

Access for People with a Disability

Development Application - Review

November 2010

**Site 8b Commercial Building
Murray Rose Drive, Sydney Olympic Park, Homebush NSW**

Document QA

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1. Introduction

1.1 Methodology

This access review of the development application plans addresses the proposed access provisions for people with physical and sensory disabilities to potentially meet compliance with relevant Australian Standards (AS1428, AS2890.6; AS1735.12), Sydney Olympic Park access requirements, the Building Code of Australia and the Disability Discrimination Act's obligations of equitable and dignified access.

Appropriate access for all persons is to be provided to the proposed Site 8B Commercial Building via a continuous accessible path of travel:

- from points of arrival including the footpath in Murray Rose Avenue and passenger set down area
- to and through the principal entrance to the commercial facility
- to and through the principal entrances to the two proposed retail areas
- to all accessible toilet and shower facilities

All comments written in this access report have been made after review of the following scale drawings by Bates Smart Architects issued on 09 and 15 November 2010.

Points for consideration in ongoing design are highlighted by a 'recommendation' throughout the report.

1.2 Drawings

Drawing	Issue	Title	Scale	Date
A01.001	B	Site plan	1:250@A1/1:500 @A3	21.10.10
A02.002	B	Basement 2 Plan	1:100@A1/1:200 @A3	21.10.10
A02.001	B	Basement 1 Plan	1:100@A1/1:200 @A3	15.11.10
A02.00	B	Ground Floor Plan	1:100@A1/1:200 @A3	21.10.10
A02.01	B	First Floor Plan	1:100@A1/1:200 @A3	21.10.10
A02.02	B	Typical Floor Plan	1:100@A1/1:200 @A3	21.10.10
A02.06	B	Plant level 6	1:100@A1/1:200 @A3	21.10.10
A05.001	B	South elevation	1:100@A1/1:200 @A3	21.10.10
A05.002	B	South elevation	1:100@A1/1:200 @A3	21.10.10
A06.001	B	Section A-A	1:100@A1/1:200 @A3	21.10.10
A06.002	B	Section B-B	1:100@A1/1:200 @A3	21.10.10
A06.003	B	Section C-C	1:100@A1/1:200 @A3	21.10.10

1.3 References

Building Code of Australia BCA 2010/2011 - Parts D3, E3.6 & F2.4

AS1428.1 – 2009 Design for access and mobility Part 1: General requirements for access – New building work.

AS1428.2 – 1992 Design for access and mobility Part 2: Enhanced and additional requirements – buildings and facilities.

AS1428.4 – 2009 Design for access and mobility Part 4.1: Means to Assist the orientation of people with vision impairment -tactile ground surface indicators

AS1735.12 – 1999 Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities

AS2890.6 -2009 Parking Facilities - Off-street parking for people with disabilities

Disability Discrimination Act 1992 (DDA) DDA Advisory Notes on Access to Premises – HREOC, June 1997

Disability (Access to Premises - Buildings) Standards 2010 released by the Attorney General – 15 March 2010

Sydney Olympic Park Authority – Access Guidelines – Second Edition – 2008

1.4 Legislative background

In accordance with the principles of the Disability Discrimination Act 1992 (DDA) best practice is to be emphasised in the provision of access for people with a disability in the design of the proposed new commercial building and retail facilities.

This access review prepared at the development application stage of the design addresses the requirements for access by people with a disability, to the proposed facilities as the public, staff and visitors and reviews the key legislative requirements the Building Code of Australia (BCA) and Sydney Olympic Park access requirements.

DDA

The objectives of the Disability Discrimination Act 1992 (DDA) – section 23, focus on the provision of equitable, independent and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities.

The DDA covers existing premises, including heritage buildings, those under construction and future premises. It extends beyond the building itself to include outdoor spaces and within, to address furniture, fittings and practices.

Draft Disability (Access to Premises - Buildings) Standard 2010 released by the Attorney General – 15 March 2010 is proposed as an update of the BCA (2011) access provisions for people with disabilities to more fully meet the intent of the DDA.

It is our understanding that if building works commence on following May 2011, the project must take the Premises Standard into account.

BCA

The draft BCA (2011) includes the following relevant parts to meet the deemed to satisfy provisions to satisfy the performance requirements DP1, DP4, DP6, DP8 and DP9:

D3 Access for People with Disabilities outlines the general building access requirements, it includes:

- Table D3.1 which outlines the parts of the building required to be accessible that must comply with AS1428.1(2009)
- D3.2 access to buildings which outlines requirements for accessways, doors and entrances
- D3.3 the parts of buildings required to be accessible and meet the requirements of AS1428.1 (2009)
- D3.4 exemptions
- D3.5 accessible car parking requirements
- D3.6 signage requirements for identification of accessible facilities, services and features
- D3.7 hearing augmentation requirements
- D3.8 tactile ground surface indicators

- D3.9 wheelchair spaces in Class 9b Buildings
- D3.10 swimming pools
- D3.11 ramps
- D3.12 glazing requirements on an accessway

Part D4 Braille and tactile Signs

Part D5 Accessible water entry/exit from swimming pool

E3.6 outlines the requirements for passenger lifts in accessible buildings.

F2.4 outlines the requirements for unisex accessible sanitary facilities, accessible showers and cubicles for people with ambulant disabilities designed to meet the requirements of AS1428.1 (2009).

AS1428.1 (2009)

AS1428.1 was revised and update in 2009 and while currently not referenced in the BCA it is our understanding it will be referenced in BCA 2011. The 2009 version of AS1428.1 adopts in principal the increased circulation space requirements of AS1428.2 (1992). Proposed updates of AS1428.2 will include fittings and fixtures only (currently not anticipated in the near future).

We note that the Australian Standards on access and mobility do not include a section for outdoor environments. We recommend that Sydney Olympic Park Access Guidelines (2010) section 6 Public Domain and Outdoor Access be used as guidelines in access provision in outdoor spaces.

AS2890.6 (2009)

AS2890.6, referenced in AS2890.1 (2004) was published in 2009 and while currently not referenced in the BCA (2010) it is our understanding it will be referenced in BCA 2011. To meet the requirements of people driving current models of accessible vehicles we are recommending designers provide the off street car space layouts as per AS2890.6, which include additional circulation space for the operation of vehicle mounted hoists. In our opinion AS2890.6 more fully meets the intent of the DDA.

1.5 Access compliance recommendations:

In principle a design based on AS1428.1 (2009) for this project, will in our opinion meet the following:

- The intent of the DDA
- BCA (2010) and proposed draft BCA 2011 and Disability (Access to Premises- Buildings) Standards 2010
- Sydney Olympic Park requirements for accessible buildings

1.6 Management Strategies

In this commercial facility it is important to design paths of travel and circulation spaces within the proposed new building works to meet the intent of the Disability Discrimination Act.

In addition to compliant new building works including: accessible paths of travel; accessible parking spaces and accessible sanitary facilities it will be necessary for building occupiers to develop an operational management strategy that includes the proposed intention to provide equipment and adapt areas within the facility to meet the requirements of specific individuals (staff) with a disability.

This strategy is to meet the specific requirements of staff and visitors with a disability whose individual requirements cannot be addressed within the base building design.

An operational management strategy acknowledges the need to meet full accessibility compliance through the provision of policy strategies.

A design that has the potential to be modified as required to suit individuals with a disability is desirable.

2. Site and Building Description

The site for the site 8B Commercial building is located on Murray Rose Avenue opposite Parkes Street and the Sydney Olympic Park Train Station.

The principal entrance is proposed to be located centrally in the building on the existing footpath in Murray Rose Avenue. An existing entry drive way on the eastern side of the site will be utilized to provide vehicle access to the 2 levels of basement parking.

The new building is to include:

- 2 basement levels which are proposed to include a total of 53 parking spaces, a bicycle store area and change room facilities, including a unisex accessible combined shower and sanitary facility
- A ground floor level with a centrally located commercial lobby and 2 areas proposed as retail tenancies (eastern and western sides of the building)
- 5 levels of commercial space which include gender specific and accessible toilet facilities on each level
- Two (2) centrally located lifts and two adjacent fire isolated stairs are indicated to link all levels of the proposed building

3. Access Provisions

3.1 Car Parking

Requirements:

BCA (2011) clause D3.5 requires a class 5 building to provide 1 accessible parking space for every 100 car parking spaces or part thereof. SOP Access Guidelines require compliance with BCA part D3.5 or provision of 3% of car spaces as accessible, whichever is greater.

The layout of accessible parking spaces is required to meet the requirements of AS2890.6 (2009).

Proposed:

32 parking spaces are indicated on basement level 2 and 21 parking spaces are indicated on basement level 1. Two accessible parking spaces are indicated on basement 1 in a convenient location adjacent to the change facilities and lift lobby.

The accessible parking spaces are located on an accessible path of travel, which potentially meets the requirements of the BCA part D3 and AS1428.1 and the space and adjacent shared area are indicated to include dimensions to meet the requirements of AS2890.6 (2009).

Recommendations:

- (i) In ongoing design ensure the proposed new accessible parking spaces include a layout and features meeting the requirements of AS2890.6.

3.2 External paths of travel – Entrances**Requirements:**

BCA (2011) clause D3.2 - Access to buildings requires accessways to be provided to accessible buildings from the main points of a pedestrian entry at the allotment boundary and from any accessible car parking space or accessible associated buildings connected by a pedestrian link.

BCA (2011) clause D3.2 - Access to buildings requires the principal pedestrian entrance to be accessible in all cases and not less than 50% of all pedestrian entrances, including the principal pedestrian entrance to be accessible. In buildings with a total floor area of more than 500 square meters, an inaccessible entrance cannot be more than 50 meters from an accessible entrance. This ensures that situations where people have to travel an unreasonable distance between entrances are avoided

Proposed:

To meet the requirements of BCA (2011) clause 3.2, continuous accessible paths of travel are indicated:

- from the Murray Rose Avenue footpath via an entry at grade at the **principal entry** (commercial lobby) via auto opening sliding doors
- from the Murray Rose Avenue footpath separate entries to the retail tenancies are indicated via inward opening doors in the glazed facade wall
- a new kerb ramp is indicated in the Murray Rose Avenue footpath providing a link to the on street passenger set down area adjacent to the vehicle driveway at the eastern end of the site.

Recommendations:

- (i) In ongoing design ensure to meet the requirements of AS1428 4.1, tactile ground surface indicators are provided on the footpath at the 'at grade' driveway crossing where kerbs are not indicated.

3.3 Basement facilities

Requirements:

To meet the requirements of the BCA (2011) part D3.1 an accessible path of travel complying with AS1428.1 is to be provided to and within all areas normally used by occupants.

To meet the requirements of the BCA (2011) part F2.4 (b) not less than 1 accessible unisex shower must be provided for every 10 showers or part thereof.

To meet the requirements of the BCA (2011) part F2.4 not less than one unisex accessible sanitary facility must be provided on every storey containing sanitary compartments.

To meet the requirements of the BCA (2011) part F2.4 (c) at each bank of toilets where there is one or more toilets, in addition to an accessible sanitary compartment a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 (2009) must be provided for use by males and females

Proposed:

Two levels of basement parking are proposed.

The Basement 1 level is indicated to include:

- male and female change facilities, which include showers, toilet cubicles (one cubicle for people with ambulant disabilities is indicated in each area) and lockers
- a combined unisex accessible shower and sanitary facility adjacent to the gender specific facilities
- parking as detailed in **3.1** above
- bicycle store
- a lift lobby

Facilities including the lift lobby, accessible sanitary facility and gender specific toilets at this stage of the design process are indicated on continuous paths of travel that meet the requirements of AS1428.1 and BCA part D3.3.

The combined unisex accessible shower and sanitary facility is indicated to include circulation space at the door, WC pan, basin and shower to meet the requirements of AS1428.1 clauses 15.2 and 15.5 (2009).

Recommendation:

- (i) Ensure in ongoing design path of travel including at the abutting surfaces at the lift lobby meet the requirements of AS1428.1 clause 7 including not lip greater than 3mm.
- (ii) Ensure in ongoing design the combined unisex accessible facility includes fittings to meet the requirements of AS1428.1 clauses 15.2 and 15.5 (2009)
- (iii) Ensure in ongoing design a locker is included in the unisex accessible sanitary facility (so as not to encroach into any required circulation spaces) within an accessible reach range that meets the requirements of AS1428.2.
- (iv) Ensure in ongoing design a locker which includes circulation space to meet the requirements of AS1428.1 is provided in or adjacent to the accessible facility

3.4 Internal paths of travel**3.4.1 Ground floor****Requirements:**

To meet the requirements of the BCA (2011) part D3.1, continuous accessible paths of travel meeting the requirements of AS1428.1 (2009) are required to and within all areas normally used by the occupants of the building.

Proposed:

Entry at grade from the footpath in Murray Rose Avenue is indicated via auto opening doors in the glazed facade wall to a reception/lift lobby which is indicated over two levels. A walkway, indicated with a gradient of 1:20 is proposed on the western side of the lobby and adjacent to stairs, which are indicated for the remaining width of the lobby. Loose furniture is indicated within the lobby.

Fitout of the 2 retail areas on the ground floor level are not included in the current scope of work.

Recommendation:

- (i) Ensure in ongoing design that retail doors, including a single leaf of double doors, include a minimum clear opening of 850mm to comply with AS1428.1 clause 13.2 (2009).
- (ii) Ensure in ongoing design to meet the BCA part D3.12 (2011) that the unframed glazed doors and walls are provided with visual indicators to fully comply with AS1428.1 clause 6.6 (2009) and that doorways are provided with luminance contrast to meet the requirements of AS1428.1 clause 13.1 (2009).
- (iii) Ensure in ongoing design to meet the BCA (2011) and AS1428.1 clause 11 **stairs** other than fire isolated stairs include:
 - 900mm set back is to be maintained from the adjacent path of travel

- nosing profiles which include 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing that includes a minimum luminance contrast of 30% with the tread to comply with AS1428.1 figures 27a and b
- tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom tread
- handrails on both sides that include a 300mm horizontal extension at the top and bottom set back by a minimum of 300mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 26(A)

3.4.2 Level 1 and typical levels

The level 1 and typical levels are indicated to include:

- male and female toilet cubicles (one cubicle for people with ambulant disabilities is indicated in each area)
- a unisex accessible sanitary facility adjacent to the gender specific facilities
- a Lift lobby

Fitout of the commercial tenancy areas on levels 1 – 4 are not included in the current scope of work.

See **section 3.5** following for comments on toilets:

3.5 Toilets

Requirements:

To meet the requirements of the BCA (2011) part F2.4 and the DDA not less than one unisex accessible sanitary facility must be provided on every storey containing sanitary compartments. Where two or more accessible sanitary facilities are provided the number of left and right handed mirror image facilities must be provided as evenly as possible.

To meet the requirements of the BCA (2011) part F2.4 (c) at each bank of toilets where there is one or more toilets, in addition to an accessible sanitary compartment, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 (2009) must be provided for use by males and females.

Proposed:

Unisex accessible sanitary facilities are proposed adjacent to gender specific toilets on Levels 1, 2 3 and 4.

To meet BCA F2.4 accessible facilities on the first floor level and typical floors are indicated as right hand facility layouts and the Basement level 1 is indicated as a left hand facility layout. The proposed circulation space at the door, WC pan and basin appear to meet the requirements of AS1428.1 clause 15.

Cubicles for people with ambulant disabilities are indicated in female and male areas on each level of the new building.

Recommendations:

- (i) Ensure that in ongoing design unisex accessible sanitary facilities include a layout, circulation space (door, WC pan, basin) and fittings to meet the requirements of AS1428.1 clause 15.
- (ii) Ensure in ongoing design that cubicles for people with ambulant disabilities include features complying with AS1428.1 clauses 13.4 and 16 and figures 34 and 53 (signage, entry airlock and cubicle door circulation, WC pan, grabrails, toilet paper dispenser, clothes hook).

3.6. Vertical Access

3.6.1 Lifts

The location of the 2 passenger lifts is indicated centrally in the building to provide vertical access from the basement level to all levels of the building.

Recommendations:

- (i) Ensure in ongoing design that the passenger lift includes features to fully comply with AS1735.12 and the BCA E3.6 to include: floor dimensions not less than 1400mm x 1600mm for lifts travelling more than 12m and 1100mm x 1400mm for lifts travelling less than 12m and accessible features including provision of a handrail and call & control buttons meeting the requirements for tactile, (and) Braille and luminance contrast. The inclusion of auditory announcement in lift cars serving more than 2 levels is required.

3.6.2 Stairs

Two internal fire isolated stairways are indicated to link all levels of the building centrally.

3.7. Emergency Egress

To meet the objective of the DDA all users of the facility are to be provided with a means of egress from the premises to a place of safety. People with disabilities should be provided with the same level of protection as other premises users.

Wheelchair refuges (800 x 1500mm) are indicated in the entry landings, adjacent to the path of travel to the stairs in the western fire stair on basement level 1, level 1 and typical levels.

Individual evacuation plans for staff are recommended as part of the operational management strategy.

Recommendation:

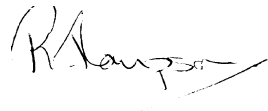
- (i) It is recommended in DR07019 that suitable emergency evacuation devices be provided for people to be carried down the stairwell, this should be considered in ongoing design.
- (ii) Both auditory and visual elements are required in emergency alarms to ensure those with vision or hearing impairments can detect a warning, particularly in areas where they are likely to be isolated from others (eg; accessible sanitary facilities and offices).

4. Conclusion

Having reviewed the listed DA drawings, it is our opinion that the access provisions for people with physical and sensory disabilities have the potential to comply with the performance requirements of the BCA (2011) sections D3, E3.6 and F2.4; AS1428.1 (2009), AS2890.6 and the SOP access Guidelines for access.

The provision of access for people with a disability in the proposed new building provides continuous accessible paths of travel, clear wayfinding guidance and the equitable provision of accessible facilities including accessible sanitary facilities and accessible parking to provide inclusive design to meet the anticipated requirements of staff and visitors.

Consequently, in our opinion the proposed drawings, in conjunction with developed operational management strategies, will meet the objectives of the Disability Discrimination Act through its intention to provide non-discriminatory access and the equitable and dignified use of all appropriate areas of the facility. This will be achieved through the ongoing design which includes continuous accessible paths of travel and equitable provision of accessible facilities to facilitate inclusive access.



Robyn Thompson

Access Associates Sydney

Qualifications: Diploma of Occupational Therapy, Cumberland College of Health Sciences (Sydney) 1976.

Affiliations: Member OT Australia (No: 200195)

Accredited member Association of Consultants in Access Australia (No: 150)

Affiliate member Australian Institute Building Surveyors (No: 4233)