bath | Bath |
| Shower | SHR |
| Wash hand basin | WHB |
| Sink | S |
| Wash trough | WT |
| Drip sink | DS |
| Water closet | WC |
| Urinal | UI |
| Floor Drain | FD |
| Inspection chamber | IC |
| Inspection eye | IE |
| Rodding Eye | RE |
| Cleaning eye | CE |
| Dished gulley | DG |
| Grease trap | GT |
| Gully | GD |
| Waste pipe | WP |
| Vent pipe | VP |
| Vent Valve | VV |
| Waste and vent pipe | WVP |
| Soil and vent pipe | SVP |
| Ramp | RAMP |
| Rain water pipe | RW |
| Storm water pipe | SW |
| Catchpit | CP |
| Soil pipe | SP |
| Expansion pipe | Exp. P |
| Top of Concrete | TOC. |
| Above finished floor level | AFFL |
| Under Slab Soffit | USS |
| Above Slab Soffit | ASS |
| From Above | FA |
| From Below | FB |
| To Above | TA |
| To Below | TB |
| On Wall | ON |
| In Wall | IW |
| In Surface Bed | ISB |
| Under Surface Bed | USB |
| Stub Stack | SS |
| Branchbalf Fitting Geberit | BF |
| Shower Trap and Outlet | SPO |
| Wet Services | WS |
| Hot water | HW |
| Hot water return | HWR |
| Cold Water | CW |
| Non Portable water | NoPo |
| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |

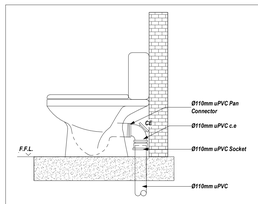
NOTE
1. Label Material to be made from traffolyte and be white with black engraving.
2. The Double sided tape to be used shall be of the Automative tape 3M type.
3. It can be purchased from any Automative paint supply shop.
4. Label to be fitted against the Ceiling Strip below the Valves above
5. All valves to be labelled
6. Locations of valves in ceiling void to be labelled with engraved labels on ceiling tee strip




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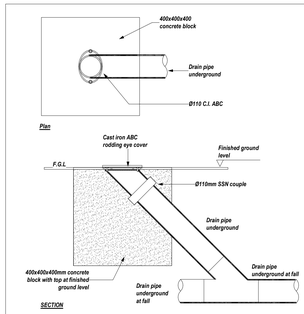
## Revision Schedule

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## WC WITH PAN CONNECTOR DETAIL

NTS




## RODDING EYE DETAIL

NTS

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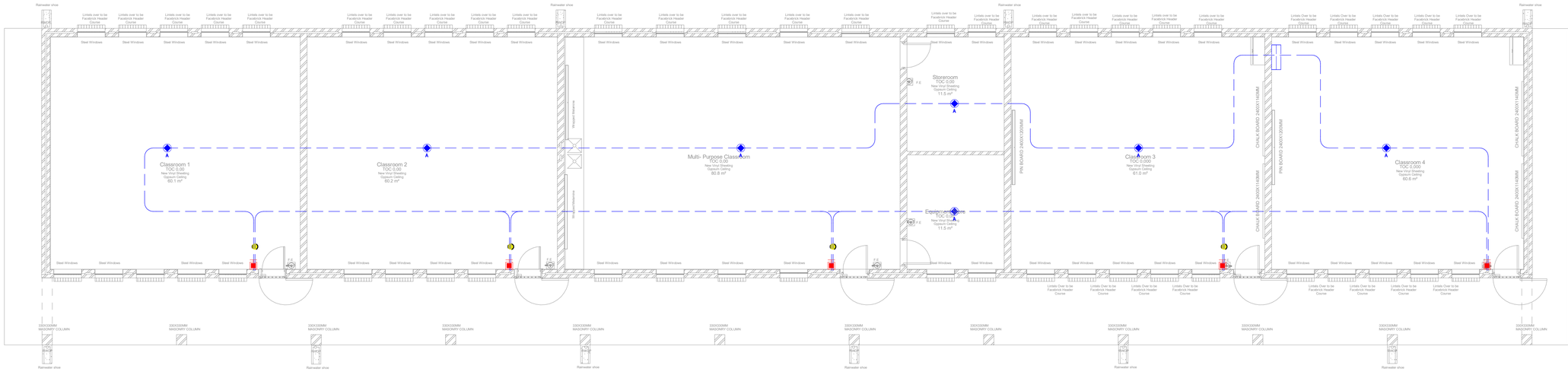
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

LIBRARY AND COMPUTER LAB
WET SERVICES LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER | ME-400-LCL-WS | | |

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE CLASSROOM & MULTI-PURPOSE CLASSROOM FIRE DETECTION PLAN

1 : 75

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DRAWING DESCRIPTION

CLASSROOM & MULTI-PURPOSE
CLASSROOM FIRE DETECTION LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A1 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER | ME-400-MC-FD | | |

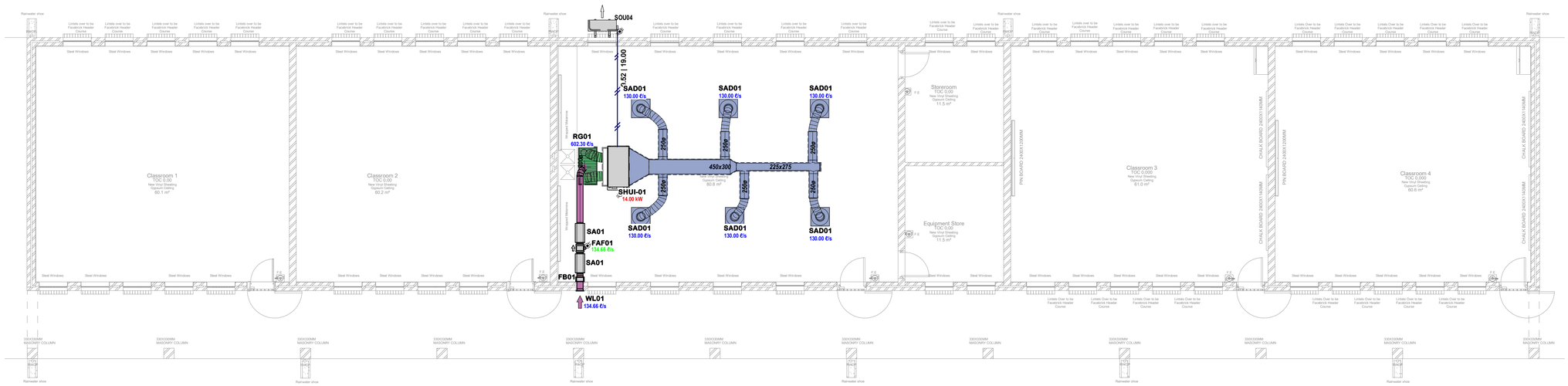
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## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
8. A/C equipment to be fitted with anti-vibration mountings as per the specification.
9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
12. All refrigerant piping, electrical and control wiring between indoor and outdoor split type units shall run in trunking with cover plate / Wire basket / tray and adequately strapped.
13. All supply air ducting to be externally insulated & treated as per specification, unless otherwise stated.
14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.

## HVAC LEGEND

- *Fresh Air Duct*
- *Externally Insulated Supply Air Duct*
- *Return Air Duct*
- *Extract Air Duct*
- *600 x 600 supply air diffuser*
- *disc valve*
- *Return air grille/Extract grille*
- *Weather Louvre/Side Grille*
- *Sound Attenuator*
- *Wall Mounted Fan*
- *Washable filter*
- *Mix Vent Fan*
- *Axial Fan*
- *Midwall Indoor Unit*
- *Fan Coil Unit/Air Handling Unit*
- *4 Way Cassette Indoor Unit*
- *Door grille*
- *Single Phase Isolator*
- *Three Phase Isolator*
- *Chilled Water Supply*
- *Chilled Water Return*
- *Controller*
  ** 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN*




# TLALE CLASSROOM & MULTI-PURPOSE BLOCK HVAC FLOOR PLAN

1 : 75

### Tlale Classrooms and Multi-Purpose Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| RG01 | Return Air Grille | 602.30 | | 595 | 1200 | 300 | 1 | |
| SAD01 | Supply Air Diffuser | 130.00 | | 595 | 595 | 250 | 6 | |
| WL01 | Weather Louvre Supply Air | 134.66 | | 200 | 200 | | 1 | |

### Tlale Classrooms and Multi-Purpose Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SHUI-01 | Ceiling Concealed Ducted Split Unit | 14.00 kW | 15.00 kW | 300 | 1400 | 700 | 5.200 | 400/3/50 | 1 | |

### Tlale Ablution Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| FB01 | Filter | | | | 200 | 200 | 1 | |
| SA01 | Sound Attenuator Small | 200 | 200 | 600 | | | 2 | |

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DRAWING DESCRIPTION

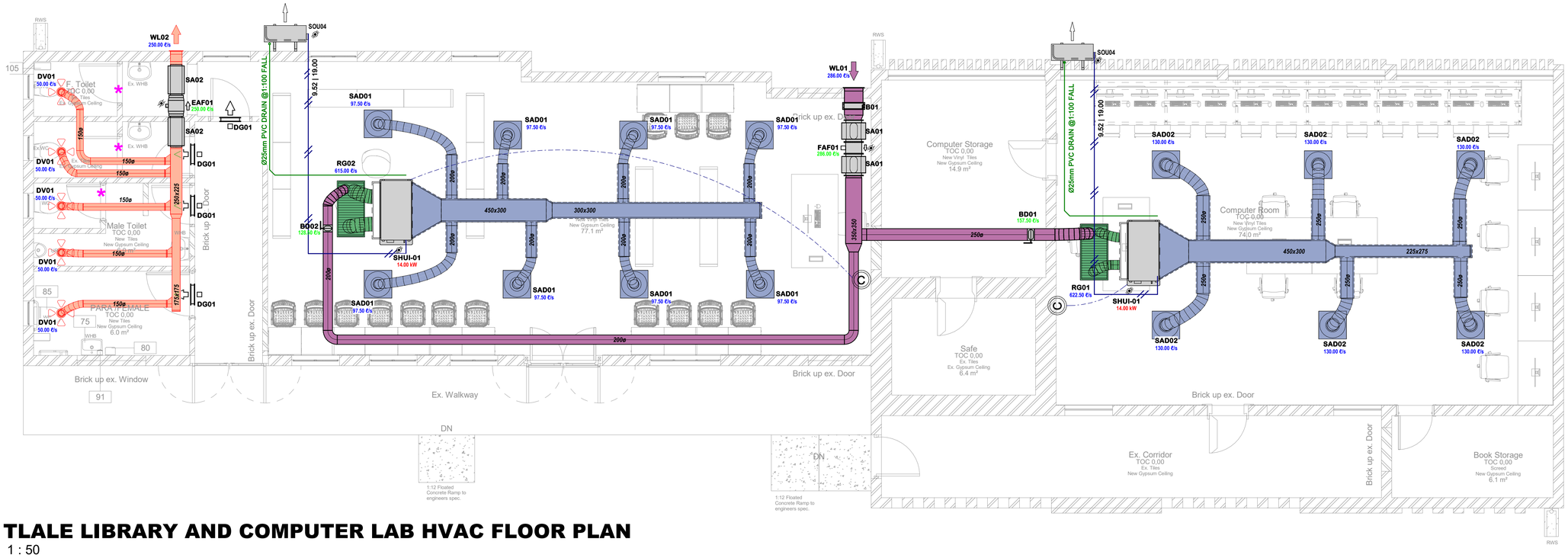
CLASSROOMS & MULTI-PURPOSE HVAC LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-MC-HVAC** | | |

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## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
8. A/C equipment to be fitted with anti-vibration mountings as per the specification.
9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
12. All refrigerant piping, electrical and control wiring between indoor and outdoor split type units shall run in trunking with cover plate / Wire basket / tray and adequately strapped.
13. All supply air ducting to be externally insulated & treated as per specification, unless otherwise stated.
14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.




# TLALE LIBRARY AND COMPUTER LAB HVAC FLOOR PLAN

1 : 50

## HVAC LEGEND

- *Fresh Air Duct*
- *Externally Insulated Supply Air Duct*
- *Return Air Duct*
- *Extract Air Duct*
- *600 x 600 supply air diffuser*
- *disc valve*
- *Return air grille/Extract grille*
- *Weather Louvre/Side Grille*
- *Sound Attenuator*
- *Wall Mounted Fan*
- *Washable filter*
- *Mix Vent Fan*
- *Axial Fan*
- *Midwall Indoor Unit*
- *Fan Coil Unit/Air Handling Unit*
- *4 Way Cassette Indoor Unit*
- *Door grille*
- *Single Phase Isolator*
- *Three Phase Isolator*
- *Chilled Water Supply*
- *Chilled Water Return*
- *Controller*
  *1 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN*

## Tlale Library & Computer Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| DG01 | Door Grille | 0.00 | | 400 | 400 | | 4 | |
| DV01 | Extract Disc Valve | 50.00 | 150 | | | 150 | 5 | |
| RG01 | Return Air Grille | 622.50 | | 595 | 1200 | 200 | 1 | |
| RG02 | Return Air Grille | 615.00 | | 595 | 1200 | 300 | 1 | |
| SAD01 | Supply Air Diffuser | 97.50 | | 595 | 595 | 200 | 8 | |
| SAD02 | Supply Air Diffuser | 130.00 | | 595 | 595 | 250 | 6 | |
| WL01 | Weather Louvre Supply Air | 286.00 | | 400 | 400 | | 1 | |
| WL02 | Weather Louvre Extract Air | 250.00 | | 250 | 250 | | 1 | |

## Tlale Library & Computer Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| BD01 | Balancing Damper Round | 250 | | | | | 1 | |
| BD02 | Balancing Damper Round | 200 | | | | | 1 | |
| FB01 | Filter | | | | 400 | 400 | 1 | |
| SA01 | Sound Attenuator 1.5D with Pod | 315 | 315 | 473 | | | 2 | |
| SA02 | Sound Attenuator Small | 250 | 250 | 600 | | | 2 | |

## Tlale Library & Computer Block Axial Fan Schedule

| Code | Description | Air Flow (l/s) | Inlet Diameter (mm) | Power Absorbed (kW) | Power Motor(kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| EAF01 | Inline Fan | 250.00 | 250 | 0.11 kW | 0.11 kW | 230/1/50 | 1 | |
| FAF01 | Axial Fan | 286.00 | 315 | 0.20 kW | 0.26 kW | 230/1/50 | 1 | |

## Tlale Library & Computer Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SHUI-01 | Ceiling Concealed Ducted Split Unit | 14.00 kW | 15.00 kW | 300 | 1400 | 700 | 5.200 | 400/3/50 | 2 | |

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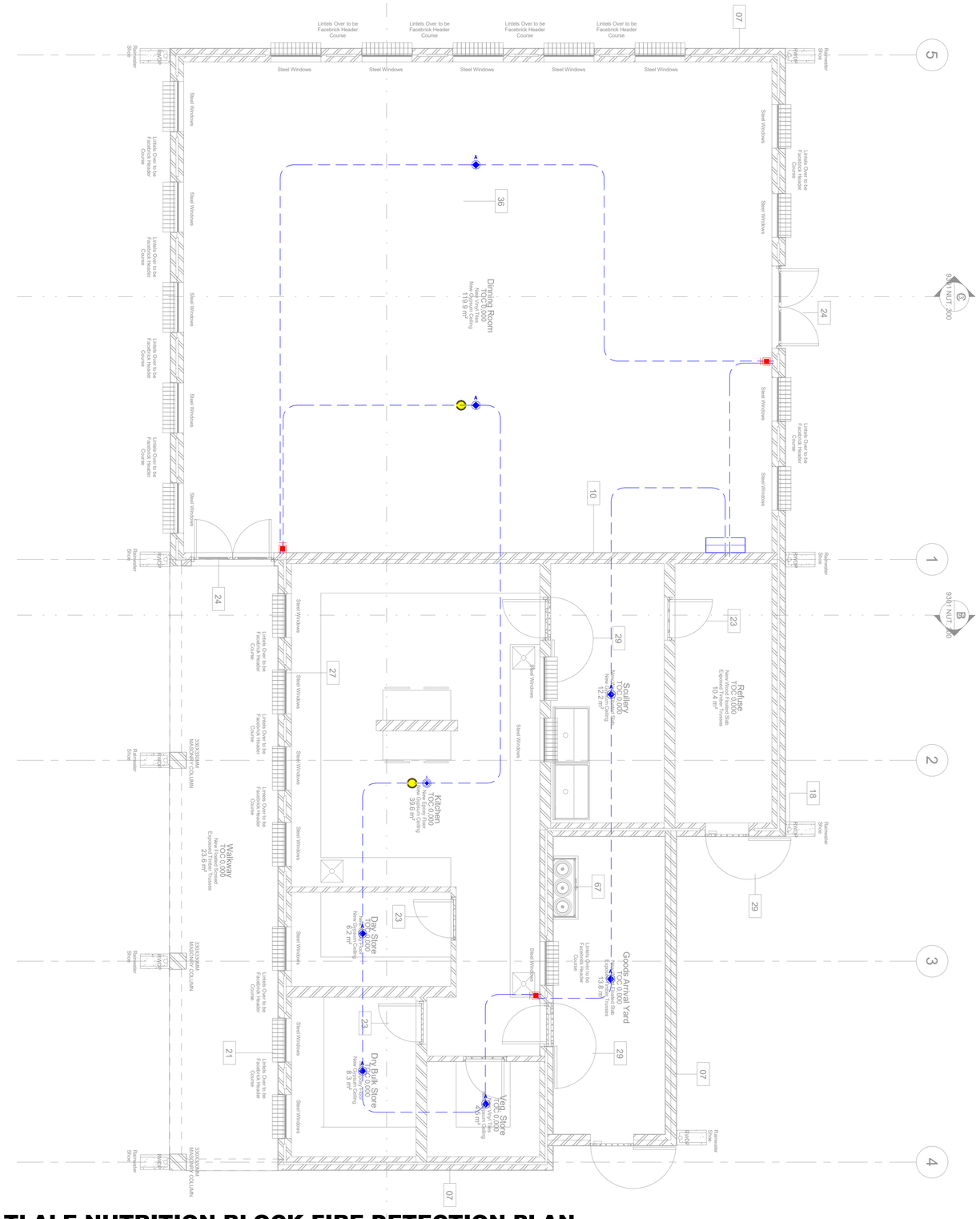
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

LIBRARY AND COMPUTER LAB HVAC LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: B.MAHLAELA | DRAWN BY: M.LEBOHO | APPROVED BY: B.MAHLAELA | SHEET SIZE: A1 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER: ME-400-MP-HVAC | | | |




# TLALE NUTRITION BLOCK FIRE DETECTION PLAN

1 : 50

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |

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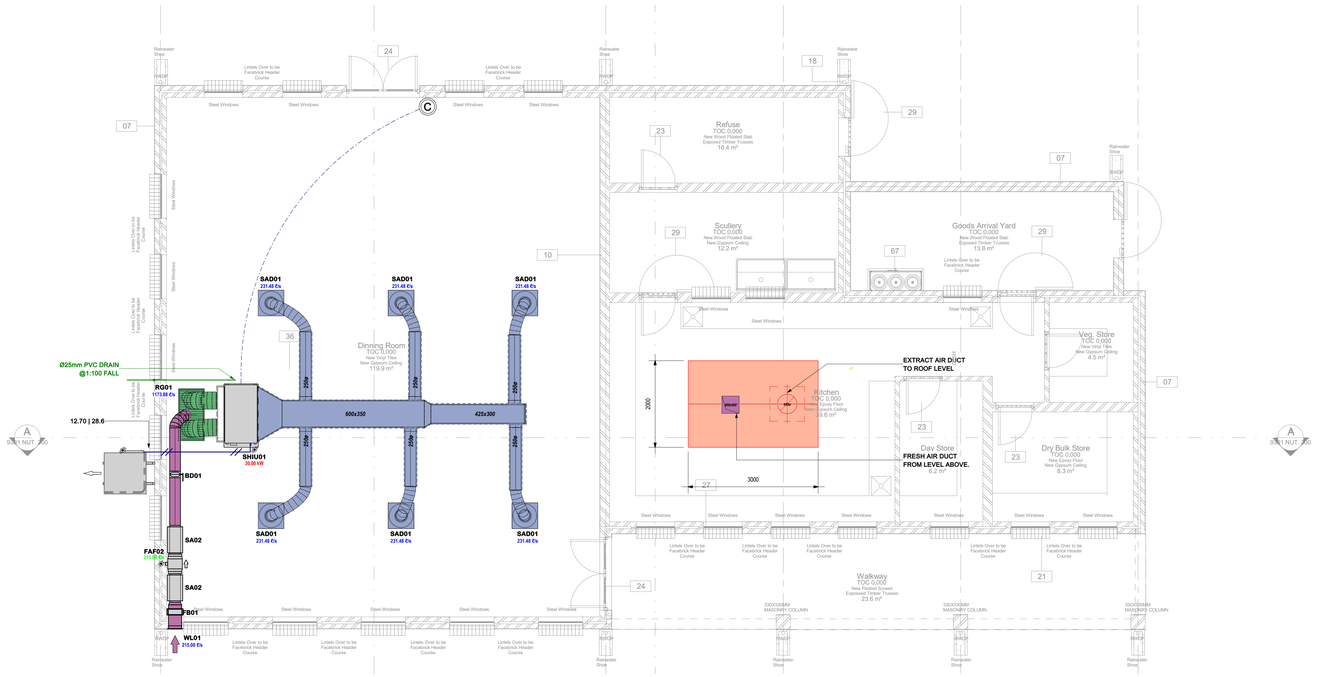
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TLALE PRIMARY SCHOOL
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DRAWING DESCRIPTION

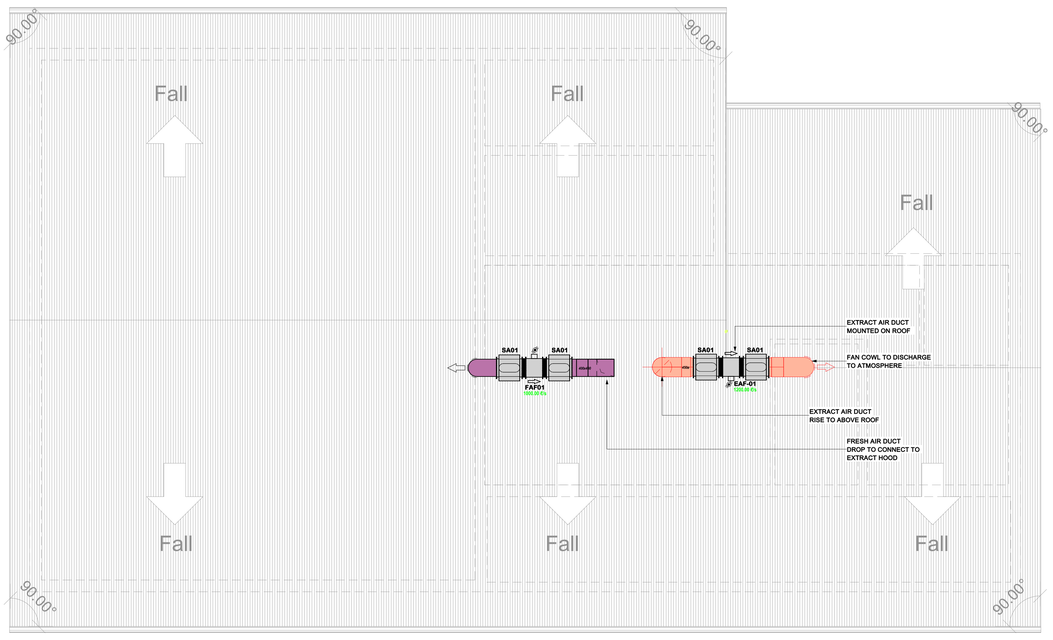
NUTRITION BLOCK FIRE DETECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-NB-FD** | | |




# TLALE NUTRITION BLOCK HVAC FLOOR PLAN

1 : 50




# TLALE NUTRITION BLOCK ROOF HVAC FLOOR PLAN

1 : 50

## Tlale Nutrition Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| RG01 | Return Air Grille | 1173.88 | | 595 | 1200 | 400 | 1 | |
| SAD01 | Supply Air Diffuser | 231.48 | | 595 | 595 | 250 | 6 | |
| WL01 | Weather Louvre Supply Air | 215.00 | | 300 | 300 | | 1 | |

## Tlale Nutrition Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| BD01 | Balancing Damper Round | 250 | | | | | 1 | |
| FB01 | Filter | | | | 300 | 300 | 1 | |
| SA01 | Sound Attenuator 1.5D with Pod | 400 | 400 | 600 | | | 4 | |
| SA02 | Sound Attenuator Small | 250 | 250 | 600 | | | 2 | |

## Tlale Nutrition Block Axial Fan Schedule

| Code | Description | Air Flow (l/s) | Inlet Diameter (mm) | Power Absorbed (kW) | Power Motor(kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| EAF-01 | Axial Fan | 1200.00 | 400 | 0.80 kW | 0.80 kW | 400/3/50 | 1 | |
| FAF01 | Axial Fan | 1000.00 | 400 | 0.80 kW | 0.80 kW | 400/3/50 | 1 | |
| FAF02 | Inline Fan | 215.00 | 250 | 0.11 kW | 0.11 kW | 230/1/50 | 1 | |

## Tlale Nutrition Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SHIU01 | Ceiling Concealed Ducted Split Unit | 30.00 kW | 30.00 kW | 510 | 1470 | 795 | 9.800 | 230/1/50 | 1 | |

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## HVAC LEGEND

- Fresh Air Duct
- Externally Insulated Supply Air Duct
- Return Air Duct
- Extract Air Duct
- 600 x 600 supply air diffuser
- disc valve
- Return air grille/Extract grille
- Weather Louvre/Side Grille
- Sound Attenuator
- Wall Mounted Fan
- Washable filter
- Mix Vent Fan
- Axial Fan
- Midwall Indoor Unit
- Fan Coil Unit/Air Handling Unit
- 4 Way Cassette Indoor Unit
- Door grille
- Single Phase Isolator
- Three Phase Isolator
- Chilled Water Supply
- Chilled Water Return
- Controller
  * 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN

## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
8. A/C equipment to be fitted with anti-vibration mountings as per the specification.
9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
12. All refrigerant piping, electrical and control wiring between indoor and outdoor split type units shall run in trunking with cover plate / Wire basket / tray and adequately strapped.
13. All supply air ducting to be externally insulated & treated as per specification, unless otherwise stated.
14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.

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### Revision Schedule

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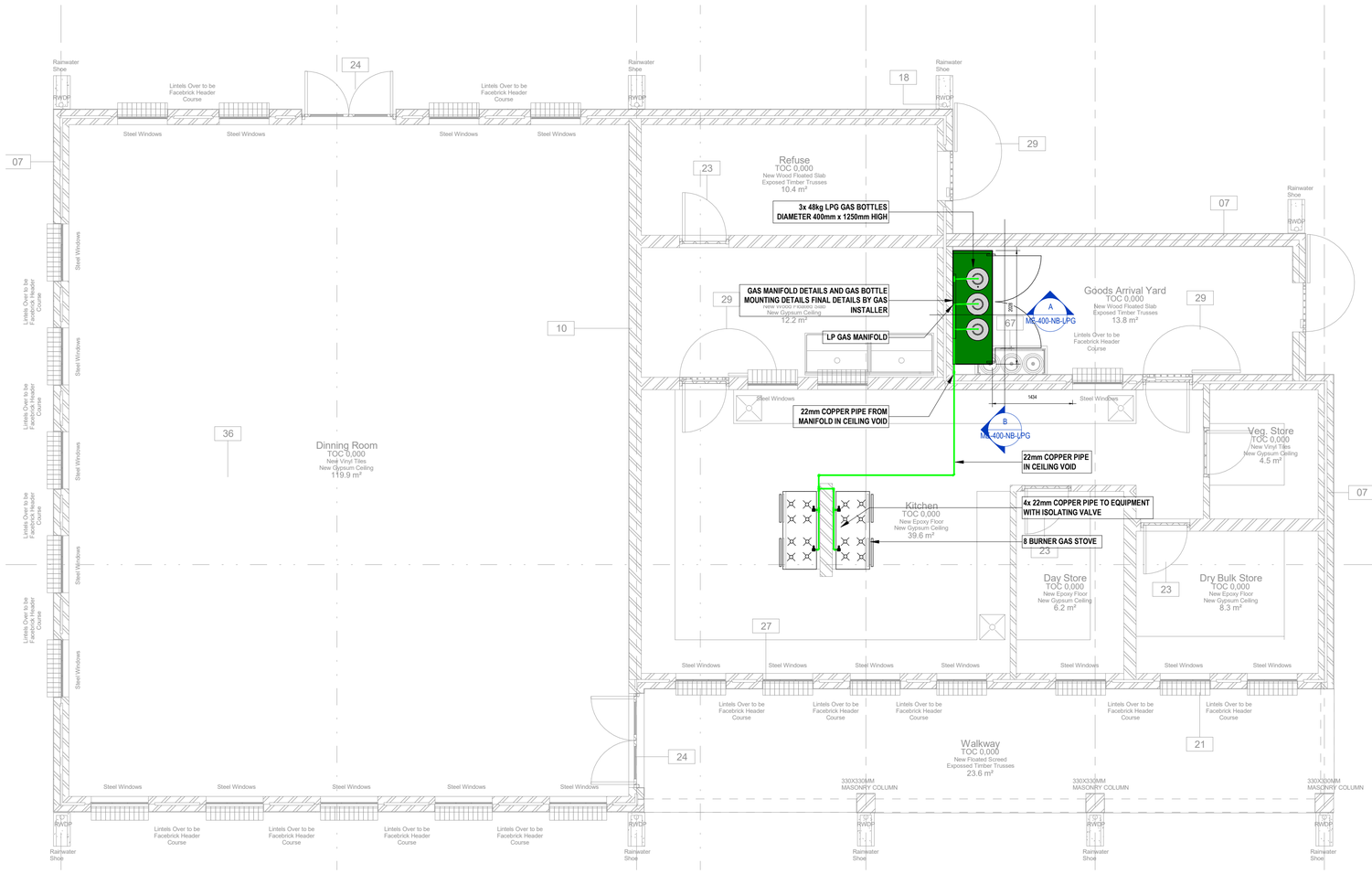
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

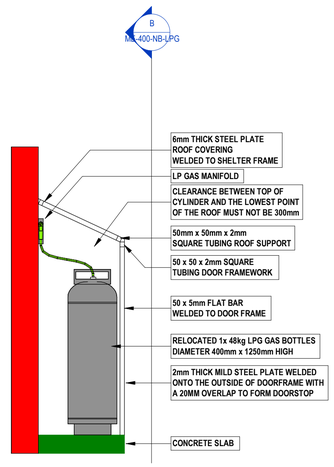
NUTRITION BLOCK HVAC
LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER | ME-400-NB-HVAC | | |



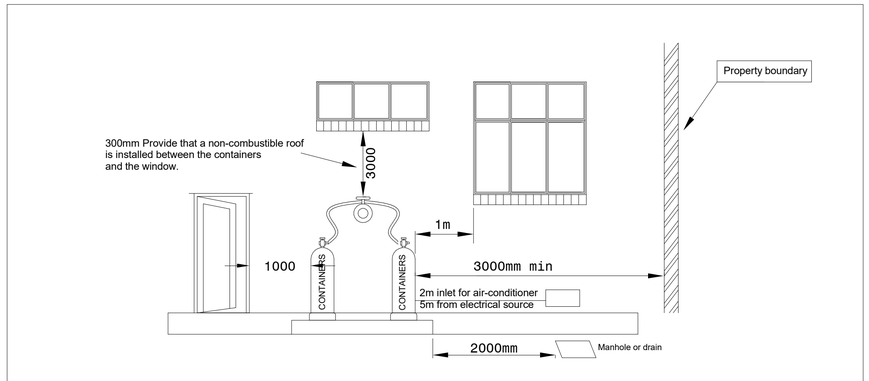

# TLALE PRIMARY SCHOOL NUTRITION BLOCK LPG FLOOR PLAN

1 : 50

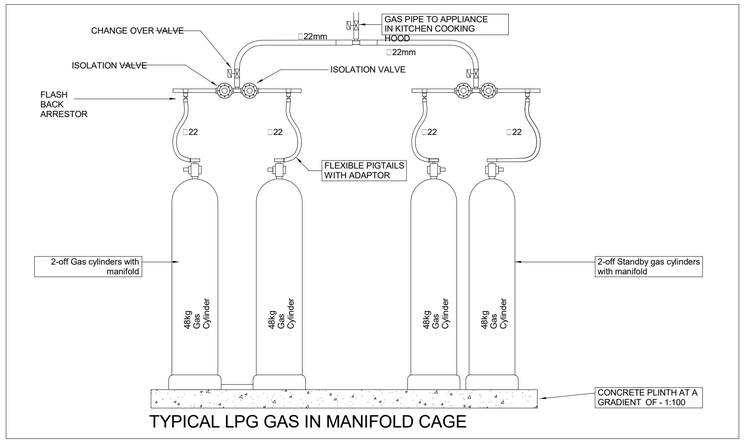



# GAS SECTION A

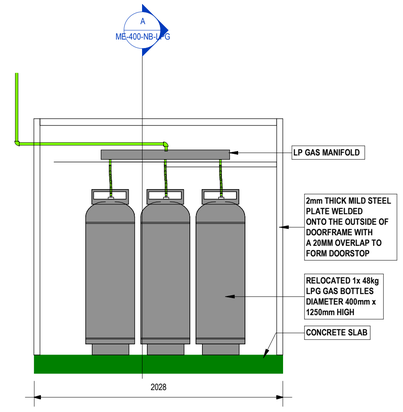
1 : 25




TYPICAL DETAIL FOR MINIMUM DISTANCE REQUIRED AROUND LPG MANIFOLD




TYPICAL LPG GAS IN MANIFOLD CAGE




# GAS SECTION B

1 : 25

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## GAS Legend

LPG GAS COPPER PIPE

L.P GAS CYLINDER
(SHALL CONFORM TO SANS 10019)

## NOTES:

1. ALL PIPES SHALL BE SCHEDULE 40 OR COPPER CLASS 2
2. ALL BURNER PIPES SHALL BE PROTECTED AGAINST CORROSION

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### Revision Schedule

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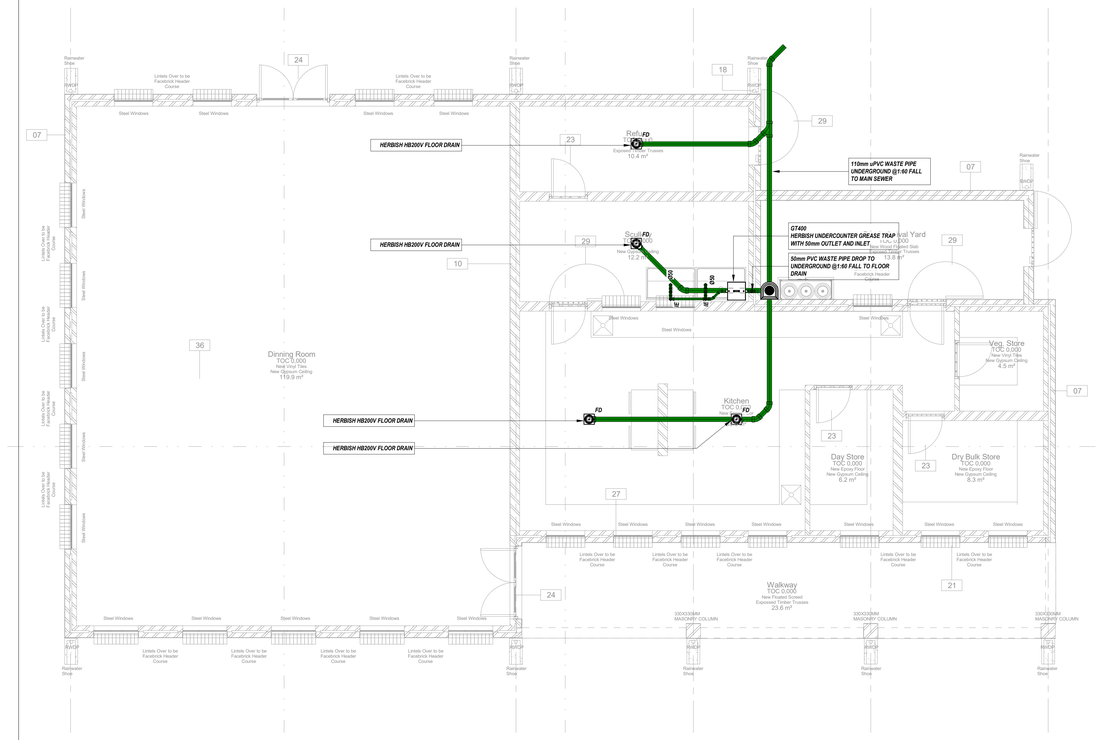
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

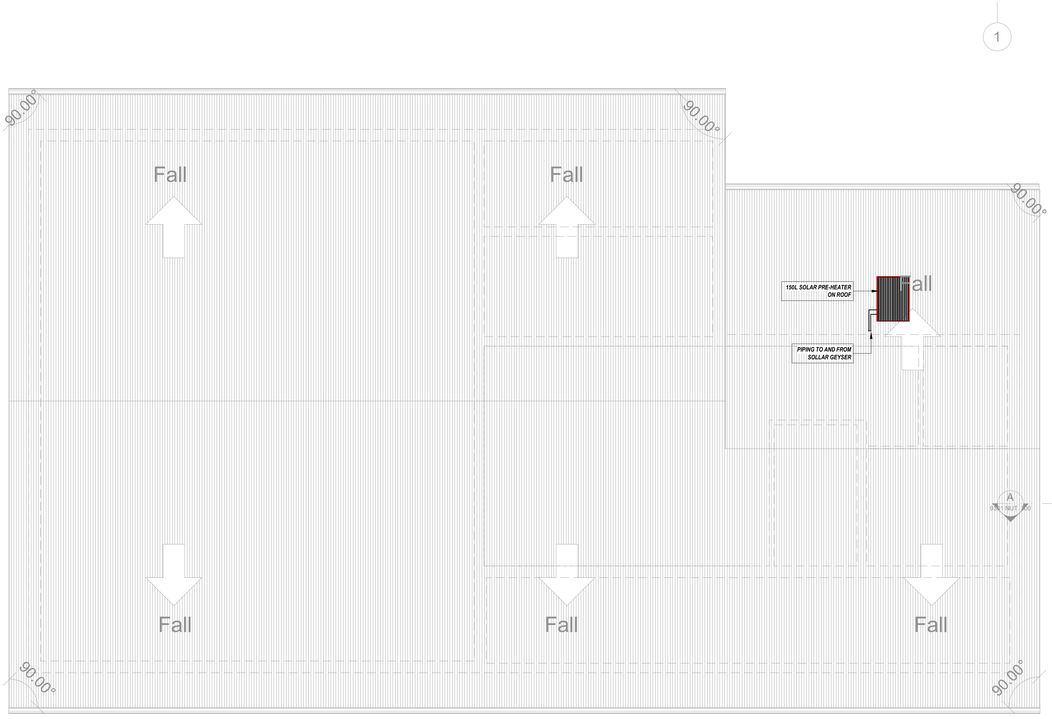
NUTRITION BLOCK LP GAS LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A1 |
| DATE | SCALE | CHECKED BY | |
| 2024.11.08 | As indicated | B.MAHLAELA | |
| DRAWING NUMBER | ME-400-NB-LPG | | |

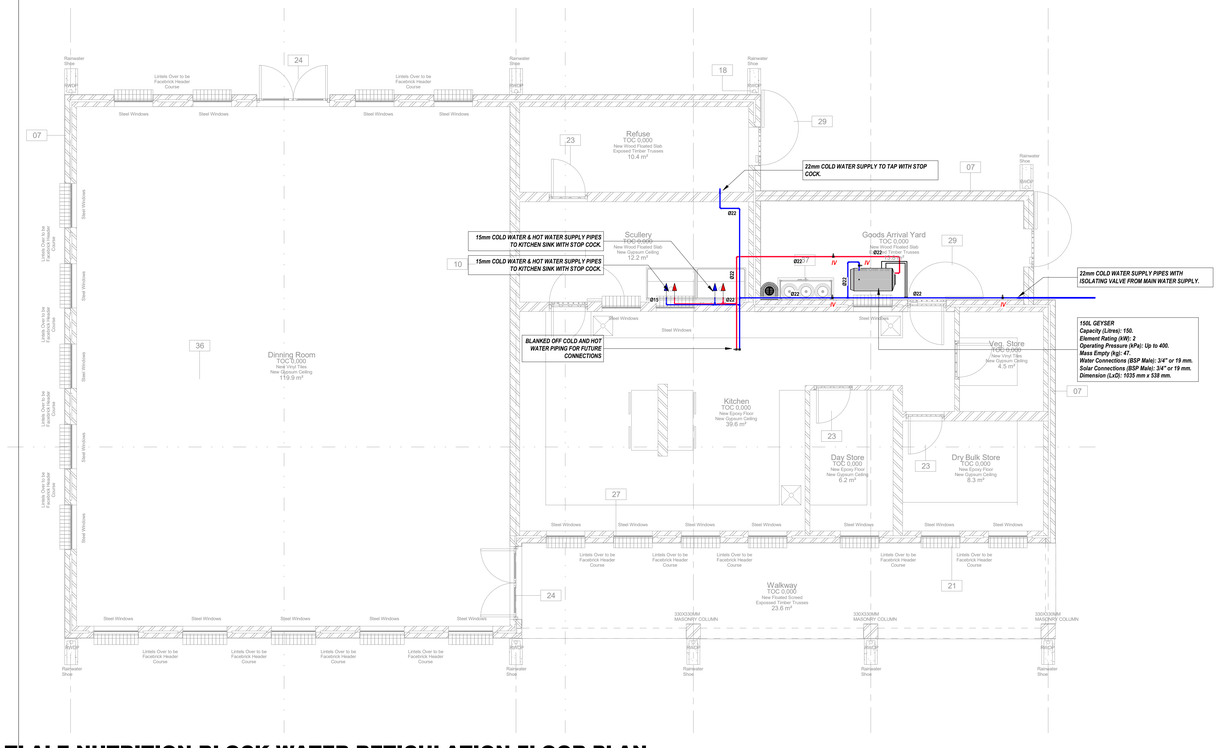
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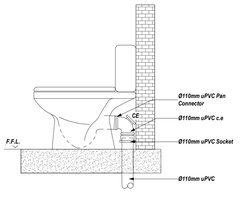

## TLALE NUTRITION BLOCK DRAINAGE FLOOR PLAN
1 : 50



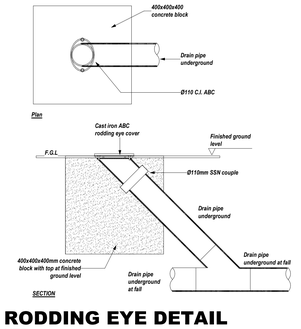

## TLALE NUTRITION BLOCK ROOF WATER RETICULATION FLOOR PLAN
1 : 50




## TLALE NUTRITION BLOCK WATER RETICULATION FLOOR PLAN
1 : 50




## WC WITH PAN CONNECTOR DETAIL
NTS




## RODDING EYE DETAIL
NTS

### Pipe Legend
- COLD WATER COPPER SUPPLY PIPE
- HOT WATER COPPER SUPPLY PIPE
- BALL VALVE
- uPVC Soil Pipe
- uPVC Waste Pipe
- uPVC Vent Pipe

### Installation Notes
- *All Drainage in coordance with SANS10400 (Part P) - 2010*
- *All subsurface (underground) drainage shall be Ø110mm. Pipes shall be installed at an invert level of 450mm below TOC unless otherwise noted.*
- *No 90° junctions in any horizontal line. All junctions in the horizontal plane shall be 45 Y junctions. No T junctions or swept entry junctions allowed.*
- *All soil and drain pipes shall be installed at a minimum fall of 1:60 unless otherwise noted.*
- *All soil stack or waste stack shall have long radius bends or 2x45° bends at bottom of stack.*
- *Stacks higher than 10m shall be enlarged at the stack foot to 160mm and reduce back to 110mm after 2.5m*
- *A rodding eye/inspection eye shall be fitted 1000mm AFFL on each stack and be accesable for rodding from a service duct.*

### Abbreviations

| | |
|---|---|
| Cast iron pipe | CI |
| Galvanized mild steel pipe | GMS |
| Copper pipe | Cu |
| High Density Polyethylene Pipe | HDPE |
| Concrete pipe | Conc |
| Unplasticised Polyvinyl chloride Pipe | uPVC |
| Bath | Bath |
| Shower | SHR |
| Wash hand basin | WHB |
| Sink | S |
| Wash trough | WT |
| Drip sink | DS |
| Water closet | WC |
| Urinal | UI |
| Floor Drain | FD |
| Inspection chamber | IC |
| Inspection eye | IE |
| Rodding Eye | RE |
| Cleaning eye | CE |
| Dished gulley | DG |
| Grease trap | GT |
| Gully | GD |
| Waste pipe | WP |
| Vent pipe | VP |
| Vent Valve | VV |
| Waste and vent pipe | WVP |
| Soil and vent pipe | SVP |
| Ramp | RAMP |
| Rain water pipe | RW |
| Storm water pipe | SW |
| Catchpit | CP |
| Soil pipe | SP |
| Expansion pipe | Exp. P |
| Top of Concrete | TOC. |
| Above finished floor level | AFFL |
| Under Slab Soffit | USS |
| Above Slab Soffit | ASS |
| From Above | FA |
| From Below | FB |
| To Above | TA |
| To Below | TB |
| On Wall | OW |
| In Wall | IW |
| In Surface Bed | ISB |
| Under Surface Bed | USB |
| Stub Stack | SS |
| Branchball Fitting Geberit | BF |
| Shower Trap and Outlet | SPO |
| Wet Services | WS |
| Hot water | HW |
| Hot water return | HWR |
| Cold Water | CW |
| Non Portable water | NoPo |
| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |

NOTE
1. Label Material to be made from traffolyte and be white with black engraving.
2. The Double sided tape to be used shall be of the Automative tape 3M type.
3. It can be purchased from any Automative paint supply shop.
4. Label to be fitted against the Ceiling Strip below the Valves above
5. All valves to be labelled
6. Locations of valves in ceiling void to be labelled with engraved labels on ceiling tee strip




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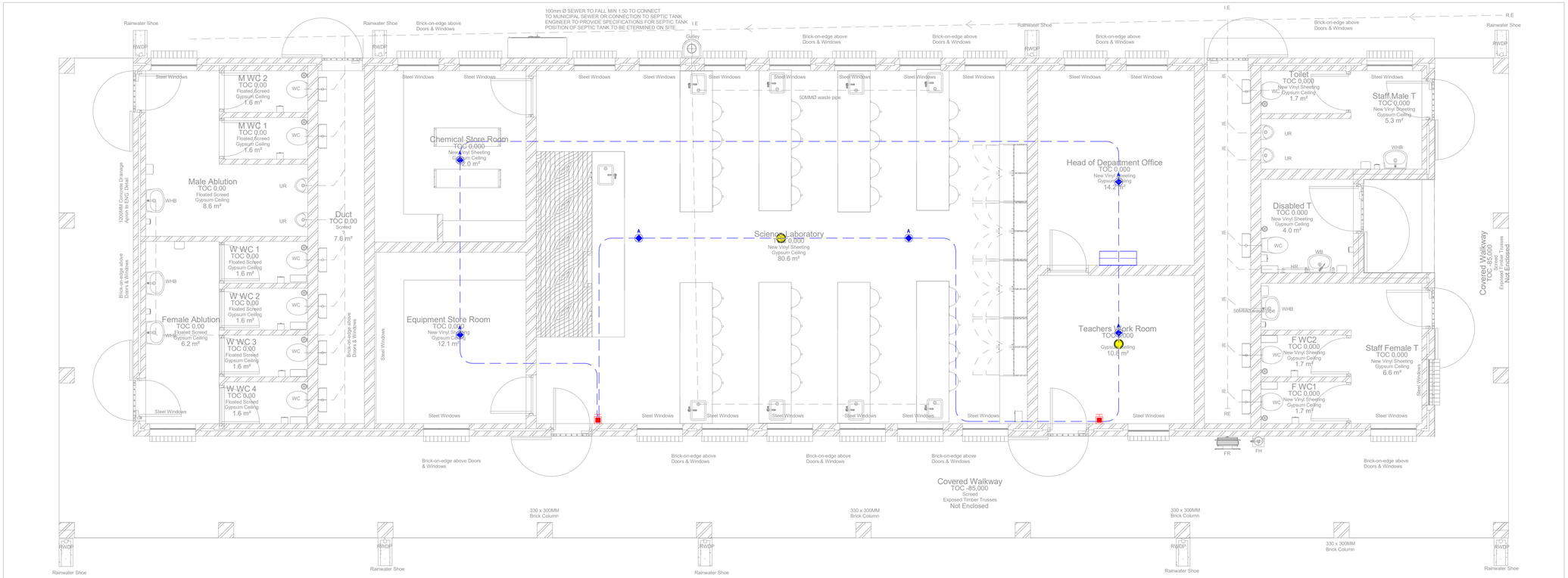
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

NUTRITION BLOCK WET SERVICES LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| B.MAHLAELA | M.LEBOHO | B.MAHLAELA | A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER: ME-400-NB-WS | | | |

| LEGEND: | | |
|---|---|---|
| Symbol | QTY | Description |
| | . | HEAT DETECTOR MOUNTED ON CEILING |
| | . | SMOKE DETECTOR MOUNTED ON CEILING |
| | . | SOUNDER WITH BEACON |
| | . | RED BREAK GLASS |
| | . | PH30 FIRE RESISTANT CABLING IN 25mm CONDUIT |
| | . | FIRE DETECTION PANEL |




# TLALE SCIENCE BLOCK FIRE DETECTION PLAN

1 : 50

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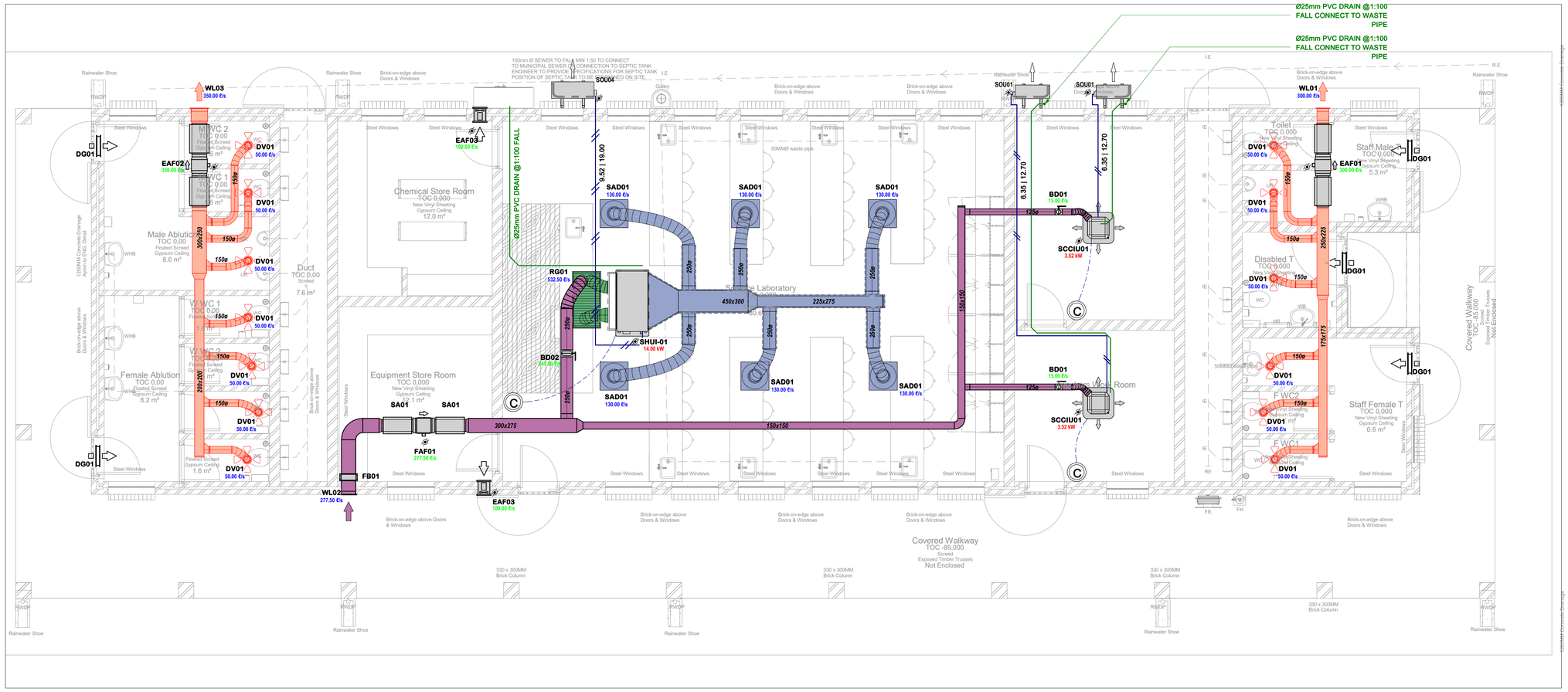
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

SCIENCE BLOCK FIRE DETECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-SCL-FD** | | |




# TLALE SCIENCE BLOCK HVAC FLOOR PLAN

1 : 50

## Tlale Science Block Air Terminal Schedule

| Code | Description | Air Flow (l/s) | Diameter (mm) | Width (mm) | Height (mm) | Inlet Diameter (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| DG01 | Door Grille | 0.00 | | 400 | 400 | | 5 | |
| DV01 | Extract Disc Valve | 50.00 | 150 | | | 150 | 13 | |
| RG01 | Return Air Grille | 532.50 | | 595 | 1200 | 250 | 1 | |
| SAD01 | Supply Air Diffuser | 130.00 | | 595 | 595 | 250 | 6 | |
| WL01 | Weather Louvre Extract Air | 300.00 | | 250 | 250 | | 1 | |
| WL02 | Weather Louvre Supply Air | 277.50 | | 300 | 300 | | 1 | |
| WL03 | Weather Louvre Extract Air | 350.00 | | 350 | 350 | | 1 | |

## Tlale Science Block Accessory Schedule

| Code | Description | Diameter (mm) | Inlet Diameter (mm) | Length (mm) | Width (mm) | Height (mm) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| BD01 | Balancing Damper Round | 125 | | | | | 2 | |
| BD02 | Balancing Damper Round | 250 | | | | | 1 | |
| FB01 | Filter | | | | 300 | 300 | 1 | |
| SA01 | Sound Attenuator Small | 250 | 250 | 600 | | | 4 | |
| SA02 | Sound Attenuator Small | 315 | 315 | 600 | | | 2 | |

## Tlale Science Block Axial Fan Schedule

| Code | Description | Air Flow (l/s) | Inlet Diameter (mm) | Power Absorbed (kW) | Power Motor(kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|
| EAF01 | Inline Fan | 300.00 | 250 | 0.11 kW | 0.11 kW | 230/1/50 | 1 | |
| EAF02 | Inline Fan | 350.00 | 315 | 0.20 kW | 0.26 kW | 230/1/50 | 1 | |
| EAF03 | Wall Mounted Fan | 100.00 | 200 | 0.03 kW | 0.03 kW | 230/1/50 | 2 | |
| FAF01 | Inline Fan | 277.50 | 250 | 0.11 kW | 0.15 kW | 230/1/50 | 1 | |

## Tlale Science Block Indoor Equipment Schedule

| Code | Description | Cooling Capacity (kW) | Heating Capacity (kW) | Height (mm) | Width (mm) | Depth (mm) | Power Input (kW) | Power(V-Ph-Hz) | Quantity | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| SCCIU01 | 4-Way Blower Ceiling Cassette Split Unit | 3.52 kW | 4.00 kW | 260 | 655 | 655 | 1.160 | 230/1/50 | 2 | |
| SHUI-01 | Ceiling Concealed Ducted Split Unit | 14.00 kW | 15.00 kW | 300 | 1400 | 700 | 5.200 | 400/3/50 | 1 | |

## Standard Notes:

1. All exhaust air ducting to be un-insulated unless otherwise stated.
2. Duct sizes shown are internal sizes.
3. For duct treatment refer to specification.
4. All ducting to be manufactured & installed in accordance with SANS 10142-1
5. All A/C shafts to be fitted with a mentis grid platform on all floors including airtight access door unless otherwise stated.
6. All exposed ducting to be painted to an approved colour, unless otherwise stated.
7. All take-offs from supply & exhaust air ducting to have 45° boots.
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9. HVAC (sub)contractor to ensure that all condensate drains are trapped and sloped adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top,unless otherwise stated.
11. HVAC (sub)contractor shall be responsible for connecting the condensate drains to the drain stack. The connection must be a inverted solid connection to prevent leakage, unless otherwise stated.
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14. All BMS wiring shall be installed in PVC / galvanised conduit by the BMS (sub)contractor, unless otherwise stated.
15. All supply air flexible's to be of the insulated acoustic type.
16. All fans to have inlet /outlet cones complete with wire mesh screen where not directly connected to ducting.
17. All pipes to be colour coded as per specification.
18. All diffusers/grilles/louvres "finish" to be approved by the architect.
19. Auto air vents to be provided in pipe runs where required.
20. Drain points with ball valves, plugged must be provided at bottom of each chilled water riser and at lowest point in plant room.
21. All equipment selected must fit into plant room provided.
22. Sufficient space for adequate maintenance must be allowed for around equipment.

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## HVAC LEGEND

- Fresh Air Duct
- Externally Insulated Supply Air Duct
- Return Air Duct
- Extract Air Duct
- 600 x 600 supply air diffuser
- disc valve
- Return air grille/Extract grille
- Weather Louvre/Side Grille
- Sound Attenuator
- Wall Mounted Fan
- Washable filter
- Mix Vent Fan
- Axial Fan
- Midwall Indoor Unit
- Fan Coil Unit/Air Handling Unit
- 4 Way Cassette Indoor Unit
- Door grille
- Single Phase Isolator
- Three Phase Isolator
- Chilled Water Supply
- Chilled Water Return
- Controller * 2x 32mm CONDUIT FOR POWER AND DATA BY ELECTRICIAN

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### Revision Schedule

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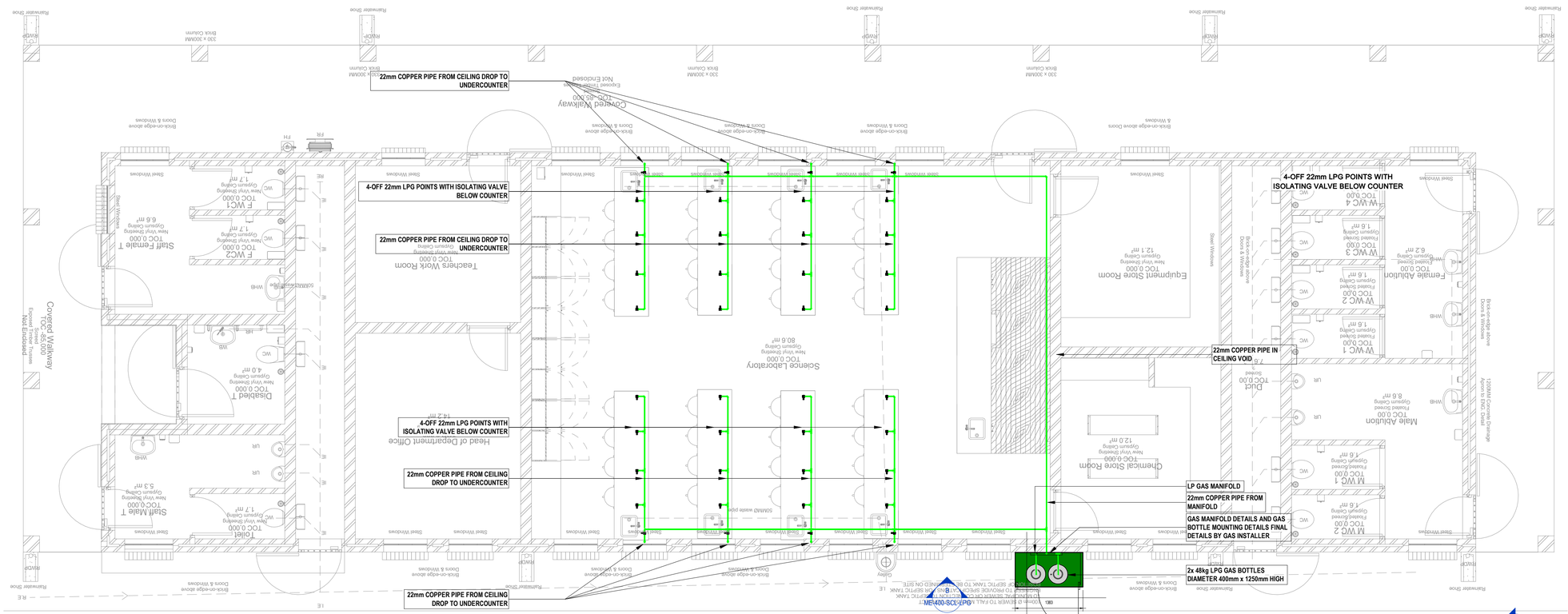
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

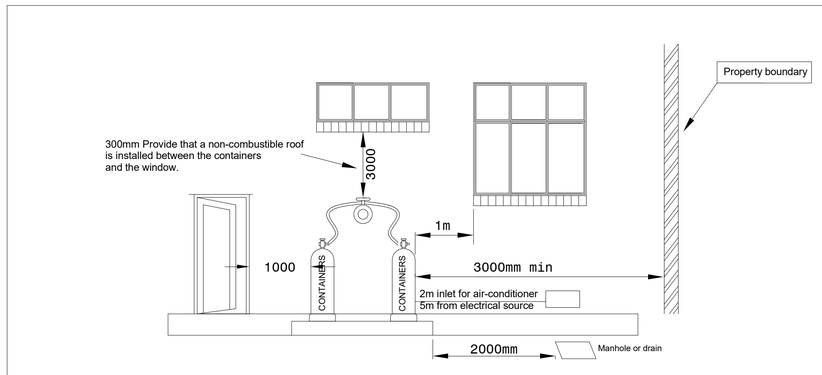
SCIENCE BLOCK HVAC LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY **B.MAHLAELA** | DRAWN BY **M.LEBOHO** | APPROVED BY **B.MAHLAELA** | SHEET SIZE A1 |
| DATE **2024.11.08** | SCALE **As indicated** | CHECKED BY **B.MAHLAELA** | |
| DRAWING NUMBER | **ME-400-SCL-HVAC** | | |

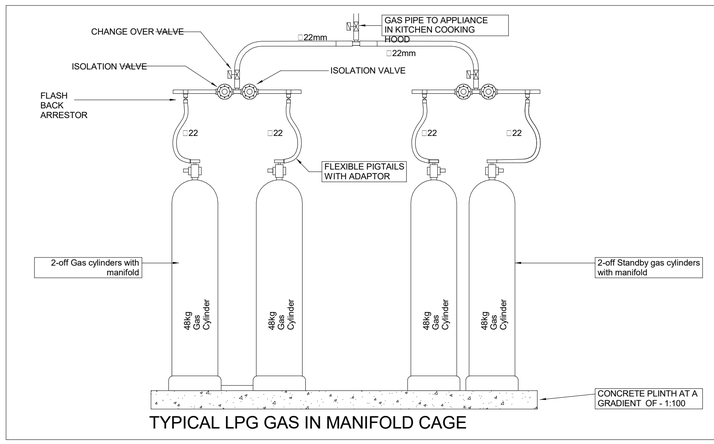



# TLALE PRIMARY SCHOOL SCIENCE BLOCK LPG FLOOR PLAN

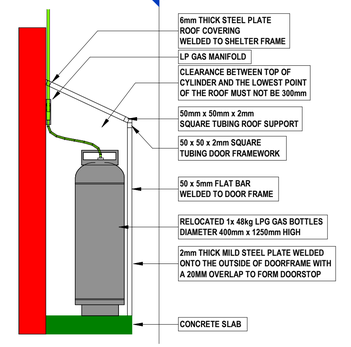
1 : 50




TYPICAL DETAIL FOR MINIMUM DISTANCE REQUIRED AROUND LPG MANIFOLD

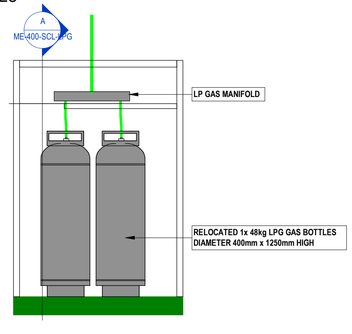



TYPICAL LPG GAS IN MANIFOLD CAGE




# GAS SECTION A

1 : 25




# GAS SECTION B

1 : 25

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## GAS Legend

LPG GAS COPPER PIPE

L.P GAS CYLINDER
(SHALL CONFORM TO SANS 10019)

## NOTES:

1. ALL PIPES SHALL BE SCHEDULE 40 OR COPPER CLASS 2
2. ALL BURNER PIPES SHALL BE PROTECTED AGAINST CORROSION

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Revision Schedule

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PROJECT

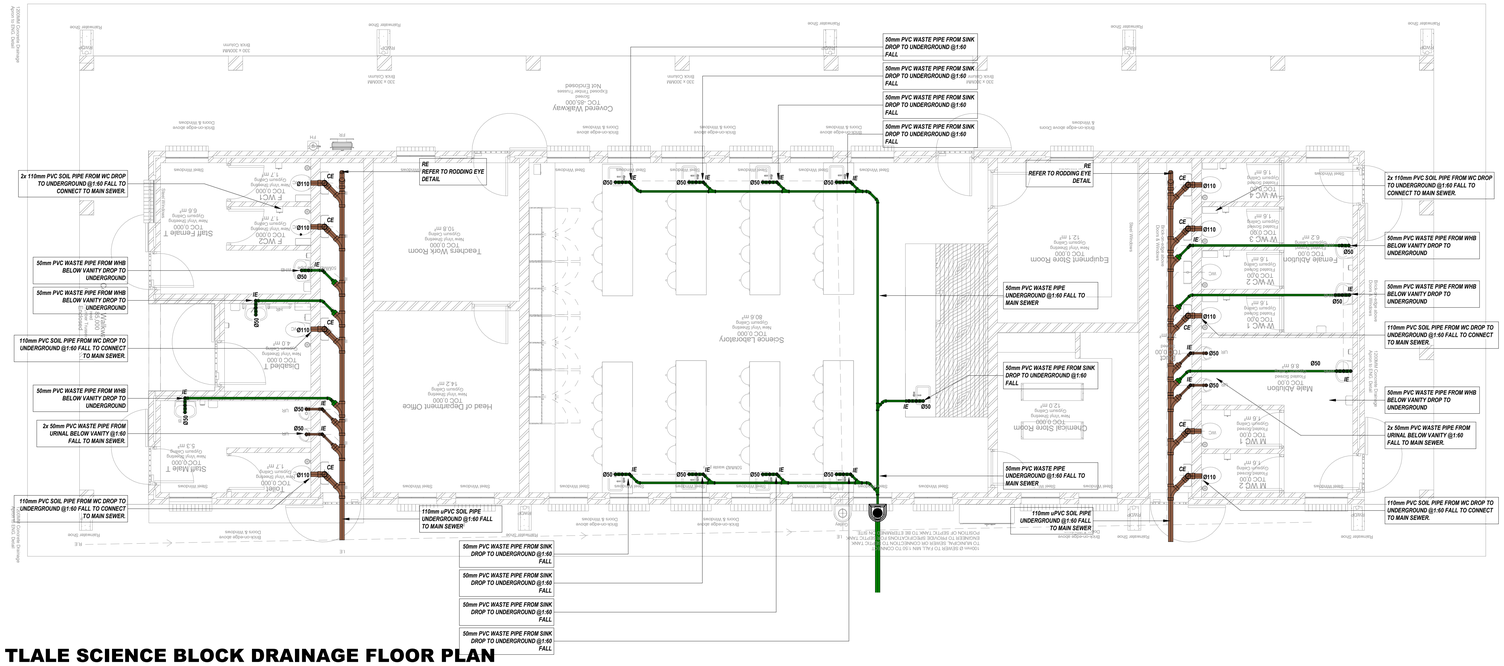
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

SCIENCE BLOCK LP GAS LAYOUT

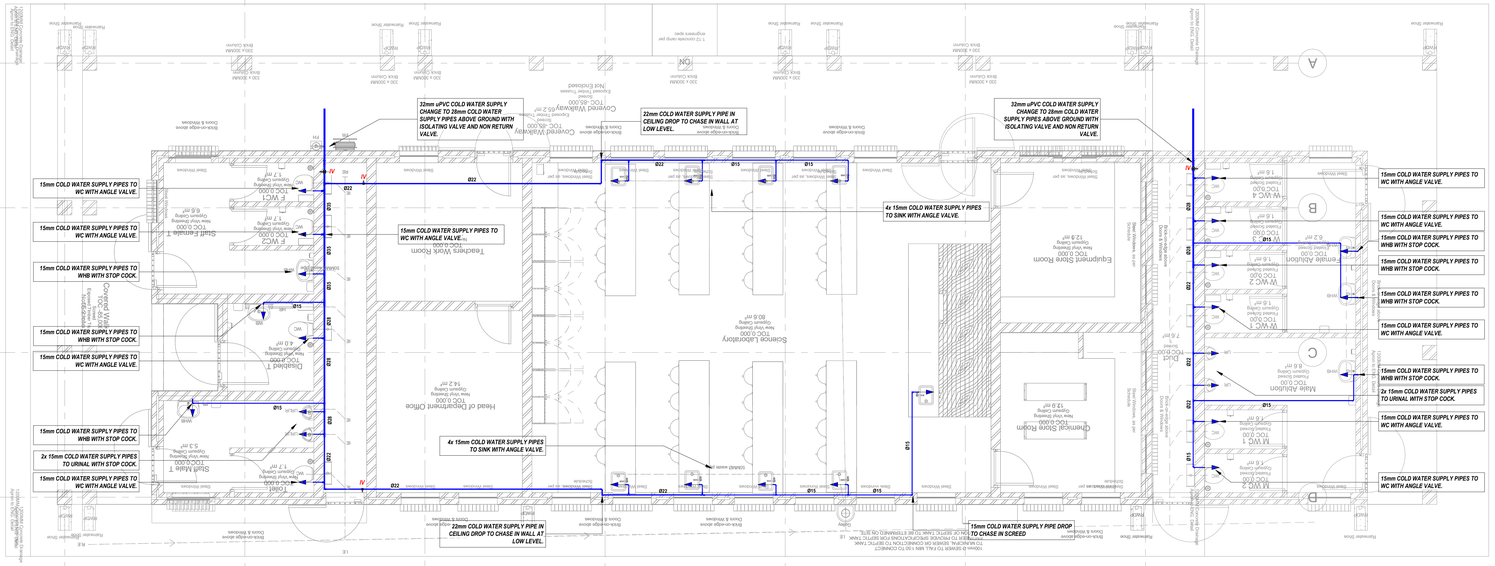
| | | | |
|---|---|---|---|
| DESIGNED BY<br>B.MAHLAELA | DRAWN BY<br>M.LEBOHO | APPROVED BY<br>B.MAHLAELA | SHEET SIZE<br>A1 |
| DATE<br>2024.11.08 | SCALE<br>As indicated | CHECKED BY<br>B.MAHLAELA | |
| DRAWING NUMBER | ME-400-SCL-LPG | | |

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## TLALE SCIENCE BLOCK DRAINAGE FLOOR PLAN

1 : 50




## TLALE SCIENCE BLOCK WATER RETICULATION FLOOR PLAN

1 : 50

### Pipe Legend

- COLD WATER COPPER SUPPLY PIPE
- HOT WATER COPPER SUPPLY PIPE
- BALL VALVE
- uPVC Soil Pipe
- uPVC Waste Pipe
- uPVC Vent Pipe

### Installation Notes

- All Drainage in coordance with SANS10400 (Part P) - 2010
- All subsurface (underground) drainage shall be Ø110mm. Pipes shall be installed at an invert level of 450mm below TOC unless otherwise noted.
- No 90° junctions in any horizontal line. All junctions in the horizontal plane shall be 45 'Y' junctions. No 'T' junctions or swept entry junctions allowed.
- All soil and drain pipes shall be installed at a minimum fall of 1:60 unless otherwise noted.
- All soil stack or waste stack shall have long radius bends or 2x45° bends at bottom of stack.
- Stacks higher than 10m shall be enlarged at the stack foot to 160mm and reduce back to 110mm after 2.5m
- A rodding eye/inspection eye shall be fitted 1000mm AFFL on each stack and be accesable for rodding from a service duct.

### Abbreviations

| | |
|---|---|
| Cast iron pipe | CI |
| Galvanized mild steel pipe | GMS |
| Copper pipe | Cu |
| High Density Polyethylene Pipe | HDPE |
| Concrete pipe | Conc |
| Unplasticised Polyvinyl chloride Pipe | uPVC |
| Bath | Bath |
| Shower | SHR |
| Wash hand basin | WHB |
| Sink | S |
| Wash trough | WT |
| Drip sink | DS |
| Water closet | WC |
| Urinal | UI |
| Floor Drain | FD |
| Inspection chamber | IC |
| Inspection eye | IE |
| Rodding Eye | RE |
| Cleaning eye | CE |
| Dished gulley | DG |
| Grease trap | GT |
| Gully | GD |
| Waste pipe | WP |
| Vent pipe | VP |
| Vent Valve | VV |
| Waste and vent pipe | WVP |
| Soil and vent pipe | SVP |
| Ramp | RAMP |
| Rain water pipe | RW |
| Storm water pipe | SW |
| Catchpit | CP |
| Soil pipe | SP |
| Expansion pipe | Exp. P |
| Top of Concrete | TOC. |
| Above finished floor level | AFFL |
| Under Slab Soffit | USS |
| Above Slab Soffit | ASS |
| From Above | FA |
| From Below | FB |
| To Above | TA |
| To Below | TB |
| On Wall | OW |
| In Wall | IW |
| In Surface Bed | ISB |
| Under Surface Bed | USB |
| Slab Slack | SS |
| Branchbad Fitting Geberit | BF |
| Shower Trap and Outlet | SPO |
| Wet Services | WS |
| Hot water | HW |
| Hot water return | HWR |
| Cold Water | CW |
| Non Portable water | NoPo |
| Cover Level | CL |
| Invert Level | IL |
| Air Vent Valve | AVV |

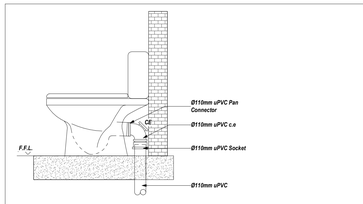
NOTE
1. Label Material to be made from traffolyte and be white with black engraving.
2. The Double sided tape to be used shall be of the Automative tape 3M type.
3. It can be purchased from any Automative paint supply shop.
4. Label to be fitted against the Ceiling Strip below the Valves above
5. All valves to be labelled
6. Locations of valves in ceiling void to be labelled with engraved labels on ceiling tee strip




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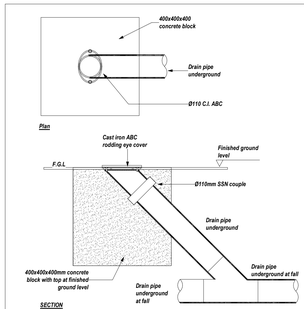
### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
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## WC WITH PAN CONNECTOR DETAIL

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## RODDING EYE DETAIL

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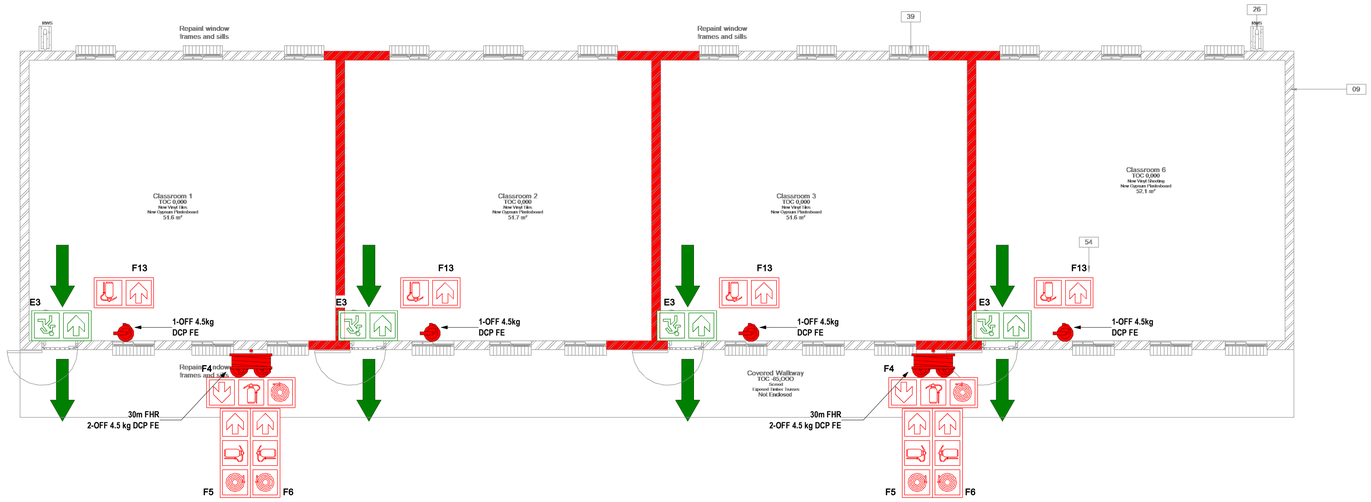
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

SCIENCE BLOCK WET SERVICES LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: B.MAHLAELA | DRAWN BY: M.LEBOHO | APPROVED BY: B.MAHLAELA | SHEET SIZE: A0 |
| DATE: 2024.10.17 | SCALE: As indicated | CHECKED BY: B.MAHLAELA | |
| DRAWING NUMBER: ME-400-SCL-WS | | | |

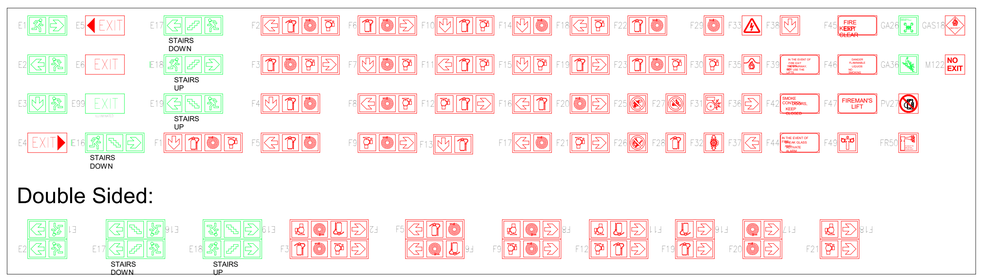



# TLALE Ex 4x CLASSROOM BLOCK 2 FIRE PROTECTION PLAN

1 : 75

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

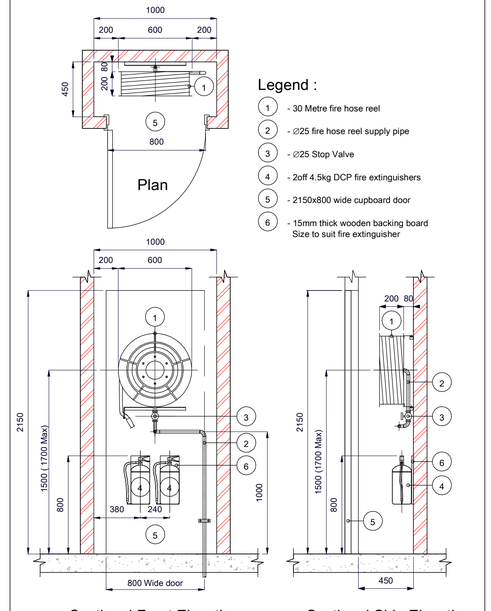
**FIRE PROTECTION NOTES**

1. All work to comply wth Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

## Fire Doors Types

SANS 1400-T; Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall<br>min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |




## FHR + FE DETAIL

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### Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

### Fire Wall

- 120MIN FIRE RATED WALL

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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### Revision Schedule

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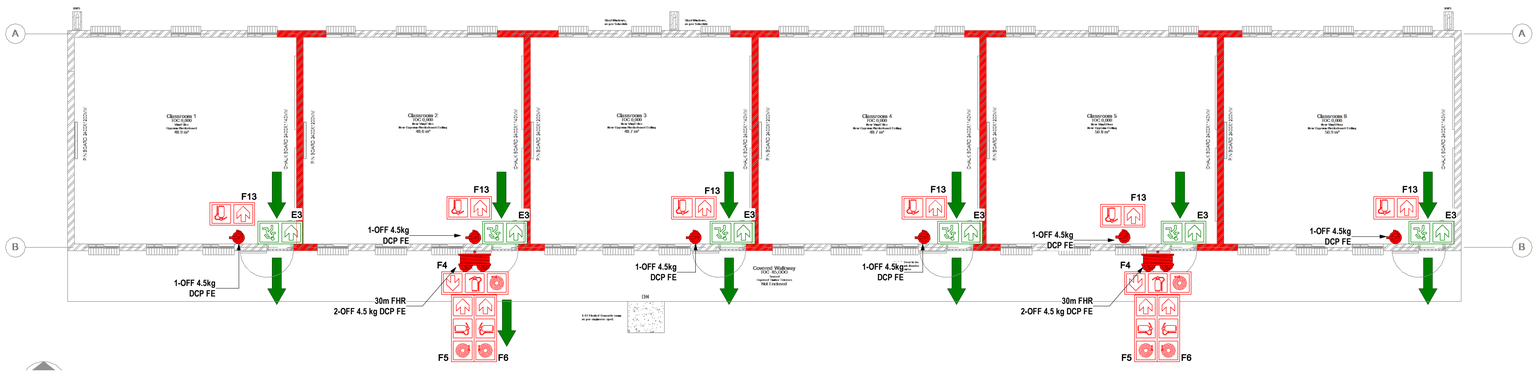
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE EXISTING 4x CLASSROOM BLOCK
1 FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY CC | DRAWN BY M.L | APPROVED BY CC | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY CC | |
| DRAWING NUMBER | ME-400-4CLB2-FP | | |

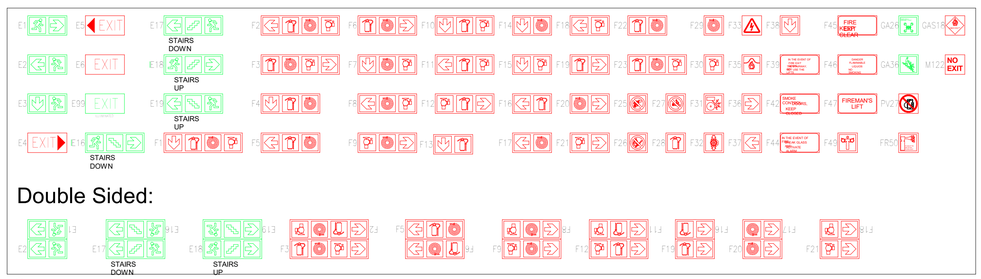



# TLALE Ex 6x CLASSROOM BLOCK 1 FIRE PROTECTION PLAN

1 : 100

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

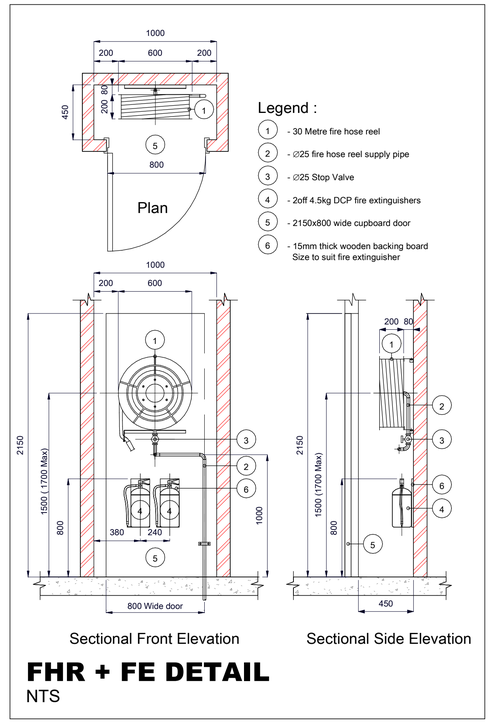
**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

## Fire Doors Types

SANS 1400-T; Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall<br>min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |




## FHR + FE DETAIL

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### Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

### Fire Wall

- 120MIN FIRE RATED WALL

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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### Revision Schedule

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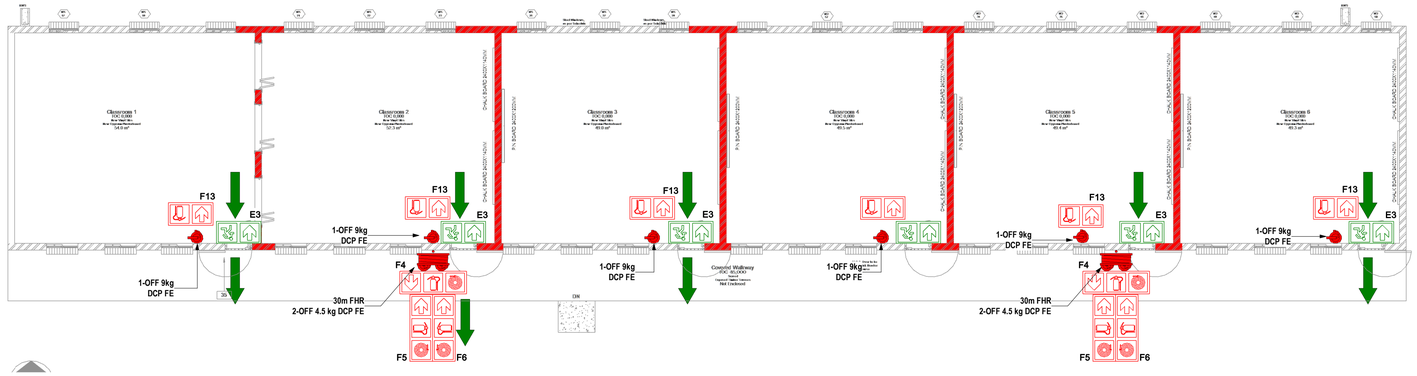
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE EXISTING 6 CLASSROOM BLOCK 1
FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY CC | DRAWN BY M.L | APPROVED BY CC | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY CC | |
| DRAWING NUMBER | ME-400-6CLB1-FP | | |

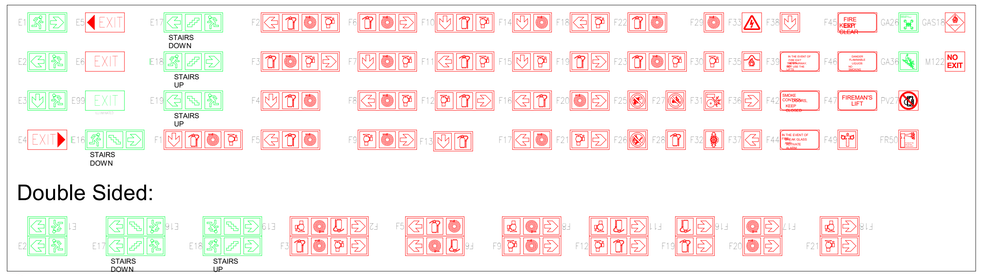



# TLALE Ex 6x CLASSROOM BLOCK 3 FIRE PROTECTION PLAN

1 : 100

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

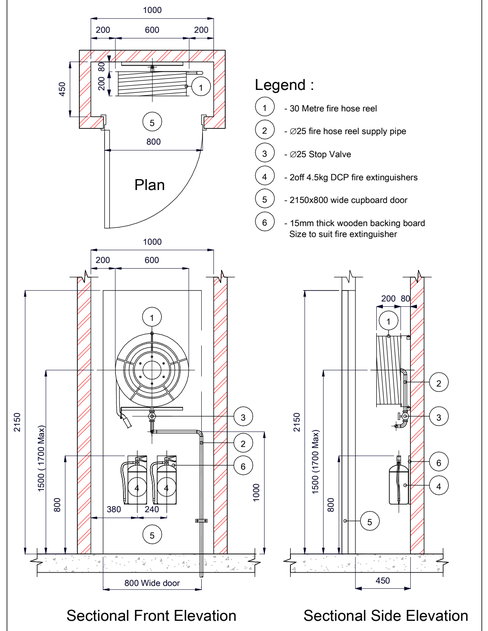
**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

## Fire Doors Types

SANS 1400-T; Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |




# FHR + FE DETAIL

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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### Revision Schedule

| Rev | Date | by | Description |
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| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

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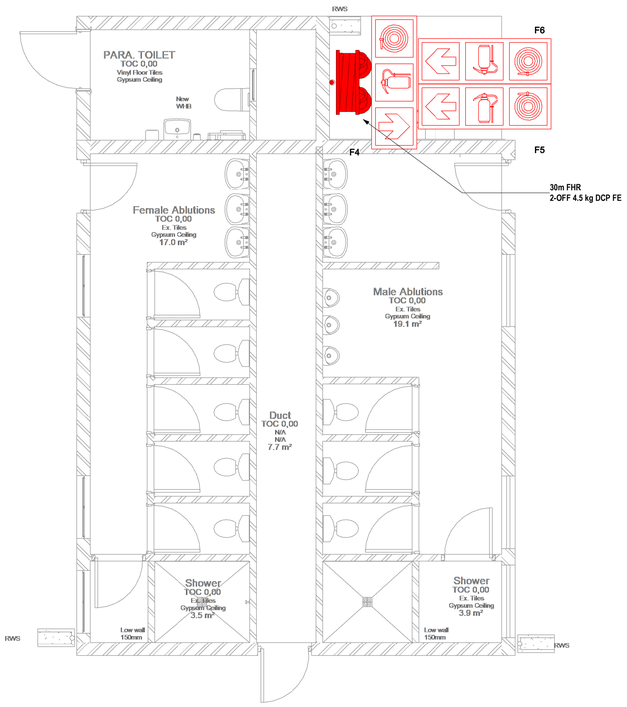
PROJECT

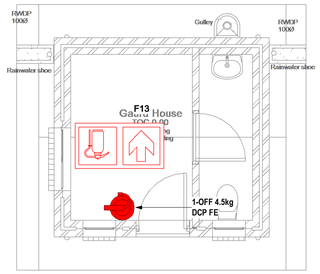
TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE EXISTING 6 CLASSROOM BLOCK 3
FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY CC | DRAWN BY M.L | APPROVED BY CC | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY CC | |
| DRAWING NUMBER | ME-400-6CLB3-FP | | |



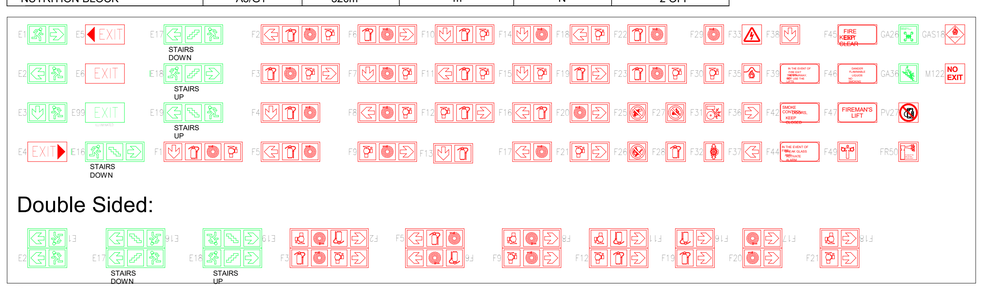




# TLALE ABLUTION BLOCK AND GUARD HOUSE FIRE PROTECTION PLAN

1 : 50

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

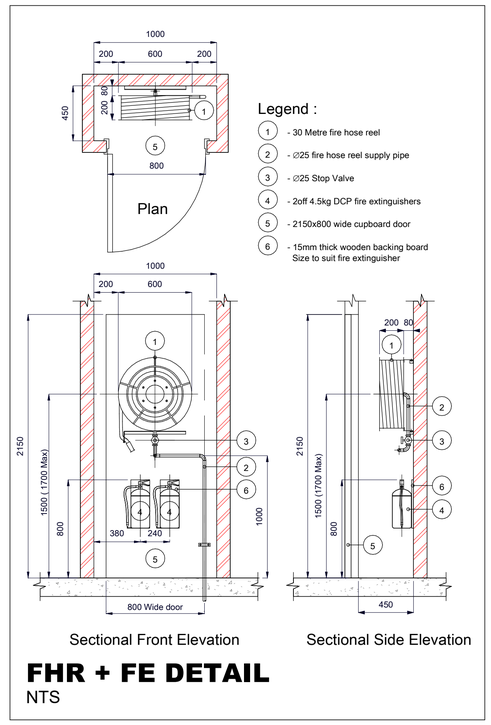
**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

## Fire Doors Types

SANS 1400-T; Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall<br>min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |




# FHR + FE DETAIL

NTS

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

**ISSUED FOR INFORMATION**

## Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

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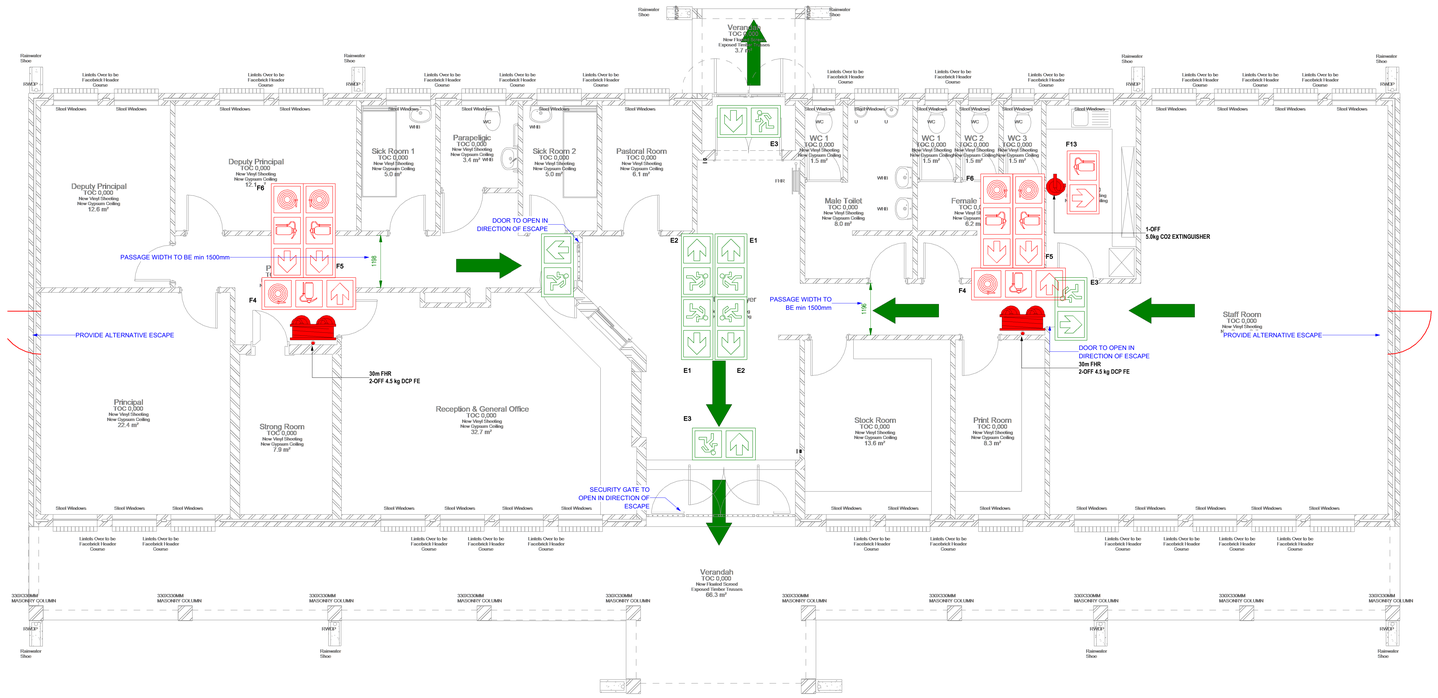
**PROJECT**

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

**DRAWING DESCRIPTION**

TLALE ABLUTION BLOCK & GUARD HOUSE FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY<br>CC | DRAWN BY<br>M.L | APPROVED BY<br>CC | SHEET SIZE<br>A1 |
| DATE<br>2024.11.08 | SCALE<br>As indicated | CHECKED BY<br>CC | |
| DRAWING NUMBER | ME-400-ABGH-FP | | |

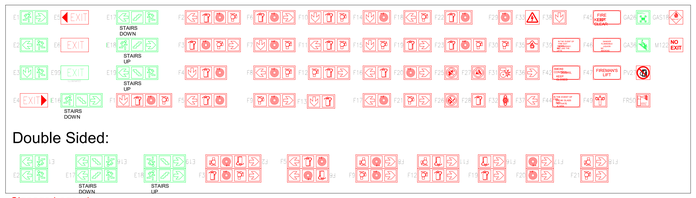



# TLALE ADMINISTRATION BLOCK FIRE PROTECTION PLAN

1 : 50

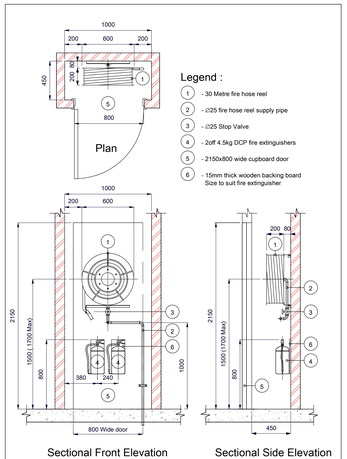
## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.




## FHR + FE DETAIL

NTS

## Standard Notes:

**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
   b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
   c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

## Fire Doors Types

SANS 1400-T: Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |

- Wet curtain protected glass door
- (A) Self-closing Class 'A'
- (B) Self-closing Class 'B'
- (S) Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- BD Beam Detector
- FAC Fire Alarm Call Point
- EC Emergency Door Release Call Point
- RU Relay Unit
- FCP Fire Control Panel
- ICV Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

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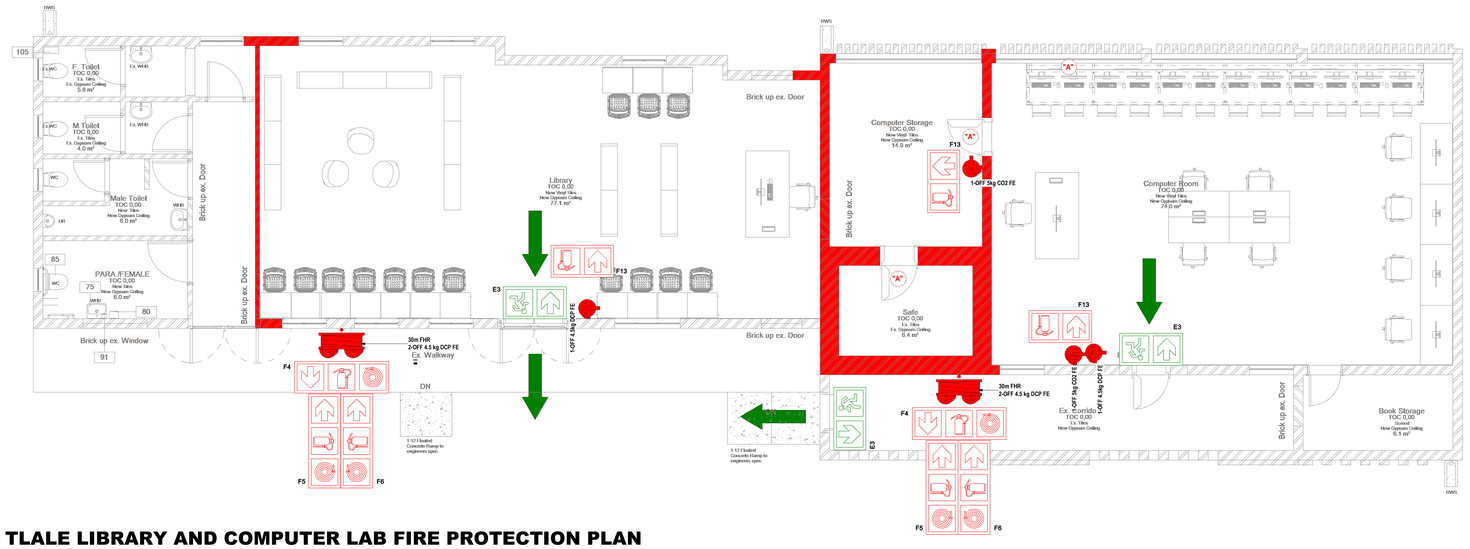
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE ADMINISTRATION BLOCK
FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY: CC | DRAWN BY: M.L | APPROVED BY: CC | SHEET SIZE: A0 |
| DATE: 2023.08.25 | SCALE: As indicated | CHECKED BY: CC | |
| DRAWING NUMBER: | ME-400-ADM-FP | | |

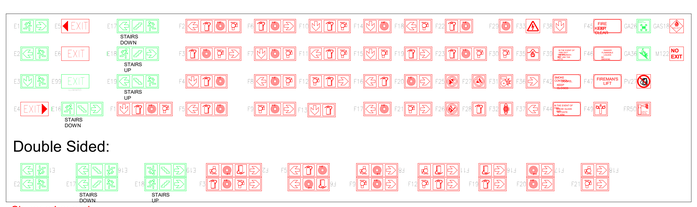



# TLALE LIBRARY AND COMPUTER LAB FIRE PROTECTION PLAN

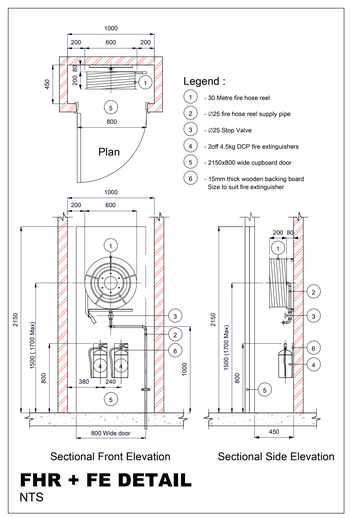
1 : 50

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:
All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.




## FHR + FE DETAIL

NTS

## Standard Notes:

**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

## Fire Doors Types

SANS 1400-T: Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| Divisional seperation | 60 | A |
| | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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| Rev | Date | by | Description |
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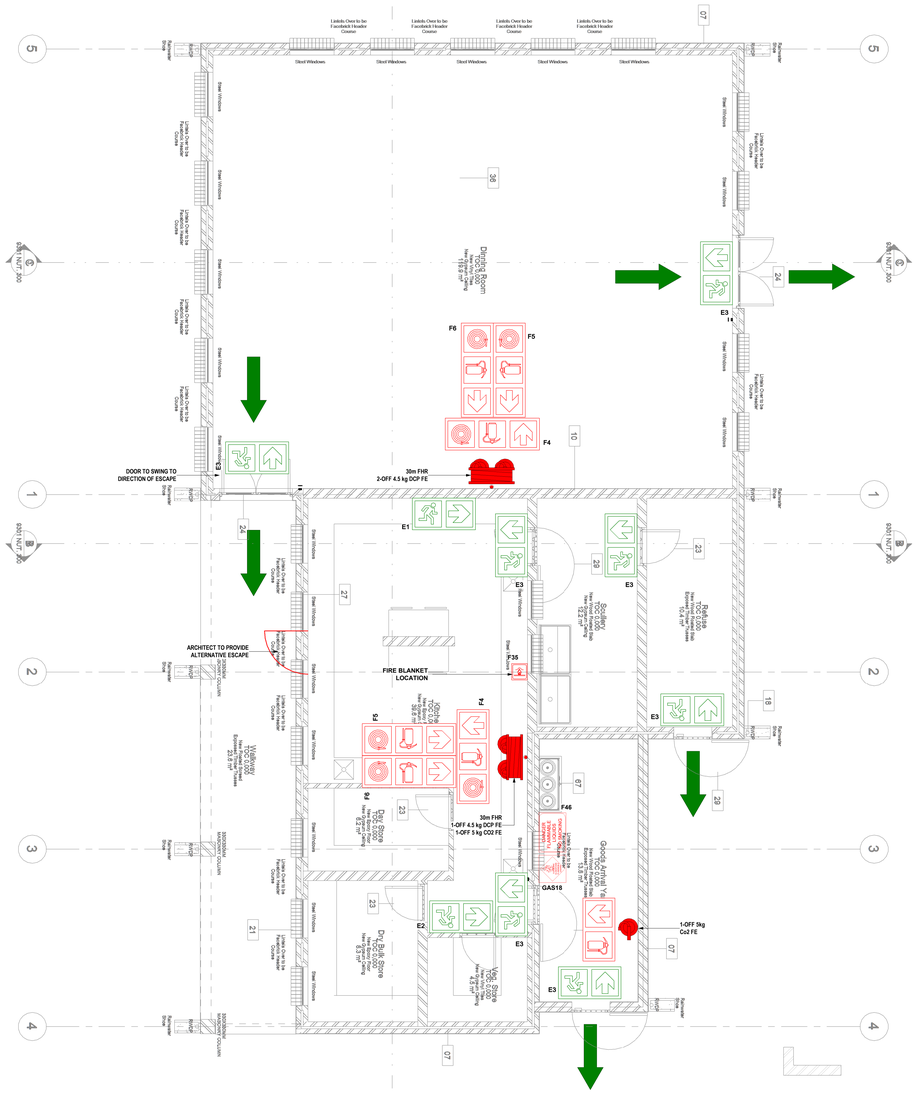
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE LIBRARY & COMPUTER BLOCK FIRE PROTECTION LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| CC | M.L | CC | A0 |
| DATE: 2024.11.08 | SCALE: As indicated | CHECKED BY: CC | |
| DRAWING NUMBER | ME-400-LBC-FP | | |

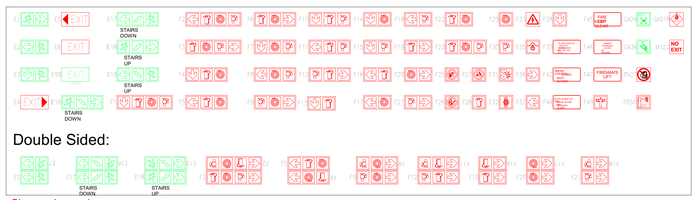



# TLALE NUTRITION BLOCK FIRE PROTECTION PLAN

1 : 50

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |

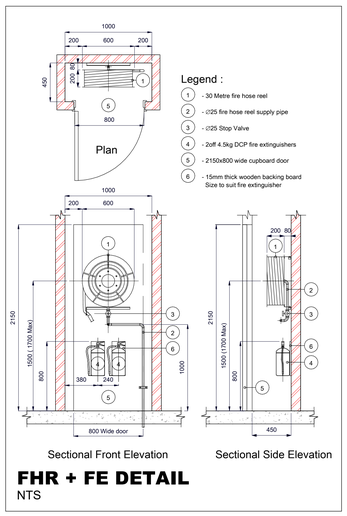



Signage Legend:
All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
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11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.




## FHR + FE DETAIL

NTS

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

## Fire Doors Types

SANS 1400-T: Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

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## Revision Schedule

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Department of Education
NORTH WEST PROVINCL

idt independent development trust

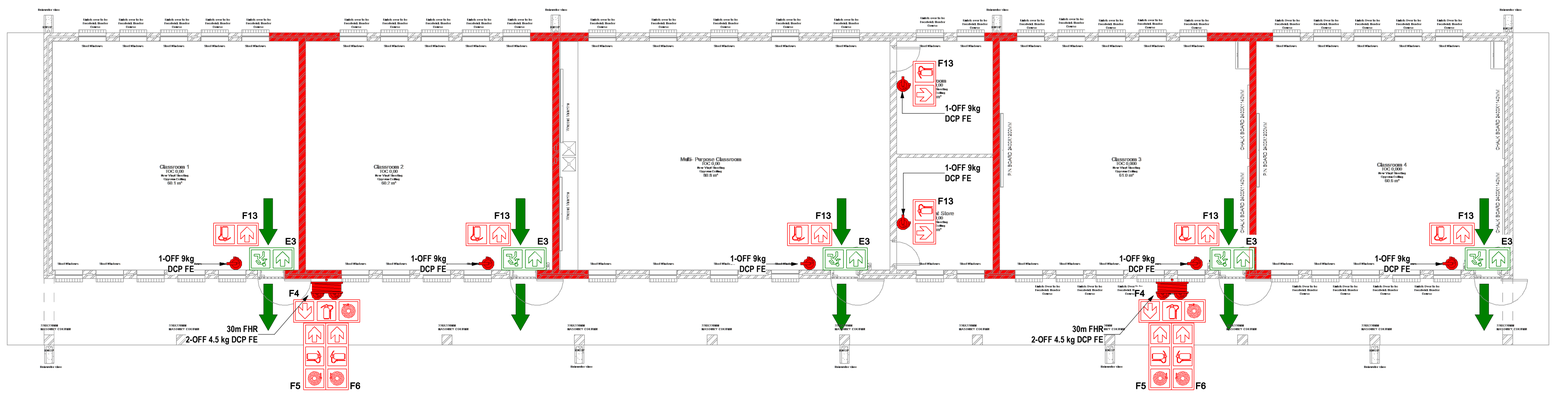
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE NUTRITION BLOCK FIRE PROTECTION LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| CC | M.L | CC | A0 |
| DATE | SCALE | CHECKED BY | |
| 2024.11.08 | As indicated | CC | |
| DRAWING NUMBER | ME-400-NB-FP | | |

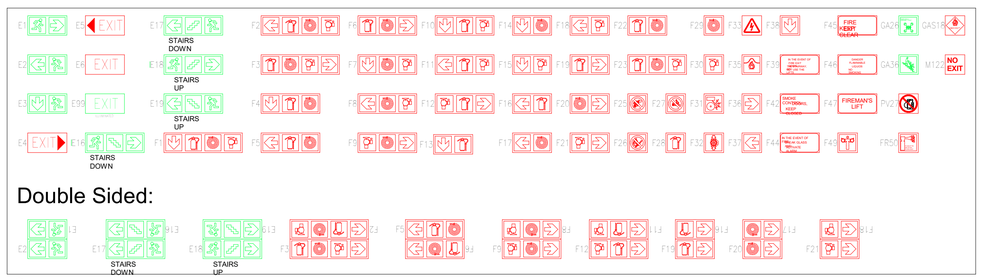



# TLALE NEW CLASSROOM & MULTI-PURPOSE FIRE PROTECTION PLAN

1 : 100

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:

All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.

## Standard Notes:

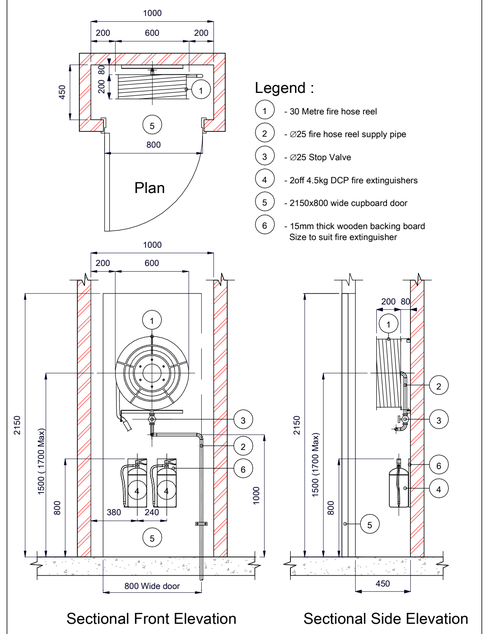
**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

## Fire Doors Types

SANS 1400-T; Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall<br>min | Class of fire door or fire shutter |
| Occupancy separation | 60 | A |
| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |




# FHR + FE DETAIL

NTS

COPY RIGHT RESERVED

## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing Type
- Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

ISSUED FOR INFORMATIONN

### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

MECHANICAL CONSULTANT

isagoarchitecture

CLIENT

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCE

idt

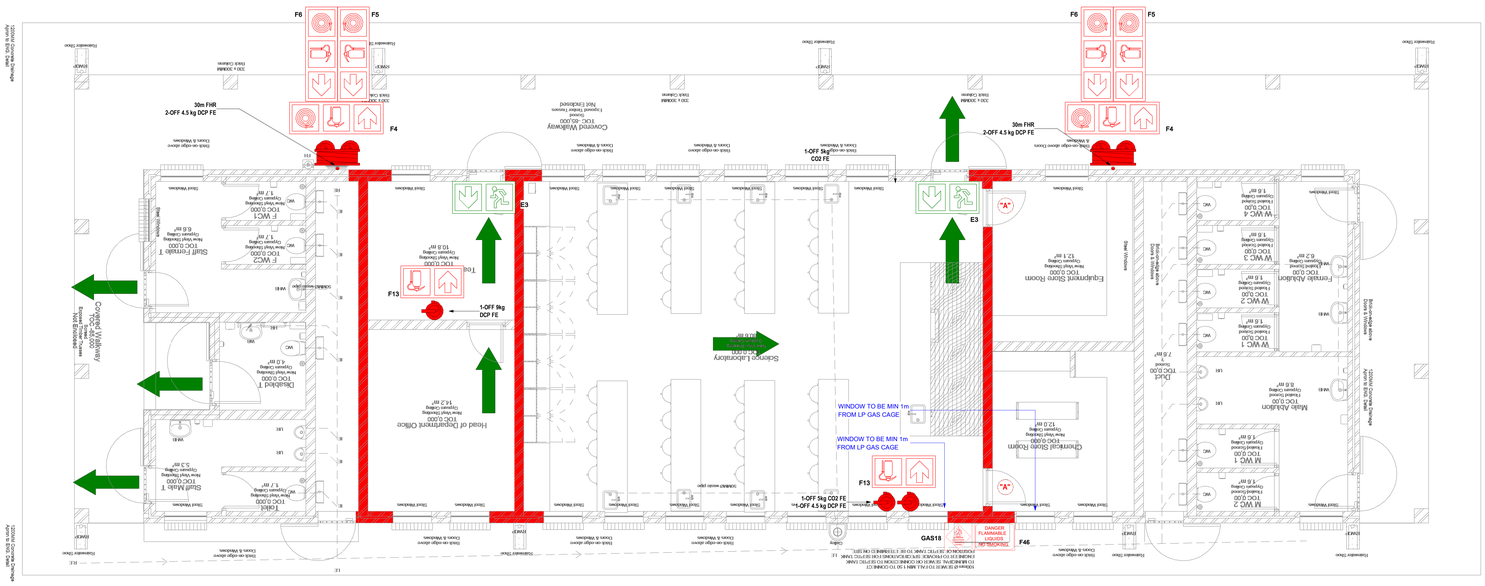
PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE NEW CLASSROOM & MULTI-PURPOSE FIRE PROTECTION LAYOUT

| | | | |
|---|---|---|---|
| DESIGNED BY CC | DRAWN BY M.L | APPROVED BY CC | SHEET SIZE A1 |
| DATE 2024.11.08 | SCALE As indicated | CHECKED BY CC | |
| DRAWING NUMBER | ME-400-NCMP-FP | | |

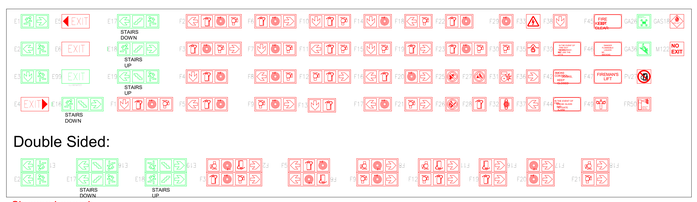



# TLALE SCIENCE BLOCK FIRE PROTECTION PLAN

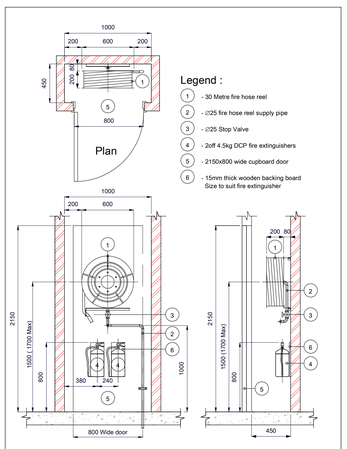
1 : 50

## AREA SCHEDULE

| | OCCUPANCY | TOTAL AREA | MAX. FIRE COMPARTMENT | SPRINKLERS REQUIRED? | SANS 10400T:T11 F.E |
|---|---|---|---|---|---|
| ADMINISTRATION BLOCK | G1 | 454m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 1 | A3 | 471m² | m² | N | 2 OFF |
| Ex 4x CLASSROOM BLOCK 2 | A3 | 325m² | m² | N | 2 OFF |
| Ex 6x CLASSROOM BLOCK 3 | A3 | 471m² | m² | N | 2 OFF |
| NEW CLASSROOM & MULTI-PURPOSE | A3 | 576m² | m² | N | 2 OFF |
| SCIENCE LAB | A3 | 395m² | m² | N | 2 OFF |
| ABLUTION BLOCK | A3 | 99m² | m² | N | 1 OFF |
| LIBRARY AND COMPUTER LAB | A3 | 315m² | m² | N | 1 OFF |
| NUTRITION BLOCK | A3/G1 | 320m² | m² | N | 2 OFF |




Signage Legend:
All signs to be 190mm x 190mm photo-luminescent, with white back ground. Recommended height 2m - 2,5m from floor level to bottom of sign.




## FHR + FE DETAIL

NTS

## Standard Notes:

**FIRE PROTECTION NOTES**

1. All work to comply with Act 103 of 1977 and SANS 10400 Part T-2024.
2. Occupancy Classification: A3 as per SANS 10400-A clause 20.
3. a) 1 x 4.5Kg Extinguishers, per 200m2 or part thereof, to be installed in accordance with SANS 10105 and clause 4.38.
b) 30 m Hose reels, per 500m2 or part thereof, to be installed in accordance with SANS 543 and Clause 4.34
c) Hydrants to be installed in accordance with SANS 1128: Part 1 and Clause 4.35
4. Existing fire services to be extended to new hose reel positions.
5. Water supply to the fire fighting equipment to comply with SANS 10400 - 2011 Part W and with relevant Water By-Laws.
6. Portable fire extinguishers to be hung on purpose made boards, as indicated on plan.
7. Doors in escape routes may only be fitted with approved locking devices and shall comply with clause 4.16, 4.17, 4.19.
8. Floor coverings to be Class: 3 or better as per clause 4.14.
9. Wall coverings to be Class: 3 or better as per clause 4.15.
10. Photoluminescent escape signs to be provided and to comply with SANS 1186 Part 1 and 5, as per 4.29.
11. Photoluminescent symbolic signs, indicating fire equipment, to be provided and to comply with SANS 1186 Part 1 and 5 as per 4.32.
12. Suspended ceiling and its supporting members shall be of non combustible material.
13. Structural elements and components shall have a minimum stability rating of 30 minutes.
14. Insulation material to comply with SANS 428: 2006.
15. Stacking height to comply with clause 4.4.b of SANS 10400-2011 Part T.
16. No dangerous goods will be stored in excess of the exempt quantities as per SANS 10263-0 Annex A.

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## Zones

- EMERGENCY/FIRE ESCAPE STAIRCASE
- FIRE BRIGADE INCIDENT COMMAND STAGING AREA

## Fire Wall

- 120MIN FIRE RATED WALL

## Fire Doors Types

SANS 1400-T: Table 7-Class of fire doors or fire shutters.

| 1 | 2 | 3 |
|---|---|---|
| Type of Wall | Required min fire resistance of wall min | Class of fire door or fire shutter |
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| | 120 | B |
| Occupancy separation- Plant rooms or other ancillary accommodation | 120 | C |
| | 60 | A |
| Divisional seperation | 60 | A |
| | 120 | D |
| Emergency Route | 120 | B |
| Protected corridor and protected stairs. | 30 | E |
| Service shafts not fire stopped at every floor level | 60 or 120 | A or B |
| Openings in all walls | 30 | F |

- Wet curtain protected glass door
- Self-closing Class 'A'
- Self-closing Class 'B'
- Smoke door
- Escape Route
- Smoke Baffle
- 1 Hour Fire-Rated Firewall
- 30min Fire-Rated Firewall
- 65mm Pillar Type Fire Hydrant
- Fire Booster Connection
- Hose reel & 2 x extinguishers
- Fire Extinguisher
- Fire Extinguisher in translucent cage
- Siren: Red Flashing
- Type Smoke Detector
- Void Smoke Detector
- Heat Detector
- Beam Detector
- Fire Alarm Call Point
- Emergency Door Release Call Point
- Relay Unit
- Fire Control Panel
- Installation Control Valve
- Air inlet galvanized steel duct
- Hose Reel Pipe

ISSUED FOR INFORMATION

### Revision Schedule

| Rev | Date | by | Description |
|---|---|---|---|
| A | 2024.11.08 | ML | ISSUED FOR INFORMATION |

ARCHITECTS

isagoarchitecture

CLIENT

education
Lefapha la Thuto
Onderwys Departement
Department of Education
NORTH WEST PROVINCL

idt
independent development trust

PROJECT

TLALE PRIMARY SCHOOL
NORTH WEST PROVINCE

DRAWING DESCRIPTION

TLALE SCIENCE BLOCK FIRE PROTECTION LAYOUT

| DESIGNED BY | DRAWN BY | APPROVED BY | SHEET SIZE |
|---|---|---|---|
| CC | M.L | CC | A0 |
| DATE | SCALE | CHECKED BY | |
| 2024.11.08 | As indicated | CC | |
| DRAWING NUMBER | ME-400-SCL-FP | | |

# C4 SITE INFORMATION

## C4.1 Site Information

# 2) DESCRIPTION OF THE WORKS

### 1.1 THE SITE

The site is accessible from Motlhabeng Village Mahikeng. The central coordinates of the site are Latitude 25°51'1.57"S Longitude 25°35'57.73"E. with an elevation from mean sea level of about 1126 m.

### 1.2 WORK AREA

Employer shall make available a work site, free of charge, to the Contractor for the duration of the Contract. The location of the site will be pointed out by the Principal Agent during the site clarification meeting. The Contractor shall submit a site layout plan indicating the proposed working areas, storage, stock piling area, amongst others before for approval by the Project Manager before establishing on site.

The contractor

a. shall take responsibility to locate all buried services prior to excavating
b. is responsible for providing his own equipment in order to determine the location of existing services.
c. is to ensure the protection and integrity of all existing services exposed and encountered through the course of construction activities.
d. must inform the relevant service provider immediately (within 2 hours of incident) such that procedures for the reinstatement of the service can be affected, should he damage or break an existing service (whether known or unknown).

### 1.3 ACCESS

The Contractor and the Principal Agent shall agree on the exact location for the temporary access.

### 1.4 GENERAL - Restrictions on site

The construction will happen whilst the rest of the facilities are operational, and the contractor is expected to plan his activities to ensure minimum disturbances to the operations. Proper barricading must be in place around the working areas and Contractor is to ensure full compliance to occupational, health and safety policies and Acts. The Contractor is to seek confirmation from the Principal Agent before any site establishment.

Contractor to also make use of the decanting plan provided for decanting purposes.

# ADDENDUM A

## Occupational Health and Safety Regulations

GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

No. R. .....  7 February 2014

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993**

# CONSTRUCTION REGULATIONS, 2014

The Minister of Labour has under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule.

ADDENDUM A

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
Regulation 3 of the Construction Regulations, 2014

NOTIFICATION OF CONSTRUCTION WORK

1.(a) Name and postal address of principal contractor:

_____

(b) Name and tel. no of principal contractor's contact person:

_____

2. Principal contractor's compensation registration number: ___

3.(a) Name and postal address of client:

_____

(b) Name and tel no of client's contact person or agent:

_____

4.(a) Name and postal address of designer(s) for the project:

_____

(b) Name and tel. no of designer(s) contact person:

_____

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6.(1). _____

6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 6.(2).

_____

7. Exact physical address of the construction site or site office:

_____

8. Nature of the construction work:

_____

_____

_____

9. Expected commencement date: _____

10. Expected completion date: _____

11. Estimated maximum number of persons on the construction site.

_____

12. Planned number of contractors on the construction site accountable to principal contractor:

_____

13. Name(s) of contractors already chosen.

_____
_____
_____

_____ _____
Principal Contractor Date

_____ _____
Client Date

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.

- **ALL PRINCIPAL CONTRACTORS** THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

# ADDENDUM B

## Occupational Health and Safety Specification

**THE ADDITIONS AND RENOVATIONS TO TLALE PRIMARY SCHOOL FOR THE DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE**

## INDEPENDENT DEVELOPMENT TRUST

(Hereinafter referred to as the Employer)

## OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

This specification shall be used in conjunction with all other applicable safety specifications, legislation and regulations in force at the time of the contract. Where unique site specifications are in force, those site specifications shall take precedence over this Specification.

The Independent Development Trust (IDT)
Glenwood Office Park
Cnr. Oberon and Sprite Street
Faerie Glen
Pretoria
0182

## ADDENDUM "A"

## PRO-FORMA AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT 1993

**PRO-FORMA AGREEMENT IN TERMS OF**

**OCCUPATIONAL HEALTH AND SAFETY ACT 1993 – SECTION 37 (2)**

**NEW CONSTRUCTION SAFETY REGULATIONS**

The above-mentioned regulations were promulgated in the Govt. Gazette on Friday, 18 July 2014 under the Occupational Health & Safety Act (85 of 1993) and are now in force.

The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 1993 (Act 85 of 1993, hereinafter referred to as the Act), that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act, namely:

(a) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all the relevant provisions of the Act and the regulations promulgated in terms of the Act, and the Employer's Health and Safety Specifications included in the contract documents.

(b) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations and the Employer's Health and Safety Specifications included in the contract documents will be complied with in all respects.

(c) In relation to any work or activity performed by the Contractor, his workmen or any other person for whose acts or omissions the Contractor is responsible in terms of the Contract, the Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from itself being obliged to comply with any of the aforesaid duties, obligations and prohibitions.

(d) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the Contractor has complied with his undertakings as set out more fully in paragraphs (a) and (b) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or to inspect any appropriate records held by the Contractor.

(e) The Contractor shall be obliged to report forthwith in writing to the Representative/Agent full details of any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract.

(f) Forward “safety meeting” minutes to the representative/Agent.

For the Employer: _____ Date: _____

Witnesses: 1) : _____ 2) _____

For the Contractor: _____ Date: _____

Witnesses: 1) : _____ 2) _____

## ADDENDUM "B"

## NOTIFICATION OF CONSTRUCTION WORK

**NOTIFICATION OF CONSTRUCTION WORK**
(Regulation 3 of the Construction Regulations, 2014)

## 1. CONTRACTOR

1.1 Name and postal address of Contractor:

_____
_____
_____

1.2 Name and telephone number of Contractor's contact person :

_____

1.3 Contractor's compensation registration number :

_____

1.4 Name and telephone number of Contractor's Construction Supervisor :

_____

1.5 Physical address of the construction site or site office:

_____
_____
_____

1.5 Estimated number of persons on the construction site:

_____

1.6 Estimated number of Subcontractors on the construction site accountable to the Contractor:

_____

## 2. EMPLOYER

2.1 Name and postal address of Employer :

_____
_____
_____

2.2 Name and telephone number of Employer's Principal Agent:

## 3. DESIGN CONSULTANTS

3.1 Name and postal address of OHS consultants:

3.1.1 Occupational Health and Safety

**To be advised**

3.1.2 Other (if any):

3.2 Name and telephone number of design consultant's contact person:

3.2.1 Construction project managers/ Principal Agent:

3.2.2 Architects:

3.2.3 Structural engineer :

3.2.4 Electrical engineer:

3.2.5 Mechanical engineer:

3.2.6 Civil engineer:

3.2.7 Other (if any):

## 4. THE WORKS

Nature of the works:

Commencement date:

_____

Completion date:

_____

Contractor: _____ Date: _____

Employer: _____ Date: _____

THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.

ALL CONTRACTORS THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER CONTRACTOR ON THE SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

# ADDENDUM C

## Environmental Management Plan

TO BE PROVIDED BY THE SUCCESSFUL BIDDER

# ADDENDUM I

## Drawings

# ADDENDUM J

**IDT Addendum to the JBCC**




# ADDENDUM

To the

# THE JBCC PRINCIPAL BUILDING AGREEMENT

**NAME OF PROJECT:** ----------
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---
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**INTRODUCTION**

**WHEREAS**, the Independent Development Trust ("IDT") made an Offer of Appointment and the Contractor has accepted such appointment subject to the conditions stipulated in the aforesaid Offer of Appointment Letter, which conditions include signing of the JBCC Agreement, Edition …… (hereinafter referred to as "Main Agreement").

**AND WHEREAS**, this addendum shall form part of the Main Agreement between the Employer and the Contractor.

**1.** ADDENDUM TO THE MAIN AGREEMENT

1.1 This Agreement will constitute an Addendum to the Main Agreement as contemplated herein;

1.2 The Terms of Reference, Accepted Proposal or BID, Standard Conditions of BID, Special Conditions of BID and adjusted Priced Bills of Quantities shall form part of the agreement between the Contractor and the Employer;

1.3 This Addendum will be deemed to incorporate, with or without variation, all the provisions of the Main Agreement, unless the context clearly requires otherwise;

1.4 All words and phrases used in this Addendum which are defined in the Main Agreement, will bear the same meaning assigned to them in the Main Agreement; and

1.5 All references in the Main Agreement to "the/this Agreement" itself, will be deemed to be references also to the Main Agreement duly amended by this Addendum.

**1.6 Interpretations and Definition**

1.6.01 **Financial Implications** shall means the variation amount over and above the awarded contract sum.

## 2. SPECIAL CONDITION

If there is any conflict between the contents or any part of this Addendum and the contents or any part of the Main Agreement and other annexures, the content of this Addendum shall prevail.

## 3. WAIVER OF CONTRACTOR'S LIEN

3.1 The Contractor hereby waives, in favour of the Employer, any lien or right of retention that is or may be held in respect of the Works to be executed on the Site.

3.2 The Employer, as an Organ of State, shall not be required to provide payment guarantees.

## 4. ASSIGNMENT OF RIGHTS OR OBLIGATIONS

4.1 Neither **party** shall assign or cede rights or obligations without the written consent of the other **party**, which consent shall not be unreasonable withheld.

4.2 Where the Contractor intend to cedes any right to monies due or to become due under this agreement as security in favour of a financial institution, a written consent in accordance with clause 4.1 above, shall be obtained from the Employer prior to entering into such cession.

4.3 Any cession entered into without the necessary written consent from the either party, shall be null and void.

4.4 The Employer shall not consent to a cession of monies due or to become due under this agreement as security in favour of a financial institution, unless such financial institution submitted to the IDT a Valid Tax Clearance Certificate, is registered as a credit provider in terms of the National Credit Act and as a vendor in the IDT's Vendor Management System.

## 5 INTERIM PAYMENT

5.1 The **Employer** shall, in accordance with clause 8.2.3 of the treasury regulation of March 2005, pay to the **Contractor** the amount certified in an interim **payment certificate** within **thirty (30) calendar days** of the date of submission of the **payment certificate**".

5.2 Default interest, where applicable, shall only be effective after the 30 calendar days of the date of receipt of the interim **payment certificate from the Principal Agent.**

5.3 The Employer shall be entitled to apply a set-off against a legitimate and liquid claim against the Contractor from which a valid invoice has been received.

## 6 TAX COMPLIANCE MEAUSRES

6.1 The Contractor hereby grant confirmation that SARS may, on on-going basis during the contract term, disclose the Contractor's tax compliance status to the employer.

6.2 Should the Contractor appoint a sub-contractor to execute a portion of a work in excess of the threshold (currently 25%) prescribed by the National Treasury, the Contractor must ensure that a sub-contractor is tax complaint and remains tax compliant for the full duration of the contract. The contractor shall obtain a written consent from its sub-contractors confirming that SARS may on on-going basis during the contract term, disclose the sub-contractor's tax compliance status to the employer.

6.3 The Contractor shall submit a valid tax clearance certificate within 10 working days from the date of expiry of the tax clearance certificate. The Employer reserve the right to demand a valid Tax Clearance Certificate prior to making any payment to the Contractor, should it become aware that the tax clearance corticated has expired.

6.4 Unless the Employer receive a written confirmation that the Contractor has challenged its tax compliance status with SARS, the Employer shall not process

any payment to the Contractor, if 30 days has lapsed since the written notice by the Employer and the Contractor has failed to remedy its tax compliance status.

6.5 Employer's non-payment of the Contractor's invoice in accordance with clause 6.4 above shall not absolve the contractor from performing its obligation in terms of the contract.

6.6 Unless the Employer receives a written confirmation that the Contractor or sub-Contractor has challenged its tax compliance status with SARS, the Employer shall be entitled to cancel the contract with the Contractor or instruct the Contractor to cancel its contract with the Sub-Contractor.

6.7 Where a Contractor is a JV, each party to a JV must be tax complaint and remains tax compliant for the full duration of the contract, failing which, the Employer shall invoke paragraph 6.4 or 6.6 above.

## 7. APPROVAL OF VARIATION ORDERS

7.1 Upon receipt of the Variation Order (VO), the Principal Agent must professionally consider the merits of the Variation Order and make a recommendation to the Employer.

7.2 The Principal Agent shall not have the power to approve any deviation or variation which has financial implications on the Employer without the necessary written approval of the Employer, except under emergency circumstances wherein failure to undertake the work may result in loss of life.

7.3 The Employer must communicate the approval of a Variation Order in writing to the Principal Agent and the Principal Agent shall, upon receipt of confirmation of the approval of the VO, issue the necessary Contract Instruction to the contractor to undertake the works.

7.4 The Contractor shall not commence with any Variation Order Works without the written approval of the Variation Order from the Employer, except under circumstances mentioned in paragraph **7.2** above.

7.5 Should the Contractor undertakes the Variation Order Works without the necessary written approval of the Variation Order from the Employer, the Contractor shall be entirely liable for any financial and any related implications and hereby indemnify and hold harmless the Employer from and against any and all claims, actions, damages, liabilities, injuries, costs, fees, expenses, or losses, including and without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by, or for which liability may be asserted against, the Employer arising out of the Contractor's performance or non-performance of unauthorized works, but only to the extent caused by the negligent acts, errors or omissions of the Contractor.

7.6 The Contractor shall not accept any instructions from any party, including beneficiary Department, other than the Principal Agent.

## 8. JOINT VENTURE AGREEMENT

8.1 Should the Joint Venture Agreement be dissolved or any of the JV partner pull out the JV Agreement for any reasons whatsoever, the Employer hereby reserve its right to terminate the contract with immediate effect.

8.2 Should the Employer decide not to terminate the contract upon the dissolution of the JV Agreement and the replacement JV partner does not meet the BBBEE threshold stipulated in the BID document, the IDT shall be entitled to cancel the contract with immediate effect.

8.3 Should the BBBEE status of the Joint Venture be changed to a lower rate than the BIDding rate, based on legislation applicable at the closing date of the

8.4 BID, the IDT shall be entitled to cancel the contract.

**9. BREACH**

9.1 In the event that the contractor: -

9.1.1 commits an act of insolvency; or

9.1.2 is placed under a provisional or final winding-up or judicial management order; or

9.1.3 is placed under or applied for business rescue; or

9.1.4 makes an assignment of more than 25% of either its right and/or its obligation for the benefit of the third arty without the written consent of the employer; or

9.1.5 the Contractor is registered or fails to renew his registration with the CIDB or changes directorship during the course of the project, resulting in the contravention of BBBEE statutory requirement; or

9.1.6 fails to satisfy or take steps to have set aside any judgment taken against it within 14 (Fourteen) business days after such judgment has come to its notice,

then the other Employer will be entitled to terminate the Agreement on written notice.

Signed at …… on this the …… day of ……..**202……B.**

**AS WITNESSES:**

**A.** _____ _____

For and on behalf of the **Employer: (…….)**, in his/her capacity as the ----------

**B.** _____ _____

For and on behalf of the **Employer: (……..)**,in his/her capacity as the ----------.

Signed at …… on this the …… day of ……**202…**

**AS WITNESSES:**

**C.** _____

f

**D.** _____ _____

For and on behalf of the **Contractor: ……..**in his/her capacity as ……, who hereby confirm that he/she is duly authorized.