CIVIL Engineering Department

centre of architecture technology

KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

POLITEKNIK MALAYSIA
PORT DICKSON

KAWANS
KAJIAN ALAM WARISAN NEGERI SEMBILAN

MEASURED DRAWING

SYARIKAT AIR NEGERI SEMBILAN (SAINS)

BANDAR SEREMBAN, NEGERI SEMBILAN

1920s

MEASURED DRAWING

SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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PREFACE

The Measured Drawing Research for the SAINS Building in Seremban, Negeri Sembilan, is an in-depth study of one of the significant colonial-era buildings that form part of Seremban's rich architectural heritage. Formerly used as a fire station, this historical building has stood for nearly 105 years — a lasting symbol of resilience and timeless design.

Despite the passage of time, the SAINS Building remains remarkably well-preserved, reflecting the strength and craftsmanship of early colonial construction. Its architectural form combines elements of European colonial design with local influences, evident in its grand arches, high ceilings, and finely detailed ornamentation. These features not only showcase the aesthetic values of the colonial period but also represent the adaptation of Western architectural principles to the tropical Malaysian context.

This measured drawing project was carried out to document and analyse the architectural and historical significance of the building. It aims to serve as a valuable reference for heritage studies, fostering awareness of the importance of preserving historical architecture for future generations. Through this work, we hope to contribute to the appreciation and conservation of Malaysia's built heritage, ensuring that the legacy of the SAINS Building continues to inspire both present and future observers.

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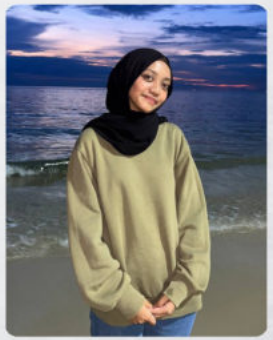

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CERTIFICATION AND SIGNATURE

This is to certify and confirm that all documentations regarding the building study of Syarikat Air Negeri Sembilan has been prepared by the our team members for the course DCA50233 Measured Drawing. This is to fulfill the requirements for Semester 5 at Politeknik Port Dickson, Port Dickson, Negeri Sembilan Darul Khusus.

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ACKNOWLEDGEMENT

Alhamdulillah, all praise is due to Allah. With His mercy and blessings, as well as with our hard work, our team has successfully completed the assignment for the DCA50233 Measured Drawing course. In general, this course not only provides technical skills but also valuable knowledge about architecture.

Our deepest appreciation also goes to the 2024/2025 session lecturers, Puan Siti Fatimah Tuzzahrah Binti HJ. Abdul Latif, Puan Nur Athirah Binti Ibrahim, and Ts. Puan Fahanim Binti Abdul Rashid who guided us, provided full support, and provided invaluable guidance throughout the learning process of this course. We would also want to express our deepest appreciation to Puan Seroja, the building manager for taking the time to provide explanations and cooperation from the beginning of the building survey to the measurement and research phase of the Science Building.

We also went to several places such as Arkib Negara, Balai Bomba Klang, and then Perpustakaan Negeri Sembilan to gather more information about this building.

Finally, our endless gratitude to all parties who have contributed to the success and completion of this study. Throughout this research, we have gained valuable experience, and we hope that the knowledge and lessons learned will be beneficial for our future endeavors.

C O N T E N T

1.0

INTRODUCTION

Figure 1.1.1 SAINS building

Figure 1.1.2 Side facade SAINS building

1.1 INTRODUCTION

The SAINS building in Seremban, Negeri Sembilan is a historical colonial-era monument that holds significant architectural and heritage value. Originally built as a fire station, this building has stood the test of time for over 105 years, showcasing the durability and craftsmanship of past construction techniques. Despite its antiquity, the building remains structurally intact, reflecting the strength and endurance of its design.

This measured drawing study aims to examine, analyze and document the SAINS building's architectural elements, historical background, and structural integrity. Through detailed measurements and research, this study contributes to the preservation of historical architecture and raises awareness of heritage conservation efforts. The findings from this study can serve as a reference for future restoration, adaptive reuse, and educational efforts.

1.2 OBJECTIVES

- To Document Architectural Features – Accurately record the architectural details, structural elements, and spatial layout of the SAINS Building through measured drawings.
- To Preserve Historical Significance – Provide a detailed reference for heritage conservation by documenting the building's historical design, cultural values, materials, and construction techniques.
- To Analyze Structural Integrity – Assess the condition of the building and identify any structural or material deterioration for potential restoration or preservation efforts.
- To Contribute to Heritage Conservation – Support conservation initiatives by providing comprehensive architectural documentation that can be use in the future restoration, adaptive reuse, or maintenance planning.
- To Educate and Raise Awareness – Increase public awareness and appreciation of colonial heritage buildings in Seremban by making the documentation available for research, education, and heritage studies.

Figure 1.3.1 SAINS building

1.3 PROCEDURE

At the start of the project, information regarding the SAINS building, Seremban is gathered, analyzed and recorded in a set of comprehensive report. Every group member contributed significantly in the collection of data in terms of history, building background and architectural style of the building. Various methods are used to obtain additional information related to the SAINS building including searching for information and materials in libraries and museums in Seremban.

This is a procedure for conducting measured drawing research.

- Information Gathering and Data Collection
- Research and Analysis
- Preparation of Initial Sketches
- Measurement and Drawing
- Review and Verification
- Finale of Measured Drawing
- Compilation and Documentation

1.4 METHODOLOGY

The survey of the SAINS Building, Seremban follows a structured methodology to ensure accurate documentation and analysis of the architectural features and history of the building.

PRELIMINARY RESEARCH

⮟

SITE VISIT & OBSERVATION

⮟

MEASUREMENT DATA & DATA COLLECTION

⮟

DOCUMENTATION & DRAWING PROCESS

⮟

INTERPRETATION & ANALYSIS

⮟

REPORT WRITING & COMPILATION

⮟

FINAL PRESENTATION & SUBMISSION

Figure 1.4.1 Measuring building

Figure 1.4.2 Collection Data

Figure 1.4.3 Rubbing

Figure 1.4.4 Sketching

1.4.1 METHODOLOGY

1. Preliminary Research - Research the background on the history, function, and architectural significance of the building.

2. Site Visit & Observation - Identify key architectural characteristics and structural elements for documentation.

3. Measurement & Data Collection - Use measuring tools such as measuring tape, camera, butter paper, charcoal, and laser distance meter. Take photographs from various perspectives to capture textures, materials, and structural elements.

4. Documentation & Drawing Process - Transfer all recorded sketches and measurements into technical drawings using AutoCAD or SketchUp to produce floor plans, elevations, sections, and detailed drawings.

5. Interpretation & Analysis - Examine the structure and condition of the building based on the data collected.

6. Report Writing & Compilation - Analyse and compile all data, drawings into a report.

7. Final Presentation - Present the research findings, measured drawings and report that represent the building study based on actual on-site measurement for documentation and conservation.

1.5 SELECTION OF STUDY BUILDING

The selection of buildings for this study was done by our group. We have identified several colonial buildings that are more than one hundred of years old for research and data collection.

In addition, we considered numerous factors when selecting the building. Among the factors are the architectural building features, building structures, and building elements such as walls, pillars, windows and doors. In addition, we took into account the history of the building.

Figure 1.5.1 View of SAINS building

1.6 FIELDWORK OF MEASURED DRAWING CAMP

The site work was carried out on the site during measured drawing camp for five days, starting from 3rd to 7th February 2025. Our group leader has assigned tasks to the group members in order to facilitate and carry out the work on site.

MEASURING

Figure 1.6.1 Measuring work

RUBBING & TRACING

Figure 1.6.2 Rubbing and tracing work

PHOTO AND VIDEO DOCUMENTARY

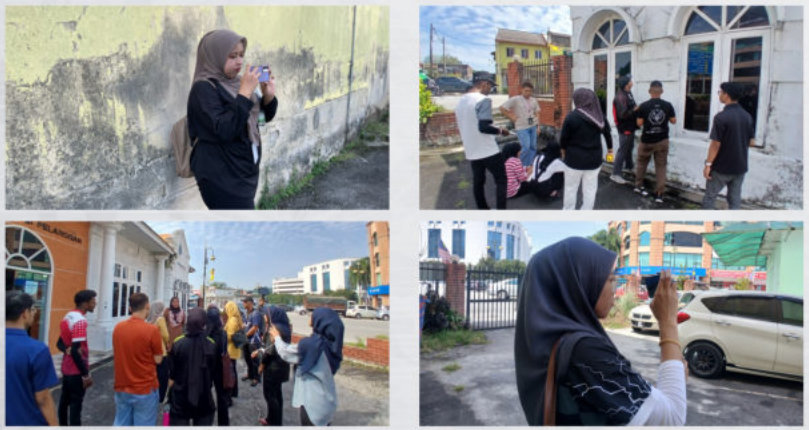

Figure 1.6.3 Documenting video and photos work

SKETCHING

Figure 1.6.4 Sketching work


HIDMAT PELANGGAN


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SAINS BUILDING

2.0

BUILDING BACKGROUND & HISTORY


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EDGE RESIDENCE

2.1 HISTORY OF SEREMBAN, NEGERI SEMBILAN

Seremban developed as the administrative centre of Negeri Sembilan during British rule. The headquarters of the state government and British administrative offices were located in Seremban. The city became a major hub for the development of infrastructure and public services.

During World War II, Malaya fell into Japanese hands in 1941. Seremban and the rest of Negeri Sembilan served as administrative and movement centre during the Japanese occupation of Malaya. After the end of World War II, the British returned to Malaya.

After the war and through a process of negotiation, Malaysia finally achieved independence in 1957. The British officially left Malaya, and Seremban, along with the other states, became part of the newly independent nation of Malaysia.

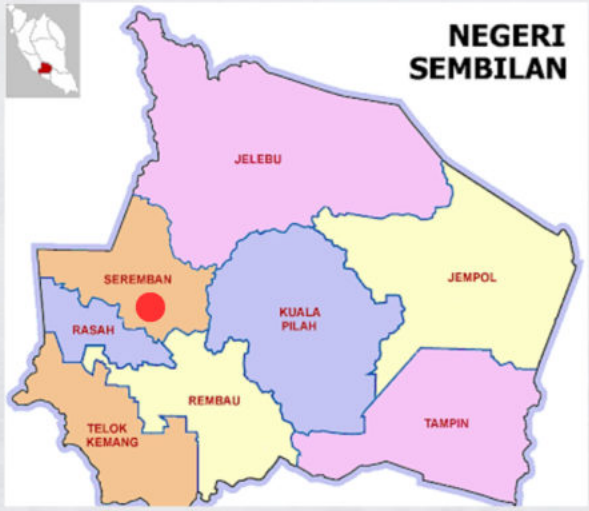

Figure 2.1.1 Map of Negeri Sembilan

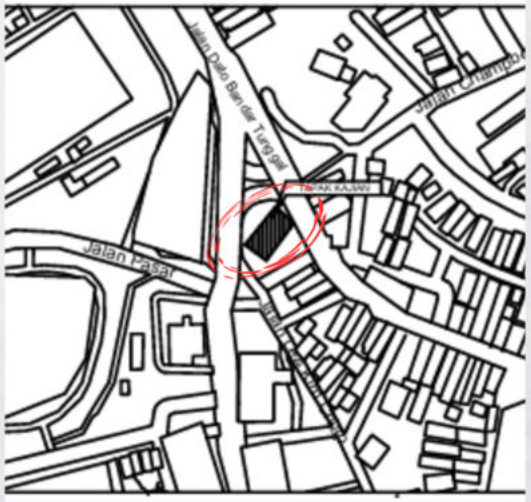

Figure 2.1.2 Location plan of Syarikat Air Negeri Sembilan, Seremban.

2.2 HISTORY & BACKGROUND OF THE BUILDING

The SAINS building was originally a fire station constructed during the colonial era. It was completed and approved by the district officer in 1928. The building was constructed to address contemporary issues while adapting to the changing times. After undergoing renovations in 1994 to become the headquarters for SAINS (Science and Research), this study examines the architectural features of the building, which reflect British colonial influences. These features include a sturdy structure, large windows, sloped roofs, and classical elements such as columns and pillars. The building serves as an example of how architectural heritage can be preserved and repurposed for modern commercial and administrative use.

Figure 2.2.1 Main facade of SAINS Seremban, 310A, Jalan Dato Bandar Tunggal, Bandar 70000, Seremban, Negeri Sembilan

2.3 COMPARISON OF EXISTING SIMILAR BUILDING

Figure 2.3.1 Klang fire station

Architectural:

- Built in the early 20th century (around the 1930s).
- The architectural style of the Klang Fire Station is a colonial-era design that blends elements of British classical architecture, especially with neoclassical influences.
- Features such as symmetrical facades, large windows, and arched doorways are prominent.

Construction Materials:

- Mostly brick and plaster for durability. This is typical of colonial-era structures to withstand the tropical climate while maintaining a strong formal appearance.
- These materials also provide thermal insulation, helping to keep the building cool in Malaysia's hot and humid weather.

Preservation and Usage

- The Klang Fire Station is still an active fire station, which means it has undergone renovations and upgrades to meet modern fire service needs. The preservation of the building's colonial features, however, has been maintained.
- The building is a heritage site, but due to its ongoing use, it remains less altered in terms of interior space.

Figure 2.3.2 Rear facade of SAINS Seremban building

Architectural:

- Built in early 20th century (around the 1920s).
- Like the Klang Fire Station, this building also adopts a colonial architectural style, although it is more simple, reflecting Art Deco influences evident in other part of Seremban's urban development.
- The symmetry and rectangular windows are key characteristics, however the façade less elaborate compared to the Klang Fire Station.

Construction Materials:

- The SAINS building also used brick and plaster as the main construction materials.
- Some decorative stonework or detailing in the Seremban station might be simpler and more functional compared to the more refined finishes in the Klang station.

Preservation and Usage

- The old fire station in Seremban is no longer in use as a fire station, but it has been preserved as a historical building. Today, it stands as a heritage site, and its function has been repurposed, known as Bangunan SAINS, Seremban.
- Despite no longer being an active station, the structure remains strongly intact with its historical elements well-preserved.

COMPARISON OLD & CURRENT BUILDING LAYOUT

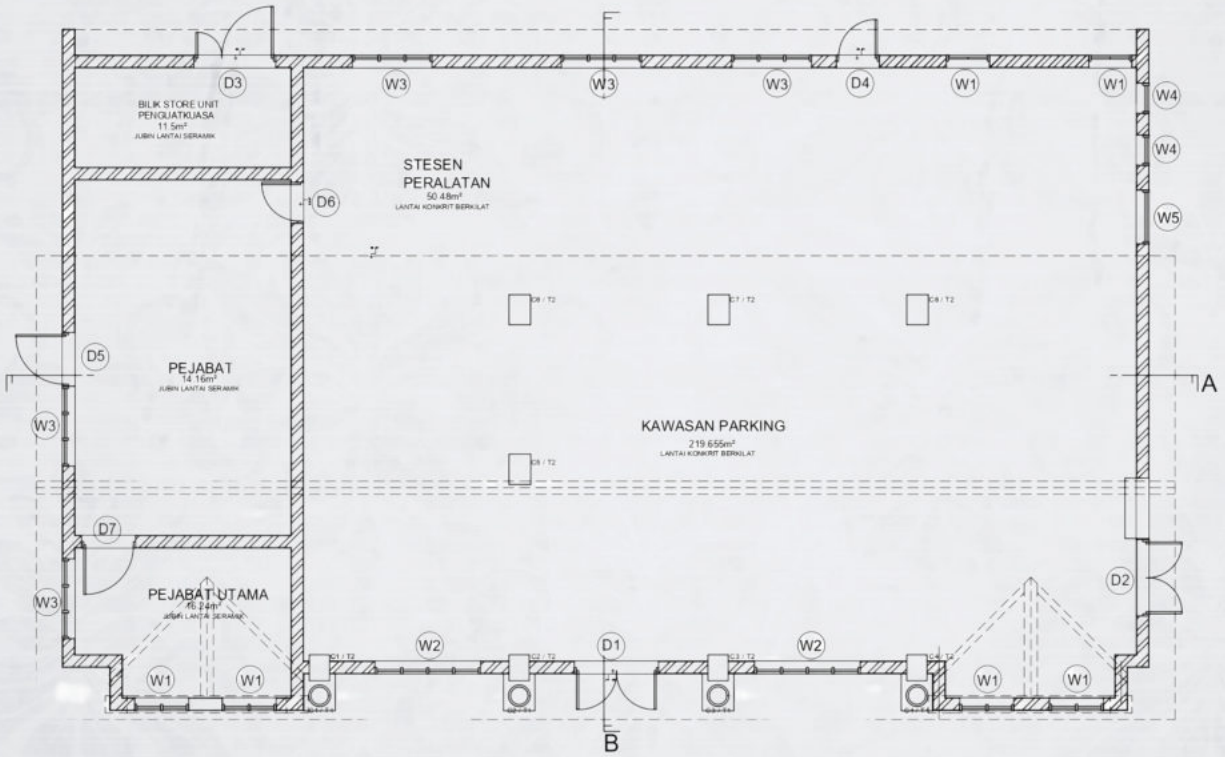

Figure 2.3.3 Old floor plan (before renovation)

OLD:

- Built in early 20th century (around the 1920s) as a Fire Station, Seremban Negeri Sembilan.
- The existing room is office, main office parking, equipment storage & store unit.
- Material of floor old building is polish concrete tiles.

COMPARISON OLD & CURRENT BUILDING LAYOUT

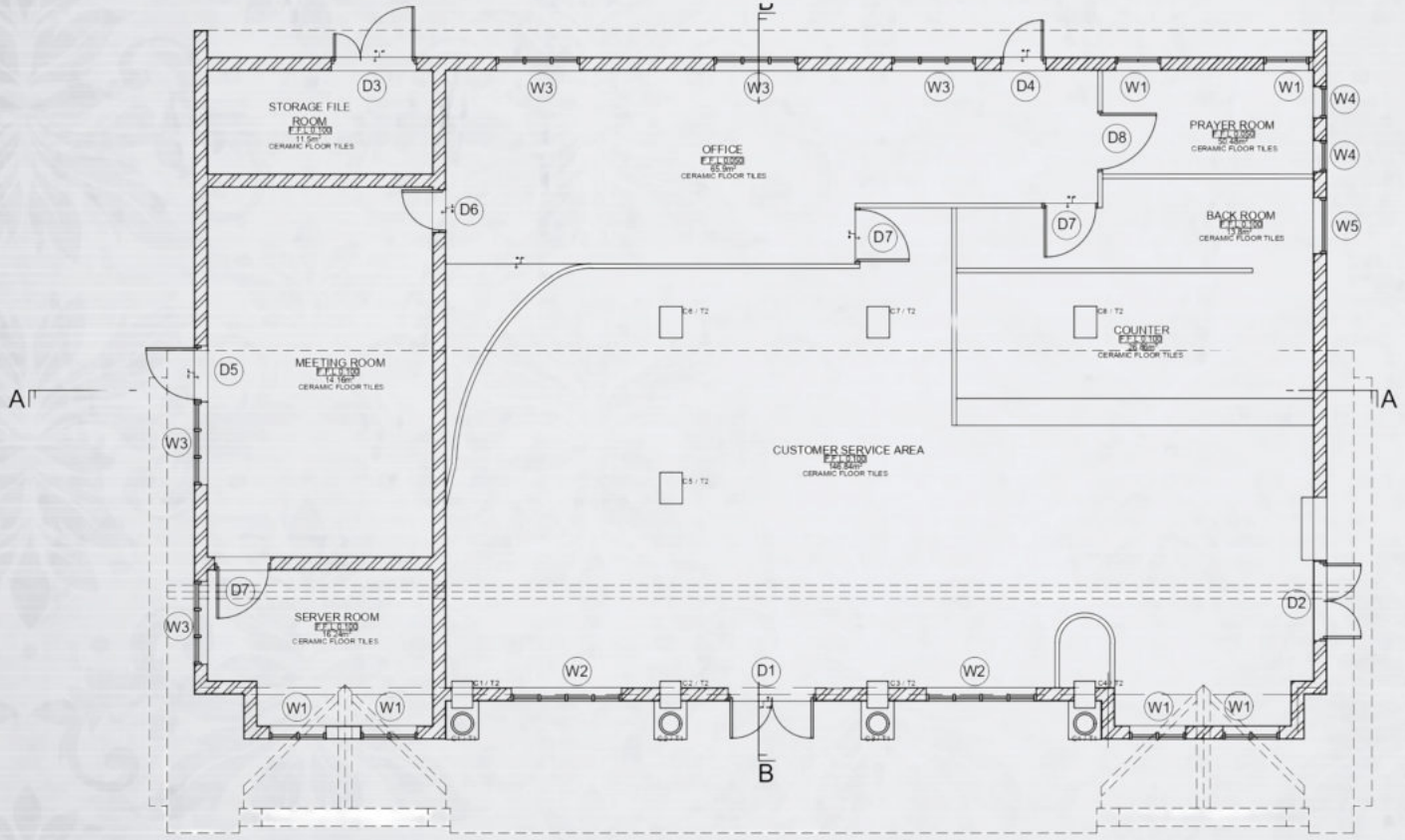

Figure 2.3.3 Current floor plan (after renovation)

LATEST:

- Suruhan Air Negeri Sembilan (SAINS) take over this building at 1994.
- They add on partition walls at right side in the building to create additional rooms such as counter, back room, prayer room & office.
- Floor material of the current building is mosaic & ceramic tiles.(after renovation)


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3.0

BUILDING ANALYSIS

BUILDING CHARACTERISTICS

Figure 3.1.1 Strong structure

STRONG STRUCTURE

The building was constructed using durable and sturdy materials such as brick and concrete, which are typical of colonial architecture to ensure longevity and safety. This building was built with strong facades features a symmetrical design, geometric shapes, and may include elements like columns, porticos, square or rectangular profiles.

Figure 3.1.2 Large window

LARGE WINDOWS

This building features with large windows with arched casement windows and multi-paned rectangular windows. A significant feature of British colonial architecture, large windows allow ample natural light to enter the building, creating a bright and open atmosphere.

Figure 3.1.3 Sloped roof

SLOPED ROOF

The building had a sloping roof, a common feature in British colonial design, which not only enhances aesthetics but also functions as a protection and efficiently diverting rainwater.

Figure 3.1.4 Classic element such as columns and pillars

CLASSIC ELEMENTS SUCH AS COLUMNS AND PILLARS

Large columns and pillars are classic architectural features frequently used in colonial buildings to provide a grand and elegant appearance, symbolizing strength and stability.

Figure 3.1.4 Practical and functional design

PRACTICAL AND FUNCTIONAL DESIGN

Originally built as a fire station, the building was designed to meet practical needs and function efficiently during emergencies. After renovations, its design remains practical for administrative and office use.

Figure 3.1.5 Preservation of colonial architectural heritage

PRESERVATION OF COLONIAL

Colonial architectural elements can be retained while serving modern purposes, making it a prime example of heritage architecture for contemporary commercial and administrative functions.

Figure 3.1.4 Meeting room

Figure 3.1.4 Customer service

BUILDING CONSTRUCTION & MATERIALS

3.2 BUILDING CONSTRUCTION & MATERIALS

The construction and materials of the SAINS building reflects a blend of colonial British architectural style and modern adaptations

1. Flooring:

- The floors were originally composed of polished cement or terrazzo, which were common flooring materials in colonial buildings due to their durability and simplicity of care. Nevertheless, ceramic tiles were utilised in part of the current flooring for aesthetic reasons.

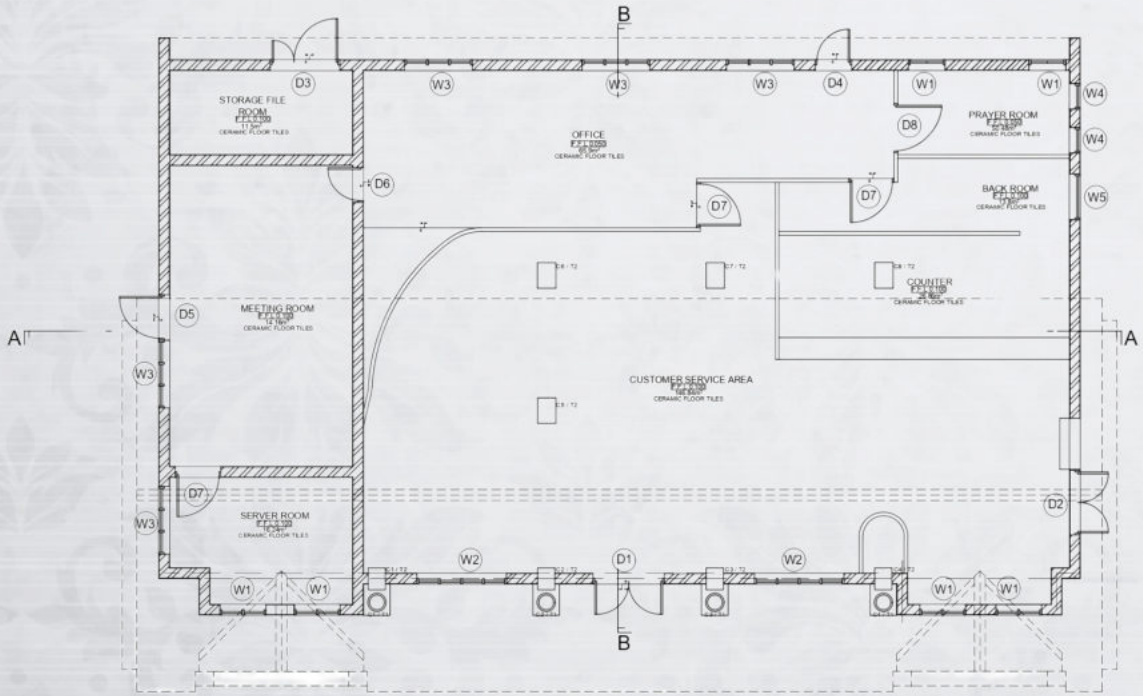


Figure 3.2.1 Floor Plan

Figure 3.2.2 Flooring

BUILDING CONSTRUCTION & MATERIALS

The construction and materials of the SAINS building reflects a blend of colonial British architectural style and modern adaptations

2. Columns and Pillars:

- The building features classical columns and pillars at the entrance or supporting certain parts of the structure. It's a 4400mm (H) x R300mm Tuscan column. These elements were commonly used in colonial architecture to give a grand and stately appearance. The columns were made of reinforced concrete or brick, depending on their location and function.

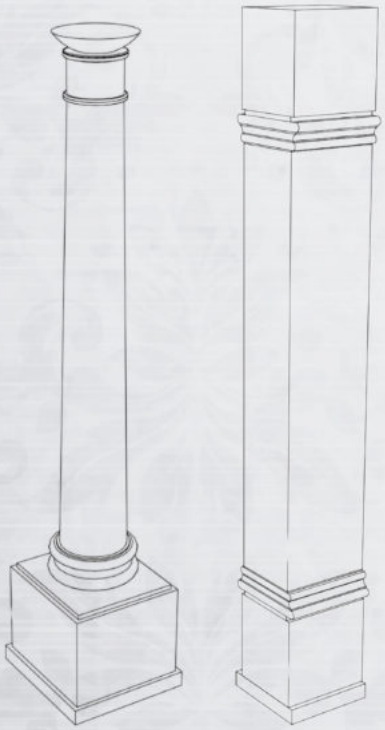


Figure 3.2.3 Columns and pillars

BUILDING CONSTRUCTION & MATERIALS

The construction and materials of the Sains building reflects a blend of colonial British architectural style and modern adaptations

3. Roof

- **Metal Roof Deck** - Commonly used for roofing materials because of its durability and thermal insulation properties.
- **Timber Structures** - Utilized for roof framing due to the abundance of quality timber during that period.

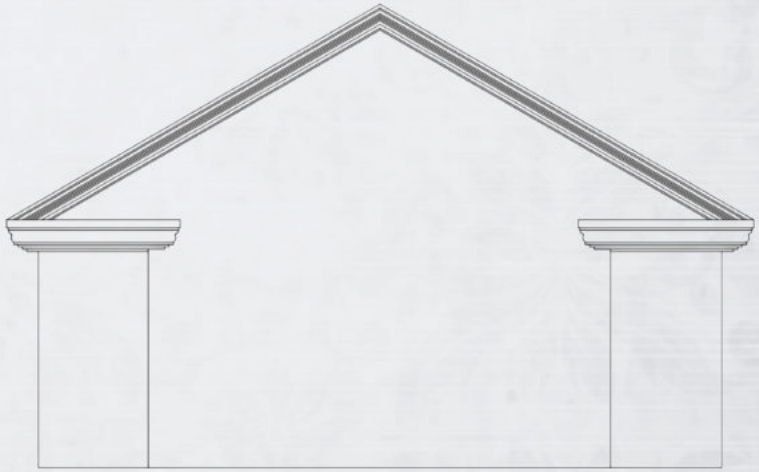


Figure 3.2.5 Roof

BUILDING CONSTRUCTION & MATERIALS

The construction and materials of the Sains building reflects a blend of colonial British architectural style and modern adaptations

4. Wall

- **Load-Bearing Walls -** These walls support the weight of the structure above them, including the floors and roof. They are typically made of materials like brick, concrete, or stone. It's 150MM THK. brick load bearing wall, 15MM plastered on both side and finished with 5MM paint.

Figure 3.2.6 Wall

BUILDING CONSTRUCTIONS & MATERIAL.

The construction and materials of the Bangunan Sains (Science Building) reflect a blend of colonial British architectural style and modern adaptations

5. Door

- **Solid Timber (Kayu Padu)** – Commonly used in colonial buildings for its durability and classic aesthetic.
- **Glass Panels with Wood Frame** – If the building has undergone modernization, some doors may feature glass elements for a contemporary look while maintaining historical integrity.

Figure 3.2.7 Door

BUILDING CONSTRUCTION & MATERIALS

The construction and materials of the Sains building reflects a blend of colonial British architectural style and modern adaptations

6. Window

- **Timber Frames -** Utilized for their durability and aesthetic appeal.
- **Glass Panes -** Incorporated to allow natural light into the building.

Figure 3.2.8 Window

SPACE AND FUNCTION

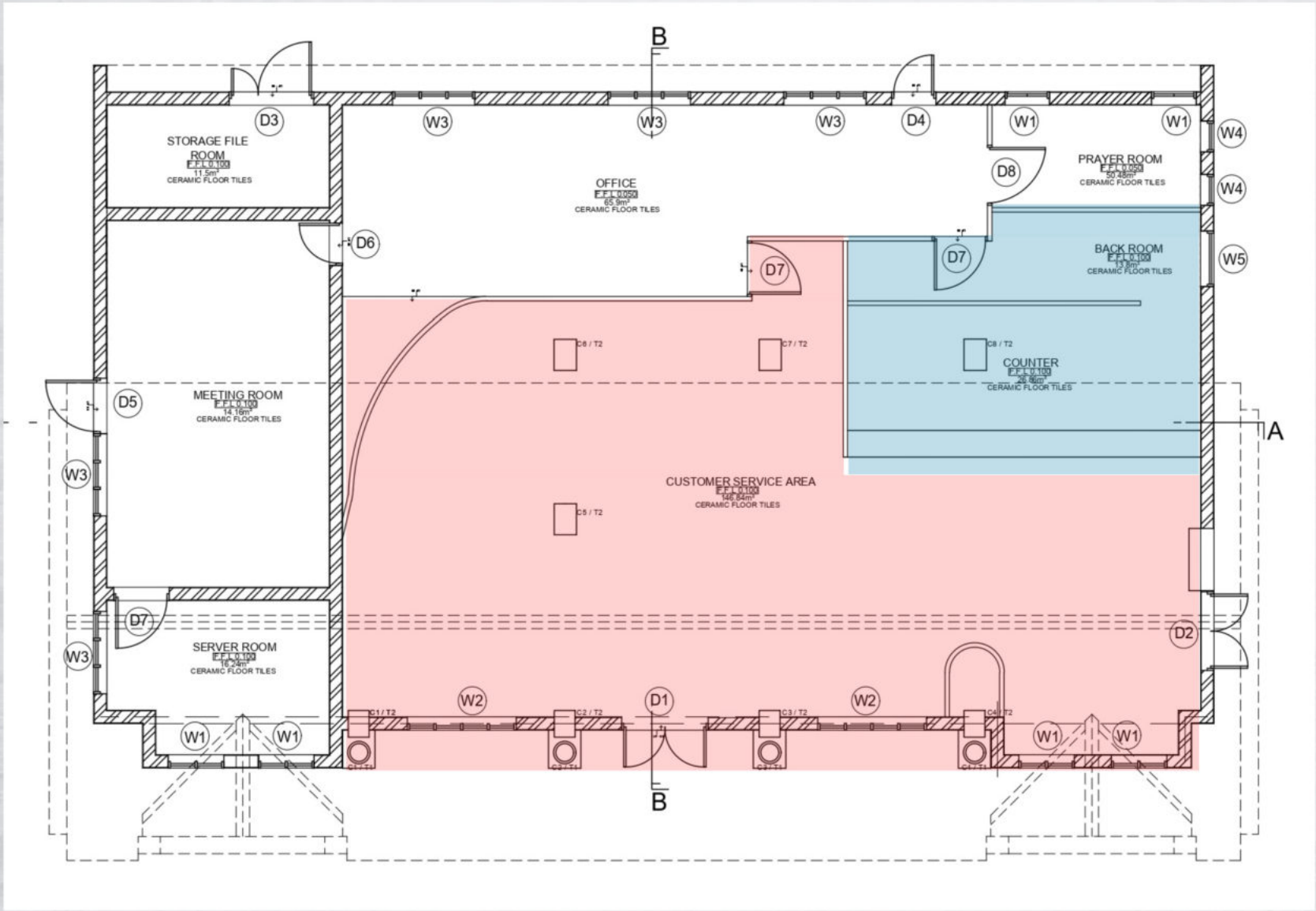
Main Customer Service Area

- Customer Service Counter
  - Handles customer inquiries regarding water bills, supply disruptions, and complaints.
  - Equipped with a queue number system for efficient service.
- Payment Counter
  - Facilitates water bill payments via cash, debit/credit card, or e-wallet.
- Registration & Inquiry Counter
  - Processes new account registrations, ownership transfers, and water meter installations.

Counter and Back Room

- Private Consultation Room
  - For further discussions on complex complaints or billing resolutions.
- Corporate Service Room
  - Provides specialized services for industrial clients and large corporations.

SPACE AND FUNCTION



LEGEND

MAIN CUSTOMER SERVICE AREA

COUNTER AND BACK ROOM

SPACE AND FUNCTION

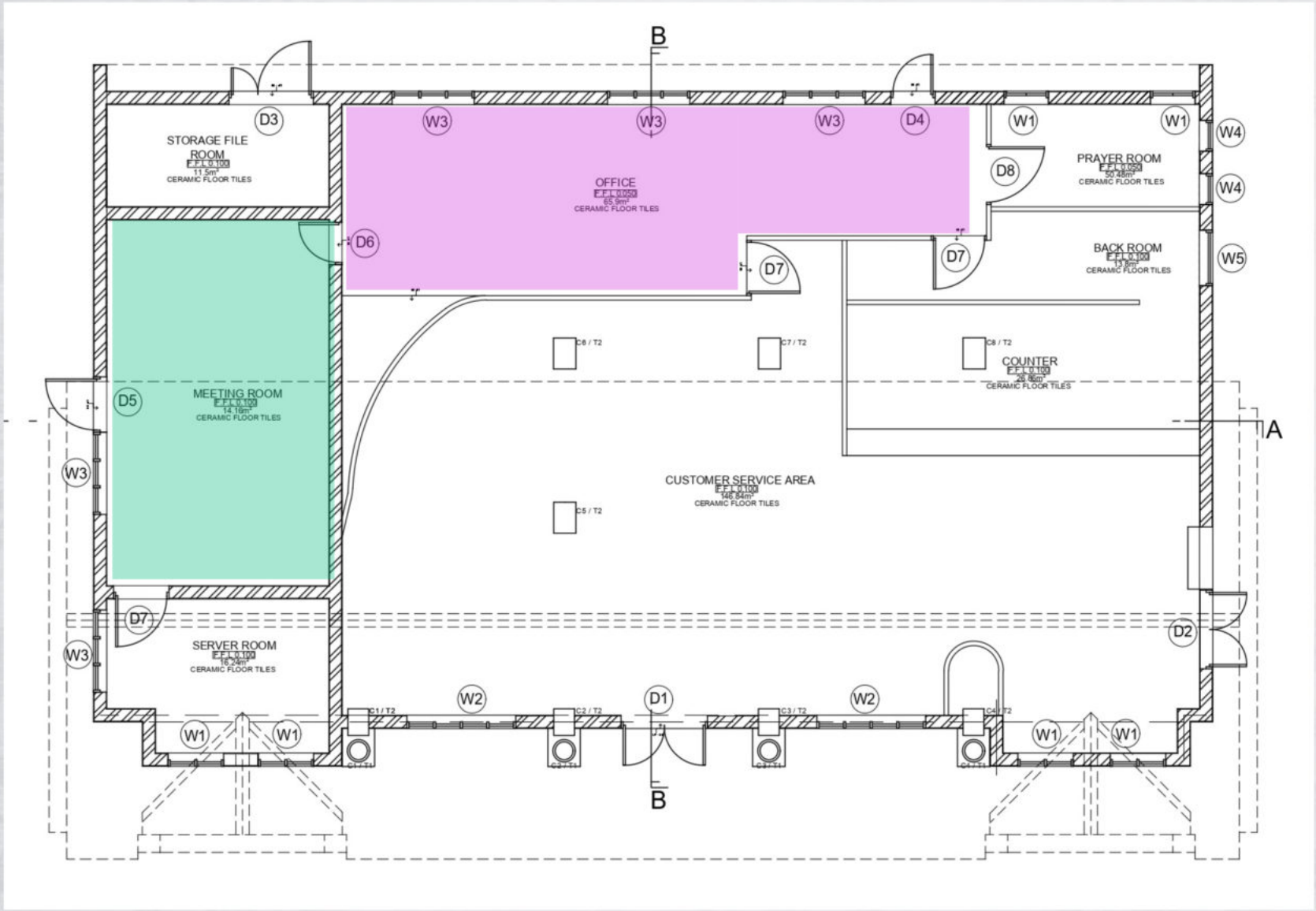
Back Office & Operations Area

- Customer Service Staff Office
  - Workspace for staff handling online and telephone customer service.
- Complaint Management Room
  - For analyzing and resolving customer issues that require further action.
- Data & Monitoring Center
  - Displays real-time water supply status and serves as the complaint control center.

Meeting Room

- Internal Staff Meetings
  - Facilitates discussions among departments on operational matters policies, and services improvements
- Training & Workshop
  - Used for staff training, knowledge-sharing sessions, and skill development programs.
- Virtual & Hybrid Meetings
  - Equipped with video conferencing technology for online meetings with remote participants.

SPACE AND FUNCTION



LEGEND

- MEETING ROOM
- BACK OFFICE & OPERATION AREA

SPACE AND FUNCTION

Storage File

- Document Organization
  – Stores important records, contracts, and customer files.
- Backup & Archiving
  – Preserves historical data and old records for legal compliance.
- Space Optimization
  – Reduces clutter in workspaces by centralizing document storage.

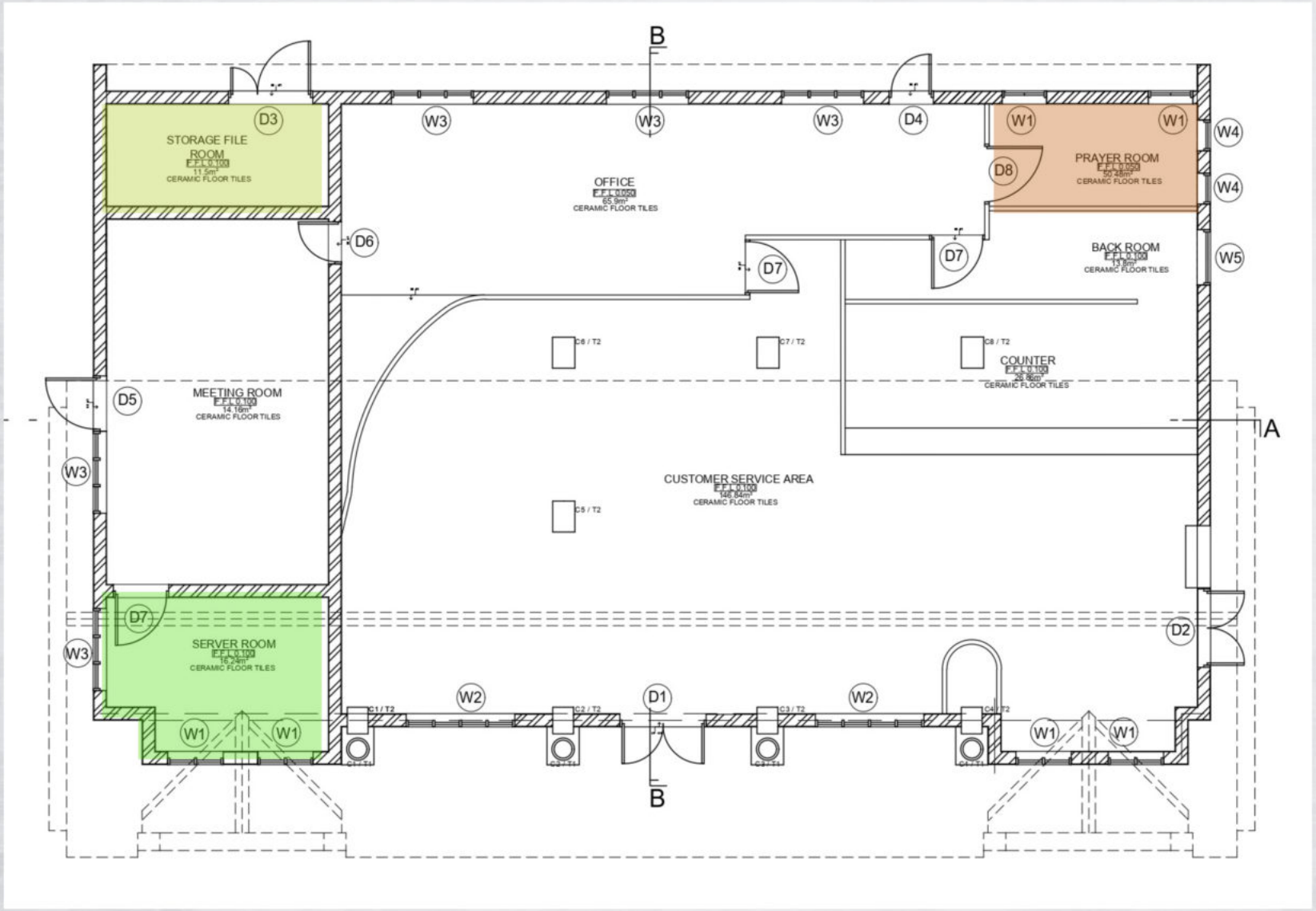
Prayer Room

- Place of Worship
  – Provides a quiet space for employees and to perform prayers.
- Convenience
  – Allows staff to pray without leaving the building, savings time.
- Clean & Peaceful Atmosphere
  – Equipped with prayer mats, ablution facilities, and proper ventilation.

Server Room

- Network Infrastructure
  – Maintains internet, intranet, and communication systems.
- System Security
  – Protects sensitive data from cyber threats and unauthorized access.
- Backup & Recovery
  – Ensures data is backed up and recoverable in case of failures.

SPACE AND FUNCTION



LEGEND

- STORAGE FILE
- SERVER ROOM
- PRAYER ROOM

BUILDING ORNAMENTS AND DECORATIONS

BUILDING ORNAMENT

TUSCAN COLUMN

Characteristics of the Tuscan Column:

1. **Simplicity and Strength:**

- The Tuscan column is characterized by its simplified design, which lacks the ornate decorations found in other classical orders (such as the Corinthian or Ionic columns). It is very straightforward and robust, typically unadorned except for a simple base and capital.
- The shaft of the Tuscan column is smooth (without fluting), giving it a plain and sturdy appearance.

2. **Proportions:**

- Tuscan columns are typically shorter and thicker than those from other orders, contributing to their appearance of strength and solidity.
- The column's height-to-diameter ratio is generally lower, making it more compact and heavy.

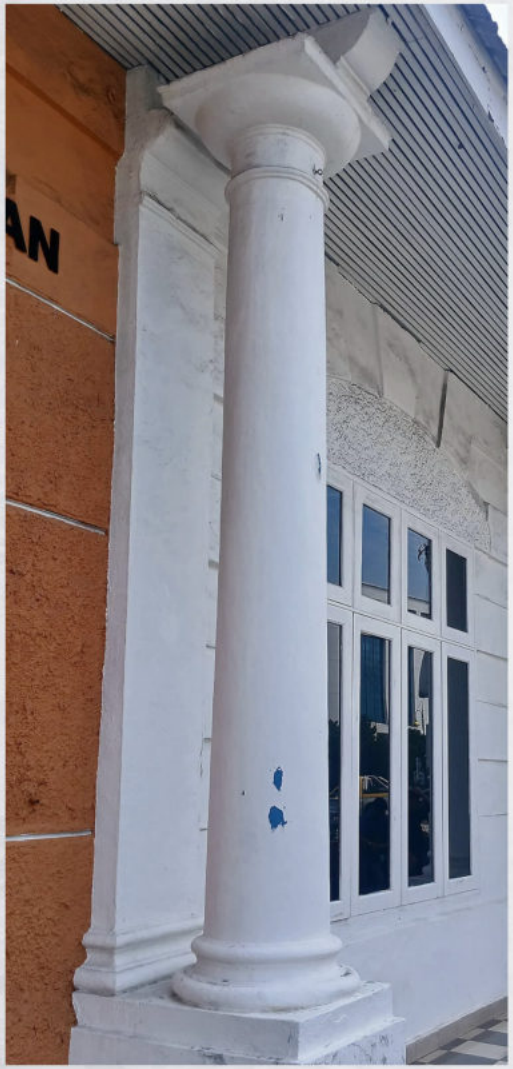
3. **Materials:**

- Tuscan columns in colonial buildings were commonly made of stone, brick, or wood, depending on the available materials in the region. In more elaborate buildings, they were often made of marble or limestone.
- Functionality and Aesthetic: Tuscan columns were used as both structural supports (to hold up porticos, balconies, and other parts of buildings) and decorative features. They often appeared in rows along porticos, providing a sense of rhythm and proportion to the building's exterior.
- Colonial Influence: The simplicity of the Tuscan column made it ideal for colonial buildings because it could be easily adapted to different climates and materials, and it was practical in terms of construction. The British and other colonial powers often used it in buildings intended to convey power, order, and permanence.

3.3 BUILDING ORNAMENT

TUSCAN COLUMN

Places of Tuscan Column at front elevation SAINS building.



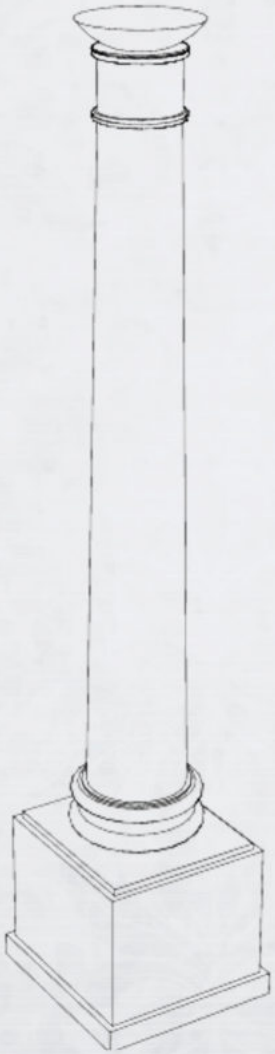


Figure 3.3.1 Tuscan Column

BUILDING ORNAMENT

Open Pediments built at front elevation SAINS building.

1. **Triangular Shape:**

- The most basic characteristic of a pediment is its triangular shape. It is usually placed above a doorway or window or over a group of columns to emphasize a sense of entrance or centrality in a building's design.

2. **"Open" Design:**

- The open space is often designed as a decorative feature, sometimes filled with carved ornaments, sculptures, or windows. This open space makes the pediment appear lighter and more decorative than a solid, closed pediment.

3. **Decorative Motifs:**

- The gap at the top of the open pediment can be filled with reliefs, carvings, or even large windows. Common motifs include floral patterns, scrollwork, or crest designs, often reflecting the grandeur and elegance of the building.

Use of Open Pediments in Colonial Architecture:

1. **Aesthetic Appeal:**

- The open pediment provides a decorative and grand appearance, making it a feature of monumental architecture. It is often found on the façades of important public buildings like government offices, churches, and banks, as well as on the facades of wealthy homes built by colonial elites.

2. **Colonial Influence:**

- During the colonial era, British, Dutch, and Portuguese colonists brought European architectural traditions to the colonies. The open pediment became an important part of this legacy, influenced by neoclassical designs that were popular in Europe during the 18th and 19th centuries.

BUILDING ORNAMENT

Open Pediments built at front elevation SAINS building.

Figure 3.3.2 Open Pendiments

BUILDING DECORATION

OCULUS WINDOW

- In a Colonial-era fire station, the oculus could provide light to the upper floors or large central areas, such as the main hall where firefighting equipment might be stored. These stations were often large, open spaces, and an oculus would help illuminate these areas without the need for multiple traditional windows. It also be part of the fire station's iconic appearance, helping it stand out while still fitting into the neoclassical or Georgian design styles popular at the time. The oculus could be placed in a prominent location, such as above the entrance or in the upper part of the building, giving it a majestic and historic look.

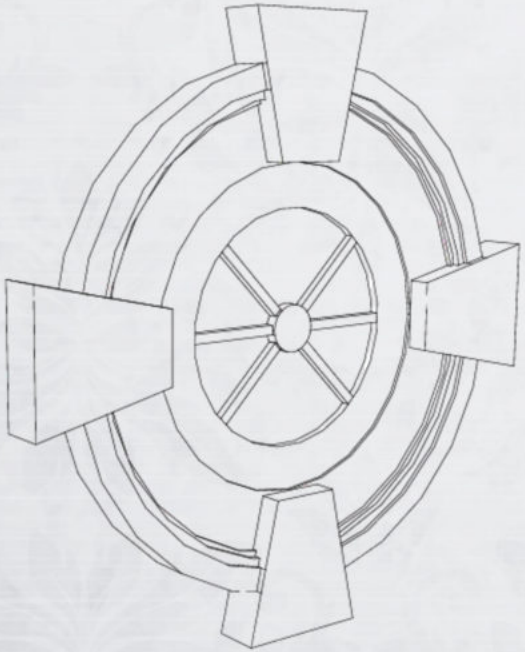


Figure 3.3.3 Oculus Window

BUILDING DECORATION

Figure 3.3.4 Window

- The grill design in the image does not appear to have a specific, widely recognized name. It can be described as a decorative metal window grill with a combination of geometric and stylized elements. The design incorporates horizontal and vertical bars, a half-round arch at the top, and repeating decorative motifs resembling stylized "S" shapes or hearts.

BUILDING DECORATIVE

Half-round sunburst door & window pediment

1. **Colonial Influence:**

- Modillions are derived from classical Greek and Roman architecture, which heavily influenced colonial-era designs in Europe and the Americas. Their presence in colonial buildings reflects a desire to align with the grandeur of classical antiquity.

2. **Materials:**

- In colonial constructions, modillions were typically crafted from wood, stone, or plaster. In later periods, more durable materials like terra cotta, concrete, and metal were used, particularly for larger, public buildings and mansions.

3. **Cultural Significance:**

- Modillions convey a sense of authority and status, often found in buildings such as government offices, mansions, churches, and public institutions. They were used to enhance the perception of the building's importance.

4. **Structural Support:**

- While primarily ornamental, modillions in colonial buildings often served a structural function by supporting the weight of the roof eaves or overhang, helping to distribute weight and prevent stress on the wall.

BUILDING DECORATIVE

Half-round sunburst door & window pediment

Figure 3.3.5 Window

BUILDING DECORATIVE

James Hardie Artisan V-Groove siding

1. **British Colonial Architectural Elements:**

- This building is influenced by British colonial architecture, which often uses a stepped wall design (sinking) to create shadows and texture, making it more visually appealing.

2. **Strengthening the Building Structure:**

- Stone walls can increase the structural strength of a building. The raised layers or patterns are often used to add stability to brick or concrete walls.

3. **Natural Ventilation System:**

- This design may aid in passive ventilation, where the uneven wall surfaces help reduce heat absorption and accelerate air flow, making the interior cooler.

Figure 3.3.6 Building Sains

4.0

CONCLUSION

CONCLUSION

The Negeri Sembilan Water Supply Company (SAINS) building in Seremban is a historical landmark that plays an important role in the architectural heritage and development of Negeri Sembilan. Built in the 1920s as a fire station during the British colonial era, this building reflects British colonial architectural style, featuring a solid structure, elegant symmetry, and classic elements such as pillars and columns. This study finds that the building is an excellent example of how historical buildings can be adapted to meet modern needs without compromising their original aesthetic value and heritage. The combination of traditional elements and modern amenities in both design and function demonstrates a successful effort to balance the preservation of history with functional progress. Ongoing maintenance, strategic planning, and the use of green technologies are essential steps to ensure that this building remains relevant and sustainable for the long term. Overall, this building not only stands as a symbol of history and progress in Negeri Sembilan, but also conveys an important message about how architectural heritage can be preserved and utilized to support community and economic development. The SAINS building in Seremban is proof that heritage conservation can coexist with the needs of the modern world.

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www.sainswater.com

WORKING DRAWING
SYARIKAT AIR NEGERI SEMBILAN

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

ADDRESS OF BUILDING :
310A, JALAN DATO' BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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TS. FAHANIM BINTI ABD RASHID
MADAM NUR ATHIRAH BINTI IBRAHIM

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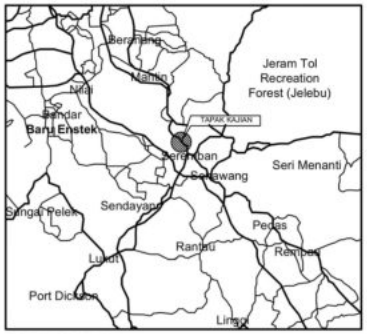
NURUL SYUHADAH SYAZRENA BINTI ABD HADI	F2007
SATHISWARAN A/L ARRIKRISHNAN	F2038
NUR SHAIDATUL HAMIYA BINTI ABDUL HAMID	F2012
FATIN AMALIN SYAZWANI BINTI ZAHARUDDIN	F2031
NURNAJMINA NAJWA BINTI ABDULLAH	F2034
MUHAMMAD ALHAKIMIN BIN ZULKIFLI	F2005
MOHAMAD MUBIN SAFWAN BIN SAMSURI	F2042



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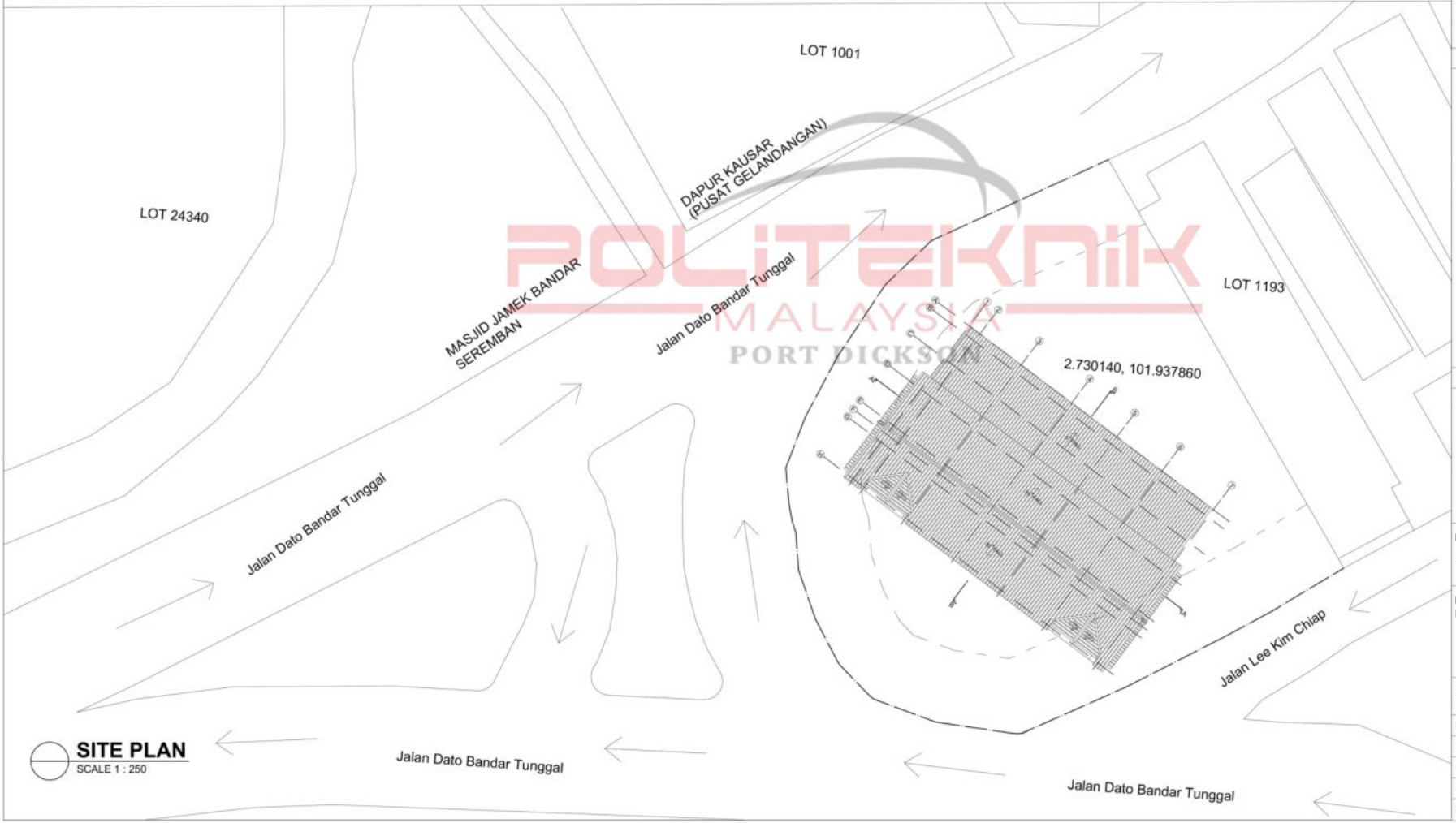
SCALE : NTS

LOCATION PLAN
SCALE : NTS



SITE PLAN
SCALE 1 : 250

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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NUR NAJMINA BINTI ABDULLAH
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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SITE PLAN, KEY PLAN, LOCATION PLAN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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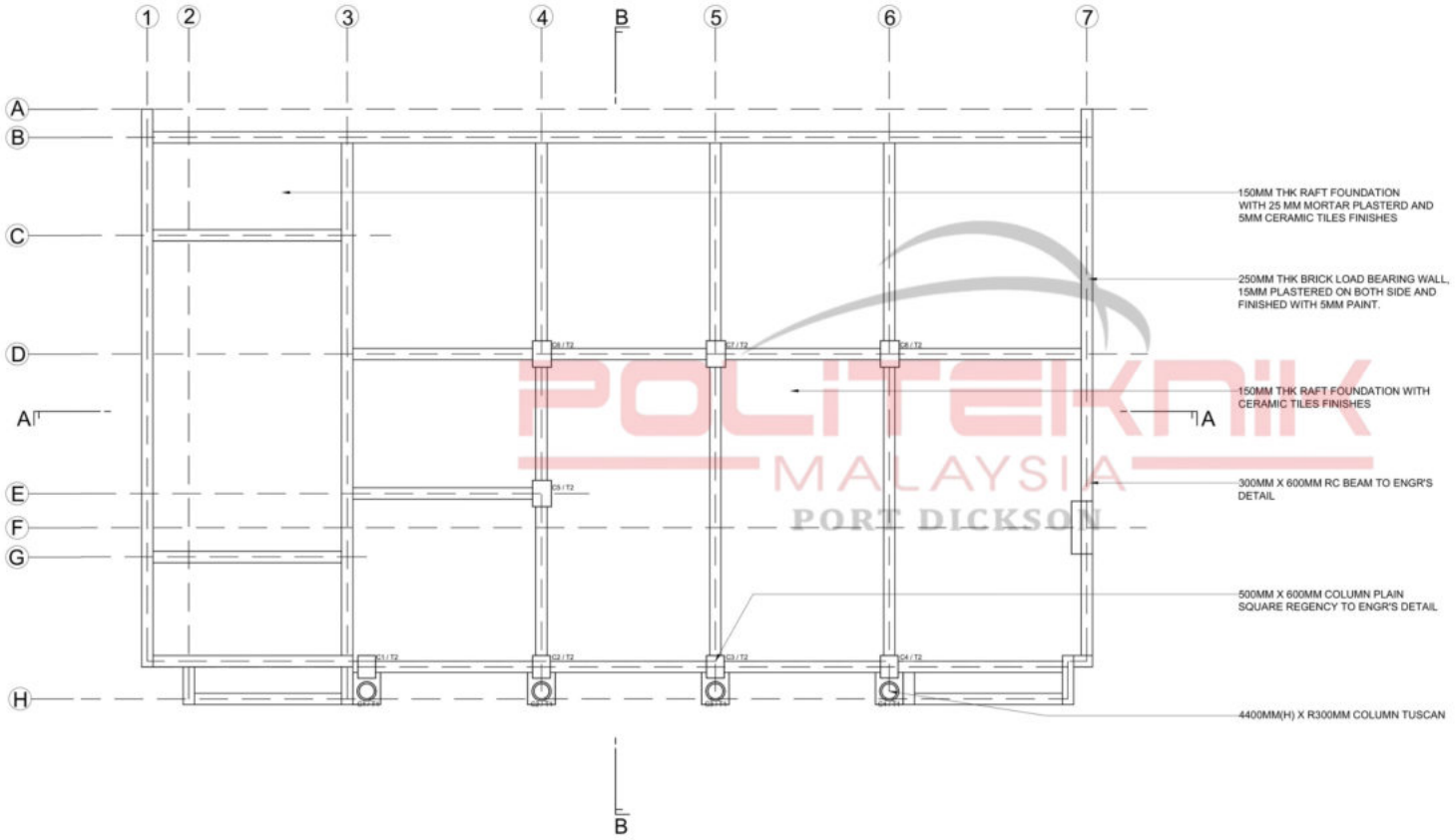

STRUCTURE PLAN

SCALE 1 : 100

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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DRAWING TITLE :

STRUCTURE PLAN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

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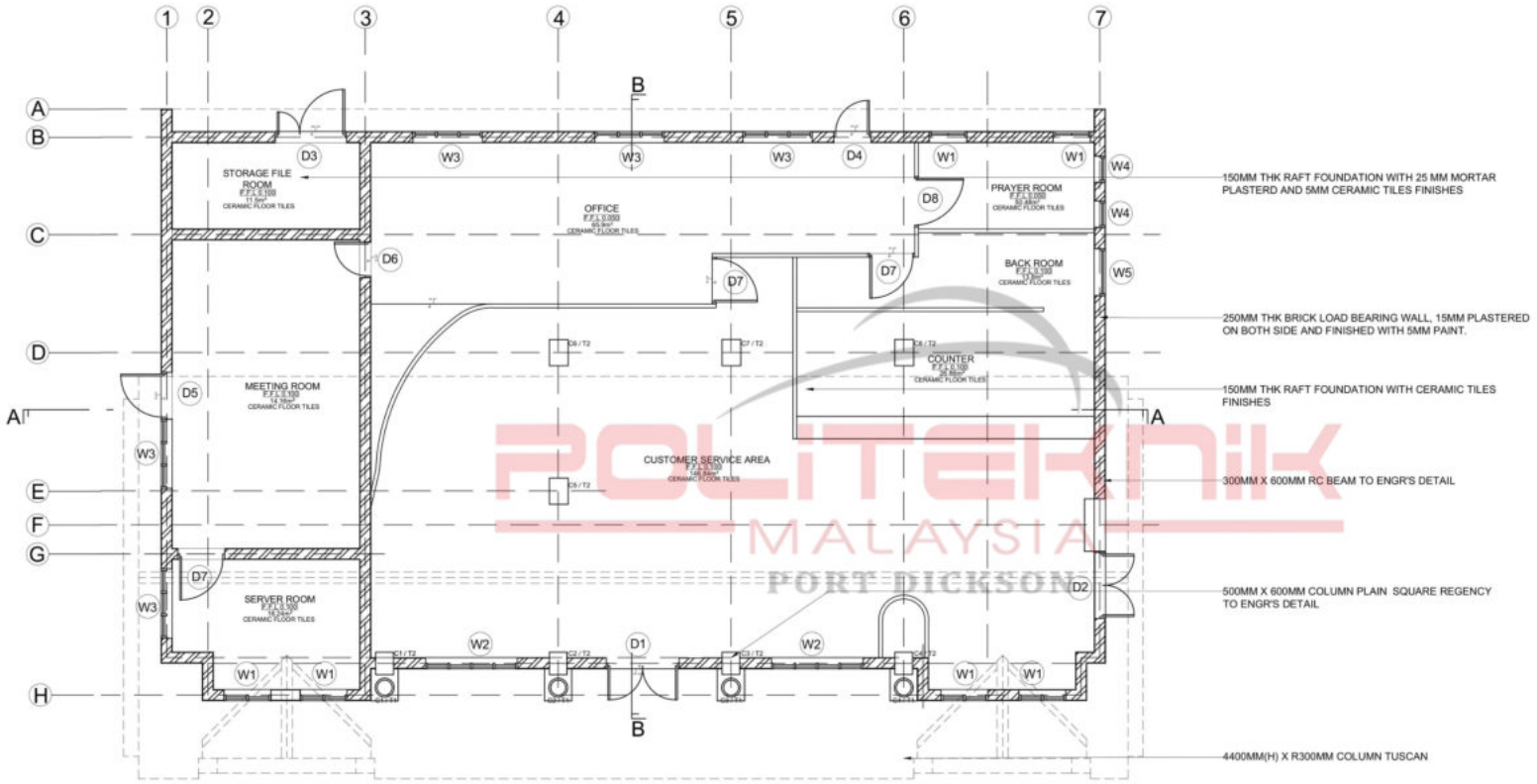

FLOOR PLAN

SCALE 1 : 100

SIZE DOOR

DOOR	SIZE
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D2	2100MM X 1770MM
D3	2100MM X 1900MM
D4	2009MM X 1000MM
D5	2100MM X 1250MM
D6	2100MM X 1250MM
D7	2100MM X 1250MM
D8	2100MM X 1250MM

SIZE WINDOW

WINDOW	SIZE
W1	2273MM X 1200MM
W2	2400MM X 2340MM
W3	2237MM X 1800MM
W4	R351
W5	1850MM X 1600MM
W6	R550

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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DRAWING TITLE :

FLOOR PLAN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

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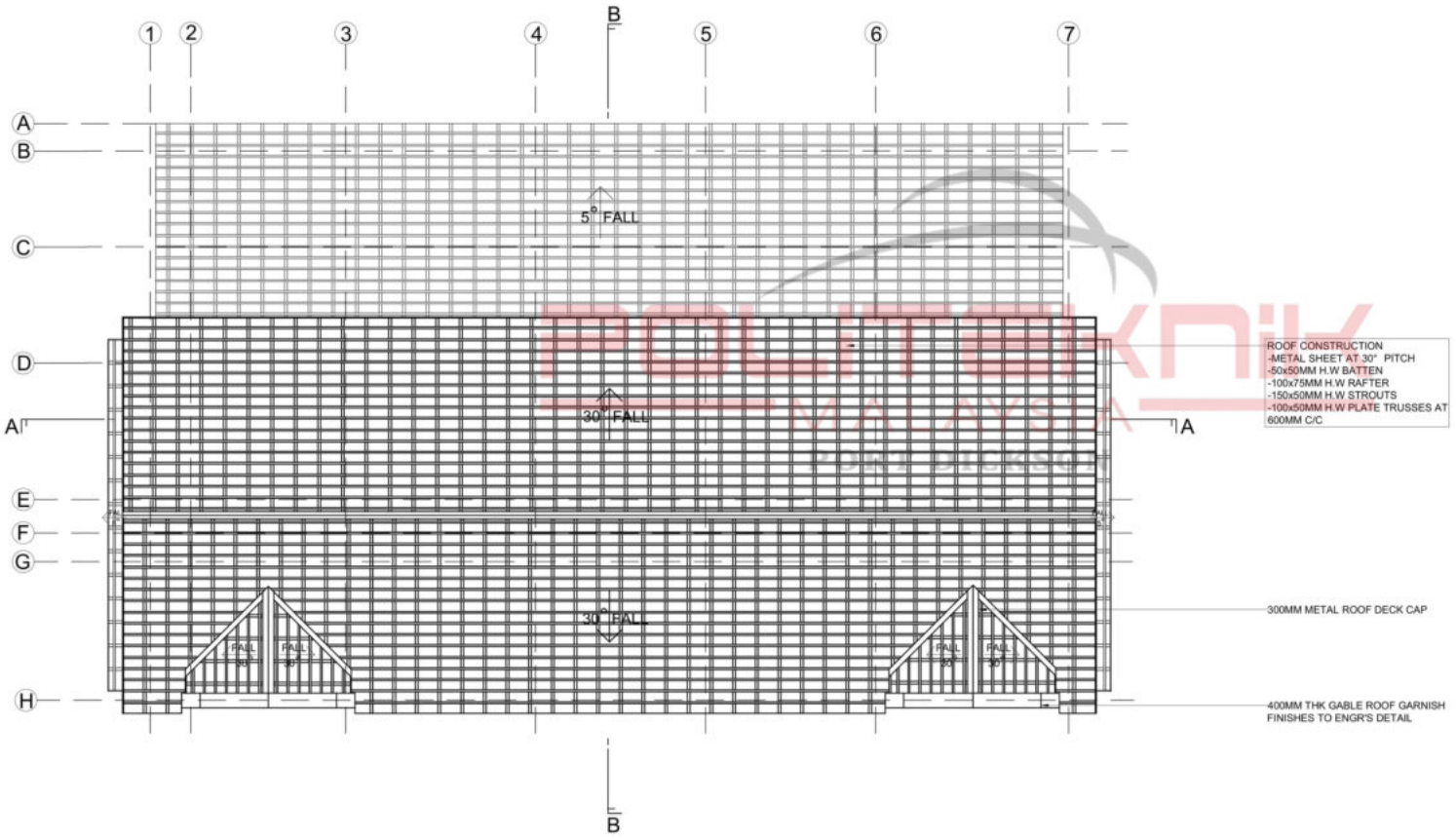

STRUCTURE ROOF PLAN

SCALE 1 : 100

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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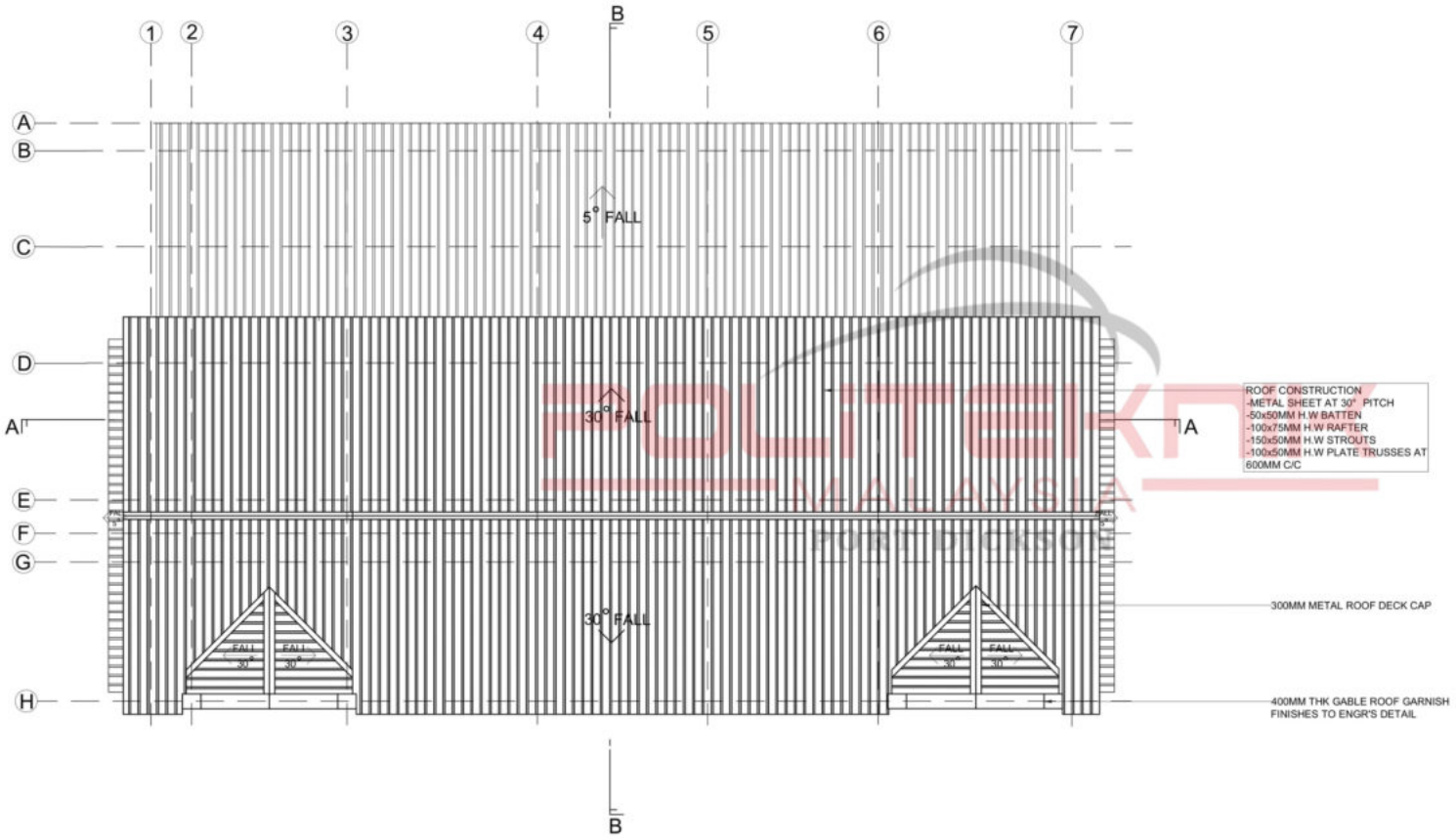

ROOF PLAN

SCALE 1 : 100

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310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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ROOF PLAN

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BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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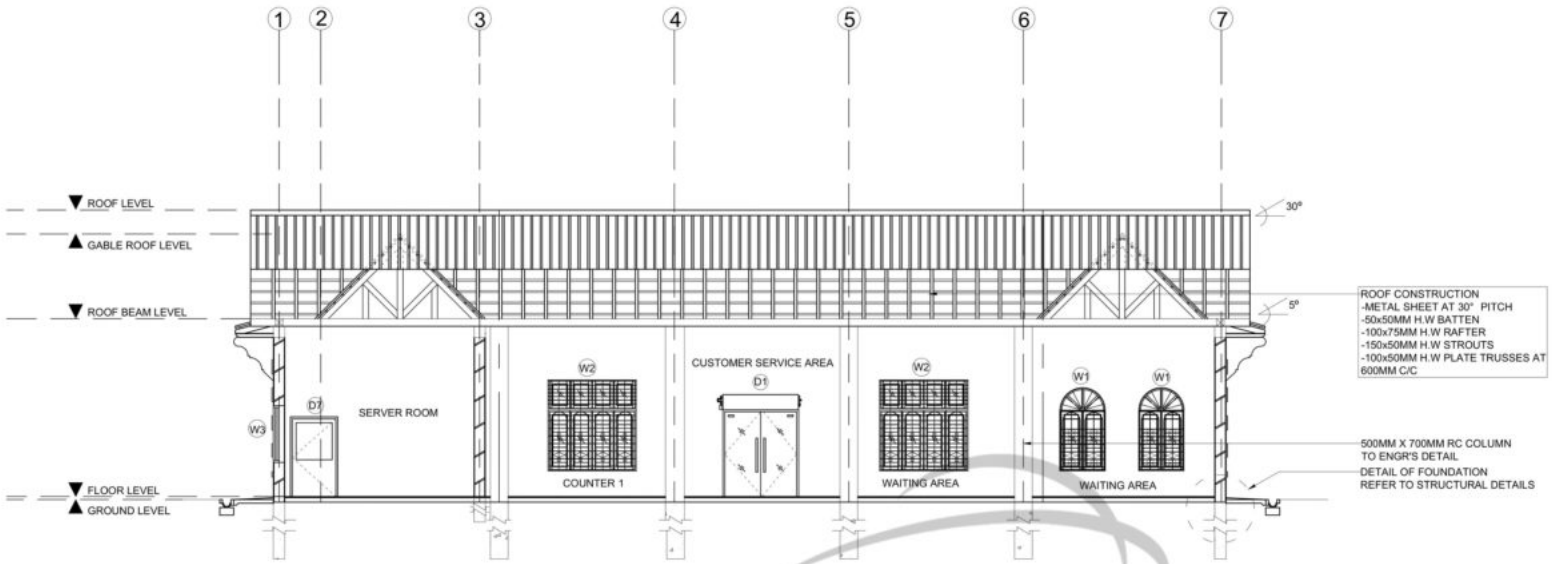

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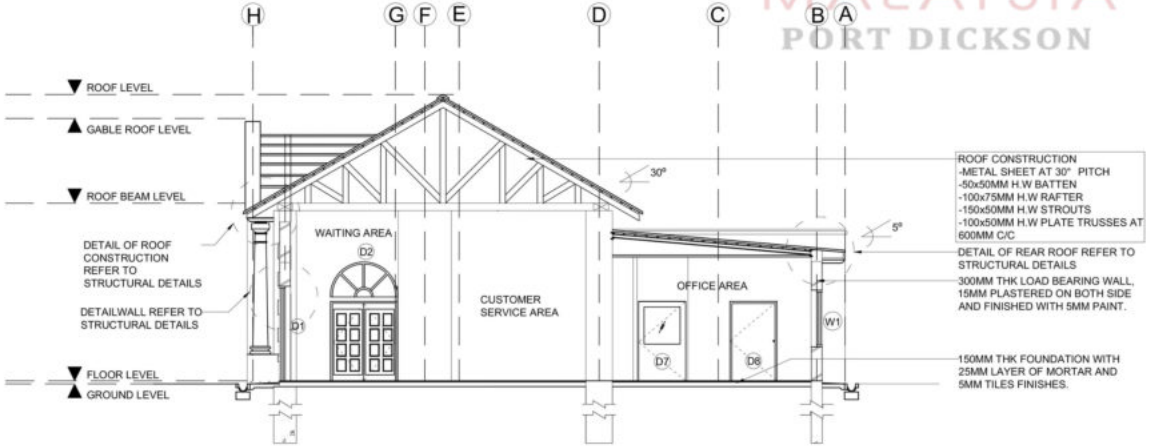

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POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SECTION A-A, SECTION B-B

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

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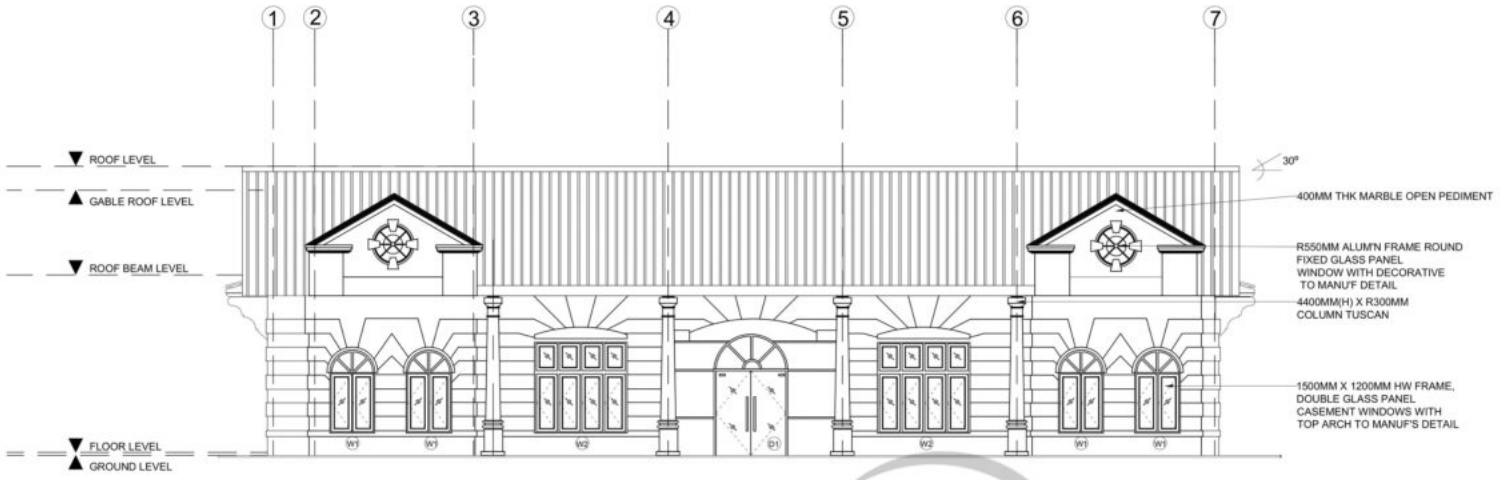

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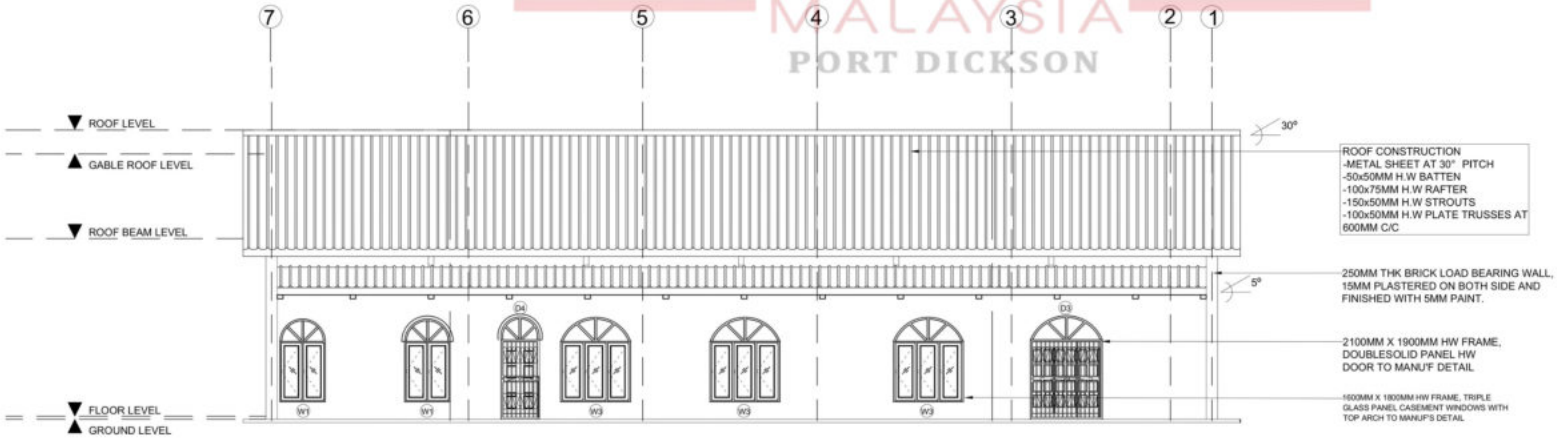

REAR ELEVATION
SCALE 1 : 100

POLITEKNIK MALAYSIA

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

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DRAWING TITLE :

FRONT ELEVATION, REAR ELEVATION

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

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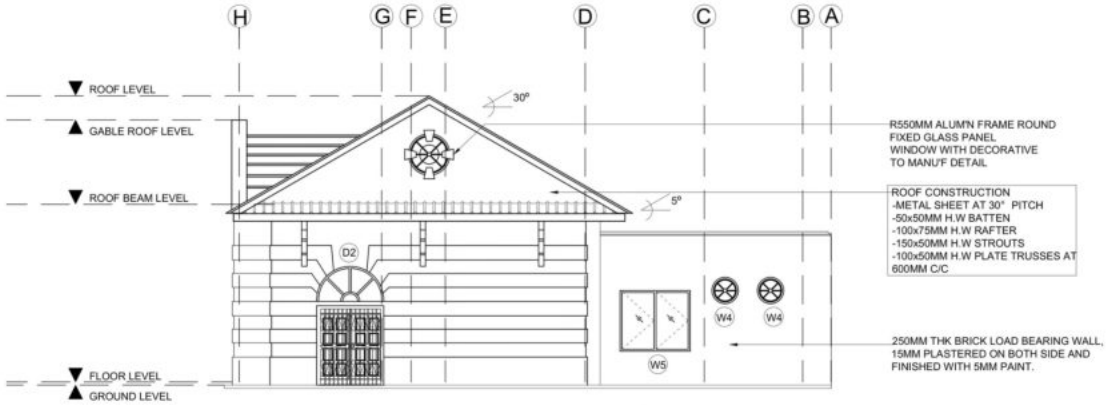

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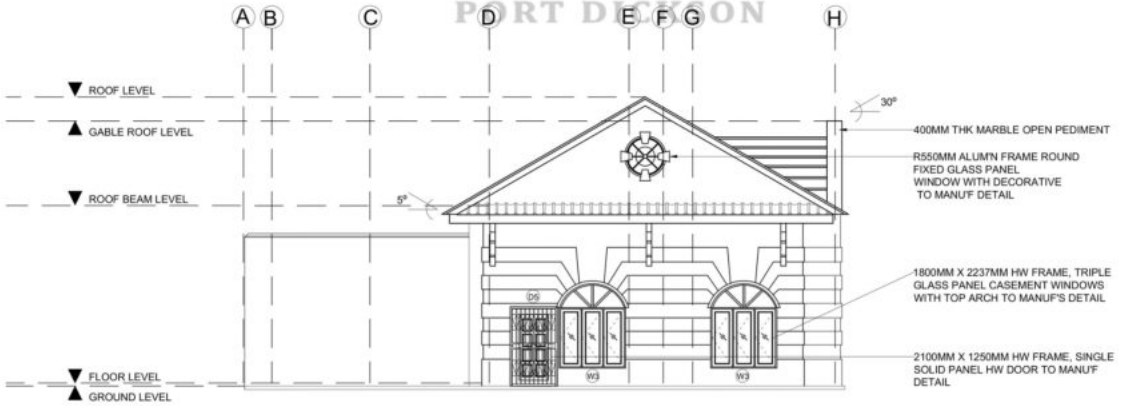

LEFT ELEVATION
SCALE 1 : 100

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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DRAWING TITLE :

RIGHT ELEVATION, LEFT ELEVATION

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

DRAWN BY :TAJUL MUHAMMAD NABIL

CHECKED BY :

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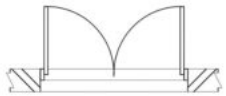
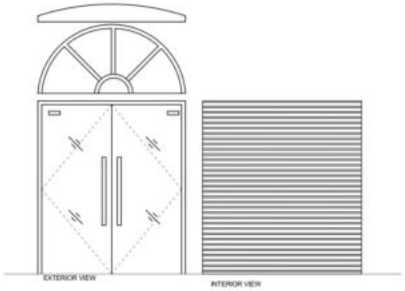
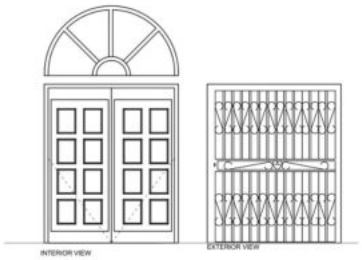
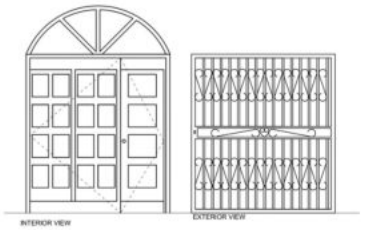
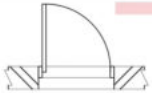
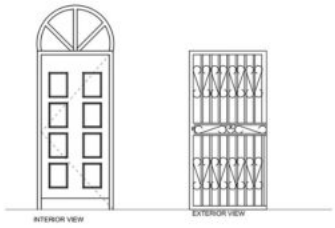
DRAWING NO : MD/D08

TYPE DOOR	D1 GD1	D2 GD2	D3 GD3
VIEW PLAN			
			
MATERIAL	ALMUN FRAME, DOUBLE PANEL GLASS DOOR TO MANU'F DETAIL	HW FRAME, DOUBLE SOLID PANEL HW DOOR TO MANU'F DETAIL	HW FRAME, DOUBLESOLID PANEL HW DOOR TO MANU'F DETAIL
LOCATION	CUSTOMER SERVICE AREA	STORAGE FILE ROOM	CUSTOMER SERVICE AREA
QUANTITY	1	1	1

TYPE DOOR	D4 GD4
VIEW PLAN	
	
MATERIAL	HW FRAME, SINGLE SOLID PANEL HW DOOR TO MANU'F DETAIL
LOCATION	OFFICE
QUANTITY	1

DOOR SCHEDULE

SCALE1 : 50

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

SUPERVISOR

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

DOOR SCHEDULE

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

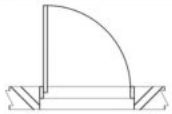
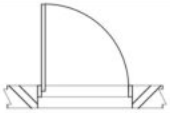
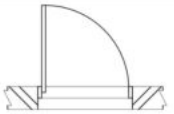
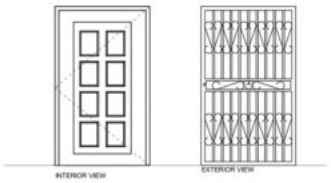
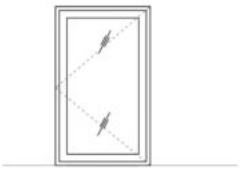
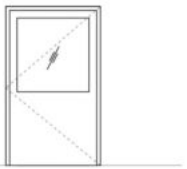
DATE : 6 / 3/ 2025

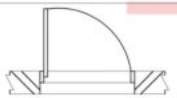
DRAWN BY :NUR SHAIDATUL HAMIYA

CHECKED BY :

SCALE : 1:50

DRAWING NO : MD/D09

TYPE DOOR	D5 GD5	D6	D7
VIEW PLAN			
			
MATERIAL	HW FRAME, SINGLE SOLID PANEL HW DOOR TO MANU'F DETAIL	HW FRAME, SINGLE PANEL GLASS DOOR TO MANU'F DETAIL	HW FRAME, SINGLE PANEL GLASS DOOR TO MANU'F DETAIL
LOCATION	MEETING ROOM	MEETING ROOM	SERVER ROOM, OFFICE, CUSTOMER SERVICE AREA
QUANTITY	1	1	3

TYPE DOOR	D8
VIEW PLAN	
	
MATERIAL	HW FRAME, SINGLE SOLID PANEL HW DOOR TO MANU'F DETAIL
LOCATION	PRAYER ROOM
QUANTITY	1

DOOR SCHEDULE

SCALE 1 : 50

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

SUPERVISOR

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

DOOR SCHEDULE

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

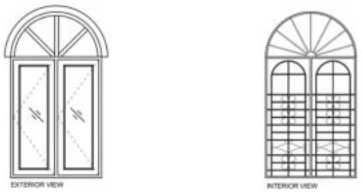
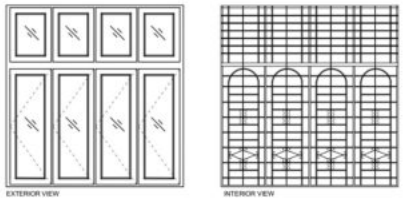
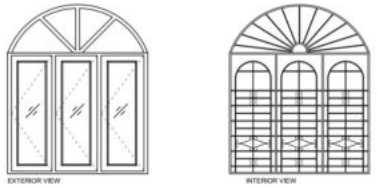
DATE : 6 / 3 / 2025

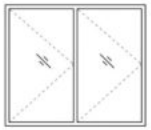
DRAWN BY :NUR SHAIDATUL HAMIYA

CHECKED BY :

SCALE : 1:50

DRAWING NO : MD/D010

TYPE DOOR	W1 GW1	W2 GW2	W3 GW3
VIEW PLAN			
			
MATERIAL	HW FRAME, DOUBLE GLASS PANEL CASEMENT WINDOWS WITH TOP ARCH TO MANUF'S DETAIL	HW FRAME, FOURTH GLASS PANEL CASEMENT WINDOWSWITH TOP ARCH TO MANUF'S DETAIL	HW FRAME, TRIPLE GLASS PANEL CASEMENT WINDOWS WITH TOP ARCH TO MANUF'S DETAIL
LOCATION	CUSTOMER SERVICE AREA,SERVER ROOM, OFFICE	CUSTOMER SERVICE AREA	OFFICE , MEETING ROOM, SERVER ROOM
QUANTITY	6	2	7

TYPE DOOR	W4	W5	W6
VIEW PLAN			
			
MATERIAL	ALUM'N FRAME ROUND FIXED GLASS PANEL WINDOW TO MANU'F DETAIL	ALUM'N FRAME CASEMENT GLASS PANEL WINDOW TO MANU'F DETAIL	ALUM'N FRAME ROUND FIXED GLASS PANEL WINDOW TO WITH DECORATIVEMANU'F DETAIL
LOCATION	PRAYER ROOM	CUSTOMER SERVICE AREA	GABLE ROOF
QUANTITY	2	1	4

WINDOW SCHEDULE

SCALE 1 : 50

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

SUPERVISOR

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

WINDOW SCHEDULE

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

DRAWN BY :MOHAMAD MUBIN SAFWAN

CHECKED BY :

SCALE : 1:50

DRAWING NO : MD/D11

TYPE	COLUMN TUSCAN C1
	
PLAN VIEW	
UNIT	4
MATERIAL	FIBERGLASS, POLYESTER RESIN AND MARBLE POWDER

ISOMETRIC

SCALE : NTS

SCHEDULE OF COLUMN

SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF COLUMN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

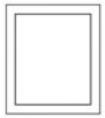
DATE : 6 / 3 / 2025

DRAWN BY :NUR NAJMINA NAJWA

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D12

TYPE	COLUMN PLAIN SQUARE REGENCY C2
	
PLAN VIEW	
UNIT	4
MATERIAL	CONCRETE

ISOMETRIC
SCALE : NTS

SCHEDULE OF COLUMN
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF COLUMN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

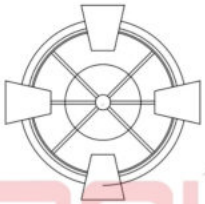
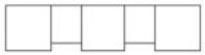
DATE : 6 / 3 / 2025

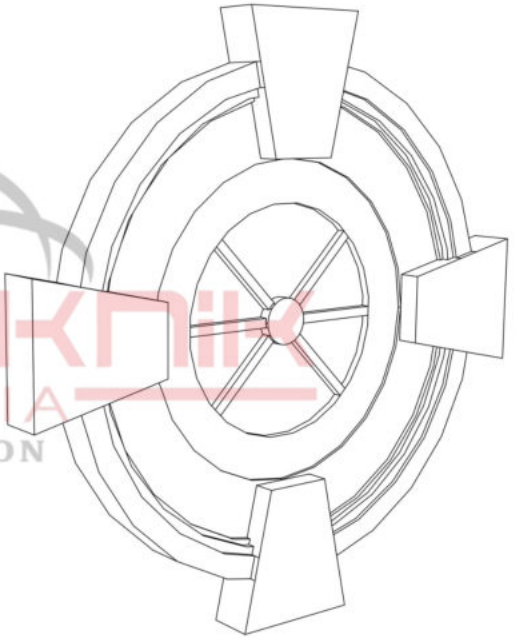
DRAWN BY :SATHISWARAN

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D13

TYPE	ROUND WINDOW CASEMENT RW1
	
PLAN VIEW	
UNIT	4
MATERIAL	PLASTER AND GLASS



ISOMETRIC
SCALE : NTS

SCHEDULE OF ROUND WINDOW
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF ROUND WINDOW

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

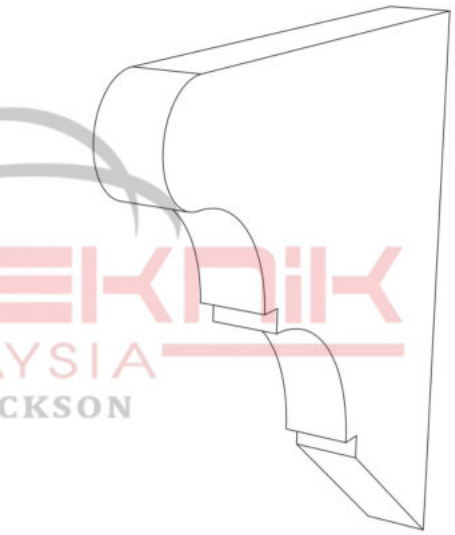
DRAWN BY :NUR NAJMINA NAJWA

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D14

TYPE	MODILLIONS M1
	 
PLAN VIEW	
UNIT	12
MATERIAL	FIBERGLASS, POLYESTER RESIN AND MARBLE POWDER



ISOMETRIC
SCALE : NTS

SCHEDULE OF MODILLIONS
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF MODILLIONS

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

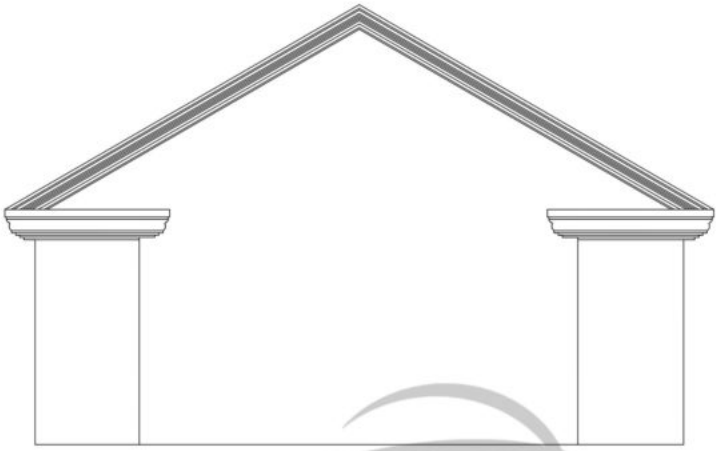
DATE : 6 / 3 / 2025

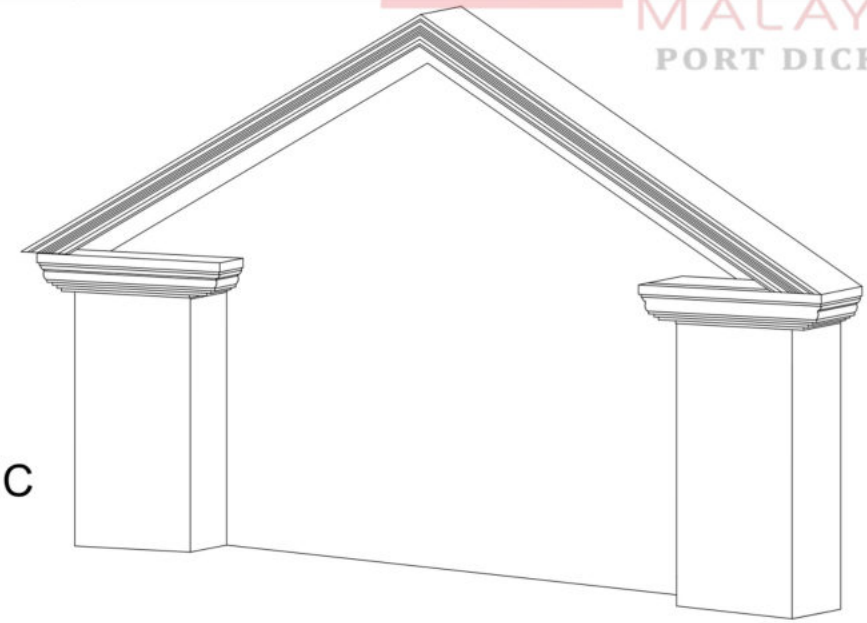
DRAWN BY :SATHISWARAN

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D15

TYPE	GABLE ROOF GR1
	
UNIT	2
MATERIAL	PLASTER



ISOMETRIC
SCALE : NTS

SCHEDULE OF OPEN PENDIMENT
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF GABLE ROOF

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

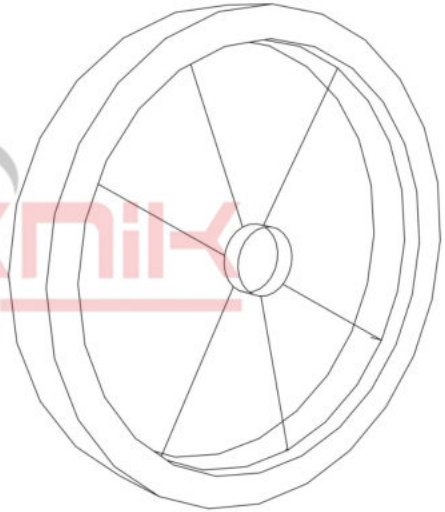
DRAWN BY :NUR NAJMINA NAJWA

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D16

TYPE	ROUND CIRCLE CASEMENT WINDOW W4
	
PLAN VIEW	
UNIT	2
MATERIAL	ALUMINUM AND GLASS



ISOMETRIC
SKALA : NTS

SCHEDULE OF ROUND WINDOW
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

SUPERVISOR

PN. SITI FATIMAH TUZZAHRAH BINTI HJ. ABD LATIF
TS. FAHANIM BINTI ABD RASHID
PN. NUR ATHIRAH BINTI IBRAHIM

GROUP MEMBERS

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NUR NAJMINA BINTI ABDULLAH
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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF ROUND WINDOW

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

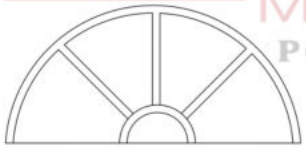
DATE : 6 / 3 / 2025

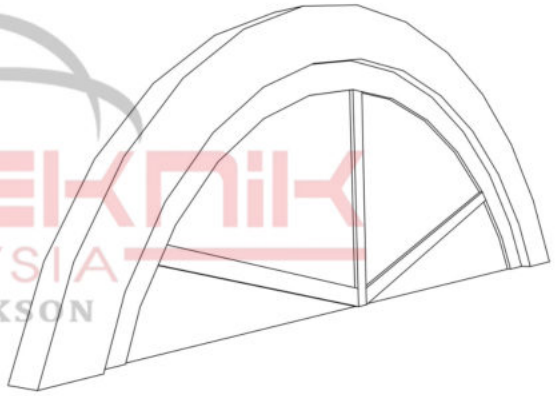
DRAWN BY :MOHAMAD MUBIN SAFWAN

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D17

TYPE	DOORS DECORATIVE D1
	
UNIT	1
MATERIAL	PLASTER



ISOMETRIC
SCALE : NTS

SCHEDULE OF DOOR TOP ARCH
SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF DOOR DECORATIVE

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

DRAWN BY :MOHAMAD MUBIN SAFWAN

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D18

TYPE OF GRILL WINDOW	01	02
		
SIZE	671MM X 610MM	1943MM X 297MM
LOCATION	CUSTOMER SERVICE AREA, MEETING ROOM,OFFICE, SERVER ROOM	OFFICE, MEETING ROOM, CUSTOMER SERVICE AREA,SERVER ROOM
QUANTITY	27	9

SCHEDULE OF ORNAMENT

SCALE1 : 25

POLITEKNIK MALAYSIA

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF ENGRAVING

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

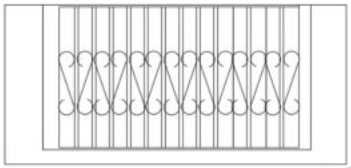
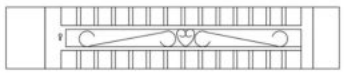
DATE : 6 / 3 / 2025

DRAWN BY :NUR SHAIDATUL HAMIYA

CHECKED BY :

SCALE : 1:25

DRAWING NO : MD/D19

TYPE OF GRILL WINDOW	03	04
		  
SIZE	1770MM X 956MM	165MM X 1770MM
LOCATION	STORAGE FILE ROOM, MEETING ROOM, CUSTOMER SERVICE AREA,OFFICE	STORAGE FILE ROOM, MEETING ROOM, CUSTOMER SERVICE AREA,OFFICE
QUANTITY	44	4

SCHEDULE OF ORNAMENT

SCALE 1 : 25

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

DRAWING TITLE :

SCHEDULE OF ENGRAVING

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

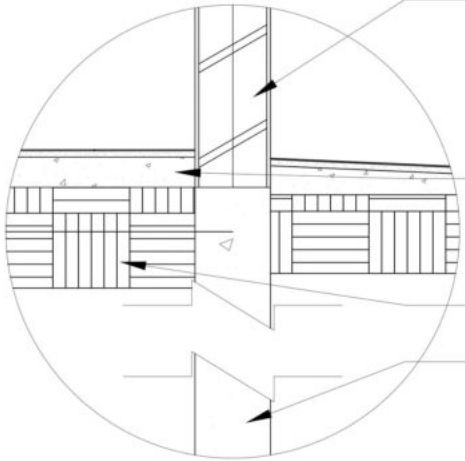
DATE : 6 / 3 / 2025

DRAWN BY :NUR SHAIDATUL HAMIYA

CHECKED BY :

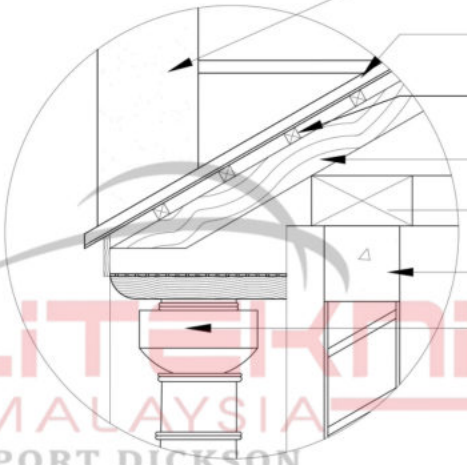
SCALE : 1:25

DRAWING NO : MD/D20



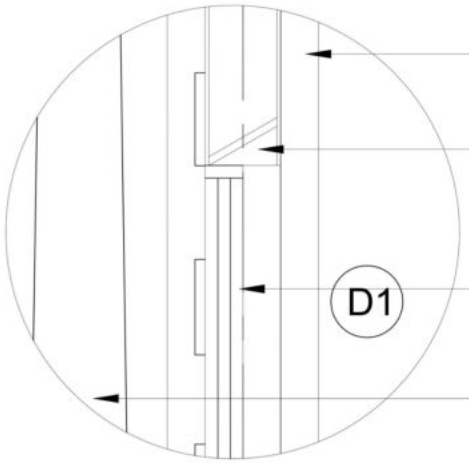
DETAILS OF FLOOR STRUCTURE

SCALE 1 : 15



DETAILS OF ROOF CONSTRUCTION

SCALE 1 : 15



DETAILS OF WALL CONSTRUCTION

SCALE 1 : 15

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TINGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SMEBILAN, MALAYSIA

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MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN 310A, JALAN DATO BANDAR TINGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SMEBILAN, MALAYSIA

DRAWING TITLE :

DETAILS OF STRUCTURE, DETAILS OF ROOF, DETAILS OF TUSCAN COLUMN

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

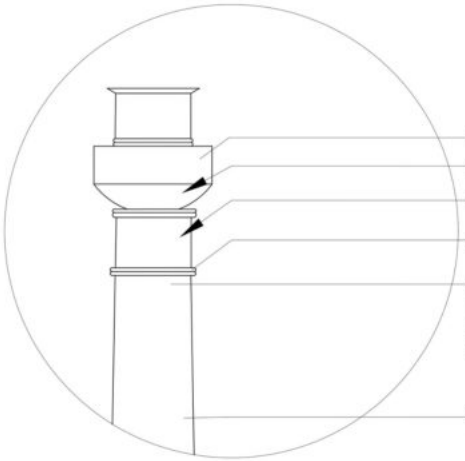
DATE : 6 / 3 / 2025

DRAWN BY :MUHAMAD BIN ANUAL

CHECKED BY :

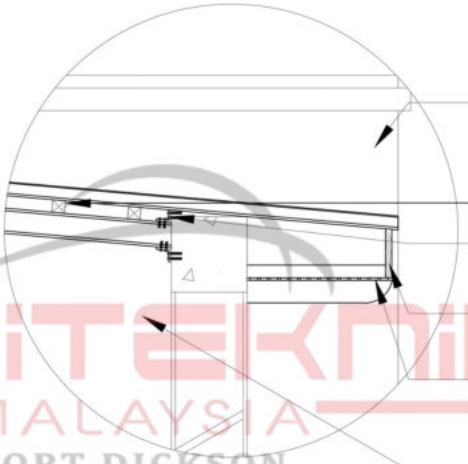
SCALE : 1:15

DRAWING NO : MD/D21



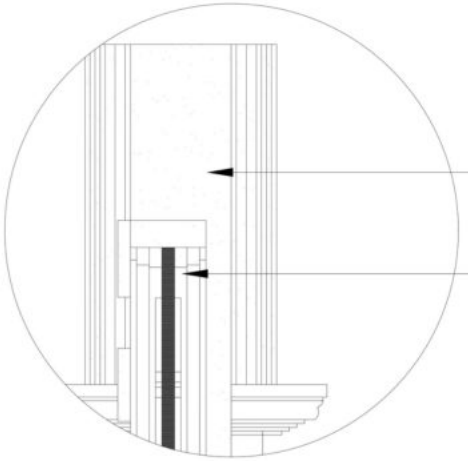
DETAILS OF TUSCAN COLUMN

SCALE 1 : 15



DETAILS OF REAR ROOF CONSTRUCTION

SCALE 1 : 15



DETAILS OF PEDIMENT

SCALE 1 : 15

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TINGGAL,
BANDAR SEREMBAN, 70000 SEREMBAN,
NEGERI SMEBILAN, MALAYSIA

SUPERVISOR

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NUR NAJMINA BINTI ABDULLAH
MUHAMMAD AL HAKIMIN BIN ZULKIFLI
MOHAMAD MUBIN SAFWAN BIN SAMSURI

WORK DRAWING

PROJECT TITLE :

LUKISAN TERUKUR BAGUNAN JEJAK WARISAN
310A, JALAN DATO BANDAR TINGGAL, BANDAR
SEREMBAN, 70000 SEREMBAN, NEGERI
SMEBILAN, MALAYSIA

DRAWING TITLE :

DETAILS OF MAIN DOOR, DETAILS OF REAR
ROOF, DETAILS OF WINDOW AND WALL

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR
NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

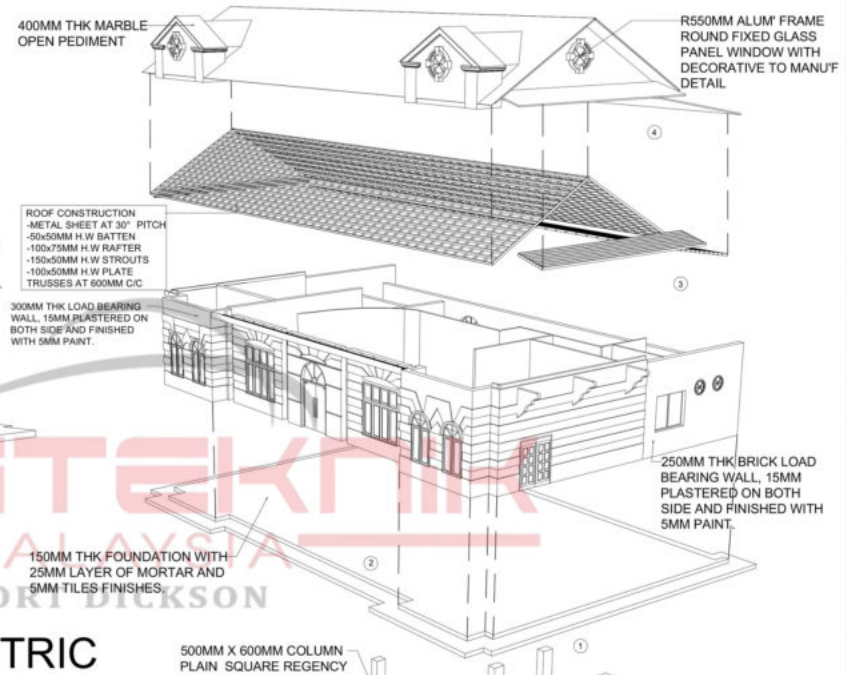
DRAWN BY :NORFADZILAH BINTI SAMSU

CHECKED BY :

SCALE : 1:15

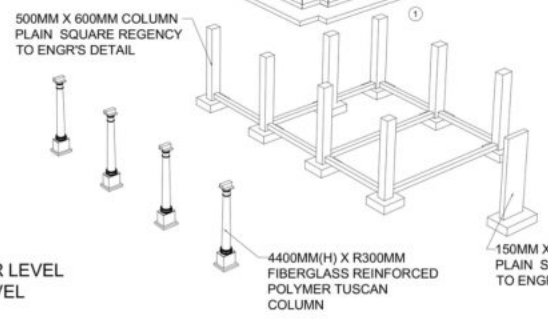
DRAWING NO : MD/D22

ISOMETRIC
SCALE : NTS



ISOMETRIC
EXPLODED

SCALE : NTS



LEGEND
1. GROUND LEVEL
2. GROUND FLOOR LEVEL
3. ROOF BEAM LEVEL
4. ROOF LEVEL

POLITEKNIK MALAYSIA

KAWANS

BANGUNAN JEJAK WARISAN SEREMBAN SYARIKAT AIR NEGERI SEMBILAN (SAINS)

310A, JALAN DATO BANDAR TUNGGAL, BANDAR SEREMBAN, 70000 SEREMBAN, NEGERI SEMBILAN, MALAYSIA

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DRAWING TITLE :

ISOMETRIC 3D, ISOMETRIC EXPLODE

LECTURER'S SIGNATURE - MEASURED DRAWING

BUILDING BRANCH OF SYARIKAT AIR NEGERI SEMBILAN (SAINS)

DATE : 6 / 3 / 2025

DRAWN BY :TAJUL, ALHAKIMIN, MUHAMAD

CHECKED BY :

SCALE : N.T.S

DRAWING NO : MD/D23


PUSAT KHIDMAT PELANGGAN
SELAMAT DATANG

MEASURED DRAWING SYARIKAT AIR NEGERI SEMBILAN, BANDAR SEREMBAN

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POLITEKNIK PORT DICKSON

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