PHILIP CHUN
Building Compliance

ACCESS REPORT

GLENWOOD HIGH SCHOOL

Glenwood Park Drive & Forman Avenue, Glenwood NSW 2768

Report Prepared for: NSW Department of Education
Level 8, 259 George Street
Sydney NSW 2020

Attention: Jeremy Stott – NSW Department of Education

Report Prepared by: Philip Chun Accessibility Pty Ltd.
Suite 404
44 Hampden Road
Artarmon NSW 2064

Contact: Lucy Alderson
Access Consultant

Our Ref: AN020-215523_SINSW_Glenwood HS_SSDA_LA_V4_211112

Date: 12/11/2021

CONTENTS

DOCUMENT ACCEPTANCE

	Name	Signed	Date
Prepared by	Lucy Alderson *Access Consultant*		12/10/2021

REVISION HISTORY

Revision No.	Prepared by	Description	Date
R01	Lucy Alderson	Draft SSDA Access Report for review and comments	06/10/2021
R02	Lucy Alderson	Draft SSDA Access Report addressing the comments provided	12/10/2021
R03	Lucy Alderson	FINAL SSDA Access Report addressing the comments provided	13/10/2021
R04	Lucy Alderson	FINAL Updated SSDA Access Report	12/11/2021

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 Building Code of Australia (BCA) and additional issues which have been deemed an impediment to access provision and may increase Client risk of attracting a complaint under the Disability Discrimination Act 1992 (Cth) (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 Accessibility.

Philip Chun Accessibility 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 Accessibility Report accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of a State Significant Development Application (SSD - 23512960).

The development is for upgrading works comprising alterations and additions to Glenwood High School at 85 Forman Avenue, Glenwood. The site is legally described as Lot 5227 DP 868693.

The site is roughly rectangular in shape, with a total area of 60,790m2 and street frontages to Forman Avenue to the south and Glenwood Drive to the east. Glenwood Reserve adjoins the northern and western boundaries of the school.

This accessibility report is the result of the review of the SSDA design package as issued by PTW Architects and as available at the time of assessment against the requirements of the Building Code of Australia 2019 Amendment 1 (BCA 2019 Amdt 1). This report overviews the design philosophy and provides information for the designers to incorporate into the design as well as identify areas that do not meet the BCA 2019 Amdt 1 requirements and may require some revision, additional details, or performance solutions.

This report relates to the proposed works and additions to Blocks A, E, & J including the proposed new 3 storey building (referenced as Block N). The intent of this SSDA design report is to address the main Parts of the BCA inclusive of Parts A, B, C, D, E, F, G, H, and J of the BCA 2019 Amdt 1. This report demonstrates that the design is generally capable of meeting a combination of the Deemed-to-Satisfy and Performance Requirements of the BCA 2019 Amdt 1. Areas of the design are still being developed but likely to be addressed prior to issue of a Section 6.28 Crown Design Verification Certificate (S6.28 CDVC).

1.1 Project Description

This SSDA seeks consent for alterations and additions to the existing Glenwood High School. The proposal entails

The Proposal maintains:

- Construction of a new three-storey building at the north-eastern portion of the site facing Glenwood Park Drive which will accommodate approximately 54 learning spaces.
- Refurbishment of existing Building Block A (ground floor only) to provide one new support unit within the space of an existing general learning space;
- Refurbishment of Building Block D (ground floor only) to provide an additional office space and storeroom;
- Refurbishment of Building Block E to re-purpose it on the ground floor for computer learning spaces, staff and administration as well as upgrades to the library on the first floor;
- Refurbishment of Building Block J to re-purpose it from visual arts and performing arts to learning spaces and workshops for food tech and woods/metal unit; and
- The proposed development will also involve ancillary works at the site associated with the proposed upgrades

1.2 Site and Contexts

The development is for upgrading works comprising alterations and additions to Glenwood High School at 85 Forman Avenue, Glenwood. The site is legally described as Lot 5227 DP 868693.

The site is roughly rectangular in shape, with a total area of 60,790m2 and street frontages to Forman Avenue to the south and Glenwood Drive to the east. Glenwood Reserve adjoins the northern and western boundaries of the school.

Figure 1. Site Paln

1.3 Reviewed Documentation

The following architectural drawings prepared by PTW Architects form the basis of this report.

Dwg No. & Revision No.	Title	Date
DA-AR-0012/D	SSDA SITE + CONTEXT PLAN	10/11/21
DA-AR-0013/D	SSDA SITE ANALYSIS	10/11/21
DA-AR-0020/D	SSDA SITE PLAN -RL 62.075	10/11/21
DA-AR-0021/D	SSDA SITE PLAN -RL 65.975	10/11/21
DA-AR-0022/D	SSDA SITE PLAN -RL 69.875	10/11/21
DA-AR-0024/C	SSDA PUBLIC DOMAIN PLAN	10/11/21
DA-AR-0201/D	SSDA STREET ELEVATION	10/11/21

Dwg No. & Revision No.	Title	Date
DA-AR-0301/D	SSDA SITE SECTIONS	10/11/21
DA-AR-A101/D	SSDA BUILDING A -DEMO PLAN - LEVEL 00	10/11/21
DA-AR-A102/D	SSDA BUILDING A -GA - LEVEL 00	10/11/21
DA-AR-E101/D	SSDA BUILDING DEF -DEMO PLAN - LEVEL 00	10/11/21
DA-AR-E102/D	SSDA BUILDING DEF -GA -LEVEL 00	10/11/21
DA-AR-E111/D	SSDA BUILDING DEF -DEMO PLAN - LEVEL 01	10/11/21
DA-AR-E112/D	SSDA BUILDING DEF -GA -LEVEL 01	10/11/21
DA-AR-E201/ C	SSDA BUILDING DEF -ELEVATIONS	10/11/21
DA-AR-E301/ C	SSDA BUILDING DEF -SECTIONS	10/11/21
DA-AR-HJ101/D	SSDA BUILDING HJ -DEMO PLAN - LEVEL 00	10/11/21
DA-AR-HJ102/D	SSDA BUILDING HJ -GA -LEVEL 00	10/11/21
DA-AR-N103/D	SSDA GA -LEVEL 00	10/11/21
DA-AR-N113/D	SSDA GA -LEVEL 01	10/11/21
DA-AR-N123/D	SSDA GA -LEVEL 02	10/11/21
DA-AR-N133/D	SSDA GA -LEVEL 03 -ROOF PLAN	10/11/21
DA-AR-N201/D	SSDA ELEVATIONS – SHEET 1	10/11/21
DA-AR-N202/D	SSDA ELEVATIONS – SHEET 2	10/11/21
DA-AR-N301/D	SSDA SECTIONS – SHEET 1	10/11/21
DA-AR-N302/D	SSDA SECTIONS – SHEET 2	10/11/21
DA-AR-N501/C	SSDA TYPICAL FAÇADE SECTIONS-SHEET1	10/11/21
DA-AR-N502/C	SSDA TYPICAL FAÇADE SECTIONS-SHEET2	10/11/21
DA-AR-P103/D	SSDA PERFORMING ARTS -FLOOR PLAN -RL 64.000	10/11/21
DA-AR-P113/D	SSDA PERFORMING ARTS -ROOF PLAN	10/11/21
DA-AR-P201/C	SSDA PERFORMING ARTS - ELEVATIONS – SHEET 1	10/11/21
DA-AR-P202/C	SSDA PERFORMING ARTS - ELEVATIONS – SHEET 2	10/11/21
DA-AR-P301/D	SSDA PERFORMING ARTS - SECTIONS	10/11/21
DA-LA-0001/F	SSDA LANDSACPE PLAN	10/11/21
DA-LA-0002/E	SSDA DETAIL LANDSACPE PLAN SHEET 1	10/11/21
DA-LA-0003/E	SSDA DETAIL LANDSACPE PLAN SHEET 2	10/11/21

1.4 Methodology

Philip Chun Accessibility 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.

Access requirements for people with a disability have been assessed against the provisions of the BCA-2019 and the Premises Standards 2010. Any assessment against Australian Standards such as AS1428.1-2009, where not specifically referenced in the BCA or the Premises Standards, will be provided as recommendations. Any such access recommendations shall be noted as 'best practice' options within this report.

Accessibility is paramount in providing an inclusive environment for all users.
Phillip Chun Accessibility 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.

2. LEGISLATION

2.1 Disability Discrimination Act

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) (DDA), 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.

2.1 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.

2.2 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.

2.3 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 framework of the DDA.

2.4 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).

2.5 National Construction Code / Building Code of Australia

The National Construction Code (NCC) comprises the Building Code of Australia (BCA) and the Plumbing Code of Australia (PCA). NCC is all encompassing and contains Volumes One, Two and Three; The Guide; and the Consolidated Performance Requirements.

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 proposed building use matrix for this project:

Building Classification(s)	Blocks A, B, C, G, H, J, K & L	Class 9b (Existing classrooms, amenities, gymnasium and pre-school)
	Blocks D, E & F	Class 5 & 9b (Staff rooms, reception, amenities, classroom and library)
	Block N Performance Workshop	Class 9b (Home bases, library, amenities and staff rooms)

Note: Blocks B, C, G, H, K & L do not form part of the scope of works.

Building Classifications

The different parts of the building are classified as follows as they relate to the facility:

Class 5: - is an office building used for professional or commercial purposes.

Class 9: - is a building of a public nature—
(b) Class 9b — an assembly building, including a trade workshop, laboratory or the like in a primary or secondary school.

3. ACCESS AND APPROACH

3.1 Approach from the Allotment Boundary

BCA & Access to Premises Standard Part D3.2

The BCA requires that a continuous accessible path of travel within the meaning of AS1428 .1 (2009) be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.

Comments:

At this current stage indicates the entrances to the new building can be readily addressed during subsequent design development stages.

The existing continuous accessible path of travel to the existing Block E which is to be refurbished to Staff and admin area achieves compliance.

Detailed compliance requirements to be coordinated to comply during subsequent design development stages.

Refer to Appendix A for Mandatory Compliance requirements.

3.2 Approach from the Accessible Carpark

BCA & Access to Premises Standard 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 car parking areas to the main building entrance.

Comments:

The current SSDA design package indicates that this can be readily addressed during subsequent design development stages

Detailed compliance requirements to be coordinated to comply during subsequent design development stage.

Refer to Appendix A for Mandatory Compliance requirements.

3.3 Approach between Buildings on Site

BCA & Access to Premises Standard Part D3.2

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

Comments:

Generally as shown in the current SSDA package linkages between the new building, Block E and J appear to be sufficient to accommodate all the required turning and passing spaces.

Detailed compliance requirements to be coordinated to comply during subsequent design development stage.

Refer to Appendix A for Mandatory Compliance requirements.

3.4 Building Entrances

BCA & Access to Premises Standard 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 500m^2, therefore the distance of travel between accessible and inaccessible entrances must not exceed 50 metres.

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

Comments:

At this SSDA stage indicates that this can be readily addressed during subsequent design development stages.

Detailed compliance requirements to be coordinated to comply during subsequent design development stages.

Refer to Appendix A for Mandatory Compliance requirements.

.

3.5 Accessible Carparking

BCA & Access to Premises Standard 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 9b 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.

Comments:

At this SSDA stage, we require confirmation from TTW that there is sufficient accessible carparking spaces and finer details of compliance such as layout and location of the space along an accessway to be confirmed and coordinated to comply during subsequent design development stages.

Refer to Appendix A for compliance requirements.

4. ACCESSIBILITY PROVISIONS

4.1 Internal Paths of Travel

BCA & Access to Premises Standard Parts D3.1 and D3.3

The BCA requires that accessways complying with AS 1428.1 (2009) is to 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 and length of 1800 x 2000mm to be provided in corridors at maximum 20 metres intervals where a direct line of sight is not available. A passing space may serve as a turning space.
- Turning spaces with a minimum width and length of 1540 x 2070mm to be provided within 2 metres of the end of corridors and at maximum 20 metres intervals.
- Increased landings are required at changes of direction, including 1500 x 1500mm turning spaces to facilitate a 60-90 degree turn, and 1540 x 2070 for a 180 degree turn.

Accessible path of travel is required to be step free, not include a stairway, turnstile, revolving door, escalator, moving walk or other impediment. Accessible path is required to have a slip-resistant surface (AS 1428.1 (2009), Clause 6.1 and 7.1).

Comments:

Generally, at this SSDA design package review, internal path of travel for the new building appear to be sufficient to accommodate the required turning and passing spaces.

This can be coordinated and to comply during subsequent design development stages.

Existing buildings Block E and J with internal modifications appear to be capable of accommodating required affected paths of travel through further detailed design coordination.

Refer to Appendix A for compliance details.

4.2 Floor Finishes / Surfaces

BCA & Access to Premises Standard Part D3.3

The following applies to interior finishes 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.

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.3 Internal Doors

4.3.1 Circulation Spaces at Doorways

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)		
		Latch side	Hinge side	Depth in front of door
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)		
	Latch side	Slide side	Depth in front of door
Front	530	-	1450
Slide Side	395	660	1280
Latch Side	660	185	1230
Either Side	660	660	1280

Note: the above clearances are based on an unobstructed door opening width of 850mm, which is the minimum required clearance. Widths greater than 850mm have different requirements. This will be reviewed upon the 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, and 900mm for the path of travel to ambulant toilet cubicles.

Comments:

All doorways for the new building appears to be sufficient to accommodate the required turning and passing spaces

For the existing buildings where internal modifications are being proposed, there are multiple doorways, which achieve non-compliant door circulation spaces these doors will need to be coordinated and to comply during subsequent design development stages.

Refer to Appendix A for compliance details.

4.3.2 Door Operational Forces

Door operating forces are required to meet AS 1428.1 (2009), Clause 13.5.2 (e).

Where a door closer is fitted to doors other than fire doors and smoke doors, the force required at the door handle to operate the door does not exceed:

- 20N to initially open the door;
- 20N to swing the door; and
- 20N to hold the door open between 60 and 90 degrees.

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.4 Exemptions

BCA & Access to Premises Standard Part D3.4

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).

Comments:

There are multiple areas that can be exempt from accessibility under Part D3.4 of BCA for both building J and existing buildings where internal modifications are being proposed.

Refer to Appendix A for exemption details.

4.5 Signage

BCA & Access to Premises Standard 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 required to 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; and
- Each door required by BCA 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.

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.6 Tactile Indicators

BCA & Access to Premises Standard Part D3.8

Tactile indicators are required to be provided, in accordance with AS1428.4.1 (2009) to:

- A stairway;
- A ramp, other than kerb ramp;
- Any overhead obstruction less than 2 metres above the finished floor level, other than a doorway, where a suitable barrier has not been provided; and
- Where an accessway meets a vehicular way in the absence of a kerb or kerb ramp.

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.7 Glazing on an Accessway

BCA & Access to Premises Standard Part D3.12

The BCA 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).

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.8 Slip Resistance

BCA Part D2.14

Landings in a stairway are required to 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

Comments:

This can be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

4.9 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:

(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 (2009); or

In NSW D2.15 (d) and (e):

(d) in a Class 9b building used as an entertainment venue, the door sill of a doorway opening to a road, open space, external stair landing or external balcony is not more than 50mm above the finished floor level to which the doorway opens; or
(e) 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.

Comments:

At this SSDA stage, details of door threshold for both new building and existing buildings generally appears to be sufficient to accommodate the required turning and passing spaces.

This will need to be coordinated and detailed to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance requirements.

5. VERTICAL CIRCULATION

5.1 Passenger Lifts

BCA & Access to Premises Standard Part E3

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

Lift dimensions:

- Lift floor dimensions of not less than 1100 x 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400 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 AS173.5.12.
- 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 are required to 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.

Comments:

At this SSDA stage, no details of proposed passenger lifts for the new building, which comprises of 3 levels, have been provided for review and to ascertain compliance. However, this can be readily coordinated and to comply during subsequent design development stages.

Refer to Appendix A for compliance details.

5.2 Stairs

BCA & Access to Premises Standard Part D3.3

New stairs will need to meet BCA requirements for accessibility. The layouts shown indicate that compliance is capable of being met. Details can be reviewed when available as part of further design detailing. At this SSDA stage, it is assumed that many stairways will be used for vertical circulation, which can be confirmed as part of the further assessment process.

All stairways, excluding fire-isolated stairs, are required to be designed and constructed in accordance with AS 1428.1 (2009), Clause 11. Stairs to have a minimum clear unobstructed width of 1000mm, and to include the provision of handrails, handrail extensions, opaque risers, contrasting nosing strips and tactile indicators as per the following:

- Handrails both sides with appropriate profile and extensions;
- Tread and riser dimensions per BCA Table D2.13;
- Opaque risers with no over-hanging treads or angled risers exceeding 25mm setback;
- Visual nosing strips; and
- Warning tactile ground surface indicators per AS 1428.4.1 (2009) (BCA D3.8)

Stairways must be set back from transverse paths of travel to allow for installation of warning tactile ground surface indicators and handrail extensions without protrusion into the adjacent pathway (BCA D3.3). This also applies to internal stairs and is an important design element to ensure sufficient space to allow handrail extensions to the top and bottom of stairs.

Further to this, it 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.

Comments:

There are multiple new stairways for the new building, where adequate stair setbacks are required to prevent the handrail extensions (top and bottom of stairs) from protruding into the transverse path of travel.

Finer detailed requirements can be readily coordinated to comply during subsequent detailed

Refer to Appendix A for compliance details.

5.3 Fire-Isolated Stairs

BCA & Access to Premises Standard Part D3.3

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

As per BCA Clause D2.17 (a) and (vi), handrails within the fire isolated stairways are required to comply with AS 1428.1 (2009), Clause 12. The height of handrails is to be between 865-1000mm and be consistent along the length of the stair.

Comments:

There are multiple new stairways for the new building. Finer detailed requirements can be readily coordinated to comply during subsequent detailed design development stages.

Refer to Appendix A for compliance details.

6. SANITARY FACILITIES

6.1 Unisex Accessible Sanitary Facilities

BCA Part F2.4

The BCA states that accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a) & (b) as per below:

BCA Table F2.4(a)

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

BCA Table F2.4(b)

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

Design

- An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels.
- The circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with the requirements of AS1428.1.
- The internal dimensions and layout of these facilities must be appropriate to ensure circulation of not less than 1900mm x 2300mm to the pan and 1600mm x 2350mm to the shower, in accordance with AS 1428.1 (2009). The washbasin may not encroach greater than 100mm into these spaces when located opposite to the pan.
- 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.
- Provision of alternate left and right handed facilities should be included in the scheme, which should be provided with suitable signage.
- Signage provision in accordance with AS1428.1 (2009) and BCA D3.6
- 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.

Comments:

The proposed unisex accessible sanitary compartments for each level of the new building, appear to have sufficient overall room dimensions to accommodate all the required circulation spaces around a pan and basin for compliance with AS1428.1-2009.

Detailed set outs of all unisex accessible sanitary compartments and associated doors, sanitary ware, fixtures and fittings to be coordinated during subsequent detailed design development stages for compliance.

Refer to Appendix A for compliance details.

6.2 Ambulant Toilet Cubicles

BCA Part F2.4

Cubicles for use by a person with an ambulant disability need to be included in the scheme, in accordance with AS 1428.1 (2009) and (BCA F2.4). This should be reviewed and included within the scope of the scheme; which is in addition to wheelchair accessible unisex facilities, noted above.

Ambulant toilet facilities should be provided to meet the guidance identified in BCA Part F2.4(c), which prescribed the following requirement:

- At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females

Furthermore, design detailing should follow the guidance in Clause 16 of AS1428.1 (2009), which includes the following requirements:

- Each ambulant cubicle will require a clear circulation space of 900mm x 900mm internally between the ambulant pan (610mm to 660mm depth projection) and the cubicle door in its most open position (if door swings into the cubicle)
- Each ambulant cubicle will require a clear circulation space of 900mm x 900mm externally between the cubicle door in its most open position (if door swings out of the cubicle) to any obstruction
- Each ambulant cubicle shall achieve a clear width ranging between 900mm to 920mm
- Each ambulant cubicle shall be provided with a cubicle entry door achieving a clear open width of minimum 700mm
- If ambulant cubicle is provided within a larger male and/or female bank of toilets, the entry door/s (incl. door forming air locks) to the toilets (other than unisex accessible toilet) shall achieve a clear open width of minimum 700mm
- If airlocks are provided leading to the ambulant toilet facility, a clear circulation space of 900mm x 900mm is required between consecutive door swings in each air lock
- Each ambulant cubicle requires provision of grab rails on both sides
- Each ambulant cubicle requires provision of a coat hook
- Signage provision in accordance with AS1428.1 (2009) and BCA D3.6

Note: Unisex ambulant sanitary compartments are technically non-compliant with BCA Part F2.4.

Comments:

At this SSDA stage generally the ambulant toilet cubicles appears to have sufficient dimensions to accommodate the required circulation space. Detailed set outs of all ambulant sanitary compartments and associated doors, sanitary ware, fixtures and fittings to be coordinated during subsequent detailed design development stages for compliance.

Refer to Appendix A for compliance details.

7. HEARING AUGMENTATION

7.1 Hearing augmentation (BCA Part D3.7)

A hearing augmentation system must be provided in a room in a Class 9b building; or in an auditorium, conference room, meeting room or room for judicatory purposes where an inbuilt amplification system is provided, other than one used for emergency purposes only as required by BCA Part D3.7.

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

Comments:

Hearing augmentation details have not been indicated at this early stage of the design development process.

However, this can be readily coordinated and detailed to comply during subsequent detailed design development stages.

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 and Premises Standards. The design is at the SSDA stage where the inherent BCA philosophies need to be further investigated during subsequent design stages. The finer details with respect to BCA compliance can be finalised prior to the issue of a Construction Certificate.

APPENDIX A

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 180º, landings to be 1540mm in length – refer to AS1428.1 (2009) Clause 10.8.

B3 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.

B4 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.

B5 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.

B6 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.

B7 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.

B8 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 (2009) Clause 6.6.

B9 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 bot a standing and seated position.
- At changes in direction.
- At locations where directional decisions are made.
- As required to amenities and exits.

B10 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.

B11 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 1100 x 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400 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 AS173.5.12.
- 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.

B12 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.

B13 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.

As per BCA Clause D2.17 (a) (vi), handrails within the fire isolated stairways are required to comply with Clause 12 of AS 1428.1 (2009).