

APPENDIX 25

Access Review



BARANGAROO DELIVERY AUTHORITY

BARANGAROO HEADLAND PARK

ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL v2

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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in the design development of Barangaroo Headland Park, and an appropriate response to the AS1428 series, Building Code of Australia (BCA), and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris-Goding Accessibility Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The development has been reviewed to ensure that ingress and egress, paths of travel; circulation areas, toilets, lifts, and car parking comply with relevant statutory guidelines.

In general, the development has accessible paths of travel that are continuous throughout. In line with the report's recommendations, the proposed development has demonstrated a reasonable degree of accessibility. The Project Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and accessible sanitary facilities, can be readily achieved.

It is advised that the provisions of the DDA Access Code 2010 are due to be inserted into the BCA from 1 May 2011. The provisions of the DDA Access Code will from that date onwards thereby become mandatory for new building work. If it is anticipated that construction certificate for this project is to be granted on or after 1 May 2011, the adoption of the recommendations in this report which have been made in accordance with the DDA Access Code is advised.

2. INTRODUCTION

2.1. General

Barangaroo Delivery Authority has engaged Morris-Goding Accessibility Consulting to provide an accessibility report in relation to the proposed Headland Park, which is to be located in the north sector of the Barangaroo development.

The development includes a public park and below-ground car park. The development also includes provision for a future space underneath the public park.

The requirements of the investigation are to:

- Review the supplied drawings of the proposed development;
- Provide a report that will analyse the provisions of disability design; 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 including residents, staff, visitors, and members of the public. The Report attempts to deliver equality, independence and functionality to people with a disability inclusive of:

- People with a mobility impairment (ambulant and wheelchair)
- People with a sensory impairment (hearing and vision)
- People with a dexterity impairment

The Report seeks to provide compliance with the DDA. In doing so, the Report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

2.3. Accessibility Regulations and Standards

The following standards and regulatory instruments have been applied in the report:

- AS 1428.1(2009)– (80% of people with a disability accommodated)
- AS 1428.2(1992) – (90% of people with a disability accommodated)
- AS 1735.12(1999) – (Passenger Lift Access for People with a Disability)
- AS 2890.6(2009) – (Off-Street Parking for People a with Disability)
- BCA – (Building Code of Australia)
- City of Sydney Access DCP 2004
- DDA Access Code 2010
- Disability Standards for Accessible Public Transport 2002 (current to 13 May 2010)

3. INGRESS & EGRESS

3.1. North Main Entry Point (Towns Place)

There is a main entry point into the Barangaroo Headland Park which fronts Towns Place. The main entry point consists of an unobstructed gate. Each opening in the above main entry gate has a clear width of approximately 3.5m, which is compliant with AS 1428.2.

There is a continuous accessible path of travel from Towns Place to the north main entry gate.

3.2. South Main Entry (Hungry Mile)

The main southern entry point into the Barangaroo Headland Park fronts the Hungry Mile. The entry point consists of a footpath. The above footpath has a clear width of 8 metres, which is compliant with AS 1428.1(2009). The main path of travel at the southern main entrance has a clear width which will allow two wheelchair users the ability to pass each other simultaneously whilst travelling in the opposite direction, compliant with AS 1428.1(2009).

This entry point connects directly to the 2 passenger lifts that can take the public to the top of Headland park.

The above footpath heads west and connects to the main foreshore footpath, which is the principal, arterial walkway of the Headland Park.

Accordingly, there is a continuous accessible path of travel from the Hungry Mile into the Headland Park.

3.3. Merriman Street Main Entry Points

There are a total of 2 minor entry points from Merriman Street into the Headland Park.

The entry points from Merriman Street into the Headland Park each consist of at-grade pedestrian bridges over the entry atrium of the underground space for future use below. The gradients of the path of travel across each of the 2 bridges from Merriman Street into the upper bluff portion of the Headland Park appear to be compliant with AS 1428.1(2009) throughout.

Each of the above three main entry points from Merriman Street have appropriate clear width compliant with AS 1428.1(2009). The main paths of travel each have a clear width which will allow two wheelchair users the ability to pass each other simultaneously whilst travelling in the opposite direction, compliant with AS 1428.1(2009).

3.4. Cultural Centre Main Entry

There is a proposed space for a Cultural Centre located underground adjacent to Merriman Street.

The main entry point into the Cultural Centre is located at RL4.0, from the south of the Park. The provision of a seamless accessible path of travel from the Hungry Mile to the above main entry point has been achieved.

Recommendation:

- (i) Provide a minimum clear width of 850mm (920mm door leaf) at the main entry doorway to the Cultural Centre, compliant with AS 1428.1(2009).

3.5. Emergency Egress (Cultural Centre)

The paths of travel for emergency egress from basement levels 1-2 appear to be via various emergency egress stairways or via the vehicular entry ramp.

The paths of travel for emergency egress from the floor level at RL4.0 are via the main entrance into the Cultural centre or via the loading dock vehicular entry ramp (to the south).

Recommendations:

- (i) Consideration to be given to providing a minimum clear width of 850mm (920mm door leaf) at each entry doorway connecting to the emergency egress stairways.
- (ii) Consider provision for visual and audio alarms in event of emergency

4. PATHS OF TRAVEL

4.1. Foreshore Footpaths

There are two footpaths which run parallel to each other adjacent to the shoreline. The foreshore footpaths extend south from northern (Towns Place) main entry point to the Barangaroo Central precinct. The footpath has gradients of between 1:30 and 1:70 throughout, which is readily suitable for a continuous accessible path of travel under AS 1428.1.

The foreshore footpaths have a clear width of 5 metres throughout. The foreshore footpaths will each allow two wheelchair users the ability to pass each other simultaneously whilst travelling in the opposite direction, compliant with AS 1428.1 (2009). The foreshore footpaths will allow a single wheelchair user the ability to turn 180° in an independent and equitable manner, compliant with AS 1428.1(2009).

One of the foreshore footpaths is a dedicated pedestrian footpath and the other foreshore footpath is a shared pedestrian/cyclist pathway. It is noted that there is some opposition within disability representative and advocacy groups to the provision of shared pedestrian/bicycle pathways in general due to concerns about safety.

Recommendations:

- (i) The provision of appropriate safety mechanisms to minimise the risk to people with a disability in relation to cyclists is preferred. Safety mechanisms include, but are not limited to, signage, chicanes, painted strips on pavement surface, and warning TGSIs.
- (ii) The foreshore footpaths are set back at varying distances from the shoreline itself. The provision of tangibly contrasting surface treatments or similar at the footpath edge so as to provide for people with a visual impairment a clear tactile delineation between the footpath and the potentially hazardous rocky shore is preferred.

4.2. Upper Bluff Footpaths

As discussed under Ingress & Egress above, there are separate entry points into the public park from Merriman Street. The entry points each connect to a single footpath which runs in a ring within the upper bluff portion of the park. Approximately half of the above pathway has a continuous gradient of 1:30 or shallower, which is compliant with AS 1428.1(2009). The remainder of the footpath has a gradient of no steeper than 1:20, which is also compliant with AS 1428.1(2009).

There is also a winding (switchback) footpath which connects the upper bluff footpath with the foreshore footpath. The above footpath appears to have a gradient of no steeper than 1:20 throughout, compliant with AS 1428.1(2009).

Each of the above footpaths have a clear width throughout which will each allow two wheelchair users the ability to pass each other simultaneously whilst travelling in the opposite direction, compliant with AS 1428.1(2009). The footpaths also all have a clear

width which will allow a single wheelchair user the ability to turn 180° in an independent and equitable manner, compliant with AS 1428.1(2009).

Alternatively there will be public access to the upper Bluff pathway ring via the passenger lifts (southern end) which would form part of the facility that would occupy the space for future use. This is appropriate given the location of the nearby proposed Light Rail and main pedestrian flows coming from the southern areas.

Recommendations:

- (i) Provide level landings at 15-metres intervals along the 1:20 walkways within the public park, compliant with AS 1428.1(2009). Where there is no change in direction, the level landings are to be 1200mm in length. Where there is a change in direction, level landings are to be 1500mm in length, compliant with AS 1428.1(2009).
- (ii) The bushwalk track should be enlarged to have a width of 1.8 metres
- (iii) Provide directional signage indicating the location of the accessible paths of travel.

4.3. Park Stairways

There are multiple public-use stairways within the public park.

It is noted that the outer and inner foreshore footpaths are located at separate grades. There appear to be various stairways which each separately connect the outer (lower) and the inner (upper) foreshore footpaths. In general the above stairways are set back to minimize safety hazard.

Recommendations:

- (i) Consider 2 x handrails to be compliant with AS 1428.1 at the public use stairway.
- (ii) Consider provision of tactile ground indicators at top and bottom of stairways in accordance with AS1428.4

4.4. Cultural Centre

The space for future use is located over 3 floor levels.

There are a total of 2 passenger lifts that each constitutes a continuous accessible path of travel between the three floor levels of the space for future use.

There are continuous accessible paths of travel throughout each of the three floor levels. Each of the above paths have a clear width throughout will each allow two wheelchair users the ability to pass each other simultaneously whilst travelling in the opposite direction, compliant with AS 1428.1 (2009). The paths of travel will also allow a single wheelchair user the ability to turn 180° in an independent and equitable manner, compliant with AS 1428.1(2009).

The paths of travel on all three levels are assumed to be continuously level throughout. The main paths of travel are suitable under the BCA, the City of Sydney Access DCP, and the DDA Access Code 2010.

There is in addition a stairway which connects the floor levels at RL5.0 and RL13.0.

Recommendation:

- (i) Provide handrails compliant with AS 1428.1(2009) on either side of the stairway which connects the floor levels at RL5.0 and RL13.0.

4.5. Passenger Lifts

There are a total of 2 passenger lifts in the proposed development. Each of the above lift cars has internal dimensions of 2.0m (width) x 2.2m (length), compliant with AS 1735.12, the City of Sydney Access DCP, and the DDA Access Code 2010.

There is a circulation space within each lift lobby which will allow a wheelchair user the ability to turn 180° in an independent and equitable manner, compliant with AS 1428.1(2009) and City of Sydney Access DCP.

Recommendation:

- (i) Ensure components of each of the passenger lift cars (control panels, audio/visual indicators, handrails and light levels) are designed in accordance with AS 1735.12.

4.6. Rest Seating and Street Furniture*Recommendations:*

- (i) Consideration to be given to providing, as a matter of accessibility best practice, rest seating at intervals of 60 metres along each of the accessible paths of travel within the Headland Park.
- (ii) Any rest seating should have back and arm rests, compliant with AS 1428.2.
- (iii) Ensure any street furniture (eg, rest seating, drinking fountains, or sculptures) shall not protrude into an accessible path of travel, compliant with City of Sydney Access DCP section 4.2.10.

4.7. Signage*Recommendations:*

- (i) Provide directional signage indicating the location of key features such as main entrance to the space for future use, the main entry passenger lifts, the accessible car parking, the light rail stops
- (ii) Provide directional signage indicating to users the location of the continuous accessible path of travel via the 1:20 walkway from the park lower levels (foreshore) to the park upper levels (upper bluff) as well as the passenger lifts on the southern side of the park
- (iii) Interpretative signage to include Braille as well as consider audio provision
- (iv) All signage is to meet the requirements of DDA Access Code clause D3.6.

5. COMMON FACILITIES & AMENITIES

5.1. Sanitary Facilities

There appears to be a public use accessible toilet on ground floor (RL 4) adjacent the Cultural Centre. There are direct accessible paths of travel leading to the accessible toilet from the foreshore pathway.

Recommendations:

- (i) The unisex accessible toilet should be designed in accordance with AS1428.1-2009.
- (ii) Provide ambulant cubicles in the male and female toilets

5.2. Accessible Car Parking

There is a car park located on basement levels 1-2, under the space for future use. There is a continuous accessible path of travel to each of the basement car parking levels via the passenger lifts. There are a total of approximately 282 car parking bays in the car park.

The provision of 4 accessible car parking on basement level 2 has been provided, adjacent the passenger lifts.

The accessible car parking bays has been designed in accordance with AS 2890.6(2009), compliant with DDA Access Code 2010.

Recommendations:

- (i) Provide an additional 2 accessible car bays to achieve compliance with DDA Access Code Table D3.5 and City of Sydney Access DCP Appendix 2
- (ii) Basement 2 lift lobby should have clear width of 1800mm between lift car and accessible car bays
- (iii) Provide a minimum vertical clearance of 2.5m over each accessible car parking bay.
- (iv) Provide a minimum vertical clearance of 2.2m over the vehicular path of travel from the vehicular main entrance to each accessible car parking bay.

6. TRANSPORT LINKAGES

6.1. Light Rail

A new light rail line is proposed along the Hungry Mile and Hickson Road as part of the Sydney Light Rail Extension.

It is proposed to locate two light rail stops in close proximity to the new Headland Park. The first light rail stop is located at the intersection of Towns Place and Hickson Road. The provision of a continuous accessible path of travel from the light rail stop to the Headland Park northern main entrance is achievable.

The Hungry Mile light rail stop is located at a beeline distance of approximately 190 metres from the main entrance to the space for future use. The provision of a continuous accessible path of travel from the light rail stop to the main entrance of the space for future use and to the Headland Park itself is achievable.

The provision of suitable circulation areas at each light rail platform is achievable, compliant with the DDA Public Transport Standards.

Recommendations:

- (i) The Hungry Mile light rail stop is located at a beeline distance of approximately 190 metres from the main entrance to the space for future use. This may pose fatigue issues particularly for people who use mobility aids (eg, wheelchair or walking frame). The relocation of the light rail stop to a location closer to the main entrance to the space for future use is recommended on this basis.
- (ii) Provide a continuous accessible path of travel to each light rail stop, compliant with the DDA Public Transport Standards.
- (iii) Provide a minimum of one wheelchair waiting area per platform at each light rail stop (a minimum of two preferred), compliant with the DDA Public Transport Standards section 7.2.
- (iv) Provide warning tactile ground surface indicators (TGSIs) compliant with AS1428.4(1992) along each light rail platform edge.

6.2. Kiss-and-Ride and Taxi Facilities

The provision of an accessible kiss-and-ride zone and an accessible taxi stand is recommended, so as to enhance amenity for people with a disability to the public park in general and to the space for future use in particular.

Recommendations:

- (i) Consideration to be given to providing an accessible kiss-and-ride bay and an accessible taxi stand along the Hungry Mile. It is preferred that the accessible kiss-and-ride bay and taxi stand are to be located along the Hungry Mile precinct as close as possible to the cultural centre main entrance (near the Northern Cove).

- (ii) Ensure any accessible kiss-and-ride bay or taxi stand is designed in accordance with AS 2890.6(2009). Ensure any parallel accessible kiss-and-ride bay or accessible taxi stand is designed in accordance with AS 2890.6(2009) figure 2.5.