

**SYDNEY INTERNATIONAL CONVENTION,
EXHIBITION AND ENTERTAINMENT PRECINCT
(SICEEP)**

DARLING SQUARE SOUTH-EAST PLOT

ACCESS REPORT

**FOR STAGE 2 STATE SIGNIFICANT
DEVELOPMENT APPLICATION (SSDA 9)**

Morris-Goding Accessibility Consulting

FINAL

26 February 2016

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1. INTRODUCTION

1.1. General

This report supports a State Significant Development (SSD) Development Application (DA) submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Application (referred to as SSDA 9) follows the approval of a staged SSD DA (SSDA 2) in December 2013. SSDA 2 sets out a Concept Proposal for a new mixed use residential neighbourhood at Haymarket referred to as “Darling Square”, previously known as “The Haymarket”. Darling Square forms part of the Sydney International Convention, Exhibition and Entertainment precinct (SICEEP) Project, which will deliver Australia’s global city with new world class convention, exhibition and entertainment facilities and support the NSW Government’s goal to “make NSW number one again”.

More specifically this subsequent DA seeks approval for mixed use development within the South East development plot of Darling Square and associated public domain works. The DA has been prepared and structured to be consistent with the Concept Proposal DA.

1.2. Overview of Proposed Development

The proposal relates to a detailed (‘Stage 2’) DA for a mixed use residential development in the South East Plot of Darling Square together with associated public domain works. The Darling Square Site is to be developed for a mix of residential and non-residential uses, including but not limited to residential buildings, commercial, retail, community and open space. The South East Plot is one of six development plots identified within the approved Concept Proposal.

Under the Concept Proposal, the South East Plot is planned to accommodate a mixed use podium and three residential buildings (SE1, SE2, and SE3) above and within the podium structure. More specifically, this SSD DA seeks approval for the following components of the development:

- Demolition of existing site improvements, including the existing Sydney Entertainment Centre (SEC);
- Associated tree removal and planting;
- Construction and use of a predominantly 5 storey mixed use podium, including:
 - retail floor space and residential lobbies on Ground Level;
 - above ground parking;
 - residential apartments; and
 - communal facilities.
- Construction and use of three residential buildings above podium;
- Public domain improvements adjacent to the site;
- Provision of vehicle access to the development from Harbour Street;
- Landscaping works to the podium roof level; and
- Extension and augmentation of physical infrastructure / utilities as required.

1.3. Background

The NSW Government considers that a precinct-wide renewal and expansion of the existing convention, exhibition and entertainment centre facilities at Darling Harbour is required, and is committed to Sydney reclaiming its position on centre stage for hosting world-class events with the creation of SICEEP.

Following an extensive and rigorous Expressions of Interest and Request for Proposals process, a consortium comprising AEG Ogden, Lend Lease, Capella Capital and Spotless was announced by the NSW Government in December 2012 as the preferred proponent to transform Darling Harbour and create SICEEP.

Key features of the Preferred Master Plan include:

- Delivering world-class convention, exhibition and entertainment facilities, including:
- Up to 40,000m² exhibition space;
- Over 8,000m² of meeting rooms space, across 40 rooms;
- Overall convention space capacity for more than 12,000 people;
- A ballroom capable of accommodating 2,000 people; and
- A premium, red-carpet entertainment facility with a capacity of 8,000 persons.
- Providing a hotel complex at the northern end of the precinct.
- A vibrant and authentic new neighbourhood at the southern end of the precinct, now called 'Darling Square', including apartments, student accommodation, shops, cafes and restaurants.
- Renewed and upgraded public domain that has been increased by a hectare, including an outdoor event space for up to 27,000 people at an expanded Tumbalong Park; and
- Improved pedestrian connections linking to the proposed Ultimo Pedestrian Network drawing people between Central, Chinatown and Cockle Bay Wharf as well as east-west between Ultimo/Pymont and the City.

On 21 March 2013 a critical step in realising the NSW Government's vision for the SICEEP Project was made, with the lodgement of the first two SSD DAs with the (now) Department of Planning and Environment. The key components of these proposals are outlined below.

Public Private Partnership SSD DA (SSD 12_5752)

The Public-Private Partnership (PPP) SSD DA (SSDA 1) includes the core facilities of the SICEEP Project, comprising the new, integrated and world-class convention, exhibition and entertainment facilities along with ancillary commercial premises and public domain upgrades. SSDA1 was approved on 22 August 2013.

Concept Proposal (SSD 13_5878)

The Concept Proposal SSD DA (SSDA 2) establishes the vision and planning and development framework which will be the basis for the consent authority to assess detailed development proposals within the Darling Square Site. SSDA2 was approved on

5 December 2013. The Stage 1 Concept Proposal approved the following key components and development parameters:

- Indicative staging of demolition and development of future development plots;
- Land uses across the site including residential and non-residential uses;
- Street and laneway layouts and pedestrian routes;
- Open spaces and through-site links;
- Six separate development plots, development plot sizes and separation, building envelopes, building separation, building depths, building alignments, and benchmarks for natural ventilation and solar access provisions;
- A maximum total gross floor area (non-residential and residential GFA);
- Above ground car parking including public car parking;
- Residential car parking rates;
- Design Guidelines to guide future development and the public domain; and
- A remediation strategy.

The Concept Proposal was modified on 26 November 2015 to increase the amount of non-residential GFA. This minor increase in GFA was allocated to the approved North-West Plot building to meet tenant requirements. In addition to the approval of SSDA2, the following approvals have been granted for various stages of Darling Square site:

- Darling Drive (part) development plot (SSDA3) for the construction and use of a residential building (student accommodation) and the provision of associated public domain works approved on 7 May 2014;
- North-West development plot (SSDA4) for the construction and use of a mixed use commercial development and public car park building and associated public domain works approved on 7 May 2014; and
- South-West development plot (SSDA5) – construction and use of a mixed use residential development and associated public domain works approved on 21 May 2014.
- North-East development plot (SSDA7) – construction and use of a mixed use residential development and associated public domain works approved on 16 April 2014.

Approval was also granted on 15 June 2014 for SSDA6 which includes the construction and use of the International Convention Centre (ICC) Hotel and provision of public domain works. Approval was also granted for SSDA8 on 16 October 2015 which comprised the ICC Hotel fitout, external lighting and subdivision.

This report has been prepared to support a detailed Stage 2 SSD DA for mixed use development and associated public domain works within Darling Square (SSDA 9), consistent with the Concept Proposal (SSDA 2).

1.4. Site Description

The SICEEP Site is located within Darling Harbour. Darling Harbour is a 60 hectare waterfront precinct on the south-western edge of the Sydney Central Business District that provides a mix of functions including recreational, tourist, entertainment and business.

With an area of approximately 20 hectares, the SICEEP Site is generally bound by the light rail Line to the west, Harbourside shopping centre and Cockle Bay to the north, Darling Quarter, the Chinese Garden and Harbour Street to the east, and Hay Street to the south (refer to Figure 1). The Darling Square Site is:

- located in the south of the SICEEP Site, within the northern portion of the suburb of Haymarket;
- bounded by the Powerhouse Museum to the west, the Pier Street overpass and Little Pier Street to the north, Harbour Street to the east, and Hay Street to the south; and
- irregular in shape and occupies an area of approximately 37,700m².

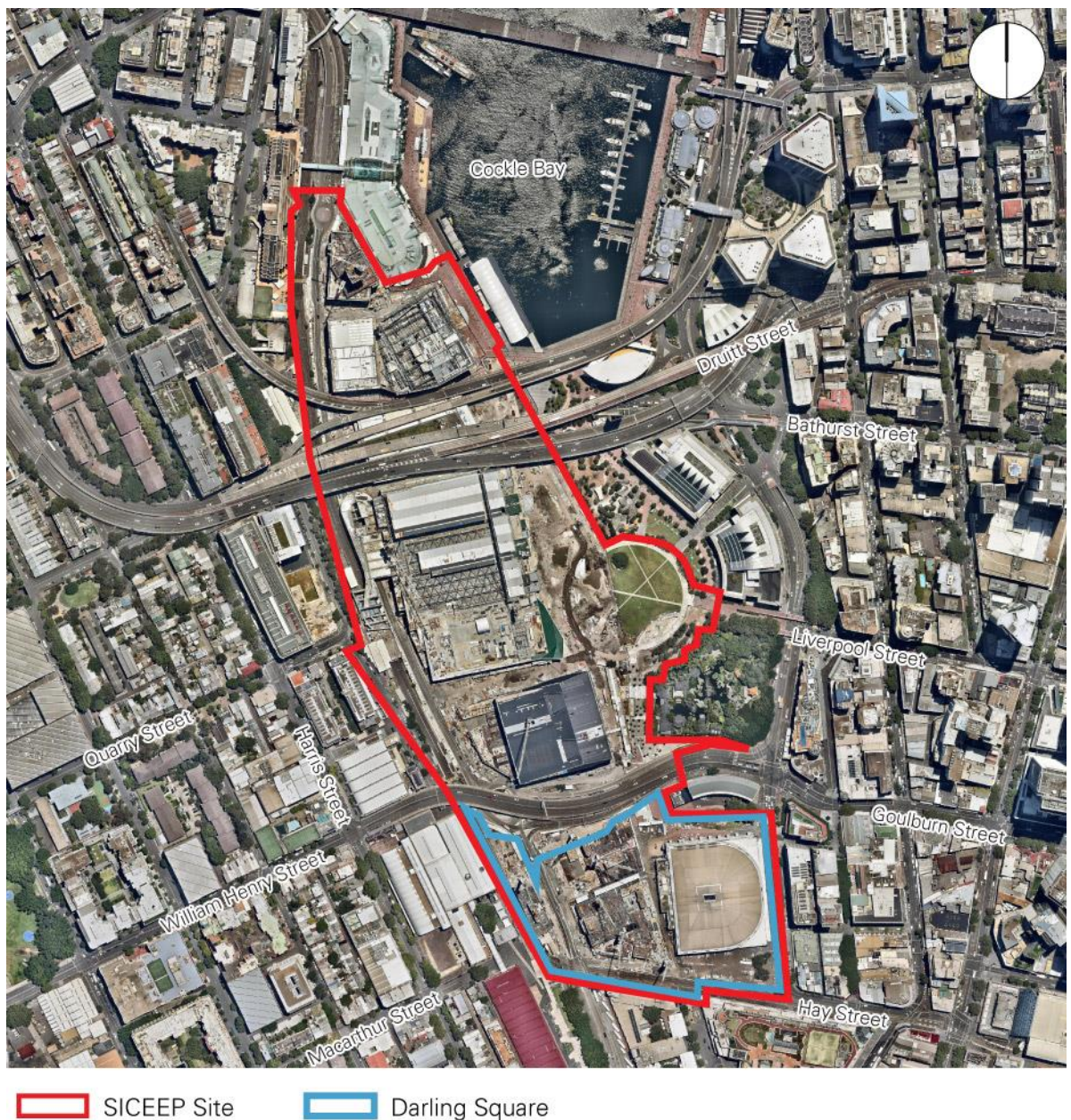


Figure 1 – Aerial Photograph of the SICEEP Site

The Concept Proposal DA provides for six (6) separate development plots across the Darling Square Site (refer to **Figure 2**):

1. North Plot;
2. North East Plot;
3. South East Plot;
4. South West Plot;
5. North West Plot; and
6. Western Plot (Darling Drive).

The Application Site area relates to the South East Plot and surrounds as detailed within the architectural and landscape plans submitted in support of the DA.

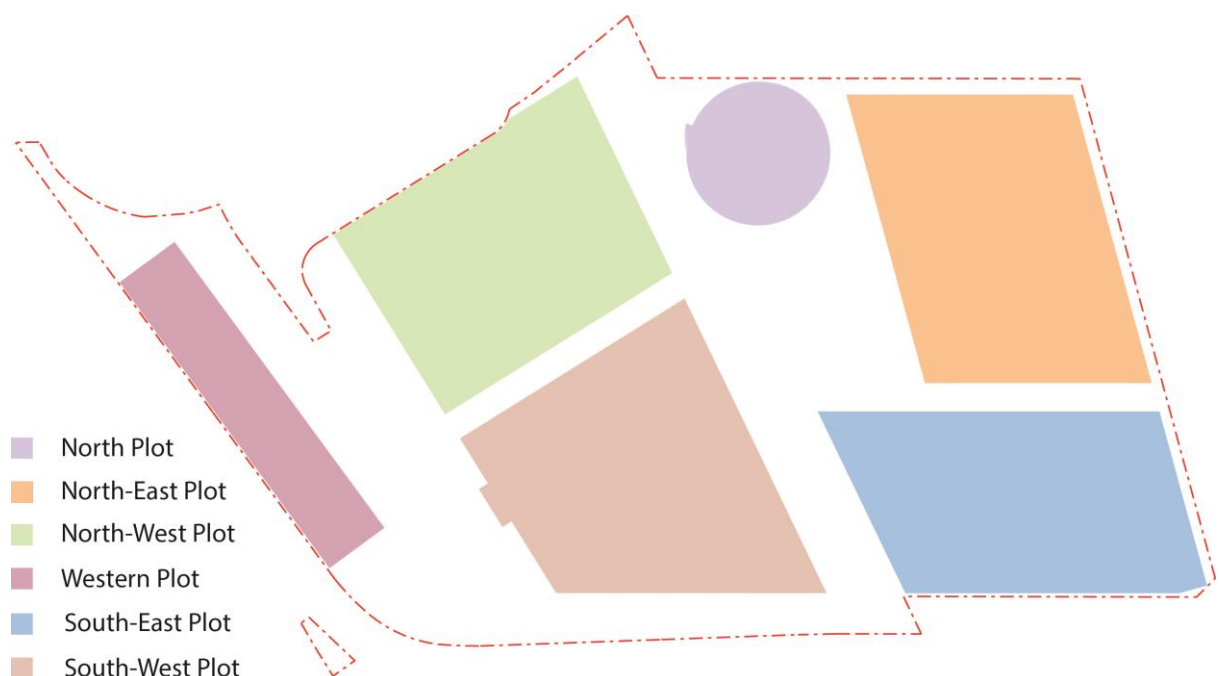


Figure 2 – Concept Proposal Development Plots

1.5. Planning Approvals Strategy

The SICEEP Project has resulted in the lodgement of numerous SSD DAs for the various components of the redevelopment project. Future applications will continue to be lodged in accordance with the Concept Proposal SSD DA for the remaining development plots of Darling Square Site.

2. PROJECT REQUIREMENTS

2.1. General

Lend Lease has engaged Morris-Goding Accessibility Consulting to provide an accessibility design review of the South-East Plot of Darling Square as required by the Secretary's Environmental Assessment Requirements ('SEARs').

The requirements of the investigation were to:

- Review supplied DA drawings of the proposed development;
- Provide a report that will analyse the provisions of disability design of the development; and
- Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS 1428 series.

2.2. Objectives

The report considers user groups, such as staff and visitors. The Report seeks to deliver equality, independence and functionality for people with disabilities with respect to the subject development, inclusive of:

- People with sensory impairment (hearing and vision);
- People with mobility impairments (ambulant and wheelchair); and
- People with dexterity impairments.

The Report seeks to provide compliance with the Disability Discrimination Act 1992. In doing so, the Report seeks to eliminate, as far as possible, discrimination against persons on the ground of disability and ensure, as far as practicable, that persons with disabilities have the same rights of access to premises as the rest of the community.

2.3. Referenced Standards

The following standards are to be used to implement the Report:

- BCA – Building Code of Australia 2015
- AS1428.1(2009) – (80% of people with disabilities accommodated)
- AS2890.6(2009) – Car Parking for People with a Disability
- AS1735.12(1999) – Passenger Lift Access for People with a Disability
- Disability (Access to Premises – Buildings) Standards 2010, Schedule 1 of which is known as 'DDA Access Code 2010'
- DDA – Federal Disability Discrimination Act 1992

3. INGRESS & EGRESS

3.1. Main Entrances into Retail Tenancies

There are a total of 16 retail tenancies in the subject development – namely, tenancies 1-10, 11A, 12A, 12B, and 13-15. The retail components of the subject development have a building classification of class 6.

The provision of an accessible main entrance into each of the above tenancies is achievable for compliance with the DDA Access Code 2010 and the BCA. Each of the main entry doorways will be detailed to comply with AS1428.1(2009).

Recommendation:

- (i) Ensure each retail main entry doorway has a minimum clear width of 850mm (920mm door leaf) and level transition areas for compliance with AS1428.1(2009).

3.2. Main Entrance for Residential Towers SE1 and SE3

There are a total of three residential towers in the subject development – namely, towers SE1, SE2, and SE3. The residential component of the subject development has a building classification of class 2. Under DDA Access Code 2010 / BCA 2015, the provision of an accessible main entrance that complies with AS1428.1 – 2009 is required into each of the residential towers.

There is a residential main entry that fronts the Hay Street colonnade on ground level in the south sector. The southern main entrance consists of a dual-leaf sliding doorway and serves both towers SE1 and SE3. The dual sliding entry doorway at the main entrance will be detailed to comply with AS1428.1 – 2009.

From the southern main entrance, a continuous accessible path of travel to the passenger lifts of tower SE1 can be achieved via 1:40 graded walkway which extends for approximately 21m and achieves a clear width of 1.9m, compliant with AS1428.1 – 2009.

There is a consecutive set of 1:20 walkways from the shared southern entrance which extends approximately for 14m to the passenger lift lobby for tower SE3. In between the 1:20 walkways there is a 1.2m long landing which serves as a door circulation area leading into the SE3 mail room. The SE3 mail room is a common area requiring access to and within from the Southern shared entrance for a class 2 building. The landing as an external door circulation area is on a 1:40 surface which is considered as a level surface sufficient in accordance to AS1428.1 – 2009.

There is another single-hinged door swinging out to the above intermediate landing which is designed to connect between retail tenancy T12A to the residential foyer. It is to be noted this doorway will be used for emergency egress and is not part of a common doorway. Confirmation is to be required from a fire engineer.

3.3. Main Entrance for Residential Tower SE2

There is a residential main entrance that fronts The Boulevard in the west sector. The entrance serves SE2 residential tower alone. The main entrance consists of a single-leaf sliding door. The above doorway will be detailed to comply with AS1428.1(2009).

There is an accessible path of travel from The Boulevard main entrance to the SE2 lift lobby via two consecutive 1:20 walkways with 1:40 intermediate landings, compliant with AS1428.1 – 2009.

Approaching from the main entrance facing The Boulevard, the first walkway extends for 5.7m before a 1.2m length intermediate landing. Both walkways and intermediate landing achieve a clear width of no less than 2.4m which is compliant with AS1428.1 – 2009. From this landing, the second walkway extends for 7.6m before the tapered top edge of the level surface of the SE2 lobby.

In addition, there is an opening leading into the common-use SE2 mail room along the above intermediate landing which forms the accessible path of travel via the graded main entry walkway. There is a provision of a 1:40 door circulation space of at least 1.2m depth in front of the above mail room entry doorway, which is sufficient in accordance with AS1428.1(2009).

3.4. Emergency Egress

The main paths of travel for emergency egress from each of the retail tenancies on ground level are via the main entry doorways of those tenancies and via the back-of-house corridors on the same level. Refer to section 4.2 below.

The main paths of travel for emergency egress from the upper residential, commercial, and car parking levels of the subject development are via various fire-isolated stairways.

It is advised that there are only limited Deemed-to-Satisfy requirements for emergency egress for people with a disability in the BCA 2015 and the DDA Access Code 2010. All of the DTS requirements will be addressed during design development.

Recommendation:

- (i) As a matter of accessibility best practice, as opposed to code compliance, consideration should be given for each fire door that leads to a fire-isolated stairway to have a minimum clear width of 850mm.

4. RETAIL AND COMMERCIAL AREAS

4.1. Paths of Travel: Retail Tenancies on Ground Level

The fit outs of the various retail tenancies on ground level will be subject to separate approvals to the present development application. The base-building design of all of the retail tenancies will be designed to enable the provision of continuous accessible paths that comply with AS1428.1(2009) of travel to and within those tenancy areas.

4.2. Paths of Travel: Retail Back-of-House Corridors on Ground Level

There are various back-of-house corridors on the ground level of the subject development. The back-of-house corridors will be for the use of retail staff and it is acknowledged that the back-of-house corridors it will also be part of a required path for emergency egress.

However, there is a unisex accessible toilet on ground level for retail staff use along the above back-of-house corridor near retail tenancies 4 and 5. There is an emergency egress doorway discharging out to Little Hay Street which will be also nominated as a common doorway connecting to the unisex accessible toilet facility. As such, the path of travel provided by the back-of-house corridors between Little Hay Street egress doorway and the retail staff unisex accessible toilet on ground floor needs to comply with the requirements of the DDA Access Code 2010, the BCA, and AS1428.1(2009). An accessible path of travel between the two areas mentioned above can be readily achieved in response to the following items below during design development.

There is, in addition, a building manager's office adjacent to the loading dock on ground level. For the above room to be subject to an exemption from access compliance under clause D3.4 of the DDA Access Code 2010 / BCA, confirmation will be required that the users of that room will typically be required to do more than mere clerical work – that is, the users would be required to physically attend to issues throughout the building.

Recommendations:

- (i) The doorway discharging out to Little Hay Street which connects to back-of-house corridor require latch-side clearances of 510mm (door swings away from user) and 530mm (door swings towards user) along 1450mm clear depth level door circulation areas on either sides to be compliant with AS1428.1 – 2009;
- (ii) Ensure for the above doorway facing Little Hay Street has the door hinged along the middle of the wall to allow wheel-chair accessibility in line with AS1428.1.
- (iii) Provide handrails on both sides of the back-of-house 1:14 ramp that connect between the above doorway discharging out to Little Hay Street and the unisex accessible toilet mentioned above.

For the above 1:14 ramp, ensure all handrails their extensions and offset TGSIs at landings are compliant with AS1428.1 – 2009 and do not protrude into path of travel.

4.3. Staff Sanitary Facilities – Ground Level

There is a bank of staff sanitary facilities near retail tenancies 4 and 5 on ground level. There is one unisex accessible toilet at the above bank of sanitary facilities. The provision of one accessible toilet at that bank satisfies the minimum quantity of accessible toilets that is required under the DDA Access Code 2010 / BCA 2015.

The room in which the accessible toilet is located has internal dimensions of 2430mm wide by 2730mm long which can accommodate the minimum combined shower with pan, washbasin, and entry doorway circulation requirements under AS1428.1(2009).

In addition, there is an ambulant cubicle inside each bank of staff male and female sanitary facilities satisfying the DDA Access Code 2010 / BCA 2015. From the air lock entry, there are required circulation spaces along path of travel leading to each ambulant cubicle, compliant with AS1428.1 – 2009.

Recommendations:

- (i) Ensure each ambulant cubicle can accommodate 900mm x 900mm clear circulation space between the leading edge of the pan and closed cubicle door, compliant with AS1428.1 – 2009.

In addition, provide grab rails on both sides and all other required fittings inside each ambulant cubicle compliant with AS1428.1 – 2009.

- (ii) Ensure the entry doorway of the accessible toilet has a minimum clear width of 850mm and is located along the middle of the wall, in line with AS1428.1 – 2009
- (iii) Provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

5. RESIDENTIAL PATHS OF TRAVEL

5.1. General

The residential portion of the subject development has a Class 2 building classification. Under the DDA Access Code 2010 and the BCA 2015, the provision of access within the meaning of AS1428.1(2009) is required to the main entry doorway of every residential unit in a building of this classification.

5.2. Passenger Lifts

There are a total of three passenger lifts that serve tower SE1. There is one passenger lift that serves tower SE2. There are a total of two passenger lifts that serve tower SE3.

The above passenger lifts constitute the continuous accessible paths of travel from the respective residential main entrances on ground level to each of the residential floor levels for compliance with DDA Access Code 2010 / BCA 2015. The lift shaft of each of the above passenger lifts has the outline of the lift car (2m by 2m) detailed which satisfies the minimum internal car dimensions in accordance with DDA Access Code 2010 / BCA 2015.

Recommendation:

- (i) Ensure lift components of each passenger lift in the subject development meet DDA Access Code 2010 and BCA 2015 requirements and AS1735.12(1999). (Mandatory)

5.3. Common Residential Corridors and Lobbies

There can be continuous accessible paths of travel from the residential passenger lifts to the main entry doorway of each unit in the subject development. This is in accordance with the DDA Access Code 2010 / BCA 2015.

There are suitable wheelchair turning bays that comply with AS1428.1(2009) at the ends of the common residential corridors in towers SE1, SE2, and SE3 respectively for compliance with the DDA Access Code 2010 / BCA 2015.

Clause D3.3 of BCA 2015 / DDA Access Code 2010 requires the provision of wheelchair passing bays that comply with AS1428.1(2009) at the points on an accessway at which there is a poor line of sight. For compliance with clause D3.3 of BCA 2015 / DDA Access Code 2010, a suitable wheelchair passing bay has been provided on most residential floor levels of towers SE2 and SE3 respectively.

However, in tower SE1 a review is required to provide a 1.8m wide by 2m long passing bay at the 90 degree turn along residential corridor on podium level 2 near adaptable unit SE1.03 where is a poor line of sight. This can be achieved in accordance to clause D3.3 of BCA 2015 / DDA Access Code 2010.

Recommendations:

- (i) Modify the storage room to accommodate a 1.8m wide by 2.4m long wheel chair passing bay compliant with AS1428.1 – 2009 at the 90 degree turn along the residential corridor on level 2 near adaptable unit SE1.03 where is a poor line of sight where there is no clear line of sight.

This is required under clause D3.3 of BCA 2015 / DDA Access Code 2010.

- (ii) If applicable, provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

5.4. Common Stairways

There is car parking on podium levels 2-5 (inclusive) of the subject development. The car parking areas are assumed to have a building classification of class 7a.

There are stairways that variously connect the split levels of the car parking, all of which are located near the passenger lift of tower SE2 and all which are non-fire-isolated. Under the BCA 2015 / DDA Access Code 2010, all of the above stairways will require compliance with AS1428.1(2009).

Recommendations:

- (i) Provide handrails on either side of each of the non-fire-isolated stairways within the car parking areas on levels 2-5 (inclusive) of the subject development.
- (ii) Ensure the lowermost and uppermost risers of all of the above stairways are suitably set back from any transverse path of travel to allow for the provision of handrail extensions in accordance with AS1428.1(2009).

6. ACCOMMODATION

6.1. General

There are a total of 391 apartment units proposed throughout the entire development distributed across three apartment towers SE1, SE2 and SE3. The distribution of the units across the three apartment towers are as follows:

Towers	No. Units
SE1	292
SE2	29
SE3	70
TOTAL	391

6.2. Adaptable Unit Provision

There are a total of 10 adaptable units in the subject development. The provision of a total quantity of 10 adaptable units is in line with the previous quantities of adaptable units in the North-East and South-West Plots of the Darling Square precinct respectively.

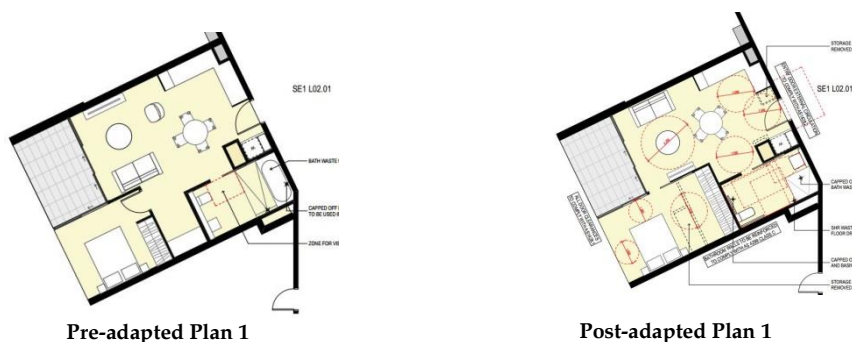
There are a total of four different adaptable-unit designs in the subject development. The adaptable units have been allocated as follows:

Level(s)	Type	Quantity
2	Tower SE1, 1-bedroom type	1
2-5	Tower SE1, 2-bedroom type	4
3-5	Tower SE3, 2-bedroom type	3
6	Tower SE1, 1-bedroom type	2
	TOTAL	10

From the above, it is noted that a range of adaptable unit types have been provided across a range of locations in the subject development. The provision of a range of adaptable unit types across a range of locations is in line with common DCP requirements in Sydney Local Government Areas for adaptable units to be of a range of types.

6.3. SE1 – 1 Bedroom Type Unit Design (L02)

The following is an assessment of the adaptable unit designs against the requirements of the adaptable housing code – that is, AS4299(1995).



Pre-adapted Plan 1

Post-adapted Plan 1

From the entry doorway into the 1 bedroom type adaptable unit in tower SE1, accessible paths of travel to the various areas of the unit such as the main bathroom, kitchen, laundry, living and dining, and the main bedroom can be readily achieved in accordance with AS4299. Also the main bathroom achieves an overall dimension of 2m width by 3.7m length to sufficiently accommodate all the required circulation spaces around the toilet pan, wash basin and shower recess in accordance with AS1428.1 – 2009.

The overall layout of the main bedroom achieves compliance with AS4299 and allocation of furniture items such as the television set outside this bedroom entry can be finalised during design development stage.

Recommendations:

- (i) Ensure the sliding doorway leading into the main bathroom achieves a clear opening width of at least 850mm to be compliant with AS1428.1 – 2009.
- (ii) Ensure the main bathroom at pre-adaptation stage is provided with continuous water-proofing and tiling, under the bath tub. This is to ensure that the process of adapting that bathroom to comply with AS1428.1(2009) is achievable at minimum cost and effort for the end user, as provided in objects of AS4299.

In addition ensure all the required sanitary fittings and fixtures are installed in accordance with AS1428.1 – 2009.

- (iii) Ensure all door components comply with AS1428.1 – 2009.
- (iv) Provide continuous wheel chair access to balconies at pre-adapted stage or if not accessible from outset at pre-adapted stage, provide a set-down slab down to allow for use of removable ramp, compliant with AS1428.1 – 2009.

Alternatively the height of balcony balustrade to be increased from outset to allow for a raised external floor surface level with internal area to be installed (at post-adaption) and still satisfy BCA balustrade height requirements.

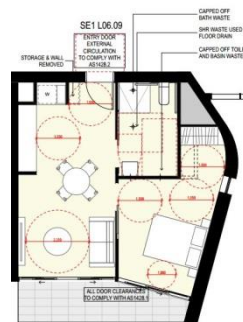
- (v) Provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

6.4. SE1 – 1 Bedroom Type Unit Design (L06)

The following is an assessment of the adaptable unit designs against the requirements of the adaptable housing code – that is, AS4299(1995).



Pre-adapted Plan 2



Post-adapted Plan 2

From the entry doorway into the 1 bedroom type adaptable unit in tower SE1, accessible paths of travel to the various areas of the unit such as the main bathroom, kitchen,

laundry, living and dining, and the main bedroom can be readily achieved in accordance with AS4299. The main bathroom has an overall dimension of 1960mm width by 3700mm length which can sufficiently accommodate all the required circulation spaces around the toilet pan, wash basin and shower recess in accordance with AS1428.1 – 2009. Also the main bedroom achieves all the required circulation spaces around the queen sized bed and near the bedroom doorway for compliance with AS4299.

Recommendations:

- (i) Ensure the sliding doorway leading into the main bathroom achieves a clear opening width of at least 850mm to be compliant with AS1428.1 – 2009.
- (ii) Ensure the main bathroom at pre-adaptation stage is provided with continuous water-proofing and tiling, under the bath tub. This is to ensure that the process of adapting that bathroom to comply with AS1428.1(2009) is achievable at minimum cost and effort for the end user, as provided in objects of AS4299.

In addition ensure all the required sanitary fittings and fixtures are installed in accordance with AS1428.1 – 2009.

- (iii) Ensure all door components comply with AS1428.1 – 2009.
- (iv) Provide continuous wheel chair access to balconies at pre-adapted stage or if not accessible from outset at pre-adapted stage, provide a set-down slab down to allow for use of removable ramp, compliant with AS1428.1 – 2009.

Alternatively the height of balcony balustrade to be increased from outset to allow for a raised external floor surface level with internal area to be installed (at post-adaption) and still satisfy BCA balustrade height requirements.

- (v) Provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

6.5. SE1 – 2 Bedroom Type Unit Design (L02 - 06)

The following is an assessment of the adaptable unit designs against the requirements of the adaptable housing code – that is, AS4299(1995).



From the entry doorway into the 2 bedroom type adaptable unit in tower SE1, accessible paths of travel to the various areas of the unit such as the main bathroom, kitchen, laundry, living and dining, and the main bedroom can be readily achieved in accordance with AS4299. However, at the current stage there is no provision of a laundry area along an accessible path of travel. The laundry area to be detailed in design development stages to be compliant with AS4299.

Recommendations:

- (i) Provide a doorway with 850mm clear open width (generally 920mm leaf) for the entry leading into the main bedroom at pre-adapted stage, compliant with AS1428.1 – 2009 as required under AS4299.
- (ii) Provide a laundry area along an accessible path of travel from the main unit entry doorway which can accommodate a 1550mm clear diameter turning circle in front of laundry appliances to be compliant with AS4299.
- (iii) Ensure the sliding doorway leading into the main bathroom achieves at least 850mm clear opening width at pre-adapted stage, compliant with AS1428.1 – 2009 as required under AS4299.
- (iv) Ensure the main bathroom at pre-adaptation stage is provided with continuous water-proofing and tiling, under the bath tub.

This is to ensure that the process of adapting that bathroom to comply with AS1428.1(2009) is achievable at minimum cost and effort for the end user, as provided in objects of AS4299.

- (v) Provide continuous wheel chair access to balconies at pre-adapted stage or if not accessible from outset at pre-adapted stage, provide a set-down slab down to allow for use of removable ramp, compliant with AS1428.1 – 2009.

Alternatively the height of balcony balustrade to be increased from outset to allow for a raised external floor surface level with internal area to be installed (at post-adaptation) and still satisfy BCA balustrade height requirements.

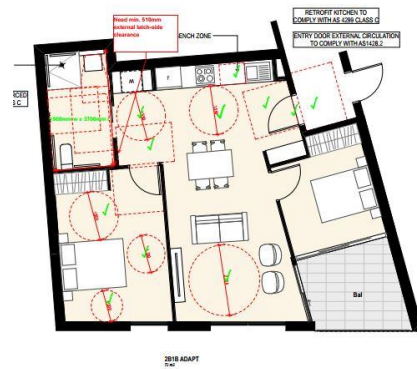
- (vi) Provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

6.6. SE3 – 2 Bedroom Type Unit Design (L03 - 05)

The following is an assessment of the adaptable unit designs against the requirements of the adaptable housing code – that is, AS4299(1995).



Pre-adapted Plan 4



Post-adapted Plan 4

From the entry doorway into the 2 bedroom type adaptable unit in tower SE3, accessible paths of travel to the various areas of the unit such as the main bathroom, kitchen, laundry, living and dining, and the main bedroom can be readily achieved in accordance with AS4299.

Recommendations:

- (i) Ensure the sliding doorway leading into the main bathroom achieves at least 850mm clear opening width at pre-adapted stage, compliant with AS1428.1 – 2009 as required under AS4299.

- (ii) Ensure the main bathroom at pre-adaptation stage is provided with continuous water-proofing and tiling, under the bath tub.

This is to ensure that the process of adapting that bathroom to comply with AS1428.1(2009) is achievable at minimum cost and effort for the end user, as provided in objects of AS4299

In addition ensure all the required sanitary fittings and fixtures are installed in accordance with AS1428.1 – 2009.

- (iii) Provide continuous wheel chair access to balconies at pre-adapted stage or if not accessible from outset at pre-adapted stage, provide a set-down slab down to allow for use of removable ramp, compliant with AS1428.1 – 2009.

Alternatively the height of balcony balustrade to be increased from outset to allow for a raised external floor surface level with internal area to be installed (at post-adaption) and still satisfy BCA balustrade height requirements.

- (iv) Provide slip resistant floor surface with min. wet pendulum test rating of 'P3' (under HB198/AS4586) in all wet areas such as bathroom, kitchen and laundry as required under AS4299.

7. RESIDENTIAL COMMON FACILITIES

7.1. General

Under the DDA Access Code 2010 and BCA 2015, the provision of access within the meaning of AS1428.1(2009) is required to and within each unique residential common facility in a Class 2 building.

7.2. Residential Mail Rooms (SE 1, 2 & 3)

SE1 and SE3 Mail Rooms

There are common-use residential mail room for the use of towers SE1 and SE3 on ground level near the residential southern main entrance. At current stage there are no doors detailed leading into mail rooms SE1 and SE3. The openings into each of the two mail rooms achieve 1.2m clear width which can sufficient accommodate a 920mm door leaf with at least 850mm clear open width to comply with AS1428.1 – 2009.

There is one parcel room within the SE1 mail room on ground level. The entry doorway to SE1 parcel room is a double hung doorway with a clear width of 450mm between at least one door leaf and jamb which will require compliance with AS1428.1(2009).

SE2 Mail Room

There is a residential mail room for the use of tower SE2 on ground level in the north-west sector near The Boulevard. There is a level landing surface achieving a dimension of 1.2m length x 2.5m depth over 1 in40 gradient, directly in front of the opening leading into the SE2 mail room. This is sufficient for an either side approach door circulation area in accordance to AS1428.1 – 2009.

The opening into the SE2 mail room also achieves a width of 1.2m which can sufficiently accommodate a 920mm door leaf with at least 850mm clear open width to comply with AS1428.1 – 2009.

There is also a parcel room within the mail room for tower SE2 itself. The entry doorway to the above parcel room consists of a double hung doorway with a clear width of 450mm between at least one door leaf and jamb which will require compliance with AS1428.1(2009).

7.3. Common-Use Cyclist Bike Parking – Podium Ground Level

There is a bike parking facility for residents on the podium ground level along the back-of-house area which requires an accessible path of travel from shared southern main building entrance under part D3.1 of DDA Access Code as a common use facility for a class 2 building.

At the current stage, there appears to be an accessible path of travel provided between the shared residential entrance of towers SE1/SE3 and common bike parking area on podium ground floor. The accessible path of travel can be delineated from the above shared entrance through the SE1 Mail Room and via the two kerb ramps along the loading dock and emergency vehicle car parking areas respectively on the ground floor to satisfy part D3.1 of DDA Access Code.

In addition, there is a separate path of travel inclusive of all cyclists from the car park access via the vehicular driveways along 1:20 graded car ramps on the ground floor.

Recommendation:

- (i) Modify all inserted kerb ramps along the path of travel between the SE1/SE3 shared entrance and the common bike parking facility on ground floor to achieve gradients no steeper than 1 in 8 with max. ramp length of 1520mm, sloping sides and min.1500mm depth landing areas that are compliant with AS1428.1 – 2009.

7.4. Common-Use Podium Roof Garden (Level 6)

There is a common-use roof garden on level 6 for the use of the residents in the subject development. Under the DDA Access Code 2010 / BCA 2015, the provision of access in accordance with AS1428.1-2009 is required to and within the above roof garden.

From the main building entrances on the ground level, there is a continuous accessible path of travel to level 6 via the passenger lifts of towers SE1, SE2, and SE3 respectively. The provision of a continuous accessible path of travel from those lifts to the roof garden is achievable. The provision of continuous accessible paths of travel within the roof garden itself is also achievable.

The provision of access to and within common features within the common-use podium landscape area will be achieved during design development.

Recommendations:

- (i) Provide sufficient accessible doorway to connect SE2 lift lobby on level 6 to the roof top garden. The accessible doorway shall achieve at least 850mm clear open width with min 530mm latch-side clearances over 1450mm depth, compliant with AS1428.1 – 2009.

In addition from the above accessible doorway provide new external paved pathway to connect the doorway to the existing paved pathway of the roof garden.

- (ii) Ensure the doorways that connect the residential corridors of towers SE1, SE2, and SE3 respectively have a minimum clear width of 850mm and minimum latch-side clearances of 530mm (e.g. SE1 end of L6 corridor) for compliance with AS1428.1-2009.

7.5. SE2 Community Rooms (Levels 6 and 7)

There are community spaces on levels 6 and 7 in tower SE2. There is a continuous accessible path of travel from the residential levels of tower SE2 to each of the above rooms via the residential lifts. The provision of a continuous accessible path of travel from towers SE1 and SE3 to the community rooms via the common roof garden is also achievable.

There is an internal stairway that directly connects the community space on level 6 with the community space on level 7. The above stairway will require compliance with AS1428.1(2009).

The above stairway provides a direct path of travel for able-bodied users between the two community spaces on levels 6 and 7. The accessible path of travel for people with a disability between those two spaces is via the common-use passenger lift of tower SE2. The paths of travel to the common-use lift would require a user to exit the spaces on level 6 or 7 to take the lift.

Recommendations:

- (i) Ensure the entry doorways of each of the community rooms on levels 6 and 7 have sufficient external door circulation areas with at least 530mm latch-side clearance when door swings towards user, compliant with AS1428.1 – 2009.
- (ii) Provide handrails on each side of the stairway that connects the community room on level 6 with the community room on level 7.

7.6. Common-Use Sanitary Facilities (Level 6)

There is a bank of common-use sanitary facilities within the community room on level 6. There is one unisex accessible toilet at the above bank of facilities. The provision of one unisex accessible toilet meets the minimum quantity of accessible toilets under the DDA Access Code 2010 / BCA 2015.

There is a continuous accessible path of travel to the accessible toilet. The room in which the accessible toilet is located will have suitable internal dimensions for compliance with AS1428.1(2009).

There is, in addition, a single unisex toilet adjacent to the accessible toilet on level 6. The above toilet will need to be an ambulant cubicle for compliance with the DDA Access Code 2010 / BCA 2015.

Recommendations:

- (i) Ensure the entry doorway to the unisex accessible toilet on level 6 has a minimum clear width of 850mm.
- (ii) In accordance with the DDA Access Code 2010 / BCA 2015, ensure that the unisex toilet that is adjacent to the unisex accessible toilet is designed as an ambulant cubicle that meets AS1428.1(2009).
- (iii) Ensure that the path of travel to the ambulant cubicle complies with the ambulant cubicle requirements of AS1428.1(2009).

7.7. Common-Use Swimming Pool (Level 6)

There is a common-use swimming pool for residents on level 6 in the north sector. The pool has a perimeter of approximately 49 metres. Under the DDA Access Code 2010 / BCA 2015, the provision of one accessible means of access into the pool itself will be required. This is achievable.

Recommendations:

- (i) Define a continuous accessible path of travel from each residential tower to the swimming pool on level 6.
- (ii) In accordance with DDA Access Code 2010 / BCA 2015, provide one accessible means of entry into the swimming pool itself.

7.8. Residential Storage Cages

There are multiple storage cages for the use of residents within the subject development. Storage cages cannot be considered a common facility, given that each storage cage is allocated for the use of one specific unit rather than for all residents in common. The storage cages therefore do not fall within the requirement under the DDA Access Code 2010 / BCA 2015 for the provision of access to common areas or facilities. Furthermore, there is no specific requirement under AS4299 – 1995 for the provision of access to

storage cages that are allocated to adaptable units. There is, therefore, no mandatory code requirement for access to storage cages.

On the other hand, it would not be unreasonable to expect that a resident with a disability would, notwithstanding, wish to have a storage facility that is accessible. Consideration should be given for the provision of an accessible path of travel that complies with AS1428.1(2009) to any storage cages that are allocated to the use of the adaptable units.

8. CAR PARKING

8.1. Car Parking: Quantity and Design

There are a total of 10 adaptable units in the subject development and there are a total of 10 x adaptable-unit car parking bays in the subject development to satisfy the 1 x adaptable-unit car bay for each adaptable unit in accordance with AS4299(1995).

Each adaptable-unit car bay has a compliant dimension of 3800mm width and 5400mm length which is sufficient in accordance with AS2890(2009). It is noted that there is no visitor car parking in the subject development.

Recommendations:

- (i) Ensure a minimum vertical clearance of 2500mm over each adaptable-unit car parking bay and, where relevant, each associated shared area.
- (ii) Ensure a minimum vertical clearance of 2200mm over the entire vehicular path of travel from the vehicular main entrance to each adaptable-unit car parking bay.

8.2. Car Parking - Paths of Travel

There are adaptable units located in towers SE1 and SE3. The provision of a continuous accessible path of travel is required from each of the adaptable unit car bays to the corresponding adaptable unit in those towers.

There is at least one adaptable unit respectively on levels 2-6 in tower SE1. The provision of a continuous accessible path of travel from the adaptable unit car parking bays on that level to the pedestrian main entry that is adjacent to the lift lobby on those levels is achievable.

There is at least one adaptable unit respectively on levels 3-6 in tower SE3. The car park pedestrian main entry into tower SE3 will comply with AS1428.1(2009). The provision of a continuous accessible path of travel from the adaptable-unit car parking bays to the adaptable units in that tower is achievable.

On podium levels 3 to 5, there are no accessible paths of travel from lift lobbies of SE2 to the associated car parks as the sole means of access is via stairs. Given that there are no adaptable units proposed within the apartment tower SE2, there is no mandatory requirement to provide an accessible path of travel on podium levels 3 to 5 between the respective SE2 lift lobbies and the associated car parking areas.

In coherence with the above, the platform lift proposed on podium level 2 which connects between the SE2 lift lobby to the associated car parking area is to be removed.

Recommendation:

- (i) Remove the platform lift located on podium level 2, which connects SE2 lobby to the associated car park on the same level.

This is in coherence to podium levels 3 to 5 where there are no adaptable units and adaptable car bays associated with SE2 lift lobbies.

9. SIGNAGE AND COMMUNICATIONS

9.1. Hearing Augmentation

Recommendations:

- (i) In accordance with DDA Access Code 2010 and the BCA, where there is an in-built system of audio amplification within either of the residential community rooms on levels 7 or 8, provide a system of hearing augmentation in that room. An audio induction loop is strongly recommended for this type of facility.

9.2. Signage

Recommendation:

- (i) Signage within the subject development is to comply with the requirements of clause D3.6 of the DDA Access Code 2010 and the BCA.

10. CONCLUSION

MGAC has assessed the Darling Square SE Plot development as a part of the State Significant Development Application (SSDA7) submitted to the Department of Planning and Environment pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 ('EP&A Act').

In general, the development can provide continuous accessible paths of travel for people with disabilities. In line with the report's recommendations, the proposed development has demonstrated an appropriate degree of accessibility.

The Development Application drawings indicate that compliance with statutory requirements and common area access facilities can be readily achieved.