

Candidate Number :

Seat Number :

HKIA / ARB Professional Assessment 2017

Paper 6 SITE DESIGN

22 November 2017

9:00 am – 1:00 pm (4 hours)

Kowloonbay International Trade & Exhibition Centre (KITEC)
Kowloon Bay

ONE COMPULSORY QUESTION 100 Marks

General Notes

Format	Examination paper, both A3 plain and A3 tracing paper, are provided. Use as appropriate.
Presentation	Black ink line drawings are preferred. You may use colour for clarity. DO NOT use RED.

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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 Prototypes	1:500	A3 size
Attachment 6	Minimum Standards of Turning Circle for Private Cars, Goods Vehicles and Tourist Bus	Not to scale	A3 size

1 INTRODUCTION

Your client is a movie production company. They plan to establish a **Movie Village**, which is also intended to be a tourist attraction, on a suburban lot.

Your office 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 the client's operational requirements.

2 THE SITE

2.1 Site Context

The Site is located on a suburban lot in the New Territories.

The Site is flat, bounded by a 15m wide public road (Road A) on its north, west and south (part). Office/ educational developments of 6-10 storeys abut the Site on the east and southeast.

Refer to the Location Plan (Attachment 2).

2.2 Planning and Lease Restrictions

The Site is zoned as 'Government, Institution or Community' in the concerned Outline Zoning Plan (OZP). Movie production facilities, cinemas, quarters, and hotels are always permitted. The OZP also limits all buildings within the Site to the height of **56.0mPD**.

(For the purpose of this paper, building height refers to the height from the mean street level to the roof of the highest usable floor area.)

Under the lease, the total domestic gross floor area and total non-domestic gross floor area are stipulated and tabulated in Section 3.1.

The site coverage shall not exceed 60% of the site.

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

2.3 Trees

No trees currently exist within the Site.

2.4 Vehicular Access

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

3 **THE BRIEF**

3.1 Accommodations

The proposed development shall comprise the following:

Total domestic GFA	:	4,000m ² maximum
Total non-domestic GFA	:	5,800m ² maximum (including hotel)

Accommodation	Required Area / Number	Other Requirements
(A) Visitor / Tourist facilities (open to public)		
(1) Movie studio & Cinema/ Visitor Centre	1,000m ² (non-domestic)	rectangular, 10m high
(2) Hotel	4,800m ² (non-domestic)	Use Prototype 2 Min. floor-to-floor height 3.5m
(B) Movie Shooting Scenery (open to public) (non-GFA accountable)		
(1) Exterior scenery A: Central promenade lined with shophouses and coffee shops on both sides	--- 10 nos.	Promenade: Min. 60m long x 7.5m wide Shophouses (1 storey): 6m (frontage) x 4m (deep) each
(2) Exterior scenery B: Old Chinese village with a temple	20 nos 1 no.	Village houses (1 storey) : 10m ² each Temple: 10m x 5m
(3) Exterior scenery C: Castle wall with moat ¹	min. length: 120m	Wall height: 15m Moat width: 3m
(4) Exterior scenery D : Bamboo Forest	200m ²	
(C) Movie production accommodations (private)		
(1) Quarters for movie production crew	4,000m ² (domestic)	Use Prototype 1. Min. floor-to-floor height 3.3m (max. 5 storeys, including ground floor)
(D) Carparking, Loading/ Unloading facilities		
(1) Carparks	100 nos.	
(2) Loading / unloading bays	2 nos.	

¹ "Moat" is a deep wide ditch filled with water, dug round a castle as a defence.

3.2 Prototype

Prototype 1 – Quarters

Use the prototype 1 floor plan of quarters provided in Attachment 5 for the feasibility study. The typical floor-to-floor height shall be at least 3.3m. The ground floor can ONLY be used as entrance lobby, covered landscape area (assumed GFA of covered landscape area not accountable) and E&M plant rooms.

The profile, configuration and size of the prototype can be adjusted within 10% variance to suit the site conditions and the proposed master layout.

Prototype 2 – Hotel

Use the prototype 2 floor plan of hotel provided in Attachment 5 for the feasibility study. The typical floor-to-floor height shall be at least 3.5m. The ground floor can ONLY be used as entrance lobby, coffee shop and covered landscaped area (assumed GFA of covered landscape area non-accountable) and E&M plant rooms.

Single loaded hotel is preferred to capitalize on the frontage to scenery.

The profile, configuration and size of the prototype can be adjusted to suit the site conditions and the proposed master layout sensibly.

3.3 Other Requirements

- (a) The visitor centre, cinema and restaurant / canteen shall be easily accessible by the visitors and tourists from the public streets/ internal road/footpaths.
- (b) The central promenade and movie studio may be open to the visitors and tourists. They shall be linked to the visitor centre through pedestrian footpaths.
- (c) The quarters are private and shall not be accessible by the visitors and tourists. They shall be laid out so as to allow security control.
- (d) To avoid adverse impact on movie shooting, the hotel and quarters shall be screened as far as possible from exterior sceneries B & C.

4 THE TASK

4.1 General

You shall demonstrate the optimum arrangement of the required accommodations and facilities within the Site so as to satisfy the Brief and to respond to the site constraints and opportunities.

Special attention shall be paid to the accessibility of each individual building, pedestrian and vehicular circulation, servicing of the buildings, relationship between the open areas and the buildings, and demarcation between the public and private areas.

The design proposal shall be modest yet imaginative, functionally and commercially sensible, technical feasible, and shall comply with the relevant statutory requirements.

4.2 Sustainable Building Design

(a) Building separation

For the purpose of this paper, it is NOT required to demonstrate building permeability if the proposed continuous projected façade length (L_p) for any building or group of buildings does not exceed the requirement under PNAP APP-152.

(b) Street setbacks

For the purpose of this paper, the setback requirements do not apply to the internal roads within the Site.

(c) Green coverage

The minimum site coverage of greenery (20% of the total site area) shall be provided. For the purpose of this paper, all greenery shall be provided at the pedestrian zone level.

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.
- Demonstrate general compliance with the SBD Guidelines with regards to building separation, street setback and green coverage.
(Note: Show in-principle compliance only; detailed illustrations / calculations are not required).

Master Section(s)

Work on the blank A3 size answer sheets provided.

Scale 1:500.

- Demonstrate the proposed design in at least one section through the entire site.
- Indicate clearly 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.

V 3.0

- End of Paper 6 -

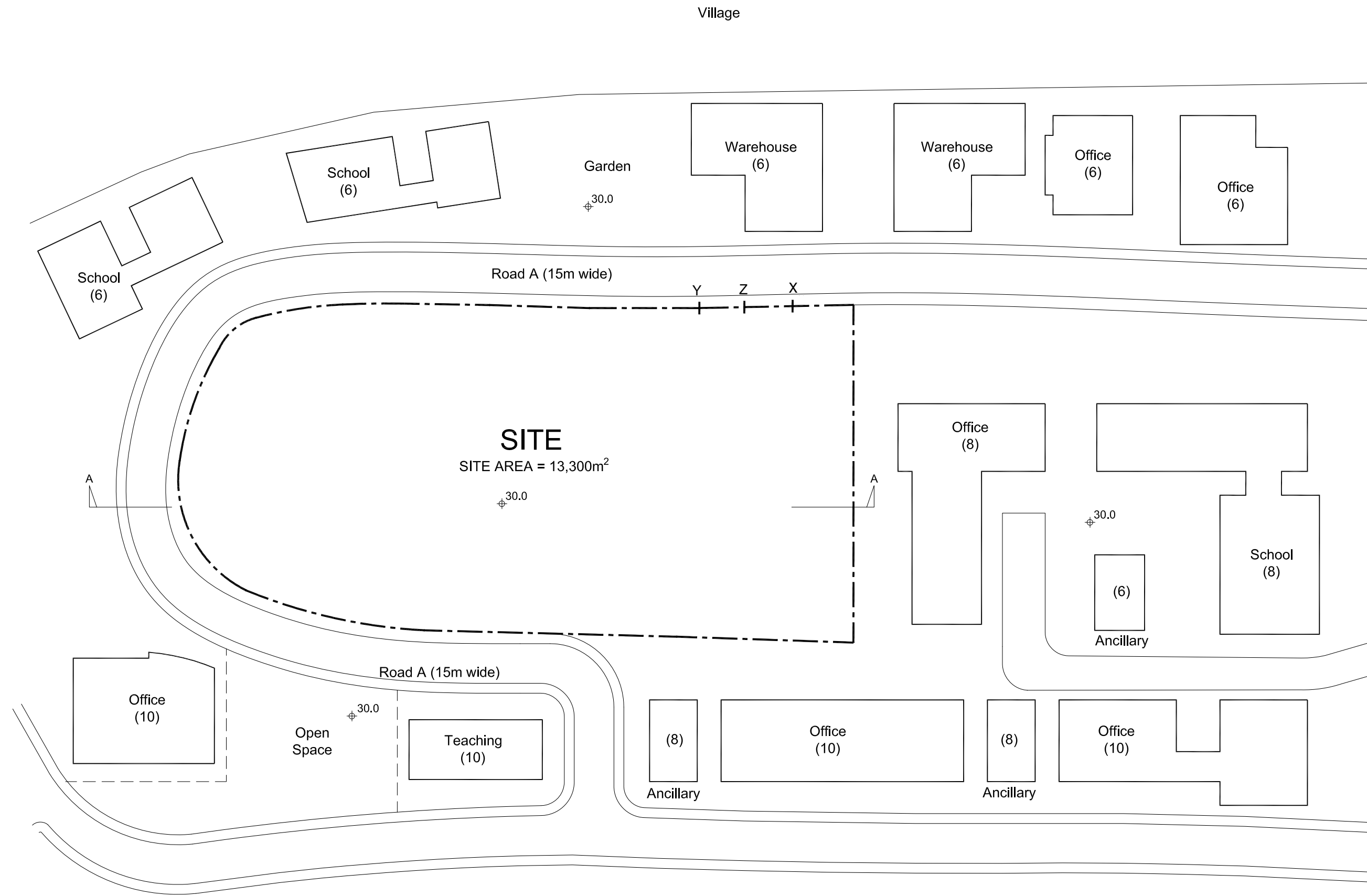
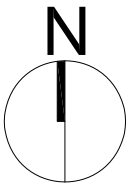
Candidate Number :

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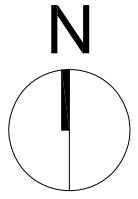
Design Data Sheet

	<i>Required under Lease / Statutory enactments</i>	<i>Proposed</i>
Site area	13,300m ²	-----
Gross floor area - Domestic - Non-domestic - Hotel		
Plot ratio		
Height limit		
Site coverage		
Open space provisions		
Green coverage		
Number of car parking spaces		
Number of loading / unloading bays		

DO NOT TAKE answer scripts, question papers, any reference materials, draft and loose sheets provided out of the examination hall.



Note: The number in brackets denotes the number of storeys.



30.0

Road A (15m wide)

Y

Z

X

SITE

SITE AREA = 13,300m²

30.0

85m

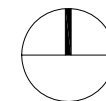
A

A

Road A (15m wide)

170m

30.0



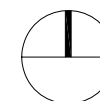
Boundary
Line

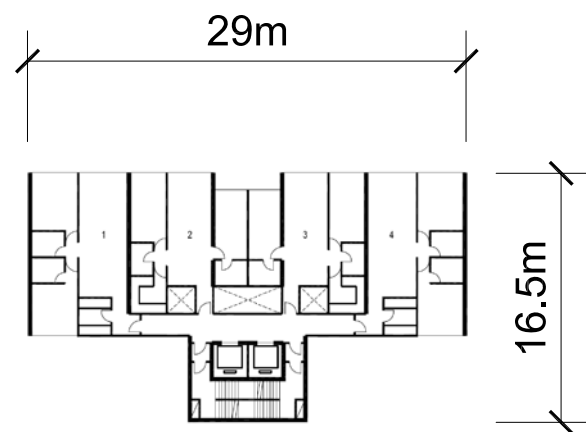
Boundary
Line

SITE

ROAD B

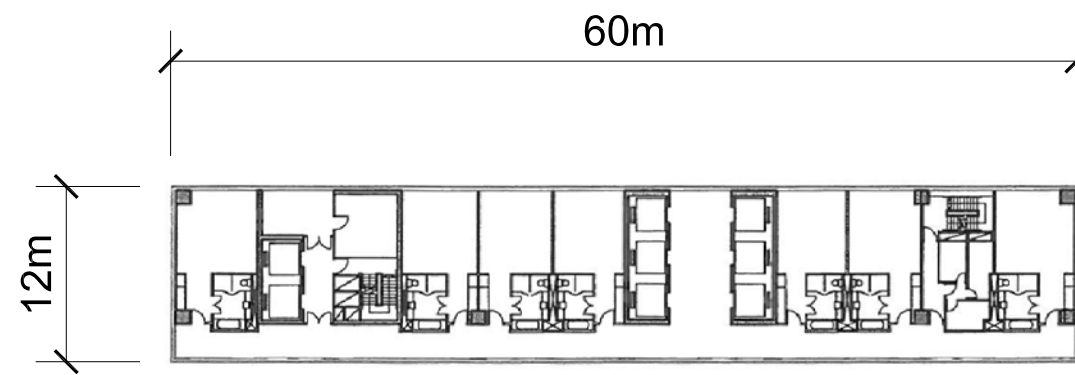
30.0





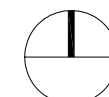
PROTOTYPE 1
STAFF QUARTER

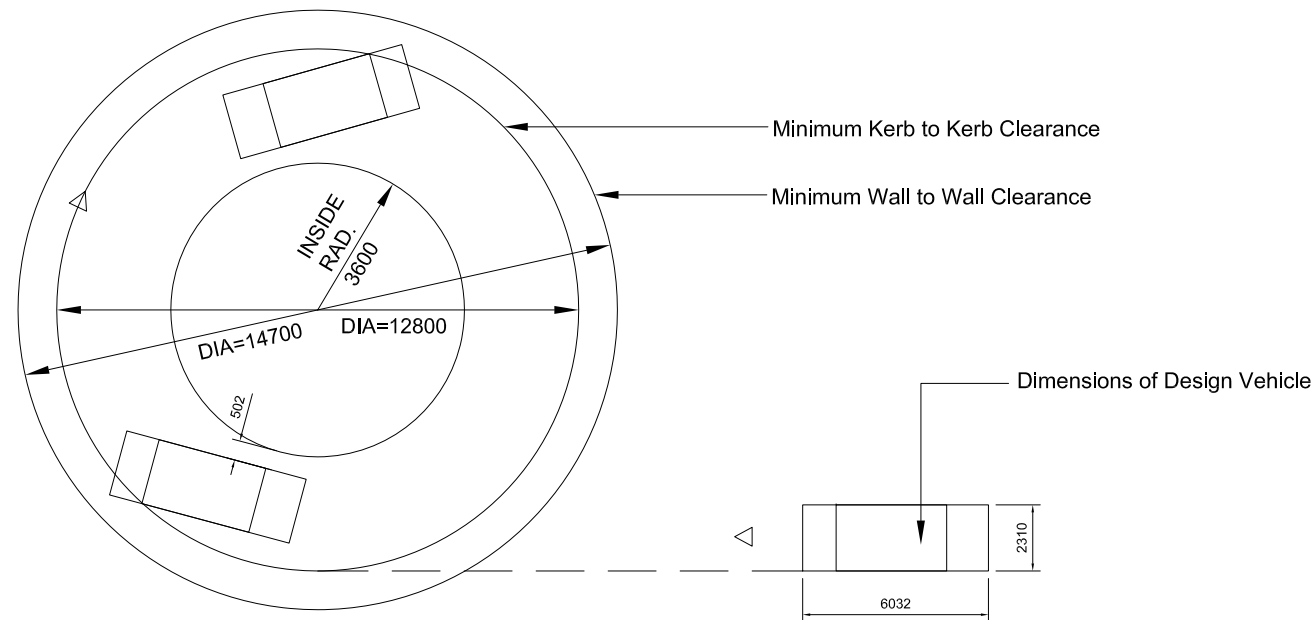
GFA PER FLOOR = 360m²
(ASSUME INTERNAL BATH ROOMS & KITCHEN)



PROTOTYPE 2
HOTEL

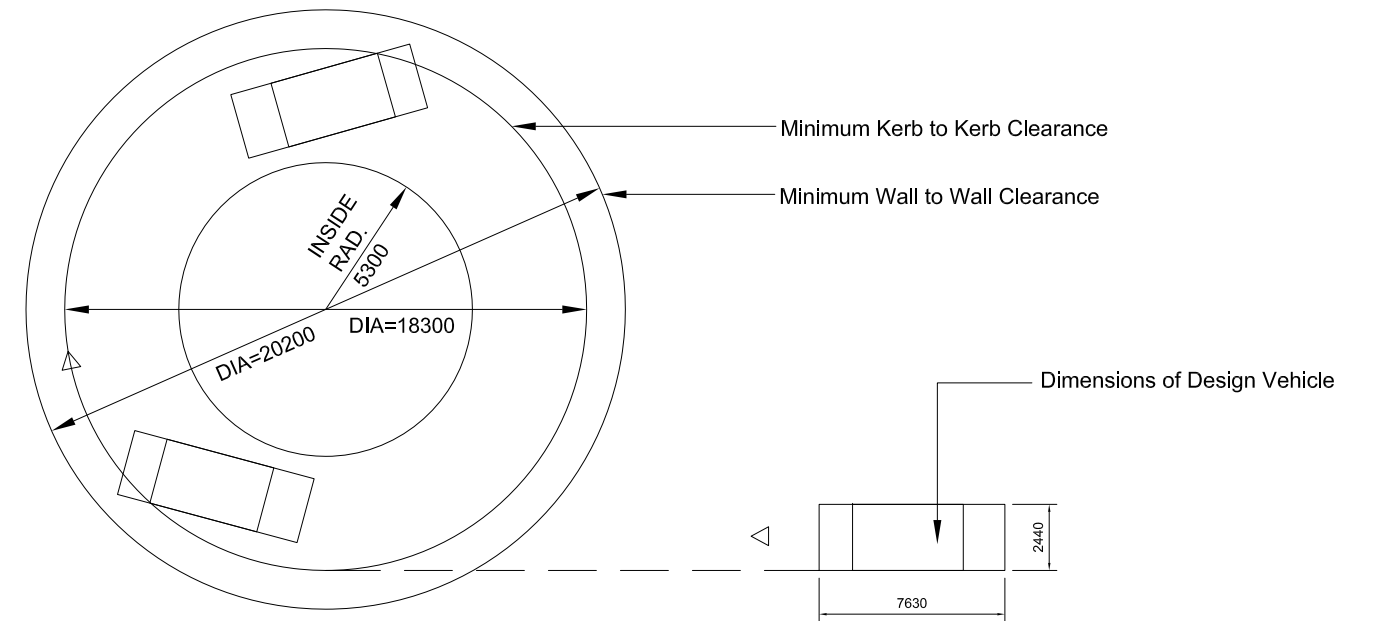
GFA PER FLOOR = 720m²
(FLAT PLATE CAN BE ADJUSTED TO SUIT YOUR DESIGN BASED ON TYPICAL ROOM MODULE)





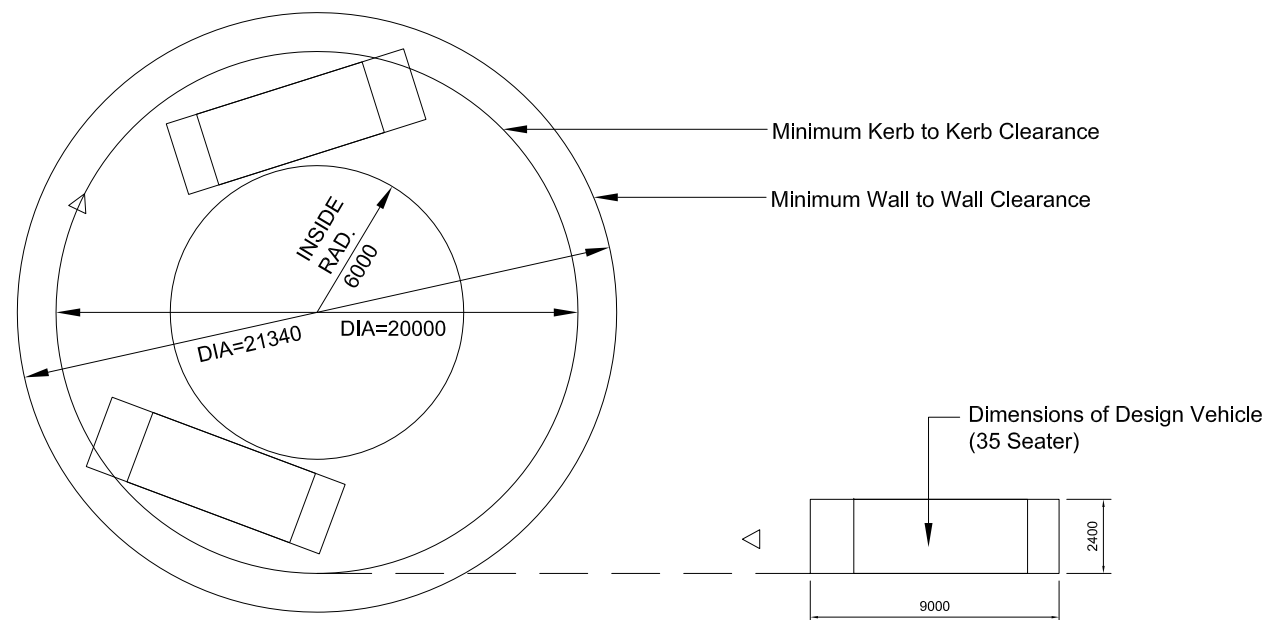
**RECOMMENDED MINIMUM STANDARDS OF
TURNING CIRCLE FOR PRIVATE CARS**

(not to scale)



**RECOMMENDED MINIMUM STANDARDS OF
TURNING CIRCLE FOR GOODS VEHICLES**

(not to scale)



**RECOMMENDED MINIMUM STANDARDS OF
TURNING CIRCLE FOR TOURIST BUS**

(not to scale)

