

Candidate Number :

Seat Number :

## **HKIA / ARB Professional Assessment 2013**

### **Paper 7 BUILDING DESIGN**

22 November 2013  
9:00 am – 3:00 pm (6 hours)

Kowloonbay International Trade & Exhibition Centre (KITEC)  
Kowloon Bay

### **ONE COMPULSORY QUESTION 100 Marks**

#### **General Notes**

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

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Attachment 1	LOCATION PLAN	(1:1000)
Attachment 2	SITE PLAN	(1:200)
Attachment 3	SITE PLAN	(1:100)

## 1 **PROBLEM STATEMENT**

You are commissioned to design a residential development for a private developer.

Your task is to prepare a schematic design which satisfies generally all functional and statutory requirements to a level that is fit for presentation to the Client's representatives.

Your design should maximize the development potential with an integrated solution that incorporates preliminary provisions and requirements for building structure, building services, utilities etc. The design should also be sensitive to the site and neighbourhood.

## 2 **SITE DESCRIPTION**

### **Context**

The Site is a hypothetical site in an urban area. It is generally flat and served by major Road A and secondary Road B. The widths of the two roads are shown in Attachment 2.

The vicinity of the Site comprises residential developments in the adjacent lots.

Please see Location Plan and Site Plans in Attachment 1 to 3.

### **Vehicular Access**

Run-in/out for vehicles is not required.

### **Environmental Factor**

Traffic noise from roads A and B is considered insignificant.

### **3 DESIGN BRIEF**

#### **3.1 Development Requirements**

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Site Area 608 m<sup>2</sup> (approximate)

Zoning Only residential use

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Permissible GFA under lease unrestricted

Permissible Plot Ratio (PR) and Site Coverage (SC) Requirements under the Buildings Ordinance shall be complied with.

Building Height Not higher than +100mPD (main roof)

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Site Vehicular Access NOT required.

Carpark No Parking is required for the purpose of this Paper.

Loading and Unloading No loading and unloading bay is required for the purpose of this Paper.

Refuse Collection Vehicular access is NOT required for the purpose of this Paper.

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Barrier Free Access Statutory requirements shall be complied with.

Lift(s) Statutory requirements shall be complied with.

Minimum of 2 nos. of passenger lifts (shaft size minimum 2200mm X 2200mm) shall be provided.

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### 3.2 Design Requirements

This development will maximize the development potential of the site. You are required to design a multi-storey residential tower with 3 units on each typical floor, and provide ground floor lobby for access. Sustainable Building Design Guidelines shall be complied with.

### 3.3 Accommodation Schedule

	Gross Floor Area (m <sup>2</sup> )	Remarks
Ground Floor Lobby	As appropriate	
Typical Floor	220(approx.)	EACH floor including the following: <ul style="list-style-type: none"><li>• 2 nos. of 2 bedrooms units (saleable area of not less than 60 m<sup>2</sup>)</li><li>• 1 nos. of 1 bedrooms unit (saleable area of not less than 40 m<sup>2</sup>)</li><li>• Other facilities as appropriate e.g. refuse recovery chamber, fire escape stairs, other M/E room as appropriate.</li><li>• Floor to floor height of not less than 3150mm.</li></ul>
Club House Facilities	As appropriate	

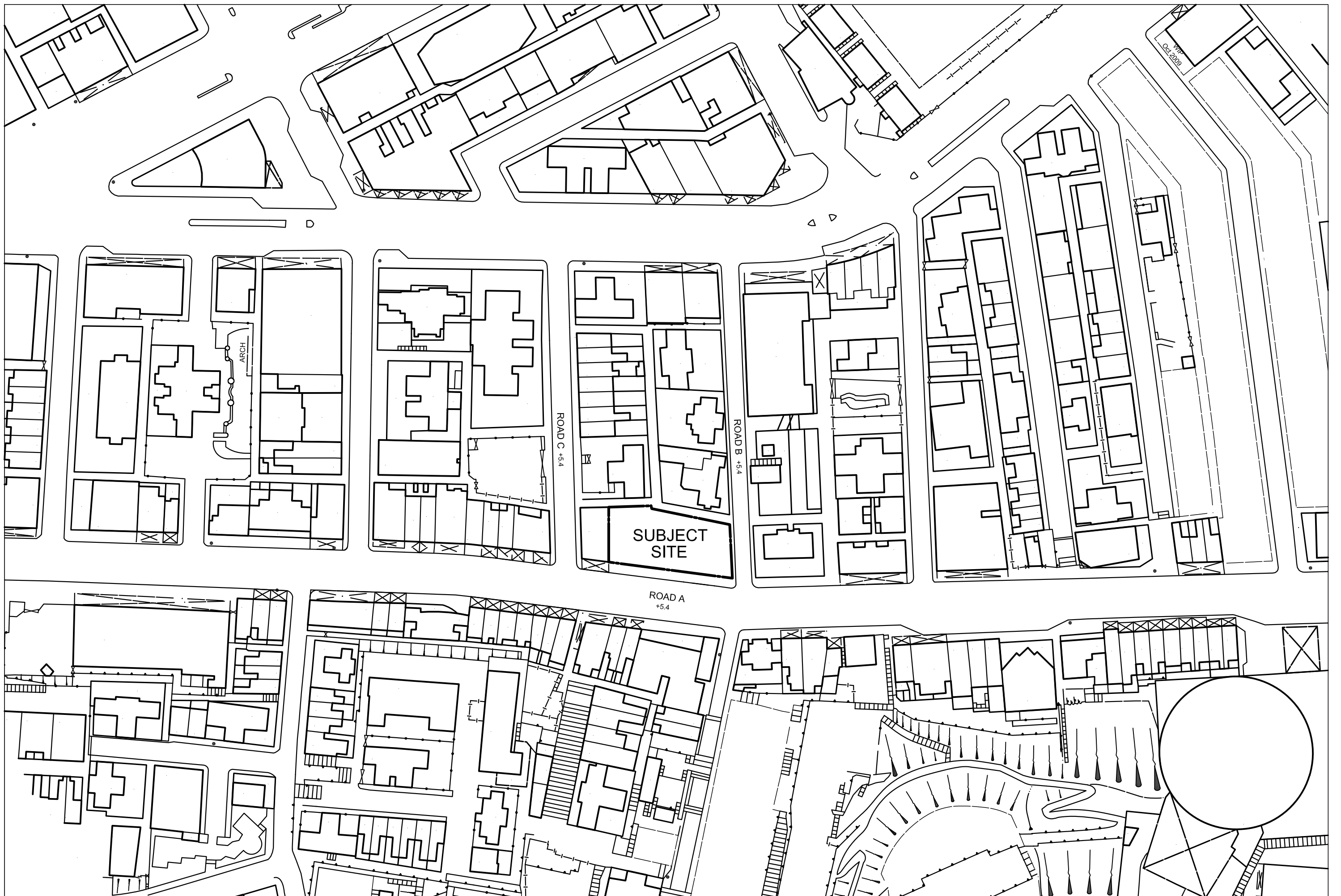
#### 4 SUBMISSION REQUIREMENTS

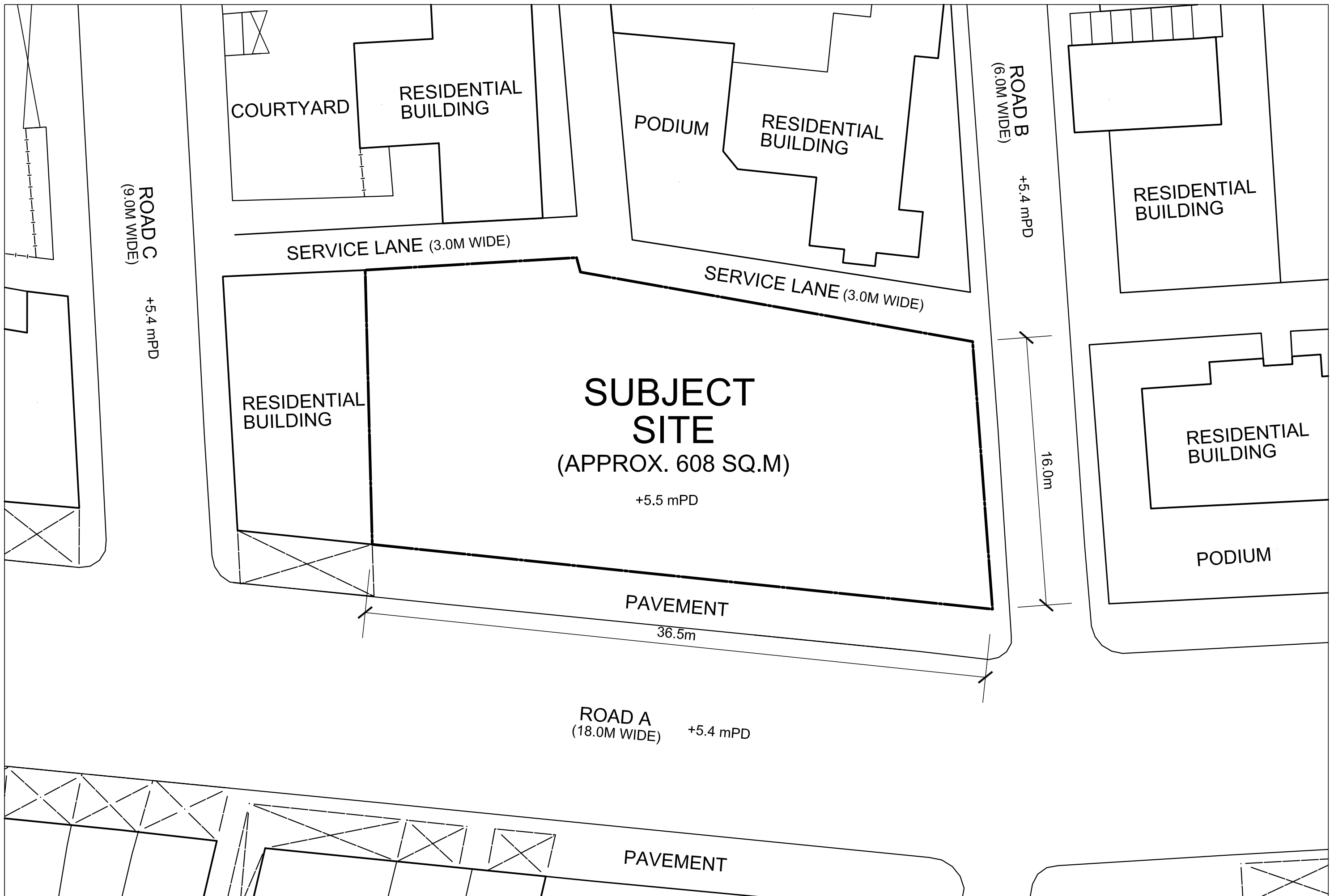
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<b>Site Plan</b> (1:200)	Show site development including access point(s) for pedestrians.
<b>Plan of Ground floor</b> (1:100)	Indicates the following: <ul style="list-style-type: none"><li>• All required spaces according to Accommodation Schedule with labels</li><li>• Major structural elements</li><li>• Overall and critical dimensions</li><li>• Appropriate annotation</li><li>• Site boundary, adjacent streets and structures</li><li>• Means of Access for Firefighting &amp; Rescue</li></ul>
<b>Plan of Typical floor</b> (1:100)	Indicates the following: <ul style="list-style-type: none"><li>• All required spaces according to Accommodation Schedule with labels</li><li>• Major structural elements</li><li>• Overall and critical dimensions</li><li>• Appropriate annotation</li><li>• Layout of kitchens and bathrooms</li></ul>
<b>Section</b> (A minimum of 1 at 1:200)	Please indicate the following: <ul style="list-style-type: none"><li>• Floor to floor height, total height of building and other critical dimension</li><li>• Appropriate annotation</li><li>• Relationship between elements of construction <i>(E.g. Interfaces and connections of building structure, building envelope, finishes, building services, and etc.)</i></li></ul>
<b>3-dimensional Illustration</b>	Not compulsory
<b>Calculations</b>	All design is assumed to be in compliance with relevant building ordinances and regulations.  No calculation is required

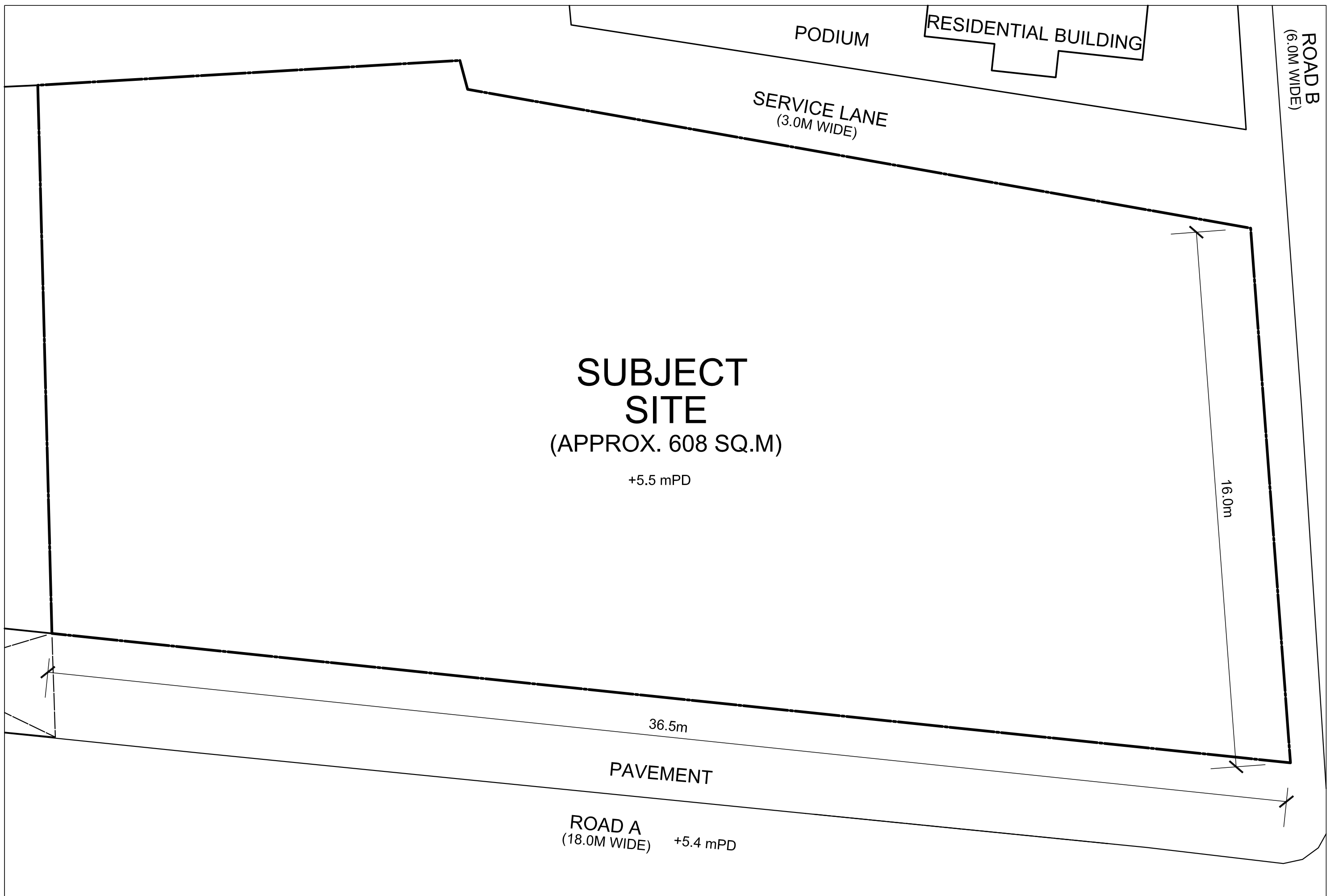
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END OF PAPER 7









**SUBJECT  
SITE**  
(APPROX. 608 SQ.M)

+5.5 mPD

36.5m

16.0m

ROAD A  
(18.0M WIDE) +5.4 mPD

PAVEMENT

SERVICE LANE  
(3.0M WIDE)

PODIUM

RESIDENTIAL BUILDING

ROAD B  
(6.0M WIDE)

