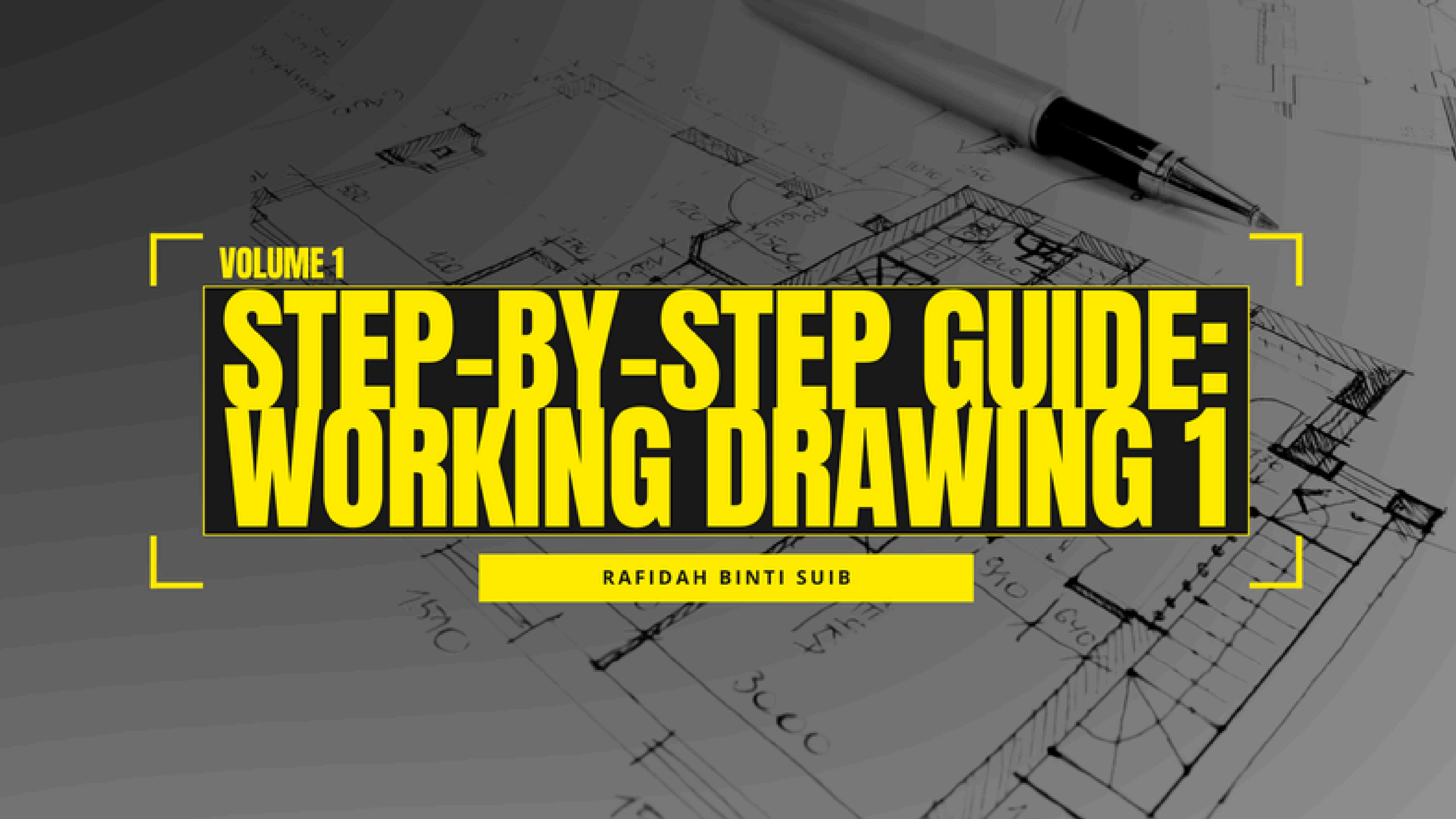


The background of the entire image is a grayscale architectural drawing, likely a floor plan or section, showing various rooms, walls, and dimensions. A black pen with a silver tip is positioned diagonally across the upper right portion of the drawing. The drawing includes various lines, circles, and text annotations, some of which are partially obscured by the title box.

VOLUME 1

STEP-BY-STEP GUIDE: WORKING DRAWING 1

RAFIDAH BINTI SUIB

「STEP-BY-STEP GUIDE:
WORKING DRAWING 1
VOLUME 1」

Politeknik Port Dickson,
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71050 Si Rusa Negeri Sembilan, Malaysia.
No Tel: 06-662 2000 No Faks: 06-662 2026

First Published 2026

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Diterbitkan oleh:
Politeknik Port Dickson,
KM14 Jalan Pantai,
71050 Si Rusa
Negeri Sembilan.



Cataloguing-in-Publication Data

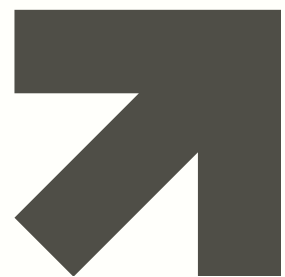
National Library of Malaysia

A catalogue record for this book is available from the
National Library of Malaysia

eISBN 978-629-7643-94-6

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PREFACE

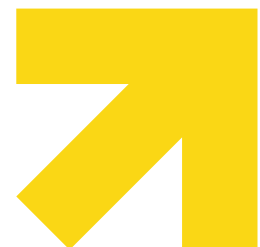
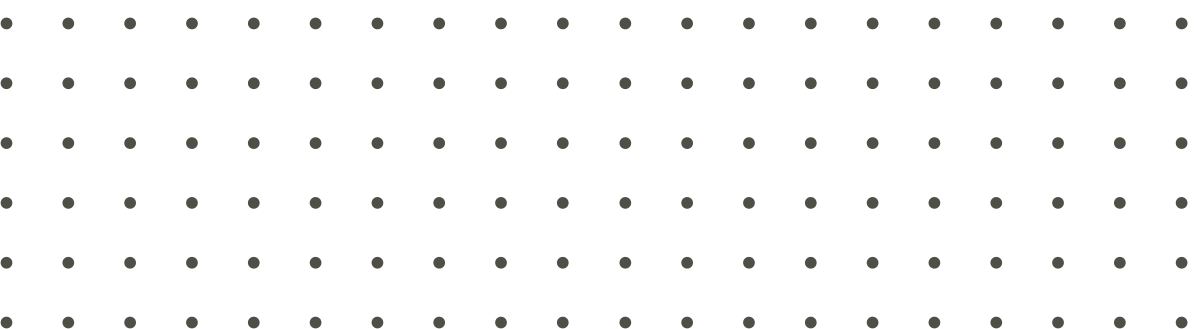
Welcome to Step-by-Step Guide: Working Drawing 1 (Volume 1).

This book is designed as a comprehensive companion for Diploma in Architecture students to master the essentials of the DCA20333: Working Drawing 1 course.

The primary goal of this guideline is to simplify the complexities of architectural documentation through a structured, easy-to-follow approach. By breaking down intricate tasks into manageable steps, this book aims to sharpen your technical skills and boost your confidence in producing professional-standard drawings.

Specifically, this guide focuses on helping you navigate the vital transition from manual drafting to Computer-Aided Design and Drafting (CADD). Whether you are laying down your first lines or refining your digital layouts, these modules are crafted to ensure you meet your course requirements with precision and clarity.

We hope this guide serves as a valuable roadmap in your journey toward becoming a proficient architectural technician.



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KEY PLAN & LOCATION PLAN

INTRODUCTION KEY PLAN

- The purpose of key plan is to locate the site of construction in region.
- Person can use key plan to reach.
- The plan shows main roads and well-known buildings as landmark to reach the site
- Key plan should cover area of 2 km radius around the site.
- Key plan are drawn to the scale of 1 in 10,000.
- The area covering the property is highlighted with hatching lines.





Finding Your Key Plan & Location Plan

Using JUPEM Website

(Department of Survey and Mapping Malaysia)

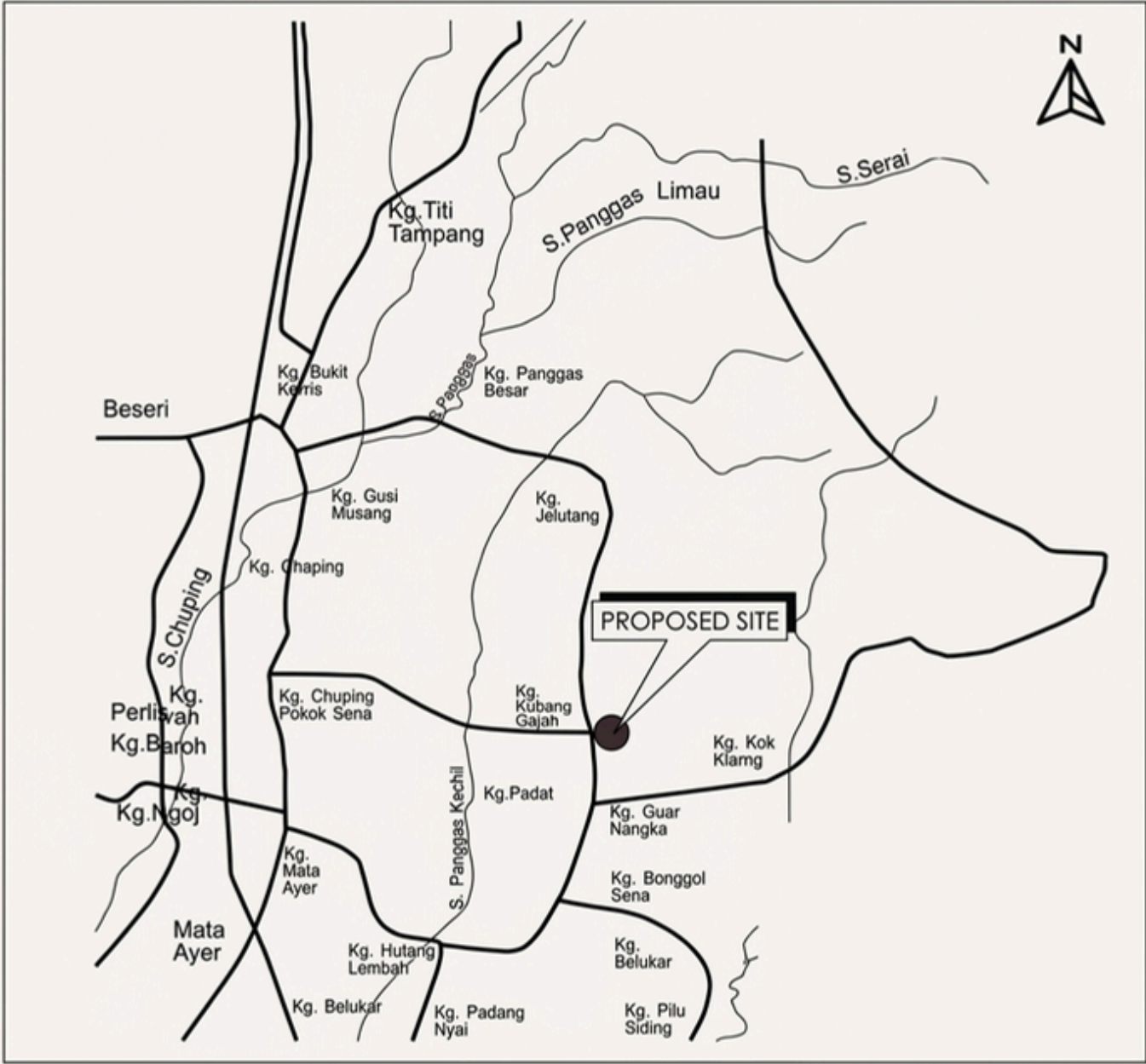


KEY PLAN

Key Plan Features Checklist

- [] **Proposed Site Location:**
Clearly marked with a solid dark circle/ hatch and a callout label.
- [] **Geographical Orientation:**
Includes a North Point arrow (labeled 'N') at the top right corner.
- [] **Settlement/Village Names:**
Labels for various areas such as Kg. Kubang Gajah, Kg. Chuping, Kg. Mata Ayer, and others.
- [] **Hydrological Features:**
Representation of rivers (labeled as 'S.' for Sungai), including S. Panggas, S. Chuping, and S. Serai.
- [] **Road Network:**
Solid black lines representing the main access roads and connecting routes between villages.
- [] **Territorial Boundaries:**
Outlined areas indicating the coverage of the key plan.
- [] **Title and Scale Disclaimer:**
Clearly labeled as "KEY PLAN" with the notation "NOT TO SCALE".
- [] **Border Frame:**
A clean rectangular frame enclosing the entire map area.

EXAMPLE OF KEY PLAN



KEY PLAN
NOT TO SCALE

Artline Pen Thickness Guidelines for Working Drawings

Pen Thickness	Line Category	Application / Usage
0.7mm - 0.8mm	Extra Bold	Drawing borders, title blocks, and major section titles.
0.5mm - 0.6mm	Bold	Cut walls (structural), columns, and primary object outlines.
0.3mm - 0.4mm	Medium	Architectural elements (doors, windows), built-in furniture, and steps.
0.1mm - 0.2mm	Fine / Thin	Dimension lines, leader lines, grid lines, and hatching patterns.
0.05mm	Extra Fine	Very fine textures, material symbols, and intricate details.
Dashed / Hidden	Thin (0.1mm)	Elements above or below the cutting plane (e.g., roof overhangs, floor patterns).

LOCATION PLAN

- A location plan shows the proposed development in relation to its surrounding properties.
- It must be based on an up-to-date map and at an identified standard metric scale (typically 1:1250 or 1:2500)
- The site of the proposed development needs to be outlined in red and any other land owned by the applicant that is close to or adjoining the site needs to be outlined in blue.
- Choose from 2 scales:
 - 1:1250 Location Plan: for urban areas and small properties within 200 x 200m
 - 1:2500 Location Plan: for rural areas and large properties within 400 x 400m

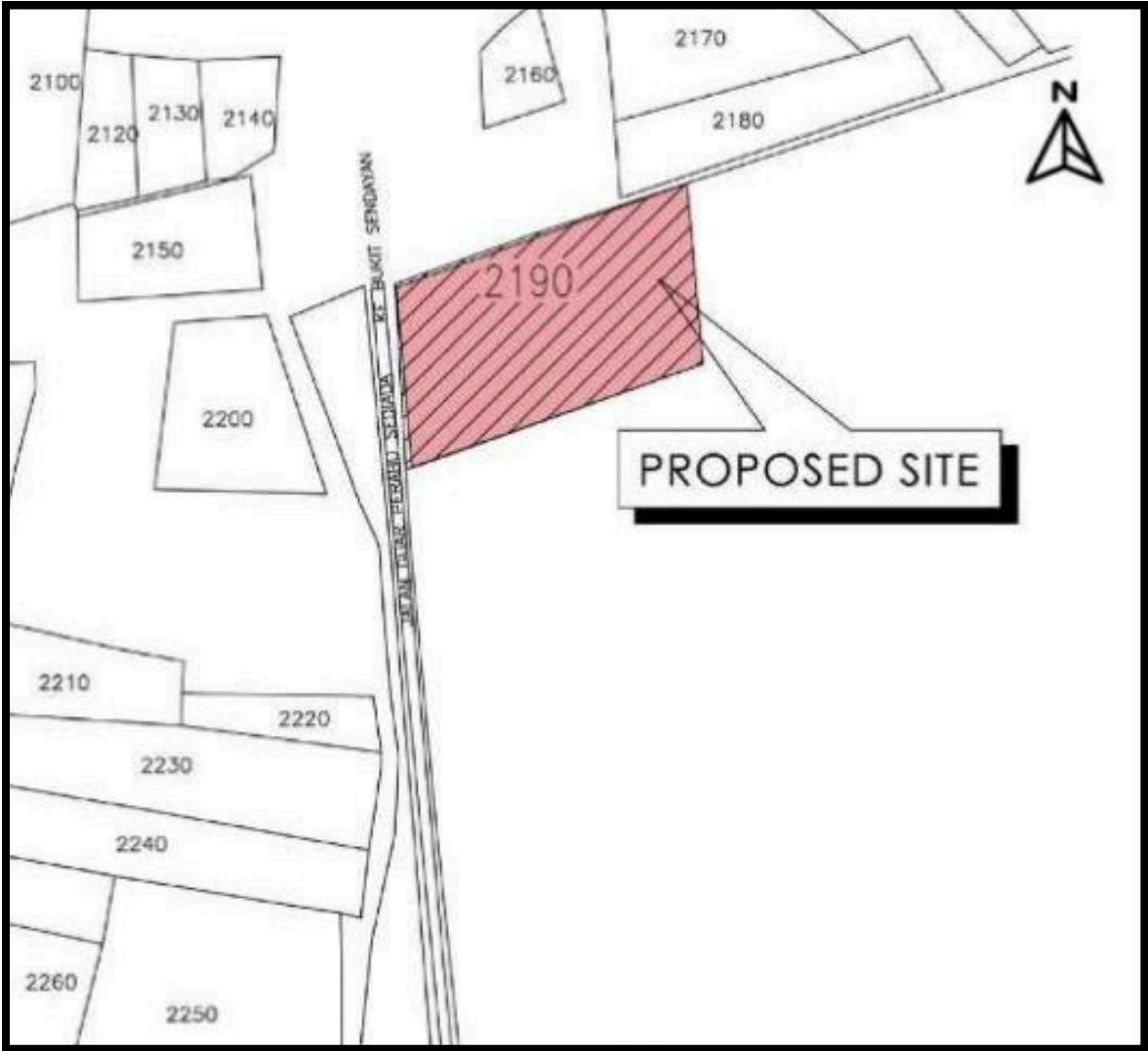


LOCATION PLAN

Key Plan Features Checklist

- [] **Subject Lot Identification:** The specific lot (Lot 2190) is clearly highlighted with a diagonal hatch pattern.
- [] **Adjoining Lot Numbers:** Surrounding lots (e.g., 2180, 2200, 2220) are labeled to show the site context.
- [] **Access Road:** The main road serving the site is clearly outlined and labeled (e.g., Jalan Bukit Senggora).
- [] **Hydrological Features:** Representation of rivers (labeled as 'S.' for Sungai), including S. Panggas, S. Chuping, and S. Serai.
- [] **Subject Site Callout:** A "PROPOSED SITE" label with a leader line pointing directly to the hatched lot.
- [] **Schedule of Land (Jadual Tanah)** A data table at the bottom providing specific details
- [] **North Point:** An orientation arrow (labeled 'N') indicating the direction of North.
- [] **Boundary Lines:** Clear distinction between the subject site boundary (thick) and neighboring lot boundaries (thin).
- [] **Border Frame:** A professional rectangular frame enclosing all mapping and data elements.

EXAMPLE OF LOCATION PLAN



LOCATION PLAN
NOT TO SCALE

Artline Pen Thickness Guidelines for
Working Drawings



Drawing Element	Pen Thickness (Artline)	Line Category	Purpose / Description
Proposed Site (Lot 2190)	0.5mm - 0.6mm	Bold	To clearly distinguish the subject lot from surrounding
Adjacent / Neighboring Lots	0.3mm	Medium	To show the context of surrounding boundaries without overpowering the main
Hatching Pattern	0.1mm	Fine / Thin	To fill the proposed site area neatly without making it look messy or "heavy".
Roads & Access Ways	0.3mm - 0.4mm	Medium Bold	To indicate main transportation routes and
Text Labels & Lot Numbers	0.2mm - 0.3mm	Standard	For clear legibility of numbers (e.g., 2180, 2200) and village names.
Table Frame & Borders	0.4mm - 0.5mm	Bold	To create a strong enclosure for the "Jadual Tanah" and the map frame.
Dimension Lines / Leader Lines	0.1mm	Extra Fine	For the line pointing to the "Proposed Site" label to ensure it doesn't look like a boundary.

Printing Guidelines for Key & Location Plans

A4 size

Paper Size & Orientation:

- Use standard A4 paper (210mm x 297mm).
- Set the orientation to Landscape to ensure both plans fit side-by-side comfortably.

Scale & Layout:

- Since these are "NOT TO SCALE" (NTS), ensure the Title Block remains legible on the right side.
- Maintain a clear margin (at least 10mm) from the edges to avoid cutting off important text.

Resolution & Line Work:

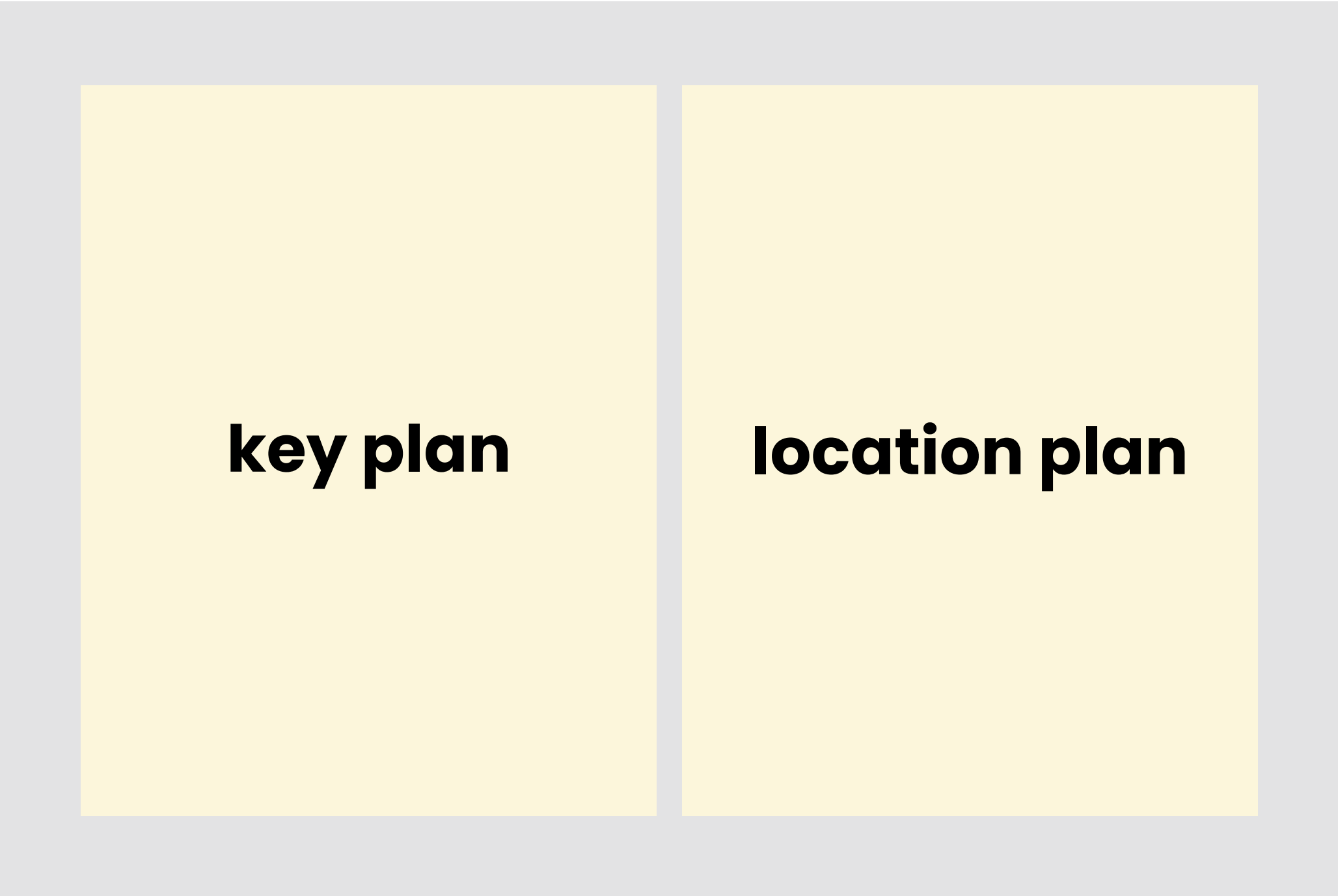
- Print at a minimum of 300 DPI for sharp, professional lines.
- Ensure the hatching on the "PROPOSED SITE" is distinct and doesn't bleed into solid black.

Color Settings:

- Use Grayscale or Monochrome settings.
- If the "PROPOSED SITE" circle is in color (e.g., red), select "Print in Color" or ensure the line weight is thick enough to be seen in black and white.

File Format:

- Save and print from a PDF format rather than an image file (JPG/PNG) to maintain vector-like clarity for the text and lines.



Printing Guidelines for Key & Location Plans

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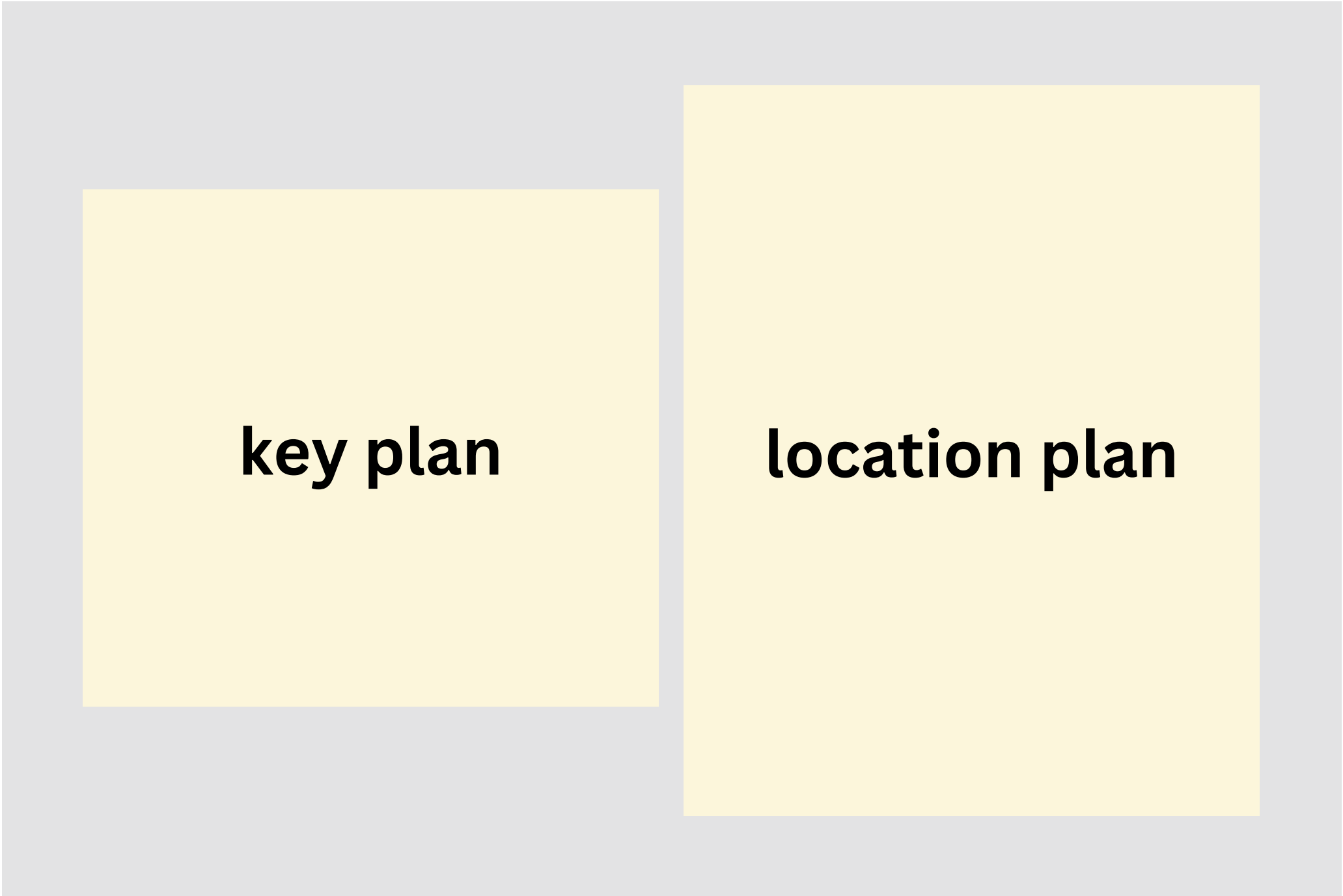
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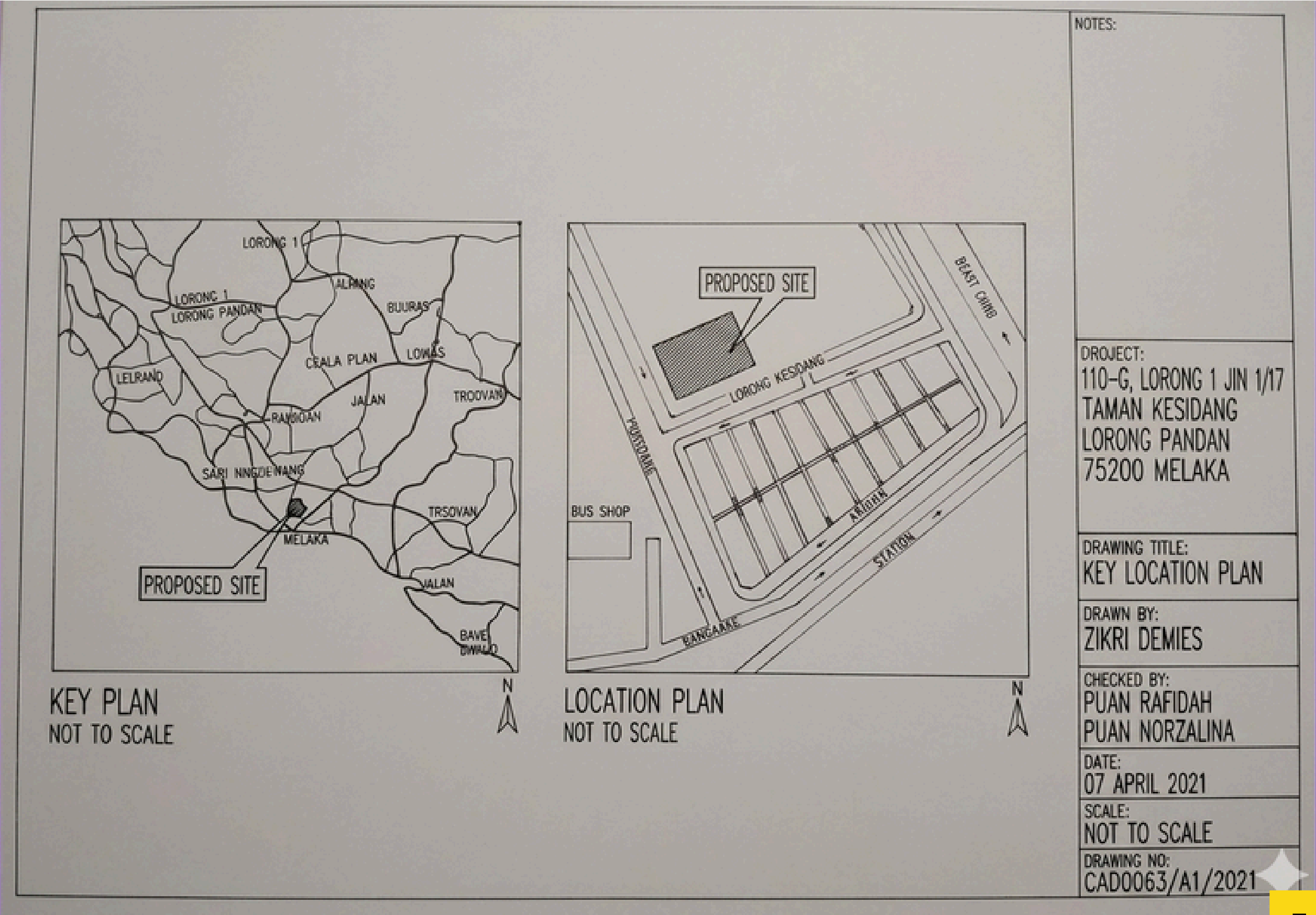
File Format:

- Save and print from a PDF format rather than an image file (JPG/PNG) to maintain vector-like clarity for the text and lines.

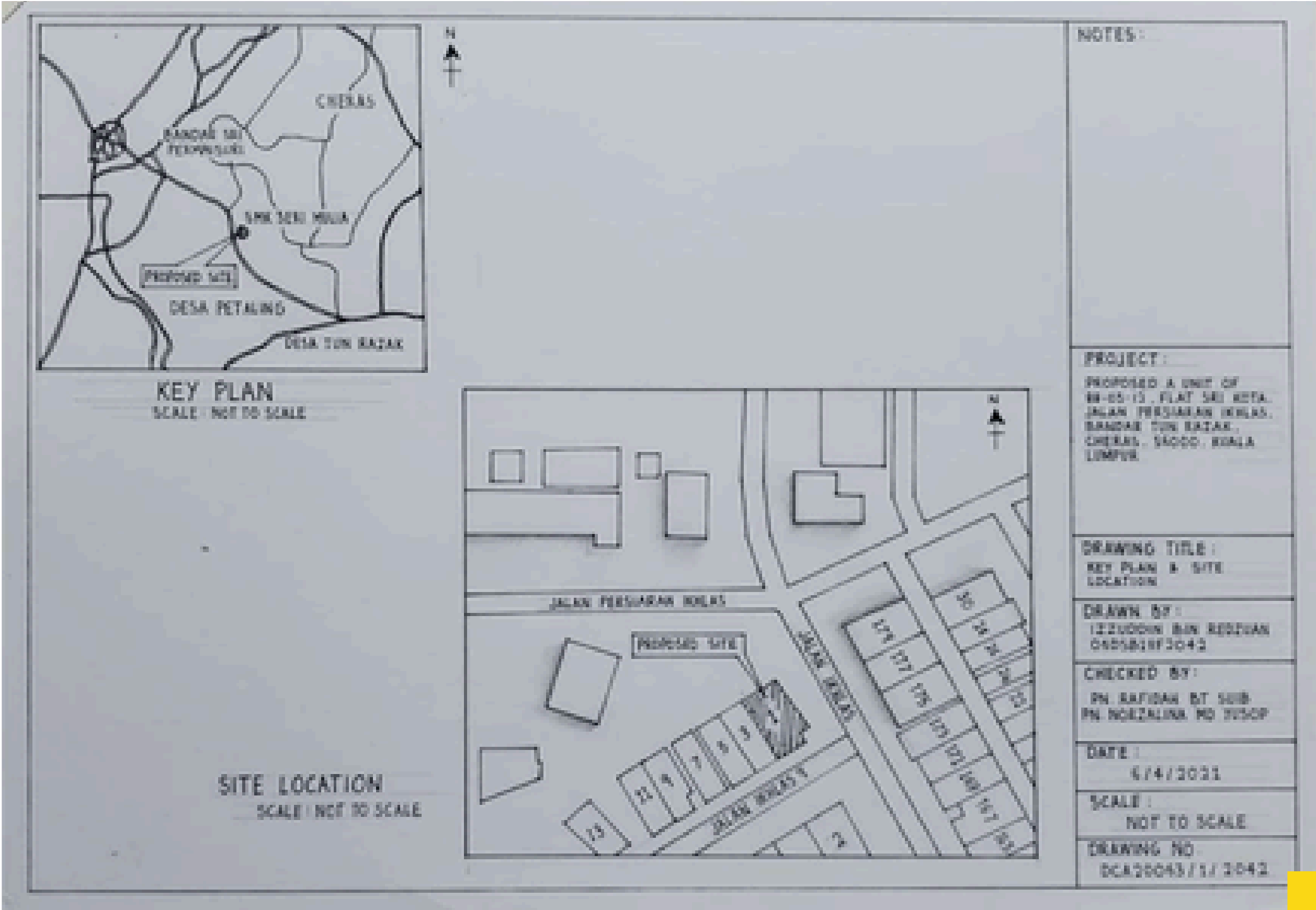
key plan

location plan

EXAMPLE OF KEY PLAN
& LOCATION PLAN



EXAMPLE OF KEY PLAN
& LOCATION PLAN



Steps to Find Your Key Plan & Location Plan

1

Go to the JUPEM Website

<https://jupem2u.kul.jupem.gov.my/mylot/negeri.html>

2

Navigate to MyGeoportal / eBIZ JUPEM

3

Search for your house using address or coordinates

4

Identify the Key Plan and Location Plan

5

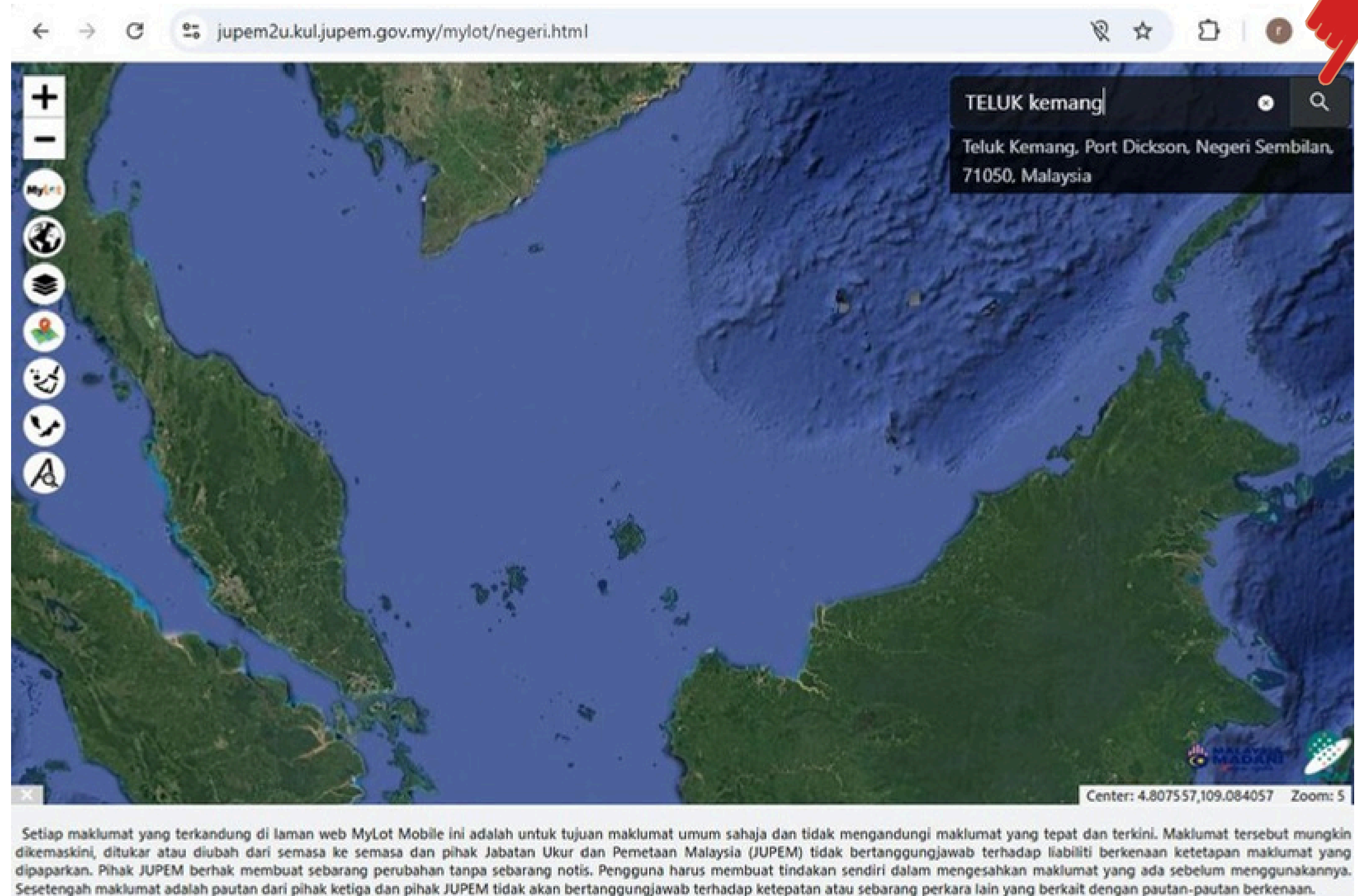
Save the maps (JPEG/PNG) format

6

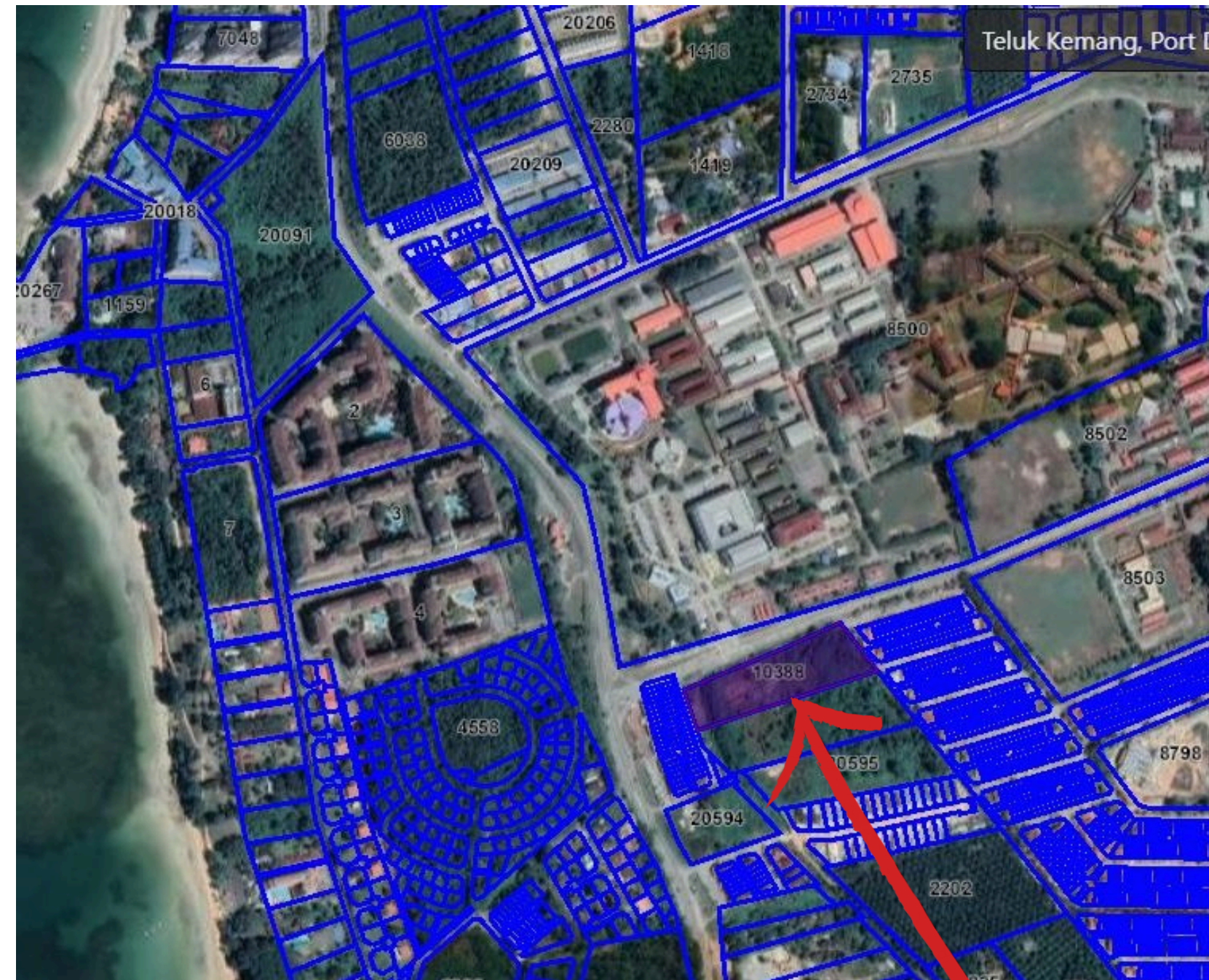
Print out

Steps to Find Your **Key Plan** & Location Plan

choose your address/ location



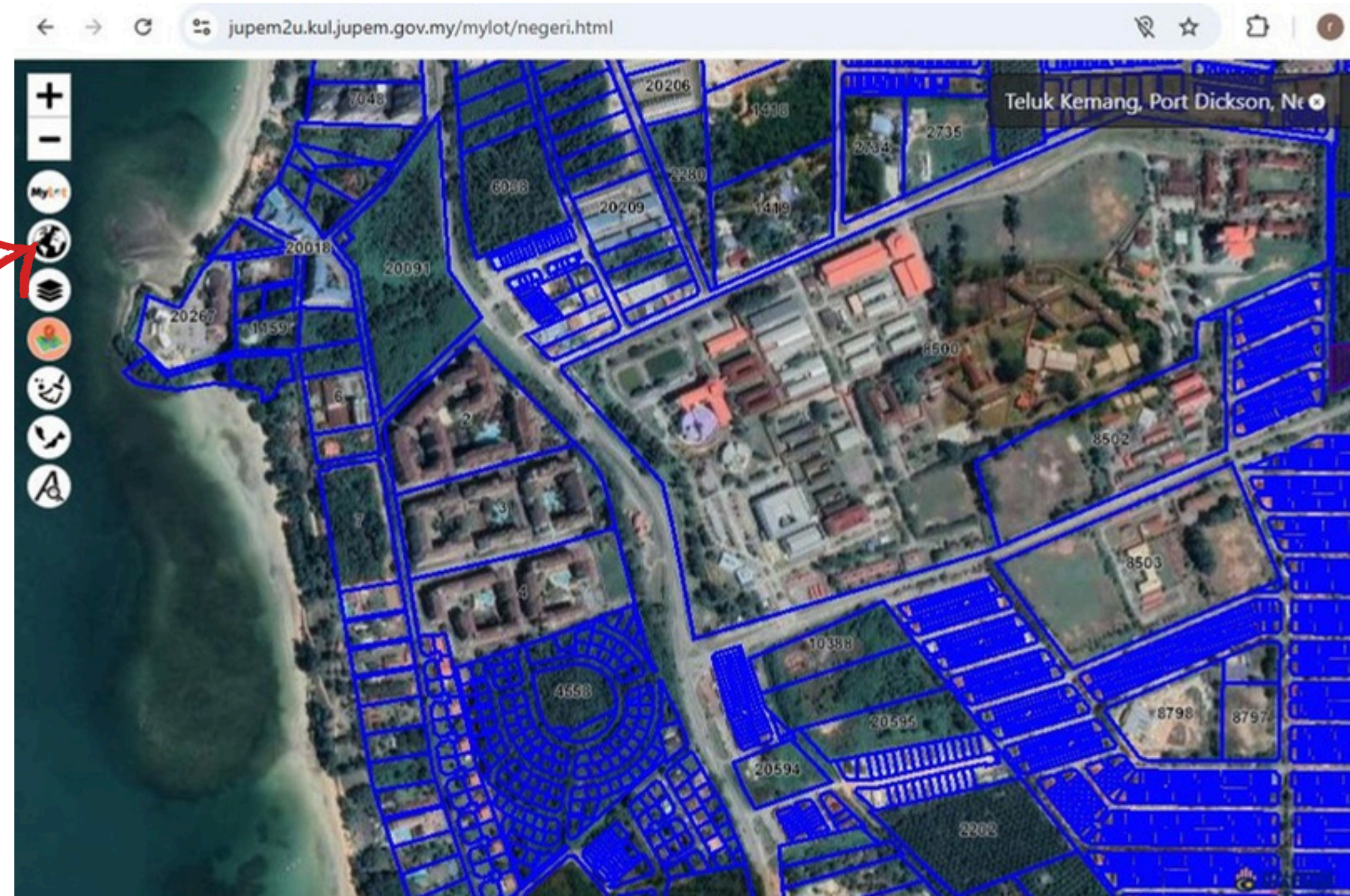
Steps to Find Your Location Plan



choose your lot

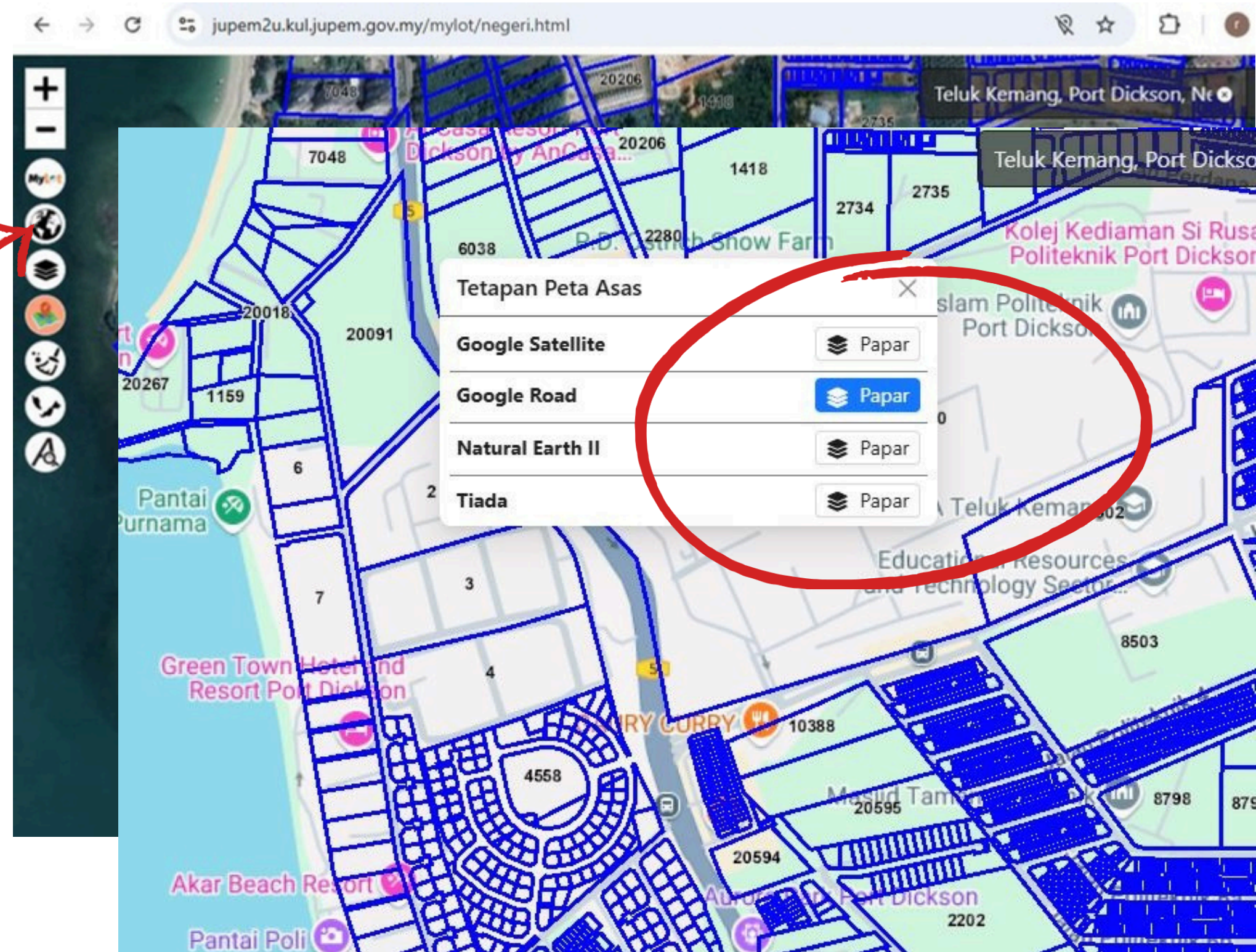
Steps to Find Your Location Plan

click



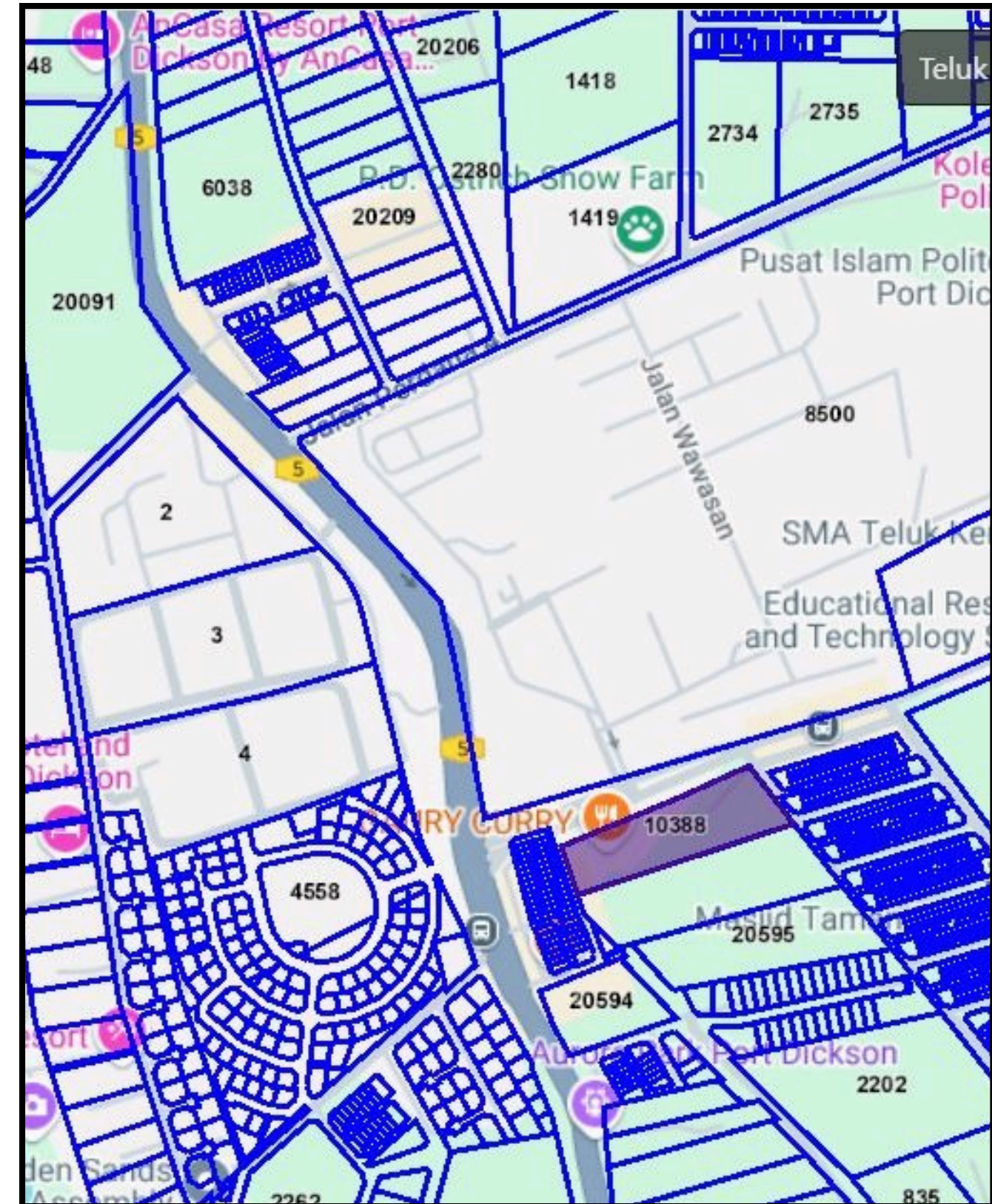
Steps to Find Your Location Plan

click



Steps to Find Your Location Plan

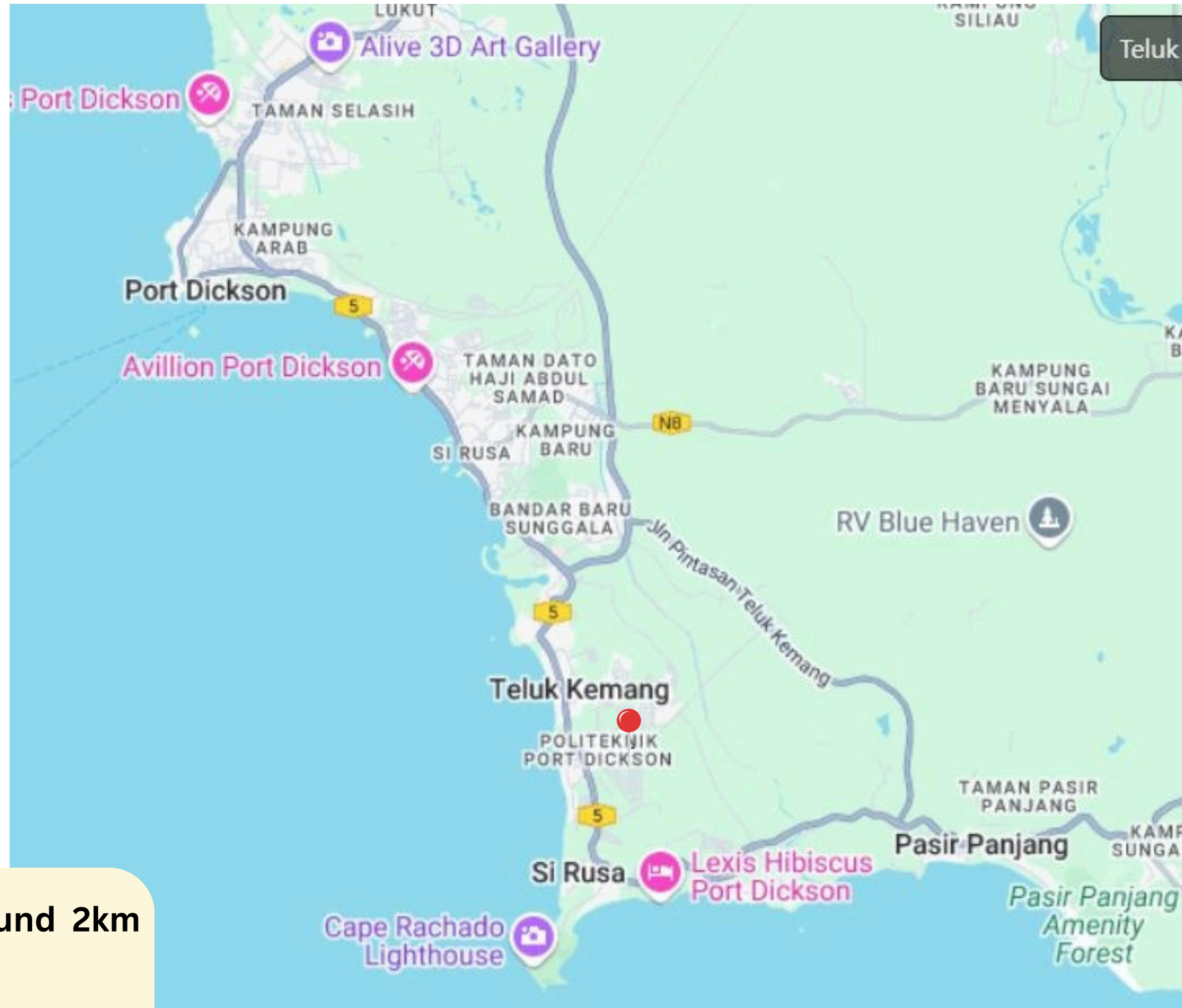
save as jpeg/ png format.



Steps to Find Your Key Plan

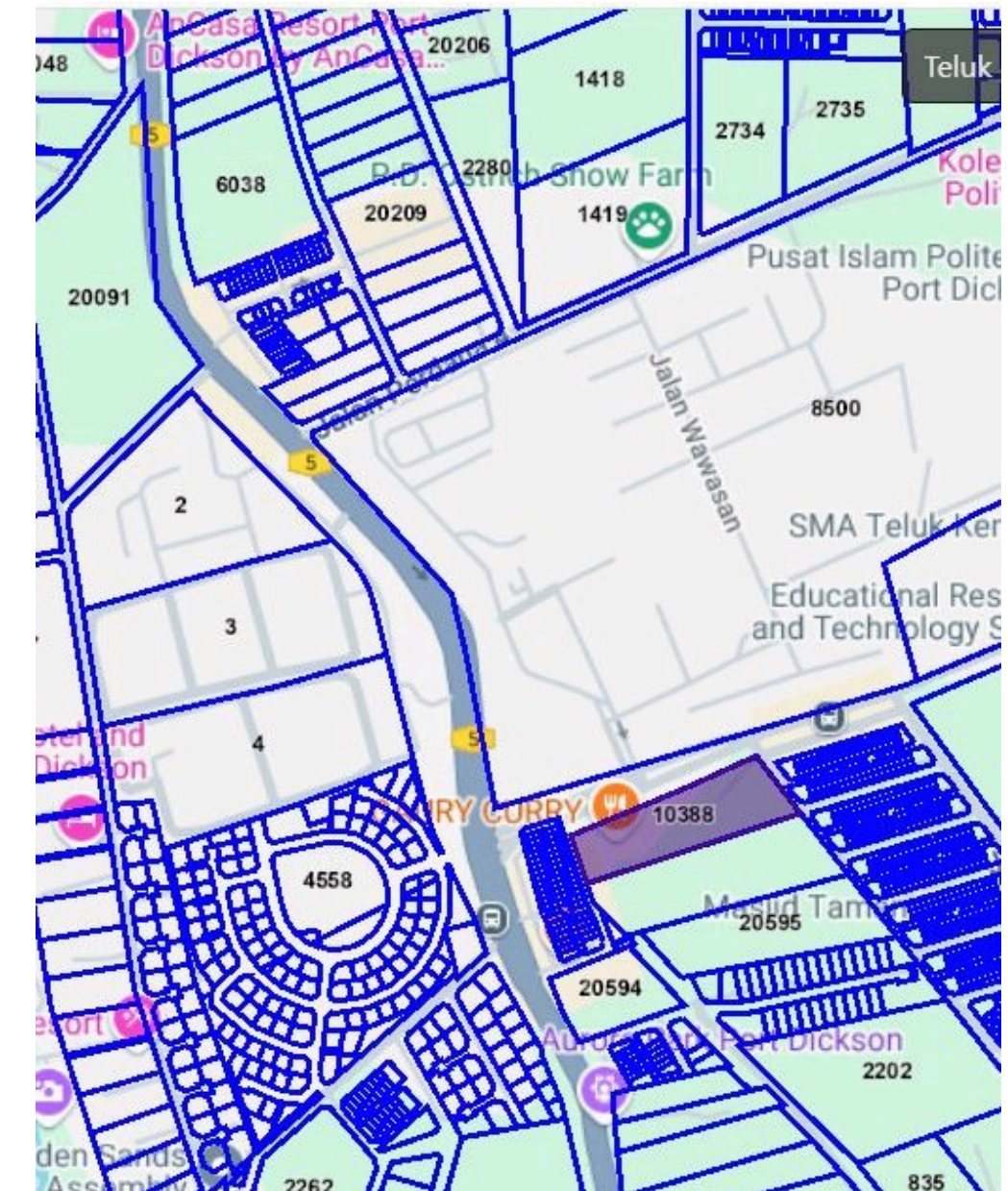
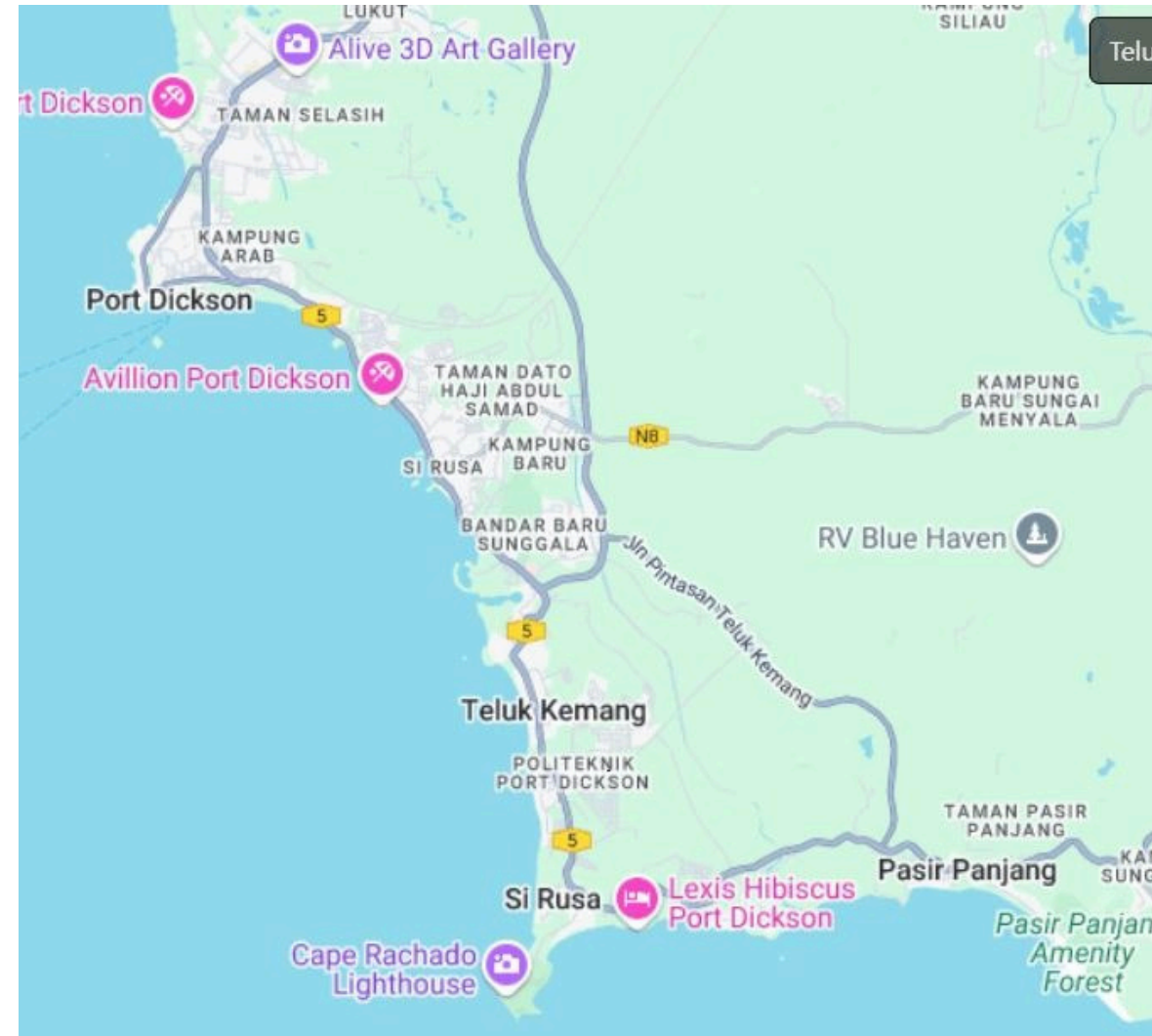


- zoom out your plan, around 2km radius
- save as jpeg/ png.



Steps to Find Your Key Plan

- print out- A4 size



STEPS TO TRACE A KEY PLAN

Understanding Lineweight

Lineweight refers to the thickness of lines used in a drawing.

Purpose: Creates hierarchy, depth, and readability.

Common Lineweights:

0.7 – 1.0 mm: Building outlines, boundary walls

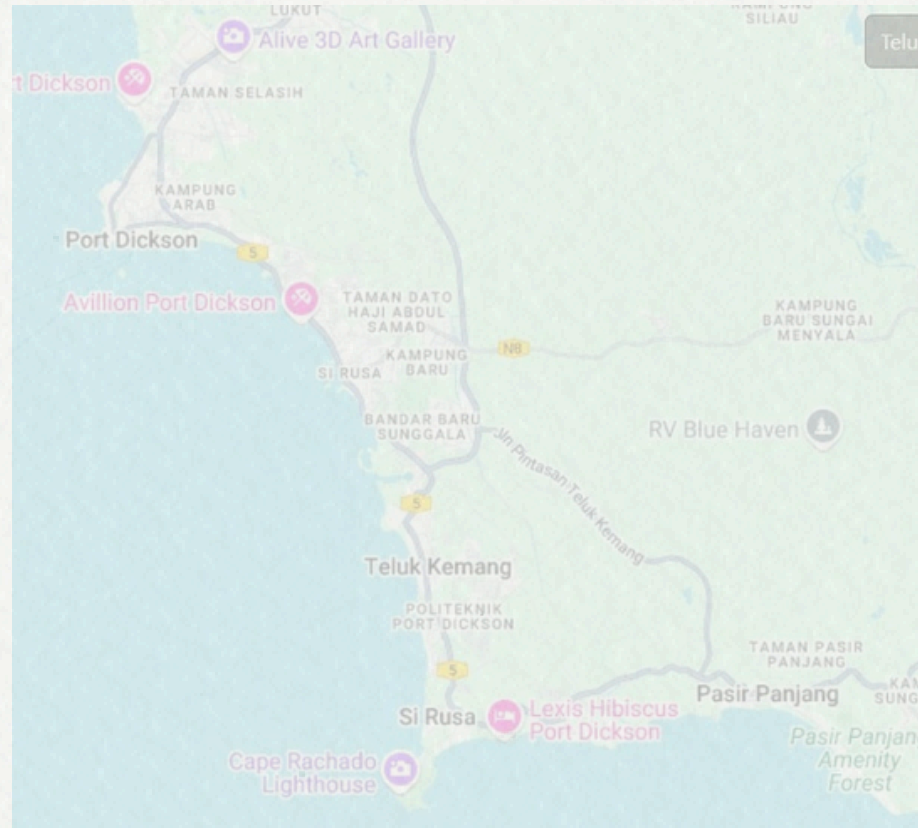
0.5 - 0.6 mm: Primary walls, site boundaries

0.3 mm: Secondary elements (roads, pathways)

0.1 – 0.2 mm: Fine details, furniture, annotations

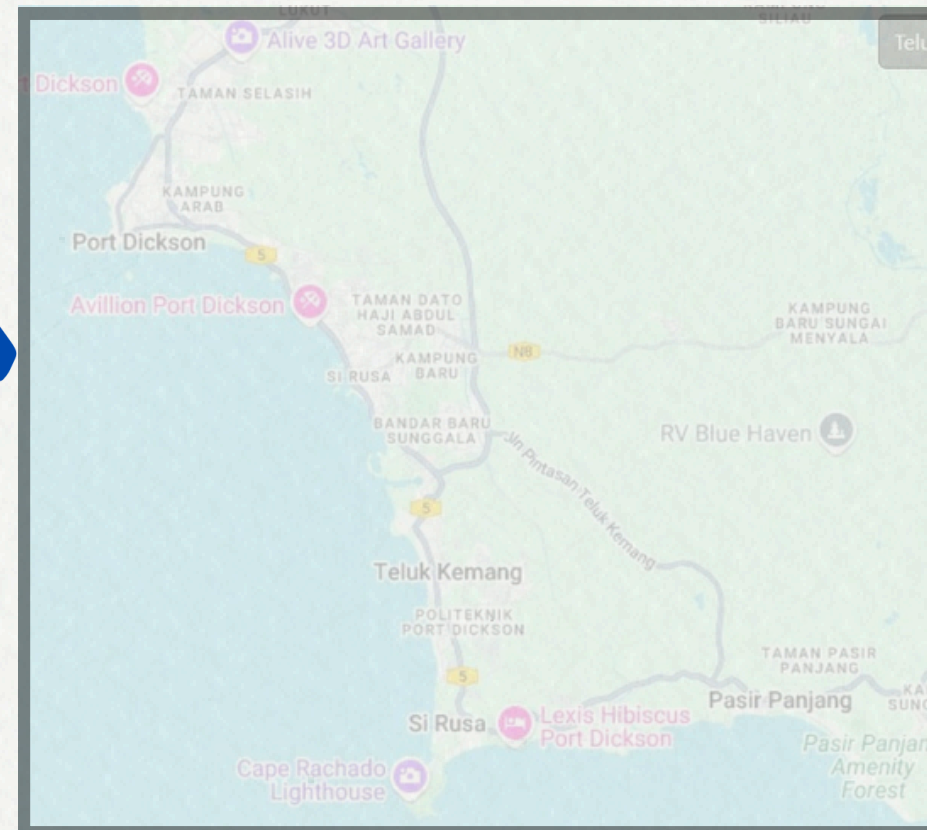
Prepare the Reference Plan

- Place the key plan under tracing paper.



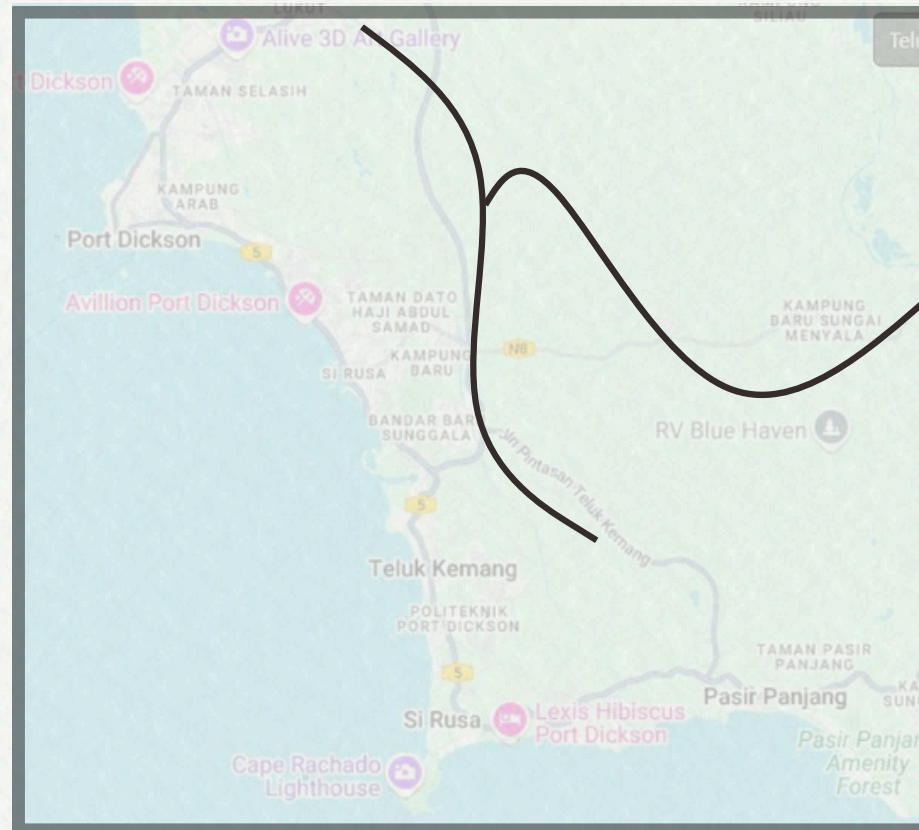
Outline the Building Perimeter

- Use 0.5 mm or 0.6 mm pen for bold outlines.



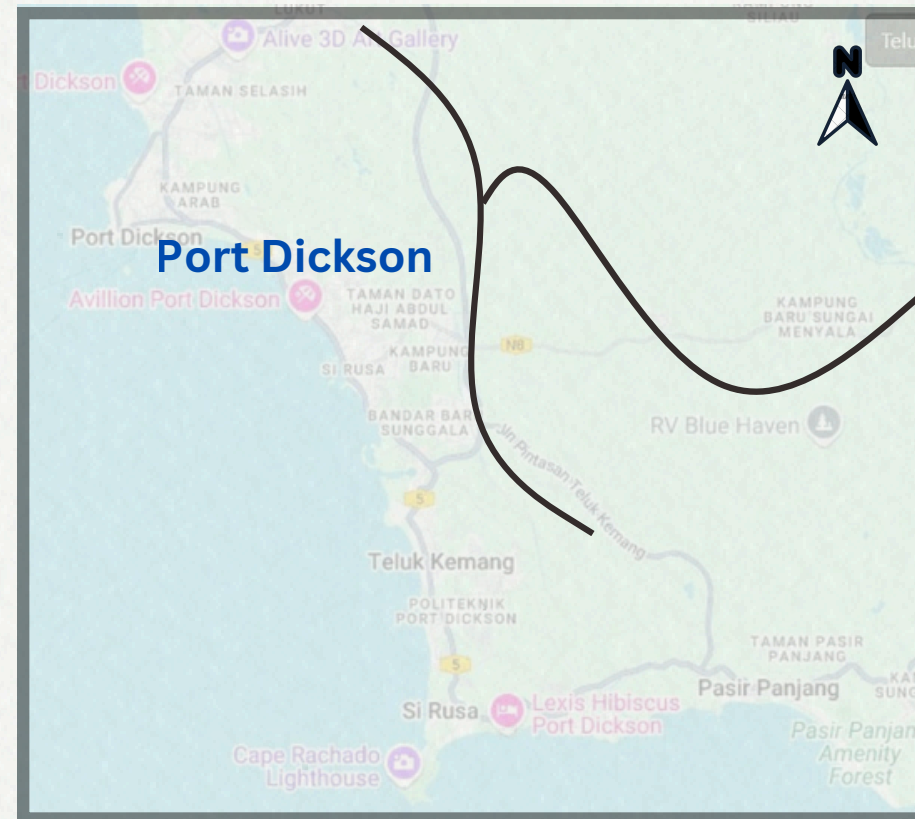
Trace Roads, Pathways & Boundaries

- Use 0.3 mm pen for secondary elements.



Label Important Elements

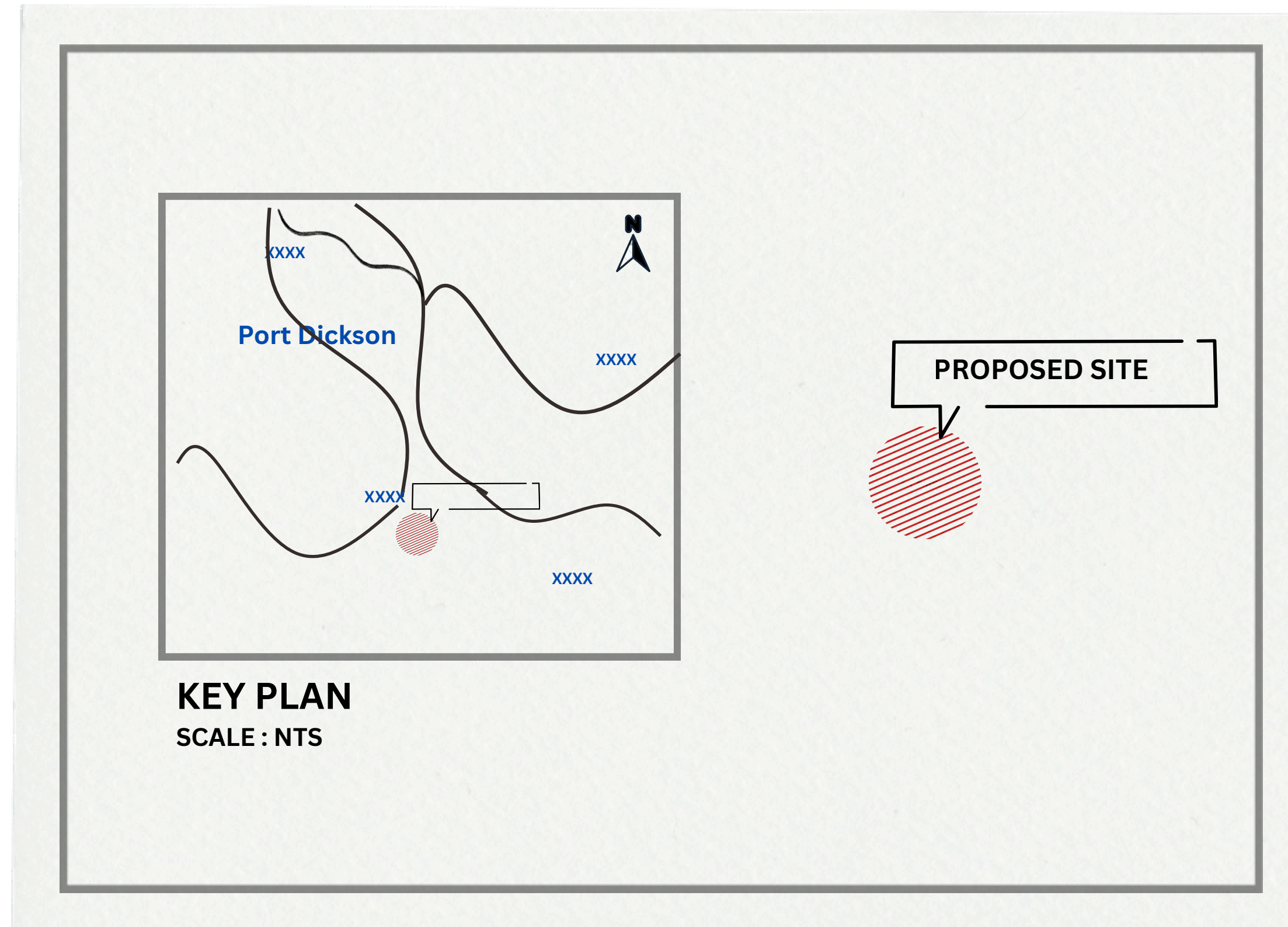
- Add text for street names, north direction, and scale.
- Use 0.1 mm or 0.2 mm



KEY PLAN
SCALE : NTS

Highlight the Proposed Site

- Use (0.1– 0.2 mm) hatching/shading to emphasize the proposed site.
- Optionally, use red or colored ink for extra visibility.

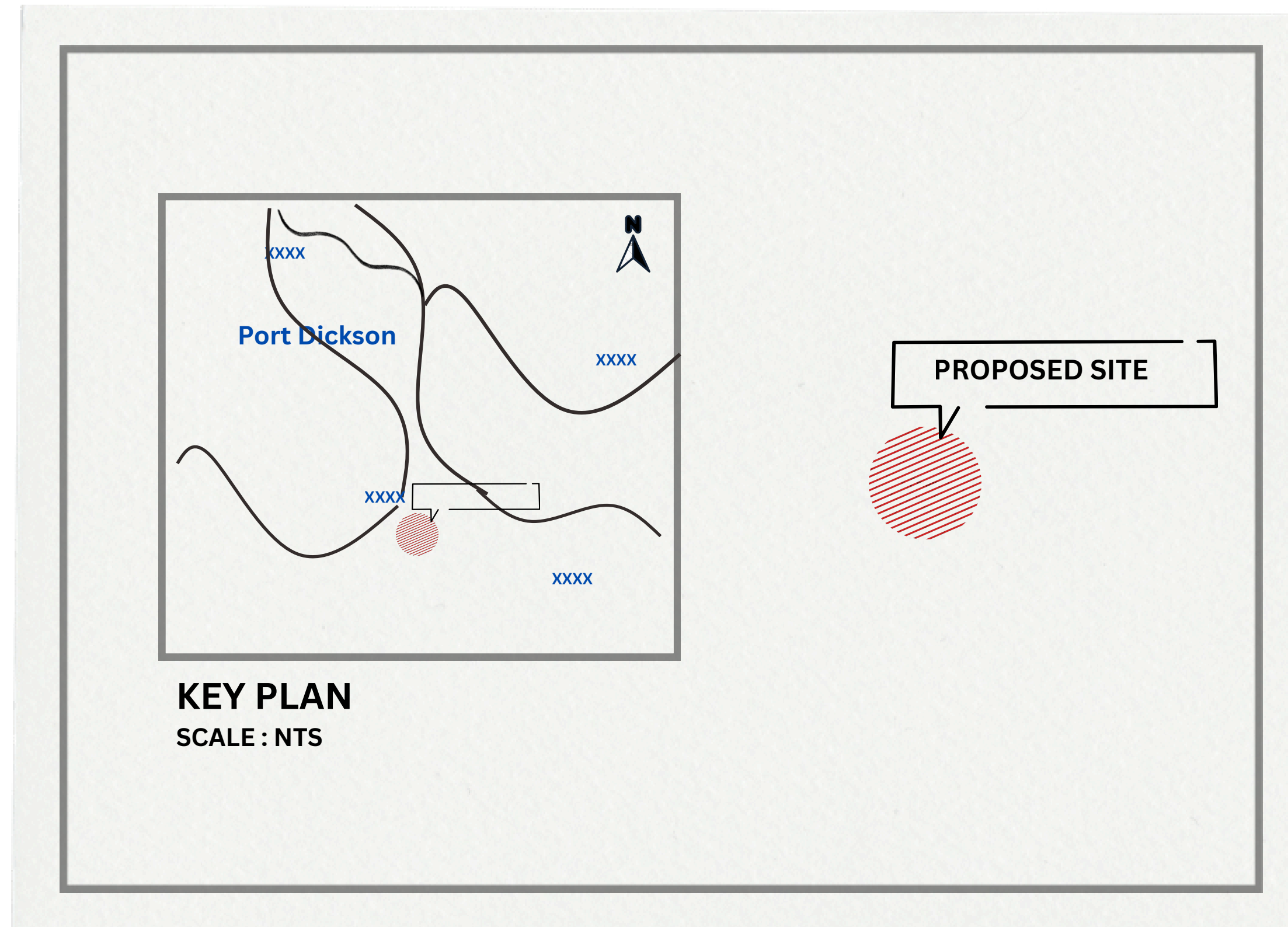


Highlight the Proposed Site

- Use (0.1– 0.2 mm) hatching/shading to emphasize the proposed site.
- Optionally, use red or colored ink for extra visibility.



Check and Finalize
Ensure consistent linework,
erase unnecessary marks.



STEPS TO TRACE A LOCATION PLAN

The location plan is to be traced by following the same method as previously described.

Trace Roads, Highways & Pathways

*Use 0.5 mm pen for main roads,
0.3 mm for secondary roads.*

Add Surrounding Buildings & Landmarks

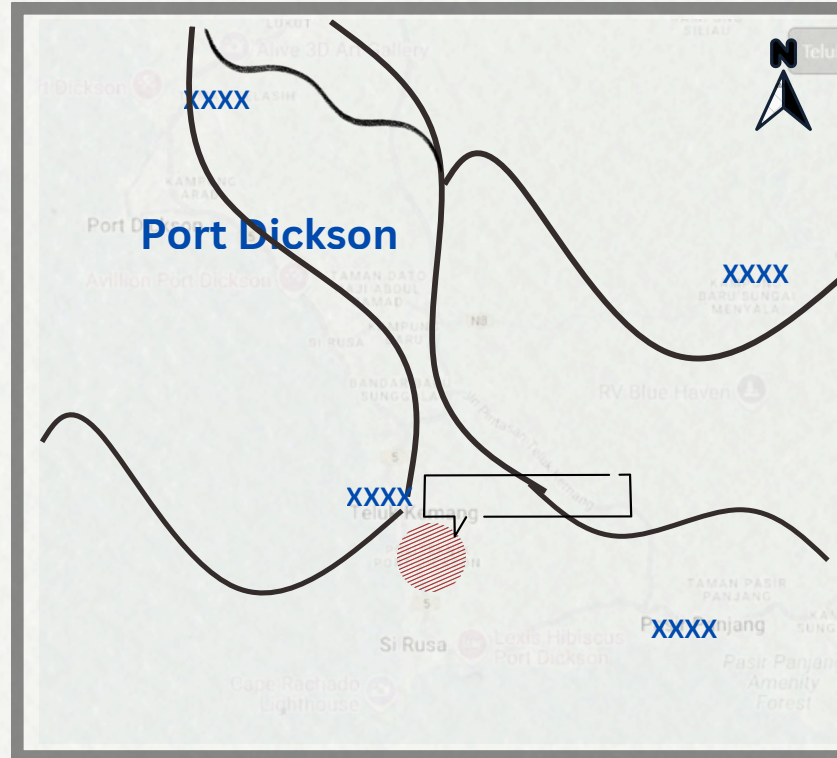
- Use 0.3 mm for nearby structures/lots.

Common Lineweights for a Location Plan:

- 0.7 – 1.0 mm: Proposed site boundary
- 0.5 mm: Main roads, highways
- 0.3 mm: Secondary roads, adjacent buildings
- 0.1 – 0.2 mm: Minor details, annotations



The location plan must be placed either next to or below the key plan.



KEY PLAN

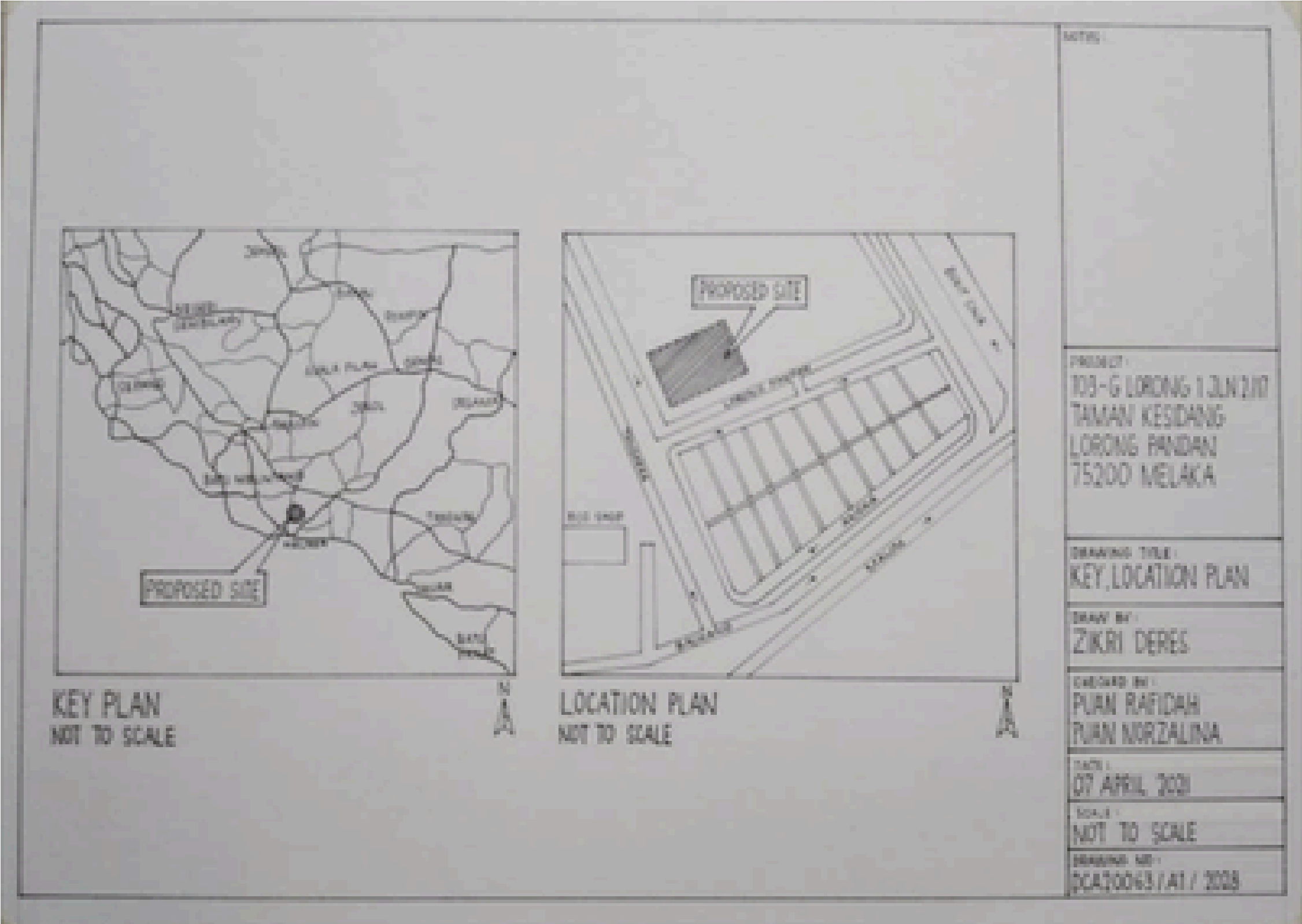
SCALE : NTS



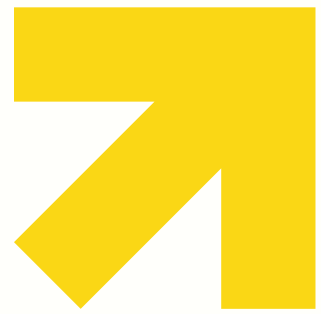
LOCATION PLAN

SCALE : NTS

The following shows the completed manual trace of the location and key plans.



SITE PLAN



SITE PLAN

- Sometimes called a 'block plan', a site plan shows the proposed development in relation to the property boundary.
- Site plans are typically submitted at a scale of either 1:200, 1:250 or 1:500
- Site plans should include the following:
 - The size and position of the existing building (and any extensions proposed) in relation to the property boundary.
- The site plan should show the location of the building in relation to the site boundaries.
- All landscape elements, streets and pedestrian walkways should be indicated and dimensioned.
- Choose from 2 scales:
 - 1:200 Site Plan: perfect for a close-up of a small area and areas within 32 x 32m
 - 1:500 Site Plan: for close-up of particular area and areas within 80 x 80m

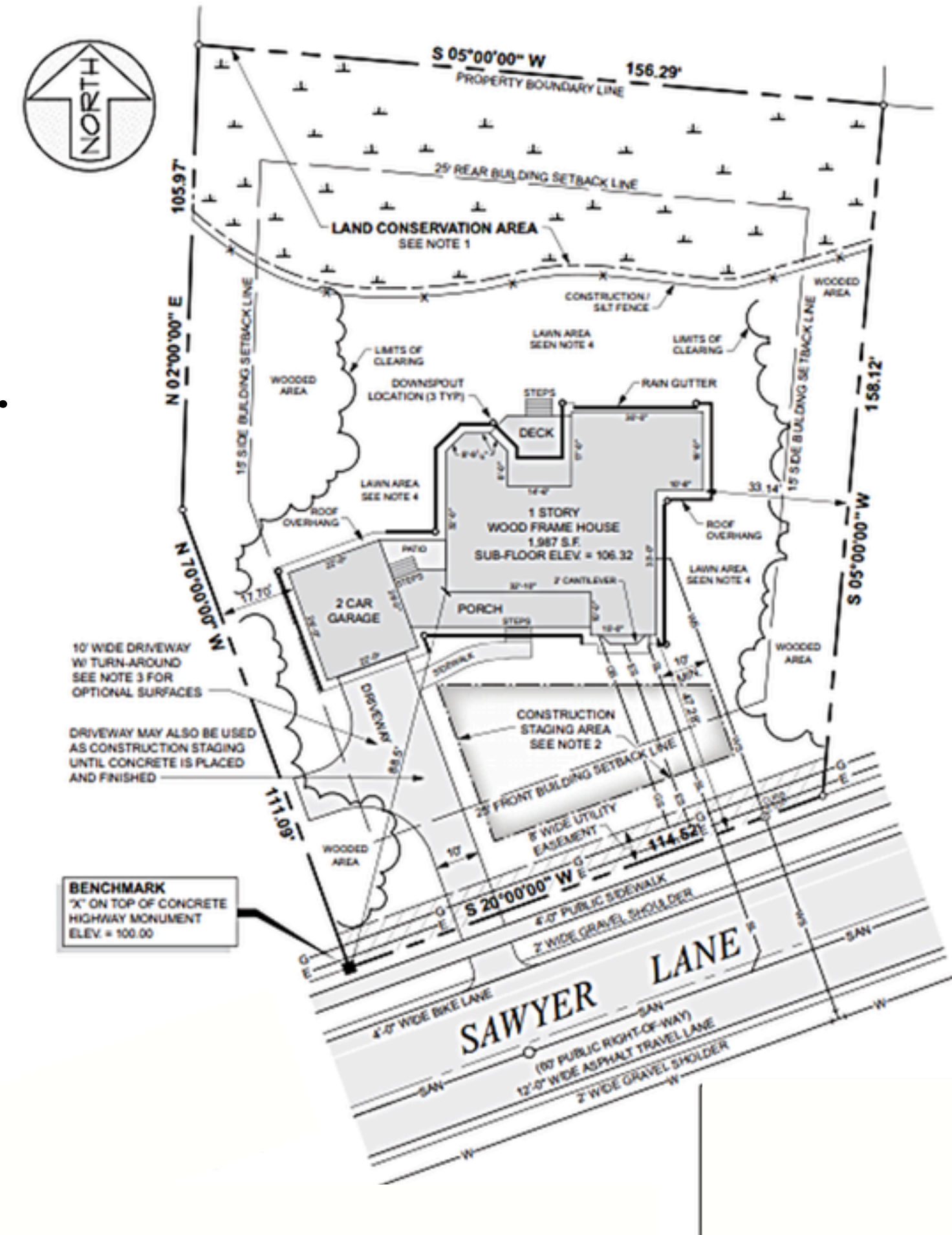
Importance of a Site Plan

Helps in construction planning and approvals.

Ensures compliance with zoning and building regulations.

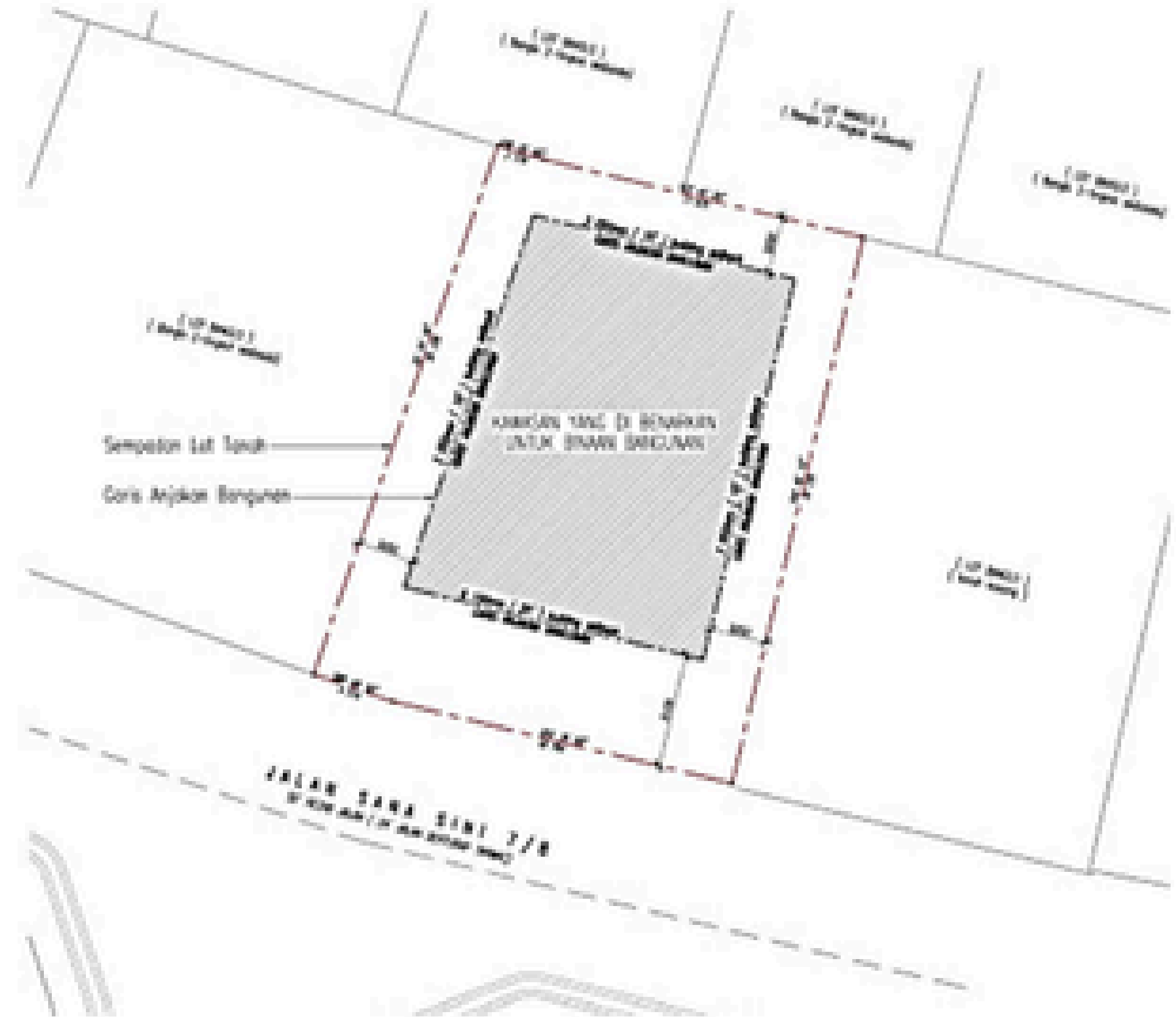
The functions of the site plan are to show:

- The location of the building or buildings in relation to their surroundings.
- The topography of the site, with both existing and finished levels.



What is Building Setback?? (*Garis Anjakan Senibina*)

According to the Town Planning Act, the building displacement line for a single house/ bungalow is 20 feet (6096mm) from the Land Lot, ie from the front entrance and 10 feet (3048mm) on each side and back of the Land Lot into site.

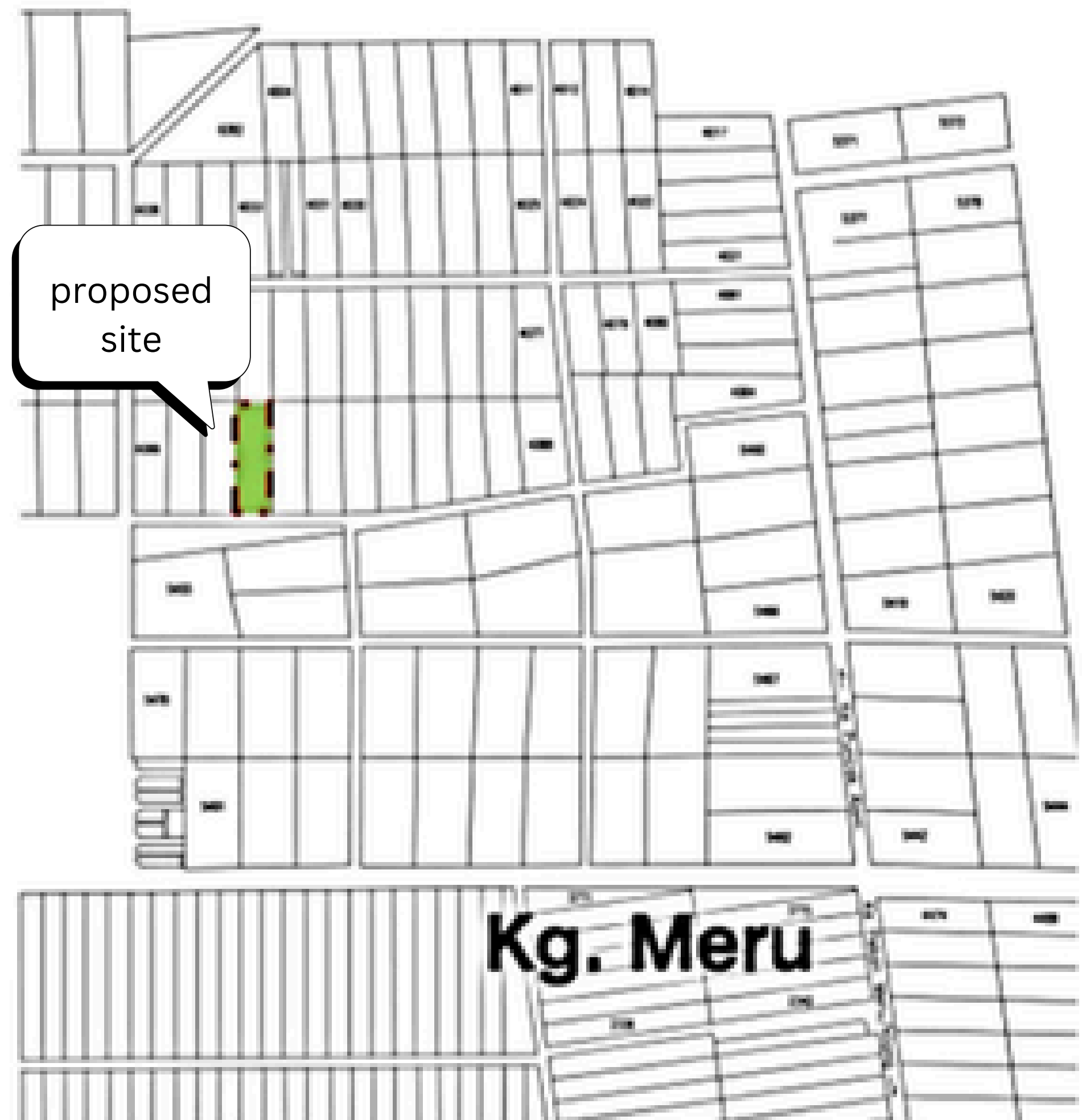




Exceptions are only allowed for the construction of roof projections (overhang roof eaves) only that is not more than 2 feet and a half (or 762 mm) from the building setback line (building setback).

Gates, Security Fences, Garbage House, Components such as Water Meters, Electricity Meters or Mailboxes, Gates, Guards House, Lamap posts, gazebo, pergolas and non-permanent structures.

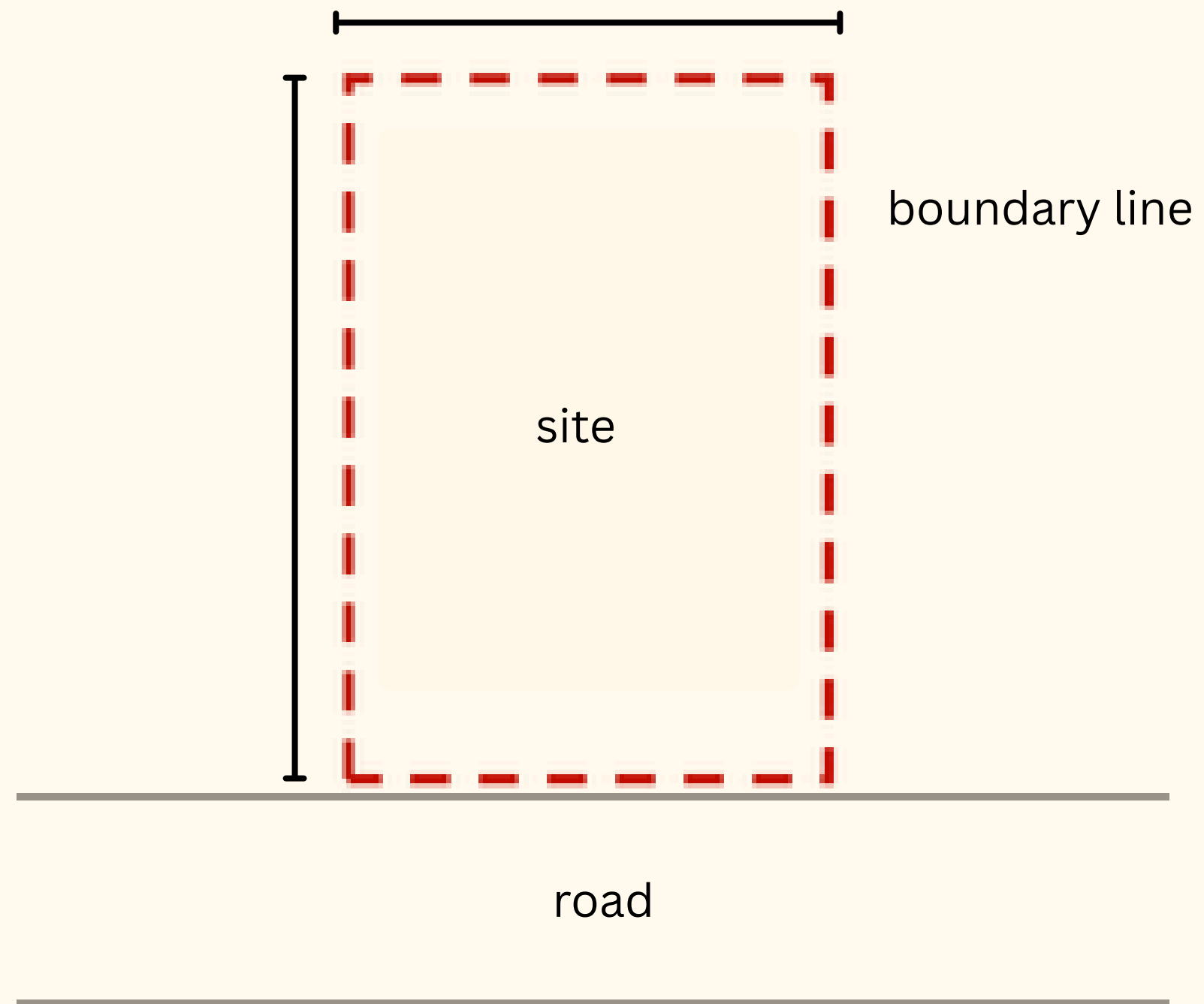
STEPS TO DEVELOP A SITE PLAN



Example of proposed site that you can choose for site plan. (refer your location plan)

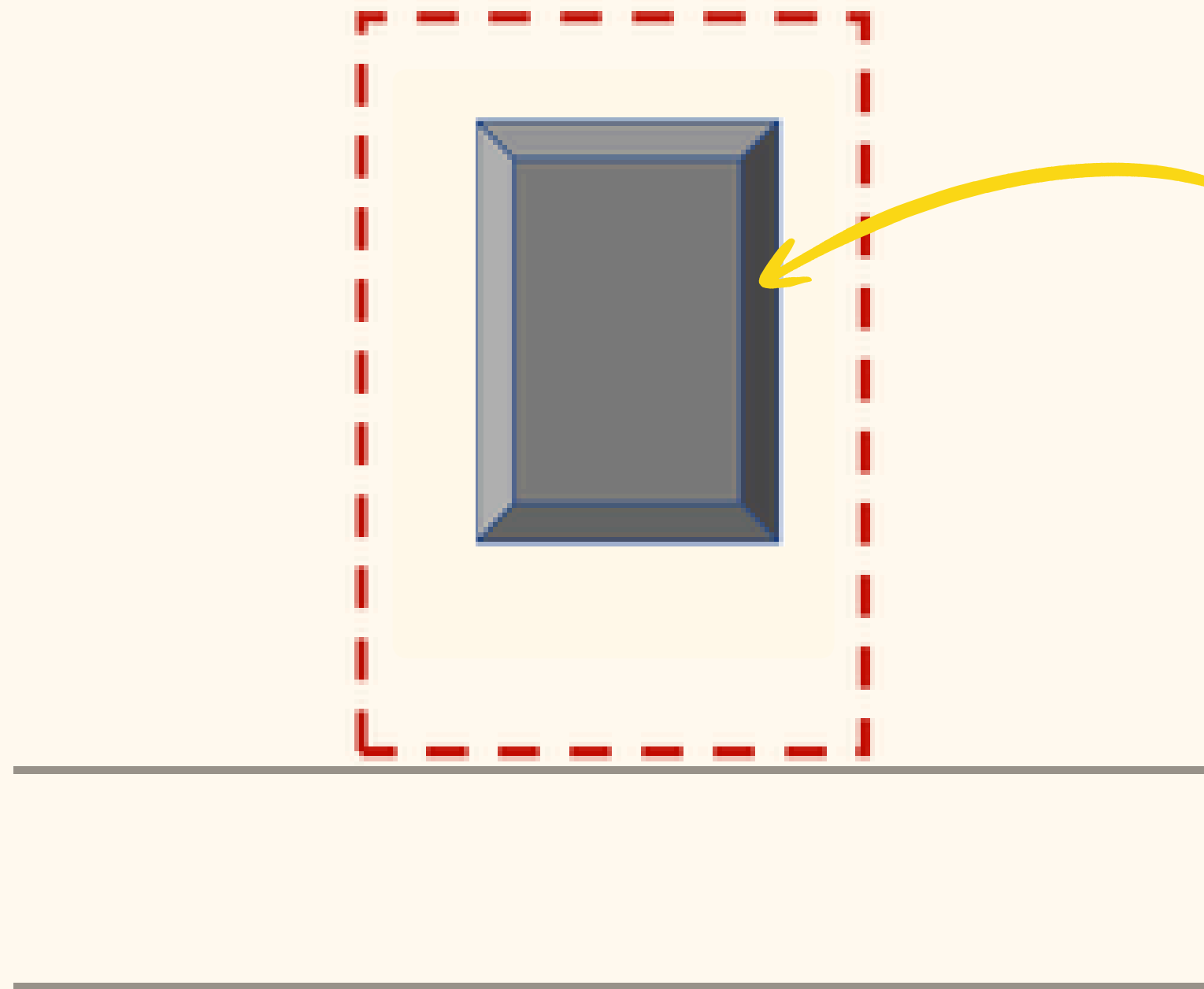
KEY PLAN
NOT TO SCALE

LOCATION PLAN
NOT TO SCALE

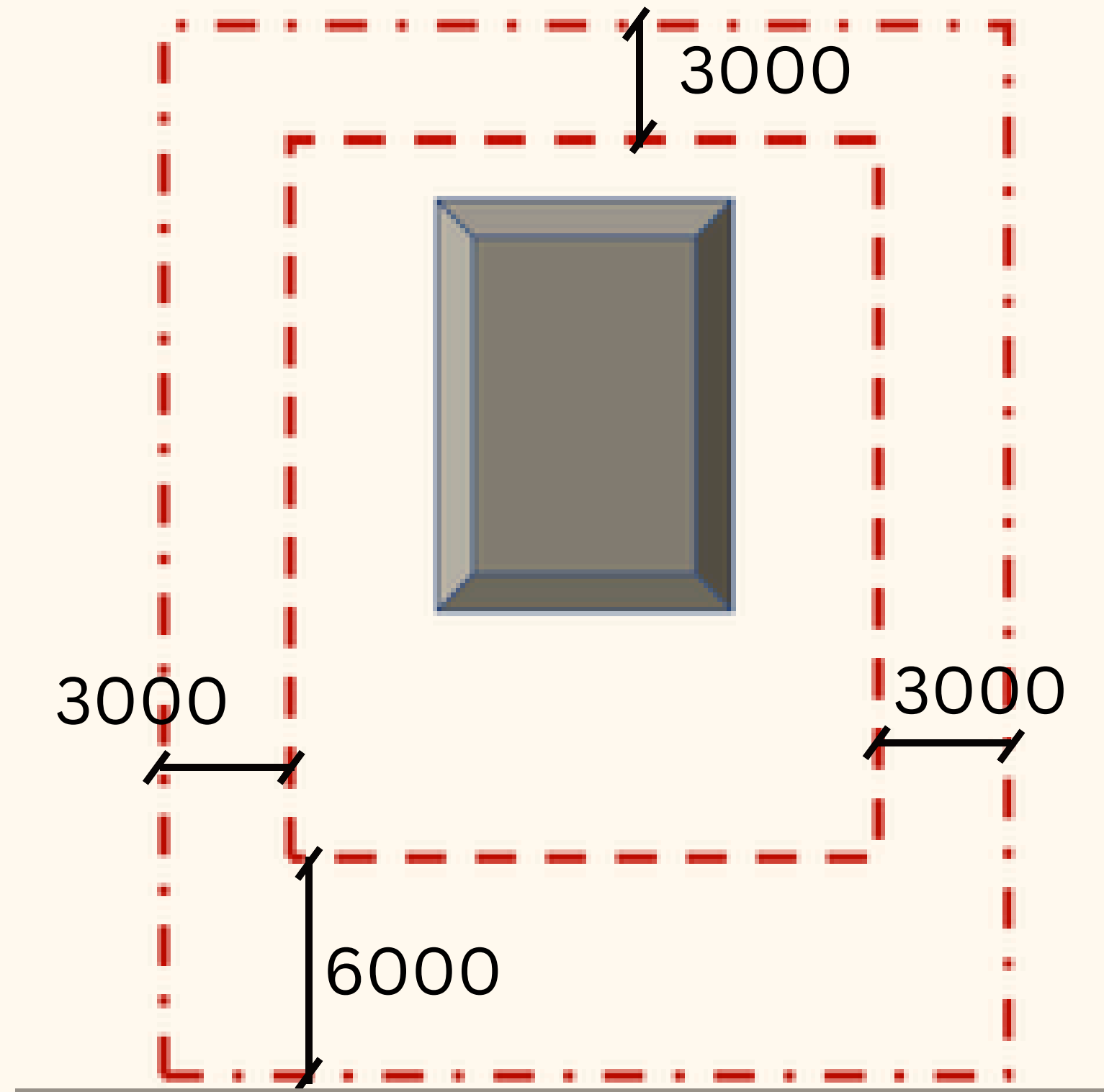


example: location plan

- Draw the site boundary based on the location plan.
- Measure and set out the site dimensions.
- Identify the adjacent road(s) and label the road name(s).



- Insert the roof plan inside the allowable building area.
- Position the building within the building line.
- Do not encroach into the required setbacks (3 m side and rear, 6 m front).



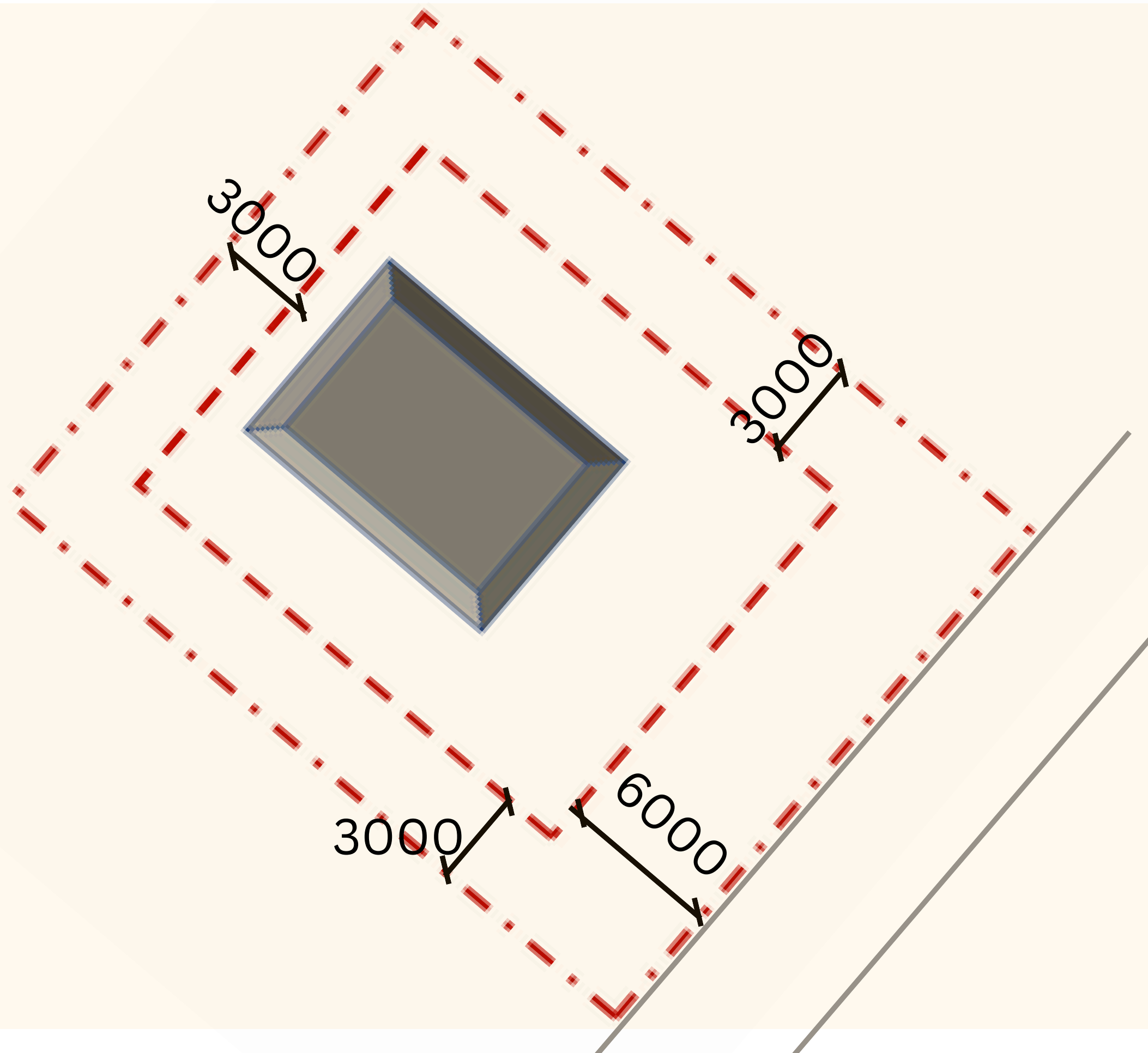
Determine the Building Setback

Determine the required building setbacks based on the type of road surrounding the site. Refer to the applicable planning guidelines to ensure compliance.

Road Types for Reference:

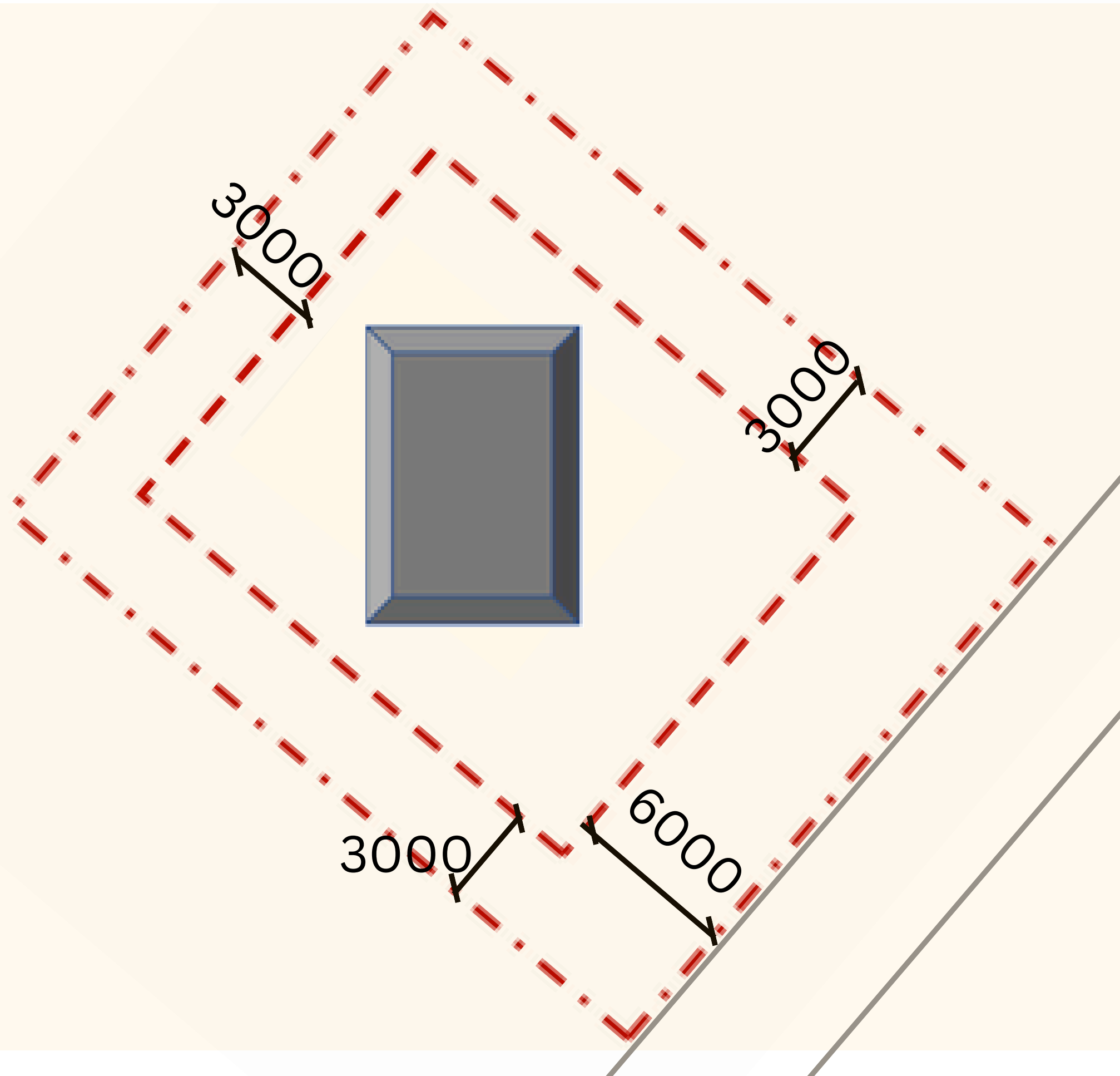
- **Primary Road (Arterial Road)** – Major road with high traffic volume.
- **Secondary Road (Collector Road)** – Connects local roads to primary roads.
- **Local Road (Access Road)** – Provides direct access to residential or commercial properties.
- **Service Road** – Runs parallel to a main road and provides access to adjacent properties.

Road Type	Description	Typical Minimum Front Setback
Primary Road (Arterial Road)	Major road with high traffic volume.	9.0 m
Secondary Road (Collector Road)	Connects local roads to primary roads.	6.0 m
Local Road (Access Road)	Provides direct access to residential or commercial properties.	4.5 m
Service Road	Runs parallel to a main road and provides access to adjacent properties.	3.0 m



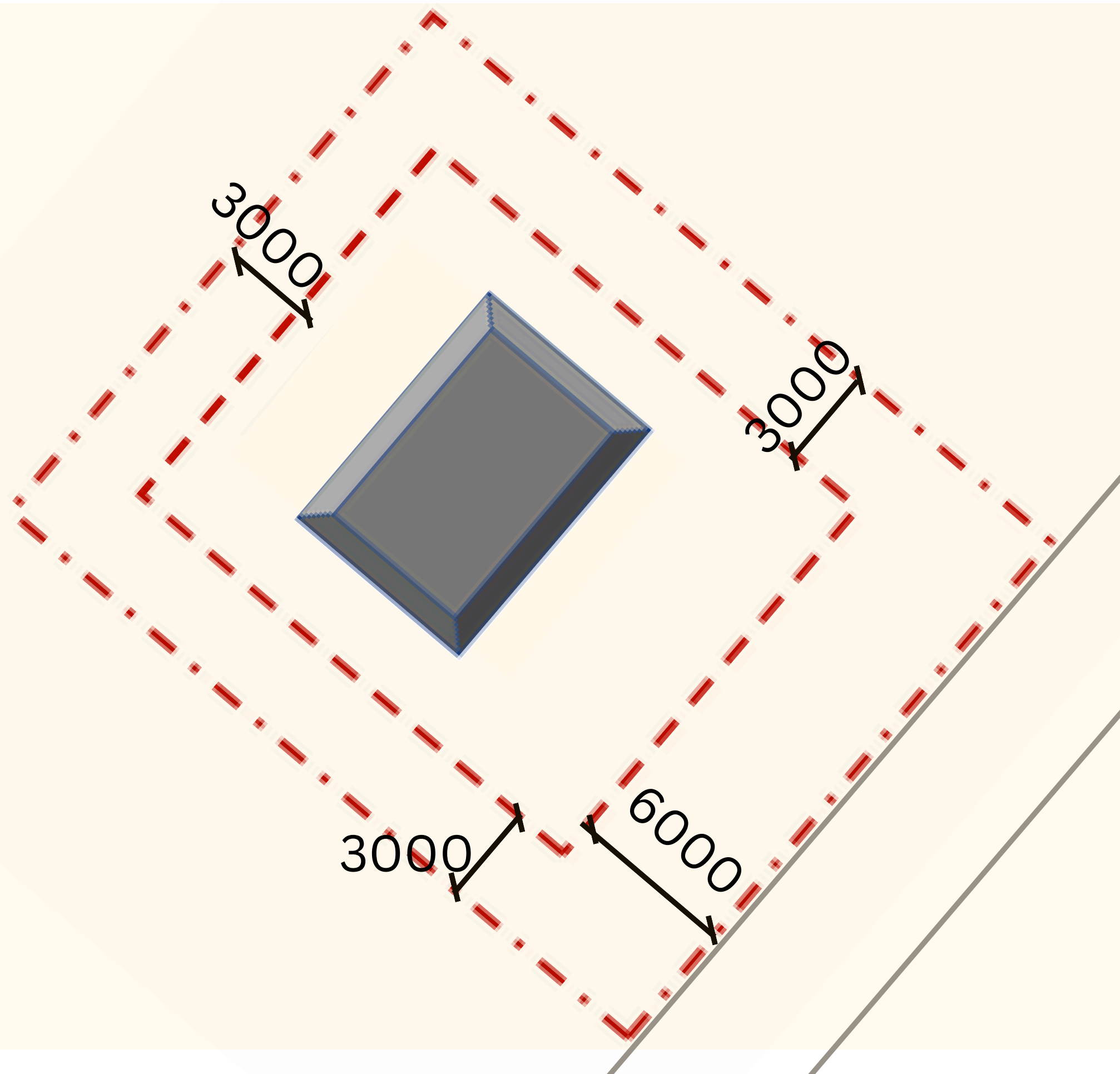
Building Orientation

- Position the building according to the site layout.
- The building may face the main road entrance.



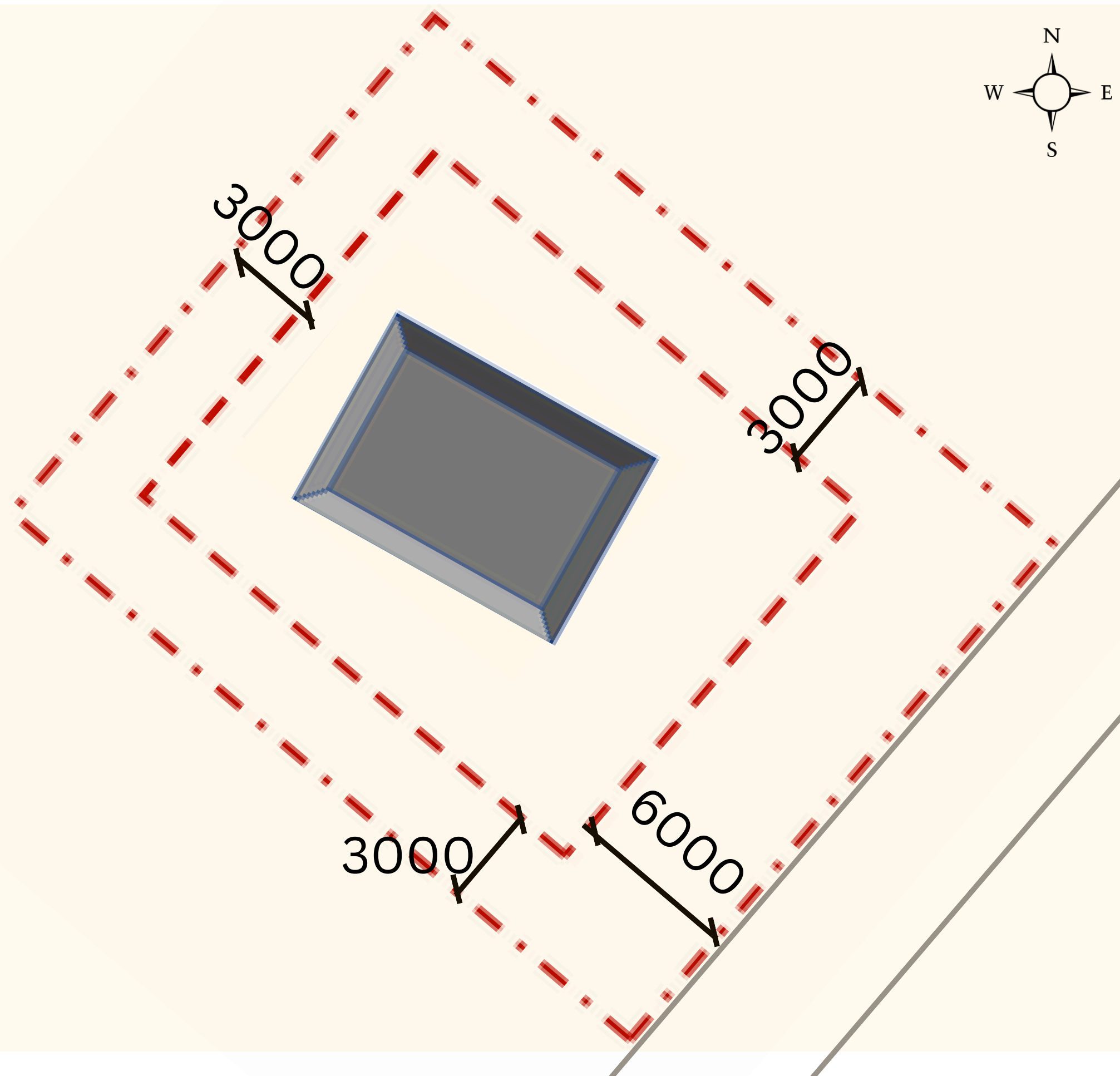
Building Orientation

- The building may be oriented vertically or horizontally.



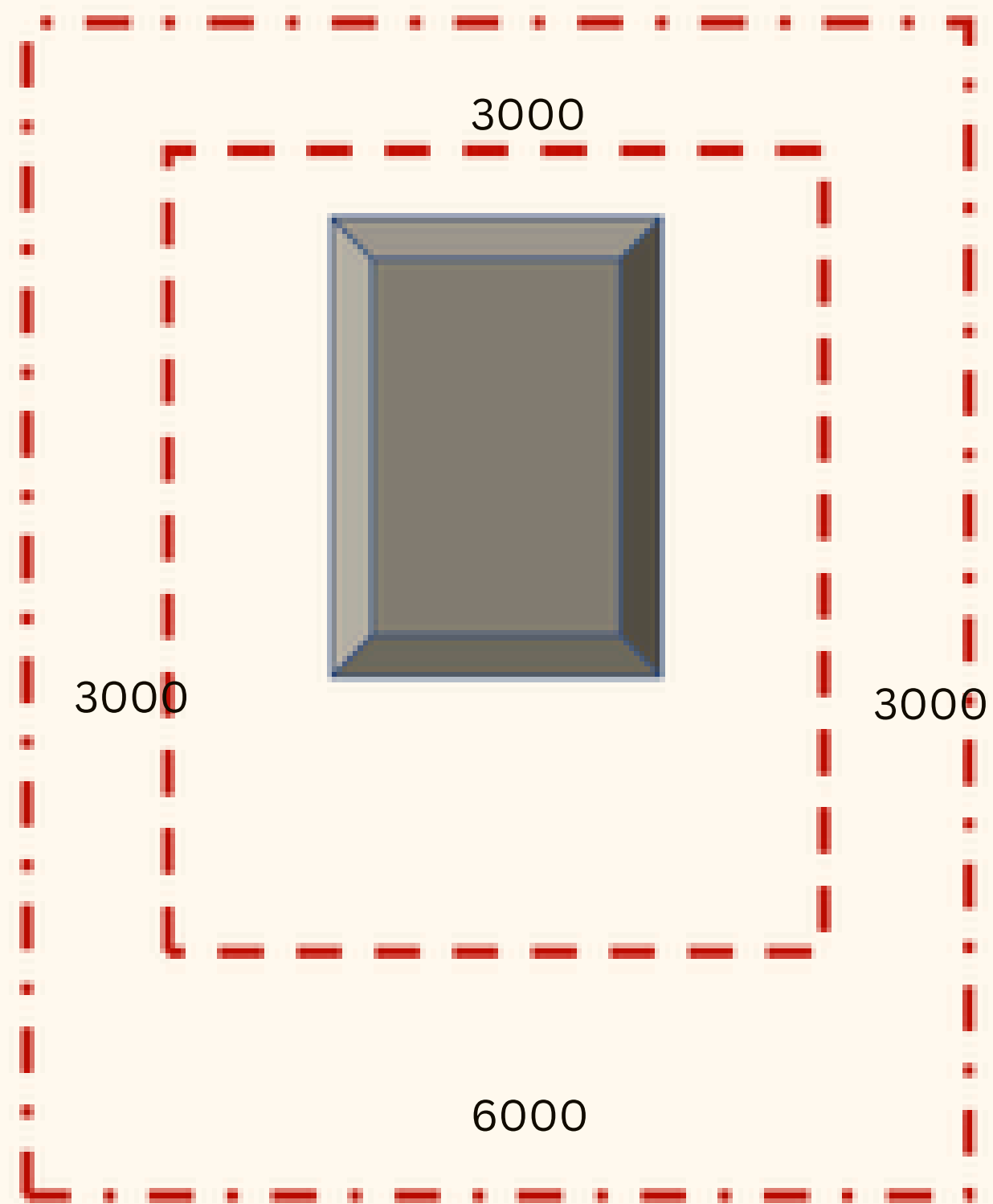
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Building Orientation

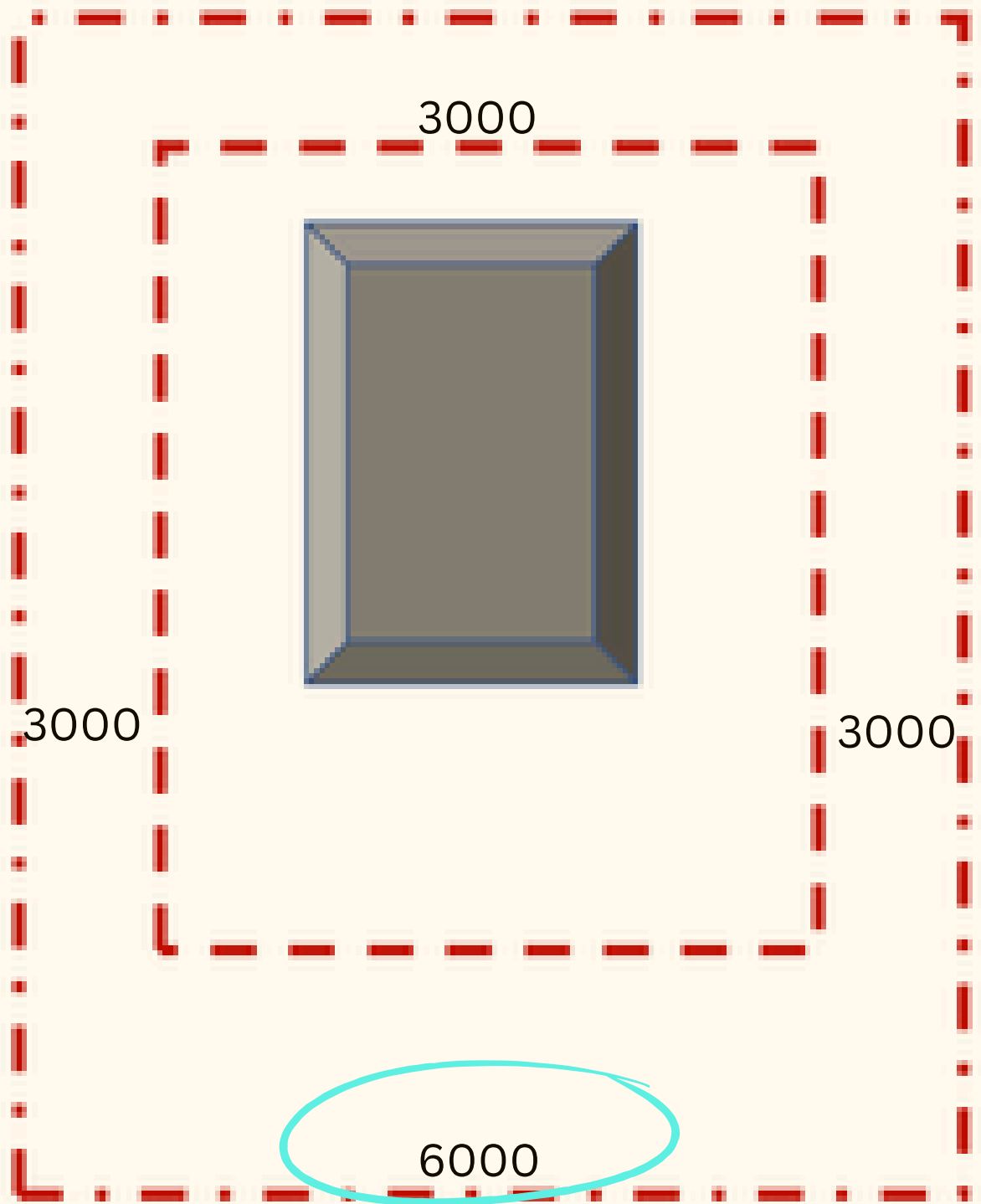
- The building may also be rotated to face the Qibla, if required.



setback size

lot no.

lotxy

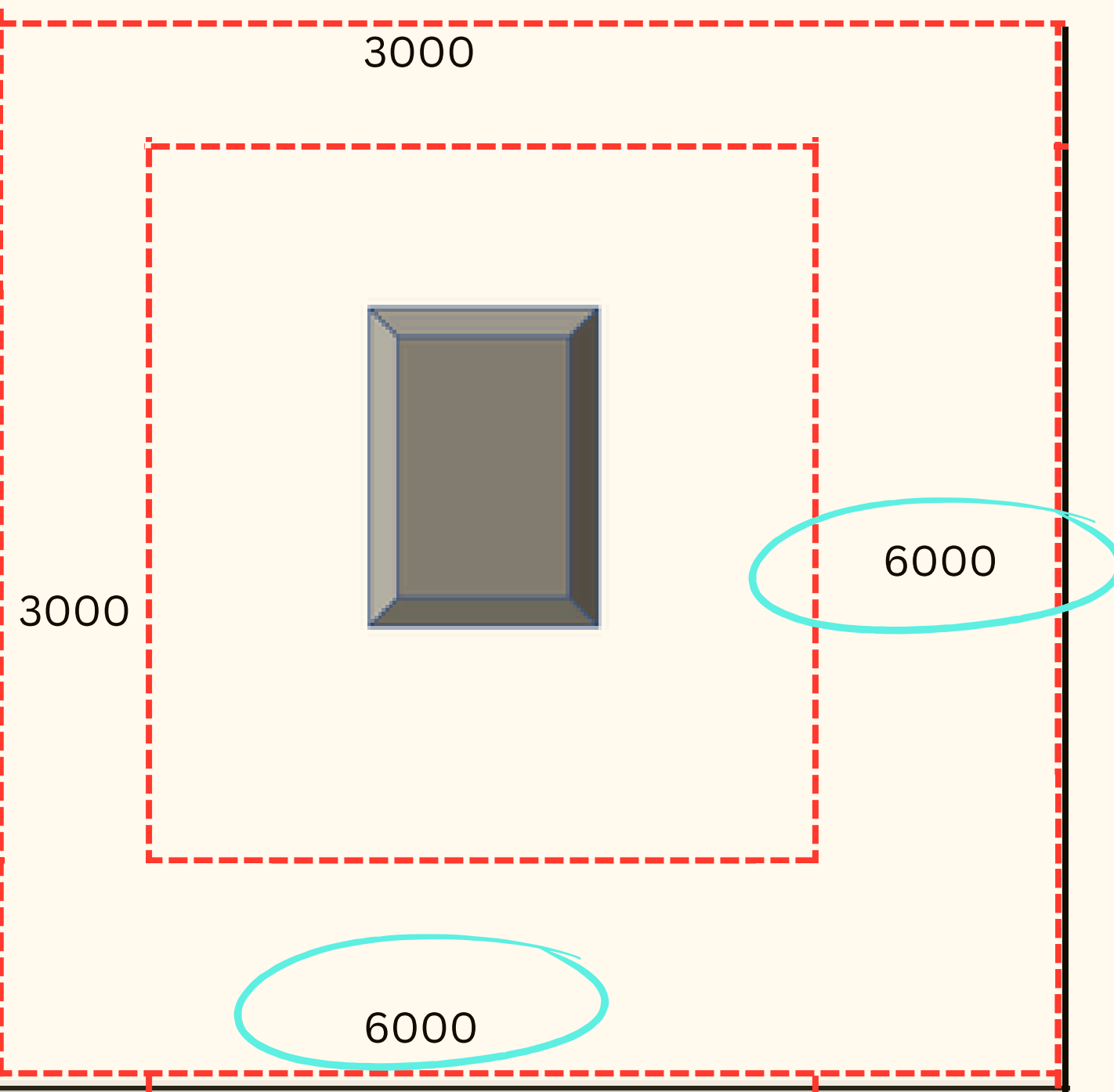


lotxx



road name & size

lotxy

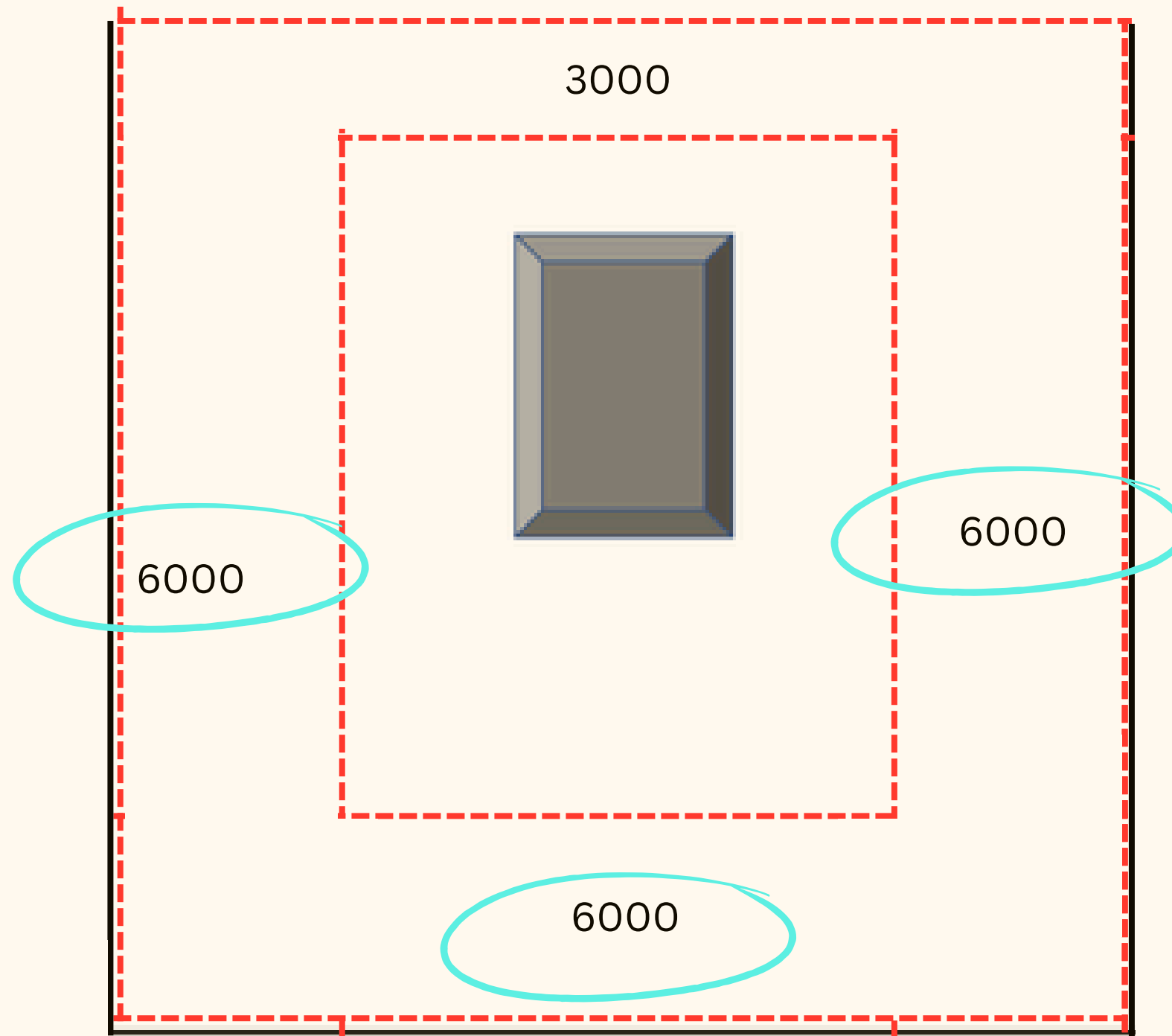


lotxx

Jalan Melur

setback size
(refer road types)

lotxy



lotxx

Jalan Melur

setback size
(refer road types)

lotxy

6000

6000

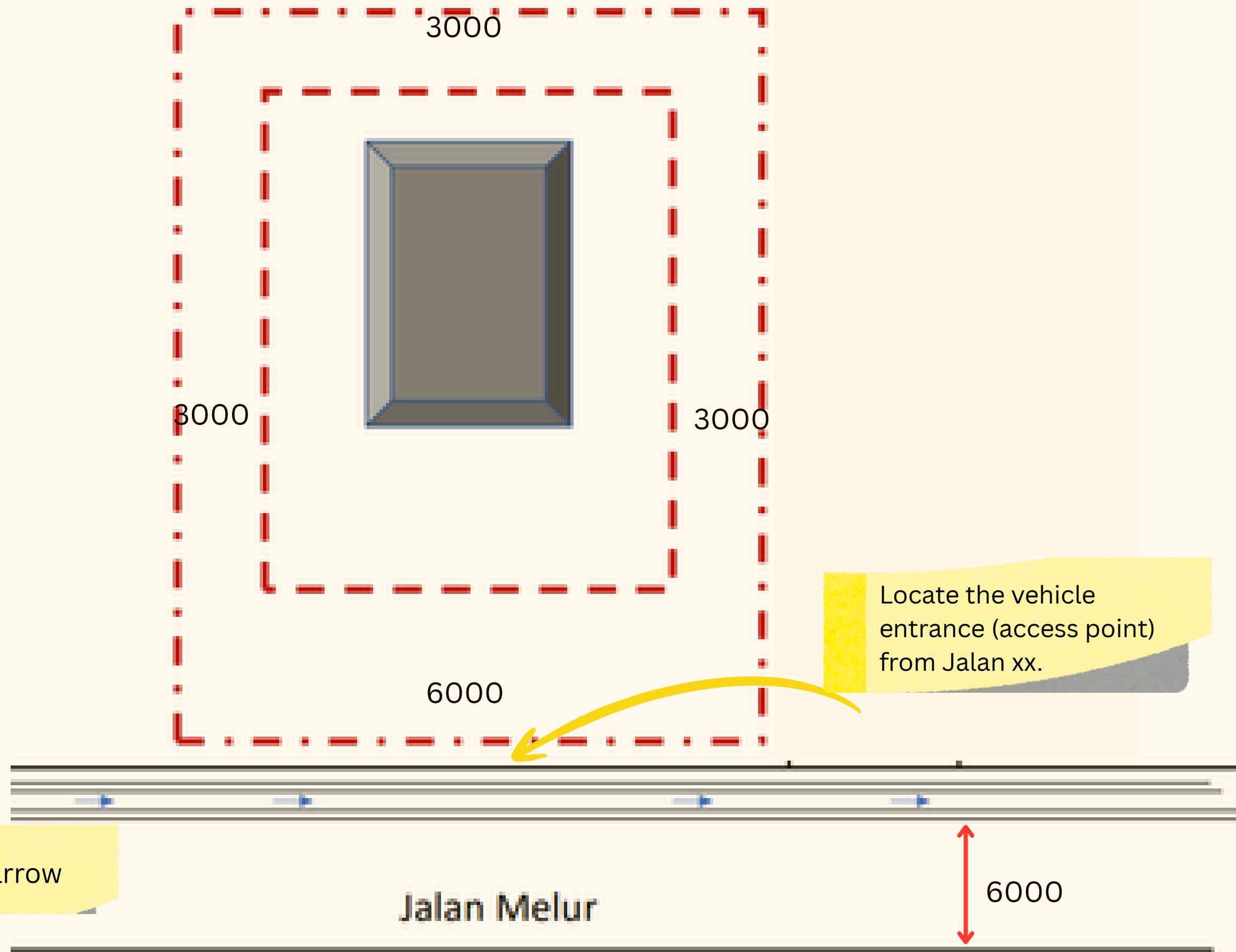
6000

6000

Jalan Melur

lotxx

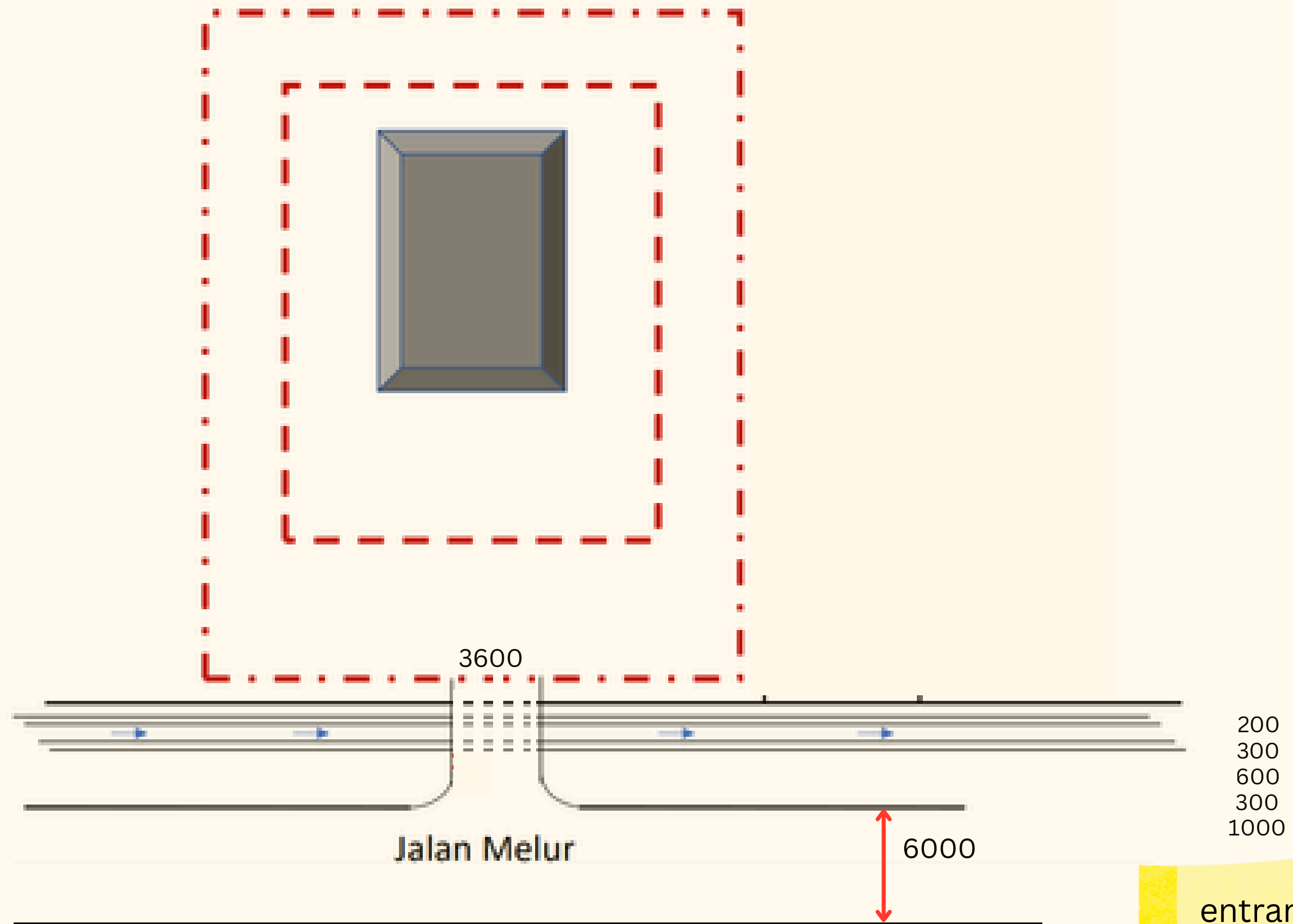
setback size
(refer road types)

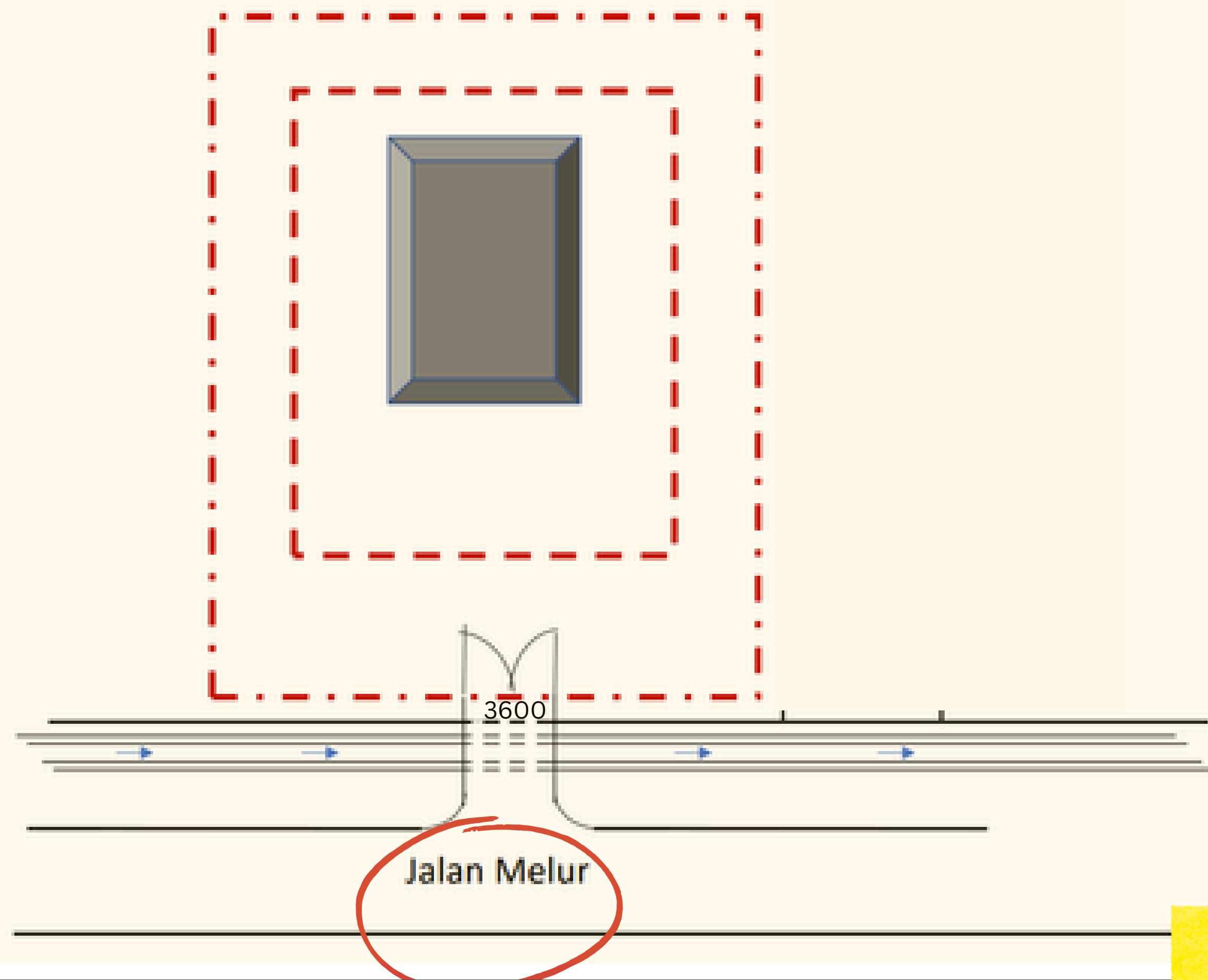


Road Reserve Components

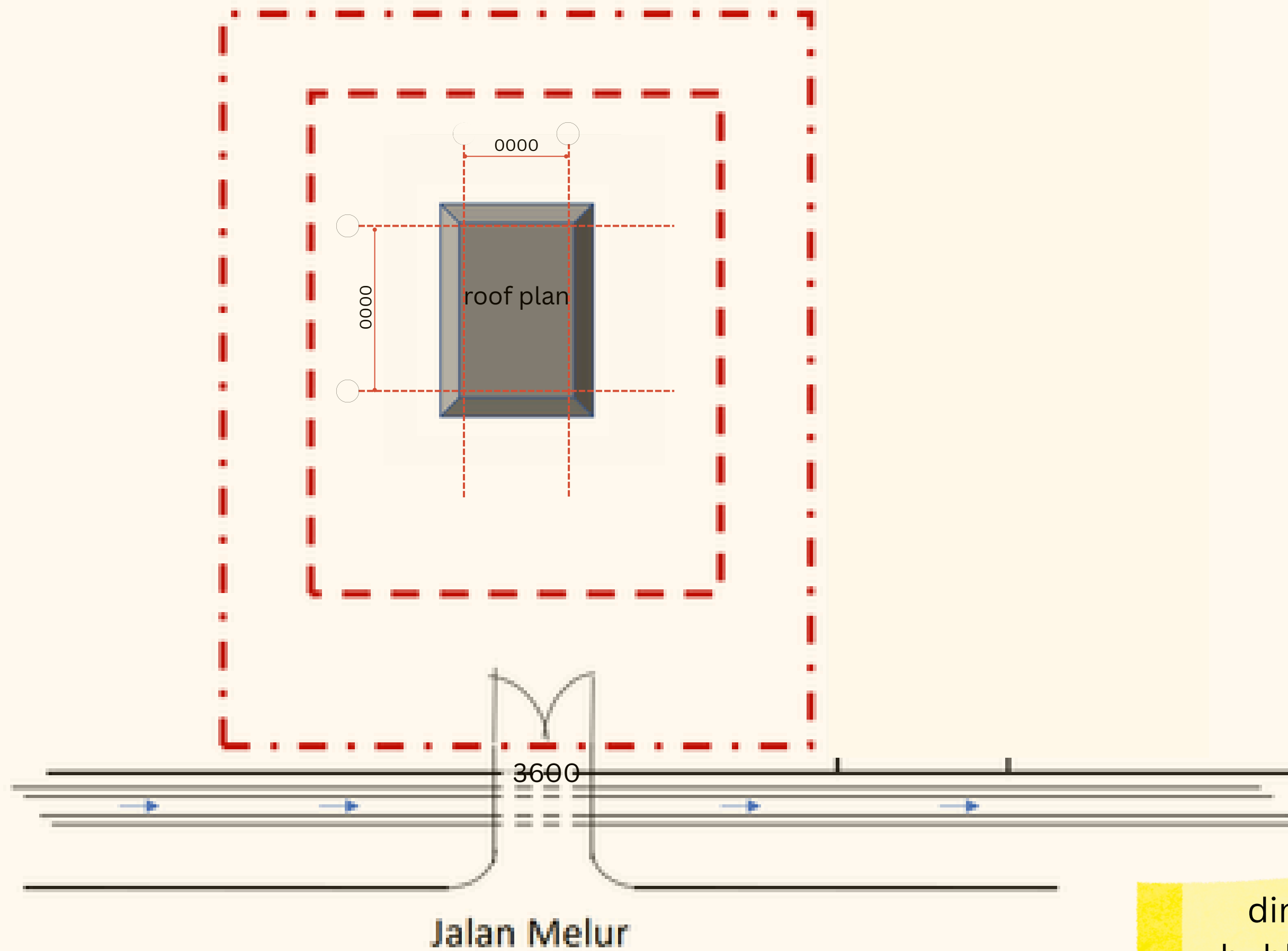
- 200 mm – Road verge / utility reserve
- 300 mm – Drainage
- 600 mm – Road carriageway (main road)
- 300 mm – Drainage / road verge

200
300
600
300

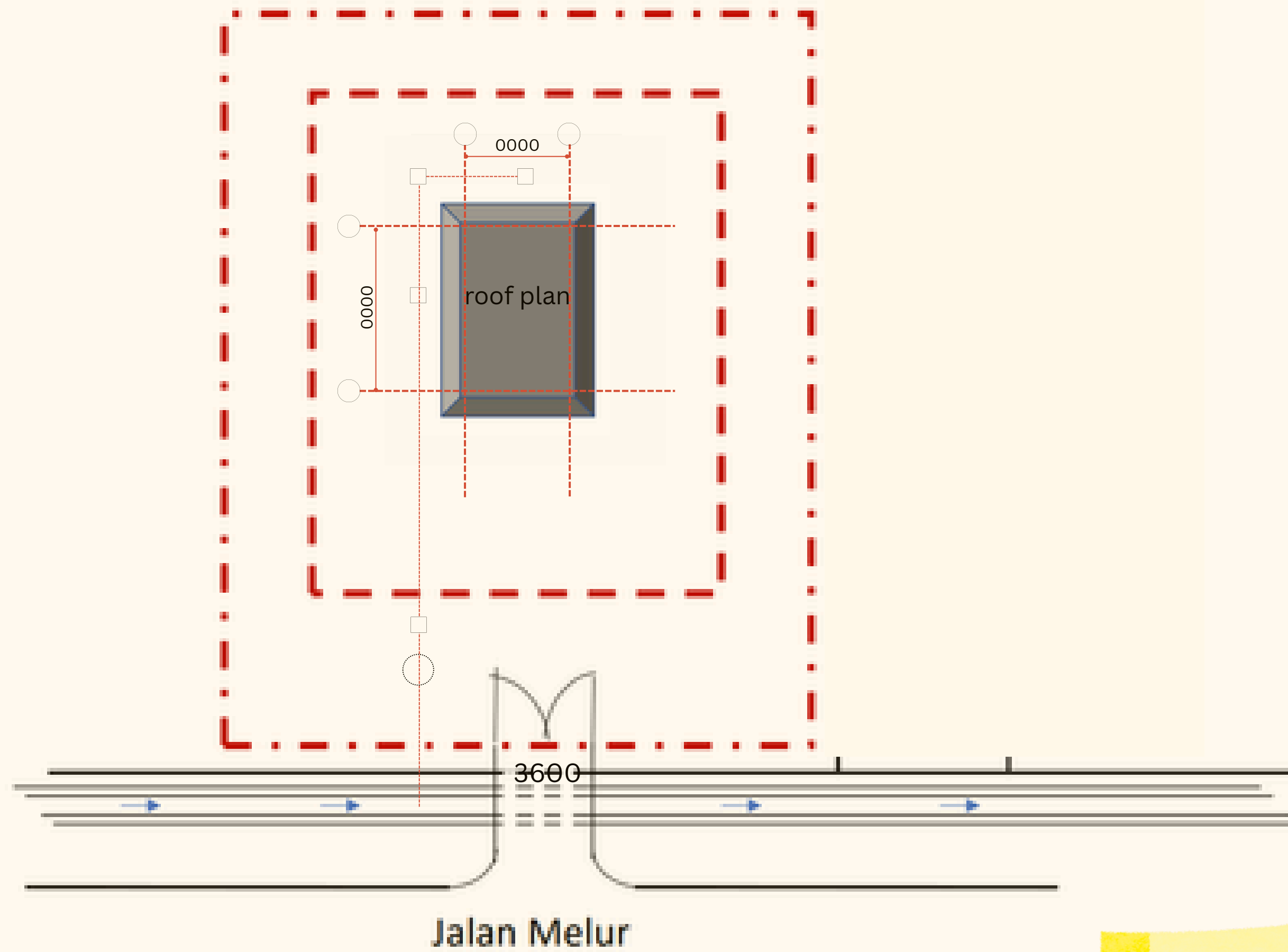




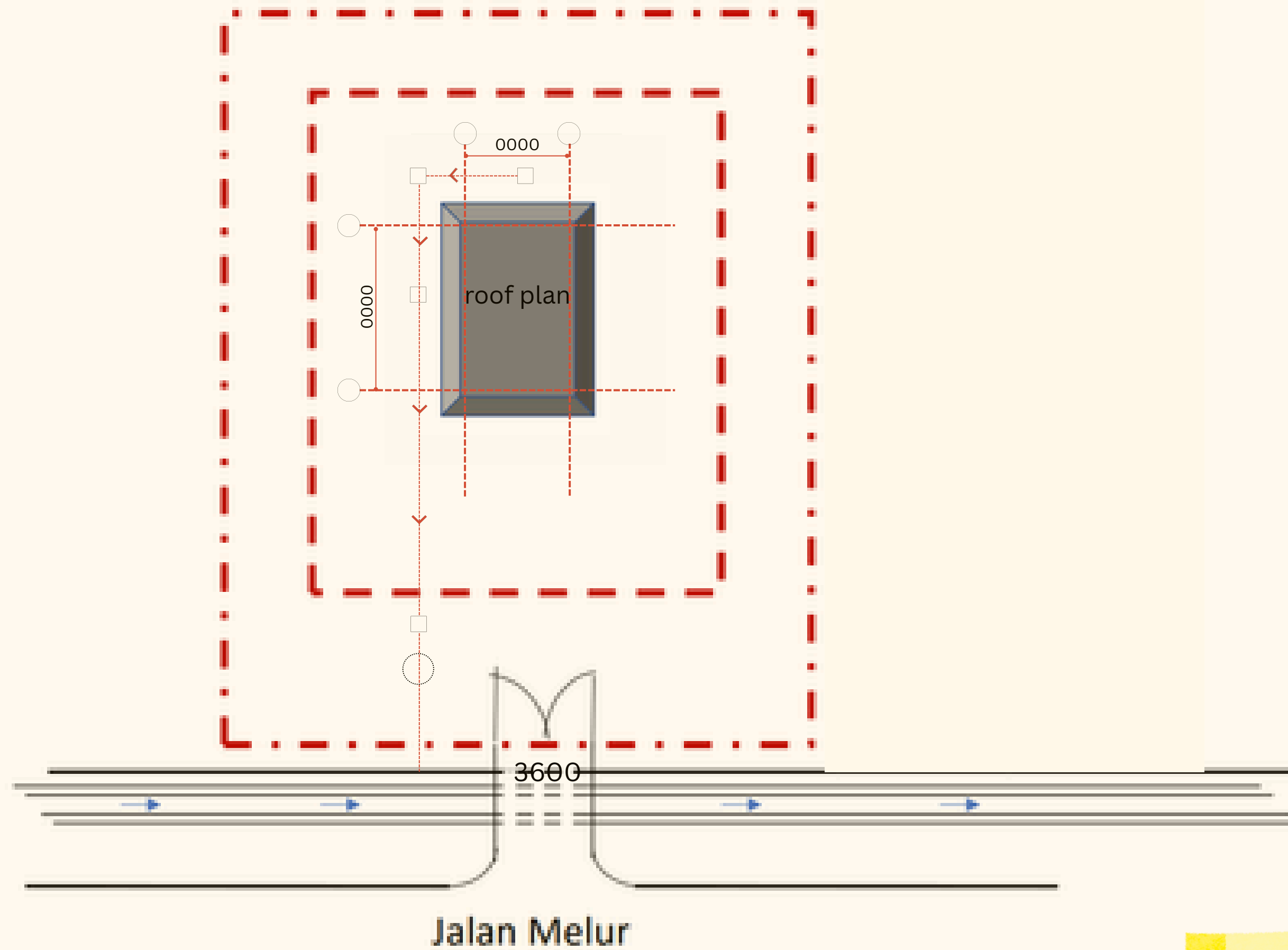
gate



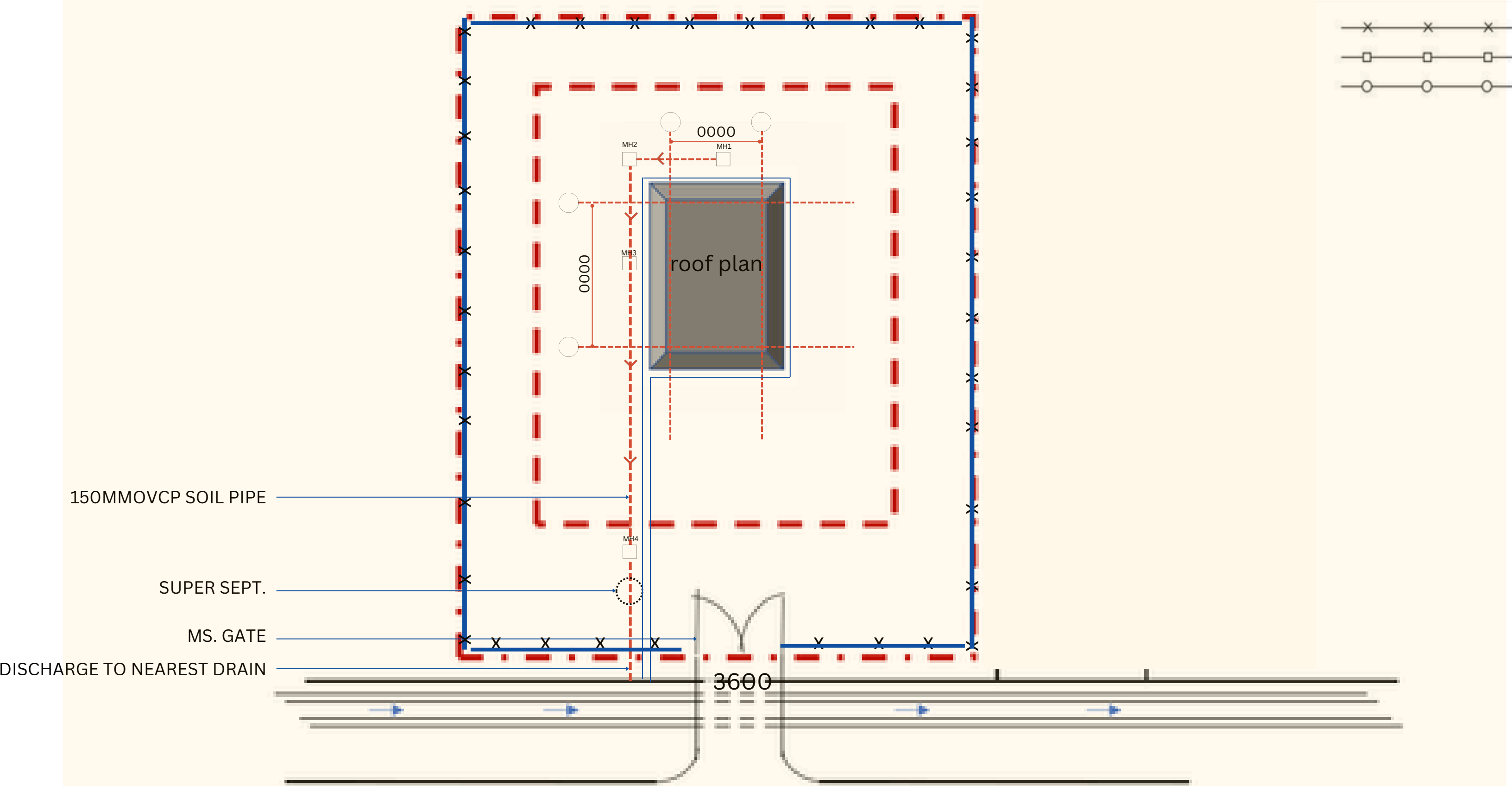
dimension &
bubble diagram



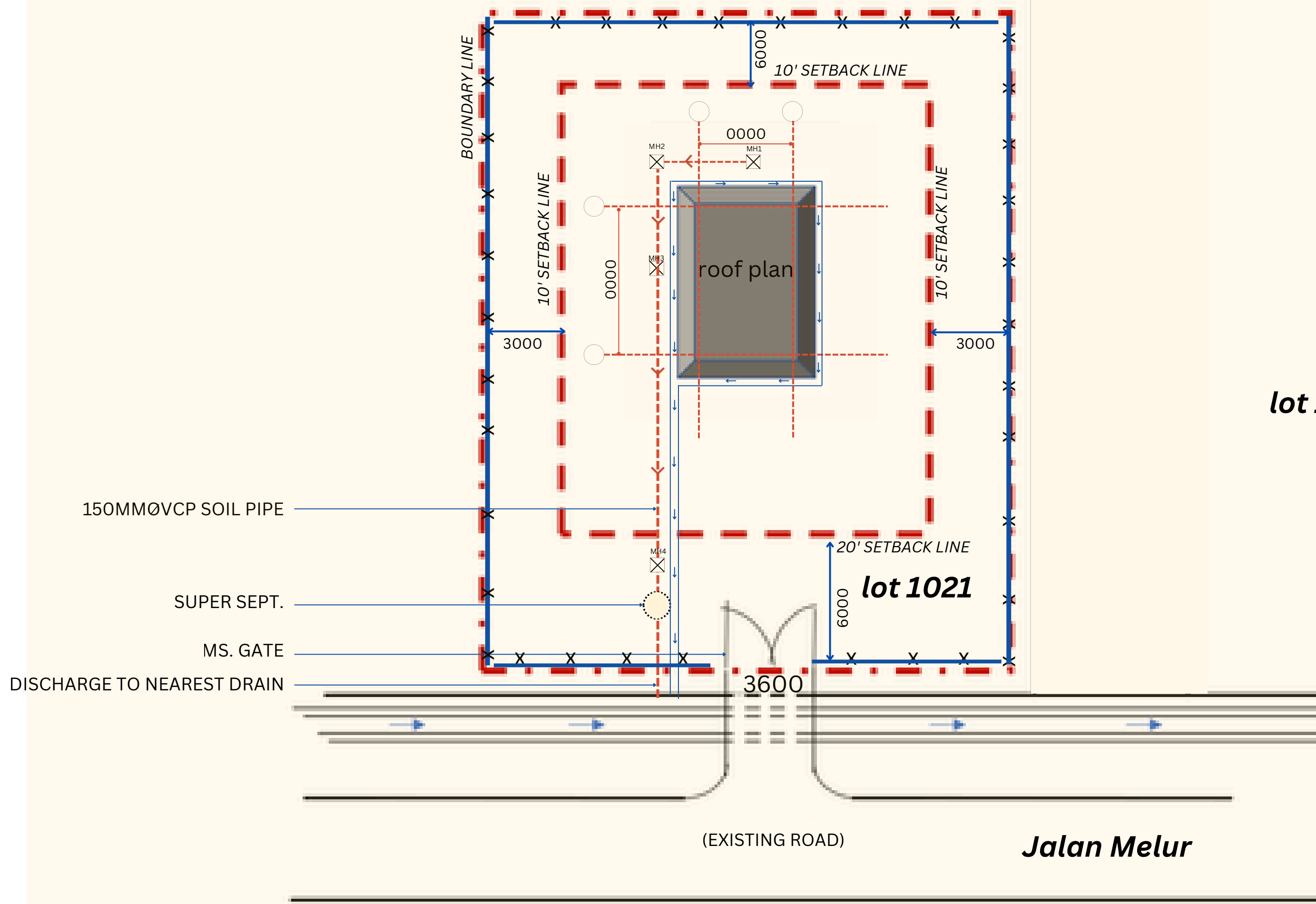
manhole flow to septic
tank



arrow flow



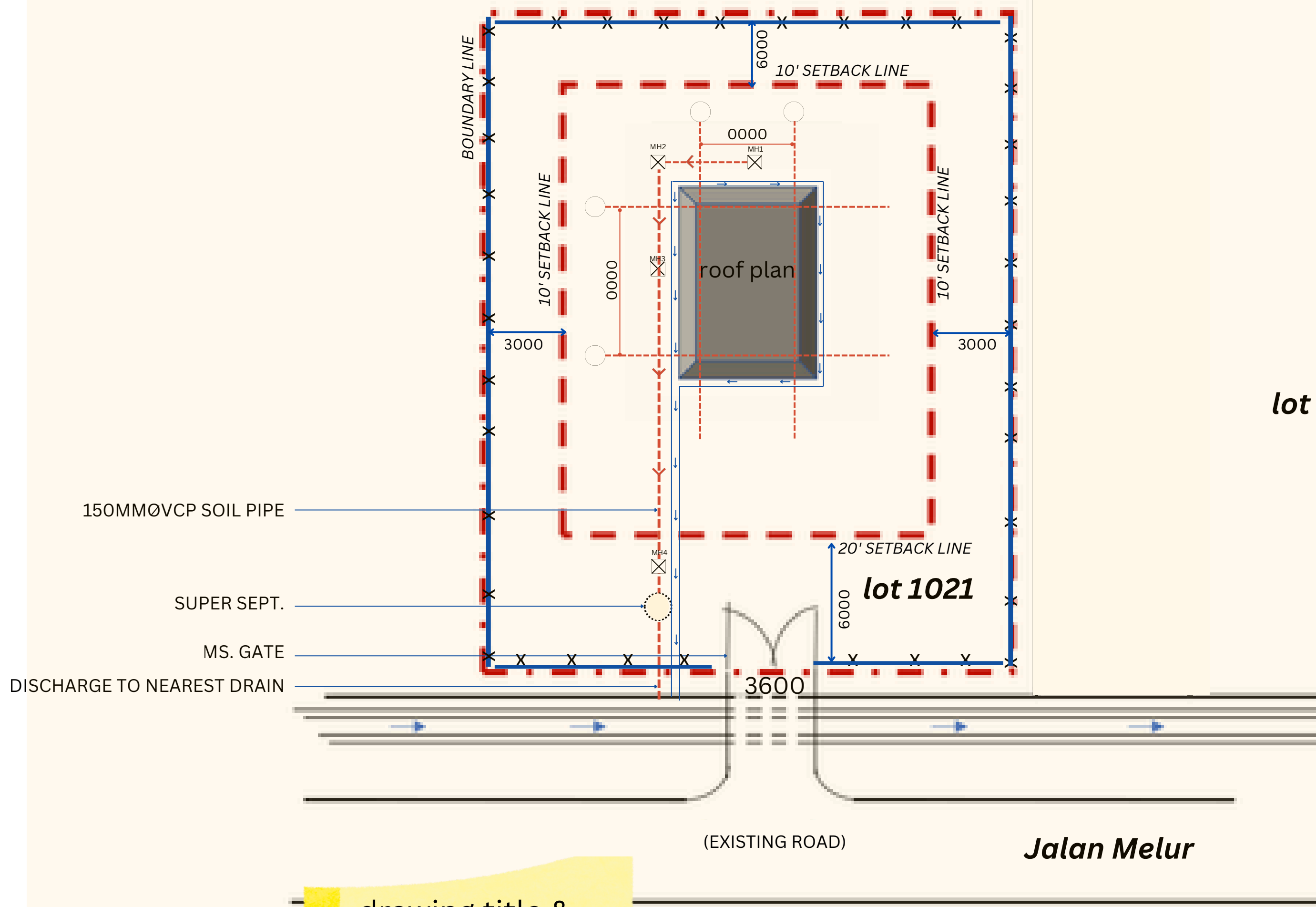
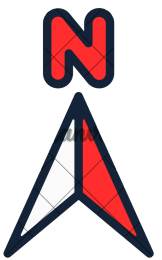
- specifications
- fences



north point

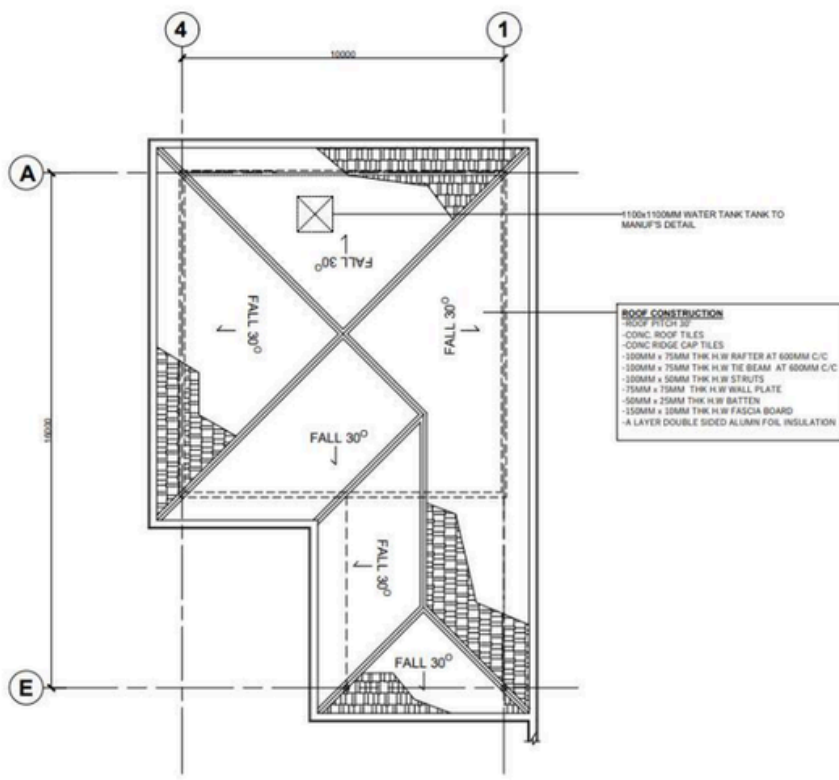
lot 1022

- Label the site boundary line.
- Label the setback line.
- Dimension the site boundary and setback distances accurately.



lot 1022

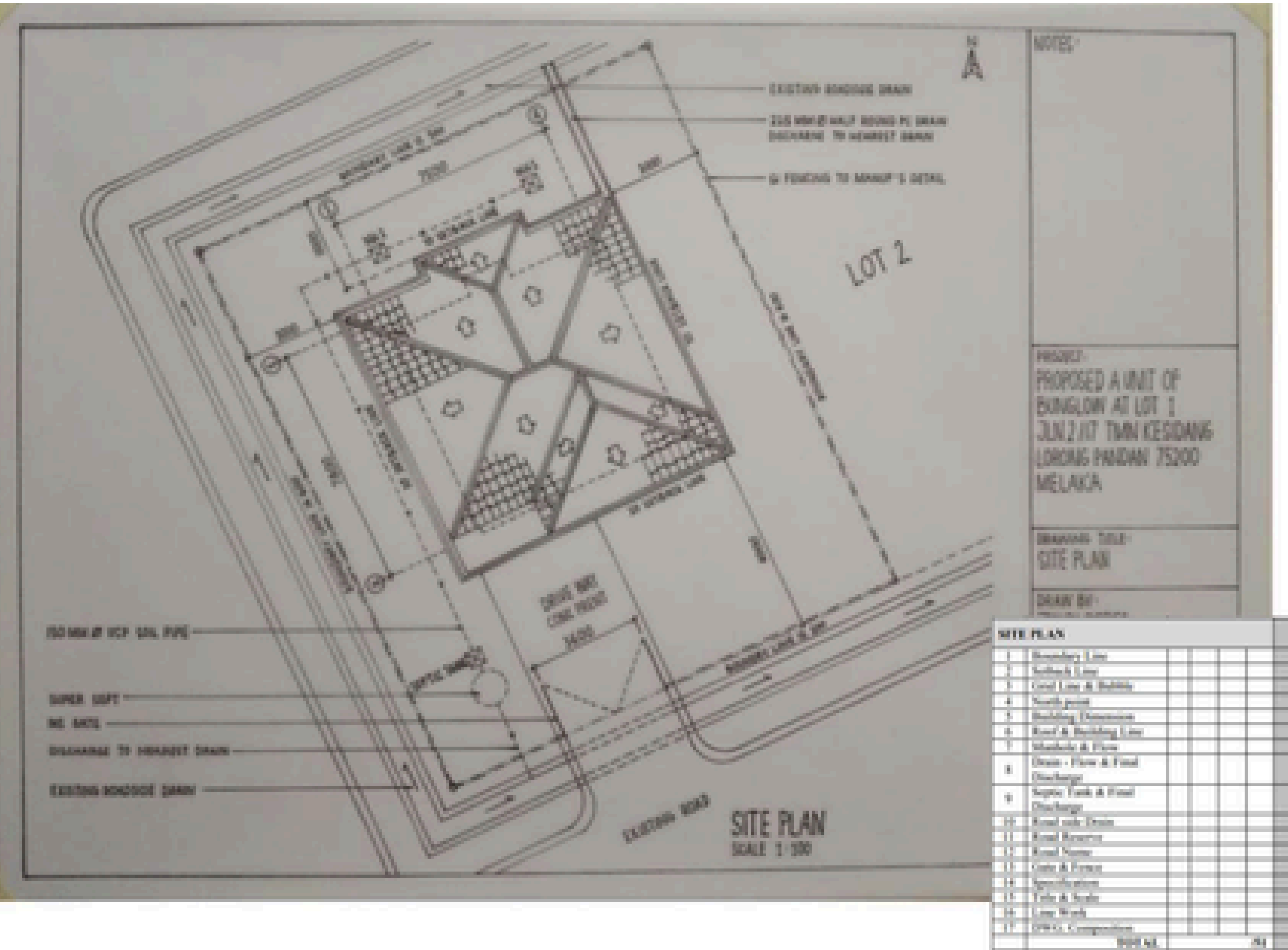
**refer roof plan*



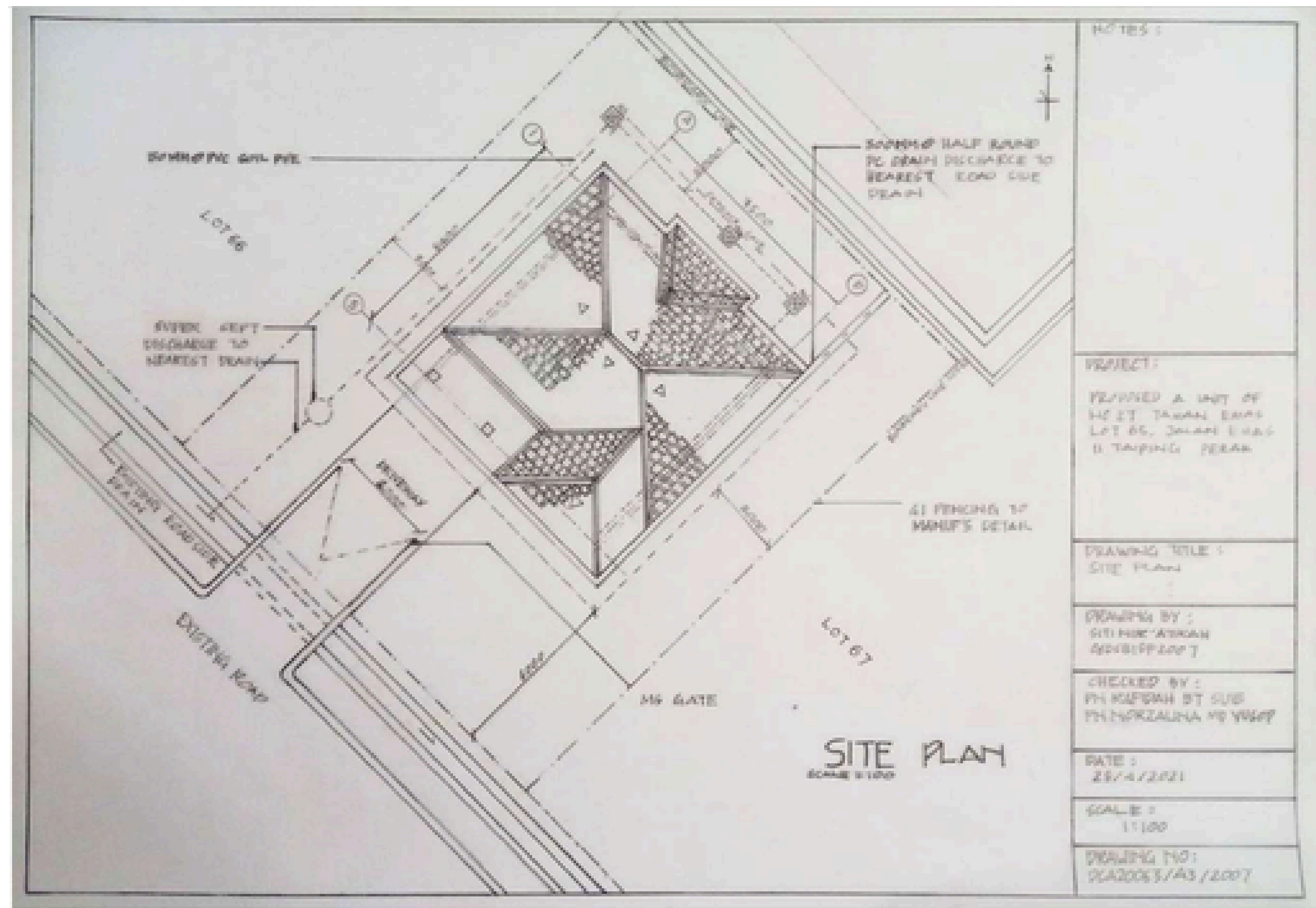
ROOF PLAN

drawing title &
scale

SITE PLAN
SCALE 1:250



Final output example.



Final output example.

FLOOR PLAN

FLOOR PLAN

What is a Floor Plan?

A scaled drawing that shows the layout of rooms, walls, doors, and fixtures.

Why is it Important?

Essential for construction, design coordination, and space planning.

Objective of This Guide

Learn the step-by-step process to create a floor plan accurately.



**What information
can we gather from a
floor plan?**

Exterior and interior walls

Size and location walls, windows and doors

Built-in cabinets and appliances

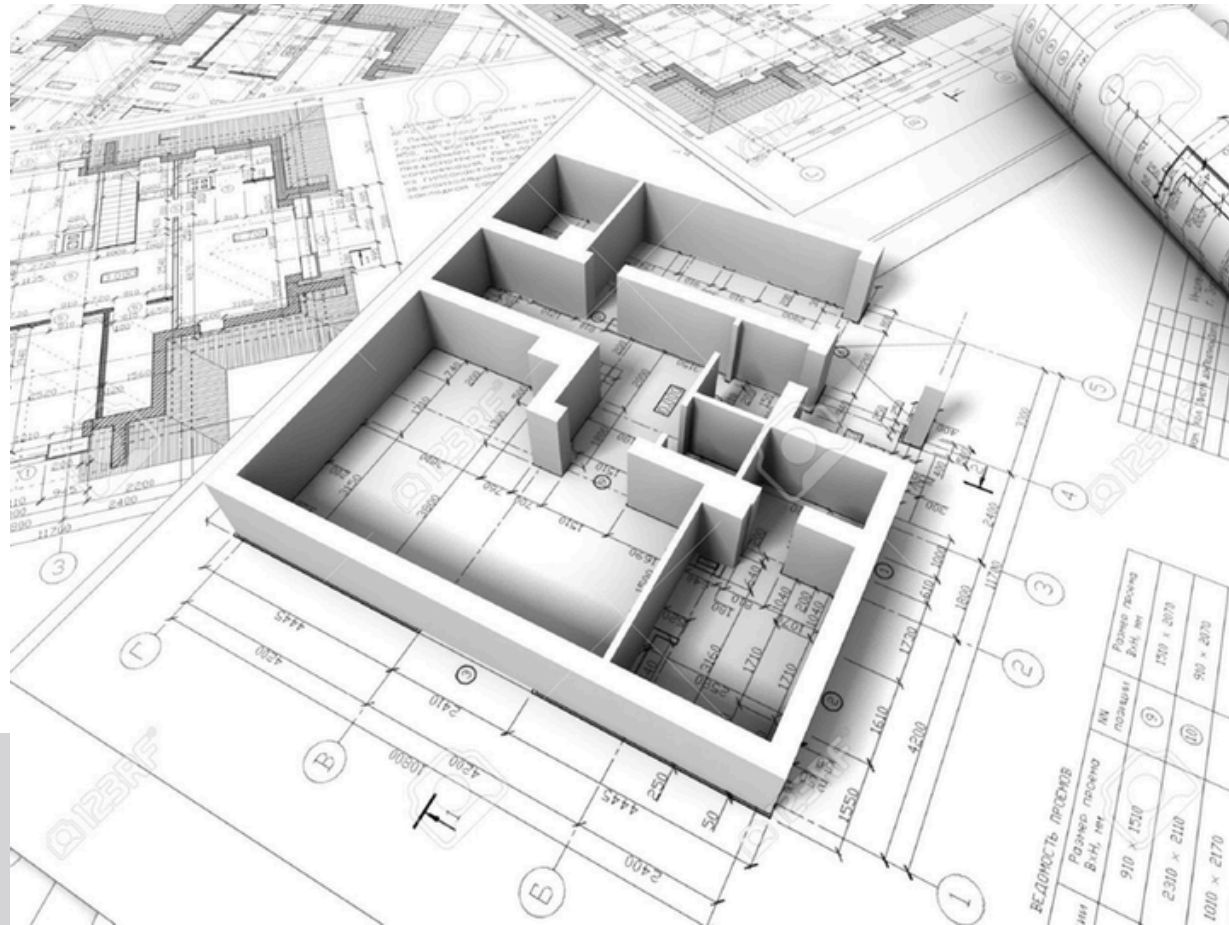
Stairs and fireplaces- if included in the plan

Porches, patios and decks

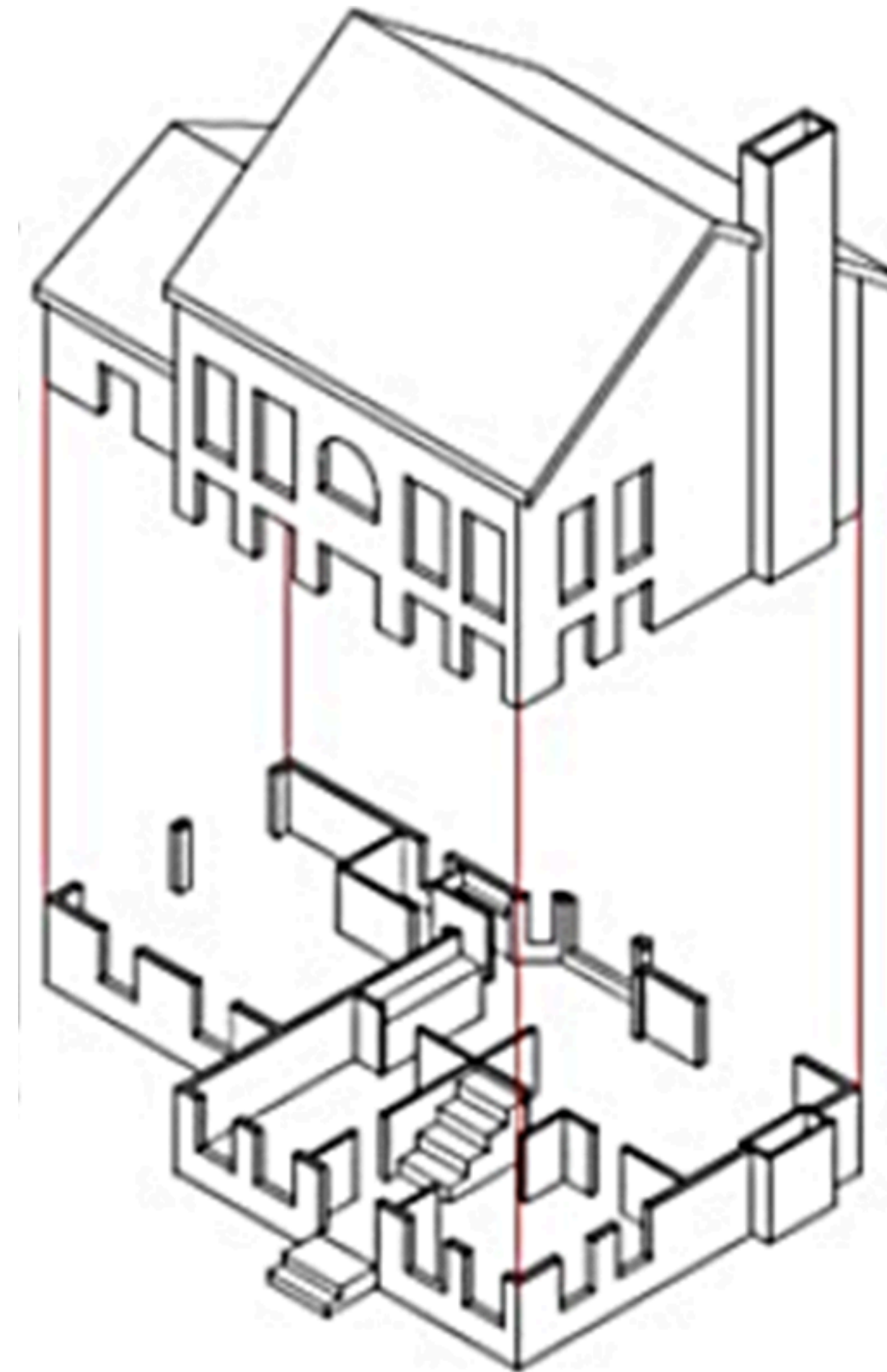
Room names, closets and approximate sizes

Notes for constructions

Symbols for electrical items



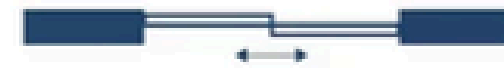
A floor plan is made with a horizontal cutting plane 4'-0" (**1200mm**) above the ground. A diagram usually to scale, shown from overhead, showing the relationships between rooms, spaces and other physical features at one level of a structure



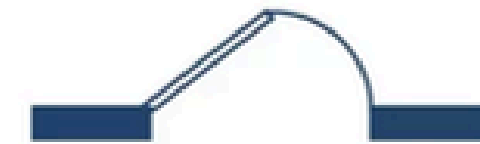
Door Symbols



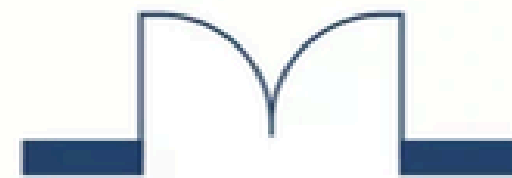
BIFOLD DOOR



BYPASS SLIDING DOOR



CLOSET DOOR



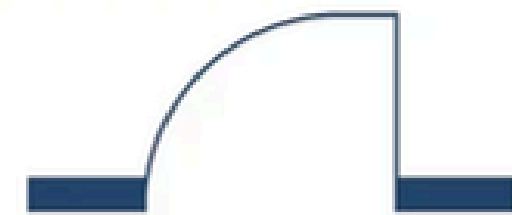
DOUBLE DOOR



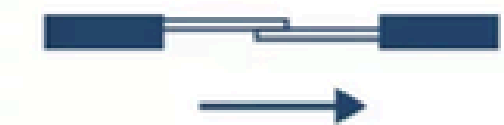
OPEN DOORWAY



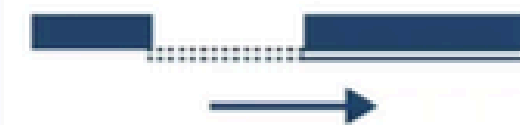
POCKET DOOR



SINGLE DOOR

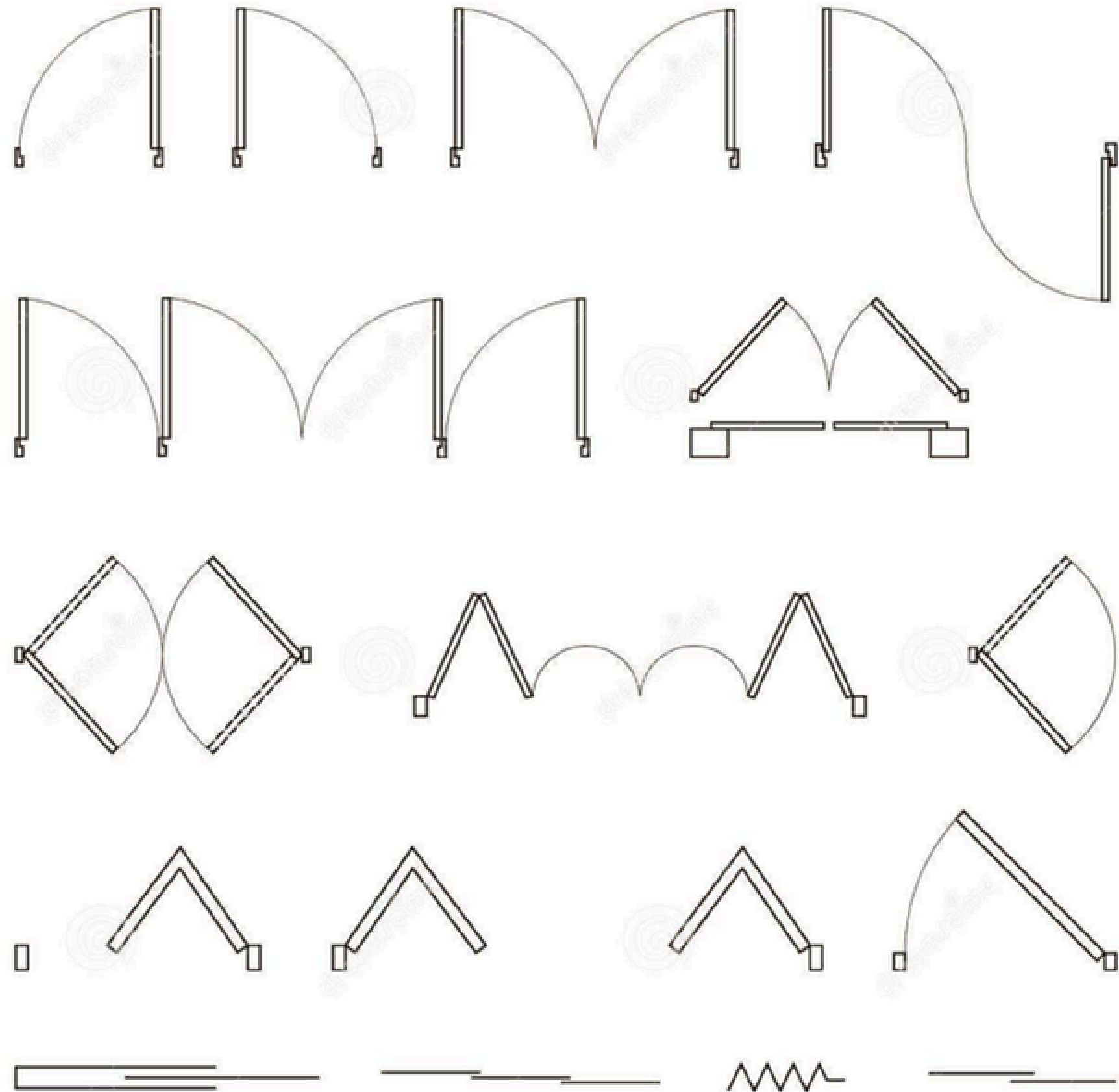


SLIDING DOOR

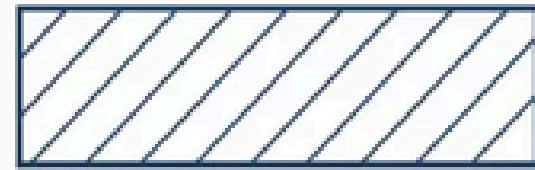


SURFACE SLIDING DOOR

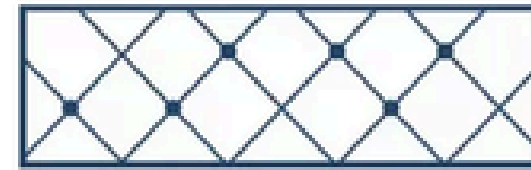
Door Symbols



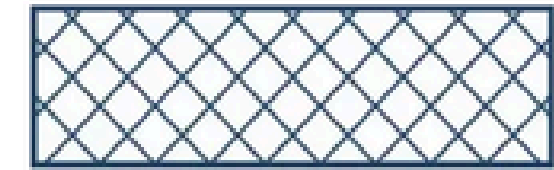
Wall Symbols



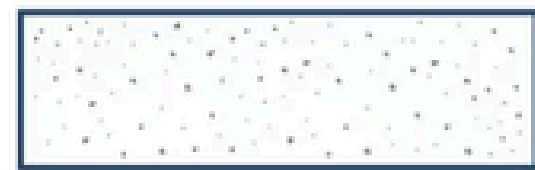
BRICK WALL



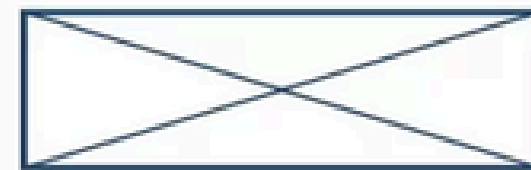
CERAMIC WALL



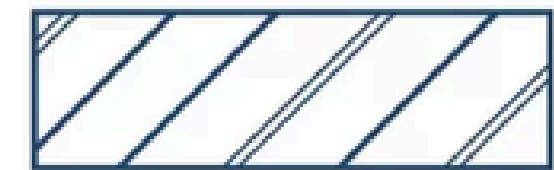
CONCRETE BLOCK WALL



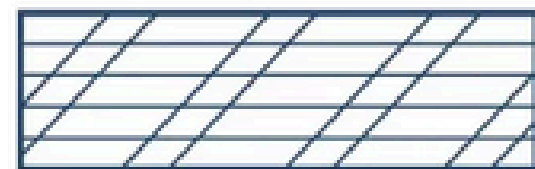
CONCRETE WALL



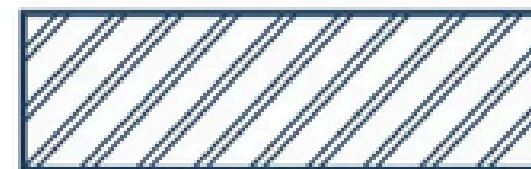
LUMBER WALL



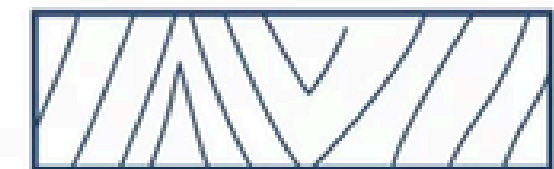
METAL WALL



PLYWOOD WALL

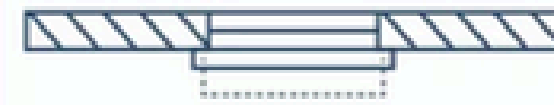


STEEL WALL

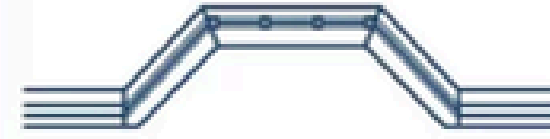


WOOD WALL

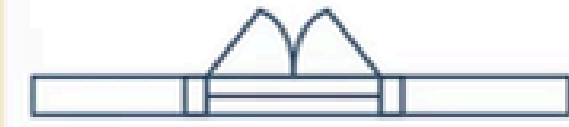
Window Symbols



AWING WINDOW



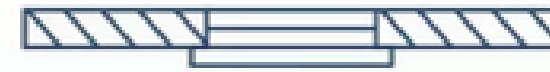
BAY WINDOW



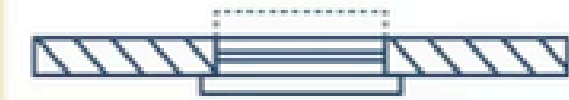
DOUBLE CASEMENT WINDOW



DOUBLE-HUNG WINDOW



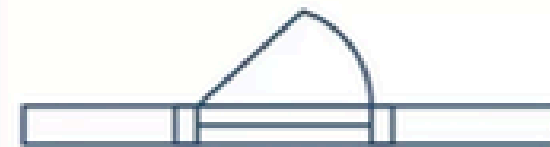
FIXED WINDOW



HOPPER WINDOW



JALOUSIE WINDOW

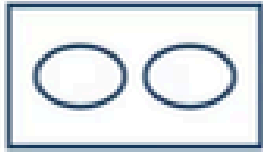
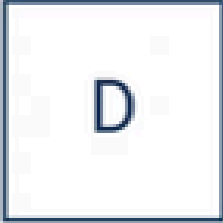
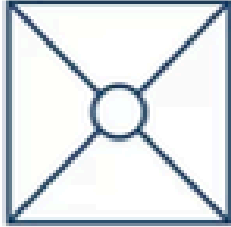
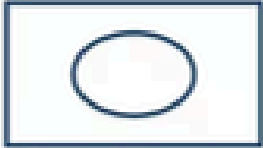
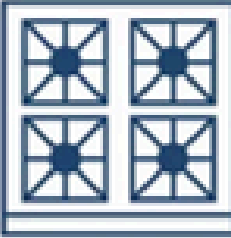
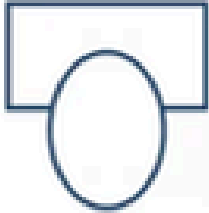


SINGLE CASEMENT WINDOW

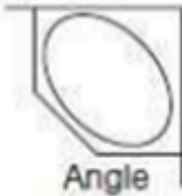
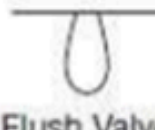
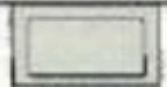
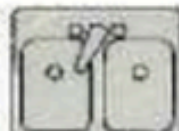


SLIDING WINDOW

Appliances and Furniture Symbols

 BATHTUB	 CABINET	 COUNTERTOP	 DISHWASHER
 DOUBLE BED	 DOUBLE SINK	 DRYER	 REFRIGERATOR
 SHOWER	 SINGLE BED	 SINK	 SOFA
 STOVE/OVEN	 TOILET	 WASHER	 WATER HEATER

Plumbing Fixture Symbols

Baths	 Corner	 Recessed	 Angle		WC	Toilet, floor outlet	 LAV	Lavatory
	 Whirlpool	 Institutional or island			WC	Toilet, wall hung	 BATHTUB	Bathtub, recessed type
					WC	Toilet, tank type		
Showers	 Stall	 Corner Stall	 Wall Gang			Bidet	 DF	Drinking fountain, floor mounted
					UR	Urinal, wall hung	 DF	Drinking fountain, wall hung
Water Closets	 Tank	 Flush Valve	 Bidet		S	Sink, general	 SHWR	Shower, stall type
					FS	Sink, floor		
Urinals	 Wall	 Stall	 Trough		KS	Sink, kitchen	 SHWR	Shower, handicapped
					MS	Sink, mop	 HWT	Hot Water Tank
Lavatories	 Vanity	 Wall	 Counter		SS	Sink, utility	 WH	Water Heater
	 Pedestal							

Types of Lines

Part Outlines	Heavy
Section Lines	Light
Hidden Lines	Medium
Center Lines	Light
Dimension and Extension Lines	Light 3.000
Cutting Plane	Heavy
Break Lines	Heavy Light

STEPS TO DEVELOP A FLOOR PLAN

Set the Scale:

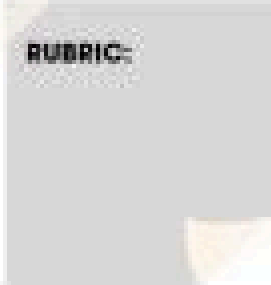
1:100 means 1 cm on paper = 1 meter in real life.

Tools Needed:

hand sketching tools (tracing paper, Artline/technical pen, scale ruler, T-square).

Drawing Element	Line Thickness (mm)
Main Structural Walls	0.7 – 1.0 mm
Partition Walls	0.5 – 0.7 mm
Doors & Windows	0.4 – 0.5 mm
Grid Lines	0.3 – 0.5 mm
Floor Finishes & Tiles	0.3 – 0.4 mm
Furniture & Fixtures	0.2 – 0.4 mm
Dimension Lines	0.2 – 0.3 mm
Hidden Elements (Dashed)	0.2 – 0.3 mm
Roof Overhangs (Dashed Line)	0.2 – 0.3 mm
Hatching (Sections, Materials, Concrete, etc.)	0.1 – 0.2 mm
Text/Annotations	0.2 – 0.5 mm

- ✓ Thicker Lines (0.7 – 1.0 mm) → Used for main structural elements (walls, beams, columns).
- ✓ Medium Lines (0.4 – 0.5 mm) → Used for doors, windows, grid lines, and flooring.
- ✓ Thin Lines (0.2 – 0.3 mm) → Used for dimensioning, hatching, and minor details.
- ✓ Dashed Lines (0.2 – 0.3 mm) → Used for hidden elements, roof overhangs, and underground

1CM DRAWINGS SPECIFICATIONS 1CM	RUBRIC: 	
	PROJECT : TO PROPOSED A UNIT OF BUNGALOW AT LOT.... (YOUR SITE LOCATION)	6CM
	DRAWING TITLE:	2CM
	DRAWN BY:	
	(FULL NAME)	2CM
	CHECKED BY:	
	(LECTURER'S NAME)	2.5CM
	DATE:	1.5CM
SCALE:	1.5CM	
	DRAWING NO:	1.5CM
	DCA30043/MATRICS NO./ 1	

Prepare template- A3 size

Use Gridlines

- Provide a structured framework for the floor plan.
- Help builders locate specific points in the layout.
- Ensure symmetry and alignment of structural elements.

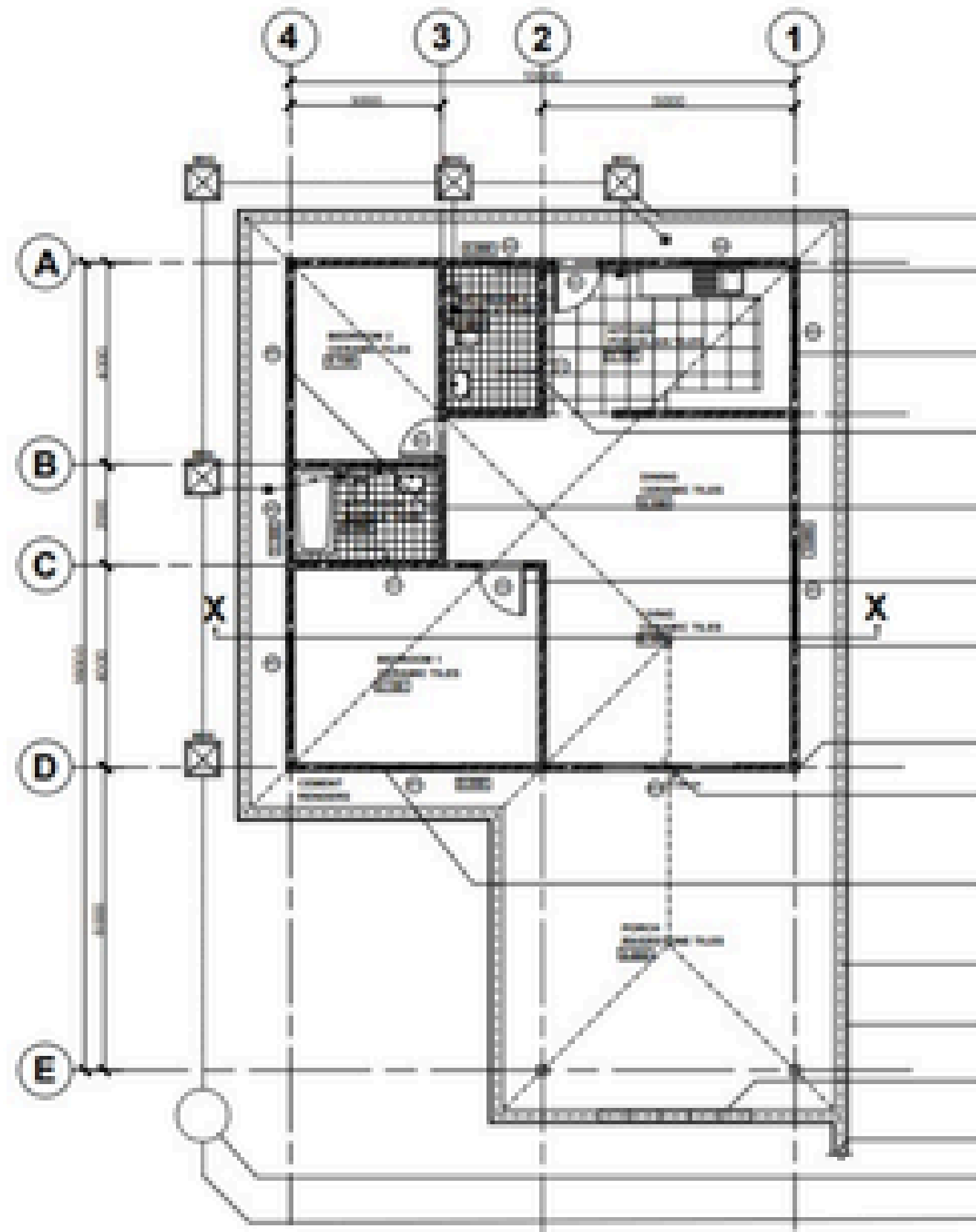
How to Draw Gridlines?

- Use letters (A, B, C, etc.) for horizontal grids.
- Use numbers (1, 2, 3, etc.) for vertical grids.
- Spacing depends on room layout and structural elements.

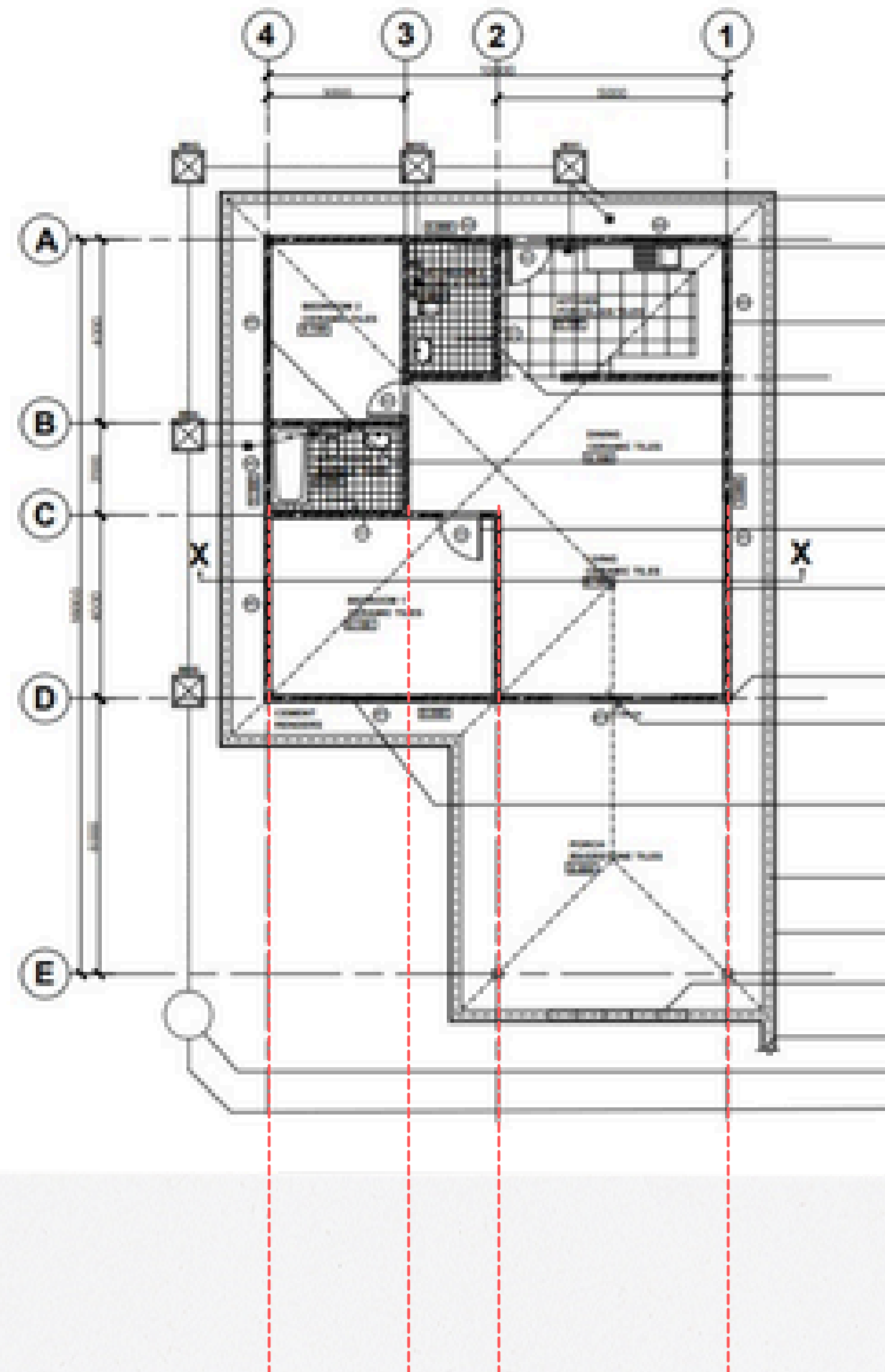
Labeling & Annotation of Gridlines

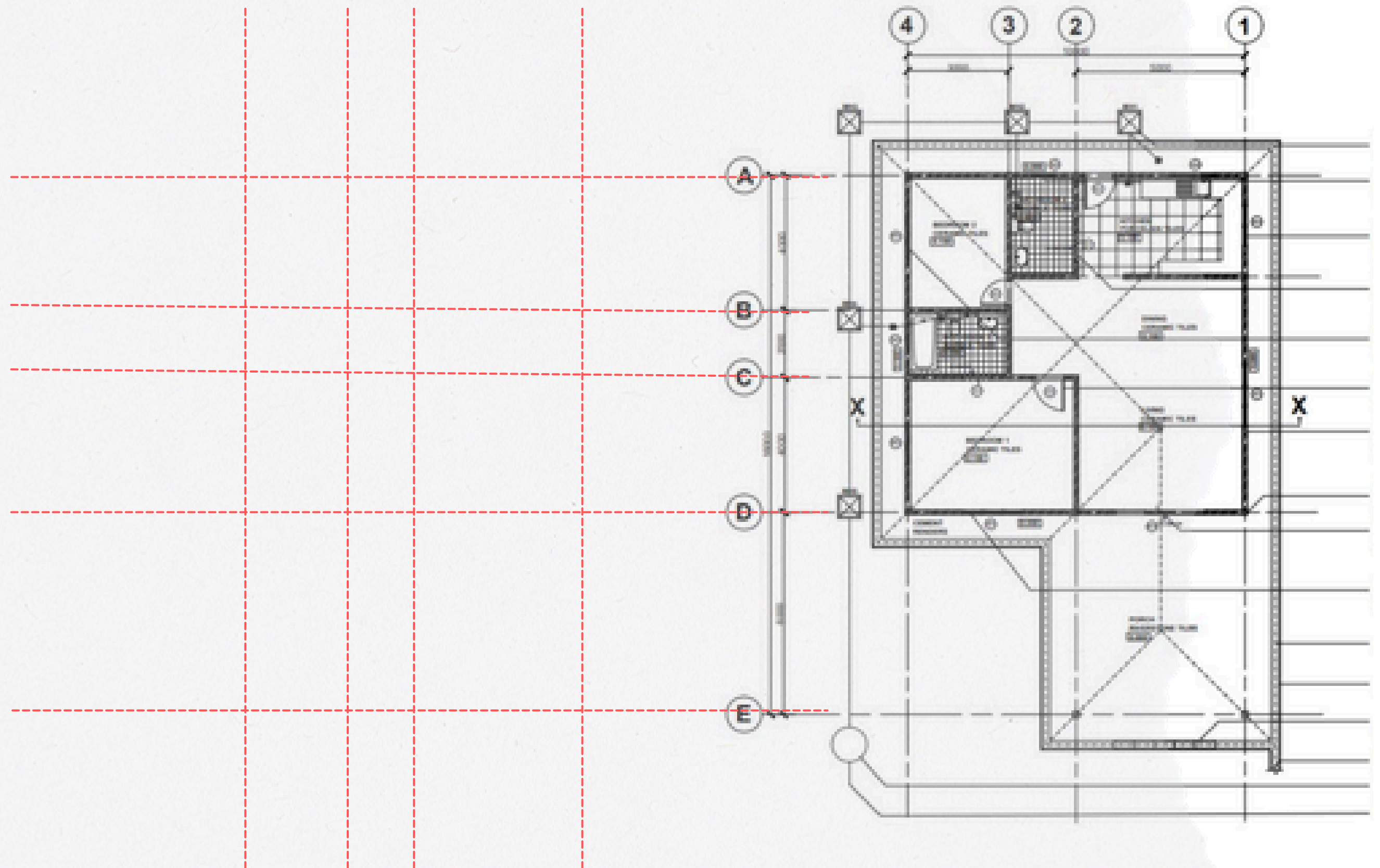
- Add grid bubbles (circles) at the ends with grid labels (A, B, C / 1, 2, 3).
- Use dashed or thin solid lines for better readability.
- Ensure grids are visible on all related drawings

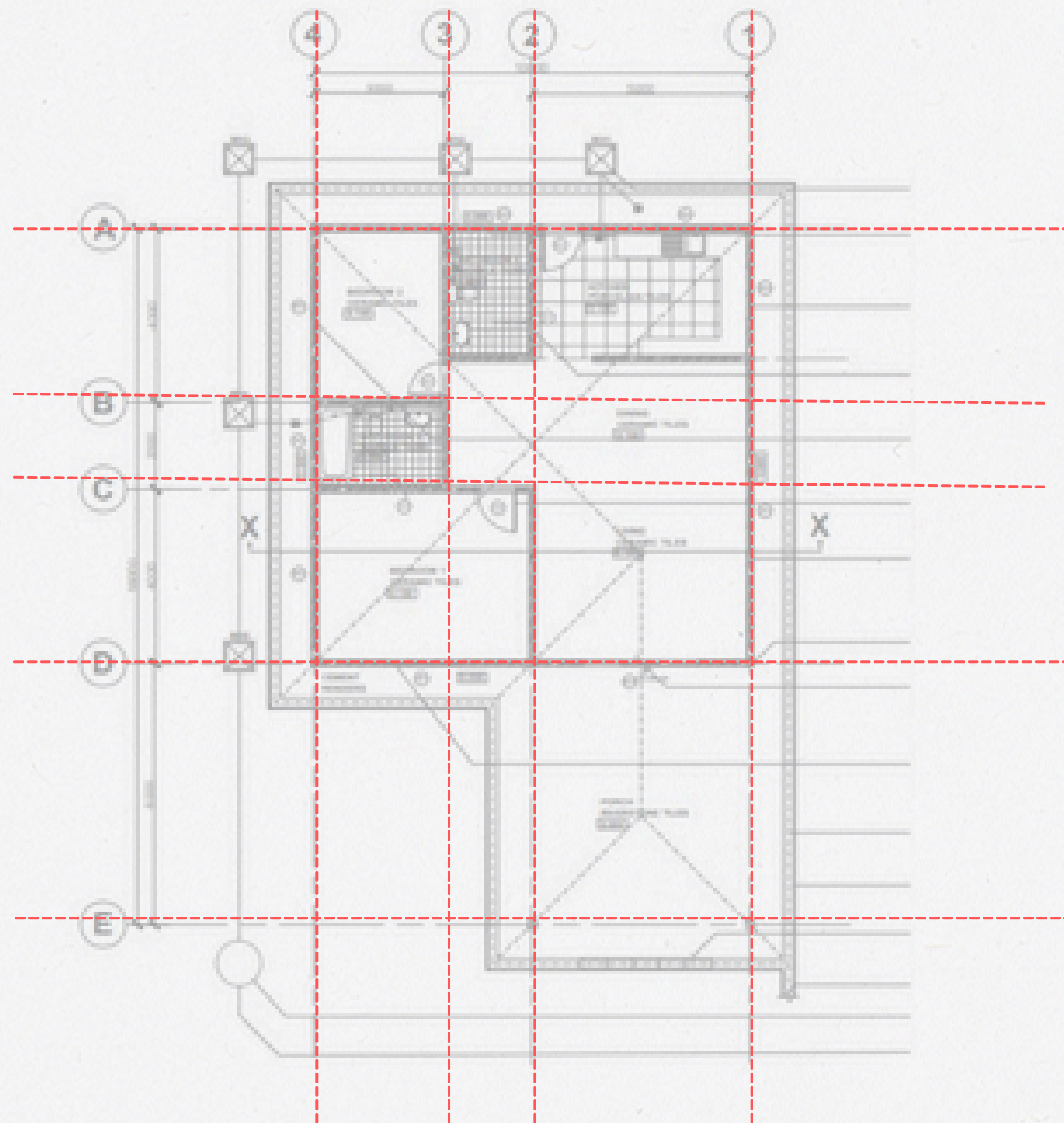
FLOOR PLAN



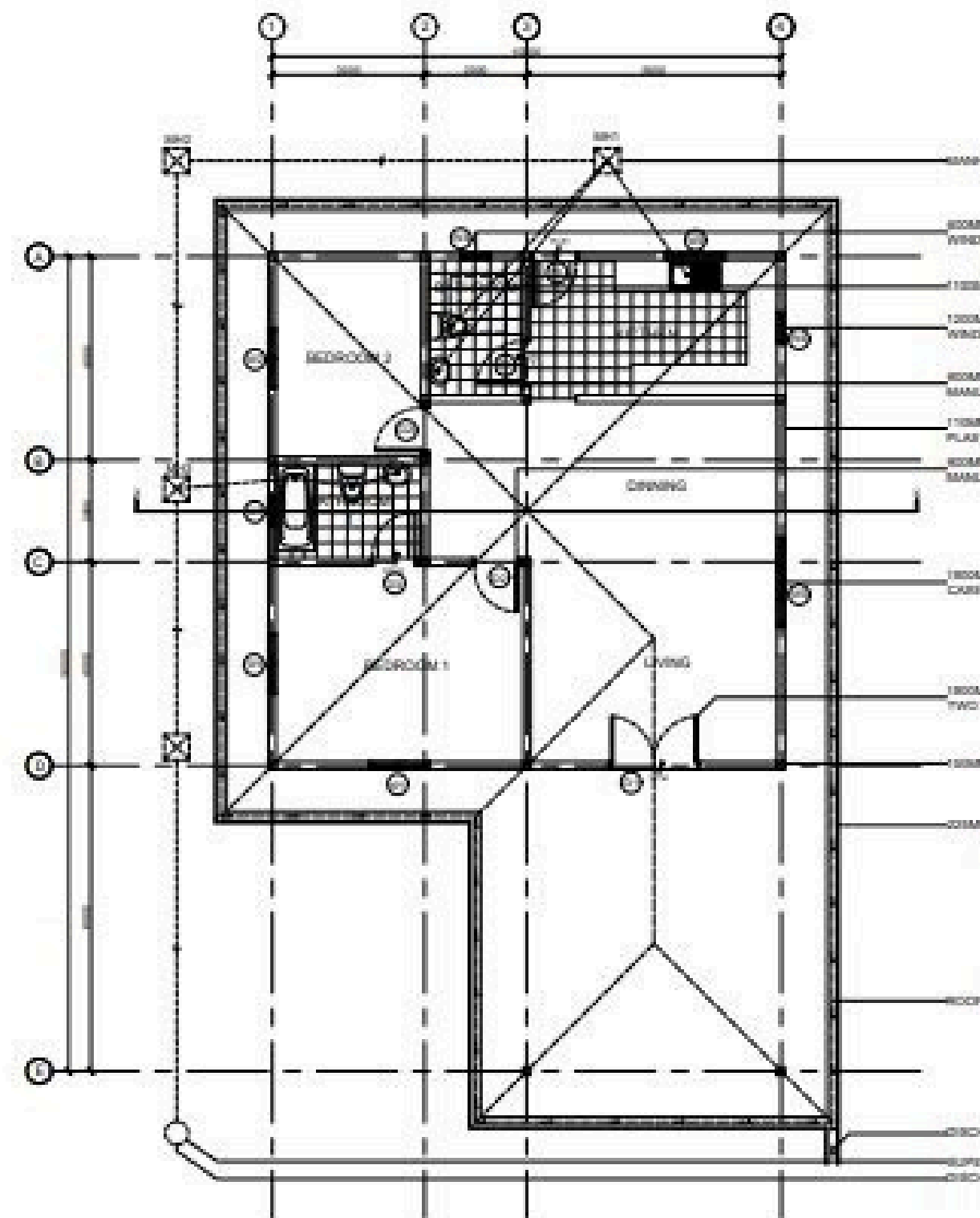
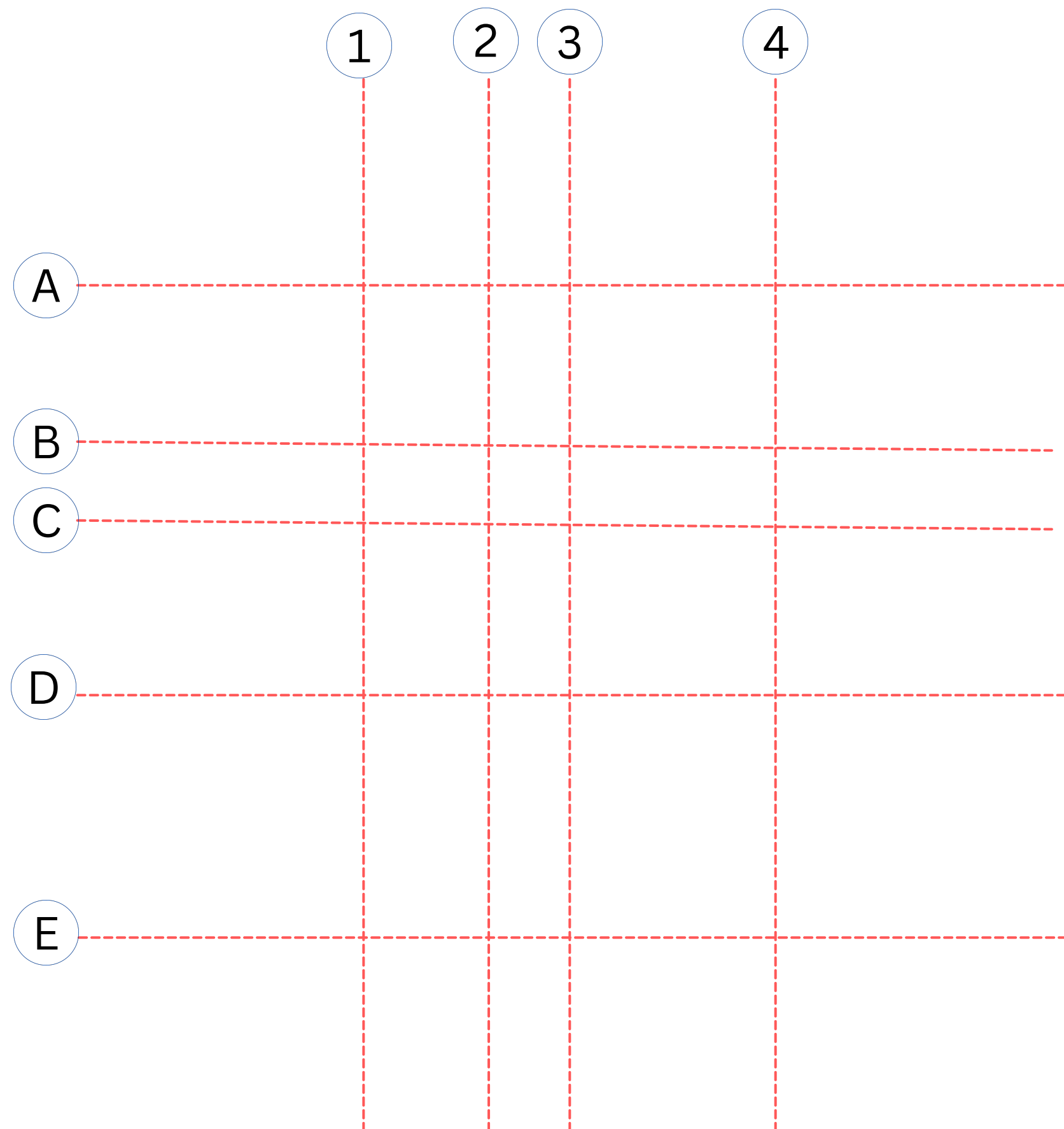
- gridlines



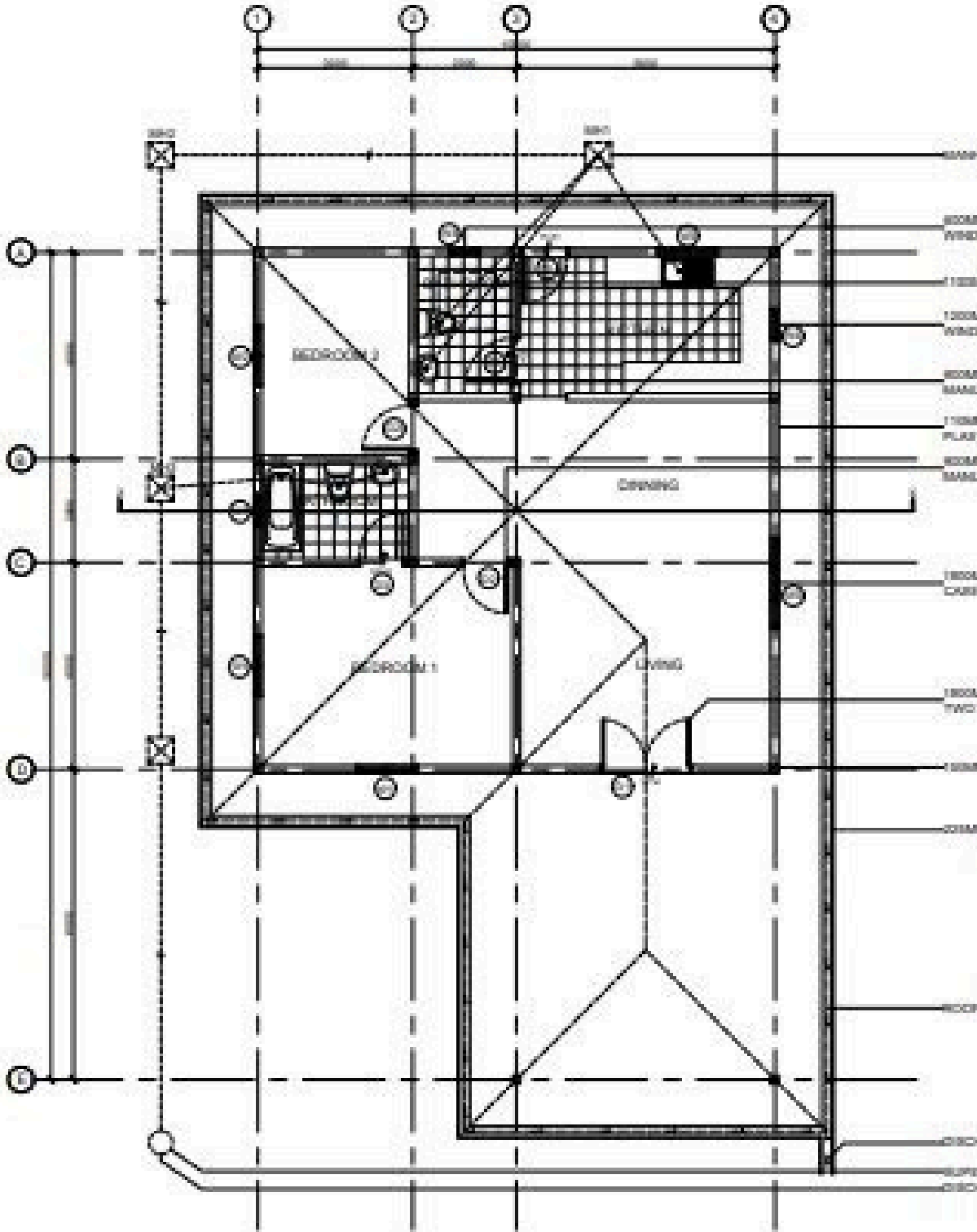
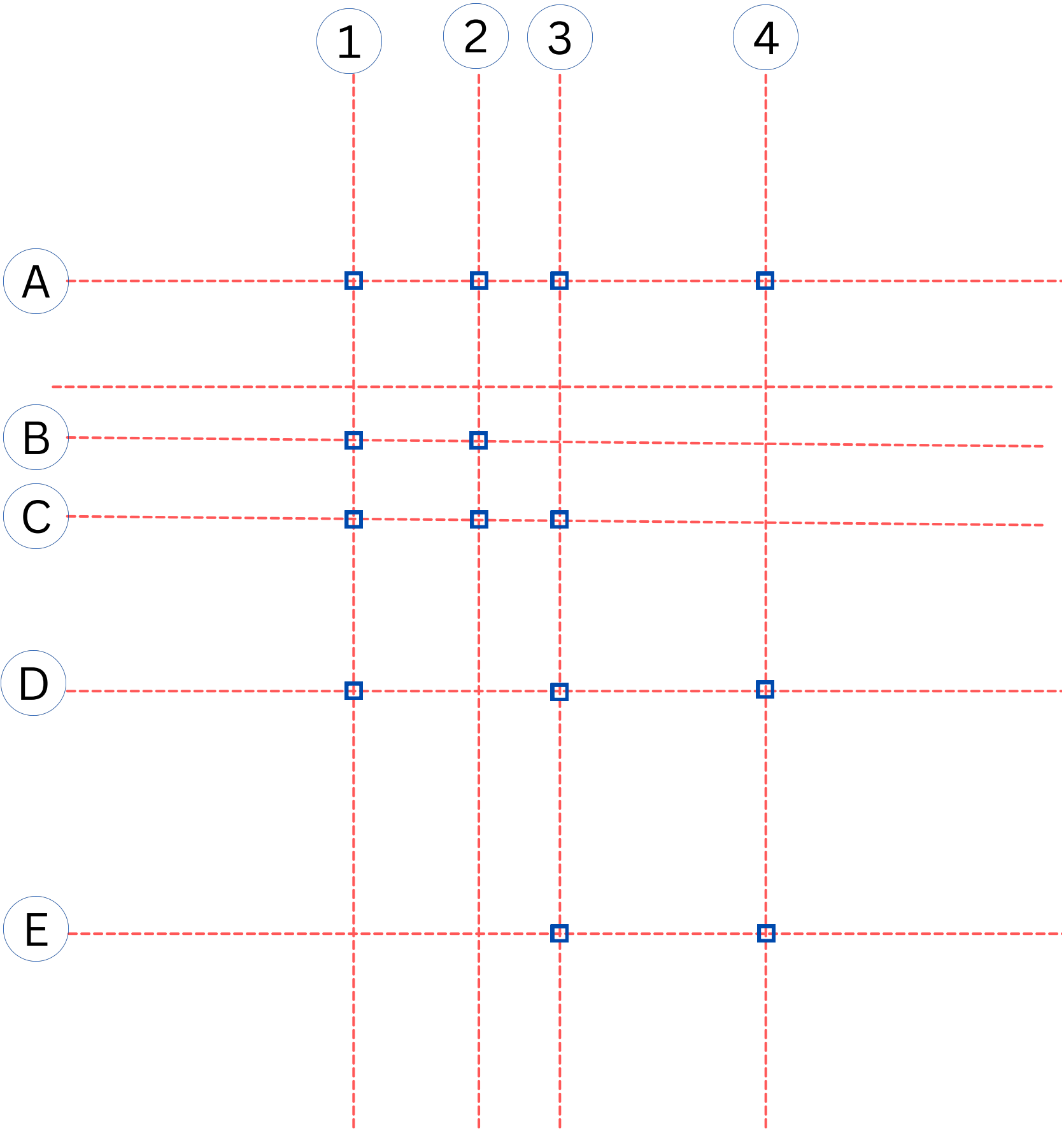




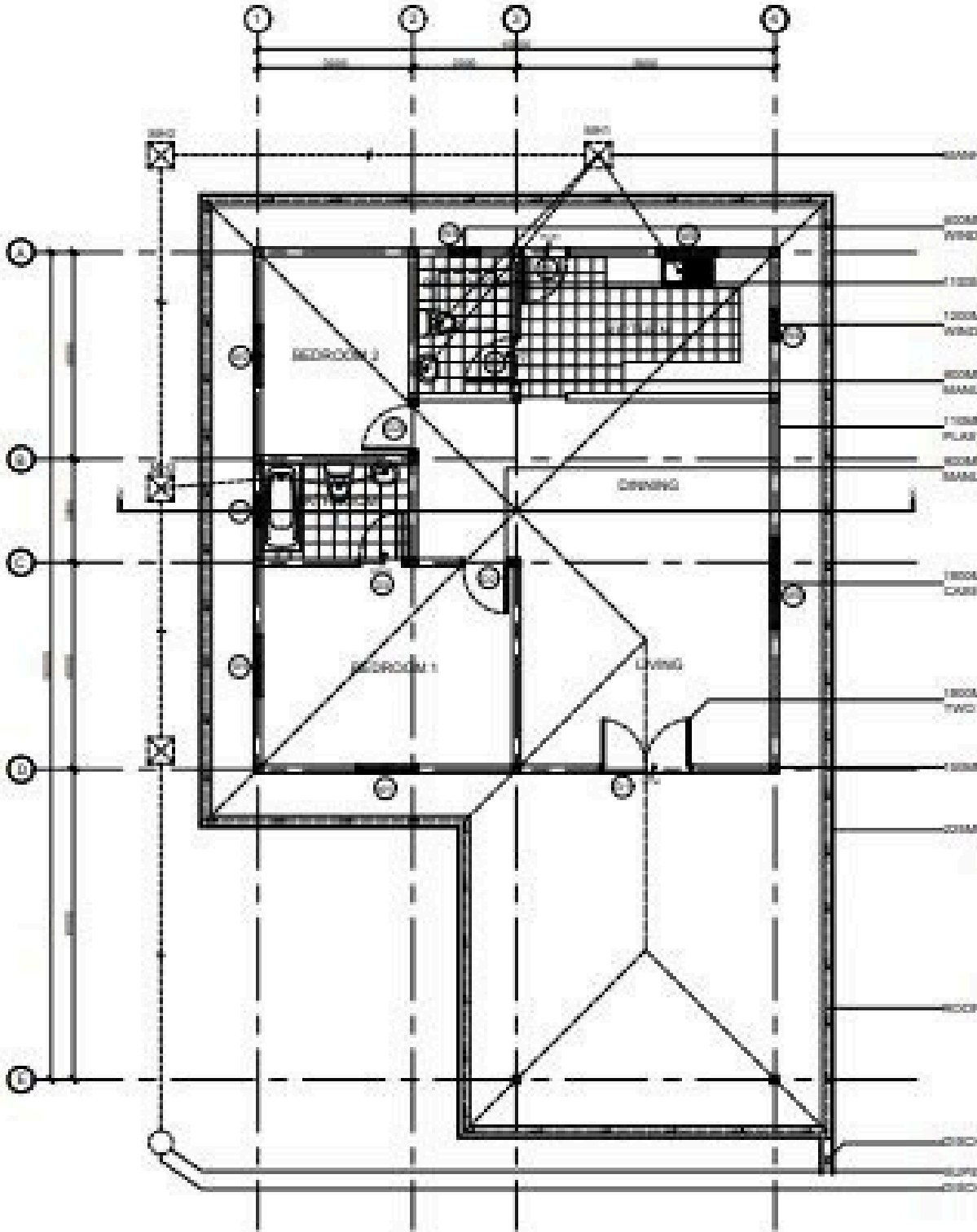
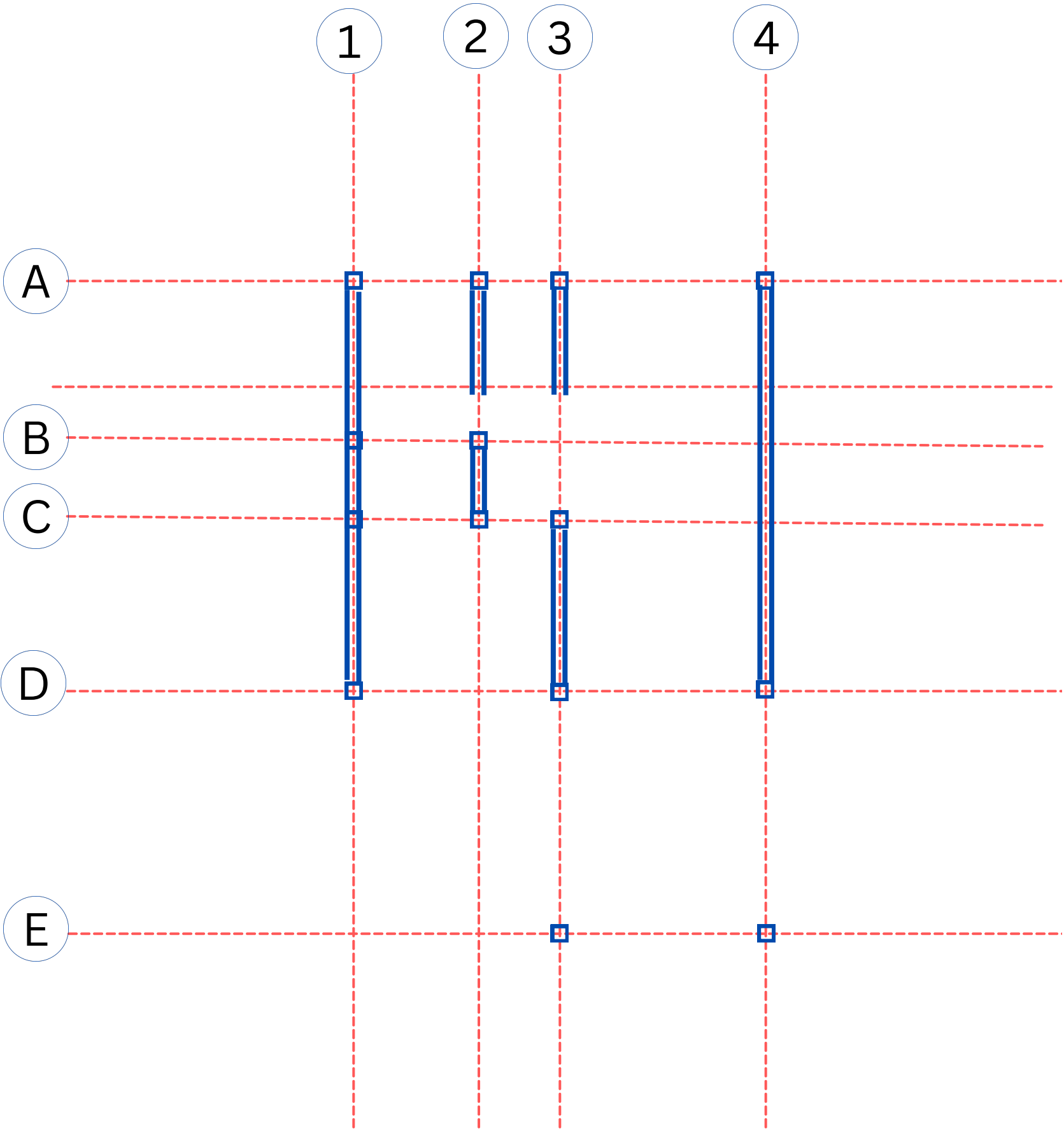
- bubble & numbering



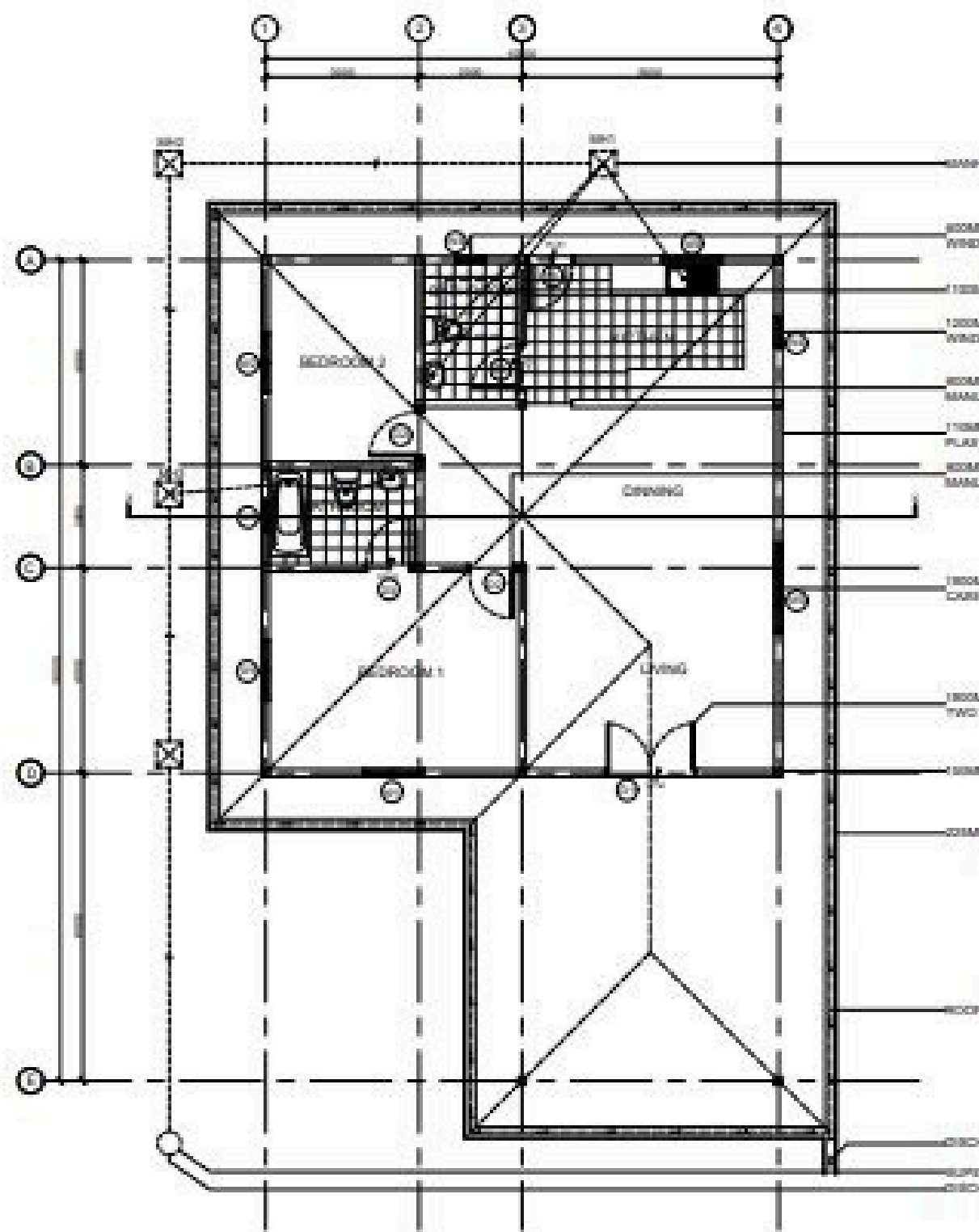
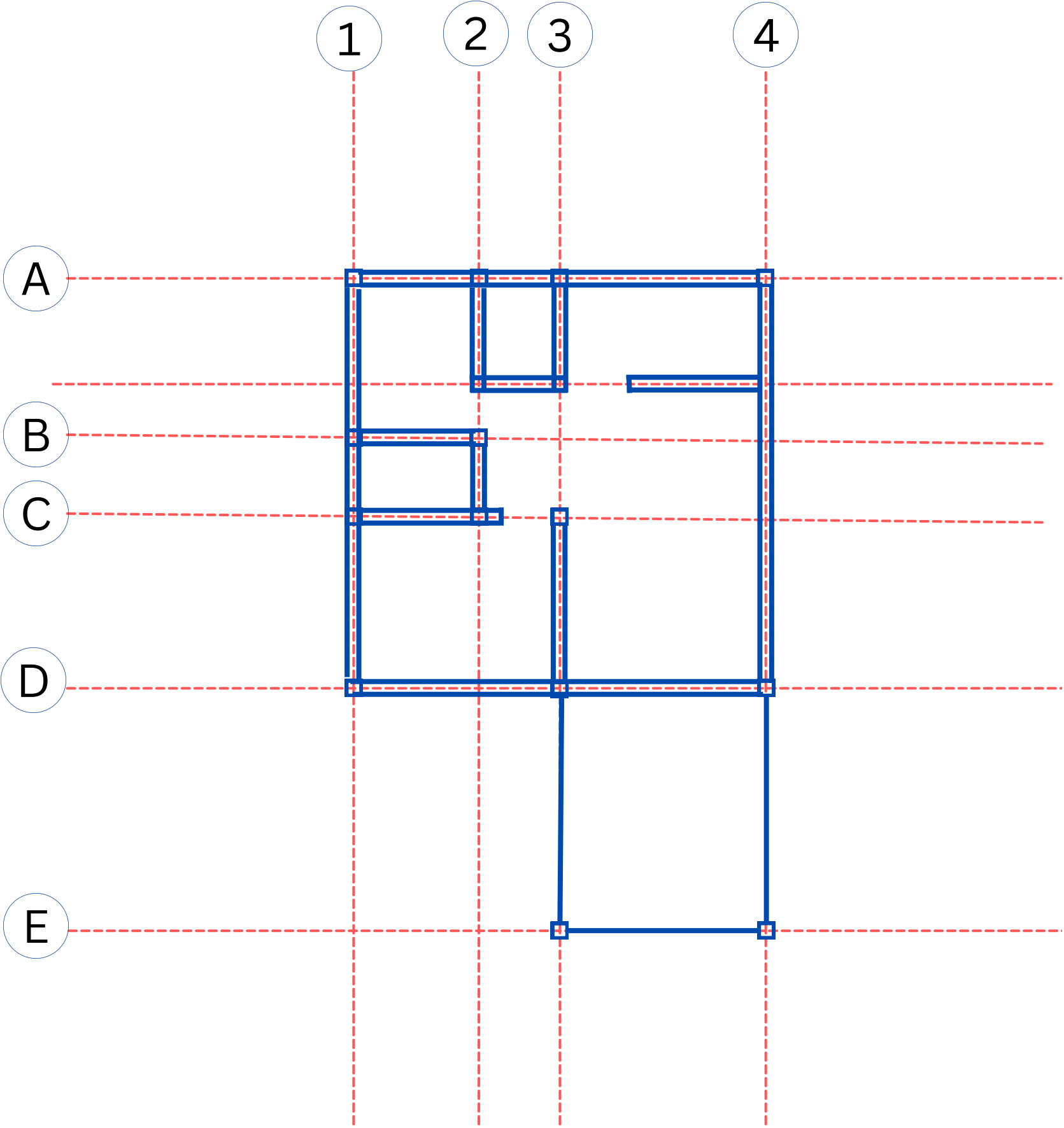
● column
150x150mm



- wall line
150mm

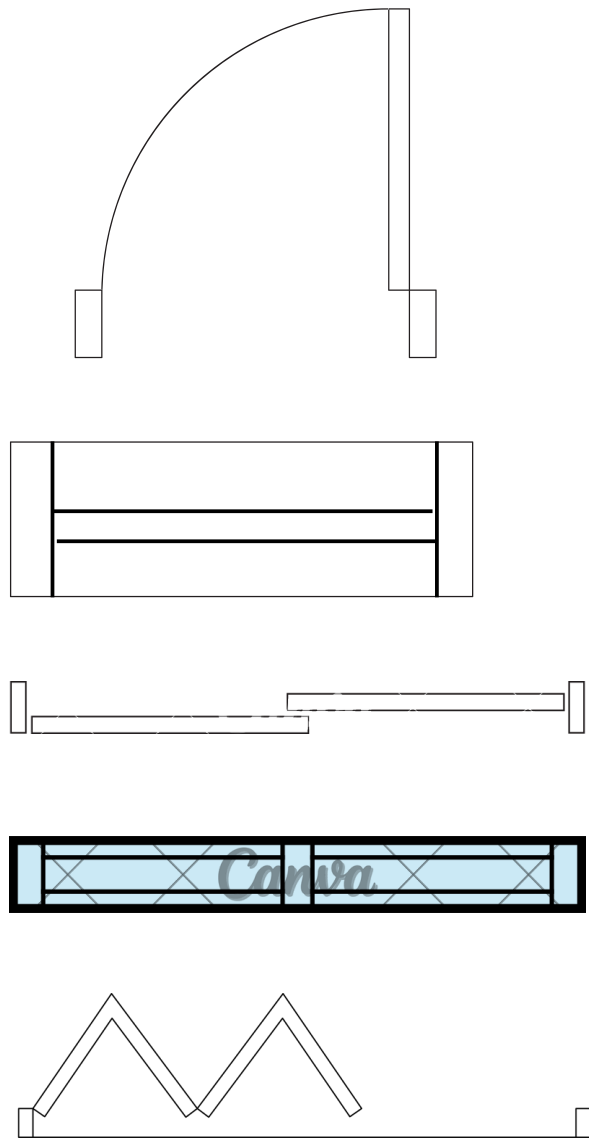


- wall line
150mm



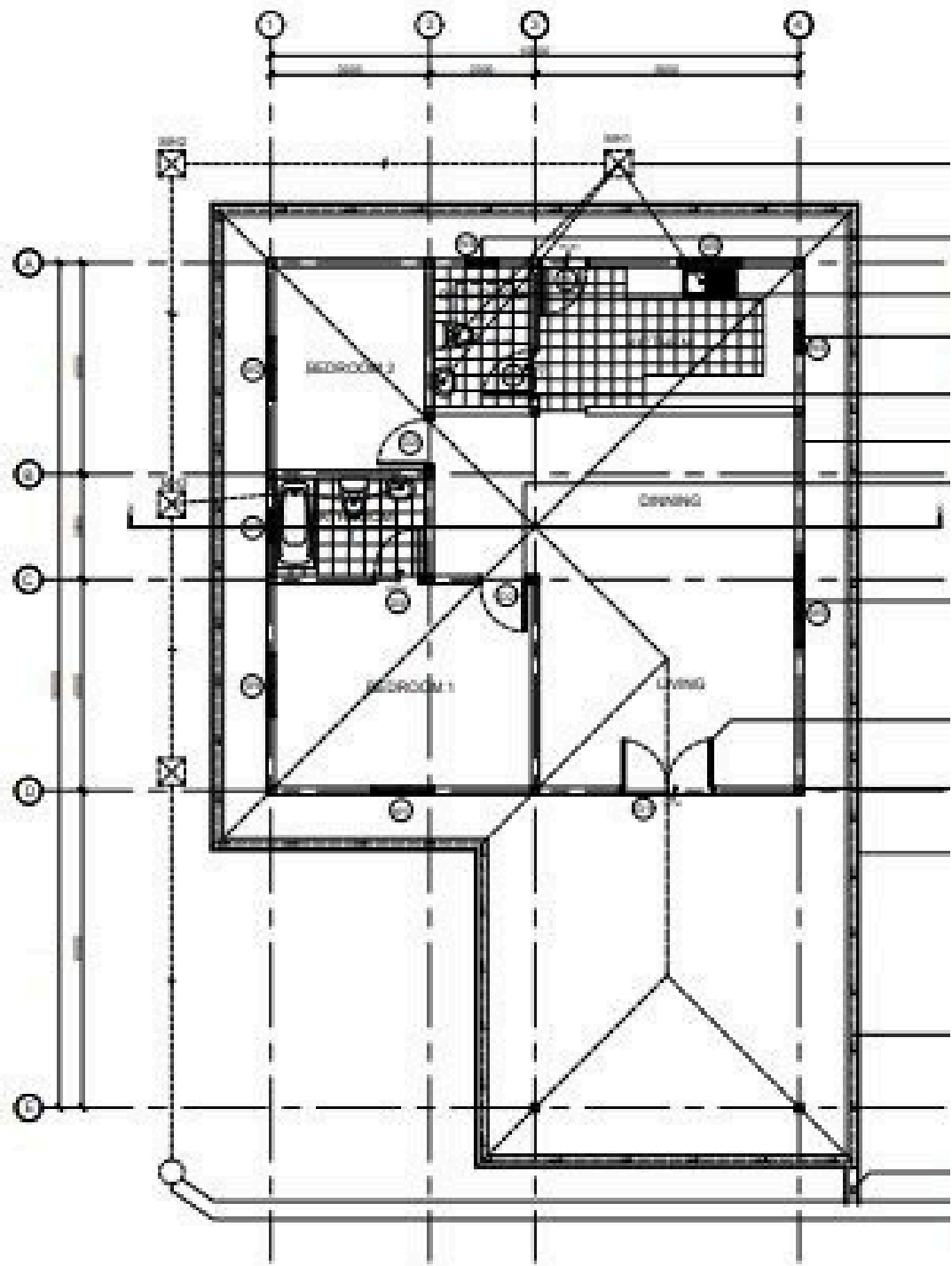
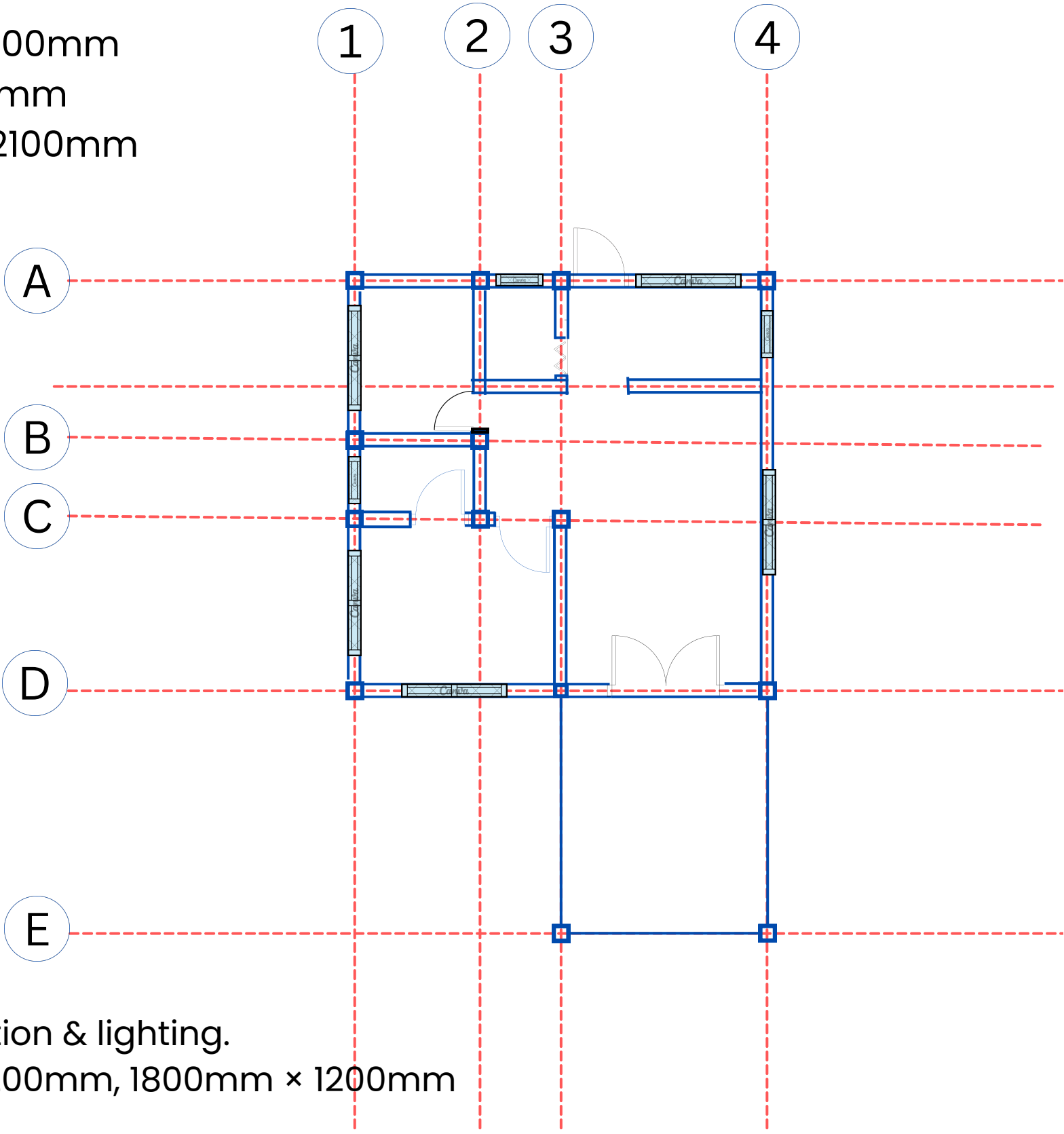
Doors & Windows

- Main entrance: 1200mm × 2100mm
- Room doors: 900mm × 2100mm
- Bathroom doors: 700mm × 2100mm



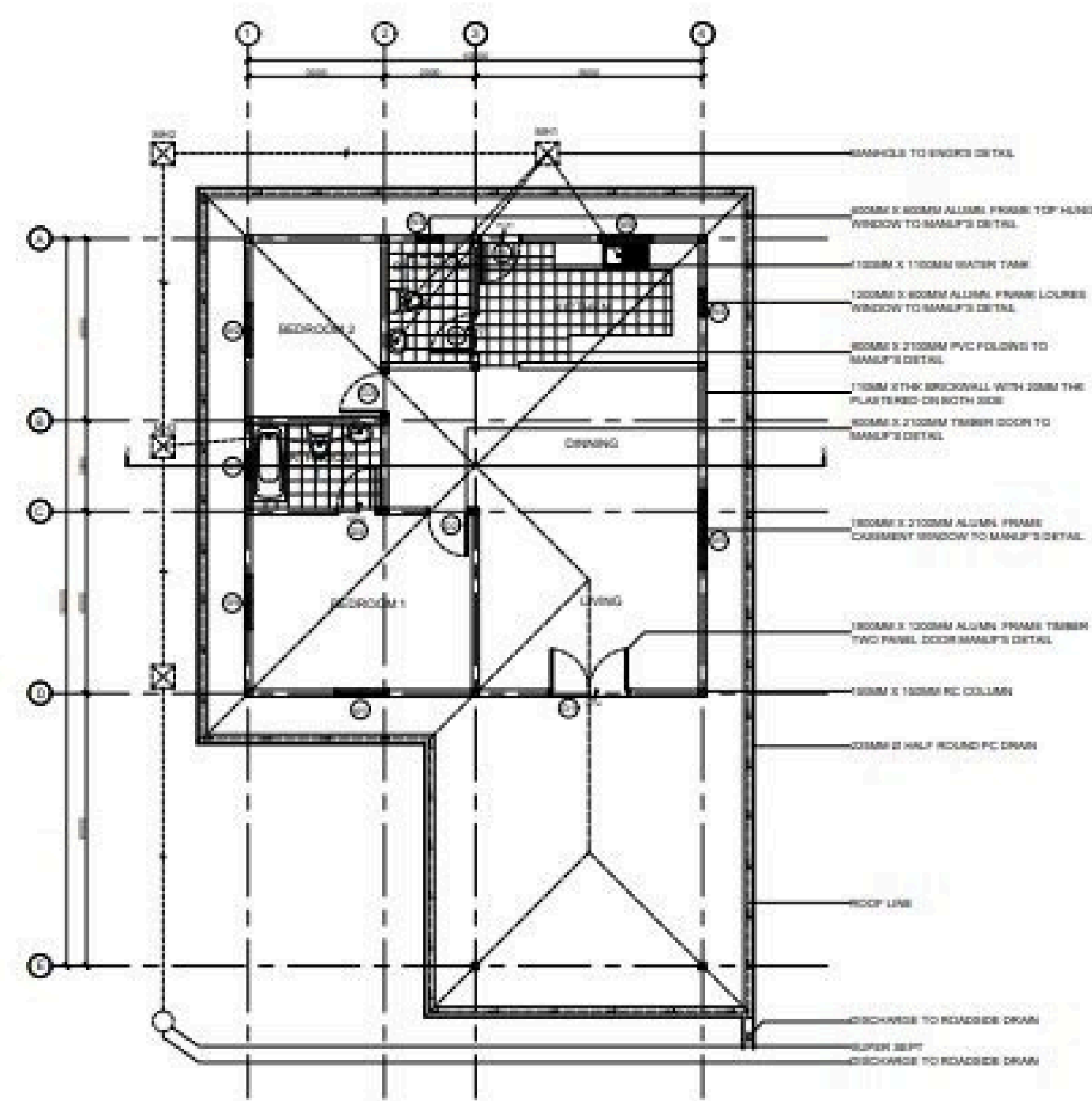
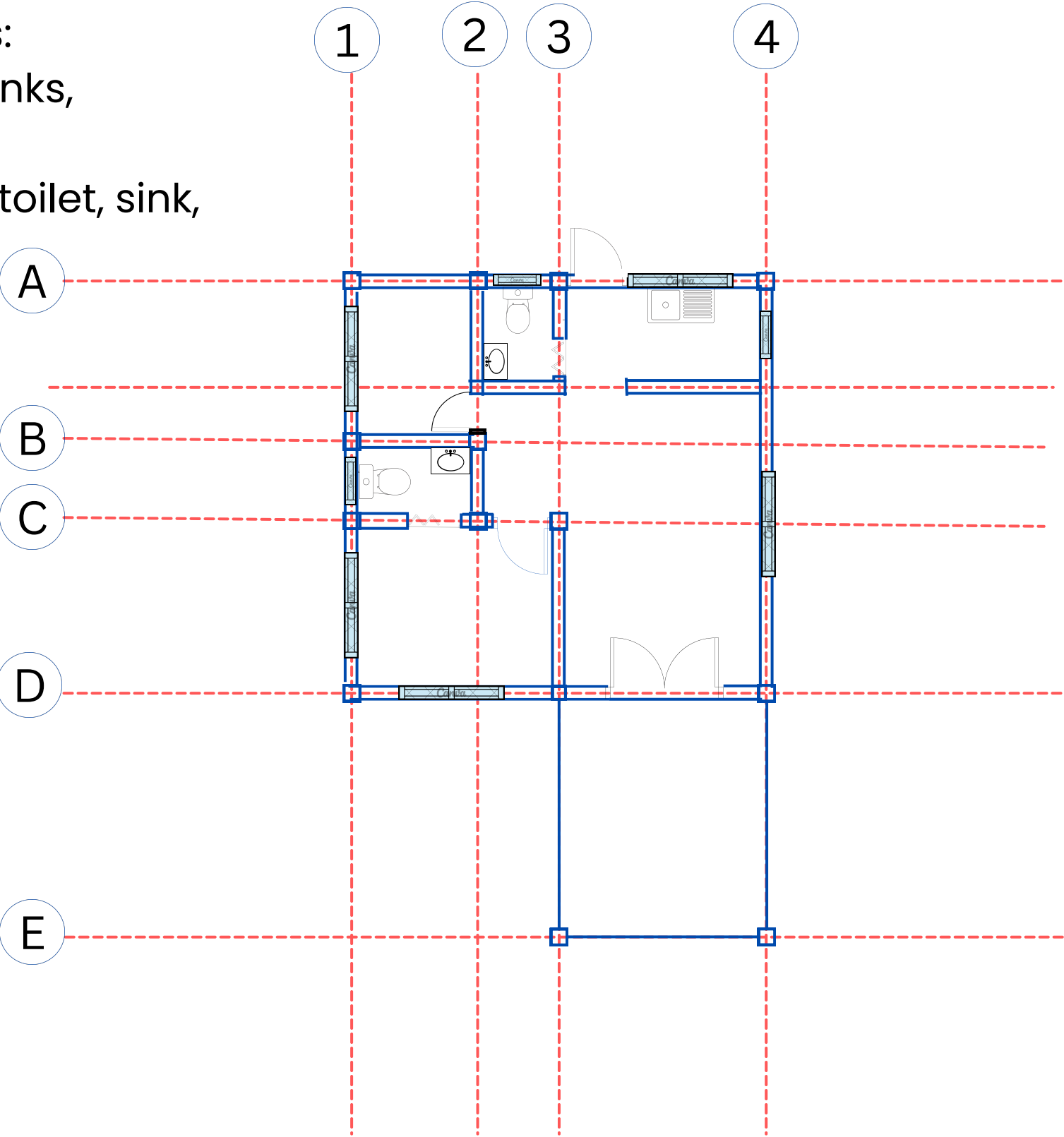
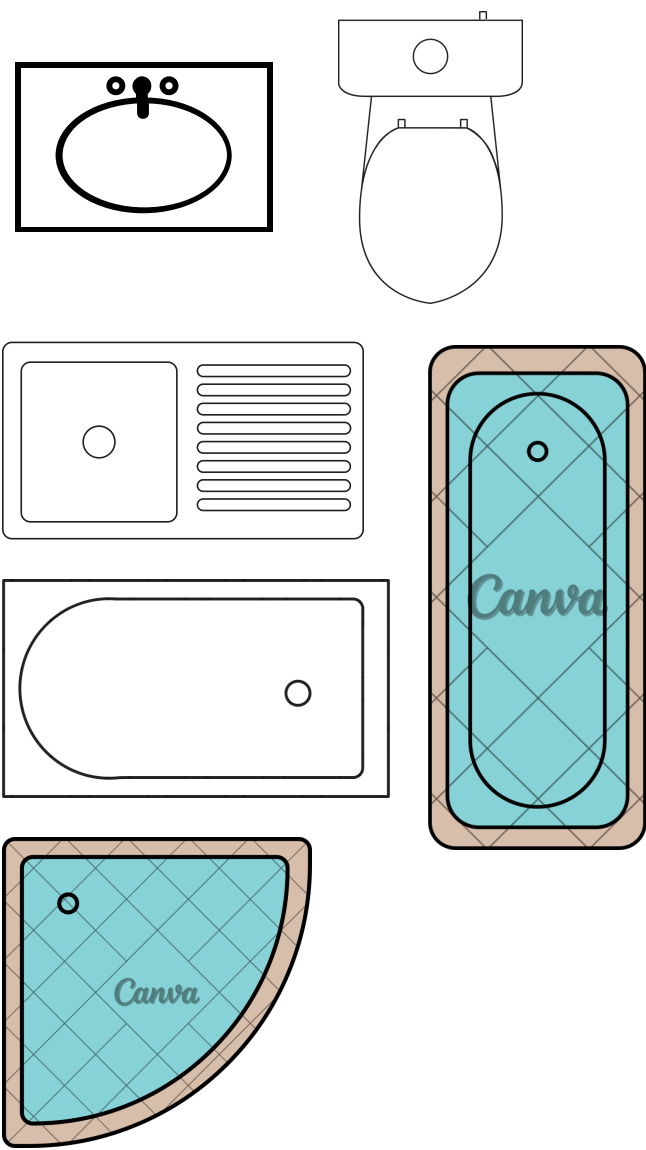
Window placements for ventilation & lighting.

- Common sizes: 1200mm × 1200mm, 1800mm × 1200mm
- top hung 600 x 600mm.



Fixtures & Furniture

- Include built-in fixtures:
 - Kitchen cabinets, sinks, wardrobes.
 - Bathroom fixtures (toilet, sink, bathtub/shower).

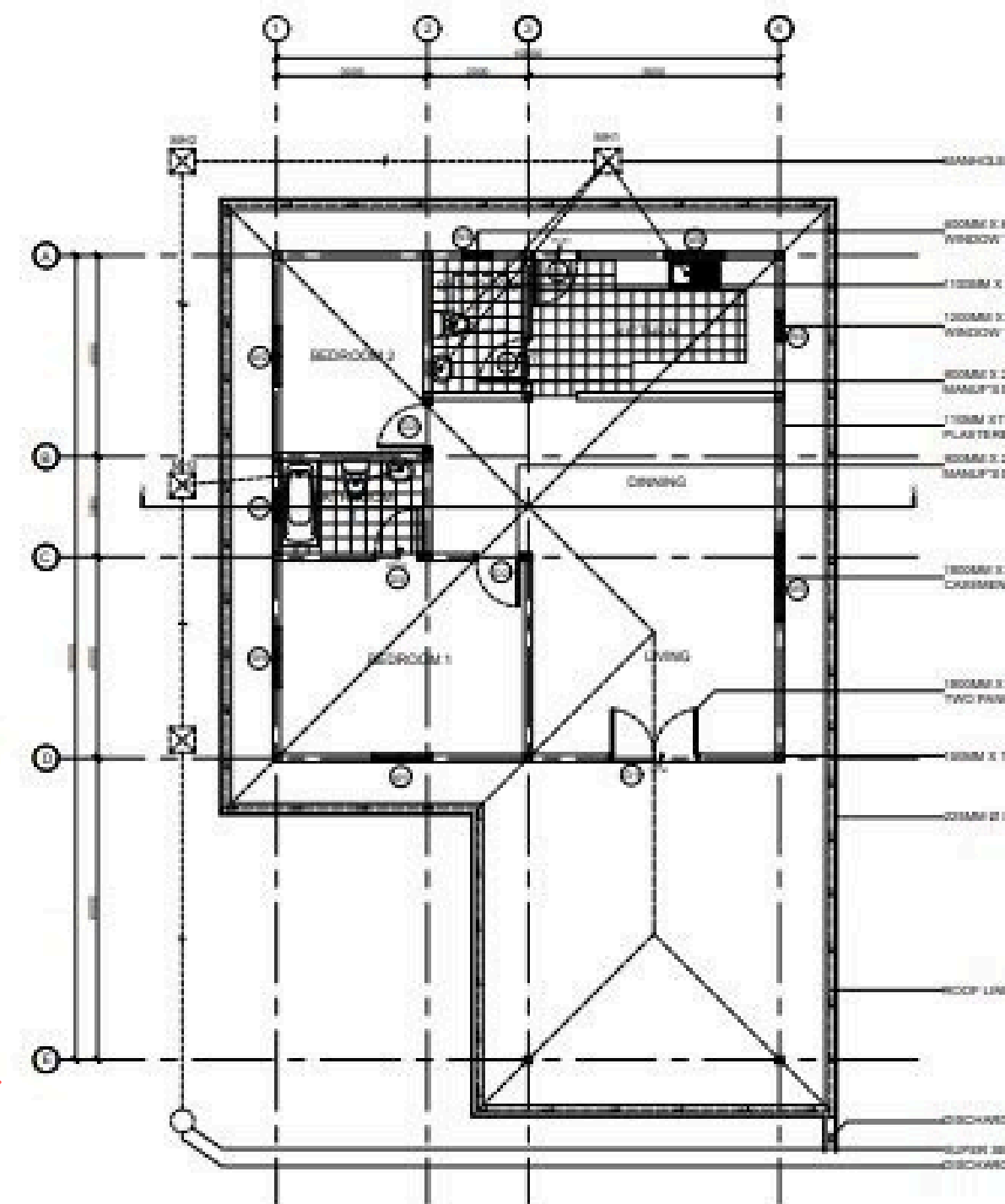
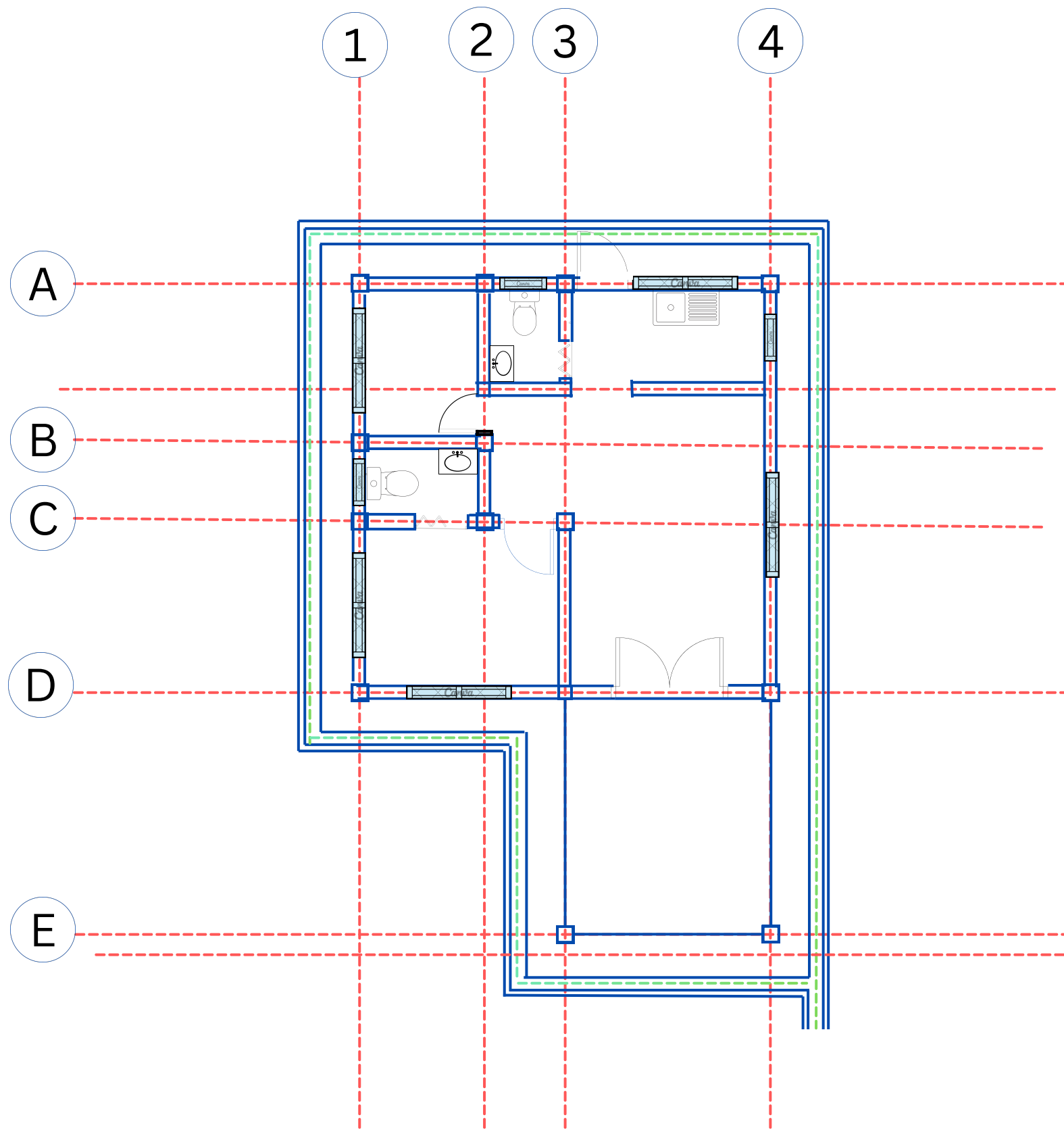
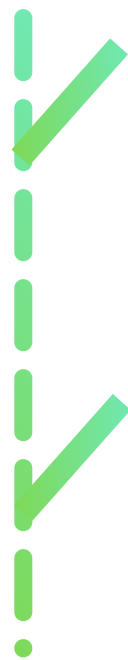


Apron & Drainage

Mark the apron around the building

- Usually 600mm – 1200mm wide around the perimeter
- Use 900mm.

drainage flow -arrow



Manhole & Septic Tank

Manhole?

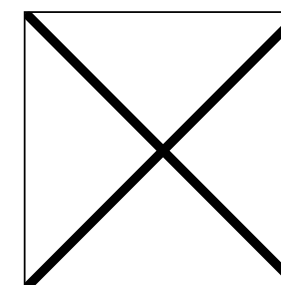
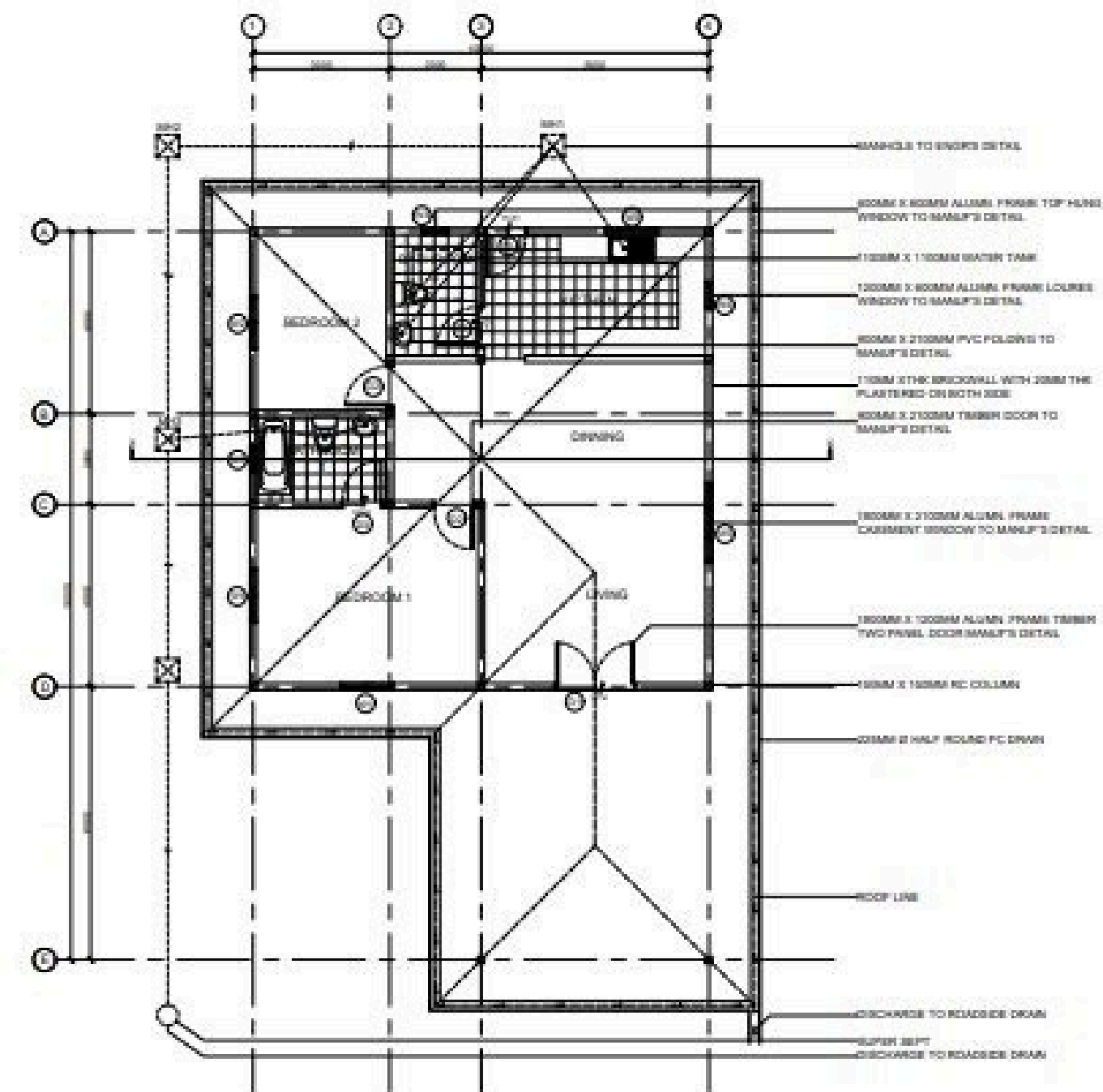
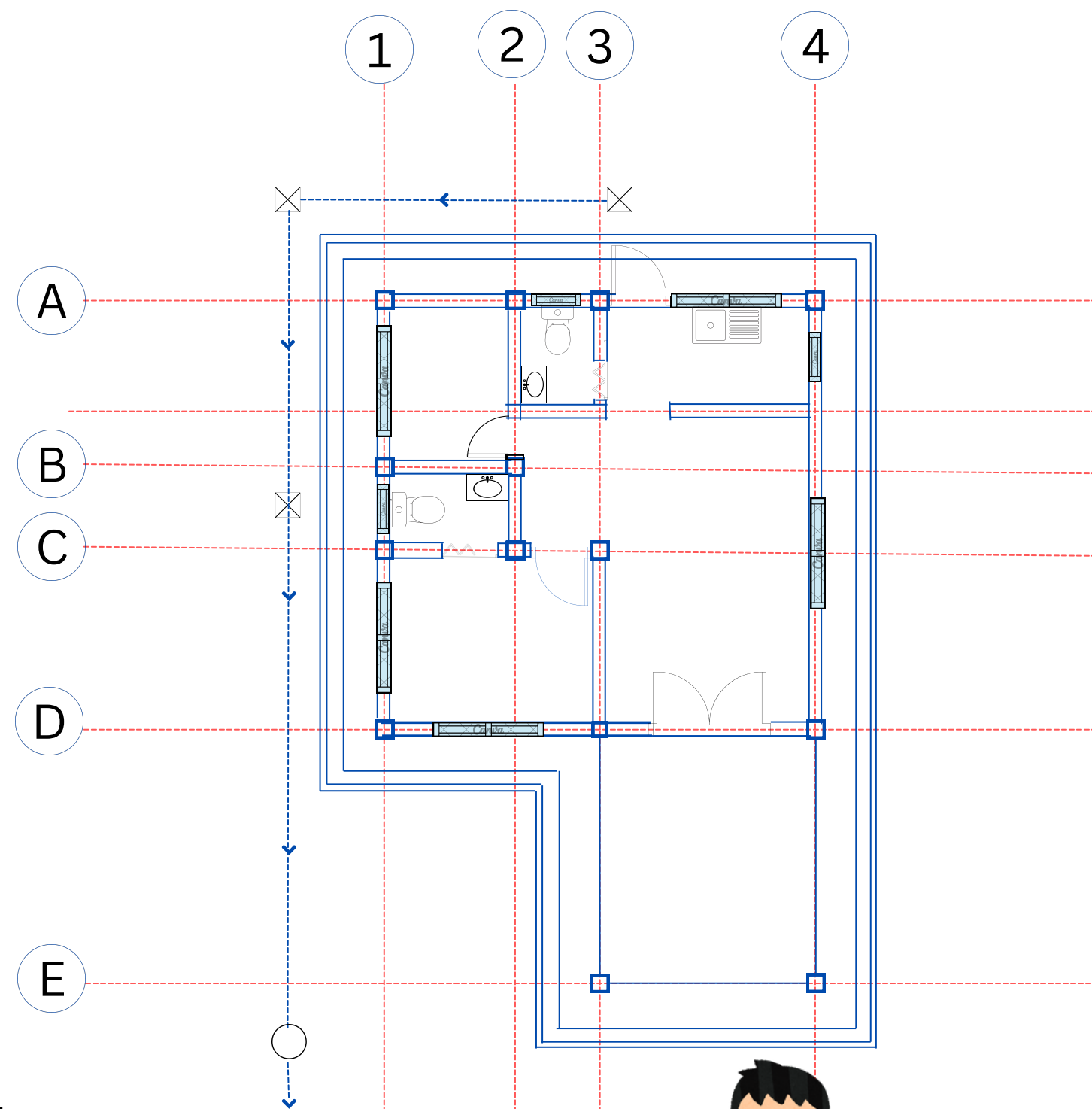
- A manhole is an underground access point to the sewer or drainage system.
- Used for maintenance, inspection, and cleaning of drainage pipes.
- Typically placed at junctions, changes in direction, or every 5-10 meters in long runs

Standard Sizes:

Diameter: 600mm – 1000mm
Depth: 1.2m – 1.5m (varies based on site conditions)

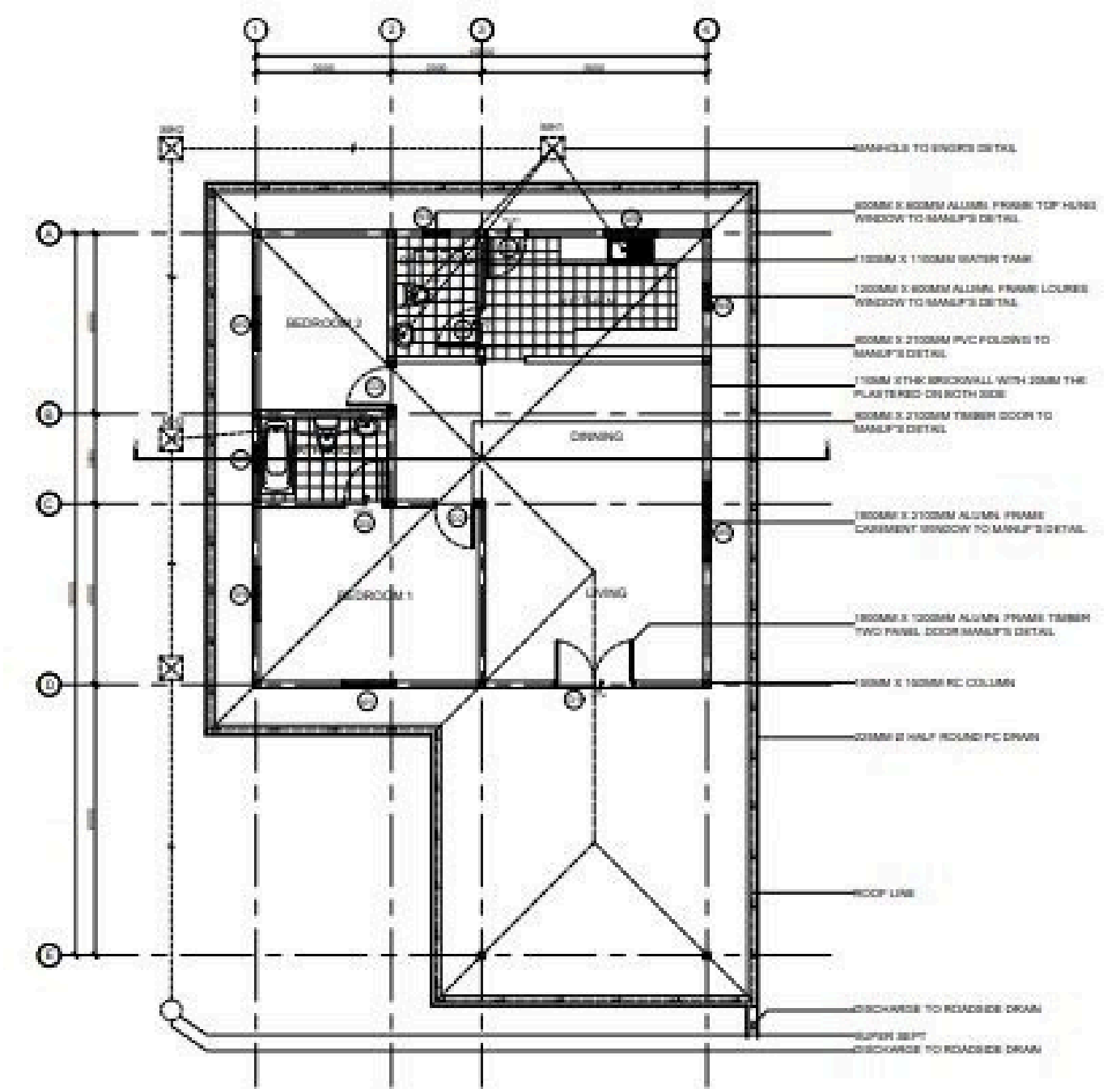
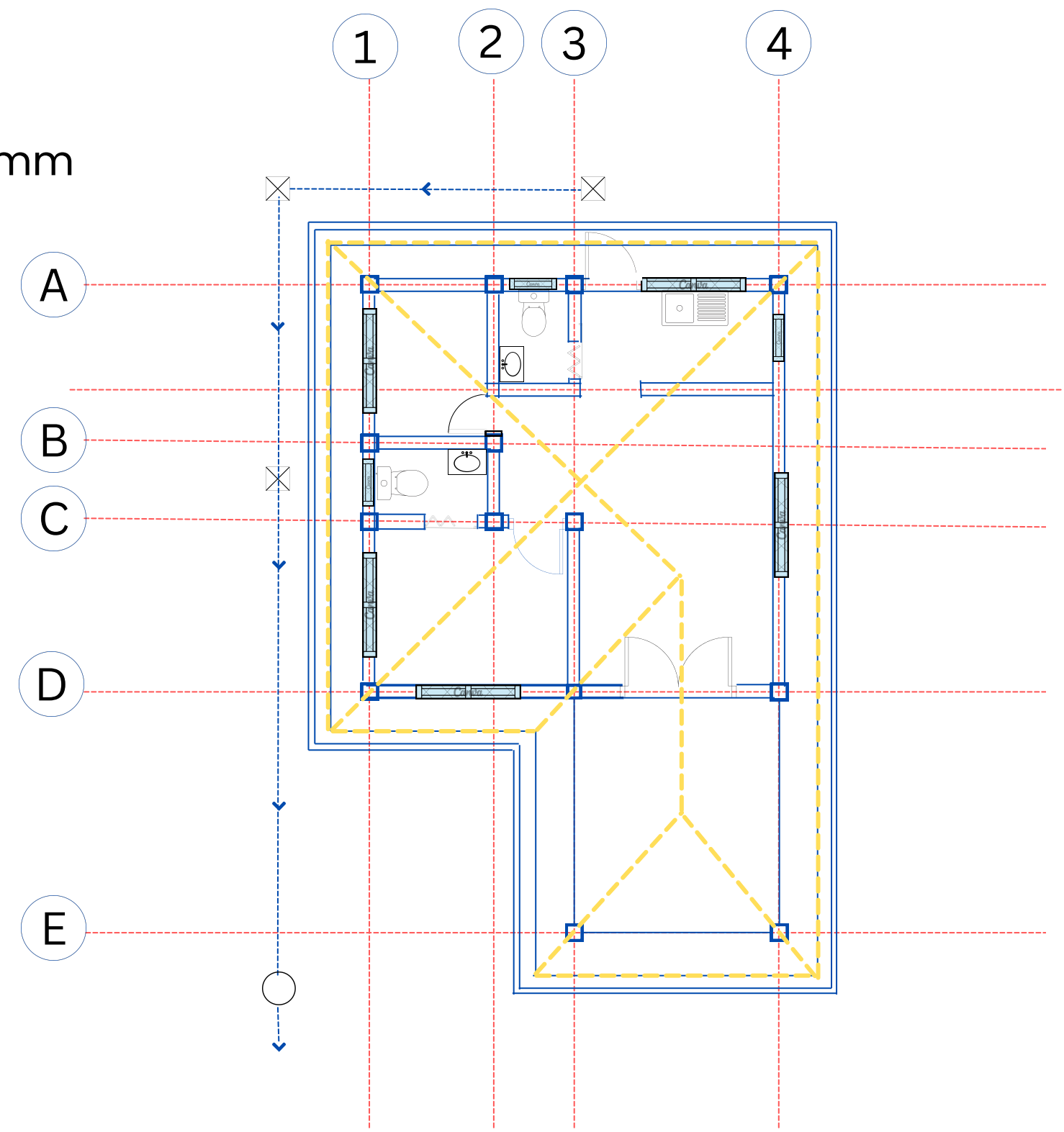
General Distance Guidelines

- ✓ Minimum Distance: 600mm – 1000mm from the apron edge.
- ✓ Recommended Distance: 1.2m – 2.0m from the apron for ease of maintenance.

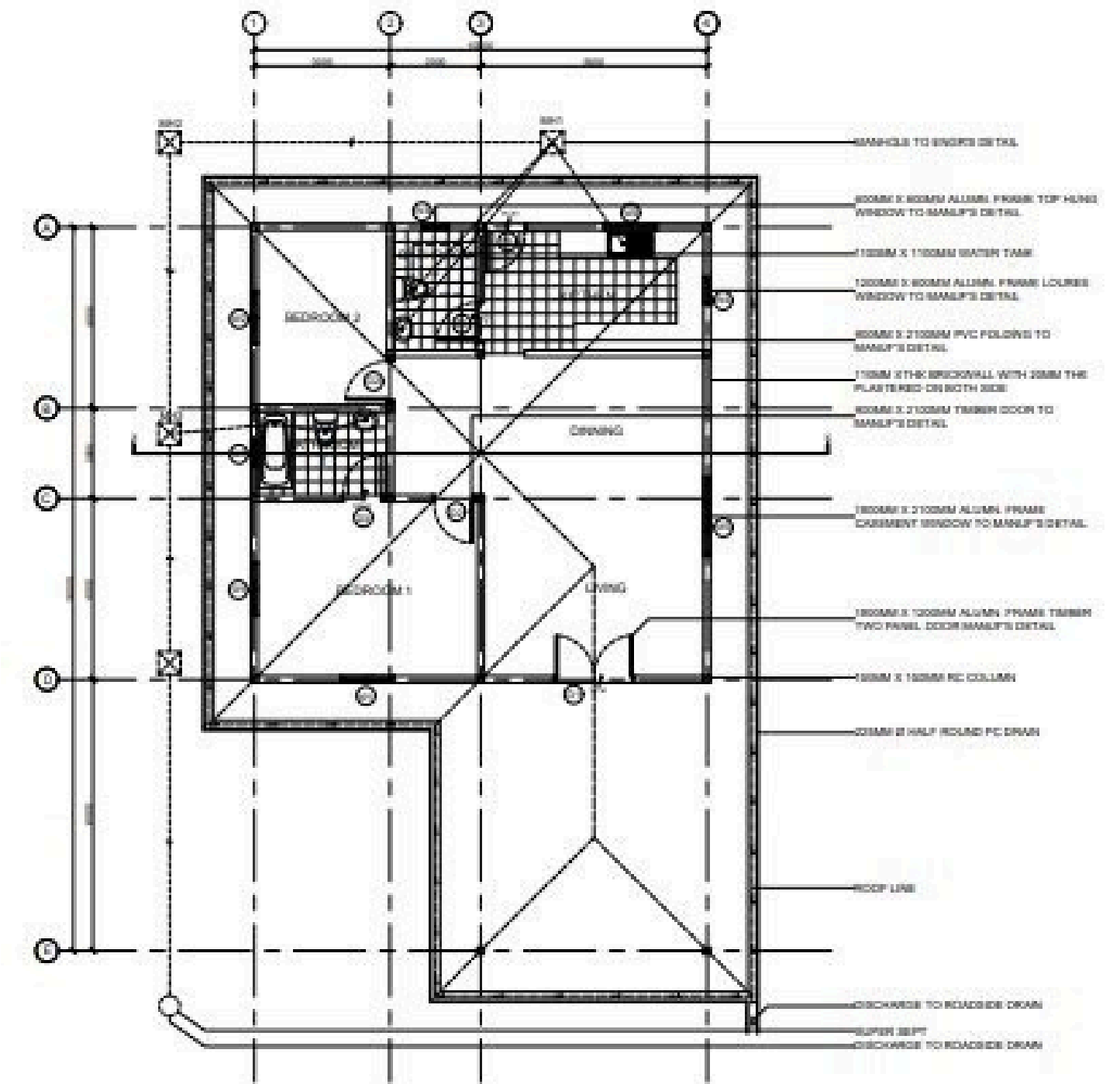
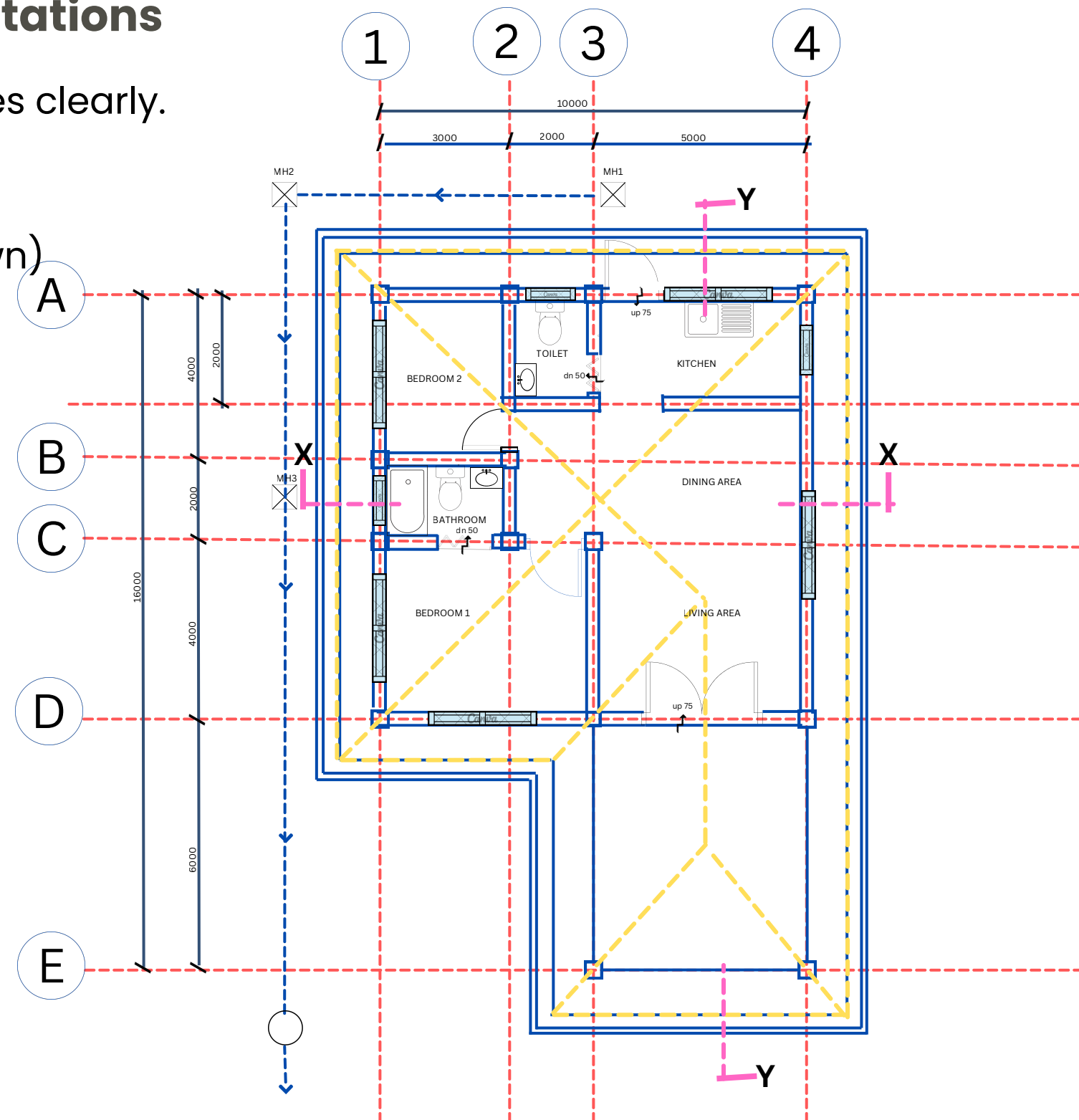
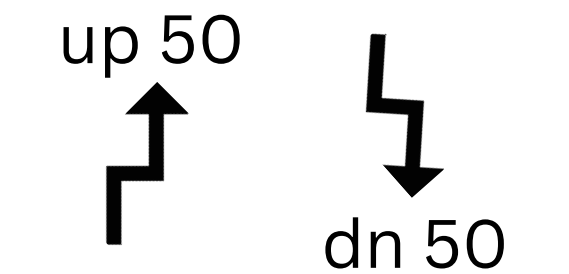


Roof Lines

- Dashed Lines
- Add the roof overhang (typically 450mm – 600mm for a bungalow).



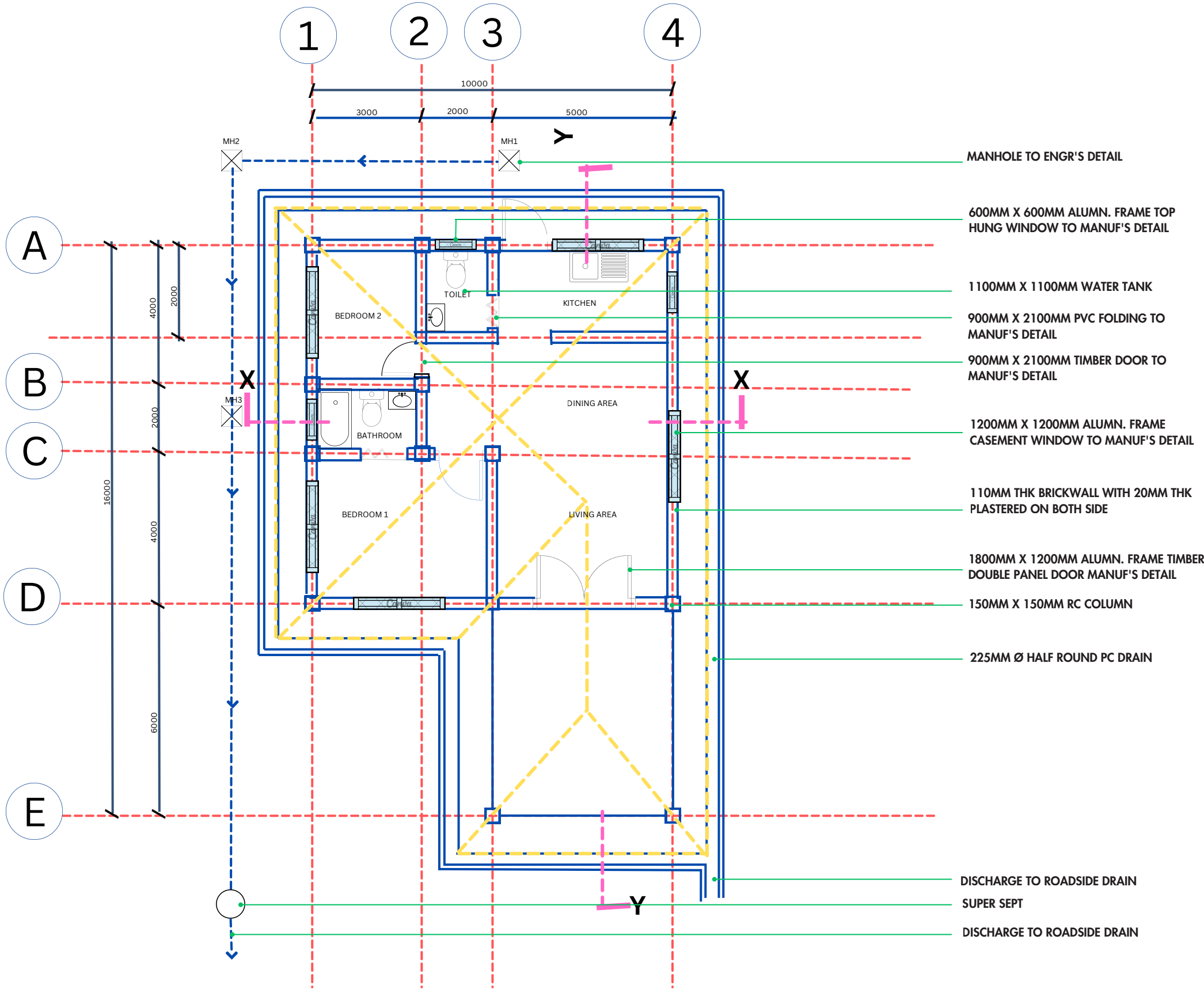
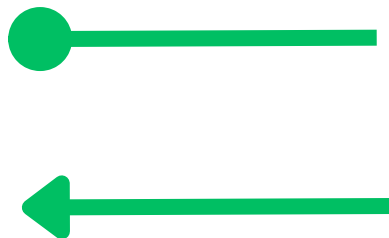
- Label rooms & spaces clearly.
- Add dimensions
- Show section lines.
- Floor level (Up & down)



Up Arrow (▲ or

specifications

a detailed written description of the materials, construction methods, dimensions, and quality standards required for a building project



water tank

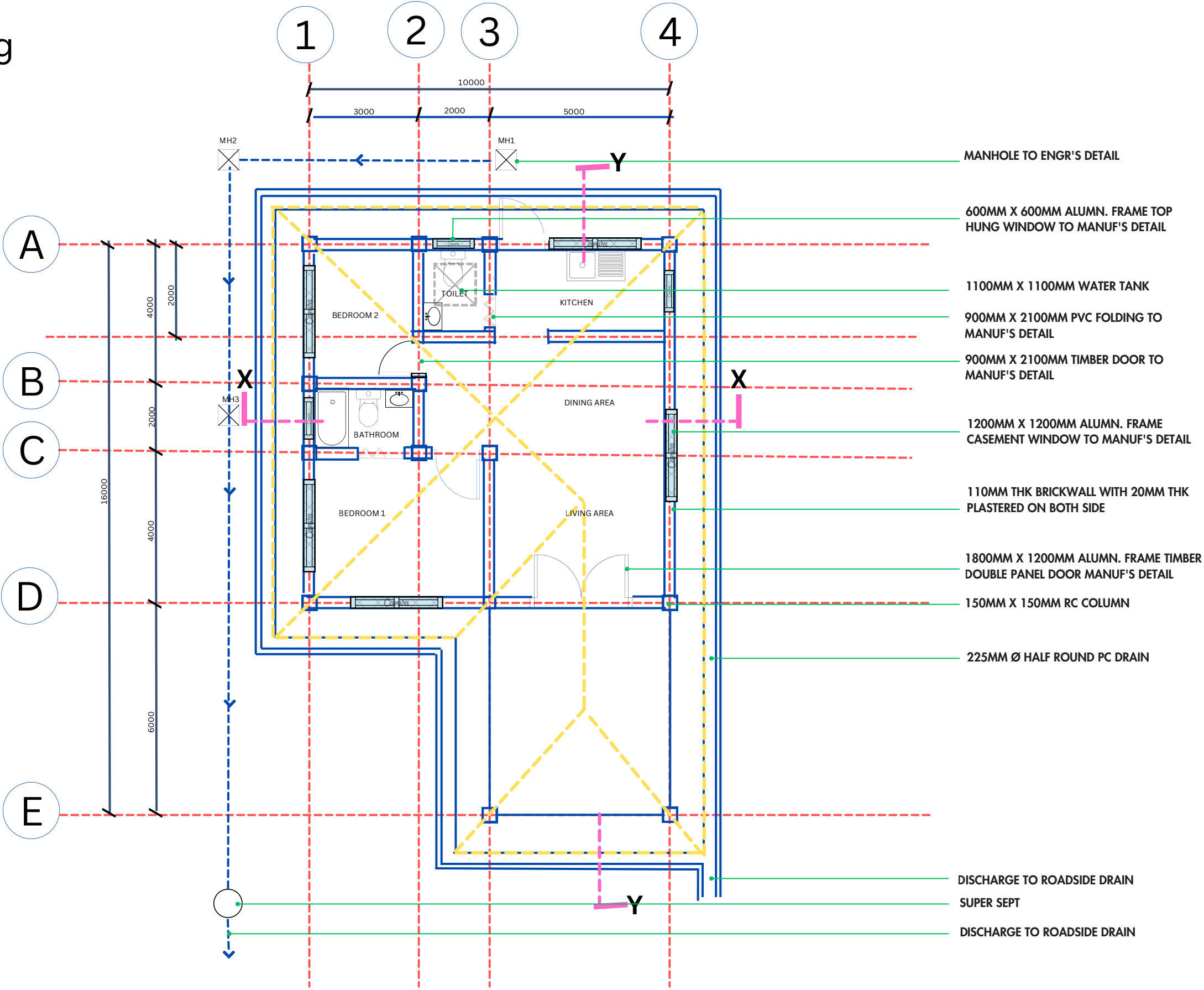
A water tank is a storage unit for supplying clean water to a building.



Household Size	Recommended Tank Size
1 - 2 people	500 – 750 liters
3 - 4 people	1000 – 1500 liters
5 - 6 people	2000 – 3000 liters
7 - 10 people	3000 – 5000 liters

Capacity (Liters)	Approximate Dimensions (D × H)
500L	900mm × 900mm
1000L	1100mm × 1200mm
2000L	1400mm × 1600mm
3000L	1500mm × 2000mm
5000L	1800mm × 2200mm

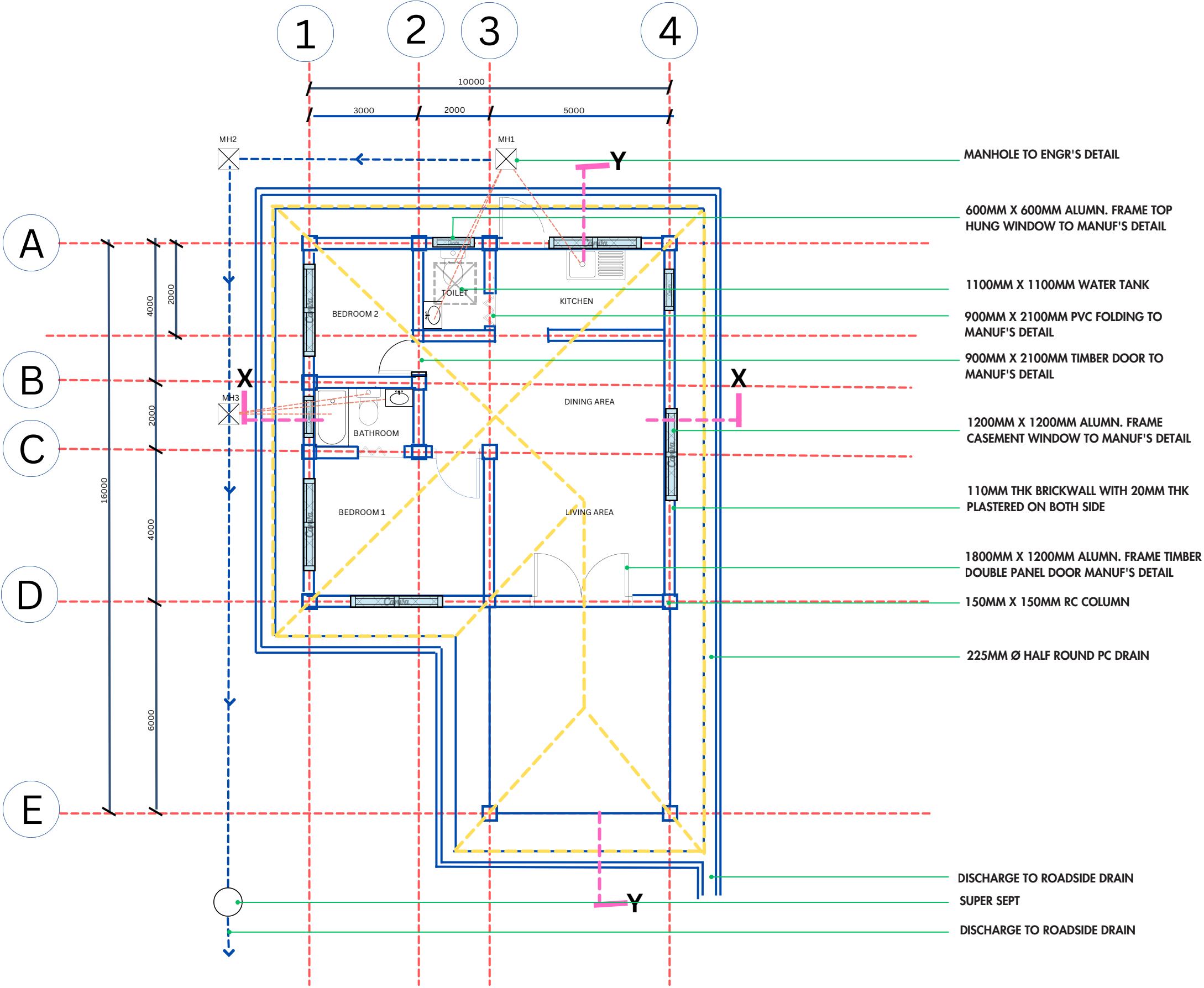
- ✔ Plastic (Polyethylene) Tanks – Lightweight, affordable, UV-resistant.
- ✔ Concrete Tanks – More durable, used for underground storage.
- ✔ Steel Tanks – Stronger but prone to rust without proper coating.



piping line

A piping line from a toilet/kitchen to a manhole is part of the sanitary drainage system that carries wastewater from the toilet/kitchen to the municipal sewer or septic system.

FLOOR PLAN	
1	Gridline & bubble
2	Dimensions
3	Space label
4	D/W Const. & Symbols
5	Floor level
6	Section line
7	San fitting label
8	Hatch- Kitch & Bath
9	Manhole- flow
10	Water tank
11	Drain- flow & final discharge
12	Septic tank & final discharge
13	Specification
14	Linework
15	Dwg composition



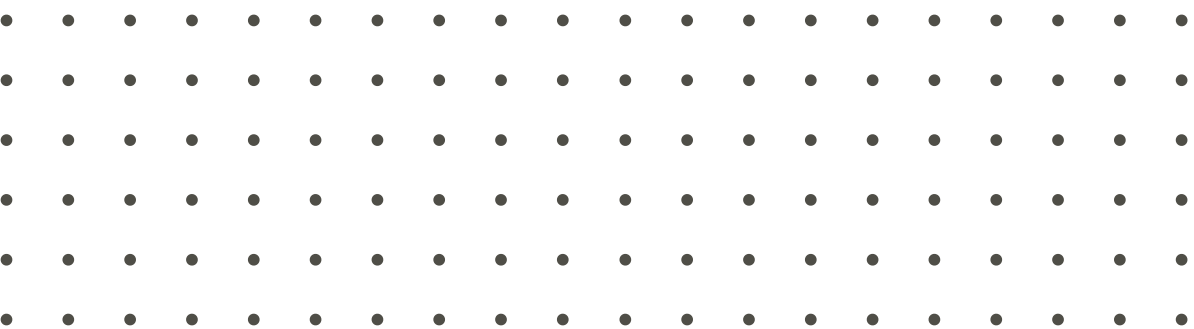
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eISBN 978-629-7643-94-6



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