

Meadowbank Education and Employment Precinct Schools Project Access Review Report

SSD 18_9343

Prepared by Morris Goding Access Consulting
For School Infrastructure NSW
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REPORT REVISIONS		
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This report prepared by:

John Ward
Senior Access Consultant
Morris Goding Access Consulting



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1. Executive Summary

The Access Review Report is a key element in the design development of Meadowbank Education and Employment Precinct Schools Project, located at 2 Rhodes Street, Meadowbank, and an appropriate response to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) and ultimately the Commonwealth Disability Discrimination Act (DDA).

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

The review will ensure that ingress and egress, paths of travel, circulation areas, and sanitary facilities comply with relevant statutory guidelines, and in addition, compliance with a higher level of accessibility and inclusiveness benchmarks set by the project.



2. Introduction

2.1 Overview

This Access Review Report has been prepared by Morris Goding Access Consulting on behalf of the NSW Department of Education and School Infrastructure NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9343) for the Meadowbank Education and Employment Precinct Schools Project (hereafter referred to as MEEPSP) at 2 Rhodes Street, Meadowbank (the site).

MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposal seeks consent for:

- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:
 - Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
 - Adaptable classroom home bases;
 - Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3;
 - Laboratories and workshops;
 - Staff workplaces;
 - Canteens;
 - Indoor gymnasium;
 - Multipurpose communal hall;
 - Outdoor learning, play and recreational areas (both covered and uncovered).
- Associated site landscaping and public domain improvements;
- An on-site car park for 60 parking spaces; and
- Construction of ancillary infrastructure and utilities as required.

The purpose of this Access Review Report is to ensure compliance with statutory requirements and enhanced benchmark requirements set by the project. The Report considers user groups, who include students, staff, 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); and
- People with a dexterity impairment



The Report seeks to provide compliance the Disability Discrimination Act 1992. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

Response to SEARs

The Access Review Report is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9343. This table identifies the SEARs and relevant reference within this report.

Table 1 – SEARs and Relevant Reference

SEARs Item	Report Reference
Access Review Report	Plans and Documents

2.2 Background

The proposed development is expected to fall under BCA classification Class 9b (school)* only.

*NOTE: Other applicable classifications that may be present, such as Class 5 (offices) or Class 7 (car park) are expected to be absorbed under the major 9b classification concession of the BCA. This must all be confirmed by the BCA consultant and/or PCA.

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), relevant Australian Standards, and enhanced benchmark requirements set by the project.

2.3 Limitations

This report is limited to the accessibility provisions of the building in general. It does not provide comment on detailed design issues, such as: internals of accessible/ambulant toilet, fit-out, lift specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSIs, handrail design, signage etc. that will be included in construction documentation.



2.4 Accessibility of Design

The proposed design will utilise the Federal Disability Discrimination Act (DDA), Disability (Access to Premises – Buildings) Standards 2010, BCA/DDA Access Code, Universal Design principles, the AS 1428 Series, and other design guidelines, to develop appropriate design documentation, to provide reasonable access provisions for people with disabilities.

The design will be developed to ensure the principles of the DDA are upheld. Under the DDA, it is unlawful to discriminate against people with disabilities in the provision of appropriate access, where the approach or access to and within a premise, makes it impossible or unreasonably difficult for people with disabilities to make use of a particular service or amenity.

2.5 Statutory Requirements

The statutory and regulatory guidelines to be encompassed in the developed design to ensure effective, appropriate and safe use by all people including those with disabilities will be in accordance with:

- Federal Disability Discrimination Act (DDA);
- Disability (Access to Premises – Buildings) Standards 2010;
- Building Code of Australia (BCA) Part D3, F2, E3;
- AS 1428.1:2009 - (General Requirement for Access);
- AS 1428.4.1:2009 - (Tactile Ground Surface Indicators);
- AS 2890.6:2009 - (Parking for People with Disabilities);
- AS 1735.12:1999 - (Lift Facilities for Persons with Disabilities);
- Disability Standards for Education 2015;
- Educational Facilities Standards and Guidelines;
- Ryde Local Environmental Plan (LEP) 2014

Please note that there are also additional advisory standards (not currently referenced by BCA or DDA Premises Standards) as well as other relevant guidelines that will be considered, as relevant to promote equity and dignity in line with over-arching DDA principles and aspirational objectives. These include:

- Universal Design Principles;
- Human Rights Commission (HEREOC) Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture;
- AS1428.2:1992 Enhanced and Additional requirements (referenced in EFSG);
- AS1428.4.1 Draft Way-finding Standard;



- AS3745:2010 – Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance)



3. General Access Planning Considerations

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Rights Commission is the governing body who control and enforce DDA compliance.

Nevertheless, building elements that provide insufficient accessible provisions for people with disabilities remain subject to the DDA. The improvement of non-compliant building elements and areas to meet current access requirements will mitigate the risk of a DDA complaint be made against the building owner.

Since the 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009 in the same manner as they would comply with the BCA by meeting deemed-to-satisfy provisions or by adopting an alternative solution that achieves the relevant performance requirements.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximized, without adding on specialized 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1: Equitable Use
- Principle 2: Flexibility in Use
- Principle 3: Simple and Intuitive Use
- Principle 4: Perceptible Information
- Principle 5: Tolerance for Error
- Principle 6: Low Physical Effort
- Principle 7: Size and Space for Approach and Use



4. Ingress & Egress

4.1 External Linkages

The BCA and DDA Premises Standards contain requirements for site approaches for the use of persons with disabilities. These requirements can be summarised as follows:

- It will be necessary to provide an accessible path of travel from main pedestrian entry points at the site allotment boundary to all building entrances compliant with AS1428.1:2009.
- An accessible path of travel between buildings (or parts of buildings) that are connected by a pedestrian linkage, within the site allotment boundary, compliant with AS1428.1:2009 is also required.
- An accessible path of travel to building entrances (required to be accessible) from associated accessible car-parking bays, compliant with AS1428.1:2009 is required.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The main pedestrian entry points (for both the Primary School and the High School) are available from Rhodes Street, at the north-east corner of the site. These would appear to have near level interfaces with building entrance points (on the level nominated as Ground Floor). On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

Secondary pedestrian entry points serving the High School portion of the development are available south of the site via TAFE NSW Meadowbank campus on Lower Ground Floor level. On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

4.2 Entrances

The BCA and DDA Premises Standards contain requirements for building entry for the use of persons with disabilities. These requirements can be summarised as follows:

- Access is required through at least 50% of entrances, including the principal pedestrian entrance/s to all buildings or parts of buildings (i.e. when they have a separate function and/or use e.g. external retail tenancy). Note it is preferred that all entrances are accessible.
- A non-accessible entry cannot be located more than 50m distance from an accessible entry (for buildings greater than 500m²).



- All accessible doors to have 850mm min. clear width opening and suitable door circulation area, compliant with AS1428.1:2009. Note: Manual doors require lightweight door forces to be operable by people with disabilities (20N max.). We recommend that main entrances include automated sliding doors to be used where possible. Revolving doors are not accessible, if maintained an alternate accessible door is required adjacent.
- An accessible path of travel e.g. ramp or lift needs to be provided adjacent (or in reasonable proximity) to any stair access. Note: providing choice of access route directly adjacent so that people can start and finish in the same location/travel similar route promotes inclusion and UD principles.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

4.3 Emergency Egress

BCA 2016 Part D2.17 has requirements for all fire-isolated egress stairs from areas required to be accessible (not communication stairs) to include at least one continuous handrail designed to be compliant with AS1428.1 Clause 12. Provision of an off-set tread at the base of stair flights or an extended mid-landing that will allow a 300mm extension clear of egress route is considered appropriate for achieving a consistent height handrail (without vertical or raked sections).

Where fire-isolated egress stairs will also be used for communication stair purposes between levels, they should be designed to meet AS1428.1:2009. Confirmation is required on the presence of fire-isolated stairs in the project (not clear from the drawings) and the likely use of these stairs for communications between levels (in which case full compliance with AS1428.1 is required).

There is currently no mandatory requirement within BCA or DDA Premises Standards for provision of independent accessible egress for people with a disability in accordance AS1428.1 and this remains an important DDA issue. Consideration of an accessible egress strategy with emergency evacuation plan will be needed as a minimum starting point.

Consideration of management systems and fire wardens for emergency egress for people with disabilities.



5. Paths of Travel

5.1 Circulation Areas

The BCA and DDA Premises Standards contain requirements for circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair passing bays (1800mm width x 2000 length) are also required when a direct line of sight is not available and are to be provided at 20m max. intervals along access-ways.
- Turning spaces (at least 1540mm W x 2070mm L) are required within 2m of every corridor end and at 20m.max intervals along all access-ways. This is needed for wheelchairs to make a 180 degree turn, compliant with AS1428.1:2009.
- All common-use doors (i.e. not excluded under Part D3.4) to have 850mm min. clear width opening (each active door leaf) and suitable door circulation area, compliant with AS1428.1:2009.
- All common-use corridors and accessible paths of travel to be at least 1000mm min. width when travelling in linear direction (or 1200mm min. under AS1428.2 in line with Ryde Access DCP). Note: Increased clear width paths of travel required for doorway circulation, turning areas etc.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

Corridors throughout are generally wide and generous. The indicative positioning of doors throughout is generally suitable and all access requirements are expected to be achieved. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

5.2 Passenger Lifts

The BCA and DDA Premises Standards contain requirements for passenger lifts and circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Passenger lifts to have min. internal size at floor of 1400mm width x 1600mm depth, compliant with BCA/DDA Access Code Part E3.6 and AS1735.12.
- All lift lobbies and main corridors on each level to have 1800mm min. clear width to allow two wheelchairs ability to space pass each other.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.



On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

5.3 Stairs & Ramps

The BCA and DDA Premises Standards contain requirements for stairs and ramps for the use of persons with disabilities. These requirements can be summarised as follows:

- Ramps are to have maximum 1:14 gradient with landings at no more than 9 metre intervals (under EFSG and Ryde Access DCP these are preferred at 6m max. intervals)
- Ramps are to have handrails on both sides with minimum 1 metre clearance in accordance with AS1428.1 (under EFSG and Ryde Access DCP this is preferred to be 1.2m min. clearance)
- Landings are to have 1200mm length with 1500mm length at 90 degree turns
- Stairs are to have handrails on both sides in accordance with AS1428.1
- Stairs and ramps are to be offset to ensure no encroachment of handrail extensions into from transverse path of travel at top and bottom of stair/ramp

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The use of ramps and stairs throughout the project is widespread. On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

5.4 Walkways

The BCA and DDA Premises Standards contain requirements for walkways for the use of persons with disabilities. These requirements can be summarised as follows:

- Walkways are to have maximum 1:20 gradient with landings at no more than 15 metre intervals
- Landings are to have 1200mm length with 1500mm length at 90 degree turns
- Walkways require low walls, kerbs, or level contrasting surfaces to both edges

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.



The use of walkways throughout the landscape design is widespread. On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.



6. Facilities & Amenities

6.1 Sanitary Facilities

The BCA and DDA Premises Standards contain requirements for sanitary facilities suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- For Class 9b: Provide at least 1 unisex accessible toilet, adjacent to every bank of toilets (where provided) on each level, compliant with AS1428.1 under BCA/DDA Access Code part F2.4. If more than 1 toilet bank provided on each level, accessible toilet is required at 50% min. of toilet banks at each level (note, due to the BCA classification of 9b schools, staff and student/public amenities must be separate and will therefore trigger separate accessibility requirements).
- For Class 9b: If common-use change facilities provided (i.e. both toilets and showers) a separate combined accessible WC/shower adjacent to male and female change rooms is required, compliant with AS1428.1 under BCA/DDA Access Code Part F2.4.
- An even number of left hand (LH) and right hand (RH) transfer WC pans (accessible toilets) is required within the building. Alternating LH/RH layouts on each subsequent level is the most appropriate and inclusive approach.
- Accessible WC requires 2300mm x 1900mm around the pan with the basin to sit outside this area in accordance with AS1428.1.
- An ambulant cubicle is required within every standard toilet bank adjacent to an accessible toilet under DDA Access Code Part F2.4 compliant with AS1428.1:2009.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

On the basis of the current level of detail there are amenities widely distributed throughout the building. There is no detailed layout information yet available, although compliance is achievable. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

6.2 Car Parking

The BCA and DDA Premises Standards contain requirements for parking which are applicable to this project. These requirements can be summarised as follows:

- Class 5 commercial, 9b development: Provide 1 accessible car bay for every 100 car bays or part thereof, compliant with AS2890.6.
- Accessible car bays require 2.4 metre width with 2.4 metre shared area.
- All accessible car bays to be located near relevant lifts and/or associated building entry points to minimise distance to relevant lift and ensure accessible path of travel between these areas.



- Ensure 2.5m min. height clearance, compliant with AS2890.6 fig 2.7 over accessible car bays with 2.2 m min. vertical clearance leading to the accessible car bays (Note: consideration for 2.3 or 2.4m min. height preferred for higher vans/adapted vehicles is recommended as good practice).

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

Car parking is provided at Car Park level. The drawing describes 60 spaces with 1 as accessible, which meets the BCA requirements. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

6.3 Signage

Signage provisions (identification and directional, as required) will be developed to comply with BCA Part D3.6, Spec D3.6, and AS1428.1 requirements during design development. Compliance is achievable and will need to be demonstrated at design development stage.

6.4 Hearing Augmentation

Hearing Augmentation provisions will be developed in accordance with the DDA Premises Standard and BCA Part D3.7 where an in-built system of audio amplification is provided, other than a system used only for emergency warning (note, school bell and PA are triggers for hearing augmentation). Compliance is achievable and will need to be demonstrated at design development stage.

6.5 Lighting

In general the maintenance illumination levels should be 150 lux for paths of travel, corridors and stairs. Ensure all lighting levels comply with AS1680. Compliance is achievable and will need to be demonstrated at design development stage.



7. Conclusion

MGAC has assessed the proposed scheme. The proposed drawings indicate that accessibility requirements, pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved. It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in building design and external domain design.