morris goding accessibility consulting

PROJECT ARCHIMEDES

WENONA SCHOOL

255 – 265 MILLER ST, NORTH SYDNEY NSW

ACCESSIBILITY REPORT

Morris Goding Accessibility Consulting

FINAL v5

18 June 2015

REPORT REVISIONS		
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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

The Access Report is a key element in the design development of Project Archimedes: a new Science, Technology, Engineering, Maths (STEM) building located at Wenona School at 255 – 265 Miller Street. The review report is 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 Accessibility Consulting has prepared the Development Application Access Report to provide advice and strategies to maximize reasonable provisions of access for people with disabilities.

The proposed development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas and sanitary facilities comply with relevant statutory guidelines. In general, the development can achieve accessible paths of travel that are continuous throughout. In line with the reports' recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible and ambulant toilets can be readily achieved.

The recommendations in this report are to be developed in the ongoing design development and should be confirmed prior to construction certificate stage. As the project proceeds, further review of documentation is recommended to ensure that appropriate access is provided to and throughout the development. The main recommendations that have arisen from the access review include:

(i) Ensure the existing entrance to the gymnasium, being retained on lower ground level 2 and accessible path of travel to new work areas within existing building are compliant with AS1428.1 under the 'Affected Part' requirements of the DDA Premises Standards.

(ii) Provide designated wheelchair seating spaces at tiered seating areas within Pool Hall spectator areas and Science Amphitheatre compliant with BCA/DDA Access Code Part D3.9 and AS1428.1.

(iii) Provide alternative solution to satisfy BCA performance requirements for the Recreation accessible and standard toilets on lower ground level 1 not being located adjacent to each other (departure from BCA/DDA Access Code Part F2.4 c).

(iv) Ensure all communication and non-fire isolated egress stairs are designed with suitable stair configuration/set-backs to enable required handrail extensions on both sides, compliant with AS1428.1.

(v) Ensure corridor widths leading to accessible toilets on level 1, 2 have door circulation areas, compliant with AS1428.1 and wheelchair turning area (1540mm x 2070mm) within 2m of corridor ends.

2. INTRODUCTION

2.1. General

Morris Goding Accessibility Consulting has been engaged by APP to provide an access design review of Project Archimedes, located at Wenona School, 255 – 265 Miller Street North Sydney NSW 2060.

Project Archimedes is Stage 1 of the Wenona Master-plan. The proposed Science, Technology, Engineering, Maths (STEM) development extends over six storeys. It will link into an existing adjacent school building (gymnasium) known as 249 – 261 Miller Street that is being retained with internal alterations and additions. In addition, a new footbridge link (to replace existing) is proposed to connect to main school complex.

It has been assumed that relevant BCA building classification for building is Class 9b – Assembly building school. There are no new car-parking provisions being provided as part of this development.

The requirements of the investigation are to:

(i) Review supplied drawings/documentation of the development provided.

(ii) Provide a report that will analyse the design of access provisions within the development.

(iii) Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), DDA Access to Premises Standards (including DDA Access Code), Building Code of Australia (BCA) and AS 1428 series.

2.2. Affected Part

This project involves new works within an existing building that will require building approval, therefore the 'affected part' of the existing building is required to be upgraded to be compliant with AS1428.1:2009 in accordance with DDA 2010 Clause 2.1 (5).

The affected part is:

- The principal pedestrian entrance of an existing building that contains a new part, and
- Any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

2.3. Objectives

The Report considers user groups of the facility, which include school students, teachers/staff, parents, and visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

People with mobility impairment (ambulant & wheelchair)

People with sensory impairment (hearing & vision)

People with dexterity impairment

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.

2.4. 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 and/or ramp specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSI's, handrail design, signage, hearing augmentation system etc. that will be included in construction documentation.

2.5. Statutory Requirements

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

- DDA Access to Premises Standards 2010 (including DDA Access Code)
- BCA 2015 - Building Code of Australia
- AS 1428.1 – 2009 (General Requirements for Access)
- AS 1428.4.1 – 2009 (Tactile Ground Surface Indicators)
- AS 1735.12 – 1999 (Lifts, Escalators, & Moving Walks)
- North Sydney City Council DCP 2013 (which references AS1428.2)
- Disability Discrimination Act 1992

3. SITE LINKAGES

3.1. External Access

Wenona School is an operating junior and secondary school for girls in North Sydney, NSW. It is large complex of associated buildings that are located both facing and between Walker Street, Miller Street, Elliot Street, Ridge Street and existing built development.

Project Archimedes is Stage 1 of the Master-plan development for Wenona. The Master-plan will integrate development with a number of existing school facilities and introduce new connections to unify the school campus. A key feature is the 'Wenona School Spine' a new circulation path that, as part of future stages will provide a continuous linkage through the school from Miller through to Walker Street.

Project Archimedes will have two new main points of pedestrian entry at the school site allotment boundary. The first is located at 263-265 Miller Street (ground level), the western termination of the 'Wenona School Spine' and a main entry point to the Science, Technology, Engineering, Maths part of the STEM building. The second located at 6 Elliot Street (lower ground 2 mezzanine) is the main entry point to the Recreation part of the STEM building.

The paths of travel to the proposed development from the Miller Street and Elliot Street entry points are direct off public pedestrian footpath areas. The internal linkage from the proposed new footbridge over Elliot St (to replace existing footbridge) is from an existing adjacent building in the main school complex.

Based on the information provided, external access to the development from the main points of entry at the Miller Street and Elliot Street allotment boundary and from footbridge linkage (from existing building), can achieve compliance with AS1428.1 and BCA/DDA Premises Standards Part D3.2.

4. INGRESS & EGRESS

4.1. Main Entry - Wenona School Spine

The main entry access to the STEM development is at ground level. A large sliding gate will be fixed in the open position during operational hours and provide a suitable width opening in excess of 1000mm clear width. Directly beyond, there will be security barriers with a wide aisle of 1000mm min. width that is a suitable for people using wheelchairs and other mobility aids under AS1428.1.

From the security barrier the 'Wenona School Spine' provides a direct accessible path of travel via to Main Reception area, passenger lift, internal stairs and primary circulation paths that enable access to and within building areas. The path of travel exceeds 1800mm clear width, which is adequate clearance for two persons using wheelchairs to pass each other in an equitable and dignified manner, compliant with AS1428.1 and the DDA Premises Standards.

4.2. Elliot Street Entrance

The main entry access to the Recreation part of the STEM development is at lower ground 2 mezzanine level, facing Elliot Street. A doorway is not currently shown but can be easily achieved to provide 850mm min. clear width in compliance with AS1428.1.

A continuous path of travel to the main stairs, passenger lift, and doorway to Sports Foyer area that connects to circulation paths to and within building is achievable. The paths of travel exceeds 1800mm clear width which is adequate clearance for two persons using wheelchairs to pass each other in an equitable and dignified manner, compliant with AS1428.1 and the DDA Premises Standards.

The 1:25 walkway is suitable incline walkway for people with disabilities under AS1428.1 to enter the building. Following on is a 1:14 max. gradient ramp with 1200mm min. length level landing areas at top and base areas that leads to lift lobby. The 1:14 entry ramp can be recessed at top and base (or have its side walls extended) to cover the required handrail extensions on both sides of the ramp, compliant with AS1428.1.

The level landing in front of lift and gym 2 foyer doors is at least 1800mm min. length to accommodate 1540mm width x 2070mm length wheelchair turning space to manoeuvre to enter and exit lift and a passing space for two wheelchairs. The level landing at top of stairs down to pool level extends across the full width of stairs and is at least 1000mm min. length to accommodate required handrails and required TGSIs on a level surface.

Recommendation:

(i) Provide handrails on both sides of the Foyer entry stair, compliant with AS1428.1.

4.3. Existing Building– Affected Part Entrance

The existing entrance to the gymnasium being retained is located on lower ground level 2. Entry is via 3 sets of double-hinged doors that are shown to be 850mm min. clear width opening each leaf with suitable circulation on both sides, compliant with AS1428.1.

From the entry area, an existing stair connects up to lower ground 2 mezzanine level, where the new sports foyer and existing gymnasium 2 are located. An existing corridor provides a direct path of travel to a new connecting entry door to the new development with suitable width and circulation areas, compliant with AS1428.1 to Pool Entry Foyer.

It has been advised that this may be a hold open door (to close in emergency situations only).

The paths of travel exceeds 1800mm clear width which is adequate clearance for two persons using wheelchairs to pass each other in an equitable and dignified manner, compliant with AS1428.1 and the DDA Premises Standards.

It is noted that there is an existing passenger lift (within gymnasium building) being retained that will connect to the same levels of new STEM building from ground level up to level 2. The new passenger lift will provide the required accessible path of travel within the existing building to satisfy AS1735.12 and AS1428.1:2009 (refer to Section 4.2).

Recommendation:

(i) Ensure the existing entrance to the gymnasium, being retained on lower ground level 2 and accessible path of travel to new work areas within existing building are compliant with AS1428.1 under the 'Affected Part' requirements of the DDA Premises Standards.

4.4. Emergency Egress

There are 3 egress stairs within the new building that connect upper and lower levels to external entry levels. The egress stairs appear fire-isolated at some but not all of the levels they serve. Some may also be used for communication purposes however, it has been advised that school policies may restrict use of egress stairs for students, unless in emergency situations.

Where provided, the doors to the egress stairs have 850mm min. clear width, which will allow a wheelchair user to pass through in an emergency.

The accessible point of egress from the building are via the main entry doors at Wenona School Spine, ground level, Elliot Street Entry, lower ground mezzanine 2 level and through existing Quadrangle near adjacent existing building, ground level.

Recommendations:

(i) Ensure all non-fire isolated egress stairs are designed with suitable stair configuration/set-backs to enable required handrails with extensions on both sides, compliant with AS1428.1.

(ii) Provide at least one accessible handrail within all fire-isolated stairs, compliant with AS1428.1 as required under BCA 2015 part D2.17.

(iii) Consideration for the client to provide a documented management plan for emergency egress which would include the use of a fire warden to assist students/staff /visitors with disabilities (advisory).

(iv) Consideration for emergency services to include audible and visual warnings and signals to assist people with sensory disabilities (advisory).

5. VERTICAL CIRCULATION

5.1. General

Continuous accessible paths of travel from the two new entrances to the development (Wenona School Spine and Elliot Street Entry) to and within all new upper and lower building levels is achievable via new centrally located passenger lift. Internal stairs are also provided for vertical circulation to connect various building levels for ambulant users.

Generally the primary circulation paths and main corridors have greater than 1800mm clear width that will allow two people in wheelchairs the ability to pass each other travelling in opposite directions and a person using a wheelchair to turn 180°, compliant with AS1428.1 and the DDA Premises Standards.

5.2. Passenger Lift

The new passenger lift will provide continuous access to all building levels. The lift connects both main building entrance levels down to the LG3 level BOH area and up to level 2 Senior Ecosystem.

The lift is centrally located between the new and existing building (gymnasium) to improve access between the various building levels and interface areas. For this reason the lift also has a two sided lift car.

The passenger lift shaft has approx. dimensions of 2400mm x 2400mm which can achieve a lift car with internal dimensions of approx. 1400mm width x 1700mm length, in line with AS1735.12, DDA Premises Standards Table E3.6 and North Sydney Council DCP (that references AS1428.2).

On each level, the lift lobby circulation areas achieve at least 1800mm clear width in front of lift doors to enable manoeuvring and appropriate passing spaces for two wheelchair users, compliant with AS1428.1.

Recommendation:

(i) All Lift car components (eg. grabrail, control buttons, lighting etc.) to comply with AS1735.12 and the DDA Premises Standards Part E3.6.

5.3. Stairs

There are numerous new communication stairs within the building that connect various levels areas. These include stairs between:

- Elliot Street Entry, LG2 mezzanine level to Pool Lobby, LG2 level
- Pool Entry Foyer, LG2 level to Gymnasium Foyer, LG2 mezzanine level
- Gymnasium Foyer, LG2 mezzanine level to Sports Foyer, LG1 level
- Sports Entry, LG1 level to Wenona School Spine, ground level
- Wenona School Spine, ground level to General Terrace, level 1

All stairs are located in reasonable proximity to the new passenger lift to enable ease of access. There are direct sight lines to the lift from most stairs however at level 1 and 2, there are doorways located between and the distance is increased which will require additional way-finding signage. All stairs can achieve suitable configuration and set-backs

at top/base areas to enable the required handrails with extensions to be provided in compliance with AS1428.1. This will be further reviewed in ongoing development stage.

There are also various existing stairs within the existing gymnasium building that are being retained. It is noted that as stairs do not strictly form part of the 'accessible path of travel' any existing stairs that are not being modified or form part of the building application are not required to be upgraded to comply with AS1428.1 under the 'Affected Part' requirements of DDA Premises Standards.

Recommendations:

(i) Provide handrails on both sides of all communication stairs, with suitable set-backs at top and base, compliant with AS1428.1.

(ii) Any stairs with exposed undersides to make provision for appropriate barriers or access features to assist people with vision impairment, compliant with AS1428.4.1.

6. RECREATION FACILITIES AND AMENITIES

6.1. Paths of Travel

The lower levels of the STEM building (lower ground 3 level up to lower ground level 1) are dedicated Recreation areas including: BOH storage areas; pool zone including reception, main pool, learn to swim pool, associated seating areas and change amenities, staff area, first aid; entry lobby, sports foyer, gymnasium 2 (existing), sports viewing areas; multifunctional sports space (GPLA, cardio, free gym), associated staff and sanitary facilities.

In general, an accessible path of travel from the Elliot Street Entry to and within all common-use areas on all levels of the Recreation development is achievable as required under the DDA Premises Standards Table D3.1. It is to be noted that all doors on required accessible paths of travel (excluding areas exempt under Part D3.4) are to achieve 850mm min. clear widths and appropriate circulation areas, compliant with AS1428.1:2009. Further review of doors will be made during design development stage.

The new doorway connection at the lower ground 2 level, will enable access to/from the main entrance of the existing gymnasium building (Affected part) and the existing passenger lift that is accessed outside of the proposed development to the new development.

The main paths of travel to and around Pools and Sports zones have suitable clear width that will allow wheelchair access with appropriate turning and passing areas in accordance with DDA Premises Standards and AS1428.1:2009.

Within staff office areas linear paths of travel of at least 1000mm clear width can be achieved with increased turning bays at corridor ends for wheelchair users to turn or manoeuvre as required by AS1428.1. Some of these doors and/or circulation areas will require review at design development stage to provide the necessary doorway circulation and wheelchair turning spaces (1540mm width x 2070mm length) within 2m of ends, with the intended fit-out.

Recommendations:

(i) Lower ground 1 level: The 2 x steps in corridor to egress stairs and toilets (approx. 350mm height variation) to be designed as stair with handrails on both sides, compliant with AS1428.1. This will affect their position within the corridor.

(ii) Ensure common area floor surfaces required to be accessible are suitably slip resistant and traversable by a wheelchair or walking frame, compliant with AS 1428.1:2009 and HB198/AS4856 (wet pendulum method).

6.2. Swimming Pools

There are two Pool Halls (Main Pool and Learn to Swim Pool) at lower ground level 2, accessed from Pool Entry Foyer, and passenger lift. It is understood auto sliding doors are proposed to provide secure entry access to the pool halls. These doors can achieve suitable door clearances and circulation, to satisfy AS1428.1.

The Main Pool has a perimeter of more than 70m and will require access to and within by either a fixed ramp, zero depth entry or platform lift and aquatic wheelchair in accordance with BCA and DDA Premises Standards Part D3.10 (a), (b) or (c) and Part D5.

The Learn to Swim pool perimeter is more than 40m and will require also require access into the pool by one of the above methods OR by a sling style hoist in accordance with BCA and DDA Premises Standards Part D5.5 and Figure D5.7 due to its reduced size.

It has been advised the client is currently considering a platform lift model known as 'Pool Pod' to service/enable access into both swimming pool areas. This approach appears suitable in line with equity and dignity principles however needs further review to ensure it satisfies the dimensions and weight capacity etc. under BCA and DDA Access Code.

There are continuous paths of travel to the tiered spectator seating at either end of both pools and to the associated sanitary/change facilities and the staff areas via the entry foyer. The proposed seating capacity will determine the number and grouping of wheelchair seating spaces required. The connecting doors between pool halls will require review to ensure suitable door circulation areas are provided. This is achievable.

Recommendations:

(i) Provide designated wheelchair seating spaces at tiered spectator seating areas within Pool Hall areas, compliant with BCA/DDA Access Code Part D3.9 and AS1428.1. Note: Required wheelchair spaces need to be adjacent to other seating in the row, which will require a recessed zone at base rows.

(ii) The stepped aisles to tiered seating will require a continuous handrail on all external sides, compliant with AS1428.1. Consideration for smaller discontinuous handrails on internal sides for improved access and safety (advisory).

6.3. Gymnasium2

Continuous access to existing gymnasium 2, lower ground 2 mezzanine level from the main entry is achievable via the new gym foyer which has a level transition to the existing area. Various new doorways are provided to gymnasium 2 that can achieve compliance with AS1428.1 in terms of clear width and circulation space.

The gymnasium is a large open plan area that will allow wheelchair access with appropriate turning and passing areas in accordance with DDA Premises Standards and AS1428.1:2009.

Recommendation:

(i) All new work to and within the existing gymnasium 2 including doorways, floor surfaces etc. on required accessible paths of travel (excluding areas exempt under Part D3.4) to be compliant with AS1428.1:2009.

6.4. Sports Zone

Continuous access to multifunction sports zone, lower ground 1 from main entry is provided via passenger lift to and through the sports foyer, which is at the same level. The sports zone is a large open plan space with central circular area divided into various functions. Suitable paths of travel for wheelchair access with appropriate turning and passing areas in accordance with DDA Premises Standards and AS1428.1:2009 can be achieved.

There are various doorways to associated staff offices and amenities located around the area that can achieve compliance with AS1428.1 in terms of the required min. 850mm clear width opening and door circulation space. Access to the sports viewing area on

lower ground 2 mezzanine achievable via doors from the new gym 2 foyer that can achieve compliance with AS1428.1.

Recommendation:

(i) Ensure continuous access and level floor transitions to and within all multifunction sports and viewing areas, compliant with AS1428.1.

6.5. Unisex Accessible Toilets and Combined Toilets/Showers

There are 3 x unisex accessible toilets indicated as follows:

- 1 x Accessible combined WC (LH) /Shower, Main Pool, LG2:
- 1 x Accessible WC (LH) (staff only), Main pool, LG2:
- 1 x Accessible WC, Sports Zone (RH), LG1 level

At least 1 x accessible WC provided in Sports Zone, LG1 level where another 1 x bank of standard sanitary facilities (near lift) are provided. As accessible and standard toilets are not located directly adjacent to each other, an alternative solution may be required to satisfy Part F2.4 (c) performance requirements.

At least 2 x accessible WCs provided within Pool Zone, LG2 level where another 4 x banks of sanitary facilities (across Main, LTS Pool, Staff E.O.J) are provided. This ensures accessible facilities are provided at not less than 50% of all banks on this storey. At least 1 accessible shower is provided within Pool Zone, LG2 level where another 10 plus showers (across student and staff facilities) are provided.

The above provision is a suitable number of accessible toilets and showers proposed in the building in accordance with the DDA Premises Standard and the BCA Part F2.4.

It is understood that aside from staff only accessible toilet, located within separate Staff area (LG2 level), the combined accessible WC/shower (LG2 level) and accessible WC facility (LG1 level) will be available for shared use of students, visitors and staff with disabilities if needed.

The accessible facilities are suitably accessed from a common-use area not reserved for single sex use. Entry doors can achieve 850mm min. clear width door, and appropriate door circulation area compliant with AS1428.1.

The overall dimensions of the 2 x unisex accessible toilets and 1 x accessible combined toilet/shower can achieve circulation requirements of AS1428.1:2009.

Recommendations:

(i) Provide an alternative solution to satisfy BCA performance requirements for the Recreation accessible and standard toilets on lower ground level 1 not being located adjacent to each other (departure from BCA/DDA Access Code Part F2.4c).

(ii) If there are any potential issues with staff member with a disability being able use the Accessible WC/Shower in Main Pool, LG2 then review would be required to provide a dedicated staff accessible WC/shower facility.

(iii) Given the two accessible facilities on lower ground level 2, provide staff accessible facility with mirror image layout (to become RH) so there is a suitable balance of left and right hand accessible WC facilities provided within the development.

6.6. Ambulant Toilets within Standard Toilet banks

There are 5 x standard toilet banks indicated as follows:

- Change 1, 3 cubicles, Main Pool, LG2:
- Change 2, 4 x cubicles, Main Pool, LG2:
- 1 x standalone toilet (student/visitor use – presumed unisex), LTS pool, LG2:
- Staff E.O.J toilets, 2 x cubicles, LG2:
- 2 x cubicles (student use), Sports Zone, LG1 level

At this stage ambulant cubicles for people with disabilities are indicated within the above toilet banks as required by the DDA Premises Standards with minor review of the maximum clear width required for the cubicles. It is noted that not all toilet banks are directly adjacent to accessible toilets however all require at least one ambulant cubicle under Part F2.4. An exception has not been made for the toilet in LTS pool (not adjacent to accessible toilet) as it is presumed that this is the only unisex standard toilet facility provided on this storey.

Recommendation:

(i) Ensure the ambulant cubicles (900-920mm max. width) for people with disability in each of the standard toilet banks, to satisfy BCA and DDA Premises Standards Part F2.4 (c) are compliant with AS1428.1. This is achievable.

7. STEM FACILITIES & AMENITIES

7.1. Paths of Travel

The upper 3 levels of the STEM building (from ground level up to level 2) are dedicated Science, Technology, Engineering, Maths areas that include: main entrance, reception, food technology, café, science hubs and classrooms; senior ecosystem, seminar room, outdoor learning areas, terrace, staff rooms and work-spaces, quiet areas and associated amenities and sanitary facilities.

In general, an accessible path of travel from the Wenona School Spine Entry to and within the common-use areas on all levels of the STEM development is achievable as required under the DDA Premises Standards Table D3.1 via the passenger lift.

The main paths of travel are at least 1800mm clear width that will allow two people in wheelchairs the ability to pass each other travelling in opposite directions and person in a wheelchair to turn 180°, compliant with AS1428.1 and the DDA Premises Standards. In general, within 2m of corridor ends a suitable turning space can be achieved as required.

The interfacing of new and existing building levels provides accessible connections between the new and existing adjacent building existing passenger lift (gymnasium building) that will now be able to be accessed internally through the proposed development to the new development.

The main paths of travel leading to and key learning zones, associated offices and amenities have suitable clear width that will allow wheelchair access with appropriate turning and passing areas in accordance with DDA Premises Standards and AS1428.1:2009.

Within staff office areas linear paths of travel of at least 1000mm clear width can be achieved with increased turning bays at corridor ends for wheelchair users to turn or manoeuvre as required by AS1428.1.

Recommendations:

(i) Continuous access is required to and through any external entrances to/from outdoor areas (eg. café hub/existing quadrangle, outdoor learning area, swamp, terrace) with inclusion of appropriate hardstand paths of travel compliant with AS1428.1.

(ii) Ensure common area floor surfaces required to be accessible are suitably slip resistant and traversable by a wheelchair or walking frame, compliant with AS 1428.1:2009 and HB198/AS4856 (wet pendulum method).

7.2. Doors

The doors to the Science Rooms, Learning Areas, Staff workspaces, Seminar rooms and offices are mostly shown as hinged manual doors. There are some auto-sliding doors indicated tin areas such as; outdoor learning areas, level 1. Some areas include bi-fold concertina doors, which can provide a barrier to people with disabilities, when not provided adjacent to a hinged door.

Generally, doorways provide at least 850mm clear width door with suitable door circulation areas on both sides achievable, compliant with AS1428.1. This will be reviewed further and developed at design development stage for all common-use doors (ie. not excluded under Part D3.4) to areas that are required to be accessible.

Recommendation:

(i) Provide at least one hinged door adjacent to any bi-fold concertina door systems eg. level 2 terraces, compliant with AS1428.1, to ensure suitable accessible entry.

7.3. Senior Ecosystem Science

The Senior Ecosystem is a collaborative open plan space located over levels 1 and 2 of the building. The larger area is located on level 1 and it includes all associated common-use areas and amenities (eg. kitchen/social area, seminar room, staff rooms and outdoor terrace, learning area/swamp) in addition to desk/work-space areas. The smaller level 2 area includes desks/work-space area, quiet zone, outdoor terrace and sanitary facilities.

The space is divided by an Amphitheatre, with tiered seating and stepped aisles either side that will enable direct access for ambulant users from level 1 and 2 areas. Wheelchair seating spaces will be required. The proposed seating capacity will determine the number and grouping of wheelchair seating spaces required.

There is an alternate accessible path of travel between level 1 and 2 via the passenger lift that is located within reasonable proximity (within 50m distance). Due to the need to exit the space to access the lift, appropriate directional signage will be required at top and base of stairs and to identify the accessible path of travel to the alternative accessible lift and assist way-finding on both levels. This is deemed reasonable, given that similar function and amenity is provided in both level 1 and 2 areas and an accessible connection travel is available to both areas.

Recommendations:

(i) Provide designated wheelchair seating spaces at tiered Amphitheatre seating areas, compliant with BCA/DDA Access Code Part D3.9 and AS1428.1. Note: Required wheelchair spaces need to be adjacent to other seating in the row, which will require a recessed zone at top and base rows.

(ii) The stepped aisles to tiered seating will require a continuous handrail on all external sides, compliant with AS1428.1. Consideration for smaller discontinuous handrails on internal sides for improved access and safety (advisory).

7.4. Staff Areas

There are various staff rooms and offices throughout the various levels. The main workspace is on level 1, which is entered from the general terrace. There is direct stair access to the general terrace from the Wenona School Spine, ground level. There is alternate accessible path of travel to general terrace via the passenger lift and through the Senior Ecosystem space, level 1. Due to the need to use the Senior Ecosystem space to access the lift, appropriate directional signage will be required at top and base of stairs to identify the accessible path of travel to the alternative accessible lift facility and assist way-finding on both levels. This is deemed reasonable, for staff members given the proximity of lift and the layout of areas.

7.5. New Footbridge (Adjacent School Complex)

There is a new proposed covered footbridge (to replace existing footbridge) at ground level between the Wenona School Spine and the adjacent school building complex on other side of Elliot Street.

The footbridge has greater than 1800mm min. clear width which is suitable circulation area for wheelchair access turning and passing areas in accordance with DDA Premises Standards and AS1428.1:2009.

Based on RL information provided there is a height variation of approx. 710mm between the finished floor level of the buildings which will require footbridge to have a gradient of approx. 1.28, which is acceptable gradient for a walkway for people with disabilities under AS1428.1. The bridge form and detailing will be further developed at design development stage to ensure suitable access for all users.

(i) Ensure new footbridge linkage has level landing areas (no steeper than 1:40) on either side that provides level transition with the new and existing floor surfaces, designed in compliance with AS1428.1.

7.6. Unisex Accessible Toilets

There are 3 x unisex accessible toilets provided adjacent to standard toilet banks as follows:

- 1 x Accessible WC, near new bridge connection, ground level:
- 1 x Accessible WC, near Lift Lobby, level 1:
- 1 x Accessible WC, near Lift Lobby, level 2:

It is understood that the above accessible WC facilities are for shared use of students, visitors and staff with disabilities if needed.

At least 1 x accessible WC is provided on each storey where another 1 x bank of standard sanitary facilities is provided and at not less than 50% of all banks on level 1 and 2 where there is more than 1 bank to satisfy the BCA and DDA Premises Standard Part F2.4.

The accessible toilets are accessed from common-use corridor areas not reserved for single sex use. Entry doors can achieve 850mm min. clear width door, compliant with AS1428.1. Review of the corridor widths outside the accessible toilets on level 1 and 2 (near service cupboards) is required to ensure appropriate door circulation area and turning space.

The overall dimensions of the accessible toilets are sufficient to satisfy circulation requirements of AS1428.1:2009 for a WC and basin. There are a balance of left hand and right hand accessible WC transfer pans within the STEM building to satisfy Part F2.4 requirements.

Recommendation:

(i) Ensure corridor widths leading to accessible toilets on level 1, 2 have door circulation areas, compliant with AS1428.1 and wheelchair turning area (1540mm x 2070mm) within 2m of corridor ends.

7.7. Ambulant Toilets within Standard Toilet banks

There are 6 x standard toilet banks indicated/located as follows:

- 2 x cubicles (staff only), Student Hub, ground level:
- 4 x cubicles, near Spine, ground level:
- 3 x cubicles, near Lift Lobby, level 1:

- 2 x cubicles (staff only), Staff Workspace, level 1:
- 3 x cubicles, near Lift Lobby, level 2:
- 2 x cubicles, Senior Ecosystem, level 2:

At this stage ambulant cubicles for people with disabilities have not been indicated within the above toilet banks as required by the DDA Premises Standards however can be achieved. It is noted that not all toilet banks are directly adjacent to accessible toilets, which triggers requirement for at least one ambulant cubicle under Part F2.4.

Recommendation:

(i) Provide at least 1 x ambulant cubicle for people with disability in each of the standard toilet banks, (adjacent to accessible toilets) and in staff only toilet bank on level 1 (due to being for unisex use), to satisfy BCA and DDA Premises Standards Part F2.4 (c) and AS1428.1.

8. MISCELLANEOUS

8.1. Hearing Augmentation

Hearing augmentation is required where inbuilt PA systems are installed (excluding those for emergency warning only) to assist people with hearing impairment in all 9B rooms in accordance with the DDA Premises Standard and BCA Part D3.7. Of particular note are the following areas:

- Pool Halls with spectator seating
- Gymnasium and Multifunctional Sports Area
- Amphitheatre
- Science Labs/Teaching Areas
- Seminar and Meeting Rooms
- Informal Learning Areas

Recommendations:

(i) Ensure that hearing augmentation induction loops extend to at least 80% of the floor area space where covered by the inbuilt amplification systems (not used only for emergency warning) within Class 9b rooms (95% for systems using receivers) in line with DDA Premises Standards and BCA Part D3.7.

(ii) If hearing augmentation is provided within the Pool Hall, any screen or scoreboard that can display public announcements is to be capable of supplementing the public address system (excluding if only used for emergency warning).

8.2. Signage

Recommendations:

(i) Identification and directional signage is required to identify sanitary facilities, accessible facilities and paths of travel to these areas when not clearly apparent eg. sanitary facilities, accessible toilets, ambulant toilets, hearing augmentation systems, passenger lifts etc.

(ii) All signage is to comply with DDA Premises Standards, BCA Part D3.6 and AS1428.1 requirements.

8.3. Reception/Service Counters

Recommendation:

(i) Consideration to provide a lowered accessible counter area at all public reception/service desks in line with the equity and dignity principles of the DDA eg. pool reception, gymnasium foyer, general reception (science)café hub service counter, compliant with AS1428.2 (advisory/good practice).

8.4. Lighting

Recommendation:

(i) Consideration for all lighting levels to be in accordance with AS1428.2 (advisory).