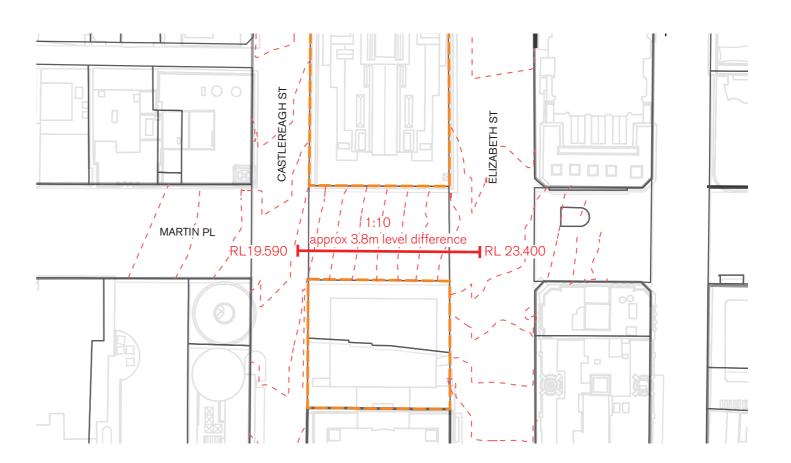


\_Overland flow implications for Martin place and adjacent buildings (sourced from Figure 3, Peak Flood Depth PMF Design Flood Event extracted from the C.o.S Draft City Area Floodplain Risk management Plan)



\_Topography and accessibility

### Key Urban Design Issues

## 3.3.2 Open Space

#### Ground Plane of Martin Place 3.3.2.2

### **Analysis**

The removal of the existing train station entry from the centre of this space and its integration in the proposed new southern building allows for a reduction of clutter and increased opportunity for public space activation within Martin Place, and the realisation of the Jan Gehl scheme.

The redesign of the southern building also offers opportunity for greater façade activation through the integration of levels between the building and Martin Place.

The historic building at 50 Martin Place offers very limited opportunity to activate this public space due to its use, its important heritage qualities and the relationship between the interior and the exterior.

There may be opportunities to increase daylight in Martin Place through potential reflection from the north façade of the southern building and the east and west facades of the northern building. This is to be investigated in the design development process.

The level change between Elizabeth and Castlereagh Street is steep at over 10:1 resulting in challenging access issues for properties with Martin Place frontages.

#### Principles

Public domain activation by the southern building is to be maximised.

\_The amount of building frontage addressing the public domain accommodating services is to be minimised and not permitted to Martin Place.

Remove existing train station access from the centre of Martin Place and integrate in the southern building. Entry located at the north-west corner of this building is encouraged to facilitate accessible access to the railway station.

Reduce public domain clutter to allow maximum opportunity for public space activation.

Design proposals to take into account overland flow and potential flood impacts predicted for the locality.

Wind impacts of proposal to meet relevant public domain standards appropriate for use and proposed activity.

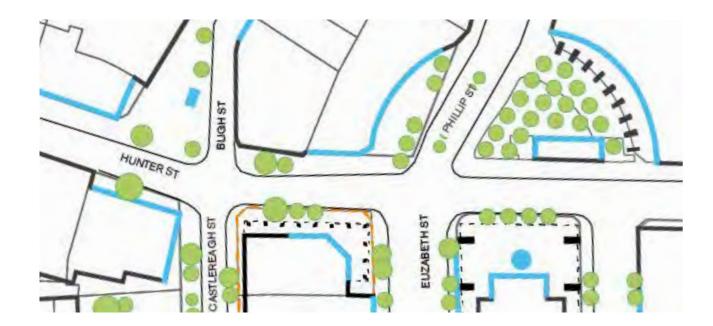
Daylight access analysis to be provided to Martin Place to show impact of design proposals.

Investigate the potenial to improve daylight levels to Martin Place through reflection from the north façade of the southern building and the east and west facades of the northern building.

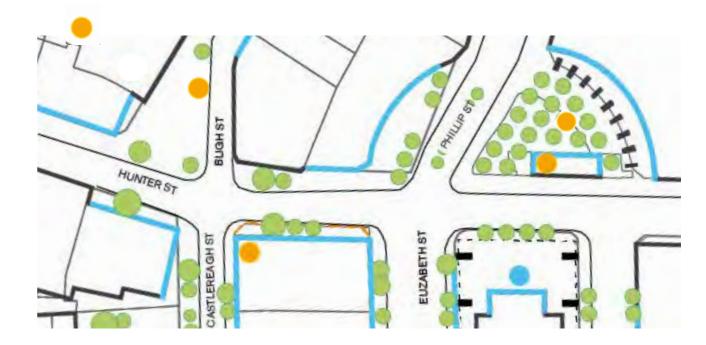
Solar access impacts to be limited to those predicted by built form of the CoS LEP 2012 Solar Access Plane and maximum height limits.

Rain cover is to be provided to the South Site although no awnings are permitted to Martin Place.

Some street tree planting and the use of terracing to make usable outdoor spaces in the redesign of Martin Place's topography is encouraged.



\_Current public domain activation



\_Opportunities for public space activation of Richard Johnson and Chifley Squares



## Key Urban Design Issues

3.3.2 Open Space

### Ground Plane of Chifley Square and Richard 3.3.2.3 Johnson Square

### Overview

Chifley and Richard Johnson Squares are located to the north east and north. The City of Sydney Sydney DCP 2012 Part 2.1.12 Locality Statement for west of the precinct.

The Hunter Street façade of the redevelopment will play an important role in the definition of both of these spaces.

Equally, both of these spaces will be highly significant in the distribution of commuter pedestrian traffic from the new station to the north of the precinct.

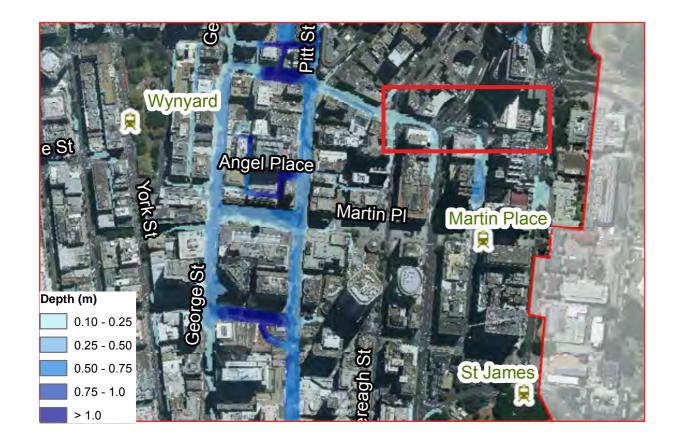
Both of these public spaces also have highly significant heritage contexts which will need to be maintained and enhanced.

Due to the developments location to the south of these spaces they will not result in impacts on their current levels of solar access. (Refer to Solar Impact Reports for: MARTIN PLACE, Sydney, Australia. prepared by PSN Matter) The North Site's OSD offers potential opportunities to improve daylight levels through the use of reflected light from the northern façade.

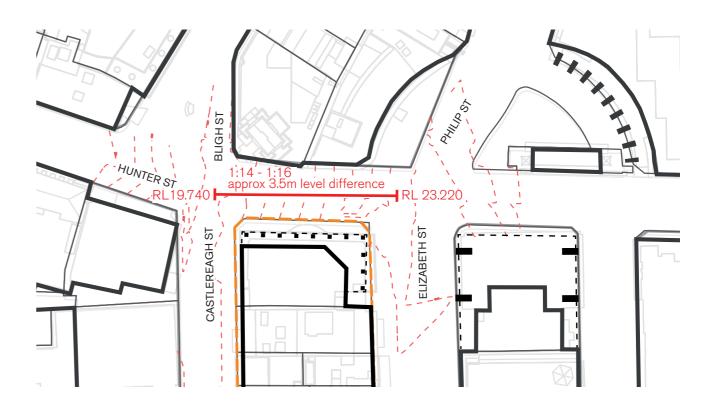
The current wind levels are at a level suitable to support the intended. (Refer to Wind Tunnel Test for: MARTIN PLACE OVERSTATION, Sydney, Australia. prepared by CPP)

### **Planning Context**

Chifley Square describes some general ambitions for these spaces. They are to recognise and enhance Chifley Square as one of the important public open spaces in the heart of the financial centre of the city, promote and encourage the use of the space as a destination and meeting place for people, to interpret the history of the place and its evolution in the design of both public and private domain and create a distinct sense of place inherent in the character of Chifley Square and to protect and extend sun access to Chifley Square during lunchtime hours from mid-April to the end of August..



\_Overland flow implications for Richard Johnson and Chifley Square and adjacent buildings (sourced from Figure 3, Peak Flood Depth PMF Design Flood Event extracted from the C.o.S Draft City Area Floodplain Risk management Plan)



\_Topography and accessibility

### 3.3 Key Urban Design Issues

3.3.2 Open Space

# 3.3.2.3 Ground Plane of Chifley Square and Richard Johnson Square

### **Analyis**

Chifley Square is a semi-circular public space that terminates the north south orthogonal streets of Phillip Street and Elizabeth Street and resolves the transition to the more topographic street layout to the north of the precinct.

There is a significant fall from east to west which is currently resolved by a café pavilion aligned with Hunter Street that permits the levels of Chifley Square to be relatively flat. This structure activates the square yet forms a barrier between Hunter Street and the Square. A grid of palm trees reinforces the geometry of the square.

Richard Johnson Square is a small triangular public space that also takes up the transition between the roughly orthogonal street network to the south of Hunter Street with the more topographic to the north. The space is dominated by a memorial to commemorate the site of the first church erected in Australia, as well as significant street tree planting.

These important public spaces are linked by the significant heritage structures of Emil Sodersten's City Mutual Life Building (1936) and Felix Tavener's Qantas House (1950).

The Hunter Street façade of the redevelopment is critical in the definition of these spaces as it forms the northern edge of the orthogonal street network that allows the specific geometry of both Chifley Square and Richard Johnson Square to be legible. This frontage is required to be able to activate both of these spaces.

There are flooding and overland flow requirements that require resolution to ensure the capacity of the building to activate these spaces is not significantly impacted.

### **Principles**

\_Improve connections to and activate Hunter Street as well as Chifley and Richard Johnson Square.

\_Facilitate effective pedestrian connections from the metro station to the northern parts of the city through the considered location and design of the station entries and their connection to the surrouding public domain.

\_The placement of any new metro station entries in these spaces needs to consider their important spatial and heritage qualities.

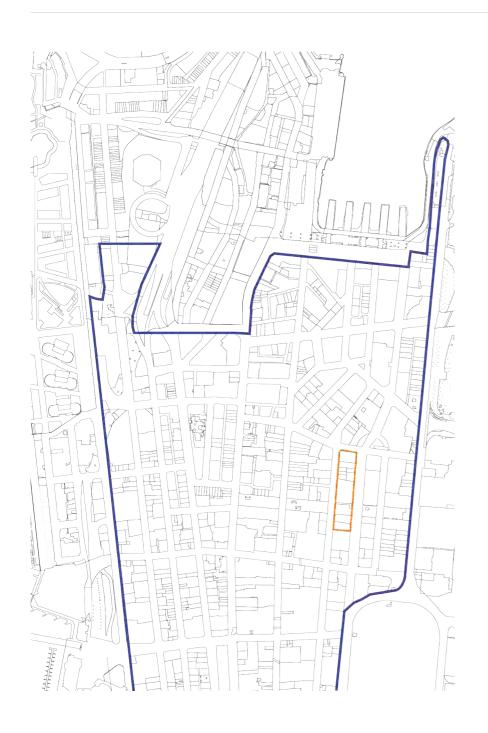
\_The amount of building frontage addressing the public domain accommodating services is to be minimised and not permitted on Hunter Street.

Reduce public domain clutter to allow maximum opportunity for public space activation.

\_Design to ameliorate overland flow and potential flood impacts predicted for the locality.

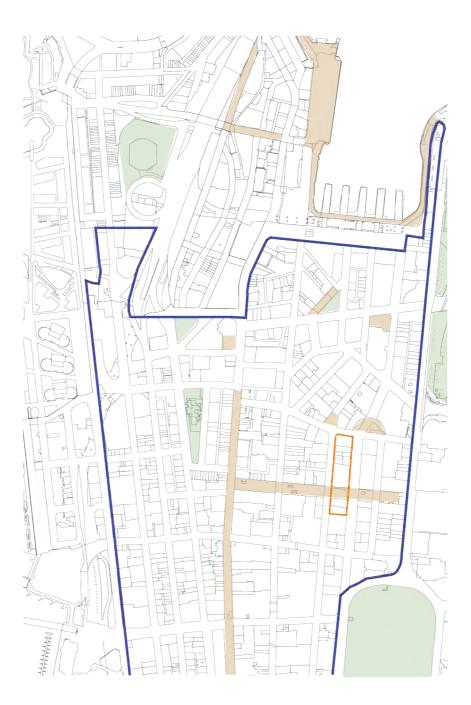
\_Wind impacts of proposal to meet relevant public domain standards appropriate for use and proposed activity.

\_The frontage is to incorporate features that provide rain cover for local pedestrians and users of the new metro station.



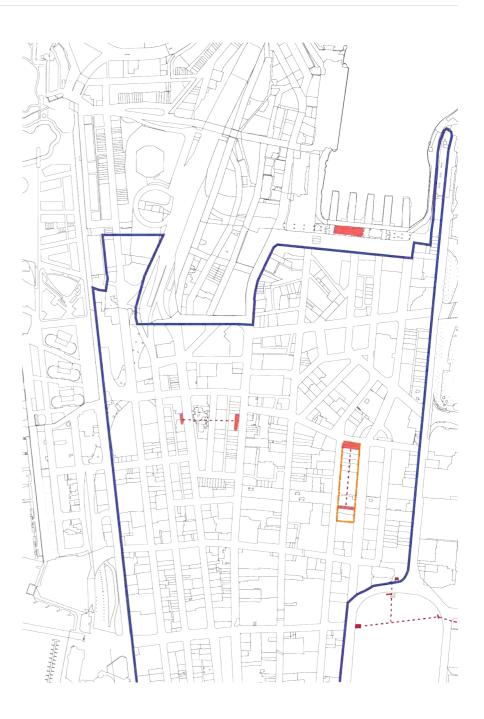
\_FSR 8:1 Zone

\_LEP shows consistent base FRS over the city



\_FSR 8:1 zone and public domain

\_The precinct has very high levels of public space access and amenity

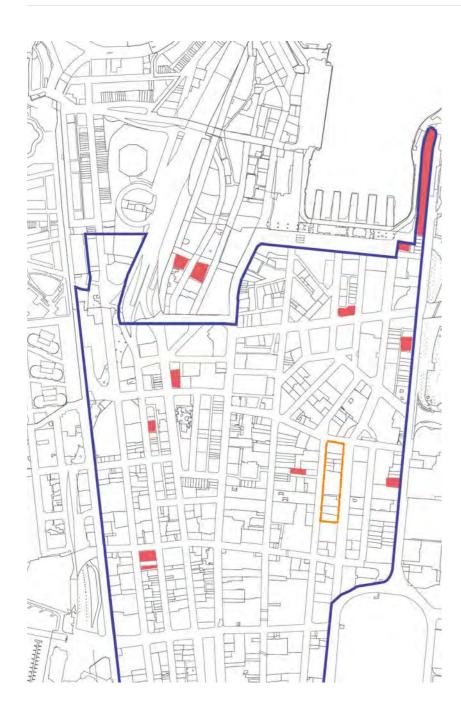


\_FSR 8:1 zone and railway station locations

\_The precinct has high levels of public transport accessibility

### Key Urban Design Issues

3.3.3 Built Form



FSR 8:1 zone and residential building

The absence of local residential development limits the precinct's capacity to impact residential ammenity

### 3.3.3.1 Density

#### Overview

The majority of the city has a blanket 'base' FSR of 8:1. Within this context there is a great variety of site specific variables that underpin variations to this proposed density, often referred to as 'bonus density.'

The ability to achieve the precinct's maximum density permissible under the Sydney LEP 2012, or beyond, depends on numerous merit assessment variables. These include proximity and capacity of public transport, the available amenity on the precinct as well as the impact on the amenity of The precinct has very high levels of transport accessibility being located surrounding public space and properties, particularly residential properties, the impacts on heritage items as well as street and lot structure, and finally the functional requirements of the city to promote and encourage the major business activities of the city.

The precinct's relationship with all of these variables encourages a high density occupation of the precinct. This is consistent with the City of Sydney's identification of blocks in the precinct including the OSD sites that have the capacity for significant increases in FSR as noted in the Central Sydney Planning Strategy - Appendix B Built Form Capacity Study.

### Planning Context

Density is controlled by the CoS LEP 2012 Floor Space Ratio control. (Sydney LEP 2012 4.4). The objectives of which are as follows:

to provide sufficient floor space to meet anticipated development needs for the foreseeable future;

to regulate the density of development, built form and land use intensity and to control the generation of vehicle and pedestrian traffic;

to provide for an intensity of development that is commensurate with the capacity of existing and planned infrastructure; and

to ensure that new development reflects the desired character of the

locality in which it is located and minimises adverse impacts on the amenity of that locality.

This control defines a 'base' Floor Space Ratio for both the North and South Sites of 8:1. With the inclusion of 'bonuses' for commercial uses and end of trip facilities for cyclists, this increases to a maximum FSR of 12.8:1 for both sites.

directly above a major railway interchange and within a local bus interchange. It is highly accessible to pedestrians being located on the pedestrianised public space of Martin Place which is also directly connected to the soon to be pedestrianised public space of George Street.

The precinct has potential for high levels of amenity for the occupants of the building and the design principles established in this document are designed to ensure a high amenity for the public domain. The building's location in a predominantly commercial district of the city means that the amenity of residential buildings is not compromised by the proposed built form.

The location of the existing heritage building at 50 Martin Place, means that the space over this building is already maximised. The potential building envelope consolidates development on the North Site ensuring the amenity of Martin Place and the local heritage values are maintained.

The precinct is located within the primary financial and government district. This location encourages the maximisation of density to appropriately support these uses and to consolidate Sydney's ambitions as a global financial centre for the Asia Pacific region.

### Principles

Gross Floor Area should be maximised within the proposed envelope allowing for appropriate built form and façade articulation.





X

Floor Space Growth Scenrios

Council Precincts

Potential Amalgamation

Block ID

Site Sub-Code

\_Built Form Capacity Site Identification Map

Source: Central Sydney OPlanning Strategy - Appendix B Built Form Capacity Study & JBA

## 3.3 Key Urban Design Issues

3.3.3 Built Form

Block Ref	Prevailing Height Control	Maximum Potential Height (RL)	Maximum Potential Height (m)	Total Floor Space sqm (moderate)	FSR (moderate) (x:1)	Total Floor Space sqm (High)	FSR (high) (x:1)
			City Co	re			
26A1	No Additional Overshadowing – Australia Square	215	200	51,723	14.2	59,712	16.4
26A2	No Additional Overshadowing – Australia Square	189	172	51,644	12.7	59,265	14.5
27	No Additional Overshadowing – Australia Square	330	217	84,232	15.2	97,537	17.6
28A	No Additional Overshadowing – Macquarie Place	217	211	116,054	13.9	133,838	16.1
28C	PANS OPS	330	326	99,972	22.9	117,502	26.9
29C	PANS OPS	330	327	59,561	19.3	69,624	22.6
34A	Sun Access Plane – Wynyard Park	216	196	108,377	13.0	124,549	14.9
43B	No Additional Overshadowing - Pitt Street	271	253	67,609	18.3	78,882	21.4
44A	No Additional Overshadowing - Pitt Street	315	302	155,050	22.9	182,246	27.0
46	Sun Access Plane – Wynyard Park	193	184	75,038	13.3	86,322	15.3
55A1	Sun Access Plane – Martin Place	203	190	57,349	13.3	65,994	15.4
54A	No Additional Overshadowing – Martin Place	200	187	98,436	14.2	113,622	16.4
55A2	No Additional Overshadowing – Martin Place	170	151	45,614	10.3	51,702	11.7

\_Commercial development capacity of identified blocks

Source: Central Sydney OPlanning Strategy - Appendix B Built Form Capacity Study







### LEP Overshadowing

spaces in the city - Hyde Park and Martin place

## \_LEP Sun access Protection built form

\_The precinct is adjacent to several protected public \_The precinct is impacted by the LEP sun access planes protecting access to these public spaces - SAP 2A and 5B

### \_LEP consolidated Height

\_The precinct is in the context of the consolidated height mapping in the city. The northern site is on the southern edge of the precinct where maximum building heights are permitted

\_The precinct is located within the context of existing and proposed towers

## Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.2 Tower Height

### Overview

city, establishing hierarchies in the public domain and determining amenity in both the public domain and for surrounding buildings.

The particular characteristics of the precinct and its position in the city mean that both the northern and southern towers can perform all of these roles, making the city more distinctive, legible and with a discernible hierarchy of public spaces that can be appreciated from a variety of vantage points including heights, distances and contexts.

### Planning Context

The maximum height of the buildings on the precinct is defined by LEP Principles 2012 Solar Access Planes and in the case of the South Site by the LEP's height limit of 55 metres for a distance of 25metres south of the Martin Place Boundary.

The South Site is controlled by Solar Access Plane 2A - Hyde Park North which is designed to provide a defined limit to the overshadowing of Hyde Park between 10am and 2pm in mid winter.

The North Site is controlled by Solar Access Plane 5B - Martin Place which is designed to provide a defined limit to the overshadowing of Martin Place between 12 noon and 2pm in mid winter.

### **Analysis**

The height of towers forms an important role in defining the built form of the The Sun Access Plane (SAP) allows for a building form on the South Site that tapers from RL 141.434 to RL 156.10 and a building form on the North Site that tapers from RL 132.58 to RL 214.27. The Sun Access Planes are a critically important design tool for maintaining the amenity of significant public spaces.

> Owing to the high level of amenity on the precinct, its access to public transport and the significance of its location within the financial centre of the City of Sydney, a city with growing regional significance and ambition, the precinct presents a unique opportunity and responsibility to maximise development capacity.

Both towers are not to breach the Sun Access Planes.

Both towers are to maximise their capacity within the constraints of the Sun Access Planes and the design principles of this report.

\_Rooftop and mechanical plant to be wholly within built form envelope and a considered part of the mechanical design.

## Key Urban Design Issues

3.3.3 Built Form

### Podium Street Wall Definition - Setbacks and 3.3.3.3 Height

### Overview

Street wall definition and height are critical to the formation and sense of enclosure of urban public spaces. Typically, consistent street wall alignments and heights create the spatial character of these places.

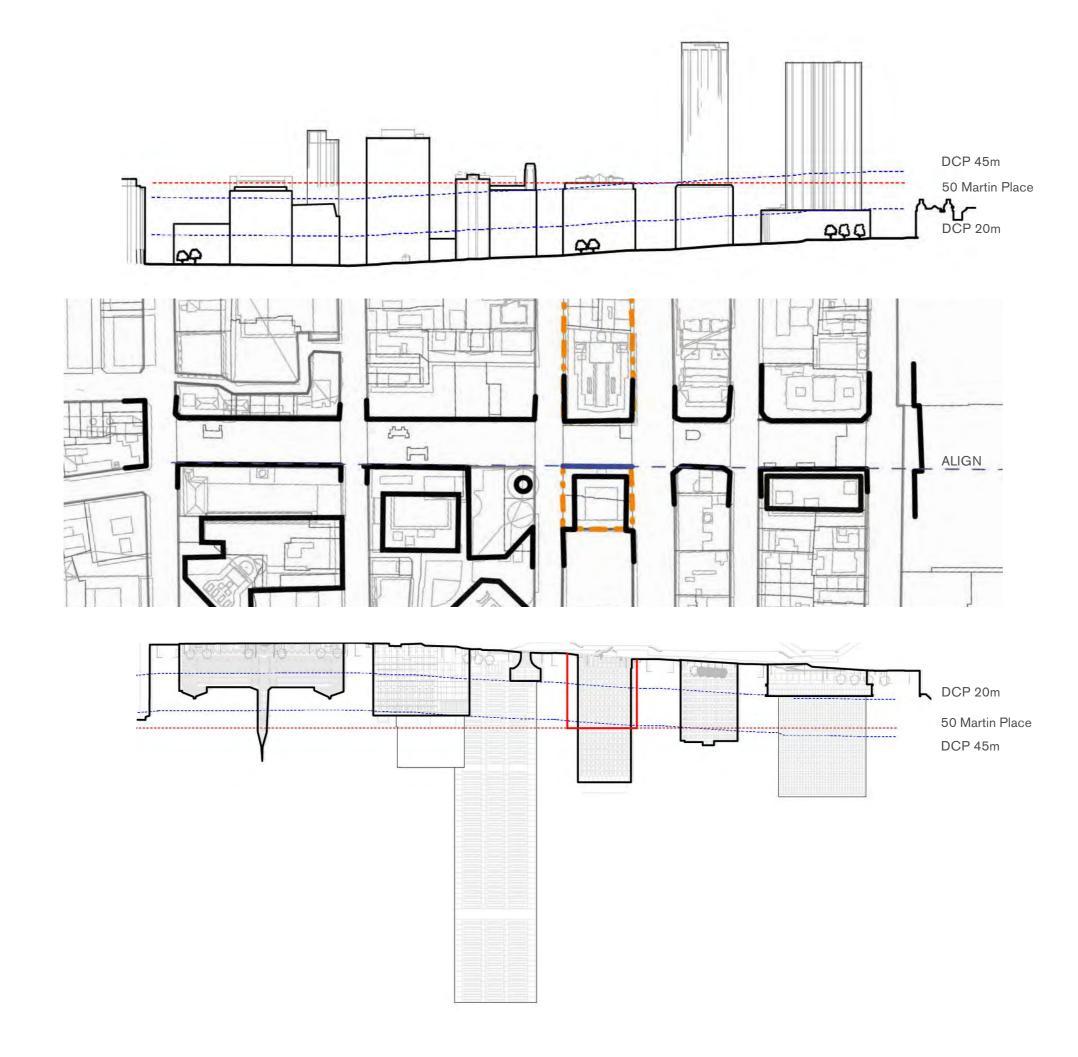
Due to changing planning controls and their implementation over time, there is significant variety of street wall heights that surround and include the precinct.

The proposal is developed from the study of these existing conditions and aims at integration, to reinforce and support the existing spatial characteristics of the public domain surrounding the precinct.

### Planning Context

Generally the CoS planning strategy for built form in the city is to establish a podium that defines the street wall with towers setback above.

This is defined in the CoS DCP2012 5.1.1 Street frontage heights which establishes a typical street wall height between 20 and 45m and to relate to the predominant street frontage height of adjacent buildings and buildings in the vicinity. There are some specific controls relating to the previously mentioned character areas described as follows.



### Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.3.1 Podium Street Wall Definition - Martin Place

### Planning Context

The City of Sydney DCP 2012 Part 2.1.7 Locality Statement for Martin Place describes some general ambitions for Martin Place. They are to retain and enhance the urban character, scale and strong linear enclosure of Martin Place by requiring new buildings to be built to the street alignment, have street frontage heights consistent with the prevailing form of buildings in the area and to have building setbacks above those street frontage heights.

### **Analysis**

Currently the building occupying the South Site does not match the Note: refer to section 3.3.3.4 for relevant tower setbacks. predominant street wall alignment of Martin Place.

There is significant variation in street wall height as noted on the attached diagrams, ranging from 30m to 50m with the MLC centre reading as a strong break in the street wall midway along the southern edge of Martin Place.

The northern façade of Martin Place, in the block which forms part of the precinct, will be defined by the existing heritage listed building at 50 Martin Place.

As a result of the variety of street wall heights and alignments as well as the benching of the precinct from east to west with each block forming a subtle room within the larger space of Martin Place, the opportunity to achieve a stronger relationship between the northern and southern street walls between Elizabeth and Castlereagh Streets will improve the civic character of the precinct. Key alignments for the southern block will be established by the architecture at 50 Martin Place.

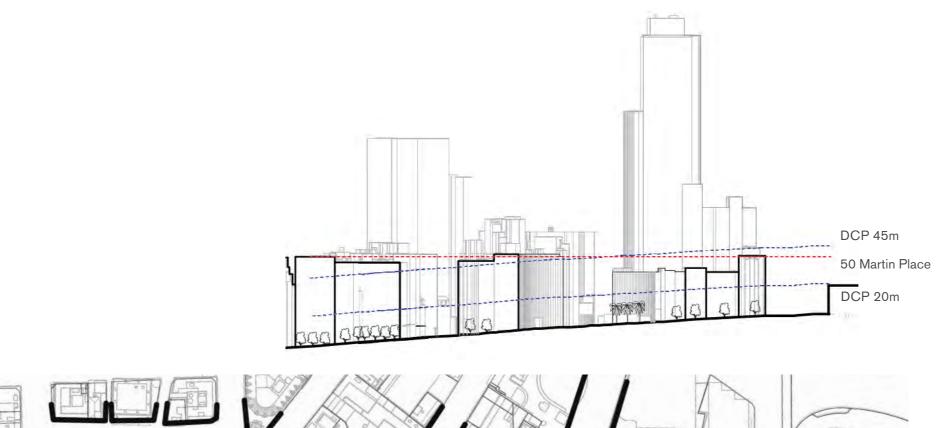
### Principles

The proposed building on the South Site is to have a zero setback for the podium to match the predominant street alignment.

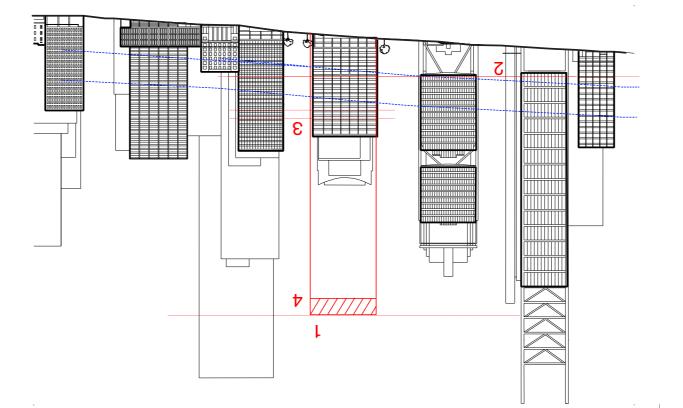
Proposed street wall height of the podium on the southern site is to relate to the heritage building at 50 Martin Place.

A recess in the built form of the tower is to increase the articulation and definition of the street wall from the tower over.

The proposed building on the South Site is not recommended to be set back on Elizabeth and Castlereagh Streets for the reasons outlined in this report.







\_Hunter Street - Street walls

(Comparison to 50 Martin Place)

50 Martin Place

DCP 20m

DCP 45m

### Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.3.2 Podium Street Wall Definition - Hunter Street

### Planning Context

The City of Sydney DCP 2012 Part 2.1.12 Locality Statement for Chifley Square describes some general ambitions for these spaces. They are to reinforce the urban character and distinct sense of enclosure of Chifley Square by emphasising and reinforcing the semi-circular geometry of the space, requiring new buildings to be integrated with the form of existing buildings, and limiting the height of new buildings.

### **Analysis**

The existing building has a zero setback to Hunter Street with an approximate street wall height of 66m - 71m.

The building is positioned at the junction of two distinct building alignments following the bend in Hunter Street at it's junction with Castlereagh Street.

The building alignment to the east set by 8 Chifley and Deutsche Bank is critical as it provides the southern definition of both Chifley Square and Richard Johnson Square. The straightening of this alignment enhances the spatial definition of both spaces through the increased contrast between the linearity of the southern alignment with the curve of Chifley Square and the triangle to Richard Johnson Square.

The two buildings to the east of the precinct, 8 Chifley and Deutsche Bank, which together with the subject site, form the southern edge of Chifley Square are characterised by being towers to ground rather than podium and tower buildings. Instead they have 'reverse podiums' being recessed as they meet the ground, with the level of these reverse podiums being relatively consistent for both buildings.

### Principles

The northern building alignment to Hunter Street is to be set back from the street in alignment with the northern facades of 8 Chifley and Deutsche Bank. There is some minor variation in this setback.

The proposed design of the northern tower is to respond to the 'reverse podium' alignment of 8 Chifley and Deutsche Bank in its architectural form. It is not to undermine the spatial definition of Chifley Square or Richard Johnson Square through the implementation of a significant undercroft space in replication of these two buildings.

Note: refer to section 3.3.3.4 for relevant tower setbacks.



## 3.3 Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.3 Podium Street Wall Definition - Elizabeth Street

### **Analysis**

There is considerable variety of street wall heights along the western alignment of Elizabeth Street including that occupied by the subject precinct.

There is general alignment between the street wall heights of 50 Martin Place with that of the street wall height of the former Qantas House.

There is potential to increase the legibility of the block structure between Martin Place and Hunter Street, as well as the station development within the local context, through the recognition of this alignment in the proposed built form. This design strategy also has the potential to visually connect Martin Place and Chifley Square through this alignment.

### **Principles**

\_Street wall height of the proposed building on the South Site is to match that of the heritage building at 50 Martin Place.

A recess in the built form of the tower on the South Site is to increase the articulation and definition of the street wall from the tower over.

\_The proposed design of the northern tower is to respond to the street wall alignment and height of both 50 Martin Place and former Qantas House.

## Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.4 Podium Street Wall Definition - Castlereagh Street

### **Analysis**

There is considerable variety of street wall heights along the eastern alignment of Castlereagh Street including that occupied by the subject site.

There is general alignment between the street wall heights of 50 Martin Place with that of the street wall height of the former Qantas House and the 60-66 Hunter Street, otherwise known as the City Mutual Building.

There is potential to increase the legibility of the block structure between Martin Place and Hunter Street as well, as the station development within the local context, through the recognition of this alignment in the proposed built form. This design strategy also has the potential to visually connect Martin Place and Richard Johnson Square through this alignment.

### **Principles**

\_The proposed building on the South Site is to respond to the street wall height of the heritage building at 50 Martin Place.

A recess in the built form of the tower on the South Site is to increase the articulation and definition of the street wall from the tower over.

The proposed design of the northern tower is to respond to the street wall alignment and height of both 50 Martin Place and the 60-66 Hunter Street, otherwise known as the City Mutual Building. Note: refer to section 3.3.3.4 for relevant tower setbacks.





\_View of southern edge of Martin Place looking West (Photography by Arterra Interactive)

\_View of southern edge of Martin Place looking east (Photography by Arterra Interactive)

## 3.3 Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.4 Tower Setbacks

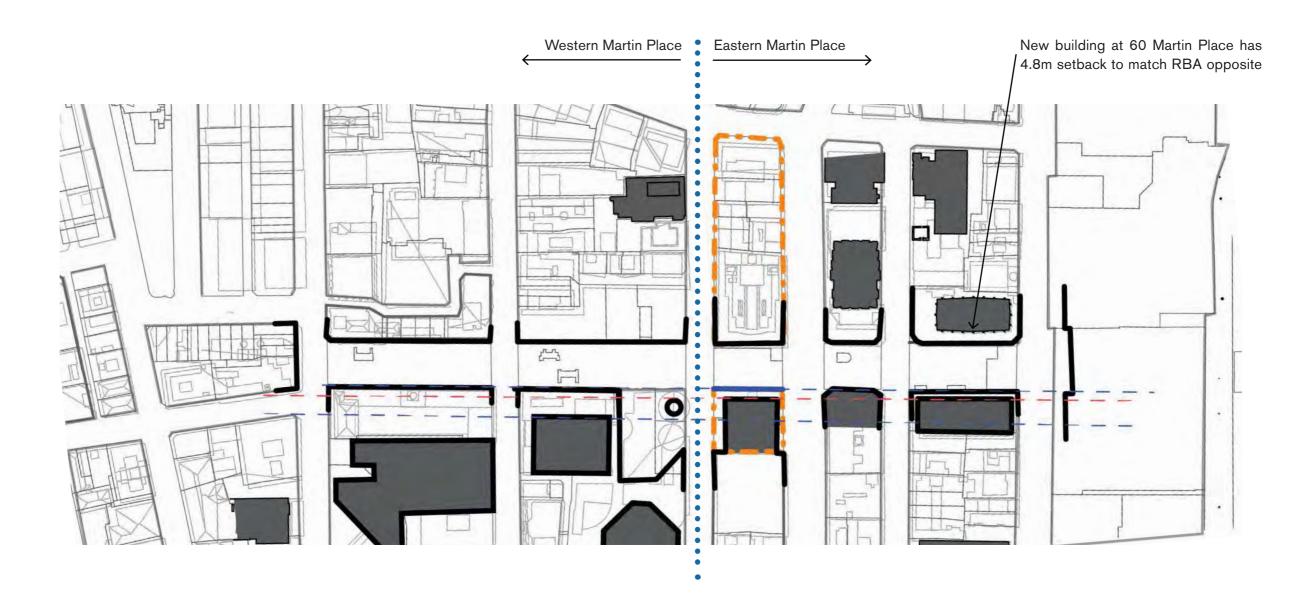
### Overview

The above podium setback of towers can form an important role in defining the built form of the city, establishing hierarchies in the public domain and determining amenity in both the public domain and for surrounding buildings.

The particular characteristics of the precinct and its position in the city will be enhanced if both the northern and southern towers are required to address these design considerations to make a more distinctive and legible urban morphology for the city with a discernible hierarchy of public spaces that can be appreciated from a variety of vantage points, distances and contexts.

### Planning Context

The setbacks for the precinct are defined in a number of areas by the City of Sydney. The major one being the City of Sydney LEP 2012 Height control map which defines a 25m setback for the northern façade of the South Site to Martin Place. More detail is provided in the City of Sydney DCP 2012 5.1.2 Building setbacks which also defines the 25m setback to Martin Place. This section of the DCP also requires a 10m setback above heritage items, a minimum weighted average setback of 8m above the required street frontage height with a partial reduction of up to 2m. The DCP also specifies 3m side and rear setbacks for commercial buildings noting that walls without windows do not need to be set back.



- \_The MLC centre breaks the street wall of Martin place
- \_Towers on either side of this break exhibit two consistent setbacks
- \_The western side generally aligns with the 25m setback or greater
- \_The eastern side ranges between 0-4.8 m and set by heritage listed buildings

### Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.4.1 Tower Setbacks - Martin Place

### **Analysis**

Both the CoS LEP and DCP 2012 propose a 25m set back from Martin The Solar Impact Reports prepared by PSN Matter demonstrate that the Place for towers above the Martin Place podium. The diagrams describing this also prescribe a similar set back for the Reserve Bank Site and no tower over the precinct directly to the east at 53-63 Martin Place. (Note: Both the Reserve Bank and 53-63 Martin Place buildings are listed heritage items that must be maintained.) The intent of this is to provide consistent articulation between the podium and street wall definition of Martin Place and also to allow unimpeded access to views of the GPO clock tower.

Analysis of the precinct reveals that the heritage building directly to the east is at the height of approximately 62m, is significantly taller than the predominant street wall height, forming a 'mini-tower'. The Reserve Bank heritage item is highly unlikely to be demolished and a new building erected at the 25m setback. In addition to this, the break in the street wall caused by the MLC centre creates two diverse conditions for the southern elevation of Martin Place. The western side is characterised by a 25m setback with the Westin Hotel and Commonwealth Bank building at 5 Martin Place. The eastern side is characterised by reduced setbacks with a zero setback for 53-63 Martin Place and 6m for the Reserve Bank. It is noted that although these buildings do not follow the 25m setback they still support the specific spatial qualities of Martin Place, particularly its linear spatial quality and sense of enclosure.

The setback to Martin Place, equivalent to the Reserve Bank and the existing building on the South Site, can be maintained as an appropriate response to the South Site provided the podium levels are built to the street alignments.

View analysis prepared by Arterra Interactive demonstrates that the implementation of a recessed articulation above the podium combined with the 6m setback effectively meets the built form objectives for the precinct and retains views of the GPO clock tower. (Refer to View impact analysis prepared by Tzannes)

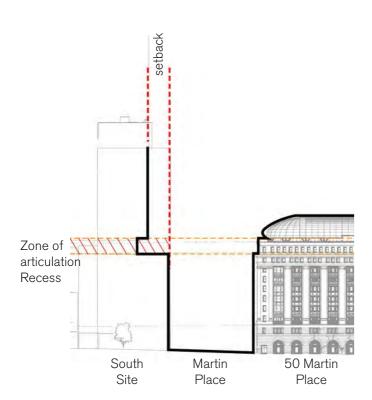
overshadowing impact of this reduced setback is within the anticipated range of impacts described by the built form of the Solar Access Plane.

The wind analysis prepared by CPP also demonstrates that the wind impact of this reduced set back is not significant, with the wind conditions in the public domain anticipated as being well within required standards.

### **Principles**

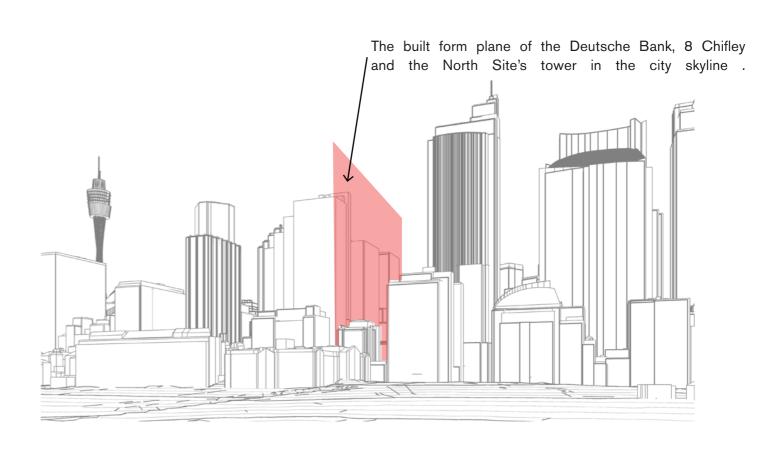
Setback to Martin Place to respond to the alignment of the Reserve Bank building and 53 Martin Place as well as the break in the spatial definition of Marting place created by the MLC building.

Provide a zone of articulation between the tower and the podium to better define the spatial quality of Martin Place. This articulation is to be predominantly created by a defined and significant recess in the tower



Recess to articulate podium structure and tower to retain street definition of Martin Place





\_The general alignment of the face of the North Site with 8 Chifley and Deutsche Bank enhance the spatial definition of both Chifley Square and Richard Johnson Square.

\_The general alignment of towers on the North Site, 8 Chifley and Deutsche Bank makes the transition of city grids legible in the skyline of the city.

\_The alignment of towers including the North Site makes these important urban structures legible in the city skyline.

## 3.3 Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.4.2 Tower Setbacks - Hunter Street

### **Analysis**

The Hunter Street façade alignment of the northern tower forms an important role in the articulation of the built form of the city.

A zero setback for this façade allows the tower to be aligned with those directly to the east, forming a strong southern edge to Chifley and Richard Johnson Square. Furthermore, this alignment of towers, with their podiums, across these three towers allows this important public space to be legible in the skyline of the city.

It also makes legible the underlying logic and development of the city, marking the line at which the orthogonal city grid meets the more organic, topographic structure of the original city to the north of Hunter Street.

The change in the street geometry where Hunter Street meets Castlereagh Street also means that there a no long views down Hunter Street and the zero setback does not result in an overly enclosed quality to the street.

The Solar Impact Reports for: MARTIN PLACE, Sydney, Australia. prepared by PSN Matter demonstrate that the overshadowing impact of a zero setback is within the anticipated range of impacts described by the built form of the Solar Access Plane.

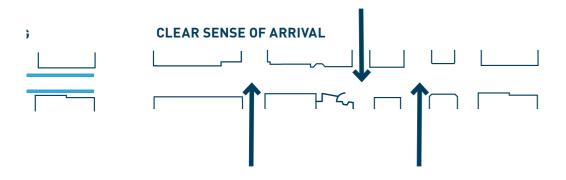
The wind analysis prepared by CPP also demonstrates that the wind impact of a zero set back is not significant, with the wind conditions in the public domain anticipated as being well within required standards.

Both overshadowing and wind analysis demonstrate the benefits of modelling the corners of the towers to improve wind performance and to potentially reduce solar impact.

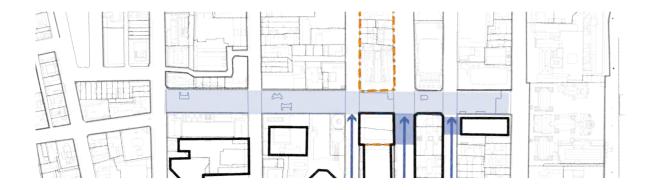
### **Principles**

\_Zero set back to Hunter Street to align with the towers adjacent to the east along Hunter Street.

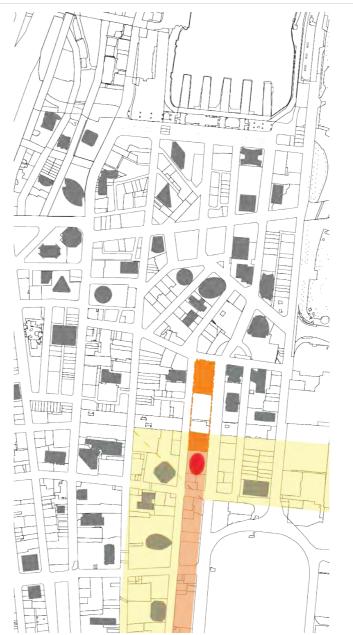
\_Model corners of North Site's tower for enhanced solar access, daylight to the public domain and wind performance



\_Jahn Gehl proposed threshold entries to Martin Place to enhance the importance of this space in context of the city in his CoS Urban Design Study 2015.



\_The zero setback to the towers on Elizabeth and Castlereagh Streets create this threshold and support the character of Martin place on either side of the MLC centre.



\_The relationship between the sun access plane and the block between Elizabeth Street and Castlereagh Street ensures that the podium towers are only viable north of Market Street and prevent the impact of towers for this part of the city.



Site

Sun access plane

Towers

Tower in site block alignment



The bend in the streetline of Castlereagh and Elizabeth Street at Hunter Street ensures the setback non-compliances do not increase the enclosure of the street for the North Site.



Site

Site lines

Proposed setback

Towers which obstruct views

Towers

### Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.4.3 Tower Setbacks - Elizabeth and Castlereagh Streets

### **Analysis**

The tower setbacks to Elizabeth Street and Castlereagh Street are a The change in street geometry at Hunter Street also means that there are no significant opportunity to provide legibility to the urban morphology of the city and accentuate the importance of Martin Place as a major public space.

Despite its significance in the city, Martin Place, is in effect a pedestrianised The Solar Impact Reports for: MARTIN PLACE, Sydney, Australia. prepared street, meaning that it is only differentiated in its formal structure from the other streets in the city through its pedestrianisation and the activities that take place there. In order to increase its differentiation or 'specialness' when moving through the city, other built form design strategies are required.

One design strategy is the creation of thresholds, or the differentiation of one space from another by creating a narrowed entry. The use of zero setbacks for the towers defining the edges of Martin Place have the capacity to achieve this effect and create a more distinctive character to the public space of Martin Place. This strategy is proposed by Jan Gehl in his 2015 design proposal for Martin Place which also argues for a greater emphasis in making a distinct entry to Martin Place.

This design strategy is also applicable for the northern site which forms the northern threshold to Martin Place, the southern threshold to Chifley Square as well as defining an important transition in the city street network.

When considering this strategy in terms of the overall spatial enclosure of the city at high level it is important to note the impact of the Sun Access Plane. This means that that there are very few towers of significant scale in daylight to the public domain and wind performance. the block between Elizabeth and Castlereagh Streets until Park Street. The result of this amplifies the role of the towers as thresholds to Martin Place and Chifley Square. As a consequence tower forms can not be built to result in an overly enclosed quality to the surrounding streets when viewed from the public domain

long views down Elizabeth or Castlereagh Street and the zero setback does not result in an overly enclosed quality to the street.

by PSN Matter demonstrate that the overshadowing impact of this reduced setback is within the anticipated range of impacts described by the built form of the Solar Access Plane.

The wind analysis prepared by CPP also demonstrates that the wind impact of this reduced set back is not significant, with the wind conditions in the public domain anticipated as being well within required standards.

### **Principles**

Zero set back to Castlereagh and Elizabeth Streets is recommended for the reasons outlined in this report..

Provide a zone of articulation between the tower and the podium to better define the spatial quality of Martin Place. This articulation is to be predominantly created by a defined and significant recess in the tower facade.

Model corners of tower on the North Site for enhanced solar access,



\_Martin Place South



\_Martin Place North

Photographic montages of Martin Place street walls showing general character

## Key Urban Design Issues

3.3.3 Built Form

#### Street Wall Articulation 3.3.3.5

#### Overview

Street wall articulation is a key supporting factor to street wall height and is critical to the definition and enclosure of urban public domain. Typically, considered built form articulation reinforces the spatial character of these urban spaces.

The proposal is developed from the study of existing conditions and aims to reinforce and support the existing spatial characteristics of the public domain surrounding the precinct.

#### Street Wall Articulation - Martin Place 3.3.3.5.1

### **Analysis**

The predominately heritage listed character of the architecture of Martin Place has resulted in the retention of largely traditional masonry and terra cotta clad architecture with fenestration consisting of a high ratio of wall to window or solid to void. (These facades typically have vertically proportioned windows in contrast to more contemporary architecture. These buildings are also characterised by façade ordering devices that provide a tripartite (base, middle and top) composition with a variety of scaling devices and materials that enhance the geometric configuration of the architecture. 50 Martin Place is an excellent example of these attributes and as it is located directly opposite the southern site, forming its counterpoint, is an important reference to the design of the southern podium.

The MLC centre, the new building at 30 Martin Place, the current building occupying the South Site and 52 Martin Place are more contemporary buildings that do not follow these patterns and could be considered to not support to the same degree, the general character of Martin Place.

### **Principles**

The Martin Place façade of the southern building is to respond to the articulation and principal datum lines of 50 Martin Place.

The Martin Place façade of the southern building is to respond to the general solidity of 50 Martin Place as well as the other key heritage buildings of Martin Place.

\_Awnings are not to be used on the Martin Place frontage.

Appropriately scaled openings are recommended for the Metro Station entrance onto Martin Place



\_Hunter Street South



\_Hunter Street North

Photographic montages of Hunter Street street walls showing their varied character

## Key Urban Design Issues

3.3.3 Built Form

### 3.3.3.5.2 Street Wall Articulation - Hunter Street

### **Analysis**

The architecture of Hunter Street, including Chifley and Richard Johnson Square is considerably more diverse than that of Martin Place and offers a greater flexibility for design options to articulate the built form of the North Site.

The architecture of this area includes the important heritage buildings such as Emil Sodersten's City Mutual Life Building (1936) and Felix Tavener's Qantas House (1950) as well as the architecture of Kohn Pedersen Fox with Travis McEwen and examples of the work of of Foster + Partners and Rogers Stirk Harbour + Partners.

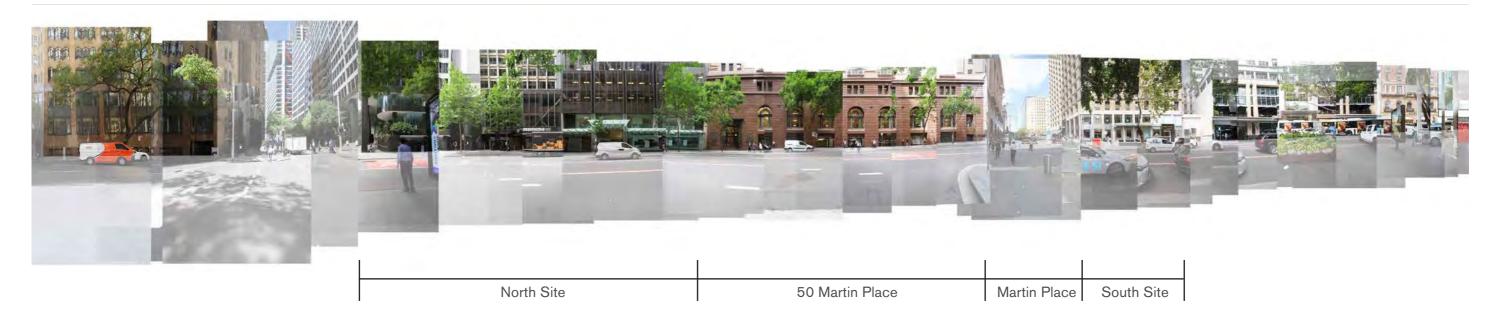
### **Principles**

The Hunter Street façade of the North Site is to respond to the articulation and principal street wall height or other key datum lines of 50 Martin Place.

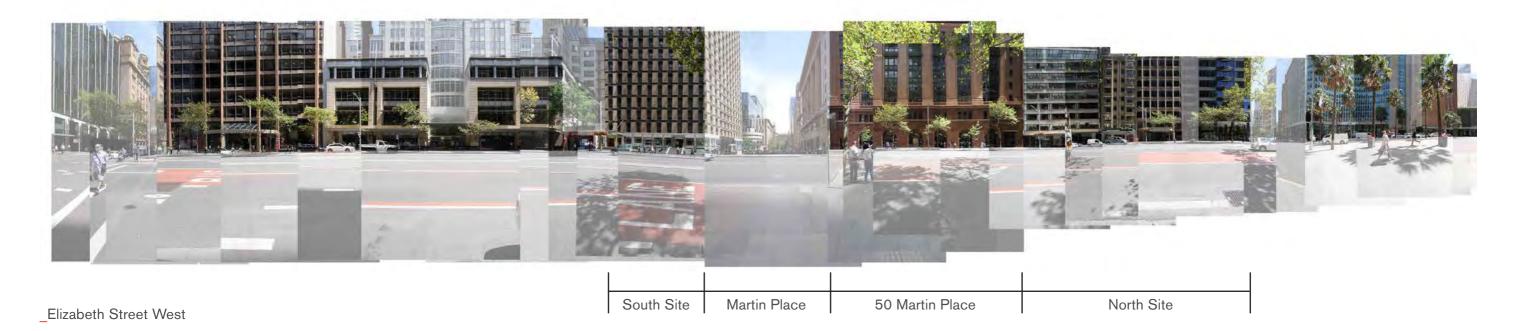
\_The Hunter Street façade of the North Site is to respond to the articulation and principal street wall height of the former Qantas House.

\_The Hunter Street façade of the northern site is to respond to the articulation of the 'reverse podium' alignment of 8 Chifley and the Deutsche Bank building.

\_The north east view from Chifley Square down Elizabeth Street an important view in the context of the city, and the detailed design of the northern building is to respond to it.



## \_Castlereagh Street East



Photographic montages of Elizabeth and Hunter Streets street walls showing their varied character and relationship to 50 Martin Place

## Key Urban Design Issues

3.3.3 Built Form

### Street Wall Articulation - Elizabeth and 3.3.3.5.3 Castlereagh Streets

### **Analysis**

Elizabeth and Castlereagh Streets both connect the more consistent architecture of Martin Place with the more diverse architecture of Hunter Street. The diverse and oblique views down and across these streets make these connections explicit requiring a considered architectural response in relation to these two conditions. 50 Martin Place forms a critical component in these views.

The oblique views of the South Site available down and across Martin Place ensure a strong relationship is required between the Martin Place podium façade and the facades to Elizabeth and Castlereagh streets.

Similarly the views down these streets require a considered relationship between 50 Martin Place and the connected new northern building.

### **Principles**

The façade podium articulation of the South Site's tower is to extend from the Martin Place façade to both the Elizabeth and Castlereagh Streets to ensure the three dimensional integrity and solidity of the podium is maintained.

Provide a zone of articulation between the tower and the podium on the South Site to better define the spatial quality of Martin Place. This articulation is to be predominantly created by a defined and significant recess in the tower facade. This is also to return to the side elevations of Elizabeth and Castlereagh streets for the extent of this architectural language.

The articulation of the base of the North Site's tower is to respond to the architectural language of 50 Martin Place.

The architectural form and expression of the North Site's tower should allow 48-50 Martin Place to be understood as a distinct and independent architectural element in the Elizabeth and Castlereagh Street streetscapes.

\_The North Site's tower should allow the historic north-east and northwest lift overrun towers of 48-50 Martin Place to be understood visually as distinct forms.

A considered transition between the North Site's tower and 50 Martin Place is required.

Elizabeth Street between Martin Place and Chifley Square is a rare 'full block' elevation design opportunity. This elevation is required to be a contributory visual experience in the city.

# 3.3 Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.6 Street Wall Materiality

#### Overview

Street wall materiality can be a key supporting factor to street wall height and articulation, and is critical to the definition and enclosure of urban public domain. Typically, considered built form materiality reinforces the spatial character of these urban spaces.

The proposal is developed from the study of existing conditions and aims to integrate, reinforce and support the existing spatial characteristics of the public domain surrounding the precinct.



\_Martin Place South



\_Martin Place North

Photographic montages of Martin Place street walls showing their consistent material character

## Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.6.1 Street Wall Materiality - Martin Place

## **Analysis**

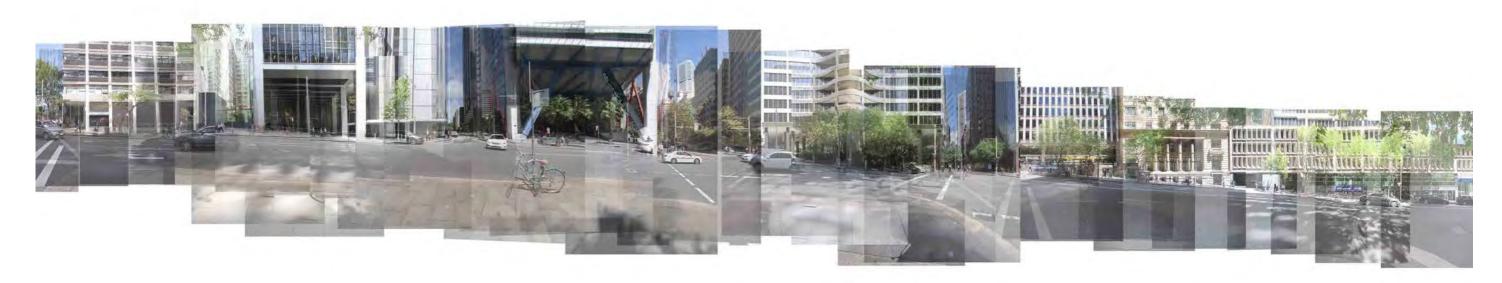
The predominately heritage listed character of the architecture of Martin Place has resulted in a predominantly masonry architecture. This materiality is usually earth toned in colour with the majority of these buildings constructed in Sydney sandstone. 50 Martin Place is an exception to this, being clad in a deep pink glazed terracotta tile.

The MLC building, the new building at 20 Martin Place, and the Reserve Bank buildings are more contemporary buildings that do not follow this material palette including colour tone and could be considered to not support to the general character of Martin Place.

#### **Principles**

\_The Martin Place façade of the South Site is to respond to the materiality of 50 Martin Place as well as the other heritage structures.

\_The materiality of the South Site's tower over is to respond to its context in the city skyline and to support its articulation from the building's podium.



\_Hunter Street South



\_Hunter Street North

Photographic montages of Hunter Street street walls showing their varied material character

## Key Urban Design Issues

3.3.3 Built Form



Hunter Street looking West



Phillip Street looking South

## 3.3.3.6.2 Street Wall Materiality - Hunter Street

## **Analysis**

The materiality of the architecture of Hunter Street, including Chifley and Richard Johnson Square is considerably more diverse than that of Martin Place and offers a greater flexibility for material options to support the built form of the North Site.

The materiality of this area includes the sandstone (with granite entry) of Emil Sodersten's City Mutual Life Building, the predominantly glass with sandstone elements in the architecture of Felix Tavener's Qantas House, the granite and glass of Chifley Tower and the predominantly glass and metal of the architecture of Foster + Partners and Rogers Stirk Harbour + Partners.

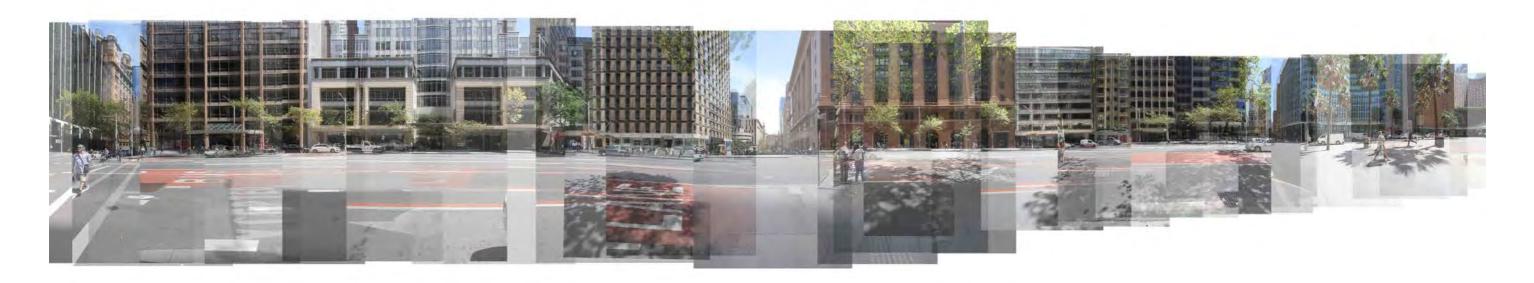
#### Principles

The materiality of the lower sections of the Hunter Street façade of the North Site is to respond to the materiality of 50 Martin Place.

\_The materiality of the North Site's tower is to respond to its context in the city skyline.



## \_Castleraegh Street East



\_Elizabeth Street East

Photographic montages of Elizabeth and Hunter Streets street walls showing their varied material character and relationship to 50 Martin Place

## Key Urban Design Issues

3.3.3 Built Form

#### Street Wall Materiality - Elizabeth and 3.3.3.6.3 Castlereagh Streets

#### **Analysis**

Elizabeth and Castlereagh streets both connect the more consistent materiality of Martin Place with the more diverse materiality of Hunter Street. The diverse and oblique views down and across these streets make these connections explicit requiring a considered material response in relation to these two conditions. 50 Martin Place forms a critical component in these views.

The oblique views of the South Site available down and across Martin Place ensure a strong relationship is required between the materiality of the Martin Place podium façade and the facades to Elizabeth and Castlereagh streets.

Similarly the views down these streets require a considered material relationship between 50 Martin Place and the connected new North Site's tower.

### **Principles**

The podium façade materiality of the South Site's tower is to extend from the Martin Place façade to both the Elizabeth and Castlereagh Street facades, to ensure the three dimensional integrity and solidity of the podium

There is greater flexibility for the materiality of the South Site's tower over as the tower is required to respond to the skyline of the city.

The articulation of the base of the North Site's tower is to respond to the architectural materiality of 50 Martin Place.

\_The materiality of the North Site's tower over is to respond to its context in the city skyline.

\_The approximate site footprint of the proposed towers in the context of the city with towers of generally equivalent footprint.

## 3.3 Key Urban Design Issues

3.3.3 Built Form

## 3.3.3.7 Scale

#### Overview

The use of scale, proportion, materials and articulation in the tower architecture is critical to successfully integrate these larger buildings within both the city skyline and within the public domain. The creation of a 'landmark' buildings can be and in these cases must be compatible with their urban role in Sydney.

The analysis of the buildings in their context, the distances at which they are viewed, as well as their fabrication typically provides clues for their appropriate articulation.

#### **Analysis**

The review of the footprints of the towers in the context of the city demonstrates that the tower on the South Site is relatively conventional when compared to the scale of typical Sydney towers. The northern tower will have one of the larger commercial office tower floorplates in Sydney. The size of the consolidated site provides an important opportunity to deliver the type of office space that is in high demand in the financial services sector and in a location that is very well suited to it. The scale of the North Site's tower requires a nuanced approach to the detailed design and massing to ensure the built form of the tower is appropriately integrated into the city.

#### **Principles**

\_Tower architecture to have appropriate vertical and horizontal articulation to enhance scale.

# Graphic Representation of Development Principles