# DEVELOPMENT SUMMARY


## Staging

The delivery of the SW Plot is proposed to be staged.

### Stage 1

Included within this stage:

- All SW Plot local authorities plant and utilities
- Vehicle access and loading/ service area
- Podium, SW2 and SW3 residential blocks and associated car parking spaces and storage
- Retail units: The Boulevard + Dickson's Lane (part)
- The podium rooftop landscape (part)
- The Boulevard
- Dickson's Lane (part)
- Upgrade of the Hay Street public domain
- Upgrade of Darling Drive public domain (part)
- Demolition of the existing Sydney Entertainment Centre
- All Stage 2 ground slab and foundations

### Stage 2

Included within this stage:

- Podium and SW1 residential blocks and associated car parking spaces and storage
- Retail units: Dickson's Lane (part)
- IQ incubator hub (potential)
- Dickson's Lane (part)
- Upgrade of the Darling Drive public domain (part)

Note: Stage 2 demarcation line within public domain to be confirmed and agreed with the certifier.

In the event that the proposal is staged as per the diagrams, Stage 1 will include appropriate treatments and interim uses to ensure the ground plane is safe attractive and inviting. These treatments could include hoardings featuring public art or community information about the project, interim uses such as pop up retail and interactive elements focusing on community engagement could also be considered.

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# SHADOW STUDIES

# SHADOW STUDIES

## Shadow studies:

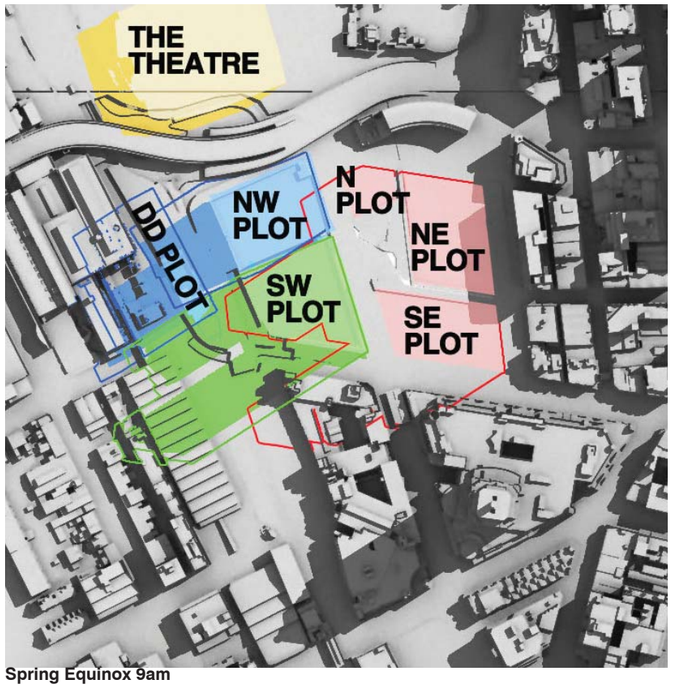
Shadow study renders copyright Virtual Ideas.

The following shadow studies compares the SW Plot overshadowing against the maximum building envelope overshadowing and its impact on the new public spaces and adjacent buildings.

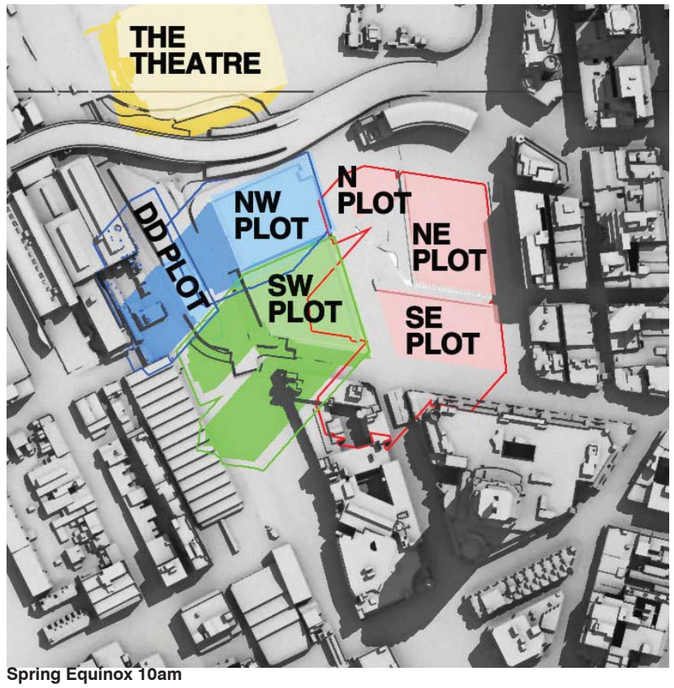
### Spring Equinox (21st September)

| | |
|---|---|
| 9:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing onto Hay Street and northwest corner of UTS building to south of SW Plot;<br>– Reduced overshadowing onto Macarthur Street – limited to Powerhouse Museum parking/ goods area – Goods Yard, Goods Shed and existing buildings west of Goods Shed to west of SW Plot;<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction and Goods Yard as a result of increased separation of SW1 and SW3 towers; and<br>– Overshadowing of DD Plot building east elevation unchanged. |
| 10:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing onto Hay Street and northwest corner of UTS building to south of SW Plot;<br>– Reduced overshadowing onto Darling Drive, Goods Yard and Goods Shed to west of SW Plot;<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction and Goods Yard as a result of increased separation of SW1 and SW3 towers; and<br>– Increased direct sunlight onto Darling drive between SW, DD and NW Plots. |
| 11:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing onto Hay Street and northwest corner of UTS building to south of SW Plot. Increased direct sunlight to northwest corner of central courtyard;<br>– Reduced overshadowing onto Darling Drive to west of SW Plot;<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction as a result of increased separation of SW1 and SW3 towers; and<br>– Increased direct sunlight onto Darling drive between SW, DD and NW Plots. |
| 12:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing onto Hay Street/ Quay Street junction and UTS building to south of SW Plot;<br>– Small area of direct sunlight onto Hay Street adjacent UTS building as a result of increased separation of SW1 and SW3 towers; and<br>– Reduced overshadowing onto Darling Drive and new landscaped verge. |
| 1:00 | – No overshadowing along northern and western boundaries;<br>– Negligible overshadowing along eastern boundary onto The Boulevard;<br>– Hay Street overshadowing unchanged and reduced overshadowing onto Quay Street to south of SW Plot;<br>– Reduced overshadowing onto UTS building eastern edge. Increased direct sunlight to western side of central courtyard; and<br>– Negligible overshadowing of Market City western edge. |
| 2:00 | – No overshadowing along northern and western boundaries;<br>– Reduced overshadowing onto The Boulevard allowing direct sunlight along eastern edge of Boulevard until SW corner of SE Plot;<br>– Reduced overshadowing onto Hay and Quay Street and northeast corner of UTS building to south of SW Plot;<br>– Narrow strip of direct sunlight onto Hay Street and Boulevard as a result of setback SW3 tower;<br>– overshadowing unchanged and reduced overshadowing onto Quay Street to south of SW Plot;<br>– Reduced overshadowing onto northwest corner of Market City; and<br>– No shadow impact onto SE Plot. |
| 3:00 | – No overshadowing along northern and western boundaries;<br>– Reduced overshadowing onto Haymarket Square allowing direct sunlight along eastern edge of square. Reduced by overshadowing from NW Plot;<br>– Reduced overshadowing onto Hay and Quay Street;<br>– Reduced overshadowing (extents) onto northern edge of Market City; and<br>– Reduced shadow impact onto SE Plot. |
| 4:00 | – No overshadowing along northern and western boundaries;<br>– Reduced overshadowing onto Little Hay Street and existing buildings on Harbour Street. Will be obscured by SE Plot buildings when completed;<br>– Reduced overshadowing onto Hay Street;<br>– Reduced overshadowing onto northern edge of Market City; and<br>– Reduced shadow impact onto NE and SE Plots. |
| 5:00 | Not Available |

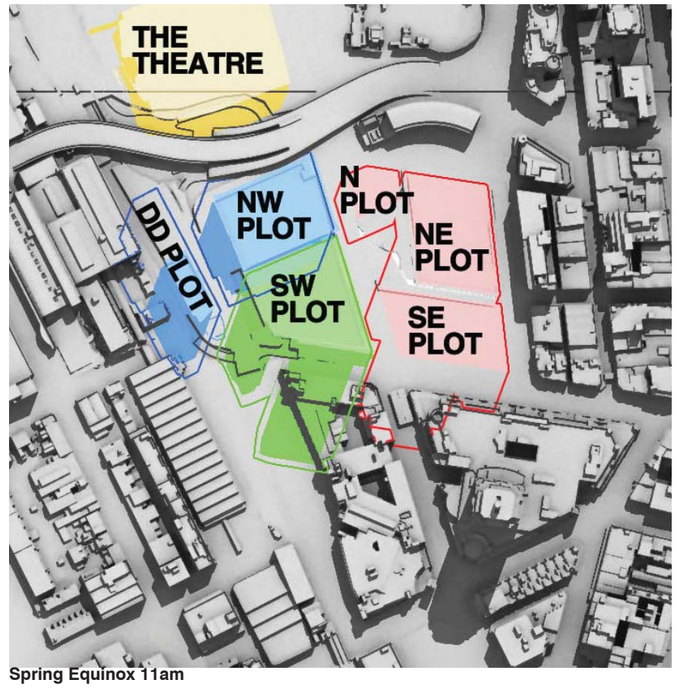
# SHADOW STUDIES



Spring Equinox 9am



Spring Equinox 10am



Spring Equinox 11am

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

Shadows cast by SSDA3 + SSDA4 buildings

Parameter plan shadow for DD + NW plot

Concept proposal parameter plan shadows for N, NE + SE plots

Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

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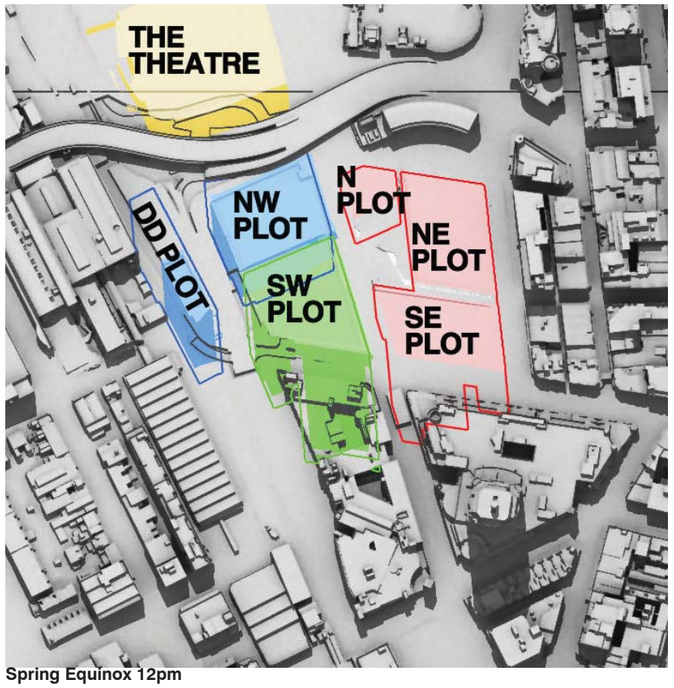
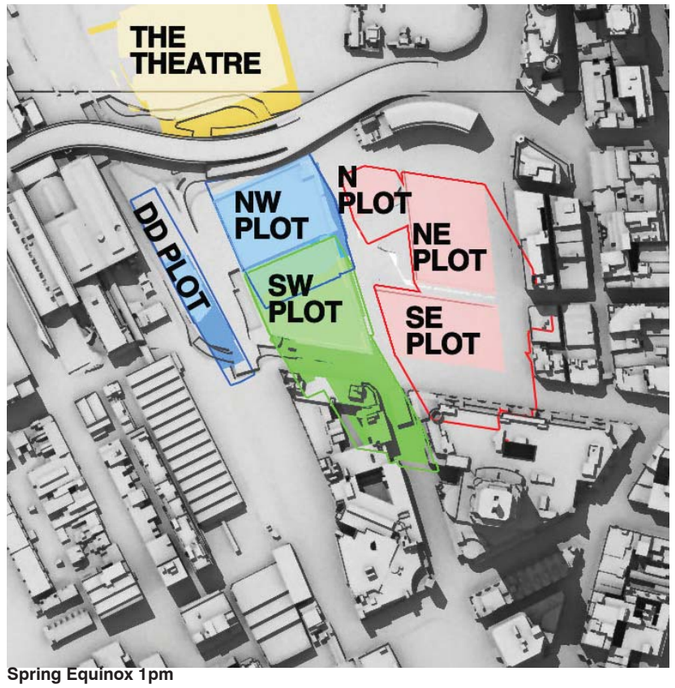
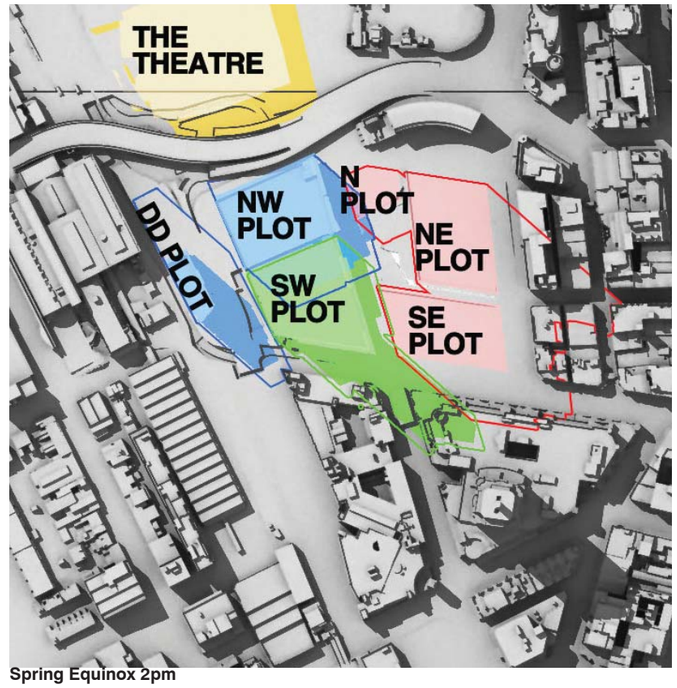


Spring Equinox 12pm



Spring Equinox 1pm



Spring Equinox 2pm

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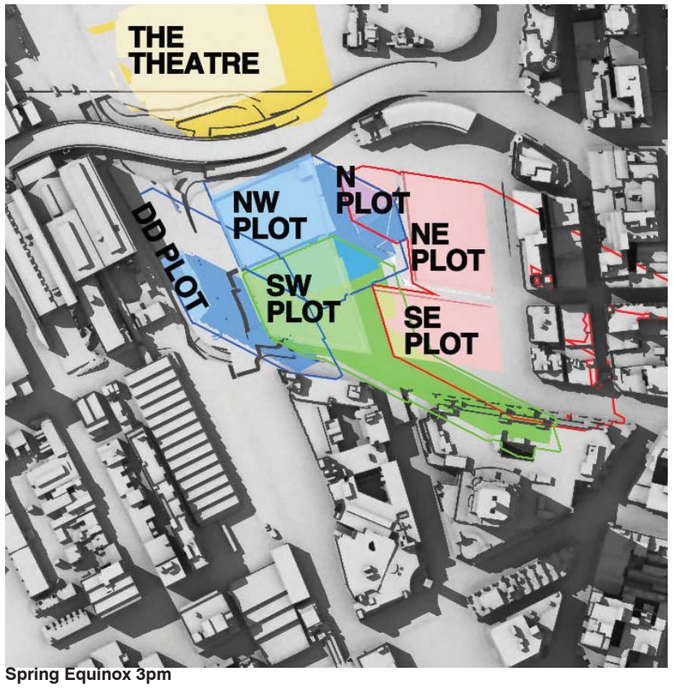
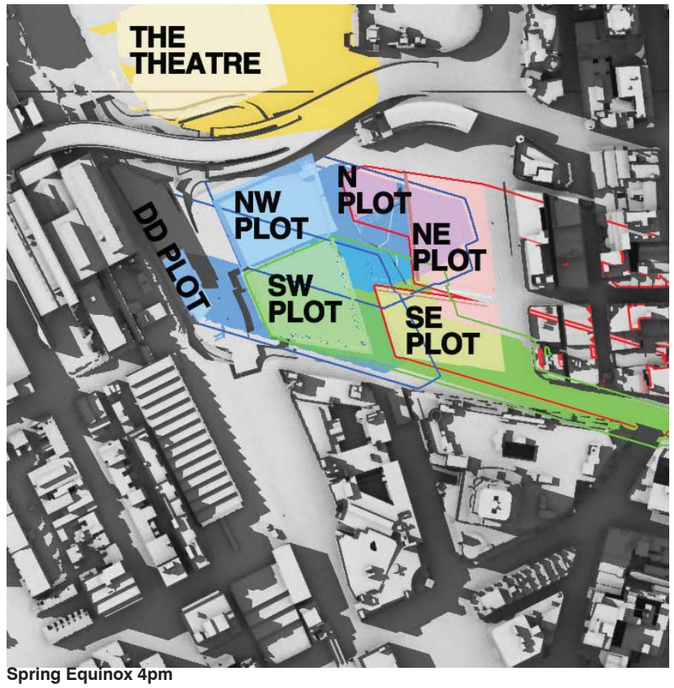



Spring Equinox 3pm




Spring Equinox 4pm

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# SHADOW STUDIES

## Summer Solstice (21st December)

| | |
|---|---|
| 9:00 | – No overshadowing along eastern boundary;<br>– Reductions in the overshadowing as a result of reduced building massing have no impact on northern and western context due to adjacent massing of NW and DD Plot buildings;<br>– Reduced overshadowing to southern and eastern elevations of DD Plot building; and<br>– Reduced extent of overshadowing onto Hay Street, Darling Drive and the southeast corner of the Powerhouse Museum to south of SW Plot. |
| 10:00 | – No overshadowing along eastern boundary;<br>– Reduced extent of overshadowing onto Dickson's Lane on north side of SW Plot allowing direct sunlight along northern edge of lane;<br>– Reduced overshadowing to southern and portion of eastern elevations of DD Plot building;<br>– Reduced extent of overshadowing onto Hay Street, Darling Drive and the current Powerhouse parking/ loading area. |
| 11:00 | – No overshadowing along eastern boundary and majority of northern boundary;<br>– Improved direct sunlight onto Dickson's Drive;<br>– Reduced overshadowing to portions of southern and eastern elevations of DD Plot building;<br>– Reduced extent of overshadowing onto Hay Street, junction with Darling Drive and light rail alignment; and<br>– No overshadowing of northwest corner of UTS building. |
| 12:00 | – No overshadowing along eastern boundary and northern boundaries;<br>– Reduced overshadowing to portions of Darling Drive with significant increase of direct sunlight between SW1 and SW3 towers onto Hay Street/ Darling Drive junction;<br>– Reduced extent of overshadowing onto Hay Street, junction with Darling Drive and light rail alignment; and<br>– Negligible overshadowing of northwest corner UTS building. |
| 1:00 | – No overshadowing along eastern boundary and northern boundaries;<br>– Reduced overshadowing onto Darling Drive on western boundary;<br>– Reduced extent of overshadowing onto Hay Street and junction with Darling Drive;<br>– Overshadowing retreats from UTS building allowing direct sunlight onto south side of Hay Street; and<br>– Reduced overshadowing at important Quay Street/ Boulevard interface. |
| 2:00 | – No overshadowing along northern and western boundaries;<br>– Reduced overshadowing onto Hay Street and the Boulevard; and<br>– Reduced shadow impact onto SE Plot. |
| 3:00 | – No overshadowing along northern and western boundaries;<br>– Negligible overshadowing onto Hay Street on southern boundary;<br>– Reduced overshadowing onto The Boulevard adjacent Haymarket Square allowing direct sunlight along eastern edge of boulevard; and<br>– Reduced shadow impact onto SE Plot. |
| 4:00 | – No overshadowing along northern, western and southern boundaries;<br>– Reduced overshadowing onto Haymarket Square with nearly all of the square receiving direct sunlight;<br>– Small area of direct sunlight onto The Boulevard adjacent the SE Plot;<br>– Reduced shadow impact onto SE Plot; and<br>– Reduced overshadowing onto Harbour Street – significantly set back from existing buildings. Will be obscured by SE Plot buildings when completed. |
| 5:00 | – No overshadowing along northern, western and southern boundaries;<br>– Reduced overshadowing onto Haymarket Square with increased area of direct sunlight onto north east corner of Haymarket Square;<br>– Reduced shadow impact onto SE and NE Plots; and<br>– Reduced overshadowing onto Harbour Street and existing buildings – Little Hay Street unchanged. Will be obscured by SE Plot buildings when completed. |

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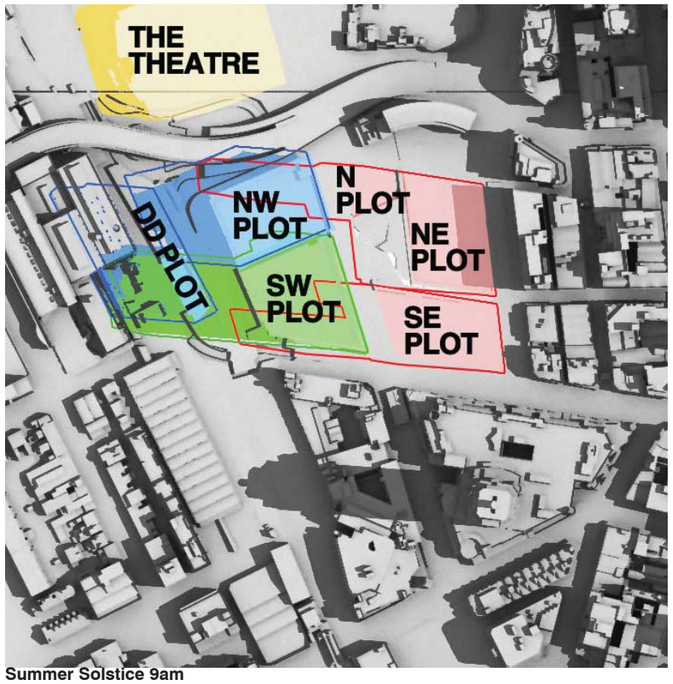
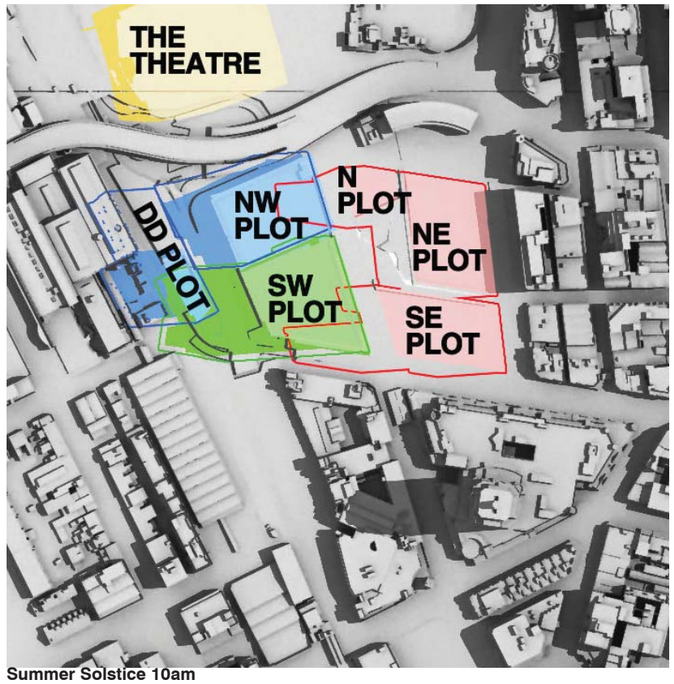
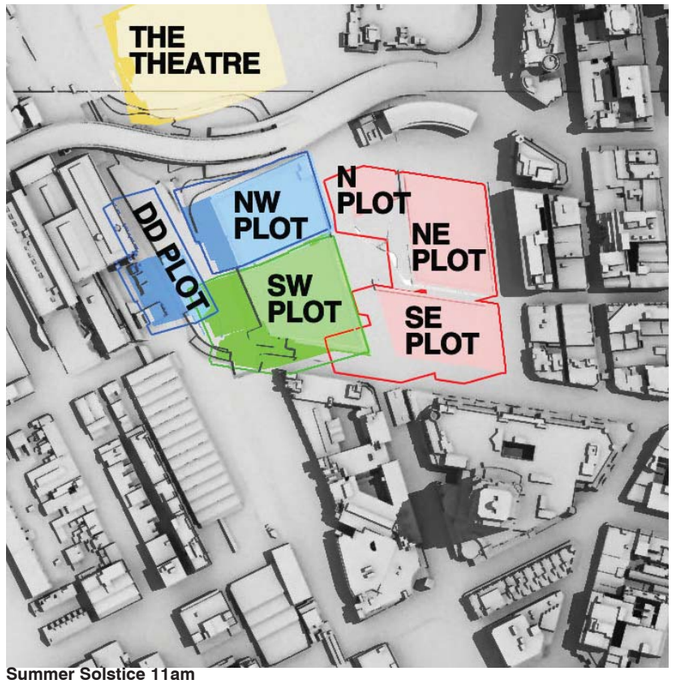


Summer Solstice 9am



Summer Solstice 10am



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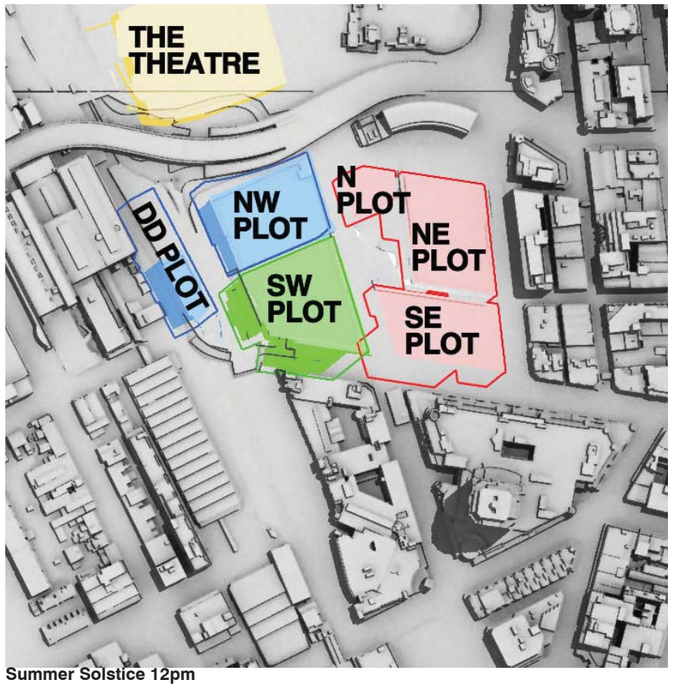
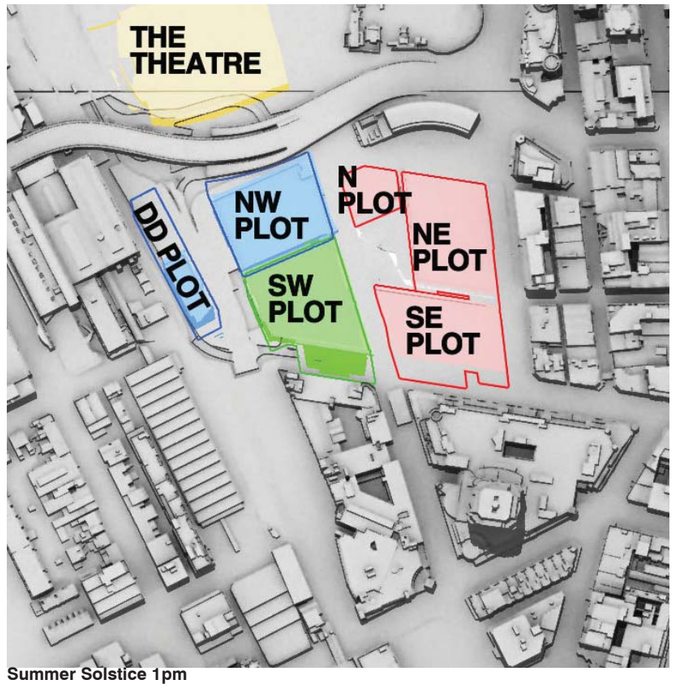
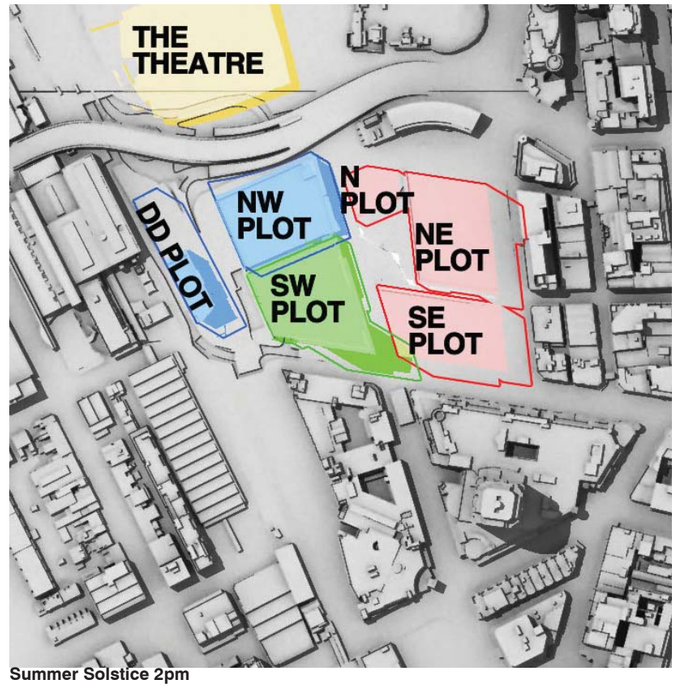


Summer Solstice 12pm



Summer Solstice 1pm



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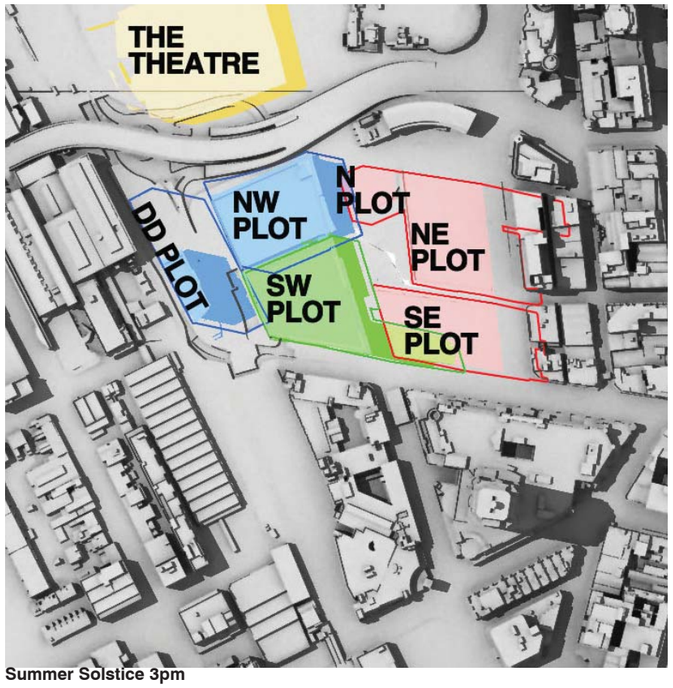
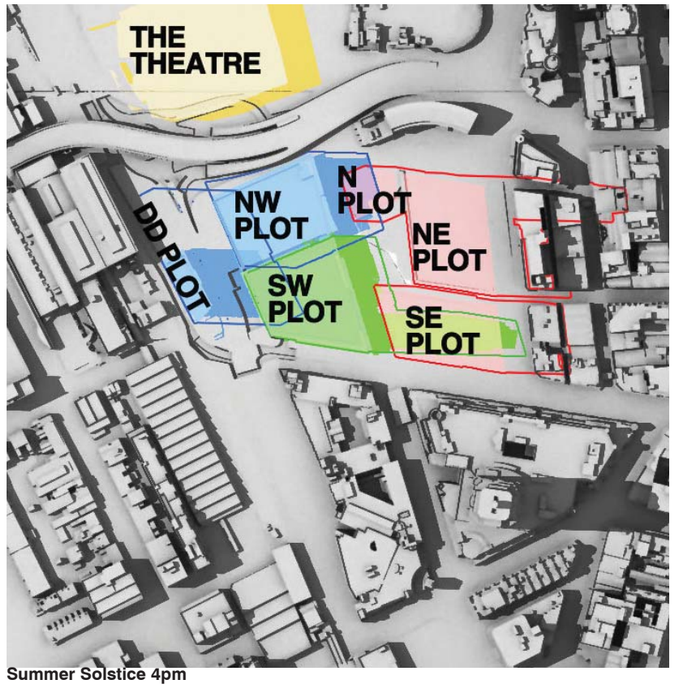
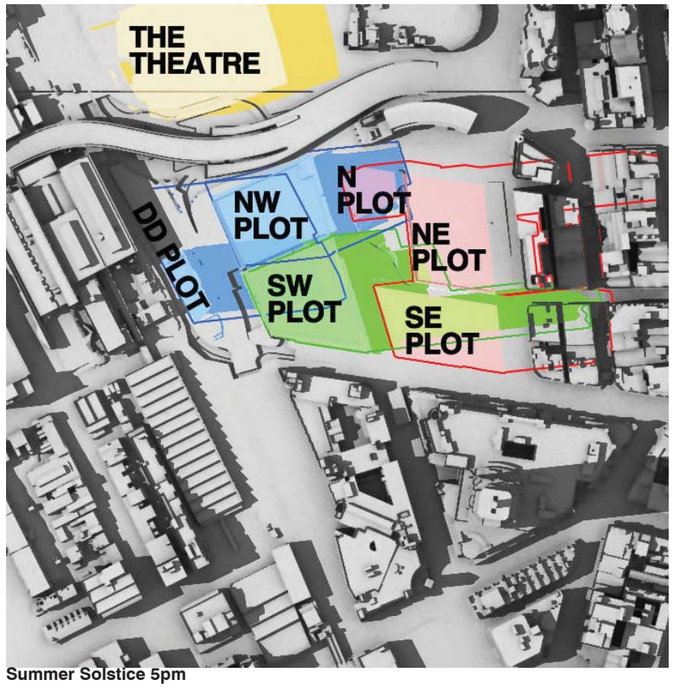


Summer Solstice 3pm



Summer Solstice 4pm



Summer Solstice 5pm

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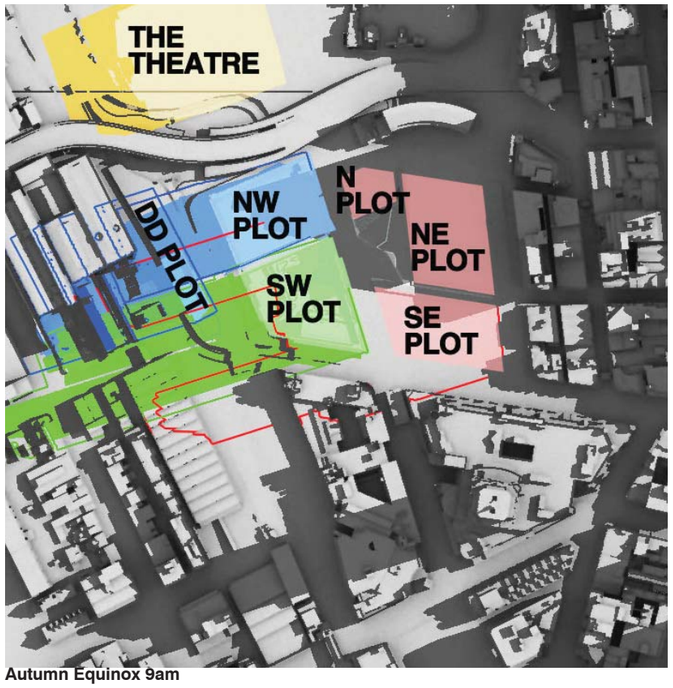
Shadows cast by Existing City Buildings

# SHADOW STUDIES

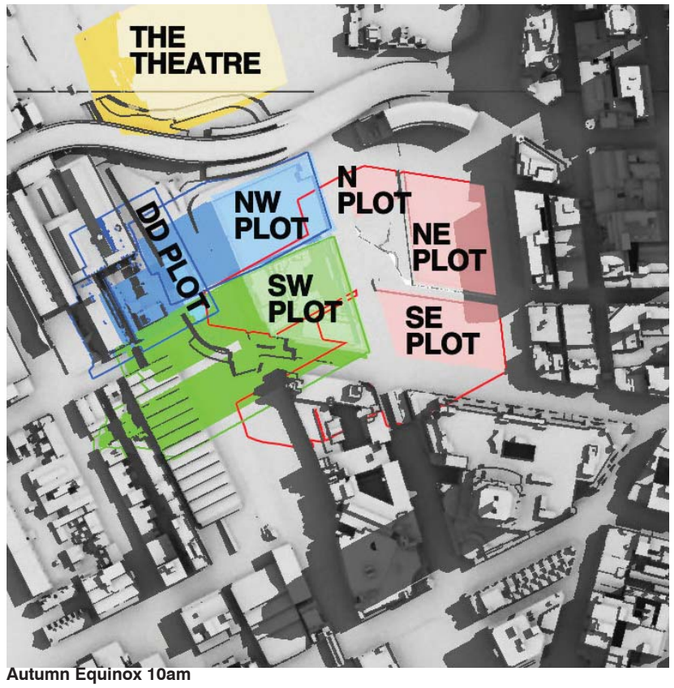
## Autumn Equinox (21st March)

| | |
|---|---|
| 9:00 | – No overshadowing along eastern boundary;<br>– No overshadowing along northern boundary allowing direct sunlight to Dickson's Lane;<br>– Reduced overshadowing onto Harris Street, Macarthur Street, Goods Yard and existing buildings south of Macarthur Street;<br>– Narrow strip of direct sunlight along eastern end of Macarthur Street as a result of increased separation of SW1 and SW3 towers; and<br>– Overshadowing of DD Plot building east elevation and Powerhouse Museum forecourt unchanged. |
| 10:00 | – No overshadowing along eastern and northern boundary;<br>– Reduced overshadowing onto Hay Street and northwest corner of UTS building to south of SW Plot;<br>– Reduced overshadowing onto Goods Yard, Goods Shed and buildings west of Goods Shed to west of SW Plot; and<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction and Goods Yard as a result of increased separation of SW1 and SW3 towers. |
| 11:00 | – No overshadowing along eastern and northern boundary;<br>– Reduced overshadowing onto Hay Street and northwest corner of UTS building to south of SW Plot;<br>– Reduced overshadowing onto Goods Yard and Goods Shed. SW1 tower shadow retreats from Goods Shed allows increased direct sunlight to eastern edge of Goods Yard; and<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction and Goods Yard as a result of increased separation of SW1 and SW3 towers. |
| 12:00 | – No overshadowing along eastern and northern boundary;<br>– Reduced overshadowing onto Hay Street;<br>– Reduced overshadowing onto UTS building with no overshadowing of central courtyard;<br>– Narrow strip of direct sunlight onto Hay Street/ Darling Drive junction and Goods Yard as a result of increased separation of SW1 and SW3 towers; and<br>– Increased direct sunlight onto Darling drive between SW, DD and NW Plots. |
| 1:00 | – No overshadowing along eastern and northern boundary;<br>– Reduced overshadowing onto Hay Street with narrow strip of direct sunlight onto Hay Street as a result of increased separation of SW1 and SW3 towers;<br>– Reduced overshadowing on Darling Drive and new landscaped verge; and<br>– Reduced overshadowing onto UTS building. |
| 2:00 | – No overshadowing along northern and western boundaries and negligible along eastern boundary;<br>– Reduced overshadowing onto UTS building with some direct sunlight to western edge of central courtyard;<br>– Small area of direct sunlight onto Hay Street adjacent UTS building; and<br>– Reduced overshadowing onto Quay Street. |
| 3:00 | – No overshadowing along northern and western boundary;<br>– Reduced overshadowing onto Hay Street, northeast corner of UTS building, Quay Street and northwest corner of Market City to south of SW Plot;<br>– Narrow strip of direct sunlight onto Hay Street and Boulevard as a result of setback SW3 tower; and<br>– Reduced overshadowing of Boulevard allowing direct sunlight along eastern edge. |
| 4:00 | – No overshadowing along northern and western boundary;<br>– Reduced overshadowing onto Hay Street and Quay Street;<br>– No overshadowing of northeast corner of UTS building;<br>– Reduced overshadowing (reduced depth) of Market City podium;<br>– Reduced overshadowing of Haymarket Square and allows direct sunlight to southern edge of square; and<br>– Reduced shadow impact onto SE Plot. |
| 5:00 | – No overshadowing along northern and western boundary;<br>– Reduced overshadowing onto Hay Street and northeast corner of Market City podium;<br>– No overshadowing of existing buildings on corner of Harbour Street. Will be obscured by SE Plot buildings when completed;<br>– No overshadowing of Little Hay Street;<br>– Reduced overshadowing of Haymarket Square allowing direct sunlight to southeast corner of square. Will be overshadowed by NW Plot buildings; and<br>– Reduced shadow impact onto SE Plot. |

# SHADOW STUDIES



Autumn Equinox 9am



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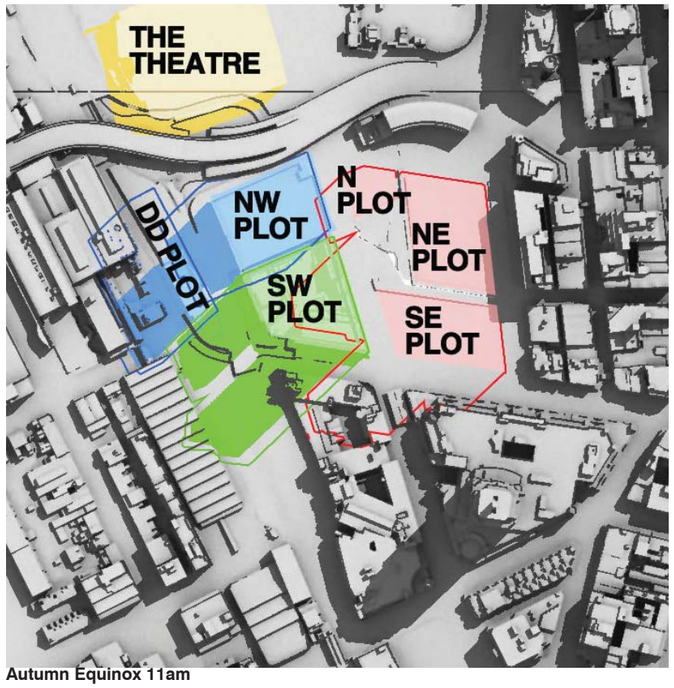

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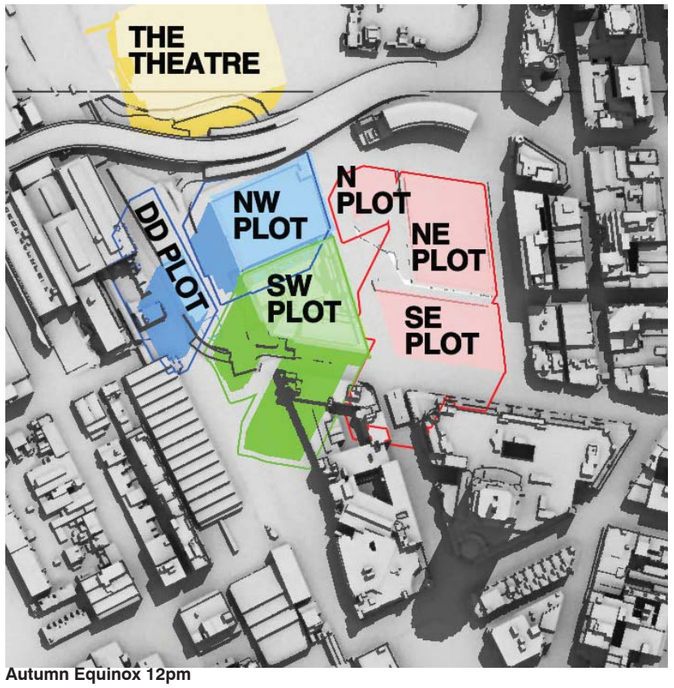
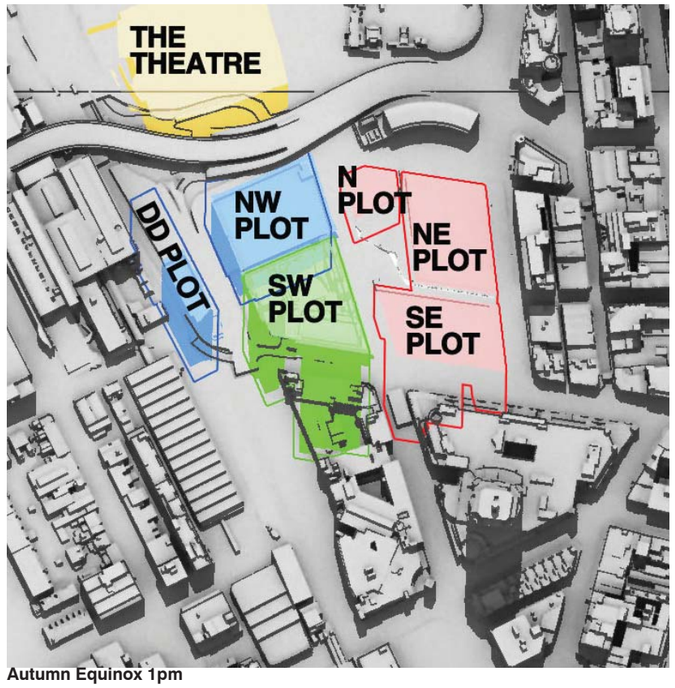
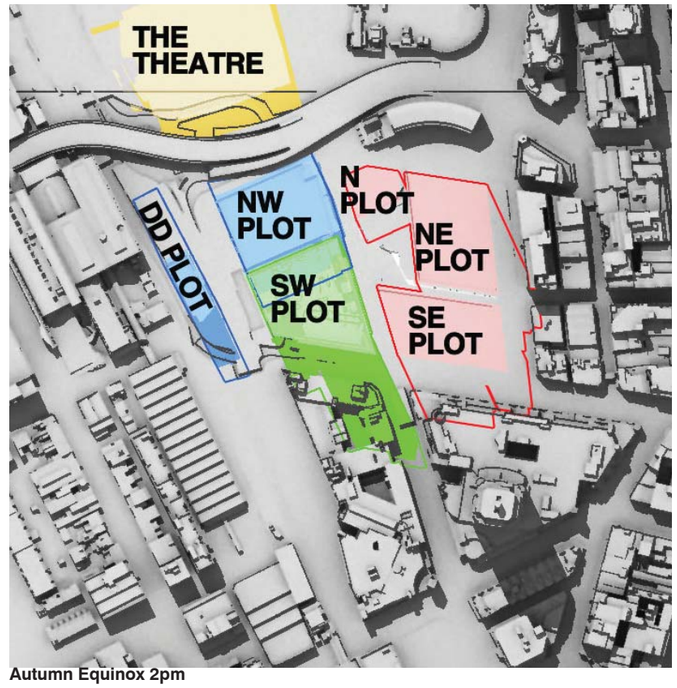


Autumn Equinox 12pm



Autumn Equinox 1pm



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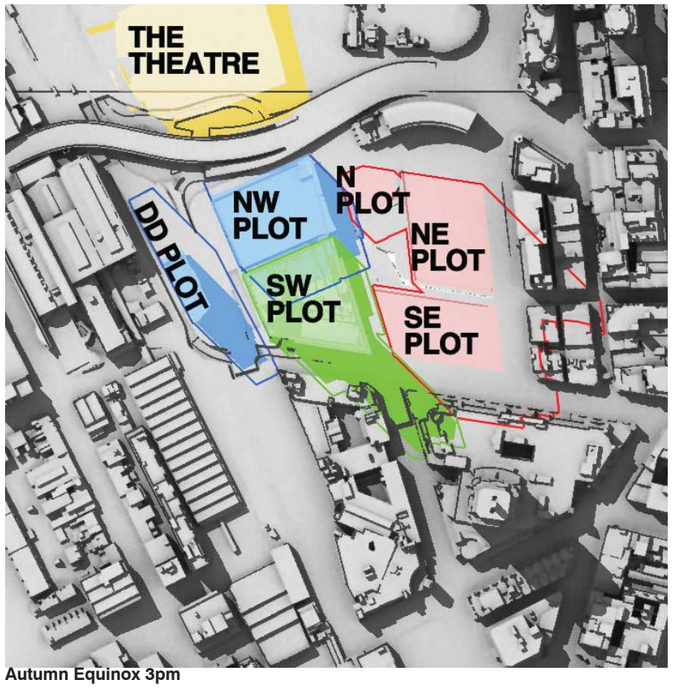

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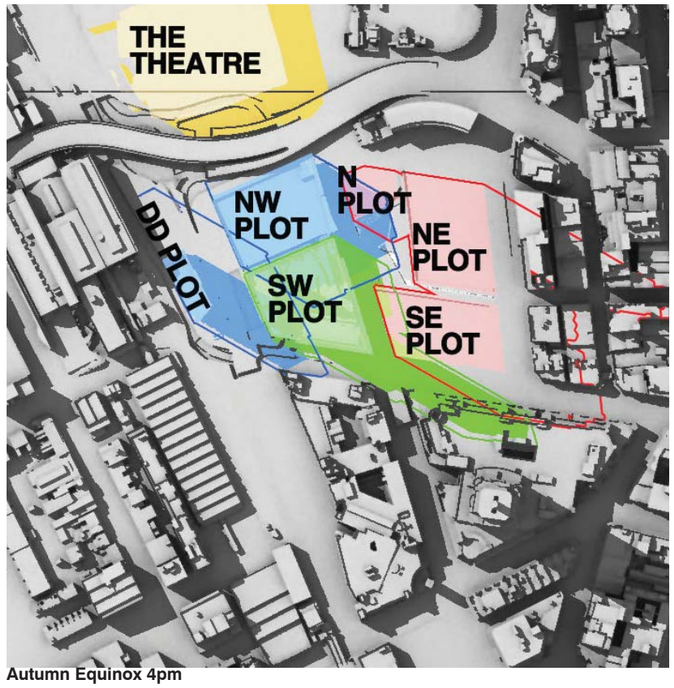

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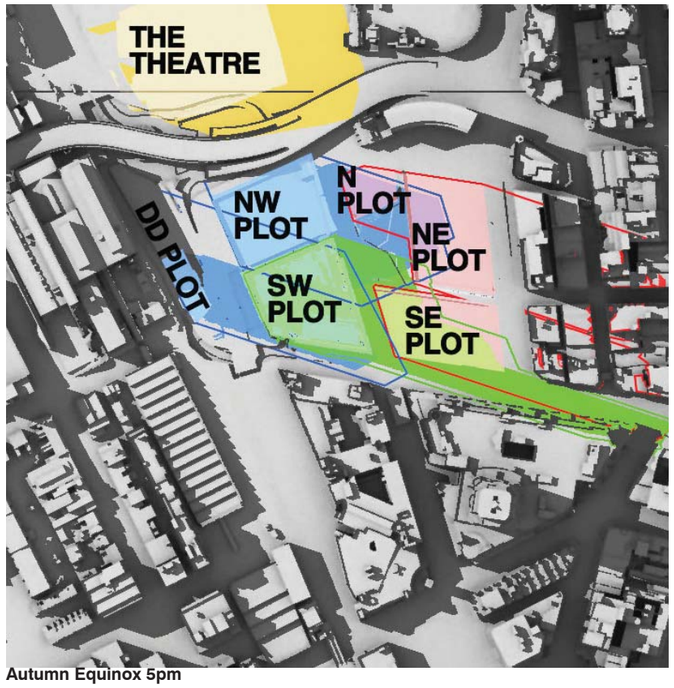

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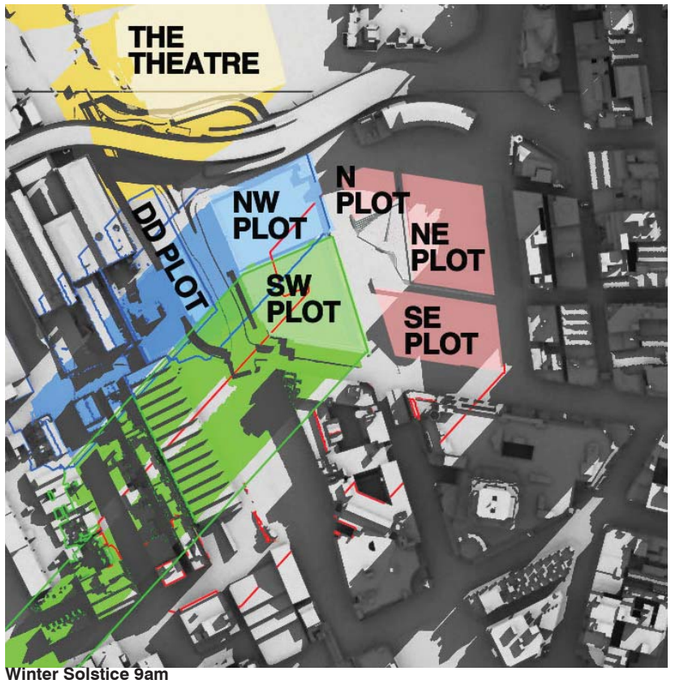
# SHADOW STUDIES

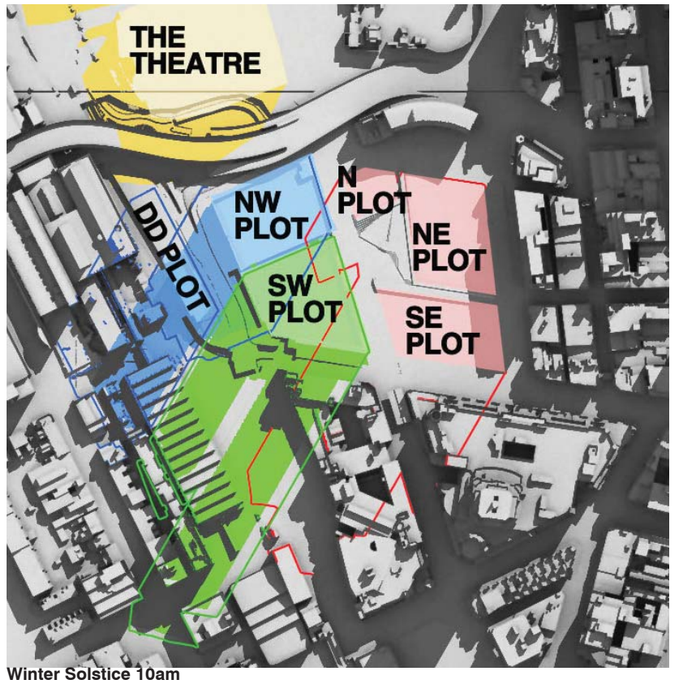
## Winter Solstice (21st June)

| | |
|---|---|
| 9:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing along edges of all maximum envelope towers<br>– Narrow strip of direct sunlight onto Goods Yard, Goods Shed and Ultimo buildings as a result of increased separation of SW1 and SW3 towers; and<br>– Narrow strip of daylight potentially between SW and DD Plots; and<br>– Reduced overshadowing onto northwest corner of UTS building. |
| 10:00 | – No overshadowing along northern and eastern boundaries;<br>– Reduced overshadowing along edges of all maximum envelope towers<br>– Narrow strip of direct sunlight onto Goods Yard, Goods Shed and Ultimo buildings as a result of increased separation of SW1 and SW3 towers; and<br>– Increased direct sunlight onto Goods Yard, Goods Shed as a result of increased separation of SW and DD Plots; and<br>– Reduced overshadowing onto northwest corner of UTS building. No overshadowing of central courtyard. |
| 11:00 | – No overshadowing along northern and eastern boundaries;<br>– No change to Darling Drive and Hay Street;<br>– Reduced overshadowing onto UTS building. Increase direct sunlight into central courtyard;<br>– Reduced overshadowing onto Goods Yard and Darling Drive to southwest of SW Plot; and<br>– Narrow strip of direct sunlight onto Goods Yard and Ultimo buildings as a result of increased separation of SW1 and SW3 towers. |
| 12:00 | – No overshadowing along northern and eastern boundaries;<br>– No change to Darling Drive and Hay Street;<br>– Reduced overshadowing onto UTS building. Increase direct sunlight into central courtyard;<br>– Reduced overshadowing onto Goods Yard and Darling Drive to southwest of SW Plot; and<br>– Narrow strip of direct sunlight onto Goods Yard and Ultimo buildings as a result of increased separation of SW1 and SW3 towers. |
| 1:00 | – No overshadowing along northern and eastern boundaries;<br>– Negligible overshadowing along western boundary; and<br>– Reduced shadow impact on buildings south of SW Plot. |
| 2:00 | – No overshadowing along northern and western boundaries;<br>– Reduced overshadowing onto The Boulevard allows direct sunlight along eastern edge of boulevard.<br>– Reduced shadow impact on Quay Street and buildings south of SW Plot. |
| 3:00 | – No overshadowing along northern and western boundaries;<br>– SW1 tower projecting bay increases shadowing onto northeast corner of UTS building, overshadows northeast corner of central courtyard and Quay Street;<br>– Reduced overshadowing along Hay Street to southeast of SW Plot;<br>– No change to Market City podium;<br>– Reduced shadow impact onto SE Plot. |
| 4:00 | – No significant change. |
| 5:00 | Not Available |

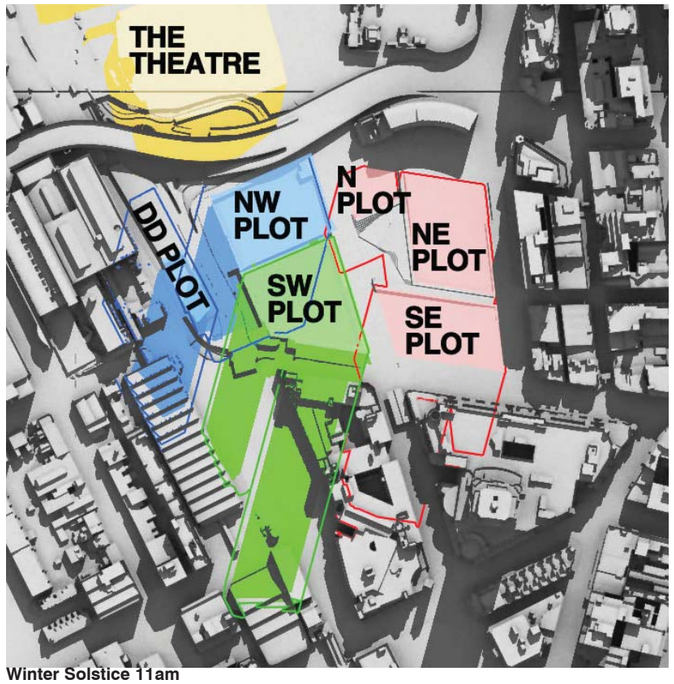
# SHADOW STUDIES



Winter Solstice 9am



Winter Solstice 10am



Winter Solstice 11am

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

Shadows cast by SSDA3 + SSDA4 buildings

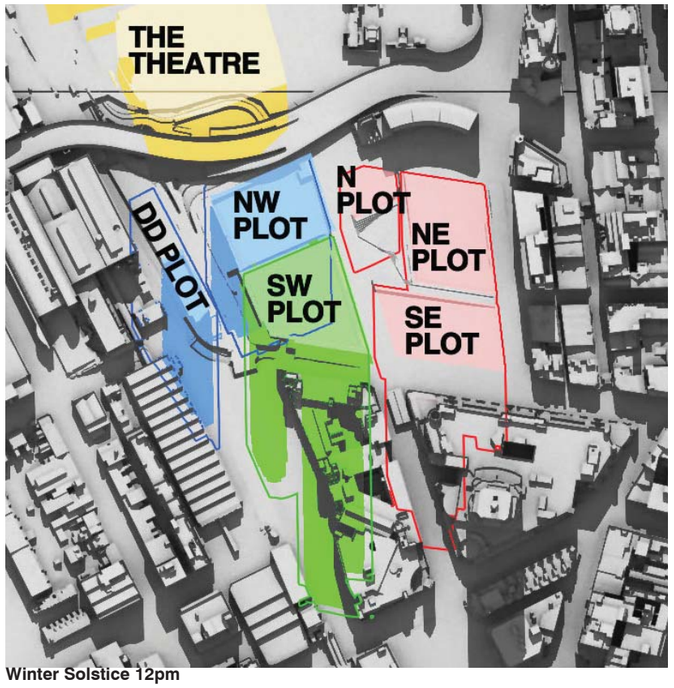
Parameter plan shadow for DD + NW plot

Concept proposal parameter plan shadows for N, NE + SE plots

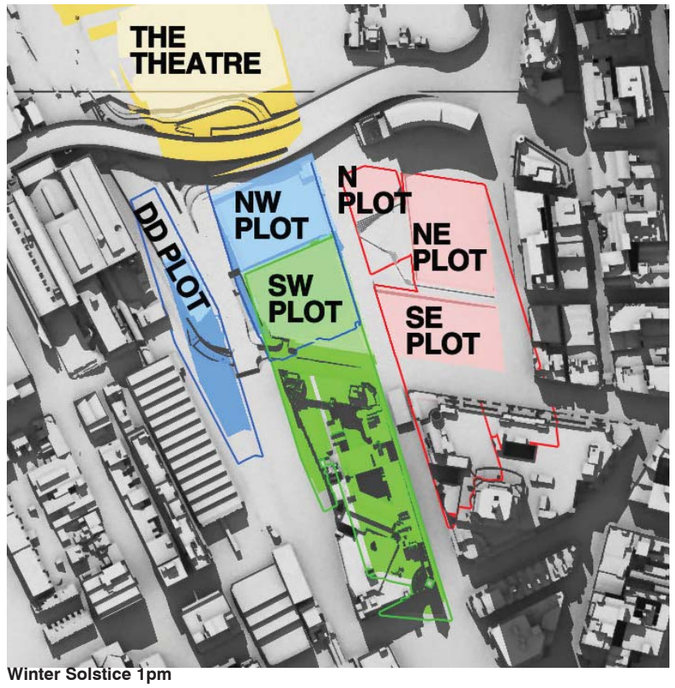
Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

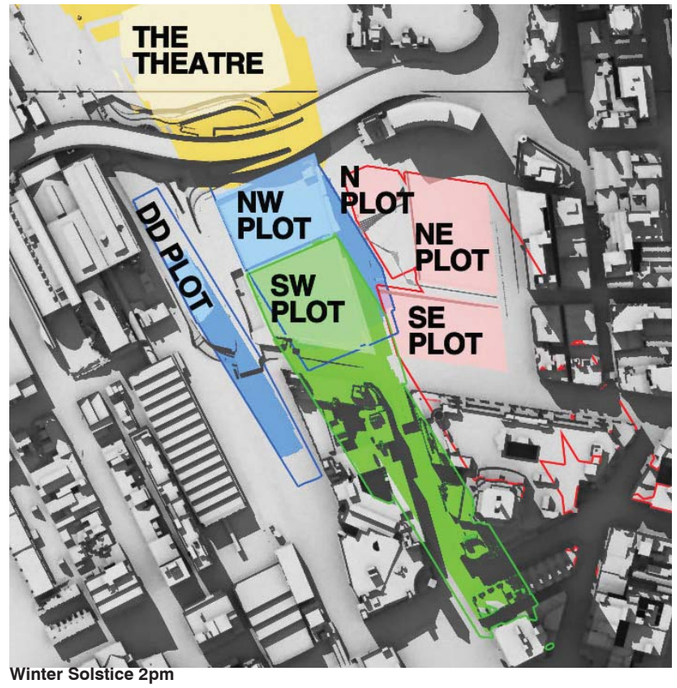
# SHADOW STUDIES



Winter Solstice 12pm



Winter Solstice 1pm



Winter Solstice 2pm

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Shadows cast by SSDA3 + SSDA4 buildings

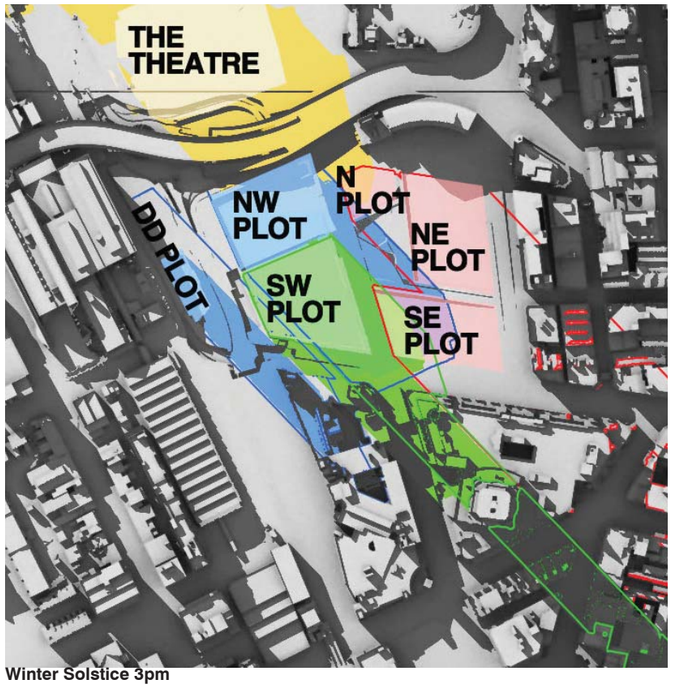
Parameter plan shadow for DD + NW plot

Concept proposal parameter plan shadows for N, NE + SE plots

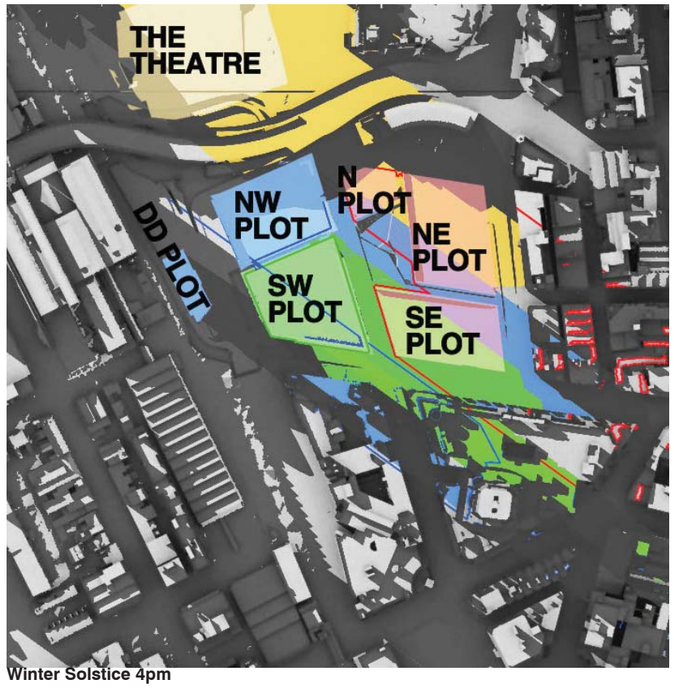
Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

# SHADOW STUDIES



Winter Solstice 3pm



Winter Solstice 4pm

Shadows cast by SSDA5 building

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Shadows cast by SSDA3 + SSDA4 buildings

Parameter plan shadow for DD + NW plot

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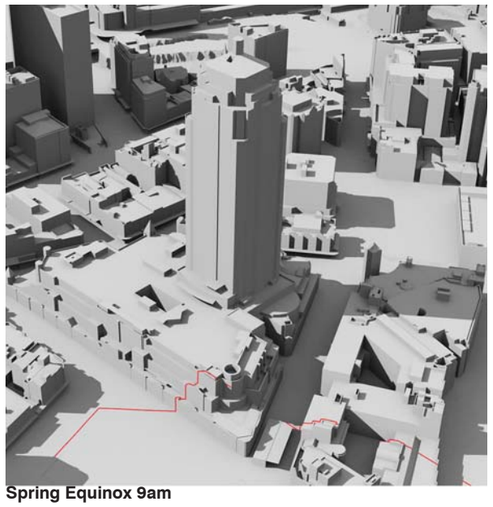
Shadows cast by Existing City Buildings

# SHADOW STUDIES

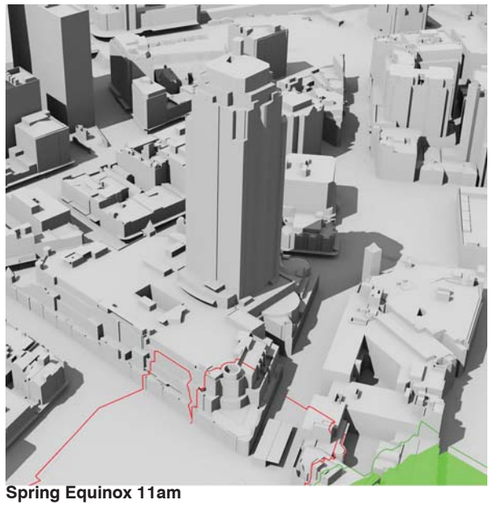
The following shadow studies and associated narrative summarises the overshadowing impact upon the Peak Tower and Market City podium rooftop amenities:

| Spring equinox (21st September) | |
|---|---|
| 9:00 - 12.00 | NO IMPACT |
| 1:00 | – A slight portion of the Market city podium elevation is in shadow – no impact at podium roof level. |
| 2:00 | – A portion of the north west corner of the Market city podium roof is overshadowed; andThe extents of overshadowing are slightly reduced when compared to the maximum building envelope model. |
| 3:00 | – A zone across the western half of the north face of the Market city podium roof is overshadowed; and<br>– The extents of overshadowing are slightly reduced when compared to the maximum building envelope model. |
| 4:00 | – The eastern edge of the Market City podium north elevation is in shadow – no impact on the podium roof level; and<br>– The extents of overshadowing are significantly reduced when compared to the maximum building envelope model. |



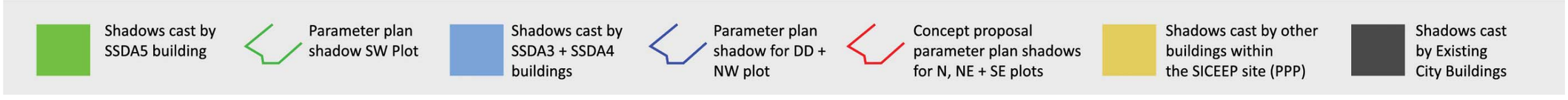
**Spring Equinox 9am**

**Spring Equinox 10am**

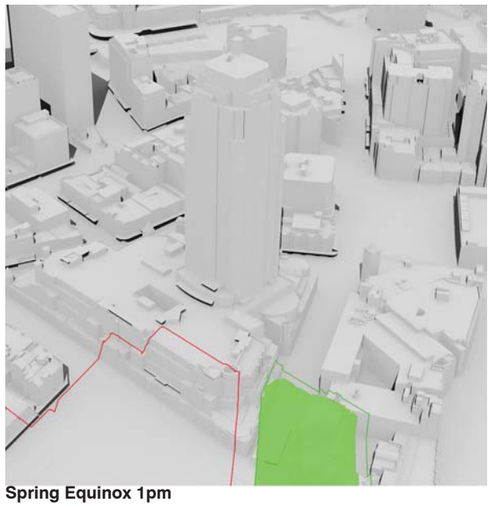


**Spring Equinox 11am**

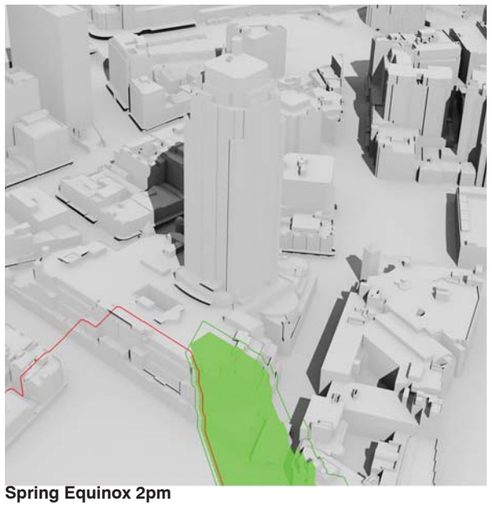
**Spring Equinox 12pm**



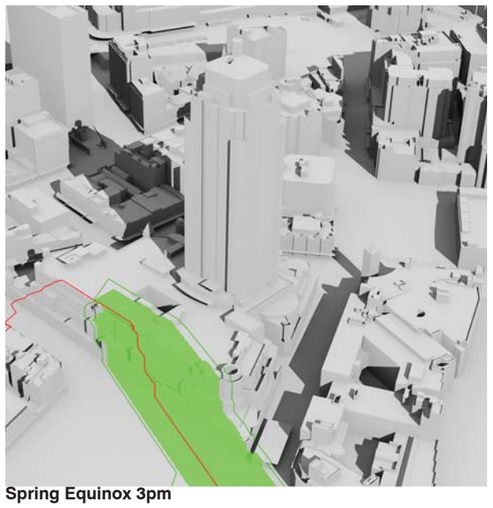
# SHADOW STUDIES



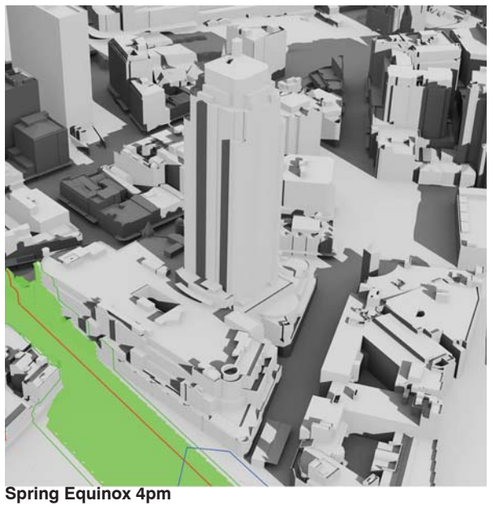
Spring Equinox 1pm



Spring Equinox 2pm



Spring Equinox 3pm



Spring Equinox 4pm

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

Shadows cast by SSDA3 + SSDA4 buildings

Parameter plan shadow for DD + NW plot

Concept proposal parameter plan shadows for N, NE + SE plots

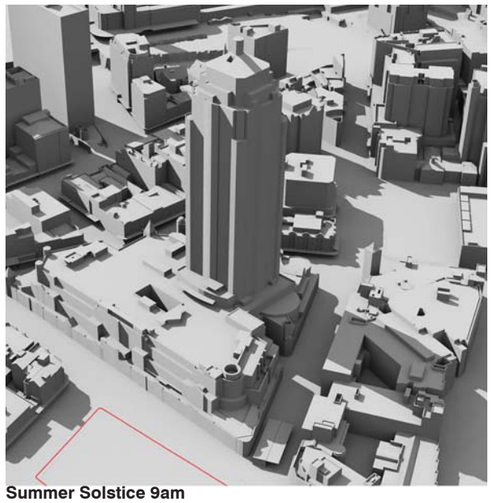
Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

# SHADOW STUDIES

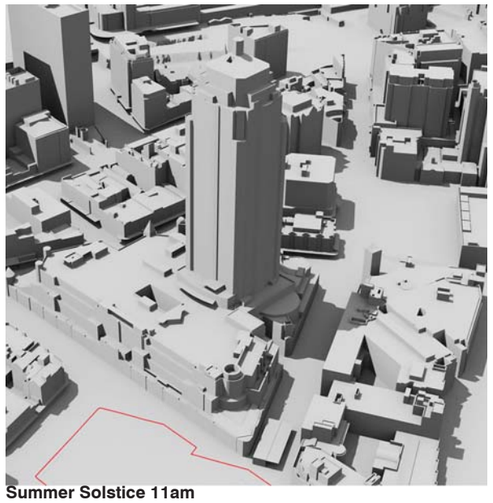
Summer solstice (21st December)

| | |
|---|---|
| 9:00 - 4.00 | NO IMPACT |



Summer Solstice 9am

Summer Solstice 10am



Summer Solstice 11am

Summer Solstice 12pm

Shadows cast by SSDA5 building

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Parameter plan shadow for DD + NW plot

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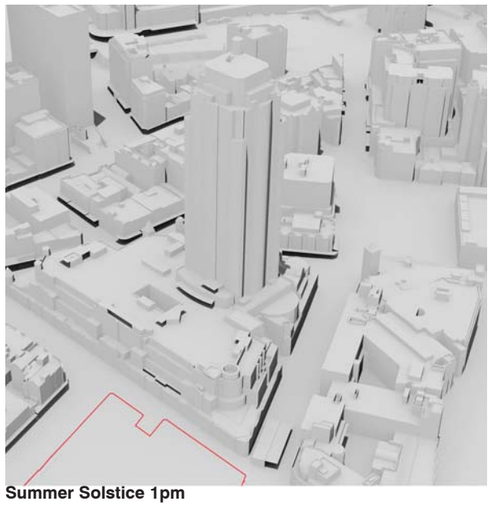
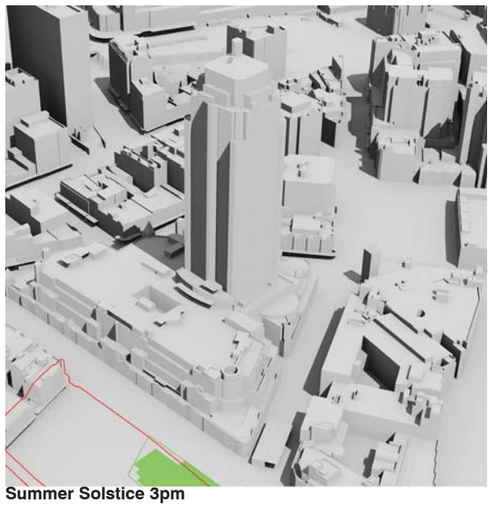
Shadows cast by Existing City Buildings

# SHADOW STUDIES

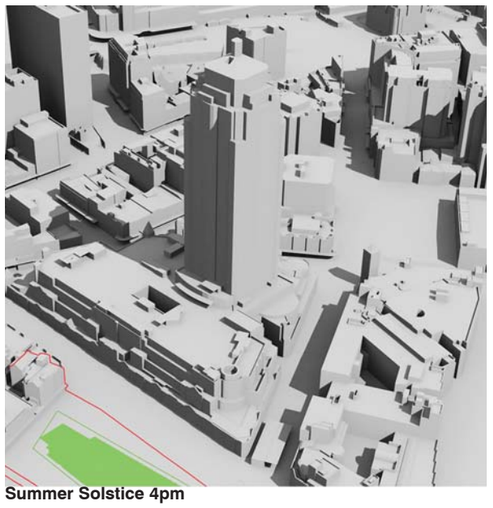


Summer Solstice 1pm

Summer Solstice 2pm



Summer Solstice 3pm



Summer Solstice 4pm

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

Shadows cast by SSDA3 + SSDA4 buildings

Parameter plan shadow for DD + NW plot

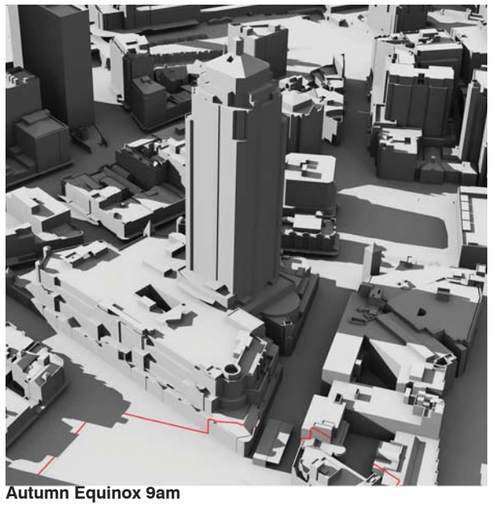
Concept proposal parameter plan shadows for N, NE + SE plots

Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

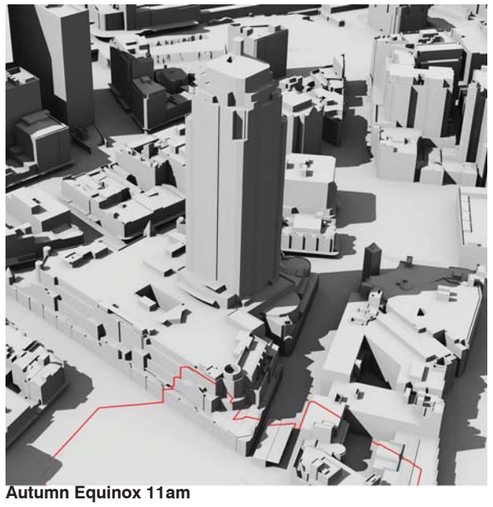
# SHADOW STUDIES

| Autumn equinox (21st March) | |
|---|---|
| 9:00 - 2.00 | NO IMPACT |
| 3:00 | – A portion of the north west corner of the Market city podium roof is overshadowed; and<br>– The extents of overshadowing are slightly reduced when compared to the maximum building envelope model. |
| 4:00 | – A zone across the western half of the north face of the Market city podium roof is overshadowed; and<br>– The extents of overshadowing are slightly reduced when compared to the maximum building envelope model. |



**Autumn Equinox 9am**

**Autumn Equinox 10am**



**Autumn Equinox 11am**

**Autumn Equinox 12pm**

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

Shadows cast by SSDA3 + SSDA4 buildings

Parameter plan shadow for DD + NW plot

Concept proposal parameter plan shadows for N, NE + SE plots

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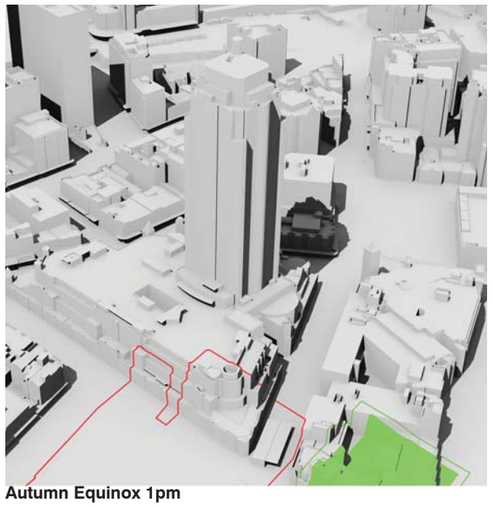
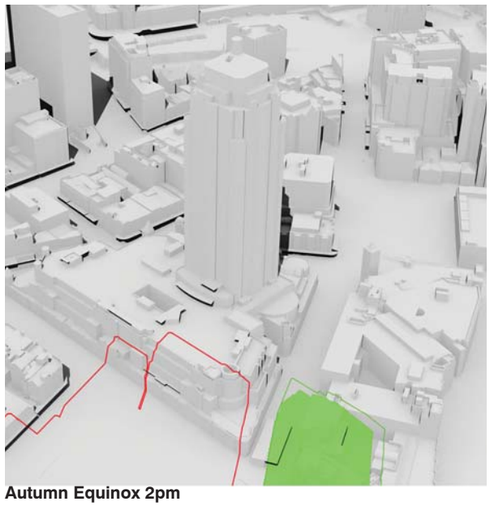
Shadows cast by Existing City Buildings

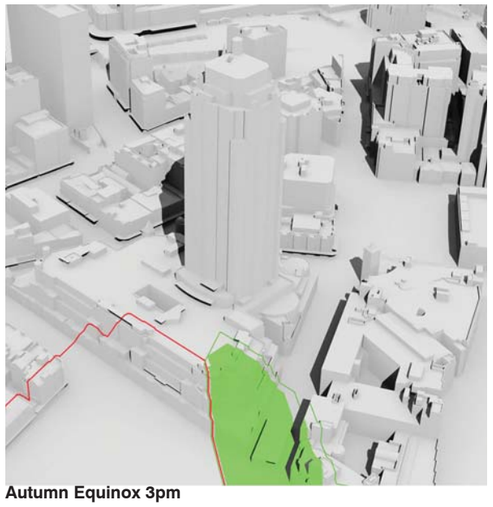
# SHADOW STUDIES



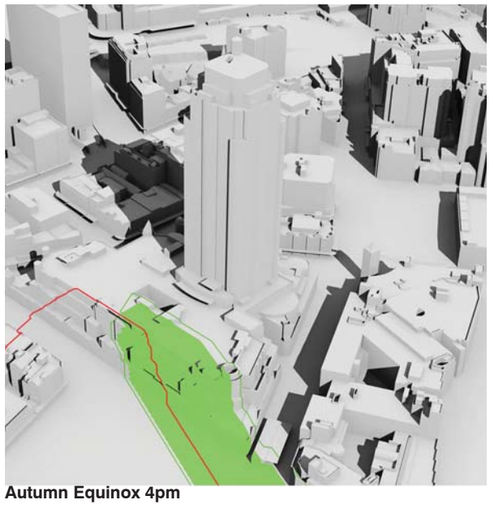
Autumn Equinox 1pm



Autumn Equinox 2pm



Autumn Equinox 3pm



Autumn Equinox 4pm

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

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Parameter plan shadow for DD + NW plot

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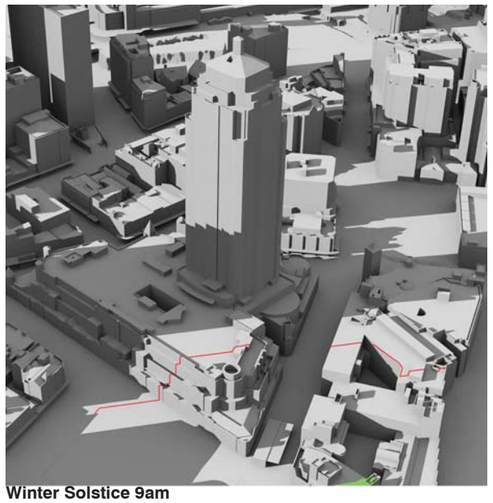
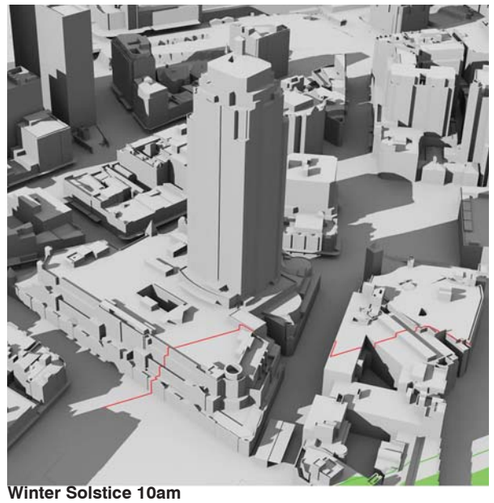
Shadows cast by Existing City Buildings

# SHADOW STUDIES

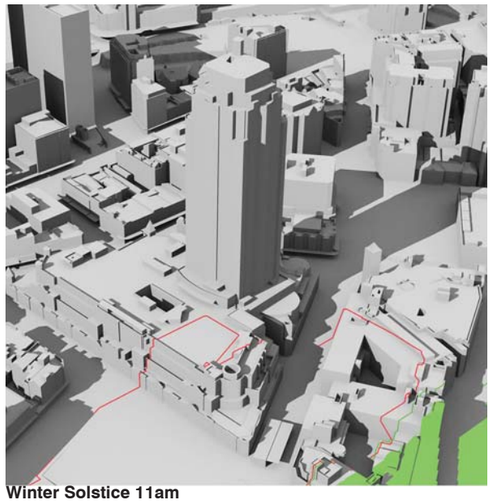
| Winter solstice (21st June) | |
|---|---|
| 9:00 - 1.00 | NO IMPACT |
| 2:00 | – The western edge of the Market City podium roof is overshadowed;<br>– 10-15% of the Peak Tower western elevation is overshadowed; and<br>– A slight reduction in the extents of overshadowing when compared to the maximum building envelope model. |
| 3:00 | – The Market City podium roof is overshadowed from the north west corner to the Peak Tower;<br>– 40-45% of the Peak Tower northern elevation is overshadowed;<br>– 40-45% of the Peak Tower western elevation is overshadowed;<br>– A portion of the Peak Tower western elevation (5%) now receives direct sunlight when compared to the maximum building envelope model – previously overshadowed at 2pm; and<br>– 5-10% of the Peak Tower western elevation remains in shadow since 2pm |
| 4:00 | – The Market City podium roof is overshadowed from the north west corner to the in front of the north elevation of the Peak Tower;<br>– 45-50% of the Peak Tower northern elevation is overshadowed;<br>– 15-20% of the Peak Tower northern elevation remains in shadow since 3pm;<br>– A portion of the Peak Tower north elevation (15-20%) now receives direct sunlight when compared to the maximum building envelope model – portions of which were previously overshadowed at 3pm; and<br>– Additional overshadowing to the Market City podium roof results from the student accommodation – discussed under separate development application. |



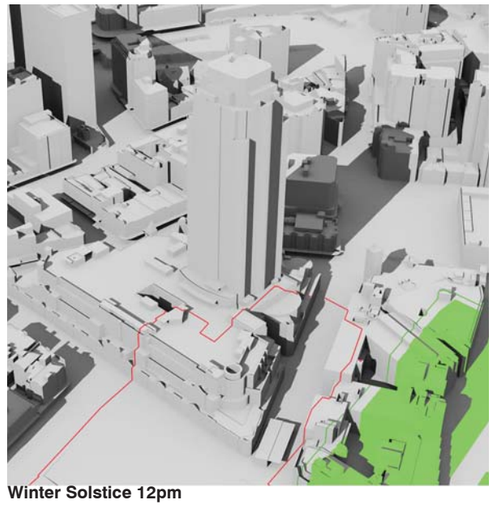
**Winter Solstice 9am**



**Winter Solstice 10am**



**Winter Solstice 11am**



**Winter Solstice 12pm**

Shadows cast by SSDA5 building

Parameter plan shadow SW Plot

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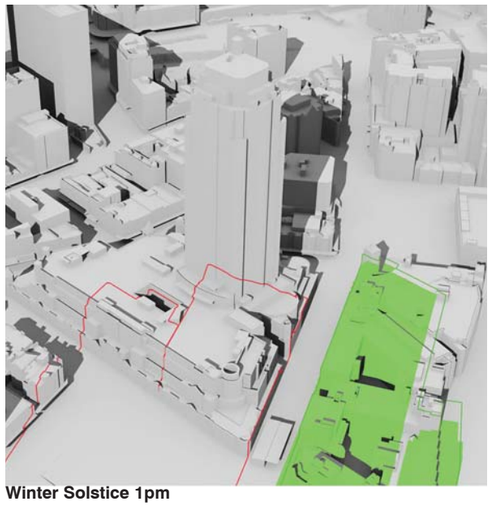
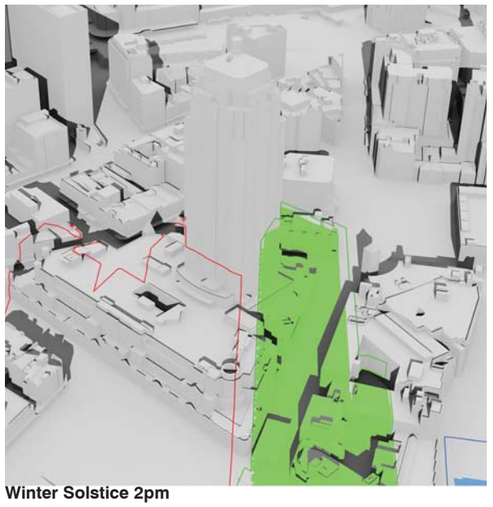
Shadows cast by Existing City Buildings

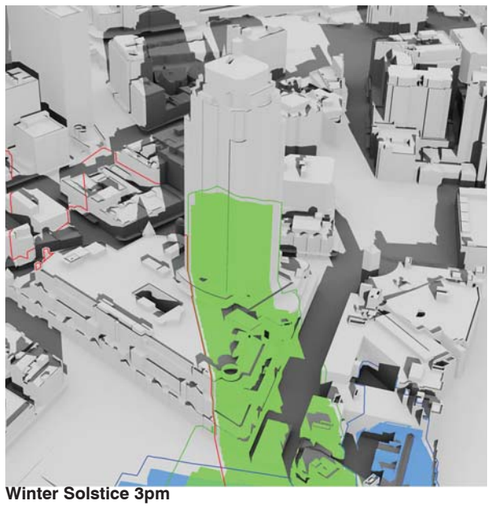
# SHADOW STUDIES



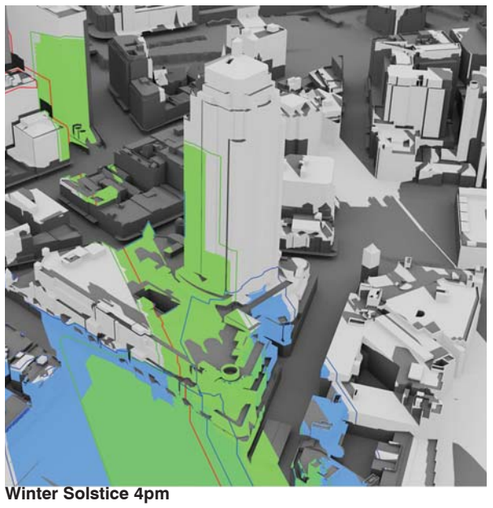
Winter Solstice 1pm



Winter Solstice 2pm



Winter Solstice 3pm



Winter Solstice 4pm

Shadows cast by SSDA5 building

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Shadows cast by other buildings within the SICEEP site (PPP)

Shadows cast by Existing City Buildings

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# SEPP 65 ASSESSMENT

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## Principle 1: Context

**Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.**

Response

The site referred to as the SW Plot sits within 'The Haymarket', itself part of the Sydney International Exhibition, Conference and Exhibition Precinct (SICEEP) renewal project to be delivered by the Darling Harbour Live consortium.

The site is located within southwest corner of The Haymarket Concept Proposal as submitted for SSDA 2. Currently the site contains the Sydney Entertainment Centre and a multi-storey car park, both of which will be demolished. The brief proposes a high density mixed-use building containing retail, community and residential uses.

The site sits outside the City of Sydney's Local Environmental Plan (LEP). The design of the proposal has instead been developed in consultation with the Urban Design and Public Realm Guidelines (UDPRG) prepared for Infrastructure New South Wales (INSW). That document provides guidance on maximum building envelope and setbacks, minimum street and building separation widths and encourages good overall urban design outcomes.

The site is owned by Sydney Harbour Foreshore Authority (SHFA); however the procurement will be led by INSW.

Overall The Haymarket site development area is 47,530m$^2$ with a built form development footprint of only 14,170m$^2$ - equal to about 30% coverage. Of the remaining portion, a significant amount will be given over to the creation of new public spaces. The SW Plot site is 12,096m$^2$ with a plot area of 5,072m$^2$.

The SW Plot site is bounded by Dickson's Lane to the north, Darling Drive to the west, The Boulevard to the east and Hay Street to the south. The new public boulevard traverses north/south across The Haymarket and will be delivered with the SW Plot.

The proposed design has evolved to take advantage of the surrounding views. The taller built forms hold the urban perimeter, retreating from the eastern edge overlooking The Boulevard and future new square and the western edge on Dickson's Lane due to proximity to the NW Plot.

The Concept Proposal site context is dominated by a mix of post-industrial, market and university uses. The Market City and UTS buildings of local heritage value sit opposite the southern boundary of the Concept Proposal site.

The SW Plot adopts the plot boundary defined within the Parameter Plans submitted in the SSDA 2, and maintains proposed street alignments and widths. A 'street wall' partially sheaths the car park beyond and provides a datum of maximum 20 metres (as per the Parameter Plans) that relates to a human scale and the inner city context. Increased height is proposed around the square edge to provide an appropriate civic scale, addressing the proportion of the open public space.

## Principle 2: Scale

**Good design provides an appropriate scale in terms of the bulk and height that suits the proportion of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.**

Response

The existing context in and around The Haymarket is of a mixed scale and use. Market City, with the tall Peak Apartment Tower, provides a vertical benchmark of RL +170m. The other surrounding buildings provide a range of scales varying from 2 – 12 storeys (RLs notionally +10.00m to +45.00m).

The Concept Proposal advocates variation in building heights for four key reasons:

– Context - to respond to the range in height of existing buildings.

– Amenity - to ensure that buildings and open spaces have adequate access to sunlight and daylight.

– Built Form and Aesthetics - to ensure that there is sufficient variety in the appearance of buildings to make the development feel like a genuine part of the city.

– View sharing - the massing along the street edge considers the impact on views across the site from adjoining buildings and also from within the site itself.

The design approach for the SW Plot follows the advocacy of more towers of a reduced height and footprint, supporting the desire to maximise view-sharing corridors from within and through the site; a finer grain approach that talks of streets and buildings as opposed to podiums and towers. The location of the residential towers reinforces the urban design narrative – from forming a gateway to mark the entrance to The Boulevard to providing a local landmark on axis for pedestrians approaching the site from the west along Macarthur Street.

Generous street widths along Darling Drive and Hay Street can accommodate massing along the street edge, ameliorating the impacts of overshadowing and scale on the streetscape and buildings beyond.

## Principle 3: Built form

**Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.**

Response

The Concept Proposal adopts the principle of perimeter block planning, proposing envelopes aligned with streets to clearly separate the public domain and urban edges. A variety of public spaces comprising roads, pedestrian streets, parks and pathways result from the careful arrangement of built form. By adopting these guidelines and adhering to the building plots as proposed in the SSDA 2 Parameter Plans, the Concept Proposal should be built as intended.

Within the SW Plot the urban block is partially 'sleeved' with occupied space to maintain an active street wall. The massing increases slightly as buildings along The Boulevard front onto Haymarket Square to create a more civic scale. Two residential towers are located on the western and southern edges of the urban block and are arranged to maximise view outlook for the residents.

Tall buildings are setback from The Boulevard and Haymarket Square to avoid dominating the space. Locating the massing at the site perimeter responds to, and reinforces, the urban edge of the site and addresses the topography as buildings rise up to the Pyrmont ridge lines.

Dickson's Lane leading into The Boulevard is kept tight to minimise erosion of the public space perimeter, and allow a more intimate scale for diners, customers and visitors as a counterpoint to the grand scale of the square and boulevard.

The SW Plot shows retail frontages with either recessed ground planes or projecting canopies, improving pedestrian amenity and enhancing the building edge condition. Where possible, the retail ground level is at The Boulevard level to maximise activation and permeability. However this entails an engineered solution to overcome challenges created by being lower that the proposed site flood datums.

Building separation, lane and street size, and public domain interface respond to the principles contained within the Urban Design and Public Realm Guidelines (UDPRG) prepared for INSW and the Residential Flat Design Codes (RFDC).

## Principle 4: Density

**Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.**

Response

The dwelling density is appropriate for the site and its future context. High density is supported for The Haymarket site, with the City of Sydney's Local Environmental Plan setting a Floor Space Ratio (FSR) of 8:1 for residential development on sites surrounding the site and an FSR of 4.3:1 advocated within the Concept Proposal. The FSR is as noted below.

| | Haymarket | Concept Proposal | SW Plot FSR (site boundary) | SW Plot (plot boundary) |
|---|---|---|---|---|
| **FSR** | 8:1 | 4.3:1 | 3.7:1 | 8.9:1 |

The current proposal will deliver 542 new apartments ranging from studios to 3 bedroom units.

The Concept Proposal advocates a high-density mixed-use development given the proximity to employment and activity centres ranging from the central business district to the north-east and the universities precinct to the south. These study, employment and activity centres are all easily accessible via pedestrian, cycle and public transport linkages. Non-vehicular use will be promoted on site and within the wider SICEEP with cycle storage provided for all apartments. This is in keeping with the Sydney 2030 Strategic Directions for "A City for pedestrians and cyclists."

The dwelling density is sustainable due to the provision of new infrastructure in SICEEP, such as stormwater, sewer, electricity, green energy, telecommunications and retail and community facilities.

It is proposed that both towers be tall rather than wide, to allow more space between built forms and provide a good level of solar penetration. The towers are comparable in height and density to other CBD buildings within close proximity such as the Peak Apartments and World Square towers. The development mix of low, mid- and high-rise forms provides variety that addresses issues of view-sharing, lifestyle and affordability.

The tall buildings provide a visible presence on the skyline and herald a new natural extension of the city. The towers are strategically located to avoid over-shadowing and over-dominating new public spaces, whilst marking key urban features in the Concept Proposal and assisting way-finding across the city.

## Principle 5: Resource, energy and water efficiency

**Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and re-use of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.**

Response

The design seeks to achieve an 'Australian Excellence' 4-Star As-built Green Star rating for the residential component.

Passive solar design has informed the massing approach and allowance for envelopes. The SW Plot has the majority of apartments oriented north, northeast or north-west, while proposed building envelopes can accommodate generous balcony overhangs to minimise solar gain in summer. The SW Plot has a number of apartments with dual orientation, maximising opportunities for natural cross ventilation. Natural ventilation opportunities will be explored in the detailed development.

Rainwater will be harvested to irrigate the landscaped podium and an overall water management strategy is proposed for the public domain and landscaped podium. Low energy, efficient appliances and water efficient fixtures will be incorporated into the apartments. All dwellings are fitted with air conditioners with individual controls in each room and the ability to run a single room in the entire dwelling reduces energy consumption. A kill switch will be provided to allow all electrical appliances and fixtures to be turned off when resident's exit the apartment (similar to a hotel).

The deep soil zones with permeable surfaces along The Boulevard and Darling Drive enable rainwater and overland flow to enter the ground and replenish the water table. Further detail is provided within the Public Domain Design Report for SSDA 5 prepared by Hassel.

The overland flow path is a significant driver for the public domain design. Careful management and re-grading of the existing site levels reduces the need for additional in-ground culverts, thus permitting a reduction in other infrastructure.

The Public Domain Design Report for SSDA 2 catalogues the existing tree and planting stock and will look to retain and/or re-use existing mature planting around the site on a precinct wide basis. A water sensitive approach to the rooftop garden will support minimal irrigation use.

# SEPP 65 ASSESSMENT

## Principle 6: Landscape

**Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.**

Response

The Concept Proposal has developed a considered landscape strategy focusing on key public and semi-public spaces. Those being delivered within the SW Plot application include:

– The Boulevard is a new pedestrian spine that links The Haymarket with Tumbalong Park and through to Darling Harbour. It has a continuous tree canopy broken at key moments along the route and lined with cafés, retail, and residential entrances to activate the route.

– Improvement of the Hay Street public domain addresses pedestrian movement from the Goods Line, the Powerhouse Museum and Macarthur Street. The western end of this road provides access to the car park, loading, and services areas. Segregation of vehicles and the light train alignment is carefully managed. New shade trees, paving and seating will be provided as an extension of the community hub.

– Darling Drive road corridor has been reduced by narrowing the road width and reducing the number of lanes. A landscaped buffer has been introduced along its eastern boundary to accommodate overland flood paths and provide a soakaway north of the site as part of the Waster Sensitive Urban Design (WSUD). New pedestrian crossings manage the movement of pedestrians + cyclists over Darling Drive and the light rail alignment into The Haymarket.

– A landscaped podium provides communal, semi-private amenity for the residents. Deep soil zones have been provided to ensure a generous canopy and privacy screening throughout.

– Shared facilities such as a pool, outdoor gym, barbeques, seating, dining and sheltered areas are provided with careful layering and design of the planting to maintain privacy, respite, views and openess. The landscape engages with the building edge and provides views out.

– The streets are planted with street trees and the existing landscape treatments are drawn into the site to provide continuity and assist in a seamless transition between new and old.

The existing site has been re-graded to support the movement of overland flows through Haymarket at surface level. The ground plane – including car park levels – are built above this flood datum. The resultant level transitions are integrated into the landscape design to provide thresholds, interest and create outlook opportunities.

Planting selection has been considered in the light of a sustainable water management strategy and the saline conditions present around site, whilst still providing protection and visual amenity.

The landscaped podium planting provides a more lush and verdant backdrop to the amenities to encourage privacy. The design is inspired to stimulate the senses through touch, sound and smell.

## Principle 7: Amenity

**Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.**

Response

The development provides a range of apartment types to suit a variety of lifestyles and aspirations. From apartments accessed off the local lanes and that engage with the square, to prestigious tower-top dwellings with panoramic views out over the city skyline and Darling Harbour. The mix of apartment types is as described in the table below.

| Unit size | No. units | % | Car park ratio | Max no. cars |
|---|---|---|---|---|
| Studio | 31 | 5.7 | 0 | 0 |
| 1 bed | 184 | 34 | 0.34 | 63 |
| 1 bed + study | 76 | 14 | 1 | 76 |
| 2 bed (large) | 236 | 43.5 | 1 | 236 |
| 3 beds + | 15 | 2.8 | 2 | 30 |
| Total | 542 | 100 | - | 405 |

Tower cores have been located on the western and southern faces to maximise the benefit of north facing amenity for the dwellings. Many apartments will have a primary aspect that optimises daylight and sunlight access, along with views into the future Haymarket Square and beyond to Darling Harbour and the CBD skyline. More than half the units will have a corner or dual aspect to enable natural cross ventilation.

Many dwellings have studies and media alcoves to reflect modern lifestyles and work from home opportunities. The ceiling height within the main habitable rooms is minimum 2.7m. No dwelling units are located at ground level and a generous retail floor-to-floor height ranging from 4.5m to 6.3m has been provided. Each dwelling (with the exception of Studios) has access to a secure private open space, such as a balcony, terrace or court. Adequate storage space has been made available for the residents and is distributed inside apartments within zones in the car park. Additional storage is included within larger apartments.

Resident amenity is enhanced by the public domain within The Haymarket and SICEEP, which provide recreational and pedestrian spaces in the immediate vicinity. Landscaped podiums will also contribute to the overall level of amenity by offering resident facilities and introducing vegetation within the built fabric.

Secure undercover parking will be provided and limited to the residents including small car spaces and 10 accessible car spaces. No visitor parking will be provided on site.

Each core contains a waste chute to transfer both general and recyclable waste to refuse rooms at ground level. Residential waste is stored separately from retail waste and is picked up from the loading area within the building footprint. An area for bulk storage has been allocated in the loading area. Further detail can be found in the Waste Consultant's Report.

The amenity and quality of the apartments within the SW Plot have been prepared with due consideration of the Residential Flat Design Code (RFDC). Compliance with these recommendations are summarised under the RFDC 'Rules of Thumb' assessment within this Design Report.

## Principle 8: Safety and security

**Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.**

Response

The design of the buildings optimises safety and security, both internal to the development and to the public domain. Safety and security have also been considered, in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.

The SW Plot provides active street frontages throughout the development by providing retail and potential IQ incubator hub, and residential lobbies at ground level. The broad mix of uses generates different footfall patterns throughout the day and maximises passive surveillance within and around the precinct. Partially sleeving the urban blocks with occupied space provides an additional level of oversight across the whole development and associated public spaces. Darling Drive vehicular movement, as well as the connecting pedestrian and cycle networks, provides an additional layering of activity around the development.

The residential lobbies will generate significant pedestrian traffic across the site. The tower lobbies are located on key corners of the building, capitalising on the key addresses whilst providing passive surveillance along two streets. SW2 and SW3 lobbies share The Boulevard - a very public address. SW1 lobby on the corner of Dickson's Lane and Darling Drive overlooks the student accommodation entry across the street.

Parking within the residential development is restricted to residents only, access being controlled at ground level. Direct access from the car park to residential lobbies is provided on every floor. An intercom at the main entries and key card access for residents secures the perimeter. Visitor cycle parking is provided at ground level, but access is controlled by resident intercoms.

Access to the landscaped podium is restricted to residents and their guests. Units face out onto this space, but fence changes provide separation to maintain security and visual privacy for these residents.

## Principle 9: Social dimensions

**Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.**

Response

The SW Plot will deliver the first new residential accommodation within The Haymarket. By providing several residential typologies and a range of apartment sizes, the proposal seeks to meet the Council's vision for a diverse and vibrant community. The unit mix and apartment sizes are carefully considered with a mix of one, two and three bed apartments to be provided (refer to breakdown of apartment types in Principle 7).

The Concept Proposal seeks to establish a technology hub within The Haymarket. As part of this offer an IQ hub incubator space is proposed which could provide low-cost rental studio and collaborative spaces to support tech-industry start-ups fostered by the local universities. The detail of this IQ Hub is still to be confirmed.

## Principle 10: Aesthetics

**Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.**

Response

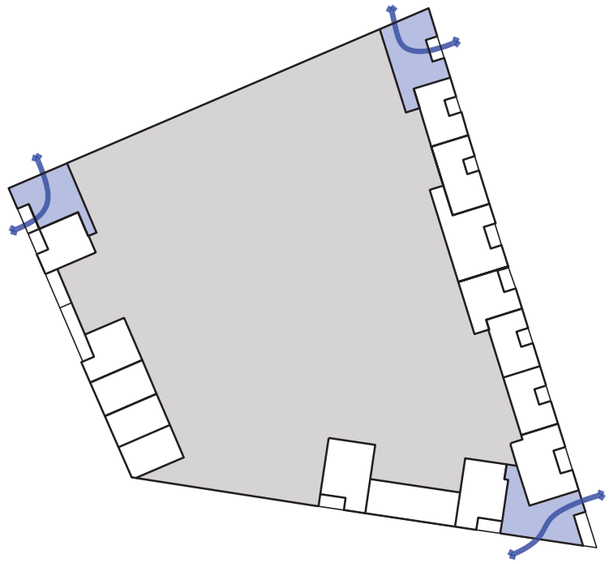
The buildings should have a modern aesthetic to express the aspirations of the SICEEP overall, its spirit of innovation and environmental excellence. The expression of the elevations responds to many factors including sun control, construction, technology and apartment amenity.

The SW Plot will add to the rich tapestry and heritage of the Haymarket area, reflecting the composition, choice of materials and colours of the existing local built context. To provide a point of difference which speaks of the regeneration of the precinct, its relationship to the SICEEP, and its maritime legacy, a different aesthetic is proposed around the square (SW2). The materiality, along with a greater level of articulation, seeks to transition from the residential setting to the much more public and event based environment and materiality within the SICEEP.

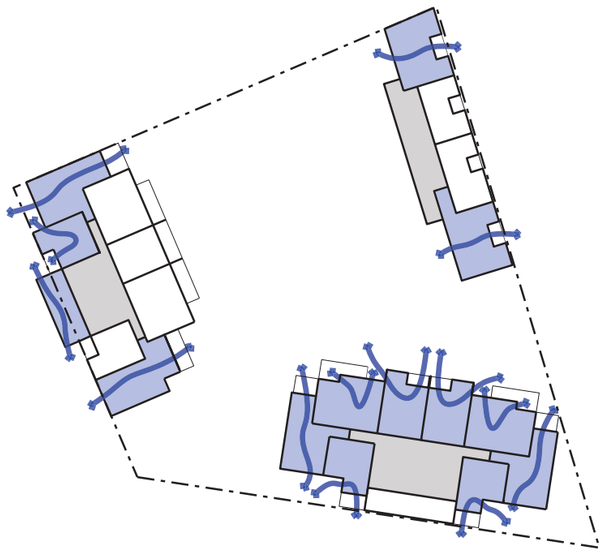
The towers above the urban block sit within the context of adjacent towers and take their place in the skyline, seeking to establish a unique address for the site.

# SEPP 65 ASSESSMENT

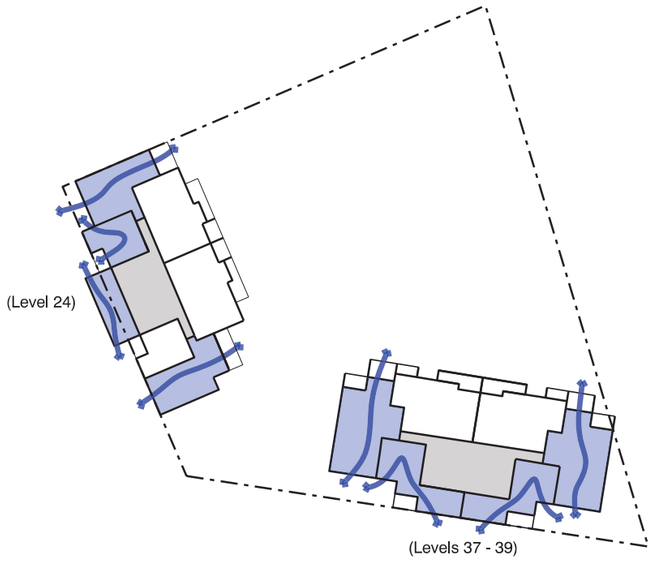
## Cross Ventilation Analysis



PODIUM PLAN



TYPICAL TOWER PLAN
*SW3 - 1 no 2B apartment in lieu of 2 no 1B apartments at Podium (Level 5)




SW3 UPPER FLOOR PLAN

Natural Ventilation

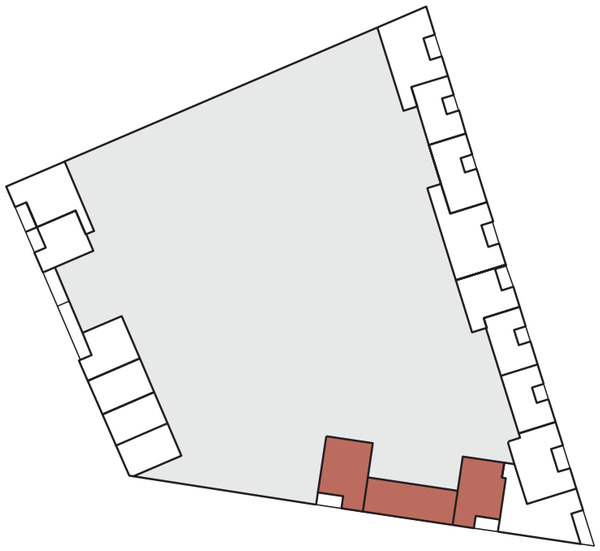
Under the RFDC, a minimum of 60% of apartments should have two aspects to support natural cross ventilation. Recognising the challenges faced with high density residential development, wherever possible the design of the SW Plot has been developed to maximise opportunities for cross ventilation whilst maintaining privacy between individual apartments. A summary of the apartments achieving cross ventilation is included below.

| PLOT | Breakdown | % of units |
|---|---|---|
| SW | Podium | 17% |
| | SW1 | 50% |
| | SW2 | 50% |
| | SW3 | 88% |
| | Overall | 67% |

KEY

- Residential Units with a corner aspect on a typical floor which support natural cross ventilation
- Units/ Rooms without a corner aspect on a typical floor which do not support natural cross ventilation
- Areas not included in this study

# South Facing Units



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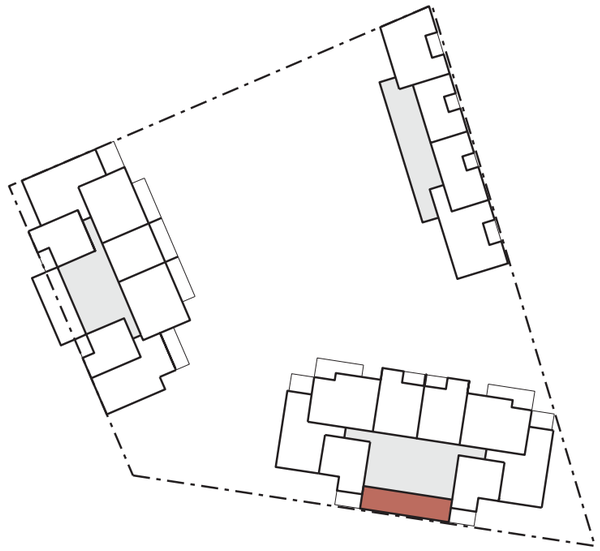
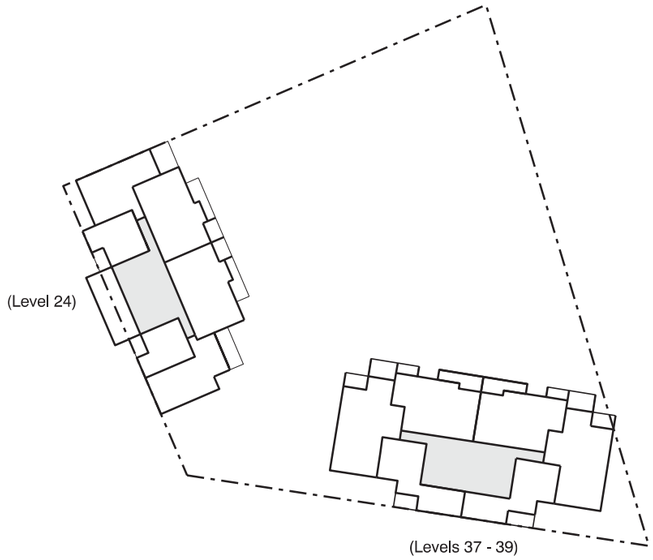


TYPICAL TOWER PLAN
*SW3 - 1 no 2B apartment in lieu of 2 no 1B apartments at Podium




UPPER FLOOR PLAN

Minimising south facing units

RFDC rules of thumb seek to limit the number of apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed. Recognising the challenges faced with high density residential development, wherever possible the design of the SW Plot sought to minimise the number of apartments with an aspect in the 90˚ arc between southwest and southeast. A summary of the apartments with a southerly aspect is provided below.

However, impacted apartments typically face onto open spaces at least 30m wide, where a large area of visible sky will ensure good sunlight levels.

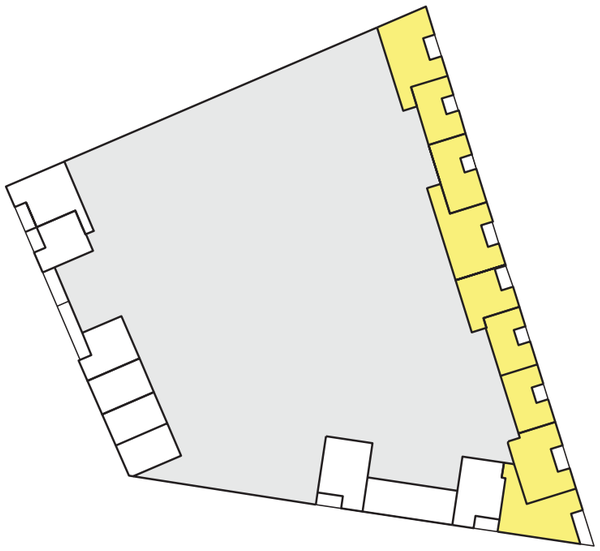
| PLOT | Breakdown | % of units |
|---|---|---|
| SW | Podium | 17% |
| | SW1 | 0% |
| | SW2 | 0% |
| | SW3 | 10% |
| | Overall | 8% |

KEY

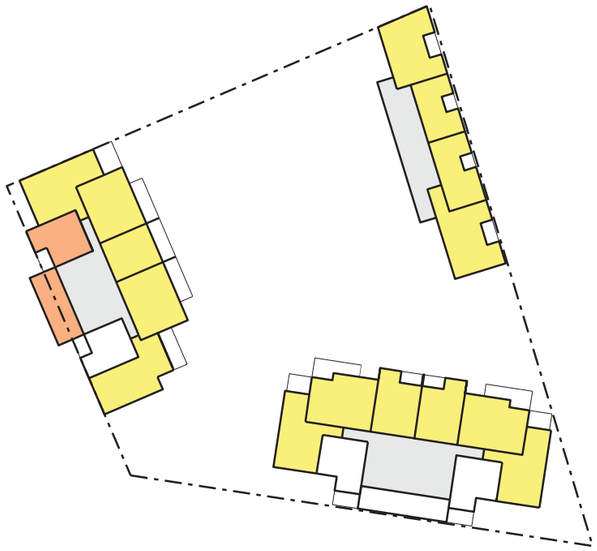
- Residential Units with a single aspect in the 90˚ arc between southwest and southeast
- Units not facing south
- Areas not included in this study

# SEPP 65 ASSESSMENT

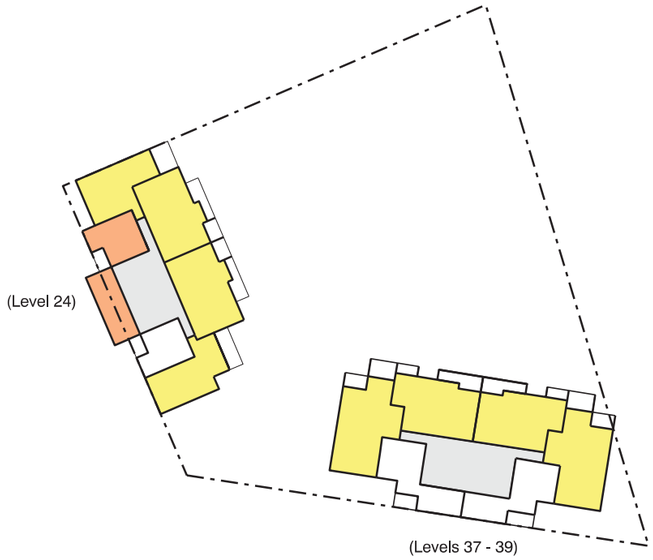
## Solar Access June 22



PODIUM PLAN



TYPICAL TOWER PLAN
*SW3 - 1 no 2B apartment in lieu of 2 no 1B apartments at Podium




UPPER FLOOR PLAN

Access to sunlight

Under the RFDC rules of thumb, a minimum of 70% of apartments should receive at least two hours of direct sunlight between 9am and 3pm in mid-winter, within denser urban areas. Recognising the challenges faced with high density residential development, wherever possible the design of the SW Plot south to maximise direct sunlight reaching living rooms and balconies. A summary of the apartments which receive more than two hours of direct sunlight between 9am and 3pm on June 21st is included below.

This assessment takes into account the forecast overshadowing generated by the maximum building envelopes proposed within future development plot sites.

| PLOT | Breakdown | % of units |
|---|---|---|
| SW | Podium | 50% |
| | SW1 | 62% |
| | SW2 | 100% |
| | SW3 | 67% |
| | **Overall** | **65%** |

KEY

- Residential Units which receive more than two hours of direct sunlight between 9am and 3pm on June 21st
- Residential Units which receive 90 minutes of direct sunlight between 9am and 3pm on June 21st
- Residential Units which do not receive more than two hours of direct sunlight between 9am and 3pm on June 21st
- Areas not included in this study

2 additional units as noted achieve 90 minutes of direct sunlight between 9am and 3pm on June 21st which equates to 71% overall.

# Minimum Building Separation


Building Separation

The RFDC rules of thumb seek to establish minimum building seperation between habitable rooms and balconies to maintain visual and acoustic privacy, access to natural amenity (light, air and open space). This is scaled in proportion to height.

| Habitable room to habitable room separation | Height | RFDC | SSDA 2 | SSDA 5 |
|---|---|---|---|---|
| SW Podium to NW Plot* | >12m <25m | 9m | 8m | 8m |
| SW1 to NW Plot (above podium) | >25m | 24m | 8m | 8m |
| SW1 to SW2 (above podium) | <12m (SW2) | 12m | 21m | 41m |
| SW1 to SW3 (above podium) | >25m | 24m | 18m | 18.5m |
| SW podium to DD Plot | >25m | 24m | >24m | >24m |
| SW podium to SE Plot** | >12m <25m | 18m | 20m | 20m |
| SW2 to SW3 (above podium) | <12m (SW2) | 12m | 9m | 16.2m |

* (Dickson's Lane)
** (Boulevard)

Given the proximity to a number of key amenities, and activity and employment centres, its urban context and proximity to key pedestrian and public transport nodes, the SSDA 2 application sought to establish higher criteria. These are still subject to approval.

KEY

- Proposed building footprints (above podium)
- Balcony zones

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# RFDC
# ‘RULES OF THUMB’
# ASSESSMENT

# RFDC ‘RULES OF THUMB’ ASSESSMENT

The following table lists the relevant Residential Flat Design Code ‘Rules of Thumb’ and the project’s conformance with those standards. Where variations are proposed these have been addressed within the body of the SSDA 5 Design Report.

| Requirement | Complies | SW Plot |
|---|---|---|
| **KEY ISSUES** | | |
| **Building depth** | | |
| In general, an apartment building depth of 10 to 18 metres is appropriate. Freestanding buildings may have a depth greater than 18 metres only if they achieve satisfactory daylight and natural ventilation. | Yes | Glass-line to glass-line measurement<br>Podium + SW2 – typical 8.4m<br>SW1 – typical 16m (max 20.6m – min 12.1m)<br>SW3 – typical 17m (max 21.1m – min 12.8m) |
| **Open space** | | |
| The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger and brownfield sites may have potential for more than 30 percent.<br>Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space. | Yes | Communal Roof area nominal 3000m$^2$<br>(60% of development plot area) |
| **Visual privacy** | | |
| Five to eight storeys/up to 25m<br>– 18m between habitable rooms/balconies<br>– 13m between habitable rooms/balconies and non-habitable rooms<br>– 9m between non-habitable rooms<br>– nine storeys and above/over 25m<br>– 24m between habitable rooms/balconies<br>– 18m between habitable rooms/balconies and non-habitable rooms<br>– 12m between non-habitable rooms | No* | There is an 19.2m separation between habitable rooms on SW1 + SW3 towers. (17.5m between balconies)<br>There is an 8m separation between habitable rooms on SW1 tower and the commercial (NW) plot.<br>16.6m between SW3 + SW2 (2 storey podium)<br>However these are not the primary views and further use of screening and limited opening sizes will create visual privacy.<br>All other building separations are >24m.<br>*Complies with SSDA 2 Parameter Plans |
| **Planting on structures** | | |
| Provide adequate soil depths allowances on roofs – notionally<br>– Large trees 1300mm<br>– Medium trees 1000mm<br>– Small trees 800mm<br>– Shrubs 500 – 600mm<br>– Ground cover 300 – 450mm<br>– Turf 100 – 300mm | Yes | Roof structure can typically accommodate 300mm soil build-up.<br>Allowances within allocated zones for soil depths up to 1000mm. |

# RFDC ‘RULES OF THUMB’ ASSESSMENT

| Requirement | Complies | SW Plot |
|---|---|---|
| **Pedestrian access** | | |
| Identify the access requirements from the street or car parking area to the apartment entrance. | Yes | Clear access to lobbies from the Boulevard and Dickson’s Lane and internal car park. |
| Follow the accessibility standard set out in Australian Standard (AS 1428) as a minimum. | | All apartments have lift access. |
| Provide barrier free access to at least 20% of dwellings in the development. | | |
| **Vehicle access** | | |
| Limit the width of driveways to a maximum of 6 metres. | Yes | Car park access 6.6m (2 x 3.0m driveways) |
| Locate away from main pedestrian entries and on secondary frontages. | | Car park access located on SW corner off Hay Street. |
| **Apartment layout** | | |
| Single-aspect apartments should be limited in depth to 8 metres from a window. | Partial | Max single aspect apartment depths 8.4m<br>Back wall of single side kitchens 3.8 – 6.1m<br>Front of bench of island kitchens 3.2 – 6.0m<br>Back wall of island kitchens 5.6 – 8.4m<br>Excludes kitchens located on external walls. |
| The back of a kitchen should be no more than 8 metres from a window. | | |
| The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts. | | |
| Buildings not meeting the minimum standards listed above must demonstrate how satisfactory day-lighting and natural ventilation can be achieve, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation). | Partial | 67% Cross Ventilated<br>65% Solar Access - note 71% of units have access to 90 minutes of sunlight in winter. |
| If Council chooses to standardise apartment sizes, a range of sizes that do not exclude affordable housing should be used. As a guide, the Affordable Housing Service suggest the following minimum apartment sizes which can contribute to housing affordability: (apartment size is only one factor influencing affordability)<br>– 1 Bedroom apartment 50m²<br>– 2 Bedroom apartment 70m²<br>– 3 Bedroom apartment 95m² | Yes | Apartment sizes<br>– Studio 42 – 47m²<br>– 1 Bed unit 50 – 52m²<br>– 1 Bed + study 59 – 62m²<br>– 2 Bed unit 73 – 83m²<br>– 2 Bed unit (large) 83 – 112m²<br>– 3 Bed unit 103 – 131m² |
| **Balconies** | | |
| Minimum depth of private balconies 2 metres | Yes | Typically<br>– Studios no balconies<br>– 1B unit 2.0 – 2.6m<br>– 2B unit 2.0 – 3.0m<br>– 3B unit 2.0 – 3.0m |
| **Ceiling heights** | | |
| Minimum 2.7m for all habitable rooms. | Yes | 2.7m |
| In Mixed Use buildings: 3.3m minimum for ground floor retail or commercial and for first floor retail. | Yes | Floor to floor 4.5 – 6.3m |

# RFDC ‘RULES OF THUMB’ ASSESSMENT

| Requirement | Complies | SW Plot |
|---|---|---|
| **Internal circulation** | | |
| In general where units are arranged off a double-loaded corridor, the number of units accessible from a single core corridor should be limited to 8. | Partial | – SW1 maximum 8 units per core<br>– SW2 maximum 4 units per core<br>– SW3 (podium) maximum 3 units per core<br>– SW3 maximum 9 units per core |
| **Storage** | | |
| In addition to kitchen cupboards and bedroom wardrobes, provide associated storage facilities at the following rates:<br>– Studio apartments 6m³<br>– One bedroom apartments 6m³<br>– Two bedroom apartments 8m³<br>– Three plus bedroom apartments 10m³ | Yes | 4.7m³ per unit within car park.<br>– Studio 5.5 m³<br>– 1 Bed unit 6 m³<br>– 2 Bed unit 7.5 m³<br>– 3 Bed unit 12 m³ |
| **Daylight access** | | |
| Living rooms and private open spaces for at least 70 percent (70%) of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of two hours may be acceptable. | No | 65% receive 2 hours of sunlight between 9am and 3pm in midwinter.<br>71% receive 90 minutes of sunlight between 9am and 3pm in midwinter. |
| Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10 percent (10%) of the total units proposed.<br>Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed. | Yes | 8% Southerly aspect<br>Those apartments with a southerly aspect face onto open spaces at least 30 metre wide, where a large area of visible sky will ensure good daylight levels. |
| **Natural ventilation** | | **Glassline to glassline measurement** |
| Building depths which support natural ventilation typically range from 8 to 15 metres. | No | Podium + SW2 – typical 8.4m<br>SW1 – typical 16m (max 20.6m – min 12.1m)<br>SW3 – typical 17m (max 21.1m – min 12.8m) |
| Sixty percent (60%) of residential units should be naturally cross-ventilated. | Yes | 67% Cross Ventilated |
| Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.<br>Developments which seek to vary from the minimum standards must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms. | Yes | 29% of kitchens located on an external wall/ adjacent window |

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

The following table lists the relevant Design Guideline controls and the project's compliance with these recommendations. Where variations are proposed these have been addressed within the body of the SSDA 5 Design Report.

| Requirement | SW Plot |
|---|---|
| **KEY CONTROLS** | |
| **Urban Blocks** | |
| Adopt existing street grid of small urban blocks.<br>Align urban blocks with built edge of existing streets.<br>Maximum development plot sizes defined within Parameter Plans. | Adopts Parameter Plan plot footprint.<br>Maintains building edge alignments and minimum lane/street widths as defined. |
| **Streets + Lanes** | |
| Minimum street widths are to comply with the parameter plans. Minimum/ maximum street lane widths are to be as follows:<br>1. Lanes 6/8metres<br>2. Streets 12/16metres<br>3. Boulevard 20/24 metres<br>4. Square 60/80 metres<br>Development, including level changes in public domain, must not encroach upon Boulevard.<br>New lanes and streets are to be open to sky along their entire length excluding canopies and tenant awnings.<br>Level thresholds into retail and entrance lobbies are to be provided.<br>Public realm and street edge activation zones to allow minimum 2.5 metre clear paths for pedestrian access. | Adopts Parameter Plan plot footprint.<br>– Dickson's Lane 8m<br>– The Boulevard 20m<br>Minimum street widths are maintained and open to sky except for canopies required for continuous weather protection.<br>All thoroughfares and access to buildings in compliance with AS 1428. |
| All retail to be serviced from loading/service dock within building footprints. No goods or service vehicle access permitted into square or pedestrian streets. | Combined resident and service vehicle access located on SW corner of building to minimise traffic along Hay Street.<br>Loading/service area layout provides rear access to retail units.<br>Pedestrian only use to Dickson's Lane and the Boulevard. Hay Street to be shared surface. |

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

| Requirement | SW Plot |
|---|---|
| **Edges + activation** | |
| Street wall heights (above ground level) are to be as follows:<br>1. Street edges 16.5m – 23m<br>2. Boulevard + Square edge 25m – 30m<br>Introduce a physical separation (re-entrant) between the lower and upper levels of the building to distinguish between 'street wall' and tower built form. | Urban block parapet height (street wall):<br>– Street edge17.5m (RL+21.2m excl handrail)<br>– Boulevard 25.2m (RL+28.8m)<br>SW3 towers rise from urban block. Set back nom. 3m in lieu of re-entrant. |
| Podium level car parking should be partially 'sleeved' or concealed by podium level apartments or secondary activation uses where possible. Where this is not possible then the podium car parking facades will be activated by high quality screens. | Car park edge on Dickson's Lane and 30% of Hay Street above ground uses.<br>Car park elevations adopt same grid order as residential facades for continuity. Refer elevations for details.<br>Habitable space not viable on Dickson's Lane. Exposed car park edge enables assisted natural ventilation solution. |
| Provide a range of uses appropriate to each street and lane which generate different footfall patterns.<br>Distribute residential lobbies around the site. | SW1 and SW3 lobbies located on prominent building corners. SW2 on Boulevard.<br>Retail uses provided on Dickson's Lane and Boulevard.<br>Retail other (incl. potential IQ incubator hub) and pockets of services/ plant use along Darling Drive and Hay Streets.<br>Vehicle access on Hay Street. |
| Retail floor to floor heights are to be a minimum of 4.5m.<br>Retail uses are to incorporate elements of visual transparency to reveal active uses. | Floor to floor 4.7 – 7.2m<br>Retail use along Boulevard dropped to ground level to maximise accessibility/ visual connectivity. |
| Provide minimum canopy zone of 2.5m throughout where there is no recessed ground plane. Allow a maximum 4.0m tenant awning zone to all primary streets and retail. | Fixed canopy depth 3.0m.<br>Fixed canopy to 75-80 % of perimeter. Supplemented by recessed ground plane and/or proprietary awnings and canopies. |
| **Massing + built form (above urban blocks)** | |
| Maximum building envelope must comply with the relevant parameter plans.<br>Maximum floorplate depth for all buildings must comply with the relevant parameter plans<br>Minimum building separation must comply with the defined parameter plans. | Adopts Parameter Plan plot footprint except 12 wide section of SW1 west elevation projects 2.4m outside of maximum building envelope zone. |
| Where towers exceed 40m in length the broadest face to each tower must be < 30 metres, with remaining elevation set back a minimum of three (3) metres. | SW1 length 40.4m<br>– Maximum building face east 27m<br>– Maximum building face west 12m<br>SW3 length 43.8m<br>– maximum building face north 14.6m<br>– maximum building face south 23m |

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

| Requirement | SW Plot |
|---|---|
| Built form should be located at perimeter edge of plots to maximise separation and privacy between dwellings.<br>Minimum building separation (above retail podium):<br>– Non-overlooking (maximum RL +12m) 8m<br>– Non-overlooking (RL +25m and above) 15-18m<br>– Overlooking (maximum RL +12m) 15m<br>– Overlooking (RL +25m and above) 24m | Adopts Parameter Plan plot footprint.<br>Minimum separation distances<br>– SW1 to NW Plot 8.0m<br>– SW1 to SW3 19.2m<br>– SW2 to SW3 16.6m<br>– All others >24m |
| **Public domain** | |
| Avoid erosion of edges and chamfering of corners when joining the Boulevard and the Square to ensure that public domain is clearly defined. | Dickson's Lane/ Boulevard corner set back to create al fresco seating opportunity. Lane edge held by columns, raised ground level and upper level balcony. |
| Carefully consider planters and ramps running parallel to facades to minimise physical barriers between buildings and public domain. | Planters/ seating along Dickson's Lane to define retail activation zones. |
| **Podium roofs** | |
| Provide deep planting zones at roof level to support significant planting.<br>Locate communal facilities on rooftop gardens away from dwelling private space.<br>Provide physical demarcation between communal external spaces and dwellings beyond.<br>Mechanical plant and services will be designed, arranged and screened to provide a disciplined, orderly and aesthetic arrangement on podium roofs. | 1000mm deep soil planting zones coordinated with car park structure.<br>Refer to page 55 for the Landscape Section for podium landscape plan.<br>1800mm fences and landscape buffer to maintain privacy to gardens.<br>No services plant to be located within podium landscape.<br>Plant enclosures at roof level integrated with building design. |
| **Residential amenity + planning** | |
| Maximum development height set within proposed Parameter Plans – including rooftop plant and lift overruns.<br>Parameter plans set maximum floorplate depth for all buildings. | Adopts Parameter Plan maximum building envelopment heights. SW1 breaches Parameter Plan building footprint, but overall depth < Parameter Plan. |
| Provide a highly efficient and functional building.<br>Maximum twelve units accessed from core per floor to minimise corridor length. | Yield and mix in compliance with Lend Lease brief.<br>Maximum 9 apartments accessed from core per floor |
| Respond to and account for the specific specialised and multiple use requirements.<br>Avoid balconies located adjacent to one another or provide full height + depth screens.<br>Incorporate screening where appropriate to address solar or privacy impacts.<br>Respond appropriately to the surrounding context including relationship to neighbours, amenities, access, identity, visibility and acoustic privacy. | Full depth 1800mm screens provided between balconies and to address overlooking issues.<br>Adjacencies between different uses have been considered to avoid conflict. |
| Consider SEPP 65 and the RFDC within the design.<br>Acknowledge the orientation of the site and proposed buildings – note the significance of northern and western solar loading and glare. | Refer to 'RFDC Rules of Thumb' assessment. |

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

| Requirement | SW Plot |
|---|---|
| **Traffic, car parking + service access** | |
| Car parking ratios:<br>– Studios 0 cars<br>– 1 Bed units 0.5 cars<br>– 1 Bed + study 1 car<br>– 2 Bed units 1 car<br>– 3 Bed units 2 cars | Car park complies with ratios except 1B units - 0.37 cars. |
| Car park and services access to be shared to minimise vehicle entry opening on façade.<br>Lane splitting to access car park to occur where required. | Single combined vehicle entrance. |
| Service and loading vehicle access from public roads is to be provided in a ”drive in/drive out” configuration.<br>Loading dock should be located in close proximity to service access for retail and where possible, concealed from general public realm/ interfaces.<br>A clear height of 4.5 metres minimum should be provided for loading and service areas to meet statutory requirements. | Private and service vehicles segregated within building. Adequate spatial allowance for manoeuvring.<br>Service/ loading area clear height 4.1 metres – sufficient for planned vehicle sizes. |
| **Articulation** | |
| All balconies are to be recessed into built form and not applied to façade.<br>Architectural expression shall be achieved within a nominated 500mm architectural zone (non-habitable space) – refer relevant parameter plans.<br>Avoid creating large horizontal surfaces or ledges to minimise risk of staining or bird fouling. Streetscape façade design will provide shade and visual interest through window, wall and balcony recesses. | Balconies integral to tower elevations design.<br>Detailing of horizontal planes to avoid roosting/ staining. |
| **Materials** | |
| Longevity, durability and flexibility shall be considered in the choice of materials. | Materials palette – Concrete pre-cast panels, timber framing, glazing and window systems, infill panels of precast, terracotta (effect), metal and/ or timber (effect) panels. |
| **Signage** | |
| **Residential buildings**<br>All signage to be located within the zones listed below and identified on the Signage diagram:<br>– Entry Level and Lobby signage<br>– Podium signage<br>– Tower signage<br>Tower signage to be limited to a maximum of 2 storeys in height.<br>Content of permanent signage shall relate to building naming/ identification.<br>Content of temporary signage within the zones identified may include for the developers branding or other advertising.<br>Detailed design of signage to be considered as part of the overall design of the building. | Signage element to be subject of separate Development Application. Signage zones identified on drawings. To be submitted to Director General for approval at a later stage. |

# SSDA 2 DESIGN GUIDELINES COMPLIANCE

| Requirement | SW Plot |
|---|---|
| **Retail/community** | Signage element to be subject to separate Development Application. |
| All signage to be located within the zones listed below and identified on the Signage diagram:<br>– Shop front<br>– Canopies, awnings and umbrellas<br>Content of signage shall relate to retail/community tenancy naming/ branding/identification. | |
| **Sustainability** | |
| Achievement of the Building Sustainability Index (BASIX) Multi Dwelling Certificate.<br>Achieve a Green Building Council of Australia (GBCA) 4 Star Green Star (As Built) – Multi Unit Residential v1 Certified Rating for all residential flat buildings. | BASIX modelling under taken for current design.<br>Green Star pre-assessment undertaken to set design/plant allowances + strategy. |
| **SSDA 2 Illustrative Proposal RFDC Benchmarks** | |
| Cross Ventilation<br>Overall 43%<br>SW Plot 45% | Cross Ventilation<br>67% |
| Southern Aspect Units<br>Overall 17%<br>SW Plot 15% | Southern Aspect Units<br>8% |
| Access to Sunlight<br>Overall 70%<br>SW Plot 72% | Access to Sunlight<br>65% |

# URBAN DESIGN + PUBLIC REALM GUIDELINE COMPLIANCE REVIEW

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| INFRASTRUCTURE NSW; SICEEP URBAN DESIGN + PUBLIC REALM GUIDELINES (29 FEBRUARY 2012) | | | |
| 01 URBAN STRUCTURE | | | |
| 1.1 | Movement Framework. The design must: | | |
| 1.1.1 | Take into account the movement assessment that has been undertaken | Yes | SW Plot has been developed in consultation with traffic engineer. |
| 1.1.2 | Design for ease of walking | Yes | Thoroughfares in accordance with Concept Proposal - all level changes to be gradients > 1:20. |
| 1.1.3 | Connect with the existing networks | Yes | SW Plot adopts the Parameter Plan plot development footprint and complies with the proposed street/ lane networks within the Concept Proposal.<br>Alignment with Hay Street and Darling Drive existing built edge.<br>Allowance made for proposed new Boulevard and Dickson's Lane alignments. |
| 1.1.4 | Integrate upper levels as well as the valley floor | N/A | Not applicable to SW Plot Development Application. |
| 1.1.5 | Stitch the east, west and the south together | Yes | As per item 1.1.3 above. |
| 1.1.6 | Make or break boundaries | Yes | As per item 1.1.3 above. |
| 1.1.7 | Provide choice through a grid network with a clear hierarchy | Yes | As per item 1.1.3 above.<br>Active uses at the ground level reinforce street/ lane hierarchy. |
| 1.2 | Walking. The design must: | | |
| 1.2.1 | Maintain the pedestrian dominance of Darling Harbour | Yes | SW Plot in accordance with Concept Proposal - Boulevard and Dickson's Lane pedestrian only; Hay Market pedestrian priority, shared surface; Darling Drive pavement increased. |
| 1.2.2 | Provide pedestrian and cycle-friendly streets | Yes | As per item 1.2.1 above.<br>End of trip facilities and secure cycle storage provided within SW Plot to encourage cycle use.<br>New dedicated cycle lanes provided along Darling Drive. |
| 1.2.3 | Create attractive and character rich routes | Yes | Mix of uses provided at ground level including residential lobbies, diverse retail (including food + beverage use) and IQ incubator hub uses.<br>Car park and services access consolidated within single access point to minimise impact. |
| 1.2.4 | Ensure accessible routes along all pathways and desire lines | Yes | As per item 1.1.2 above. |
| 1.2.5 | Separate Front of House areas from Back of House areas | Yes | Loading area services access provided to rear of all retail units and residential lobbies. Loading area access provided from Hay Street. |
| 1.3 | Cycling, the design must: | | |
| 1.3.1 | Provide a design for convenient cycling | Yes | As per items 1.2.1 + 1.2.2 above. |
| 1.3.2 | Allow for passing of parked cars | Yes | No street edge parking provided around SW Plot. |
| 1.3.3 | Provide streets that are safe for cyclists | Yes | Thoroughfares are SW Plot are pedestrian only/ priority - refer 1.2.1 above. |
| 1.3.4 | Cycle lanes should be provided outside the public realm (i.e. commuter cycling) | Yes | Commuter cycling within new cycle lane - refer 1.2.2 above. |
| 1.3.5 | Recreational cycling should be provided within the public realm | Yes | As per items 1.2.1 + 1.2.2 above. |

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GUIDELINE COMPLIANCE REVIEW

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 1.3.6 | Provide public cycle parking from the outset | Yes | Secure storage for 48 cycles provided at ground level.<br>Additional cycle loops provided in Public Domain. |
| 1.3.7 | Include secure community / public bike storage along cycle routes and nodes | TBA | As per item 1.3.6 above. |
| 1.4 | Public Transport. The design must: | | |
| 1.4.1 | Make connections for people on the bus, train and light rail | Yes | SW Plot located on light rail alignment. Pedestrian connections to public transport supported in Precinct Plan. |
| 1.4.2 | Make it convenient to catch the bus, train and light | Yes | As per 1.4.1 above. |
| 2.0 URBAN GRAIN | | | |
| 2.1 | Streets and traffic. The design must: | | |
| 2.1.1 | Define street types by capacity and character | Yes | Thoroughfares in accordance with Concept Proposal - refer also 1.2.3 above. |
| 2.1.2 | Ensure street hierarchy is clear:<br>Lane (7.5m - 12m)<br>Residential (12m - 25m<br>Commercial (18m to 40m)<br>Boulevard (27m - 36m) | Yes | Thoroughfares in accordance with Concept Proposal - refer also 2.1.1 above. |
| 2.1.3 | Ensure no vehicular traffic within pedestrianised areas | Yes | As per items 1.2.1 + 1.2.5 above. |
| 2.1.4 | Support the key pedestrian connections with vehicular access that includes VIP arrival and drop-off zones for red carpet and similar events | N/A | Not applicable to SW Plot Development Application. |
| 2.1.5 | Make the street an address | Yes | Identity reinforced by location of residential lobbies and retail brief. Confirmation of final retail tenancy to be confirmed in subsequent Development Applications. |
| 2.1.6 | Make the routes go through | Yes | As per 1.1.3 above |
| 2.1.7 | Connect to finer grain laneways that are open to the sky | Yes | SW Plot delivers southern edge of Dickson's Lane - with retail and residential lobby uses - refer also items 1.1.7 + 1.2.3 above. |
| 2.1.8 | Provide streets for everyone | Yes | As per items 1.1.2 + 1.2.4 above |
| 2.1.9 | Provide places not roads | Yes | As per items 1.2.3 + 2.1.1 above |
| 2.1.10 | Put the urban space first | Yes | SW Plot in accordance with Concept Proposal - refer also items 1.2.3 + 2.1.1 above |
| 2.1.11 | Keep junctions tight | Yes | Built edge not eroded at ground level. Retail unit at Dickson's Lane/ Boulevard corner recessed for al fresco seating. Built form maintained by columns, raised ground plane and balustrading. |
| 2.1.12 | Allow for an appropriate amount of vehicular traffic | Yes | Resident car park and service vehicle access located on western end of Hay Street to minimise vehicle movement along Hay Street. |
| 2.1.13 | Provide wide crossings on busy or main roads | Yes | New pedestrian crossing provided on Darling Drive to address connections from Powerhouse Museum, Goods Line and the student accommodation. |
| 2.1.14 | Slow traffic down | Yes | Shared surface to be paved with no markings to encourage slower traffic speeds. |

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 2.2 | Blocks defined by Street Network. The design must: | | |
| 2.2.1 | Ensure blocks face and front the street | Yes | Residential lobbies located on corners of SW Plot.<br>Other uses activate street edges - refer items 1.2.3 + 2.1.1 above |
| 2.2.2 | Respect people's privacy by the arrangement of buildings | Yes | SW Plot adopts the Parameter Plan minimum building separation. Buildings orientated to minimise direct overlooking into adjacent properties. Privacy reinforced through use of screens. |
| 2.2.3 | Build to the street alignment and line the perimeter | Yes | As per items 1.1.3 + 2.2.1 above. |
| 2.2.4 | Encourage continuity of street frontage and rhythm | Yes | Concept Proposal retail Design Guidelines of Concept Proposal seeks to continue adjacent retail typologies into development.<br>Retail units subject to separate Development Application. |
| 2.2.5 | Keep blocks small | Yes | SW Plot adopts the Parameter Plan plot development footprint |
| 2.2.6 | Provide a block that allows for change and the future | Yes | Ground level floor to floor height varies from 4.5m - 7.2m to accommodate range of configurations.<br>Car park and residential floor levels consistent in podium. |
| 2.2.7 | Provide for internal flexibility | Partial | 10 adaptable apartments provided within SW Plot.<br>Opportunity to combine smaller apartments to deliver bigger apartment. |
| 2.2.8 | Keep the grain fine | Yes | SW Plot adopts the Concept Proposal whereby the accommodation is delivered within a number of smaller towers distributed around the plot.<br>Expressed grid to urban block 'street wall' provides fine grain and human scale at street level. Diversity in materials within grid adds additional layer and responds to fine grain.<br>Separate Development Applications to be prepared for retail units. |
| 2.2.9 | Keep commercial units narrow on ground floors | Yes | Separate Development Applications to be prepared for retail units. To adopt Retail design guidelines. |
| 2.3 | Landmarks, vistas + focal points. The design must: | | |
| 2.3.1 | Ensure a sense of arrival | Yes | Massing in accordance with Concept Proposal - tall towers located on Boulevard/ Hay Street gateway and Dickson's Lane/ Macarthur Street junction.<br>Residential lobbies hold prominent corners. |
| 2.3.2 | Provide a southern gateway to Darling Harbour | Yes | As per item 2.3.1 above |
| 2.3.3 | Make it easy to find your way around | Yes | As per items 1.1.3 + 1.1.7 above.<br>Supplemented by precinct-wide wayfinding strategy.<br>Public art introduced to address Macarthur Street/ Dickson's Lane junction. |
| 2.3.4 | Emphasise the hierarchy of the place | Yes | As per item 1.1.7 above.<br>Massing and architectural treatment reinforces local character. |
| 2.3.5 | Show the way for visitors | Yes | As per item 2.2.3 above |
| 2.3.6 | Create an interesting and identifiable skyline | Yes | SW3 signature tall tower design to provide unique silhouette and form marker for site. |

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| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 2.3.7 | Provide a point and line approach to vistas | Yes | As per items 1.1.3 + 2.2.3 above. |
| 2.3.8 | Ensure focal points are appropriately located and scaled | Yes | Tower massing forms urban design gateways at city scale - refer items 2.3.1 + 2.3.2 above.<br>Retail uses support public realm use and activation - i.e. food + beverage unit on Dickson's Lane/ Boulevard corner.<br>Planting/ landscape design to reinforce desire lines within public domain and landscaped podium.<br>Refer also item 2.2.3 above. |
| 2.3.9 | Provide an entrance that welcomes people | Yes | Quality urban design and materials within public domain and built form reinforce experience. Refer also items 1.2.3 + 2.1.1 above. |
| 2.3.10 | Provide ceremonial entrance/s for the Core Functions | N/A | Not applicable to SW Plot Development Application. |
| 2.4 | Utilities Infrastructure. The design must: | | |
| 2.4.1 | Plan for sustainable infrastructure provision | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.4.2 | Design a discreet and co-located network | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.4.3 | Make services subservient to the design | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.4.4 | Coordinate design development with service providers | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.4.5 | Put services underground in shared strips | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.4.6 | Hide the services boxes and plant facilities from Front of House areas | Yes | Refer to Civil Engineer's Design Report for further detail. |
| 2.5 | Parking + Servicing. The design must: | | |
| 2.5.1 | Ensure sustainable parking levels | Yes | No visitor or staff parking provided within SW Plot.<br>Car parking ratio approximately 0.8 cars per unit. |
| 2.5.2 | Minimise the need for service vehicles to park, stop or queue on the public road network, including Darling Drive | Yes | Central services/ loading area provided within SW Plot providing a 'drive in/ drive out' arrangement. |
| 2.5.3 | It is preferable to put parking behind, under, above or to the side of buildings | Yes | Basement car parking not viable due to overland flood risks, soil contamination and in-ground infrastructure. Resident car park located above ground level and partially 'sheathed' with other uses. |
| 2.5.4 | Design the commercial car park following secure-by-design principles | N/A | Not applicable to SW Plot Development Application. |
| 2.5.5 | Soften and screen basements and multi-storeys | Yes | As per item 2.5.3 above.<br>Exposed car park elevations integrated into design of 'street wall' to minimise visual impact. |
| 2.5.6 | Make car parks discreet or if they are prominent make them beautiful | Yes | As per items 2.5.3 + 2.5.5 above |
| 3.0 DENSITY + MIX | | | |
| 3.1 | Mixing uses. The design must: | | |
| 3.1.1 | Build a walkable Precinct | Yes | As per items 1.1.2 + 1.2.1 above |
| 3.1.2 | Create a patchwork of different activities throughout the Precinct | Yes | As per items 1.2.3 + 2.1.5 above.<br>Dickson's Lane + Boulevard - predominantly retail;<br>Darling Drive - predominantly residential lobby/ IQ Hub. |

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 3.1.3 | Include uses such as: tourist; educational; recreational; entertainment; cultural and commercial facilities | Yes | SW Plot to include residential, retail and IQ incubator hub uses - in line with the concept Proposal. |
| 3.1.4 | Maximise synergy and minimise conflict of uses | Yes | Retail management strategy and acoustic treatments incorporated to support residential above retail/ food + beverage uses. |
| 3.1.5 | Include Convention, Exhibition and Entertainment uses | N/A | Not applicable to SW Plot Development Application. |
| 3.1.6 | Combine commercial and civic uses with hotel and other uses such as residential to provide a sustainable and viable mix of uses | Yes | Refer to item 3.1.3 above. |
| 3.1.7 | Emphasise the civic values of the Precinct | Yes | As per items 2.2.1 + 2.2.8 above.<br>Scale of SW2 responds to setting on new square. |
| 3.1.8 | Complement the existing retail of Darling Harbour | Yes | As per items 1.2.3 + 2.2.4 above |
| 3.1.9 | Wrap and cap 'big box' facilities with other uses | Yes | Car parks sheathed - refer items 2.5.3 + 2.5.5 above |
| 3.1.10 | Bring dead edges to life through active uses | Yes | As per items 1.2.3 + 2.5.3 above. |
| 3.1.10 | Provide a rich mix in the transition of uses | Yes | As per items 1.2.3 + 3.1.3 above. Confirmation of final retail tenancy to be confirmed in subsequent Development Applications. |
| 3.1.12 | Focus on links to public transport nodes | Yes | As per items 1.4.1 + 1.4.2 above. |
| 3.2 | Density, Facilities + form. The design must: | | |
| 3.2.1 | Integrate with the city context | Yes | As per items 1.1.3, 1.1.5, 2.2.1, 2.2.3 + 2.2.4 above |
| 3.2.2 | Focus on activity centres and use clusters | Yes | As per items 2.1.5, 2.1.9, 2.1.10 + 2.2.1 above |
| 3.2.3 | Vary the density profile of different Facilities | N/A | Not applicable to SW Plot Development Application. |
| 3.2.4 | Cater for a range of users and lifestyles | Yes | SW Plot provides a range of apartments catering for market and lifestyles. Includes 10 no adaptable apartments and accessible parking. |
| 3.2.5 | Blend the best parts of town | Yes | SW plan adopts Concept Proposal Design Guidelines which benchmarked local, national and international exemplars. |
| 3.2.6 | Enable people to trade space for place | Yes | As per item 3.2.4 above. |
| 3.2.7 | Take a long term view | Yes | SW Plot first stage in multi-stage development (2016 - 2021) |
| 4.0 HEIGHT + MASSING | | | |
| 4.1 | Building size + scale. The design must: | | |
| 4.1.1 | Define The Big Picture | N/A | Aspirational statement |
| 4.1.2 | Develop a building height strategy | Yes | SW Plot sits within the Parameter Plan maximum building envelopes supporting different heights for each building. |
| 4.1.3 | Relate building height to context | Yes | SW Plot sits within the Parameter Plan maximum building envelope.<br>Street wall of nominal 16.5m responds to scale of local streets.<br>Refer also item 2.2.6 above. |
| 4.1.4 | Wrap up and step down to provide a human scale to the facilities | Yes* | * Guideline refers to PPP Core facilities however; SW Plot responds as per item 4.1.3 above. |
| 4.1.5 | Adapt with topography | Yes* | * Guideline refers to PPP Core facilities however; SW Plot responds as per item 4.1.3 above. |

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| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 4.1.6 | Respect overshadowing principles | Yes | SW Plot building envelope (above podium) smaller than submitted within Parameter Plan maximum building envelope. Overshadowing reduced compared to SSDA2. |
| 4.1.7 | Consider view sharing for residential neighbours | Yes | As per item 4.1.6 above.<br>Smaller building envelope reduces visual impact on neighbouring properties. |
| 4.1.8 | Plan shallow building depths | Yes | Tower floorplates typically 18m from glass line to glass line. |
| 4.1.9 | Orientate for flexibility and suitable access | Yes | SW1, SW2 + SW3 accessed from centrally located core - allowing for alternative apartment layouts. |
| 4.1.10 | Ensure the building form turns the corner where streets meet | Yes | SW Plot built form located on corners. Continuous street wall wraps podium car park. |
| 4.1.11 | Provide trim and slim (narrow) building types or frontages to Big Box facilities | Yes* | * Guideline refers to PPP Core facilities however; SW Plot responds as per items 3.1.9 + 3.1.10 above |
| 4.2 | Building for change. The design must: | | |
| 4.2.1 | Provide a mix of uses where most uses are compatible side-by-side | Yes | As per items 1.2.3, 2.1.5 + 3.1.2 above.<br>Management plan to be establish guidelines on use and activities to minimise retail and residential conflict of interests. |
| 4.2.2 | Ensure a mix of uses at close quarters | Yes | |
| 4.2.3 | Provide a vertical mix of uses: Make uses stack up through the building | Yes | SW Plot has retail, IQ community hub and lobbies at ground level with apartments on floors above. |
| 4.2.4 | Provide access for all and meet Disability Discrimination Act requirements | Yes | SW Plot complies with DDA and AS 1428 requirements. 10 no adaptable apartments and accessible parking provided - refer also item 3.2.4 above.<br>Refer also DDA report prepared by MGAC. |
| 4.2.5 | Reveal the history of the place | Yes | SW Plot adopts street grid within Concept Proposal. Architectural materiality reflect built heritage of Haymarket (brick predominance) and maritime legacy. |
| 4.3 | Positive outdoor spaces. The design must: | | |
| 4.3.1 | Define the space, its function and character | Yes | The distribution of uses support the aspirational character and functions proposed within the Concept Proposal. Refer also items 1.2.3 + 2.1.9 above. |
| 4.3.2 | Provide and ensure the right to light between buildings. | Yes | As per items 2.1.7, 2.2.2, 4.1.6 + 4.1.7 above. |
| 4.3.3 | Form and shape outdoor rooms using built form | Yes | SW Plot complies with the Concept Proposal and the proposed new lanes, boulevard and square. |
| 4.3.4 | Use light and shadow to add dynamism within spaces | Yes | SW Plot complies with the Parameter Plan maximum building envelope to minimise massing/ overshadowing of new spaces + places. Refer also item 4.1.6 above.<br>Articulation of canopy/ awning zone at ground level caters for micro-climate and adds interest - such as clear openings by lobby entrances. |
| 4.3.5 | Avoid creating microclimate issues for example negative wind conditions caused by tall building location and design | Partial | SW Plot complies with the Concept Proposal and locates built form on street edges and key urban gateways. Microclimate issues addressed within design. |

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 4.4 | Building line and setbacks. The design must: | | |
| 4.4.1 | Provide buildings that are built to an appropriate building line | Yes | As per item 4.3.5 above. |
| 4.4.2 | Form appropriate heights of street walls with taller sections of building setback from the street | Yes | SW Plot tower articulation to meet brief/ Design Guidelines has resulted in setbacks +/- 3m. Refer also items 4.1.3 + 4.3.5 above. |
| 4.4.3 | Proportion buildings with a base, middle and top | Yes | SW Plot towers rise from urban block base responding to street scale. Consistent expression of tower form with unique top to SW3 signature tower. Rooftop plant on other buildings to be managed architecturally. |
| 4.4.4 | Create an interface for humans at the public realm | Yes | Ground plane uses support functions within the lanes, streets + squares. A rich layering of colour, materiality and signage will be encouraged within the retail frontages. Detail to be submitted in subsequent DAs. Refer to the Retail Design Guidelines prepared by 6º. Refer also items 1.2.3 + 2.2.8 above. |
| 4.4.5 | Create enclosure and definition to the space around and between buildings | Yes | As per item 2.1.11 + 4.1.3 above |
| 5.0 PUBLIC REALM - for the SW Plot SSDA 5 'Public Realm' has been applied to the podium landscape. | | | |
| 5.1 | Public realm. The design must: | | |
| 5.1.1 | Provide focus activity areas within the public realm | Yes | Podium landscape delivers a mix of active and respite uses in compliance with the Green Star requirements. The key feature is a central pool area. |
| 5.1.2 | Ensure there are appropriate uses in and around the space | Yes | As per item 5.1.1 above, appropriate uses have been included within the podium garden. These have been carefully situated to minimise impact on surrounding residences and careful use of planting to provide screening and privacy. |
| 5.1.3 | Build in versatility and flexibility | Yes | Large areas of lawn support a variety of uses. Stepped slab and deep soil zones allow for flexibility to adjust landscape. |
| 5.1.4 | Provide adequate routes through space: enable people to pass directly from A to B | Yes | Podium landscape well provided with paths/route options. |
| 5.1.5 | Stimulate the human senses through touch; sound; smell | Yes | Materials, trees, lighting and furniture will combine to create a visually stimulating environment. |
| 5.1.6 | Create a distinctly local Sydney identity | N/A | Landscape design to support amenity. |
| 5.1.7 | Plant local species | Partial | Mix of evergreen native and exotic deciduous trees to achieve the desired micro-climate and seasonal interest. Deciduous trees are used to maximise passive solar design to apartments . Species are selected for suitability to grow on the podium landscape conditions. |
| 5.1.8 | Enhance natural ecology and ecosystems | Partial | Urban site with limited natural existing ecology. Improvements limited to enhance natural environment through increased planting, adopting native species and management of storm water. |
| 5.1.9 | Embrace the Sydney climate | Yes | Deciduous trees within podium landscape shade in summer and allow sun in winter. Lighter paving materials reduce heat absorption. Periodic heavy rain falls addressed within stormwater strategy. |

DENTON CORKER MARSHALL

7428A_SW PLOT, THE HAYMARKET
URBAN DESIGN + PUBLIC REALM
GUIDELINE COMPLIANCE REVIEW

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 5.1.10 | Ensure the place is of high quality and is built to last | Yes | A simple palette of robust and durable materials to be used. |
| 5.1.11 | Integrate art within built and landscape forms | Partial | Design of and/or treatment to pavilions, planters and fences create visual interest. |
| 5.2 | Safety + security. The design must: | | |
| 5.2.1 | Build in Safety | Yes | Safety built in through strong community ownership, clear sight lines, safe lighting levels etc in line with CPTED principles |
| 5.2.2 | Focus on natural surveillance | Partial | Balance sought between passive surveillance of podium landscape and maintaining privacy for users. |
| 5.2.3 | Follow secure-by-design principles | Yes | As per items 5.2.1 + 5.2.2 above. |
| 5.2.4 | Watch the main entrance closely | Yes | As per item 5.2.1 above. |
| 5.2.5 | If there has to be a security fence or grill, design it as a sculpture | Yes | As per item 5.1.11 above. |
| 5.3 | Temporary uses: The design must: | | |
| 5.3.1 | Ensure there are rich day and night experiences | N/A | Not appropriate for residential setting. |
| 5.3.2 | Provide appropriate amenity for an 18 hour/7 days a week site | N/A | Not appropriate for residential setting. |
| 5.3.3 | Allow for a diverse range of events and overlays | Yes | As per items 5.1.1 + 5.1.2 above. |
| 5.3.4 | Provide large gathering spaces and intimate areas for diversity | Yes | As per item 5.1.1 above, but of a scale appropriate to a residential garden setting. |
| 5.3.5 | Balance the event spaces with recreational spaces and circulation spaces | Yes | As per item 5.1.1. above. Refer to the Design Report for further detail. |
| 5.4 | Accessibility. The design must: | | |
| 5.4.1 | The design must follow the principles to be adopted for walking routes and follow the five C's approach as follows:<br>- connected<br>- convivial<br>- conspicuous<br>- comfortable<br>- convenient | Yes | These principles all considered within the podium landscape design and facilities. |
| 6.0 STREETSCAPE + LANDSCAPE - for the SW Plot SSDA 5 'Landscape' has been applied to the podium landscape. | | | |
| 6.1 | Landscape. The design must: | | |
| 6.1.1 | Provide a variety of open space types | Yes | Streetscape - as per item 2.1.1 above<br>Landscape - as per items 5.1.1 + 5.1.2 above. |
| 6.1.2 | Create park life | Yes* | As applies to podium landscape - refer items 5.1.1, 5.1.2 + 5.3.3 above. |
| 6.1.3 | Ensure that parks are within walking distance | Yes | SW Plot includes podium landscape. Proposed new square and Tumbalong Park in close proximity. |
| 6.1.4 | Connect open spaces as a network | Yes | As per item 1.1.3 above. |
| 6.1.5 | Work with the earth and the historic landform cuts of the valley | N/A | Not applicable to SW Plot Development Application. |
| 6.2 | Wildlife + ecology. The design must: | | |
| 6.2.1 | Balance human access and wildlife shelter | Partial | As per item 5.1.8 above. SW Plot sits within a highly urban, city pedestrian precinct with limited site value as a wildlife shelter. Opportunities will be explored further to ensure that where practical, the public domain and podium landscape environments encourage native birds. |
| 6.2.2 | Ensure that all sites are created as habitats | N/A | As per item 6.2.1 above. |

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 6.2.3 | Aid biodiversity | Partial | Proposal for streets trees and podium landscape greatly increases existing extent of planting. |
| 6.3 | Microclimate. The design must: | | |
| 6.3.1 | Consider the influence of the elements | Yes | As per item |
| 6.3.2 | Plant with the sun in mind | Yes | As per item 5.19 above. |
| 6.3.3 | Harness cool breezes | Yes | The Boulevard exposed to prevailing southerly winds but also to coastal breezes from the north. Evergreen tree planting will help deflect Southerlies in The Boulevard. Dickson's Lane sheltered and main seating areas located away from high wind areas. |
| 6.3.4 | Protect from winter winds | Yes | As per item 6.3.3 above. |
| 6.3.5 | Make the place comfortable | Yes | As per item 5.1.9 above |
| 6.4 | Wayfindng. The design must: | | |
| 6.4.1 | Make the place legible | Yes | As per 1.1.3, 2.2.3, 2.3.7 + 2.3.8 above. |
| 6.4.2 | Use urban markers through both built form and landscape elements | Yes | As per 1.1.3, 2.2.3, 2.3.7 + 2.3.8 above. |
| 6.4.3 | Achieve a macro-precinct to micro-pedestrian scale wayfinding strategy | Yes | Refer to SSDA 5 Public domain Design Report for detail. |
| 6.5 | Street furniture, art + lighting. The design must: | | |
| 6.5.1 | Clean up the existing clutter and provide a collection that is integrated and harmonious with the Design | Yes | Integrated landscape, furniture and lighting strategy proposed for public domain. Refer to SSDA 5 Public Domain Design Report for further detail. |
| 6.5.2 | Provide a consistent palette of quality street furniture | Yes | As per item 6.5.1 above. |
| 6.5.3 | Fit art to the place | Yes | Art installation proposed at end of Dickson's Lane to create focal point/ mark gateway. Catenary lighting within Dickson's Lane to create attractive setting. |
| 6.5.4 | Integrate art within built and landscape forms | Yes | As per item 6.5.3 above. |
| 6.5.5 | Make art a spectacle and worth repeat visits | N/A | Not applicable to SW Plot Development Application. |
| 6.5.6 | Illuminate each unique scene and harness an identifiable night time experience | Yes | Lighting strategy a key element of Precinct character and place experience. Refer to SSDA 5 Public Domain Design Report for more detail. |
| 6.5.7 | Consider 'plug and play' (smart poles or equivalent) lighting poles to facilitate event overlays | N/A | Not applicable to SW Plot Development Application. Haymarket Square delivery in next stages. |
| 7.0 FAÇADE + INTERFACE | | | |
| 7.1 | Animating the edge. The design must: | | |
| 7.1.1 | Provide a varied and active frontage | Yes | As per items 4.1.3 + 4.4.4 above. |
| 7.1.2 | Reach out to the street | Yes | As per items 1.2.3 + 4.4.4 above. |
| 7.1.3 | Make buildings provide a setting to the spaces between them and in front | Yes | As per items 1.2.3, 2.1.9, 3.1.2, 4.2.2 + 4.3.1 above |
| 7.1.4 | Strengthen local identity | Yes | As per items 2.2.4, 3.1.11 + 4.2.5 above. |
| 7.1.5 | Keep the design rich from both near and afar | Yes | SW Plot design adopts architectural ordering devices to create distinctive design that relates to human scale. Refer also item 2.3.8 above. |
| 7.1.6 | Express the use and the purpose of the facilities | N/A | Not applicable to SW Plot Development Application. |
| 7.1.7 | Relate to the human scale | Yes | As per items 4.1.2, 4.1.3, 4.1.4, 4.2.2 + 4.4.2 above. |
| 7.1.8 | Embrace the identity of the Precinct | Yes | As per items 1.2.1 + 1.2.3 above. |
| 7.1.9 | Make entrances a feature in the façade | Yes* | * Guideline refers to PPP Core facilities however; SW Plot responds as per items 2.1.5 + 2.2.1 above. |

DENTON CORKER MARSHALL

7428A_SW PLOT, THE HAYMARKET
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| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 7.1.10 | Utilise detailed massing and facade treatments to welcome, guide and orientate users | TBA | As per items 2.3.4 + 7.1.5 above. |
| 7.1.11 | Relate the facade and ground level portions of buildings to the public realm | Yes | As per items 1.2.3, 2.2.8, 2.3.8, 3.1.2 + 4.2.2 above |
| 7.1.12 | Combine event strategies and elements such as banners, light poles and other event structures for the site with permanent ground level uses | Yes | Refer to SSDA 5 Public Domain Design Report for more detail. |
| 7.2 | Continuous weather protection. The design must: | | |
| 7.2.1 | Provide a weather protected route along all primary routes, including Quay Street (and its northern extension) and the Quarry Street extension. | Yes | Fixed canopies provided around 70% of building perimeter to address microclimate issues - predominantly Boulevard, Hay Street + Darling Drive. Proprietary awnings allowed for along retail frontages - predominantly on Boulevard and Dickson's Lane. Subject to retail Design Guidelines. Refer also item 4.3.4 above. |
| 7.2.2 | Use colonnades or awnings along building frontages to allow a consistent datum to be read along a street edge | Yes | As per item 7.2.1 above. Retail Design Guidelines advocate some variety in awning/ proprietary canopy heights to provide interest and increase light penetration. |
| 7.2.3 | Provide diversity in the elevations through articulation of the façade | Yes | 4 distinct 'architectures' are applied to the SW Plot in response to context/ desire for diversity. Adoption of architectural visual ordering devices provide a human micro-scale response whilst also providing a macro-scale composition. |
| 8.0 DETAILS + MATERIALS | | | |
| 8.1 | Precinct scale. The design must: | | |
| 8.1.1 | Demonstrate a precinct approach to materials and their built assembly | Yes | SW Plot follows the Concept Proposal Design Guidelines which establish an articulation and materiality approach to harmonise the Haymarket and integrate within existing built context. |
| 8.1.2 | Recognise that the grain, texture and scale of the skyline is of great importance | Yes | As per items 2.2.5, 2.2.8 + 2.3.6 above. |
| 8.1.3 | Materials should be used to define and reinforce different character areas within the Precinct | Yes | The podium reflects the masonry and brick of the Haymarket; the SW2 block creates a timber context around the new square; the towers (SW1 + SW3) respond to the skyline context and seek to establish a unique and readily identifiable new architecture. The Public Domain borrows for the surrounding streetscape and lays down a new layer/ palette for the Precinct. Refer to the SSDA 2 Public Domain Design Report. Refer also item 4.2.5 above. |
| 8.1.4 | Be built of the same fundamental elements that make Darling Harbour the place it is. A place for celebration, for transaction and for entertainment with quality venues, shops, hotel, homes and public realm | Yes | As per item 8.1.3 above. |
| 8.1.5 | Respond to surrounding existing and historic character | Yes | As per items 1.1.3, 2.2.4, 3.2.5 + 8.1.3 above. |
| 8.1.6 | Add a distinctive townscape element within the wider Darling Harbour area | Yes | SW Plot complies with Concept Proposal which introduces urban street grain and mixed use buildings within The Haymarket. |

| *Item* | *Urban Design requirement/ guideline* | *Compliance* | *Design approach* |
|---|---|---|---|
| 8.1.7 | Add another 'layer' of character into Darling Harbour, the new materiality will be symbolic of the change and transformation of the area | Yes | As per items 8.13 + 8.1.6 above.<br>Timber frame/ clad buildings to square introduce new materiality to Haymarket reflect former maritime legacy of site and adds another layer to the history of regeneration within the local area. |
| 8.2 | Pedestrian scale. The design must: | | |
| 8.2.1 | Ensure that detail resolution matters | N/A | Aspirational statement. |
| 8.2.2 | Ensure that materials are easily maintainable | Yes | Robust materials palette proposed for public domain, buildings and podium landscape. Retail Design Guidelines will advocate similar for the retail frontages as per item 3.1.10 above. |
| 8.2.3 | Ensure that the buildings are sustainable, durable and visually interesting | Yes | Design excellence of project team will ensure successful outcome for all buildings and precinct. |
| 8.2.4 | All materials in the public realm areas of the Precinct, and especially the lower base<br>elements of all buildings are to be highly durable | Yes | As per item 8.2.2 above. |
| 8.2.5 | Create a hierarchy of materials | Yes | As per item 8.1.3 above. |
| 8.2.6 | Propose a primary material to dominate the frontage, other materials should be used to demarcate different elements of the building | Yes | As per item 8.1.3 above.<br>Consistent materials use natural/added colour variation to provide contrast/interest. |
| 8.2.7 | Primarily use glazing where there is a key public use and where there are retail frontages | Yes | Retail Design Guidelines prepared to inform retail fit-out of ground plane in subsequent Development Applications. |
| 8.2.8 | Identify with the climatic conditions of Sydney and provide appropriate shade and shelter | Yes | As per items 4.3.4 + 7.2.1 above. |
| 8.2.9 | Use colour to add vibrancy and distinctiveness. Colour may be added through coloured light, retail signage, coloured glass or glazed brick as well as coloured fabrics of awnings and parasols. | Yes | Subtle insertions of colour highlight distinctive features of each building and reinforce unique identity. Retail Design Guidelines prepared to inform retail fit-out of ground plane in subsequent Development Applications. |
| 8.3 | Materials. The design must: | | |
| 8.3.1 | Consider Sydney as a blue and green connected city | No | Palette responds to Haymarket/maritime heritage. |
| 8.3.2 | Celebrate the temperate climate | Yes | As per item 9.1.1 below. |
| 8.3.3 | Use landscape and plant materials | Yes | Podium landscape provided for residents |
| 9.0 ENERGY + RESOURCE EFFICIENCY | | | |
| 9.1 | Resource Efficiency. The design must: | | |
| 9.1.1 | Orientate buildings towards the sun | Yes | Buildings adopt SEPP 65 and RFDC minimum standards to maximise apartments with natural cross ventilation and good sunlight and daylight. Further detail provided in RFDC compliance section of SSDA 5 Design Report. |
| 9.1.2 | Let the light in and keep the heat out in summer | Yes | As per item 9.1.1. above. Further detail provided within Residential Amenity section of SSDA 5 Design Report. |
| 9.1.3 | Recycle rainwater where possible | Yes | Rainwater harvest tanks provided for podium landscape irrigation. |
| 9.1.4 | Use the potential of the ground | No | Flood risk, extensive in-ground infrastructure and archaeology and high risk of soil contamination prevent use of ground/in-ground solutions. |
| 9.1.5 | Work with the wind | Yes | As per item 9.1.1 above. |

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|---|---|---|---|
| 9.1.6 | Do more with less | Yes | SW Plot design and materials reflect modern methods of construction to improve efficiency, minimise waste and incorporate standardisation. |
| 9.1.7 | Waste not, want not | Yes | As per item 9.1.6 above. |
| 9.1.8 | Prioritise Precinct wide solutions | No | SW Plot is self-sustaining to allow for stage delivery of Concept Proposal. |
| 10.0 STAGING + MANAGEMENT | | | |
| 10.1 | Precinct management. The design must: | | |
| 10.1.1 | Provide a platform for a range of events | Yes | Diversity in ground plan uses, character and articulation provide range of different experiences. |
| 10.1.2 | Provide a place for locals, visitors and international guests | Yes | As per items 1.2.3 + 2.1.5 above.<br>Dickson's Lane - intimate, local venue. The Boulevard - public event corridor. |
| 10.1.3 | Allow the Precinct to change over time and evolve with contemporary culture | N/A | Whole of Precinct solution |
| 10.1.4 | A new Tumbalong Park will provide the opportunity for event staging. | N/A | Not applicable to SW Plot Development Application. |

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# APPENDIX A
# DRAWINGS

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# APPENDIX A - DRAWING REGISTER

## Architecture + landscape drawings

| Plans | Dwg # | Rev |
|---|---|---|
| Site Plan - Existing | SK_001 | P5 |
| Site Plan - Proposed | SK_002 | P5 |
| Ground Level Plan | SK_011 | P4 |
| Level 01 Plan | SK_012 | P5 |
| Level 02 Plan | SK_013 | P5 |
| Level 03 Plan | SK_019 | P5 |
| Level 04 Plan | SK_020 | P5 |
| Podium Roof Plan | SK_014 | P5 |
| Typical Tower Plan | SK_015 | P5 |
| Roof Plan | SK_016 | P5 |
| SW1 Typical Podium Plan - Levels 02-04 | SK_040 | P4 |
| SW1 Podium Roof Plan - Level 05 | SK_041 | P5 |
| SW1 Lower Tower Plan - Levels 06-19 | SK_050 | P6 |
| SW1 Typical Tower Plan - Levels 20-23 | SK_051 | P5 |
| SW1 Upper Tower Plan - Level 24 | SK_053 | P6 |
| SW2 Typical Podium Plan - Levels 01-04 | SK_042 | P5 |
| SW2 Podium Roof Plan - Level 05 | SK_043 | P5 |
| SW2 Typical Plan - Levels 06-07 | SK_052 | P5 |
| SW3 Typical Podium Plan - Levels 02-04 | SK_044 | P5 |
| SW3 Podium Roof Plan - Level 05 | SK_045 | P6 |
| SW3 Typical Tower Plan - Levels 6-36 | SK_054 | P6 |
| SW3 Upper Tower Plan - Levels 37-39 | SK_055 | P6 |

### Elevations

| | | |
|---|---|---|
| North Elevation | SK_101 | P5 |
| South Elevation | SK_102 | P6 |
| East Elevation | SK_103 | P5 |
| West Elevation | SK_104 | P5 |
| North Podium Elevation | SK_111 | P5 |
| South Podium Elevation | SK_112 | P6 |
| East Podium Elevation | SK_113 | P5 |
| West Podium Elevation | SK_114 | P6 |

| Sections | Dwg # | Rev |
|---|---|---|
| Section AA | SK_201 | P5 |
| Section BB | SK_202 | P5 |
| Section CC | SK_203 | P5 |
| Section DD | SK_204 | P5 |
| Section EE | SK_205 | P5 |

### Public Realm Interface (PRI)

| | | |
|---|---|---|
| PRI Section 1 - The Boulevard | SK_211 | P5 |
| PRI Section 2 - Hay Street | SK_212 | P5 |
| PRI Section 3 - Darling Drive | SK_213 | P5 |
| PRI Section 4 - Dickson's Lane | SK_214 | P6 |

### Bay Studies

| | | |
|---|---|---|
| Podium - Bay Study | SK_227 | P4 |
| Podium - Bay Study | SK_228 | P4 |
| SW1 - Bay Study | SK_220 | P4 |
| SW1 - Bay Study | SK_221 | P4 |
| SW1 - Bay Study | SK_222 | P5 |
| SW2 - Bay Study | SK_226 | P4 |
| SW3 - Bay Study | SK_223 | P4 |
| SW3 - Bay Study | SK_224 | P4 |
| SW3 - Bay Study | SK_225 | P5 |

### Schedules

| | | |
|---|---|---|
| Exterior Finishes Schedule | SK_120 | P4 |
| Nather's Certificate | SK_121 | P4 |

| Perspective Views | | |
|---|---|---|
| Aerial view from east | SK_250 | P4 |
| View on Hay Street and Boulevard corner | SK_251 | P4 |
| View at corner of Dickson's Lane and Boulevard | SK_252 | P4 |
| View from Haymarket Square | SK_253 | P4 |
| Darling Drive view looking north | SK_255 | P4 |
| Hay Street view looking west | SK_256 | P4 |
| Hay Street at night | SK_257 | P4 |

### Landscape Drawings

| | | |
|---|---|---|
| Landscape Plan | DA_1308_1 | D |
| Landscape Perspective View 1 | DA_1308_2 | B |
| Landscape Perspective View 2 | DA_1308_3 | B |
| Landscape Sections | DA_1308_4 | C |
| Indicative Plant Images and Plant Schedule | DA_1308_5 | B |

EXISTING EXHIBITION CENTRE
TO BE DEMOLISHED
(SEPERATE DEVELOPMENT APPLICATION)

CHINESE
GARDEN OF
FRIENDSHIP

HARBOUR STREET

SUSSEX STREET

PIER STREET

GOULBURN STREET

PUMP HOUSE

LITTLE PIER STREET

SHFA

FACTORY STREET

KIMBERLANE

DIXON STREET

ENTERTAINMENT
CENTRE CAR PARK
(2014)

SYDNEY
ENTERTAINMENT
CENTRE
(2016)

LITTLE HAY STREET

POWERHOUSE
MUSEUM

DARLING DRIVE

HAY STREET

QUAY STREET

MARKET CITY

KEY

- Existing buildings to be demolished (commencement as noted in drawing)
- Existing monorail (demolition to commence July 2013 - by others)
- Neighbouring buildings
- Haymarket Boundary
- Demolition Boundary

DARLING HARBOUR LIVE

Lend Lease

ABSA
Astr # 61704 Cert # 1005237373
Sign
Date 28-May-13

| | | | | |
|---|---|---|---|---|
| 7428A SK-001<br>1:1500 @ A3<br>0 7.5 37.5m | P 5<br>06/06/2013 | DENTON CORKER MARSHALL | THE HAYMARKET<br>LEND LEASE DEVELOPMENT | DEVELOPMENT APPLICATION<br>SOUTH WEST PLOT<br>EXISTING SITE AND DEMOLITION PLAN |

EXHIBITION CENTRE

CHINESE GARDEN OF FRIENDSHIP

HARBOUR STREET

SUSSEX STREET

PIER STREET

GOULBURN STREET

PUMP HOUSE

LITTLE PIER STREET

SHFA

FACTORY STREET

KIMBERLANE

DIXON STREET

LITTLE HAY STREET

POWERHOUSE MUSEUM

DARLING DRIVE

DICKSON'S LANE

THE BOULEVARD

SW1

SW2

SW3

SW PLOT

HAY STREET (NO VEHICULAR ACCESS)

QUAY STREET

MARKET CITY

KEY

- SW Plot
- SW Plot Residential (above podium)
- Public Domain
- Haymarket Concept Plan plot boundaries
- Neighbouring buildings
- Works beyond plot boundary (pedestrian footbridge)
- Haymarket Boundary
- SW Plot Boundary

DARLING HARBOUR LIVE

Lend Lease

ABSA
Assr # 61704 Cert # 1005237373
Sign
Date 28-May-13

| | | | | | |
|---|---|---|---|---|---|
| 7428A SK-002<br>1:1500 @ A3<br>0 7.5 37.5m | P5<br>07/06/2013 | DENTON CORKER MARSHALL | **THE HAYMARKET**<br>**LEND LEASE DEVELOPMENT** | **DEVELOPMENT APPLICATION**<br>**SOUTH WEST PLOT**<br>**SITE PLAN - PROPOSED** |


## Legend

ST | 1B | 1B_S | 2B | 3B | Balcony | Retail | IQ Hub (Potential) | Carpark | Circulation/Lobby | Services/Storage

Note: Retail shopfront illustrative to future DA

DARLING HARBOUR LIVE

Lend Lease

ABSA
Accr # 61704 Cert # 1005237373
Sign
Date 28-May-13

7428A SK-011 P 4
29/05/2013
1:500 @ A3
0 5 10 15M

DENTON CORKER MARSHALL

**THE HAYMARKET**

**LEND LEASE DEVELOPMENT**

**DEVELOPMENT APPLICATION**
**SOUTH WEST PLOT**
**GROUND PLAN**