

FORM-BASED ZONING REGULATIONS
DOHA DOWNTOWN
CAPITAL CITY CENTRE



JUNE 2020



وزارة البلدية والبيئة
Ministry of Municipality & Environment

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SECTION 1 : INTRODUCTION

Downtown Doha Capital City Centre will be regulated by a context specific and physical form as the organising principles for the regulations, as well as the function/use. It is a hybrid approach whereby the both methods of use-regulation (Euclidian) and of form regulation (Form-Based Code) have been considered and chosen for regulating this Centre, as they are the most effective tools for regulating diverse, mixed-use environment and rapid physical changes that currently being experiencing by the area as the result of the vast economic development.

Upon adoption, the Doha Downtown Capital City Centre Regulations has the role as the statutory and regulatory development plans that will provide holistic directions for future change and will become a fundamental ground for development management decision for the Capital City Centre.

What are the Form-Based Regulation for the Capital City Centre ?

The regulations for all the Capital City Centres is primarily based upon **the use as well as the key physical elements that shape the form and give a character to the place**. The use will be regulated in a simpler fashion. They are simplified and carefully designated to be compatible with the intended building type.

To be more informative and easier to understand by the any development applicant, the regulations will be addressed in **a block by block fashion**. Each block will be comprehensively equipped by the use regulation as well as the physical form regulation.

The Capital Centre Regulations will comprise:

1. Zoning-Use Regulations

Each block will have specific set of use regulations of:

- General Use Regulation;
- Specific Use Regulation;
- Use-Split Regulation;
- Permitted Uses Table

2. Physical Form Regulations

Each block will have specific set of use regulations of:

- Bulk Regulations;
- Building Typology
- Building Placement;
- Building Size and Dimension;
- Building Orientation
- Frontage Profile
- Recommended Accessibility Point for Pedestrian
- Recommended Egress and Ingress for Vehicle
- Recommended Public Access on Private Plot
- Architectural Style and Standards
- Landscape Standards

3. Incentives

It is very imperative for any development in the area to strive and support the creation of the envisioned attractive cultural and civic place, which has become the role pattern for sustainable and liveable development for all.

There are several new incentives are introduced in the regulations:

1. **Parking waiver:** Parking waiver is introduced to discourage the vehicle dependable on the Downtown area. Certain identified locations are granted lower standard of parking allowance due to their proximity to the transit point, aligning to the Parking Waiver Policy by MoTC for ToD areas
2. **Floor Bonus:** Floor bonus is a part of planning incentives, and it is designed to encourage provision of public open spaces and public accesses, or shared parking facilities within private properties.

SECTION 2: HOW TO USE THE REGULATION

This section outlines the basic steps for users on how to use these overall Doha Downtown Capital City Centre Regulations, which are based upon physical form as well as appropriate use in line to the building type.

The illustration is not intended to describe the procedure for an application submission, it is to guide users the step by step on using the package of the Regulations Plans.

The three (3) sets of basic step are illustrated in the Quick General Guide as follows:

1. IDENTIFY THE LOCATION CONTEXT OF THE PARCEL/PLOT

The first step: the Applicant needs to locate where is his/her parcel or plot within the planning map context:

- 1) Identify the number of the Zone
- 2) Identify the number of the block

2. FIND OUT AND COMPLY WITH THE ZONING-USE REGULATIONS

The second step: the Applicant needs to find out what, and comply to, the respective zoning-use regulations that applied to his/her parcel or plot:

- 1) Identify the Zoning Category: Commercial or Mixed Use Commercial or Mixed Use Residential or Residential
- 2) Identify what use is allowed under the Zoning Category
- 3) Identify what combination of uses that is allowed: commercial with residential etc

3. FIND OUT AND COMPLY WITH THE ZONING-FORM REGULATIONS

The third step: the Applicant needs to find out what, and comply to, the respective physical form regulations that applied to his/her parcel or plot:

- 1) Identify the Bulk/Massing regulations: Building Height, Floor Area Ratio (FAR), Building Coverage (BC)
- 2) Identify the Building Type regulations: Building Typology (eg. attached-podium and tower; semi-detached mid rise etc), Front Profile of the buildings (eg. with arcade, with fore-court, with small front- landscape, etc
- 3) Identify the Building Placement regulations, on how to position the buildings: setbacks, build to line etc
- 4) Identify the Building Size and Dimension regulations: max depth for podium etc.

QUICK GENERAL GUIDE

Step

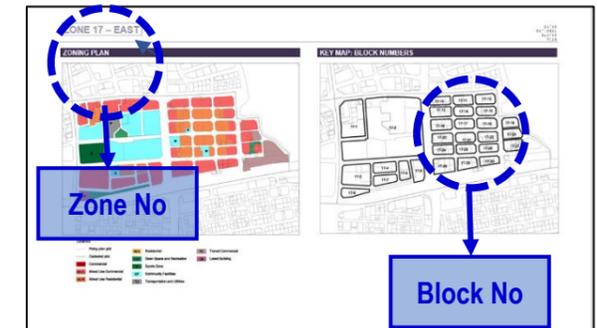
What needs to do

Reference

1

Identify **the plot or the parcel in the context map** or from MME's website:

- Zone Number
- Block Number

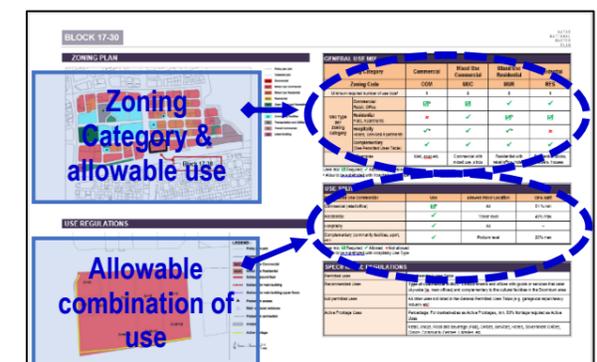


Page 1: ZONING PLAN & KEY MAP BLOCK NUMBER

2

Comply with the respective **Zoning-Use Regulations:**

- Zoning Category
- Allowable Use Type (s)
- Allowable Use-Mix (combination of uses)

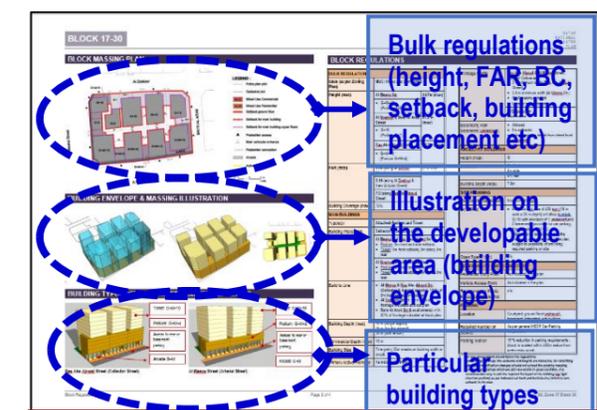


Page 2: BLOCK - USE REGULATIONS

3

Comply with the respective **Physical Form Regulations:**

- Bulk Regulations (Building Height, Floor Area Ratio (FAR); Building Coverage (BC)
- Appropriate Building Typology
- Building Placement
- Building Size-Dimension
- Architectural Styles etc



Page 3: BLOCK - FORM REGULATIONS

SECTION 3: VISION-OBJECTIVE-STRATEGY

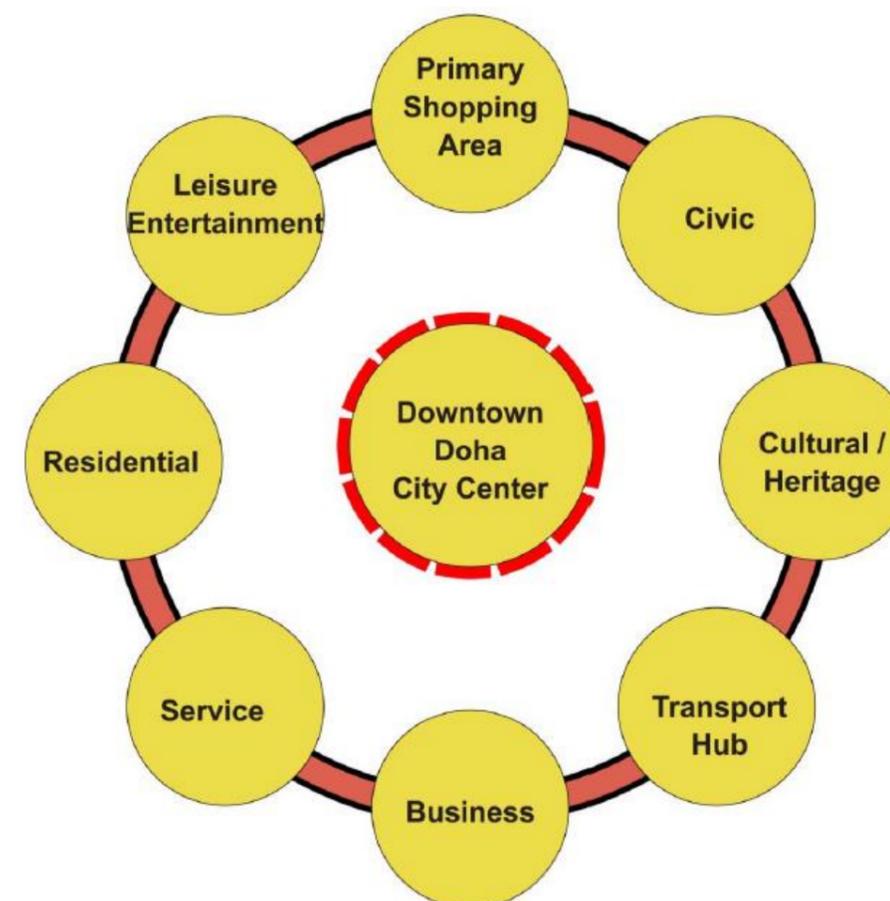
The Downtown Doha Capital City Centre has multiple roles, ranging from national, regional to local level of functions. These roles need to be enhanced and reflected in the planning regulations for the area. Therefore, a stringent form-based regulation is imposed to ensure the physical characters of the Downtown, as envisioned as follows:

2.1 Vision

'Re-establish Downtown Doha as the cultural and civic heart of Doha, where Qatari and non Qatari call home and choose to live'



The main agenda of the Regulation is to rejuvenate and to improve the 'Downtown-ness' quality of our Downtown, by assisting in redefining the roles and functions of the Capital City Centre.



Therefore, it is the main objective of the planning and design frameworks for this Capital City Centre to guarantee the creation of a balanced and viable place as a physical platform for the Downtown to perform its significant roles.

The Regulations will be the planning tool to ensure the Downtown functions well, through comprehensively deals with the issue of the appropriate spatial structure, land use distribution and development density.

Moreover, as Doha Downtown should be one of the enjoyable places to be within in the country, therefore, the Regulations will also ensure the creation of vibrant and thriving Downtown for people, that visually pleasant and harmonious, through properly regulate the architectural styles and building forms.

Ultimately, the Regulations has a significant role as the tools to achieve healthier and more liveable place, for Downtown to be the best exemplar of sustainable development pattern in Qatar.

2.2 Key Objectives

The main drivers of this form-based Regulations are derived from the below key objectives and strategies in order to overcome the current challenges that are facing by the Downtown:

Create a truly and proper Downtown for Doha

By:

Redefining the center boundary
Redefining the roles of the center
Redefining the **right attributes for a downtown**

Enhance the intrinsic characters and assets of the place

By:

- Retaining **and maintaining the old morphology** as much as possible
- Defining the character areas based upon intrinsic social and economic potential
- Performing active onservation to the heritage area
- Setting a heritage trail and cultural destinations
- Rejuvenating edge development , positive space across and fine grain urban (via fine grain platting) form as the lessons learnt from the old urban form orphology
- **Ensuring harmony and integration between old and new urban form and street pattern**

Create a vibrant and viable place across the centre

By:

- Ensuring **balance mix between commercial and residential**
- Ensuring the right density of population and development as per QNDF (infill densification)
Ensuring well-integration between mega projects and adjacent developments
- Defining and **ensuring active frontages of the developments**
- Ensuring sufficient service of community and public facilities

Create a low carbon place

By:

- Ensuring **the creation of pedestrian friendly environment** across the Downtown
- Ensuring the integration of pedestrian and open space networks

2.3 Key Strategies: Applying Good Planning & Urban Design Practice

2. Climate Responsive Design

Guidance for creating shaded façades:

- Window-to-wall ratios (WWR) should depend on the façade orientation (Figures 9 and 10):
 - North façades: 50-60%.
 - South façades: 40-50% (with shading).
 - East/west façades: 30-40% (with shading).
 - South-east/south-west façades: 30-40% (with shading).
 - North-east/north-west façades: 40-50%.
- Solar-control glazing (maximum 0.3 solar heat gain coefficient), is recommended for all orientations.
- Limit the use of flat-roof skylights and consider north-facing clerestories.
- Buildings with a lower surface area-to-volume ratio are recommended (that is, fewer exterior exposed surfaces).

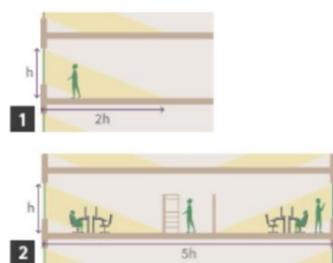
C2.1.2 Daylight

Rationale: As a result of the latitude of Qatar and frequent occurrence of clear skies, daylight levels are usually high. This daylight intensity can be beneficial for daylight access but, at the same time, it can create glare issues and high contrast.

Vernacular architecture in Qatar has dealt with intense daylight via narrow streets, small window openings, shallow floor plates, and shading in the form of overhangs and screens. The influence of western architecture, on the other hand, has brought wider streets, deep floor plans, and fully glazed buildings, which are not capable of offering adequate daylight quality and rely on internal blinds to provide visual comfort.

An adequately daylight space should reduce glare risks, connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of artificial lighting.

Natural daylight increases productivity and wellbeing, and reduces lighting energy consumption.



| Building type | Daylight | | Natural ventilation | |
|---------------|--------------------------|-------------|---------------------|-------------|
| | Single aspect | Dual aspect | Single aspect | Dual aspect |
| | Room depth (D) in metres | | | |
| | H | D = 2H | D = 2.5H | D = 5H |
| Office | 3 | 6 | 7.5 | 15 |
| | 4 | 8 | 10 | 20 |
| Residential | 3 | n/a | 7.5 | 15 |
| | 4 | n/a | 10 | 20 |

1. Active Frontages & Corners

3. Appropriate Morphology, Development Density & Mixed Use

Rules of thumb

To achieve the maximum permeability of movement, the following rules of thumb are recommended as a guide for residential plots in different context situations.

| Rural | Suburban | Urban |
|-----------------|------------------|----------------|
| Least permeable | Medium permeable | Most permeable |
| 40-100m depth | 40-60m depth | 25-40m depth |

Shifting to a 'build-to-line' arrangement of building disposition

Block size comparison

These two sample areas from the same urban area of Doha show the connections possible with different size blocks.

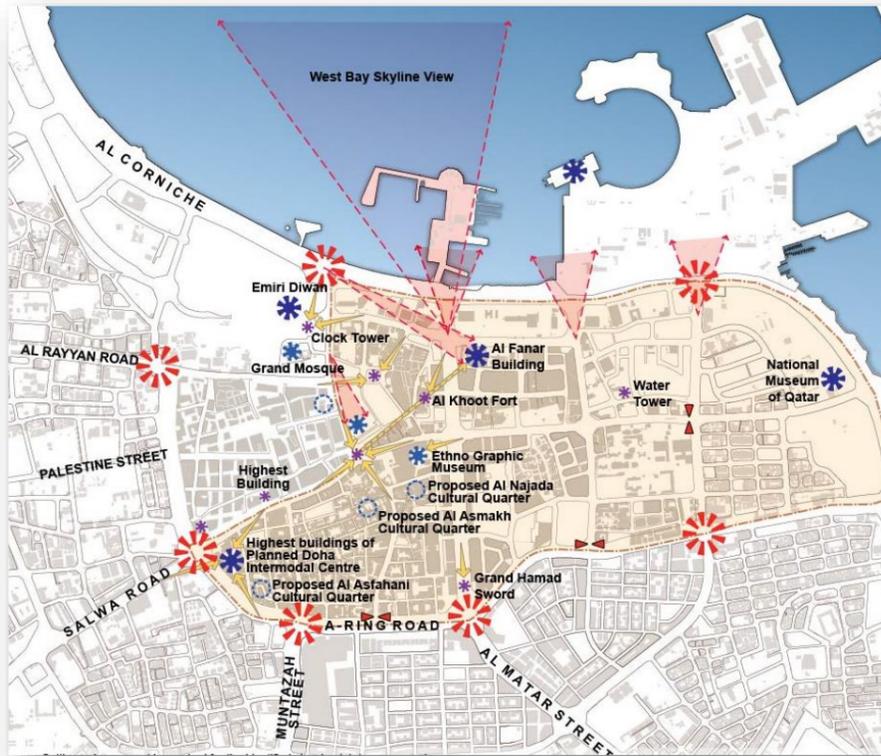
Block size = 100m x 50m

Block size = 400m x 250m

Least mix of uses and lowest density

4. Distinctive Architectural Styles & Green Buildings

SECTION 4: CONCEPTS



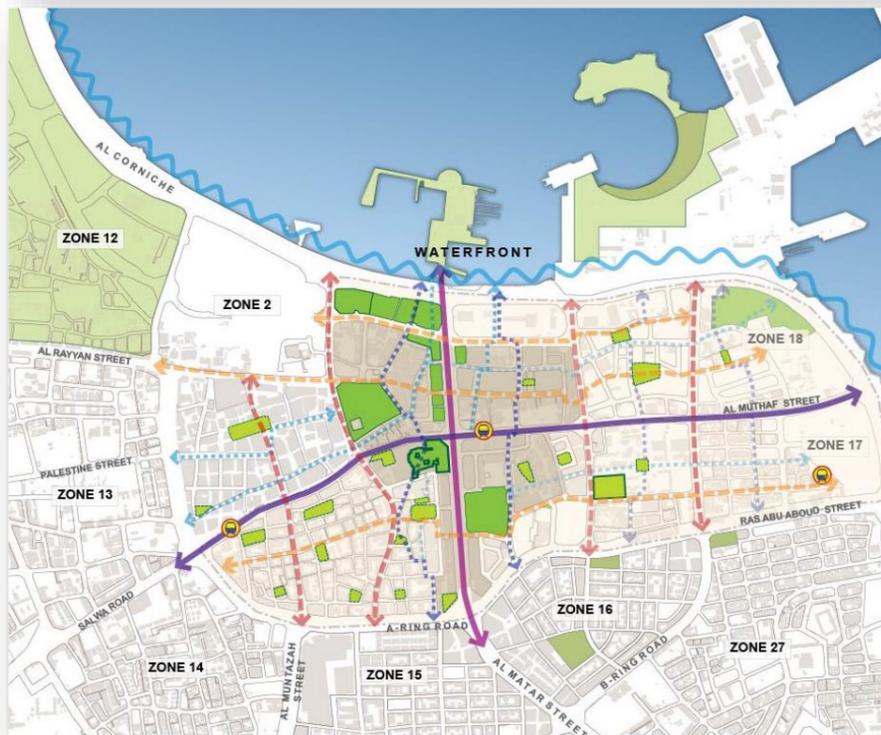
1. Acknowledge the physical assets and major destinations:

- Landmarks
- Prominent buildings/ features
- Historical significance
- Architectural significance
- Serial vision or vista potential



3. Distinctive townscape by identification of visually prominent spaces and features:

- Main junctions
- Secondary junctions



2. Integrate pedestrian and open space networks based upon hierarchical order:

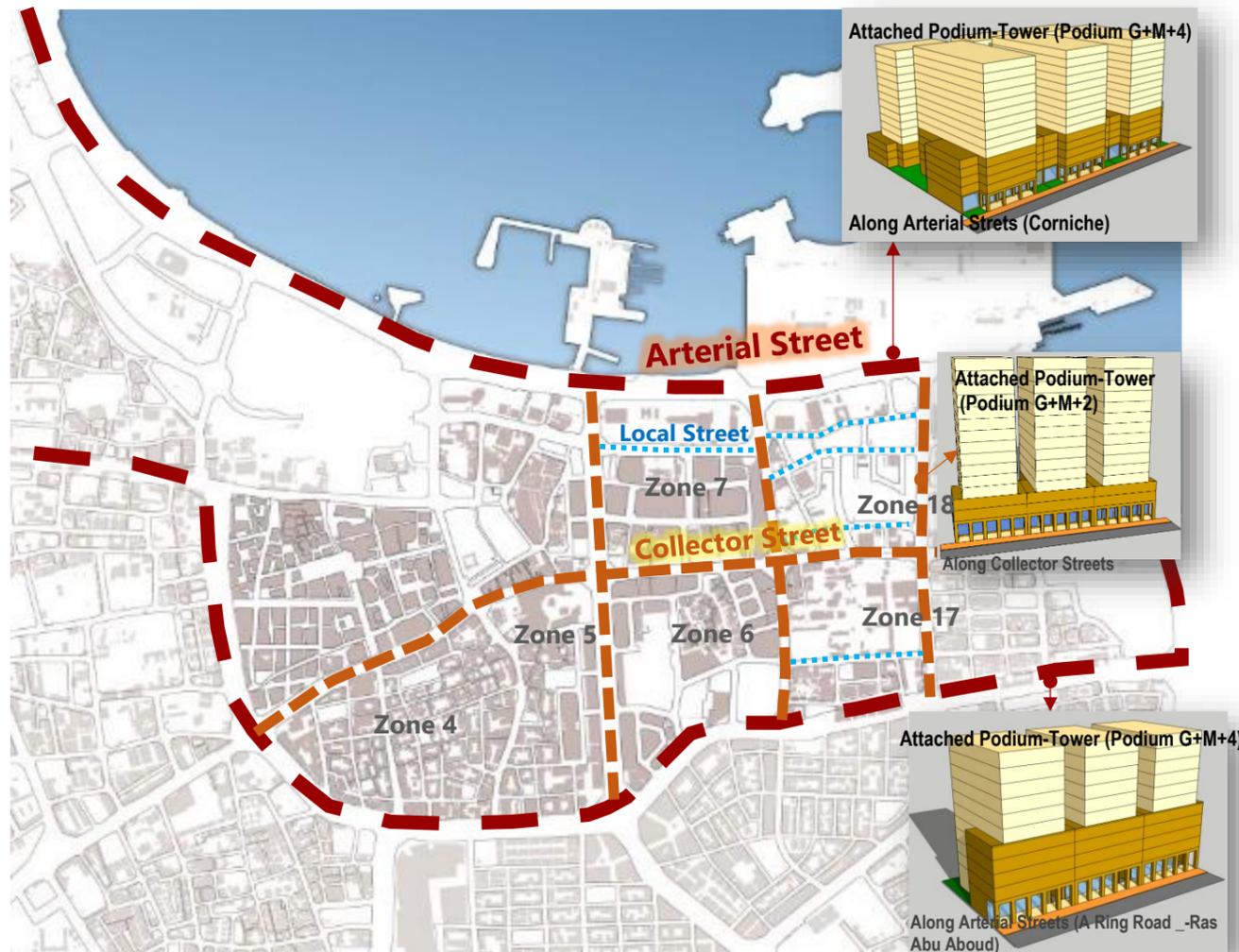
- Heritage Trails
- Main North-South pedestrian link
- Main East-West pedestrian link
- Secondary North-South pedestrian link
- Secondary East-West pedestrian link

4. Work from the existing condition: respecting skyline & building types generated overtime



SECTION 5: KEY PRINCIPLES

5.1 Building Types & Characters vs Streets Hierarchy



5.2 Bulk: Building Height-FAR-BC-Minimum Subdivision



Note: Integrated parking within a building design is included in the FAR calculation, however it is calculated as 50% than the normal calculation

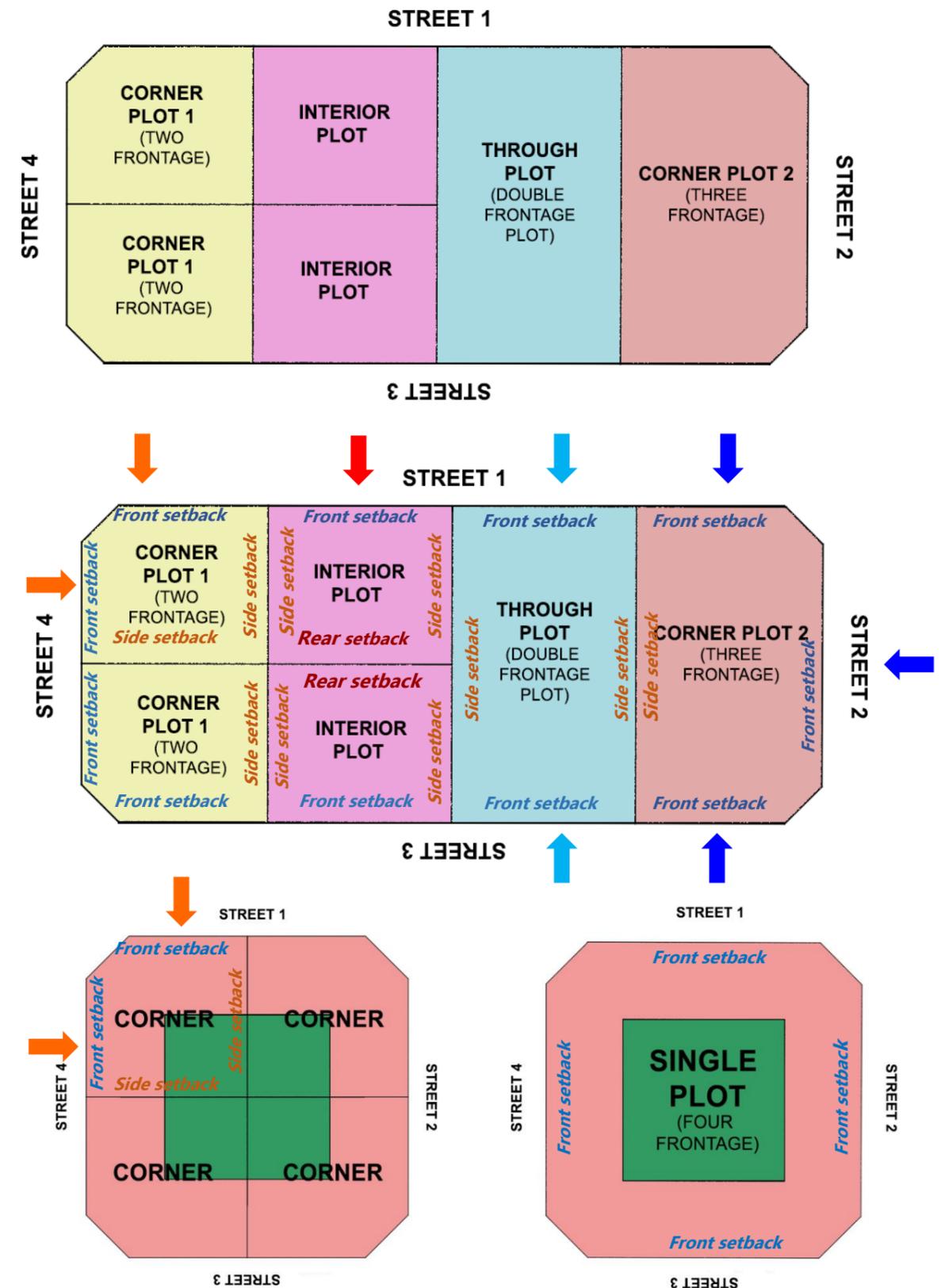
| Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 17 | Zone 18 |
|---|---|---|--|--|--|
| <p>Low Rise Vernacular Courtyard</p> <p>Low Rise Semi-Detached with Courtyard</p> | <p>Low Rise Vernacular Courtyard</p> <p>Low Rise Semi-Detached with Courtyard</p> <p>Attached Low Rise with Courtyard</p> <p>Attached Mid Rise with Courtyard/ Atrium</p> | <p>Low Rise Vernacular Courtyard</p> <p>Semi-Detached Mid Rise with Courtyard</p> <p>Attached Mid Rise with Courtyard/ Atrium</p> <p>Detached Mid Rise with Courtyard/ Atrium</p> | <p>Attached Low Rise with Courtyard</p> <p>Detached Low Rise with Courtyard / Atrium (for Souqs)</p> | <p>Attached Mid Rise Podium-Tower (Podium G+M+4) along Arterial Streets</p> <p>Attached High Rise Podium-Tower (Podium G+M+4) along Arterial Streets</p> <p>Attached Mid Rise Podium-Tower (Podium G+M+2) along Collector Streets</p> <p>Attached High Rise Podium-Tower (Podium G+M+2) along Collector Streets</p> <p>Attached Mid Rise Podium-Tower (Podium G+1) along Local Streets</p> <p>Attached High Rise Podium-Tower (Podium G+1) along Local Streets</p> | <p>Attached High Rise Podium-Tower (Podium G+M+4) along Arterial Streets</p> <p>Attached High Rise Podium-Tower (Podium G+M+2) along Collector Streets</p> <p>Attached High Rise Podium-Tower (Podium G+1) along Local Streets</p> |

| Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 17 | Zone 18 |
|---|---|--|---|--|--|
| G+M+1 / G+1 | G+M+4 / G+4 | G+M+7 / G+7 | G+M+5 / G+5 | G+M+10 / G+10 | G+M+14 / G+14 |
| <ul style="list-style-type: none"> FAR 2.00 BC 85% Minimum subdivision 200 sqm | <ul style="list-style-type: none"> FAR 4.00 BC 85% Minimum subdivision 300 sqm | <ul style="list-style-type: none"> FAR 5.00 & 6.10 BC 70% & 85% Minimum subdivision 400 sqm | <ul style="list-style-type: none"> FAR 4.70 BC 75% Minimum subdivision 350 sqm | <ul style="list-style-type: none"> FAR 6.10 BC 75% Minimum subdivision 600 sqm FAR 7.00 along Collector roads FAR 6.60 along Arterial streets FAR 6.10 along Local Streets | <ul style="list-style-type: none"> FAR 7.70 BC 75% Minimum subdivision 800 sqm FAR 8.50 along Collector roads FAR 8.20 along Arterial streets FAR 7.70 along Local Streets |

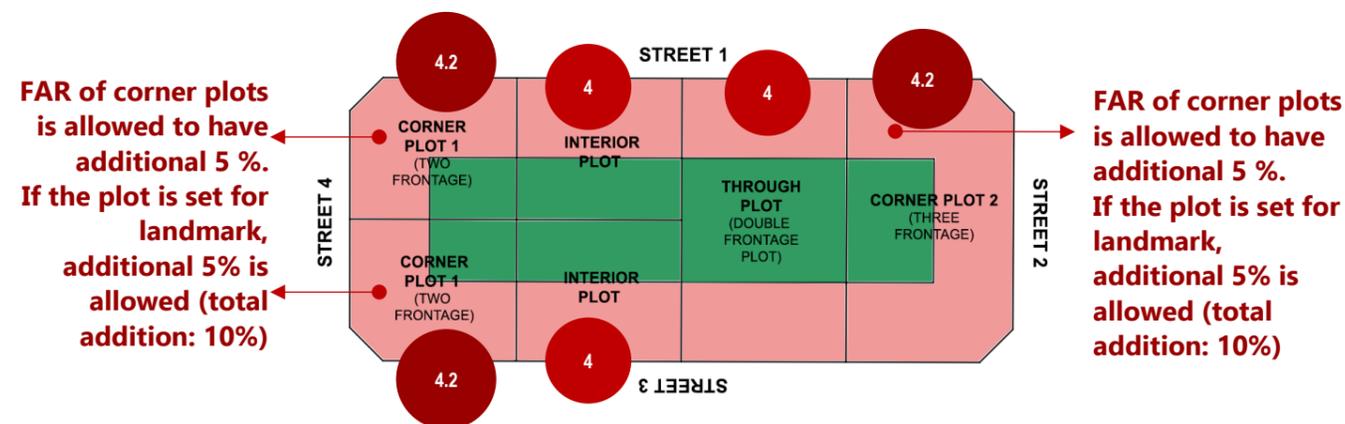
5.3 Types of Plots with FAR & Setback Application

- **Types of Plot.** There are many types of plot in the Downtown, and they can be categorized as below (along with the applied setbacks to determine the building placement based on the its typology):

| | Type of Plot | Number of Frontage | Applied Setbacks |
|---|--|--------------------|--|
| 1 | Corner Plot 1 (shared borders with 2 plots) | Two (2) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 2 | Interior Plot (shared borders with 3 plots) | One (1) | <ul style="list-style-type: none"> • Front setback • Side setback • Rear setback |
| 3 | Through Plot (shared borders with 3 plots) | Two (2) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 4 | Corner Plot 2 (shared borders with 1 plot) | Three (3) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 5 | Single Solitaire Plot | Four (4) | <ul style="list-style-type: none"> • Front setback |



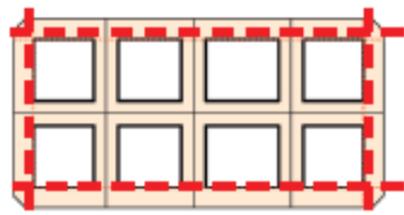
- **Floor Area Ratio (FAR).** It is the measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on. Typically, FAR is calculated by dividing the gross floor area of a building(s) by the total buildable area of the piece of land upon which it is built (source: metrocouncil.org).



5.4 Build-To-Line & Building Placement - Typology

- One of the fundamental differences between Euclidean and Form-Based, is that in the building arrangement factor, the latter use Built-To-Line* method/guidance.

Shifting to a 'build-to line' arrangement of building disposition

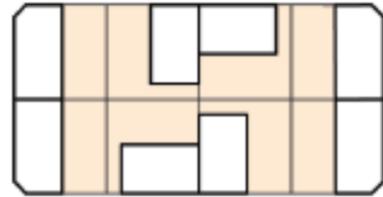


1 Existing setback zoning regulations

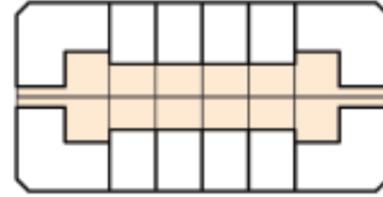


2 A form-based method using build-to line guidance

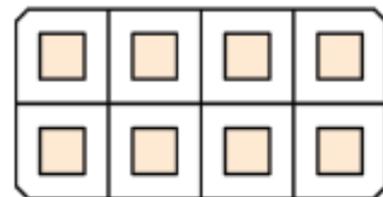
Alternative plot arrangements possible with a form-based build-to line



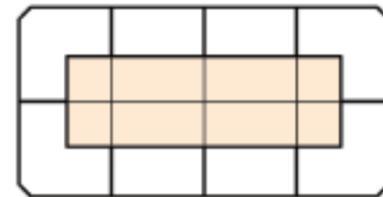
3 Privacy model
Build-to line: 0m



4 Townhouse terrace
Build-to line: 0m

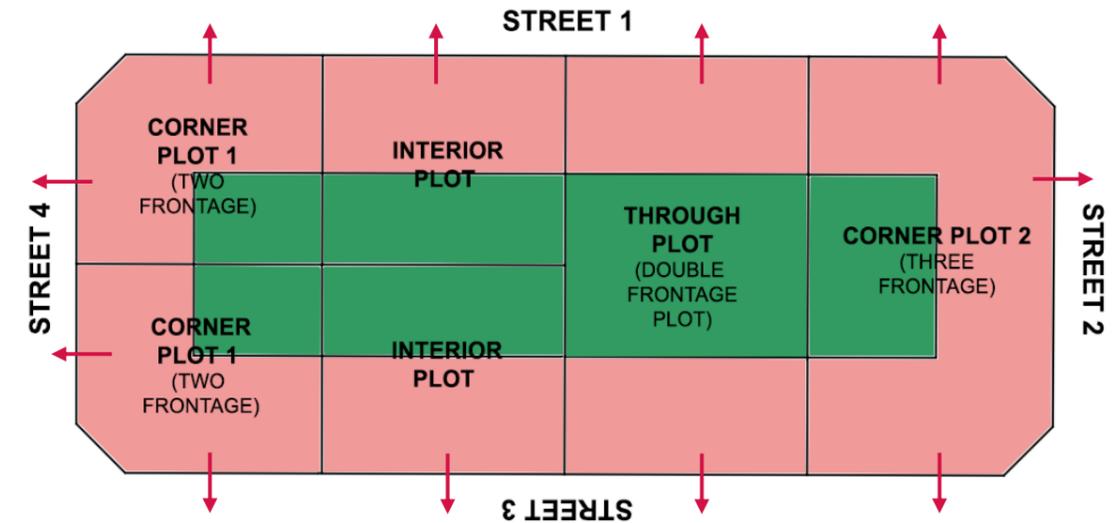


5 Courtyard housing
Build-to line: 0m
Front setback: 0m

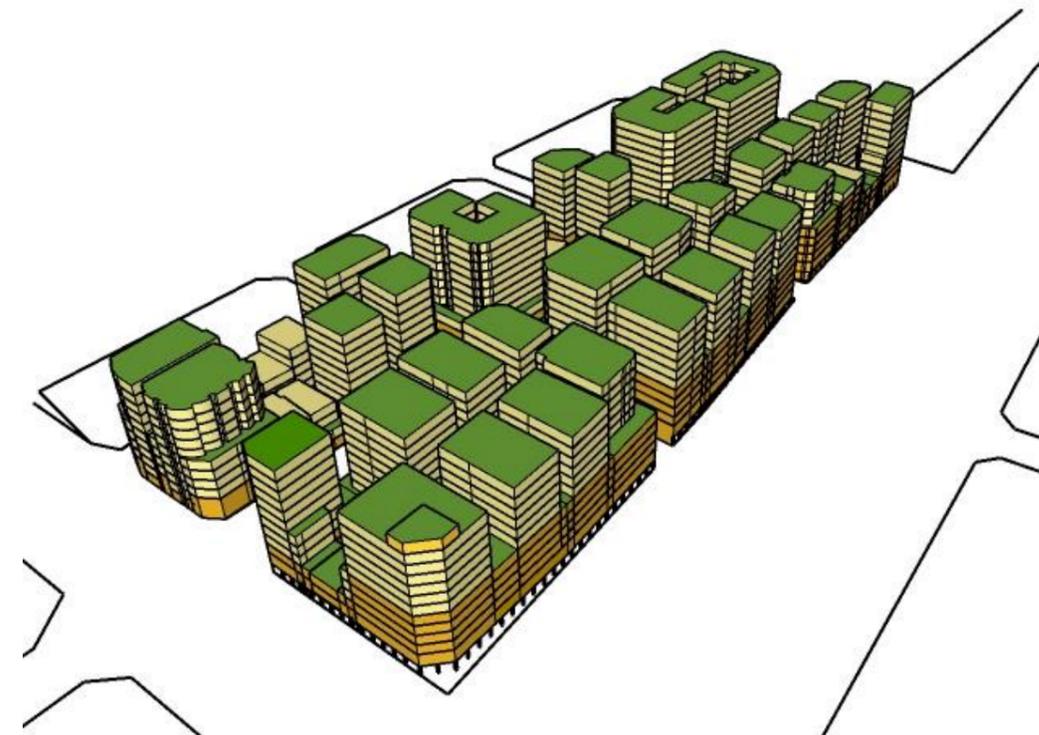


6 Perimeter block
Build-to line: 0m

- To create a stronger engagement with people on the sidewalk, the Regulation in Downtown sets continued Build-To-Line zero (0 m) for most of blocks. This also has the advantage to create a stronger street wall that defines the streets.



→ **Front:** Front and back of the buildings should be clear: & buildings should always respect the streets



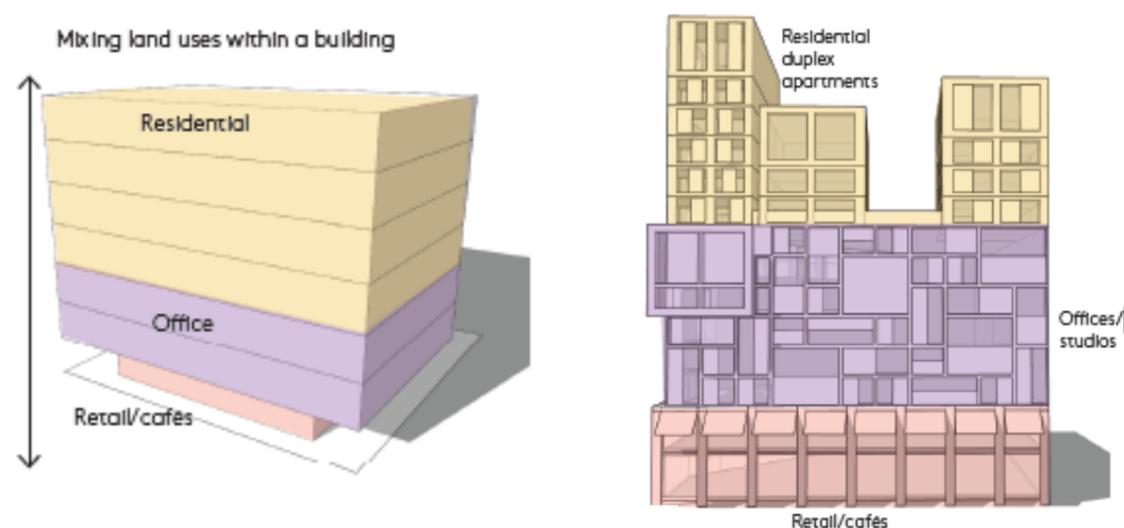
* a set building line on a plot, measured parallel from the front and/or corner side plot line, where the structure must be located. The building facade must be located on the build-to line

5.5 Method of Mixing the Uses

Depending upon location context, the size and scale of the development, there are three (3) ways of mixing the uses in term of the physical form:

5.5.1 Vertical Mixed Use

Stack up the uses is best applied within higher density areas and smaller sites, to efficiently use the space and buildings. This vertical layered use is recommended to be applied in an urban context:



The possibilities of vertical combination are illustrated as follows:

1. Mixing primary uses-offices (for low, medium and highrise buildings):

- Office building of various sizes of space;
- Offices over commercial retail such as shops, restaurants, leisure uses or community facilities;
- Flats over offices
- Offices and several flat cover retail
- Offices over commercial retail

2. Mixing primary uses-commercial retail (for low rise):

- Retail of various types and sizes (i.e shopping centres, department stores)
- Offices over retail
- Offices and several maisonette residential over retail
- Hotel over retail

5.5.2 Horizontal Mixed Use

Combining different single uses within one lot, parcel or a development is recommended to be appropriately applied in a **medium-large size lot area (more than 1500 sqm)**, where there is a likelihood the development will be in the form of multiple buildings or a complex of buildings. By bringing together complementary uses in one place or premise, this approach will bring benefits as follows:

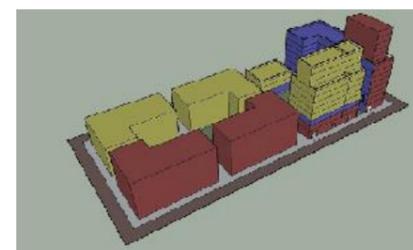
- easy to build;
- mixed use within a walkable block surrounded by thoroughfares (i.e compound type);
- avoids the financing and coding complexities of vertical layered;
- achieving the goal of good placemaking;
- the advantage of sharing utilities and amenities .

Horizontal mixed-use examples



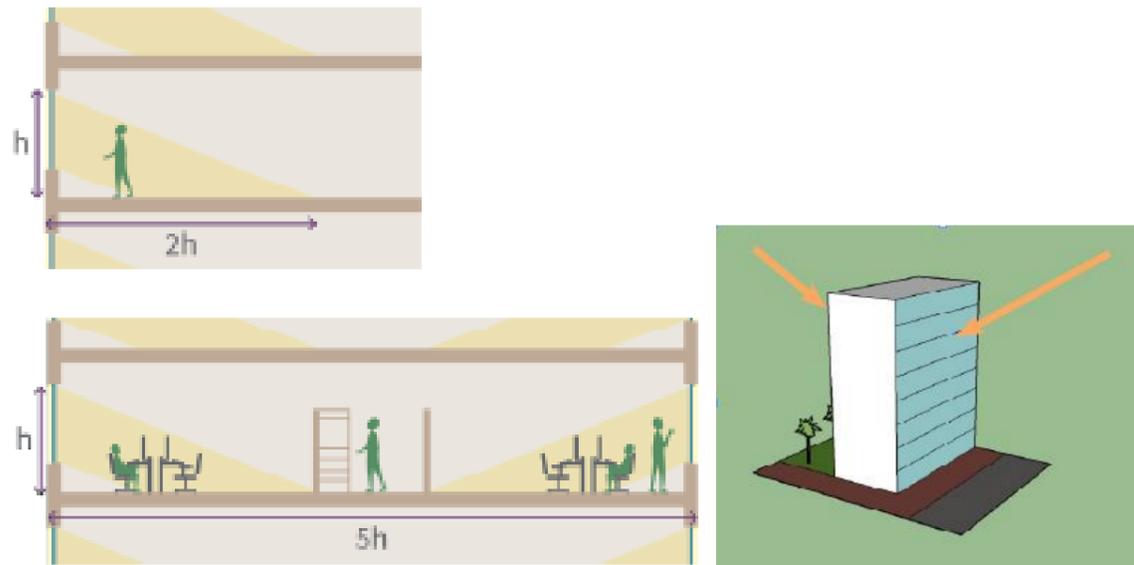
5.5.3 Combined Vertical & Horizontal Mixed Use

For large size of development site (eg. 5 hectare and more), the combination of different uses in vertical-horizontal layered should consider, not only economic feasibility, but also feasibility in the technical aspects, such as design configuration and modular layout, building structure and construction, and the specific technical requirements of each use. In addition, the aspect of privacy and security should also be properly addressed.



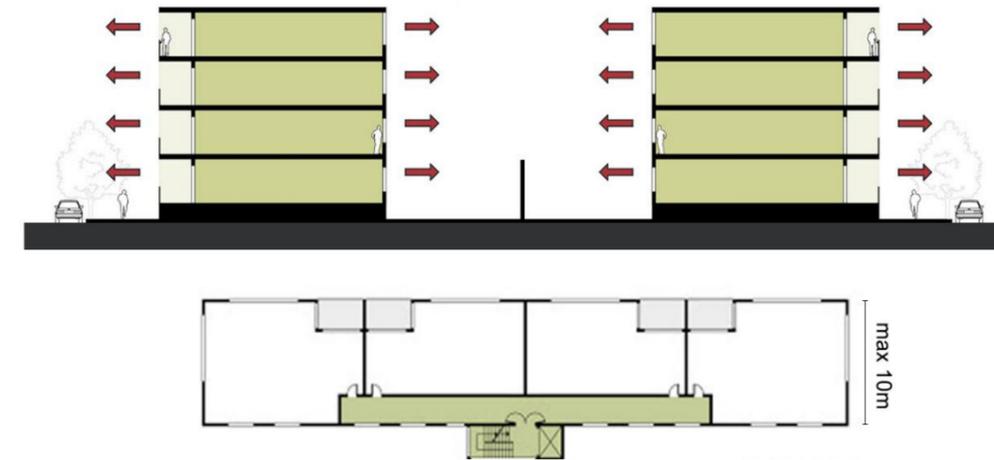
5.6 Building Dimension and Arrangement

- **Thinner / Shallow Plan Building.** One of the most important agenda of the Regulations is to lead the developments in Downtown to perform a Climate Responsive Design. Building dimension, orientation and arrangement should strongly consider health aspects of the users, as well as reducing the energy consumption. Thinner building design and courtyard building typology are recommended, to allow better natural air ventilation, natural lit and sun exposure. This will save so much energy as it reduces the usage of artificial light during the daytime.

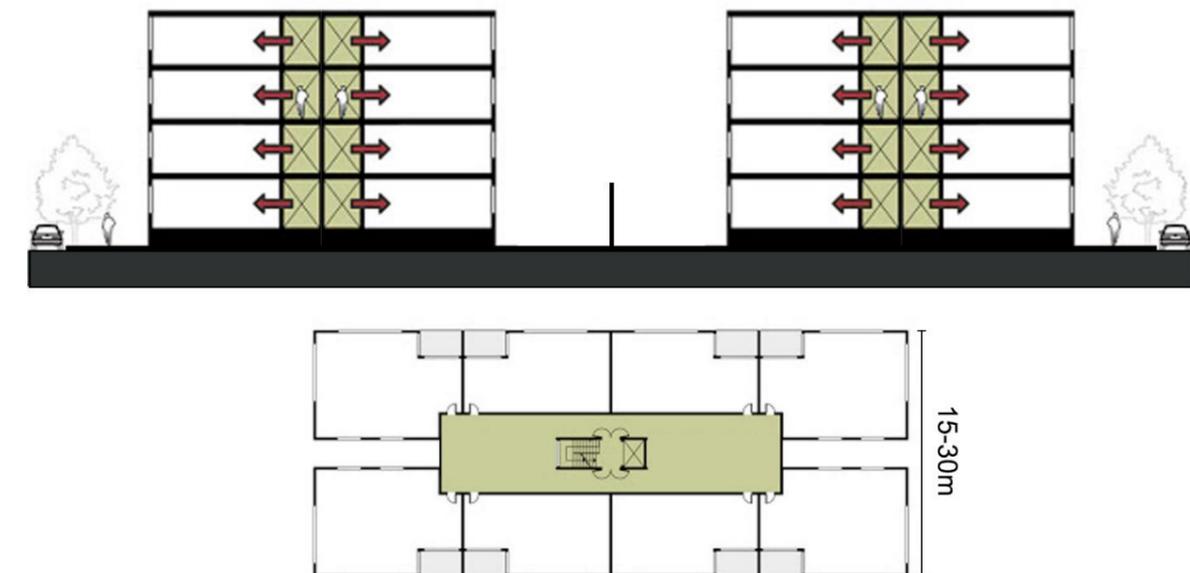


| Building type | | Daylight | | Natural ventilation | |
|---------------|----------------------|--------------------------|---------------|---------------------|-------------|
| | | Single aspect | Single aspect | Single aspect | Dual aspect |
| | Height (H) in metres | Room depth (D) in metres | | | |
| | H | D= 2H | D= 2.5H | D= 5H | D= 5H |
| Office | 3 | 6 | 7.5 | 15 | 15 |
| | 4 | 8 | 10 | 20 | 20 |
| Residential | 3 | n/a | 7.5 | 15 | 15 |
| | 4 | n/a | 10 | 20 | 20 |

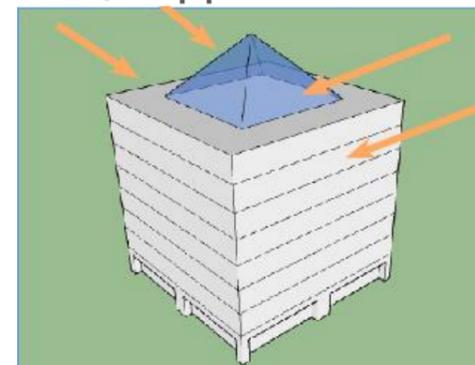
- **10 m (max) for Single-Aspect Building (Single-loaded arrangement)**



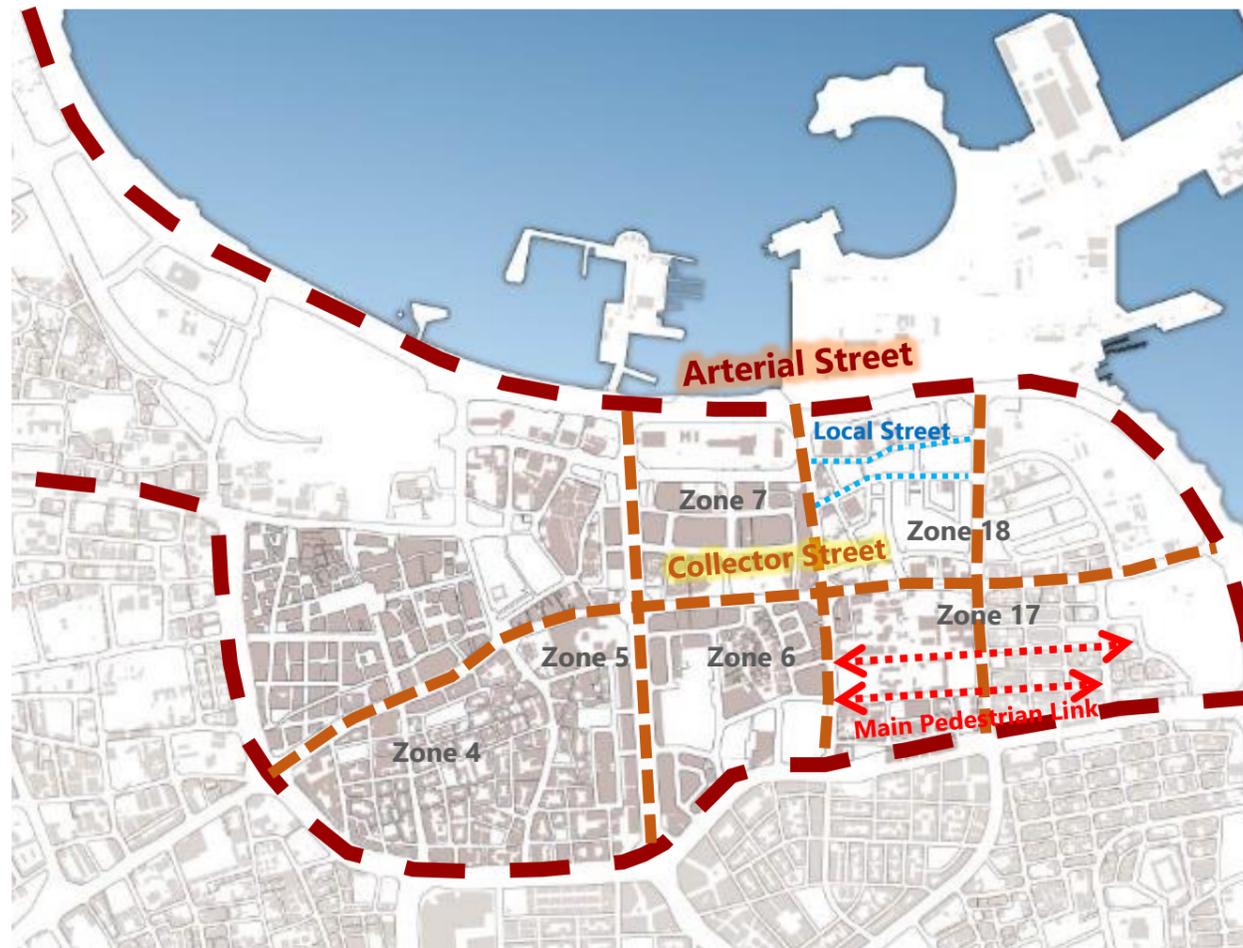
- **15 m (max) for Double-Aspect Building (Double-loaded arrangement) without atrium**



- **30 m/ deep plan needs internal courtyard or skylight (atrium)**

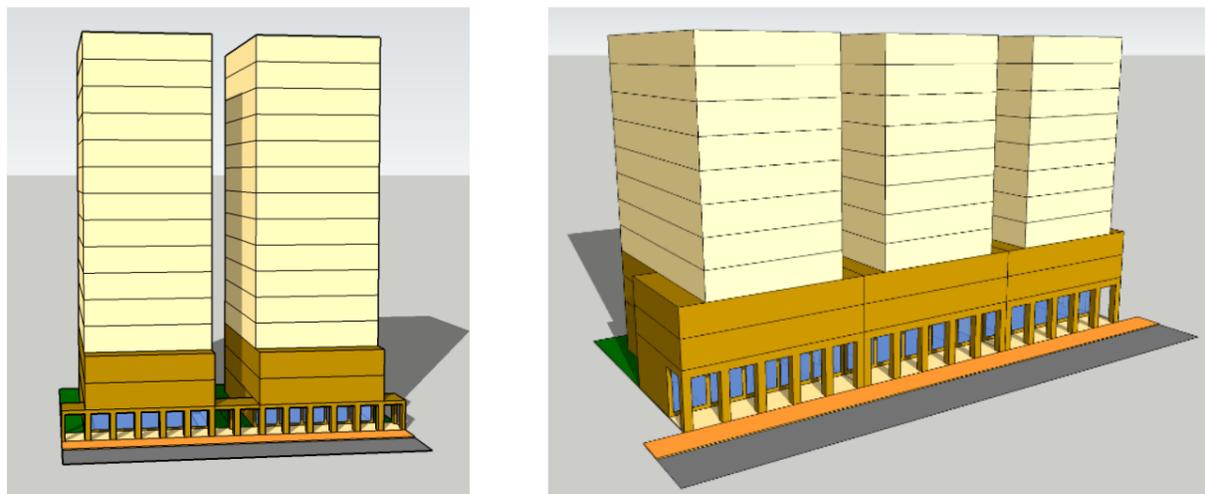


5.7 Frontage Profiles and Active Frontage



Frontage Profiles. To create a distinctive character and to enhance the legibility of the place, different types of frontage profile are recommended between major and minor streets.

5.5.1 Arcades along Arterial, Collector Streets & Main Pedestrian Links



5.5.2 Fore-Courts along Local Streets



Forecourts with small garden

Forecourts with stairs (buildings with half-basement / undercroft)

Active frontage. The frontage of the building is where 'the dialogue' between private and public realm occurred. A vitality of a place very much depends upon the quality of the frontage of the buildings in the areas in enlivening the streets. The more entrance, openings, balconies along a stretch of a street, the greater sense of safety and security will be experienced by the passer byers. **In principle, active frontage should be applied all around buildings' facade within a block and blank walls are forbidden.**



Blank

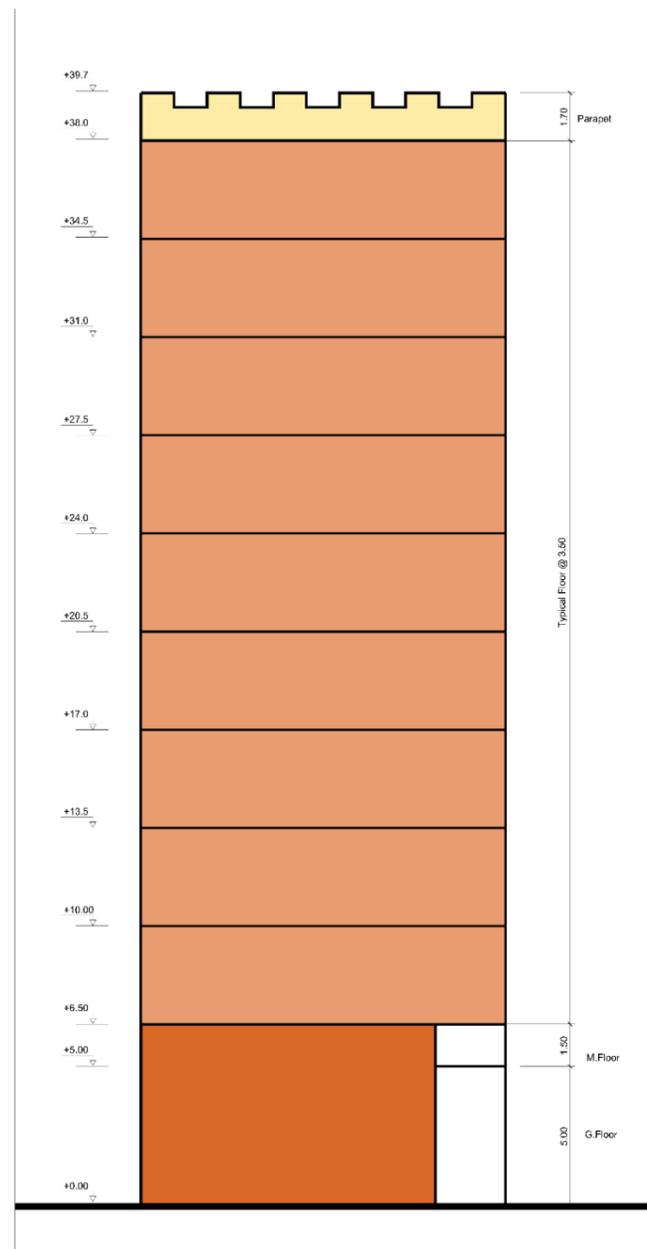
Single-side active

Both-side active

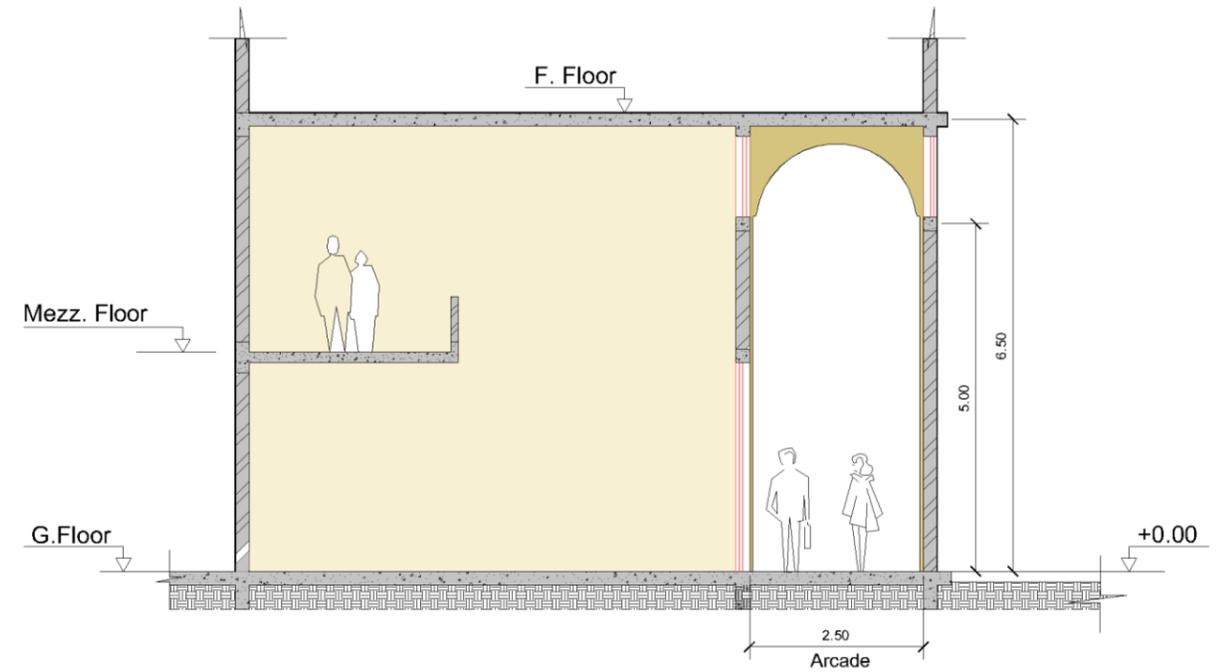
(Source: tandfonline.com)

5.8 Building Height

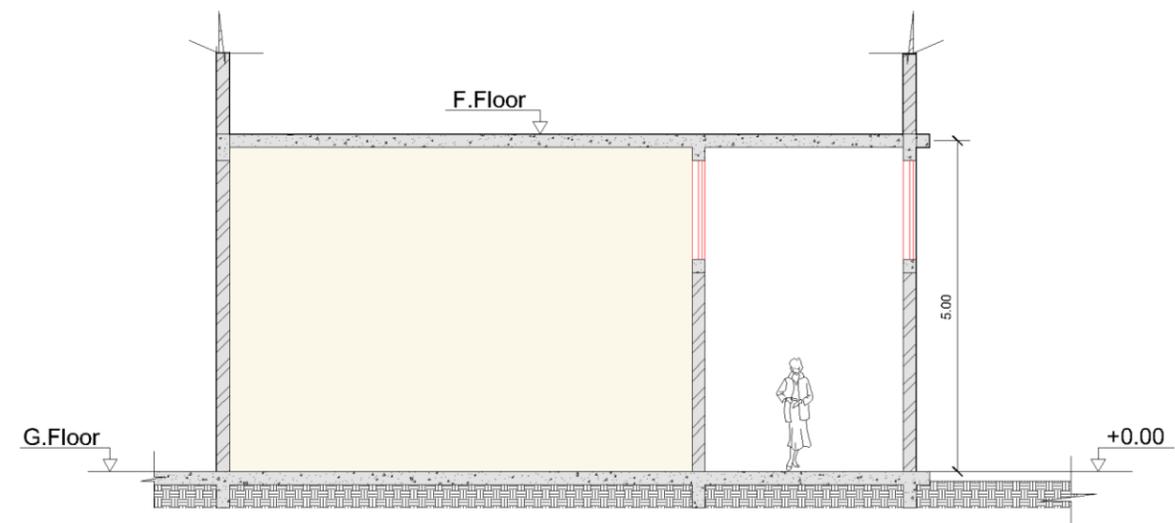
- To measure the height of the building, there are three (3) segments of the building which determine the overall height:
 - Base Part:** the height of the ground floor, whether it is G+M (6.5 m) or G (5 m), it depends on the location of the plot
 - Mid Part:** the typical floor height is maximum 3.5 m. Only buildings facing to Corniche have the exception for 4 m (maximum) on the podium floors
 - Parapet:** the parapet height is maximum 1.7 m



- Arcades with Mezzanine (G+M): 6.5 m**



- Arcades without Mezzanine (G): 5 m**

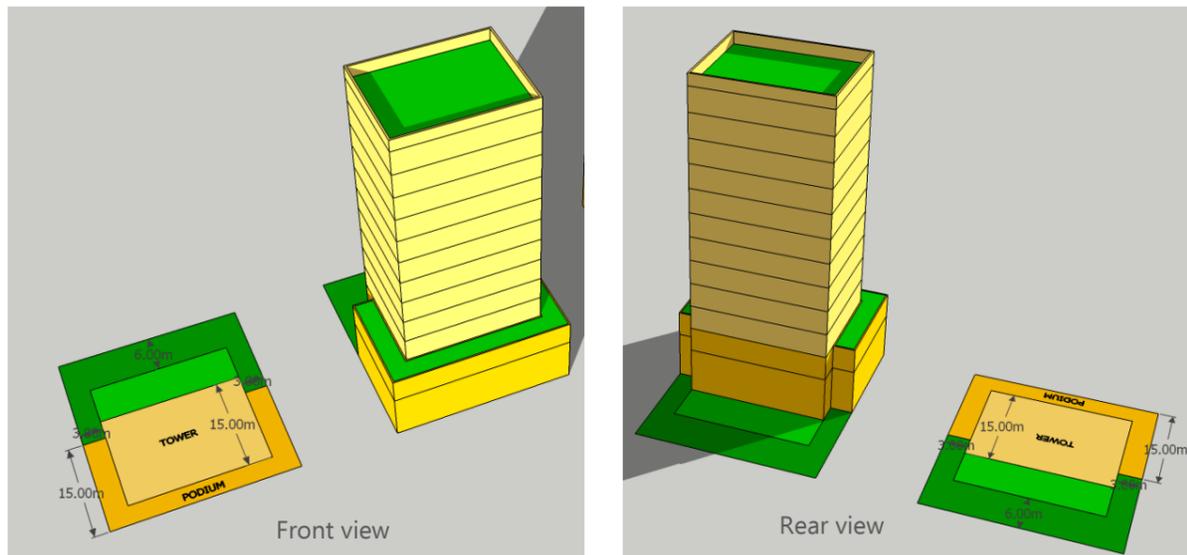


5.9 Building Envelope & Design Development

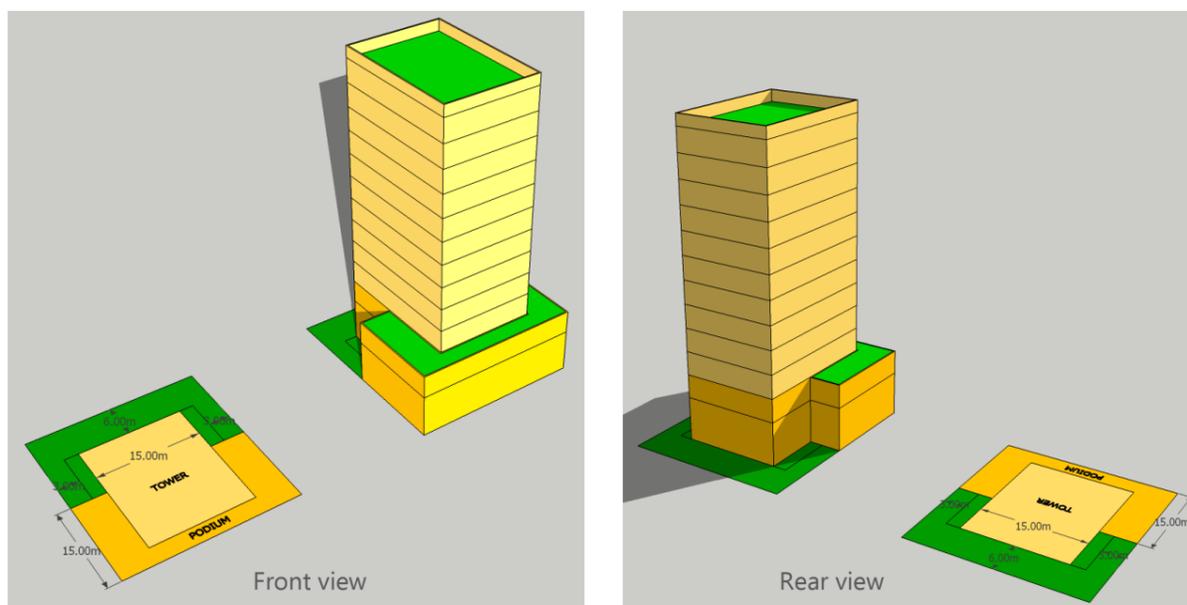
In the second page (page 2) of each Block Regulation, there are a series of diagrams to illustrate the building massing. However, it is not meant to be the exact design. In the design development stage, designers still have a room to lead a creative and innovative design.

Examples: Alternative designs with given setbacks and building disposition

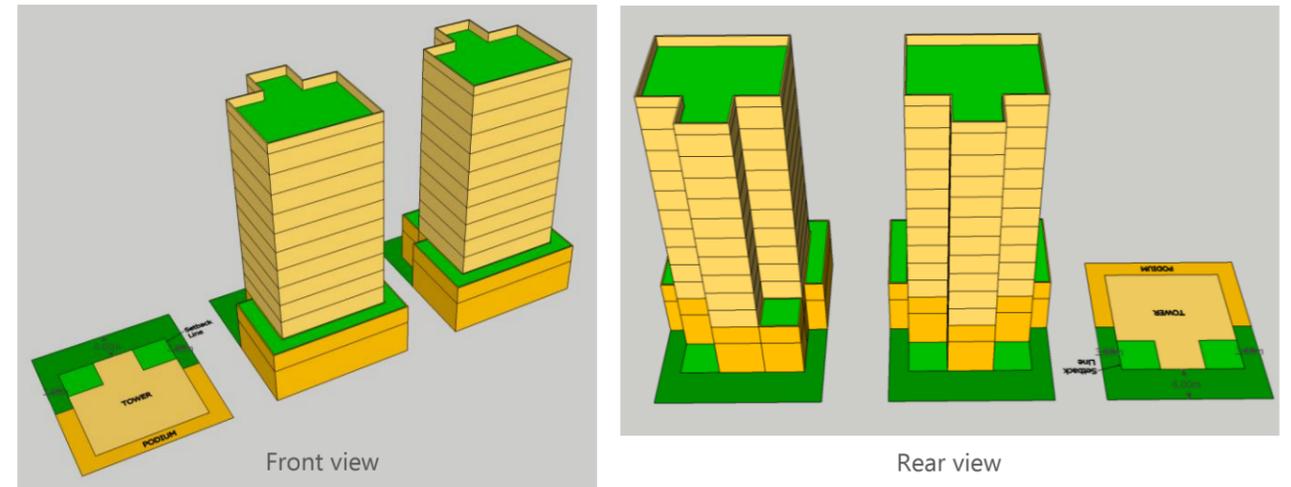
- **Alt. Single Rectangular Tower 1**



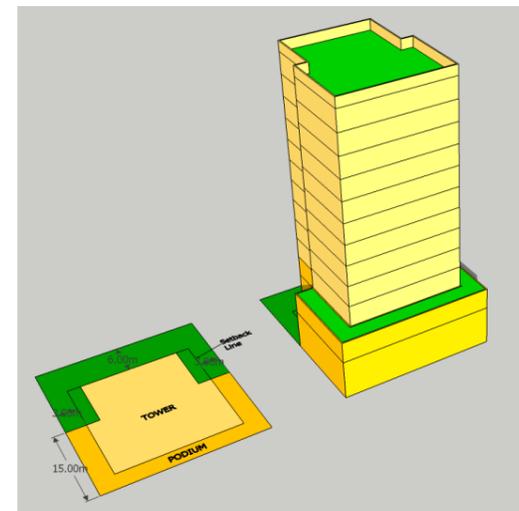
- **Alt. Single Rectangular Tower 2**



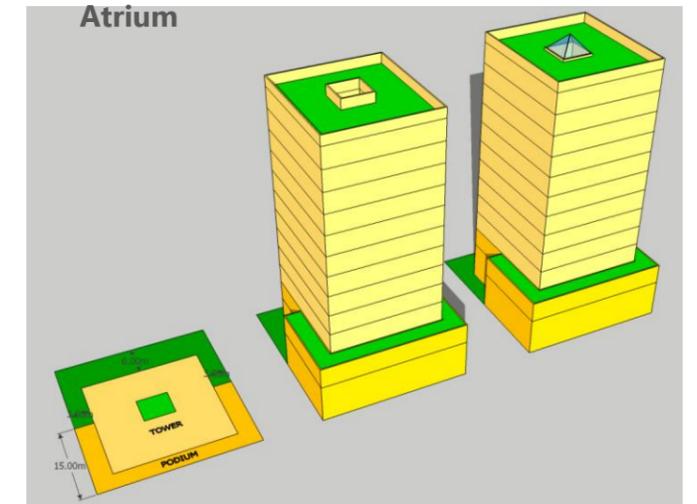
- **Alt. Single T-Shape Tower 1**



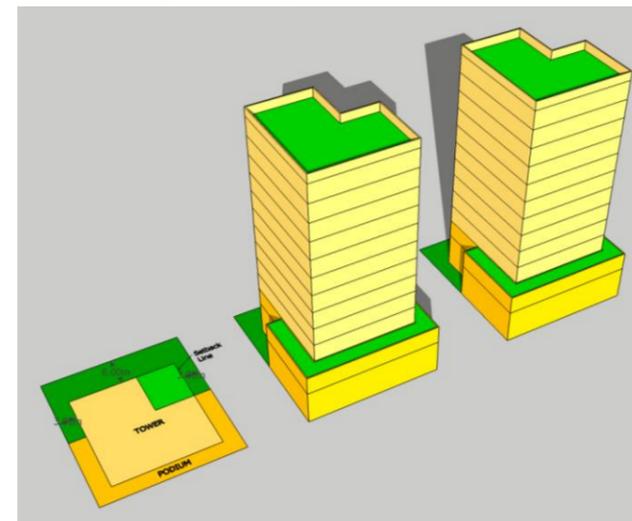
- **Alt. Single T-Shape Tower 2**



- **Alt. Single Square Tower _Courtyard / Atrium**



- **Alt. Single L Shape Tower**

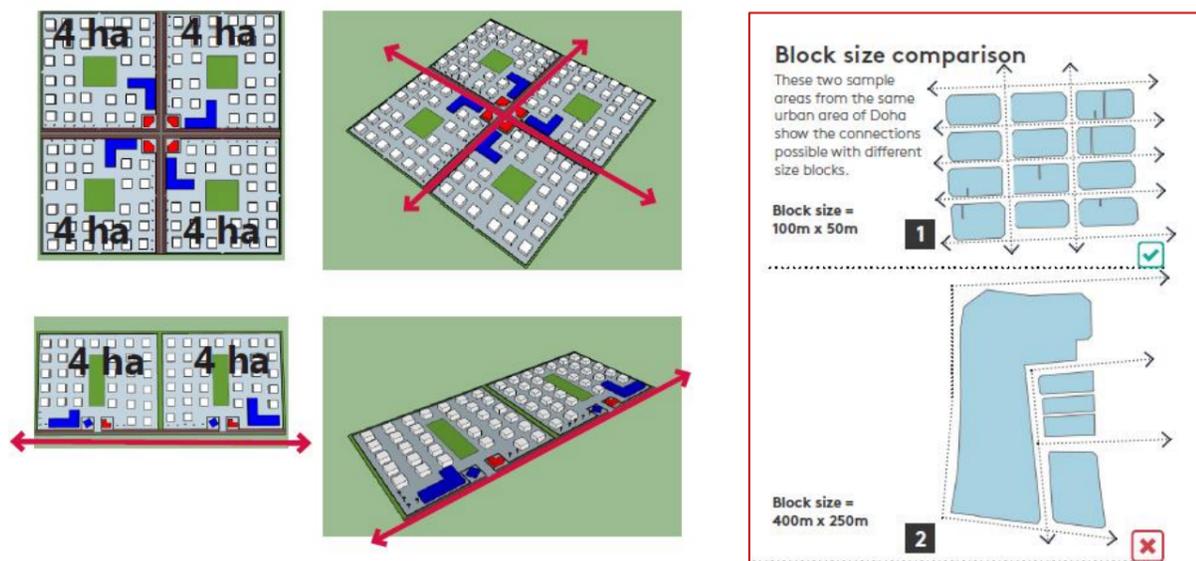


5.10 Parcelisation and Subdivision

New development should improve the quality of place, therefore it should demonstrate its roles in 'stitching', connecting and integrating to the surroundings.

Block Sizes

For large size of lands (>4 ha) . To ensure the permeability and connectivity across the Centre, parcelisation should not exceed the acceptable walking distance, of which 200 meter maximum. Any development should set its parcels of development with maximum area approximately 40,000 sqm (200m x 200m).



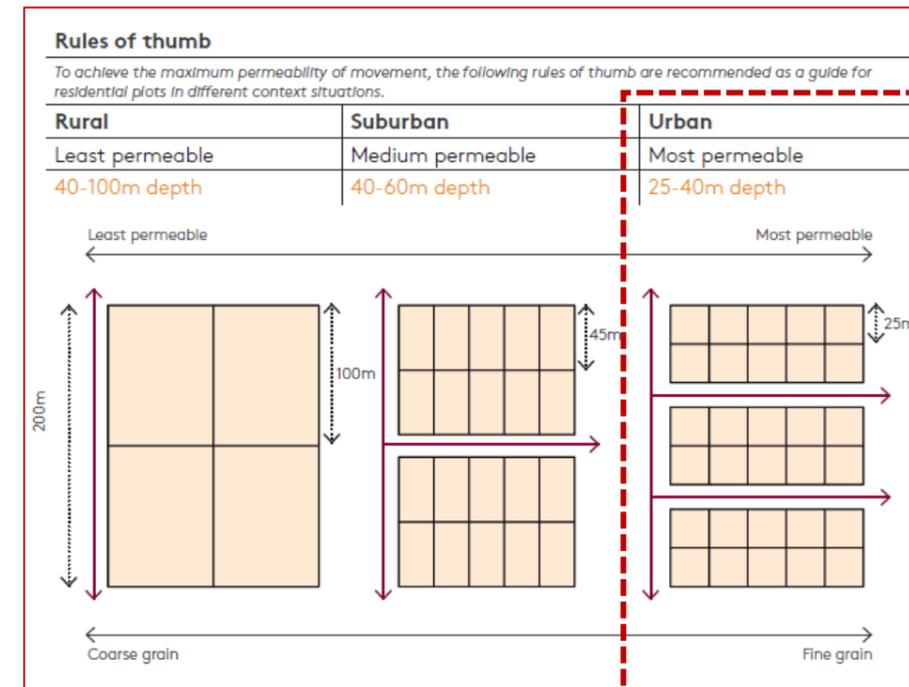
For medium size of lands (<4 ha). To enhance the fine-grain character of the Downtown and in order to optimize road/building ratio and ensure permeability for pedestrians, an optimum block size of between 100m and 150m maximum length or depth should be achieved.

Block depths will vary according to the land use and building typology:

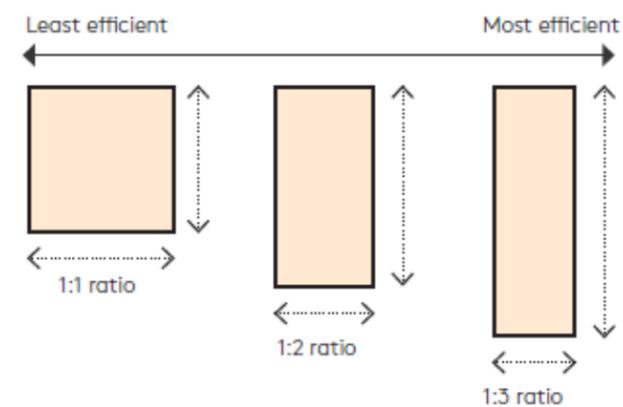
1. **For commercial/ mixed use independent block:** min.50 m depth
2. **For commercial/mixed use back-to-back block,** consider a service street in the middle between plots, to serve the 'back of the house' activities (disposal, loading and unloading etc). Minimum depth: 120m
3. **For residential/mixed use residential back-to back block:** min.60m

Plot Sizes

It is strongly recommended to use small plot sizes in the Downtown to create a fine grain of mixed uses. Plan the plot sizes around walking distances to create a permeable network of streets. The smaller the plot and block, the more opportunity for through routes.

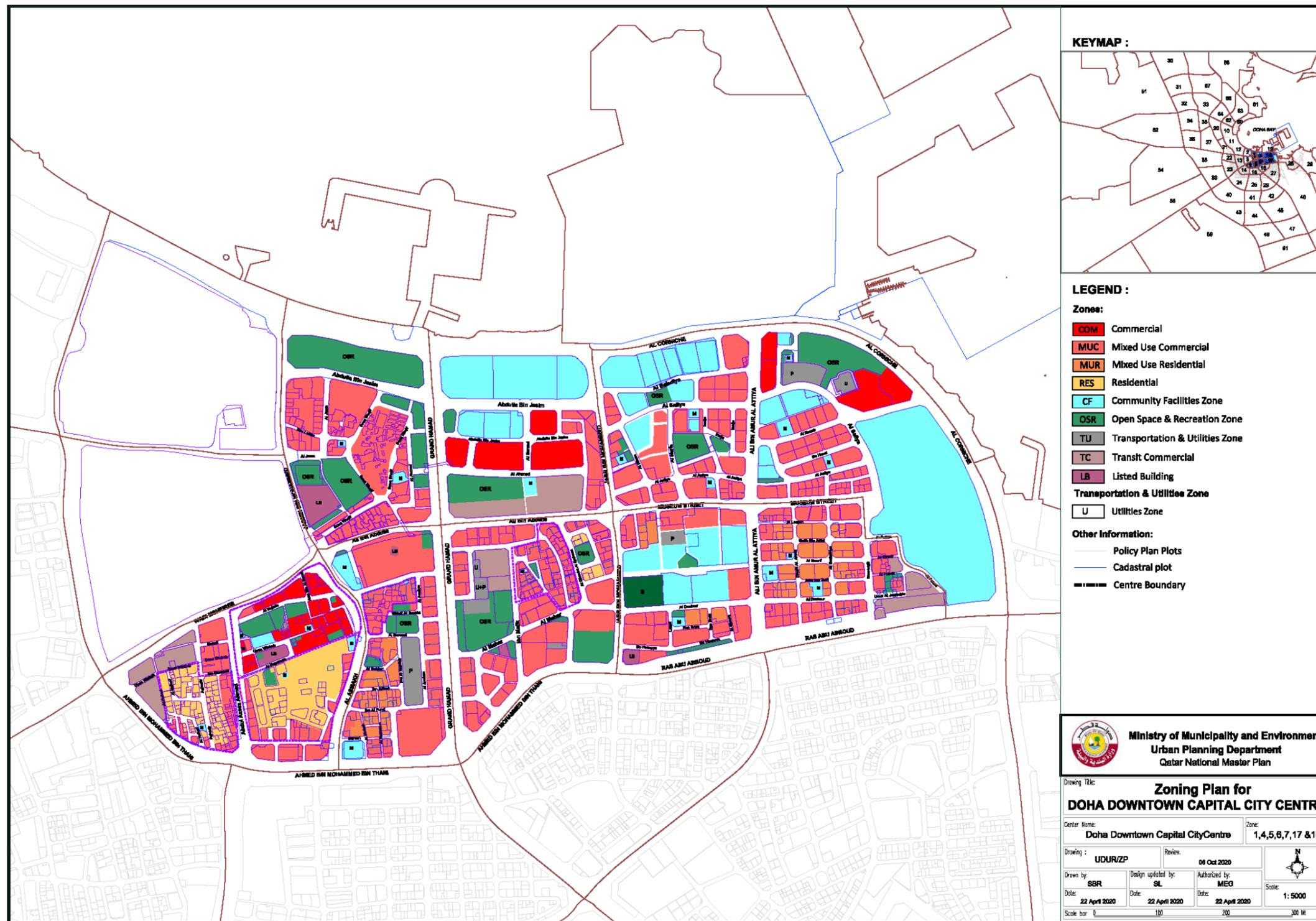


Plots should be of sufficient size to allow for a sufficient ratio between external area and floor plates. The following is the rules of thumb to design an affective ratio of plot:



A ratio of 1:3 width to depth should be achieved for optimum infrastructure/plot cost.

SECTION 6: ZONING PLAN



SECTION 7: KEY MAP FOR BLOCK NUMBERS

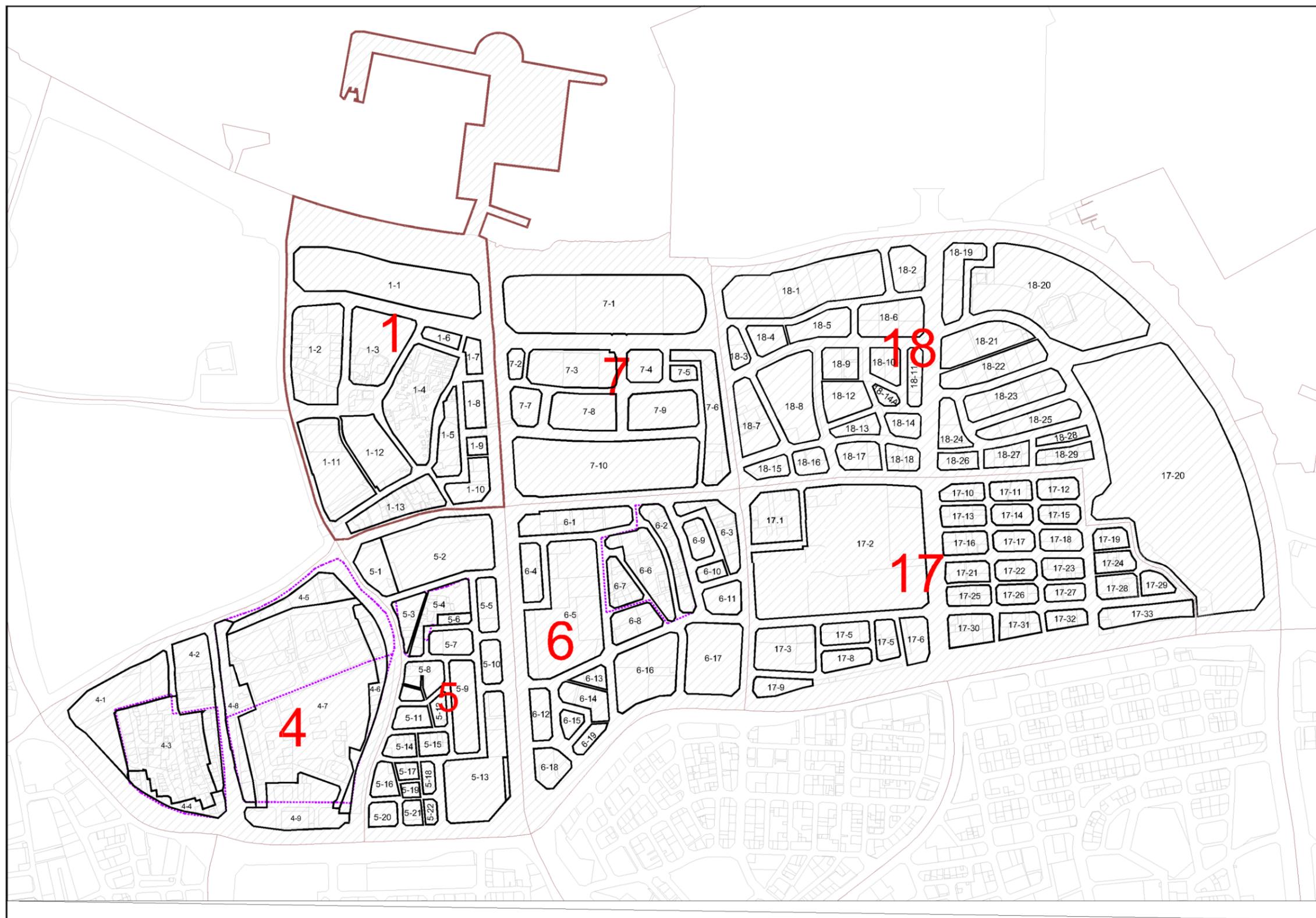


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SECTION 1 : INTRODUCTION

Downtown Doha Capital City Centre will be regulated by a context specific and physical form as the organising principles for the regulations, as well as the function/use. It is a hybrid approach whereby the both methods of use-regulation (Euclidian) and of form regulation (Form-Based Code) have been considered and chosen for regulating this Centre, as they are the most effective tools for regulating diverse, mixed-use environment and rapid physical changes that currently being experiencing by the area as the result of the vast economic development.

Upon adoption, the Doha Downtown Capital City Centre Regulations has the role as the statutory and regulatory development plans that will provide holistic directions for future change and will become a fundamental ground for development management decision for the Capital City Centre.

What are the Form-Based Regulation for the Capital City Centre ?

The regulations for all the Capital City Centres is primarily based upon **the use as well as the key physical elements that shape the form and give a character to the place**. The use will be regulated in a simpler fashion. They are simplified and carefully designated to be compatible with the intended building type.

To be more informative and easier to understand by the any development applicant, the regulations will be addressed in **a block by block fashion**. Each block will be comprehensively equipped by the use regulation as well as the physical form regulation.

The Capital Centre Regulations will comprise:

1. Zoning-Use Regulations

Each block will have specific set of use regulations of:

- General Use Regulation;
- Specific Use Regulation;
- Use-Split Regulation;
- Permitted Uses Table

2. Physical Form Regulations

Each block will have specific set of use regulations of:

- Bulk Regulations;
- Building Typology
- Building Placement;
- Building Size and Dimension;
- Building Orientation
- Frontage Profile
- Recommended Accessibility Point for Pedestrian
- Recommended Egress and Ingress for Vehicle
- Recommended Public Access on Private Plot
- Architectural Style and Standards
- Landscape Standards

3. Incentives

It is very imperative for any development in the area to strive and support the creation of the envisioned attractive cultural and civic place, which has become the role pattern for sustainable and liveable development for all.

There are several new incentives are introduced in the regulations:

1. **Parking waiver:** Parking waiver is introduced to discourage the vehicle dependable on the Downtown area. Certain identified locations are granted lower standard of parking allowance due to their proximity to the transit point, aligning to the Parking Waiver Policy by MoTC for ToD areas
2. **Floor Bonus:** Floor bonus is a part of planning incentives, and it is designed to encourage provision of public open spaces and public accesses, or shared parking facilities within private properties.

SECTION 2: HOW TO USE THE REGULATION

This section outlines the basic steps for users on how to use these overall Doha Downtown Capital City Centre Regulations, which are based upon physical form as well as appropriate use in line to the building type.

The illustration is not intended to describe the procedure for an application submission, it is to guide users the step by step on using the package of the Regulations Plans.

The three (3) sets of basic step are illustrated in the Quick General Guide as follows:

1. IDENTIFY THE LOCATION CONTEXT OF THE PARCEL/PLOT

The first step: the Applicant needs to locate where is his/her parcel or plot within the planning map context:

- 1) Identify the number of the Zone
- 2) Identify the number of the block

2. FIND OUT AND COMPLY WITH THE ZONING-USE REGULATIONS

The second step: the Applicant needs to find out what, and comply to, the respective zoning-use regulations that applied to his/her parcel or plot:

- 1) Identify the Zoning Category: Commercial or Mixed Use Commercial or Mixed Use Residential or Residential
- 2) Identify what use is allowed under the Zoning Category
- 3) Identify what combination of uses that is allowed: commercial with residential etc

3. FIND OUT AND COMPLY WITH THE ZONING-FORM REGULATIONS

The third step: the Applicant needs to find out what, and comply to, the respective physical form regulations that applied to his/her parcel or plot:

- 1) Identify the Bulk/Massing regulations: Building Height, Floor Area Ratio (FAR), Building Coverage (BC)
- 2) Identify the Building Type regulations: Building Typology (eg. attached-podium and tower; semi-detached mid rise etc), Front Profile of the buildings (eg. with arcade, with fore-court, with small front- landscape, etc
- 3) Identify the Building Placement regulations, on how to position the buildings: setbacks, build to line etc
- 4) Identify the Building Size and Dimension regulations: max depth for podium etc.

QUICK GENERAL GUIDE

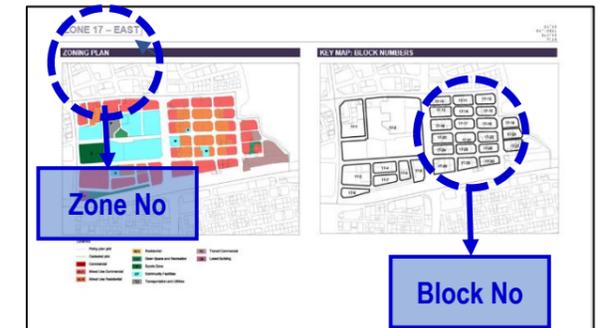
Step

What needs to do

Reference

1

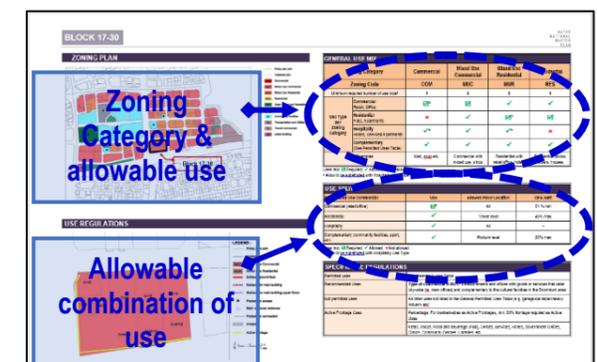
- Identify **the plot or the parcel in the context map** or from MME's website:
- Zone Number
 - Block Number



Page 1: ZONING PLAN & KEY MAP BLOCK NUMBER

2

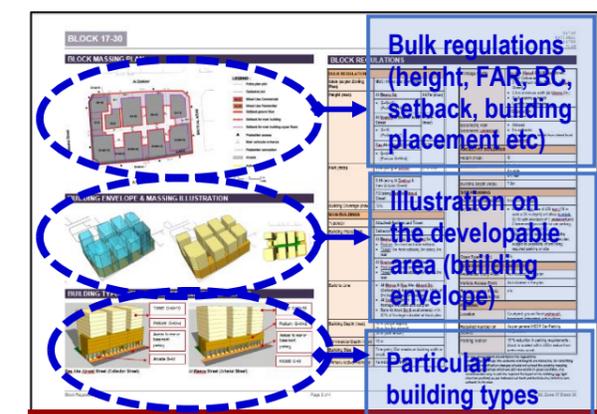
- Comply with the respective **Zoning-Use Regulations:**
- Zoning Category
 - Allowable Use Type (s)
 - Allowable Use-Mix (combination of uses)



Page 2: BLOCK - USE REGULATIONS

3

- Comply with the respective **Physical Form Regulations:**
- Bulk Regulations (Building Height, Floor Area Ratio (FAR); Building Coverage (BC)
 - Appropriate Building Typology
 - Building Placement
 - Building Size-Dimension
 - Architectural Styles etc



Page 3: BLOCK - FORM REGULATIONS

SECTION 3: VISION-OBJECTIVE-STRATEGY

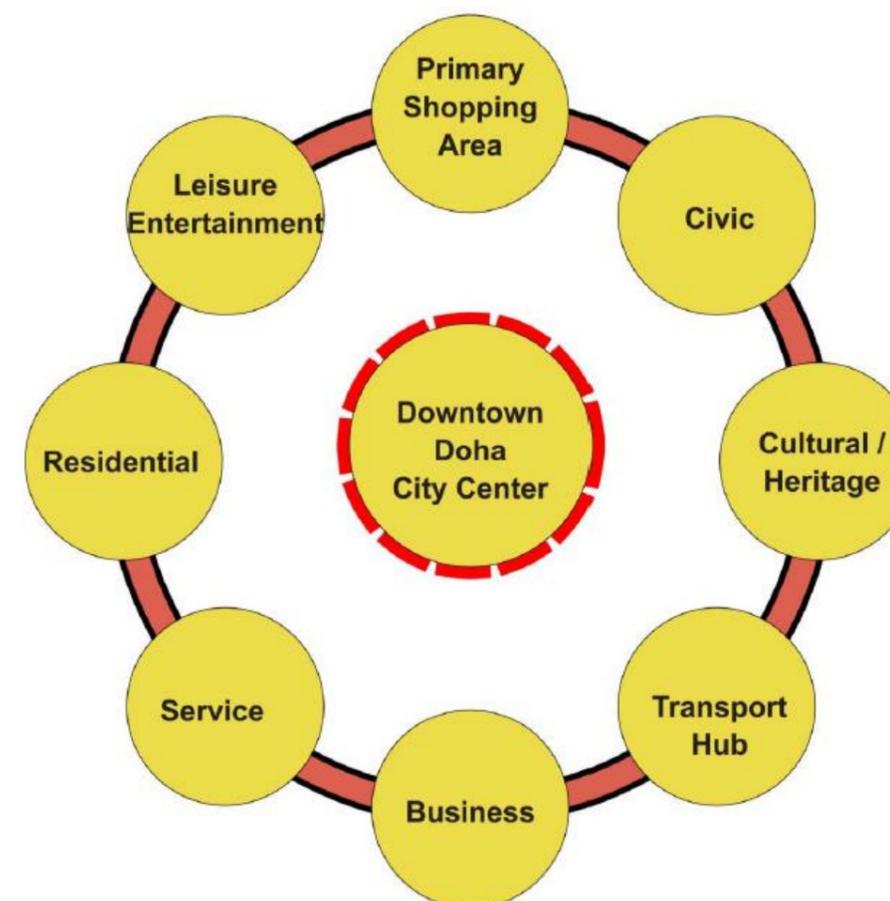
The Downtown Doha Capital City Centre has multiple roles, ranging from national, regional to local level of functions. These roles need to be enhanced and reflected in the planning regulations for the area. Therefore, a stringent form-based regulation is imposed to ensure the physical characters of the Downtown, as envisioned as follows:

2.1 Vision

'Re-establish Downtown Doha as the cultural and civic heart of Doha, where Qatari and non Qatari call home and choose to live'



The main agenda of the Regulation is to rejuvenate and to improve the 'Downtown-ness' quality of our Downtown, by assisting in redefining the roles and functions of the Capital City Centre.



Therefore, it is the main objective of the planning and design frameworks for this Capital City Centre to guarantee the creation of a balanced and viable place as a physical platform for the Downtown to perform its significant roles.

The Regulations will be the planning tool to ensure the Downtown functions well, through comprehensively deals with the issue of the appropriate spatial structure, land use distribution and development density.

Moreover, as Doha Downtown should be one of the enjoyable places to be within in the country, therefore, the Regulations will also ensure the creation of vibrant and thriving Downtown for people, that visually pleasant and harmonious, through properly regulate the architectural styles and building forms.

Ultimately, the Regulations has a significant role as the tools to achieve healthier and more liveable place, for Downtown to be the best exemplar of sustainable development pattern in Qatar.

2.2 Key Objectives

The main drivers of this form-based Regulations are derived from the below key objectives and strategies in order to overcome the current challenges that are facing by the Downtown:

Create a truly and proper Downtown for Doha

By:

Redefining the center boundary
Redefining the roles of the center
Redefining the **right attributes for a downtown**

Enhance the intrinsic characters and assets of the place

By:

- Retaining **and maintaining the old morphology** as much as possible
- Defining the character areas based upon intrinsic social and economic potential
- Performing active onservation to the heritage area
- Setting a heritage trail and cultural destinations
- Rejuvenating edge development , positive space across and fine grain urban (via fine grain platting) form as the lessons learnt from the old urban form orphology
- **Ensuring harmony and integration between old and new urban form and street pattern**

Create a vibrant and viable place across the centre

By:

- Ensuring **balance mix between commercial and residential**
- Ensuring the right density of population and development as per QNDF (infill densification)
Ensuring well-integration between mega projects and adjacent developments
- Defining and **ensuring active frontages of the developments**
- Ensuring sufficient service of community and public facilities

Create a low carbon place

By:

- Ensuring **the creation of pedestrian friendly environment** across the Downtown
- Ensuring the integration of pedestrian and open space networks

2.3 Key Strategies: Applying Good Planning & Urban Design Practice

1. Climate Responsive Design

Guidance for creating shaded façades:

- Window-to-wall ratios (WWR) should depend on the façade orientation (Figures 9 and 10):
 - North façades: 50-60%.
 - South façades: 40-50% (with shading).
 - East/west façades: 30-40% (with shading).
 - South-east/south-west façades: 30-40% (with shading).
 - North-east/north-west façades: 40-50%.
- Solar-control glazing (maximum 0.3 solar heat gain coefficient), is recommended for all orientations.
- Limit the use of flat-roof skylights and consider north-facing clerestories.
- Buildings with a lower surface area-to-volume ratio are recommended (that is, fewer exterior exposed surfaces).

C2.1.2 Daylight

Rationale: As a result of the latitude of Qatar and frequent occurrence of clear skies, daylight levels are usually high. This daylight intensity can be beneficial for daylight access but, at the same time, it can create glare issues and high contrast.

Vernacular architecture in Qatar has dealt with intense daylight via narrow streets, small window openings, shallow floor plates, and shading in the form of overhangs and screens. The influence of western architecture, on the other hand, has brought wider streets, deep floor plans, and fully glazed buildings, which are not capable of offering adequate daylight quality and rely on internal blinds to provide visual comfort.

An adequately daylight space should reduce glare risks, connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of artificial lighting.

Natural daylight increases productivity and wellbeing, and reduces lighting energy consumption.

| Building type | Daylight | | Natural ventilation | |
|---------------|--------------------------|---------------|---------------------|-------------|
| | Single aspect | Single aspect | Single aspect | Dual aspect |
| | Room depth (D) in metres | | | |
| | H | D = 2H | D = 2.5H | D = 5H |
| Office | 3 | 6 | 7.5 | 15 |
| | 4 | 8 | 10 | 20 |
| Residential | 3 | n/a | 7.5 | 15 |
| | 4 | n/a | 10 | 20 |

1. Appropriate Morphology, Development Density & Mixed Use

Rules of thumb

To achieve the maximum permeability of movement, the following rules of thumb are recommended as a guide for residential plots in different context situations.

| Rural | Suburban | Urban |
|-----------------|------------------|----------------|
| Least permeable | Medium permeable | Most permeable |
| 40-100m depth | 40-60m depth | 25-40m depth |

Block size comparison

These two sample areas from the same urban area of Doha show the connections possible with different size blocks.

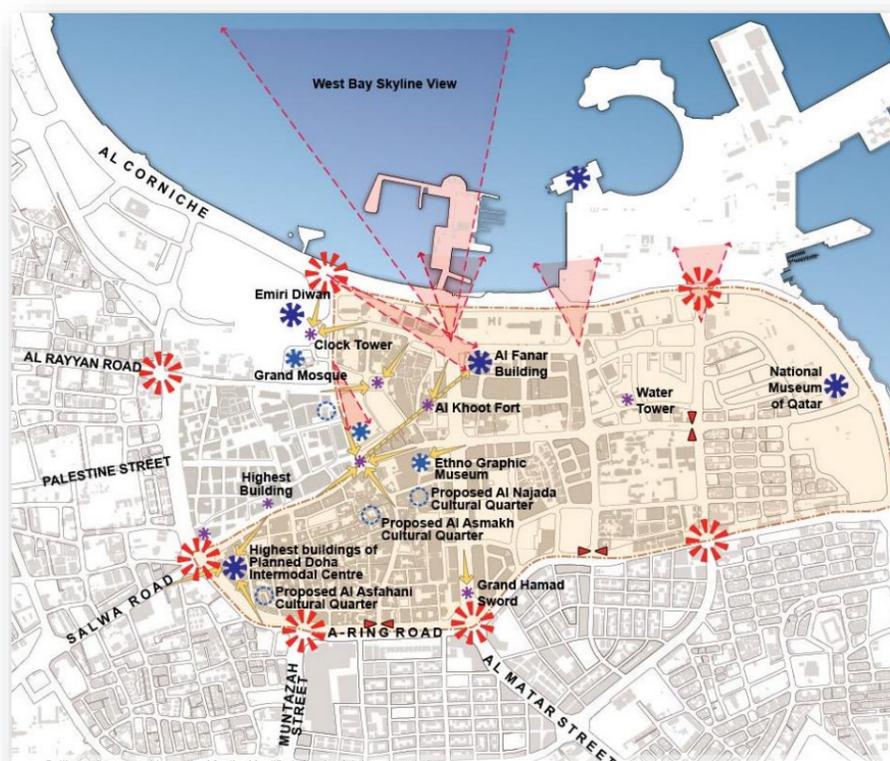
Block size = 100m x 50m

Block size = 400m x 250m

3. Active Frontages & Corners

4. Distinctive Architectural Styles & Green Buildings

SECTION 4: CONCEPTS



1. Acknowledge the physical assets and major destinations:

- Landmarks
- Prominent buildings/ features
- Historical significance
- Architectural significance
- Serial vision or vista potential



2. Integrate pedestrian and open space networks based upon hierarchical order:

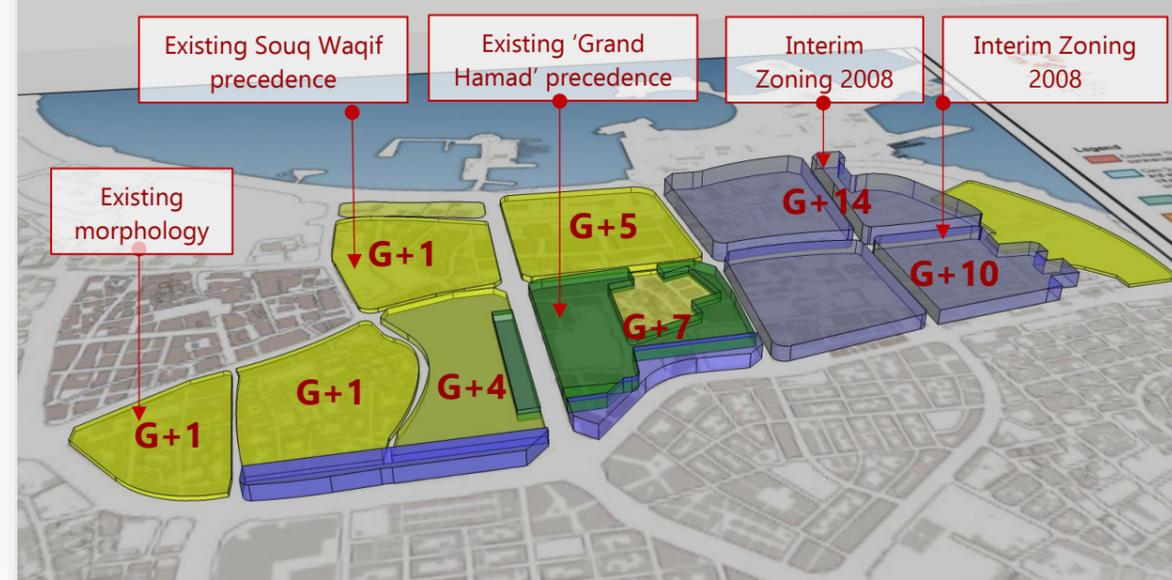
- Heritage Trails
- Main North-South pedestrian link
- Main East-West pedestrian link
- Secondary North-South pedestrian link
- Secondary East-West pedestrian link



3. Distinctive townscape by identification of visually prominent spaces and features:

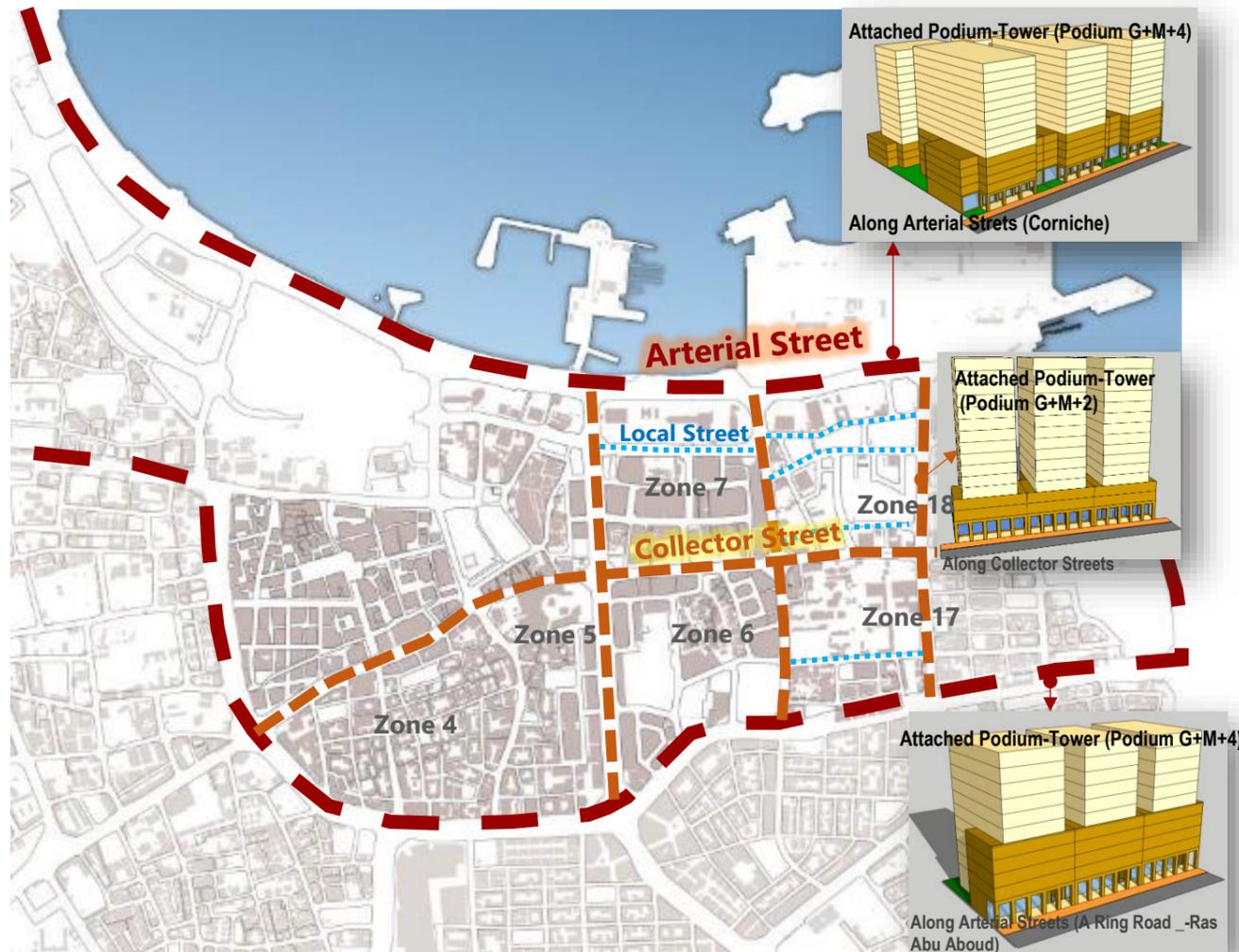
- Main junctions
- Secondary junctions

4. Work from the existing condition: respecting skyline & building types generated overtime



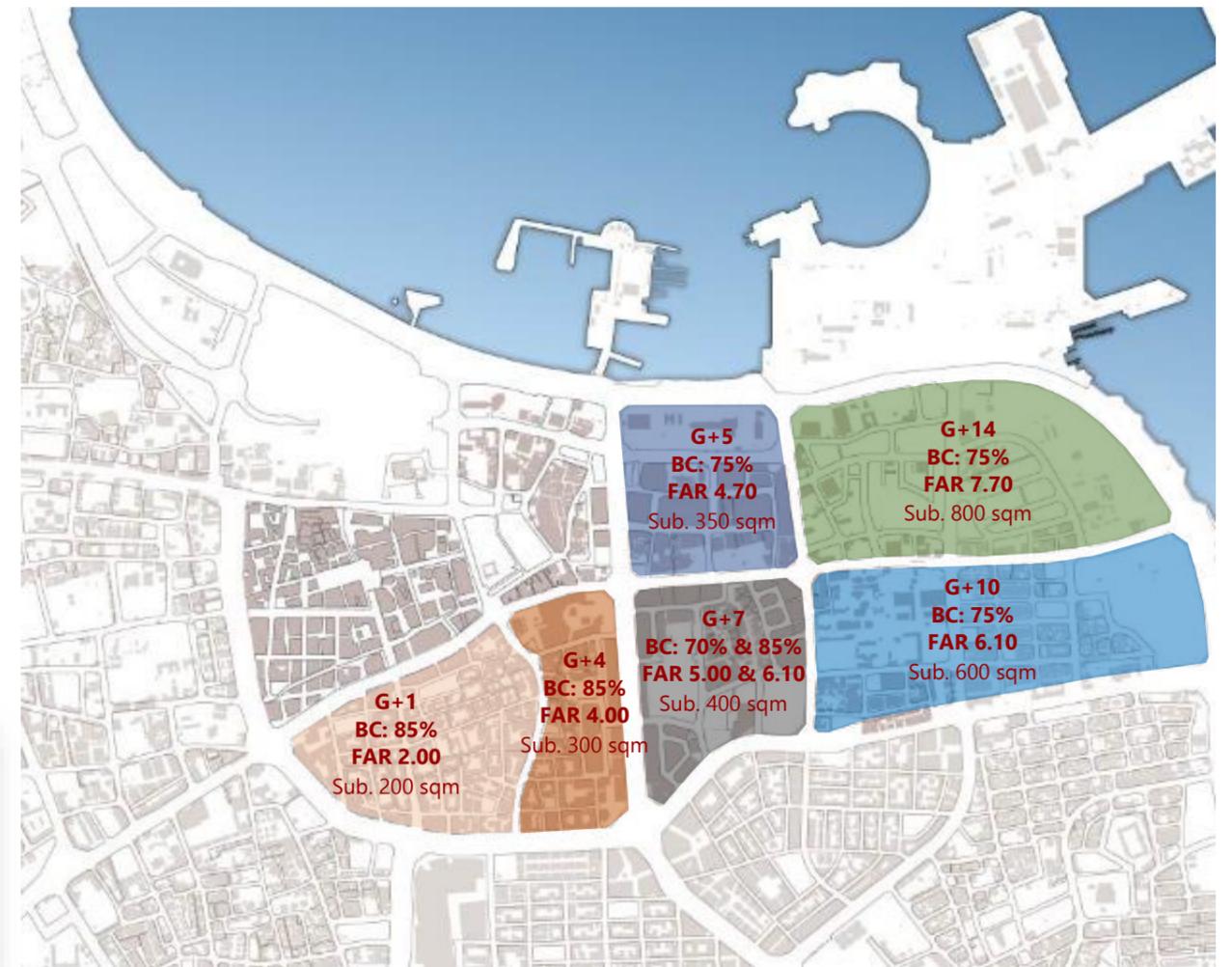
SECTION 5: KEY PRINCIPLES

5.1 Building Types & Characters vs Streets Hierarchy



| Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 17 | Zone 18 |
|---|---|---|--|---|--|
| <p>Low Rise Vernacular Courtyard</p> <p>Low Rise Semi-Detached with Courtyard</p> | <p>Low Rise Vernacular Courtyard</p> <p>Low Rise Semi-Detached with Courtyard</p> <p>Attached Low Rise with Courtyard</p> <p>Attached Mid Rise with Courtyard/ Atrium</p> | <p>Low Rise Vernacular Courtyard</p> <p>Semi-Detached Mid Rise with Courtyard</p> <p>Attached Mid Rise with Courtyard/ Atrium</p> <p>Detached Mid Rise with Courtyard/ Atrium</p> | <p>Attached Low Rise with Courtyard</p> <p>Detached Low Rise with Courtyard / Atrium (for Souqs)</p> | <p>Attached Mid Rise Podium-Tower (Podium G+M+4) along Arterial Streets</p> <p>Attached Mid Rise Podium-Tower (Podium G+M+2) along Collector Streets</p> <p>Attached Mid Rise Podium-Tower (Podium G+1) along Local Streets</p> | <p>Attached High Rise Podium-Tower (Podium G+M+4) along Arterial Streets</p> <p>Attached High Rise Podium-Tower (Podium G+M+2) along Collector Streets</p> <p>Attached High Rise Podium-Tower (Podium G+1) along Local Streets</p> |

5.2 Bulk: Building Height-FAR-BC-Minimum Subdivision

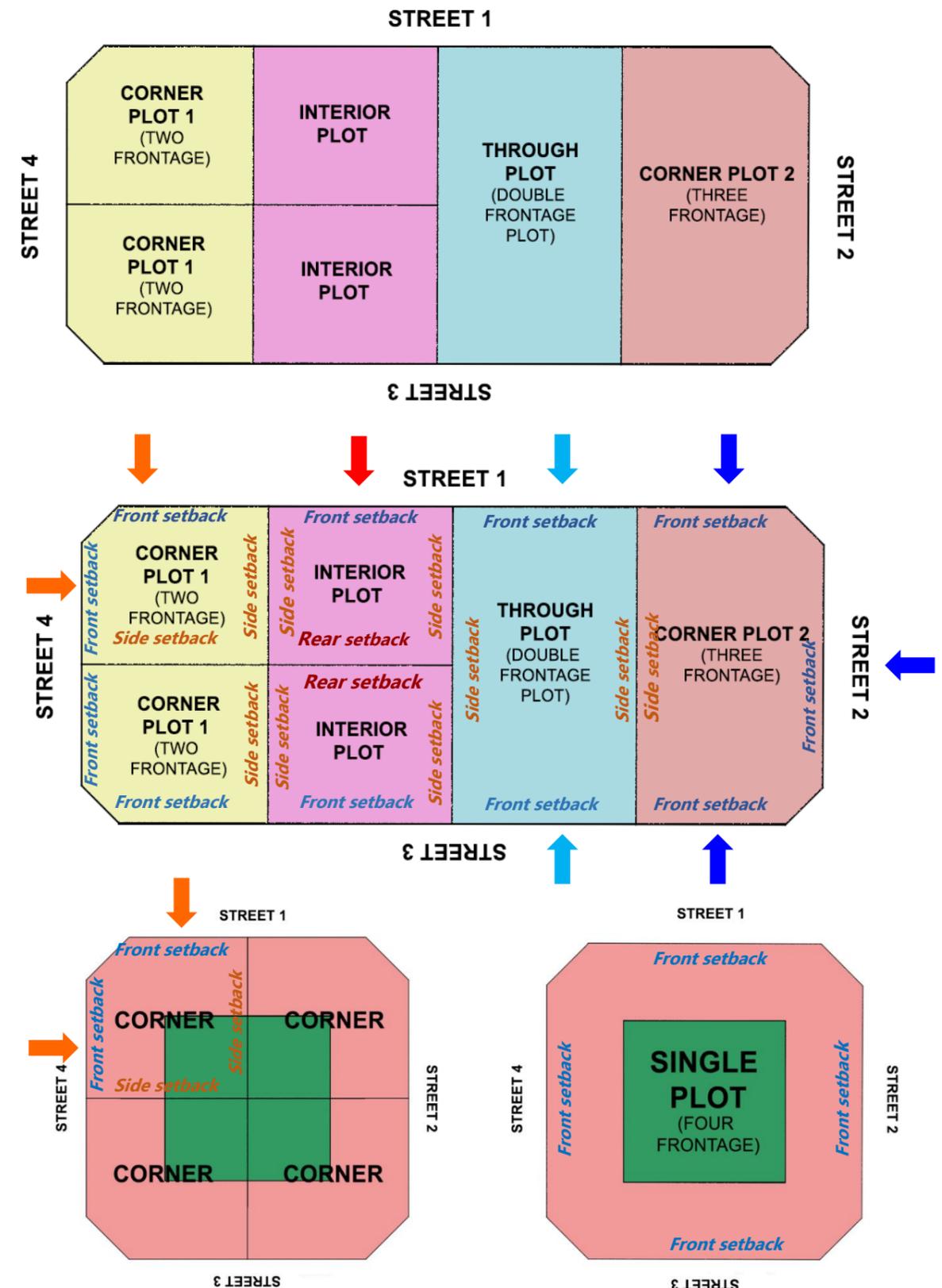


| Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 17 | Zone 18 |
|---|---|--|---|--|--|
| <p>G+M+1 / G+1</p> <ul style="list-style-type: none"> • FAR 2.00 • BC 85% • Minimum subdivision 200 sqm | <p>G+M+4 / G+4</p> <ul style="list-style-type: none"> • FAR 4.00 • BC 85% • Minimum subdivision 300 sqm | <p>G+M+7 / G+7</p> <ul style="list-style-type: none"> • FAR 5.00 & 6.10 • BC 70% & 85% • Minimum subdivision 400 sqm | <p>G+M+5 / G+5</p> <ul style="list-style-type: none"> • FAR 4.70 • BC 75% • Minimum subdivision 350 sqm | <p>G+M+10 / G+10</p> <ul style="list-style-type: none"> • FAR 6.10 • BC 75% • Minimum subdivision 600 sqm • FAR 7.00 along Collector roads • FAR 6.60 along Arterial streets • FAR 6.10 along Local Streets | <p>G+M+14 / G+14</p> <ul style="list-style-type: none"> • FAR 7.70 • BC 75% • Minimum subdivision 800 sqm • FAR 8.50 along Collector roads • FAR 8.20 along Arterial streets • FAR 7.70 along Local Streets |

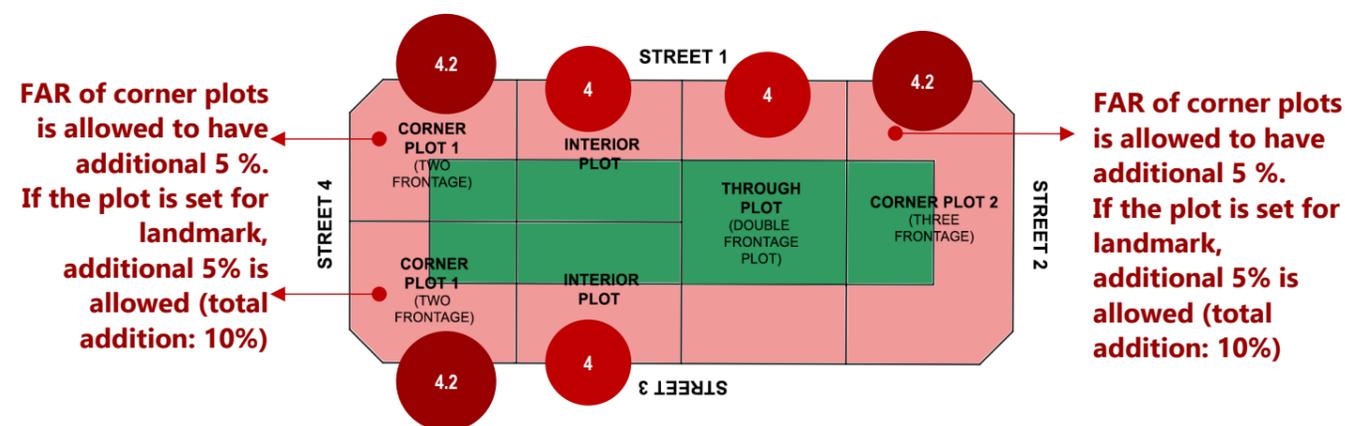
5.3 Types of Plots with FAR & Setback Application

- Types of Plot.** There are many types of plot in the Downtown, and they can be categorized as below (along with the applied setbacks to determine the building placement based on the its typology):

| | Type of Plot | Number of Frontage | Applied Setbacks |
|---|--|--------------------|--|
| 1 | Corner Plot 1 (shared borders with 2 plots) | Two (2) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 2 | Interior Plot (shared borders with 3 plots) | One (1) | <ul style="list-style-type: none"> • Front setback • Side setback • Rear setback |
| 3 | Through Plot (shared borders with 3 plots) | Two (2) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 4 | Corner Plot 2 (shared borders with 1 plot) | Three (3) | <ul style="list-style-type: none"> • Front setback • Side setback • No rear setback |
| 5 | Single Solitaire Plot | Four (4) | <ul style="list-style-type: none"> • Front setback |



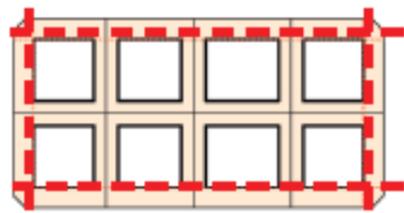
- Floor Area Ratio (FAR).** It is the measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on. Typically, FAR is calculated by dividing the gross floor area of a building(s) by the total buildable area of the piece of land upon which it is built (source: metro council.org).



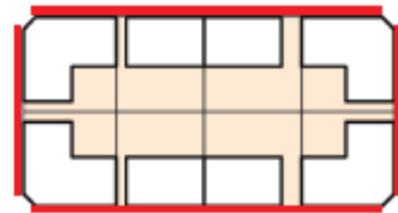
5.4 Build-To-Line & Building Placement - Typology

- One of the fundamental differences between Euclidean and Form-Based, is that in the building arrangement factor, the latter use Built-To-Line* method/guidance.

Shifting to a 'build-to line' arrangement of building disposition

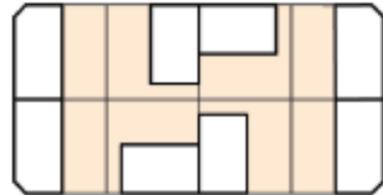


1 Existing setback zoning regulations

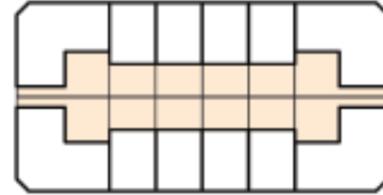


2 A form-based method using build-to line guidance

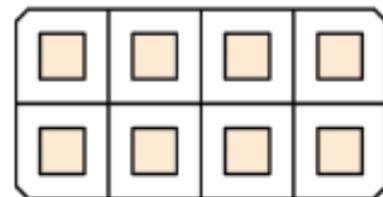
Alternative plot arrangements possible with a form-based build-to line



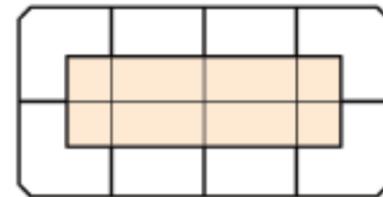
3 Privacy model
Build-to line: 0m



4 Townhouse terrace
Build-to line: 0m

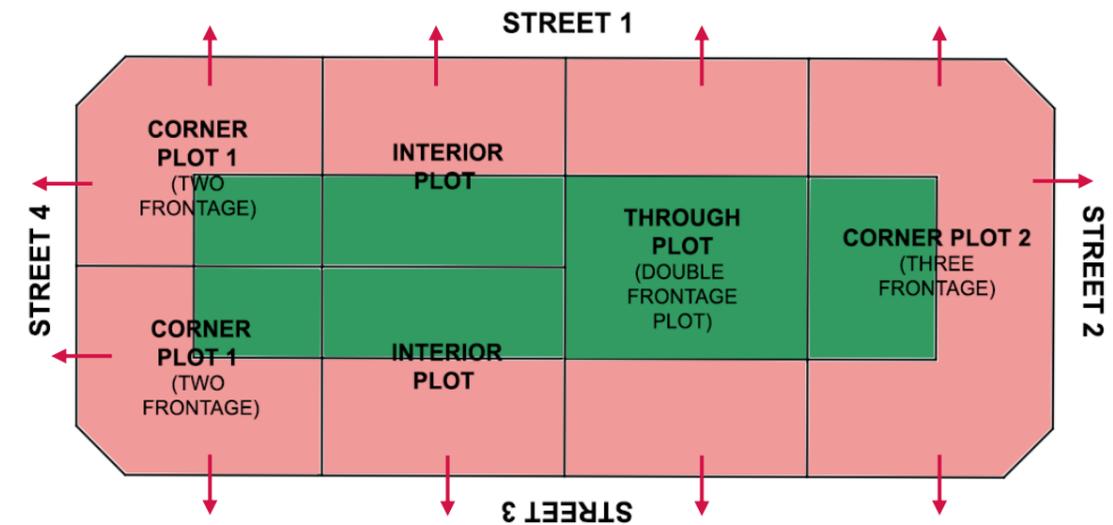


5 Courtyard housing
Build-to line: 0m
Front setback: 0m

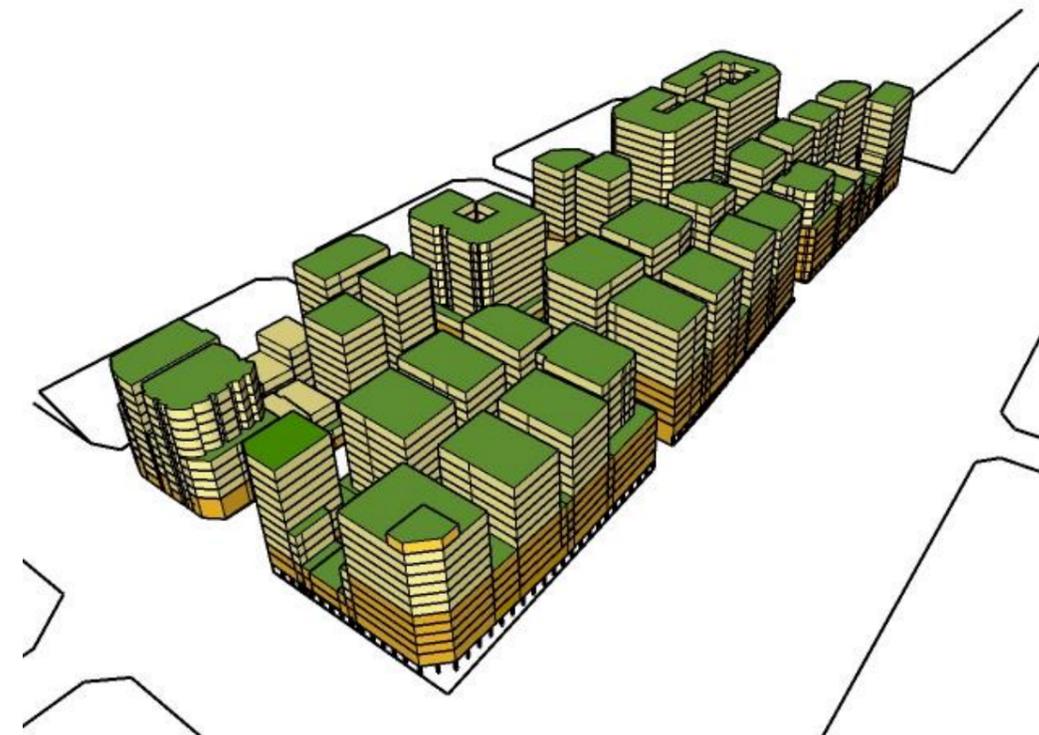


6 Perimeter block
Build-to line: 0m

- To create a stronger engagement with people on the sidewalk, the Regulation in Downtown sets continued Build-To-Line zero (0 m) for most of blocks. This also has the advantage to create a stronger street wall that defines the streets.



→ **Front:** Front and back of the buildings should be clear: & buildings should always respect the streets



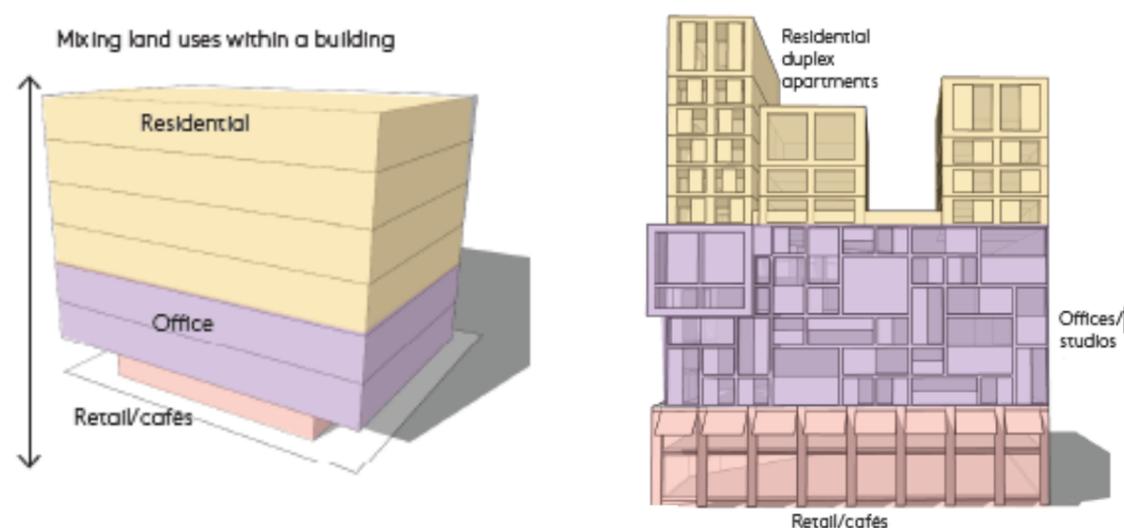
* a set building line on a plot, measured parallel from the front and/or corner side plot line, where the structure must be located. The building facade must be located on the build-to line

5.5 Method of Mixing the Uses

Depending upon location context, the size and scale of the development, there are three (3) ways of mixing the uses in term of the physical form:

5.5.1 Vertical Mixed Use

Stack up the uses is best applied within higher density areas and smaller sites, to efficiently use the space and buildings. This vertical layered use is recommended to be applied in an urban context:



The possibilities of vertical combination are illustrated as follows:

1. Mixing primary uses-offices (for low, medium and highrise buildings):

- Office building of various sizes of space;
- Offices over commercial retail such as shops, restaurants, leisure uses or community facilities;
- Flats over offices
- Offices and several flat cover retail
- Offices over commercial retail

2. Mixing primary uses-commercial retail (for low rise):

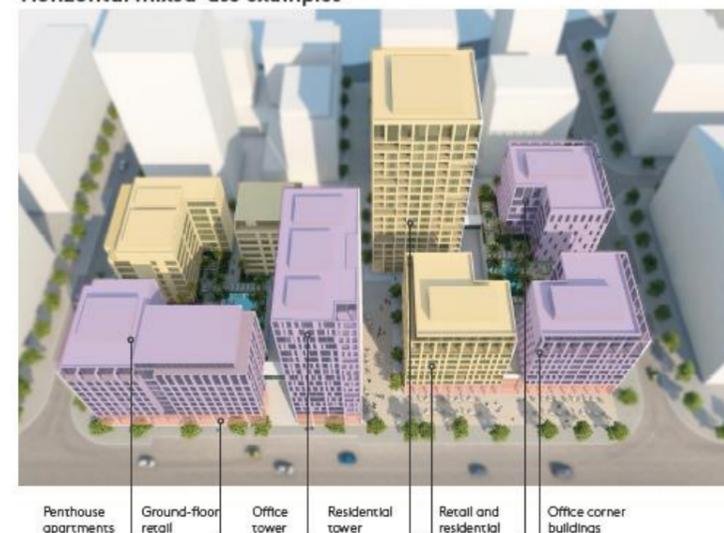
- Retail of various types and sizes (i.e shopping centres, department stores)
- Offices over retail
- Offices and several maisonette residential over retail
- Hotel over retail

5.5.2 Horizontal Mixed Use

Combining different single uses within one lot, parcel or a development is recommended to be appropriately applied in a **medium-large size lot area (more than 1500 sqm)**, where there is a likelihood the development will be in the form of multiple buildings or a complex of buildings. By bringing together complementary uses in one place or premise, this approach will bring benefits as follows:

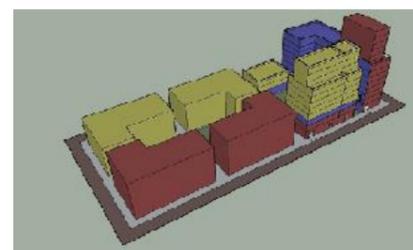
- easy to build;
- mixed use within a walkable block surrounded by thoroughfares (i.e compound type);
- avoids the financing and coding complexities of vertical layered;
- achieving the goal of good placemaking;
- the advantage of sharing utilities and amenities .

Horizontal mixed-use examples



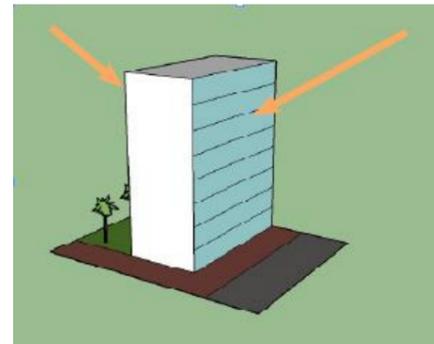
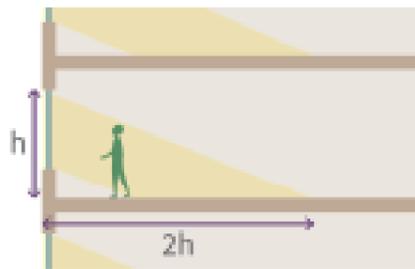
5.5.3 Combined Vertical & Horizontal Mixed Use

For large size of development site (eg. 5 hectare and more), the combination of different uses in vertical-horizontal layered should consider, not only economic feasibility, but also feasibility in the technical aspects, such as design configuration and modular layout, building structure and construction, and the specific technical requirements of each use. In addition, the aspect of privacy and security should also be properly addressed.



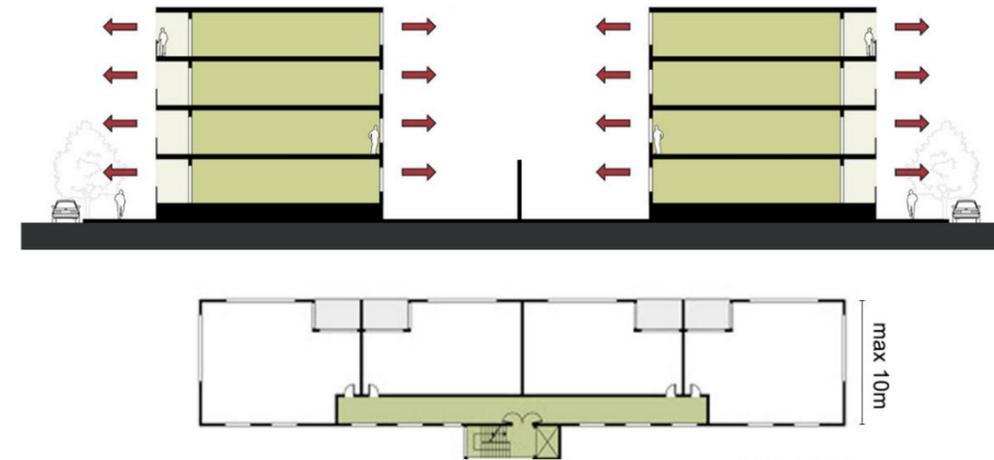
5.6 Building Dimension and Arrangement

- **Thinner / Shallow Plan Building.** One of the most important agenda of the Regulations is to lead the developments in Downtown to perform a Climate Responsive Design. Building dimension, orientation and arrangement should strongly consider health aspects of the users, as well as reducing the energy consumption. Thinner building design and courtyard building typology are recommended, to allow better natural air ventilation, natural lit and sun exposure. This will save so much energy as it reduces the usage of artificial light during the daytime.

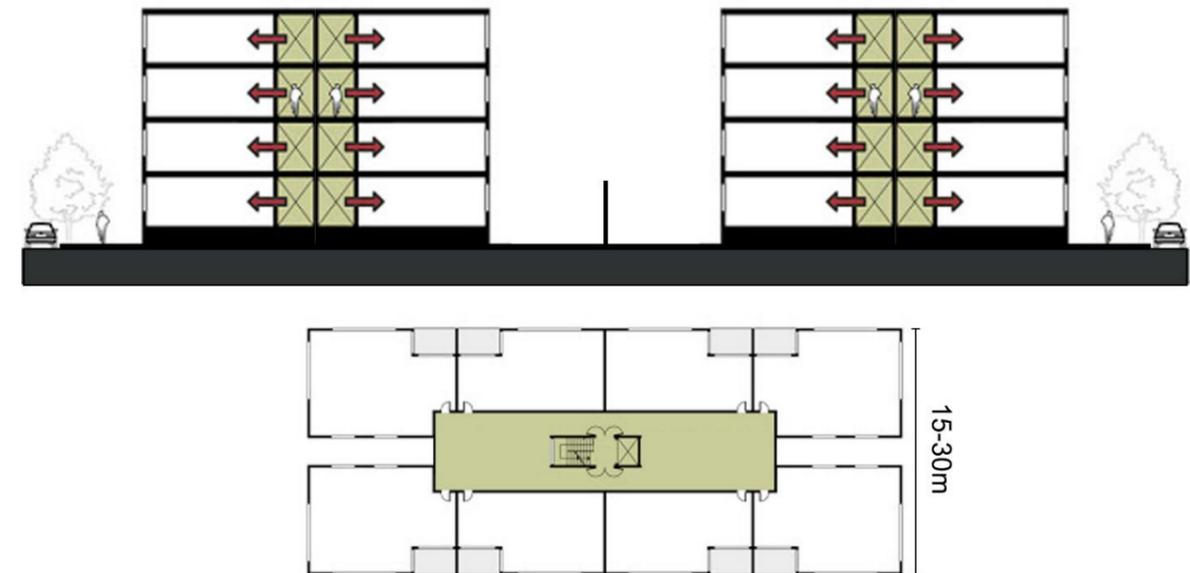


| Building type | | Daylight | | Natural ventilation | |
|---------------|----------------------|--------------------------|-------------|---------------------|-------------|
| | | Single aspect | Dual aspect | Single aspect | Dual aspect |
| | Height (H) in metres | Room depth (D) in metres | | | |
| | H | D= 2H | D= 2.5H | D= 5H | D= 5H |
| Office | 3 | 6 | 7.5 | 15 | 15 |
| | 4 | 8 | 10 | 20 | 20 |
| Residential | 3 | n/a | 7.5 | 15 | 15 |
| | 4 | n/a | 10 | 20 | 20 |

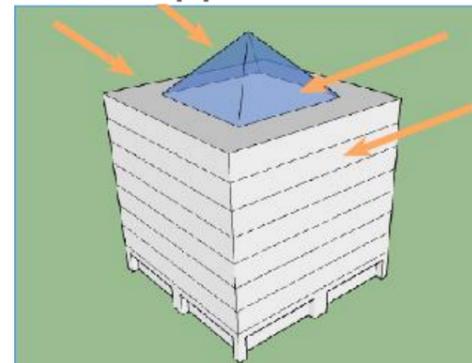
- **10 m (max) for Single-Aspect Building (Single-loaded arrangement)**



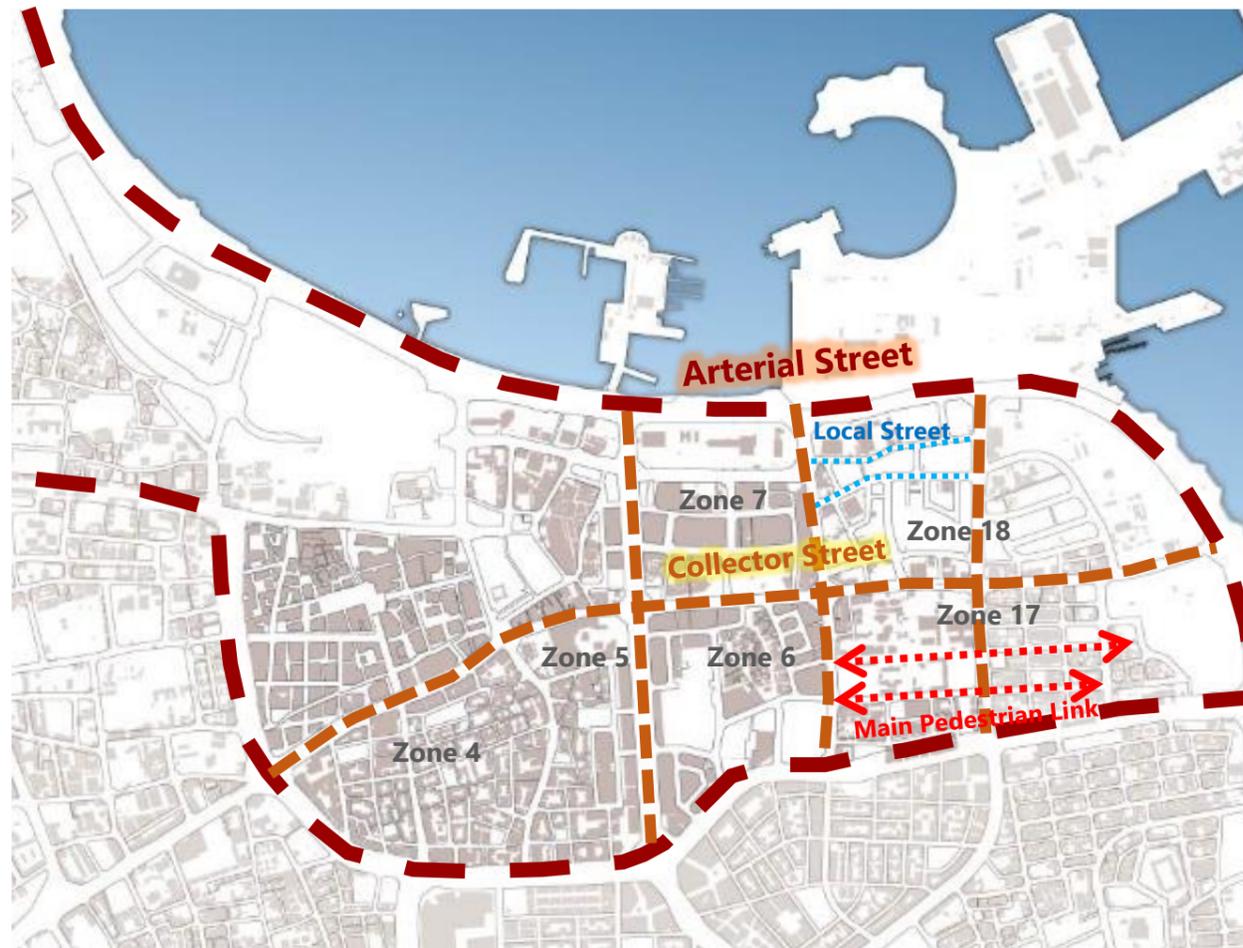
- **15 m (max) for Double-Aspect Building (Double-loaded arrangement) without atrium**



- **30 m/ deep plan needs internal courtyard or skylight (atrium)**

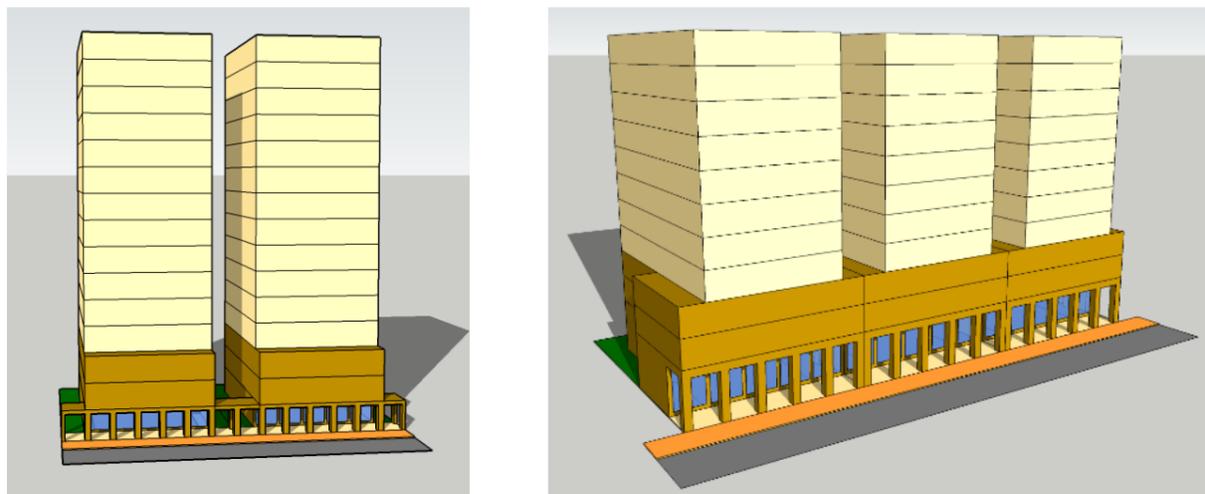


5.7 Frontage Profiles and Active Frontage



Frontage Profiles. To create a distinctive character and to enhance the legibility of the place, different types of frontage profile are recommended between major and minor streets.

5.5.1 Arcades along Arterial, Collector Streets & Main Pedestrian Links



5.5.2 Fore-Courts along Local Streets



Forecourts with small garden

Forecourts with stairs (buildings with half-basement / undercroft)

Active frontage. The frontage of the building is where 'the dialogue' between private and public realm occurred. A vitality of a place very much depends upon the quality of the frontage of the buildings in the areas in enlivening the streets. The more entrance, openings, balconies along a stretch of a street, the greater sense of safety and security will be experienced by the passer byers. **In principle, active frontage should be applied all around buildings' facade within a block and blank walls are forbidden.**



Blank

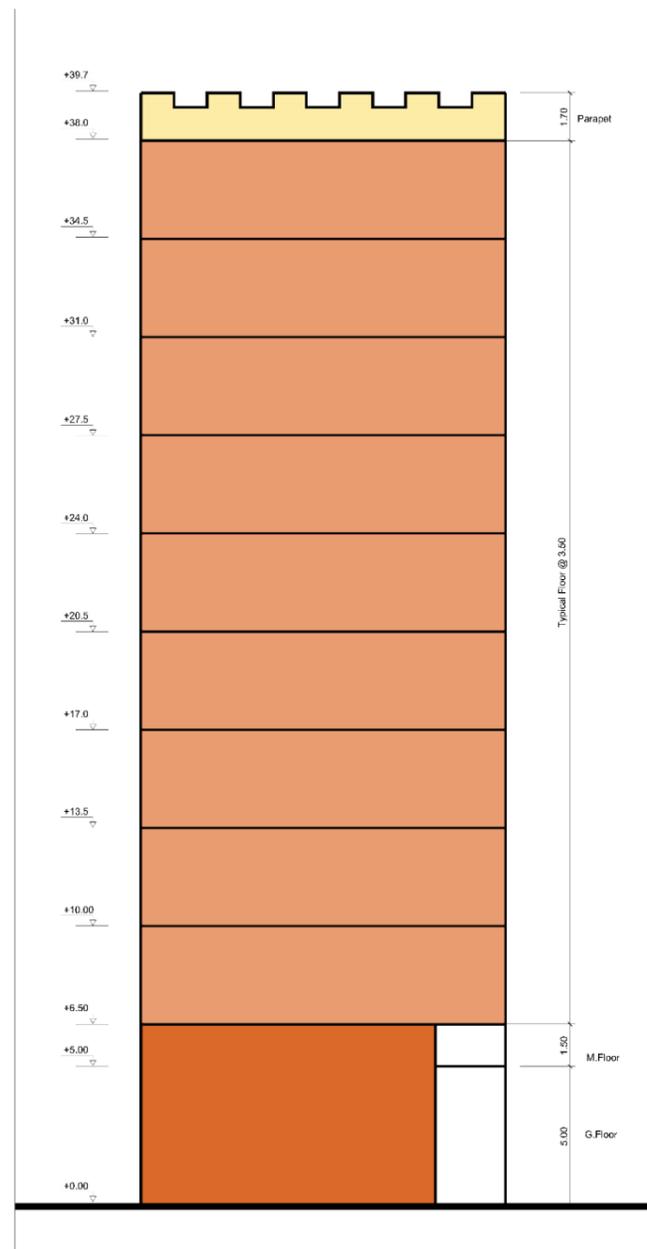
Single-side active

Both-side active

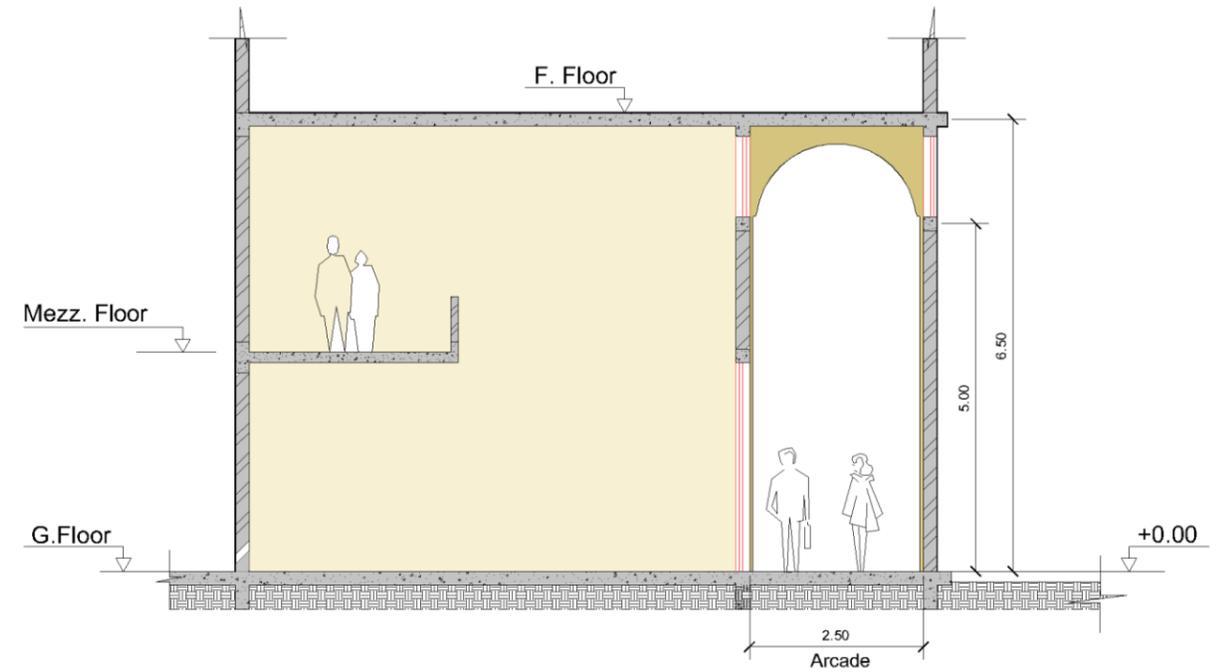
(Source: tandfonline.com)

5.8 Building Height

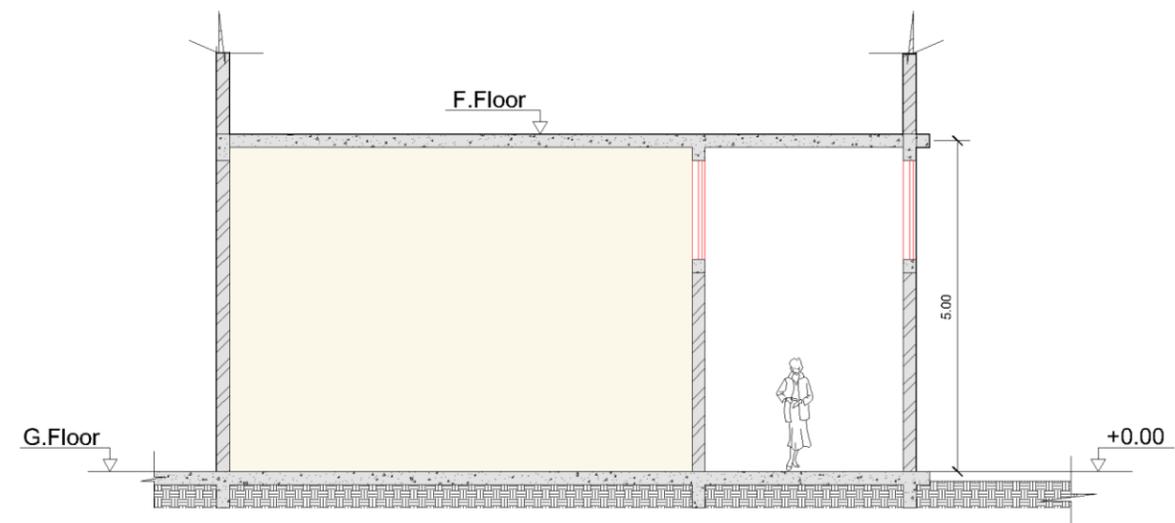
- To measure the height of the building, there are three (3) segments of the building which determine the overall height:
 - Base Part:** the height of the ground floor, whether it is G+M (6.5 m) or G (5 m), it depends on the location of the plot
 - Mid Part:** the typical floor height is maximum 3.5 m. Only buildings facing to Corniche have the exception for 4 m (maximum) on the podium floors
 - Parapet:** the parapet height is maximum 1.7 m



• Arcades with Mezzanine (G+M): 6.5 m



• Arcades without Mezzanine (G): 5 m

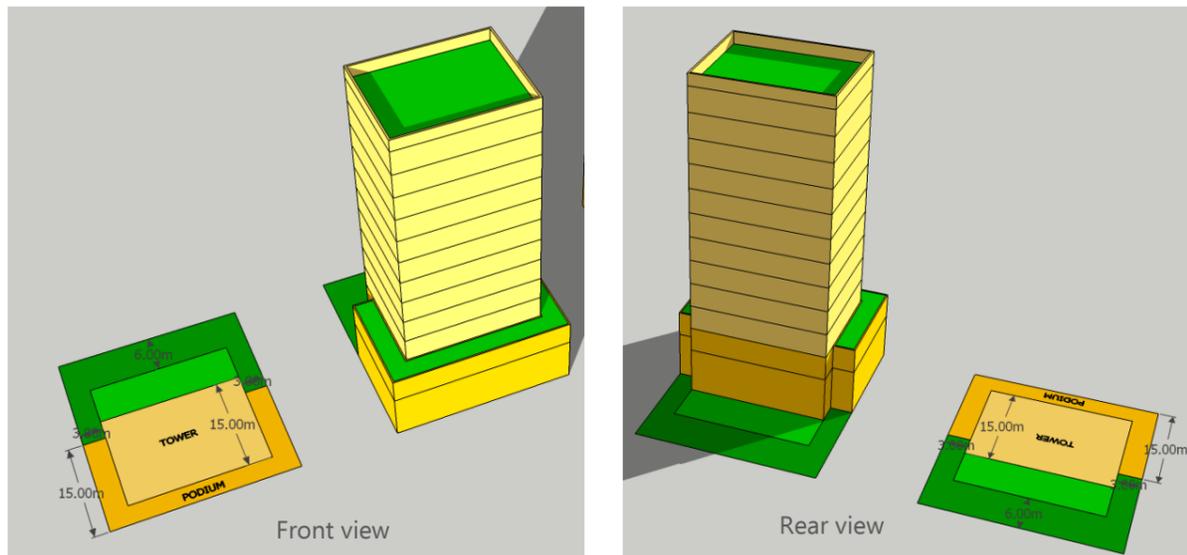


5.9 Building Envelope & Design Development

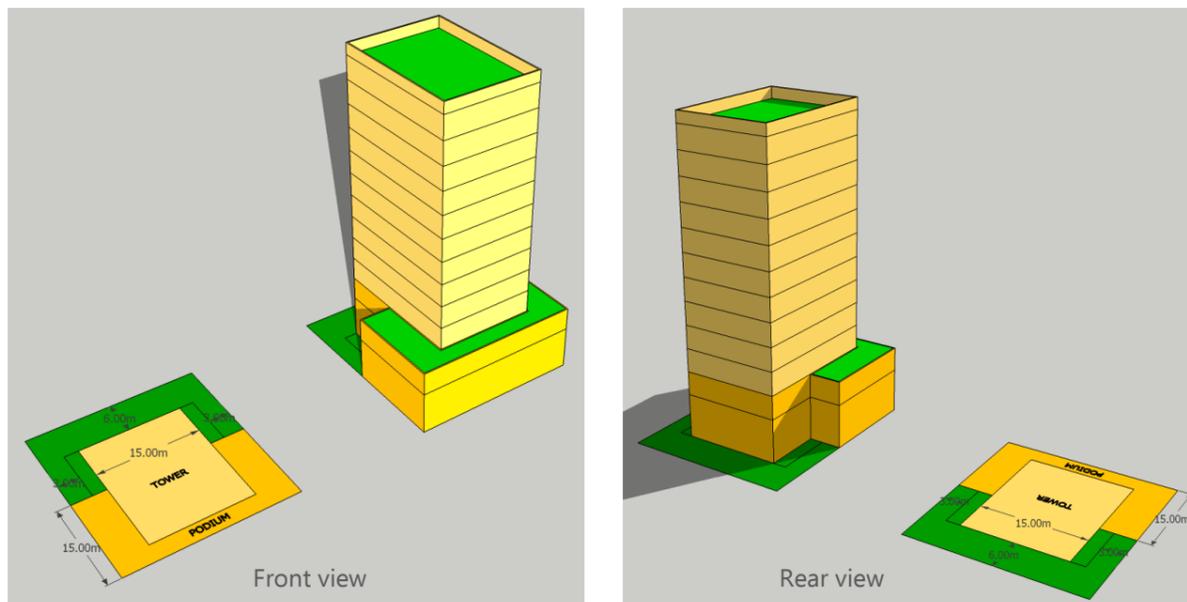
In the second page (page 2) of each Block Regulation, there are a series of diagrams to illustrate the building massing. However, it is not meant to be the exact design. In the design development stage, designers still have a room to lead a creative and innovative design.

Examples: Alternative designs with given setbacks and building disposition

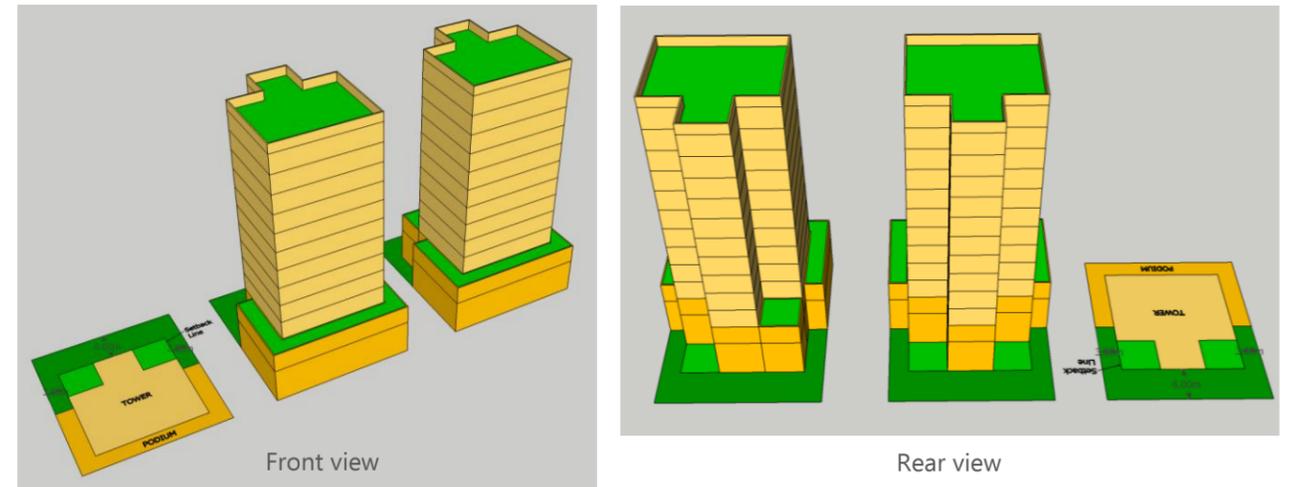
- Alt. Single Rectangular Tower 1



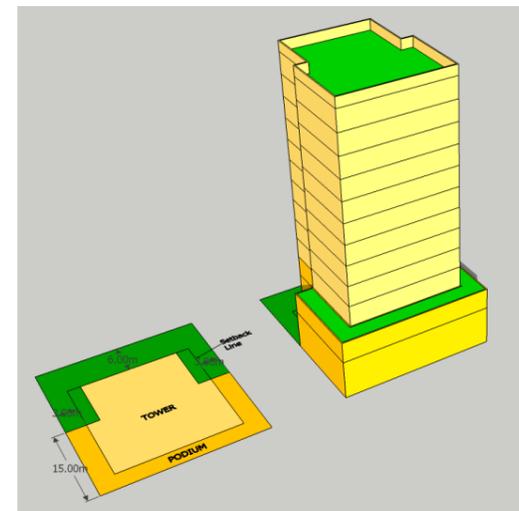
- Alt. Single Rectangular Tower 2



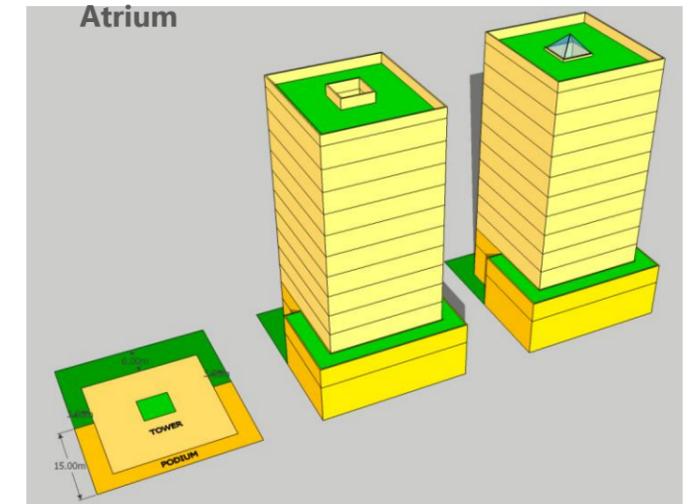
- Alt. Single T-Shape Tower 1



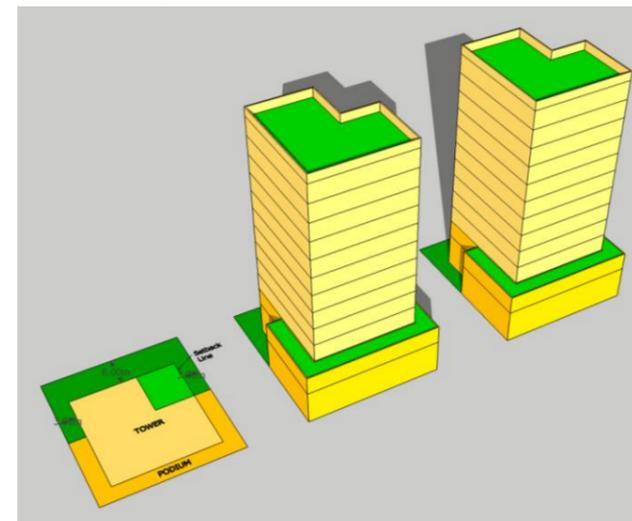
- Alt. Single T-Shape Tower 2



- Alt. Single Square Tower _Courtyard / Atrium



- Alt. Single L Shape Tower

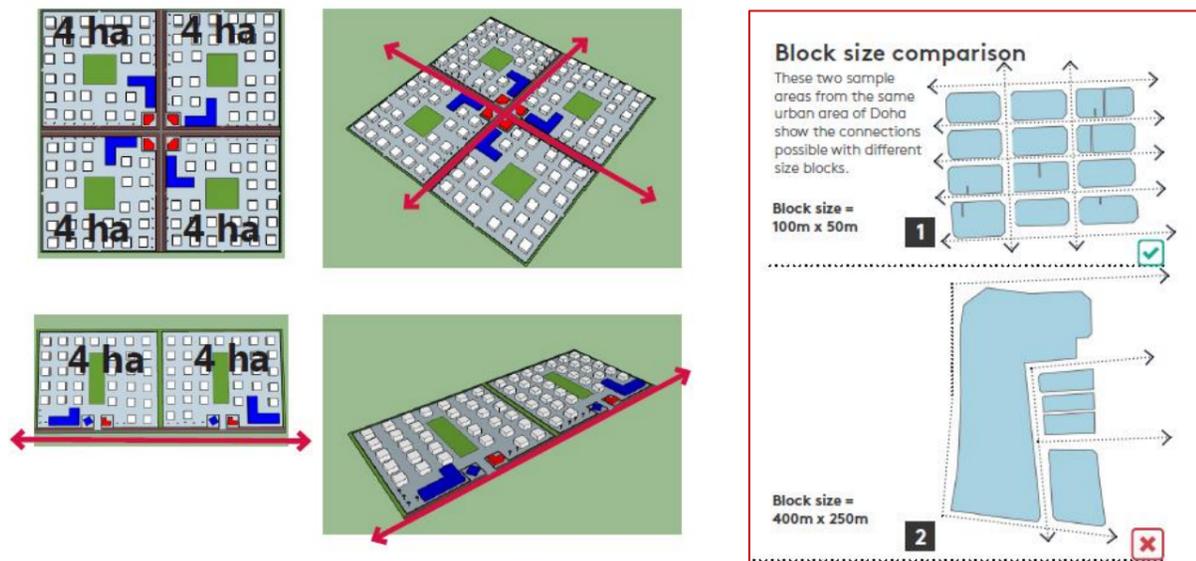


5.10 Parcelisation and Subdivision

New development should improve the quality of place, therefore it should demonstrate its roles in 'stitching', connecting and integrating to the surroundings.

Block Sizes

For large size of lands (>4 ha). To ensure the permeability and connectivity across the Centre, parcelisation should not exceed the acceptable walking distance, of which 200 meter maximum. Any development should set its parcels of development with maximum area approximately 40,000 sqm (200m x 200m).



For medium size of lands (<4 ha). To enhance the fine-grain character of the Downtown and in order to optimize road/building ratio and ensure permeability for pedestrians, an optimum block size of between 100m and 150m maximum length or depth should be achieved.

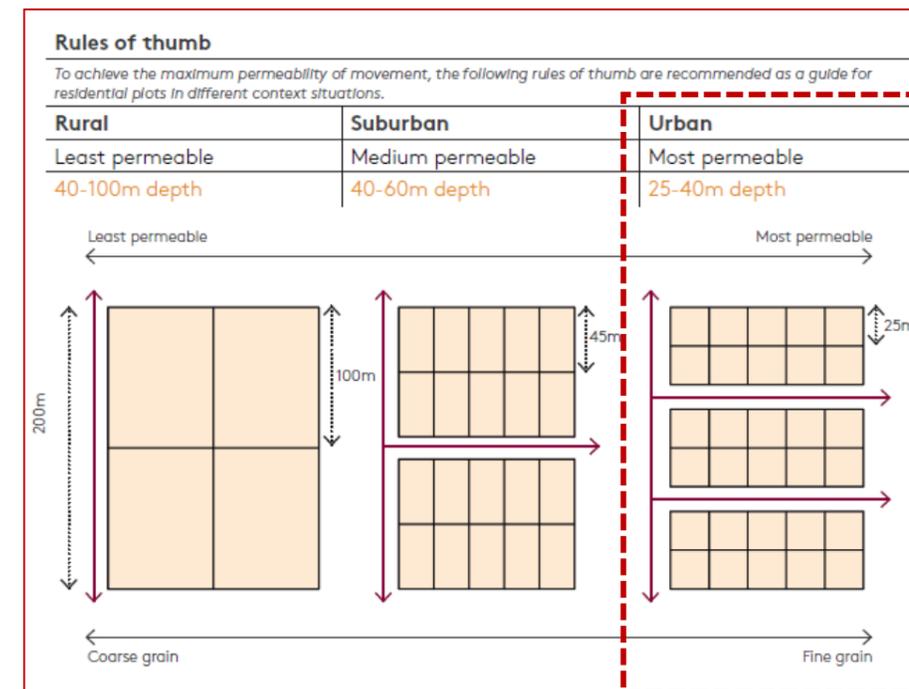
Block depths will vary according to the land use and building typology:

1. **For commercial/ mixed use independent block:** min.50 m depth
2. **For commercial/mixed use back-to-back block,** consider a service street in the middle between plots, to serve the 'back of the house' activities (disposal, loading and unloading etc). Minimum depth: 120m
3. **For residential/mixed use residential back-to back block:** min.60m

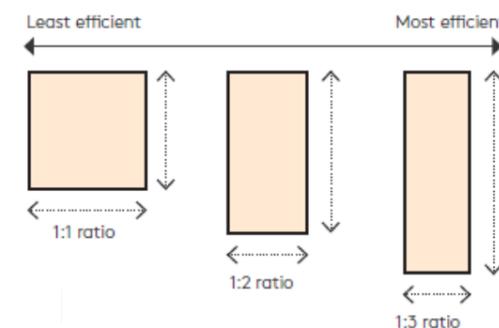
Plot Sizes

It is strongly recommended to use small plot sizes in the Downtown to create a fine grain of mixed uses.

Plan the plot sizes around walking distances to create a permeable network of streets. The smaller the plot and block, the more opportunity for through routes.

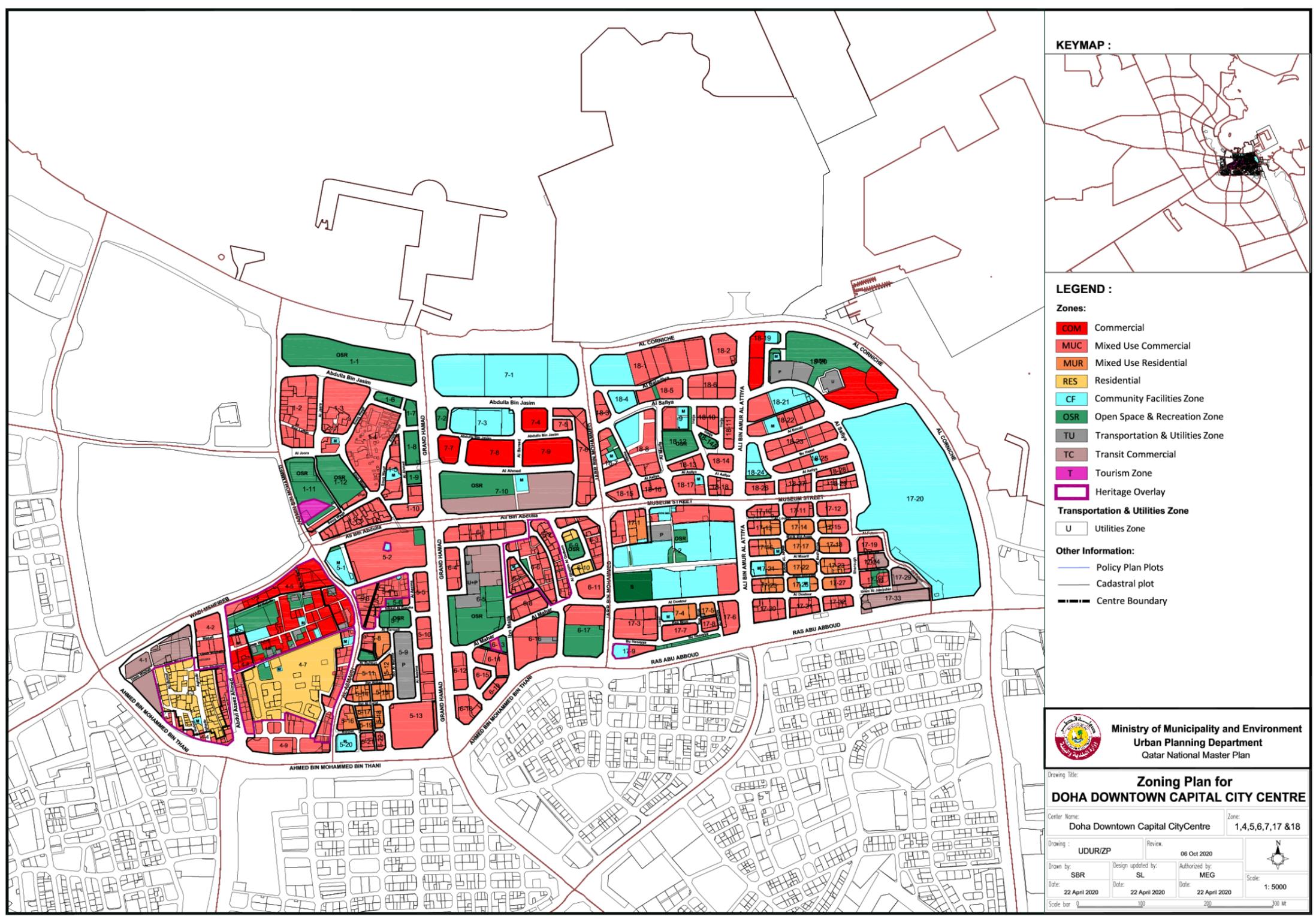


Plots should be of sufficient size to allow for a sufficient ratio between external area and floor plates. The following is the rules of thumb to design an affective ratio of plot:



A ratio of 1:3 width to depth should be achieved for optimum infrastructure/plot cost.

SECTION 6: ZONING PLAN



SECTION 7: KEY MAP FOR BLOCK NUMBERS

