

Development Application Accessibility Review Shore Physical Education Centre & Bishops Gate Carpark Blue Street, North Sydney NSW

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ACCESS CONSULTING



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00	Lindsay Perry	DRAFT for comment	20 April 2016
01	Lindsay Perry	Issued for DA	27 May 2016

This report has been prepared based on the available time allocated to conduct the review, and all reasonable attempts have been made to identify key compliance matters pursuant to the BCA and additional issues which have been deemed an impediment to access provision and may increase Client risk of attracting a complaint under the DDA.

The information provided within this report is relevant to this project and the documentation referenced. As such the information provided may not be transferred to other projects. This report must not be issued for public comment or be used for any other purpose without prior permission from Philip Chun Access.

Philip Chun Access accepts no responsibility for any loss suffered as a result of any reliance upon such assessment or report other than providing guidance to alleviate access barriers in the built environment and reduce Client risk of attracting a complaint under the DDA.



1. INTRODUCTION

This report documents a comprehensive review of the proposed project documentation with consideration to all aspects of accessibility to the site and throughout the development and with reference to the Building Code of Australia (BCA), Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards), relevant Australian Standards as they relate to access to premises and the spirit and intent of the Disability Discrimination Act 1992 (*Cth*) (DDA).

This report has been prepared by Philip Chun Access with the aim of providing reasonable recommendations in regards to access to premises. Philip Chun Access has endeavoured to clearly identify each issue of concern with respect to the building element and with reference to relevant legislation and guidelines.

Matters that fall outside the scope of this report include structure or installation methods and assessment against Occupational Health and Safety legislation.

1.1 Site and Contexts

The Shore School campus at North Sydney is located on circa eight (8) hectares of land and comprises three (3) main sites being the Senior School, Preparatory School and Graythwaite. Bound by William Street, Blue Street and Hunter Crescent the site topography is challenging with regard to accessibility and heritage constraints also apply to buildings on the campus.

The project consists of the construction of a physical education centre over five levels and the upgrade of Bishops Gate carpark. Facilities within the new physical education centre include an Olympic pool, basketball courts, multipurpose areas for gymnastics, trampolining cardio and weight training with associated administrative, classroom and amenity areas.

Connection to the existing campus buildings occurs at Level Four through the upgraded Travers Courtyard which adjoins Blue Street and Level 3 through the existing basketball sportshall.

1.2 Reviewed Documentation

This report is based upon the following design documents produced by Cox Architecture for Philip Chun Access review.

Document No	Title	Revision
A-DA-0012	Site Plan Proposed	01
A-DA-2100	Lower Ground Floor Plan	01
A-DA-2110	Ground Floor Plan	01
A-DA-2120	First Floor Plan	01
A-DA-2130	Second Floor Plan	01
A-DA-2140	Third Floor Plan	01
A-DA-2150	Fourth Floor Plan	01
A-DA-2190	Bishops Gate Ground Floor Plan	01
A-DA-2121	Bishops Gate First Floor Plan	01

1.3 Council Requirements

North Sydney Council DCP 2013, Section 12 Access provides requirements for accessibility within all new development. General objectives of this document are to ensure that the design of new development provides permeability, legibility, flexibility, consistency and clarity to allow for the access needs of all members of the community.



This section of the DCP applies to all development applications for new development of alterations and additional to existing non-residential development. As such, it is applicable to this development.

The requirements of this document have been considered in the preparation of this access report.

1.4 Methodology

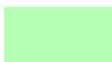
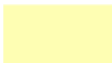
Philip Chun Access aims to provide achievable recommendations related to the provision of access to premises based on current legislation and best practice options, enabling independent, equitable and functional access for all.

Accessibility is paramount in providing an inclusive environment for all users. Phillip Chun Access looks beyond basic compliance issues to ensure that all users are offered the opportunity to participate in society. We incorporate the principles of Universal Design into all of our work, taking a holistic approach in the provision of access for people with disabilities.

This report should be read in conjunction with the attached marked plans, included as Appendix A. which should be read in conjunction with the subsequent sections of this report. With regards to notations included within Appendix A, please note:

- All items notated in **red** relate to mandatory requirements under the BCA, and Premises Standards;
- All items notated in **blue** relate to additional, enhanced recommendations provided in accordance with the spirit and intent of the DDA. These items are provided for Client consideration.

The following key has been implemented to identify areas requiring attention by the design team and/or further discussion to ensure an independent, equitable and functional access for all:

	Identification of accessible areas, including accessible car parking. • Accessible car parking spaces designed per AS/NZS 2890.6 (2009).
	Identifies locations where a change in level appears to exist and/or requires clarification, such as: • Ramps (proposed gradients); and • Stairways (other than fire-isolated) used for public/staff communication. • All ramps must be designed per AS 1428.1 (2009); • All stairways must be designed per AS 1428.1 (2009).
	Denotes accessible sanitary facilities, including: • Designated accessible sanitary facilities; and • Locations where sanitary compartments for people with ambulant disabilities must be provided to meet the BCA / Premises Standards. • Circulation space and fixture placement per AS 1428.1 (2009) must be accommodated.
	Identifies elements where joinery documentation is required for review, including: • Servery counters; • Consider incorporating access for people with disabilities, such as a lower section of counter with appropriate knee and foot clearance.
	Identification of doorways which appear to lack appropriate circulation to permit independent access by people with disabilities. • Further review required to ensure all doors to areas required to be accessible possess sufficient circulation space.



2. LEGISLATION

2.1 Building Code of Australia

The primary classification for the proposed buildings pursuant to the BCA is a Class 9b, being a school.

Part D3 of the BCA and Premises Standards prescribes the minimum requirement for access to a building. Access for people with disabilities is required through the principal pedestrian entrance and throughout the building in accordance with Table D3.1. The following table outlines the general building access requirements for this project:

Class of building	Access requirements
Class 7a	To and within any level containing <i>accessible</i> carparking spaces
Class 9b	
<i>Schools and early childhood centres</i>	To and within all areas normally used by the occupants
<i>An assembly building not being a school or an early childhood centre</i>	To wheelchair seating spaces provided in accordance with Part D3.9 To and within all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces

2.2 Disability Discrimination Act 1992 (Cth) (DDA)

The accessibility assessment process covers all aspects of the infrastructure (premises), to the extent required to meet the objectives of the Disability Discrimination Act 1992 (Cth), including, however not limited to, Section 23 which relates to access to premises and facilities which the public may enter or use.

The Act is enforced primarily through a complaints mechanism, which allows individuals who have directly or indirectly experienced unlawful discrimination to seek a conciliated outcome through the Australian Human Rights Commission and, in the instance of unsuccessful conciliation, to bring an action in the Federal Magistrates Court or the Federal Court of Australia.

2.3 Access to Premises Standards – General

In contrast to building regulations, the DDA is not prescriptive. The implementation of the Premises Standards in 2010, and corresponding changes to the BCA, is a significant step towards achieving equal access to premises and is crucial to justice and social inclusion for people with disabilities.

It is noted that the Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA. It is acknowledged that the Premises Standards could address a broader range of accessibility issues including considerations to accessibility of parkland, playgrounds, transport vehicles, interior fit-out of buildings, and fixtures and fittings. As such, there are features which fall beyond the scope of the Standards which may be subject to the general complaints provisions of the DDA.

2.4 Access to Premises Standards – New Work

Where new work that requires building or construction approval is undertaken on an existing building, such as an extension or refurbishment, there is a requirement to ensure the new or modified part of the building complies with the Premises Standards.



2.5 Access to Premises Standards – Affected Part

In addition to the new work requirement, there is a requirement to provide an accessible path of travel from the principal public entrance, to the new or modified part of an existing building. This is referred to as the 'affected part' of a building (Subsection 2.1(5) of the Premises Standards).

Areas outside of the new work and the affected part work do not have any access requirements imposed by the Premises Standards but these areas will continue to be subject to the general complaints framework of the DDA.

2.6 Access to Premises Standards – Lift Concession

Under Section 4.4 of the Premises Standards, there is a concession from the requirements of Table E3.6 (b), which do not apply to an existing passenger lift that is in a new part, or an affected part of a building if the lift:

- Travels more than 12m; and
- Has a lift floor of not less than 1100mm (width) x 1400mm (depth)

All other access features within the lift, including however not limited to the control panel, audible information, lift landing controls and handrail, must be provided and are not subject to the concession.

2.7 Access to Premises Standards – Toilet Concession

Section 4.5 of the Premises Standards includes a concession for existing accessible sanitary facilities, stating that certain existing accessible sanitary facilities located within a 'new or modified part' or an 'affected part' are not subject to upgrade if, the existing facility complies with the circulation and fit-out requirements of AS 1428.1 (2001).

3. ACCESS AND APPROACH - EXTERNAL AREAS

External areas of the development generally comprise the approach to the building from Blue Street and Hunter Crescent and courtyards / forecourt areas that link the proposed building to other facilities on the site. . Pedestrian access has been provided from each of the street entrances and a strategy developed to maximise access for people with disabilities to and within the proposed development.

3.1 Approach from the Allotment Boundary (BCA Part D3.2)

The BCA requires that a continuous accessible path of travel within the meaning of AS1428 be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.

A formed footpath has been provided from the allotment boundary along both Blue Street and Hunter Crescent to the building entrance. An accessible path of travel is available from each of these street frontages – refer to Appendix B for compliance requirements regarding pathways, ramps and walkways.

3.2 Approach from the Accessible Carparking (BCA Part D3.2)

The BCA requires that a continuous accessible path of travel within the meaning of AS1428.1 (2009) be provided from the accessible carparking areas to the main entrance.

Accessible carparking is intended to be provided within the Bishop Gate Carpark. An accessible link to the Physical Education Centre is provided by way of an accessible ramp in keeping with BCA requirements – refer to Appendix B for compliance requirements regarding pathways, ramps and walkways..



3.3 Approach between Buildings on Site (BCA Part D3.2)

The BCA requires that a continuous accessible path of travel within the meaning of AS1428 be provided between associated accessible buildings.

The provision of the Physical Education Centre and upgrade of surrounding courtyard areas will improve the overall accessibility of the site and provide links to other buildings on the site in keeping with BCA requirements.

3.4 Accessible Carparking (BCA Part D3.5)

Accessible carparking, designed and constructed in accordance with AS 2890.6 (2009), is required to be provided as per the below ratio:

Class of building to which the Class 7a building or carparking area is associated	Number of accessible carparking spaces required
Class 9b	
(a) School	1 space for every 100 carparking spaces or part thereof.

There are a total of 55 carparking spaces provided on the site within the addition to the Bishop Gate Carpark. Two spaces are designated as accessible – one within the new building, the other within the Bishops Gate Carpark. This will meet BCA requirements for the number of designated accessible carparking spaces. Accessible carparking is to offer compliance with AS 2890.6 (2009). Refer to Appendix B for compliance requirements.

3.5 Building Entrance (BCA Part D3.2)

A continuous, accessible path of travel must be provided through the principal pedestrian entrance and not less than 50% of all pedestrian entrances / exits.

Where the total floor area of the building exceeds 500m², therefore the distance of travel between accessible and inaccessible entrances must not exceed 50m.

Where a door required to be accessible has more than one door leaf, one of the leaves must have a clear opening of 850mm.

Double swinging doors are provided for entry to the building and appear to be capable of compliance - refer to Appendix B for compliance requirements.

4. ACCESSIBILITY PROVISIONS – INTERNALS AREAS

The internal areas of the development include an Olympic pool, basketball courts, multipurpose areas for gymnastics and trampolining with associated administrative, teaching and amenity areas over five levels.

Due to the topography of the site, two lifts have been introduced to ensure access for people with limited mobility to all areas of the building. The second floor acts as a transfer level between the lifts.

4.1 Internal Paths of Travel Generally (BCA Part D3.3)

BCA Part D3.3 requires that accessways complying with AS 1428.1 (2009) must be provided to and throughout areas of buildings required to be made accessible, including:

- Minimum corridor widths of not less than 1000mm;
- Passing spaces with a minimum width of 1800mm and minimum length of 2000mm to be provided in corridors at maximum 20m intervals where a direct line of sight is not available; and



- Turning spaces of minimum 1540mm width and minimum 2070mm length to be provided within 2m of the end of corridors and at maximum 20m intervals.

Note: a passing space may serve as a turning space.

Increased landings are required at changes of direction, including 1500mm x 1500mm turning spaces to facilitate a 60-90 degree turn.

Drawings indicate that sufficient areas are provided for circulation purposes.

4.2 Floor Finishes / Surfaces (BCA Part D3.3)

The following applies to interior finished and surface materials, in keeping with AS1428.1 (2009):

- Where carpet or any soft flexible materials are used as flooring material, the pile height or pile thickness is to be no greater than 11mm and the carpet backing to be not more than 4mm thick.
- Matting recessed within a continuous accessible path of travel to have a surface level difference to surrounding materials not more than 3mm for vertical and 5mm for rounded or bevelled edges.
- Grates are to have openings no greater than 13mm in diameter and any slotted openings to be no more than 13mm wide and orientated perpendicular to the dominant direction of travel.

We recommend that the abovementioned items be addressed during subsequent design stages.

4.3 Internal Doors

Doors and doorways to be provided with the following circulation clearances as per AS 1428.1 (2009):

Table 5.3(a) – Hinged Door Requirements

Door Approach	Door opening direction	Clearances (mm)		Depth in front of door
		Latch side	Hinge side	
Front	Towards occupant	530	110	1450
	Away from occupant	510	-	1450
Latch Side	Towards occupant	900	110	1670
	Away from occupant	660	240	1240
Hinge Side	Towards occupant	900	660	1670
	Away from occupant	340	560	1220
Either Side	Towards occupant	900	660	1670
	Away from occupant	660	560	1240

Table 5.3(b) – Sliding Door Requirements

Door Approach	Clearances (mm)		Depth in front of door
	Latch side	Slide side	
Front	530	-	1450
Slide Side	395	660	1280
Latch Side	660	185	1230
Either Side	660	660	1280

Note: the above clearances are based upon an unobstructed door opening of 850mm, which is the minimum required clearance. Unobstructed door openings greater than 850mm will have different requirements. This will be reviewed upon provision of a door schedule and detailed architectural drawings.



Where a door required to be accessible has more than one door leaf, one of the leaves must have a clear opening of 850mm.

The distance between successive doors within airlocks, vestibules and the like require a minimum 1450mm depth between swing doors, 900mm for the path of travel to ambulant toilet cubicles.

Drawings indicate that doorways are generally provided with adequate circulation areas for compliance – refer to marked plans for exceptions. This will be addressed in subsequent design stages. For additional compliance requirements, refer to Appendix B.

4.4 Exemptions (BCA Part D3.4)

Where full access is unachievable due to the functions of the space, there may be opportunity to access the area under the permitted exemptions of the BCA D3.4 which states:

The following areas are not required to be accessible:

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

Exempt areas will be defined during subsequent design phases and co-ordinated with the building certifier.

4.5 Signage (BCA Part D3.6)

Braille and tactile signage is required to be provided throughout any building required to be made accessible in accordance with BCA specification D3.6 and AS1428.1 (2009) and must identify:

- Each sanitary facility
- Any space with a hearing augmentation system
- Accessible unisex facilities and indicate whether the facility is suitable for left or right handed use
- Ambulant accessible sanitary facilities on the door of the cubicle
- Where an entrance is not accessible, directional signage to identify nearest accessible entrance
- Where a bank of sanitary facilities is not provided with an accessible sanitary facility, directional signage to identify nearest accessible sanitary facility.
- Each door required by Part E4.5 to be provided with an exit sign and state “Exit” and “Level” followed by either the floor level number, the floor descriptor or combination of these.

We recommend that the abovementioned items be addressed during subsequent design stages.

4.6 Hearing augmentation (BCA Part D3.7)

A hearing augmentation system must be provided where an inbuilt amplification system is provided, other than one used for emergency purposes only as required by BCA Part D3.7.

Further, for buildings that are required to be accessible, the BCA (Part D3.7) requires hearing augmentation systems at service counters **where the user is screened from the service provider.**

Note: Consideration to the design specifications of AS 1428.5 (2010) is recommended, however is not mandatory to meet the Premises Standards.

We recommend that the abovementioned items be considered during subsequent design stages.



4.7 Tactile indicators (BCA Part D3.8)

Where a building is required to be made accessible, BCA Part D3.8 requires that tactile indicators must be provided, in accordance with AS1428.4.1 (2009)) to:

- A stairway
- A ramp, other than kerb ramp
- Any overhead obstruction less than 2m above the FFL, other than a doorway, where a suitable barrier has not been provided
- Where an accessway meets a vehicular way in the absence of a kerb or kerb ramp

Tactile indicators will be required to stairs, ramps and potential overhead obstructions (being the stairs).

4.8 Wheelchair seating spaces in Class 9b assembly buildings (BCA Part D3.9)

Wheelchair seating areas are required to be provided within Class 9b assembly buildings as per BCA Part D3.9 and in accordance with AS1428.1 (2009).

Number of fixed seats in a room or space	Number of wheelchair seating spaces	Grouping and location
Up to 150	3 spaces	1 single space; and 1 group of 2 spaces
151 to 800	3 spaces plus 1 additional space for each additional 50 Seats or part thereof in excess of 150 seats	not less than 1 single space; and not less than 1 group of 2 spaces; and not more than 5 spaces in any other group

There are two areas that require the provision of wheelchair seating being the spectator stands in the basketball courts and pool areas.

Designated wheelchair seating spaces have been indicated within each area and their distribution is in keeping with BCA requirements.

4.9 Swimming pools (BCA Part D3.10)

The BCA Part D3.10 requires access for persons with a disability to swimming pools with a total perimeter greater than 40m that are associated with as Class 1b, 2, 3, 5, 6, 7, 8, or 9 building that is required to be accessible (Table D3.1).

For pools required to be accessible by this clause, not less than one accessible entry / exit must be provided by means of a fixed or moveable ramp and an aquatic wheelchair; or a zero depth entry at a maximum gradient of 1:14; or a platform swimming pool lift; or a swing style swimming pool lift. For pools with a perimeter greater than 70m, the use of a swing stile swimming pool lift is not permitted.

An Olympic swimming pool is to be provided within the building. It is intended that this be used for swimming and water polo competition purposes.

While the perimeter of the pool measures more than 70m, it is proposed to provide a hoist access to the pool due to the provision of a ramp or lift affecting competition standards. As there is an intended controlled user group for the pool (it is not open to the public), we consider this a reasonable approach to the provision of access to the pool for people with limited mobility subject to a management plan being implemented to ensure the hoist is available and operational at all times.



4.10 Glazing on an accessway (BCA Part D3.12)

BCA Part D3.12 requires that where full height glazing that can be mistaken for an unobstructed opening is provided along an accessway, the glazing must be provided with visual identification as per AS 1428.1 (2009).

We recommend that the abovementioned items be addressed during subsequent design stages – refer to Appendix B for compliance requirements.

4.11 Slip Resistance (BCA Part D2.14)

Landings in a stairway must have;

- (a) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or
- (b) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586, where the edge leads to a *flight* below;

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

We recommend that the abovementioned items be addressed during subsequent design stages.

4.12 Thresholds (BCA Part D2.15)

The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless—

- (a) in patient care areas in a Class 9a health-care building, the door sill is not more than 25 mm above the finished floor level to which the doorway opens; or
- (b) in a Class 9c aged care building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold; or

NSW D2.15(d),(e)

- (c) in a building required to be accessible by Part D3, the doorway—
 - (i) opens to a road or open space; and
 - (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or
- (d) in other cases—
 - (i) the doorway opens to a road or open space, external stair landing or external balcony; and
 - (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.

We recommend that the abovementioned items be addressed during subsequent design stages – refer to Appendix B for compliance requirements.



5. VERTICAL CIRCULATION

Lifts and stairs provide access between levels of the building. Two lifts are provided within the development. Stairs within the building are both public access and fire isolated egress stairs.

5.1 Passenger Lifts (BCA Part E3)

Every passenger lift in an accessible building must be suitable for use by people with a disability and offer compliance with AS1725.12. Typically, the following is required to be provided:

Lift dimensions

- Lift floor dimensions of not less than 1100mm X 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400mm X 1600mm for lifts which travel more than 12m.
- Provision for a stretcher facility within at least one emergency lift required by E3.4, or where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12m, in at least one of those lifts to serve every floor served by lifts.

Lift Features

- Handrail complying with the provisions for a mandatory handrail in AS1735.12.
- Minimum clear door opening complying with AS1735.12.
- Passenger protection system complying with AS1735.12.
- Lift landing doors at the upper landing.
- Lift car and landing control buttons complying with AS1735.12.
- Lighting in accordance with AS1735.12.
- 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.

All passenger lifts serving more than 2 levels must possess:

- Automatic audible information within the lift car to identify the level each time the car stops.
- Audible and visual indications at each lift landing to indicate the arrival of the lift car.
- Audible information and audible indication must be provided in a range between 20-80dB(A) at a maximum frequency of 1500Hz.

We recommend that the abovementioned items be addressed during subsequent design stages – refer to Appendix B for compliance requirements.

The area proposed for the lifts offers floor area conducive to compliance.

5.2 Accessible Ramps (BCA Part D3.3 & D3.11)

All accessible ramps must be designed and constructed in accordance with AS 1428.1 (2009) Clause 10. The maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).

On and accessway –

- (a) A series of connected ramps must not have a combined vertical rise of more than 3.6m; and
- (b) A landing for a step ramp must not overlap a landing for another step ramp or ramp.

We recommend that the abovementioned items be addressed during subsequent design stages. – refer to Appendix B for compliance requirements.

The area proposed for the ramp (fifth floor) offers a floor area conducive to compliance.



5.3 Stairs (BCA Part D3.3)

All stairways, excluding fire-isolated stairs, must be designed and constructed in accordance with AS 1428.1 (2009) Clause 11 and include the provision of handrails, handrail extensions, opaque risers, contrasting nosing strips and tactile indicators.

Further to this is recommended that fire-isolated stairways proposed to be used as a means of general communication between floors should meet these enhanced requirements for the safety of all occupants.

We recommend that the abovementioned items be addressed during subsequent design stage – refer to Appendix B for compliance requirements.

5.4 Fire Isolated Stairs (BCA Part D3.3)

All fire-isolated stairways must possess luminance contrast to the stair nosing as per AS 1428.1 (2009) Clause 11.1(f) and (g).

We recommend that the abovementioned items be addressed during subsequent design stages – refer to Appendix B for compliance requirements.

6. SANITARY AND OTHER FACILITIES

6.1 Unisex Accessible Toilets (BCA Part F2)

Accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a). That is:

Class of building	Minimum accessible unisex sanitary compartments to be provided
Class 5, 6, 7, 8 and 9 — except for within a ward area of a Class 9a <i>health-care building</i>	Where Part F2.3 of the <i>BCA</i> requires closet pans: (a) 1 on every <i>storey</i> containing <i>sanitary compartments</i> ; and (b) where a <i>storey</i> has more than 1 bank of <i>sanitary compartments</i> containing male and female <i>sanitary compartments</i> at not less than 50% of those banks

Design

- The circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with the requirements of AS1428.1.
- 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.
- The door to a fully enclosed sanitary compartment must:
 - (i) Open outwards; or
 - (ii) Slide; or
 - (iii) Be readily removable from the outside of the sanitary compartment,Unless there is a clear space of at least 1.2m measured in accordance with Figure F2.5, between the closet pan with the sanitary compartment and the doorway.

Location

- An accessible sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only.
- Where male sanitary facilities are provided in a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of these locations.

Unisex accessible sanitary facilities are provided throughout the building meeting BCA requirements. General arrangement of fixtures and room sizes appear to be capable of compliance – refer to Appendix B for compliance requirements.



6.2 Unisex Accessible Showers (BCA Part F2)

Accessible unisex showers must be provided in accordance with Table F2.4(b). That is:

Class of building	Minimum accessible unisex showers to be provided
Class 5, 6, 7, 8 and 9 — except for within a ward area of a Class 9a <i>health-care building</i>	Where Part F2.3 of the <i>BCA</i> requires 1 or more showers, not less than 1 for every 10 showers or part thereof.

Unisex accessible showers are provided throughout the building in conjunction with the change room areas. General arrangement of fixtures and room size appears to be capable of compliance – refer to Appendix B for compliance requirements.

6.3 Sanitary compartments for people with an ambulant disability (BCA Part F2)

At each bank of toilets where there are one or more toilets are provided in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for people with an ambulant disability (PAD) must be provided for use by males and females.

Design of the cubicles is to include the following:

- PAD cubicles within male and female toilets to be in compliance with AS1428.1 (2009).
- Width of PAD cubicles is to be 900–920mm.
- Provide grabrails to PAD cubicles.
- Provide 900 x 900mm circulation space in front of pan and each side of doors on path to the toilet. Doors are not to swing into circulation spaces.

PAD cubicles are provided for gender specific use. General arrangement of fixtures and room size appears to be capable of compliance – refer to Appendix B for compliance requirements.

7. ADDITIONAL ACCESSIBILITY CONSIDERATIONS

As detailed above, it is acknowledged that the Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA only. Philip Chun Access provides the following as a summary of additional accessibility issues that can be addressed in order to reduce Client risk of attracting a discrimination complaint. Refer to Appendix C for specific requirements

- Fire Egress for People with Disabilities
- Accessible Reception Counters
- Seating in Public Areas
- Signage and Wayfinding
- Access controlled entries to carparks
- Depth of Door Recess
- Luminance Contrast
- Lockers
- Furniture Hardware
- Lighting and Glare

8. CONCLUSION

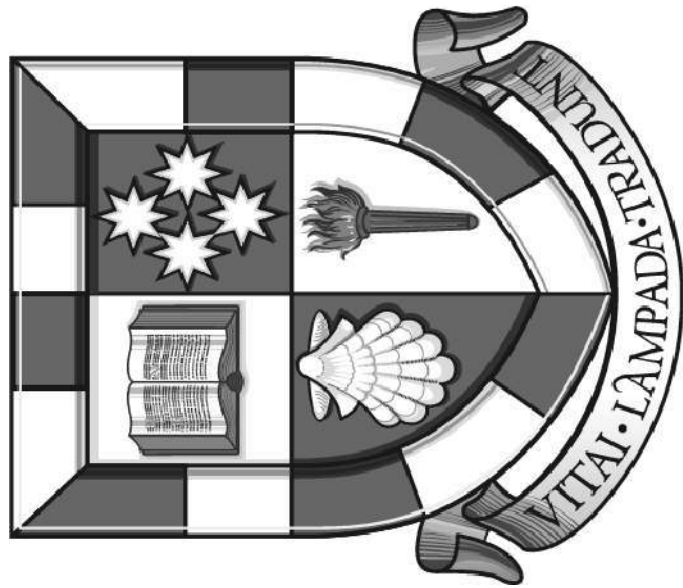
We have assessed the architectural documentation available to date and have reviewed the proposed building works with respect to the Building Code of Australia 2015 and Premises Standards. The design is at a point where the inherent BCA philosophies have been checked and development consent can be sought. The finer details with respect to BCA 2015 compliance can be finalised prior to the issue of a Construction Certificate.

The proposed development is capable of achieving a high level of access for people with disabilities and meeting all the relevant standards.



APPENDIX A

MARKED PLANS



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Client SYDNEY CHURCH OF ENGLAND
GRAMMAR SCHOOL (SHORE)

Project No. 213204

Project

**SHORE PHYSICAL
EDUCATION CENTRE**

BLUE ST, NORTH SYDNEY, NSW, 2060

Drawing Title

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DEVELOPMENT APPLICATION

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Project Director:	RL	Revision:	01
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Cox Architecture Pty Ltd ACN 002 535 891

PHILIP CHUN 
Access Consulting Building Compliance

Ref: AN16-206579, Shore Physical Education Centre
Reviewed by: Lindsay Perry
Date: 27/05/16

LEGEND

The diagram consists of two rectangular boxes. The left box is yellow with a red border and contains the text: "Mandatory requirements under the BCA 2013 and Premises Standards." A red arrow points upwards from the top of this box. The right box is white with a blue border and contains the text: "Additional enhanced recommendations in accordance with the spirit and intent of the DDA. These items are considered industry best practice and are provided for Client consideration." A blue arrow points upwards from the top of this box. The red arrow from the left box points towards the blue arrow of the right box, indicating a relationship or flow between the two sets of requirements.

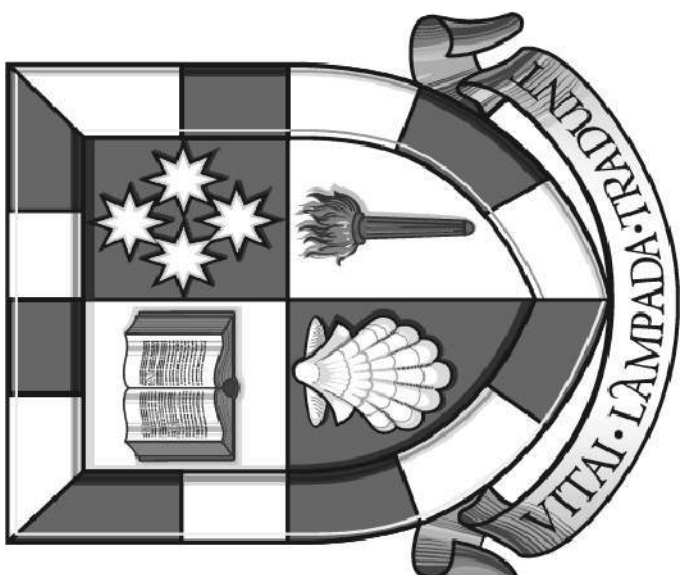
Mandatory requirements under the BCA 2013 and Premises Standards.

Additional enhanced recommendations in accordance with the spirit and intent of the DDA. These items are considered industry best practice and are provided for Client consideration.

- | | |
|---|--|
| Identification of accessible areas, including accessible car parking and accessible lifts. | |
| Identifies locations where a change in level appears to exist and/or requires clarification, such as ramps and stairways. | |
| Denotes accessible sanitary facilities, including unisex accessible sanitary facilities and accessible toilets for people with ambulant disabilities. | |
| Identifies elements where pinery documentation is required for review, such as lifts, escalators, wheelchair ramps, kitchenettes, work stations etc. | |
| Identification of doorways which appear to be a barrier to circulation space to permit independent access by people with disabilities. | |
| Identification of areas considered as exempt areas under BCA D3.4. | |



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GRAMMAR SCHOOL (SHORE)

Project No. 213204

Project
**SHORE PHYSICAL
EDUCATION CENTRE**
BLUE ST, NORTH SYDNEY, NSW, 2060

Drawing Title

LOWER GROUND FLOOR
PLAN_RL55.00

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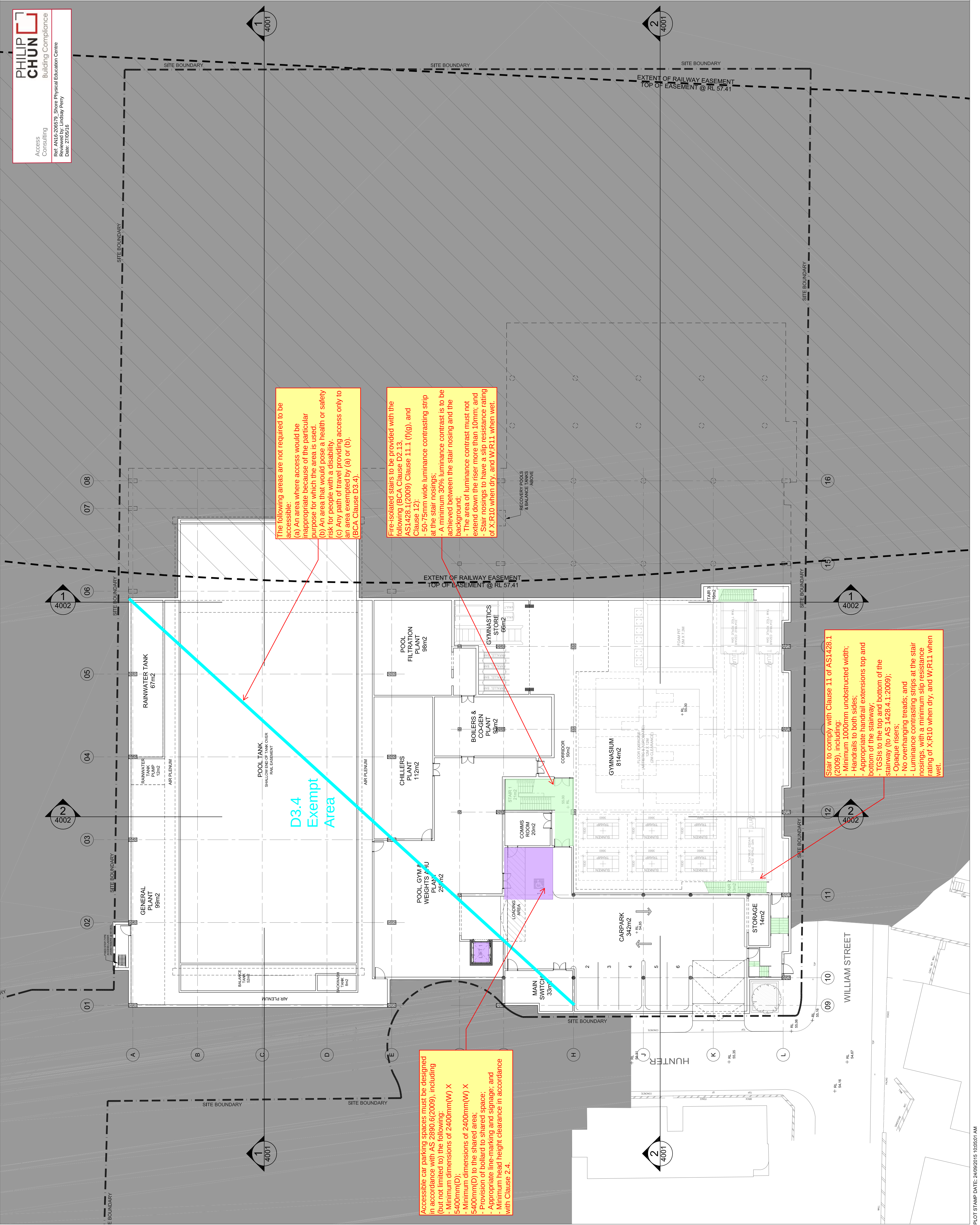
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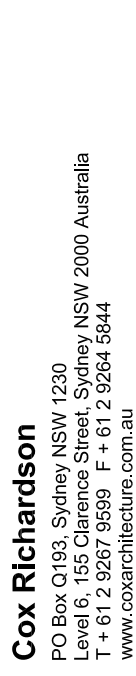
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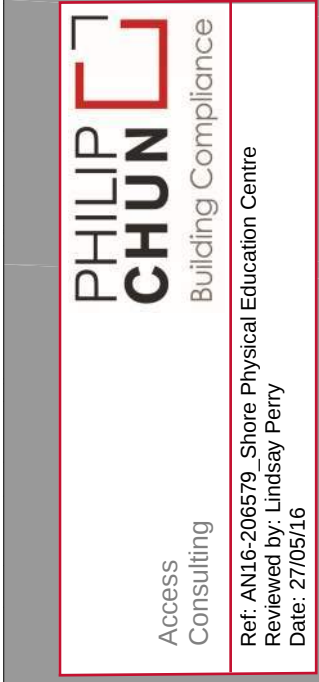
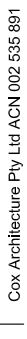
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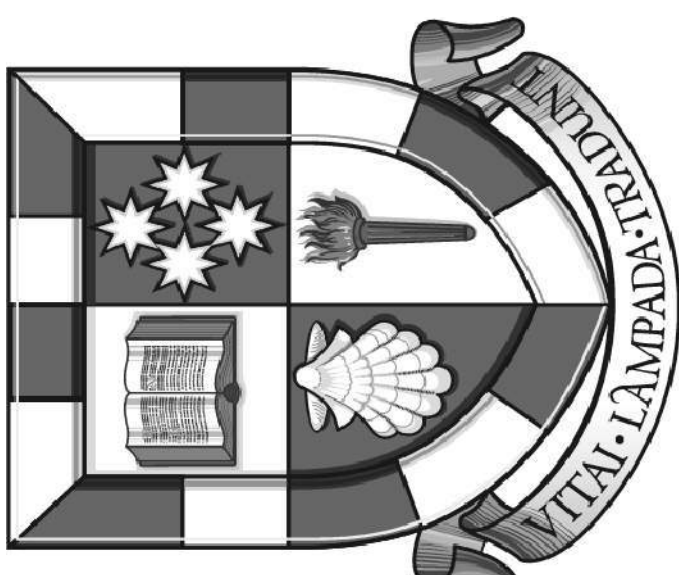
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EDUCATION CENTRE**

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GRAMMAR SCHOOL (SHORE)

Project No.

213204

Project

SHORE PHYSICAL

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PLAN 01 67 20

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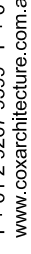
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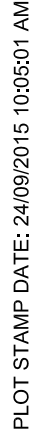
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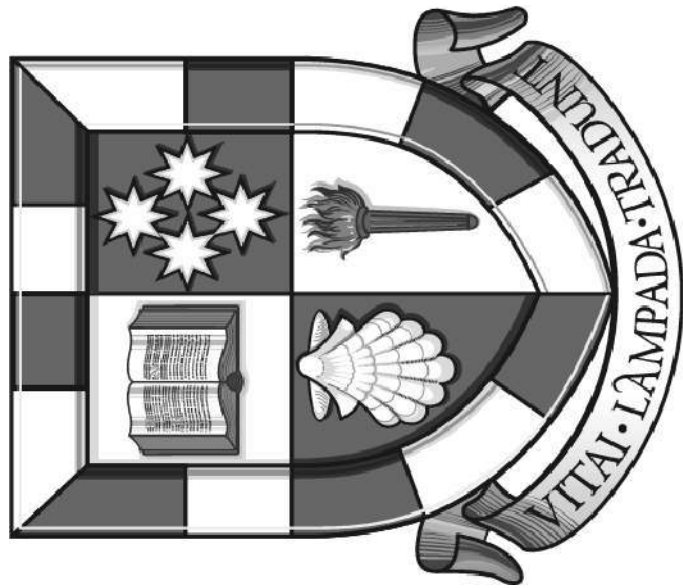


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Client

SYDNEY CHURCH OF ENGLAND
GRAMMAR SCHOOL (SHORE)

Project No.

213204

Project

**SHORE PHYSICAL
EDUCATION CENTRE**

BLUE ST, NORTH SYDNEY, NSW, 2060

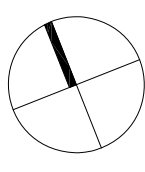
Drawing Title

**BISHOPS GATE GROUND
FLOOR PLAN - RL56.75**

Document Control Status:

DEVELOPMENT APPLICATION

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Project Architect:	AS	Date: 13.05.16
Project Director:	RL	Revision: 01
Drawing Number:		North:



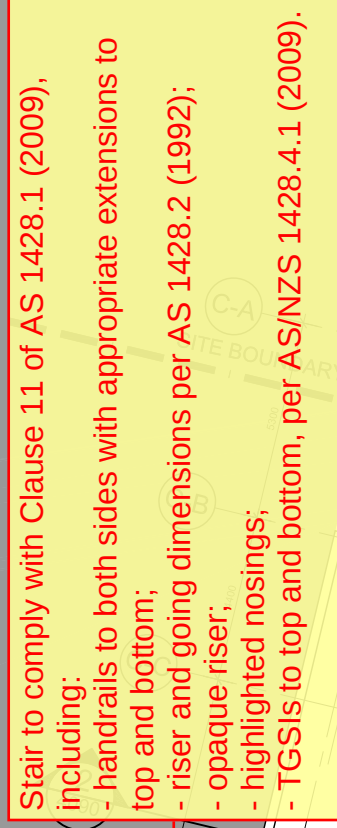
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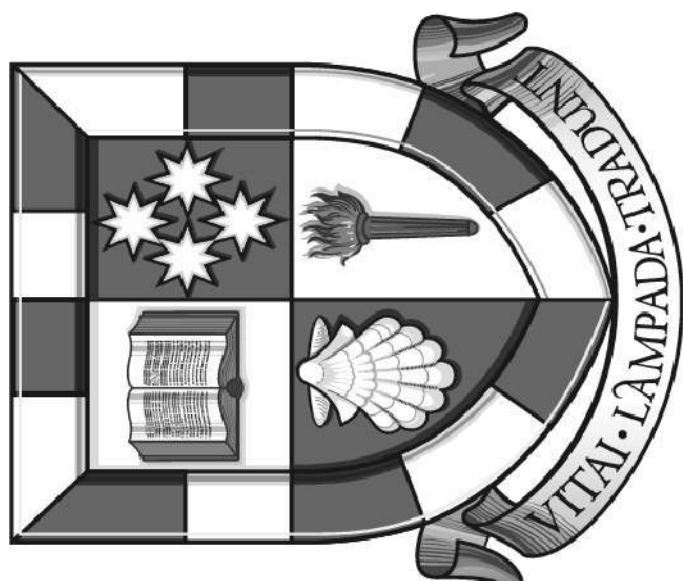
Cox Architecture Pty Ltd ACN 002 535 891

PHILIP CHUN
Building Compliance

Access Consulting

Ref: AN16-206579_Shore Physical Education Centre
Reviewed by: Lindsay Perry
Date: 27/05/16



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Client

SYDNEY CHURCH OF ENGLAND
GRAMMAR SCHOOL (SHORE)

Project No.

213204

Project
**SHORE PHYSICAL
EDUCATION CENTRE**
BLUE ST, NORTH SYDNEY, NSW, 2060

Drawing Title

BISHOPS GATE FIRST FLOOR
PLAN - RL59.60

Document Control Status:

DEVELOPMENT APPLICATION

	Drawn:	NM
A1 DRAINING SHEET		
	Scale:	1:200 @ A1
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Project Architect:	AS	
	Revision:	01
Project Director:	RL	
Drawing Number:		

A-DA-2191



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Ref: AN16-208579_Shore Physical Education Centre
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APPENDIX B

MANDATORY ACCESS COMPLIANCE REQUIREMENTS



B1 ACCESSIBLE CARPARKING

Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required. The car space and the shared zone should be a minimum of 5400mm long.

Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2. The maximum allowable crossfall of an accessible carparking area is to be 1:40, (1:33 for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.

For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7 and approach path is to have a minimum of 2200mm.

Designated accessible carparking is to be identified using the International Symbol for Access (ISA) and line marked as specified in AS2890.6.

B2 EXTERNAL PATHWAYS AND WALKWAYS

The minimum unobstructed width of all pathways and walkways is to be 1000mm (AS1428.1 (2009), Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2 (1992).

All pathways and walkways are to be constructed with no lip or step at joints between abutting surfaces. A construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6 of AS1428.1(2009).

The maximum allowable crossfall of pathways and walkways is to be 1:40. The surfaces of an accessible path of travel are to be slip-resistant.

The ground abutting the sides of the pathways and walkways should follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb or handrail provided to the side of the pathway (refer to AS1428.1 (2009) Clause 10.2).

Maximum allowable gradient of the walkway is 1:20 and maximum length between landings to be 15m (for 1:20 gradient). Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180°, landings to be 1540mm in length – refer to AS1428.1 (2009), Clause 10.8.

B3 KERB RAMPS

Kerb ramps to comply with AS1428 (2009) Amendment 1, Clause 10.7.

Maximum gradient of the kerb ramps to be 1:8 and maximum length to be 1520mm (providing a maximum height of 190mm).

Kerb ramps to have a non-slip surface as required by AS1428.

A tooled joint should be provided between parts of the kerb ramp to assist persons with a vision impairment with orientation.

B4 STEP RAMPS

The configuration of the step ramps to comply with the requirements of AS1428.1, Clause 10.6. Maximum gradient of the step ramp is to be 1:10 and maximum length to be 1900mm (providing a maximum height of 190mm).

Provide landings at the top and bottom of the step ramp to comply with AS1428.1, Clause 10.8.2.

Step ramp to be enclosed on both sides (minimum height 450mm) or a kerb and handrail needs to be installed. Where a kerb is to be installed, the height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level of the ramp. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.



B5 ACCESSIBLE RAMPS

Ramps are to comply with AS1428.1 (2009) Clause 10.3. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).

Accessible ramp are to have a maximum rise of 3.6m (BCA Part 3.11).

Externally, ramps are required to be set back a minimum 900mm from the property boundary (AS1428.1 (2009), Clause 10.3 (f)). This allows tactile indicators and handrail extensions to occur within the boundary and not protrude into the footpath area.

Internally, ramps are required to be set back a minimum 600mm from an internal corridor (AS1428.1 (2009), Clause 10.3 (f)). This allows tactile indicators and handrail extensions to be provided an not protrude into the corridor area.

Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1 (2009), Clause 12. Handrails are to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.

Where a ramp is not enclosed, provide kerb rails in accordance with AS1428.1 (2009). The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.

Provide tactile indicators at the top and bottom of the ramps to comply with BCA Part D3.8 and AS1428.4.1 (2009). Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4 (2009), Figure A1).

Tactile indicators will be required at a mid-landing where the ramp is not continuous. Where the handrail is continuous along both sides of the mid-landing, tactile indicators are not required.

B6 THRESHOLD RAMPS

Threshold ramps are to comply with AS1428.1 (2009), Clause 10.5.

Threshold ramps are to have a maximum rise of 35mm, maximum length of 280mm and maximum gradient of 1:8.

Threshold ramps to be located within 20mm of the door leaf that it services.

B7 BUILDING ENTRANCES

Entrances are to comply with AS1428.1 (2009), Clause 13 as part of the accessible path of travel.

Doors are to have a minimum clear opening width of 850mm to comply AS1428.1 (2009), Clause 13.2.

Door thresholds are to be level to provide seamless entry to the building. The maximum allowable construction tolerance is 3mm for compliance with AS1428.1 (2009), 5mm where bevelled edges are provided between surfaces – refer to Figure 6.

Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1 (2009), Clause 13.5)

For glass doors, provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid pattern to AS1428.1 (2009) Clause 6.6.



B8 TACTILE INDICATORS AT THE BUILDING ENTRANCE

BCA Clause 3.8 (a) (v) states that for a building that is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching – in the absence of a suitable barrier – an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building...if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4.

Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators are to be 600-800mm deep across the width of the path of travel.

B9 DOORWAYS

Doorways within the accessible path of travel are to have a minimum clear opening width of 850mm (AS1428.1 (2009), Clause 13.2). We recommend the use of a 920 leaf door as a minimum to achieve adequate clear width.

All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1 (2009), Figure 31. Circulation areas are to have a maximum crossfall of 1:40.

Doorways to have minimum 30% luminance contrast as described in AS1428.1 (2009), Clause 13.1.

Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1 (2009), Clause 13.5) and allows for single handed operation.

B10 SIGNAGE

The BCA has requirements for Braille and tactile signage within Specification D3.6. This provides information for the provision of statutory signage

Braille and tactile signage is required to be provided throughout any building required to be made accessible in accordance with BCA specification D3.6 and AS1428.1 (2009) and must identify:

- Each sanitary facility
- Any space with a hearing augmentation system
- Accessible unisex facilities and indicate whether the facility is suitable for left or right handed use
- Ambulant accessible sanitary facilities on the door of the cubicle
- Where an entrance is not accessible, directional signage to identify nearest accessible entrance
- Where a bank of sanitary facilities is not provided with an accessible sanitary facility, directional signage to identify nearest accessible sanitary facility.
- Each door required by Part E4.5 to be provided with an exit sign and state "Exit" and "Level" followed by either the floor level number, the floor descriptor or combination of these.

In addition, AS1428.2 (1992) contains additional information as to the form of signage.

Signage should be easily comprehended by all building users. In this regard, the use of pictograms is highly recommended. The message that the sign conveys should be unambiguous.

Placement of signage should be considered at the following locations:

- Where it is clearly visible to people in both a standing and seated position.
- At changes in direction.
- At locations where directional decisions are made.
- As required to amenities and exits



B11 TACTILE INDICATORS

Installation of tactile indicators is to be in accordance with AS1428.4.1 (2009).

Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators are to be 600-800mm deep across the width of the path of travel.

B12 VISUAL INDICATION TO GLAZING

Provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid pattern to AS1428.1 Clause 6.6.

B13 HEARING AUGMENTATION

A hearing augmentation system must be provided where an inbuilt amplification system is provided, other than one used for emergency purposes only as required by BCA Part D3.7.

Further, for buildings that are required to be accessible, the BCA (Part D3.7) requires hearing augmentation systems at service counters **where the user is screened from the service provider.**

While it is not referenced by the BCA, AS1428.5 (2010): Communication for people who are deaf or hearing impaired contains information regarding assisted listening systems and can be used to ensure equitable facilities are provided for this user group.

The standard provides information relating to design solutions and equipment for the following:

- Assisted listening systems.
- Early warning systems
- Visual display systems for intercommunication, public announcements and the like
- Telephone services and telecommunications available to the public.

B14 WHEELCHAIR SEATING

Where fixed seating is provided in an assembly building, the required wheelchair seating spaces (number per BCA) are required to be:

- Accessed via an accessible path of travel.
- Located adjacent to, and at the same level as, other seating in a row.
- Located to allow lines of sight comparable to those for general viewing areas.

The special requirement for the footprint of a single wheelchair seating space is 800x1250mm.

B15 PASSENGER LIFTS

Every passenger lift in an accessible building must be suitable for use by people with a disability and offer compliance with AS1725.12. Typically, the following is required to be provided:

Lift dimensions

- Lift floor dimensions of not less than 1100mm X 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400mm X 1600mm for lifts which travel more than 12m.
- Provision for a stretcher facility within at least one emergency lift required by E3.4, or where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12m, in at least one of those lifts to serve every floor served by lifts.



Lift Features

- Handrail complying with the provisions for a mandatory handrail in AS1735.12.
- Minimum clear door opening complying with AS1735.12.
- Passenger protection system complying with AS1735.12.
- Lift landing doors at the upper landing.
- Lift car and landing control buttons complying with AS1735.12.
- Lighting in accordance with AS1735.12.
- 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.

All passenger lifts serving more than 2 levels must possess:

- Automatic audible information within the lift car to identify the level each time the car stops.
- Audible and visual indications at each lift landing to indicate the arrival of the lift car.
- Audible information and audible indication must be provided in a range between 20-80dB(A) at a maximum frequency of 1500Hz.

B16 STAIRS

Stair construction is to comply with AS1428.1 (2009) Clause 11.1.

Stairs are to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open risers.

Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS1429.1 (2009) Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.

Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2). Handrails are to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails should be continuous around the landings where possible. Handrails are required on both sides of the stair to cater for left and right handed disabilities. A central handrail is also an acceptable solution where adequate width is available.

Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

Stair nosings shall not project beyond the face of the riser.

Provide tactile indicators at the top and bottom of the stair to comply with BCA Part D3.8 and AS1428.4.1 (2009).

Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

B17 FIRE ISOLATED STAIRS

Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

Stair nosings shall not project beyond the face of the riser.



B18 UNISEX ACCESSIBLE SANITARY FACILITIES

Set-out of fixtures and fittings within the accessible sanitary facilities to offer compliance with AS 1428.1 (2009) Clause 15 as follows.

Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.

A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.

Grabrails are to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.

Taps are to have lever handles, sensor plates or similar controls. For lever taps a minimum of 50mm clearance to be provided to adjacent surfaces.

Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (e.g. pan, wall or floor) and remain in the upright position when fully raised.

Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.

Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).

Doorways are to have a minimum clear opening width of 850mm to comply AS1428.1 (2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.

Door hardware are to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

Controls within the accessible toilet facilities, such as light switches, are to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1 (2009), Clause 14. Controls should be located not less than 500mm to a corner.

B19 UNISEX ACCESSIBLE SHOWERS

Showers are to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range. The minimum dimensions of an accessible shower are to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.



B20 PEOPLE WITH AMBULANT DISABILITIES CUBICLES (PAD)

PAD cubicles within male and female toilets to be in compliance with AS1428.1, Clause 16.

Width of PAD cubicles is to be 900-920mm.

Provide grabrails to PAD cubicles to comply with AS1428.1, Clause 17 and Figure 53A.

Doors are to have a minimum opening width of 700mm and comply with AS1428.1 Figure 53B.

Provide signage to the PAD cubicles to comply with AS1428.1, Clause 16.4.

Provide 900x900 circulation space in front of pan and each side of doors on path to the toilet. Door are not to swing into circulation spaces.



APPENDIX C

BEST PRACTICE RECOMMENDATIONS



E1 FIRE EGRESS FOR PEOPLE WITH DISABILITIES

HREOC Advisory notes on access to premises, Item 5.21 states that, in an emergency, all users should be provided with a means of egress from a premises to a place of comparative safety. This ensures people with disabilities to be provided with the same level of protection as other premises users or building occupants.

Evacuation procedures for the building should address the provision of places of comparative safety for people with limited mobility. Signage should comply with BCA D3.6 and BCA Specification 3.6 and have braille and tactile components.

E2 RECEPTION COUNTERS

We recommend the provision of accessible reception counters designed in accordance with AS1428.2 (1992), Part 24.1. Height of the counter is to be between 750mm (± 20) and 850mm (± 20) above the finished floor level and have foot and knee clearance under the counter as outlines in Figure 25. The minimum width of the accessible counter and clearance below is 900mm.

The level of access to be provided may be dependent upon the level of interaction intended, such as high level interaction, minimal and verbal and visual interaction only.

E3 SEATING TO PUBLIC AREAS

Where seating is located within public areas, a proportion of accessible seating should be provided offering compliance with AS1428.2:1992 Clause 27.

E4 SIGNAGE AND WAYFINDING

Signs and symbols should be provided to inform all users. Provide a signage system which informs all users (HREOC Advisory notes on access to premises, Item 5.15).

The development of a way-finding strategy with consideration to landmarks and visual features of the development is recommended. This would include the use of varied finished surfaces to differentiate areas of each building.

Signs including symbols, numbering and lettering shall be located where they are clearly visible to people in both a seated and standing position. That is, they should be placed within a zone at a height not less than 1400 mm and not more than 1600 mm above the plane of the finished floor. Where space in this zone is used up, the zone for placement of signs may be extended downward to not less than 1000 mm from the plane of the finished floor. This height assists people to read from either a seated or a standing position, and also assists people with low vision to read the information on the sign. Letters and symbols in relief assist people with severe visual disabilities.

Where a sign can be temporarily obscured, e.g. in a crowd, the sign should be placed at a height of not less than 2000 mm above the plane of the finished floor.

Signs to assist way-finding should be provided at changes of direction and at sites where directional decisions are made, to enable the appropriate decisions to be made before a change of direction occurs.

Where the surface of the wall surrounding the sign provides insufficient contrast (e.g. patterned wallpapers), the background area to the sign may need to be increased in size.

The message that the sign carries should be unambiguous.

Tactile floor plans or maps and prerecorded auditory instructions at the main entrance and at other useful locations can be of assistance to people with visual impairment.



E5 ACCESS CONTROLLED ENTRIES TO CAR PARKS

Where an entry to a car park is access control, the access or intercom pedestal should be positioned so that it is accessible by a driver who uses a wheelchair. The access /intercom pedestal to be positioned in accordance with AS2890.6:2009 Appendix A4.

E6 DEPTH OF DOOR RECESS

Where the depth of the door recess (measured to the face of the door) exceeds 300mm, the door must be automated to enhance access.

E7 LUMINANCE CONTRAST

Luminance contrast is the light reflected from one surface or component, compared to the light reflected from another surface or component. A luminance contrast of 30% between two surfaces is generally accepted as a minimum when considering it as a navigational / way-finding tool for people with Vision impairment.

In this regard, we recommend that the provision of a minimum 30% luminance contrast between surfaces be adopted in the following instances to assist people with Vision impairment negotiate the built environment:

- Provide luminance contrast between walls and doors.
- Generally, contrasting wall and floor surfaces should be provided. At a minimum, skirting boards which provide suitable contrast to the floor surface assist people with low vision in identifying perimeters of corridors and accessible spaces.
- For joinery, Counters or benches to achieve a minimum 30% luminance contrast with the counter / bench face to which it is viewed. Additionally, Counter / bench surfaces to have a matte or low sheen finish;
- For handrails and grabrails, provide a luminance contrast between the rail and the wall colour;
- For signage, provide luminance contrast so that message can be conveyed – luminance contrast required between the information in the sign and base sign colour.

Note: Statutory requirements for luminance contrast include tactile indicators, stair nosing strips, toilet seats and door / wall identification.

E8 LOCKERS

The provision of lockers at a suitable height for people using a wheelchair is recommended. The height range for accessible lockers to be 230mm-1350mm AFFL based on the reach ranges prescribed in AS1428.2 (1992).

E9 FURNITURE HARDWARE

Generally, drawer and cupboard fronts that have recessed finger pull handles do not comply with AS 1428.1 (2009) Clause 13.5.2(b) and therefore are not recommended for the new schools PPP.

We recommend the use of D-type pull handles to furniture generally which provide a minimum 35mm clearance between the rear face of the handle and the face of the drawer.

E10 LIGHTING AND GLARE

Minimum interior lighting levels of maintenance illumination are to be in accordance with AS1680.1 (1990) and with consideration to AS1428.2 (1992) Clause 19. Consistent lighting levels should be provided throughout, without pools of light or dark areas.

Glare and excessively reflective surfaces should be avoided. This includes glare from windows