

ACCESS



CREDWELL

ACCESS REPORT

ISSUED FOR DEVELOPMENT APPLICATION

12 The Strand

12 The Strand, Dee Why, NSW 2099

Access report BCA 2022
22/05/2025

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DOCUMENT CONTROL

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1. INTRODUCTION

1.1 OBJECTIVES

The purpose of this report is to provide an assessment of the proposal against:

1. all relevant clauses of the Building Code of Australia 2022 Volume 1 (**BCA**) relating to the provision of access for people with a disability;
2. Objective 4Q-1 of the Apartment Design Guidelines (**ADG**);
3. the Livable Housing Design Guidelines (**LHDG**) – Silver Level;
4. the adaptable housing requirements of Warringah Development Control Plan 2011 (**DCP**); and
5. associated Standards called up by the BCA and DCP including AS 1428.1-2009, AS 1428.4.1-2009, AS 2890.6-2009 and AS 4299-1995.

The assessment will address all relevant Deemed-to-Satisfy clauses therein to identify where the subject building achieves compliance and non-compliance, as well as provide recommendations for possible Performance Solutions, which are required to be prepared under separate engagement and reports.

Part 3 'Assessment Summary' of this report outlines the identified compliance matters that require further information or consideration and/or assessment as a Performance Solution (to be prepared separately).

It is presumed the assumptions, content, and limitations of this report are reviewed, noted, and understood by the reader. Credwell Consulting are to be contacted to clarify any queries or assumptions made in relation to the contents of this report and further, Credwell Consulting take no responsibility for misinterpretation of any of the content herein.

1.2 LIMITATIONS

This report does not include, nor imply, any assessment of, or compliance with:

1. The National Construction Code – Plumbing Code of Australia Volume 3;
2. The Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to);
3. Any Development Consent conditions;
4. The Liquor Licencing Act 2007;
5. The Work Health and Safety Act 2011;
6. The Swimming Pools Act 1992; and
7. Requirements of Authorities including, but not limited to, Fire and Rescue NSW, WorkCover, RMS, Council, Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like.
8. Requirements of BCA Section J.
9. The structural design of the building;

10. The design of any electrical, fire, hydraulic or mechanical services;
11. The inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to).

Interpretations

A number of matters within the BCA are known to be interpretive. Where these matters are encountered, interpretations have been used that are consistent with Credwell Consulting's understanding of standard industry practice.

Dimensions and Tolerances

In some instances, the BCA specifies minimum dimensions for construction. The assessment of plans and specifications includes a review of such minimum dimensions that are relevant to the project, but Credwell Consulting does not guarantee that all relevant minimum dimensions have been assessed where they are not clearly and explicitly denoted/marked on the architectural drawings.

The relevant designer(s) and builder(s) should confirm that all minimum dimensions are achievable on site prior to works and consideration/attention should be given to construction tolerances impacted by wall set outs, applied finishes, and skirtings to corridors and bathrooms. For example, tiling bed thickness on walls and floors can adversely impact critical minimum dimensions relating to access for people with disabilities, stair and corridor widths, and balustrade heights.

1.3 DISABILITY DISCRIMINATION ACT

The Disability Discrimination Act 1992 (Cth) (the “DDA”) is Commonwealth legislation (applies nationally). Amongst other things, it provides an avenue for an affected party to make a complaint of discrimination. Compliance with the BCA does not restrict a complaint of discrimination relating to the provision of access to and within a building from being made under the DDA. However, provided the building complies with the BCA and the Disability (Access to Premises – Building) Standards 2010, such a complaint cannot be successful.

1.4 DISABILITY (ACCESS TO PREMISES – BUILDINGS) STANDARDS 2010

The Disability (Access to Premises – Buildings) Standards 2010 (the “Premises Standards”) was created under the DDA and is also Commonwealth legislation (applies nationally). The Premises Standards identifies buildings to which it applies before specifying construction standards that those buildings are required to comply with. In summary, the Premises Standards are applicable to a new building, a new part of a building, and an affected part of a building, and the construction standards applicable are contained within “Schedule 1 Access Code for Buildings”.

The Premises Standards provides a definition for a new building, a new part of a building, and an affected part of a building. The definition of a new building and a new part of a building is currently considered to be in line with standard dictionary definitions (unless a building or part obtained construction approvals prior to 1 May 2011). However, the term “affected part” is specific to the Premises Standards and is defined by clause 2.1(5) as follows –

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

The upgrade requirements of the Premises Standards are founded on determining whether a development within an existing building results in the creation of an affected part.

As previously mentioned, the construction standards of the Premises Standards are contained within “Schedule 1 Access Code for Buildings”. It should be noted that this part of the Premises Standards was prepared in consultation with the Australian Building Codes Board (ABCB – publisher of the NCC). As such, the requirements outlined in each document are the same. Therefore, assessment of the proposed development against the relevant requirements of the NCC applicable to access for people with a disability ensures that it also complies with the Premises Standards.

The subject proposed development incorporates construction of a new building, therefore, the entire building must comply with the Premises Standards. An assessment of the building against the relevant requirements of the NCC applicable to access for people with a disability, as outlined in this Report, is equivalent to an assessment against “Schedule 1 Access Code for Buildings” of the Premises Standards. Therefore, confirmation of compliance with the NCC should also be taken as confirmation of compliance with the Premises Standards.

1.5 LIVABLE HOUSING DESIGN PART G7 OF THE BCA AND THE NSW APARTMENT DESIGN GUIDELINE ASSESSMENT

BCA Part G7 – Livable Housing design was introduced in BCA 2022 with the intent of providing housing to meet the needs of the community, including older people and those with a mobility-related disability.

Part G7 and the ABCB Standard do not apply in NSW, however the Part G7 requirements align with the NSW Apartment Design Guide (ADG) which requires new and existing residential apartment developments in NSW to adopt the Livable Housing Design Guidelines (LHDG). These requirements are enforced by the NSW State Environmental Planning Policy (Housing) 2021 (Housing SEPP) and the NSW Environmental Planning and Assessment Regulation 2021 (EP&A Regs).

Chapter 4 Design of residential apartment development of the Housing SEPP applies to development relating to residential flat buildings that are at least **three storeys** and containing at least **four dwellings**. Prior to the determination of a DA application, the consent authority are required to consider the ADG as issued by the Department [of Planning] in July 2015. The ADG must be applied to new developments, substantial redevelopment or refurbishment of an existing building or the conversion of an existing building for use as a residential flat building.

The subject proposed development has three (3) or more storeys and contains four (4) or more dwellings so the consideration of the Apartment Design Guide is required under Clause 147 of the Housing SEPP and Clause 29 of the EP&A Regs.

Generally, the ADG refers to matters outside the scope of an access assessment, however Section 4Q of the ADG relating to Universal Design provides the following objectives and design guidelines, with the most relevant being 4Q-1 as provided below.

Apartment Design Guideline		
	Objective	Design Guidance
4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members.	Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features.
4Q-2	A variety of apartments with adaptable designs are provided	Adaptable housing should be provided in accordance with the relevant council policy. Design solutions for adaptable apartments include: <ul style="list-style-type: none"> convenient access to communal and public areas

Apartment Design Guideline		
Objective		Design Guidance
		<ul style="list-style-type: none"> • high level of solar access • minimal structural change and residential amenity loss • when adapted • larger car parking spaces for accessibility • parking titled separately from apartments or shared car • parking arrangements
4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs.	Apartment design incorporates flexible design solutions which may include: <ul style="list-style-type: none"> • rooms with multiple functions • dual master bedroom apartments with separate bathrooms • larger apartments with various living space options • open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom

As a matter of assessment, the following units are to be assessed against the Livable Housing Guidelines:

Building		Level	Unit Type
-	Residential building	1	3 Bedroom
Benchmark			20%
Total Number of Units			6
Required Livable Units			2
Proposed Livable Units			101-102

A Clause-by-Clause assessment against the requirements of the Livable Housing Design Guidelines is contained within Part 5.1, with any matters of further consideration being discussed in [Part 3](#) of this Report.

1.6 ADAPTABLE HOUSING REQUIREMENTS WARRINGAH DEVELOPMENT CONTROL PLAN AND AS 4299-1995

The application of the requirements of AS 4299-1995 to residential flat buildings is specified by the relevant Councils Development Control Plan relating to the proposed development. This has been identified as **Warringah Development Control Plan 2011**.

The requirements of the DCP are as follows:

- 1. The design is to achieve a barrier free environment with consideration given to the design of door handles and switches, entrances and corridors. Steep, rough and slippery surfaces, steps and stairs and narrow paths should be avoided.*
- 2. There are to be continuous, independent and barrier-free access ways incorporated into the design of buildings.*
- 3. Pathways are to be reasonably level with minimal cross fall and sufficient width, comfortable seating and slip-resistant floor surfaces.*
- 4. Where there is a change of level from the footpath to commercial or industrial floor levels, ramps rather than steps should be incorporated.*
- 5. There is to be effective signage and sufficient illumination for people with a disability.*
- 6. Tactile ground surface indicators for the orientation of people with visual impairments are to be provided in accordance with the relevant Australian Standard.*

Note: Australian Standard AS1428.4:2002 'Design for Access and Mobility Part 4: Tactile Indicators' applied at the time the DCP was adopted.

- 7. Access for people with a disability is to be provided at the main entrance to the development.*
- 8. Development is to comply with Australian Standard AS1428.2.*

Note: All applicants are reminded of their responsibilities under the Disability Discrimination Act 1992.

The Residential Flat Design Code provides accessibility standards which are to be satisfied for residential flat building developments.

- 9. Where a development comprises at least five (5) dwellings, 10% (rounded up to next whole number) of dwellings shall be capable of being adapted (Class C) under AS4299*

AS 4299-1995, is specifically designed to allow for the future adaptation of a dwelling to accommodate the occupant's needs at minimum cost, with three classification levels being applicable:

Classification Level	Criteria
Adaptable House Class C	All essential features incorporated.

In absence of the DCP specifying the Classification Level to be attained, the Adaptable House Class C requirements will be enforced, with the following units being designed to meet the requirements of AS 4299-1995:

	Level	Unit Number	Unit Type
1.	1	101	3 bedrooms
Required Adaptable Units			1
Proposed Adaptable Units			1

One (1) adaptable car space is required for each adaptable unit to satisfy Clause 3.7.2 of AS 4299-1995, being the only essential carparking feature required for Adaptable House Class C developments. These provided in addition to any of the requirements of the BCA. The designated accessible car space should have minimum dimensions of 6.0m x 3.8m, however compliance with AS 2890.6:2009 is also considered acceptable.

Level	Carparking Space
1.	B2 West of the lift

A Clause by Clause assessment against the requirements of AS 4299-1995 is contained within part 6 of this report, with an matters of further consideration being discussed in [Part 3](#) of this Report.

It should be noted that AS 4299-1995 has not been updated in recent years, and the AS 1428 series of Australian Standards referenced throughout AS 4299 have been subject to significant updates since its publication. These updates have resulted in the requirements of AS 1428.2 essentially being incorporated into what is currently referred to as AS 1428.1-2009. As such, where AS 4299-1995 references AS1428.2, this is taken as a reference to AS 1428.1-2009.

1.7 REVIEWED DOCUMENTATION

This report is based on documentation referenced in Annexure A.

2. PROPOSED DEVELOPMENT

For the purposes of this assessment, the building has been described as detailed in this part of the report.

2.1 BUILDING LOCATION

The development, the subject of this report, is located at 12 The Strand, Dee Why NSW 2099.

The site adjoins a public road (The Strand) to the east, and all other boundaries adjoin private properties.



Figure | Satellite image of the proposed site | Source: Nearmaps

2.2 PROPOSAL

The proposed development consists of the construction of a 6-storey mixed use development including:

- Residential Sole occupancy Units (3-Storey)
- Carparking-(basement level 1 and 2)
- Retail (ground level)



Figure | | 2D perspective of the proposed development |Source: Studio Johnston architect Pty Ltd

2.3 BUILDING DESCRIPTION

For the purposes of the BCA, the building is described as follows:

Building Classification	Class 2, 6, 7a & 7b	Levels Contained	
As per Part A6 of the BCA		Total number of floor levels in the building	6
Lift Travel Distance	17.1 m		
Lowest and highest storeys served by the lift/s	(RL 1,710 – RL 18,810)		

2.4 AREAS REQUIRED TO BE ACCESSIBLE

The below table describes the access requirements of the various areas of the building as specified by Clause D4D2 of the BCA. The following table outlines the areas of the development that are required to be accessible, unless exempt under D4D5.

Location	Classification	Use	Access Requirement
	Class 2	Residential	<p>From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.</p> <p>To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <ul style="list-style-type: none"> ▪ to the entrance doorway of each sole-occupancy unit; and ▪ to and within rooms or spaces for use in common by the residents. <p>The requirements of (c) only apply where the space referred to in (c)(i) or (ii) is located on the levels served by the lift or ramp.</p>
	Class 6		To and within all areas normally used by the occupants.
	Class 7a	Carparking	To and within any level containing accessible carparking spaces.

2.5 AREAS EXEMPT FROM ACCESSIBILITY REQUIREMENTS

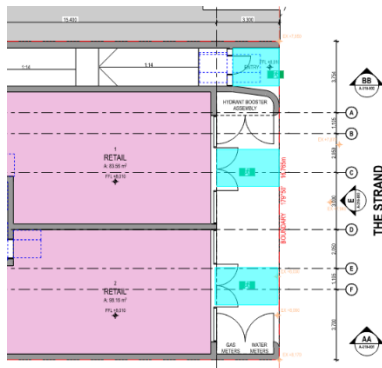
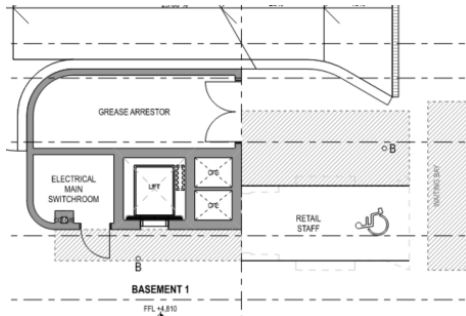
Clause D4D5 provides exemptions of the access requirements above where access to an area is deemed inappropriate based on its use, or where an area would pose a health or safety risk for people with a disability. The below areas of the building have been assessed as being exempt under this provision:

The following areas in the development have been deemed exempt under Clause D4D5.

- Loading Dock (SRV)
- Commercial hydraulic lift through to fire egress
- Commercial storage
- Basement Services Room

2.6 ACCESS TO THE BUILDING

Clause D4D3(1) of the BCA specifies accessible points of entry into the building and site. The accessways must comply with AS 1428.1 and for the purposes of this assessment, the following accessways are required

Access to Building Requirements	
DtS Provision	Assessment
D4D3 (1) a) The main points of pedestrian entrance into the site at the allotment boundary;	<p>An accessway into the building from the pedestrian entrance into the site at the eastern boundary must be provided. The entry location is indicated on the markup below.</p>  <p><i>Figure 1 Mark-up of the site entrance to the building required to be accessible Source: Studio Johnston</i></p>
D4D3 (1) b) Another accessible building connected by a pedestrian link;	<p>The proposal does not contain a pedestrian link or connection to another building and therefore an assessment against this provision is not applicable.</p>
D4D3 (1) c) Any required accessible carparking space on the allotment.	<p>The accessway into the building has an accessible path of travel to the accessible car space located on Basement 1 floor of the subject building as marked up below.</p>  <p><i>Figure 2 Mark-up of the pedestrian link from the carpark to the building required to be accessible Source: Studio Johnston architect</i></p>

2.7 ACCESS TO THE PEDESTRIAN ENTRANCE

For the purposes of Clause D4D3(2) of the BCA, the following pedestrian doors are required to be accessible:

- Main entry door on the eastern façade which adjoins 'The Strand'; and
- Entry doors to the retail premise on the eastern side of the building which adjoins 'The Strand'.

Note: Not less than 50% of pedestrian doors are required to be accessible; and as the building contains a floor area of more than 500 m² any entrance which is not accessible cannot be located more than 50m from an accessible entrance.

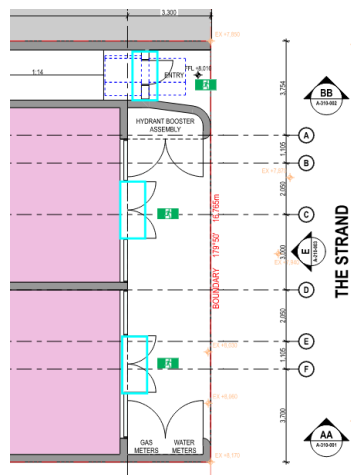


Figure | Mark-up of the entrance doors required to be accessible | Source: Studio Johnston architects

2.8 ACCESSIBLE CARPARKING REQUIREMENTS

BCA clause D4D6 specifies the total number of accessible carparking spaces required based on the use of the building. Each accessible carparking space is to comply with AS 2890.6-2009.

The below table identifies how many accessible carparking spaces must be required in this development.

Classification	D4D6 Provision	Number Required	Number Proposed / Location
Class 2	The BCA does not contain requirements that specify the minimum number of accessible carparking spaces for class 2 buildings and this is generally covered by the Councils Development Control Plan and assessed as part of the DA.	-	-
Class 6	As the development contains up to 1000 carparking spaces: 1x accessible carparking space for every 50 carparking spaces or park thereof.	The development contains a total of fifteen (15) spaces, this includes four (4) retail spaces. Therefore one space is required.	One (1)

Clause D4D6 provides the concessions to alter the requirements:

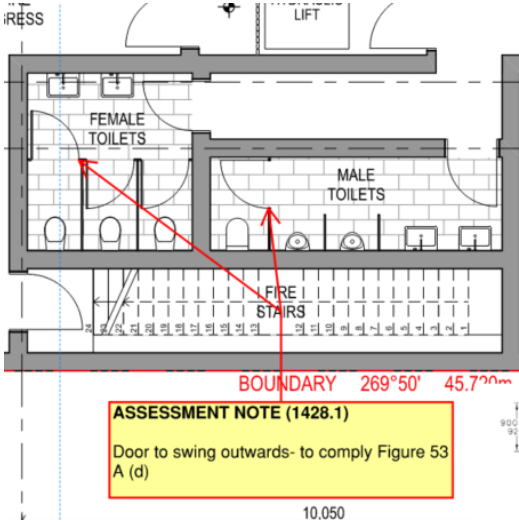
- No accessible carparking spaces are required to be provided for the development as there are no carparking spaces provided on the allotment;
- No accessible carparking spaces are required to be provided for the development as a parking service is provided and direct access to any of the carparking spaces is not available to the public;
- Need not comply with AS/NZS 2890.6 in relation to signage as there are no more than five (5) carparking spaces provided in total.

3. SUMMARY OF ASSESSMENT

The documentation referenced in [Annexure A](#) of this Report has been assessed against the in accordance within the Objectives within [Part 1](#) of this Report. Additional documentation may be required based to allow for a full assessment.

This assessment has identified the following areas where compliance requires further consideration.

3.1 POSSIBLE PERFORMANCE SOLUTIONS

Item	Performance Solution	DtS Provision
1.	<p>Circulation Space for Ambulant Sanitary Compartments (AS 1428.1-2009, Section 16)</p> <p>The male and female sanitary compartments do not comply with the required circulation space for ambulant sanitary facilities in accordance with Section 16 of AS 1428.1-2009.</p> <p>We recommend that a Performance Solution is to be done to justify the alternative layout or reduced circulation space in the ambulant sanitary compartments, demonstrating that they offer a comparable level of accessibility in accordance with the intent of AS 1428.1-2009 and the Premises Standards.</p> 	F4D5

	<p>(d)</p> <p>(a)</p>	
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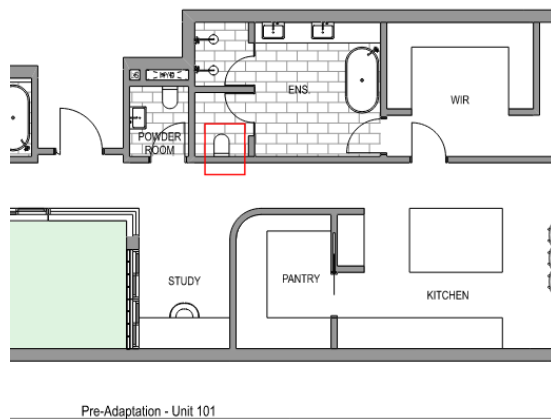
3.2 DESIGN CONSIDERATIONS

In order to meet the Deemed-to-Satisfy provisions of the BCA, the following items are to be considered by the design team.

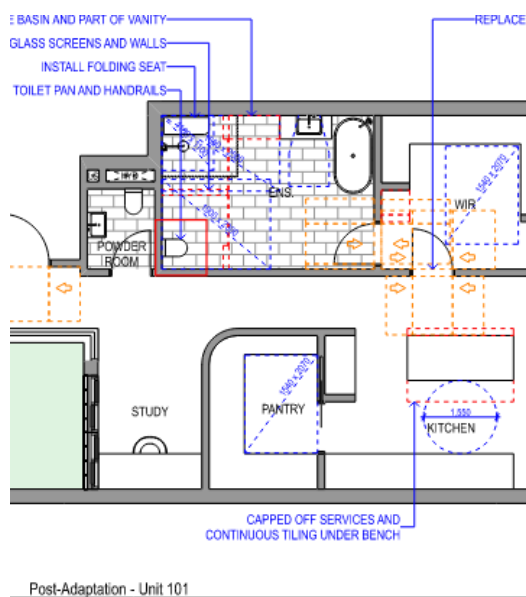
Item	Design Consideration	DtS Provision
2.	The toilet in the ensuite of Unit 101's pre-adaptation plan is located differently from that shown in the post-adaptation plan and therefore does not meet the requirements for adaptable housing.	-

To comply, the toilet location must remain consistent between the pre- and post-adaptation layouts. Please update the plans accordingly and must comply with the requirements of AS1428.1-2009.

Pre-adaptation Plan Unit 101



Post -Adaptation Plan Unit 101



In order to meet the Adaptable Housing requirements of AS 4299-1995, the following items are to be considered by the design team.

Item	Design Consideration	Clause
1.	The adaptable carparking space area is 5.6m x 4.2m and does not meet the minimum depth requirements. The adaptable carparking space is to be increased in size to achieve at least 6m in depth.	3.7.2
2.	Circulation spaces at doorways within the adaptable unit are to comply with AS1428.1-2009. Details to be shown on the post adaption plan.	4.3.7
3.	A circulation space of min. 2250 mm diameter is to be made available in the living areas after the furniture has been placed. Details to be shown on the post adaption plan.	4.7.1
4.	1550mm clearance is required in front of sink and appliances. Details to be shown on the post adaption plan.	4.5.2
5.	The bathroom area is to comply with clause 15 of AS1428.1-2009. To be indicated on a pre-adaption plan and shown as an accessible bathroom on a post adaption plan. The current layout of the bathroom and the ensuite does not comply with the requirements of this clause.	4.4.1
6.	The toilet pan is to be located the correct distance from the walls in accordance with AS1428.1-2009 at pre adaption stage.	4.4.3
7.	Doorways at laundries to have appropriate circulation spaces in accordance with AS 1428.1. To be shown on post adaptation plan.	4.8
8.	A minimum 1,550mm circulation space must be provided in front of the laundry appliances.	4.8

3.3 FURTHER INFORMATION REQUIRED

For the purposes of this report, general arrangement floor plans, elevations and sections have been reviewed to determine whether the building is capable of complying with the BCA.

Construction Documentation is to be provided and reviewed by Credwell prior to the issuance of the Access Report for the purposes of the Construction Certificate application. A detailed list of information required for review will be provided by Credwell upon engagement for the Construction Certificate stage assessment.

4. BCA REQUIREMENTS

The following assessment table outlines a clause by clause review of the subject proposed development against the relevant Deemed-To-Satisfy (DTS) provisions of the BCA that relate to access for people with a disability. All DTS clauses of the BCA that relate to access for people with a disability applicable to the proposed development are referenced and discussed in the table below. Where a clause is not relevant to the proposed development it is not discussed.

The following abbreviations have been used in the table below:

PS Performance Solution

The design does not comply with the clause; however, a Performance Solution is proposed to justify the design in its current format.

CRA Compliance Readily Achievable

It is considered that whilst there is insufficient information currently provided to determine strict compliance with the relevant DTS clause, the proposed design can comply in its current format.

Complies The proposed design complies with the relevant DTS clause

DNC Does Not Comply

The proposed design does not comply with the relevant DTS clause and requires amendment.

FI Further Information

Further information is required to determine whether the proposed design satisfies the requirements of the relevant DTS clause.

N/A Not Applicable

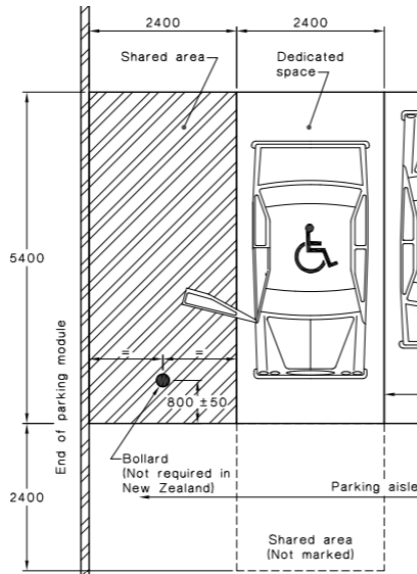
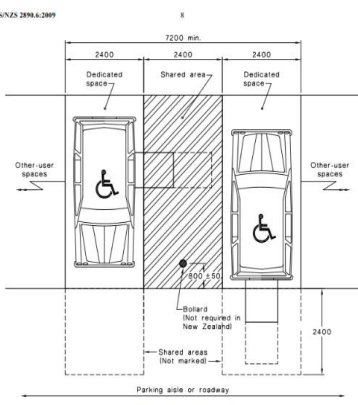
The relevant DTS clause is considered not applicable to the subject proposed development but requires further explanation to confirm reason(s).

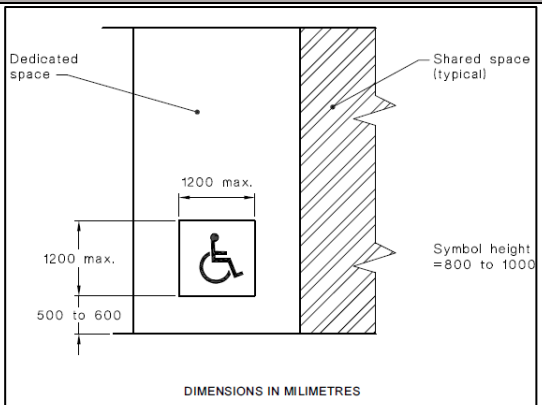
Noted The relevant DTS clause specifies information only, no assessment is required.

4.1 PART D4 – ACCESS FOR PEOPLE WITH A DISABILITY

Clause	[2019]	Description	Comments	Assessment
D4D1	D3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
D4D2	D3.1	General building access requirements	Access is required to be provided to each area within the building in accordance with this clause. Refer to Part 2.4 of this report for details on the areas which are required to be accessible.	Noted
D4D3	D3.2	Access to buildings	An accessway must be provided to a building required to be accessible in accordance with this provision. Refer to Part 2.6 of this report for accessways required.	Noted
D4D4	D3.3	Parts of buildings to be accessible	Parts of the building must comply with the relevant requirements of this clause and AS 1428.1-2009.	CRA
			<u>Stairs</u> Every stairway must comply with Part 11 of AS 1428.1.	CRA
			<u>Ramps</u> Ramps must comply with Part 10 of AS 1428.1 For ramp gradients of 1:14 intervals cannot be greater than 9m.	CRA
			<u>Doorway Circulation</u> Latch, hinge and approach circulation must be provided in accordance with Part 13 of AS 1428.1.	CRA
			<u>Wheelchair circulation – Part 6 of AS 1428.1</u> Wheelchair passing spaces (1800 x 2000mm) are to be provided at a maximum of 20m intervals on an accessway where a direct line of sight is not available. Wheelchair turning spaces (2070 x 1540mm) are to be provided within 2m of the end of accessways.	CRA

Clause	[2019]	Description	Comments	Assessment
			Wheelchair circulation for turns less than 180° must be 1500 x 1500 or with splayed corners.	
			<u>Carpet</u> The pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm. The carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.	CRA
			<u>Abutment of Surfaces</u> There is to be a smooth transition between surfaces – being that the design transition between these spaces shall be 0mm.	CRA
D4D5	D3.4	Exemptions	Refer to Part 2.5 of this report for details on any applicable exemptions.	Noted
D4D6	D3.5	Accessible carparking	Accessible carparking spaces must be provided in accordance with this provision. Refer to Part 2.8 of this report for details on the number required.	Noted
			<u>Dimensions</u> An accessible carparking space is required to be provided in accordance with Clause 2.2, and Figures 2.2 and 3.1 of AS2890.6, with the dimensions of 2.4m x 5.4m.	Complies
			<u>Shared Space</u> A shared space with the minimum dimensions of 2.4m x 5.4m and line marked in accordance with Clauses 3.1 and 3.2, and Figures 2.2 and 3.1 of AS2890.6 is to be provided.	Complies

Clause	[2019]	Description	Comments	Assessment
			  <p>FIGURE 2.3 EXAMPLE OF TWO PARKING SPACES WITH A COMMON SHARED AREA—DIMENSIONS FOR AUSTRALIA ONLY*</p>	
			<p><u>Designation</u></p> <p>The designation of the accessible carparking space is to be provided in accordance with Clauses 3.1 and 3.2, and Figure 3.1 of AS2890.6.</p>	Complies

Clause	[2019]	Description	Comments	Assessment
			 <p>FIGURE 3.1 USE OF SYMBOL OF ACCESS TO IDENTIFY SPACES</p>	
D4D7	D3.6	Signage	<p>Braille and tactile signage is to be provided in accordance with this Clause and Specification D3.6, throughout the building. Signage will need to be located to achieve compliance. Signs with single lines of characters must have:</p> <p>a) the line of tactile (braille) characters not less than 1250 mm and not higher than 1350 mm above the floor; and</p> <p>b) be located on the latch side of the door 50-300mm from the architrave. Where this is not possible and only when this is not possible the sign may be placed on the door itself.</p> <p>Where illuminated exit signage is provided to an exit door a braille and tactile sign complying with this Clause is to be provided stating "Exit" and the level number and floor level number or floor level descriptor.</p>	CRA
D4D8	D3.7	Hearing augmentation	<p>Required in auditoriums, conference room, or the like, ticket booths, reception areas, areas where the public is screened off from the service provider and in class 9b buildings.</p> <p>The development does not contain any areas subject to this provision</p>	N/A
D4D9	D3.8	Tactile indicators	<p>Tactile Ground Surface Indicators (TGSIs) must be provided to warn people that they are approaching a stairway, ramp and/or overhead obstruction in accordance with the</p>	CRA

Clause	[2019]	Description	Comments	Assessment
			requirements of this clause and AS 1428.4.1-2009.	
D4D10	D3.9	Wheelchair seating spaces in Class 9b assembly buildings	The development does not incorporate a Class 9b part therefore this clause does not apply.	N/A
D4D11	D3.10	Swimming pools	The development does not incorporate a swimming pool therefore this clause does not apply.	N/A
D4D12	D3.11	Ramps	On an accessway, a series of connected ramps must not have a combined vertical rise of 3.6m or more. Also, a landing for a step ramp may not overlap a landing for another step ramp or ramp. The ramps do not have a vertical rise of more than 3.6m.	N/A
D4D13	D3.12	Glazing on an accessway	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS1428.1-2009.	CRA

4.2 SPECIFICATION 15 – BRAILLE AND TACTILE SIGNS

Clause	[2019]	Description	Comments	Assessment
S15C1	Spec D3.6:1	Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by clause D3.6.	Noted
S15C2	Spec D3.6:2	Location of braille and tactile signs	Braille and tactile signage must be located in accordance with this clause.	CRA
S15C3	Spec D3.6:3	Braille and tactile sign specification	Braille and tactile signage must have characters in accordance with this clause.	CRA
S15C4	Spec D3.6:4	Luminance contrast	The luminance contrast of the signage must comply with this clause.	CRA
S15C5	Spec D3.6:5	Lighting	Braille and tactile signage must be illuminated to ensure the luminance contrast requirements are met at all	CRA

Clause	[2019]	Description	Comments	Assessment
			times during which the sign is required to be read.	
S15C6	Spec D3.6:6	Braille	The braille characters must comply with this clause.	CRA

4.3 SPECIFICATION 16 – ACCESSIBLE WATER ENTRY/EXIT FOR SWIMMING POOLS

The development does not incorporate a swimming pool therefore this specification does not apply.

4.4 SECTION E– SERVICES AND EQUIPMENT – PART E3 – LIFT INSTALLATIONS

Clause	[2019]	Description	Comments	Assessment
E3D1	E3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
E3D6	E3.5	Landings	Access and egress to and from lift well landings must comply with Parts D2, D3 and D4.	CRA
E3D7	E3.6, table E3.6a, Table E3.6b	Passenger lift types and their limitations	The lift travels no more than 12m, therefore, must have floor dimensions of no less than 1,100mm (wide) x 1,400mm (deep) or 1,400mm (wide) x 1,600mm (deep). The lift has been measured to scale as having dimensions of 1,550mm (wide) x 2,000mm (deep).	Complies
E3D8	Table E3.6a, Table E3.6b	Accessible features required for passenger lifts	The lift must be provided with features in accordance with this Clause and with AS1735.12-1999.	CRA

4.5 SECTION F – HEALTH AND AMENITY – PART F4 – SANITARY AND OTHER FACILITIES

Clause	[2019]	Description	Comments	Assessment
F4D1	F2.0	Deemed-to-Satisfy Provisions	Information only.	Noted
F4D5	F2.4	Accessible sanitary facilities	The accessible sanitary facility compartment has been measured to	Complies

Clause [2019]		Description	Comments	Assessment
			<p>scale as having dimensions of 2,600mm (wide) x 2,150mm (deep). The layout is capable of being fitted out in accordance with the requirements of Section 15 of AS 1428.1-2009.</p> <p>The sanitary compartment suitable for a person with an ambulant disability does not comply with the circulation space for the Male and Female under Section 16 of AS 1428.1-2009.</p>	PS
F4D6	Table F2.4a	Accessible unisex sanitary compartments	<p>The minimum number of accessible unisex sanitary compartments for a class 6 is one (1) on every storey.</p> <p>The Ground floor storey has 1 accessible unisex toilet.</p>	Complies
F4D7	Table F2.4b	Accessible unisex showers	For facilities in class 3-9 buildings under F4D4 does not require 1 or more showers and therefore this clause is not required.	N/A
F4D12	F2.9	Accessible adult change facilities	The development is not required to contain an accessible adult change facility.	N/A

4.6 SPECIFICATION 27 – ACCESSIBLE ADULT CHANGE FACILITIES

The development is not required to contain an accessible adult change facility and therefore this specification does not apply and has been removed from this report.

5. LIVABLE HOUSING DESIGN – APARTMENT DESIGN GUIDE (ADG) ASSESSMENT – SILVER LEVEL

The following assessment table provides a review of the subject development against the core design elements of the Livable Housing Australia Guidelines (LHAG).

A minimum of 20% of the apartments are to be designed to achieve the Silver Element design elements, with the relevant units being outlined in [Part 1.6](#) of this Report.

The following abbreviations have been used in the table below:

CRA **Compliance Readily Achievable**

It is considered that, whilst there is insufficient information currently provided to determine strict compliance with the relevant clause, the proposed design can comply in its current format.

Complies The proposed design complies with the relevant clause

DNC **Does Not Comply**

The proposed design does not comply with the relevant clause and requires amendment.

FI **Further Information**

Further information is required to determine whether the proposed design satisfies the requirements of the relevant clause.

N/A **Not Applicable**

The relevant clause is considered not applicable to the subject proposed development.

5.1 LIVABLE HOUSING DESIGN GUIDELINES ASSESSMENT TABLE

5.2 LIVABLE HOUSING – SILVER LEVEL REQUIREMENTS

Part	Comments	Assessment
1	Dwelling Access	N/A
2	Dwelling entrance	N/A
3	Internal doors and corridors	Complies
4	Toilet	Complies

Part	Comments	Assessment	
	<p>(iii) be located in the corner of the room if it is located in a combined toilet/bathroom.</p> <p>Level 1: The toilet located in the main bathroom, adjacent to laundry, of unit 101 has been assessed for this clause.</p> <p>The toilet located in the main bathroom, adjacent to laundry, of unit 102 has been assessed for this clause.</p>		
5	Shower	<p>One (1) bathroom is to feature a slip-resistant, hobless shower recess located in the corner of the room. Shower screens are permitted provided they can be easily removed at a later date.</p> <p>Level 1: The shower located in the main bathroom, adjacent to laundry, of unit 101 has been assessed for this clause.</p> <p>The shower located in the main bathroom, adjacent to laundry, of unit 102 has been assessed for this clause.</p>	CRA
6	Reinforcement of bathroom and toilet walls.	<p>Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided), and toilet must be reinforced to provide a fixing surface for the safe installation of grabrails in accordance with the requirements of this clause.</p>	CRA
7	Internal stairways	<p>This matter is regulated by the NCC for this building. It should be noted that the LHDG specifies that its requirements “should only be applied to the parts of the building classes not covered by the Disability Standards and NCC (BCA Vol 1 and 2)” – see “Note” on p.15.</p>	N/A

6. WARRINGAH COUNCIL DEVELOPMENT CONTROL PLAN 2011 ASSESSMENT – ADAPTABLE HOUSING

It should be noted that AS 4299-1995 is now more than 20 years old and the AS 1428 series of Standards has been subject to significant updates since it was published. These updates have resulted in the requirements of AS 1428.2 essentially being incorporated into what is currently referred to AS 1428.1-2009. As such, where AS 4299-1995 references AS1428.2, this is taken as a reference to AS 1428.1-2009.

The following assessment table outlines a review of the units designated as adaptable within the proposed subject development against the “adaptable house class C” requirements of AS 4299-1995.

The following abbreviations have been used in the table below:

CRA	Compliance Readily Achievable
	It is considered that, whilst there is insufficient information currently provided to determine strict compliance with the relevant clause, the proposed design can comply in its current format.
Complies	The proposed design complies with the relevant clause
DNC	Does Not Comply
	The proposed design does not comply with the relevant clause and requires amendment.
FI	Further Information
	Further information is required to determine whether the proposed design satisfies the requirements of the relevant clause.
N/A	Not Applicable
	The relevant clause is considered not applicable to the subject proposed development.

6.1 AS 4299-1995 (ADAPTABLE HOUSE CLASS C) ASSESSMENT TABLE

Room/Item		Clause	Comments	Assessment
1.	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	2.3	A drawing(s) showing the unit in its pre-adaptable and post-adaptable stage have been provided or are required. Plans are to be provided at the construction stage.	To be provided and CC stage
Siting				
2.	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1	3.3.2	No Street parking will be provided. An accessway from the primary principal entrance from the street frontage will be provided. Access will be provided from the basement carpark to the residential units.	Complies
Letterboxes in Estate Developments				
3.	Letterboxes to be on hard standing area connected to accessible pathway.	3.8	Letterboxes for the residential units are to be provided in the ground floor level entry lobby.	Complies
Private Car Accommodation				
4.	Carparking space or garage min area 6.0 m x 3.8 m	3.7.2	The adaptable carparking space area meets the minimum requirements for this clause.	Complies
Accessible Entry				
5.	Accessible entry	4.3.1	The entry to the apartments is via the lift. The entry lobby in front of the lift has a 1900mm x 2100mm circulation space and the entry door can be adjusted so that the latch and hinge side clearances can be maintained. Alternatively, the door from the lift lobby into the apartment may be removed to allow free access into the apartment.	CRA
6.	Accessible entry to be level (i .e. max. 1:40 slope)	4.3.2	Units are accessed from an enclosed corridor.	N/A
7.	Threshold to be low-level	4.3.2	Public corridors assumed to be flat.	CRA
8.	Landing to enable wheelchair manoeuvrability	4.3.2	The unit entry doors are internal to the building.	Complies

Room/Item		Clause	Comments	Assessment
9.	Accessible entry door to have 850mm min clearance	4.3.1	The entry door to the adaptable units are to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1-2009. Details to be shown on the post adaption plan.	Complies
10.	Door lever handles and hardware to AS 1428.1	4.3.4	Door handles are to comply with AS1428.1-2009 at the construction stage.	CRA
Interior: General				
11.	Internal doors to have 820 mm min clearance	4.3.3	Internal doors are required to have a minimum clear opening of 820mm. Details to be shown on the post adaption plan.	Complies
12.	Internal corridors min. width of 1000 mm	4.3.7	Internal corridors within the unit are to have a minimum width of 1000mm. Details to be shown on the post adaption plan.	Complies
13.	Provision for compliance with AS 1428.1 for door approaches	4.3.7	Circulation spaces at doorways within the adaptable unit are to comply with AS1428.1-2009. Details to be shown on the post adaption plan.	CRA
14.	Provision for circulation space of min. 2250 mm diameter	4.7.1	A circulation space of min. 2250 mm diameter is to be made available in the living areas after the furniture has been placed. Details to be shown on the post adaption plan.	CRA
15.	Telephone adjacent to GPO	4.7.4	Telephone outlet adjacent to GPO in living/dining area to be indicated on post adaption plan.	CRA
16.	Potential illumination level min. 300Lux	4.10	Lighting to comply at construction stage.	CRA
Kitchen				
17.	Minimum width 2.7 m (1550mm clear between benches)	4.5.2	1550mm clearance is required in front of sink and appliances. Details to be shown on the post adaption plan.	CRA

Room/Item	Clause	Comments	Assessment
18.	4.5.4	It is assumed no kitchen doors proposed.	CRA
19.	4.5.5	Work surface of 800mm to be indicated on post adaption plan.	CRA
20.	4.5.5	Refrigerator to be adjacent to the work surface and to be indicated on post adaption plan.	CRA
21.	4.5.6	The design is to allow for the removal of the cabinets under the sink and adjacent work surface. To be indicated on a post adaption plan.	CRA
22.	4.5.6	Kitchen sink bowl to be max. 150mm deep, this item is noted as something that can be altered post adaption.	CRA
23.	4.5.6(e)	Taps may be updated post adaption, with no works required at this stage.	CRA
24.	4.5.6(e)	Taps may be updated post adaption, with no works required at this stage.	CRA
25.	4.5.7	Cook tops to include either front or side controls with raised cross bars	CRA
26.	4.5.7	Cook tops to be provisioned with isolating switches or gas stop valves that can be easily and safely operated with the cook top is in use. Cook top may be updated post adaption, with no works proposed at this stage.	CRA
27.	4.5.7	Work surface adjacent to, and at the same height as the, cook top of 800mm to be indicated on post adaption plan.	CRA

Room/Item		Clause	Comments	Assessment
28.	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8	The oven is to be adjacent to an 800mm wide work surface and to be indicated on post adaption plan.	CRA
29.	GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of work surface	4.5.11	GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of work surface. To be indicated on post adaption plan.	CRA
30.	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position. To be indicated on post adaption plan.	CRA
31.	Slip-resistant floor surface	4.5.4	Floors to be slip resistant to comply with AS3661.1. To be indicated on post adaption plan.	CRA
Main Bedroom				
32.	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS 1428.2	4.6.1	Turning space minimum 1540 x 2070mm required. To be indicated on post adaption plan. (Unit 101 bedroom 1)	CRA
Bathroom				
33.	Provision for bathroom area to comply with AS 1428.1	4.4.1	The bathroom area is to comply with clause 15 of AS1428.1-2009. To be indicated on a pre-adaption plan and shown as an accessible ensuite on a post adaption plan.	DNC
34.	Slip-resistant floor surface	4.4.2	Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
35.	Shower recess- no hob. Minimum size 1160 x 1100 to comply with AS 1428.1. (Refer Figures 4.6 and 4.7)	4.4.4(f)	Shower to be hob-less. The post adaption plans to show AS1428.1 compliant sizes and fitout.	CRA
36.	Shower area waterproofed to AS 3740 with floor to fall to waste	4.4.4(f)	Entire bathroom to comply with AS3740.	CRA
37.	Recessed soap holder	4.4.4(f)	Soap holder to be recessed.	CRA

Room/Item		Clause	Comments	Assessment
38.	Shower taps positioned for easy reach to access side of shower sliding track	4.4.4(f)	Shower head and taps to be located at a height and clearance compliant to AS1428.1. To be indicated on a post adaption plan.	CRA
39.	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall – strengthening provision)	4.4.4(h)	Provisioning to be provided. To be indicated on a post adaption plan.	CRA
40.	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS 1428.1	4.4.4(h)	Provisioning to be provided. To be indicated on a post adaption plan.	CRA
41.	Tap sets to be capstan or lever handles with single outlet	4.4.4(c)	Taps may be updated post adaption, with no works required at this stage.	CRA
42.	Provision for washbasin with clearances to comply with AS 1428.1	4.4.4(g)	The washbasin and associated clear spaces must comply with AS 1428.1.	CRA
43.	Double GPO beside mirror	4.4.4(d)	Double GPO to be provided beside mirror. To be indicated on a post adaption plan.	CRA
Toilet – “Visitable”				
44.	Provision of either ‘visitable toilet’ or accessible toilet	4.4.3	Once adapted the housing unit will be provided with an accessible toilet. To be indicated on a post adaption plan.	CRA
45.	Provision to comply with AS1428.1	4.4.1	The bathroom area is to comply with clause 15 of AS1428.1-2009. To be indicated on a pre-adaption plan and shown as an accessible bathroom on a post adaption plan.	CRA
46.	Location of WC pan at correct distance from fixed walls	4.4.3	The toilet pan is to be located the correct distance from the walls in accordance with AS1428.1-2009 at pre adaption stage. The AS1428.1 requires the centre of the seat to be 450-460mm from the wall	CRA

Room/Item		Clause	Comments	Assessment
47.	Provision for grab rail zone. (Refer Figure 4.6)	4.4.4(h)	Provisioning to be provided. To be indicated on a post adaption plan.	CRA
48.	Slip resistant floor surface. (Vitreous tiles or similar)	4.4.2	Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
49.	Circulation at doors to comply with AS 1428.1	4.8	Doorways at laundries to have appropriate circulation spaces in accordance with AS 1428.1. To be shown on post adaptation plan.	CRA
50.	Provision for adequate circulation space in front of or beside appliances (min. 1550 mm depth)	4.8	A minimum 1,550mm circulation space must be provided in front of the laundry appliances.	CRA
51.	Provision for automatic washing machine	4.8(e)	Space for an automatic washing machine is to be provided. To be indicated on a post adaption plan.	CRA
52.	Where a clothesline is provided, an accessible path of travel to this	4.8(a)	No clothesline proposed.	N/A
53.	Double GPO	4.8(g)	Double GPO to be provided in the laundry. To be indicated on a post adaption plan.	CRA
54.	Slip-resistant floor surface	4.9.1	Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
Door Locks				
55.	Door hardware operable with one hand, located 900–1100mm above floor	4.3.4	Door hardware operable with one hand, located 900–1100mm above floor. To be indicated on post adaption plan.	CRA

7. STATEMENT OF COMPLIANCE

This office has completed an access review of the subject proposed development, as indicated on the drawings referenced in Annexure A of this Report, against the relevant requirements of the documents referenced in Part 1 of this Report. The details of this review are specified in the Assessment Tables provided in the discussion of the proposed development against the relevant document. Subject to this review, this office advises that the design of the proposed development complies, or is capable of complying, with the relevant requirements of the BCA, LHDG, and AS 4299-1995.

ANNEXURE A – REVIEWED DOCUMENTATION

This Report is based on a review of the documentation listed below.

Architectural Plans prepared by Studio Johnston Project Reference 2401		
Drawing Number	Revision	Drawing Title
A-110-001	04	Basement 2
A-110-002	04	Basement 1
A-110-003	04	Ground Level
A-110-004	04	Level 1
A-110-005	04	Level 2
A-110-006	04	Level 3
A-110-001	04	Adaptable Apartments
A-115-002	04	Livable Apartments