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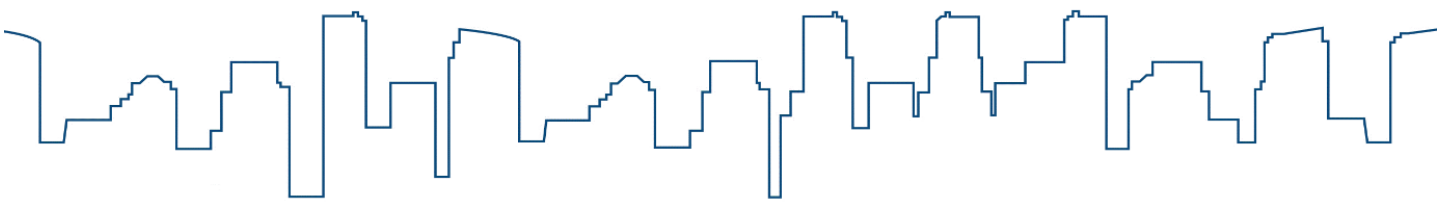
Ref: 17165-Waitara-Access Report R3-201217

WAITARA PUBLIC SCHOOL

DISABILITY DISCRIMINATION ACT (DDA) COMPLIANCE REPORT
FINAL DA STAGE REVIEW

DECEMBER 2017

Report prepared for	GHD Woodhead Level 15,133 Castlereagh Street Sydney NSW 2000 Attention: Sait Buzgan
Report prepared by	Metro Building Consultancy Suite 211, 25 Berry Street, North Sydney NSW 2060 Consultant: Sean Moore
Report reference	17165R03- Waitara Access
Job number	17165
Date	20th December 2017



CONTENTS

DOCUMENT ACCEPTANCE

Company	Name	Signed	Date
Metro Building Consultancy	Sean Moore		20/12/17

REVISION HISTORY

Description	Prepared by	Revision No.	Date
DDA Report	Sean Moore	R03	20/12/17
DDA Report	Sean Moore	R02	18/08/17
DDA Report	Sean Moore	R01	26/05/17

1.0 Introduction and Documentation

Introduction
Metro Building Consultancy have been engaged to carry out a review of the schematic / DA design documentation and prepare a Disability Discrimination Act (DDA) Compliance Report commenting on the compliance of the design for the proposed new works to Waitara Public School.

The information submitted to date has been reviewed for compliance with the deemed to satisfy requirements of Part D3 and F2 of the Building Code of Australia 2016, the Disability Access to Premises Standards 2010, the Disability Discrimination Act (DDA) 1992 and the relevant parts of AS1428.1 2009 and AS1428.4.1 2009.

This report is for the exclusive use of GHD Woodhead and cannot be used for any other purpose without the prior permission of Metro Building Consultancy. The report is only valid in its entire form.

Documentation available and assessed
The drawings provided by GHD WOODHEAD to Metro Building Consultancy on 18/12/17 have been assessed for compliance to the Building Code of Australia 2016. The list of drawings reviewed is as per the table in Appendix A of this report.

Application of Building Code of Australia 2016
Clause 109R (2) of the Environmental Planning and Assessment Act states that the BCA that is applicable to the project is the one in force at the time of the date of invitation to tender. As the tender date is due to be prior to 01/05/17 the BCA that is applicable to the project is BCA 2016.

> 109R Building, demolition and incidental work
> (2) Crown building work cannot be commenced unless the Crown building work is certified by or on behalf of the Crown to comply with the technical provisions of the State's building laws in force as at:
> (a) the date of the invitation for tenders to carry out the Crown building work, or
> (b) in the absence of tenders, the date on which the Crown building work commences, except as provided by this section.

2.0 Use and class of building

The following table lists the uses and classifications of the proposed new building.

Level	Use	Class	Approx. floor area
Level 01	Staff, Administration, Hall, Canteen and Classrooms	Class 5 & 9b	1,590m2
Level 02	Classrooms and amenities	Class 9b	1,065m2
Level 03	Classrooms and amenities	Class 9b	2,135m2
Level 04	Classrooms and amenities	Class 9b	2,135m2

The building has a rise of storey of 4.
The building has an effective height of 11.7m.

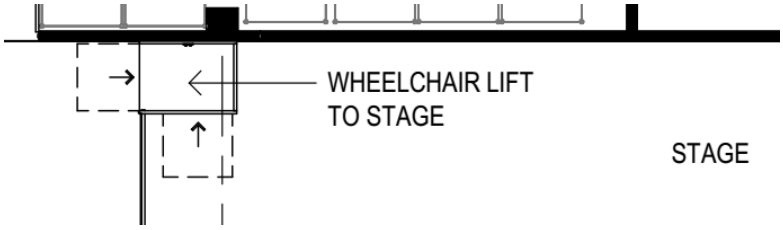
3.0 Mandatory Requirements

General building access requirements

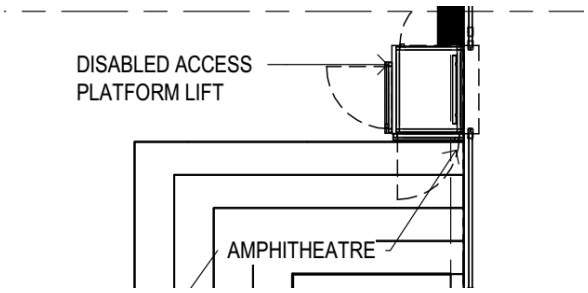
Disabled access is required to be provided to and within all areas normally used by the occupants including to any storerooms.

Stage

The stage is required to be accessible and it is proposed to be provided with a platform lift.



A platform lift is also proposed for the external amphitheatre.



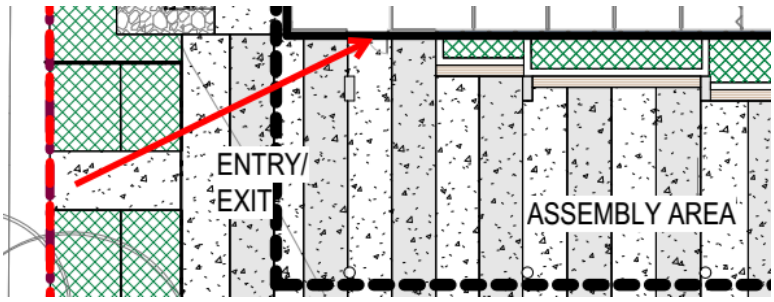
Access to buildings

Disabled access is required to be provided to the proposed building from:

- the existing and proposed 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 carparking space on the allotment.

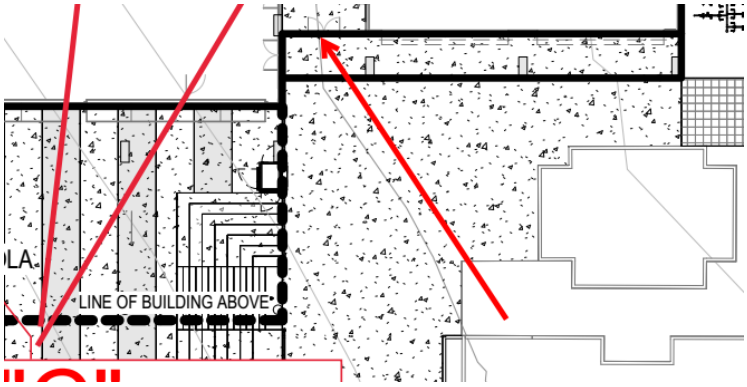
Pedestrian entry points

The proposed new main pedestrian entry into the school from Myra Street is required to be accessible and to provide an accessible path of travel to the existing and proposed buildings on site. Note that the new pathways on site should be on grade or have a maximum gradient of 1:40 if a ramp or walkway is not provided.



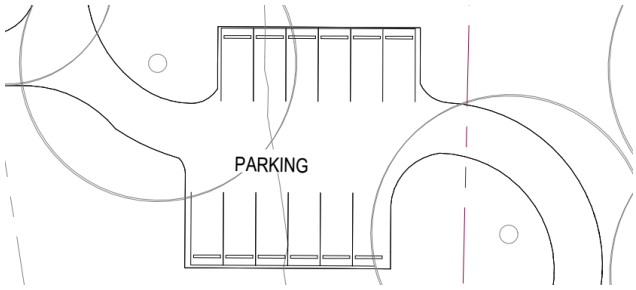
Access from other accessible buildings

An accessible path of travel is required to be provided to the building from the other accessible buildings on site. A stairs must not form the only pedestrian path from the rest of the school site, a ramp or walkway is also required.



Accessible carspaces

Confirm if the site is proposed to be provided with an accessible carspace. If it is disabled access is required to be provided from the accessible carspace to the proposed building. Note the addition of new carspaces on site will trigger the requirement for an accessible carspace to be provided.



Accessible entries to the building

In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and through not less than 50% of all pedestrian entrances including the principal pedestrian entrance.

The entrances to the building on the ground floor are required to be accessible.

Should any building entry not be accessible it must be located not more than 50m from an accessible entry.

Access within buildings

Continuous accessible paths of travel

The minimum unobstructed height of a continuous accessible path of travel is required to be 2m or 1.98m at doorways and the minimum width is required to be 1m and 850mm at doorways.

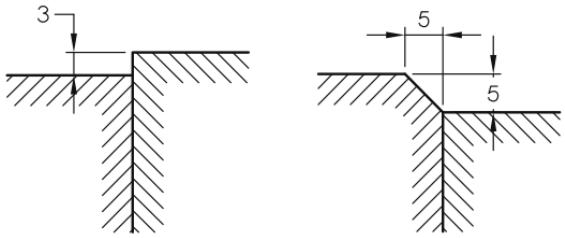
Fixtures and fittings such as lights, awnings, operable parts of windows, telephones, skirtings, essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards are not permitted to intrude into the minimum unobstructed width.

1.8m wide x 2m long passing spaces are required to be provided within 20m intervals on those parts of an accessway where a direct line of sight is not available.

Turning spaces complying are required to be provided within 2m of the end of accessways where it is not possible to continue travelling along the accessway and at maximum 20m intervals along the accessway.

Floor or ground surfaces on continuous accessible paths of travel and circulation spaces

The access requirements include a requirement that the abutment of surfaces shall have a smooth transition. Design transition shall be 0 mm. Construction tolerances shall be 0 ±3 mm for vertical changes in level and 0 ±5 mm provided the edges have a bevelled or rounded edge to reduce the likelihood of tripping.



(a) Change in level

The pile height or pile thickness of carpet is required to not exceed 11mm and the carpet backing thickness shall not exceed 4 mm.

Grates provided along a continuous accessible path of travel and in circulation spaces are required to comply with the following:

- Circular openings shall be not greater than 13 mm in diameter.
- Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.

Slip Resistance

A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use a wheelchair and those with an ambulant or sensory disability. The following table lists the minimum slip resistance classifications for common locations.

Location	Wet pendulum test	Oil-wet inclining platform test
External ramps steeper than 1:14	P5	R12
External ramps and walkways not steeper than 1:14	P4	R11
Wet areas within schools eg toilets	P3	R10
Transitional areas within schools	P2	R9
Dry areas within schools	P1	R9
Stair tread or landing surface - Dry	P3	R10
Stair tread or landing surface - Wet	P4	R11
Stair nosing or landing edge strip - Dry	P3	-
Stair nosing or landing edge strip - Wet	P4	-

Parts of buildings to be accessible

Walkways

Where walkways are provided on site they are required to be provided with landings at all changes in direction and at every doorway, gate, or similar opening.

Landings are required to have a minimum length of 1200mm where there is no change in direction and a minimum length of 1500mm where there is a change of direction not exceeding 90°. In addition, the internal corner shall be truncated for a minimum of 500mm in both directions for landings provided where there is a change in direction.

Landings provided for walkways with a change in direction of 180° are required to have a minimum length of 1540mm.

The floor or ground surface abutting the sides of the walkway are required to be provided with a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600 mm unless one of the following is provided to both sides of the walkway:

- A kerb with a minimum height of 65mm; or
- A kerb rail and handrail; or
- A wall not less than 450 mm in height.

Ramps

Ramps are required to be provided with landings at all changes in direction and at every doorway, gate, or similar opening.

Ramps are required to be provided with landings at intervals of not greater than 9m for ramp gradients of 1:14 and at intervals of not greater than 15m for ramp gradients steeper than 1:20.

For ramp gradients between 1:14 and steeper than 1:20, at intervals that shall be obtained by linear interpolation.

Landings are required to have a minimum length of 1200mm where there is no change in direction and a minimum length of 1500mm where there is a change of direction not exceeding 90°. In addition, the internal corner shall be truncated for a minimum of 500mm in both directions for landings provided where there is a change in direction.

Landings provided for ramps with a change in direction of 180° are required to have a minimum length of 1540mm.

The widths of landings are required to be measured clear of handrails and kerbrails.

Ramps shall have a handrail on each side of the ramp. The handrails are required to extend at least 300mm past the top and bottom of the ramp and have a turndown of 180° or be returned to the ground and are required to be continuous around landings

Ramps and intermediate landings are required to be provided with kerbs or kerb rails on both sides that:

- Have a minimum height above the finished floor of 65mm.
- Have a height of the top of the kerb or kerb rail that is not within the range 75mm to 150mm above the finished floor.
- The kerb or kerb rail is not permitted to have longitudinal gaps or slots greater than 20mm within the range 75mm to 150mm above the finished floor.

Ramp handrails with a height of 865-1000mm (900mm recommended) are required to be installed on both sides of the ramp, are to be continuous throughout the ramp flight and, where practicable, around landings.

The cross-section of handrails is required to be circular or elliptical, not less than 30mm or greater than 50mm in height or width for not less than 270° around the uppermost surface.

The clearance between a handrail and an adjacent wall surface or other obstruction is required to be not less than 50mm. This clearance shall extend above the top of the handrail by not less than 600mm.

Stairs

Stairs are required to have opaque risers and the stair nosings are not permitted to project beyond the face of the riser.

Each stair tread nosing is required to be provided with a strip not less than 50mm and not more than 75mm deep across the full width of the path of travel. This applies to general communication stairs and also to fire stairs only used for egress.

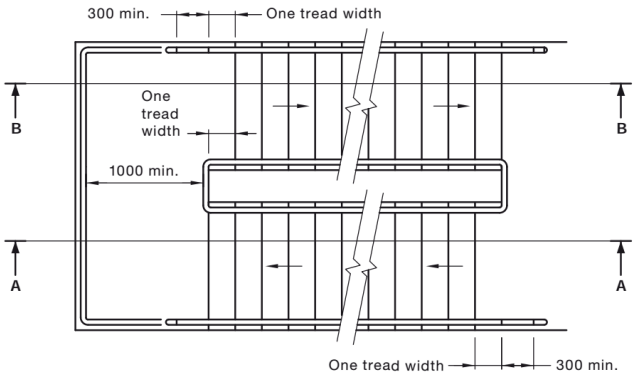
The strip may be set back a maximum of 15mm from the front of the nosing and is required to have a minimum luminance contrast of 30% to the background. (Note that black nosing strips should be specified to un coloured concrete stairs.)

Stair handrails with a height of 865-1000mm (900mm recommended) are required to be installed on both sides of the stairs, are to be continuous throughout the stair flight and, where practicable, around landings.

The cross-section of handrails is required to be circular or elliptical, not less than 30mm or greater than 50mm in height or width for not less than 270° around the uppermost surface.

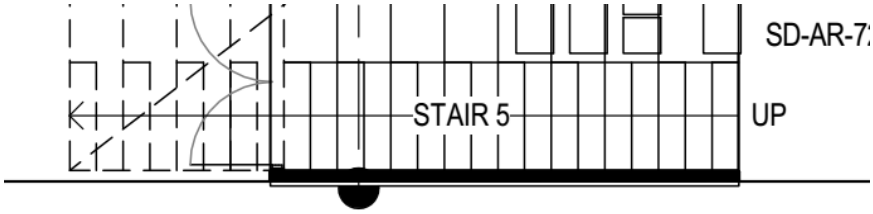
Where a handrail terminates at the bottom of a flight of stairs, the handrail is required to extend at least one tread depth parallel to the line of nosings plus minimum of 300mm horizontally from the last riser. The handrail is required to extend a minimum of 300mm horizontally past the nosing on the top riser

In order to achieve compliance with the requirement for the stair handrail to extend at least one tread width at the base of the flight it is necessary for adjacent flights to be offset from each other as shown in the diagram below.



These handrail requirements apply to general communication stairs and also to fire stairs only used for egress except that a handrail is only required to one side of a fire stairs that is not used for general communication.

The lack of a second handrail to the amphitheatre stair will be noted as a non compliance on the Section 109R Crown Works Certificate.



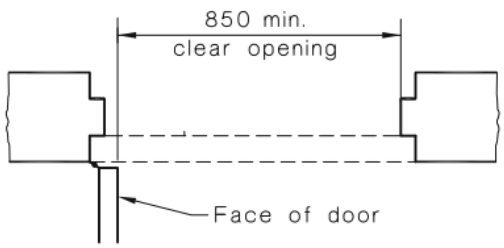
Doorways

Doorways are required to be provided with a minimum luminance contrast of 30% between:

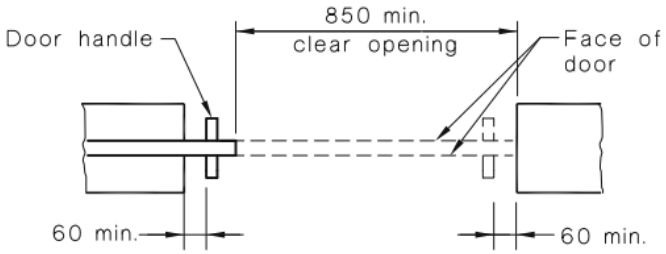
- door leaf and door jamb;
- door leaf and adjacent wall;
- architrave and wall;
- door leaf and architrave; or
- door jamb and adjacent wall.

The minimum width of the area of luminance is required to be 50mm. Note that frameless glazed doors will not comply with this requirement and should not be specified.

Doorways are required to be provided with a minimum clear opening width of 850mm and where sliding doors are provided the clear opening width must allow for a minimum 60mm gap between the door handle and the door frame when the door is open and closed.



(a) Swing door



(b) Cavity sliding door

At least one leaf of all double doors is required to have a minimum clear width of 850mm.

Circulation spaces are required to be provided at every doorway, gate, or similar entry way, on a continuous accessible path of travel. The circulation space required will depend on the type of door ie swing or sliding and the angle of approach ie side or front on etc.

Where possible the required circulation space should be provided with a construction tolerance and the required dimension of any latch side wall should be stated on the drawings.

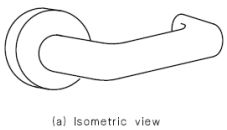
Door handles and related hardware are required to be of the type that allows the door to be unlocked and opened with one hand. The handle is required to be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch. 'D' type handles shall be provided on sliding doors.

The clearance between the handle and the back plate or door face at the centre grip section of the handle is required to be not less than 35mm and not more than 45mm.

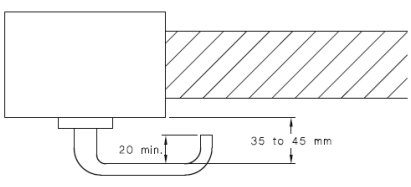
Where snibs are installed, they shall have a lever handle of a minimum length of 45mm from the centre of the spindle.

For doors other than fire doors where a door closer is fitted, the force required at the door handle to operate the door shall not exceed 20N.

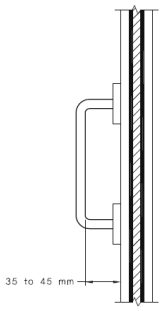
Where an outward opening door is not self-closing, a horizontal handrail or pull bar is required to be fixed on the closing face of a side-hung door.



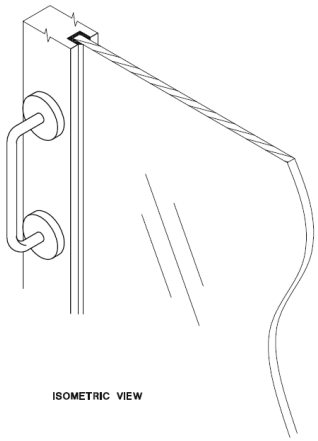
(a) Isometric view



(b) Plan view

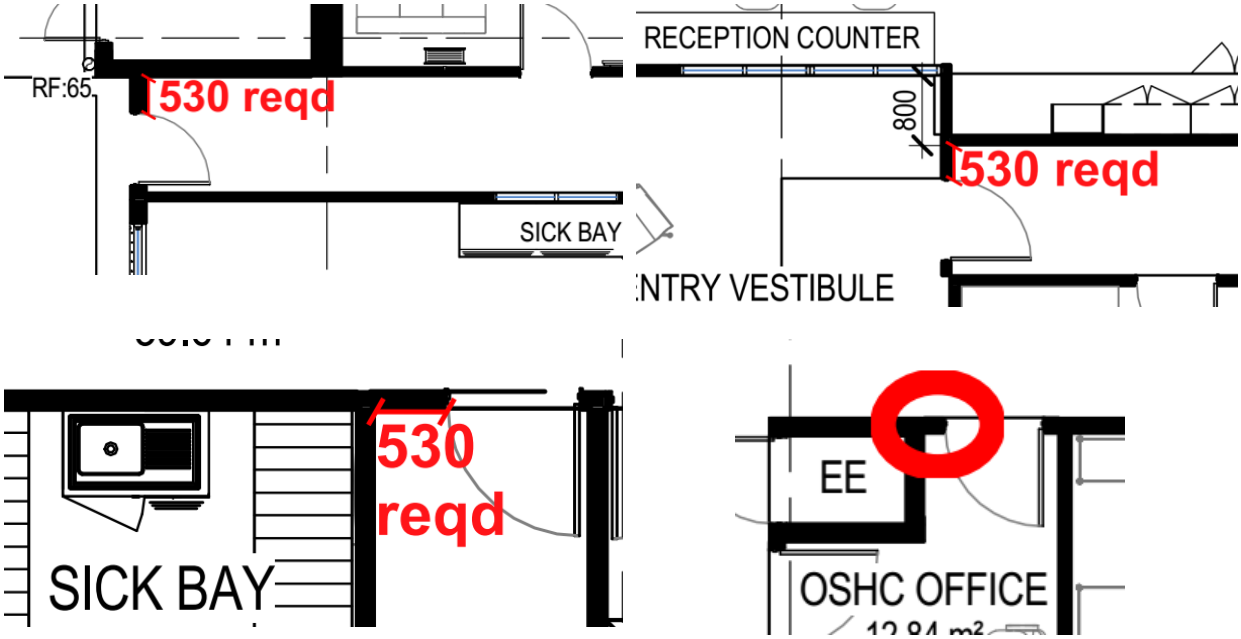


SECTIONAL ELEVATION

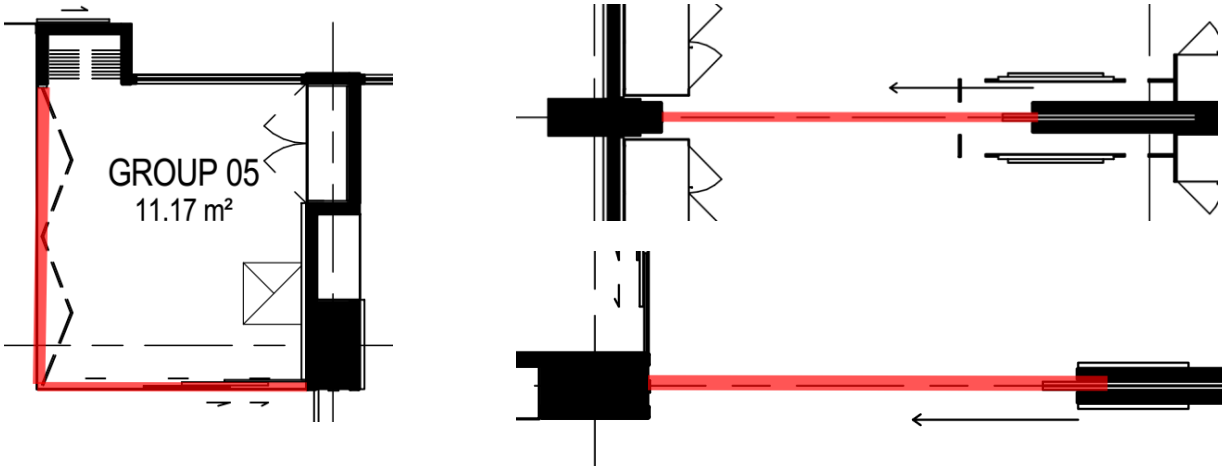


ISOMETRIC VIEW

The circulation spaces to the following doorways is required to be modified during design development to comply with the circulation space requirements of AS1428.1 2009.



The compliance of the following sliding doorways to the circulation space requirements of AS1428.1 2009 is required to be confirmed during design development.



Switches & Controls

All switches and controls on an accessible path of travel, other than general purpose outlets, are required to be located not less than 900 mm nor more than 1100mm above the plane of the finished floor and not less than 500mm from internal corners.

This applies to light switches, intercoms, card readers etc and this requirement should be stated on the architectural and services drawings.

Exemptions

The following areas are not required to be accessible:

- An area where access would be inappropriate because of the purpose for which the area is used.
- An area that would pose a health or safety risk for people with a disability.
- Any path of travel providing access only to an area exempted by (a) or (b).

This generally applies to plant rooms and other areas used occasionally by maintenance personnel. It should not be used for exempting disabled access into store rooms or other areas used occasionally by staff.

Accessible carparking

If new carparking is proposed an accessible carspace is required to be provided and is required to comply with the requirements of AS/NZS 2890.6 2009 which includes the following requirements:

- A minimum width of 2.4m and minimum length of 5.4m to the carspace;
- A minimum width of 2.4m and minimum length of 5.4m to the shared space;
- The dedicated space and the shared area are required to be at the same level;
- A bollard is required to be provided in the shared space 750-850mm from the front of the shared space and along the centre line;
- The accessible carspace and related walking and wheelchair unloading areas are required to comprise a firm plane surface with a fall not exceeding 1:40 in any direction (1:33 if the surface is a
- bituminous seal and the parking space is out of doors). These areas shall have a slip-resistant surface.
- Where kerb ramps are to be provided they are required to be placed at a front or rear corner of the parking space;
- Each dedicated space shall be identified by means of a white symbol of access between 800mm and 1000mm high placed on a blue rectangle with no side more than 1200mm, placed as a pavement marking in the centre of the space between 500mm and 600mm from its entry point.
- Dedicated parking spaces shall be outlined with unbroken non slip yellow lines 80-100mm wide on all sides excepting any side delineated by a kerb, barrier or wall;
- Shared areas shall be outlined with unbroken non slip yellow lines 80-100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall, and marked with diagonal stripes 150-200 mm wide with spaces 200-300mm between stripes. The stripes shall be at an angle of 45 ±10 degrees to the side of the space.

Signage

Braille and tactile signage complying with the requirements of BCA Specification D3.6 is required to be provided to:

- The doorway to the male and female staff toilets;
- The doorway to the male and female student toilets;
- The doors to the male and female staff ambulant cubicles;
- The doors to the male and female student ambulant cubicles;
- The doorway to the staff accessible toilets;
- The doorway to the student accessible toilets.

The sign to the doorway of the accessible toilet must identify if the facility is suitable for left or right handed use.

Braille and tactile signage complying with the requirements of BCA Specification D3.6 is required to be provided to the exit doorway to the fire stairs and to the doorway from the fire stairs to the outside. The sign is required to state ‘Exit Level 1’, ‘Exit Level 2’, ‘Exit Level 3’ or ‘Exit Level 4’ as required.

Braille and tactile signage complying with the requirements of BCA Specification D3.6 is required to be provided to a room provided with hearing augmentation.

The signage is required to include the international symbol for deafness and must identify:

- the type of hearing augmentation; and
- the area covered within the room; and
- if receivers are being used and where the receivers can be obtained.

Where a pedestrian entrance is not accessible directional signage incorporating the international symbol of access must be provided to direct a person to the location of the nearest accessible pedestrian entrance.

Where a bank of toilets is not provided with an accessible toilet, directional signage incorporating the international symbol of access must be provided to direct a person to the location of the nearest accessible toilet.

Hearing augmentation

A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed in a room in a Class 9b building.

This applies to AV systems such as period bells if they are also capable of operating as an inbuilt amplification system ie making announcements etc.

If a hearing augmentation system is an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system.

If a hearing augmentation system is a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than:

- if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and
- if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons.

Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.

Tactile indicators

Tactile indicators comply with AS1428.4.1 2009 must be provided to:

- a non fire rated stairway used for general communication;
- a fire stair used for general communication;
- a ramp;
- the underside of an overhead obstruction (eg stair soffit) unless a suitable barrier (eg handrail) is provided.

Tactile indicators are required to have a luminance-contrast to the base surface as follows:

- Where the integrated TGSIs are of the same colour as the underlying surface—not less than 30% across its entire area.
- Where discrete TGSIs—not less than 45%.
- Where discrete TGSIs are constructed using two colours or materials, the raised surface shall have a section that has 60% luminance contrast for a diameter of 25 ±1 mm tested as required below.

Wheelchair seating spaces in Class 9b assembly buildings

Where fixed seating is provided in a Class 9b assembly building (ie school), wheelchair seating spaces complying with AS 1428.1 2009 must be provided in the following ratios:

Number of fixed seats	Number of wheelchair spaces	Grouping & location
Up to 150	3 spaces	1 single space & 1 group of 2 spaces

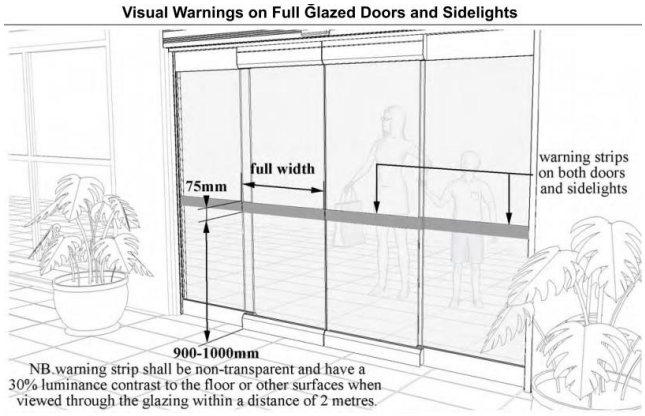
The lack of compliant wheelchair seating spaces to the amphitheatre will be noted as a non compliance on the Section 109R Crown Works Certificate.

Glazing on an accessway

All frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line.

The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between 900 mm and 1000 mm above the plane of the finished floor level.

Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.



Lifts

All lifts which travel not more than 12m must have a lift floor dimensions of not less than 1100mm wide x 1400mm deep.

Handrails complying with AS1735.12 1999 must be provided to all lifts.

All lift doors must have a clear opening width of not less than 900mm.

Any passenger lift must not rely on a constant pressure device for its operation if the lift car is fully enclosed.

All lifts must have a passenger protection system, lighting and lift car and landing control buttons that comply with AS1735.12 1999.

All lifts serving more than 2 levels must be provided with:

- automatic audible information within the lift car to identify the level each time the car stops; and
- audible and visual indication at each lift landing to indicate the arrival of the lift car; and
- audible information and audible indication *required* by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz

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 must be provided to all lifts.

Accessible sanitary facilities

Accessible toilets

At least 1 accessible toilet is required to be provided on every storey containing sanitary compartments and where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments and accessible toilet is required to be provided at not less than 50% of those banks.

The accessible toilets are required to be provided with the minimum circulation spaces and requirement stated in AS1428.1 2009 which includes:

- A minimum width of 1900mm and minimum length of 2300mm for toilet pans;
- The basin is not to encroach by more than 100mm into the required circulation space;
- A toilet pan with a seat height of 460-480mm, set out 450-460mm from the side wall to the centre line and located 790-810mm from the back wall to the front of the pan;
- A toilet seat with a minimum 30% luminous contrast to the floor finish;
- Grabrails at a height of 790-810mm and able to withstand a force of 1100 N applied at any position and in any direction without deformation or loosening or rotation of the fastenings or fittings;
- Backrests that have a height, at the lower edge of backrest to the top of the seat, of 120mm to 150mm, that have a vertical height of 150–200mm and a width of 350–400mm and that are capable of withstanding a force in any direction of 1100N;
- Washbasins that have a height of 800-830mm to the front edge;
- Ancillary fixtures and fittings eg toilet paper holder, shelves, mirrors, hooks etc and any accessible shower set out as per the requirement of As1428.1 2009.

The BCA states that where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible. This requires two of the accessible toilets in the proposed building to be a left hand transfer and at least two of the accessible toilets in the proposed building to be a right hand transfer.

Ambulant cubicles

An ambulant cubicle is required to be provided at each bank of toilets where there is one or more toilets in addition to an accessible toilet.

The ambulant cubicles are required to be provided with the minimum circulation spaces and requirement stated in AS1428.1 2009 which includes:

- A width of 900-920mm and a clear width of not less than 900mm from the front of the pan to the cubicle door;
- A toilet pan with a seat height of 460-480mm and set out along the centre line of the cubicle;
- Grabrails at a height of 790-810mm and able to withstand a force of 1100 N applied at any position and in any direction without deformation or loosening or rotation of the fastenings or fittings;
- Doorways with a minimum clear width of 700mm;
- A 900x900mm circulation space to both sides of the cubicle doors and entry doors;
- Toilet paper holder and hooks set out as per the requirement of As1428.1 2009.

4.0 DDA Optional Requirements

The following comments are the additional advisory requirements of the Disability Discrimination Act 1992 and AS1428.2 1992. These items do not have to be documented in order to obtain the Section 109R Crown Works Certificate which confirms BCA (and AS1428.1 2009) compliance.

Continuous Accessible Path Of Travel

The minimum clear width of a path of travel shall be 1200 mm except at doors.

The accessible elements of buildings and facilities shall be arranged so as to minimize distances to be travelled between them.

Ramps

Ramps shall be provided with landings at the top and bottom of the ramp and at intervals not exceeding:

- for ramp gradients of 1 in 14: 6 m;
- for ramp gradients of 1 in 19: 14 m; and
- for ramp gradients between 1 in 19 and 1 in 14, at intervals which shall be obtained by linear interpolation.

Ground and floor surfaces

Paving bricks with bevelled edges or chamfered arises and heavily textured and figured surfaces such as raked joint pavers shall not be used.

Where carpet is used on a ground or floor surface, the following requirements apply:

- The carpet shall be securely attached.
- Any pad, backing or cushioning shall provide a firm surface.
- The carpet shall have a level loop, a textured loop, a level cut pile or a level cut or uncut pile texture.
- The pile height shall be not more than 6 mm.
- Exposed edges of carpet shall be fastened to the floor surface and shall have a trim along the entire length of any exposed edge.
- Carpet edge trim shall create no ridge on the floor surface higher than 3 mm.

Handrails

Where a handrail is not continued, a tactile indicator in the form of a domed button shall be provided.

Where there is a background wall, handrails shall have a luminance contrast factor with the wall of not less than 30%.

Doorways

The minimum clear opening of a doorway shall be 850mm.

The circulation spaces at doorways shall comply with AS 1428.1 2009 except that 100mm shall be added to all length (L) values and 50mm shall be added to all width (W) values.

Glazing in joinery doors or flush doors shall be as follows:

- The lower edge of the glazing shall be not less than 300mm and not more than 1000mm above the bottom edge of the door.
- The upper edge of the glazing shall be not less than 1600mm above the bottom edge of the door.
- In width, the glazing shall extend not more than 200mm from the latch edge of the door and shall be not less than 150mm wide.

Lifts

The lift floor area shall increase 300mm in each direction from the minimum size specified earlier in this report.

Stairs

Stair risers are required to be provided with a strip of contrasting colour with a width of 25-50mm located just below the stair nosing.

Accessible toilets & showers

At least one emergency call button which complies with AS 2999 shall be installed in each accessible toilet.

Toilet seats of moulded plastics shall comply with AS 1371. The design of the seat shall provide lateral stability.

Accessible showers shall have the additional requirements set out in AS1428.2 1992.

Tactile Indicators

Tactile indicators are required to be provided to the following locations:

- kerb rams and step ramps
- pedestrian crossing at roadways
- pedestrian crossing in high use vehicle areas eg carparks
- vehicle pick up and drop off areas

Emergency warning systems

Emergency warning systems shall include both audible alarms and visual alarms. This applies to emergency evacuation signals, traffic signals and audible alarms for safety.

Audible emergency alarms shall produce audible signals in accordance with the requirements for output of loudspeakers in AS 2200.2, except that levels shall exceed by 15 dB(A) the noisiest background sound pressure level averaged over a period of 60 s, and the level shall not be less than 75 dB(A).

Visual alarms in accordance with AS 2220.1 shall be arranged to flash in conjunction with the audible emergency alarms. The flashing frequency of visual alarms shall be approximately 1 Hz.

Auxiliary alarms provided for people with hearing impairments shall be connected to the building emergency system or there shall be a standard electrical socket into which an alarm unit can be connected to be activated by the building alarm system. Instructions for use of the auxiliary alarm or connections shall be provided.

Lighting

Illumination levels shall be uniform and comply with the requirements for maintenance illumination set out in AS1680.2.3 2008.

- Doorway entrances - 150 lx
- Passageways and walkways - 150 lx
- Stairs - 150 lx
- Ramps - 150 lx
- Lifts See AS 1735.12
- Toilet and locker rooms - 200 lx
- Counter tops - 250 lx
- General displays - 200-300 lx
- Illumination of signs - 200-300 lx

Lighting shall be placed so that unwanted reflections shall not occur on the sign. The luminance factor of the surface of numbers, letters or symbols shall be not less than 30% different from their background.

Tables, counters and worktops

Any reception desks or counters are required to have a minimum width of 800mm, have foot and knee clearances and have a section with a height of 830-870mm.

A bench with easily adjustable height within the range of 700mm to 850mm from the finished floor is preferred.

For vision-impaired users, horizontal surfaces should be a lighter colour than that of the vertical surfaces. The luminance factor of the vertical surface should be not less than 30% different from surrounding horizontal surface.

Street furniture, which includes objects such as seats, tables, drinking fountains, planter boxes, rubbish bins and the like, shall be of a colour which provides a contrast with their background and have a luminance factor of not less than 30%.

Where possible, a range of street seat heights should be provided and note that children and small people may prefer seats as low as 350 mm high.

The front of the seat shall have a clear space between any legs at ground level to within 150 mm of the front edge of the seat, and to within 100 mm of the seat height to allow for rearward adjustment of feet when rising. The seat shall drain free of water.

Where armrests are provided, the top surface of the armrests shall be at a height of 260 ±40 mm above the seat.

At each location where drinking fountains or water coolers are provided, at least one of these shall be in accordance with the requirements of AS1428.2 1992.

5.0 Conclusion

The design documentation provided to date has been assessed in respect to the deemed to satisfy requirements of Part D3 and F2 of the Building Code of Australia 2016, the Disability Access to Premises Standards 2010, the Disability Discrimination Act (DDA) 1992 and the relevant parts of AS1428.1 2009 and AS1428.4.1 2009. The design is at a point where the developed design can commence, further reviews will be carried out during the next stage and prior to the completion of the design.

APPENDIX A – DRAWINGS REVIEWED

Architectural drawings prepared by GHD WOODHEAD

Drawing number, title and revision	Drawing number, title and revision
DA-AR-0000 Cover Sheet/Locality Plan/Drawing List Rev C	DA-AR-2003 General Arrangement - Level 4 Rev C
DA-AR-0050 Notification Plan And Elevations Rev C	DA-AR-2010 General Arrangement - Roof Rev C
DA-AR-0101 Context Analysis Site Plan Rev C	DA-AR-3000 North & South Elevations Rev C
DA-AR-0110 Site Demolition Plan Rev C	DA-AR-3001 East And West Elevations Rev C
DA-AR-1000 Site Plan / Set Out Plan Rev C	DA-AR-3100 Sections Rev C
DA-AR-1010 Site Elevations Rev C	DA-AR-5001 Myra Street View Rev C
DA-AR-2000 General Arrangement - Level 1 Rev C	DA-AR-5002 Edgeworth David Ave View Rev D
DA-AR-2001 General Arrangement - Level 2 Rev C	DA-AR-5010 Building Fabric Finishes Rev C
DA-AR-2002 General Arrangement - Level 3 Rev C	DA-AR-9000 Site Shadow Diagrams Rev C

Landscape drawing prepared by GHD WOODHEAD

Drawing number, title and revision
LA-1000 Landscape Site Plan Rev A