



WATERPOINT

**AUSTRALIA TOWERS
SITE 3 SYDNEY OLYMPIC PARK**

ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL

11th March 2011

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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in design development of Australia Towers Site 3 Sydney Olympic 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 paths of travel to residential apartments, retail outlets and toilets comply with relevant statutory guidelines.

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 immediate adoption of the recommendations in this report that have been made in accordance with the DDA Access Code is advised.

The main recommendations from this report are to:

1. Re-work the 1 bed and 2 bed adaptable units for compliance with AS4299
2. The ground level access to the car parking needs 850mm clear width door with 510mm latch side clearance. The access way to the car parking needs to lead to a 1 metre wide clear pathway, not to a car parking bay
3. Level B01 adaptable unit car bays for tower 1 need to be relocated closer to the tower 1 lift lobby

2. INTRODUCTION

2.1. General

Waterpoint has engaged Morris-Goding Accessibility Consulting, to provide a design review of the proposed residential development located at Australia Towers Site 3 Sydney Olympic Park.

From the information provided, the development has 568 units within 29 residential levels.

The requirements of the investigation are to:

- Review supplied 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), AS 1428 series and AS4299 Adaptable Housing and Sydney Olympic Park Authority Access Guidelines 2008.

2.2. Objectives

The report considers user groups such as residents and residential visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

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

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. Statutory Requirements

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

- AS 1428.1 - (80% of people with disabilities accommodated)
- AS 1428.2 - (90% of people with disabilities), where relevant
- AS 1735.12 - (Lifts, Escalators, & Moving Walks)
- AS 4299 – Adaptable Housing
- BCA - Building Code of Australia
- DDA - Disability Discrimination Act
- Sydney Olympic Park Authority Access Guidelines: Dec 2008

3. INGRESS & EGRESS

3.1. Residential Entrances

The main entries from the street to access the residential units are from Australia Avenue. The RLs on the drawings show accessible paths of travel are achievable from the street to the lift lobbies. There are 2 main accessible entries into the building that lead to Tower 1 and Tower 2. There are accessible paths of travel from the entry doors to both lift lobbies.

Both entries to Tower 1 and Tower 2 have clear widths of door and appropriate circulation areas in accordance with AS1428.1:2009.

The lifts are located in the ground floor lobbies of both Towers provide an accessible path of travel to all levels of the building, including the three levels of underground car parking compliant with AS1428.1:2009.

3.2. Commercial, Gym and Community Centre Entrances

The 8 commercial tenancies on ground floor have accessible paths of travel within each tenancy. There appears to be an accessible path of travel from the street compliant with AS1428.1:2009.

Access to the 1st floor gymnasium and community centre is via a central passenger lift that travels from ground to level 1. The central lift is located adjacent another set of entry doors on Australia Ave. An accessible bridge link on level 1 provides access to the community centre and gymnasium.

Recommendation:

- (i) Ensure all commercial entry doors have 850mm clear width in accordance with AS1428.1:2009.
- (ii) The entry doors adjacent the central lift are required to be swing doors (not revolving). These doors need 850mm clear widths

3.3. Emergency Egress

There are four sets of emergency egress stairs from Basement car park levels to the Ground floor. The two centrally located stairs provide egress from the basement level to all levels of both towers.

Recommendations:

- (i) Provide fire doors with an 850mm clear width compliant with AS1428.1:2009 clause 13.2.
- (ii) Provide a fire safety refuge on each level with sufficient space to allow a person with a disability to wait safely away from the main path of travel. This is a requirement under SOP Access Guidelines, alternatively at least 1 lift should be operational in the event of an emergency

4. PATHS OF TRAVEL

4.1. Ground Level

There appears to be an accessible path of pedestrian travel within the entry foyer compliant with AS14128.1:2009. There is sufficient space for a wheelchair user to turn 180° and for two wheelchair users to pass one another compliant with AS1428.1:2009 and the DDA Premises Standards.

From the lift entry doors, there is appropriate paths of travel to all residential levels above via the passenger lift compliant with AS1428.1:2009 and the DDA Premises Standards.

Recommendations:

- (i) The ground level access to the car parking needs 850mm clear width door with 510mm latch side clearance
- (ii) The access way to the car parking needs to lead to a 1 metre clear pathway, not to a car parking area

4.2. Levels 2 to 29

There is an appropriate path of travel from all lift lobbies on each level to all apartments. The lift lobby has a width of 2400mm suitable for a wheelchair user to turn 180° and for two wheelchair users to pass one another compliant with AS1428.1:2009 and AS4299 and Sydney Olympic Park Access Guidelines.

The hallways on the residential levels have at least 1800mm clear widths suitable for two wheelchairs users to pass compliant with AS1428.1:2009 and Sydney Olympic Park Access Guidelines.

4.3. Car Park

There is an accessible path of travel from the three levels of basement car parking to the lift lobbies of both towers via two sets of three lifts, complaint with AS1428.1:2009.

4.4. Lifts

There is a set of three passenger lifts within each tower providing suitable wheelchair access to all residential floors. The lifts provide an appropriate continuous accessible path of travel to and from the ground floor lift lobby to the residential apartments and the car parking levels. There is a distance of 2400mm outside the lift cars which is sufficient space for a person who is a wheelchair user perform a 180° turn compliant with AS1428.1:2009.

Each passenger lift has internal dimension of 1400mm by 1600mm (min) compliant with AS1735.12 and the DDA Premises Standards.

Recommendation:

- (iii) Provide internal lift car components (grabrail, control buttons, lighting) to comply with AS1735.12.

4.5. Community Centre & Gym

The Community Centre is provided on the Podium Level of Towers 1 & 2. There is an accessible path of travel from the lifts to both Towers. The circulation space within the Community Centre is sufficient for a person in a wheelchair.

The gym is located on the Podium Level of Towers 1 & 2. There is an accessible path of travel from the lifts to this area. The circulation space within the gym is sufficient for a person in a wheelchair.

5. ACCOMMODATION

5.1. Adaptable Units

The development falls under the Sydney Olympic Park Access Guidelines 2010. According to this document, 10% of the total number of apartments is to be designed according to AS4299. The Access Guidelines ask for the adaptable units to be built to Class B requirements with all the essential features and 50% of desirable features included.

The drawings indicate that there are 588 units therefore a total of 59 units are required to be built compliant with AS4299. This represents 10% of adaptable units, suitable under SOP Access Guidelines. The adaptable units are to be a mixture of 1, 2 and 3 bedroom units distributed equitably and providing a choice of levels, aspect and price range.

5.2. 1 Bedroom Apartment (x21)

The entry door has a 920mm clear width (970mm door leaf) compliant with AS4299. The door has a 400mm latch side clearance.

There is a direct accessible path of travel to all other areas of the accessible unit compliant with AS1428.1.

The bedroom and bathroom doors have appropriate clearances and circulation compliant with AS1428.1:2009.

The bathroom has internal dimensions of 2990mm x 2785mm suitable in accordance with AS1428.1:2009. There is appropriate circulation area outside of the shower recess and the basin, however, the basin currently encroaches into the circulation area of the pan.

The accessible bedroom has internal dimensions of 2990mm x 3000mm which does not provide appropriate circulation in accordance with AS4299.

The combined kitchen and laundry has appropriate clearances between base cabinets with appropriate work benches adjacent to the cooktop, sink and fridge in accordance with AS4299.

Recommendations:

- (i) Ensure entry door has a 510mm latch side clearance compliant with AS1428.1:2009.
- (ii) Provide appropriate 1000mm clearance on either side of the bed and a 1540mm clearance at the base of the bed in accordance with AS1428.2. A bedroom with internal dimensions of 3.6m x 3.6m outside of the robe area will be appropriate.
- (iii) Pre-adaptation drawings to indicate provision of capped off electrical and water services in kitchen for the relocation of the cooktop, fridge and laundry appliances.

5.3. 2 Bedroom Apartment (x11)

The entry door has a 920mm clear width (970mm door leaf) compliant with AS4299. The door has a 420mm latch side clearance. From the entry door, there is an accessible path of travel to all areas of the adaptable unit compliant with AS1428.1.

The minimum corridor width within the unit is 1000mm compliant with AS1428.1:2009. The bedroom and bathroom has appropriate 920mm clear widths (970mm door leaf) in accordance with AS1428.1:2009.

The bathroom has internal dimensions of 2900mm x 2600mm suitable in accordance with AS1428.1:2009. There is appropriate circulation area outside of the shower recess and the basin, however, the basin currently encroaches into the circulation area of the pan.

The accessible bedroom has internal dimensions of 3190mm x 3560mm which does not provide appropriate circulation in accordance with AS4299.

The combined kitchen and laundry has appropriate clearances between base cabinets with appropriate in accordance with AS4299.

Recommendations:

- (i) Ensure entry door has a 510mm latch side clearance compliant with AS1428.1:2009.
- (ii) Bedroom entry door needs enhanced circulation area. The door should not be positioned so that a structural wall needs to be demolished
- (iii) Provide appropriate 1000mm clearance on either side of the bed and a 1540mm clearance at the base of the bed in accordance with AS1428.2. A bedroom with internal dimensions of 3.6m x 3.6m outside of the robe area will be appropriate.
- (iv) Provide appropriate 800mm work bench areas adjacent to the cooktop and basin.
- (v) Pre-adaptation drawings to indicate provision of capped off electrical and water services in kitchen for the relocation of the cooktop, fridge and laundry appliances.

5.4. 3 Bedroom Apartment (x22)

The accessible entry has a clear width of 900mm clear width (950mm door leaf) compliant with AS4299. The door has a 410mm latch side clearance. From the entry door, there is an accessible path of travel to all areas of the adaptable unit compliant with AS1428.1.

The minimum corridor width within the unit is 1000mm compliant with AS1428.1:2009. The bedroom and bathroom has appropriate 900mm clear widths (950mm door leaf) in accordance with AS1428.1:2009.

The bathroom has internal dimensions of 2470mm x 2700mm suitable for an AS1428.1:2009 compliant bathroom. There is appropriate circulation around the pan, shower recess and basin in accordance with AS1428.1:2009.

The accessible bedroom has internal dimensions of 3300mm x 3700mm which does not provide appropriate circulation in accordance with AS4299. There is appropriate circulation around the bed in accordance with AS1428.2. There is appropriate circulation area at the door compliant with AS4299.

The combined kitchen and laundry has appropriate clearances between base cabinets with appropriate work benches adjacent to the cooktop, sink and fridge in accordance with AS4299.

Recommendations:

- (i) Ensure entry door has a 510mm latch side clearance compliant with AS1428.1:2009.

- (ii) Pre-adaptation drawings to indicate provision of capped off electrical and water services in kitchen for the relocation of the cooktop, fridge and laundry appliances.

5.5. 4 Bedroom Apartment (x11)

Entry into the adaptable unit is via a 900mm clear width door (950mm door leaf) compliant with AS4299. The door has a latch side clearance of 420mm.

From the entry door, there is an appropriate path of travel to all other areas of the residential unit. Corridors have minimum 1000mm clear widths suitable in accordance with AS1428.1:2009. All accessible room doors have a clear width of 900mm with appropriate circulation in accordance with AS4299.

The bathroom has internal dimensions of 2850mm x 3100mm suitable in accordance with AS1428.1:2009. The basin currently encroaches into the circulation area of the pan.

The accessible bedroom has appropriate circulation around the bed in accordance with AS1428.2 and AS4299.

The combined kitchen and laundry has appropriate clearances between base cabinets with appropriate work benches adjacent to the cooktop, sink and fridge in accordance with AS4299.

Recommendations:

- (i) Ensure entry door has a 510mm latch side clearance compliant with AS1428.1:2009.
- (ii) Pre-adaptation drawings to indicate provision of capped off electrical and water services in kitchen for the relocation of the cooktop, fridge and laundry appliances.

5.6. Visitable Units

Sydney Olympic Park Access Guidelines 2010 require 100% of residential units to be visitable. There is an accessible path of travel to all units in the tower blocks compliant with AS1428.1:2009.

Currently, all unit doors have appropriate minimum 850mm clear width entry doors compliant with AS1428.1:2009. There is an accessible path of travel to the living areas and visitable toilets compliant with AS4299. All internal paths of travel have minimum 1000mm or wider clear widths suitable in accordance with AS4299.

In general, there is an appropriate circulation area in front of the pan compliant with visitable toilet requirements in accordance with AS4299.

There is suitable clearance within visitable unit living areas suitable for a wheelchair user in accordance with AS4299.

It is noted that the visitable units do not comply with the strict requirements of SOP Access Guidelines.

Recommendations:

- (i) Ensure the following units within Tower 2 have appropriate clearance of 900mm x 1250mm in front of toilet pan compliant with AS4299:
 - Level 01, units 03 & 05
 - Level 02-22, units 03 & 06

- Level 24, units 02 & 05
- Level 25, units 02 & 04
- (ii) Ensure the shower screen of the following units do not encroach into the 900mm x 1250mm circulation area in front of the pan:
 - Levels 02-11, units 06, 07 & 09
 - Levels 12-21, unit 06
 - Level 22, unit 05
 - Level 23, unit 08

6. MISCELLANEOUS

6.1. Car Parking

There are 4 car park levels located within the development with approximately 709 car spaces.

Basement level B01 has 17 adaptable unit car bays designated. Ground floor has 42 adaptable unit car bays designated. This represents 1 adaptable unit car bay for each adaptable unit, suitable under AS4299.

The adaptable unit car of level B01 are suitably located for tower 2, however the path of travel to tower 1 is longer with traffic safety issues.

Ground floor has suitably located adaptable unit car bays, spread equally amongst tower 1 and tower 2 lift lobbies

Ground floor has 2 separate accessible car bay for commercial and retail use. This is suitable under DDA Premises Standards. Each accessible car bay has been designed in accordance with AS2890.6

Each adaptable unit car bay has been designed in accordance with AS2890.6. This satisfies the intent of AS4299.

Recommendations:

- (i) Level B01 adaptable unit car bays for tower 1 need to be relocated closer to the lift lobby
- (ii) All accessible/ adaptable car bays require a height clearance of 2.5 metres
- (iii) The approach to each accessible/adaptable car parking bay should have vertical clearance of not less than 2.2m.

6.2. Garbage Areas

Garbage rooms are located on all residential floors adjacent to the passenger liftshave accessible paths of travel leading to and within.

6.3. Mailboxes

Mailboxes are not indicated on the current drawings.

Recommendation:

- (i) Provide mailboxes located on a hard surface adjacent to the accessible path of travel to the adaptable units.