



# Introduction to Auckland's CITY CENTRE URBAN FORM

Presentation by Auckland Council Plans & Places team to  
Auckland City Centre Advisory Board 27.3.2019

# Quality compact city vision

## Key principles of the Auckland Plan and the Auckland Unitary Plan

- Auckland will transition to a quality compact form over time (change will be over generations)
- Most growth (jobs and homes) to be within existing urban areas
- Rural-urban boundary anticipated staged release of greenfield land with timely infrastructure
- Decade by decade land supply that keeps up with population growth



Protects our  
Heritage



Shapes our skyline



**Auckland  
Unitary Plan**



Protects our natural  
environment and  
amenity



Shapes our  
buildings

# How the Plan works

**Overlay:** Heritage, landscapes, Part 6 and 7 matters

**Precincts:** geographic areas

## **Zones:**

Residential

Business

Rural

Open space

## **Auckland Wide Rules:**

Transport

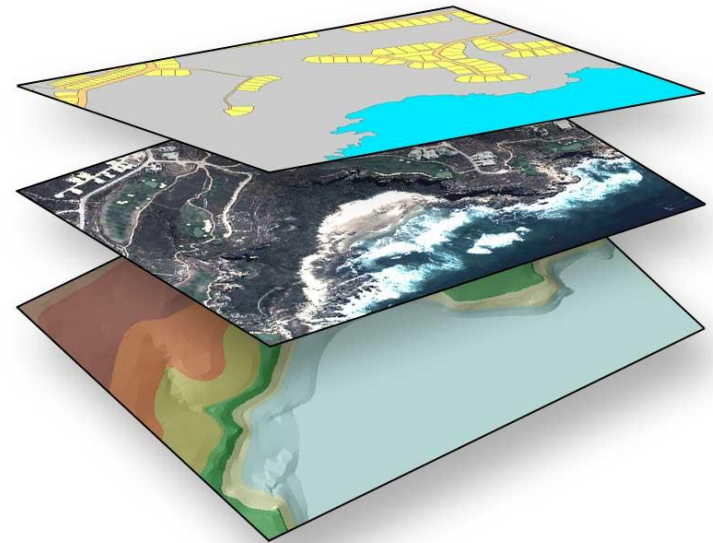
Earthworks

Subdivision

Noise

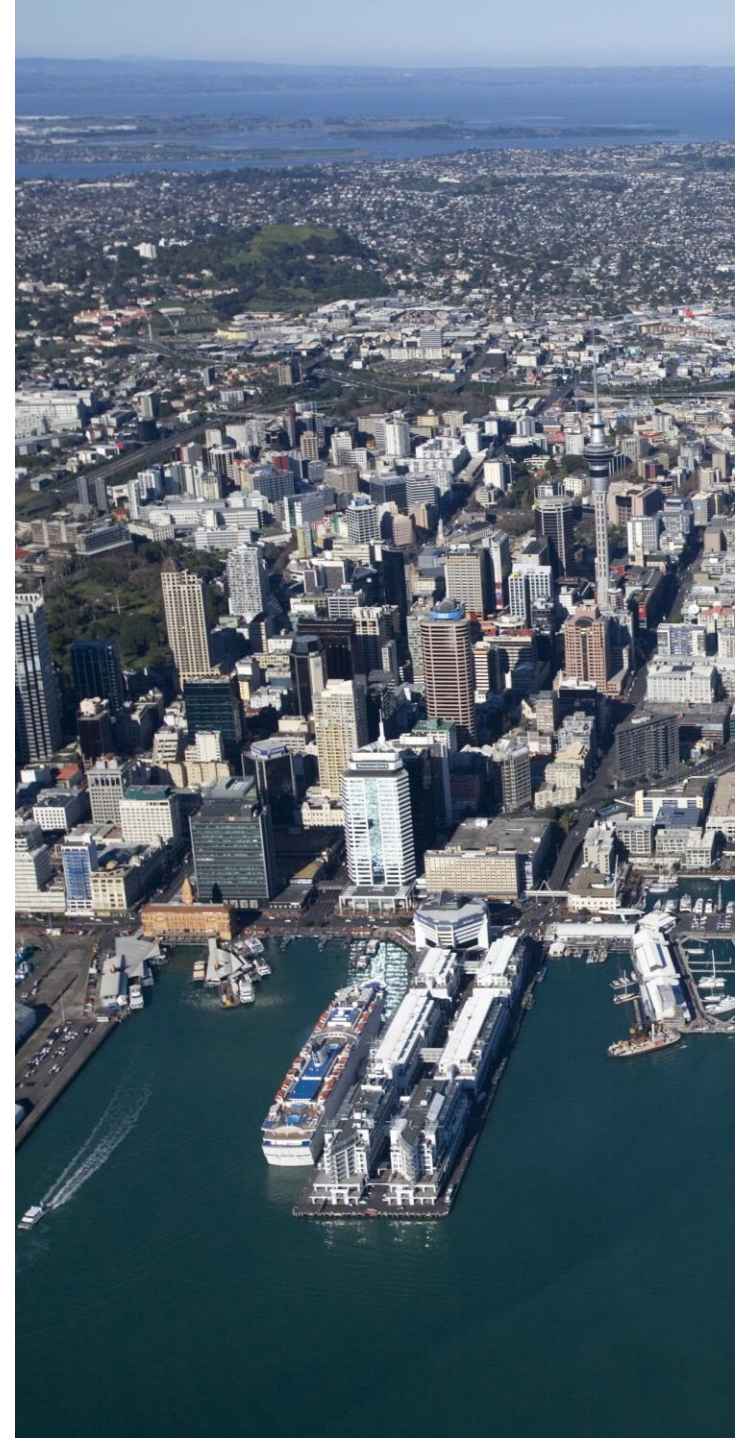
Regional

## **Coastal**



# City Centre Zone

- Top of the centres hierarchy
- Greatest intensity of development
- Development potential concentrated in the core, transitions to lower heights on the waterfront and fringe suburbs
- Unitary Plan manages the scale of development in order to protect:
  - heritage & special character areas
  - sunlight to parks and public spaces
  - significant views
  - enhance distinctiveness of precincts.
- Manages the form and scale of buildings to:
  - encourage high quality design
  - ensure new buildings successfully integrate with existing and planned built form
  - contribute to a high quality public realm
  - create an attractive and recognisable skyline



# What are other cities doing?

All the cities reviewed use a combination of all or some of the following controls:

- Minimum site size for towers (Toronto and Sydney only)
- Minimum/maximum podium height (all except Chicago)
- Minimum boundary setbacks above podium level (all)
- Minimum separation distances for two towers on the same site (all except Chicago)
- Maximum floor plate above podium level (all except Chicago)
- Maximum diagonal dimension or width dimension (all except Toronto and Chicago)
- Requirement for upper level setbacks (Chicago, San Fran, Sydney)

	BOSTON	CALGARY	CHICAGO	NEW YORK	SAN FRANCISCO	VANCOUVER
DENSITY	Regulated	Regulated	Regulated	Regulated	Regulated	Regulated
DENSITY BONUS	Regulated	Regulated	Regulated	Regulated	Regulated	Regulated
BUILDING HEIGHT	Regulated	Not Regulated	Not Regulated	Not Regulated	Regulated	Regulated
PODIUM HEIGHT	Max 27.5m	Not Regulated	Not Regulated	- Max 1.5X street width - Min 4 storeys	- Max 1 to 1.5 times street width	21m guideline
MIN HEIGHT OF FIRST STOREY	Not Regulated	Not Regulated	4m	4m	Not Regulated	Not Regulated
FRONT YARD SETBACK	In line with 80% adjacent blocks	- In line with adjacent buildings - 6m setback in residential areas	- Build-to streetwall - 5m or average of adjacent lots in residential areas	- In line with adjacent buildings	- Build-to streetwall - 1.5m in residential areas	- Build-to streetwall - 2m or 4m in residential areas
MIN FRONT YARD STEP-BACK ABOVE PODIUM	- 3m min where setback required - Skyplane setbacks	Not Regulated	Not Regulated	3m above podium plus skyplane setbacks	3m where setbacks required	Not Regulated
MIN SIDE AND REAR YARD STEPBACKS	Not Regulated	- 6m from 5-8 storeys - 12m above 8 storeys	- No side - 9m rear	- 6m if wall - 9m if window	11m downtown	12.5m
MIN TOWER SEPARATION DISTANCE	38m for elements above 47m in height	24m	Not Regulated	- 12m wall-to-wall - 15m wall-to-window - 18m window-to-window	35m Rincon Hill	25m
MAX FLOORPLATE SIZE	2,090m <sup>2</sup>	- 650m <sup>2</sup> residential - No max for commercial	Not Regulated	- 40% of lot covered by tower	- 1,600m <sup>2</sup> lower tower, 1,100m <sup>2</sup> upper tower - Max facade and diagonal lengths	- 604m <sup>2</sup> - Max tower width and depth
MAX SHADOW ON DESIGNATED PROTECTED AREAS	- Max 2h 8am-2:30pm Mar 21 to Oct 21 - 1 acre in major parks exceeded	- Max 2h 10-4 at equinox - Max 20m into major parks 10-4 at equinox	Not Regulated	Not Regulated	No new shadows on parks	Max 2 hours from 10-4 at equinox
WIND STUDIES REQUIRED	Regulated	Discretionary	Discretionary	Discretionary	Regulated	Discretionary
VIEWS PROTECTED	Not Regulated	Guideline	Guideline	Regulated	Regulated	Regulated
TRANSPARENT FACADES	Guideline	Min 2/3 facade length	Min 60%	Min 50%	Guideline	Guideline
WIDTH OF FRONTAGES	Lobby 12m max	7.5m guideline	8-12m guideline	Lobby 12m or 25% max	Not Regulated	Not Regulated
ENTRANCES FROM STREET	Not Regulated	Regulated	Regulated	Regulated	Regulated	Regulated



Boston



New York







Vancouver



San Francisco





Sydney

# CITY FORM



Boston



Vancouver



San Francisco



New York

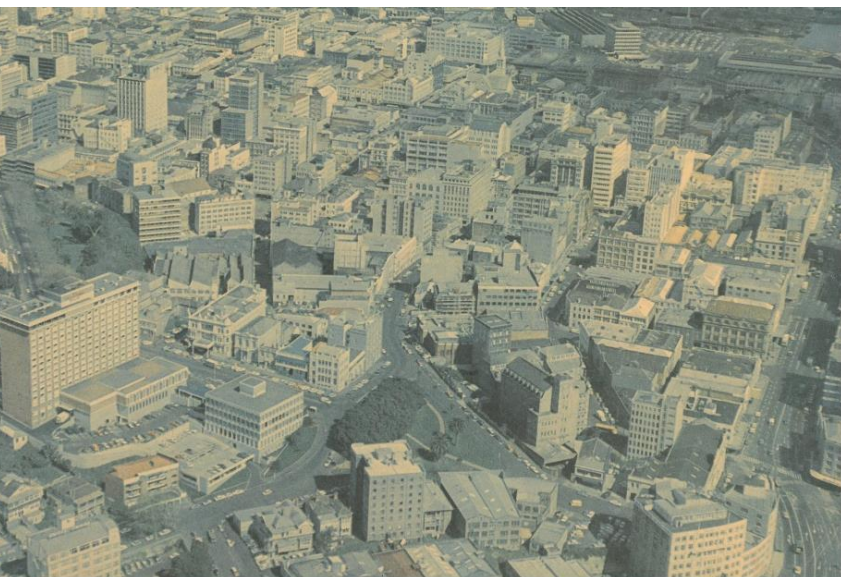
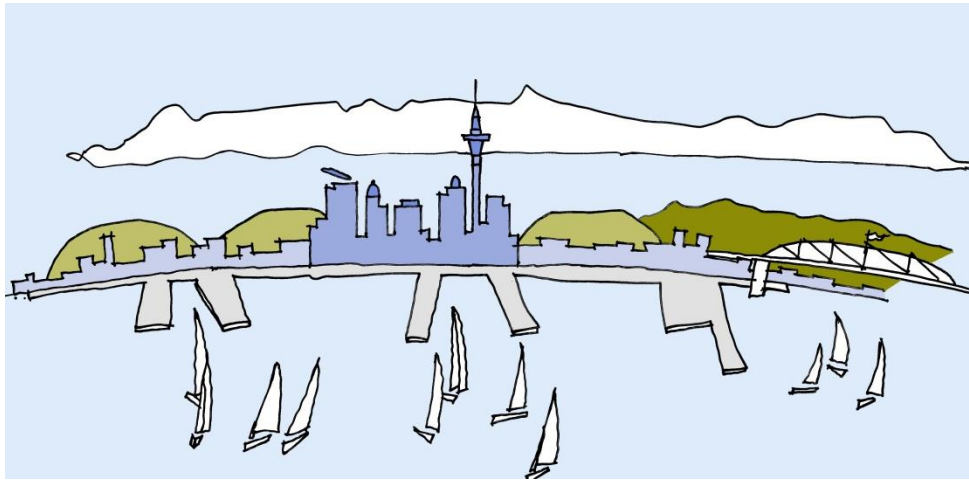


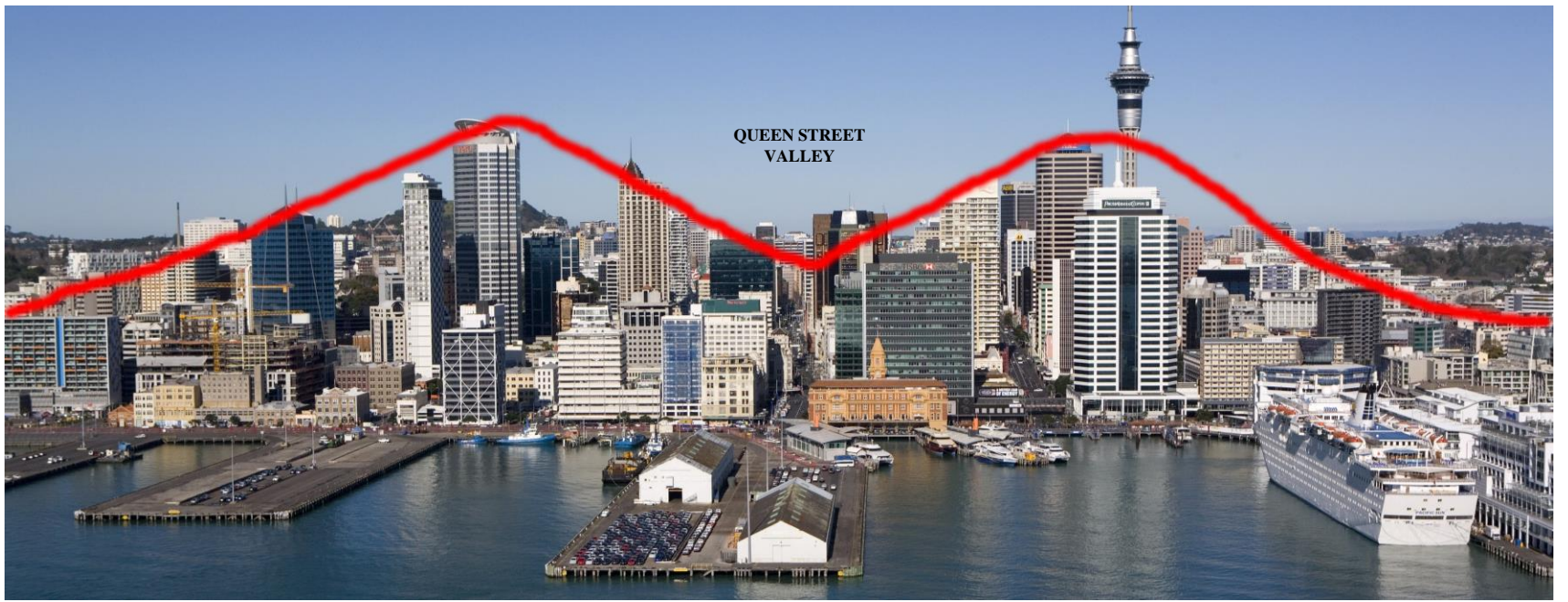
Sydney



Auckland

# *What is Auckland's identity?*





## Unitary Plan - City Centre urban form policies

H8.3 (29) Enable the **tallest buildings and the greatest density of development to occur in the core** central business district.

H8.3 (30) Manage adverse effects associated with building height and form by:

- (a) **transitioning building height and development densities down to neighbourhoods adjoining the city centre and to the harbour edge;**
- (b) protecting sunlight to identified public open spaces and view shafts;
- (c) requiring the **height and form of new buildings to respect the valley and ridgeline form of the city centre** and building design to be complementary to existing or planned character of precincts;
- (d) manage the scale, form and design of buildings to:
  - (i) avoid adverse dominance and/or amenity effects on streets and public open space; and
  - (ii) encourage well-designed, slender towers on sites identified within the special height area.

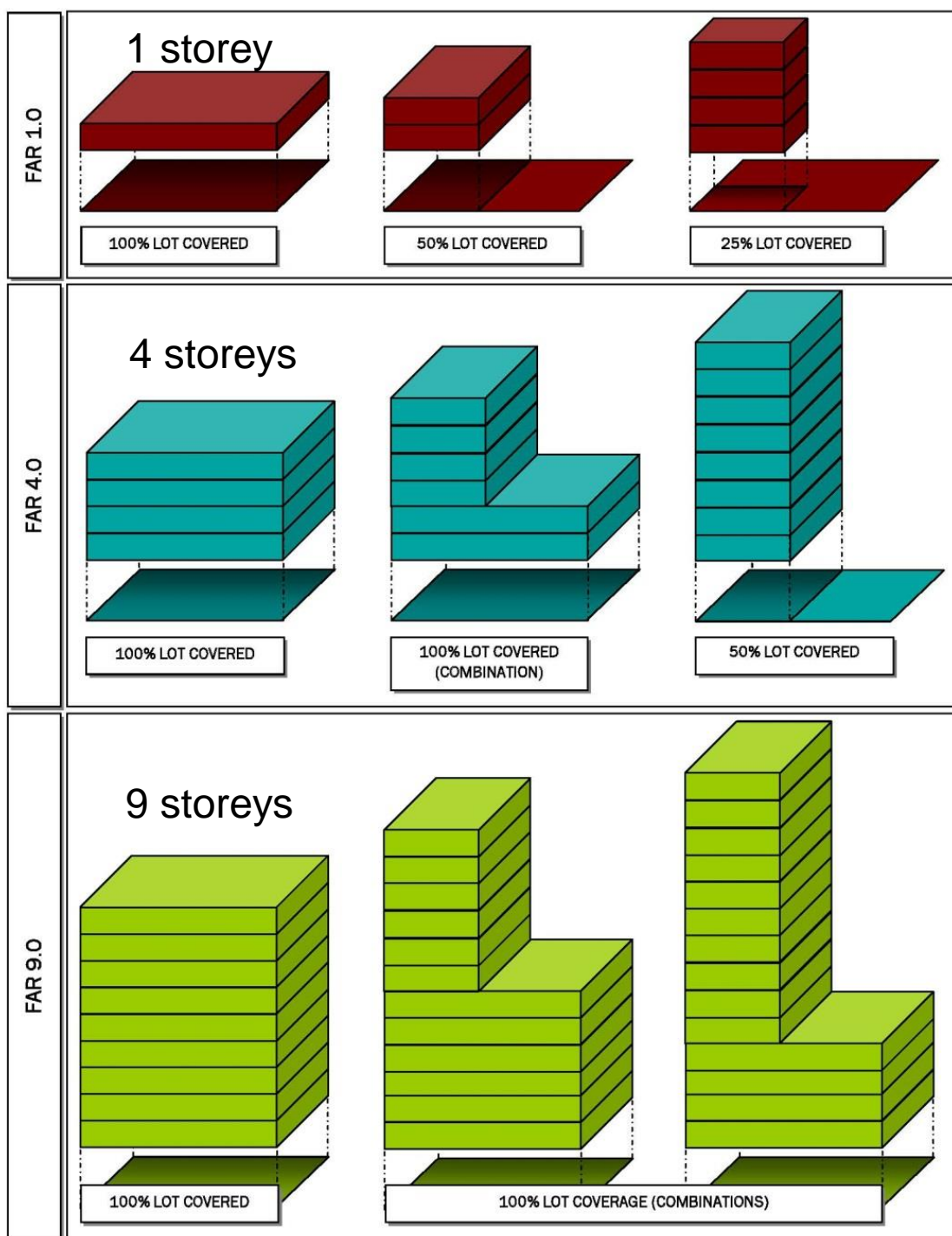
# Key rules that influence built form

- Floor area ratio – allocated development area for each site
- Height
- Sunlight and view protection
- Building design





**Floor area ratio: the development potential of a site (100% site coverage + number of storeys allocated per site)**



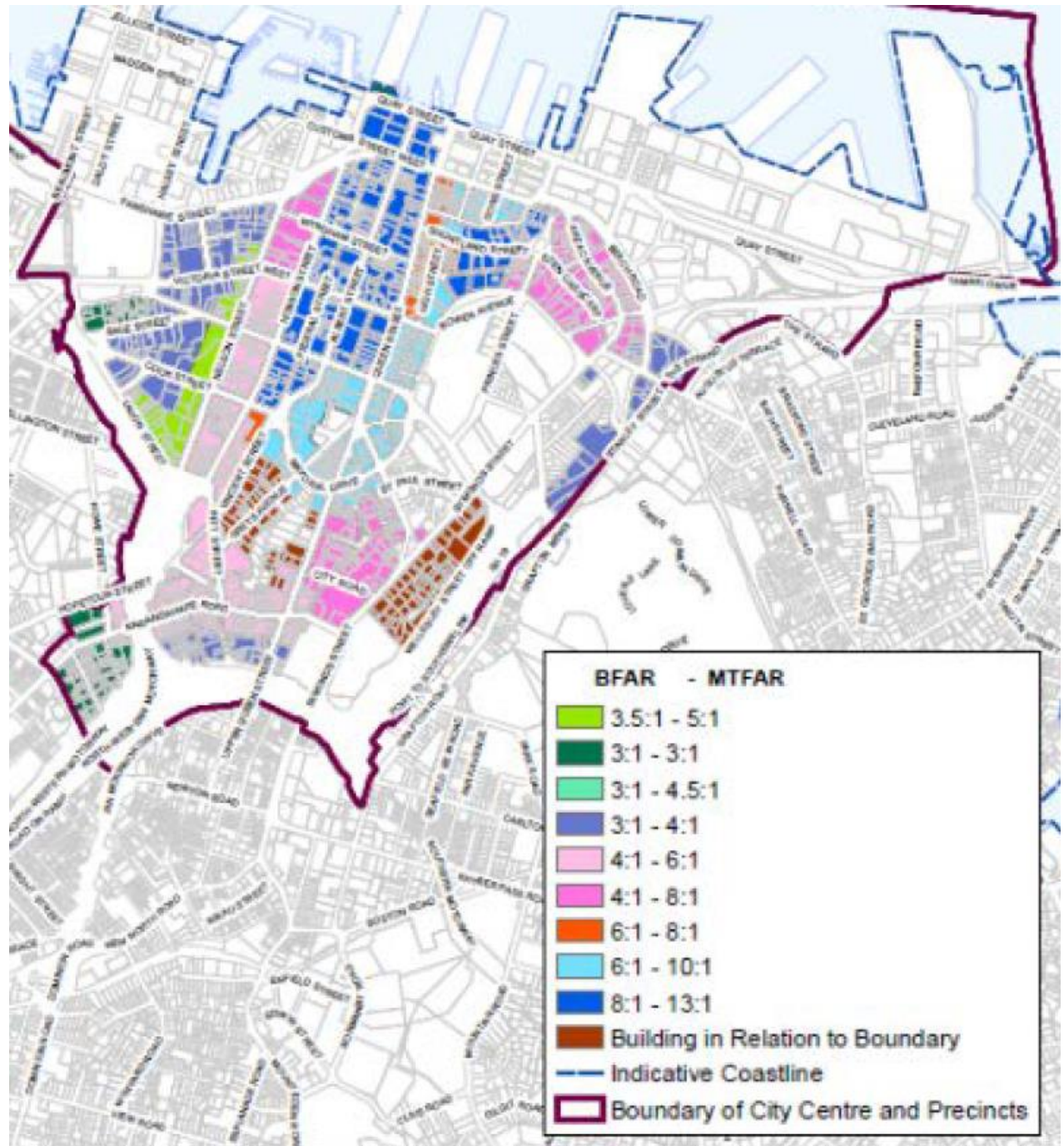
# Floor area allocation for each site

2 amounts

- Basic BFAR

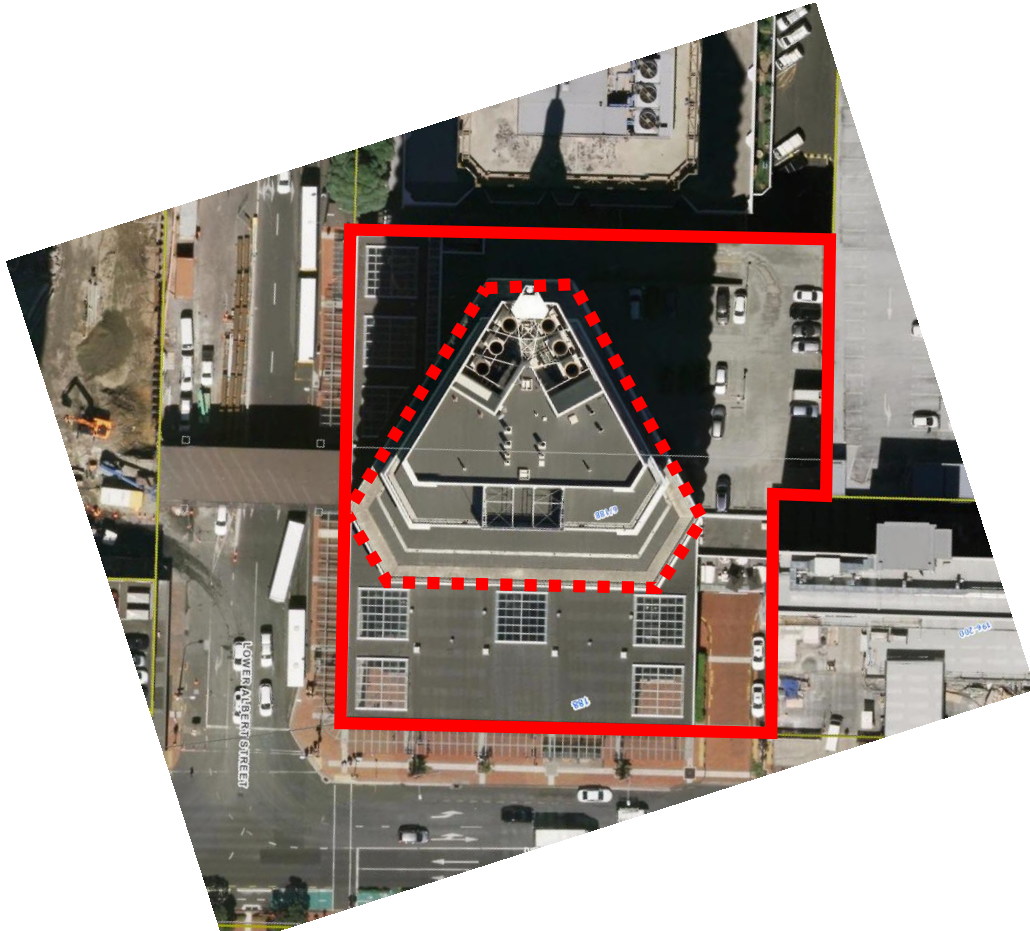
- Maximum

MTFAR (includes bonuses)



# PWC Tower

Floor area ratio: 13:1 (using bonuses)  
Up to 13 stories worth of floor area across site but PWC used floor area for a tower and podium instead



## **Bonuses for extra Floor Area**

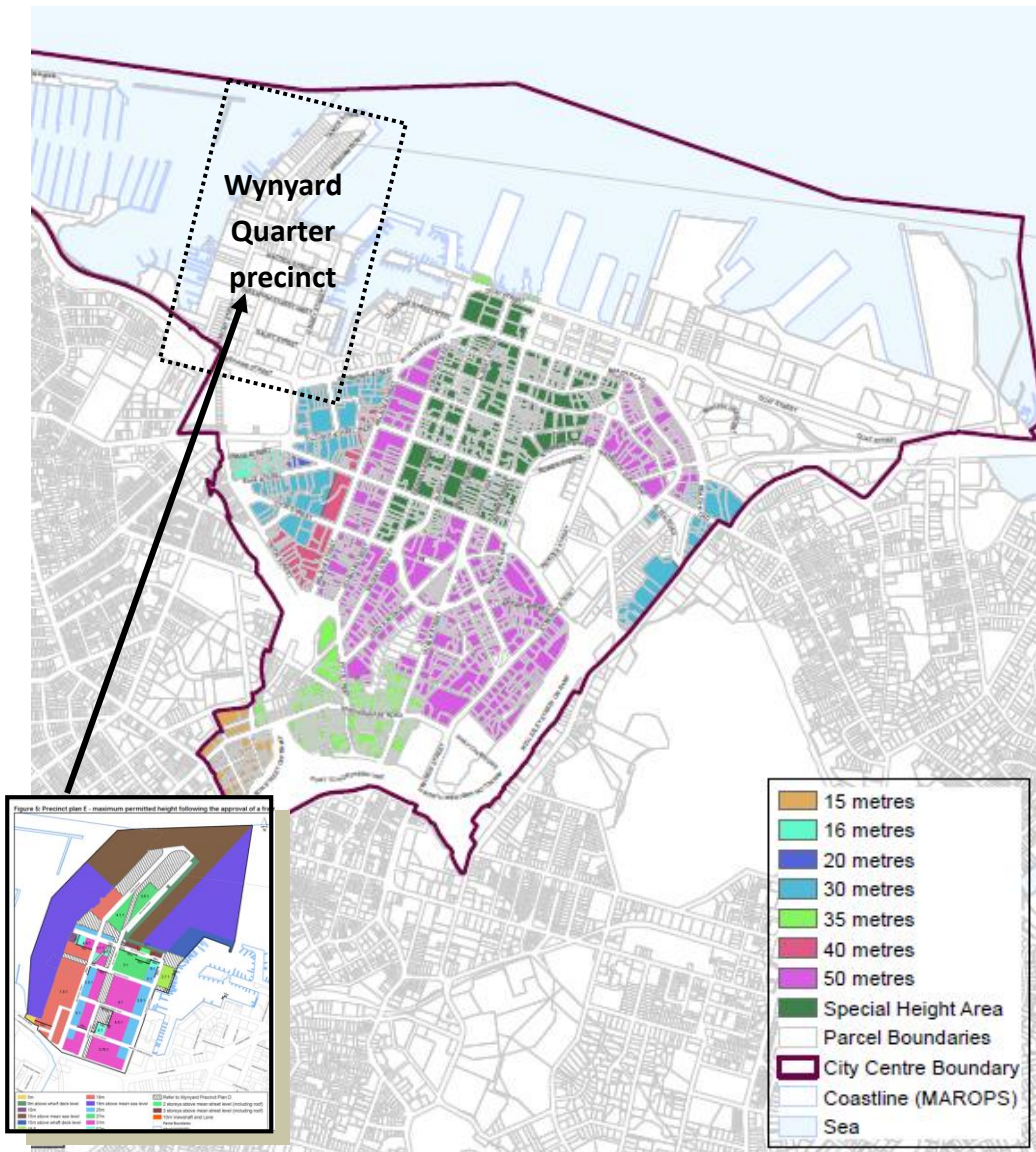
It Purpose: manage the overall scale of development in the city centre.

**Encourages developments to be designed well, contain activities or provide features that provide a benefit to the public.**

The bonuses that can be applied for to qualify for more floor area include:

- heritage protection
- through-site-links
- public art
- public open space
- tower light and outlook
- escalators
- residential provision

# Height

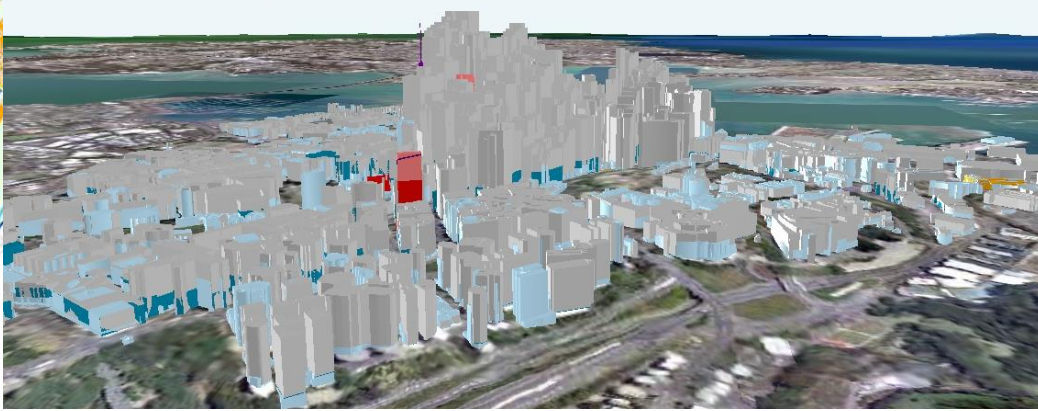
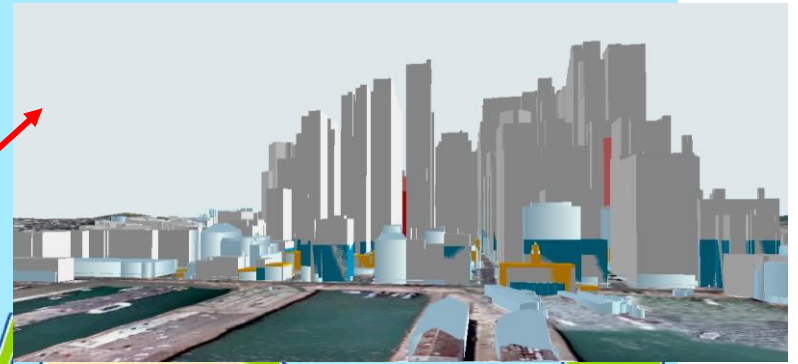
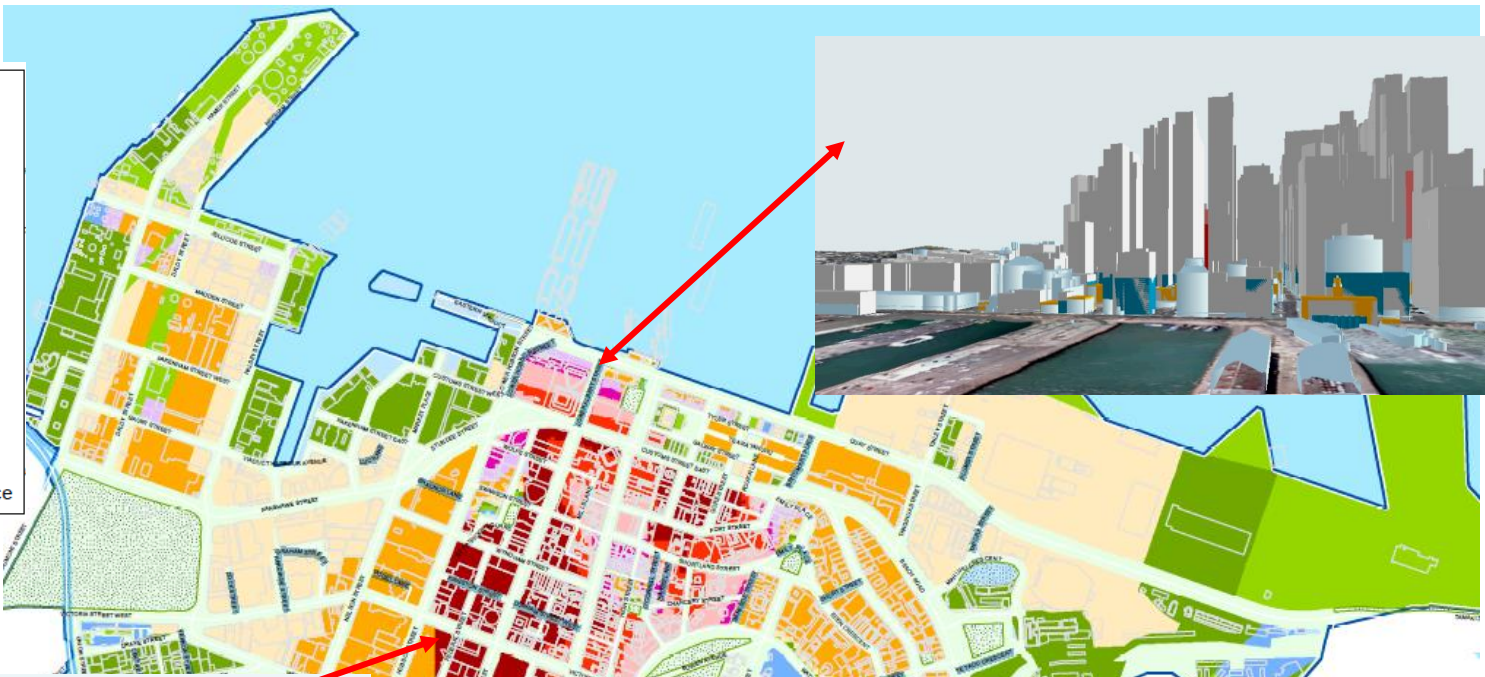


- All building heights are constrained by either one or a combination of the following - identified height limits, sunlight and view protection controls, Floor Area Ratio, site dimensions
- General height limits beyond Special Height Area – 50m transitioning to around 20-30m at the periphery
- Building height and form along the waterfront is managed by specific precinct controls

**Legend**

**Height(m)**

- 7-2
- 2-5
- 5-10
- 10-15
- 15-20
- 20-30
- 30-50
- 50-75
- 75-100
- 100-150
- 150-200
- 200-400
- Parks & OpenSpace

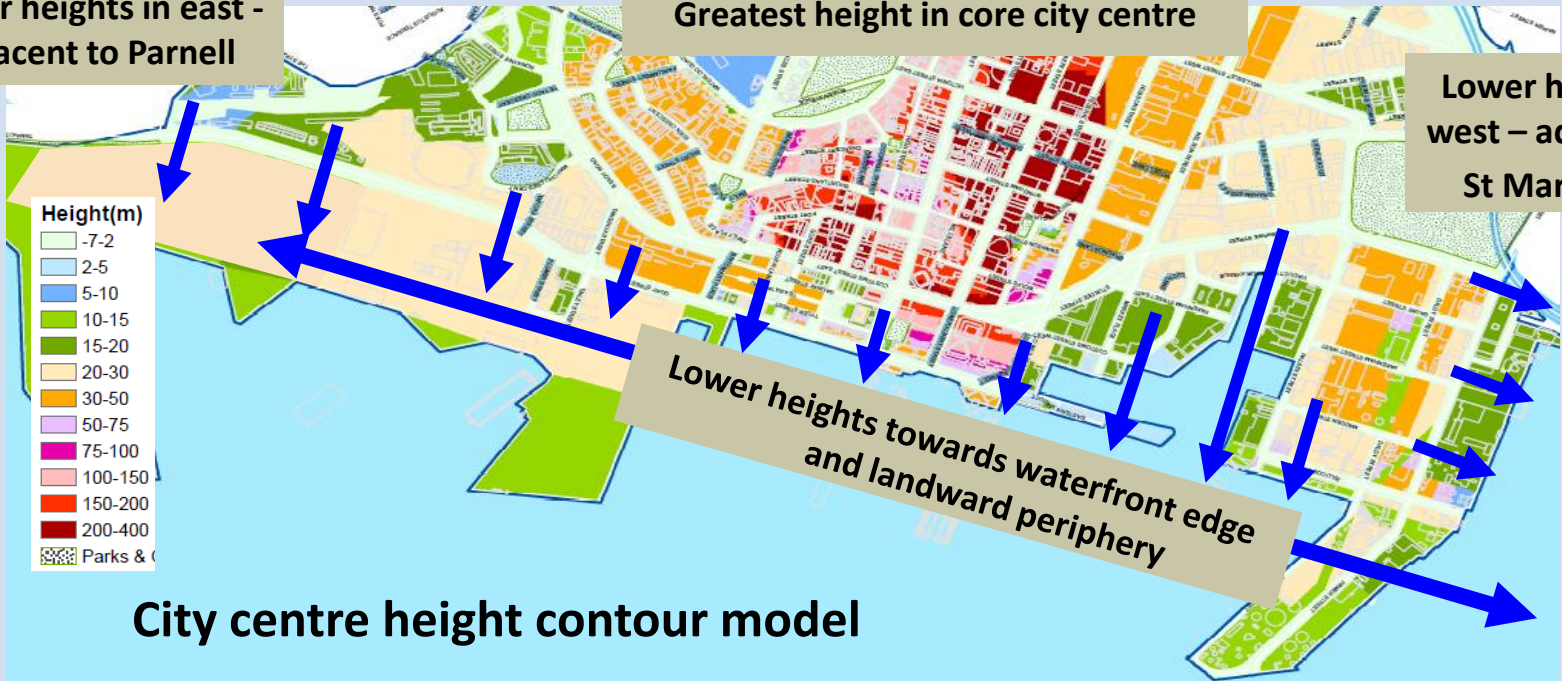




Lower heights in east - adjacent to Parnell

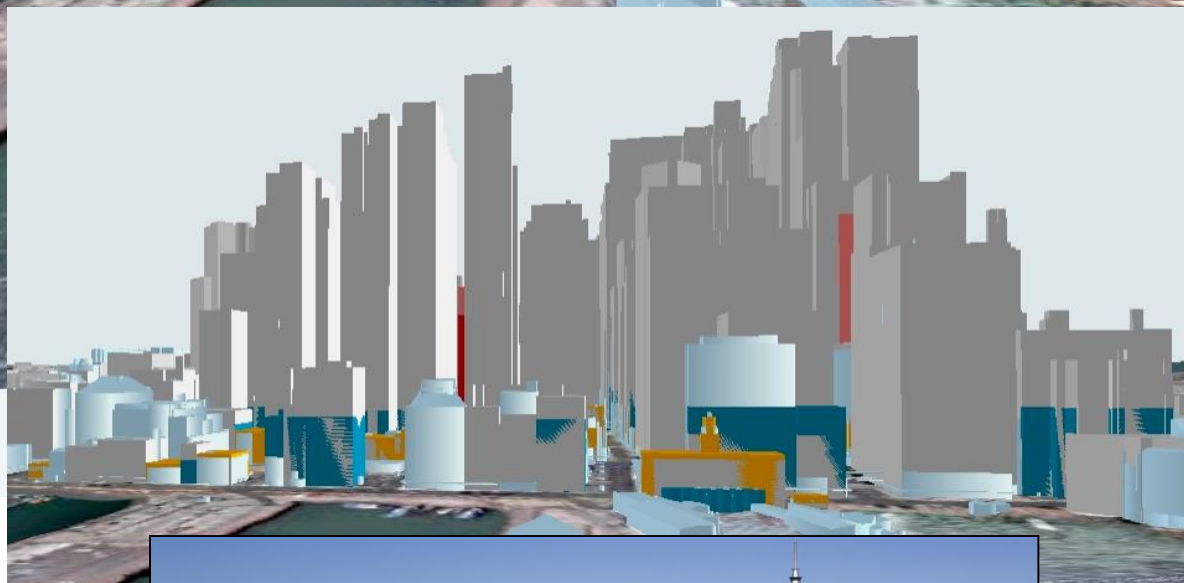
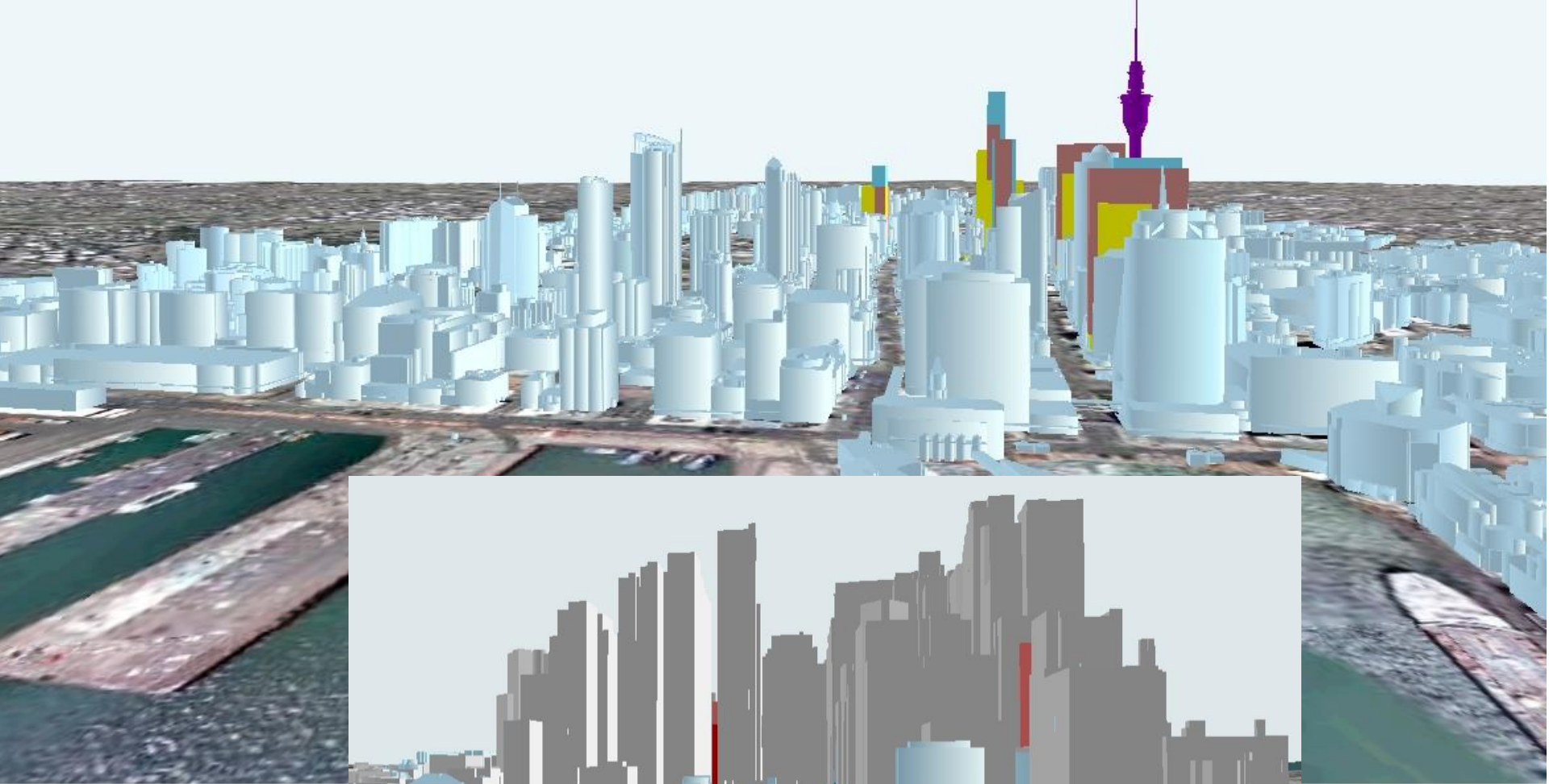
Greatest height in core city centre

Lower heights in west – adjacent to St Mary’s Bay



Lower heights towards waterfront edge and landward periphery

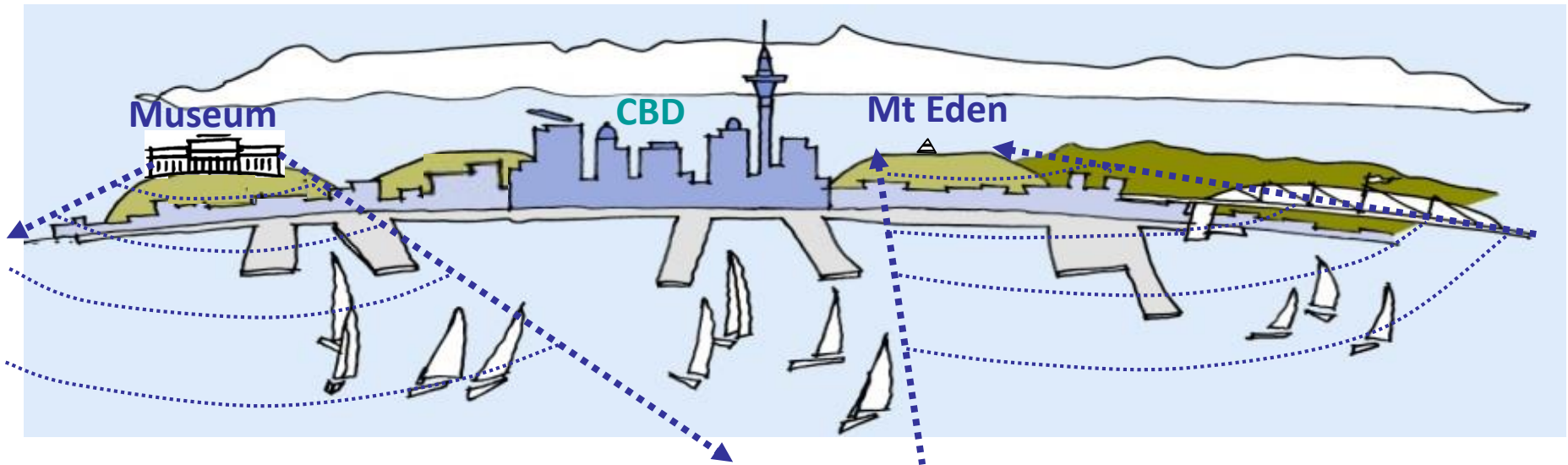
City centre height contour model





# Viewshafts

- Greatest building heights concentrated in core city centre between citywide viewshafts
- Tall height transitions to lower heights towards the waterfront and landward periphery – view protection to Museum in east and Maungawhau Mt Eden in west suppresses height
- Specific height strategies for individual precincts e.g. Britomart, Wynyard, Viaduct Harbour



**E10**



# SUNLIGHT PROTECTION for public places

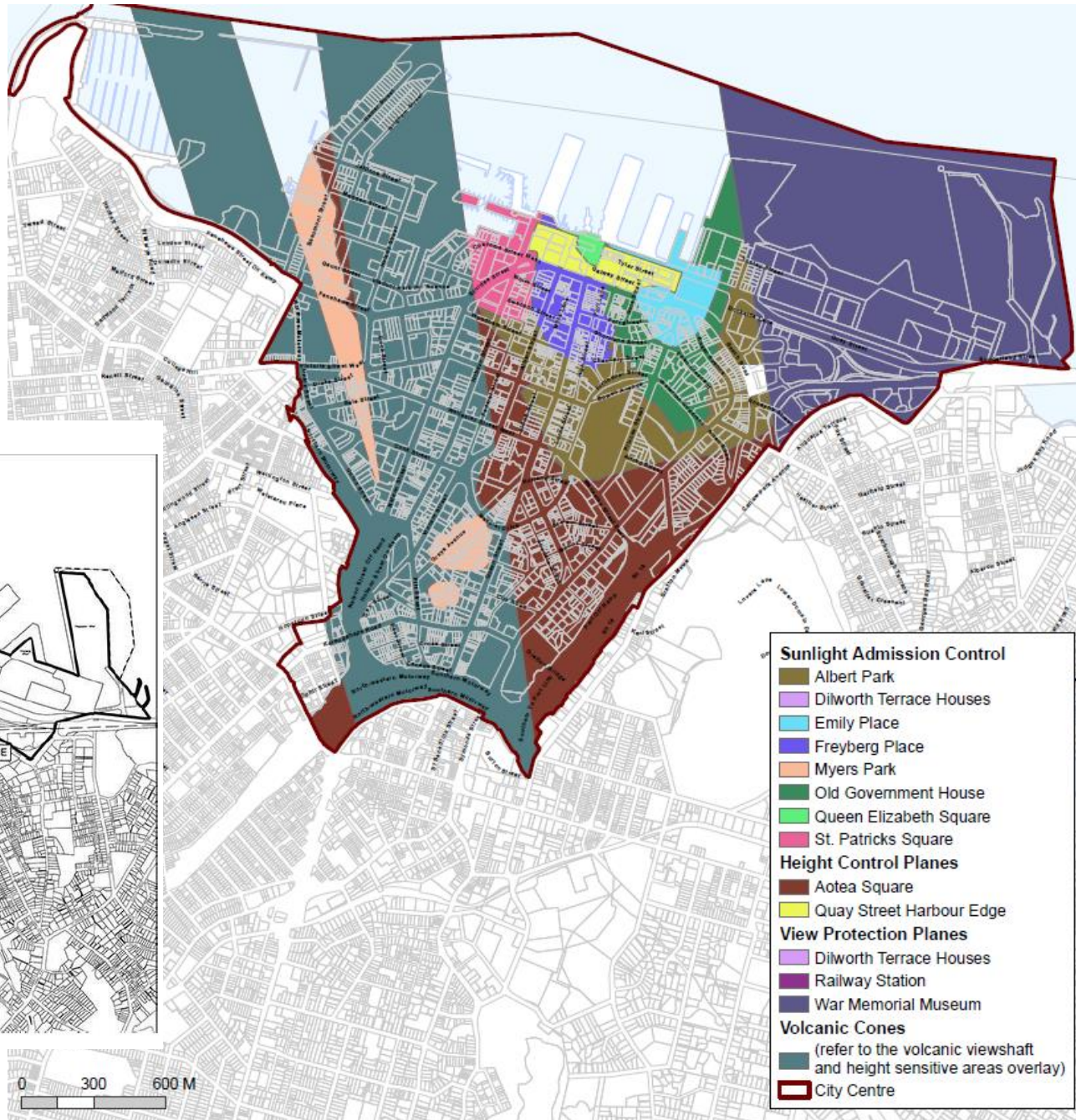
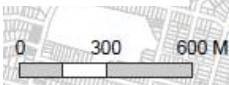
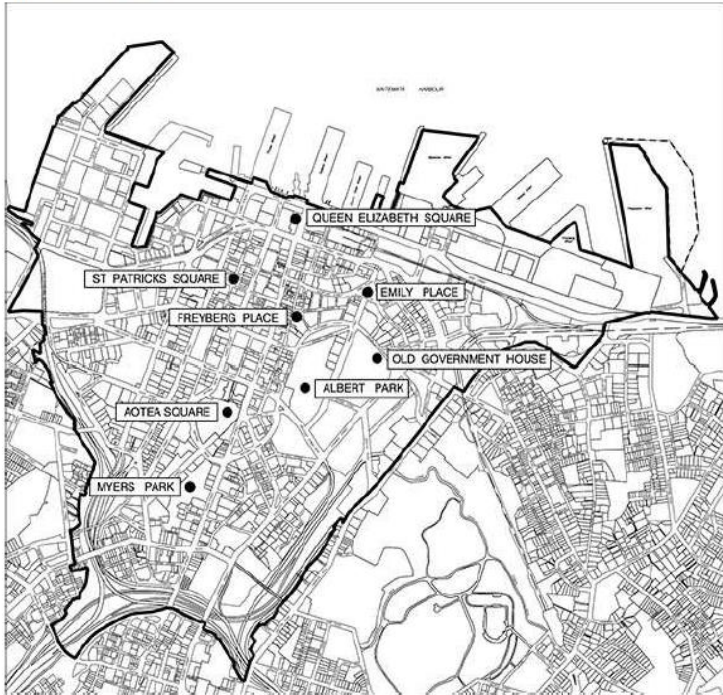
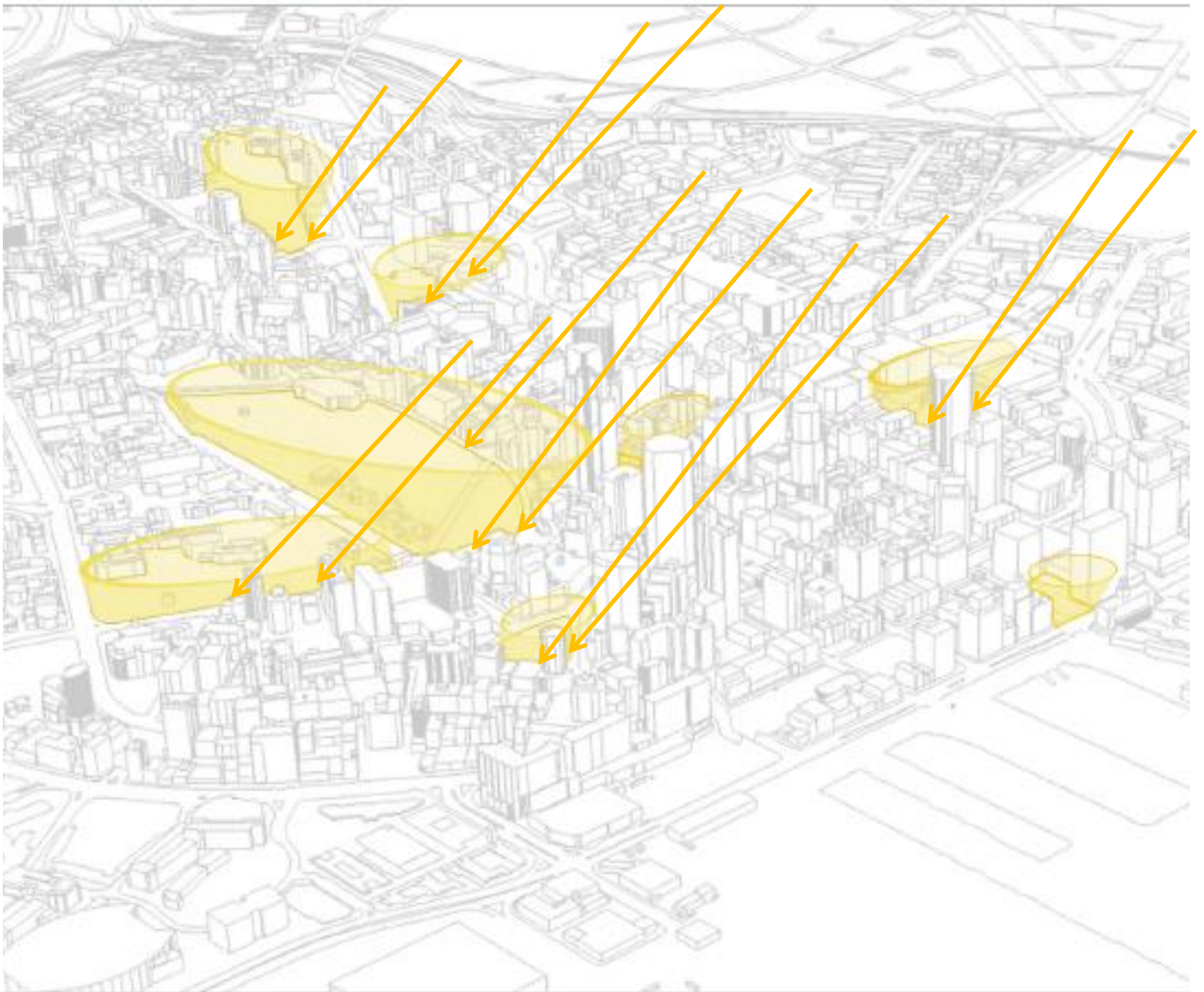
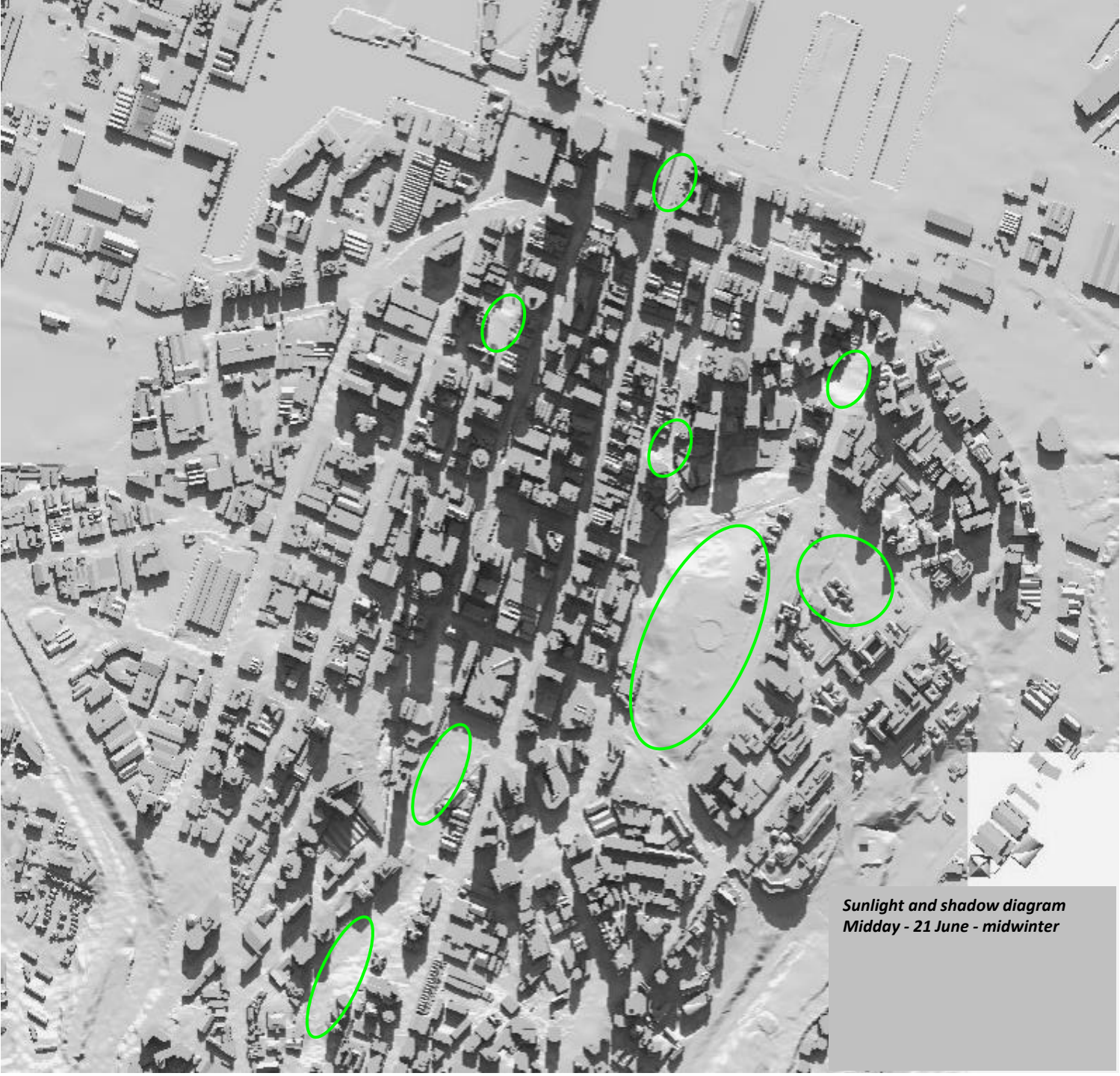


Figure 1: Locations







*Sunlight and shadow diagram  
Midday - 21 June - midwinter*

# Albert Park

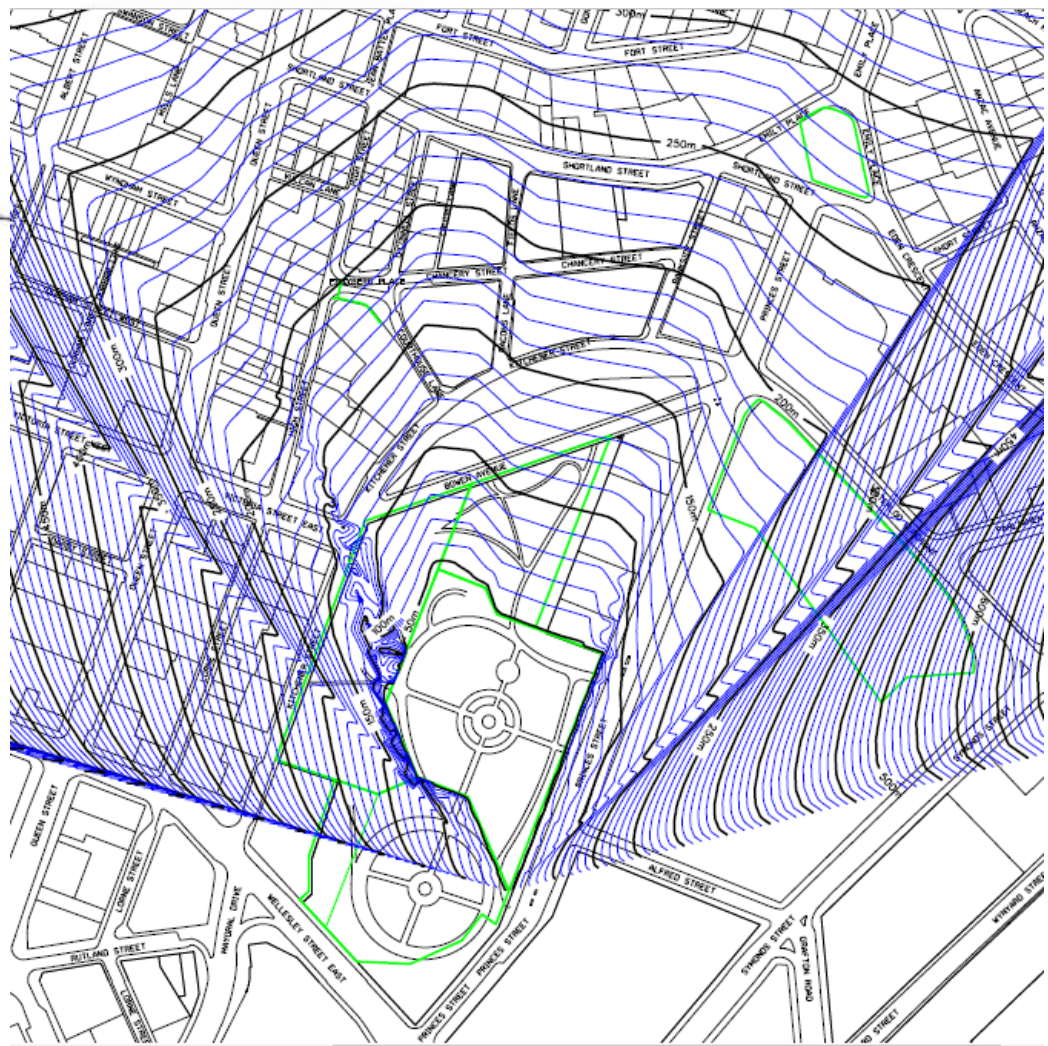


Figure 6: Admission of sunlight to Albert Park

Sunlight required on this area  
 November 1 to January 31  
 Time: 11.00am - 1.00pm  
 October 1 to March 15  
 Time: 11.00am - 12.30pm

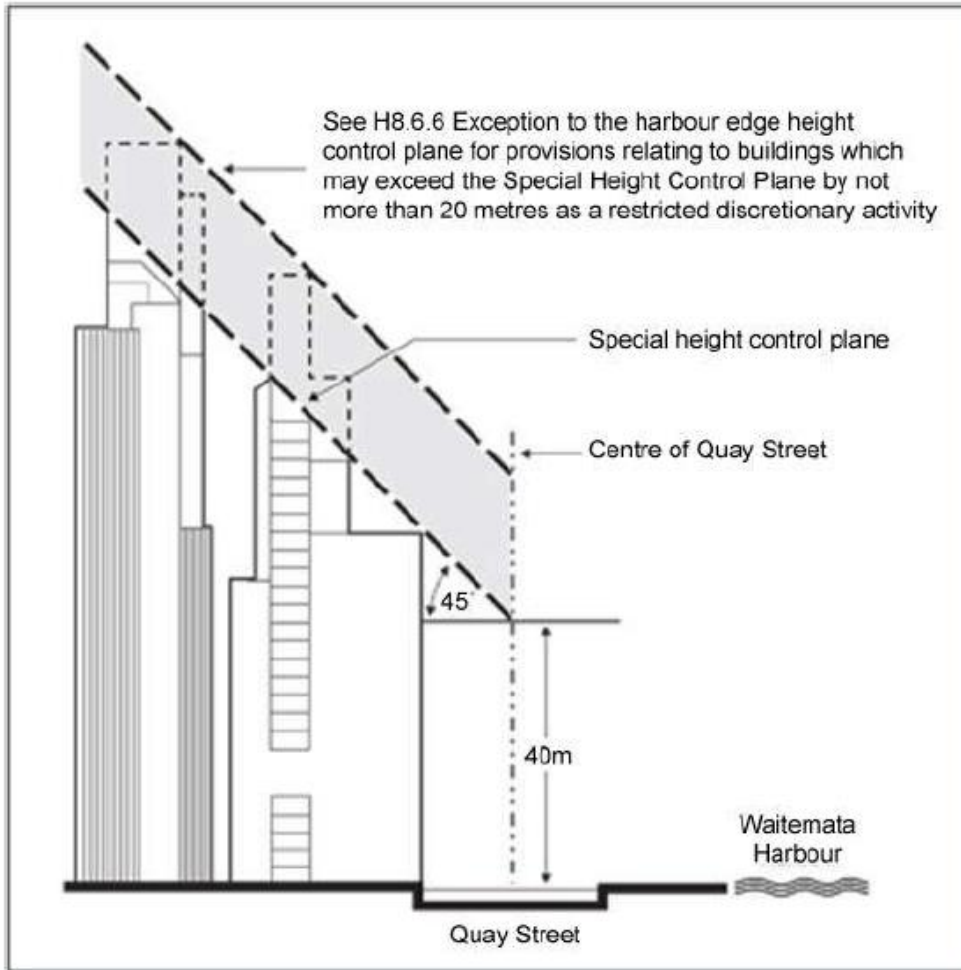
Sunlight required on this area  
 September 1 to April 15  
 Time: 10.00am - 12.00 noon  
 October 1 to March 15  
 Time: 9.00am - 2.00pm

Sunlight required on this area all year  
 11.00am - 2.00pm  
 August 15 to April 30  
 Time: 10.00am - 2.30pm  
 October 1 to March 15  
 Time: 9.00am - 3.00pm



# Harbour Edge Height Control

Figure H8.6.6.1 Harbour edge height control plane





# Protected sight lines

## Appendix 9 Business – City Centre Zone sight lines

Figure 16: Sight line 16

Figure 16a

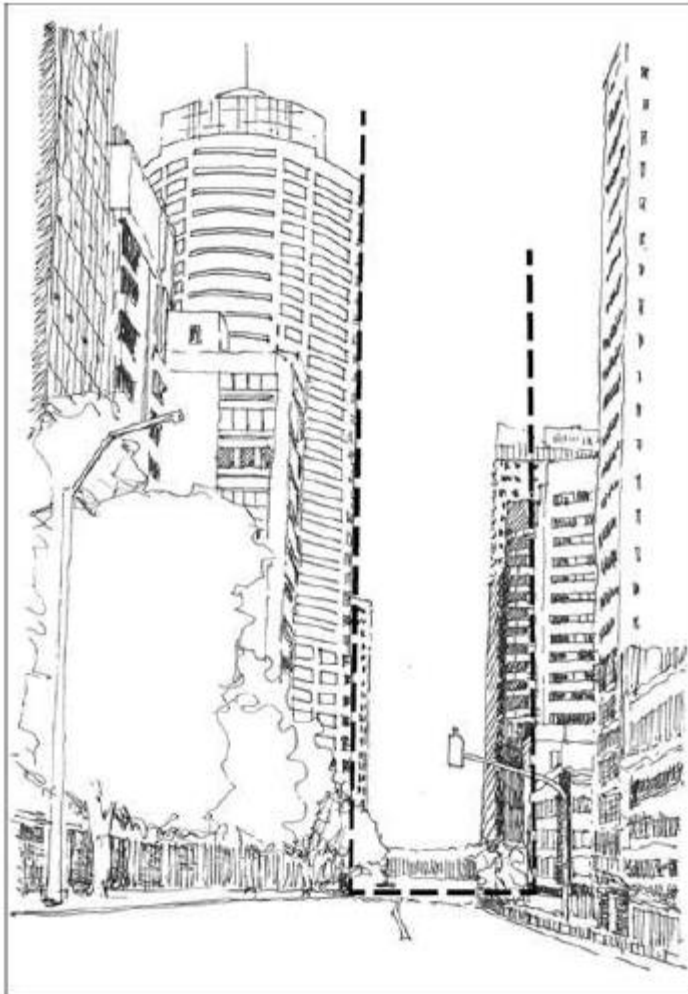


Figure 16b

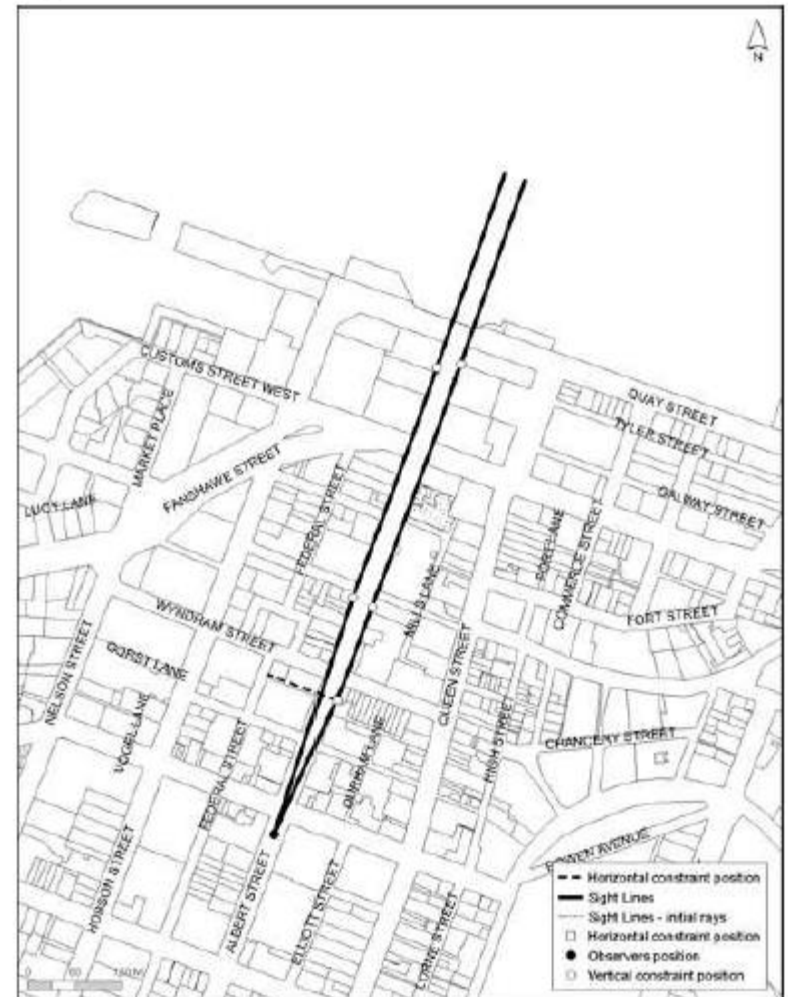
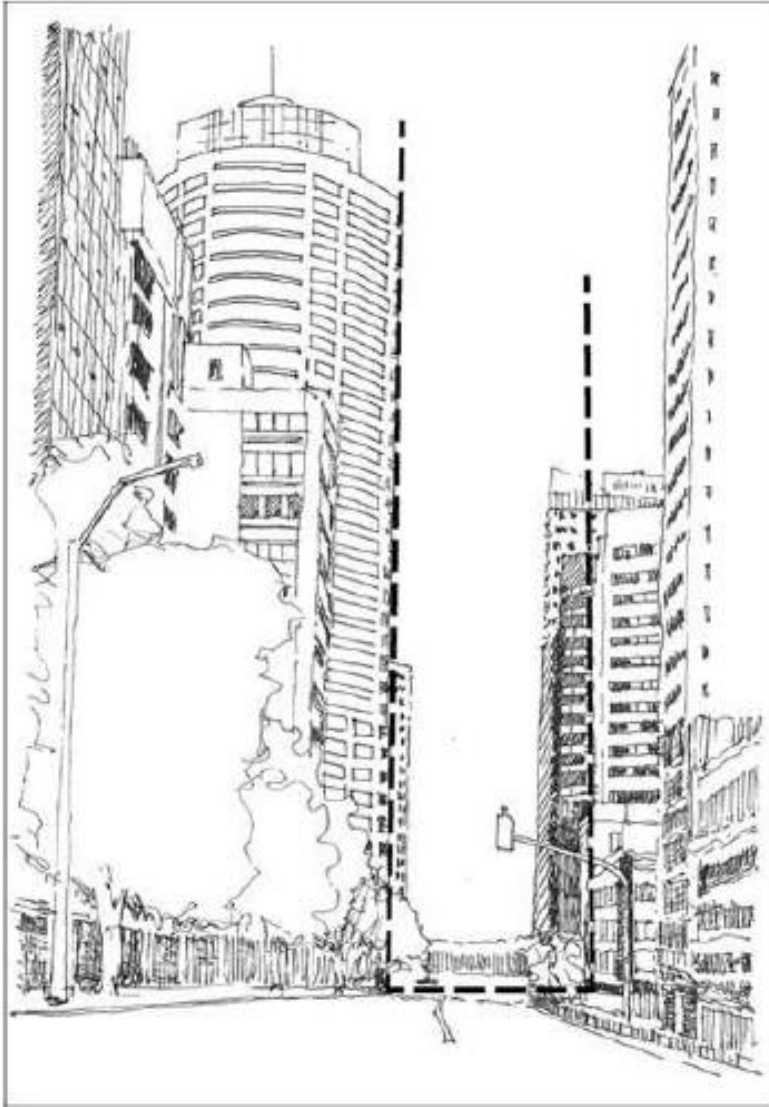


Figure 16: Sight line 16

Figure 16a



Tops of buildings tower height and bulk – influences form the cityscape and skyline



Mid sections of buildings – neighbourhood urban scape, affects adjacent buildings, neighbourhood/precinct character and site lines through the city



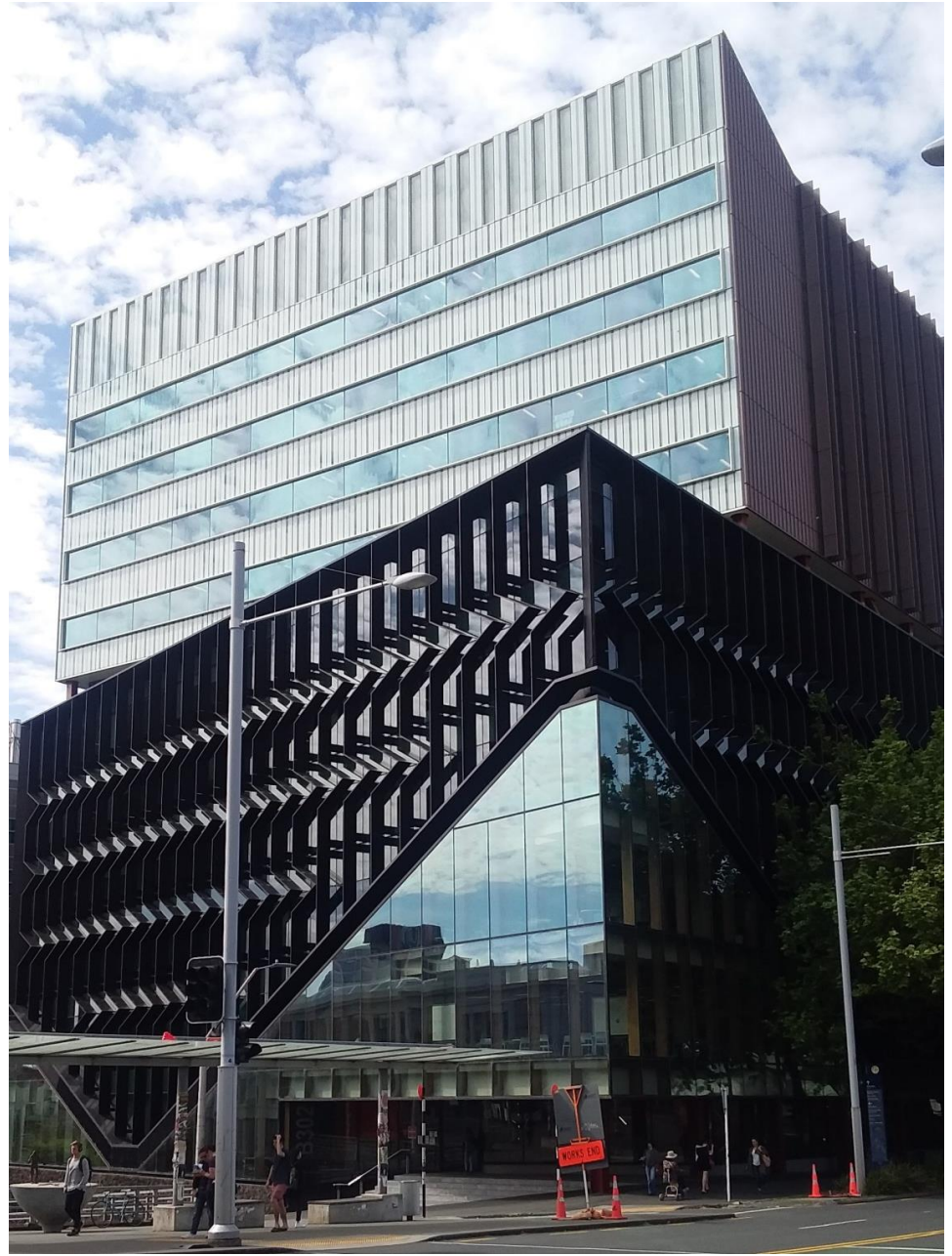
Base of buildings – affects the streetscape, quality of open spaces and people's activities

**Building design**



# Buildings affect the way streets look and feel









Towers setback 6m  
from narrow streets retain  
intimate pedestrian scale,  
reduces dominance, more  
sun and daylight  
*(Precinct apartments – Lorne St)*



# Tower separation – 6m minimum setback from boundaries and street





Wind effects on tall buildings must inform the design – *wind tests required by Unitary Plan*

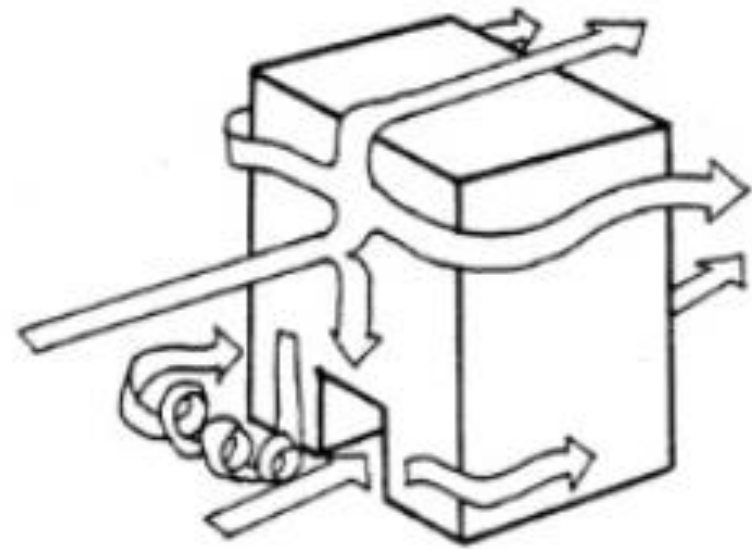
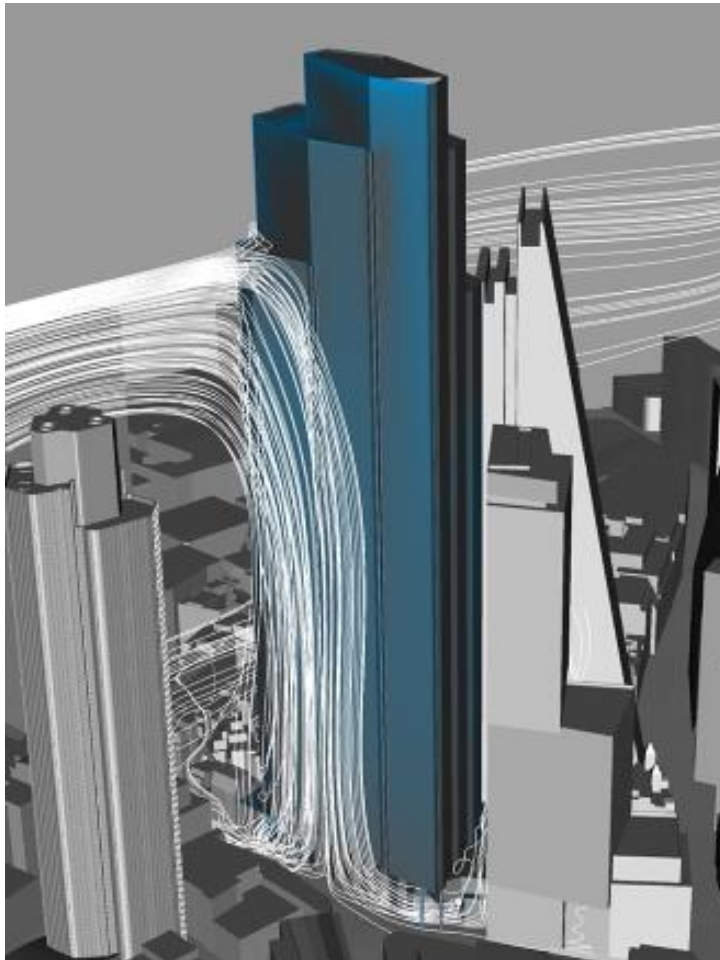


Figure 2a: Wind movements in and around an exposed building.

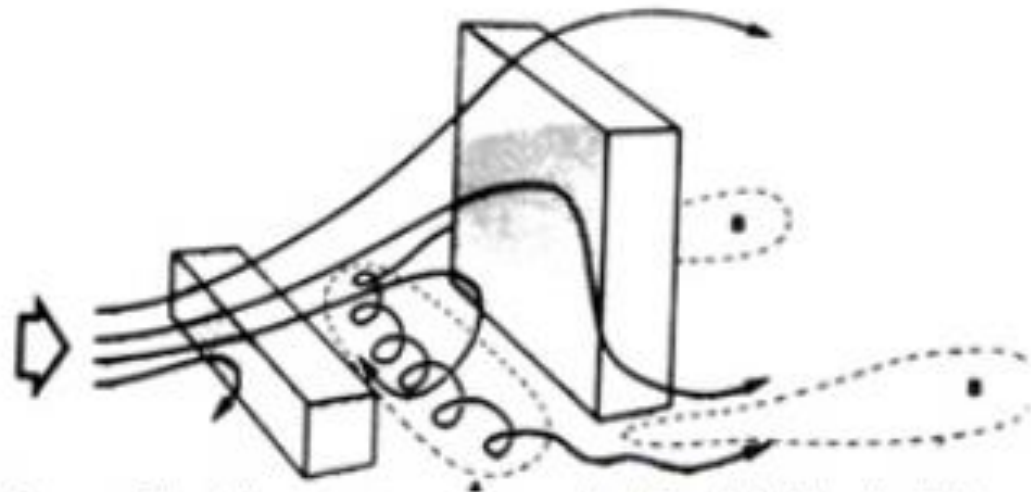


Figure 2b. Flow patterns around tall, slab-like building. areas of increased wind speeds at pedestrian level.

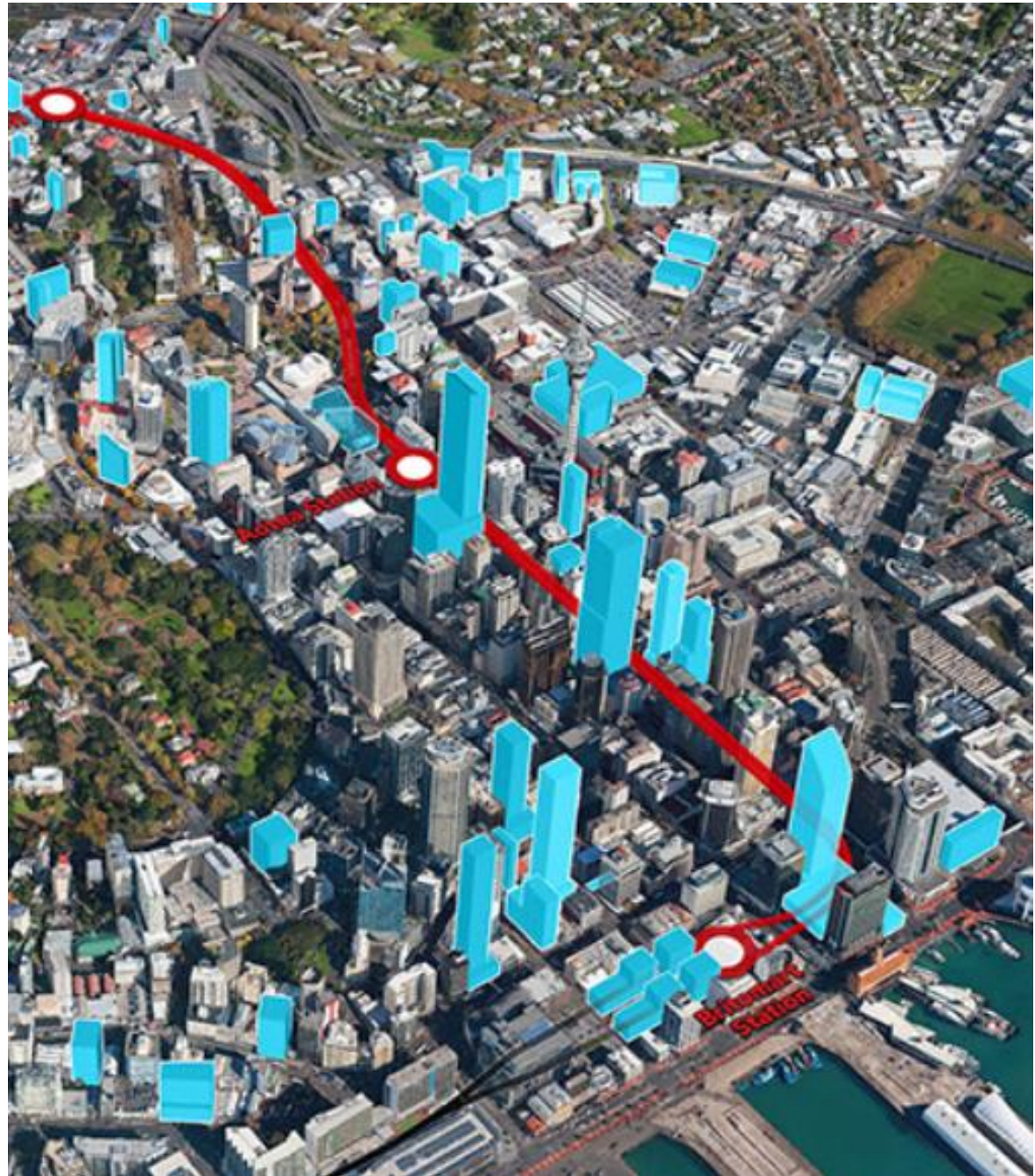
# Maximum tower dimension & set backs

Why have a standard:

- Contributes to achieving skyline and cityscape vision for city centre (refer to Unitary Plan objectives and policies)

Slender towers contribute to city's identity and international profile

- Improves liveability in high-rise centres – space, light, views, outlook and privacy between buildings
- Contributes to streetscape character, pedestrian comfort and experience
- Positively influences building design
- Minimises wind and shadow effects





HSBC 57m



135 Albert Street 46m



Vero 47m



PWC 51m



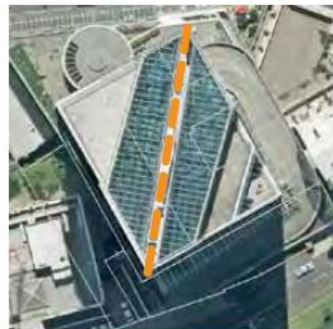
Civic Building 44m



ANZ 40m



42 Gore Street 38m  
(Oaks Residences)



Lumley 54m



Metropolis 51m

# Maximum tower dimension

## 50m maximum plan dimension

