



Access Review

Rosebank College Extension
1A Harris Road, Five Dock, NSW
Report Issue 1
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Introduction

Background

This review of the design documents for DA submission addresses the requirements for access by staff, students and visitors with a disability or who are older, to the proposed Rosebank College extension at Rosebank College, 1A Harris Road, Five Dock, NSW.

The proposed works include a new building with carpark, GLA's and sport courts.

The review addresses compliance with the Disability (Access to Premises - Buildings) Standards 2010, Parts D3 and E3.6 of the Building Code of Australia 2019 (BCA) and Australian Standards on Access and Mobility.

The key issue in the provision of appropriate access to and within the new building is the provision of a continuous accessible path of travel:

- (i) from the main points of a pedestrian entry at the allotment boundary;
- (ii) from another accessible building connected by a pedestrian link;
- (iii) from accessible visitor parking to principal building entrances; and
- (iv) to and within areas normally used by the occupants.

We have reviewed the drawings listed to assess the level of accessibility and compliance with the relevant codes, standards and legislation. The designs have been assessed to ensure that equitable and dignified access for people with disabilities to meet the intent of the Disability Discrimination Act can be provided.

In carrying out an accessibility assessment, the main objective is to ensure access is provided through the provision of accessible facilities and continuous paths of travel to and within all appropriate areas of the new building.



Introduction

Accessibility Requirements

The Building Code of Australia 2019 (BCA) in conjunction with the Disability (Access to Premises - Buildings) Standards 2010 (Premises Standards) apply to new buildings and existing buildings that undergo refurbishment.

The Premises Standards apply to any new part, and any affected part, of an existing building. A part of a building is a new part of the building if it is an extension to the building or a modified part of the building about which an application for approval for the building work is submitted to the competent authority in the State or Territory where the building is located. The definition of 'affected part' of a building is limited to the path of travel between (and including) the principal pedestrian entrance and the new work.

Under the Premises Standards, access must be provided, to the degree necessary, to enable people to approach the building from the road boundary and from any accessible carparking spaces associated with the building; approach the building from any accessible associated building; access work and public spaces, accommodation and facilities for personal hygiene; and to enable identification of access ways at appropriate locations which are easy to find.

Under the BCA 2019 and Premises Standards table D3.1 Requirements for access for people with a disability, access to this new building work (class 9b) is required to and within all areas normally used by staff, students and visitors.



Introduction

Proposed Work

The proposed new building work includes:

Lower Level:

- Carpark with 67 spaces including one accessible space
- Existing external carpark with 8 spaces including one accessible
- Lift access from carpark level to pedestrian entrance level

Mid Level:

- Entrance level from Street and adjacent school buildings
- Covered Circulation
- Foyer
- GLAs
- Office

Upper Level:

- Play Area
- Verandah
- Toilets
- Office
- GLAs
- Link to adjacent existing building via 1:20 grade walkway



Context for Planning & Design

Legislation & Standards

The new work is subject to access provisions in the following documents:

- Disability (Access to Premises - Buildings) Standards 2010
- The Building Code of Australia (BCA) 2019 parts D3, F2.4 and E3.6
- AS1428.1 (2009) (Incorporating Amendment No 1): 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) (Incorporating Amendment No 1): 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
- AS1428.4 (1992) Design for access and mobility. Part 4: Tactile ground surface indicators for the orientation of people with vision impairment
- AS2890.6 (2009) Parking Facilities - Off-street parking for people with disabilities
- AS3745 (2009) Planning for Emergencies in Facilities (referenced)
- AS1428.5 (2010) Design for access and mobility Part 5: Communications for people who are deaf or hearing impaired (referenced)
- Australian Human Rights Commission Guideline on the Application of the Premises Standards (2013)
- The Disability Discrimination Act 1992 (DDA)
- Disability Standards for Education 2005



Context for Planning & Design

Legislation & Standards

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.

Premises Standards

Disability (Access to Premises - Buildings) Standards (Premises Standards) 2010 which commenced on 01 May 2011, has been incorporated into the BCA (2019) to ensure that access provisions for people with disabilities more fully meet the intent of the DDA.

The Premises Standards apply to any new part, and any affected part, of an existing building. A part of a building is a new part of the building if it is an extension to the building or a modified part of the building about which an application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the State or Territory where the building is located.

BCA

The Building Code of Australia (BCA)(2019) applies to new buildings and existing buildings that undergo refurbishment. In this report the description of the level of accessibility throughout the new work is generally measured against the Deemed-to-Satisfy Provisions of the BCA, in particular Parts D3, E3.6 and F2.4.

AS1428 – Standards for Access

The Australian Standards design for access and mobility are a suite of standards relating to the inclusion of features in the built environment that improve access and mobility for people with a disability.

AS1428.1 (2009) sets out minimum requirements for design of buildings and facilities, while AS1428.2 includes enhanced and additional requirements that are not covered in AS1428.1, such as street furniture and reach ranges.

AS1428.4.1 (2009) Design for access and mobility Part 4.1: Means to assist the orientation of people with vision impairment primarily details the requirements for the application of tactile ground surface indicators (TGSIs).

Disability Standards for Education 2005

The objects of these standards are:

- to eliminate, as far as possible, discrimination against persons on the ground of disability in the area of education and training; and
- to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law in the area of education and training as the rest of the community; and
- to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

Reasonable adjustment is an adjustment, measure or action (or a group of measures or actions) taken by an education provider that has the effect of assisting a student with a disability.



Context for Planning & Design

Management Strategies

In the existing school facilities and proposed new building work it is important, within the limitations of the existing structures, to provide general paths of travel, circulation spaces and accessible facilities, within areas not exempt by the BCA part D3.4, to meet the intent of the Disability Discrimination Act.

In addition to accessible paths of travel, accessible parking and accessible sanitary facilities, it will be necessary to develop operational management strategies that meet the proposed intention to provide equipment and adapt areas within the building to meet the requirements of specific individuals with a disability.

Operational management strategies are required to meet the specific requirements of visitors, students and staff with a disability whose individual requirements cannot be addressed within the base buildings and existing building facilities. 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.

Ongoing development of operational management strategies are recommended for the following:

- emergency egress for people with sensory and mobility impairment
- modification of individual work areas to meet individual staff and student requirements
- facilitation of use of accessible parking spaces for visitors and staff

Documentation

This assessment is based on a site inspection, discussion with the design team and review of the following architectural documentation prepared by Alleanza Architects, issued to funktion on 19/05/20:

DA DRAWING LIST	
DA001	EXISTING SITE PLAN
DA002	SITE DEMOLITION PLAN
DA003	PROPOSED SITE PLAN
DA004	PROPOSED LOWER LEVEL
DA005	PROPOSED MID LEVEL
DA006	PROPOSED UPPER LEVEL
DA007	PROPOSED ROOF PLAN
DA008	SECTIONS
DA009	ELEVATIONS
DA010	GFA CALCULATION
DA011	SHADOW DIAGRAMS
DA012	PERSPECTIVES
DA013	PERSPECTIVES
DA014	EXTERNAL MATERIALS & FINISHES
DA015	EXTERNAL MATERIALS & FINISHES

Grand total: 15



Design Review

Accessibility Assessment

Accessible Paths of Travel

Overview

To meet the Access to Premises Standards Part D3.2 and BCA D3.2, accessible paths of travel are provided from the allotment boundary to the principal pedestrian entrance of the building and linking to all areas within the building.

A new lay back to the existing brick kerb located around the central landscaped area will provide a pedestrian link to the new building via a proposed 1:14 ramp from the existing school campus to the new work. The path of travel includes features that comply with the requirements of AS1428.1 to provide a functionally accessible path of travel.

Accessways Throughout Areas of New Work

To meet the requirements of the Premises Standards and BCA part D3.1 and D3.3(c), continuous accessible paths of travel meeting the functional requirements of AS1428.1 (2009) are proposed to and throughout the new building work via the provision of lift access linking all levels of the new work within the building and circulation space at corridors, lift lobbies and doors that meets AS1428.1 clause 6.5.

Stairways

New stairways are proposed as follows:

- Central stair from basement level to mid level and upper level
- Northern stair from lower level to mid level and upper level

To meet the BCA (2019) part D3.3 (a) and D2.17, new stairways, (except for stairways in exempted areas and fire isolated stairs) are required to comply with AS1428.1 clause 11 and BCA D3 to include double height handrails, highlighting on step nosing and tactile ground surface indicators.

To meet the requirements of the BCA (2019) part D3.8 tactile ground surface indicators (tgsi) complying with AS1428.4.1 (2009) are required to be provided at new stairways.

Lift

A lift is proposed to link all levels of the new work. The lift is required to have dimensions of 1100mm x 1400mm and door width of 900mm clear that complies with BCA D3.3 (b), E3.6 and AS1735.12.

Ramps

New 1:14 ramps are proposed adjacent the building, linking the existing school campus to the new building.

To meet the BCA (2019) part D3.3 (a), new ramps, (except for ramps in exempted areas and fire isolated ramps) are required to comply with AS1428.1 clause 10 and BCA D3 to include handrails and tactile ground surface indicators.

Bathrooms

New bathrooms are indicated on the upper level. To meet BCA F2.4, the bathrooms are indicated to include cubicles suitable for a person with an ambulant disability as well as an accessible bathroom (RH layout).



Design Review

Recommendations

Accessible Paths of Travel

In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. In ongoing design, the designated accessible parking space is to include dimensions and a layout to meet the requirements of AS2890.6 (2009) and identification signage. This includes a dedicated (non-shared) space with dimensions 2.4m wide x 5.4m long; a shared area on one side of the dedicated space 2.4m wide x 5.4m long; a shared area at the end of each space 2.4m x 2.4m and a 1200mm high bollard located in the centre and 800mm from the front edge of the shared space.
- ii. The overhead clearance at the accessible parking space and the shared space is required to be 2.5m, with 2.2m overhead clearance from the carpark entrance to the accessible parking space.
- iii. In ongoing design the parking space related walking and wheelchair unloading areas are to comprise a slip-resistant, firm plane surface with a fall not exceeding 1:40 in any direction or 1:33 if the surface is a bituminous seal.
- iv. A minimum 1000mm unobstructed path width on accessible paths of travel and 2m vertical clearance (AS1428.1 clause 6.2 and 6.3) or provision of a suitable barrier.
- v. Slip resistant surfaces on access ways that are traversable by people who use a wheelchair and those with an ambulant or sensory disability. The astro-turf surface is proposed to be comparable to permissible carpet pile height in BCA D3.3(h) ie 11mm with a 4mm backing.
- vi. All new doorways for public, student and staff areas (excluding any exempt areas meeting the BCA part D3.4) are to include a clear opening at the active leaf (minimum 850mm) and circulation spaces to meet the requirements of AS1428.1 (2009) clauses 13.2 and 13.3 and figures 31 – 34.
- vii. To meet the BCA part D3.12 (2019), unframed glazed doors and walls are to be provided with visual indicators to fully comply with AS1428.1 clause 6.6 (2009)
- viii. Doorways are required to be provided with luminance contrast to meet the requirements of AS1428.1 (2009) clause 13.1.
- ix. The force required to activate door closers, glazed or pivot action doors meet as closely as possible the requirements of AS1428.1 (2009) clause 13.5.2(e).
- x. All door handles and related hardware shall allow the door to be unlocked and opened with one hand and be such that a hand of a person who cannot grip will not slip from the handle during the operation of the latch as per AS1428.1 (2009) clauses 13.5.1 - 3 and figures 35 – 37.
- xi. To meet the BCA part D3.3 (c), corridors include circulation space for a wheelchair to turn within 2m of the end of a passage way where it is not possible to continue traveling along the accessway (90° minimum 1500mm width x 1500mm length; 180° minimum 1540mm width x 2070mm length) to comply with AS1428.1 (2009) clause 6.5 and figures 4 and 5.



Design Review

Recommendations

Vertical Links

In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. To meet BCA D3.3 and AS1428.1 clause 11, ensure in ongoing design the stairs include handrails on both sides that include a 300mm horizontal extension at the top and bottom set back by a minimum of 600mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 26(A); 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 27(a) and (b); tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom tread and opaque risers.
- ii. Ensure in ongoing design, to comply with BCA D3.3 (b) and E3.6 the lift is one of the types identified in Table E3.6a, and includes the following features in accordance with AS1735.12:
 - a. A handrail complying with the provisions for a mandatory handrail in AS 1735.12 clause 5.3
 - b. Minimum clear door opening of 900mm as in AS 1735.12 section 2
 - c. Passenger protection system complying with AS 1735.12 clause 4.2
 - d. Lift car and landing control buttons complying with AS 1735.12 section 7 for Braille, tactile and luminance contrast
 - e. Lighting complying with AS 1735.12 section 10
 - f. Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received
- iii. Ramps to include gradients, handrails, kerbs and tactile ground surface indicators to meet the requirements of AS1428.1 clause 10.3 and figures 13-19:
 - a. A maximum slope of 1:14
 - b. A constant gradient between level landings
 - c. An unobstructed/clear width minimum 1000mm
 - d. Minimum landing length of 1200mm where there is no change in direction; 1500mm x 1500mm at the change in direction
 - e. Double height handrails on both sides that include a 300mm horizontal extension at the top and bottom and set back by a minimum of 300mm so that the handrail does not protrude into the transverse path of travel



Design Review

Recommendations

Wayfinding, Emergency Egress, Hearing Augmentation

In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. Development of individual evacuation plans for staff or students with a disability is recommended as part of the building operational management strategy.
- ii. To meet AS3745 (2009) Planning for Emergencies in Facilities we recommend in ongoing design that consideration be given to the inclusion of suitable emergency evacuation devices for people to be carried down stairs.
- iii. Braille and tactual signage compliant with the BCA Part D3.6 at required exits.
- iv. In ongoing design, if an inbuilt amplification system is to be installed, BCA (2019) part D3.7 requires a hearing augmentation system to be provided where an inbuilt amplification system, other than one used for emergency warning is installed in a room in a Class 9B Building. If required, an induction loop must be provided to not less than 80% of the floor area of the room.
- v. The ambulant cubicles to have a layout and features to meet AS1428.1 clause 16.
- vi. The accessible bathroom to have a layout and features to comply with AS1428.1 clause 15.



Conclusion

Conclusion

Having reviewed the listed drawings, it is our opinion that at this development application stage of the design, the access provisions for people with physical and sensory disabilities in the proposed new work can comply with the functional accessibility requirements of BCA (2019) sections D3, E3.6; AS1428.1, AS1735.12 and the Disability (Access to Premises - Buildings) Standards 2010 for accessibility and equity.

With the development and implementation of the recommendations, the provision of access for people with a disability in the proposed Rosebank College Extension can provide continuous accessible paths of travel and the equitable provision of accessible facilities to provide inclusive design to meet the anticipated requirements of staff, students and visitors.

I certify that I am an appropriately qualified and competent person practising in the relevant area of work. I have recognised relevant experience in the area of work being reviewed. My company is holding appropriate current insurance policies.

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