

Candidate Number :

Seat Number :

HKIA / ARB Professional Assessment 2020

Paper 6

SITE DESIGN

18 November 2020

09:00 am – 1:00 pm (4 hours)

Kowloon Bay International Trade & Exhibition Centre (KITEC)

Kowloon Bay

ONE COMPLUSORY QUESTION

Total Mark: 100

General Notes:

Format	Use the A3 plain and A3 tracing papers provided as appropriate.
Presentation	Black ink line drawings are preferred. Use colour(s) for highlights if necessary. DO NOT use RED.

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Attachment 1	Design Data Sheet		A4 size
Attachment 2	Location Plan	1:1000	A3 size
Attachment 3	Site Plan	1:500	A3 size
Attachment 4	Site Section	1:500	A3 size
Attachment 5	Plan of Prototype	1:500	A3 size

1 INTRODUCTION

A local charity organisation has acquired a site next to a country park for a Retreat and Recreational facility for young people and families. The development mainly includes the following facilities:

- Visitors' Centre with check-in counter, canteen, exhibition gallery and back of the house facility,
- Young people hostel and family hostel for visitors,
- A Multi-purpose Sport Hall,
- A boat house and changing rooms near to the private beach.

Your practice has been commissioned to prepare a preliminary master layout plan to explore the feasibility of the development in compliance with the general statutory controls and other statutory enactments imposed on the site.

2 THE SITE

2.1 Site Context

The Site is a stepping site next to a Country Park to its east. It is irregular in shape and bounded by a major road (Road A, 17m wide) to the south and Road B to the south east which provides the vehicular ingress/egress point XYZ. There is a private beach belong to your client to the north. A private residential development is located to the west.

2.2 Planning and Lease Restrictions

The Site is zoned as 'Government, Institution or Community' in the concerned Outline Zoning Plan (OZP). Recreational facilities, Multi-purpose Sport Hall and Hostels are always permitted. The OZP also limits all buildings within the Site to the height of +25.5mPD.

Under the lease, the total domestic gross floor area and total non- domestic gross floor area shall not exceed 7,600m² and 6,000m² respectively.

The lease also requires that the Sustainable Building Design (SBD) Guidelines as stipulated in PNAP APP-152 shall be complied with.

2.3 Special Feature

A walking trail which leads to the country park is in the site. Right of way of the trail is to be maintained.

2.4 Vehicular Access

Vehicular ingress and egress shall be between X and Y through Z as indicated in the Location Plan and Site Plan in Attachments 2 & 3.

3 THE BRIEF

3.1 Accommodations

The proposed development shall comprise of the following:

	Accommodation	Required Area/Number	Other Requirements
1)	Young People Hostel	3,200 m ²	<ul style="list-style-type: none"> • Typical floors refer prototype 1. (about 400 m²) • 3.5m fl. to fl.
2)	Family Hostel	4,400 m ²	<ul style="list-style-type: none"> • Typical floors refer prototype 2. (about 550m²) • 3.5m fl. to fl.
3)	Visitors' Centre	4,000 m ²	<ul style="list-style-type: none"> • 5m high per floor. • 3 storeys maximum.
4)	Multi-purpose Sport Hall	800 m ²	<ul style="list-style-type: none"> • 9m high. 1 storey only.
5)	Boat House and changing rooms	600 m ²	<ul style="list-style-type: none"> • 5m high. 1 storey only
6)	Pier	15m long	/
7)	Open Carpark	20 nos.	<ul style="list-style-type: none"> • 2500mm x 5000mm each.
8)	Loading/ Unloading Bay	3 nos.	<ul style="list-style-type: none"> • 3500mm x 7000mm each.

3.2 Prototypes

The typical floor plans of the young people and family hostels are shown in Prototype 1 and Prototype 2 (attachment 5). The typical floor-to-floor height shall be 3.5m for both types of the hostels.

You are required to use these prototypes for the feasibility study. The profile and the configuration of the prototypes can be modified within reasons. The size can also be adjusted to suit your proposed master layout plan within 10% variation.

3.3 Major planning Requirements

- (a) The Visitors' Centre must be conveniently located as the social hub of the development and to be accessible to public with a sense of arrival.
- (b) The Multi-purpose Sport Hall must be easily accessible by the community.
- (c) The walking trail leading to the Country Park is to be accessible by public at all time.
- (d) Levels of the site should be respected, and no major site formation is envisaged.
- (e) Barrier free access should be provided to all buildings including the pier but not necessary to the beach.

4 THE TASK

You shall demonstrate the optimum arrangement of the building blocks within the Site to meet the development brief, to respond to the site constraints and opportunities, and to comply with the statutory requirements.

As required under the lease, the design proposal shall comply with the Sustainable Building Design (SBD) Guidelines as stipulated in PNAP APP-152. You need to show in-principle compliance only; detailed illustrations/calculations are not required.

In this regard, the site arrangement shall comply with the following:

- (a) **Building Separation**
For this paper, if the Projected Façade Length (L_p) for building separation is less than 60m, there is no need to demonstrate permeability percentage.
- (b) **Building Setback**
Building setback shall be complied for all streets that abut the site.
- (c) **Site coverage of Greenery**
For this project, the client requires that at least 20% greenery site coverage as defined under the PNAP APP 152 be provided within the pedestrian zone. The beach area is not accountable for greenery in this exercise.

Special attention shall be paid to the accessibility of each individual building, pedestrian and vehicular circulation, servicing of the buildings, and the relation between the open area and the buildings. The design proposal shall be modest yet imaginative, functionally, and ecologically sensible, technically feasible, and shall comply with the relevant statutory requirements. Barrier free access path connecting all buildings should be indicated in the plan.

5. SUBMISSION REQUIREMENTS

Master Site Plan	Work on the blank A3 size answer sheets provided. Scale 1:500
Show site development at the roof level.	
Show access points for vehicles and pedestrians.	
Show relevant features of the adjacent sites.	
Show uses, levels, circulation, lighting and ventilation provisions wherever necessary, open spaces, etc.	
Show plans at different levels to demonstrate the proposed design if necessary.	
Show car parking provisions (Note: No detailed layout of the car park is required).	
Show vehicular drop-off points and loading / unloading bays.	

Master Section(s)	Work on the Blank A3 size answer sheets provided. Scale 1:500
Demonstrate the proposed design in at least one N-S section through the entire site.	
Clearly indicate the site boundary, site formation levels, floor levels of different blocks, landscape features, and other design features.	

Development Schedule - Refer to Attachment 1.

Complete the Design Data Sheet.

End of paper 6

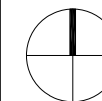
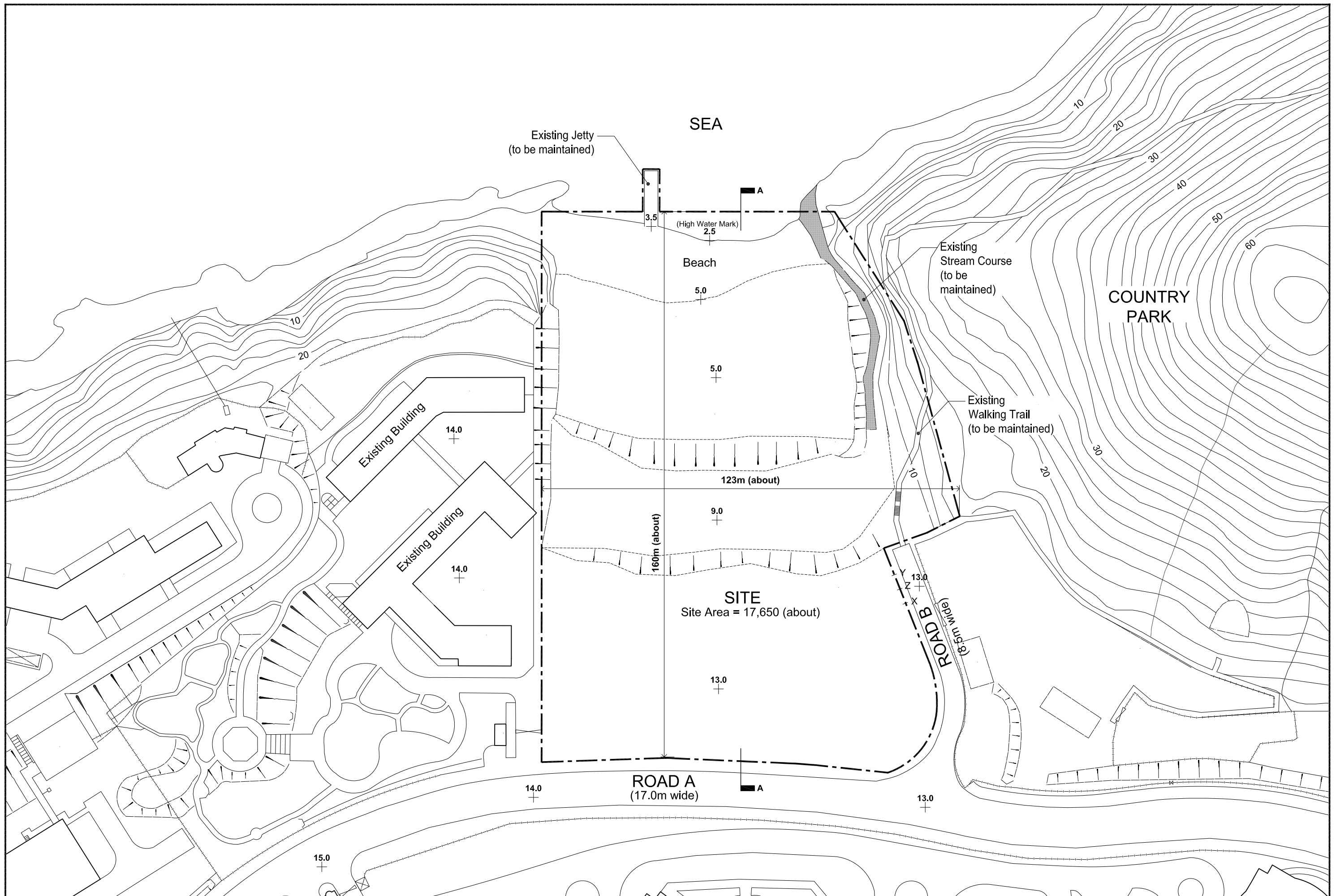
Paper 6 – Site Design

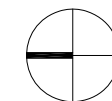
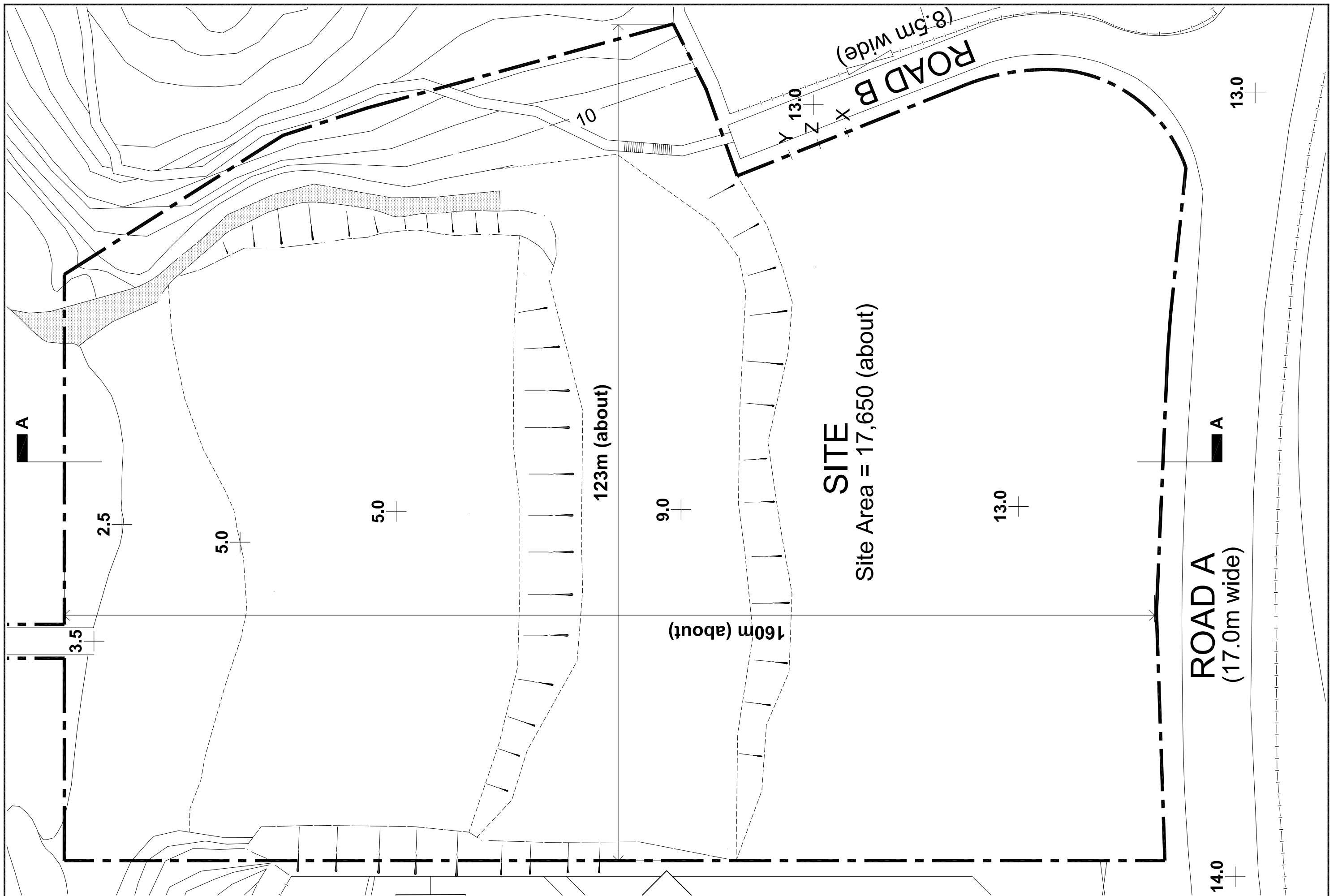
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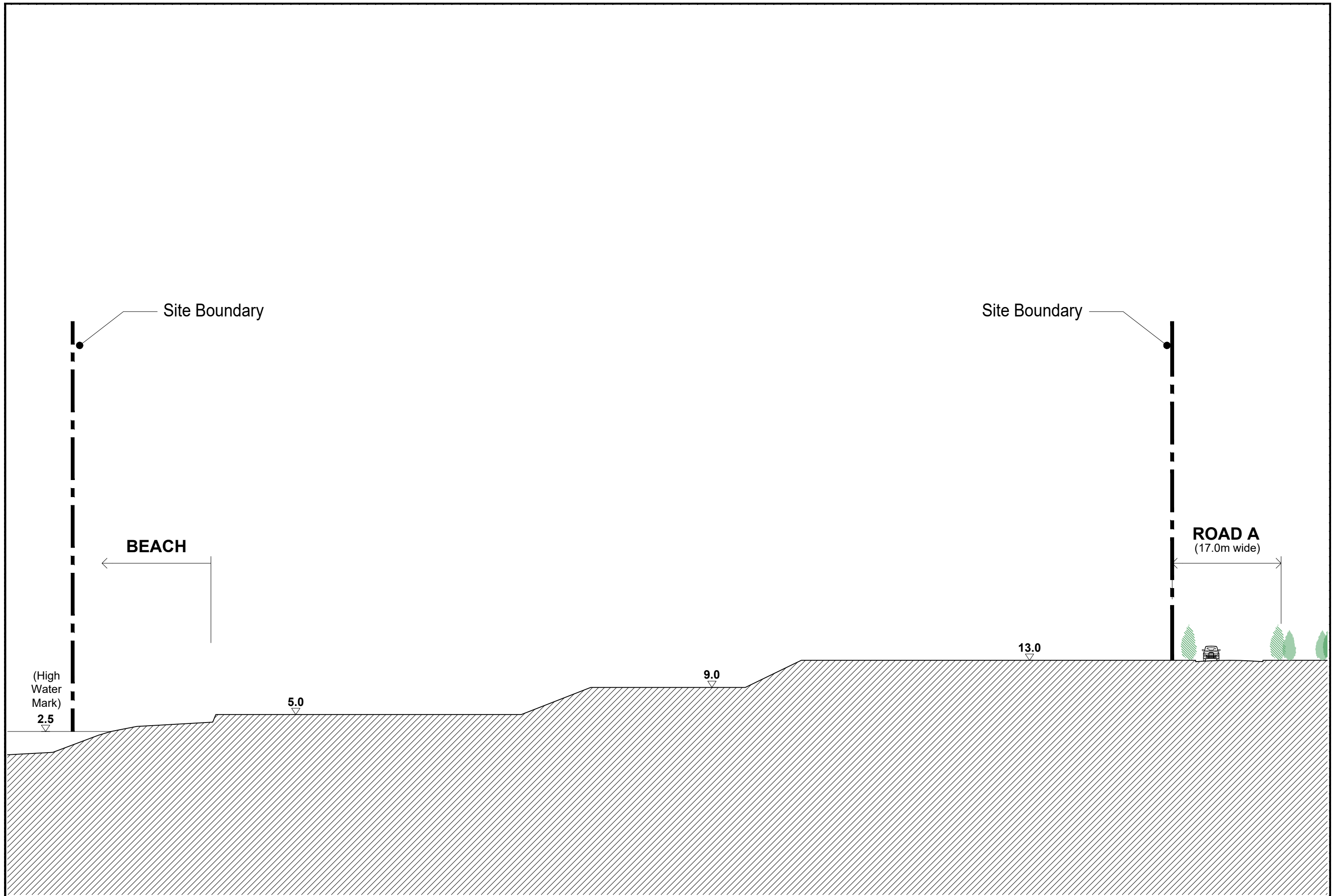
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Design Data Sheet

	<i>Required under Lease or Statutory enactments</i>	<i>Proposed</i>
Site area	17,650m ²	-----
Gross floor area Domestic - Short-stay Quarters - Long-stay Quarters Non-domestic - Multi-purpose Hall		
Plot ratio		
Height limit		
Site coverage		
Open space provisions		
Green coverage		
Number of car parking spaces		
Number of loading / unloading bays		

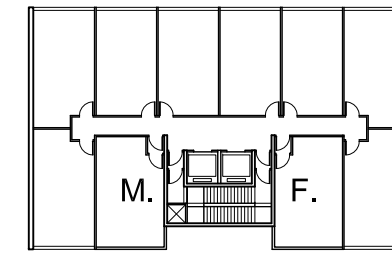
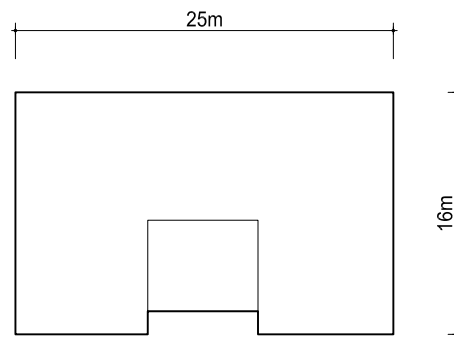




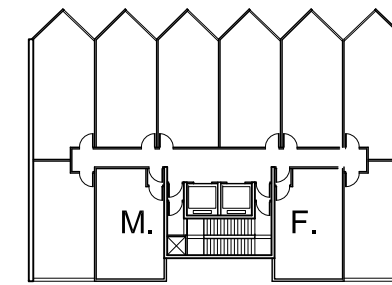
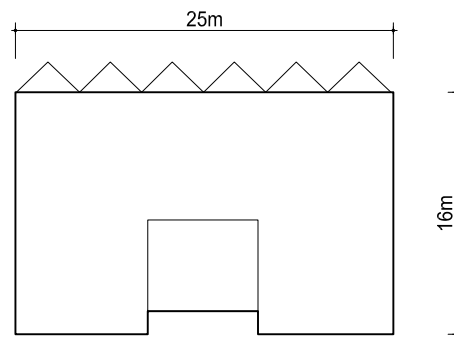


Prototype 1
Young People Hostel

~ 400 sq.m. per Floor



Basic Layout



Alternative Layout

Prototype 2
Family Hostel

~ 550 sq.m. per Floor

