



**AVIUM PROJECTS PTY LTD**

**MATER MARIA COLLEGE  
5 FOREST ROAD, WARRIEWOOD NSW**

**S96 ACCESS REVIEW**

**Morris Goding Accessibility Consulting**

**FINAL**

3<sup>rd</sup> July 2017

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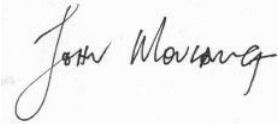
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<b>REPORT REVISIONS</b>		
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31.07.2017	Draft	DA Submission
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## 1. EXECUTIVE SUMMARY

The Development Application Section 96 Amendment's Access Review Report is a key element in the design development of Lot 1 on DP 785132, described as an Educational Establishment at 5 Forest Road, Warriewood - being an appropriate response to AS1428 series, Building Code of Australia (BCA), and ultimately the Commonwealth Disability Discrimination Act (DDA).

The project context is a 3 x storey education building containing:

- Staff Study, Administration Offices and Meeting Rooms on Level 1,
- Staff Study, Staff Common Room, Student Services and Offices on Level 2,
- Resource Centre, Seminar Rooms and an Outdoor Terrace on Level 3 and
- Extensive Terrace area on the Roof.

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

Generally, the proposed development, with accessible paths of travel that will be continuous throughout and in line with the report's recommendations, has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access and car parking, can be achieved – subject to provided details and performance solutions related to challenging site accessibility, being the steepness of the site.

The recommendations in this report are associated with future design development, detailed design and performance based solutions made under the performance requirements of the BCA. These recommendations should be addressed prior to issue of a construction certificate.

The main recommendations that have arisen from the access review include:

- (i) Ensure all aspects of the proposed development are according to the current Building Code of Australia (BCA) – either as Deemed-To-Satisfy provisions or according to the Performance Requirements of the BCA.
- (ii) Ensure accessible paths of travel, from the on-site bus stop and the accessible parking, to the proposed building's principal point of entry and no less than 50% of the building's entrances.
- (iii) Ensure all stairways and ramps are in accordance with the BCA Part D3 and AS1428.1.
- (iv) Ensure lifts are in accordance with the BCA Part E3.6 and AS1735.12.
- (v) Ensure all sanitary facilities are in accordance with the BCA Part F2.4 and AS 1428.1.

## 2. INTRODUCTION

### 2.1. General

Avium Projects Pty Ltd has engaged Morris Goding Accessibility Consulting (MGAC) to provide a design review of the proposed education development located at 5 Forest Road, Warriewood. The access review pertains to a Section 96 Development Application Amendment related to an original development consent DA No N1038/00 dated October 2000. Other buildings on the allotment included in the old DA consent have been constructed and certified for occupation according to separate and staged construction certificates. The building that is subject to this S96 application will be subject to compliance according to the NCC/BCA 2016.

The subject site is on Lot 1 on DP 785132 and is described as an Educational Establishment. A meeting was convened on 13<sup>th</sup> April 2017 between the Northern Beaches Council and the school, with its development consultants - and a Pre-Lodgment Report was issued, supporting the concept of a S96.

As a contribution to the pre-lodgment assessment, MGAC produced a submission regarding an assessment of comparison dated 29<sup>th</sup> March 2017 that supported the improved and superior elements for accessibility, as applied in this S96 submission.

The outline of the accessibility report is to:

- Review supplied S96 drawings prepared by ALLEANZA Architects of the proposed development,
- Provide a report that will analyse the provisions of disability design of the development, and
- Recommend solutions to ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS1428 series.

### 2.2. Objectives

The report considers user groups such as students, teachers, parents, visitors and staff. The report attempts to deliver safety, equity, dignity and functionality to people with disabilities inclusive of:

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

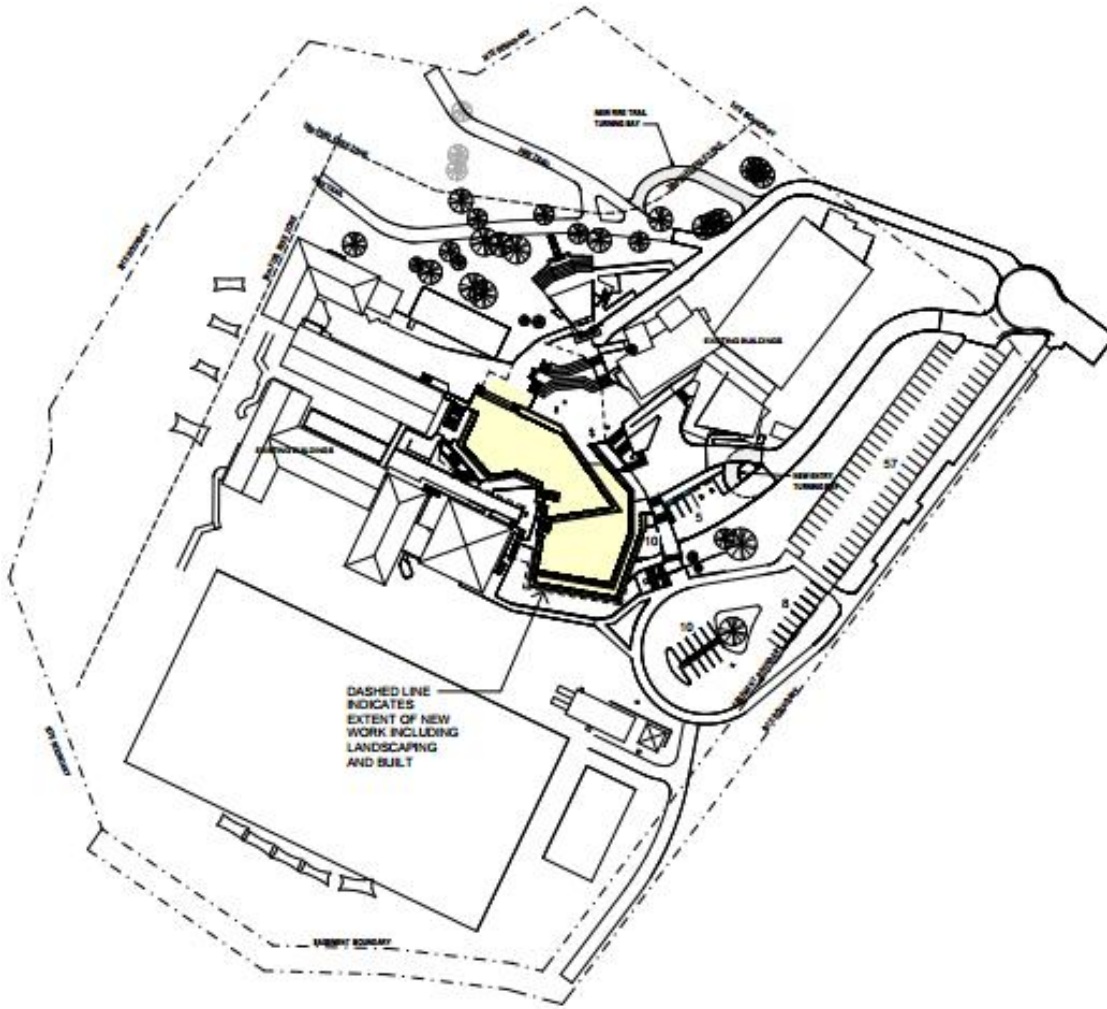
The report seeks to provide compliance with the DDA. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

### 2.3. Statutory Requirements

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

- AS 1428.1:2009 - (Design for Access and Mobility)
- AS 1735.12:1999 - (Lifts, Escalators, & Moving Walks)
- AS1428.4.1:2009 (Tactile Ground Surface Indicators)
- NCC/BCA 2016- Building Code of Australia Parts - D3, E3.6 and F2.4
- DDA Premises Standards 2010 (DDA Access Code)

- Disability Standards for Education 2005 (DDA Standard)
- DDA - Disability Discrimination Act 1992
- DCP Part C – C5.5
- Northern Beaches council 20170608 Prelodgement Report



## SITE PLAN

### 3. SITE LINKAGES

#### 3.1. Main Property Access

The development site is located on Forest Road in Warriewood. Forest Road effectively terminates at the traffic roundabout at the shared vehicle/pedestrian entrance on the allotment boundary. A very steep laneway continues in line with Forest Road before crossing the allotment boundary and terminating in the heart of the site.

According to the minimum compliance of the DDA Access Code and the NCC/BCA, an accessway must be provided to the proposed building, required to be accessible, from the main points of a pedestrian entry at the allotment boundary and from another accessible building connected by a pedestrian link and from any required accessible parking space on the allotment. The building's principal point of entry is on Level 1.

There is no dedicated pedestrian entrance on the allotment boundary. Pedestrians entering the site use the vehicle entry and walk through the on-ground car parking to reach a point where the on-site bus stop and the proposed accessible car parking is located. From this location, an accessible pedestrian ramp will connect to the proposed new building's accessible entrances.

People being dropped off from a bus, taxi or private vehicle will be at the on-site location of the bus stop and proposed accessible parking bays in close proximity. The steep extension of Forest Road that crosses onto the project site also allows taxis and private vehicles to drop a person with a disability into the heart of the development, at the location of the existing accessible parking bays.

Due to the steep nature of the site, a management plan will be prepared to account for the justification of a performance solution, under the BCA, to access the site. This will be lodged for construction certification and considered by the Principal Certifying Authority (PCA). The management plan will consider a resolution of functional/operational elements that include:

- A person with a disability travelling from a nearby home, without a vehicle, needing to enter the site and navigate the pathway to the main accessible entrances of the proposed building,
- A person with a disability who does not have an accessible parking bay or an option available, such as for a major function/event, and must park in Forest Road – having to enter the site with some pre-determined method and
- A person with a disability needing to access all other buildings required to be accessible.

*Recommendations:*

- (i) Ensure all people with a disability can connect to the proposed new building via an accessible path of travel from the existing bus stop and proposed new accessible parking bays.
- (ii) Ensure all people with a disability can navigate from the allotment boundary to the proposed new building according to a method proposed and approved by the management plan that will be assessed at Construction Certification.

## 4. BUILDING INGRESS & EGRESS

### 4.1. Building Entrances

In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, which is on the eastern end of level 1, and through not less than 50% of all pedestrian entrances including the principal pedestrian entrance. An entrance on the western face of the building will also be accessible.

Level 2 provides 4 x accessible entrances and Level 3 provides 6.

All entrance doorways will provide level landings on both sides, a clear opening of at least 850mm, sufficient latch-side clearances, level thresholds and landing gradients not exceeding 1:40. If doorways have multiple leaves, the operable leaf will have a clear opening of at least 850mm and where thresholds no greater than 35mm high exist, a threshold ramp according to AS1428.1 will be deployed. No threshold will exceed 35mm in height, 280mm in length and a gradient of 1:8.

A luminance contrast of at least 30% will be provided around the entry doorways on both sides to clearly define the openings and a contrasting strip will be provided to all glazed doors, sidelights or any panel that could be mistaken for a doorway. This is not required if a chair rail is provided in the glazing design.

Entrance doorways will have an operation force that does not exceed 20N and if the doors are automated to open and close, a threshold ramp will not be included.

#### *Recommendations:*

- (i) Ensure that the main building entrance on Level 1 is designed, architecturally, to clearly indicate that it is the principal point of entry (without requiring signage to clarify).
- (ii) Ensure that no less than 50% of building entrances are accessible and any that are not, are within 50m of an accessible entrance.
- (iii) Ensure all doorways, landings and circulation spaces meet the requirements of AS1428.1.

The above recommendation is achievable and will be incorporated at construction certificate stage.

### 4.2. Emergency Egress

No fire-isolated stairways are shown on the issued drawings.

All associated stairways, internal and external are to comply with Part 11 of AS1428.1.



## 5. PATHS OF TRAVEL

### 5.1. Level 1

The paths of travel to and around the Foyer, Administration, Staff Study and Management areas require wheelchair passing bays of 1800 x 2000mm, circulation at doorways and turning bays if/where required. These have been provided.

The Uniform Shop does not have the required latch-side clearances for accessibility. There is potential to include, in the performance solution management plan, for this door to be held open during all/any trading times.

If Boardroom, Meeting Rooms, Foyer and the like are fitted with fixed amplification systems, hearing augmentation is required in the space(s).

Doorways between Store and Stair as well as between Printer and Corridor are to be adjusted to achieve the require circulation.

Exempt areas per BCA D3.4 are the Bulk Store, Mechanical Plant and the COMMS area.

2 x Sick Bays are provided with dedicated internal toilets. MGAC will support the absence of an accessible toilet in these bays due to the close proximity of a unisex accessible toilet, but 1 x bay will be accessible (with assistance) in every other way.

*Recommendations:*

- (i) Ensure sufficient circulation at doorways and landings.
- (ii) Allow for non-slip finishes throughout.
- (iii) Allow for a 30% minimum luminance contrast strip to all/any glazed doors, sidelights and glazing that can be mistaken for an opening.
- (iv) Provide hearing augmentation if/where required.

### 5.2. Level 2

The paths of travel to and around the Foyer, Administration, Staff Study and Management areas require wheelchair passing bays of 1800 x 2000mm, circulation at doorways and turning bays if/where required. These have been provided.

If Office, Careers Room, Meeting Room, Student Foyer and the like are fitted with fixed amplification systems, hearing augmentation is required in the space(s).

Exempt areas per BCA D3.4 are Plant and the COMMS areas.

*Recommendations:*

- (i) Ensure sufficient circulation at doorways and landings.
- (ii) Allow for non-slip finishes throughout.
- (iii) Allow for a 30% minimum luminance contrast strip to all/any glazed doors, sidelights and glazing that can be mistaken for an opening.
- (iv) Provide hearing augmentation if/where required.

### 5.3. Level 3

The paths of travel to and around the Foyer, Administration, Staff Study and Management areas require wheelchair passing bays of 1800 x 2000mm, circulation at doorways and turning bays if/where required. These have been provided.

If fixed amplification systems are installed, hearing augmentation is required in the space(s).

Exempt areas per BCA D3.4 are Store, Food Services and the COMMS areas.

*Recommendations:*

- (i) Ensure sufficient circulation at doorways and landings.
- (ii) Allow for non-slip finishes throughout.
- (iii) Allow for a 30% minimum luminance contrast strip to all/any glazed doors, sidelights and glazing that can be mistaken for an opening.
- (iv) Provide hearing augmentation if/where required.

#### **5.4. Roof Level**

The building's roof is a common outdoor open space that is required to be accessible to all. 2 x external stairways link pedestrians up to the terraced common area, requiring alternative access by ramp or lift. Access for people with a mobility disability will have use of a ramp per AS1428.1 or a platform lift per AS1735.14.

There are no exempt areas per BCA D3.4.

*Recommendations:*

- (i) Consider adding, at the northern end of the roof area, an access ramp between the 2 x stairways or a stair/platform lift close by.
- (ii) Ensure sufficient circulation at the lift doorway.
- (iii) Allow for non-slip finishes throughout.

#### **5.5. Ramps and Stairways**

There are many stairways indicated on the drawings, which are not identified with numbering. There is also no indication which of the shown stairways are existing versus proposed new.

All proposed new stairways internally and externally are open/common stairs and will satisfy all the requirements of Part 11 of AS1428.1 with respect to circulation, handrails, TGSIs, nosings and the like.

All proposed new ramps and existing ramps that are relied upon to connect to the proposed new building, will satisfy all the requirements of Part 10 of AS1428.1 with respect to gradients, circulation, handrails, TGSIs and the like.

Tactile Ground Surface Indicators (TGSI) will be installed at stairways and ramps in accordance with AS1428.4.1.

*Recommendations:*

- (i) All stairways and ramps are to provide safe, equitable and dignified access to all users of the site, including people with a disability.
- (ii) Ensure, where there is 3m or less distance from the top or bottom of the stairway, the TGSIs are 300-400mm wide and where greater than 3m, the TGSIs are 600-800mm wide.
- (iii) Ensure that all stairways and ramps that provide the required access to the proposed new buildings, internally and externally.

## 5.6. Lifts

There is 1 x passenger lift connecting Levels 1, 2, 3 and Roof. The lift will be sized according to the BCA Part E3.6. These lifts are the vertical accessible path of travel through the building and must fully comply with AS1735.12, providing internal dimensions to satisfy the minimum 1400mm width x 1600mm length required by AS1735.12 and the DDA Premises Standards.

The lifts will have at least 900mm clear door opening, compliant with AS1735.12.

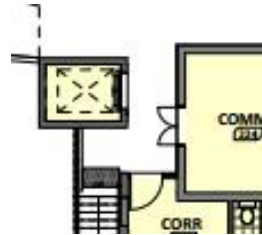
All levels provide at least 1800mm clear depth in front of the lift doors in the lift lobbies on all levels, which is sufficient area to a person using a wheelchair area to turn 180° and manoeuvre in and out of the lift car as well as for 2 x wheelchairs to pass, compliant with AS1428.1.

### *Recommendations:*

- (i) Lift car components (grabrail, control buttons, lighting) to comply with AS1735.12.
- (ii) Lift lobby call button and arrival indicators to comply with AS1735.12.



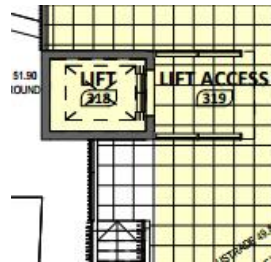
**LEVEL 1**



**LEVEL 2**



**LEVEL 3**

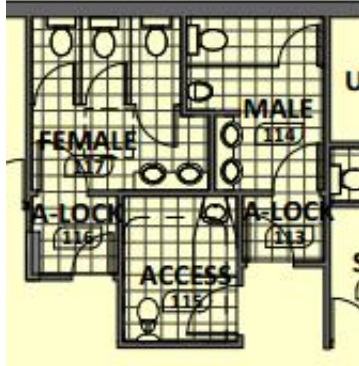


**ROOF**

## 6. SANITARY FACILITIES

### 6.1. Level 1

There is a bank of toilets at the northern end of Level 1 that has a unisex accessible toilet and separate male and female facilities. An ambulant cubicle will be provided in each of the male and female facilities. The provision of sanitary facilities satisfies the requirement of Part F2.4 of the BCA.



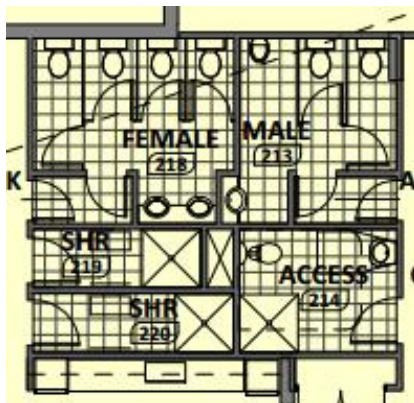
*Recommendations:*

- (i) Provide details at CC showing sufficient dimensional spaces and fittings.

### 6.2. Level 2

There is a bank of toilets in the centre of Level 2 that has a unisex accessible toilet and separate male and female facilities. An ambulant cubicle will be provided in each of the male and female facilities. The provision of sanitary facilities satisfies the requirement of Part F2.4 of the BCA.

The bank includes showers, including an accessible shower in the unisex accessible facility.



*Recommendations:*

- (ii) Provide details at CC showing sufficient dimensional spaces and fittings.

## 7. CAR PARKING

### 7.1. General

2 x new dedicated accessible parking bays are proposed in the vicinity of the existing bus stop. These add to 2 x existing dedicated parking bays located at a higher level, in the heart of the development.

The accessible parking will meet all the requirements of AS2890.6 such as size, location, vertical clearance and shared area.

Both pairs of accessible parking will be connected to the proposed new building by an accessible path of travel – as required by Part D3 of the BCA.

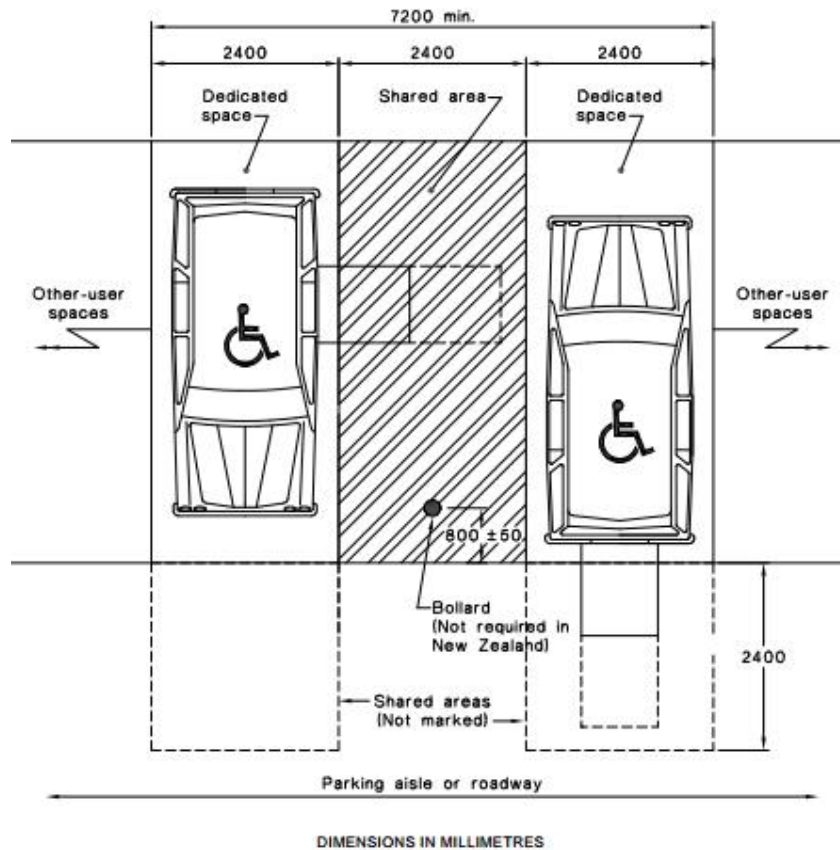


FIGURE 2.3 EXAMPLE OF TWO PARKING SPACES WITH A COMMON SHARED AREA—DIMENSIONS FOR AUSTRALIA ONLY\*

#### Recommendations:

- (i) Ensure that all dedicated accessible parking spaces are on a level, slip resistant surface.