

## Annexure A

### HEALTH AND SAFETY SPECIFICATIONS

# DEVELOPMENT BANK OF SOUTHERN AFRICA



## HEALTH AND SAFETY SPECIFICATIONS

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### DBSA SCHOOLS INFRASTRUCTURE UPGRADES, REPAIRS AND RENOVATIONS

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## **1 PREAMBLE**

In terms of Construction Regulation 5(1) of 2014 of the Occupational Health and Safety Act, (Act 85 of 1993), Development Bank Of Southern Africa, hereinafter referred to as 'DBSA' as the Client, is responsible to prepare Health & Safety Specifications for the intended Schools Infrastructure Upgrades, Repairs And Renovations and provide the Principal Contractor who is making a bid or appointed to perform construction work at the School with the same.

Development Bank Of Southern Africa further duties are as described in the Occupational Health and Safety Act, (Act 85 of 1993), and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specification' document is governed by the "Occupational Health and Safety Act, (Act No. 85 of 1993), hereinafter referred to as 'the Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document, this requirement is limited to all health and safety issues pertaining to the site of the project as referred to here-in.

Due to the scope and the nature of the intended construction work, every construction activity will be different, and circumstances and conditions may change even daily. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a risk assessment program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This risk assessment and the steps identified will be the basis or point of

departure for the Health and Safety Plan. The Health and Safety Plan shall include applicable methods statements, e.g. for demolition work, detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the risk assessment.

Development Bank Of Southern Africa intends to perform Schools Infrastructure Upgrades, Repairs And Renovations. In this, a high premium is to be placed on the health and safety of the most valuable assets of DBSA. These are its personnel, the personnel of its stakeholders and the physical assets of which it is the custodian and may also include the public as well. The responsibilities of DBSA and relevant stakeholders have towards its employees and other people present on the site are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognisance of the above statement.

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of The Development Bank Of Southern Africa.

## **2 DESCRIPTION OF THE WORKS**

The project comprises of the following:

- Schools Infrastructure Upgrades, Repairs And Renovations

## **3 SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT**

These specifications should be read in conjunction with the Act, the Construction Regulations 2014, and all other Regulations and Safety Standards which are in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, regulations and safety standards which are promulgated under, or incorporated into the Act.

The client is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for The Development Bank Of Southern Africa. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- Safety considerations affecting the site of the project and its environment;
- Health and Safety aspects of the associated structures and equipment;
- Submissions on health and safety matters required from the Principal Contractor; and
- The Principal Contractor's health & safety plan.

## **4 DEFINITIONS**

**“Purpose of the Act”** – To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

**“Health & Safety Specification”** – means a document that includes information required under the construction regulation and obtained from the clients & designers during the early planning & design stage for a specific project on a specific site for use by the contractors when preparing their tenders or bids to clients.

**“Health & Safety Plan”** – means a document which is site specific and includes all identified hazards, safe work procedures to mitigate, reduce & control the hazards identified in a project.;

**“Agent”** – means any person who acts as a representative for a client;

**“Construction Health & Safety Agent (SACPCMP)”** – The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the client’s behalf in terms of the construction regulations;

**“Construction Work”** is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

**“Contractor”** – means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

**“Accident”** – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment;

**“Hazard”** – means anything including work activities and practices with the potential to cause harm;

**“Risk”** – means the likelihood that harm will occur and the subsequent consequences.

**“Risk assessment”** – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

**Health and Safety File”** – means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

## **5 RESPONSIBILITIES**

## **5.1 The Development Bank of Southern Africa**

- a) The Development Bank Of Southern Africa or its appointed Agent on its behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.
- b) The Development Bank Of Southern Africa or its appointed Agent on its behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of both Principal Contractor and Contractor for approval.
- c) The Development Bank Of Southern Africa or its appointed Agent on its behalf will take reasonable steps to ensure that the Health and Safety Plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- d) The Development Bank Of Southern Africa or its appointed Agent on its behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
  - have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
  - have failed to implement or maintain their health and safety plan;
  - have executed construction work which is not in accordance with their health and safety plan; or
  - act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

## **5.2 Principal Contractor**

- a) The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work. Annexure 2 of the

Construction Regulations contains a “Notification of Construction Work” form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform The Development Bank Of Southern Africa or its Agent accordingly.

- b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.
- c) The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.
- d) The Principal Contractor shall provide and demonstrate to The Development Bank Of Southern Africa or its appointed Agent a suitable and sufficiently documented Health and Safety Plan based on this Specification, the Act and the Construction Regulations 2014, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all sub-contractors for which he has to take responsibility in terms of this contract.
- e) The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- f) The potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (See Annexure A: BILL OF QUANTITIES FOR HEALTH AND SAFETY)
- g) The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- h) The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to The Development Bank Of Southern Africa, an Inspector, employee or sub-contractor.

- i) The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations 2014, is opened and kept on site and made available to The Development Bank Of Southern Africa or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to The Development Bank Of Southern Africa.
- j) The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- k) The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to The Development Bank Of Southern Africa for approval.

### **5.3 Contractor**

The Contractor must demonstrate to the Principal Contractor that he has the necessary competencies and resources to perform the construction work safely.

## **6 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS**

### **6.1 Health & Safety Plan**

A Health and Safety Plan must be developed, implemented, maintained and kept up to date during the construction project.

The Principal Contractor should prepare a Health and Safety Plan that includes

- Project information;
- The Development Bank Of Southern Africa requirements for health and safety management on the project; as specified in this Health and Safety Specification

The Health and Safety Plan should include the following information:

- Details of the Client, that is the person commissioning the construction work, for example their name, representative and contact detail, details of the Principal Contractor;
- Details of the construction project, the address of the workplace, anticipated start and end date and a brief description of the type of construction work that the Health and Safety Plan will cover;

- Details on how subcontractors will be managed and monitored, including how the Principal Contractor intends to implement and ensure compliance with the Health and Safety Plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- Details on how the risks associated with traffic volumes, construction vehicles and mobile plant and all high-risk construction work that will take place on the construction project will be managed.

The Health and Safety Plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- workplace security and public safety; and
- ensuring workers have appropriate competences and training to undertake the construction work.

The Health and Safety Plan must contain:

- A general description of the type of work activities involved in the project and not just a description of the infrastructures to be constructed;
- The project program or schedule details, including start and finish dates, showing principal activities;
- Details of Client, Design Team, Principal Contractor, Subcontractors, and major suppliers; and
- Extent and location of relevant existing records, surveys, site investigation, etc

## **6.2 Health and Safety File**

The Principal Contractor must, in terms of Construction Regulation 7(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The Health and Safety File will remain the property of The Development Bank Of Southern Africa on its behalf throughout the period of the project and shall be consolidated and handed over to The Development Bank Of Southern Africa on its behalf at the time of completion of the project.



### **6.3 Notification of Intention to Commence Construction Work**

On receipt of the client notification of award of the contract and, in any event before any construction work commences, the Principal Contractor shall notify the Provincial Director of the Department of Labour in writing of the intention to undertake construction work. Annexure A of the Construction Regulations 2014 must be used for that purpose. A copy of the completed notification must be forwarded to the client or its appointed Agent and to the Architect and a copy shall be attached to the Health and Safety Plan.

### **6.4 Structure and Responsibilities**

#### **6.4.1 Overall supervision and responsibility for occupational health and safety**

- The Principal Contractor [appointed in terms of Construction Regulation 5(1)(k)] is responsible to implement and maintain the Health and Safety Plan approved by the Client.
- The Chief Executive Officer (in terms of Section 16(1) of the Act) of the Principal Contractor is to ensure that the Employer (as defined in the Act) complies with the Act.
- The Principal Contractor's Chief Executive Officer may appoint any person reporting to him/her as Designated Person in terms of Section 16(2) of the Act. Such Designated Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the Act.
- The Construction Manager, Assistant Construction Manager, Construction Supervisor and Assistant Construction Supervisor(S) appointed in terms of Construction Regulation 8 are responsible for supervising the construction work and in specific to ensure that all work undertaken comply with the requirements of the Act, its Regulations and these Health and Safety Specifications.

#### **6.4.2 Operational responsibilities for Occupational Health and Safety**

The Principal Contractor shall appoint designated competent employees and/or other competent persons as outlined in the following list to assist with the operational responsibilities for occupational health and safety. This list is only the minimum requirement and is therefore in no way exhaustive.

<b>Appointment</b>	<b>Legal Reference</b>
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Assistant Construction Manager	Construction Regulation 8(2)
Assistant Construction Supervisor	Construction Regulation 8(8)
Construction Health and Safety Officer	Construction Regulation 8(5)
Construction Manager	Construction Regulation 8(1)
Construction Supervisor	Construction Regulation 8(7)
Construction Vehicle, Mobile Plant and Machinery Supervisor	Construction Regulation 23
Drivers of Construction Vehicles and Operators of Plant	Construction Regulation 23
Electrical Installation and Appliances Inspector	Construction Regulation 24
Emergency, Security and Fire Coordinator	Construction Regulation 29
Excavation Supervisor	Construction Regulation 13
First-aiders	General Safety Regulation 3
Firefighting equipment inspector	Construction Regulation 29
Hazardous Chemical Substances Supervisor	Hazardous Chemicals Substances Regulations 10
Incident Investigator	General Administrative Regulation 9
Ladder Inspector	General Safety Regulation 13(a)
Lifting Machines and Equipment Inspector	Construction Regulation 22
Occupational Health and Safety Committee	OHSACT Section 19
Occupational Health and Safety Representatives	OHSACT Section 17
Person Responsible for Machinery	General Machinery Regulation 2
Risk Assessor	Construction Regulation 9(1)

Stacking and Storage Supervisor	Construction Regulation 28
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These appointments must be in writing and the responsibilities clearly stated together with the period for which each appointment is made. This information must be communicated to and agreed with the appointees.

Copies of appointments must be submitted to the client together with concise CV's of the appointees as part of the Principal Contractor's Health and Safety Plan, and if appointed, copies of the appointments included in the Health and Safety File. All appointments must be approved by the client and any changes of appointees or appointments must be communicated to the client and agreed upon before being implemented.

The Principal Contractor must, furthermore, provide the client with a list of all contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

#### **6.4.3 Construction Health and Safety Officer**

This project requires the appointment of a full-time Construction Health and Safety Officer, appointed in terms of Construction Regulation 8(5). This appointee should be duly registered and in good standing with a statutory body approved by the Chief Inspector as is required by Construction Regulation 8(6).

The South African Council for Project and Construction Management Professions (SACPCMP) is currently the statutory body responsible for the professional registration of construction health and safety officers and a copy of the appointee's SACPCMP's registration certificate should be submitted as part of the Principal Contractor's Health and Safety Plan and be readily available in the Health and Safety File to be kept and maintained on site.

#### **6.4.4 Designation of Occupational Health and Safety Representatives**

Where the Principal Contractor employs more than 20 persons [including the employees of other contractors (sub-contractors) and its supervisors] he has to appoint one occupational health and safety representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the occupational health

and safety representatives be executed in consultation with employee representatives or employees. (Section 17 of the Act as well as General Administrative Regulation 6 and 7 refer).

Occupational health and safety representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

#### **6.4.5 Duties and functions of the Occupational Health and Safety Representatives**

The Principal Contractor must ensure that the designated occupational health and safety representatives conduct a weekly inspection of their respective areas of responsibility, using a checklist, and report thereon to the Principal Contractor. Occupational health and safety representatives must be included in accident and/or incident investigations.

Occupational health and safety representatives must attend all occupational health and safety committee meetings.

#### **6.4.6 Appointment of Occupational Health and Safety Committee**

The Principal Contractor must establish an occupational health and safety committee consisting of all the designated occupational health and safety representatives together with a number of management representatives that are not allowed to exceed the number of occupational health and safety representatives on the committee and a representative of the client shall act as the chairperson without voting rights. The members of the occupational health and safety committee must be appointed in writing and copies of the appointments included in the occupational health and safety file.

The occupational health and safety committee must meet as a minimum on a monthly basis and consider, at least, the following agenda items:

- Opening and welcome.
- Members present, apologies and absent.
- Minutes of previous meeting.
- Matters arising from the previous meeting.
- Occupational health and safety representatives' reports.
- Incident and/or accident reports and investigations.
- Incident, accident and/or injury statistics.
- Other matters.
- Endorsement of registers and other statutory documents by a duly authorised representative of the principal contractor.

- Close and next meeting.

## **6.5 Compensation of Occupational Injuries and Diseases Act 130 of 1993**

The Principal Contractor shall submit a letter of good standing with its Compensation Insurer, to the client or his appointed representative, as proof of registration. Contractors shall submit proof of registration to the Principal Contractor before they commence work on site

## **6.6 Occupational Health and Safety Policy**

The Principal Contractor and all other Contractors shall submit to The Development Bank Of Southern Africa and to the Architect, a copy of their organisation's Health and Safety Policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and state the Health and safety objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the Health and Safety Plan

## **6.7 Health and Safety Organogram**

The Principal Contractor and all Contractors shall submit an organogram, outlining the Health and Safety site management structure including the relevant appointments/competent persons and shareholders. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the Site management structure. A copy shall be attached to the Health and Safety Plan.

## **6.8 Hazard Identifications and Risk Assessment**

The Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work, and the assessed risks shall form part of the construction phase health and safety plan submitted for approval by the client or its appointed Agent

The risk assessment must include;

- A list of hazards identified as well as potentially hazardous tasks;
- A documented site-specific risk assessment based on the list of tasks and associated hazards;
- Method statements and a set of safe working procedures to eliminate, reduce and/or control the risks assessed;
- A monitoring and review procedure of the risks assessment as the risks change

The Principal Contractor shall ensure that all employees and or Contractors are competent to perform the work and informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at

regular intervals as the risks change and as new risks develop. Proof of this shall be kept on the Health and Safety File.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (tool box talk strategy to be implemented). Appropriate signage regarding the dangers attached to the work and hazards identified must be posted at strategic places for everyone to see and be included in the method statement to be provided in the Health and Safety Plan.

## **6.9 Health and Safety Training/Induction**

### **6.9.1 Induction**

The Principal Contractor shall ensure that all site personnel undergo a risk-specific health & safety induction training session before starting work. A record of attendance shall be kept in the Health and Safety File. All visitors to the site shall also receive risk-specific health & safety induction training and a record of such shall be kept. All employees to be informed, instructed and trained by a competent person regarding the hazards and work procedures as prescribed.

### **6.9.2 Awareness**

The Principal Contractor shall ensure that, on site, periodic toolbox talk take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the Health and Safety File. All Contractors have to comply with this minimum requirement. The contractor shall inform all residence and or members of the public, who may be affected by the activities and who will most likely be exposed to the hazards identified of all precautionary measures to be taken.

### **6.9.3 Competency**

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, carry out. This will have to be assessed on regular basis e.g. periodic audits by the client, progress meetings, etc. The Principal Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

## **6.10 Medical Certificates of Fitness**

The Principal Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 of the Construction Regulations 2014.

## **6.11 Public and Site Visitor Health & Safety**

Both The Development Bank Of Southern Africa and the Principal Contractor have a duty in terms of the OHS Act to do all that is reasonably practicable to prevent members of the public and site visitors from being adversely affected by the construction activities.

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers. A record of these inductions/briefings shall be kept in the Project Health and Safety File in accordance with the Construction Regulations. Appropriate Health and Safety notices and signs shall be posted up, but this shall not be the only measure taken. The construction site shall be suitably and sufficiently fenced off/ barricaded and or provided with controlled access points to prevent the entry of unauthorized persons.

## **6.12 General Record Keeping**

The Principal Contractor and all Contractors shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993, Construction Regulations 2014 and any other legislation applicable on site. The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections, audits, etc, are kept in a Health and Safety File held in the site office. The Principal Contractor must ensure that every Contractor opens its own Health and

Safety File, maintains the file and makes it available on request. The Principal Contractor shall maintain an up to date register of each Contractor engaged in construction work on site giving the Contractors' name and the Responsible Persons' contact details and the number of employees on site. As these details may be subject to frequent change, the register must be updated at least weekly. The register is to be available for inspection

## **6.13 Health & Safety Audits, Monitoring and Reporting**

The Development Bank Of Southern Africa will conduct at least, a once monthly Health & Safety audit of the work operations including a full audit of physical site activities as well as an audit of the

administration of health & safety. The Principal Contractor is obligated to conduct similar audits on all contractors appointed by it. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings/forums. Copies of the Client audit reports shall be kept in the Project Health & Safety File while the Principal Contractor audit reports shall be kept in their File, a copy being forwarded to the client. Contractors shall audit their sub-contractors and keep records of these audits in their Health and Safety Files, available on request. These audits must be conducted by a competent person.

#### **6.14 Accident / Incident Reporting and Investigation**

Injuries are to be categorized into first aid; medical; disabling; and fatal. The Principal Contractor must stipulate in its construction phase Health and Safety Plan how it will handle each of these categories. When reporting injuries to the client, these categories shall be used. All injuries shall be investigated by the Principal Contractor, with a report being forwarded to the client forthwith. All Contractors have to report on the 4 categories of injuries to the Principal Contractor at least monthly. The Principal Contractor must report all injuries to the client in the form of a detailed injury report at least monthly. The Client's Agent must be informed forthwith of any recordable incident or accident.

#### **6.15 Hazards and Potential Situations**

The Principal Contractor shall immediately notify other Contractors as well as The Development Bank Of Southern Africa Agent of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

#### **6.16 Contractors and Sub-contractors**

The Principal Contractor shall ensure that all Contractors under its control comply with this Specification, the OHS Act of 1993, Construction Regulations 2014, and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance and a section 37(2) agreement must be put in place.

### **7 OPERATIONAL CONTROL**

#### **7.1 Emergency Procedures**

The Principal Contractor shall prepare a detailed emergency procedure prior to commencement of work on site and it shall be included in, and form part of, the Health and Safety Plan. The procedure shall be updated whenever changes occur, and it shall detail the emergency



response plans. The emergency procedures shall not be limited to, but shall include, the following key elements:

- List of key competent personnel on site;
- Details of the nearest emergency services, including their physical addresses and phone numbers;
- Actions or steps to be taken in the event of each specific type of emergency;
- Information on hazardous materials/situations that may be encountered on site.

Emergency procedures shall include, but shall not be limited to, fire, spills, accidents to employees, bomb threats, and major incidents/accidents.

A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and be readily available to site personnel at all times that there are persons on site i.e. it must not be in an area which may be inaccessible outside of normal working hours.

The Principal Contractor shall advise The Development Bank Of Southern Africa and the Engineer in writing forthwith, and thereafter at the project and Health and Safety meetings, of any emergencies that occurred, together with a record of the action taken. Copies of all reports on emergencies shall be kept in the Project Health and Safety File.

## **7.2 First Aid Boxes and First Aid Equipment**

The Principal Contractor and all other Contractors shall appoint First Aider(s) in writing. All Contractors with more than 10 employees shall have a trained, certified First Aider on site at all times. The appointed First Aider(s) are to be sent for accredited first aid training. Copies of the valid First Aid certificates for each First Aider are to be kept in the Project Health and Safety File. The Principal Contractor shall provide an on-site First Aid Station with First Aid facilities, including first aid boxes adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box(es).

## **7.3 Security**

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must, among others, include the rules that nonemployees will not be allowed on site unaccompanied.

The Principal Contractor must develop a set of project applicable security rules and procedures and maintain these throughout the construction period.

#### **7.4 Accommodation of traffic**

The Principal Contractor shall ensure that appropriate and a sufficient number of road signs be posted as per Chapter 13, Volume 2 of the South African Road Traffic Signs Manual (SARTSM) and these signs also be actively maintained to protect employees against traffic and to warn road users of the presence of construction activities and related risks next to and in the road surface. These signs should be repeated as actual construction work and risk are approached.

The maintenance of the road signs including after hour's management shall also be actively managed.

Flag persons shall be provided, where applicable with suitable road marking and flags to ensure the effectiveness of this risk mitigation measures.

#### **7.5 Stacking of materials**

The Principal Contractor and other relevant contractors shall ensure that there is an appointed Stacking and Storage Supervisor and all materials, all equipment is stacked and stored safely in a demarcated area.

#### **7.6 Speed Restrictions, Signage and Protection**

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those that are visiting the site are aware and comply with the site speed restriction(s).

Separate vehicle and pedestrian access routes shall be provided, maintained, controlled, and enforced. Signage shall be provided and should comply as per Occupational Health and Safety Act and SANS standards

#### **7.7 Hazardous Chemical Substances (HCS)**

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of HCS. The Principal Contractor shall ensure that the use, transport, and storage of HCS are carried out as prescribed by the HCS Regulations. The Contractor shall ensure that all hazardous chemicals on site have Material

Safety Data Sheets (MSDS) and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS and how to treat HCS incidents appropriately.

## **7.8 Construction Vehicle and Mobile Plant Operators**

The following requirements will apply to construction vehicles and mobile plant operators:

- Only certified and/or competent employees may be allowed to operate any construction vehicle and mobile plant.
- Every lifting machine operator must be trained specifically for the type of lifting machine that he or she is operating.
- Only employees duly authorised to do so may operate any construction vehicle and mobile plant.
- Only employees physically and psychologically fit, i.e. in possession of a medical certificate of fitness, may be allowed to operate any construction vehicle and mobile plant.

## **7.9 Construction Vehicles and Mobile Plant**

Construction vehicles and mobile plant should be formally and duly inspected by a competent person appointed by the Principal Contractor prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment must be required to comply with this specification as well as the Act and Regulations.

Construction vehicles and mobile plant must be:

- Of acceptable design and construction;
- Maintained in good working order;
- Used in accordance with their design and intention for which they were designed;
- Operated and/or driven by trained, competent and authorised operators/drivers. No unauthorised persons to be allowed to drive construction vehicles and mobile plant;
- Provided with safe and suitable means of access;
- Fitted with adequate signalling devices to make movement safe including reversing;
- Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into same;
- Provided with roll-over protection;
- Inspected daily before start-up by the driver, operator and/or user and the findings recorded in a register/log book and any defects addressed as matter of urgency;

- Fitted with two head and two tail lights that is in good working condition whilst operating under poor visibility conditions; and
- Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported.

No loose tools, material etc is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported.

No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose.

Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or adequate barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant.

In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely.

All construction vehicles and mobile plant daily inspection records must be kept in the Health and Safety File.

## **7.10 Electrical Installations**

Any electrical work undertaken as part of the project, including the installation of temporary electricity for construction use shall be in accordance with Construction Regulation 24 and the Electrical Installation Regulations.

The Principal Contractor must ensure that:

- Existing services are to be located and clearly marked before construction commences and during the progress thereof;
- Where the abovementioned is not possible, employees with jackhammers etc. will be protected against electric shock by the use of suitable protective equipment e.g. rubber mats, insulated handles etc;

- Electrical installations and -machinery are sufficiently robust to withstand normal working conditions on site;
- Temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the occupational health and safety file;
- Electrical machinery used on a construction site must be inspected daily before start-up by the competent driver/operator or any other competent person and a record of the inspections kept on the occupational health and safety file; and
- A competent person appointed in writing must control all temporary electrical installations.

### **7.11 Electrical and mechanical lockout**

An electrical and mechanical lockout procedure must be developed by the Principal Contractor and submitted to the client for approval before construction commences. All contractors on site must be informed of and adhere to this lockout procedure.

### **7.12 Use and Storage of Flammables**

The principal contractor must ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions is taken;
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with consistent access control measures in place and sufficient firefighting equipment installed and fire prevention methods practiced for example proper housekeeping;
- Only one day's quantity of flammable is to be kept in the workplace;
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas; and
- Welding and other flammable gases to be stored segregated as to the type of gas and empty and full cylinders.

### **7.13 Fire Prevention and Protection**

The Principal Contractor must ensure that:

- The risk of fire is avoided;
- Sufficient and suitable storage of flammables is provided;

- All employees are instructed in the use of the firefighting equipment and know how to attempt to extinguish a fire;
- A sufficient number of employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
- Employees are informed regarding emergency evacuation procedures and escape routes;
- Emergency escape routes are kept clear at all times and clearly marked;
- Evacuation assembly points are demarcated and made known to employees;
- Evacuation is regularly practiced to ensure that all persons are evacuated timeously and;
- Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind; and
- A clearly audible, to all persons on site, siren or alarm is fitted and regularly tested.

#### **7.14 Housekeeping**

The Principal Contractor must ensure that:

- Housekeeping is continuously implemented and maintained;
- Materials and equipment is properly stored;
- Scrap, waste and debris is removed off site regularly;
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and vehicular traffic;
- Where practicable, construction sites are fenced off to prevent entry of unauthorised persons;
- An unimpeded work space is maintained for every employee;
- Every workplace is kept clean, orderly and free of tools and the likes that are not required for the work being done;
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials; and
- The walls and roof of every indoor workplace be sound and leak-free.

#### **7.15 Stacking and Storage**

The Principal Contractor must ensure that:

- A competent person is appointed in writing to supervise all stacking and storage on a construction site;
- Adequate storage areas are provided and demarcated;
- The storage areas are kept neat and under control;
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack;

- The items in the lower layers can support the weight exerted by the top layers;
- Cartons and other containers that may become unstable due to wet conditions are kept dry;
- Pallets and containers are in good condition and no material is allowed to spill out;
- The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead or off the stack and no items may overhang);
- The articles that make up a single tier are consistently of the same size, shape and mass;
- Structures for supporting stacks are structurally sound and able to support the mass of the stack;
- No articles are removed from the bottom of the stack first but from the top tier first;
- Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him or her;
- Stacks that are in danger of collapsing are broken down and restacked;
- Stability of stacks are not threatened by vehicles or other moving plant and machinery;
- Stacks are built in a header and stretcher fashion and that corners are securely bonded; and
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

## **7.16 Employee Welfare Facilities**

### **7.16.1 Toilets**

The provision of toilets for each sex is required in terms of the National Building Regulations and Construction Regulation 30.

Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at a ratio of at least 1 toilet per 30 employees.

### **7.16.2 Showers**

At least cold-water showers of some sort for each sex have to be provided at a ratio of at least 1 shower per 15 employees.

### **7.16.3 Change rooms**

Some form of screened off changing facility must be provided separately for each sex.

#### **7.16.4 Eating facility**

Some form of eating facility sheltered from the sun, wind and rain must be provided.

#### **7.17 Personal and other protective equipment**

The Principal Contractor is required to proactively identify the hazards in the workplace and deal with them on an ongoing basis. He/she must either remove them or, where impracticable take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment should, however, be the last resort and there should always first be an attempt to apply re-engineering and other solutions to mitigating hazardous situations before the issuing of personal protective equipment is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Principal Contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the Principal Contractor maintain the said equipment, that he/she instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s in a consistent and correct manner.

Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other valid reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed but an alternative solution has to be found that may include relocating the employee.

The Principal Contractor may not charge any fee for protective equipment prescribed by him or her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed;
- Where the employee has blatantly abused or neglected the equipment leading to early failure; and where the employee has lost the equipment.



## **7.18 Portable Electrical Tools and Equipment**

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etc. In addition, electrical appliances such as fridges, hotplates, heaters, etc must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorised persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.

This equipment:

- Must be maintained in good condition at all times to prevent an electrical shock to the user;
- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

## **7.19 Portable lights**

The following requirements apply to portable lights:

- Must be fitted with a robust non-hygroscopic non-conducting handle;
- Live metal parts which may become live must be protected against contact;
- The lamp must be protected by a strong guard;
- The cable lead-in must withstand rough handling;
- A register be kept for each piece of equipment with findings of regular inspections undertaken to evaluate the condition of these lights;
- Inspections must be undertaken that concentrate on at least the plug, cord, switch, guard and any obvious faults; and
- When used in wet/damp/metal container conditions, it must be protected.

## **7.20 Public/Scholars Health and Safety**

The Principal Contractor is responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes among others:

- Non- employees entering the site for whatever reason;
- The school children
- The surrounding community; and
- Passers-by the site.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times.

All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these.

## **7.21 Excavations**

All excavation work has to comply with the following:

- Excavation work must be carried out under the supervision of a competent person with at least two years practical experience in excavation work who has been appointed in writing.
- Before excavation work begins the stability of the ground must be evaluated.
- Whilst excavation work is being performed, the Principal Contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material.
- No person may be required or permitted to work in an excavation that has not been adequately shored or braced.
- Where the excavation is in stable material or where the sides of the excavation are sloped back to at least the maximum angle of repose measured relative to the horizontal plane, shoring or bracing may be left out but only after written permission has been obtained from the appointed competent person.
- Shoring and bracing must be designed and constructed to safely support the sides of the excavation and prevent it from collapsing.
- Where uncertainty exists regarding the stability of the soil the opinion of a competent professional engineer or professional technologist must be obtained, before excavation

proceeds, whose opinion will be decisive. The opinion must be in writing and signed by the engineer or technologist as well as the appointed excavation supervisor.

- No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the excavation, unless suitable shoring has been installed to be able to carry the additional load. Best practice requires a one-meter clearance so as to reduce the pressure on the side walls as well as risk of material falling onto persons inside the excavation.
- Every excavation must be provided with means of access that must be within 6 metres of any employee within the excavation at any time. Should ladders be utilised for this purpose they should be duly secured.
- The location and nature of any existing services such as water, electricity, gas, telecommunication etc must be established before any excavation is commenced with and any service that may be affected by the excavation must be protected and made safe for employees working in or near in the excavation.
- Every excavation, including the shoring and bracing or any other method to prevent a possible collapse, must be inspected by the appointed competent person as follows:
  - Daily before work commences
  - After every blasting operation
  - After an unexpected collapse of the excavation or part thereof
  - After substantial damage to any support
  - After rain
- The results of any inspections must be recorded in a register kept on site in the health and safety file.
- Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced off, on all sides, to at least one meter high and as close to the excavation perimeter as practicable. All such excavations must also be provided with warning lights or visible boundary indicators after dark or when visibility is poor.

## **7.22 Working in Confined Spaces**

### **7.22.1 Ventilation**

- The confined space must be opened and allowed to ventilate for at least 15 minutes before entering the confined space. All confined spaces must be barricaded and manned at all times.
- A gas monitor must be lowered to the bottom of the confined space with a rope to test the presence of any toxic/flammable gas. If any gas is detected, the space must be force ventilated by means of a blower for at least 15 minutes where after the air must be tested

again. Under no circumstances may any space be entered while there is a toxic/flammable gas present.

- After the undertaking of the necessary work, the person in charge of the activities must confirm that all the employees are accounted for.

#### **7.22.2 Entering a confined space**

- When entering a confined space, the person entering the space must wear a safety harness and fully operational gas detector. A lifeline must be attached to the safety harness and a person on the surface must be in continuous contact with the person in the confined space. At least one person on the surface must be trained in basic first-aid (level 1) with proof of such training as well as a fully equipped first aid box available on site.
- No person shall remain within a confined space for a period of more than one hour at a time. A minimum of 5-minute rest periods on the surface must be taken after this period before re-entering.
- Should the alarm sound on the gas monitor, all employees must exit the confined space and the immediate area must also be evacuated immediately. The area must be properly ventilated and re-tested before re-entering the confined space. Professional support should be called for if necessary.
- Employees must be provided with flameproof lighting when entering a confined space with the possibility of flammable gases. No naked lights, smoking or unprotected electrical apparatus which may cause sparks, shall be permitted in any confined space or in its vicinity.

#### **7.22.3 General**

All employees working in confined spaces must be issued with fully functioning gas monitoring equipment and safety harnesses. All these employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

#### **7.22.4 Safety equipment**

All teams must be issued with fully functional gas monitoring equipment and safety harnesses where applicable. All employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

#### **7.22.5 General records**

The following records shall be implemented and maintained by the principal contractor:

- Confined space entry permits

- Confined space entry registers
- Safety harness and gas monitoring equipment registers
- Risk assessments
- Incident registers

#### **7.22.6 Training**

All employees that have to enter a confined space must be formally trained and confirmed competent before being required to enter such areas (new employees to complete this training and be declared competent before allowed to work in a confined space).

Refresher courses must be attended by employees at least once every 2 years or immediately if new methodologies or equipment are adopted or acquired.

Continuous onsite training and support by supervisory staff should be undertaken and enforced where required.

#### **7.23 Vessels under Pressure (VUP) and Gas Bottles**

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing
- Inspect equipment regularly and keep records of inspections
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand

#### **7.24 Fire Extinguishers and Fire Fighting Equipment**

The Principal Contractor and relevant Contractors must ensure all appropriate measures are taken to avoid the risk of fire shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. The fire equipment contemplated in previous paragraph is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof and a sufficient number of workers are trained in the use of fire-extinguishing equipment;

#### **7.25 Hired Plant and Machinery**

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the Occupational Health and Safety Act 85/1993 and Construction Regulations 2014 shall apply. The Principal Contractor shall ensure that operators

hired with machinery are competent and that certificates are kept on site in the health & safety file. All relevant Contractors must ensure the same.

### **7.26 Lifting Machines and Tackle**

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle is inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations. A competent lifting machinery and tackle inspector need to be appointed in writing and must inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle has a safe working load clearly indicated;
- Regular inspection and servicing is carried out;
- Records are kept of inspections and of service certificates;
- There is a proper supervision in terms of guiding the loads that includes a trained banksman to direct lifting operations and check lifting tackle;
- The operators are competent as well as physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

### **7.27 General Machinery**

The Principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing, and training those who use machinery.

### **7.28 High Voltage Electrical Equipment, Underground, Overhead power lines**

Care shall be taken when working close to, over or under high voltage reticulation power lines or cables. Underground services to be identified beforehand and the layout of such to be include in the Contractors Health and Safety Plan. A safe work procedure be drawn up and included into Contractors Health and Safety Plan.

### **7.29 Transport of Workers**

The Principal Contractor and other Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area of section to store them and all loose tool and plant are tied down and secured;
- Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.

- Transport workers in bakkies unless they are closed/ covered and have the correct number of seats for the passengers.

#### **Annexure E: Acknowledgement of Specifications and Annexures Form**

**CONTRACTOR NAME:**

I, the undersigned, hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and the consequences of non-compliance. The Principal Contractor furthermore reiterates its commitment to compliance of the requirements contained within the following provided documentation:

- Annexure A: OHS Bill of Quantities
- Annexure B: Contractors SHE Competency Evaluation Form;
- Annexure C: Section 37(2) Mandatory Agreements Form;
- Annexure D: Principal Contractors Appointment Letter Form
- Annexure E: Acknowledgement of Specifications and Annexure Form

Signed at ..... on this ..... Day of ..... 20.....

CONTRACTS MANAGER			
NAME	DESIGNATION	DATE	SIGNATURE
CONTRACTS SUPERVISOR			
NAME	DESIGNATION	DATE	SIGNATURE
WITNESS 1			
NAME	DESIGNATION	DATE	SIGNATURE

WITNESS 2			
NAME	DESIGNATION	DATE	SIGNATURE



## Annexure B

### BASELINE RISK ASSESSMENT

	<b>ISSUE BASE RISK ASSESSMENT</b>
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<b>DOCUMENT NAME</b>	<b>COVID-19 (CORONAVIRUS) – DBSA SCHOOLS INFRASTRUCTURE UPGRADES, REPAIRS AND RENOVATIONS</b>
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<b>Document number</b>	<b>RA Covid-19</b>	<b>Approved:</b>
<b>Department</b>	<b>OCCUPATIONAL HEALTH AND SAFETY</b>	
<b>Document Owner</b>	<b>The Development Bank Of Southern Africa</b>	
<b>Risk Assessor Signature</b>		
<b>Creation Date</b>	<b>2021/09/11</b>	
<b>Revision Number</b>	<b>00</b>	

<b>Revision Data</b>			
<b>Page number</b>	<b>Revision Details</b>	<b>Date</b>	<b>Approved By</b>

INDEX SIGNIFICANT PRIORITY					FREQUENCY / PROBABILITY					
Risk Rating	Tolerability	Tolerability Definition		Preventive action request	Rare - The unwanted event has never been known to occur in the business; or it is highly unlikely that it will occur within 20 years	Unlikely - The unwanted event has happened in the business at some time; or could happen within 20 years	Possible - The unwanted event has happened in the business at some time; or could happen within 10 years	Likely - The unwanted event has occurred infrequently; occurs in order of less than once per year & is likely to reoccur within 5 years	Almost certain - The unwanted event has occurred frequently; occurs in order of one or more times per year & is likely to reoccur within 1 year	
Extreme (21-25)	INTOLERABLE - Significant & urgent actions required	Very high risk - immediate preventive action required to reduce risk or consider discontinue		EXTREME						
HIGH (13 -20)	ALARP - Reduce risk to As Low as Reasonably Practicable	High risk – implement preventive action where practical and monitor action		HIGH						
MODERATE (6-12)		Substantial risk - implement preventive action where practical and monitor action		MODERATE						
LOW (1-5)	TOLERABLE	Acceptable risk - Monitor and manage risk		LOW						
SEVERITY										
(S/H) Harm to People (Safety / Health)	(EI) Environmental Impact	(BI/MD) Business Interruption / Material Damage & Other Consequential Losses	(L&R) Legal & Regulatory	(R/S/C) Impact on Reputation / Social / Community		1	2	3	4	5
Multiple fatalities / Impact on health ultimately fatal	Extreme environmental harm - L3 incident irreversible	Substantial or total loss of operation / > R...	Very considerable penalties & prosecutions. Multiple Law Suits & jail terms	International impact - international public attention	5	Moderate (11)	High (16)	High (20)	Extreme (23)	Extreme (25)
Single fatality or loss of quality of life / Irreversible impact on health	Major environmental harm - L2 incident remediable post LOM	Partial loss of operation R... to R...	Major breach of the law; considerable prosecution and penalties	National impact national public concern	4	Moderate (7)	Moderate (12)	High (17)	Extreme (21)	Extreme (24)
Lost time injury / Reversible impact on health	Serious environmental harm - L2 incident remediable within LOM	Partial shutdown / R... to R...	Serious breach of the law; investigation report to authority, prosecution and or moderate penalty possible	Considerable impact - regional public concern	3	Low (4)	Moderate (8)	High (13)	High (18)	Extreme (22)
Medical treatment case / Exposure to major health risk	Material environmental harm - L2 incident remediable short term	Brief description to operation / R... to R...	Minor legal issue; noncompliance and breaches of the law	Limited impact - local public concern	2	Low (2)	Low (5)	Moderate (9)	High (14)	High (19)
First aid case / Exposure to minor health risk	Minimal environmental harm - L1 incident	No disruption to operation R... to R...	Low level legal issue	Slight impact - public awareness may exist but no public concern	1	Low (1)	Low (3)	Moderate (6)	Moderate (10)	High (15)

**HAZARD** = the potential for something to cause harm (e.g. Bar Heater); **RISK** = the likelihood that harm from a hazard will occur (e.g. Fire)

**CONSEQUENCE** = Something that follows as a result (e.g. Injury, burns)

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequenc	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequenc	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
Travelling to-and-from Work	Travelling using the company transport	Person to person infection	Health infection (Corona Virus infection)	3	2	8	Educate all employees on the prevention of COVID-19. Issue hand sanitizer and face masks to employees before entering transporting vehicles. Regular disinfecting the inside of transportation vehicles before and after use. Limit the number of employees being transported in a closed vehicle. Employees to have at least 2 Meter space between each other. Employees with symptoms as described should not be transported to work and should stay at home.	3	1	4	Follow the Transportation Regulation as set out by the Minister of Public Health.
	Travelling using public transport	Contact with possible COVID-19 infected employee(s)	Health infection (Corona Virus infection). Fatality	4	4	21	Minimize the use of public transport – If using public transport, abide to the Provincial Regulations regarding COVID-19 Public Transport. Have all employees trained on the correct hygiene procedures. Have all employees regularly washing their hands . Supervisors and fellow employees to monitor each other for flu-like symptoms e.g. coughing. Employee(s) with symptoms should consult their Doctor as soon as possible.	4	3	17	Follow the Provincial Government's Public Transportation Regulation.
	Travelling across Provincial	Contact with possible COVID-19	Health infection (Corona Virus infection)	3	3	13	Avoid non-essential travel	3	2	8	

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
	Boarders for leave/ leisure	infected employee(s)					If travelled to/ from affected Provinces with high rates of infection inform your Site Manager immediately.				
<b>Vulnerable employees working on site</b>	Employee age over 50 and underlining medical conditions e.g. Chronic lung disease or moderate to severe asthma or TB. Serious heart conditions. Employees who are immune-compromised e.g. cancer, smoking, poorly controlled HIV or AIDS, and prolonged use of corticosteroids. People with diabetes, chronic kidney disease undergoing dialysis liver disease etc.	High-risk for severe illness from COVID-19	Health infection (Corona Virus infection)	<b>3</b>	<b>3</b>	<b>13</b>	Employee(s) in this group should consult their Doctor first before returning to work. Stay and work from home if possible – <u>If not possible:</u> Supervisors should plan their task to limit the exposure of “congestive work environment/ area”. Employees in this category with symptoms should not be allowed to come to work. Appropriate PPE to be worn. Number of employees should be limited in working area. Hand sanitation points to be placed at strategic places at office and on site. Social distance of at least 2 Meters between workers. Promote hand washing with water and soap. Avoid touching your eyes, nose, or mouth with unwashed hands.	<b>3</b>	<b>2</b>	<b>8</b>	<b>COVID-19 Guidance document on vulnerable groups.</b>

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
Access Control on Site	Security Gate	Contact with possible COVID-19 infected employee(s)	Health infection (Corona Virus infection)	3	3	13	Employee/ security available at each gate with appropriate PPE. Every entrance to site to have a thermometer. Every entrance to have a sanitation bottle to sanitize every person entering the sites hands. Avoid crowding at the security gate. Limit the crowd in a confined space or office. Keep at least 2 Meter space between other employees . Apply hygiene practices as being trained in. Every person shall complete the sign in register that will enable the contractor to track the person in case of a possible positive case. Non-essential visitors will not be allowed to enter the site. All persons entering the site to have a mask or a face shield on when entering, if not no access will be given to the person.	3	2	8	Information- and Warning Signages and Posters to be placed at the Site Access gate.
	Temperature Testing	Transfer of the virus from the infected person to the thermometers	Health infection (Corona Virus infection)	3	3	13	Testing officers to wear appropriate PPE. Testing office to use disinfectant wipes to clean the thermometers and any other materials used eg pen in between every test.	3	2	8	
		Transfer of the virus from the infected person	Health infection (Corona Virus infection)	3	3	13	Testing officers to wear appropriate PPE.	3	2	8	

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
		to Testing Officer									
<b>Employees working on Site</b>	Person to person and surface to person infection	Person to person infection	Health infection (Corona Virus infection)	3	3	13	Supervisors should plan their task to limit the exposure of “congestive work environment/ area”. Employees with symptoms should not be allowed to come to work. Appropriate PPE to be worn by all employees at all times. Number of employees should be limited in working area. Hand sanitation points to be placed at strategic places at site office, access points, site store, toilets, eating area, inside mobile plant, and on site. Social distance of at least 2 Meters between workers. Employee(s) with symptoms should consult their Doctor as soon as possible. Promote hand washing with water, paper towels and soap. Promote hand sanitizers Periodic disinfection of the surfaces Avoid touching your eyes, nose, or mouth with unwashed hands	3	2	8	<b>COVID-19 Policy and Procedure.</b>  <b>Regular Training on Personal Hygiene.</b>  <b>Information-Posters and Signage to be place on- and around Site.</b>
	Machine to person/ operator infection	Transfer of COVID-19 from surfaces to person	Health infection (Corona Virus infection)	3	3	13	Machine Operators to keep their machines clean and disinfected. Promote hand washing with water and soap and the use of hand sanitizers.	3	2	8	<b>Personal Hygiene Training</b>

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
							Operators should not allow any persons inside their machines if they have any flu-like symptoms.				
	Tool/ Equipment to person infection	Transfer of COVID-19 from surfaces to person	Health infection (Corona Virus infection)	3	3	13	Appropriate PPE to be worn. Tools and equipment should not be shared as far as possible. Cleaning of tools and equipment before handing it to other workers or before using it. Storeman to have appropriate PPE on and clean tools and equipment before and after handing it out or receiving it.	3	2	8	
	Ablution facilities infection	Transfer of COVID-19 from surfaces to person	Health infection (Corona Virus infection)	3	4	18	Alcohol disinfectant to be available. All ablution facilities to have a washing station or a sanitation station. Sufficient paper towels to be available. Ablution facilities to have a biochemical hazardous bin, with a medical waste bag that can be sealed. Paper towels to be discarded into the medical waste bin provided at the ablution facilities. Ablution facilities to be cleaned on a more regular basis to ensure a clean surface at all times. Chemical toilets ratio is reduced to 1-10 employees and flush toilets ratio is reduced 1-15 employees. Cleaning focus on the most touch areas before and after use (toilet handles, door handles, taps, basins surfaces, toilet seats etc).	3	3	13	Training on Personal Hygiene and information Poster to be given and posted on/ at ablution facilities.



Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
<b>Reception Areas (Security, Stores, Tuckshops, Site Offices)</b>	Person to person and surface to person infection	Transfer of COVID-19 from person to person and from surfaces to person	Health infection (Corona Virus infection)	3	3	13	<p>Ensure the area is well ventilated.</p> <p>Periodic disinfection of the surfaces e.g. door handles, desks, chairs, stationary.</p> <p>Do not share stationary as far as possible.</p> <p>Promote hand washing with water and soap and dried with paper towels and promote the use of hand sanitizers.</p> <p>All offices must have a biochemical hazardous bin with a medical waste bag that can be sealed.</p> <p>If disposable gloves are being used, they must be discarded in the medical waste bin.</p> <p>Only employees that is working in the office will be allowed in the offices.</p> <p>All visitors must arrange with office personnel if they have an appointment with one of the office employees to move outside and have the appointment outside or in a well-ventilated area and if possible, keep social distancing distance (2 Meters).</p> <p>Cleaners to focus on cleaning the following areas: desks, printers, door handles, kettles, microwaves &amp; office equipment (cabinets, staplers, punchers) etc.</p>	3	2	8	
<b>Meetings and group induction</b>	Person to person and surface to person infection	Transfer of COVID-19 from person to person and	Health infection (Corona Virus infection)	3	3	13	<p>Ensure continuous ventilation in the induction room, preferable doing induction and other training outside.</p>	3	2	8	<b>Suspend all Mass Meetings.</b>

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
		from surfaces to person					Limit meetings to max 10 x employees with 2 Meters apart in an office.				
<b>Waste management</b>	Surface to person infection	Transfer of COVID-19 from surfaces to person	Health infection (Corona Virus infection)	3	4	18	PPE and cleaning material that will be discarded will be seen as medical (biological hazardous) waste. It's to be separated from normal waste. Medical waste bins are marked and have a waste bag that can seal.	3	3	13	Training on the separation of waste to be given.
<b>Using/ Wearing of PPE</b>	Not wearing the prescribed PPE	Exposing and transferring of COVID-19 from person to person	Health infection (Corona Virus infection). Fatality.	4	3	17	All employees to have 3 x washable cloth masks or disposable mask. Cloth masks will be checked every morning at the entrance of the gate. New disposable masks to be issued before (and during) shift. Clean overalls to be worn at each shift. "Activity based gloves" to be worn during working hours only First Aiders and/ or Screening personnel to wear surgical gloves when needed. Goggles or glasses to be worn. Disposable masks and gloves to be disposed of in a biochemical hazardous waste bag.	4	2	12	Training on the safe use, limitations and disposal of PPE to be given.
<b>Work area Inspection</b>	Person to person and surface to person infection	Transfer of COVID19 from person to person and from surfaces to person	Health infection (Corona Virus infection)	3	3	13	Correct PPE to be worn when work area is being inspected. Identified employee(s) with the symptoms to immediately call the Public Health Services (0800 02 9999), and remove him from the work area immediately. Identified sick employee(s) shall be referred to their Clinic/ Doctor.	3	2	8	

Activity, Action description	Hazards	Risk (What can go wrong)	Consequences / Impacts (e.g. personal injuries or pollution)	Consequence	Likelihood	Pure Risk rating	Suggested controls (To eliminate or minimize risk)	Consequence	Likelihood	Residual Risk rating	Additional Controls (To eliminate or minimize risk)
							Employee(s) with POSITIVE COVID-19 will not be allowed to return to work till being cleared by a Doctor.				
<b>Emergency Preparedness and Procedure for POSSIBLE affected employee</b>	COVID-19 Infection - Mild to severe respiratory illness with cough, sore throat, shortness of breath or fever	Hospitalisation	Health infection (Corona Virus infection). Fatality.	<b>4</b>	<b>3</b>	<b>17</b>	Identified employee(s) with the symptoms to immediately be separated from other workers. Employee(s) with symptoms should consult their Doctor immediately. Self-isolation as quickly as possible and stay home. If already at home, call the Site Manager and inform him immediately. Call the Public Health Services (0800 02 9999).	<b>3</b>	<b>2</b>	<b>12</b>	<b>Contact detail of Site Manager and Public Health Services to be displayed on site.</b>

## Annexure C

### COVID-19 BASELINE RISK ASSESSMENT

# DEVELOPMENT BANK OF SOUTHERN AFRICA



## **BASELINE RISK ASSESSMENT**

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DBSA SCHOOLS INFRASTRUCTURE UPGRADES, REPAIRS AND RENOVATIONS

WORKS FOR: KGAUHELO PRIMARY SCHOOL

Report Prepared by SA SHEQ consultants

OCTOBER 2021

**Prepared For:** DBSA

DEVELOPMENT BANK OF SOUTHERN AFRICA

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SOUTHERN AFRICA

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## **1 TITLE**

Baseline risk assessment undertaken in terms of Construction Regulation 5(1) to identify the operational risks to be addressed by the project specific health and safety specification

## **2 TERMS OF REFERENCE**

SA SHEQ Consultants (Pty) Ltd conducted a health and safety risk assessment based on the scope of work as detailed in the project concepts reports. The assessment was conducted in July 2021 and includes the identification of occupational health and safety hazards and risks associated with the proposed works as well as the evaluation thereof. A risk profile is created and presented in the report

## **3 EXECUTIVE SUMMARY**

All construction and maintenance activities subject workers to levels of environmental stressors and safety hazards such as noise, fumes, revolving machinery, tools, moving vehicles, electricity, etc., which permanently harm the health and physical wellbeing of persons at work and greatly reduce productivity. The Occupational Health and Safety Act of 1993, and its relevant regulations, require employers to conduct occupational health and safety risk assessments of work activities at every site. Assessments must be conducted, and the identified problems addressed by the employer. Improved conditions ensure better worker morale, loyalty and greater productivity.

This assessment was made for Kgauhelo Primary School in the Freestate under the conditions as illustrated in the design report. Detailed conclusions are given in the relevant sections of this report.

- DBSA INFRASTRUCTURE UPGRADES, REPAIRS AND RENOVATIONS WORKS

## **4 HAZARD IDENTIFICATION AND RISK ASSESSEMENT**

### **4.1 OBJECTIVE OF ASSESSMENT**

A baseline risk assessment was conducted based on the scope of work as indicated on the concept report of the proposed infrastructure upgrade and repairs

The objective of the assessment was to comply with statutory requirements, inform the client of the occupational health and safety risk factors to which persons will be exposed when executing the intended works.

It must be noted that perceptions were used during the assessments and is not a quantifying survey and should only be used as an indicator for risk areas.

### **4.2 STATUTORY REQUIREMENTS**

Section 9(1) of the Occupational Health and Safety Act 1993 (Act no. 85 of 1993), requires inter alia that the employer shall establish as far as is reasonably practicable, what the hazards to the health and safety of persons are attached to any work which is performed, further establish what precautionary measures should be taken with respect to such work and he shall provide the necessary means to apply such precautionary measures. The Construction Regulations 2014 further requires that a baseline risk assessment for an intended construction work project be compiled and a suitable, sufficiently documented and coherent site-specific health and safety specification for the intended construction work based on the baseline risk assessment to be prepared.

### **4.3 RISK ASSESSMENT METHOD**

During the assessment the presence of health, safety and environmental hazards were considered, the impact, exposure and likelihood were considered for the assessment.

The risk rating was obtained by multiplying impact by exposure by likelihood, i.e.

$$\text{Risk Rating} = \text{Impact} \times \text{Exposure} \times \text{Likelihood}$$



## 4.4 RATING MATRIX

The matrix indicated below was used to rate the risk

			2% to 33%	34% to 50%	51% to 66%	67% to 96%	97% to 100%
		Almost Impossible	Very Unlikely	Unlikely	Likely	Very Likely	Almost Certain
	Basis Points	1%	18%	42%	59%	82%	100%
Extreme	100	1,0	17,5	42,0	58,5	81,5	100,0
Major	50	0,5	8,8	21,0	29,3	40,8	50,0
High	25	0,3	4,4	10,5	14,6	20,4	25,0
Moderate	13	0,1	2,3	5,5	7,6	10,6	13,0
Minor	6	0,1	1,1	2,5	3,5	4,9	6,0
Insignificant	3	0,0	0,5	1,3	1,8	2,4	3,0

Factor	Rating	Prescribed legal limits (PLL)**	Frequency	Duration	Extent	Environment
1,00	Very high	>200%	2 X per Shift	<40Hrs	over 101m	Extensive
0,80	High	101%-200%	1 X per Shift	<8hrs>40Hrs	51-100m	Widespread
0,60	Medium	75%-100%	Weekly	<2hrs>8 Hrs	11-50m	Significant
0,40	Low	50%-75%	Monthly	<1Hrs>2Hrs	6-10m	Restricted
0,20	Insignificant	< 50%	Annually	> 1 Hrs	1-5m	Negligible

Likelihood/ Probability rating	Description	Percentage
Almost certain	The event is expected to occur in most circumstances	100%
Very likely	The event will probably occur in most circumstances	67% -96%
Likely	The event should occur at sometime	51% -66%
Unlikely	The event could occur at sometime	34% -50%

Very unlikely	The event may occur only in exceptional circumstance.	2% - 33%
Almost impossible	The event may never occur	1%

Colour Code	Detail	Basis Point Range
	Tolerable risk	0 to 3
	Medium risk	3.1 to 24.9
	High risk	25 to 100

	Level	Outcome Description	Impact Values	Safety	Health	Environment
1	Extreme	Extreme event with the potential to lead to collapse of business and is fundamental to the achievement of objectives.	100	Multiple fatalities, Very serious irreversible injury from 10 people and above	May cause multiple deaths	Transboundary/National environmental disaster with long term or irreversible ecological impacts with high risk of legal and public liability.
2	Major	Major event which can be endured but which may have a prolonged negative impact and extensive consequences.	50	Fatality, multiple Major injuries or disability, Significant irreversible injuries to up to 10 people	Life threatening affects	National environmental disaster with long term ecological impacts with high risk of legal and public liability.
3	High	High impact events, which can be managed but requires additional resources and management effort.	25	Single major injury or disabling reportable	Irreversible significant health effects	Event that leads to environmental contamination (failure to manage appropriately, but contained within site boundaries)

<b>4</b>	Moderate	Event which can be managed under normal operating conditions.	13	Minor injuries, lost time,	Reversible significant health effects	Event which can be contained. Is limited to immediate area of occurrence associated with short term ecological disturbances, and/or is a transgression of internal standard
<b>5</b>	Minor	Events of which consequences can readily be absorbed under normal operating conditions.	6	Minor injuries, no lost time	Reversible minor health effects	Minor negative impact, no corrective action necessary. Must be monitored.

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<b>6</b>	Insignificant	Frequent minor risks that do not disrupt business, or with no adverse health effect or injuries.	3	No Health effects	Negligible	Negligible
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## **5 RESULTS AND DISCUSSION**

From the baseline risk assessment, 16 of the hazards that were identified were found to be high risk. These include driving onsite, fall protection, access scaffolding, lifting, electrical work, excavations and high/medium voltage electrical equipment amongst others. Fall protection and access scaffolding will apply for all the work that is going to be done at height for the construction activities. Construction of the substation will be associated with high-risk electrical work and high or medium voltage equipment hazards. Immediate action is required for all high-risk activities. Strong mandatory action is also required, and the required action must be documented on the risk assessment record

17 medium risk activities were also identified. Accommodation of transport, emergency preparedness, first aid, inclement weather among others. Planned approach to controlling the hazard is required and this also applies to temporary measures when required. Required action must be documented on the risk assessment record

Tolerable risk activities included housekeeping, occurrence of natural disasters, dangerous animals amongst others. Minor or no action is required.

Risk is tolerable/acceptable and further reduction may not be necessary.

## 6 ANNEXURE 1: RISK ASSESSMENT FORM

ACTIVITIES	HAZARDS	RISKS	RAW RISK EVALUATION			R R	CONTROL MEASURES	RESIDUAL RISK EVALUATION			R R
			C ( 1 – 3 )	L ( 1 – 3 )	O R ( C x L )			C ( 1 – 3 )	L ( 1 – 3 )	O R ( C x L )	
Driving to and from site	<ul style="list-style-type: none"> <li>Unroadworthy vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and fatalities resulting from road accidents</li> </ul>	3	2	9	H	<ul style="list-style-type: none"> <li>Vehicle inspections</li> <li>Vehicle maintenance and servicing</li> <li>Road safety awareness</li> </ul>	2	1	2	L
Driving to and from site	<ul style="list-style-type: none"> <li>Incompetent drivers</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and fatalities resulting from road accidents</li> </ul>	3	1	3	M	<ul style="list-style-type: none"> <li>Licensed drivers</li> <li>Road safety awareness</li> </ul>	2	1	2	L
Driving to and from site	<ul style="list-style-type: none"> <li>Poor weather conditions, e.g. misty, rain</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and fatalities resulting from road accidents</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Exercise extreme caution</li> <li>Reduce speed</li> <li>Avoid driving during extreme weather conditions</li> </ul>	2	1	2	L

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Driving to and from site	<ul style="list-style-type: none"> <li>Poor road conditions</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and fatalities resulting from road accidents</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Exercise extreme caution</li> <li>Reduce speed</li> <li>Avoid driving on extreme poor road conditions</li> </ul>	2	1	2	L
Site establishment	<ul style="list-style-type: none"> <li>Site identification, clearing and access routes</li> </ul>	<ul style="list-style-type: none"> <li>Injuries resulting from use of tools, mobile plant, exposure to animals and poor weather conditions</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>PPE</li> <li>Exercising caution</li> <li>Inspections and maintenance programs</li> <li>Awareness training</li> </ul>	1	1	1	L
	<ul style="list-style-type: none"> <li>Supply of office containers, storage and ablution facilities</li> </ul>	<ul style="list-style-type: none"> <li>Injuries resulting from poor manual material handling and lifting operations</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Training in manual material handling</li> <li>Safe lifting procedures</li> <li>Job observations</li> </ul>	2	1	2	L
Administrative work, planning activities in site offices	<ul style="list-style-type: none"> <li>Office work hazards e.g. cables, poorly designed workstations, defective office equipment</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with poor ergonomics, paper cuts, tripping and falling, electrical shocks etc</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Office safety training,</li> <li>Ergonomically designed workstations</li> <li>Proper cable routing</li> </ul>	2	1	2	L



Trenching	<ul style="list-style-type: none"> <li>Defective equipment and plant</li> <li>Open excavations</li> <li>Unstable excavations</li> </ul>	<ul style="list-style-type: none"> <li>Injuries or fatalities associated with defective equipment, falls into excavations or trench collapse</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Inspection and maintenance of equipment</li> <li>Barricade open excavations</li> <li>Brace or shore unstable walls</li> </ul>	2	1	2	L
Trenching	<ul style="list-style-type: none"> <li>Employees using picks and shovels to dig trenches</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from manual handling of picks and shovels</li> <li>Injuries from use of defective picks and shovels</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Use of gloves</li> <li>Inspection of tools to ensure that they are in good working order</li> <li>Defective tools to be scrapped off</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Employees working too close to each other</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and fatalities from pick swings</li> </ul>	3	1	3	M	<ul style="list-style-type: none"> <li>Ensure adequate spacing in between employees</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Poor weather conditions</li> </ul>	<ul style="list-style-type: none"> <li>Discomfort or illnesses from poor weather conditions</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Avoid working in extreme weather conditions</li> <li>Use of PPE</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Open trenches</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with falling in open trenches</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Open trenches to be barricaded</li> <li>Signs to be posted to warn employees of open trenches</li> </ul>	2	1	2	L

	<ul style="list-style-type: none"> <li>Existing underground services</li> </ul>	<ul style="list-style-type: none"> <li>Property damage</li> <li>Injuries or fatalities associated with electrocution from underground electrical cables</li> <li>Flooding caused by broken pipeline</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Existing underground services to be located and clearance given</li> </ul>	2	1	2	L
Use of power tools	<ul style="list-style-type: none"> <li>Poorly manufactured power tools</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from use of poorly manufactured power tools</li> </ul>	3	1	3	M	<ul style="list-style-type: none"> <li>Only power tools that conform to applicable SABS standards to be purchased and used</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Poorly maintained power tools</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from use of poorly maintained tools</li> </ul>	2	2	6	H	<ul style="list-style-type: none"> <li>Maintenance programme for tools to be developed and implemented</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Inappropriate use of power tools</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from inappropriate use of power tools</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Employees to be trained in the safe use of power tools</li> <li>Job observations and corrective actions</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Vibrating power tools</li> </ul>	<ul style="list-style-type: none"> <li>Hand and arm vibration syndrome</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Employee rotation</li> <li>Maintenance of power tools to ensure they are in good working condition</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Poorly manufactured power tools</li> </ul>	<ul style="list-style-type: none"> <li>Cuts, sprains, concussions arising from the failure of hand tools through poor manufacture</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Only power tools that conform to applicable SABS standards to be purchased and used</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Poorly maintained power tools</li> </ul>	<ul style="list-style-type: none"> <li>Cuts, sprains, concussions arising from the failure of hand tools through poor maintenance</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Maintenance programme for power tools to be developed and implemented</li> <li>Inspection of hand tools to be done</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Inappropriate use of power tools</li> </ul>	<ul style="list-style-type: none"> <li>Cuts, sprains, concussions arising from the failure of hand tools through inappropriate</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Employees to be trained in the use of hand tools</li> <li>Job observation to be conducted</li> </ul>	2	1	2	L
Manual handling	<ul style="list-style-type: none"> <li>poor lifting methods</li> <li>lifting heavy objects</li> <li>failure to use PPE</li> </ul>	<ul style="list-style-type: none"> <li>musculoskeletal injuries</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Training in manual material handling</li> <li>Job observations</li> <li>PPE use enforcement</li> </ul>	2	1	2	L

Machinery	<ul style="list-style-type: none"> <li>Exposure to dangerous machine parts,</li> </ul>	<ul style="list-style-type: none"> <li>Injuries, fatalities, amputation, loss of limb or sight</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Machinery inspections</li> <li>Training</li> <li>Provision of guards</li> </ul>	3	1	3	M
Electrical installations	<ul style="list-style-type: none"> <li>Failure to do isolation of electricity from the mains</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from electrocution</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Isolating electricity from the mains before work</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Exposure to live electrical cables</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from electrocution</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Inspect cables before handling for damages</li> <li>Use insulating gloves</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Incompetent work on electricity</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from electrocution</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Ensure that employees are competent to do work</li> </ul>	2	1	2	L
Stacking and storage	<ul style="list-style-type: none"> <li>Inadequate storage areas</li> <li>unstable stacks</li> </ul>	<ul style="list-style-type: none"> <li>injuries associated with unsafe stacks and inadequate storage areas</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Provide adequate storage areas</li> <li>Stacking and storage inspection and supervision</li> <li>Training on stacking and storage</li> </ul>	2	1	2	L
Work at height	<ul style="list-style-type: none"> <li>Inadequate fall protection and prevention methods</li> </ul>	<ul style="list-style-type: none"> <li>Fatal injuries from falls</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Adequate fall protection plan</li> <li>Adequate fall protection and prevention methods</li> </ul>	2	1	2	L
Use of Mobile Elevated Work Platforms (MEWP)	<ul style="list-style-type: none"> <li>Defective MEWP</li> <li>Incompetent operation</li> <li>Uneven surfaces</li> <li>Windy conditions</li> <li>Failure to use fall arrest methods</li> </ul>	<ul style="list-style-type: none"> <li>Fatal injuries</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>MEWP inspection and maintenance</li> <li>Trained and competent operators</li> <li>Operating on level surfaces</li> <li>Calm weather conditions</li> <li>Use safety harnesses</li> </ul>	2	1	2	L

Installation of fixings	<ul style="list-style-type: none"> <li>Poorly manufactured fixings</li> </ul>	<ul style="list-style-type: none"> <li>Injuries arising from the failure of fixings through poor manufacture</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Only fixings manufactured to a certain SABS/ISO standard to be used</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Inappropriate use of fixings</li> </ul>	<ul style="list-style-type: none"> <li>Injuries arising from the failure of fixings through inappropriate use.</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Safe working instruction in the use of fixings</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Inappropriate drilling of holes</li> </ul>	<ul style="list-style-type: none"> <li>Injuries arising from the drilling of fixing holes.</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Safe working instruction on drilling of holes</li> </ul>	2	1	2	L
Concrete and plastering work	<ul style="list-style-type: none"> <li>Concrete splashes</li> </ul>	<ul style="list-style-type: none"> <li>eye injuries</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Use of safety goggles</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>contact with wet cement</li> </ul>	<ul style="list-style-type: none"> <li>skin dermatitis</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Use of safety clothing i.e. overalls and gloves</li> <li>personal hygiene e.g. washing</li> </ul>	2	1	2	L
Roof work	<ul style="list-style-type: none"> <li>Unprotected roof edge</li> </ul>	<ul style="list-style-type: none"> <li>injuries from falls from the roof</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Edge protection</li> <li>Training in fall protection</li> <li>Medically fit employees</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Fragile roofs</li> </ul>	<ul style="list-style-type: none"> <li>injuries from falls from the roof</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Provision of supports</li> <li>Training in fall protection</li> <li>Medically fit employees</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Falling objects</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from falling objects</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Barricading area underneath</li> <li>Securing tools and materials at height</li> </ul>	2	1	2	L
Hazardous Chemical Substances	<ul style="list-style-type: none"> <li>Uncontrolled exposure to hazardous chemical</li> </ul>	<ul style="list-style-type: none"> <li>Respiratory illnesses</li> <li>Discomfort</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Training of users on hazardous chemicals</li> </ul>	2	1	2	L

	substances during use and storage	<ul style="list-style-type: none"> <li>Skin dermatitis</li> </ul>					<ul style="list-style-type: none"> <li>Use of PPE e.g. respirators and chemical resistant gloves</li> <li>Medical examinations</li> <li>Hygiene surveys</li> </ul>				
Use of ladders	<ul style="list-style-type: none"> <li>Defective ladders</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with falls from ladders</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Inspection of ladders</li> <li>Defective ladders to be scrapped off</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Inappropriate use of ladders</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with falls from ladders</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Safe working instruction on the use of ladders</li> </ul>	2	1	2	L
Lone working	<ul style="list-style-type: none"> <li>Lone working</li> </ul>	<ul style="list-style-type: none"> <li>Person having an accident, or feeling ill, and not being able to contact anyone</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Avoid lone working</li> <li>Keep in regular contact with the supervisor</li> </ul>	2	1	2	L
Working in noisy environment	<ul style="list-style-type: none"> <li>High levels of noise</li> </ul>	<ul style="list-style-type: none"> <li>Noised induced hearing loss (NIHL)</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Use of hearing protectors</li> </ul>	2	1	2	L
Working in a dusty environment	<ul style="list-style-type: none"> <li>Inhalation of dust</li> </ul>	<ul style="list-style-type: none"> <li>Respiratory problems</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Use of dust masks</li> </ul>	2	1	2	L
Use of chemicals such as paint and solvents	<ul style="list-style-type: none"> <li>Inhalation of chemical fumes, vapour, mist etc</li> </ul>	<ul style="list-style-type: none"> <li>Respiratory problems</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Use of respirators</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Skin contact with hazardous chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Chemical burns or skin dermatitis</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Use of gloves</li> <li>Training</li> </ul>	2	1	2	L
Use of scaffolding	<ul style="list-style-type: none"> <li>Defective scaffolding</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with falls from scaffolding</li> </ul>	3	2	9	H	<ul style="list-style-type: none"> <li>Scaffolding inspection</li> <li>Training on work at height</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Failure to use fall prevention or arrest equipment</li> </ul>	<ul style="list-style-type: none"> <li>Injuries associated with falls from scaffolding</li> </ul>	3	2	9	H	<ul style="list-style-type: none"> <li>Training on work at height</li> <li>Enforce use of fall arrest or prevention equipment</li> </ul>	2	1	2	L

Public access to construction areas	<ul style="list-style-type: none"> <li>Exposure of the public to construction work</li> </ul>	<ul style="list-style-type: none"> <li>Injuries from hazards associated with construction work</li> </ul>	3	2	6	H	<ul style="list-style-type: none"> <li>Barricade work areas</li> <li>Warning signs</li> </ul>	2	1	2	L
Employee competency	<ul style="list-style-type: none"> <li>Incompetent installation technicians</li> </ul>	<ul style="list-style-type: none"> <li>Accidents or incidence caused by incompetent employees</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Training of employees</li> <li>Inductions</li> <li>Skilled employees</li> </ul>	2	1	2	L
Employee fitness	<ul style="list-style-type: none"> <li>Unfit employees</li> </ul>	<ul style="list-style-type: none"> <li>Accidents or incidence caused by unfit employees</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>medical examinations and certificates of fitness</li> </ul>	2	1	2	L
Alcohol or drugs use	<ul style="list-style-type: none"> <li>employees working under the influence of alcohol or drugs</li> </ul>	<ul style="list-style-type: none"> <li>Accidents or incidences</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>drugs and alcohol policy</li> <li>awareness training</li> <li>drugs testing</li> </ul>	2	1	2	L
Ablution and welfare facilities	<ul style="list-style-type: none"> <li>Absence of ablution and welfare facilities</li> </ul>	<ul style="list-style-type: none"> <li>Ill-health</li> </ul>	2	2	4	M	<ul style="list-style-type: none"> <li>Sanitary and welfare facilities to be provided</li> </ul>	2	1	2	L
Ablution and welfare facilities	<ul style="list-style-type: none"> <li>Facilities not being maintained in clean and hygienic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Ill-health</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Facilities to be kept in clean and hygienic conditions</li> </ul>	2	1	2	L
Covid-19	<ul style="list-style-type: none"> <li>Employees meeting Covid-19 infected people during travelling to and from site</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Lone travelling</li> <li>Use of masks while travelling</li> <li>Admin staff to work from home</li> <li>Sanitizing vehicles</li> </ul>	2	1	2	L

**Document Title**

Kgauhelo Primary School Baseline Risk Assessment

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OHS-BRA01

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							<ul style="list-style-type: none"> <li>Washing and sanitizing hands</li> </ul>				
	<ul style="list-style-type: none"> <li>Access granted to infected people</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Screening of all people accessing site</li> <li>Preventing non-essential visitors</li> <li>Washing and sanitising hands and at the gate</li> </ul>	2	1	2	L
Covid-19	<ul style="list-style-type: none"> <li>Employees encountering Covid-19 infected employees onsite</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Social distancing during meetings, work activities and use of facilities</li> <li>Use of masks</li> <li>Sanitising and washing hands</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Contaminated goods, tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Sanitising all goods, tools and equipment</li> <li>Sanitising and washing hands</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Failure to identify symptoms</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Awareness training</li> <li>Screening of employees</li> </ul>	2	1	2	L
	<ul style="list-style-type: none"> <li>Poor hygiene facilities e.g. absence of hand washing facilities</li> </ul>	<ul style="list-style-type: none"> <li>Possible transmission, ill health and fatalities</li> </ul>	2	3	6	H	<ul style="list-style-type: none"> <li>Awareness training</li> <li>Inspections and supervision</li> <li>Provision of clean and adequate hygiene facilities</li> </ul>	2	1	2	L

## 7 ANNEXURE 2: RISK RANKING AND PROFILE

Risk	Risk	Rank	Risk Control
1.	Fall protection	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
2.	Access scaffolding	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
3.	Structures	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
4.	Lifting equipment	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
5.	Lifting tackle	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
6.	Electrical installations	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
7.	Electrical and mechanical lockout	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
8.	Excavations	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record



9.	Demolition work	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
10.	Public health and safety	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record

11.	Asbestos	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
12.	Hazardous chemical substances and flammable chemicals	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
13.	Vessels under pressure and gas cylinders	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
14.	Competency	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
15.	Fitness for Work	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record
16.	High /medium voltage electrical equipment, underground, overhead power lines	High	Immediate action required; Strong mandatory action required. Required action must be documented on the risk assessment record


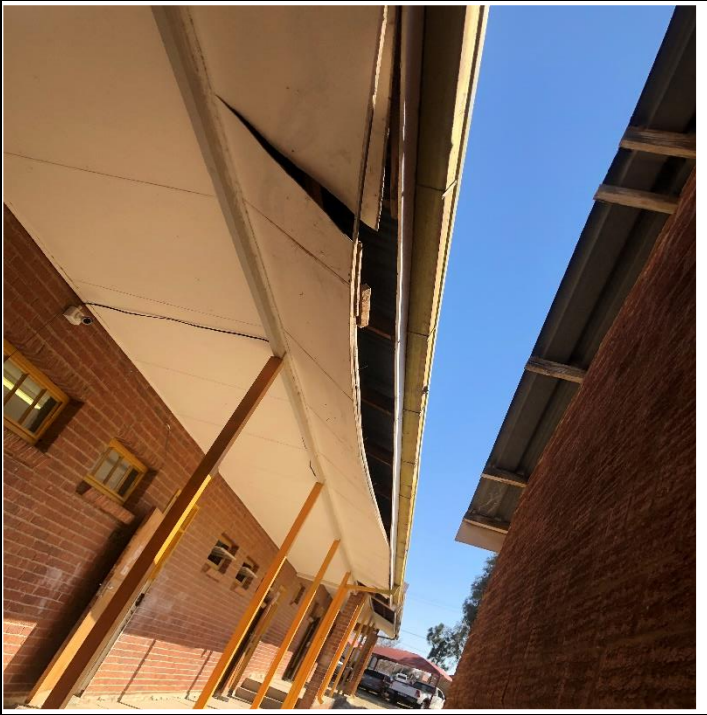
17.	Welding and flame cutting	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
18.	Working in confined spaces	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
19.	Security	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
20.	Waste Management	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
21.	Stacking and storage	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record

22.	Pressure, Air hoses and equipment	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
23.	Explosives	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
24.	Inclement weather	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record

25.	Accommodation of traffic	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
26.	Emergency preparedness, contingency planning and response	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
27.	First-aid	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record

28.	Construction vehicle and mobile plant operators	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
29.	Construction vehicles and mobile plant	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
30.	Use and storage of flammables	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
31.	Fire prevention and protection	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
32.	Portable electrical tools and equipment	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record

33.	Temporary work	Medium	Planned approach to controlling the hazard and applies temporary measure when required. Required action must be documented on the risk assessment record
34.	Poisonous animals or insects	Tolerable	Minor or no action required. Risk is tolerable/acceptable and further reduction may not be necessary
35.	Natural disasters	Tolerable	Minor or no action required. Risk is tolerable/acceptable and further reduction may not be necessary
36.	Welfare facilities	Tolerable	Minor or no action required. Risk is tolerable/acceptable and further reduction may not be necessary
37.	Housekeeping	Tolerable	Minor or no action required. Risk is tolerable/acceptable and further reduction may not be necessary
38.	Incident Reporting and Investigations	Tolerable	Minor or no action required. Risk is tolerable/acceptable and further reduction may not be necessary

Pictures taken in school	Comments
	<p>Certain walkways are damaged and the stairs are partially collapsing which may result injuries from person/s tripping and falling.</p>
	<p>Ceiling boards are partially collapsed and could fall on person/s.</p>



Ceiling boards are partially collapsed and could fall on person/s.



Roof is damaged and there a major openings within the structure which may result injuries from structures collapsing on person/s..





Unsafe stacking and storage within stores .

## Annexure D

### ARCHITECTURAL SPECIFICATION



NOTES:  
1. THIS DRAWING IS NOT TO SCALE AND IS NOT ACCURATE.  
FINAL DIMENSIONS, LEVELS AND DATUM ARE TO BE CONFIRMED FROM THE LAND SURVEYOR'S DRAWING ONCE RECEIVED.  
2. THE POSITION OF ALL NEW BUILDINGS ARE TO BE CONFIRMED ONCE THE LAND SURVEYOR'S DRAWINGS ARE RECEIVED.

NOTES:  
1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.  
2. Partial Services: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.  
3. Do not scale this drawing.  
4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

SITE PLAN - EXISTING AND NEW BUILDINGS  
SCALE - 1:200

LEGEND:

NEW DOUBLE STOREY  
CLASSROOM BLOCKS

ADMINISTRATION BLOCK

CLASSROOM BLOCKS

ABLUTIONS

STOREROOM

AWNINGS / CARPORTS

WALKWAYS

ESTIMATED  
FENCE LINE

Revisions:			
Rev. No.	Date	Description	Rev. By
A	11/11/22	For Information Purposes Only	MM

Architect :

Name :

Signature :

Client :

Name :

Signature :



Project:  
CONDITION ASSESSMENT  
KGAUHELO PRIMARY SCHOOL

Drawing description:  
SITE DEVELOPMENT PLAN

Drawn:  
URBAN PLATFORM ARCHITECTS + PLANNERS

Scales: AS SHOWN ON DRAWING

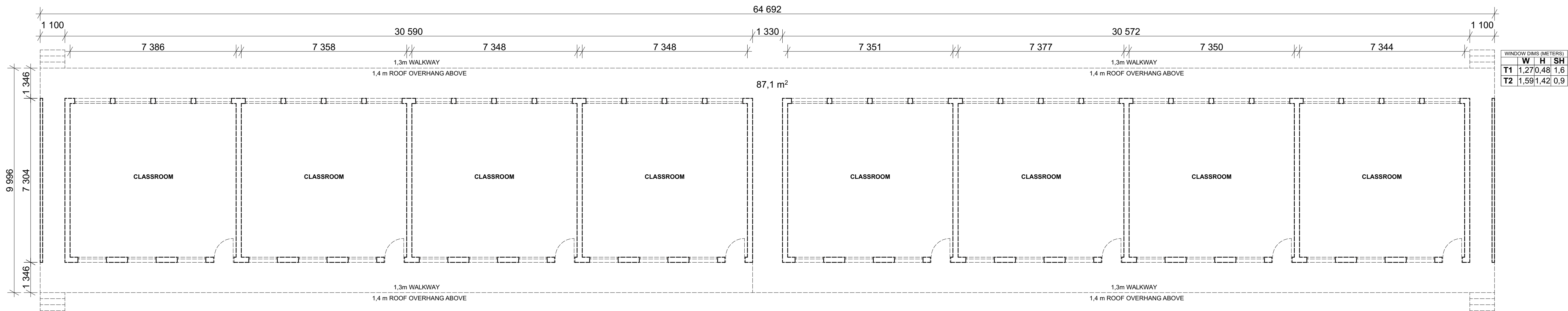
FOR INFORMATION

Drawing Number: 082-KPS-100A  
Revision: A

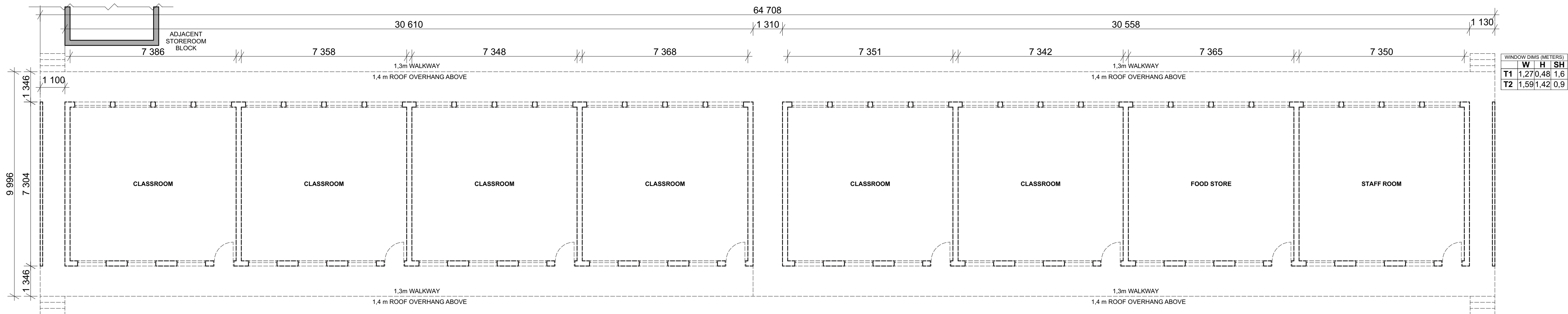




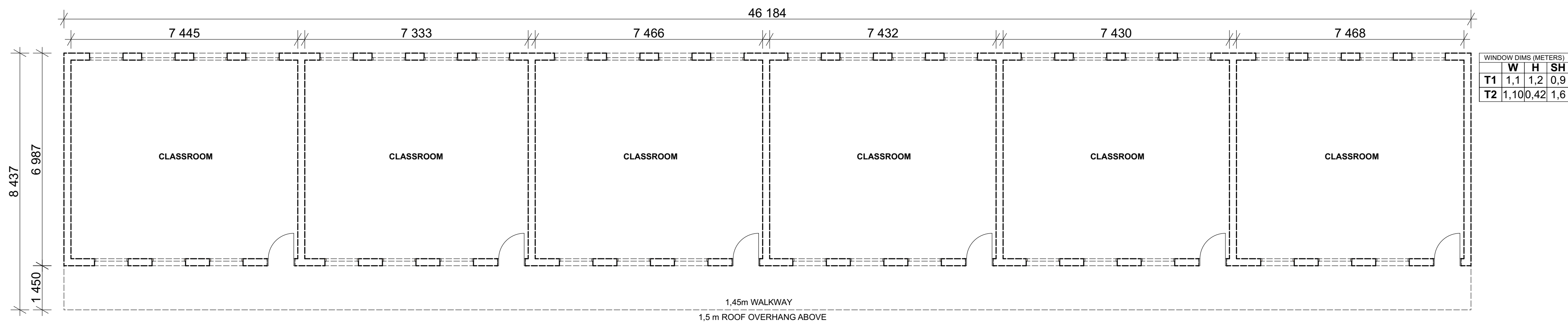




**BLOCK A: CLASSROOM BLOCK**  
**SCALE - 1:100**  
**TO BE DEMOLISHED**



**BLOCK B1: CLASSROOM BLOCK**  
**SCALE - 1:100**  
**TO BE DEMOLISHED**



**BLOCK D: CLASSROOM BLOCK**  
**SCALE - 1:100**  
**TO BE DEMOLISHED**

NOTES:  
1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.  
2. Partial Service: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.  
3. Do not scale the drawing.  
4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

WINDOW DIMS (METERS)			
	W	H	SH
T1	1,27	0,48	1,6
T2	1,59	1,42	0,9

Revisions:			
Rev No	Date	Description	Rev By
A	11/11/22	For Information Purposes Only	MM

Architect :  
Name :  
Signature :  
Client :  
Name :  
Signature :



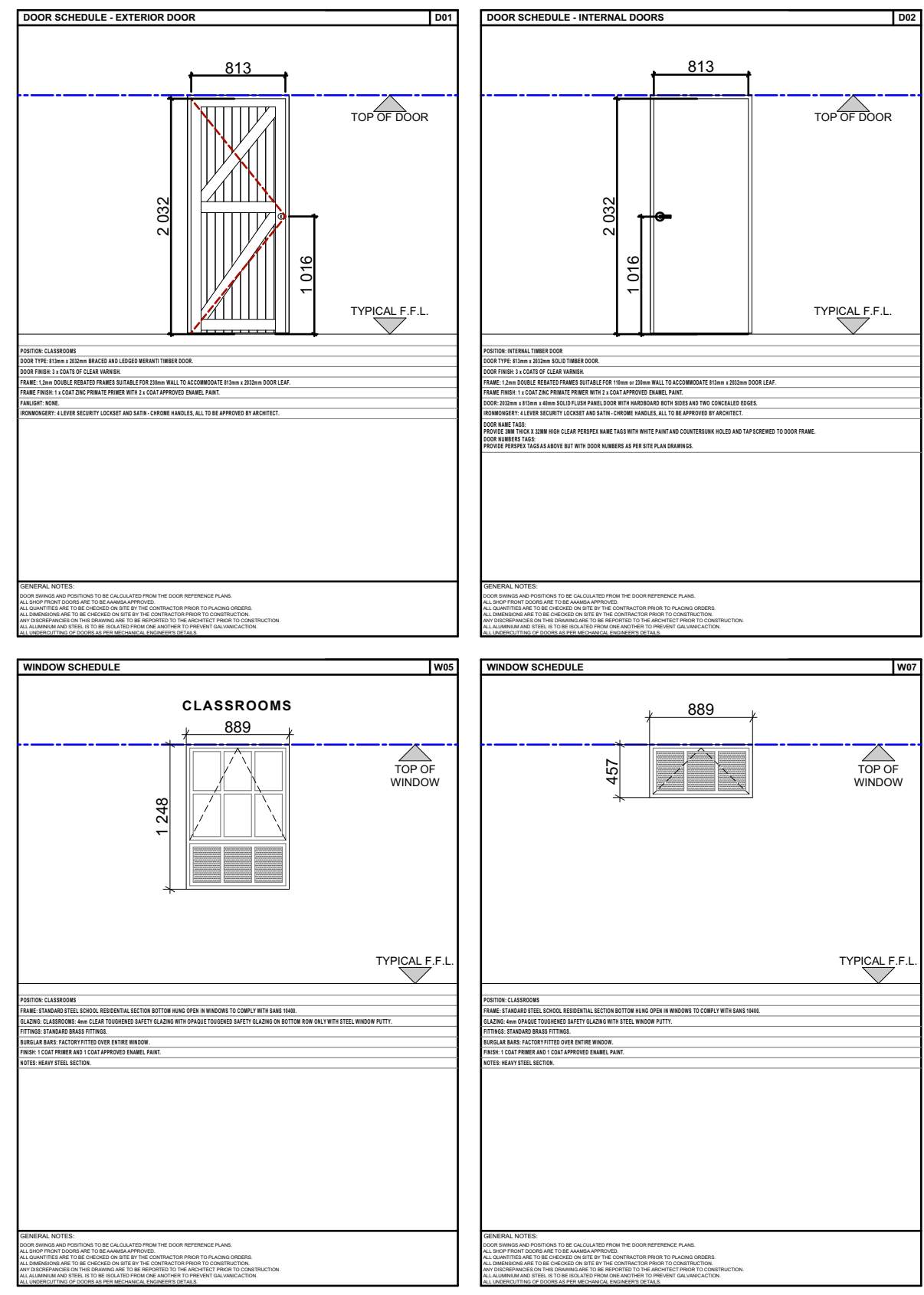
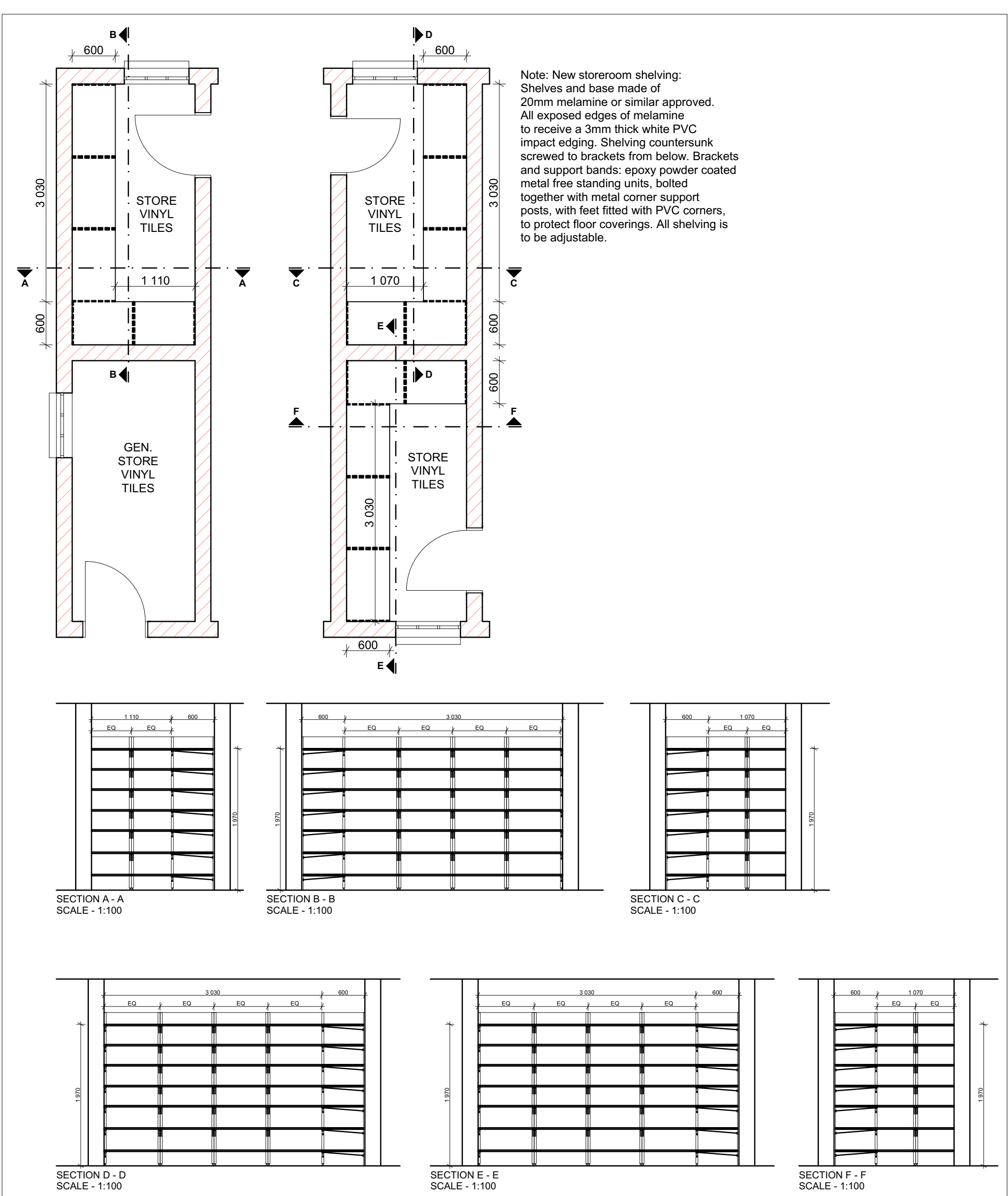
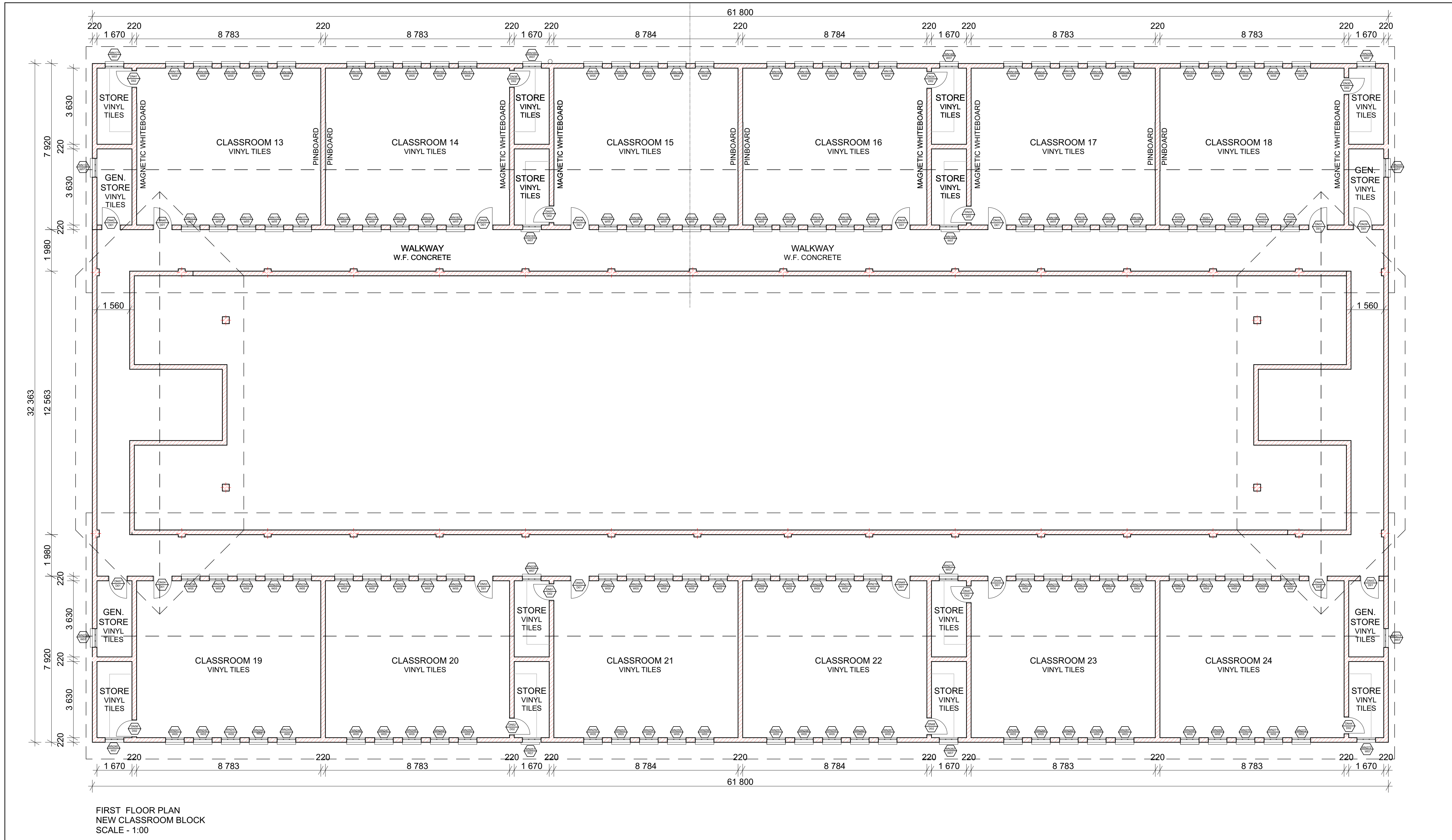
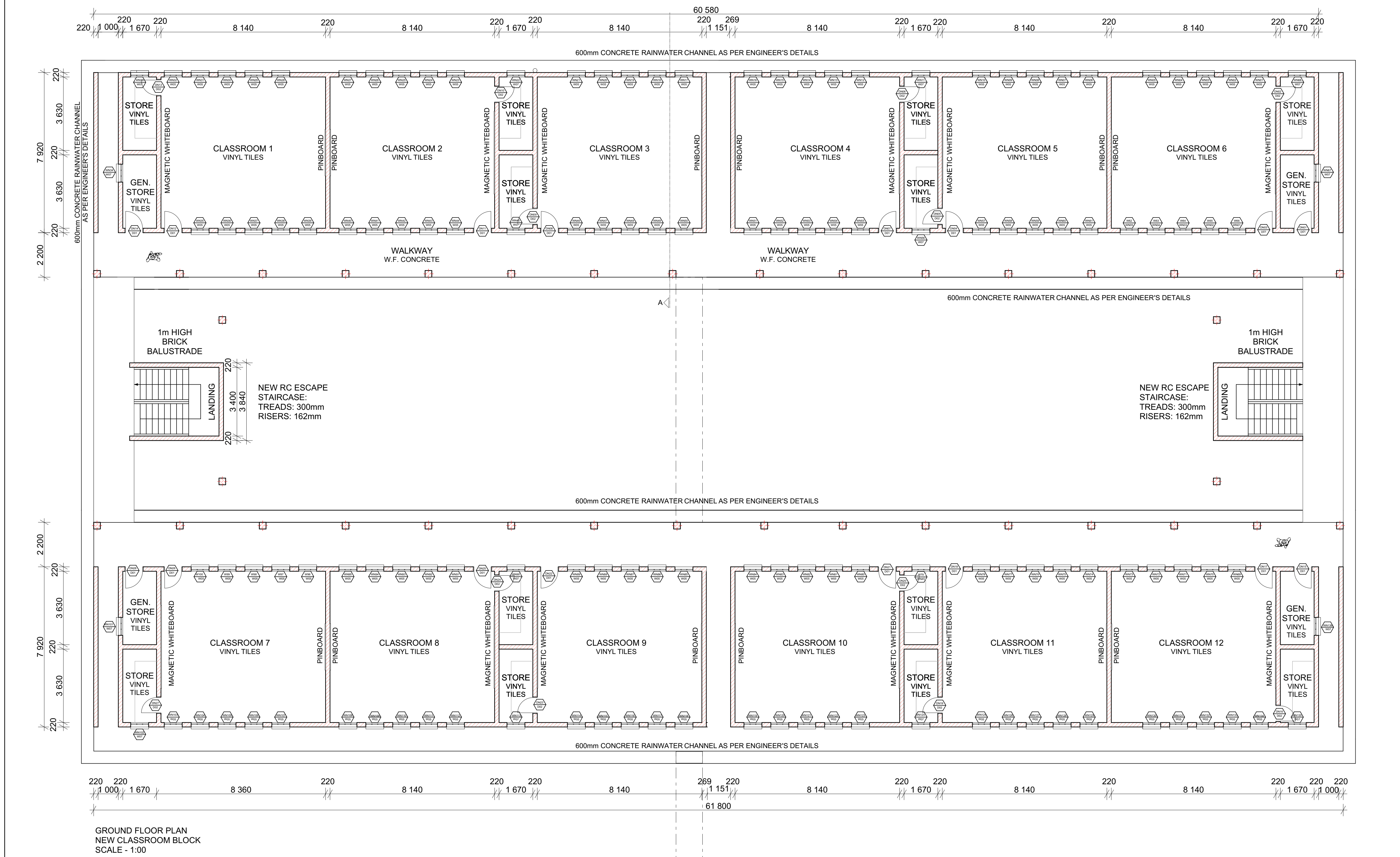
Project:  
**CONDITION ASSESSMENT  
KGAUHELO PRIMARY SCHOOL**

Drawing description:  
**EXISTING BLOCKS:  
REFURBISHMENT SCOPE OF WORKS**

Drawn:  
URBAN PLATFORM ARCHITECTS + PLANNERS  
Scale/s: AS SHOWN ON DRAWING

**FOR INFORMATION**  
Drawing Number: 082-KPS-101  
Revision: A





NOTES:

1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.
2. Partial Service: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.
3. Do not scale this drawing.
4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

Revisions:			
Rev No.	Date	Description	Rev By
A	11/11/22	For Information Purposes Only	MM

Architect :

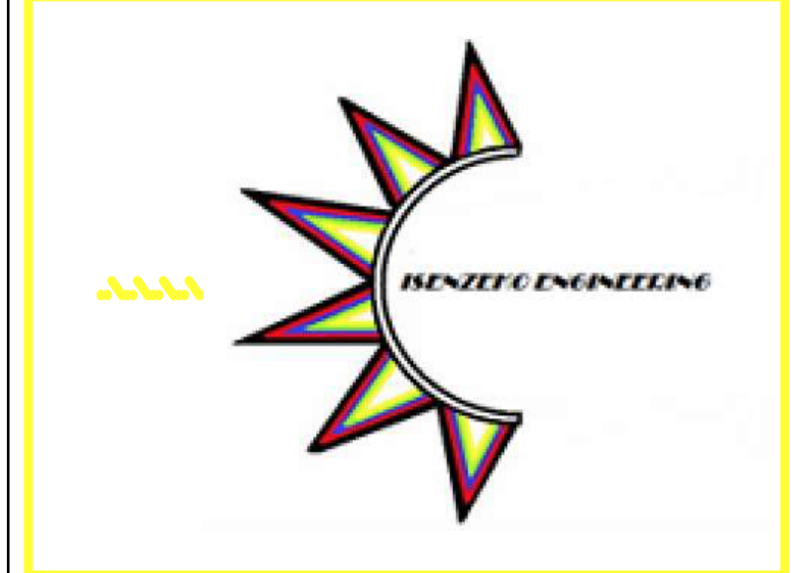
Name :

Signature :

Client :

Name :

Signature :



Project:

CONDITION ASSESSMENT  
TISETSANG SECONDARY SCHOOL

Drawing description:

PROPOSED NEW DOUBLE STOREY  
CLASSROOM BLOCK PLANS & JOINERY  
(24 CLASSROOMS)

Drawn:

URBAN PLATFORM ARCHITECTS + PLANNERS

Scale: AS SHOWN ON DRAWING

FOR INFORMATION

Drawing Number:

082-KPS-105

Revision:

A

NOTES:

1. All levels and position of new building and all of it's elements are to be confirmed once the survey has been provided.



NOTES:

1. THIS DRAWING IS NOT TO SCALE AND IS NOT ACCURATE.

FINAL DIMENSIONS, LEVELS AND DATUM ARE TO BE CONFIRMED FROM THE LAND SURVEYOR'S DRAWING ONCE RECEIVED.

2. THE POSITION OF ALL NEW BUILDINGS ARE TO BE CONFIRMED ONCE THE LAND SURVEYOR'S DRAWINGS ARE RECEIVED.

**NOTES:**

1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.
2. Partial Service: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.
3. Do not scale this drawing.
4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

[illegible]

Architect :

Name :

Signature :

Client :

Name :

Signature :



## education



DBSA  
DEVELOPMENT BANK OF SOUTHERN AFRICA

**Project:**

**CONDITION ASSESSMENT**  
**KGAUHELO PRIMARY SCHOOL**

**Drawing description:**

## SITE DEVELOPMENT PLAN

rawn:

URBAN PLATFORM ARCHITECTS + PLANNERS

scale/s: AS SHOWN ON DRAWING

FOR INFORMATION

Drawing Number:

---

# SITE PLAN - EXISTING BUILDINGS

## SCALE - 1:200

## LEGEND:

## BUILDINGS TO BE DEMOLISHED

# ADMINISTRATION BLOCK

## CLASSROOM BLOCKS

# ABLUTIONS

# STOREROOM

## AWNINGS / CARPORTS

## WALKWAYS

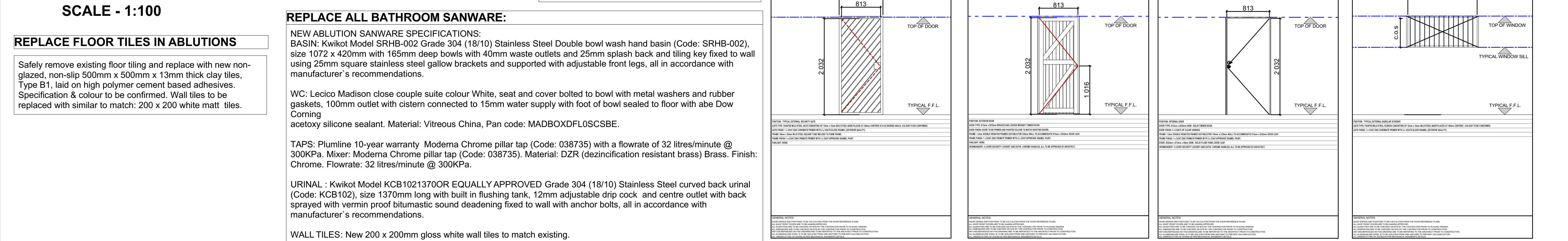
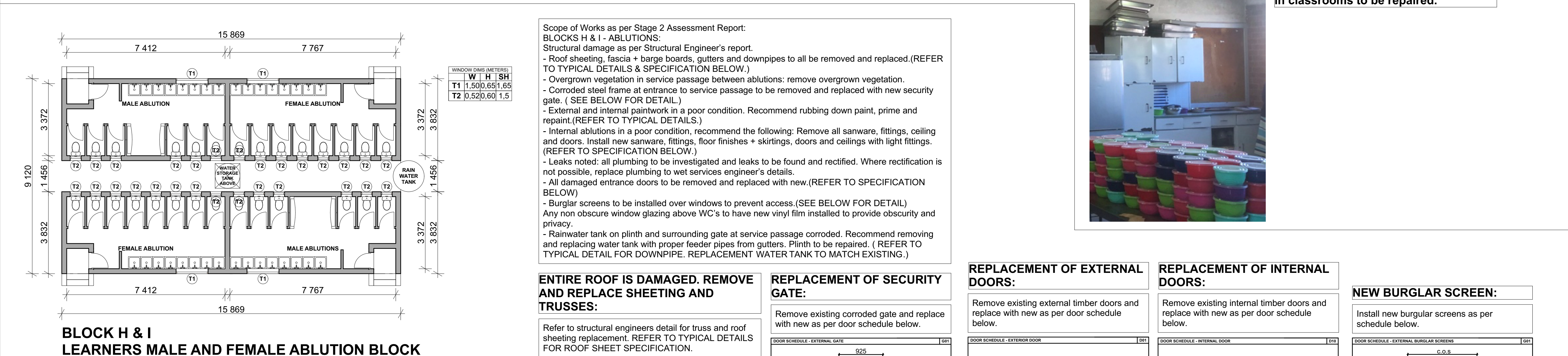
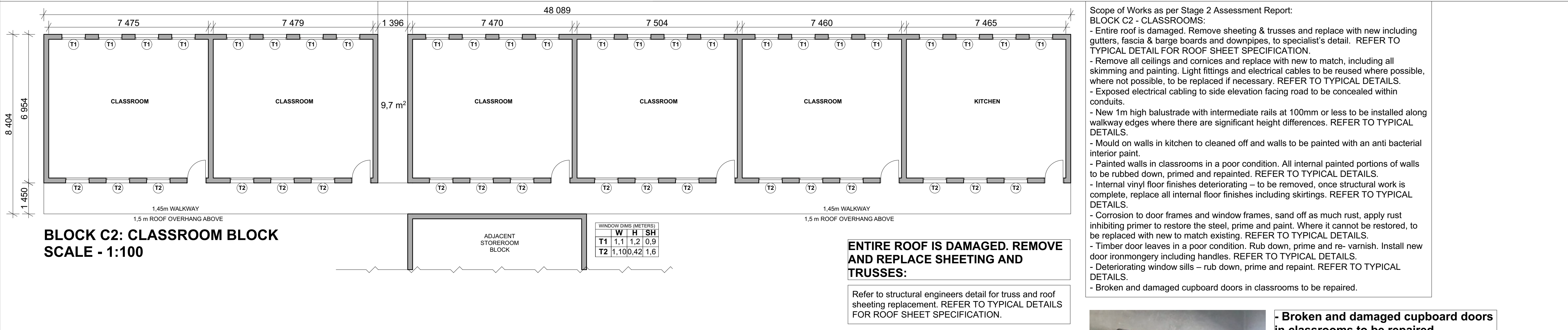
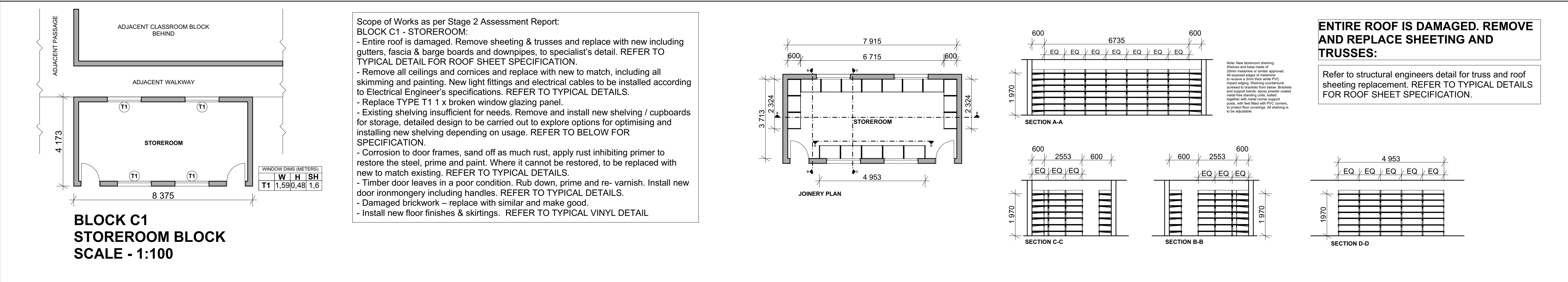
# FENCE LINE

# LINE OF NEW CLASSROOM BLOCK

N







NOTES:

1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.
2. Partial Service: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.
3. Do not scale the drawing.
4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

Revisions:

Rev No	Date	Description	Rev By
A	11/11/22	For Information Purposes Only	MM

Architect :

Name :

Signature :

Client :

Name :

Signature :

**DBSA**  
DEVELOPMENT BANK OF SOUTHERN AFRICA

Project: **CONDITION ASSESSMENT  
KGAUHELO PRIMARY SCHOOL**

Drawing description:  
**EXISTING BLOCKS:  
REFURBISHMENT SCOPE OF WORKS**

Drawn: **URBAN PLATFORM ARCHITECTS + PLANNERS**

Scale/s: AS SHOWN ON DRAWING

**FOR INFORMATION**

Drawing Number: 082-KPS-102

Revision: A

**KGAUHELO PRIMARY  
SCHOOL  
EXISTING BLOCKS:  
TYPICAL DETAILS FOR  
REFURBISHMENT  
DWG NO.: 082-KPS-104  
REV: A  
DATE: 11/11/2022**



## **TYPICAL DETAILS:**

### **REPLACEMENT OF EXISTING VINYL FLOOR FINISHES WITH VINYL FLOOR FINISHES:**

#### **REMOVAL AND REPLACEMENT OF VINYL FLOOR FINISHES:**

Remove existing vinyl flooring and make good existing surfaces (including all structural work as per Structural Engineer's details).

Install new Polyflor XL 2mm thick fully flexible PVC sheet flooring, with a monolayer and homogeneous construction, directional duotone marbleized design. Colours to be confirmed per school & building.

All vinyl is deemed to be laid on a screeded / plastered surface, unless otherwise stated. Screeds to be prepared using a recommended self levelling compound and should be sound, smooth and level in accordance with SANS. Subfloor moisture should be less than 75% RH, tested with probe at 40% depth of concrete on surface bed. Vinyl Sheetting to be installed in strict accordance with Manufacturers instruction with approved adhesive. All sheets to be correctly overlapped, scribed and then grooved prior to welding. Always remove the factory edge. All welds must be double cut, first cut must be carried out using a skid plate immediately, second cut after at least 30 minutes using a Mozart trimming knife and finished by glazing with a 5mm reducer nozzle attachment. The installation must be rolled with a 68kg 3-part roller, within the correct open time of the adhesive. "Polyflor" vinyl sheeting to be installed by an approved Polyflor Contractor.

To screeded floors: apply one coat TAL VAPORSTOP (or equal approved) all in strict accordance with manufacturers instruction, to ensure full warranty's are issued.

#### **NEW SKIRTINGS:**

Install new 100mm x 18mm Meranti skirting board with quarter round timber, both to be varnished.

#### **NEW WEATHER BAR:**

Threshold weather bar to be installed at all door thresholds when screed is being placed.

### **REPLACE FLOOR TILES IN ABLUTIONS:**

Safely remove existing floor tiling and replace with new non-glazed, non-slip 500mm x 500mm x 13mm thick clay tiles, Type B1, laid on high polymer cement based adhesives. Specification & colour to be confirmed.

### **REPLACEMENT OF EXISTING DAMAGED CEILINGS.**

Replacement of existing damaged ceilings: Carefully remove existing damaged ceilings boards and cornices.

Install new gypsum ceiling boards, 6.4mm thick, with PVC cover strips and coved cornices, to be skimmed until smooth and even. Paint with fully washable matt white PVA. Non-combustible, flexible stonewool thermal insulation is to be installed if not already, the thickness and density to be determined per climatic zone in which the school is located and to be laid as per Manufacturer's recommendations.

### **REPAINTING OF EXISTING / INTERNAL WALLS:**

If applicable, treat structural cracks as per Structural Engineer's details and methodology. Ensure all substrates are dry before any painting commences. Clean walls and strip / remove all existing paint. Treat all areas of mould and fungal growth by applying a coat of micro-organism treatment biocide as per manufacturer's recommendations. Prepare surfaces by removing all coatings, flaking paint, friable deposits, grease, dirt and cement splashes etc. Sand thoroughly to break surface gloss (whether acrylic coating or enamel paint) to provide a uniform finish. Brush down and wash to remove dust and surface contamination and wipe clean. Prime all bare and filled areas with a suitable primer. Ensure total coverage of the substrate. Allow adequate drying time as per manufacturer's recommendations and allow two coats of fully washable, matt Plascon or similar approved exterior or interior paint to existing plaster, colours to be confirmed.

### **TIMBER DOORS TO BE RE-VARNISHED**

Rub down existing timber door leaves and remove any contaminants and repair any imperfections as per surface preparation guidelines. Ensure surface is free of any contaminants and dry. Prime all repaired areas with surface compatible Dulux primer. Apply three coats of Woodgard Interior / Exterior Timbavarnish with an overcoating time of 3 hours.



## **TYPICAL DETAILS:**

### **DETERIORATION OF PAINTWORK TO DOOR FRAMES / WINDOW FRAMES / SECURITY GATES:**

Chip out / remove all of the rust and ensure that the surface is free from loose dirt, rust, paint, oil & grease. Fill holes with a suitable putty and allow to cure for 48 hours. Remove all remaining rust and strip paint down to the bare metal. Once cleaned and degreased, apply a coat of primer and when dry, apply two coats of Plascon metal paint to match existing colour, as per manufacturer's recommendations.

### **CORROSION OF ELEMENTS SUCH AS DOOR FRAMES, WINDOW FRAMES ETC:**

Chip out / remove all of the rust and ensure that the surface is free from loose dirt, rust, paint, oil & grease. Fill holes with a suitable putty and allow to cure for 48 hours. Remove all remaining rust and strip paint down to the bare metal. Once cleaned and degreased, apply a coat of primer and when dry, apply two coats of Plascon metal paint to match existing colour, as per manufacturer's recommendations.

### **NEW GUTTERS AND DOWNPIPES:**

Replacement of existing gutters and downpipes and / or installation of new gutters & downpipes:  
Carefully remove existing downpipes, gutters, rivets / screws and flashings. Make good existing fascia boards where applicable and ensure a cleaned surface. Install new (0.8mm thick form rolled) 125mm x 90mm aluminium gutter with aluminium gutter brackets fastened to fascia boards with 6mm x 25mm steel hex head screws. Install new minimum 100mm diameter aluminium rain water down pipe (min. 1mm thick), fixed to external façade of building with aluminium down pipe brackets using 6mm x 38mm nail-in anchors. Cut, join, lap and form sheet metal flashings to roof and vertical surfaces and around protruding pipes to make a watertight finish. Ensure down pipe spout is adequately orientated to stormwater runoff per Civil engineer's stormwater management plan.

### **REPLACEMENT OF DAMAGED / DEFLECTING FASCIA AND BARGE BOARDS:**

New barge boards or fascia boards:  
Install new Nutec barge or fascia boards (where they are missing or damaged), size which is suitable to the roof, as per manufacturer's recommendations. Primer and paint to be applied to barge board - paint colour to be confirmed.

### **FASCIA BOARD TO BE REPAINTED:**

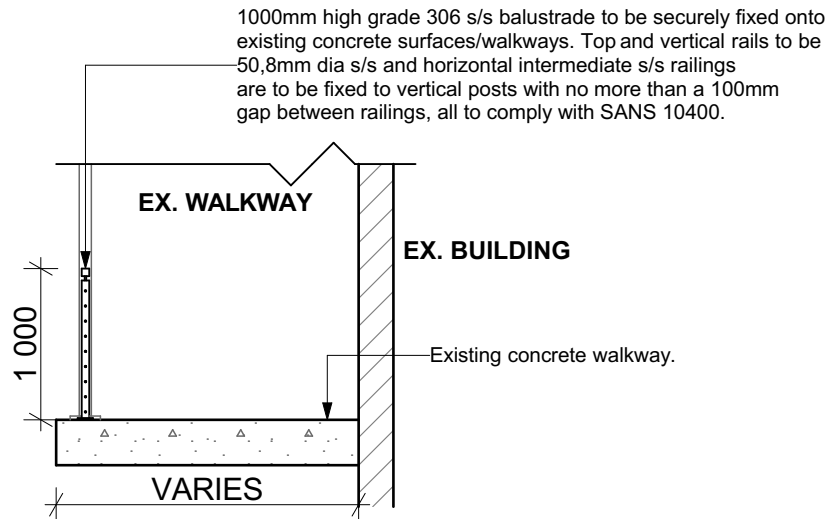
Rub down existing fascia board, primer and paint to be applied to barge board - paint colour to match existing.

### **NEW ROOF SHEETING SPECIFICATION:**

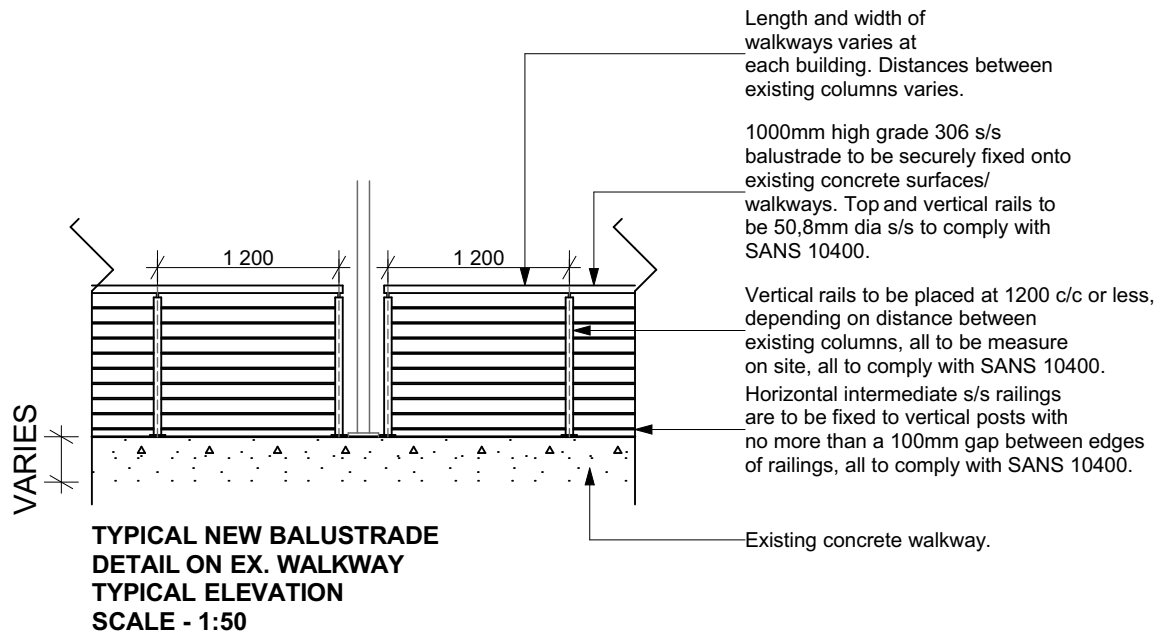
ROOF SHEETING SPECIFICATION.  
Safintra 0,55mm thick 700mm cover Saflok 700® 'Slate'  
COLORPLUS® interlocking concealed fix roof covering, fixed to timber purlins at 2112mm centres and end-span purlins at 1920mm centres (final spacing to be calculated by an engineer) by means of a SL 700® Clip 21 clips secured to purlins in combination with a suitable Class Safintra approved wafer head self-tapping fasteners with roof insulation, all in accordance with the manufacturer's recommendations. All aspects to be in strict accordance with the manufacturer's latest published recommendations. Profile measurements and proportions must be in line with the latest Product Specification Manual as published by Safintra SA. Sheet coating: AZ150.

## TYPICAL DETAILS:

### NEW 1m HIGH BALUSTRADE ALONG EXISTING EDGE OF WALKWAY:



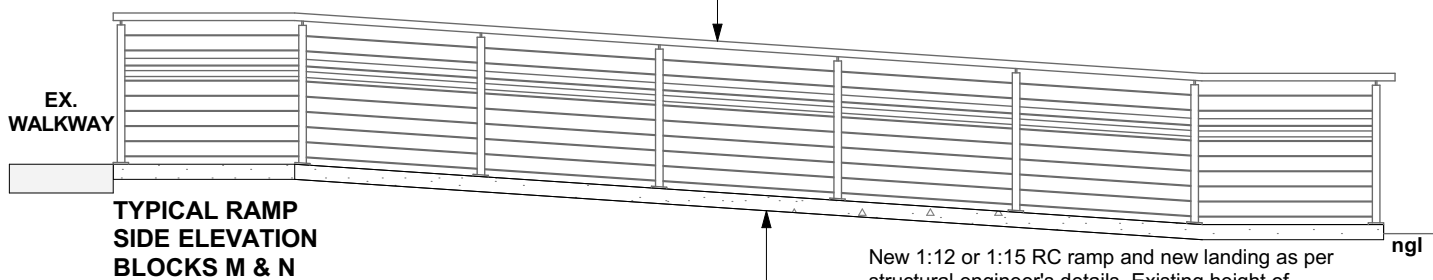
**TYPICAL NEW BALUSTRADE  
DETAIL ON EX. WALKWAY  
SCALE - 1:50**



**TYPICAL NEW BALUSTRADE  
DETAIL ON EX. WALKWAY  
TYPICAL ELEVATION  
SCALE - 1:50**

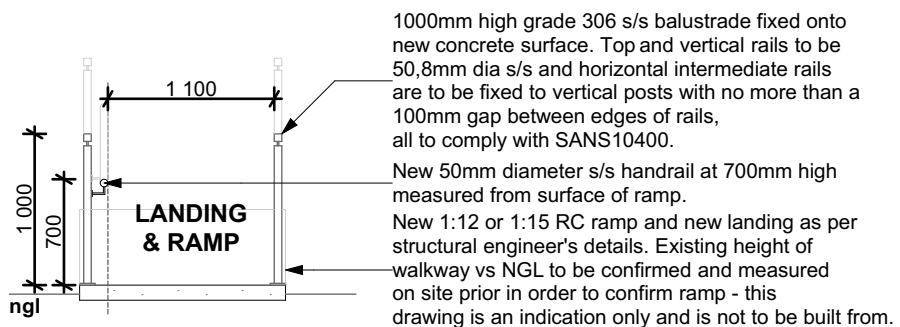
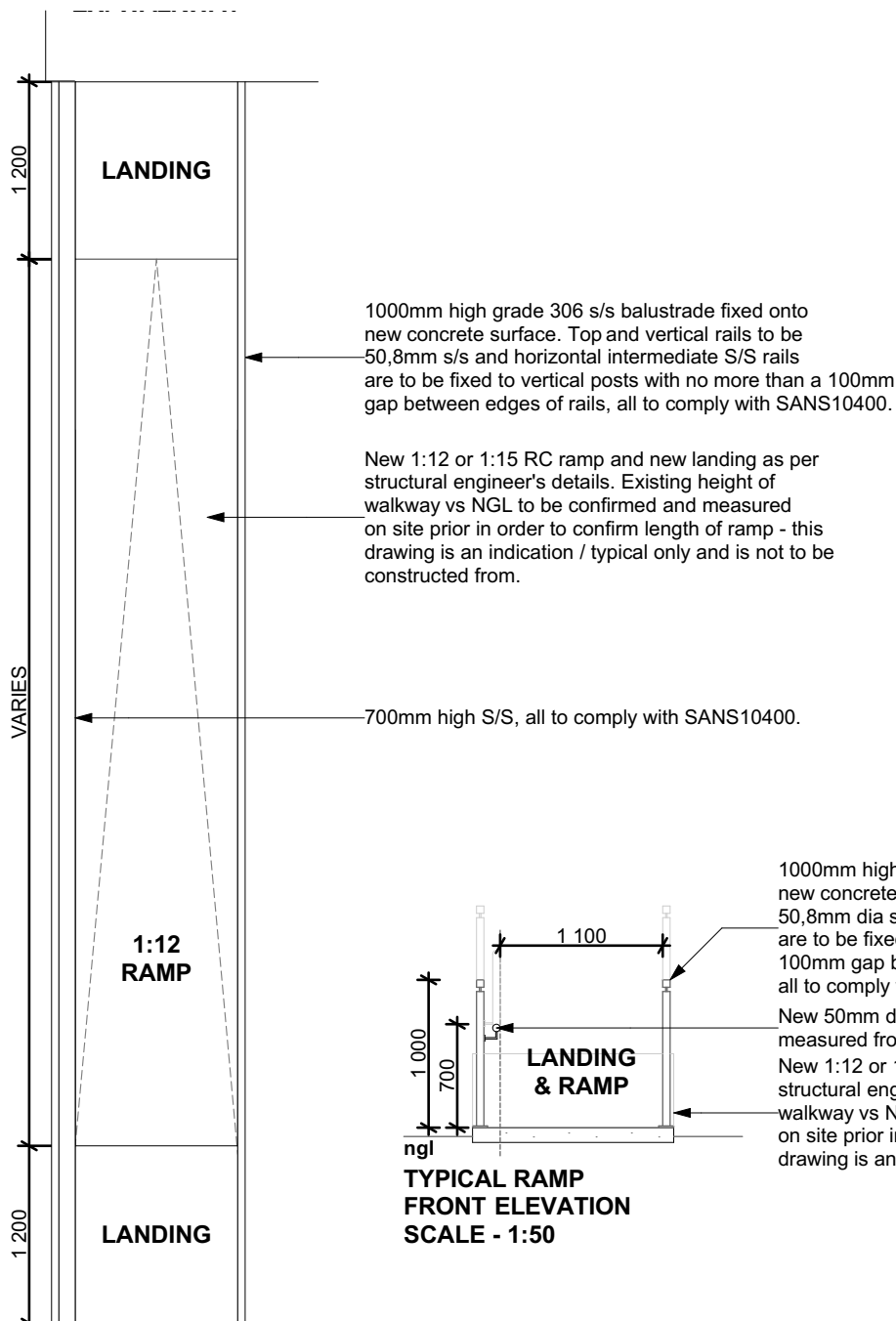
## TYPICAL DETAILS:

### NEW RAMP TO WALKWAY:



Where ramps in the same direction are used for a vertical rise of more than 600 mm, be staggered by the width of the ramp, in order to prevent a long straight line of ramps.

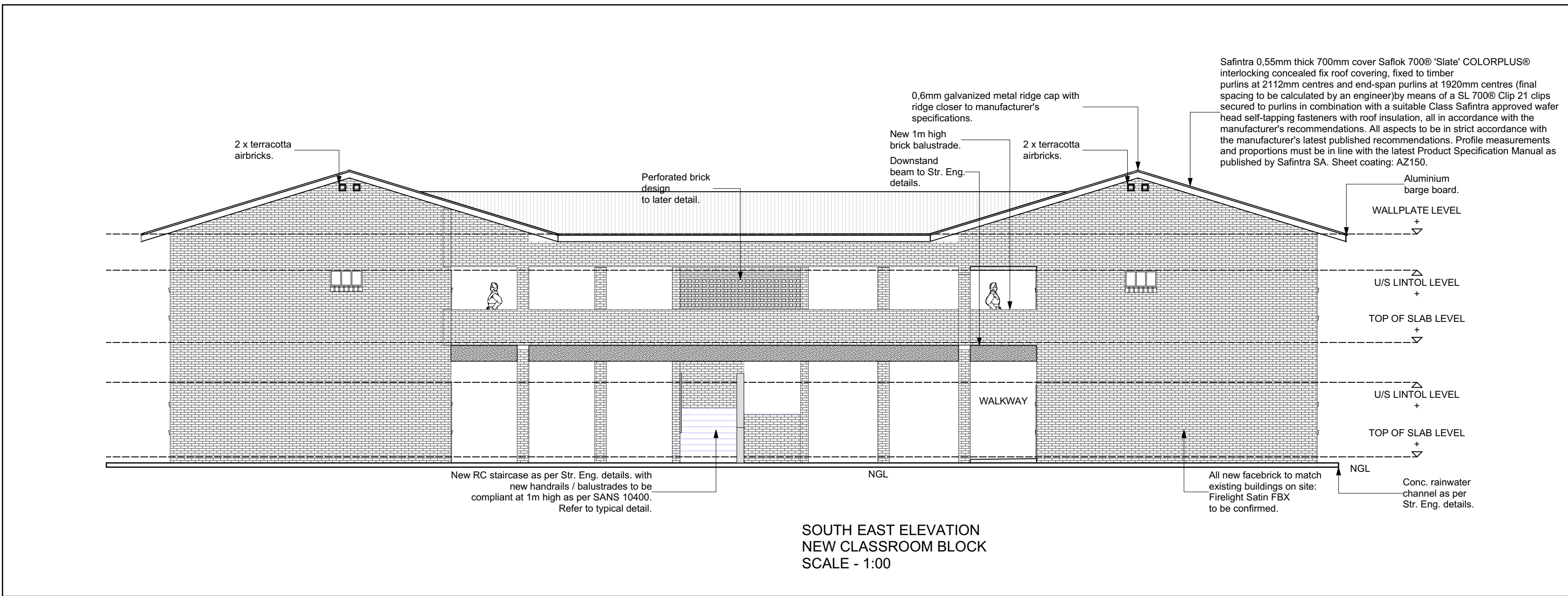
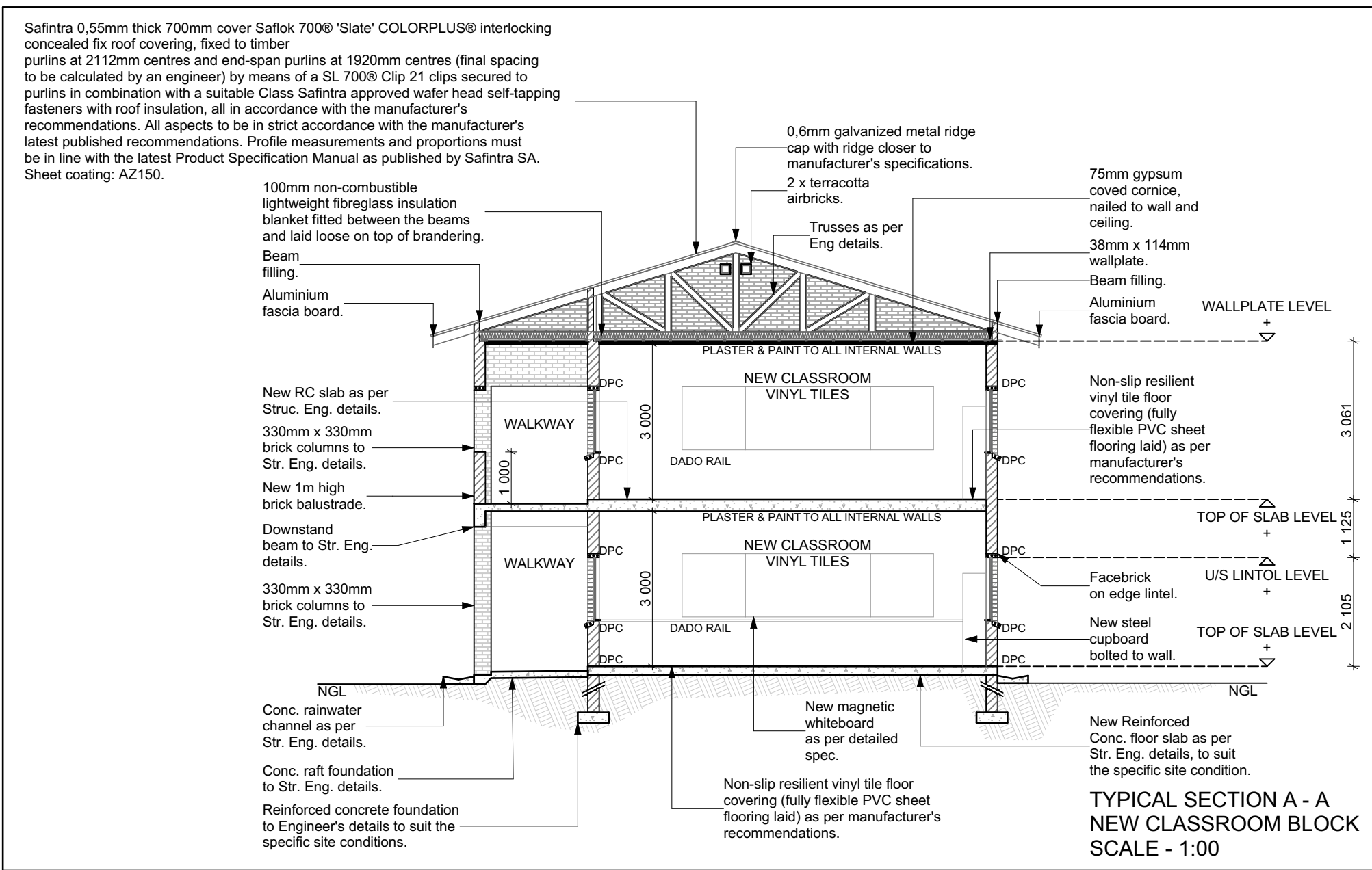
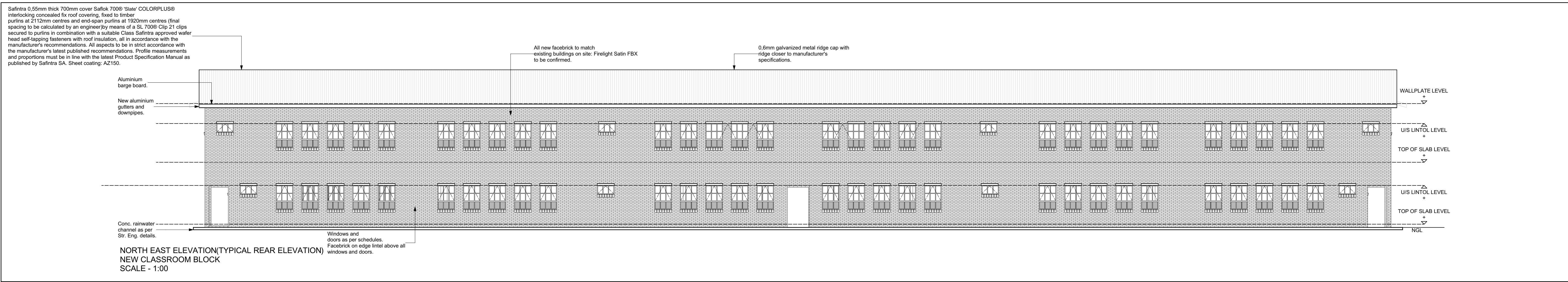
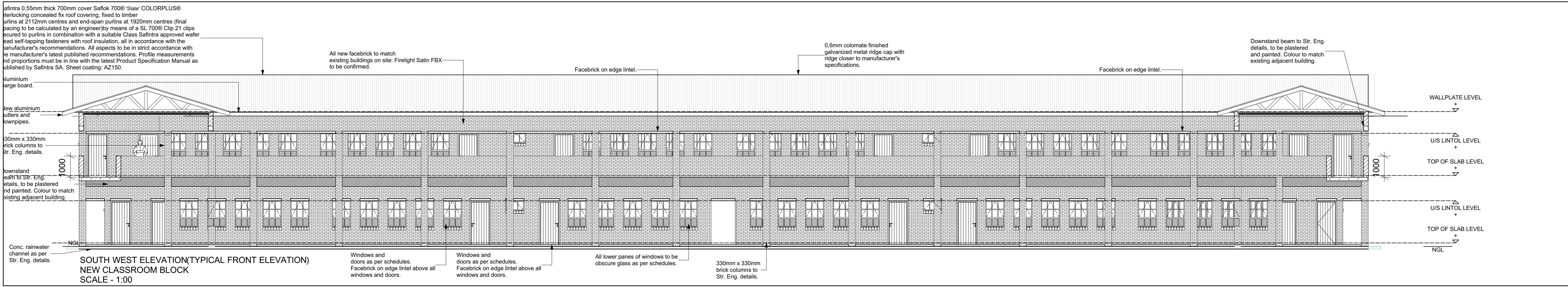
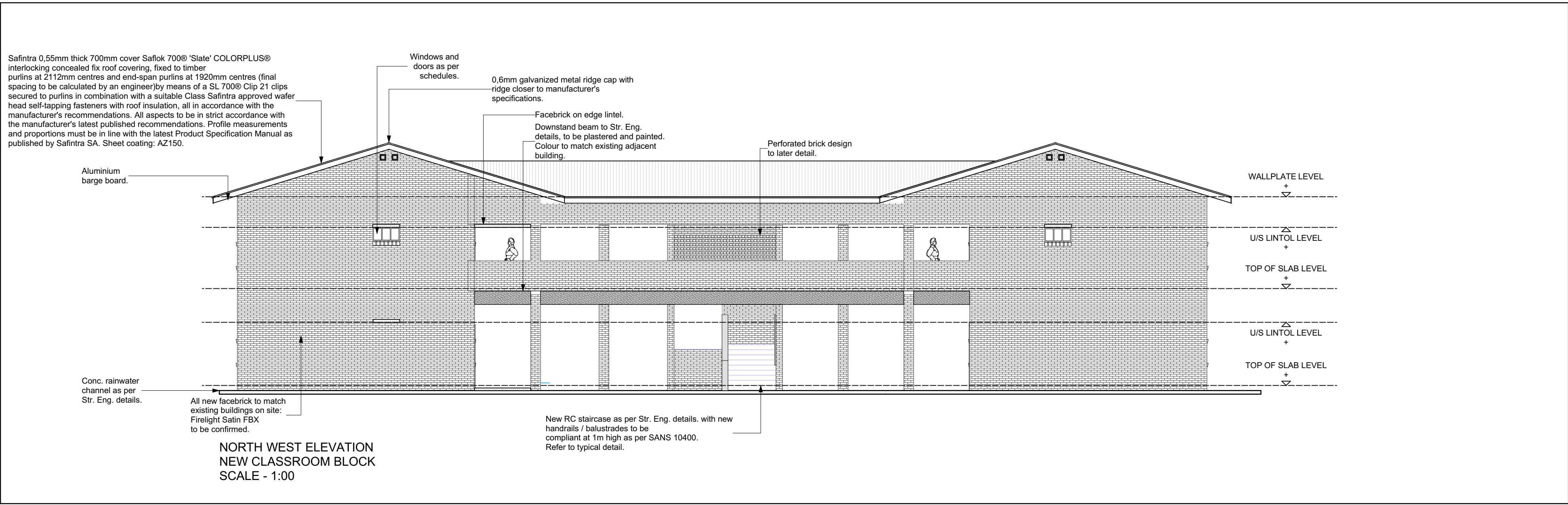
New 1:12 or 1:15 RC ramp and new landing as per structural engineer's details. Existing height of walkway vs NGL to be confirmed and measured on site prior in order to confirm length of ramp - this drawing is an indication / typical only and is not to be constructed from.



TYPICAL RAMP FRONT ELEVATION  
SCALE - 1:50

TYPICAL RAMP PLAN  
SCALE - 1:50





- NOTES:
1. All boundaries, dimensions and levels are to be checked on site before construction and any discrepancies are to be reported to the office of the Architect.
  2. Partial Service: Any discrepancies with site or other information is to be advised to the Architect and direction or approval is to be sought before the implementation of the detail.
  3. Do not scale this drawing.
  4. For the purpose of coordination, all relevant parties must check this information prior to implementation and report any discrepancies to the Architect.

Revisions:			
Rev No.	Date	Description	Rev By
A	11/11/22	For Information Purposes Only	MM

Architect :

Name :

Signature :

Client :

Name :

Signature :



**education**  
Department of  
Education  
FREE STATE PROVINCE

**DBSA**  
DEVELOPMENT BANK OF SOUTHERN AFRICA

Project:  
**CONDITION ASSESSMENT  
THISETSANG SECONDARY SCHOOL**

Drawing description:  
**PROPOSED NEW DOUBLE STOREY  
CLASSROOM BLOCK ELEVATIONS &  
SECTIONS  
(24 CLASSROOMS)**

Drawn: URBAN PLATFORM ARCHITECTS + PLANNERS (AO)

Scale/s: AS SHOWN ON DRAWING

**FOR INFORMATION**

Drawing Number: 082-KPS-106

Revision: A

NOTES:

1. All levels and position of new building and all of it's elements are to be confirmed once the survey has been provided.



## Annexure E

### ELECTRICAL SPECIFICATION

N/A

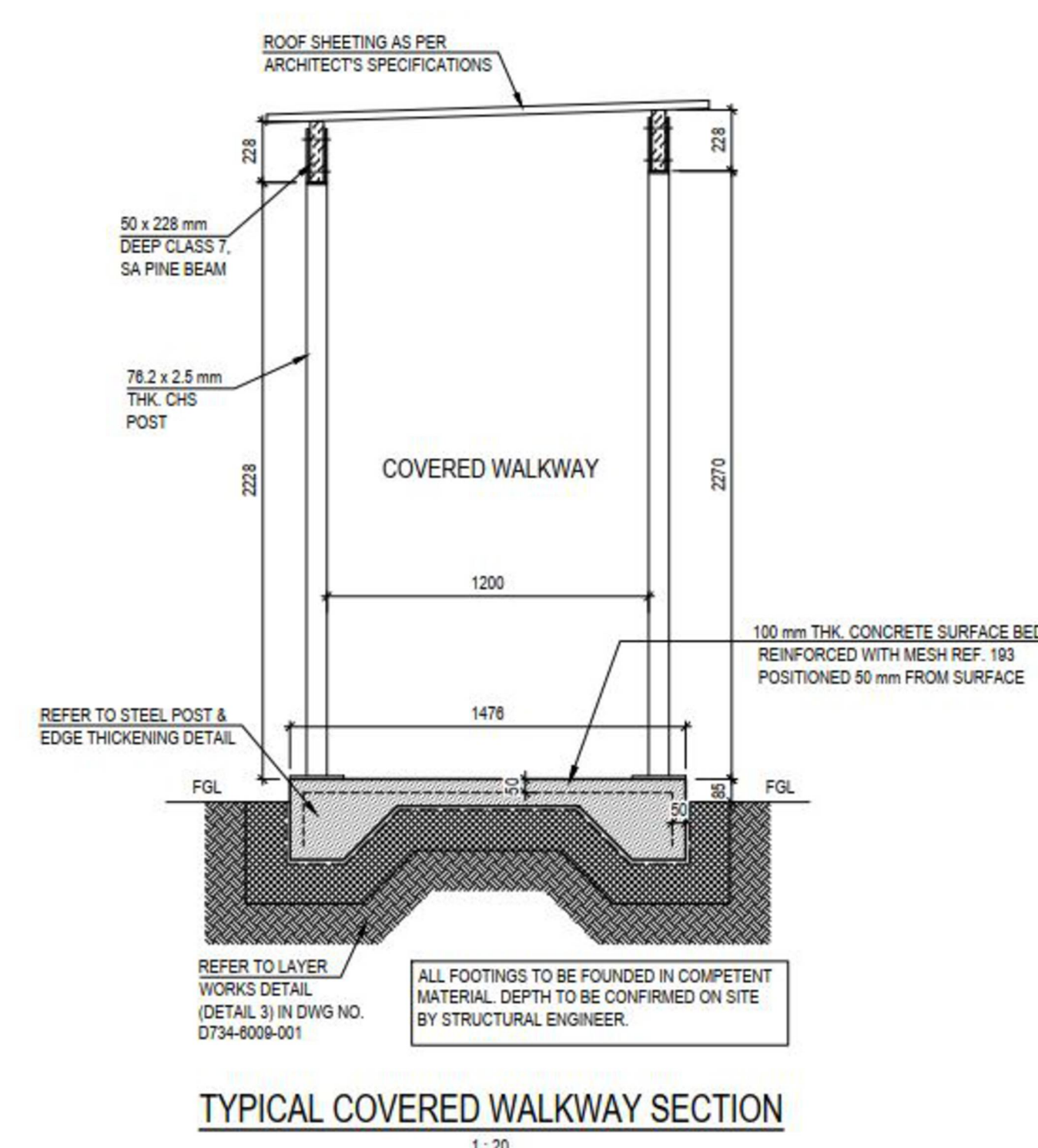
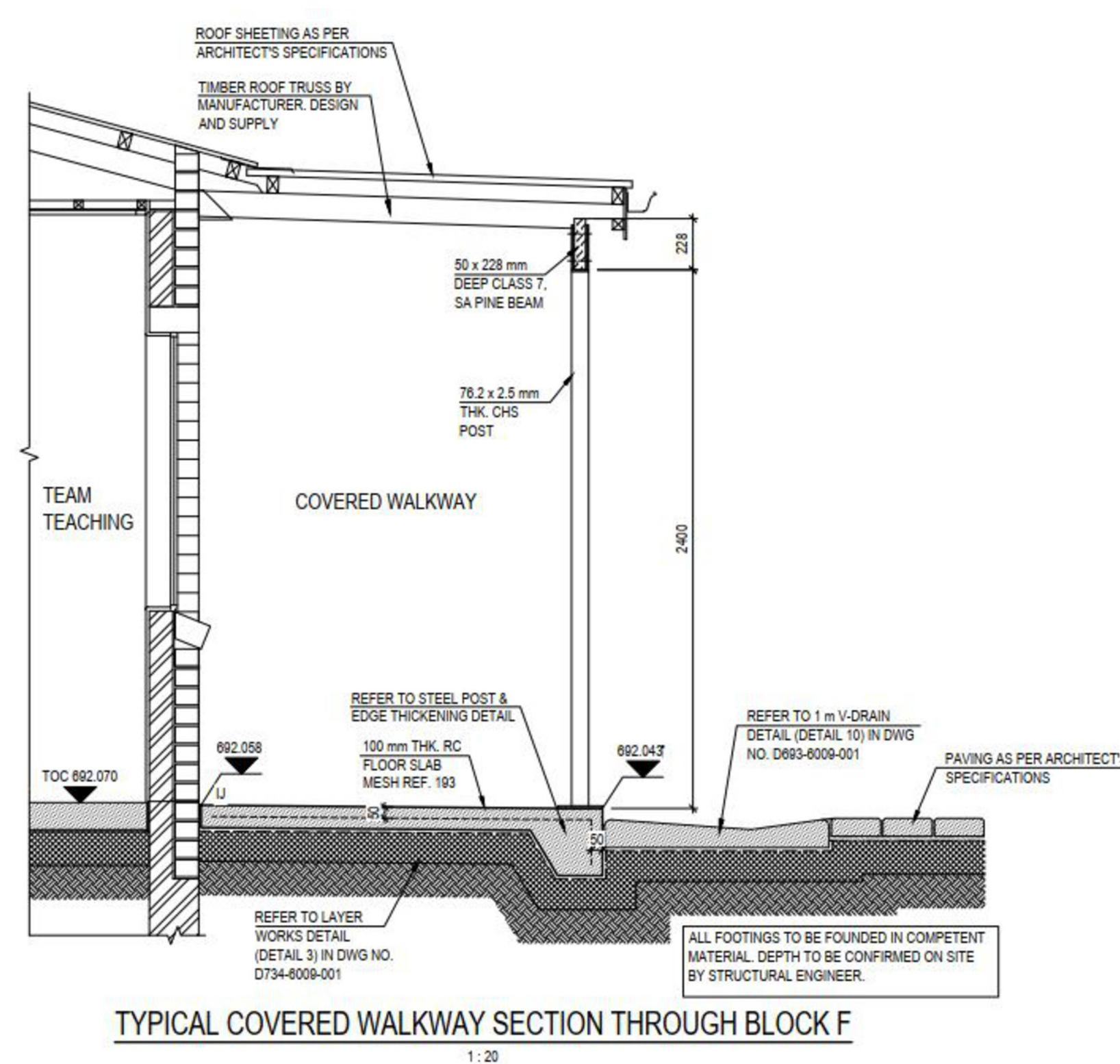
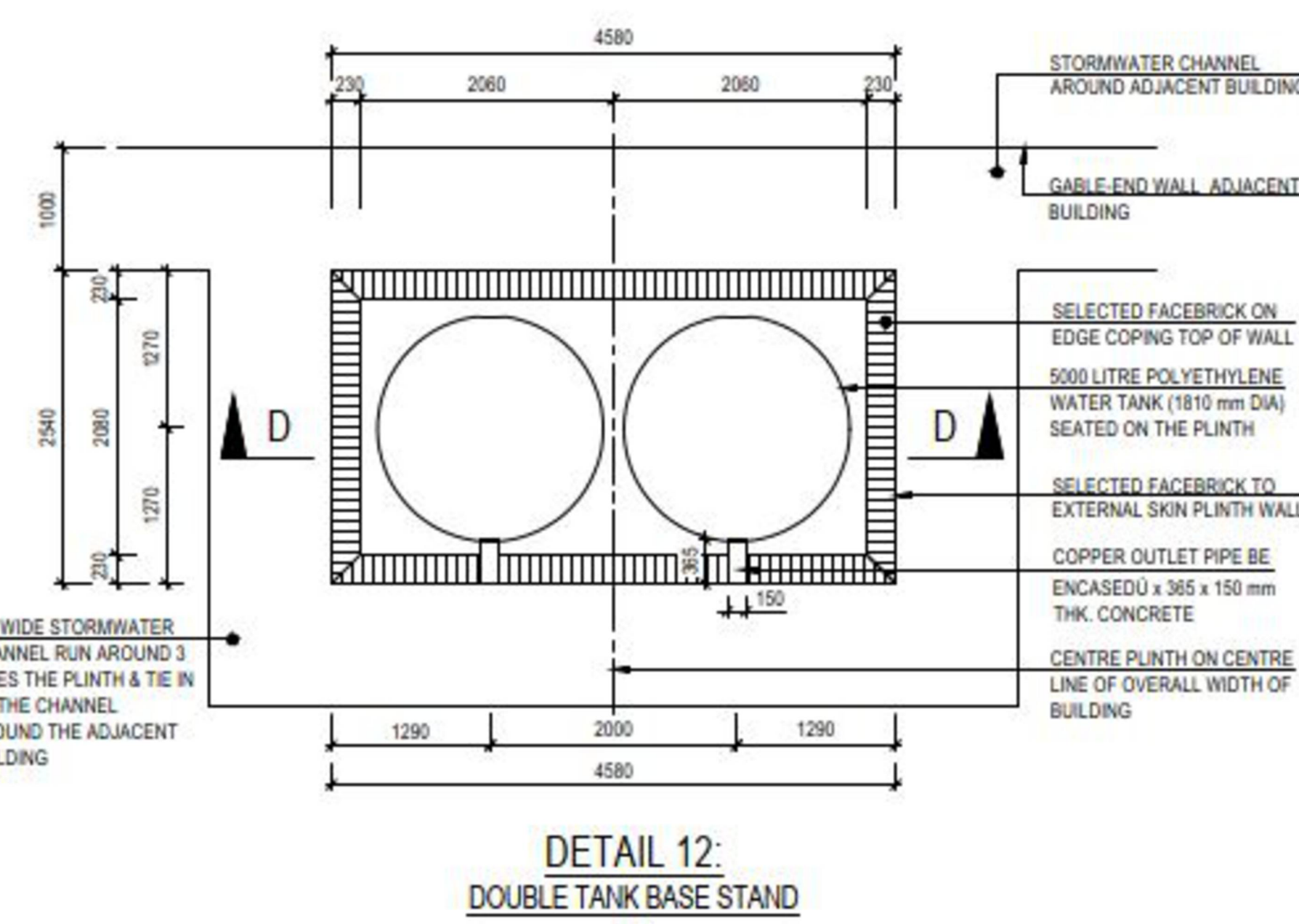
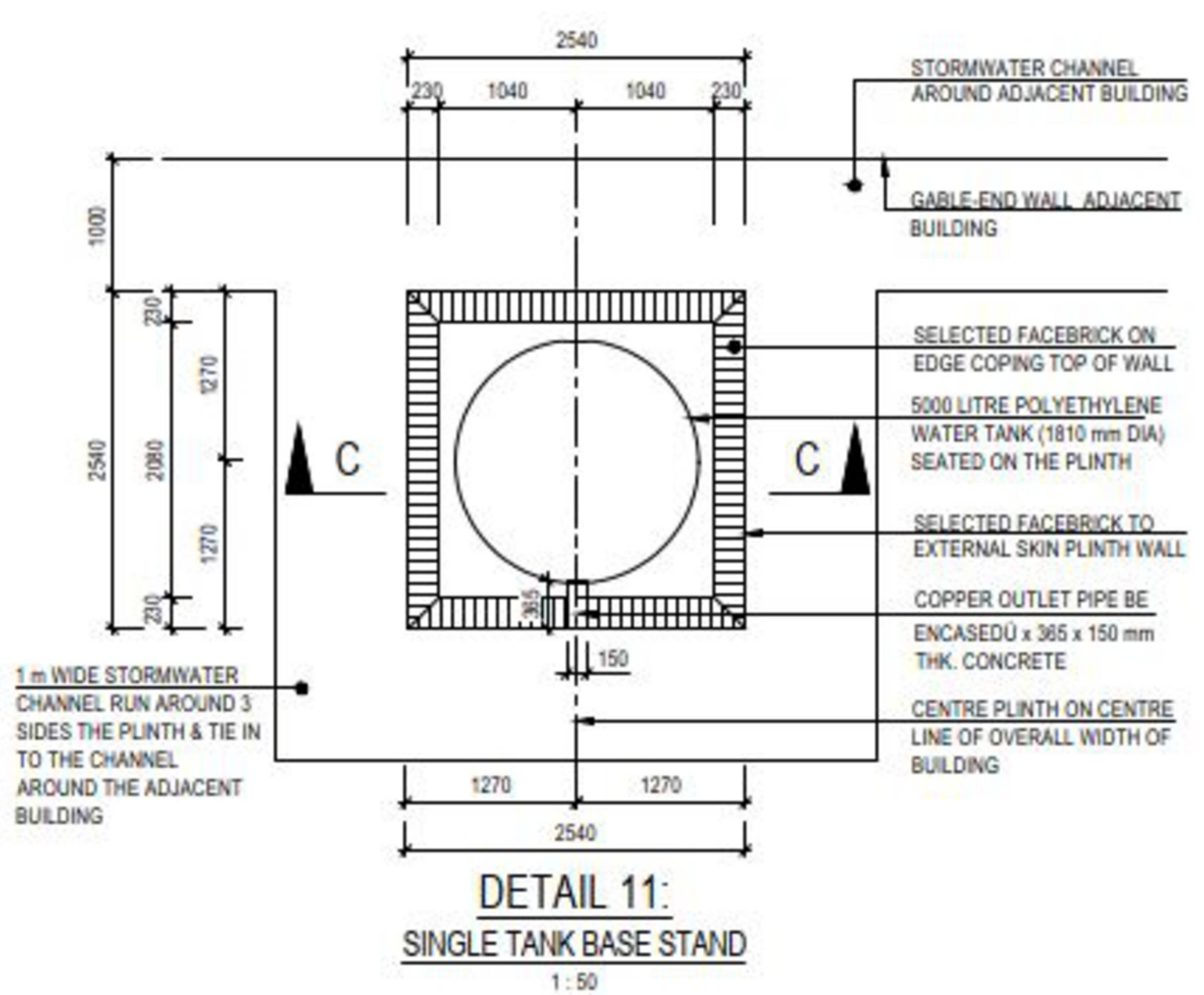
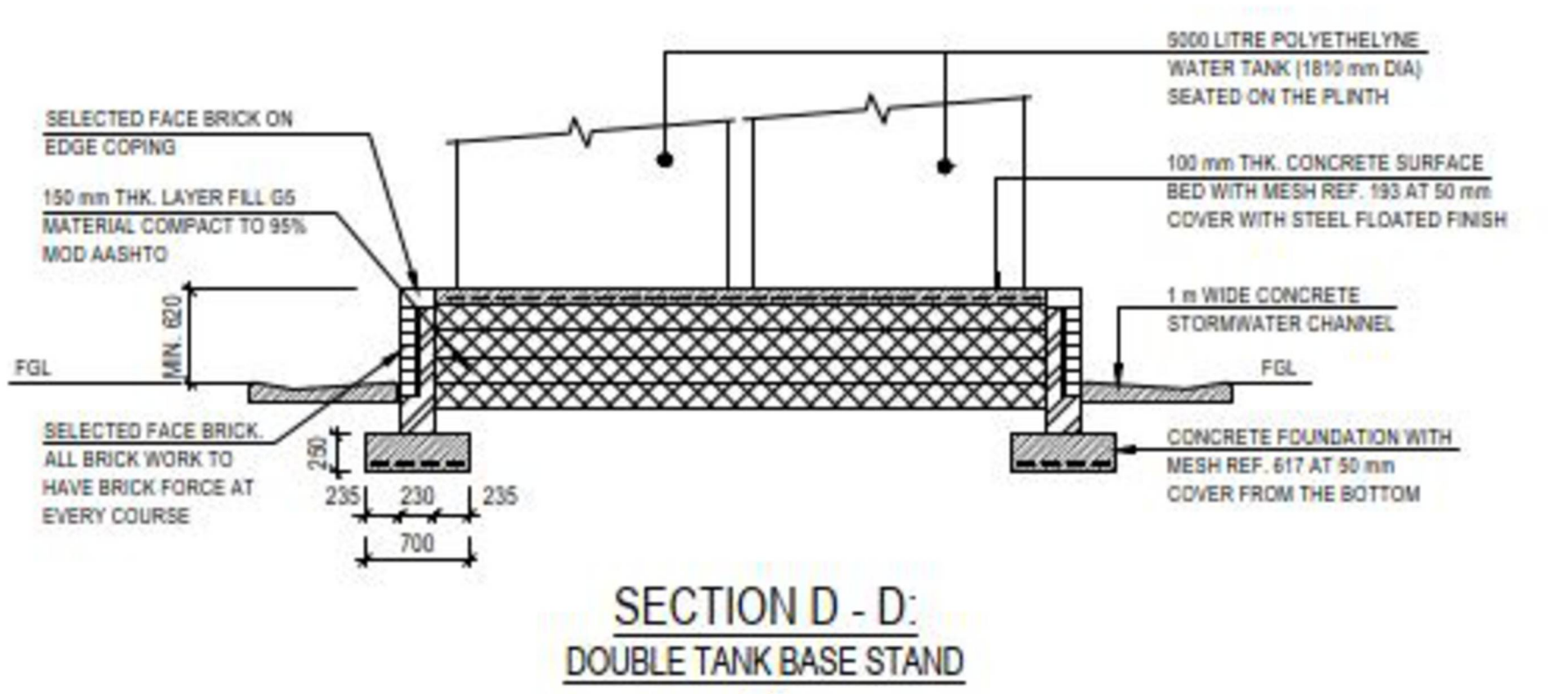
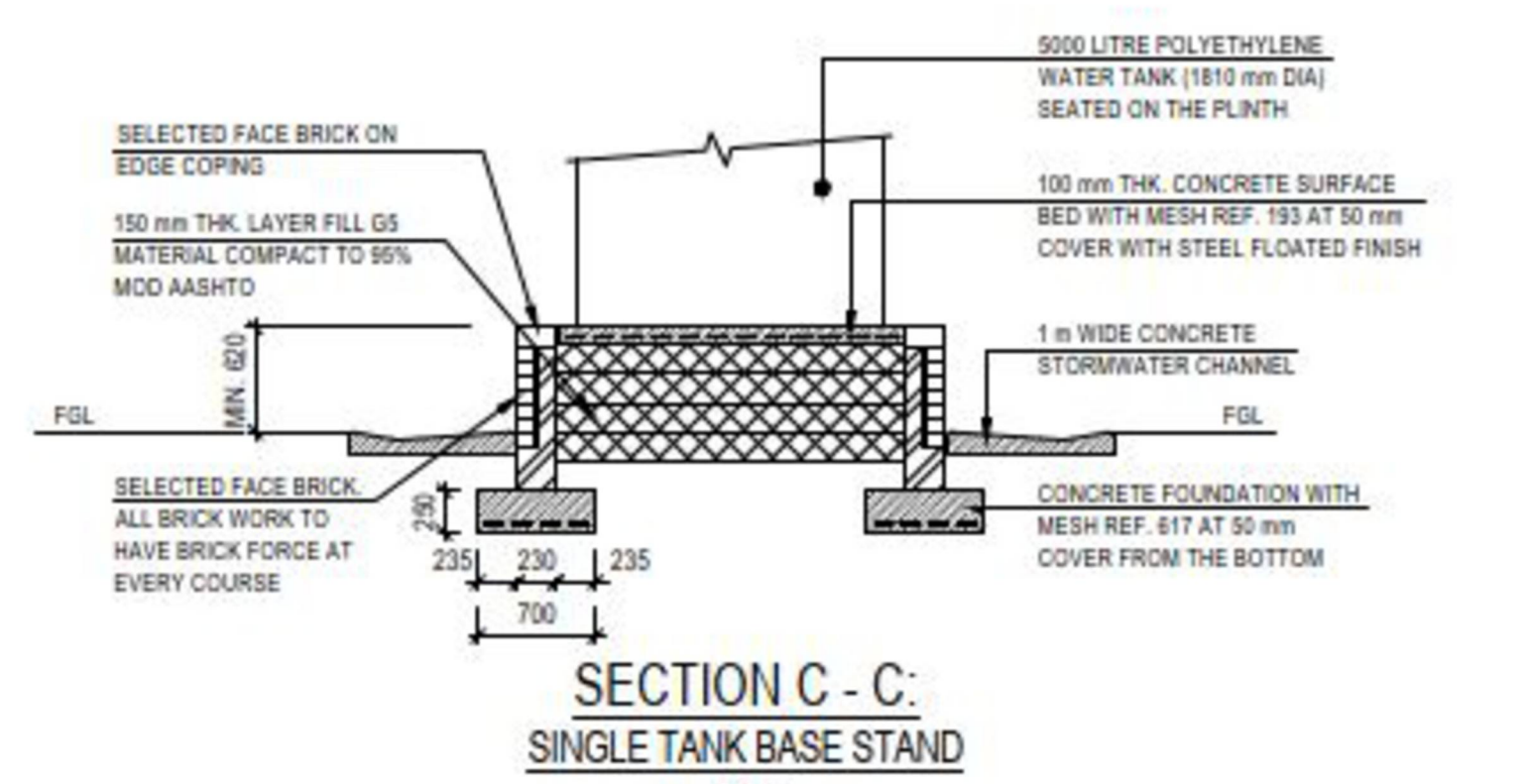
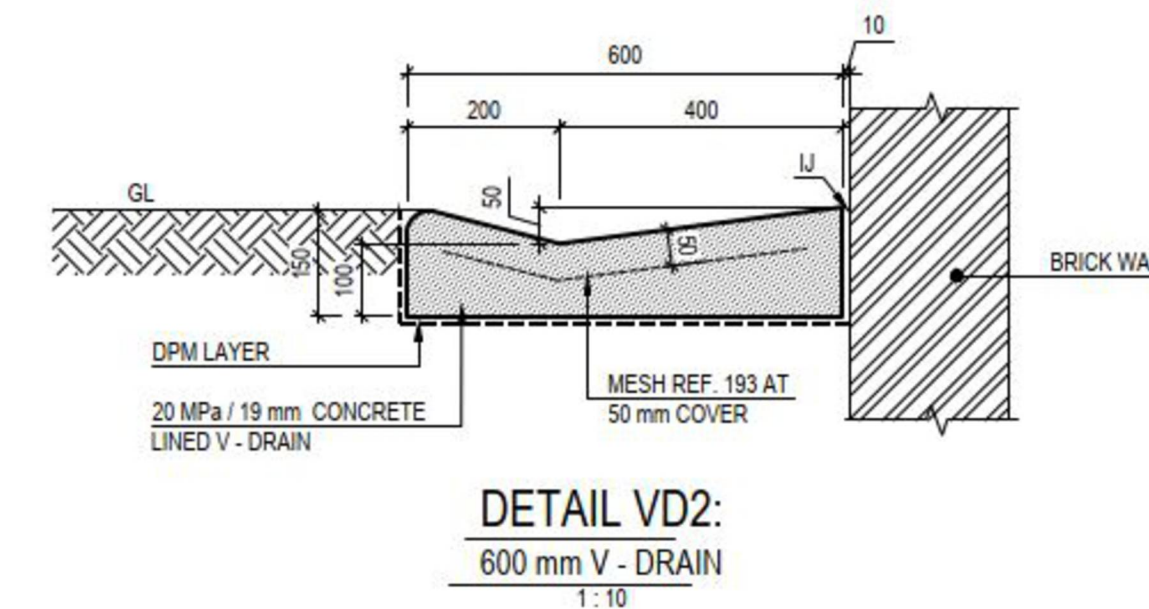
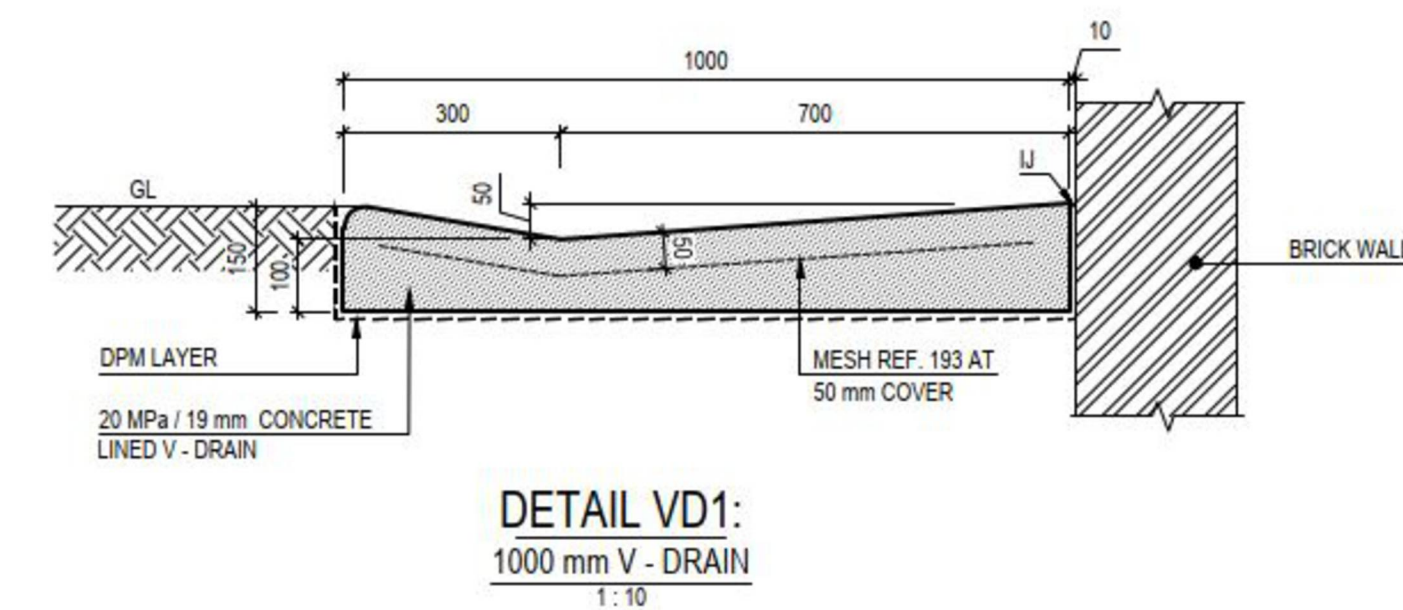
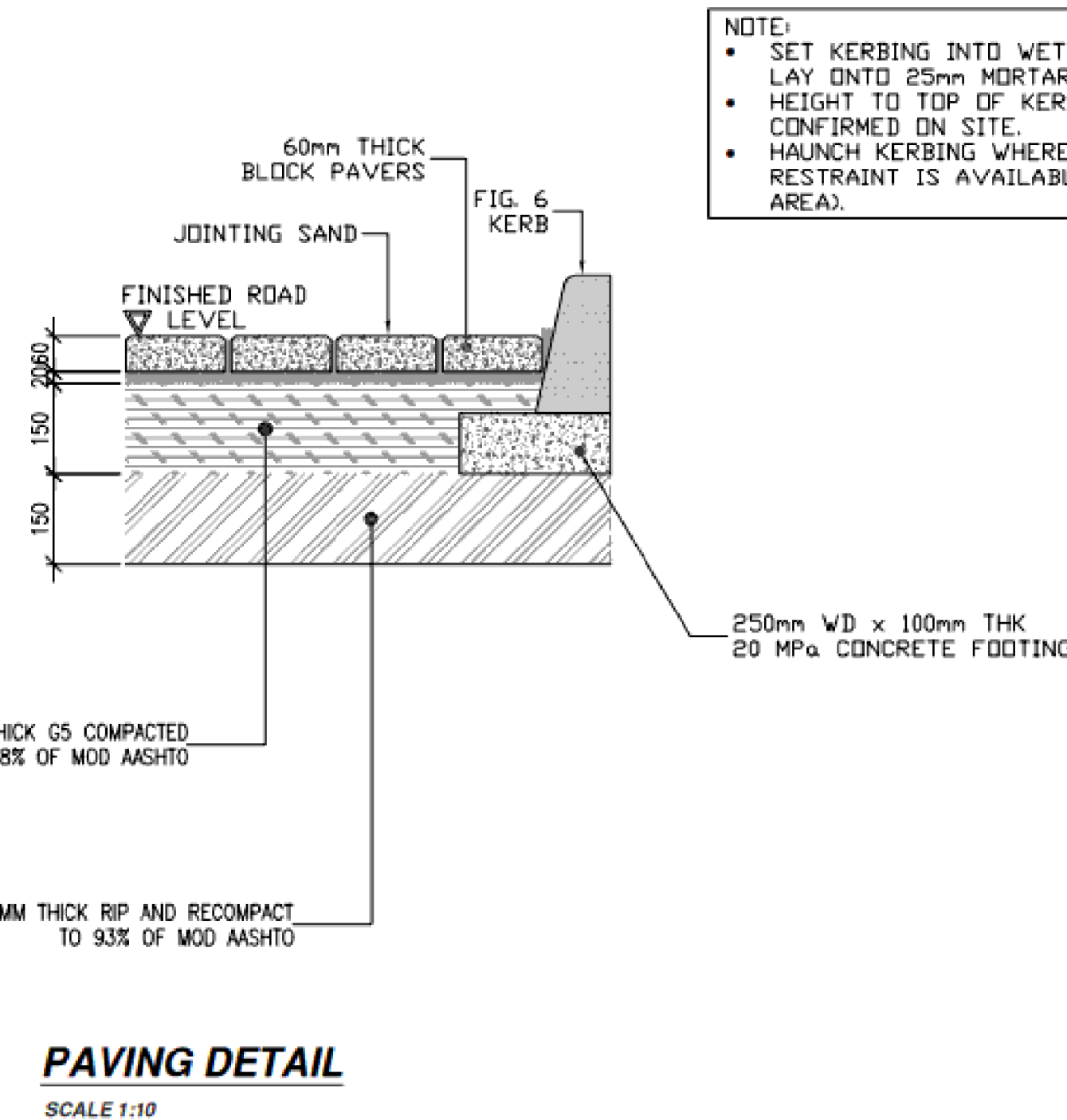
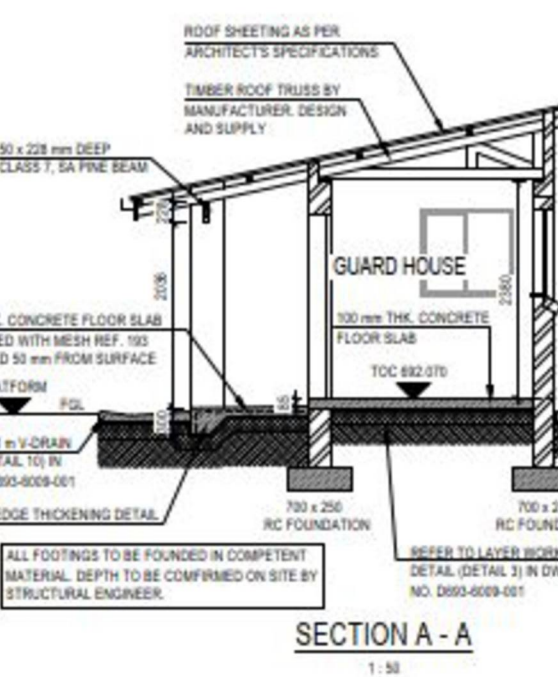
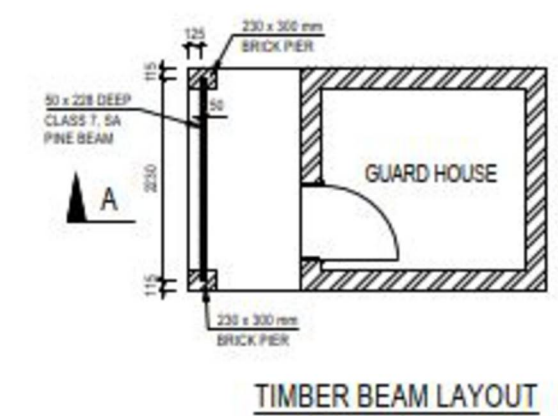
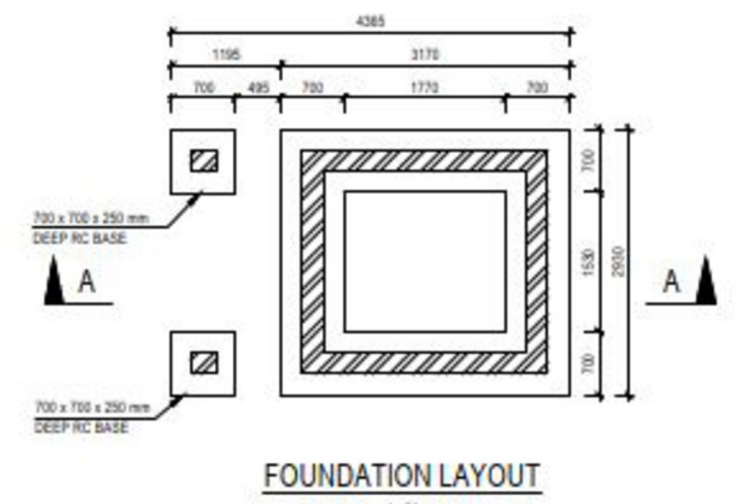
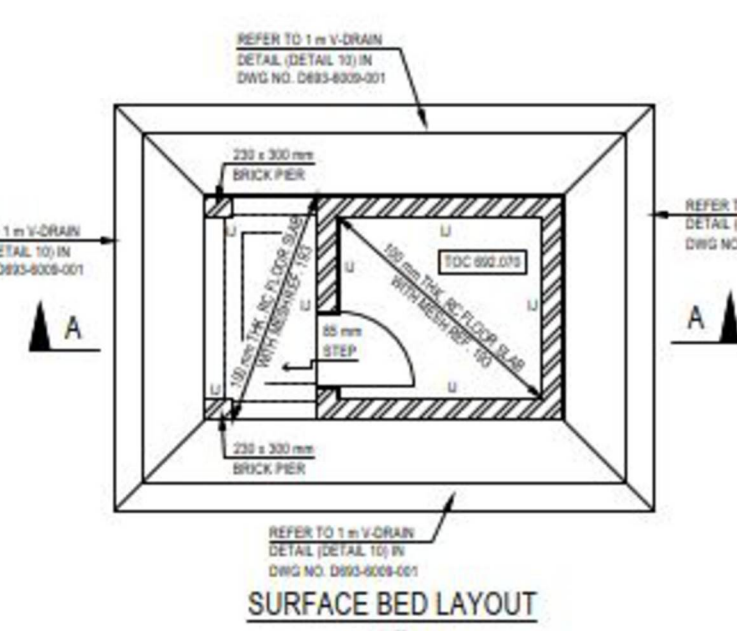
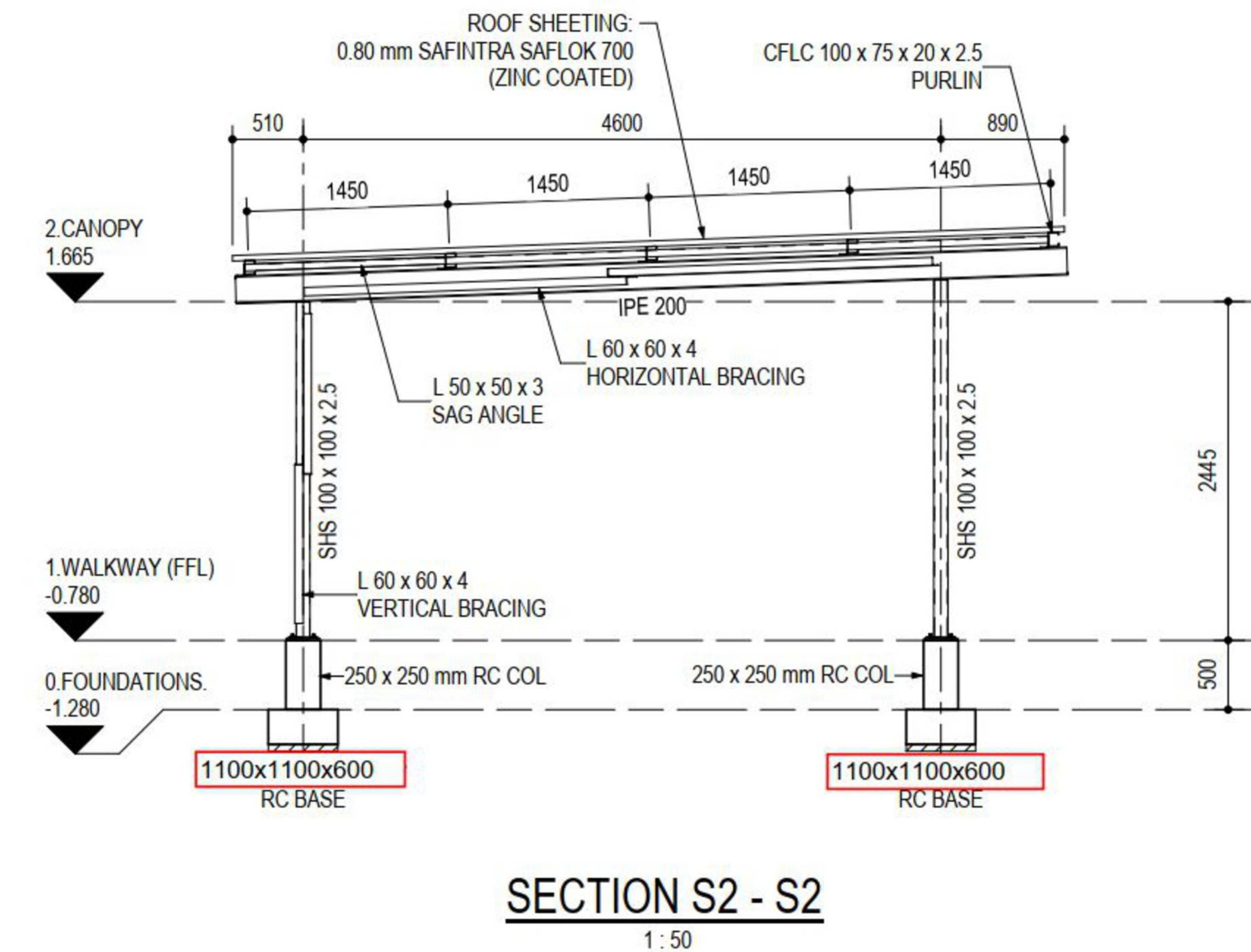
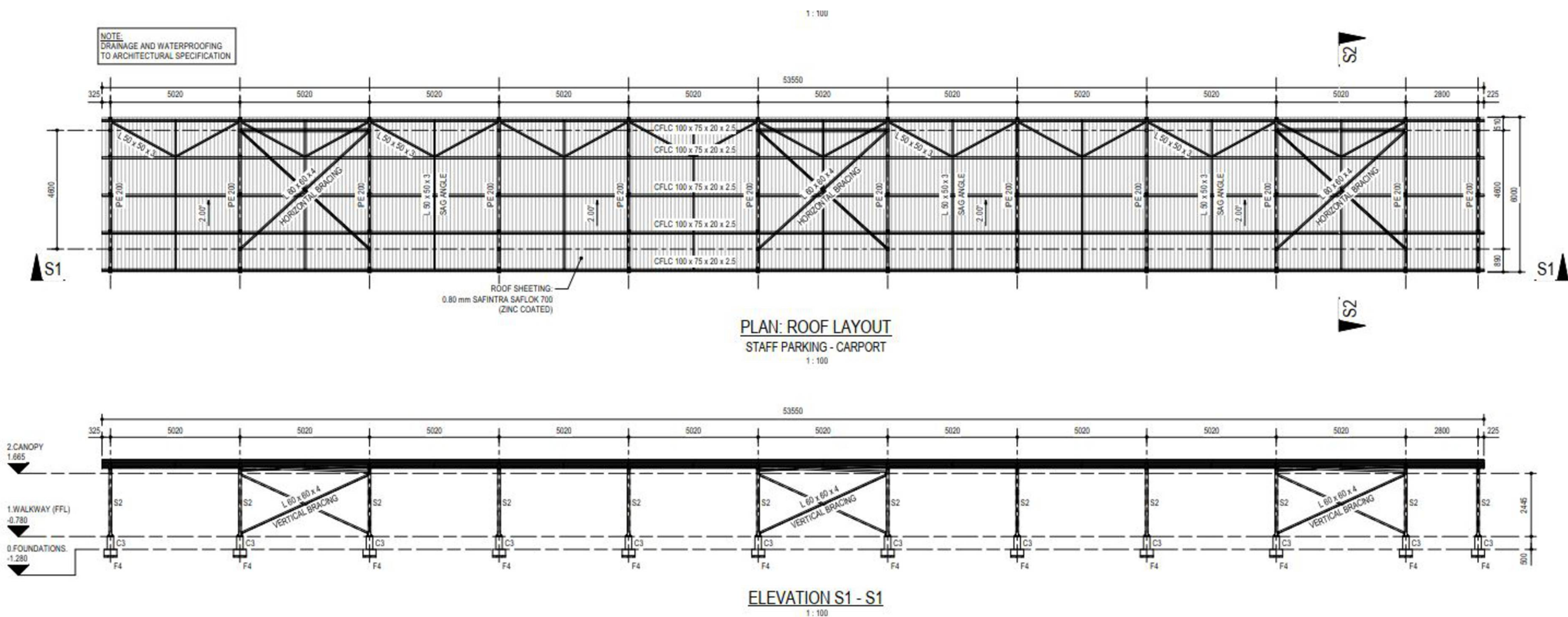
## Annexure F

CIVIL/STRUCTURAL SPECIFICATION





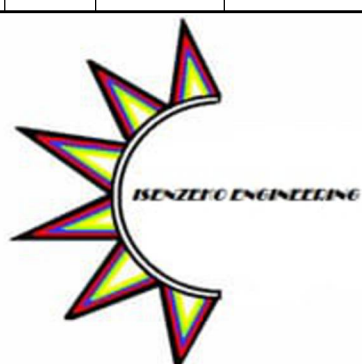




# NOTES:

- ALL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND AS REQUIRED BY THE LOCAL AUTHORITIES OR STATUTORY BODIES.
- WHERE REFERENCE IS MADE TO THE SOUTH AFRICAN STANDARD SPECIFICATIONS, THE CURRENT EDITION SHALL BE USED.
- REFER TO ARCHITECTS LAYOUTS FOR SETTING OUT INFORMATION.
- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
- ONLY WRITTEN DIMENSIONS AND LEVELS SHALL BE USED.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS FROM THE RELEVANT DISCIPLINES. ARCHITECT, CIVIL, ELECTRICAL AND MECHANICAL.
- THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST 24 HOURS ADVANCE NOTICE FOR INSPECTIONS.
- THE ENGINEER SHALL BE NOTIFIED WITHOUT DELAY SHOULD THERE BE ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS AND SPECIFICATIONS.
- FOUNDATION EXCAVATIONS TO BE INSPECTED AND APPROVED BY THE STRUCTURAL / GEOTECHNICAL ENGINEER BEFORE ANY BLINDING IS CAST.
- REINFORCING TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING CONCRETE.
- ALL DUCTS OR RECESSES TO BE APPROVED BY THE ENGINEER.
- POSITION OF CONSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER.
- CONCRETE STRENGTHS @ 28 DAYS:  
BLINDING : 15 MPa  
FOUNDATIONS : 25 MPa  
COLUMNS : 30 MPa  
SURFACE BEDS : 25 MPa  
ROOF SLABS : 30 MPa  
BEAMS : 30 MPa
- COVER TO STEEL REINFORCEMENT: U.O.N.  
FOUNDATIONS : 50 mm  
SLABS : 30 mm  
BEAMS : 30 mm  
COLUMNS : 30 mm
- ALL SHARP EXPOSED EDGES TO BE CHAMFERED 30 x 20 mm.
- ALL WATERPROOFING TO ARCHITECTS DETAIL.
- SAW CUTS ARE TO BE MADE AS SOON AS THE CONCRETE IS FIRM ENOUGH NOT TO BE TORN OR DAMAGED BY THE CUTTING BLADE (USUALLY BETWEEN 24 TO 48 HOURS AFTER CASTING).
- ALL STEELWORK TO BE FABRICATED AND ERRECTED IN ACCORDANCE WITH SANS 2001-C51 & SANS 1921-3.
- ALL STEELWORK TO BE "SANS 50025-S355JR" UNLESS OTHERWISE NOTED.
- A COMPLETE SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION COMMENCES.
- ALL WELDS TO BE MINIMUM 6mm CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED AND IN STRICT ACCORDANCE WITH SANS AND ANSI/AWS STANDARDS.
- ALL BOLTS SHALL BE GRADE 8.8 UNLESS OTHERWISE NOTED.
- ALL STEELWORK TO BE HOT DIPPED GALVANISED TO SANS 1200-HC AND SANS 121 UNLESS OTHERWISE NOTED.

REV	DATE	DRAWN	CHECKED	DESCRIPTION
00	2022-11-02	JH	MG	ISSUED FOR INFORMATION



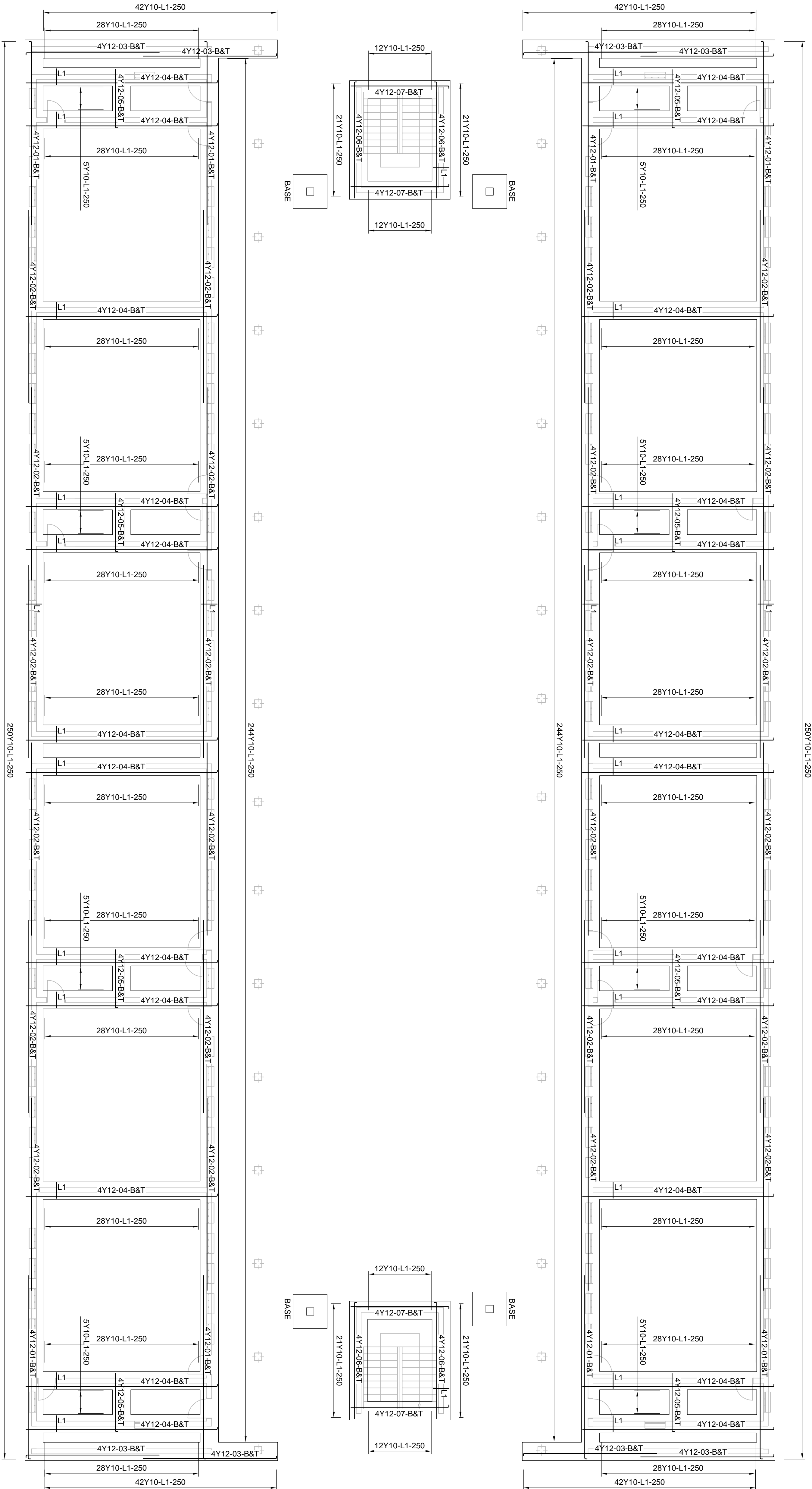
PROJECT	DBSA SCHOOLS FS
FREE STATE	
DRAWING	DETAILS SHEET 2 OF 2

DESIGNED	JH	2022-11-02
DRAWN	JH	2022-11-02
CHECKED	MG	2022-11-02
APPROVED	MANI GOVENDER (PR ENG - 20080241)	2022-11-02
SCALE	AS SHOWN	SHEET SIZE A0
PROJECT NUMBER: DRAWING NUMBER: STATUS: REVISION:		
SAB1777		
DRAWING STATUS CODES:		
R = REPORT	T = TENDER	C = CONSTRUCTION
D = DRAFT	P = PRELIMINARY	A = AS BUILT
COPYRIGHT RESERVED		

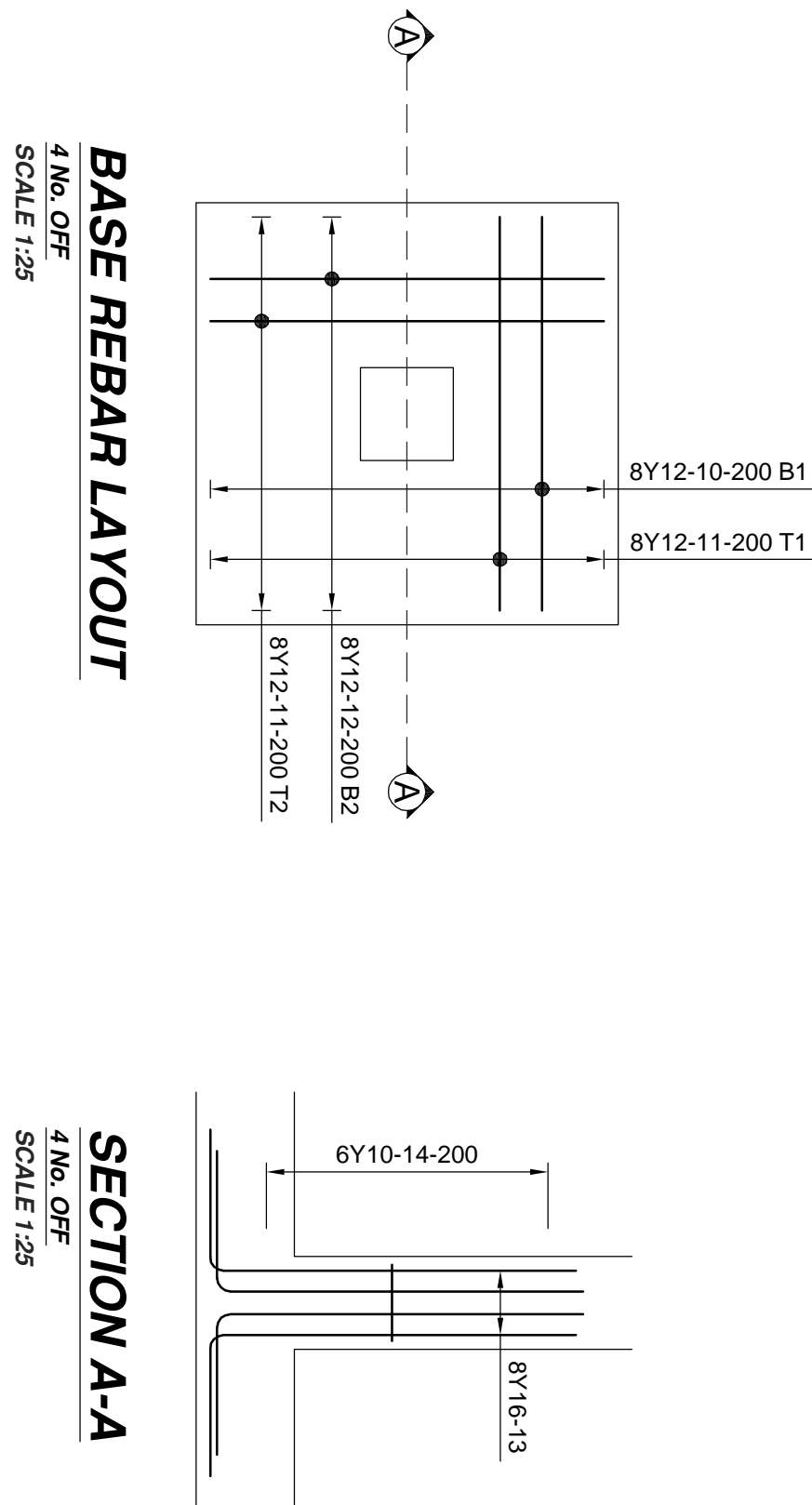


NOTES:

1. ALL WORK IN ACCORDANCE WITH THE RELEVANT NATIONAL STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITIES OR STATUTORY BODIES.
2. WHERE REFERENCE IS MADE TO THE SOUTH AFRICAN STANDARDS SPECIFICATIONS, THE CURRENT EDITION SHALL BE USED.
3. REFER TO ARCHITECTS LAYOUTS FOR SETTING OUT INFORMATION.
4. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.
5. ONLY WRITTEN DIMENSIONS AND LEVELS SHALL BE USED.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECT, CIVIL, ELECTRICAL AND MECHANICAL DRAWINGS.
7. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST 24 HOURS ADVANCE NOTICE FOR INSPECTION.
8. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY SHOULD THERE BE ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS AND SPECIFICATIONS.
9. FOUNDATION EXCAVATIONS TO BE INSPECTED AND APPROVED BY THE STRUCTURAL / GEOTECHNICAL ENGINEER BEFORE ANY BLINDING IS CAST.
10. REINFORCING TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING CONCRETE.
11. ALL DUCTS OR RECESSES TO BE APPROVED BY THE ENGINEER.
12. POSITION OF CONSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER.
13. CONCRETE STRENGTHS @ 28 DAYS:  
FOUNDATIONS : 30 MPa  
COLUMNS : 30 MPa  
ROOF SLABS : 30 MPa  
BEAMS : 30 MPa
14. COVER TO STEEL REINFORCEMENT: U.O.N.  
FOUNDATIONS : 50 mm  
COLUMNS : 30 mm  
BEAMS : 30 mm  
COLUMNS : 30 mm
15. ALL SHARP EXPOSED EDGES TO BE CHAMFERED 20 x 20mm.
16. ALL WATERPROOFING TO ARCHITECT'S DETAIL.
17. SAW CUTS ARE TO BE MADE AS SOON AS THE CONCRETE IS FIRM ENOUGH NOT TO BE TORN OR DAMAGED BY THE CUTTING BLADE USUALLY BETWEEN 2 TO 30 DAYS OF SETTING.
18. ALL STEELWORK TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH SANS 5001:2016 SANS 1921-3.
19. ALL STEELWORK TO BE SANS 5002:2005:AFR UNLESS OTHERWISE NOTED.
20. A COMPLETE SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION COMMENCES.
21. ALL WELDS TO BE MINIMUM 6mm CONTINUOUS WELDS TO BE MADE IN ACCORDANCE WITH SANS STANDARDS.
22. ALL BOLTS SHALL BE GRADE 8.8 UNLESS OTHERWISE NOTED.
23. ALL STEELWORK TO BE HOT DIP GALVANISED TO SANS 1200-CH AND SANS 1271 UNLESS OTHERWISE NOTED.



DOUBLE STOREY BLOCK: FOUNDATION REBAR LAYOUT  
SCALE 1:100



BASE REBAR LAYOUT  
1/8th OFF  
SCALE 1:25

SECTION A-A  
1/8th OFF  
SCALE 1:25



PROJECT  
DBSA SCHOOLS FS  
KGAUHELO PRIMARY SCHOOL  
FREE STATE

DRAWING  
DOUBLE STOREY BLOCK (4 CLASSROOMS)  
FOUNDATION REBAR LAYOUT

REVISION	DATE	RESPONSIBLE PERSON
DESIGNED SA	2023-11-18	
DRAWN SA	2023-11-18	
CHECKED MG	2023-11-21	
APPROVED	2023-11-21	MAN OVERSEER (PENG. 2008/04/1)
SCALE	AS SHOWN	SHEET SIZE
PROJECT NUMBER	DRAWING NUMBER	STATUS
		REVISION
		NO

SAB1777/KPS-361-P-00

DRAWING STATUS CODES:		
R - REVISIT	1 - TENDER	C - COMPLETION
D - DRAFT	P - PRELIMINARY	A - AS-BUILT

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[illegible]

## Annexure G

DRAWINGS & REPORTS

# LABOUR STATS TEMPLATE

(Minimum Info Required)

DEVELOPMENT BANK OF SOUTHERN AFRICA											
PSP/Consultant								School Name			
Contractor								Project Start Date			
Month			From : 01 April 2019 to 31 March 2020								
Record of Labour (From Start of Project to Current Month)											
No.	NAME	SURNAME	ID Number (Mandatory Field)	Male/ Female	Youth? Y/N	Disabled? Y/ N	Start Date	Finish Date	No of Days Worked for the Period	No of Hours Worked the Period	No of Hours Worked to Date
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											

Certified Correct and accurate by authorized representative of Contractor.

**NB: Please Insert Company Stamp below**

Name:.....

Signature: .....

Date : .....

# Training Stats Template

(Minimum Information required)

## **Training Stats Template**

<b>Category of training</b>	<b>Types</b>	<b>No. trained</b>	<b>Days trained</b>	<b>Trainees Placed</b>	<b>Comments</b>
1.1 Technical training for implementation	Bricklaying				
	Carpentry				
	Plumbing				
	Fencing				
	Plastering				
	Painting				
	House Building				
	Handyman				
	Electrical				
1.2 Institutional training for OMM (SGB's)					
1.3 Technical training for OMM (DoE)					
1.4 Institutional training for implementation					

# SMME STATS TEMPLATE

(Minimum Info Required)



[illegible]

[illegible]

[illegible]

WEEKLY CONTRACTORS REPORTING TEMPLATE

(Minimum Info Required)

**PROJECT NAME**

Weekly Construction Report No.03

01 April 2015

Prepared by: Name Surname (Construction Manager)

**CONSTRUCTION HEALTH CHART**

Safety	All works performed safely		Minor safety issues present		Major safety issues on project	
	X					
Work Ready Status	All actions on target		Minor elements behind		Major items behind	
			X			
Resources	All resources available		Some role issues evident		Delays from resourcing issues	
					X	
Zero Harm this week	M. Hours Worked:	215 hrs	Zero Harm Hours:	215 hrs	% Zero Harm:	100 %

**PROGRESS UPDATE**

<b>SAFETY</b>							
<ul style="list-style-type: none"> <li>Key Issues . . .</li> <li>Draft Safety Plan to be reviewed and implemented</li> <li>Training . . .</li> <li>XX people inducted for the week</li> </ul>							
<b>RESOURCES</b>							
Staff on site	Xx No	Skilled Labour	Xx No	Unskilled Labour	Xx No	Subcontractors	Xx No
Major Plant	Xx No	XX Plant	Xx No	Xx Plant	Xx No	Xx Plant	Xx No
<ul style="list-style-type: none"> <li>Requirements . . .</li> <li>Issues . . .</li> </ul>							
<b>GENERAL</b>							
<ul style="list-style-type: none"> <li>Procurement - agreement expected by . . .</li> <li>Project XXXX date set for . . .</li> <li>Staff mobilisation – refer attached histogram</li> </ul>							
<ul style="list-style-type: none"> <li><b>GEOTECH INVESTIGATIONS</b> <ul style="list-style-type: none"> <li>All nightshift works now completed.</li> <li>Geotech investigations on target for completing late Feb 15</li> <li>Additional testing associated with XXXX has commenced, with planned completion late Feb 15</li> </ul> </li> </ul>							
<ul style="list-style-type: none"> <li><b>BRIDGE INSPECTIONS</b> <ul style="list-style-type: none"> <li>All works completed</li> <li>Test results confirm design assumptions</li> </ul> </li> </ul>							
<b>AREA XXX - Zone 1</b>							
<ul style="list-style-type: none"> <li><b>ZONE 1</b> <ul style="list-style-type: none"> <li>Preliminary planning commenced for Zone 1</li> <li>Interfacing with Geotech designers continues</li> <li>Construction programme continues to be developed</li> <li>Procurement strategy for drains required</li> </ul> </li> </ul>							
<b>AREA XXX - Zones 2 and 3</b>							
<ul style="list-style-type: none"> <li><b>SITE COMPOUND</b> <ul style="list-style-type: none"> <li>Scope agreed – works will commence next week</li> <li>Design plans developed for access, site works and compound offices to be confirmed</li> <li>Issue with SW drainage to be resolved</li> <li>Procurement of buildings and IT critical</li> <li>Planning to establish site compound at Yard X.</li> </ul> </li> </ul>							