Camden Local Planning Panel

Electronic Determination
Supplementary Agenda
June 2021

CAMDEN LOCAL PLANNING PANEL

MATTERS FOR DETERMINATION

CLPP02 **Supplementary Report - DA/2020/849/1 - Change of Use from Dwelling to Cafe and Offices, Alterations and Additions, One Pole Sign and Associated Site Works at 30 Hill Street, Camden** 3

Attachment 1: BCA Report: 7

CAMDEN LOCAL PLANNING PANEL

CLPP02

SUBJECT: SUPPLEMENTARY REPORT - DA/2020/849/1 - CHANGE OF USE FROM DWELLING TO CAFE AND OFFICES, ALTERATIONS AND ADDITIONS, ONE POLE SIGN AND ASSOCIATED SITE WORKS AT 30 HILL STREET, CAMDEN

TRIM #: 21/258543

DA Number:	2020/849/1
Development:	Change of use from a dwelling to a café and offices, alterations and additions, one pole sign and associated site works
Estimated Cost of	$130,000
Site Address:	30 Hill Street, Camden

PURPOSE OF REPORT

The purpose of this report is to provide additional information to the Camden Local Planning Panel ('the Panel') to facilitate the electronic determination of the above-described development application (DA).

BACKGROUND

A Planning Assessment Report for the above-described DA was forwarded to the Panel seeking electronic determination of the application. It was recommended that the Panel approve the application subject to appropriate conditions.

The Panel have identified issues / matters that require further clarification to enable the determination of the application. The purpose of this supplementary report is to respond to the issues / matters raised.

MATTERS REQUIRING CLARIFICATION

(i) Plumbing of Coffee Machine to Sewer

Council staff recommended that condition no. 2.0(1)(e) be included in the Development Consent, which requires all coffee machine(s) to be plumbed to sewer.

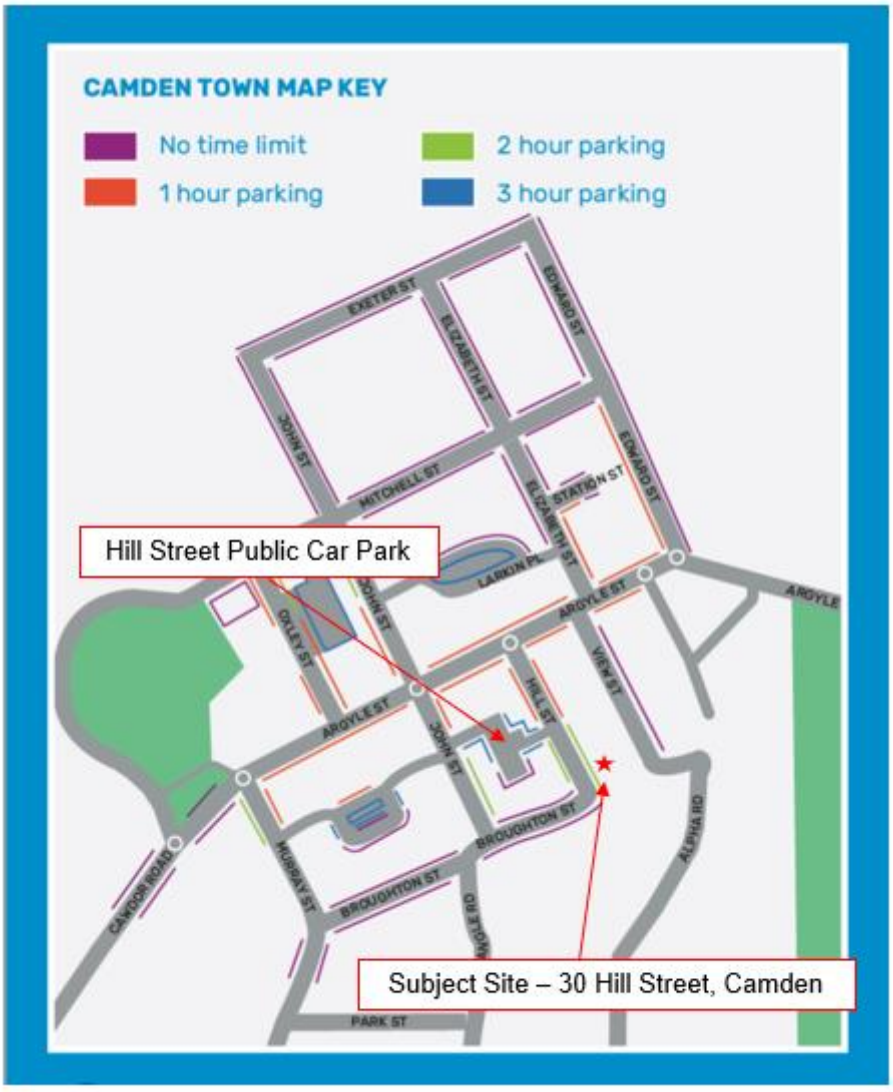
Council's Environmental Health Officer has confirmed that this is a standard requirement for compliance with Chapter 3 of *Food Standards Australia and New Zealand – Food Standards Code 2003*. Most commercial coffee machines have a wastewater outlet that can be plumbed to sewer. This is preferable to wastewater being collected in jugs/buckets, which may be stored unhygienically.

The matter was highlighted as a specific condition for the certifier to address, as coffee machine specifications were not known at the time of DA assessment. The proposed kitchen fit-out plan (page 17 of the proposed plans) identifies that the coffee machine and grinder (items "TH29" and "TH30") will be located near the sink marked "TH26". Wastewater generated from the coffee machine is therefore capable of being connected to the existing sink's plumbed waste outlet.

(ii) Car Parking

The assessment report prepared by Council staff states that there is an unrestricted car park available for use in the vicinity. Panel members have noted that there is a 3 hour time limit for this car park, as well as 1 or 2 hour time limits for the on-street parking in Hill Street.

The term “unrestricted” was only used to advise that individual spaces are not reserved for private tenancies and that the car park is open to all members of the public. It was not intended to imply that there are no time limits, although the above time periods are acknowledged, as shown in the map below:



Council staff have reviewed the potential impact of these time limits on the availability of car parking for café and office visitors and staff attending the site and make the following comments:

- Visitors to the café and offices will be short term, generally not requiring parking for longer than the 1 to 3 hour limits available.

- Longer parking demand by café and office staff will be limited to a **maximum of 8 persons** at any given time, including 2 staff/owners for the café, the same 2 staff/owners in one of the upstairs offices and a maximum of 2 staff in the remaining 3 offices.

- As shown in the map above, there are other unrestricted parking areas within walking distance of the site for staff.

- Some consultancies occupying the office premises may not require continuous full day parking from 9am to 5pm, therefore the time limited parking in the immediate area may be sufficient for their business needs.

- The proposed after-hours workshops will be held on an appointment-only basis, for a maximum period of 3 hours (between 6pm and 9pm). There is likely to be more public parking available in the vicinity of the site at this time and the posted time limits cease at 6:30pm on weekdays and 12.30pm on Saturdays (there are no restrictions on Sundays).

- As established in the original assessment report, the heritage significance of the site warranted an exception to the provision of a substantial concrete car park to the rear of the site.

- Compliance with the Australian Standards for driveway access and turning circles may not be achieved in any case, due to the existing setbacks and dimensions of the site.

- Given the site's proximity to other retail and business uses in Hill and Argyle Streets, it is likely that many customer visits will be during multi-purpose trips around the town centre, lessening the demand for parking immediately in front of the site.

(iii) Disabled Access

Panel members have sought confirmation as to why the disabled access has been proposed via the rear of the building and why the provision of the meeting room at the ground floor satisfies the disabled access requirements for the first floor commercial space.

Access for people with a disability was addressed in BCA Assessment Report (section 5.14) prepared by BCA Logic and submitted with the DA. A copy of this report is provided as **Attachment 1**. The findings of this report are supported by Council's Team Leader, Building Certification.

The principal entrance to the premises is proposed to be via the rear door, thereby ensuring equitable access for all persons. The use of the rear door as a primary entry removes the need to install unsympathetic infrastructure (such as ramps and handrails) at the front of the premises that would detract / have an unreasonable impact on the heritage significance of the building.

The provision of the meeting room on the ground floor removes the requirement to make the first floor offices accessible. This approach complies with the Deemed to Satisfy provisions of the Building Code of Australia 2019 – Clause D3.3(f) and ensures that are no unsympathetic alterations to the internal fabric of the heritage item.

RECOMMENDED

That the Panel approve DA/2020/849/1 as per the recommended conditions contained in the original planning assessment report and subject to the following additional condition being added under the heading “6.0 – Ongoing Use”:

(16) **Access to Premises** – The rear entry doors are the principal entry to the premises and all patrons of the café and visitors to the office premises must enter the premises via the rear entry.

ATTACHMENTS

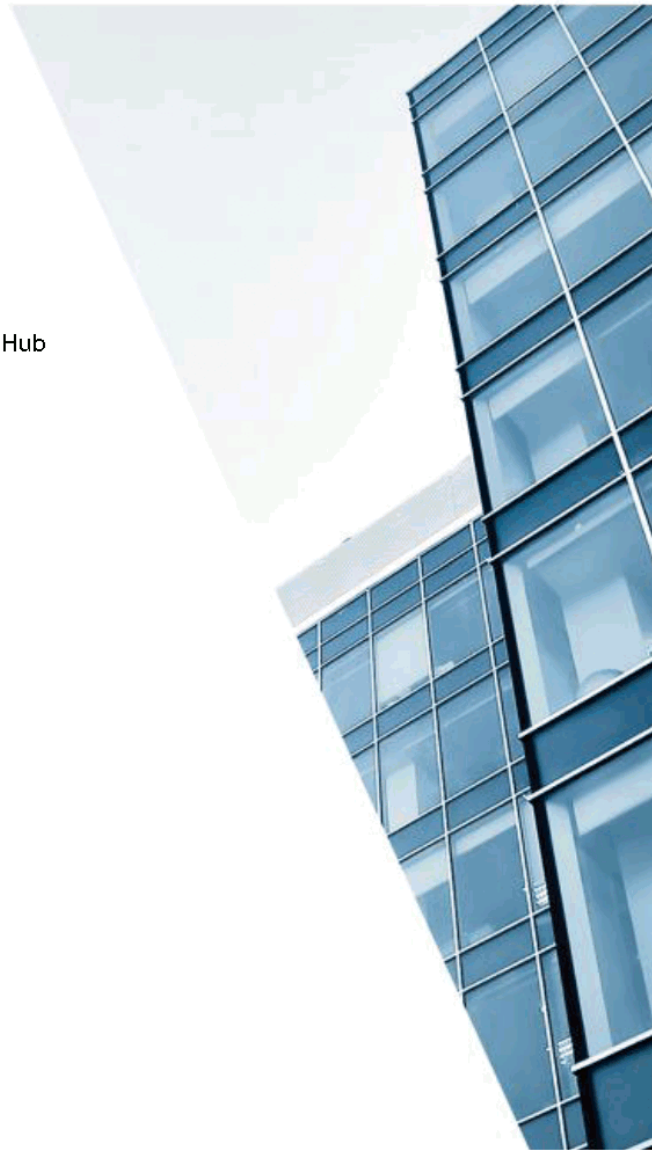
1. BCA Report

CLPP02

Attachment 1

BCA LOGIC

Building Regulation, BCA, Fire, Access and Energy Consultants



To:	Brookfield House, C/- The Planning Hub
Project:	30 Hill Street Camden.
Report:	BCA Assessment Report
Reference No:	112039-BCA-r2
Date:	16 August 2020
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Document Control

Revision	Date	Description	
112039-BCA-r1	20 July 2020	Final BCA Assessment Report	
112039-BCA-r2	16 August 2020	Final BCA Assessment Report	
		Prepared by	Verified by
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Table of Contents

EXECUTIVE SUMMARY **6**

1 BASIS OF ASSESSMENT **7**

1.1. Location and Description 7

1.2. Purpose 7

1.3. Building Code of Australia 7

1.4. Limitations 7

1.5. Design Documentation 8

1.6. Definitions 8

2 BUILDING DESCRIPTION **10**

2.1. Rise in Storeys (Clause C1.2) 10

2.2. Classification (Clause A6.0) 10

2.3. Effective Height (Clause A1.0) 10

2.4. Type of Construction Required (Table C1.1) 10

2.5. Floor Area and Volume Limitations (Table C2.2) 10

2.6. Fire Compartments 10

2.7. Exits 11

2.8. Climate Zone (Clause A1.0) 11

2.9. Location of Fire-source features 11

3 ESSENTIAL FIRE SAFETY MEASURES **12**

4 FIRE RESISTANCE LEVELS **14**

5 MATTERS FOR FURTHER CONSIDERATION **15**

5.1. General 15

5.2. Dimensions and Tolerances 15

5.3. Performance Based Design – Performance Solutions 15

5.4. Existing Building Change of Use – Category 1 Fire Safety Upgrade Works 16

5.5. Clause 94 of the Environmental Planning and Assessment Regulations 2000 16

5.6. Façade Construction – Non-Combustible 16

5.7. BCA Clause D1.6 – Dimensions of exits and paths of travel to exits 17

5.8. BCA Clause D2.8 – Enclosure of space under stairs and ramps 17

5.9. BCA Clause D2.13 – Goings and risers 17

5.10. BCA Clause D2.15 – Thresholds 17

5.11. BCA Clause D2.16 – Barriers to prevent falls 17

5.12. BCA Clauses D2.19 Doorways and doors / Clause D2.20 Swinging doors 17

5.13. BCA Clauses D2.21 Operation of latch 18

5.14. Access for people with a disability 18

5.15. Sanitary facilities 19

6 STATEMENT OF COMPLIANCE **20**

ANNEXURE A DESIGN DOCUMENTATION 21

CLPP02

ANNEXURE B DETAILED BCA 2019 ASSESSMENT 23
ANNEXURE C BCA COMPLIANCE SPECIFICATION 109

Attachment 1

Tables

Table 1. Building Classification 10
Table 2. Essential Fire Safety Measures 12
Table 3. Type C Construction 14
Table 4. Performance Solutions 15
Table 5. Architectural Plans 22
Table 6. Deemed to Satisfy Clause Assessment 25

EXECUTIVE SUMMARY

This document provides an assessment of the architectural design drawings for the proposed office and café 'change of use development at 30 Hill Street Camden., against the Deemed-to-Satisfy provisions of the Building Code of Australia (BCA) 2019, Volume 1.

Part 5 'Matters for Further Consideration' of this report outlines the identified BCA compliance issues that require further information or consideration and/or assessment as Performance Solutions.

Any Performance Solution will need to be detailed in a separate report and must clearly indicate methodologies for achieving compliance with the relevant BCA Performance Requirements.

Item	Description	BCA Provision
Performance Solutions Required		
1.	Permit rationalisation of FRL to existing timber external wall, including fixed glazing therein, bounding the sunroom within 3m of the boundary	Spec C1.1 Table 5. CP1
2.	The construction of the external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	No DtS Provisions – FP1.4 Performance Provisions Only
3.	The construction of the external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	No DtS Provisions – FP1.4 Performance Provisions Only
Building Code of Australia Compliance Matters to be Addressed		
1.	Dimensions paths of travel to exits – internal stairway width and doorway widths and height	Clause D1.6
2.	Enclosure of space under stairs and ramps	Clause D2.8
3.	Stairway non slip luminance contrast nosings	Clause D2.13
4.	Thresholds	Clause D2.15
5.	Balustrades	Clause D2.16
6.	Swinging doors	Clause D2.19 / Clause D2.20
7.	Door hardware	Clause D2.21
8.	Access for people with a disability	Part D3
9.	Sanitary facilities	Part F2

Annexure B to this report provides a detailed assessment of the proposal against ALL relevant Deemed-to-Satisfy Provisions of the BCA.

1 BASIS OF ASSESSMENT

1.1. Location and Description

The building development, the subject of this report, is located at 30 Hill Street Camden.

The proposed development is for the change of use with associated building refurbishment work of the existing residential two storey terrace dwelling of the property to an office tenancy spanning ground and first floor level and a retail café tenancy at the rear of the ground floor.

1.2. Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy Provisions of BCA 2019, and to clearly outline those areas (if any) where compliance is not achieved, where areas may warrant redesign to achieve strict BCA compliance or where areas may be able to be assessed against the relevant performance criteria of BCA 2019. Such assessment against relevant performance criteria will need to be addressed by means of a separate Performance Based Fire Safety Engineered Assessment Report to be prepared under separate cover.

1.3. Building Code of Australia

This report is based on the Deemed-to-Satisfy Provisions of the National Construction Code Series Volume 1 – Building Code of Australia, 2019 Edition (BCA) incorporating the State variations where applicable. Please note that the version of the BCA applicable to new building works is the version applicable at the time of the lodgement of the Construction Certificate application to the Accredited Certifying Authority. The BCA is updated generally on a three-yearly cycle, starting from the 1st of May 2016.

1.4. Limitations

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

(a) the structural adequacy or design of the building;

(b) the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and

(c) the design basis and/or operating capabilities of any proposed electrical, mechanical or hydraulic fire protection services.

This report does not include, or imply compliance with:

(a) the National Construction Code – Plumbing Code of Australia Volume 3

(b) the Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to), (Note: The provision of disabled access to the subject development has been assessed against the deemed to satisfy provision of Part D3 and F2.4 of BCA2019 only);

(c) Demolition Standards not referred to by the BCA;

(d) Work Health and Safety Act 2011;

(e) Requirements of Australian Standards unless specifically referred to;

(f) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like; and

(g) Conditions of Development Consent issued by the Local Consent Authority.

1.5. Design Documentation

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.

1.6. Definitions

Critical radiant flux

Critical radiant flux (CRF) means the critical heat flux at extinguishment (CHF in kW/m2) as determined by AS ISO 9239.1:2003.

Effective height

Effective height means the vertical distance between the floor of the lowest storey included in a determination of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).

Envelope

Envelope, for the purposes of Section J in Volume One, means the parts of a building's fabric that separate a conditioned

space or habitable room from—

(a) the exterior of the building; or

(b) a non-conditioned space including—

(i) the floor of a rooftop plant room, lift-machine room or the like; and

(ii) the floor above a carpark or warehouse; and

(iii) the common wall with a carpark, warehouse or the like.

Exit

Exit means –

(a) Any, or any combination of the following if they provide egress to a road or open space—

(i) An internal or external stairway.

(ii) A ramp.

(iii) A fire-isolated passageway.

(iv) A doorway opening to a road or open space.

(b) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

Fire compartment

Fire compartment means –

(a) the total space of a building; or

(b) when referred to in—

(i) the Performance Requirements — any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or

(ii) the Deemed-to-Satisfy Provisions — any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to Satisfy Provisions of the relevant Part.

Fire-resistance level (FRL)

Fire-resistance level (FRL) means the grading periods in minutes determined in accordance with Specification A2.3, for the following criteria—

(a) structural adequacy; and

(b) integrity; and

(c) insulation,

and expressed in that order.

Note: A dash means that there is no requirement for that criterion. For example, 90/–/– means there is no requirement for an FRL for integrity and insulation, and –/–/– means there is no requirement for an FRL.

Fire-source feature

(a) the far boundary of a road, river, lake or the like adjoining the allotment; or

(b) a side or rear boundary of the allotment; or

(c) an external wall of another building on the allotment which is not a Class 10 building

Group number

Group number means the number of one of 4 groups of materials used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining, or attachment to a wall or ceiling.

Loadbearing

Intended to resist vertical forces additional to those due to its own weight.

Performance Requirement

Performance Requirement means a requirement which states the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet.

Performance Solution

Performance Solution means a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.

Sole-occupancy unit

Sole-occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

(a) a dwelling; or

(b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or

(c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or

(d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

2 BUILDING DESCRIPTION

For the purposes of the Building Code of Australia (BCA) the development may be described as follows.

2.1. Rise in Storeys (Clause C1.2)

The subject building has a rise in storeys of two (2).

2.2. Classification (Clause A6.0)

The proposal has been classified as follows.

Table 1. Building Classification

Class	Level	Description
5 & 6	Ground	Offices and retail (café)
5	First Floor	Offices
and not specifically subject of the proposal:		
10a	*separate structure on site*	*separate private garage*
10b	*separate structure on site*	*separate inground swimming pool*

2.3. Effective Height (Clause A1.0)

The building has an *effective height* of less than 12 metres as it relates to the BCA.

2.4. Type of Construction Required (Table C1.1)

The building is required to be of Type C Construction, the least fire resistant.

2.5. Floor Area and Volume Limitations (Table C2.2)

The building is subject to maximum floor area and volume limits of:-

Class 5	Maximum Floor Area	3 000m^2
	Maximum Volume	18 000m^3
Class 6	Maximum Floor Area	2 000m^2
	Maximum Volume	12 000m^3

and not specifically subject of the proposal:

Class 10a	*The free-standing private garage building is not subject to floor area and volume limitations of C2.2.*
Class 10b	*The inground swimming pool is not subject to floor area and volume limitations of C2.2.*

2.6. Fire Compartments

The subject office and café building has a total floor area of approximately 325m^2 and therefore readily complies with the above floor space and volume limitations.

2.7. Exits

The following points in the building have been considered as the exits:

(a) front south western entry door serving the proposed ground floor offices;

(b) rear north eastern entry door serving the proposed ground floor café; and

(c) topmost risers of the internal stairway serving the front south western and rear north eastern portions of the first-floor office areas.

2.8. Climate Zone (Clause A1.0)

The building is located within Climate Zone 6.

2.9. Location of Fire-source features

The fire source features for the subject development are:

North Eastern:	the rear property boundary	-	~ 12 metres distant
South Western:	the far side of Hill Street	-	~ 27 metres distant
South Eastern:	side boundary shared with 32 Hill St	-	nil setback (shared party wall)
North Western:	side boundary shared with 28 Hill St	-	~ 2.8m to 4.6m distant

In accordance with Clause 2.1 of Specification C1.1, a part of a building element is exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that–

(a) has an FRL of not less than 30/–/–; and

(b) is neither transparent nor translucent.

Satellite image courtesy of Nearmap

3 ESSENTIAL FIRE SAFETY MEASURES

The following fire safety measures are required to be installed in the building. The following table may be required to be updated as the design develops and options for compliance are confirmed.

Table 2. Essential Fire Safety Measures

Item	Essential Fire and Other Safety Measures	Standard of Performance
General		
1.	Portable fire extinguishers	**BCA2019 E1.6** AS 2444–2001
2.	Fire blankets	AS 2444–2001
Electrical Services		
3.	Emergency lighting	**BCA2019 E4.2, E4.4** AS/NZS 2293.1:2018
4.	Exit signs	**BCA2019 E4.5** (Exit Signs) **BCA2019 E4.6** (Direction Signs) **BCA2019 E4.8** (Design and Operation - Exits) AS/NZS 2293.1:2018
5.	**Alternative Solution** *Fire Engineering Report (FER) prepared by XXXX, report no. XXX, issue XXXX, dated XXX. Allowing for: 1. DtS Departure from Table 5 of Specification C1.1 - Permit rationalisation of FRL to existing timber external wall, including fixed glazing therein, bounding the sunroom within 3m of the boundary; and 2. DtS Departure from Clause C3.2, C3.4 - Permit rationalisation of protection of window within 3m of the boundary. FER Requirements: 1. XXXXXXXXXXX	

Performance Solutions				
	Description of Performance Solution	**DTS Provision**	**Performance Requirements**	**Method of meeting performance solutions**
6.	Permit rationalisation of FRL to existing timber external wall, including fixed glazing therein, bounding the sunroom within 3m of the boundary	Spec C1.1 Table 5.	CP1	BCA Part A2

Item	Essential Fire and Other Safety Measures		Standard of Performance	
7.	Permit rationalisation of protection of window within 3m of the boundary.	C3.2, C3.4	CP2	BCA Part A2

4 FIRE RESISTANCE LEVELS

The following fire resistance levels (FRL's) are required for the various building elements, with a fire source feature being the far boundary of a road adjoining the allotment, a side or rear boundary or an external wall of another building on the allotment except a Class 10 structure.

Type C Construction

Table 3. Type C Construction

Item	Class 5 and Class 6
External Walls - Less than 1.5m to a *fire- source feature* - 1.5 – less 3m from *fire- source feature* - 3m or more from a *fire- source feature*	 90/90/90 60/60/60 -/-/-
External Column not incorporated in an external wall - Less than 1.5m to a fire source feature - 1.5 – less 3m from fire source feature; - 3m or more from a fire source feature	 90/-/- 60/-/- -/-/-
Common Walls and Fire Walls	90/90/90
Internal walls bounding sole occupancy units	-/-/-
Internal walls bounding public corridors, hallways and the like	-/-/-
Internal walls bounding a stair if required to be fire rated	60/60/60

Note: An external wall that is required to have an *FRL* need only be tested from the outside to satisfy the *FRL* requirement.

5 MATTERS FOR FURTHER CONSIDERATION

5.1. General

Assessment of the Architectural design documentation against the Deemed-to Satisfy Provisions of the Building Code of Australia, 2019 (BCA) has revealed the following areas where compliance with the BCA may require further consideration and/or may involve assessment as Performance Based (Fire Engineered) *Performance Solutions*. Any *Performance Solutions* will be required to clearly indicate methodologies for achieving compliance with the relevant *Performance Requirements*.

Annexure B to this report provides a detailed assessment of the proposal against ALL relevant Deemed-to-Satisfy Provisions of the BCA.

Note: It is important that Annexure B is read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

5.2. Dimensions and Tolerances

The BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. BCA Logic's assessment of the plans and specifications has been undertaken to ensure the minimal dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical maters such as access for people with disabilities, stair and corridor widths and balustrade heights.

5.3. Performance Based Design – Performance Solutions

There are specific areas throughout the development where strict Deemed-to-Satisfy BCA Compliance will not be achieved by the proposed design and site constraints. These matters will need to be address in a detailed Fire Safety Engineering Report to be prepared for this development under separate cover:

Table 4. Performance Solutions

Item	Description of Performance Solution	DTS Provision	Relevant Performance Requirements
1.	The construction of the external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	No DtS Provisions – FP1.4 Performance Provisions Only	FP1.4
2.	Permit rationalisation of FRL to existing timber external wall, including fixed glazing therein, bounding the sunroom within 3m of the boundary	Spec C1.1 Table 5.	CP1
3.	Permit rationalisation of protection of window within 3m of the boundary.	C3.2, C3.4	CP2

5.4. Existing Building Change of Use – Category 1 Fire Safety Upgrade Works

The development is subject to Development Approval considerations prescribed by the Environmental Planning and Assessment Act 1979, & the Environmental Planning and Assessment Regulations 2000 (EPAR 2000).

Where works are subject to a Development Application (DA) through a local consent authority, in this instance being Camden Council, the consent authority is able to apply discretion when considering 'Category 1' Fire Safety Upgrade provisions that maybe required of a Change of Use to a building, such as the proposed change of use from Class 1a residential dwelling to Class 5 office and Class 6 retail food use premises.

Notwithstanding, none of the 'Category One' fire safety provisions of the EPAR 2000 as listed below are relevant to the building and its proposed change of use:

- BCA Performance Requirement EP1.3 - Fire hydrants;
- BCA Performance Requirement EP1.4 - Sprinklers;
- BCA Performance Requirement EP1.6 - Fire control centres;
- BCA Performance Requirement EP2.1 - Automatic warning for sleeping occupants;
- BCA Performance Requirement EP2.2 - Smoke hazard management measures; and
- BCA Performance Requirement EP3.2 - Emergency lifts.

5.5. Clause 94 of the Environmental Planning and Assessment Regulations 2000

The relevant requirement of Clause 94 of the EP & A Regulation 2000 may not require an existing building be fully upgraded to meet the Performance Requirements of the BCA, rather it affords the consent authority (Camden Council) the discretion during the DA process, to require upgrading where it sees fit to do so.

> ***94 Consent authority may require buildings to be upgraded***
> *(cf clause 66B of EP&A Regulation 1994)*
> *(1) This clause applies to a development application for development involving the rebuilding, alteration, enlargement or extension of an existing building where—*
> *(a) the proposed building work, together with any other building work completed or authorised within the previous 3 years, represents more than half the total volume of the building, as it was before any such work was commenced, measured over its roof and external walls, or*
> *(b) the measures contained in the building are inadequate—*
> *(i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or*
> *(ii) to restrict the spread of fire from the building to other buildings nearby.*
> *(c) (Repealed)*
> *(2) In determining a development application to which this clause applies, a consent authority is to take into consideration whether it would be appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia.*
> *(2A), (2B) (Repealed)*
> *(3) The matters prescribed by this clause are prescribed for the purposes of section 4.15(1)(a)(iv) of the Act.*

Given that the project proposes to refurbish the building extensively at ground floor level for the café change of use, the consent authority should consider the applicable Fire Safety Upgrade requirements identified within this report.

5.6. Façade Construction – Non-Combustible

As the building is required to be of Type C Construction, the least fire resistant, the external façade is not required to be *non-combustible* and comply with Clause C1.9 of BCA2019.

5.7. BCA Clause D1.6 – Dimensions of exits and paths of travel to exits

The existing stairway exit serving the first floor has a width of 800mm in lieu of 1000mm minimum. In this regard, it is recommended that the Council utilise its discretionary powers under Clauses 93 and 94 of the EPAR 2000 and accept the existing stairway width as being acceptable for the proposed office uses of the first floor

Several doorways of the proposed ground and first floor office areas have door widths less than 750mm (or 850mm as required for accessibility at ground floor level). One doorway at first floor level has a 1935mm clear height in lieu of 1980mm minimum as required for a doorway. In this regard, consideration must be made to widening the doorways and in one instance increasing the height of the doorway to achieve BCA minimums of 750mm in width, or 850mm for ground floor accessibility, and 1980mm minimum in clear height.

The proposed double doors between the café and the airlock must have at least one leaf with 850mm clear opening width.

5.8. BCA Clause D2.8 – Enclosure of space under stairs and ramps

The internal stairway has an enclosed ground floor store-room space under the mid landing. This store-room must be upgraded to achieve a 'one hour' fire resistant separation from the stairway construction above, inclusive of a one hour -/60/30 FRL self-closing fire door. Alternatively, the existing doorway and the wall of the doorway may be removed to eliminate the existing enclosed storage space.

5.9. BCA Clause D2.13 – Goings and risers

The timber stairs of the existing internal stairway do not have contrasting colour non slip nosing strips. In conjunction with the stairway accessibility recommendations of item 5.14 below, it is recommended that the stair nosing to the existing stairway, in addition to any proposed stairway, be provided with luminance contrasting non slip stair nosings.

5.10. BCA Clause D2.15 – Thresholds

The first floor rear 'sunroom' to become an office room has a 160mm threshold step down from the adjacent 'Office 4' room. In this regard, it is recommended that the Council utilise its discretionary powers under Clauses 93 and 94 of the EPAR 2000 and accept the existing door threshold level change to the 'sunroom' doorway at first floor level, a proposed office use area that is not required to be accessible.

5.11. BCA Clause D2.16 – Barriers to prevent falls

The internal stairway has a existing timber balustrade height of 850mm above the stair nosings of the flights and 875mm to the top landing, in lieu of 865mm and 1000mm respectively. In conjunction with the handrail accessibility recommendations of item 5.14 below, it is recommended that the balustrade/ handrails to the existing stairway, be upgraded to achieve the BCA minimums of 865mm to the stair flights and 1000mm to the topmost landing.

5.12. BCA Clauses D2.19 Doorways and doors / Clause D2.20 Swinging doors

The proposed bi-fold doorway serving as the north eastern rear exit serving the proposed retail café tenancy will require the provision of a complying single leaf outward swinging doorway having a clear width of not less than 850mm.

Whilst the front south western entry exit door swings inwards, this is permitted for an exit that serves a part of the building with a floor area of not more than 200m^2, it is the only exit serving the front office portion of the ground floor and the doorway will need to be fitted with a hold open device.

5.13. BCA Clauses D2.21 Operation of latch

Numerous existing doorways have non-complying knob handles at 750mm in height, in lieu of lever handles 900 – 1100mm above floor level. In conjunction with the doorway circulation accessibility recommendations of item 5.14 below, all proposed and existing doorways should be provided with lever 'single hand action' style door hardware.

5.14. Access for people with a disability

The proposed change of use to office and retail café uses dictates that the ground floor of the premises must be made BCA and AS 1428 accessible:

- from the Hill Street entry to the property (former driveway gates to be modified or replaced);
- along the former driveway at the northern side of the property involving 1:20 walkway gradients and/ or 1:14 rampway gradients (with level rest mid landings, handrails to both sides and tactile ground surface indicators at the rampway landings);
- into the café tenancy at the rear of the ground floor via a BCA Clause/ Table E3.6a 'low-rise platform lift';
- with reference to report item 5.12, the proposed bi-fold doorway to serve the café must incorporate a complying single leaf outward swinging doorway having a clear width of not less than 850mm;
- this outward swinging café door will necessitate a 1670mm minimum width external landing to account for the required circulation space for this doorway;
- throughout the ground floor café (front of house areas, excluding the café staff only kitchen and any store / utility room(s)) inclusive of door circulation spaces (refer to item 5.7 above) and turning spaces generally;
- to and within all required accessible and ambulant accessible sanitary facilities (as detailed at report item 5.15 below);
- tactile ground surface indicators to the landings of the internal stairway and the proposed café entry stairway; and
- 30% luminance contrast stair nosing strips to the existing internal stairway and the proposed café entry stairway.

The first floor is not required by BCA Clause D3.3(f) to be provided with access via a ramp or lift given that it represents an above ground floor having proposed office use that has a total floor area not exceeding 200m^2.

Having regard to the ground floor offices areas inclusive of door circulation spaces (refer to item 5.7 above) and turning spaces generally, upgrading of these doorways may be achieved by the project. However, the Council may utilise its discretionary powers under Clause 94 of the EPAR 2000 and accept the existing doorway widths to this part of the ground floor as being acceptable and not require upgrading on the basis that no works are proposed to the ground floor office portion of the project.

Furthermore:

- As detailed at report item 5.7 above, the existing stairway exit serving the first floor has a width of 800mm in lieu of 1000mm minimum. In this regard, it is recommended that the Council utilise its discretionary powers under Clauses 93 and 94 of the EPAR 2000 and accept the existing stairway width as being acceptable and that only one balustrade handrail will be provided, in lieu of one handrail either side (as detailed at report item 5.11), for the proposed office uses of the first floor;
- The existing four riser flight up to the rear portion of the first floor from the stairway mid landing does not have a handrail. In this regard, it is recommended that the Council utilise its discretionary powers under Clauses 93 and 94 of the EPAR 2000 and accept the provision of one handrail in lieu of one either side for this stairway that has an existing width of less than 1000mm;
- The existing four riser stairway connecting the front entry porch of the building to the Hill Street footpath via the front landscaped garden will require a handrail. It is recommended that AS 1428.1 compliant accessible handrails be provided to both sides of this existing stairway;
- The proposed ground floor rear entry deck and stairway will require a handrail. AS 1428.1 compliant accessible handrails must be provided to both sides of this existing stairway;
- Subject to the existing garage and the property driveway not being used for carparking (the driveway must serve as an accessway), there will be no requirement for an accessible car space.

5.15. Sanitary facilities

The proposed café staff and seating for 40 café patrons will require the provision of:

- One unisex accessible sanitary facility;
- One male ambulant accessible toilet room; and
- One female ambulant accessible toilet room.

Accordingly, it is recommended that the existing unisex toilet and shower bathroom at ground floor level be converted to an AS 1428.1-2009 compliant and BCA Clause F2.4 required unisex accessible sanitary facility.

Should the option to provide a unisex accessible sanitary facility at the rear of the existing garage building be pursued, it is then recommended that the existing unisex toilet and shower bathroom at ground floor level be converted to a AS 1428.1-2009 compliant and BCA Clause F2.4 required separate male and female ambulant accessible toilet rooms.

Notwithstanding this option of providing the unisex accessible sanitary facility outside the café and office building and exposed to the weather is not providing an equitable environment. Accordingly, unless a Performance Solution is to be proposed including a covered walkway to an external accessible facility, it is recommended that the unisex accessible sanitary facility be located inside the building by conversion of the existing unisex toilet and shower bathroom at ground floor level.

The three ensuites of the former residential uses at first floor level will readily accommodate the first floor office occupants, an area that is not required to be accessible. For any office occupant requiring an accessible ground floor environment, the above detailed café sanitary facilities will also readily account for ground floor accessible office uses.

6 STATEMENT OF COMPLIANCE

The architectural design documentation as referred to in report has been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation complies or is capable of complying (as outlined in Annexure B) with that Code.

ANNEXURE A DESIGN DOCUMENTATION

Annexure A – Design Documentation

This report has been based on the following design documentation by Habitat Home Designs:

Table 5. Architectural Plans

Architectural Plans Prepared by			
Drawing Number	**Revision**	**Date Title**	**Title**
01	E	15.05.20	Cover Sheet/ Drawing Schedule
02	E	15.05.20	Existing Site Plan
03	E	15.05.20	Proposed Site Plan
04	E	15.05.20	Existing Ground Floor Plan
05	E	15.05.20	Proposed Ground Floor Plan (without accessible facilities)
05	E	15.05.20	Proposed Ground Floor Plan (with accessible facilities)
06	E	15.05.20	Existing First Floor Plan
07	E	15.05.20	Proposed First Floor Plan
08	E	15.05.20	Existing Garage and Shed
09	E	15.05.20	Proposed Garage and Shed

ANNEXURE B DETAILED BCA 2019 ASSESSMENT

Annexure B – Detailed BCA 2019 Assessment

Outlined below is a detailed assessment of the design under the Deemed-to-Satisfy Provisions of the Building Code of Australia (BCA) including the State variations where applicable.

All Deemed-to-Satisfy clauses that are applicable to the subject building have been referred to below, including a comment adjacent to each clause of the proposal's ability to satisfy each respective clause.

The abbreviations outlined below have been used in the following table.

N/A	Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed design.
Complies	The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the proposed design.
CRA – Refer Annexure C	'COMPLIANCE READILY ACHIEVABLE'. It is considered that there is not enough information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, with further design development, compliance can readily be achievable. This item is to be read in conjunction with the BCA Specification included within Annexure C of this report.
FI	Further Information is necessary to determine the compliance potential of the building design.
PS	Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to satisfy the relevant Performance Requirements.
DNC	Does Not Comply.
Noted	BCA Clause simply provides a statement not requiring specific design comment or confirmation.

Deemed to Satisfy Clause Assessment

Table 6. Deemed to Satisfy Clause Assessment

Clause	Clause Requirements	Comment	Status
Section B: Structure			
Part B1 – Structural Provisions			
B1.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
B1.1: Resistance to actions	The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions, where the most critical action has been determined in accordance with this Part	Structural Engineer to certify at CC stage.	CRA – Refer Annexure C
B1.2: Determination of individual actions	The magnitude of actions must be determined in accordance with this Clause.	Structural Engineer to certify at CC stage.	CRA – Refer Annexure C
B1.4: Determination of structural resistance of materials and forms of construction	The structural resistance of materials and forms of construction must be determined in accordance with this Clause.	Structural Engineer to certify at CC stage.	CRA – Refer Annexure C
B1.5: Structural software	Structural software used in computer aided design of a building or structure within the geometrical limits of (b) of this Clause must comply with the ABCB Protocol for Structural Software.	Structural Engineer to certify at CC stage.	CRA – Refer Annexure C
B1.6 Construction of buildings in flood hazard areas	A Class 2 or 3 building, Class 9a health care building, Class 9c aged-care building or Class 4 part of a building, in a flood hazard area (refer to Council maps) must comply the ABCB Standard for Construction of Buildings in Flood Hazard Areas.		N/A

Section C: Fire Resistance				
Part C1 – Fire Resistance and Stability				
C1.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
C1.1:	Type of construction required	The building is required to be of Type C Construction. Refer to Specification C1.1 requirements at the end of this Section.	Type C construction, the least fire resistant	Noted
C1.2:	Calculation of rise in storeys	The building has a rise in storeys of two (2).	Two storeys, ground and a first floor level	Noted
C1.3:	Buildings of multiple classification	Informational	Noted	Noted
C1.4:	Mixed Types of construction			N/A
C1.5:	Two Storey Class 2, 3 or 9c buildings			N/A
C1.6:	Class 4 Parts of building			N/A
C1.7:	Open spectator stands and indoor sports stadium			N/A
C1.8:	Lightweight construction	Lightweight construction used in a fire-rated application is to comply with Specification C1.8.		CRA – Refer Annexure C

Section C: Fire Resistance				
C1.9:	Non-combustible building elements	(a) In a building required to be of Type A or B construction, the following building elements and their components must be *non-combustible*: (iv) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (v) The flooring and floor framing of lift pits. (vi) Non-loadbearing internal walls where they are required to be fire-resisting. (b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of *non-combustible* construction in— (vii) a building required to be of Type A construction; and (viii) a building required to be of Type B construction, subject to C2.10, in— (A) a Class 2, 3 or 9 building; and (B) Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. (c) A loadbearing internal wall and a loadbearing *fire wall*, including those that are part of a loadbearing shaft, must comply with Specification C1.1. (d) The requirements of (a) and (b) do not apply to gaskets, caulking, sealants, termite management systems, Glass including laminated glass, thermal breaks associated with glazing systems and damp-proof courses. (e) The following materials, may be used wherever a *non-combustible* material is required: (ix) Plasterboard.	Not applicable, Type C construction	N/A

Section C: Fire Resistance			
	(x) Perforated gypsum lath with a normal paper finish. (xi) Fibrous-plaster sheet. (xii) Fibre-reinforced cement sheeting. (xiii) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0. (xiv) *Sarking-type materials* that do not exceed 1 mm in thickness and have a *Flammability Index* not greater than 5. (xv) Bonded laminated materials where— (A) each lamina, including any core, is *non-combustible*; and (B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (C) the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively.		
C1.10: Fire hazard properties	Fire hazard properties of internal linings, materials and assemblies must comply with C1.10 of the BCA and Specification C1.10, including floor, wall and ceiling linings, air-handling ductwork, lift cars, insulation, *sarking-type materials* and attachments, or be considered *non-combustible*.	Relates to proposed floor, wall and ceiling finishes and linings	CRA – Refer Annexure C
C1.11: Performance of external walls in fire	Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building	Not Applicable	N/A

Section C: Fire Resistance			
	having a rise in storeys of not more than 2, must comply with Specification C1.11.		
C1.12: Non-combustible materials	Clause now deleted and relocated to C1.9.		Noted
C1.13: Fire-protected timber: Concession	*Fire-protected timber* in all building classifications may be used wherever an element is required to be *non-combustible*, provided— (a) the building is— (i) a separate building; or (ii) a part of a building— (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and (b) the building has an *effective height* of not more than 25 m; and (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification E1.5; and (d) any insulation installed in the cavity of the timber building element required to have an *FRL* is *non-combustible*; and (e) cavity barriers are provided in accordance with Specification C1.13.		N/A

Section C: Fire Resistance			
C1.14: Ancillary elements	An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be *non-combustible* unless it is one of the following: (a) An ancillary element that is *non-combustible*. (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. (d) A grate or grille not more than 2 m² in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; and (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i) meets the relevant requirements of Table 4 of Specification C1.10 as for an internal element; and (ii) serves a storey— (A) at ground level; or		CRA – Refer Annexure C

Section C: Fire Resistance			
	(B) immediately above a storey at ground level; and (iii) does not serve an *exit*, where it would render the *exit* unusable in a fire. (j) A part of a security, intercom or announcement system. (k) Wiring. (l) A paint, lacquer or a similar finish. (m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).		
Part C2 – Compartment and Separation			
C2.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
C2.1: Application of Part	Informational - C2.2, C2.3 and C2.4 do not apply to a carpark provided with a sprinkler system complying with Specification E1.5 (other than an FPAA101D or FPAA101H system), an open-deck carpark or an open spectator stand.		Noted
C2.2: General floor area and volume limitations	The size of *fire compartments* in the building must not exceed that specified in Table C2.2.		Complies
C2.3: Large isolated buildings			N/A
C2.4: Requirements for open spaces and vehicular access			N/A

Section C: Fire Resistance				
C2.5:	Class 9a and 9c Buildings			N/A
C2.6:	Vertical separation of openings in external walls	Type A Construction Note: The following applies to buildings that are not provided with an AS 2118.1:2017 or AS 2118.4:2012 sprinkler system installed throughout. Where the vertical projection of an opening in an external wall falls no further than 450 mm outside an opening in the storey next below, the openings must be provided with vertical separation complying with Clause C2.6, that is: > They must be protected with a 900mm high (*FRL* 60/60/60) spandrel extending at least 600mm above the separating slab, or > They must be provided with a 1.1m horizontal projection (*FRL* 60/60/60) also extending at least 450mm either side of the openings. The above does not apply to openings within the same stairway. For the purposes of this clause, opening means that part of the external wall of a building that does not have an *FRL* of 60/60/60 or greater.		N/A
C2.7:	Separation by fire walls	**Construction** - A *fire wall* must be constructed in accordance with the following: > Any openings in a *fire wall* must not reduce the *FRL* required by Specification C1.1 for the *fire wall*, except where permitted by the Deemed-to-Satisfy Provisions of Part C3. > Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or *sarking-type material*, must not pass through or cross the		N/A

Section C: Fire Resistance			
	fire wall unless the required fire resisting performance of the *fire wall* is maintained. **Separation of buildings** – A part of a building separated from the remainder of the building by a *fire wall* may be treated as a separate building for the purposes of the Deemed-to-Satisfy provisions of Sections C, D and E if it is constructed in accordance with (a) and the following: (i) the *fire wall* extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building. (ii) The *fire wall* is carried through to the underside of the roof covering. (iii) Where the roof of one of the adjoining parts is lower than the roof of the other part, the *fire wall* extends to the underside of— (A) the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or (B) the lower roof if it has an *FRL* not less than that of the *fire wall* and no openings closer than 3 m to any wall above the lower roof; or (C) the lower roof if its covering is *non-combustible* and the lower part has a sprinkler system complying with Specification E1.5. **Separation of *fire compartments*** – A part of a building separated from the remainder of the building by a *fire wall* may be treated as a separate *fire compartment* if it is constructed in accordance with this clause and the *fire wall* extends to the underside of – > a floor having an *FRL* required for a *fire wall*; or		

Section C: Fire Resistance			
	> the roof covering.		
C2.8: Separation of classifications in the same storey	Where a storey has different classifications located alongside one another: > each building element in that storey must have the higher *FRL* prescribed in Specification C1.1 for that element for the classifications concerned; or > the parts must be separated in that storey by a *fire wall* having the higher *FRL* prescribed in Table 3; or > where one part is a carpark complying with Table 3.9, 4.2 or 5.2 of Specification C1.1, the parts may be separated by a *fire wall* complying with the appropriate Table.		CRA – Refer Annexure C
C2.9: Separation of classifications in different storeys	Type C The floor separating the Class 2, 3 or 4 part from the storey below must: (i) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an *FRL* of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal. Note: Determination of Floor *FRL*'s must also consider compliance with C2.7 whereby the floor must have the same *FRL* as the fire wall of the *fire compartment* below and D2.12 whereby roof as open space must have an *FRL* not less than 120/120/120.		N/A

Section C: Fire Resistance			
C2.10: Separation of lift shafts	Type A Passenger lifts must be separated from the remainder of the building by enclosure in a fire rated shaft achieving an *FRL* prescribed by Table 3 of Specification C1.1. Emergency lifts must be in fire-rated shafts not less than *FRL* 120/120/120. Type B Lift shaft walls, if load-bearing must have the relevant *FRL* prescribed by Table 4 of Specification C1.1 and if non-loadbearing, be of *non-combustible* construction. Emergency lifts An emergency lift must be contained within a fire-resisting shaft having an *FRL* of not less than 120/120/120.		N/A
C2.11: Stairways and lifts in one shaft	A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.		N/A
C2.12: Separation of equipment	Any of the following equipment located in the building must be separated from the remainder of the building: > lift motors and lift control panels; or > emergency generators used to sustain emergency equipment operating in the emergency mode; or > central smoke control plant; or > boilers; or > a battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.		N/A

Section C: Fire Resistance			
	Equipment need not be separated in if the equipment comprises: > smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification E2.2b; or > stair pressurizing equipment installed in compliance with the relevant provisions of AS 1668.1:2015; or > a lift installation without a machine room; or > equipment otherwise adequately separated from the remainder of the building. Separation must be by construction having an *FRL* as required by Specification C1.1, but not less than *FRL* 120/120/120 with openings protected by self-closing fire doors having an *FRL* of not less than –/120/30. Separation of on-site fire pumps must comply with the requirements of AS 2419.1:2005.		
C2.13: Electricity supply system	> Any electrical substation located within the building must be separated from the remainder of the building by construction having an *FRL* of not less than 120/120/120, and doorways protected with self-closing fire doors having an *FRL* of not less than –/120/30. > A main switchboard which sustains emergency equipment operating in the emergency mode must be fire separated from any other part of the building by construction having an *FRL* of not less than 120/120/120 and have the doorway fitted with self-closing fire door having an *FRL* of not less than –/120/30. > Any electrical conductors located within the building that supply a substation or main switchboard for		N/A

Section C: Fire Resistance			
	emergency equipment must comply with BCA clause C2.13. > Emergency equipment switchgear must be separated from non-emergency equipment switchgear by metal partitions designed to minimize the spread of a fault from the non-emergency equipment switchgear. > Emergency equipment includes but is not limited to the following: o fire hydrant booster pumps; o sprinkler pumps; o hose reel pumps; o air-handling systems designed to exhaust and control the spread of smoke; o emergency lifts; o control and indicating equipment; and o sound systems and intercom systems for emergency purposes.		
C2.14: Public corridors in Class 2 and 3 Buildings	Public corridors in Class 2 parts that exceed 40 m in length must be divided at intervals of not more than 40m with smoke-proof walls complying with Clause 2 of Specification C2.5.		N/A
Part C3 – Protection of Openings			
C3.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
C3.1: Application of Part	(a) The Deemed-to-Satisfy Provisions of this Part do not apply to–		Noted

Section C: Fire Resistance			
	(i) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose; and (ii) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45 000 mm2 in face area and is spaced not less than 2 m from any other ventilator in the same wall; and (iii) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like; and (iv) In a carpark– (A) Service penetrations through; and (B) Openings formed by a vehicle ramp in, (aa) A floor other than a floor that separates a part not used as a carpark, providing the connected floors comply as a single fire compartment for the purposes of all other requirements of the Deemed-to-Satisfy Provisions of Sections C, D and E. (b) For the purposes of the Deemed-to-Satisfy Provisions of this Part, openings in building elements required to be fire-resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL. (c) For the purposes of the Deemed-to-Satisfy Provisions of this Part, openings, other than those		

Section C: Fire Resistance			
	covered under (a)(iii), between building elements such as columns, beams and the like, in the plane formed at the construction edge or perimeter of the building, are deemed to be openings in an external wall.		
C3.2: Protection of openings in external walls	Openings in an external wall that is required to have an *FRL* must be protected in accordance with C3.4 if the distance between the opening and the *fire-source feature* is: > less than 3 m from a side or rear boundary; or > less than 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or > less than 6 m from another building on the allotment that is not Class 10; and if required to be protected under (a), not occupy more than 1/3 of the area of the external wall of the storey in which it is located unless they are in a Class 9b building used as an open spectator stand. Where wall-wetting sprinklers are used, they must be located externally.		DNC PS Refer to report item 5.3
C3.3: Separation of external walls and associated openings in different fire compartments	The distance between parts of external walls and any openings within them in different *fire compartments* separated by a *fire wall* must not be less than that set out in Table C3.3, unless— (a) those parts of each wall have an *FRL* not less than 60/60/60; and (b) any openings protected in accordance with C3.4. Table C3.3 DISTANCE BETWEEN EXTERNAL WALLS AND ASSOCIATED OPENINGS IN DIFFERENT FIRE COMPARTMENTS		N/A

Section C: Fire Resistance			
	<table><tr><th>Angle between walls</th><th>Min. Distance</th></tr><tr><td>0° (walls opposite)</td><td>6 m</td></tr><tr><td>more than 0° to 45°</td><td>5 m</td></tr><tr><td>more than 45° to 90°</td><td>4 m</td></tr><tr><td>more than 90° to 135°</td><td>3 m</td></tr><tr><td>more than 135° to less than 180°</td><td>2 m</td></tr><tr><td>180° or more</td><td>Nil</td></tr></table>		
C3.4: Acceptable methods of protection	Where protection is required, openings must be protected as follows: <u>Doorways:</u> (i) Internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing; or (ii) –/60/30 fire doors that are self-closing. <u>Windows:</u> (i) Internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –60/– fire windows that are automatically closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters. <u>Other openings:</u> (i) Excluding voids – internal or external wall-wetting sprinklers; or (ii) Construction having an *FRL* not less than –/60/–		DNC PS Refer to report item 5.3

Section C: Fire Resistance				
		Fire doors, fire windows and fire shutters must comply with BCA Specification C3.4.		
C3.5:	Doorways in fire walls	Doorways in the fire walls must be protected by a self-closing fire door that achieves an *FRL* of not less than that required by Specification C1.1 for the *fire wall* except that each door must have an insulation level of at least 30.		N/A
C3.6:	Sliding fire doors			N/A
C3.7:	Protection of doorways in horizontal exits	A doorway that is part of a horizontal exit must be protected by a single fire door that has an FRL of not less than that required by Specification C1.1 for the fire wall except that the door must have an insulation level of at least 30, or by one of the other options in Clause C3.7.		N/A
C3.8:	Openings in fire-isolated exits	Doorways that open to fire-isolated stairways, fire-isolated passageways or fire-isolated ramps, and are not doorways opening to a road or open space, must be protected by –/60/30 fire doors that are self-closing, or automatic-closing in accordance with (ii) and (iii) of Clause C3.8. A window in an external wall of a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp must be protected in accordance with C3.4 if it is within 6 m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure.		N/A
C3.9:	Service penetrations in fire-isolated exits	The fire isolated *exits* are not to be penetrated by any services **other** than: > electrical wiring associated with:		N/A

Section C: Fire Resistance			
	○ a lighting, detection, or pressurization system serving the exit; or ○ a security, surveillance or management system serving the exit; or ○ an intercommunication system or an audible or visual alarm system in accordance with D2.22; or ○ the monitoring of hydrant or sprinkler isolating valves. > ducting associated with a pressurisation system if it; (iii) is constructed of material having an *FRL* of not less than –/120/60 where it passes through any other part of the building; and (iv) does not open into any other part of the building; or > water supply pipes for fire services.		
C3.10: Openings in fire-isolated lift shafts	> Lift landing doors are required to be fire doors with an *FRL* of -/60/- that comply with AS 1735.11:1986, and be set to remain closed except when discharging or receiving, passengers, goods or vehicles. > Panels in the wall of the lift shaft must be backed by construction having an *FRL* of not less than –/60/60 if it exceeds 35 000 mm2 in area.		N/A
C3.11: Bounding Construction: Class 2, 3 and 4 Buildings	> The doorways between sole occupancy units and the public lobbies and any common / service rooms and the public lobbies (class 2 parts) must be protected by self–closing -/60/30 fire doors. tight fitting, solid core door not less than 35 mm thick (Type B & C)		N/A

Section C: Fire Resistance			
	> In a Class 2 building where a path of travel to an *exit* does not provide a person seeking egress with a choice of travel in different directions to alternative *exit*s and is along an open balcony, landing or the like and passes an external wall of– (i) another sole-occupancy unit; or (ii) a room not within a sole-occupancy unit, then that external wall must– (i) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and (ii) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and (iii) have any windows or other openings– (A) protected internally in accordance with C3.4; or (B) located at least 1.5 m above the floor of the balcony, landing or the like. Class 3 residential aged care requirements (not listed here) Automatic closing door requirements (not listed here)		
C3.12: Openings in floors and ceilings for services	Where services pass through a floor which is required to achieve an *FRL* or a ceiling required to have a resistance to the incipient spread of fire, the service must be enclosed within a fire resisting shaft or fire protected in accordance with Clause C3.15.		N/A
C3.13: Openings in shafts	Openings in shafts must be protected by:		N/A

Section C: Fire Resistance			
	(a) if it is in a sanitary compartment – a door or panel which together with its frame, is *non-combustible* or has an *FRL* of not less than –/30/30; or (b) a self-closing –/60/30 fire door or hopper; or (c) an access panel having an *FRL* of not less than –/60/30; or (d) if the shaft is a garbage shaft – a door or hopper of *non-combustible* construction.		
C3.15: Openings for service installations	Where services pass through an element which is required to achieve an *FRL* (other than an external wall or roof), the service must be fire protected in accordance with BCA Clause C3.15. **Note**: contractors should check with PCA to confirm compliance with their proposed fire stopping method.		N/A
C3.16: Construction joints	Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4:2014 to achieve the required *FRL*.		N/A
C3.17: Columns protected with lightweight construction to achieve an FRL	A column protected by lightweight construction to achieve an *FRL* which passes through a building element that is required to have an *FRL* or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required *FRL* or resistance to the incipient spread of fire.		N/A

Section C: Fire Resistance				
Specification C1.1 – Fire-Resisting Construction				
2.0:	General Requirements	Informational	Noted	Noted
2.1:	Exposure to fire-source features	A building element is exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the *fire-source feature*, or vertical projection of the feature, is not obstructed by another part of the building that– (i) has an *FRL* of not less than 30/–/–; and (ii) is neither transparent nor translucent.		Noted
2.2:	Fire protection for a support of another part	Where a part of a building required to have an *FRL* depends upon direct vertical or lateral support from another part to maintain its *FRL*, that supporting part must have an *FRL* not less than that required by other provisions of this Specification; and if located within the same *fire compartment* as the part it supports have an FRL in respect of structural adequacy the greater of that required for the supporting part itself and for the part it supports.		CRA – Refer Annexure C
2.3:	Lintels	A lintel must have the FRL required for the part of the building in which it is situated unless it does not contribute to the support of a fire door, fire window or fire shutter and meets the requirements of Spec C1.1 clause 2.3 (a) & (b).		CRA – Refer Annexure C
2.4:	Attachments not to impair fire-resistance	The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.		CRA – Refer Annexure C
2.5:	General concessions	> Steel columns (1 or 2 storey buildings)		Noted

Section C: Fire Resistance				
2.6:	Mezzanine floors: Concession			N/A
2.7:	Enclosure of shafts	Fire-isolated shafts are required to be enclosed at the top and bottom of the shaft with fire rated construction having an *FRL* required for the walls of a non-load-bearing shaft in the same building, as per specification C1.1. This fire rating is required in two directions. The above does not apply to shafts extending beyond the roof covering, other than fire isolated stair and lift shafts and the bottom of *non-combustible* shafts laid directly on the ground.		N/A
2.8:	Carparks in Class 2 and 3 Buildings	Class 2 buildings not more than 4 storeys Class 3 building not more than 3 storeys		N/A
2.9:	Residential Aged Care building: Concession			N/A
5.0:	Type C fire-resisting construction	Noted		CRA – Refer Annexure C
5.1:	Fire-resistance of building elements	The FRL's of all elements are to be in accordance with the FRL's detailed in the Table contained within Part 4.0 of this report. > An external wall that is required to have an FRL need only be tested from the outside to satisfy the FRL requirement.		Noted
5.2:	Carparks	Open deck and sprinkler protected carparks		N/A

Section C: Fire Resistance				
Specification C1.10 – Fire Hazard Properties				
1.	Scope	Informational	Noted	-
2.	Application	Informational	Noted	Noted
3.	Floor linings and floor coverings	A floor lining or floor covering must have– (a) a *critical radiant flux* not less than that listed in Table 2; and (b) in a building not protected by a sprinkler system complying with Specification E1.5, a maximum smoke development rate of 750 percent-minutes; and (c) a *group number* complying with Clause 6(b), for any portion of the floor covering that is continued more than 150 mm up a wall.		CRA – Refer Annexure C
4.	Wall and ceiling linings	(a) A wall or ceiling lining system must comply with the *group number* specified in Table 3 and for buildings not fitted with a sprinkler system complying with Specification E1.5 have– (i) a *smoke growth rate index* not more than 100; or (ii) an *average specific extinction area* less than 250 m2/kg. (b) A *group number* of a wall or ceiling lining and the *smoke growth rate index* or *average specific extinction area* must be determined in accordance with AS 5637.1:2015.		CRA – Refer Annexure C
5.	Air-handling ductwork	Rigid and flexible ductwork must comply with the fire hazard properties set out in AS 4254 Parts 1 and 2.		CRA – Refer Annexure C

Section C: Fire Resistance				
6.	Lift cars	Materials used as— (a) floor linings and floor coverings must have a *critical radiant flux* not less than 2.2; and (b) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with AS 5637.1:2015.		CRA – Refer Annexure C
7.	Other materials	Materials and assemblies not included in Clauses 3, 4, 5 or 6 must not exceed the indices set out in Table 4.		CRA – Refer Annexure C
Specification C1.11 – Performance of External Walls in Fire				
Specification C1.11 is not applicable				
Specification C2.5 – Smoke Proof Walls in Health Care and Aged Buildings				
Specification C2.5 is not applicable				
Specification C3.4 – Fire Doors, Smoke Doors, Fire Window and Shutters				
Specification C3.4 is not applicable				
Specification C3.15 – Penetration of Walls, Floors and Ceilings by Services				
Specification C3.15 is not applicable				

Section D: Access and Egress				
Part D1 – Provision for Escape				
D1.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
D1.1:	Application of Part	The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a *sole-occupancy unit* in a Class 2 or 3 building or a Class 4 part of a building.		Noted
D1.2:	Number of exits required	Every building must have at least one exit from each storey.		Complies
D1.3:	When fire-isolated stairways and ramps are required	Every *exit* stairway must be fire-isolated, except for.....		N/A
D1.4:	Exit travel distances	Class 5 Office and Class 6 Retail buildings > no point on a floor must be more than 20 m from an *exit*, or a point from which travel in different directions to 2 *exits* is available, in which case the maximum distance to one of those *exits* must not exceed 40 m; and > in a Class 5 or 6 building, the distance to a single *exit* serving a storey at the level of access to a road or open space may be increased to 30 m.		Complies
D1.5:	Distance between alternative exits	*Exits* that are required as alternative means of egress must be– (a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 *exits* is readily available from all points on the floor including lift lobby areas; and		Complies

Section D: Access and Egress			
	(b) not less than 9 m apart; and (c) not more than— (i) 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart. Note: the distance between *exits* must be measured through the point at which travel two *exits* is available.		
D1.6: Dimensions of exits and paths of travel to exits	In a required *exit* or path of travel to an *exit*– > the unobstructed height throughout *exits* and paths of travel to *exits* must not be less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and > the unobstructed width of each *exit* or path of travel to an *exit*, except for doorways must be not less than 1m; > the unobstructed width of doorways must be not less than 750 mm, unless providing access for people with disabilities in which case the unobstructed width must be not less than 850 mm. > the required width of a stairway or ramp must be measured clear of all obstructions such as handrails. > the unobstructed width of a required *exit* must not diminish in the direction of travel to a road or open space.	The existing stairway exit serving the first floor has a width of 800mm in lieu of 1000mm minimum. Several doorways of the proposed ground and first floor office areas have floor widths less than 750mm (or 850mm as required for accessibility at ground floor level). One doorway at first floor level has a 1935mm clear height in lieu of 1980mm minimum as required for a doorway. The proposed double doors between the café and the airlock must have at least one leaf with 850mm clear opening width.	DNC FI Refer to report item 5
D1.7: Travel via fire-isolated exits	> A doorway from a room must not open directly into a stairway that is required to be fire-isolated unless it is from – (i) a public corridor, public lobby or the like; or		N/A

Section D: Access and Egress			
	(ii) a *sole-occupancy unit* occupying all of a storey; or (iii) a sanitary compartment, airlock or the like. > D1.7 (b) - Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway— (i) to a road or open space; or (ii) to a point— (A) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least 2/3 of its perimeter; and (B) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or (iii) into a covered area that— (A) adjoins a road or open space; (B) and is open for at least 1/3 of its perimeter; and (C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and (D) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m. > D1.7 (c) - Where a path of travel from the point of discharge of a fire-isolated *exit* necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right		

Section D: Access and Egress			
	angles to the path of travel, that part of the wall must have— (i) an FRL of not less than 60/60/60; and (ii) any openings protected internally in accordance with C3.4, (iii) for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. > D1.7 (d) If more than 2 access doorways, not from a sanitary compartment or the like open to a required fire-isolated *exit* in the same storey – o a smoke lobby in accordance with D2.6 must be provided; or o the *exit* must be pressurized in accordance with AS 1668.1:2015 > A ramp must be provided at any change in level less than 600 mm in a fire-isolated passageway in a Class 9 building.		
D1.8: External stairways or ramps in lieu of fire-isolated exits			N/A
D1.9: Travel by non-fire-isolated stairways or ramps	> A non-fire-isolated stairway serving as a required *exit* must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. > In a Class 5, 6, 7, 8 or 9 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated		Complies

Section D: Access and Egress			
	stairway or non-fire-isolated ramp must not exceed 80m. > In a Class 5 to 8 or 9b building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than – (i) 20 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or (ii) 40 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions.		
D1.10: Discharge from exits	*Exits* must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the *exit*. If a required *exit* leads to open space, the path of travel to the road must have an unobstructed width of not less than 1m. min width of required *exit* if greater. If an *exit* discharges to open space that is at a different level that the public road to which it is connected, the path of travel to the road must be by a ramp or other incline not steeper than 1:8, or a BCA compliant stairway. The discharge points of alternative *exits* must be as far apart as practical		Complies
D1.11: Horizontal exits	*Horizontal exits* must not comprise more than half of the required *exits* from any part of a storey divided by a *fire wall*.		N/A
D1.12: Non-required stairways, ramps or escalators	An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp—		N/A

Section D: Access and Egress			
	(a) must not be used between storeys in— (i) a patient care area in a Class 9a health-care building; or (ii) a resident use area in a Class 9c building; and (b) may connect any number of storeys if it is— (i) in an open spectator stand or indoor sports stadium; or (ii) in a carpark or an atrium; or (iii) outside a building; or (iv) in a Class 5 or 6 building that is sprinklered throughout, where the escalator, walkway, stairway or ramp complies with Specification D1.12; and (c) except where permitted in (b) must not connect more than— (i) 3 storeys if each of those storeys is provided with a sprinkler system complying with Specification E1.5 throughout; or (ii) 2 storeys, provided that in each case, those storeys must be consecutive, and one of those storeys is situated at a level at which there is direct egress to a road or open space; and (d) except where permitted in (b) or (c), must not connect, directly or indirectly, more than 2 storeys at any level in a Class 5, 6, 7, 8 or 9 building and those storeys must be consecutive.		

Section D: Access and Egress			
D1.13: Number of persons accommodated	Informational– The number of persons accommodated in a storey, room or mezzanine must be determined within consideration to the purpose for which it is used and the layout of the floor area by– (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in BCA Table D1.13 according to the use of that part, excluding spaces set aside for— (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (b) reference to the seating capacity in an assembly building or room; or (c) any other suitable means of assessing its capacity. Based on floor area and Table D1.13, the population numbers are as follows:		Noted
D1.14: Measurement of distances	Informational – The nearest part of an *exit* means in the case of— (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and		Noted

Section D: Access and Egress			
	(d) a doorway opening to a road or open space, the nearest part of the doorway; and (e) a *horizontal exit*, the nearest part of the doorway.		
D1.15: Method of Measurement	Informational	Noted	Noted
D1.16: Plant rooms, lift motor rooms and electricity network substations: concession	Informational – (a) A ladder may be used in lieu of a stairway to provide egress from— (i) a plant room with a floor area of not more than 100 m2; or (ii) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m2. (b) A ladder permitted under (a)— (i) may form part of an *exit* provided that in the case of a fire-isolated stairway it is contained within the shaft; or (ii) may discharge within a storey in which case it must be considered as forming part of the path of travel; and (iii) for a plant room or a Class 8 electricity network substation, must comply with AS 1657.		N/A
D1.17: Access to lift pits	Access to the lift pit is assumed to be through the bottom landing doors as the pit is assumed to be less than 3m deep.		N/A
Part D2 – Construction of Exits			

Section D: Access and Egress				
D2.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
D2.1:	Application of Part	Informational– Except for D2.13, D2.14(a), D2.16, D2.17(d), D2.17(e), D2.21 and D2.24, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a *sole-occupancy unit* in a Class 3 building. Except for D2.13, D2.14(a), D2.16, D2.17(d), D2.17 (e), D2.18 & D2.24, the deemed-to-satisfy Provisions of this Part do not apply to internal parts of the Class 2 *sole-occupancy units*.		Noted
D2.2:	Fire-isolated stairways and ramps	The fire isolated stairways must be constructed of *non-combustible* materials and constructed so that if there is local failure it will not cause structural damage to or impair the fire-resistance of the shaft.		N/A
D2.3:	Non-fire-isolated stairways and ramps	Buildings more than 2 storeys Required stairs and ramps (including landings and any supporting building elements) must be constructed according to D2.2, or only of- (a) reinforced or prestressed concrete; or (b) steel in no part less than 6 mm thick; or (c) timber that— (i) has a finished thickness of not less than 44 mm; and (ii) has an average density of not less than 800 kg/m3 at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol		N/A

Section D: Access and Egress			
	formaldehyde or resorcinol phenol formaldehyde glue".		
D2.4: Separation of rising and descending stair flights	If a stairway serving as an *exit* is required to be fire-isolated— (a) there must be no direct connection between— (i) a flight rising from a storey below the lowest level of access to a road or open space; and (ii) a flight descending from a storey above that level; and (b) any construction that separates or is common to the rising and descending flights must be (i) *non-combustible*; and (ii) smoke proof in accordance with Clause 2 of Specification C2.5.		N/A
D2.5: Open access ramps and balconies			N/A
D2.6: Smoke lobbies			N/A
D2.7: Installations in exits and paths of travel	> Access to service shafts and services other than to fire-fighting or detection equipment must not be provided from a fire-isolated stairway or fire-isolated passageway. > Gas or other fuel services must not be installed in a required *exit*. > Any electricity meters, distribution boards or ducts, or telecommunications distribution boards or equipment installed in corridors/hallways/lobbies or the like must be enclosed with *non-combustible*		Complies & Refer Annexure C

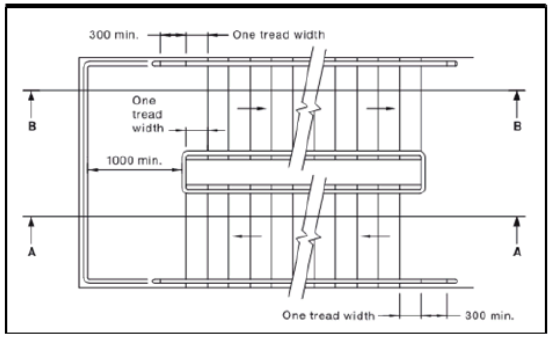
Section D: Access and Egress			
	construction or a fire protective covering with doorways suitably sealed against smoke spread. > Electrical wiring may be installed in a fire-isolated *exit* if the wiring is associated with: o a lighting, detection, or pressurization system serving the *exit*; or o a security, surveillance or management system serving the *exit*; or o an intercommunication system or an audible or visual alarm system in accordance with D2.22; or o the monitoring of hydrant or sprinkler isolating valves.		
D2.8: Enclosure of space under stairs and ramps	The space under the fire-isolated stairways within the shaft must not be enclosed to form a cupboard or similar enclosed space. The space below a required non fire-isolated stairway (including an external stairway) or non-fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless the enclosing walls and ceilings have an FRL of not less than 60/60/60 and the doorway is fitted with a self-closing –/60/30 fire door.	The internal stairway has an enclosed ground floor store room space under the mid landing.	FI Refer to report item 5
D2.9: Width of stairways and ramps	Informational– A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.		Noted
D2.10: Pedestrian ramps	> A ramp serving as a required *exit* must—		N/A

Section D: Access and Egress			
	(i) where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS 1428.1:2009; or (ii) in any other case, have a gradient not steeper than 1:8. > The floor surface of a ramp must have a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.		
D2.11: Fire-isolated passageways	The enclosing construction of a fire isolated passageway must have an FRL not less than that required for the fire isolated stair.		N/A
D2.12: Roof as open space			N/A
D2.13: Goings and risers	Stairways must comply with the following: > Stairways must have not more than 18 and not less than 2 risers in each flight; > Goings must be between 240 mm and 355 mm within the residential units; > Goings must be between 250 mm and 355 mm; > Goings must be between 250 mm and 355 mm in other areas; > Risers must be between 115 mm high and 190 mm high; > The slope relationship (2 x riser dimension + going dimension) must be within the range of 550-700; > The goings and risers must be constant (uniform) throughout each flight and the dimensions of goings (G) and risers (R) are considered constant if the variation between–	The existing internal stairway has consistent and compliant riser and going dimensions of the stairs throughout the flights. The timber stairs do not have contrasting non slip nosings.	FI Refer to report item 5

<table>
<tr><th colspan="4">Section D: Access and Egress</th></tr>
<tr><td></td><td>(A) adjacent risers, or between adjacent goings, is no greater than 5 mm; and
(B) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm.
> Risers must not contain any openings that would permit a 125 mm sphere to pass through.
> Each tread must have a non-slip finish or an adequate non-skid strip near the edge of the nosings.
> Treads must be of solid construction (not mesh or perforated) if the stairway is more than 10 m high or connects more than 3 storeys.
> In the case of a required stairway, no winders in lieu of a landing.
> Treads must have a surface or nosing strip with a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013 Slip resistance classification of new pedestrian surface materials.</td><td></td><td></td></tr>
<tr><td>D2.14: Landings</td><td>Landings must be not less than 750 mm long and have either a surface with a slip-resistance classification complying with Table D2.14 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.
<table><tr><th rowspan="2">Application</th><th colspan="2">Surface Condition</th></tr><tr><th>Dry</th><th>Wet</th></tr><tr><td>Ramp steeper than 1:14</td><td>P4 or R11</td><td>P5 or R12</td></tr></table></td><td>The internal stairway has a compliant mid landing</td><td>Complies</td></tr>
</table>

Section D: Access and Egress			
	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		
D2.15: Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless– (a) in a building required to be accessible, 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 (b) 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.	The first floor rear 'sunroom' to become an office room has a 160mm threshold step down from the adjacent 'Office 4' room.	DNC Refer to report item 5
D2.16: Barriers to prevent falls	Balustrades must be provided to stairs and balconies, driveway ramps etc where there is a fall of more than 1m. Balustrades must comply with the following: Balustrade minimum heights > 865 mm above stair nosings; > 865 mm above landings to a stair where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length; and	The internal stairway has a existing timber balustrade height of 850mm above the stair nosings of the flights and 875mm to the top landing, in lieu of 865mm and 1000mm respectively. With a first floor enclosed sunroom and a ground floor rear entry deck having a proposed height of less than 1m above ground level, there are no other balustrade compliance issues.	DNC Refer to report item 5

Section D: Access and Egress			
	> 1 m in all other locations. <u>Balustrade openings – other than fire-isolated stairs</u> > A 125 mm sphere must not be able to pass through any opening and for stairways, the 125 mm is measured above the nosing line of the stair treads. <u>Climb-ability – other than fire-isolated stairs</u> For floors more than 4m above the surface beneath, the balustrade must not incorporate any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that could facilitate climbing.		
D2.17: Handrails	Handrails to stairways must: > be located along at least one side of the ramp or flight (a flight being 2 or more risers); and > located along each side if the total width of the stairway or ramp is 2m or more; and > be fixed at a height of not less than 865 mm above the nosings of the stair treads and the floor surface of the ramp, landing, or the like; and > be continuous between stair flight landings and have no obstruction that will break a hand-hold. > be constructed to comply with clause 12 of AS 1428.1:2009 (including handrails to the fire stairs). > Handrails in common areas (other than fire stairs) must also accord with D3.3. <u>Clause 12 of AS 1428.1:2009</u> A required *exit* (fire isolated or non-fire isolated) serving an area required to be accessible must be fitted with handrails in accordance with Clause 12 of AS 1428.1:2009.	The four stair flight up to the rear portion of the first floor from the stairway mid landing does not have a handrail. The main flights of the internal stairway have a combined balustrade/ handrail. The existing four stair stairway connecting the front entry porch of the building to the Hill Street footpath via the front landscaped garden will require a handrail. The proposed ground floor rear entry deck and stairway will require a handrail.	DNC Refer to report item 5

Section D: Access and Egress			
	The handrail shall follow the angle of the nosings and be consistent height through the stair flight and any landings with no vertical sections at the landing. Compliance can be achieved via offset risers at the bottom of the flight in accordance with Figure 28 in AS 1428.1:2009 or with larger landings to accommodate required handrail extensions.  Figure 28 in AS 1428.1:2009		
D2.18: Fixed platforms, walkways stairways and ladders	Plant areas may be accessed via stairs and ladders compliant with AS 1657:2018.		N/A
D2.19: Doorways and doors	> Sliding doors serving as *exit* doors must be openable manually under a force of not more than 110N. > *Exit* doors that are power operated must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source and if leading to road or open space, open automatically if there is a power failure or on the activation of a fire or smoke alarm anywhere in the *fire compartment* served by the door.	The proposed bi-fold doorway serving as the north eastern rear exit serving the proposed retail café tenancy will require the provision of a complying single leaf outward swinging doorway having a clear width of not less than 850mm.	FI Refer to report item 5

Section D: Access and Egress			
	> A power operated door in a path of travel to a required *exit* must be able to be opened manually under a force of not more than 110 N if there is a malfunction of the power source.		
D2.20: Swinging doors	Swinging doors in a required *exit* must not encroach– (i) at any part of its swing by more than 500 mm on the required 1m width of the *exit* and (ii) when fully open, by more than 100 mm on the required 1m *exit* width; and the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door. A swinging door in a required *exit* must swing in the direction of egress unless– > it serves a building or part with a floor area not more than 200 m^2, it is the only required *exit* from the building or part and it is fitted with a device for holding it in the open position; or > it serves a sanitary compartment or airlock (in which case it may swing in either direction).	Whilst the front south western entry exit door swings inwards, this is permitted for an exit that serves a part of the building with a floor area of not more than 200m^2, it is the only exit serving the front office portion of the ground floor and the doorway will need to be fitted with a hold open device. The proposed bi-fold doorway serving as the north eastern rear exit serving the proposed retail café tenancy will require the provision of a complying single leaf outward swinging doorway having a clear width of not less than 850mm.	DNC Refer to report item 5
D2.21: Operation of latch	All doors in a required *exit* or forming part of a required *exit* AND doors in a path of travel to a required *exit* must be readily openable without a key from the side that faces a person seeking egress, by– (iii) a single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 –	All proposed and existing doorways should be provided with lever 'single hand action' style door hardware. Numerous existing doorways have non-complying knob handles at 750mm in height, in lieu of lever handles 900 – 1100mm above floor level.	DNC Refer to report item 5

Section D: Access and Egress			
	(A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35mm and not more than 45mm; or (iv) a single hand pushing action on a single device which is located between 900mm and 1.2m from the floor. (v) where the latch operation device referred to in (ii) is not located on the door leaf itself— (A) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (aa) not less than 500 mm from an internal corner; and (bb) for a hinged door, between 1 m and 2 m from the door leaf in any position; and (cc) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position. (B) braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device. The above requirements do not apply to a door that – (i) serves only or is within a *sole-occupancy unit* in a Class 2 building; or		

Section D: Access and Egress			
	(ii) serves a *sole-occupancy unit* in a Class 5, 6, 7 or 8 building with a floor area not more than 200m2; or (iii) are fitted with a fail-safe device which automatically unlocks the door upon the activation of an AS 1670.1 detection system installed throughout the building and is readily openable when unlocked.		
D2.22: Re-entry from fire-isolated exits	Doors of the fire-isolated *exits* must not be locked from the inside unless the door is fitted with a fail-safe device which automatically unlocks the door upon the activation of a fire alarm and – (i) on at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or (ii) an intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is fixed adjacent to such doors explaining its purpose and method of operation.		N/A
D2.23: Signs on doors	Signage in accordance with this clause is to be located on all fire and smoke doors stating "Fire Safety Door, Do Not Obstruct, Do Not Keep Open" and the discharge door from the fire isolated stairways are to state "Fire Safety Door – Do Not Obstruct" in capital letters not less than 20mm in height. Note: Fire signage in accordance with clause 183 of the Environmental Planning and Assessment Regulation 2000 is also required.		N/A
D2.24: Protection of openable windows	(a) Bedroom windows must be provided with protection if the floor below the window is 2m or more above the surface beneath. Change to		N/A

Section D: Access and Egress			
	'Windows in Class 9b early childhood centre' if applicable. (b) Where the lowest level of the window opening is less than 1.7m above the floor, a window opening covered by (a) must comply with the following: (i) The openable portion of the window must be protected with– (A) a device to restrict the window opening; or (B) a screen with secure fittings. (ii) A device or screen required by (i) must– (A) not permit a 125 mm sphere to pass through the window opening or screen; and (B) resist an outward horizontal action of 250 N against the– (aa) window restrained by a device; or (bb) screen protecting the opening; and (C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. (c) A barrier with a height not less than 865 mm above the floor is required to an openable window– (i) in addition to window protection, when a child resistant release mechanism is required by (b)(ii)(C); and		

Section D: Access and Egress			
	(ii) where the floor below the window is 4m or more above the surface beneath if the window is not covered by (a). (d) A barrier covered by (c) except for (e) must not– (i) permit a 125 mm sphere to pass through it; and (ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing. (e) A barrier required by (c) to an openable window in— (i) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and (ii) Class 7 (other than carparks) and Class 8 buildings and parts of buildings containing those classes; (A) must not permit a 300mm sphere to pass through it. **Note**: when considering the preferred option to comply with this clause consideration will need to be given to natural ventilation required under Clause F4.6.		
D2.25: Timber stairways: concession			N/A

Section D: Access and Egress				
Part D3 – Access for People with A Disability				
D3.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
D3.1:	General building access requirements	Access complying with AS 1428.1:2009 must be provided from the principal pedestrian entrance(s): <u>Class 5 & 6</u> > to and within all areas normally used by the occupants.		CRA – Refer Annexure C
D3.2:	Access to buildings	> Access complying with AS 1428.1-2009 must be provided to the building from the main points of pedestrian entry at the allotment boundary; > Another accessible building connected by a pedestrian link; > Any required accessible carparking on the allotment; > Compliant access must be provided through the main pedestrian entrance and not less than 50% of all pedestrian entrances; > In a building with a total floor area of more than 500m^2, a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance; and > Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm.		FI Refer to report item 5 and Annexure C

Section D: Access and Egress				
D3.3:	Parts of buildings to be accessible	> Walkways and ramps must comply with clause 10 of AS 1428.1:2009. > Non-fire-isolated stairways must comply with Clause 11 of AS 1428.1:2009. > Fire-isolated stairways must comply with clause 11 (f) & (g) of AS 1428.1:2009. > Accessways must have passing spaces (1800 mm x 2000 mm) complying with AS 1428.1:2009 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available. > Accessways must have turning spaces (1540 mm x 2070 mm) within 2m of the end of the accessway and at maximum 20 m intervals along the accessway. Note: Turning spaces must be provided clear of fixtures and fittings such as skirtings, general purpose outlets (GPOs), fire extinguishers etc. > An intersection of accessways satisfies the spatial requirements for a passing and turning space. > Access need not be provided to a first floor of a Class 5, 6, 7b or 8 building having a first floor floor area of not more than 200m^2.		FI Refer to report item 5 and Annexure C Noted
D3.4:	Exemptions	Informational – The following areas are not required to be accessible: > an area where access would be inappropriate because of the particular purpose for which the area is used. > an area that would pose a health or safety risk for people with a disability.		Noted

Section D: Access and Egress			
	> any path of travel providing access only to an exempted area. The following areas in the building are considered to not be accessible due to the specific uses of the room or space: 1.		
D3.5: Accessible car parking	Any required accessible car space must comply with AS/NZS 2890.6:2009 including signage requirements.	Subject to the existing garage and the property driveway not being used for carparking (the driveway must serve as an accessway), there will be no requirement for an accessible car space.	FI Refer to report item 5 and Annexure C
D3.6: Signage	> Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access, or deafness as appropriate, must identify each: o sanitary facility; and o any space with a hearing augmentation system; and o identify each door required by E4.5 to be provided with an *exit* sign and state "Exit" and "Level" and either: (aa) the floor level number; or (bb) a floor level descriptor; or (cc) a combination of (aa) and (bb) > Signage including the international symbol for deafness in accordance with AS 1428.1:2009 must be provided within a room containing a hearing augmentation system identifying – o the type of hearing augmentation; and o the area covered within the room; and		CRA – Refer Annexure C

Section D: Access and Egress			
	○ if receivers are being used and where the receivers can be obtained. > Signage to accessible sanitary facilities must identify if the facility is suitable for left or right handed use; and > Signage to identify an ambulant accessible facility in accordance with AS 1428.1:2009 must be located on the door of the facility. > Where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1:2009 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; > Where a bank of facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1:2009 must be places at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex facility. > in a building subject to F2.9, directional signage complying with Specification D3.6 must be provided at the location of each— (i) bank of sanitary facilities; and (ii) accessible unisex sanitary facility, other than one that incorporates an accessible adult change facility, to direct a person to the location of the nearest accessible adult change facility within that building.		
D3.7: Hearing augmentation			N/A

Section D: Access and Egress			
D3.8: Tactile indicators	(a) For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (i) a stairway, other than a fire-isolated stairway; and (ii) an escalator; and (iii) a passenger conveyor or moving walk; and (iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and (v) in the absence of a suitable barrier— (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and (B) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point, (C) except for areas exempted by D3.4. (b) (b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1:2009.		CRA – Refer Annexure C
D3.9: Wheelchair seating spaces in Class 9b assembly buildings			N/A
D3.10: Swimming pools		These provisions are not applicable to an existing pool.	N/A

Section D: Access and Egress			
D3.11: Ramps	On an accessway a series of connected ramps must not have a combined vertical rise of 3.6m and a landing for a step ramp must no overlap a landing for another step ramp or ramp		CRA – Refer Annexure C
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 AS 1428.1:2009.		CRA – Refer Annexure C
Specification D1.12 – Non-Required Stairways, Ramps and Escalators			
Specification D1.12 is not applicable.			
Specification D3.6 – Braille and Tactile Signs			
1. Scope	Informational	Noted	Noted
2. Location of Braille and Tactile Sign	Signs including symbols, numbering and lettering must be designed and installed as follows: (a) Braille and tactile components of a sign must be located not less than 1200 mm and not higher than 1600 mm above the floor or ground surface. (b) Signs with single lines of characters must have the line of tactile characters not less than 1250 mm and not higher than 1350 mm above the floor or ground surface. (c) Signs identifying rooms containing features or facilities listed in D3.6 must be located – (i) on the wall on the latch side of the door with the leading edge of the sign located between 50 mm and 300 mm from the architecture; and		CRA – Refer Annexure C

Section D: Access and Egress			
	(ii) where (i) is not possible, the sign may be placed on the door itself. (d) Signs identifying a door required by E4.5 to be provided with an *exit* sign must be located – (i) on the side that faces a person seeking egress; and (ii) on the wall on the latch side of the door with the leading edge of the sign located between 50 mm and 300 mm from the architrave; and (iii) where (ii) is not possible, the sign may be placed on the door itself.		
3. Braille and Tactile Sign Specification	(a) Tactile characters must be raised or embossed to a height of not less than 1 mm and not more than 1.5mm. (b) Title case must be used for all tactile characters, and – (i) upper case tactile characters must have a height of not less than 15 mm and not more than 55 mm, except that the upper case tactile characters on a sign identifying a door required by E4.5 to be provided with an *exit* sign must have a height of not less than 20 mm and not more than 55 mm; and (ii) lower case tactile characters must have a minimum height of 50% of the related upper case characters. (c) Tactile characters, symbols, and the like, must have rounded edges. (d) The entire sign, including any frame, must have all edges rounded. (e) The background, negative space or fill of signs must be of matt or low sheen finish.		CRA – Refer Annexure C

Section D: Access and Egress				
		(f) The characters, symbols, logos and other features on signs must be matt or low sheen finish. (g) The minimum letter spacing of tactile characters on signs must be 2 mm. (h) The minimum word spacing of tactile characters on signs must be 10 mm. (i) The thickness of letter strokes must not be less than 2 mm and more than 7 mm. (j) Tactile text must be left justified, except that single words may be centre justified. (k) Tactile text must be Arial typeface.		
4.	Luminance contrast	The following applies to luminance contrast: (a) The background, negative space, fill of a sign or border with a minimum width of 5 mm must have a luminance contrast with the surface on which it is mounted of not less than 30%. (b) Tactile characters, icons and symbols must have a minimum luminance contrast of 30% to the surface on which the characters are mounted. (c) Luminance contrasts must be met under the lighting conditions in which the sign is to be located.		CRA – Refer Annexure C
5.	Lighting	Braille and tactile signs must be illuminated to ensure luminance contrast requirements are met at all times during which the sign is required to be read.		CRA – Refer Annexure C
6.	Braille	The following applies to braille:		CRA – Refer Annexure C

Section D: Access and Egress			
	(a) Braille must be grade 1 braille (uncontracted) in accordance with the criteria set out by the Australian Braille Authority. (b) Braille must be raised and domed. (c) Braille must be located 8 mm below the bottom line of text (not including descenders). (d) Braille must be left justified. (e) Where an arrow is used in the tactile sign, a solid arrow must be provided for braille readers. (f) On signs with multiple lines of text and characters, a semi-circular braille locater at the left margin must be horizontally aligned with the first line of braille text.		
Specification D3.10 – Accessible Water Entry/Exit for Swimming Pools			
Specification D3.10 is note applicable.			

Section E: Services and Equipment				
Part E1 – Fire Fighting Equipment				
E1.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
E1.3:	Fire hydrants	As the building has a floor area less than 500 m^2, a fire hydrant system complying with AS 2419.1:2005 is not required to serve the building.	Notwithstanding, a street hydrant exists within the grass verge of Hill Street immediately outside the property.	N/A
E1.4:	Fire hose reels	A fire hose reel system complying with BCA Clause E1.4 and AS 2441:2005 is not required to be provided to the building's proposed retail café Class 6 tenancy (excluding Classes 2, 3, 4, 5, 8 and 9c) as the building has a total floor area of not more than 500m^2.		N/A
E1.5:	Sprinklers	The building is not required to be provided with a sprinkler system complying with Table E1.5 and Specification E1.5 installed throughout.		N/A
E1.6:	Portable fire extinguishers	Portable fire extinguishers must be provided in accordance with clause E1.6 & Table E1.6 of the BCA and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444:2001.		CRA – Refer Annexure C
E1.8:	Fire control centres	Over 25m & Class 6, 7, 8 or 9 over 18000m^2. > The building must be provided with a fire control centre facility in accordance with BCA Specification E1.8. > The fire control centre must be located so that egress from any part of its floor to a public road or open space does not involve changes in level which in aggregate exceed 300 mm. If building >50m must be in separate room		N/A

Section E: Services and Equipment			
E1.9: Fire precautions during construction	Informational– > During construction, not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required / temporary *exit*; and > After the building has reach an *effective height* of 12m, the required fire hydrants and fire hose reels must be operational on all floor / roof covered storeys, except for the 2 uppermost storeys; and all required booster connections must be installed.		N/A
E1.10: Provision for special hazards	Suitable additional provisions must be made if special problems of firefighting could arise because of the nature or quantity of stored materials or the location of the building in relation to a water supply.		N/A
Specification E1.5 – Fire Sprinkler Systems			
Specification E1.5 is not applicable.			
Specification E1.5a – Class 2 and 3 Buildings Not More Than 25m In Effective Height			
Specification E1.5a is not applicable.			
Specification E1.8 – Fire Control Centres			
Specification E1.8 is not applicable.			
Part E2 – Smoke Hazard Management			
E2.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted

Section E: Services and Equipment				
E2.1:	Application of Part	Informational	Noted	Noted
E2.2:	General requirements (including Tables E2.2a and E2.2b)	**General smoke hazard management requirements** An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a or Table E2.2b and which recycles air from one *fire compartment* to another *fire compartment* or operates in a manner that may unduly contribute to the spread of smoke from one *fire compartment* to another *fire compartment* (such as lobby air supply) must— (i) be designed and installed to operate as a smoke control system in accordance with AS 1668.1:2015; or (ii) (A) incorporate smoke dampers where the air-handling ducts penetrate any elements separating the *fire compartments* served; and (B) be arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1668.1:2015; and for the purposes of this provision, each *sole-occupancy unit* in a Class 2 or 3 building is treated as a separate *fire compartment*. Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1:2015 serving more than one *fire compartment* (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with that Section of the Standard. A smoke detection system must be installed in accordance with Clause 6 of Specification E2.2a to		N/A

Section E: Services and Equipment			
	operate AS1668.1:2015 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated *exits*.		
E2.3: Provisions for special hazards			N/A
Specification E2.2a – Smoke Detection and Alarm System			
Specification E2.2a is not applicable			
Specification E2.2b – Smoke Exhaust System			
Specification E2.2b is not applicable			
Specification E2.2c – Smoke and Heat Vents			
Specification E2.2c is not applicable			
Specification E2.2d – Residential Fire Safety Systems			
Specification E2.2d is not applicable			
Part E3 – Lift Installations			
E3.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
E3.1: Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1		CRA – Refer Annexure C
E3.2: Stretcher facility in lifts	A stretcher facility must be provided to an emergency lift required by E3.4.		N/A

Section E: Services and Equipment				
		A stretcher facility must be provided to passenger lifts installed to serve any storey above an *effective height* of 12 m. A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600mm wide x 2000mm long x 1400mm high above floor level.		
E3.3:	Warning against use of lifts in fire	Warning signs indicating "DO NOT USE LIFTS IF THERE IS A FIRE" shall be displayed near every call button for a passenger lift or group of lifts throughout a building as per E3.3.		CRA – Refer Annexure C
E3.4:	Emergency lifts			N/A
E3.5:	Landings	Access and egress to and from lift-well landings must comply with the Deemed-to-Satisfy Provisions of Section D.		CRA – Refer Annexure C
E3.6:	Passenger lifts	In an accessible building, every passenger lift must be one of the types specified in Table E3.6a, have accessible features in accordance with Table E3.6b, and not rely on a constant pressure device for its operation if the lift car is fully enclosed.		CRA – Refer Annexure C
E3.7:	Fire service controls	The lifts serving any storey above an *effective height* of 12 m must be provided with: (a) A fire service recall control switch complying with E3.9 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey.		N/A

Section E: Services and Equipment			
	(b) A lift car fire service drive control switch complying with E3.10 for every lift.		
E3.8: Aged care buildings			N/A
E3.9: Fire service recall switch	The fire service control switch required by E3.7, is to comply with this clause. Lift services design to confirm compliance at CC stage.		N/A
E3.10: Lift car service drive control switch	The lift car service drive control switch required by E3.7, is to comply with this clause. Lift services design to confirm compliance at CC stage.		N/A
Specification E3.1 – Lift Installations			
Specification E3.1 is not applicable.			
Part E4 – Visibility In An Emergency, Exit Signs And Warning Systems			
E4.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
E4.2: Emergency lighting requirements	An emergency lighting system must be installed throughout the building in accordance with Clause E4.2 of the BCA and AS/NZS 2293.1:2018.		CRA – Refer Annexure C
E4.3: Measurement of distance	Informational	Noted	Noted
E4.4: Design and operation of emergency lighting	The emergency lighting system must comply with AS/NZS 2293.1:2018.		CRA – Refer Annexure C
E4.5: Exit signs	*Exits* signs are to be provided above or adjacent to a door providing egress as well as directional signage throughout the entire development where necessary.		CRA – Refer Annexure C

Section E: Services and Equipment				
E4.6:	Direction signs	Where an *exit* is not readily apparent, directional signage is to be installed indicating the direction of egress.		N/A
E4.7:	Class 2 and 3 buildings and Class 4 Parts: Exemptions	Informational	Noted	N/A
E4.8:	Design and operation of exit signs	*Exit* signs must comply with AS/NZS 2293.1:2018 and be clearly visible at all times when the building is occupied.		CRA – Refer Annexure C
E4.9:	Emergency warning and intercom systems	An Emergency warning and intercom system complying where applicable with AS 1670.4:2018 must be installed within the building.		N/A

Section F: Health and Amenity				
Part F1 – Damp and Weatherproofing				
F1.0:	Deemed-to-Satisfy Provisions	*Performance Requirement* FP1.4, for the prevention of the penetration of water through external walls, must be complied with. There are no Deemed-to-Satisfy Provisions for this *Performance Requirement* in respect of external walls. The assessment contained within this report does not include an assessment against Performance Provision FP1.4.		PS Required
F1.1:	Stormwater drainage	Stormwater drainage to comply with AS/NZS 3500.3:2018.		CRA – Refer Annexure C
F1.4:	External above ground membranes	Waterproofing membranes for external above ground use to comply with AS 4654 Parts 1 and 2:2012.		CRA – Refer Annexure C

Section F: Health and Amenity				
F1.5:	Roof coverings	Roof coverings are to comply with BCA Clause F1.5.		CRA – Refer Annexure C
F1.6:	Sarking	*Sarking-type materials* used for weatherproofing must comply with AS/NZS 4200 Part 1 and 2:2017.		CRA – Refer Annexure C
F1.7:	Water proofing of wet areas in buildings	Wet areas must be constructed in accordance with AS 3740:2010 and F1.7 of the BCA.		CRA – Refer Annexure C
F1.9:	Damp-proofing	Moisture is to be prevented from reaching the walls above a damp-proof course, and the underside of the suspended floors.		CRA – Refer Annexure C
F1.10:	Damp-proofing of floors on the ground	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870:2011 (N/A to areas that do not require weatherproofing – refer specific clause exemptions).		CRA – Refer Annexure C
F1.11:	Provision of floor wastes	In Class 2 or 3 buildings or Class 4 part of a building, a bathroom or laundry is to have a floor waste where the floor is graded to the floor waste to permit the drainage of water.		CRA – Refer Annexure C
F1.12:	Sub-floor ventilation			CRA – Refer Annexure C
F1.13:	Glazed Assemblies	Glazed assemblies are to comply with AS 2047:2014 and AS 1288:2006.		CRA – Refer Annexure C
Part F2 – Sanitary and Other Facilities				
F2.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted

Section F: Health and Amenity			
F2.1: Facilities in residential buildings (including Table F2.1)	Each SOU must be provided with sanitary facilities; a kitchen sink; facility for the preparation and cooking of food; a bath or shower; a closet pan; wash basin; laundry wash tub and space for a washing machine and dryer.		N/A
F2.2: Calculation of number of occupants and facilities	Informational – (a) The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means (b) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females (c) In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility required for people with a disability may be counted once for each sex (d) For the purpose of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels		CRA – Refer to Report Part 5 and Annexure C
F2.3: Facilities in Class 3 to 9 buildings (including Table F2.3)	(a) Except where permitted by (b), (c), (f), F2.4(a) and F2.4(b), separate sanitary facilities for males and females must be provided for Class 5 and 6 buildings in accordance with Table F2.3. (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (c) If the majority of employees are one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. (d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than		CRA – Refer to Report Part 5 and Annexure C

Section F: Health and Amenity			
	a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public. (e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.		
F2.4: Accessible sanitary facilities (including Table F2.4)	A sanitary facility is to be an accessible unisex compartment compliant with AS 1428.1:2009. Thereafter, for any additional sanitary facilities proposed, separate male and female ambulant sanitary facilities are required.		CRA – Refer Annexure C and report item 5
F2.5: Construction of sanitary compartments	(a) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (i) from floor level to the ceiling in the case of a unisex facility; or (ii) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (iii) 1.8 m above the floor in all other cases. (b) 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 1.2 m, measured in accordance with Figure F2.5, between the		CRA – Refer Annexure C

Section F: Health and Amenity				
		closet pan within the sanitary compartment and the doorway.		
F2.6:	Interpretation: urinals and washbasins	Informational– (a) A urinal may be— (i) an individual stall or wall-hung urinal; or (ii) each 600 mm length of a continuous urinal trough; or (iii) a closet pan used in place of a urinal. (b) A washbasin may be— (i) an individual basin; or (ii) a part of a hand washing trough served by a single water tap.		Noted
F2.8:	Waste Management	Class 9a & 9c only		N/A
F2.9:	Accessible adult change facilities	(a) Accessible adult change facilities required by (b) (i) must be constructed in accordance with Specification F2.9; and (ii) cannot be combined with another sanitary compartment. (b) One unisex accessible adult change facility must be provided in an accessible part of a— (i) Class 6 building that is a shopping centre having a design occupancy of not less than 3,500 people, calculated on the basis of the floor area and containing a minimum of 2 *sole-occupancy units*; and (ii) Class 9b sports venue or the like that— (A) has a design occupancy of not less than 35,000 spectators; or		N/A

Section F: Health and Amenity			
	(B) contains a swimming pool that has a perimeter of not less than 70 m and that is required by Table D3.1 to be accessible; and (iii) museum, art gallery or the like having a design occupancy of not less than 1,500 patrons; and (iv) theatre or the like having a design occupancy of not less than 1,500 patrons; and (v) passenger use area of an airport terminal building within an airport that accepts domestic and/or international flights that are public transport services as defined in the Disability Standards for Accessible Public Transport 2002.		
Specification – F2.9 Accessible Adult Change Facilities			
Specification F2.9 is not applicable			
Part F3 – Room Sizes			
F3.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
F3.1: Height of rooms and other spaces	(a) The height of rooms and other spaces must be not less than— (c) in a Class 5, 6, 7 or 8 building— (i) except as allowed in (ii) and (f) — 2.4 m; and (ii) a corridor, passageway, or the like — 2.1 m; and (f) in any building— (i) a bathroom, shower room, sanitary compartment, airlock, tea preparation room,		CRA – Refer Annexure C

Section F: Health and Amenity			
	pantry, store room, garage, car parking area, or the like — 2.1 m; and (ii) a commercial kitchen — 2.4 m; and (iii) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like. (iv) A required accessible adult change facility – 2.4m		
Part F4 – Light and Ventilation			
F4.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
F4.1: Provision of natural light			N/A
F4.2: Methods and extent of natural lighting			N/A
F4.3: Natural light borrowed from adjoining room			N/A
F4.4: Artificial Lighting	Lighting to all areas is to comply with AS/NZS 1680.0:2009.		CRA – Refer Annexure C
F4.5: Ventilation of rooms	All rooms to be provided with Clause F4.6 compliant natural ventilation **OR** a mechanical ventilation or air-conditioning system complying with AS 1668.2:2012.		CRA – Refer Annexure C
F4.6: Natural ventilation	(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—		CRA – Refer Annexure C

Section F: Health and Amenity				
		(i) with an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated; and (ii) open to— (A) a suitably sized court, or space open to the sky; or (B) an open verandah, carport, or the like; or (C) an adjoining room in accordance with F4.7.		
F4.7:	Ventilation borrowed from adjoining room	Ventilation may be 'borrowed' from adjoining rooms in some instances in accordance with this clause.		CRA – Refer Annexure C
F4.8:	Restriction on position of water closets and urinals	Sanitary compartments must not open directly into a – > kitchen or pantry > public dining room or restaurant > dormitory in a Class 3 building > room used for public assembly (which is not an early childhood centre, primary school or open spectator stand) > workplace normally occupied by more than one person.		Complies
F4.9:	Airlocks	If sanitary compartments are prohibited from opening directly to another room: Class 6, 7, 8 & 9 > access must be by an airlock, hallway or other room with a floor area of not less than 1.1m2 and fitted with self-closing doors at all access doorways; or		N/A

Section F: Health and Amenity			
	> the sanitary compartments must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.		
F4.11: Carparks	Every storey of a carpark (except an open deck carpark) must have: > a system of mechanical ventilation complying with AS 1668.2:2012; or > a system of natural ventilation complying with Section 4 of AS 1668.4:2012.		N/A
F4.12: Kitchen local exhaust ventilation	Any commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1:2015 and AS 1668.2:2012 where: > any cooking apparatus has: o a total maximum electrical power input exceeding 8 kW; or o a total gas power input exceeding 29 MJ/h; or > the total maximum power input to more than one apparatus exceeds: o 0.5 kW electrical power; or o 1.8 MJ gas, Per m2 of floor area of the room or enclosure.		CRA – Refer Annexure C
Part F5 – Sound Transmission and Insulation			
Part F5 is not applicable			
Specification F5.2 – Sound Insulation for Building Elements			
Specification F5.2 is not applicable			

Section F: Health and Amenity
Specification F5.5 – Impact Sound – Test of Equivalence
Specification F5.5 is not applicable
Part F6 – Condensation Management
Part F6 is not applicable

Section G: Ancillary Provisions			
Part G1 – Minor Structures and Components			
G1.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
G1.1: Swimming pools	Swimming pools and spa pools are to be provided with safety fencing compliant with AS1926. Parts 1 and 2; and, as required by the Swimming Pools Act 1992 and the Swimming Pools Regulation 2008. A water recirculation system in a swimming pool or spa pool must comply with AS 1926.3:2010.	The existing swimming pool must remain compliant with the Swimming Pools Act and Regulations.	CRA – Refer Annexure C
G1.2: Refrigerated chambers, strong-rooms and vaults	(a) A refrigerated or cooling chamber, strongroom or vault which is of sufficient size for a person to enter must have— (i) a door which is capable of being opened by hand from inside without a key; and (ii) internal lighting controlled only by a switch which is located adjacent to the entrance doorway inside the chamber, strongroom or vault; and (iii) an indicator lamp positioned outside the chamber, strongroom or vault which is		N/A

Section G: Ancillary Provisions			
	illuminated when the interior lights required by (a)(ii) are switched on; and (iv) an alarm that is— (A) located outside but controllable only from within the chamber, strongroom or vault; and (B) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90 dB(A) when measured 3 m from the sounding device. (b) A door required by (a)(i) in a refrigerated or cooling chamber must have a doorway with a clear width of not less than 600 mm and a clear height not less than 1.5 m.		
G1.3: Outdoor play spaces	The outdoor play space must be enclosed on all sides with a barrier which complies with AS 1926.1:2012 to restrict the children from exiting the premises. The above requirements do not apply to a wall, including doors and windows, which form part of the Class 9b early childhood centre.		N/A
NSW G1.101: Provision for cleaning windows	A safe manner for cleaning of windows located 3 or more storeys above ground level must be provided, and compliance is achieved where: > the windows can be cleaned wholly from within the building; or > via a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.		N/A
Part G2 – Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues			

Section G: Ancillary Provisions			
G2.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
G2.2: Installation of Appliances	The installation of a stove, heater or similar appliance in a building must comply with: > Domestic solid-fuel burning appliances — Installation: AS/NZS 2918:2018. > For boilers and pressure vessels: Specification G2.2		CRA – Refer Annexure C
G2.3: Open Fireplaces			N/A
G2.4: Incinerator Rooms			N/A
Part G3 – Atrium Construction			
Part G3 is not applicable			
Specification G3.8 – Fire and Smoke Control in Buildings Containing Atriums			
Not applicable			
Part G4 – Construction in Alpine Areas			
Part G4 is not applicable			
Part G5 – Construction in Bushfire Prone Areas			
Part G5 is not applicable			
Part G6 – Occupiable Outdoor Areas			
Part G6 is not applicable			

Section H: Special Use Buildings
Part H1 – Class 9b Buildings
Part H1 is not applicable
Specification H1.3 – Construction of Theatres with Proscenium Walls
Specification H1.3 is not applicable
NSW Part H101 – Entertainment Venues Other Than Temporary Structures and Drive In Theatres
NSW Part H101 is not applicable
NSW Part H102 – Temporary Structures
NSW Part H102 is not applicable
NSW Part H103 – Drive In Theatres
NSW Part H103 is not applicable
Part H2 – Public Transport Buildings
Part H2 is not applicable
Part H3 – Farm Building and Farm Sheds
Part H3 is not applicable

Section I: Maintenance
Part I1 – Equipment and Safety Installations

Section I: Maintenance
This Part has been deleted in BCA2019.

Section J: Energy Efficiency (Class 5 & 6)				
Part J0 – Energy Efficiency				
J0.1:	Application of Section J	Informational	Noted	Noted
J0.2:	Heating & cooling loads of Sole Occupancy Units to Class 2 & 4 parts	Not applicable, clause relevant to class 2 & 4 only		NA
J0.3:	Ceiling fans	Not applicable		NA
J0.4:	Roof thermal breaks	Not applicable, clause relevant to J0.2 only		NA
J0.5:	Wall thermal breaks	Not applicable, clause relevant to J0.2 only		NA
Part J1 – Building Fabric				
J1.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
J1.1:	Application of Part	The provisions of Part J1 apply to building elements forming part of the *envelope* of the building.		CRA – Refer Annexure C
J1.2:	Thermal construction general	Where required insulation is to comply with AS/NZS 4859.1:2018 and be installed in accordance with this clause. The required Total R-Value and Total System U-Value, must be determined in accordance with Clause J1.2 (e).		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)			
J1.3: Roof and ceiling construction	(a) A roof or ceiling must achieve a Total R-Value greater than or equal to— (i) in climate zones 1, 2, 3, 4 and 5, R3.7 for a downward direction of heat flow; and (ii) in climate zone 6, R3.2 for a downward direction of heat flow; and (iii) in climate zone 7, R3.7 for an upward direction of heat flow; and (iv) in climate zone 8, R4.8 for an upward direction of heat flow. (b) In climate zones 1, 2, 3, 4, 5, 6 and 7, the solar absorptance of the upper surface of a roof must be not more than 0.45.		CRA – Refer Annexure C
J1.4: Roof lights	Any roof lights must have – (a) a total area of not more than 5% of the floor area of the room & space served; and (b) transparent and translucent elements with performance of – (i) Total system SHGC, in accordance with table J1.4, and (ii) Total system U-value, not more than U3.9		CRA – Refer Annexure C
J1.5: Walls	(a) The Total System U-Value of wall-glazing construction must not be greater than— (i) for a Class 2 common area, a Class 5, 6, 7, 8 or 9b building or a Class 9a building other than a ward area, U2.0; and (ii) for a Class 3 or 9c building or a Class 9a ward area— (A) in climate zones 1, 3, 4, 6 or 7, U1.1; or		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)			
	(B) in climate zones 2 or 5, U2.0; or (C) in climate zone 8, U0.9. (b) The Total System U-Value of display glazing must not be greater than U5.8. (c) The Total System U-Value of wall-glazing construction must be calculated in accordance with Specification J1.5a. (d) Wall components of a wall-glazing construction must achieve a minimum Total R-Value of— (i) where the wall is less than 80% of the area of the wall-glazing construction, R1.0; or (ii) where the wall is 80% or more of the area of the wall-glazing construction, the value specified in Table J1.5a. (e) The solar admittance of externally facing wall-glazing construction must not be greater than— (i) for a Class 2 common area, a Class5, 6, 7, 8 or 9b building or a Class 9a building other than a ward area, the values specified in Table J1.5b; and (ii) for a Class 3 or 9c building or a Class 9a ward area, the values specified in Table J1.5c. (f) The solar admittance of a wall-glazing construction must be calculated in accordance with Specification J1.5a. (g) The Total system SHGC of display glazing must not be greater than 0.81 divided by the applicable shading factor specified in Clause 7 of Specification J1.5a.		
J1.6: Floors	(h) A floor must achieve the Total R-Value specified in Table J1.6.		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)			
	(i) A floor must be insulated around the vertical edge of its perimeter with insulation having an R-Value greater than or equal to 1.0 when the floor— (i) is a concrete slab-on-ground in climate zone 8; or (ii) has an in-slab or in-screed heating or cooling system, except where used solely in a bathroom, amenity area or the like. (j) Insulation required by (b) for a concrete slab-on-ground must— (i) be water resistant; and (ii) be continuous from the adjacent finished ground level— (A) to a depth not less than 300 mm; or (B) for the full depth of the vertical edge of the concrete slab-on-ground.		
Part J2 – Glazing			
J2.0: Deemed-to-Satisfy Provisions	Part J2 has deliberately been left blank from the BCA2019		Noted
Part J3 – Building Sealing			
J3.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
J3.1: Application of Part	The requirements of this Part apply to elements forming the *envelope* of the building other than: > a building in a climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler; or		Noted

Section J: Energy Efficiency (Class 5 & 6)			
	> a permanent building opening necessary for the safe operation of a gas appliance; > a building or space where mechanical ventilation required by Part F4 provides sufficient pressurisation to prevent infiltration; > parts of building that cannot be fully enclosed.		
J3.2: Chimneys and flues	The chimney or flue of an open solid-fuel burning appliance must be provided with a damper or flap that can be closed to seal the chimney or flue.		CRA – Refer Annexure C
J3.3: Roof lights	Roof lights serving conditioned spaces, or habitable rooms in climate zone 4-8, must be sealed or be capable of being sealed and must be constructed with– (i) an imperforate ceiling diffuser or the like installed at the ceiling or lining level; or (ii) a weatherproof seal; or (iii) a shutter system readily operated either manually, mechanically or electronically by the occupant.		CRA – Refer Annexure C
J3.4: Windows and doors	(a) A door, openable window or the like must be sealed— (i) when forming part of the *envelope*; or (ii) in climate zones 4, 5, 6, 7 or 8. (b) The above does not apply to: (i) a window complying with AS 2047; or (ii) a fire door or smoke door; or (iii) roller shutter door, roller shutter grille or other security device or device installed only for out-of-hours security.		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)			
	(c) A seal to restrict air infiltration— (i) for the bottom edge of a door, must be a draft protection device; and (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like. (d) An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, revolving door or the like, other than– (i) where the conditioned space has a floor area of not more than 50m2; or (ii) where a café, restaurant, open front shop or the like has– (A) a 3m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and (B) at all other entrances to the café, restaurant, open from shop of the like, self-closing doors		
J3.5: Exhaust fans	The exhaust fans serving conditioned spaces or habitable room in climate 4 - 8, must be fitted with a sealing device, such as a self-closing damper of the like.		CRA – Refer Annexure C
J3.6: Construction of ceilings, walls and floors	The roof, walls, floors and any other openings, such as window or doors, are to be constructed to minimise air leakage by being enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or are sealed by expanding architraves, skirting, cornices; or expanding foam, rubber compressible strip, caulking or the like.		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)			
J3.7: Evaporative Coolers	The evaporative cooler must be fitted with a self-closing damper or like when serving heated space OR in climate zones 4 - 8.		CRA – Refer Annexure C
Part J4			
J4.0:	This part has deliberately been left blank in the BCA2019		N/A
Part J5 – Air Conditioning and Ventilation Systems			
J5.0: Deemed-to-Satisfy Provisions	Informational	Noted	Noted
J5.1: Application of Part	Informational	Noted	Noted
J5.2: Air-conditioning systems	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.3: Mechanical ventilation system control	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.4: Fan systems	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.5: Ductwork Insulation	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.6: Ductwork Sealing	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.7: Pump Systems	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)				
J5.8:	Pipework Insulation	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.9:	Space Heating	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.10:	Refrigerant Chillers	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.11:	Unitary Air-Conditioning Equipment	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
J5.12:	Heat Rejection Equipment	Compliance required, design certification to be provided by Mechanical Engineer.		CRA – Refer Annexure C
Part J6 – Artificial Lighting and Power				
J6.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
J6.1:	Application of Part	Informational	Noted	Noted
J6.2:	Artificial lighting	Artificial lighting must comply with BCA Clause J6.2. Design certification to be provided by the electrical designer.		CRA – Refer Annexure C
J6.3:	Interior artificial lighting and power control	Lighting switches and control devices must comply with BCA Clause J6.3. Design certification to be provided by the electrical designer.		CRA – Refer Annexure C
J6.4:	Interior decorative and display lighting	Lighting falling under this clause is to be separately switched from other lighting, be under a manual switch and controlled with a time switch. Design certification to be provided by the electrical designer.		CRA – Refer Annexure C

Section J: Energy Efficiency (Class 5 & 6)				
J6.5:	Exterior artificial lighting	Exterior lighting attached to or directed at the façade of the building must be controlled by daylight sensors or time switches in accordance with the specific requirements of this clause. Design certification to be provided by the electrical designer.		CRA – Refer Annexure C
J6.6:	Boiling water and chilled water storage units	The power supply to a fixed boiling water or chilled water storage unit must be controlled by a time switch in accordance with BCA Specification J6. Design certification to be provided by the electrical designer.		CRA – Refer Annexure C
J6.7:	Lifts	Lifts must be configured to ensure artificial lighting and ventilation in the car are turned off when it is unused for 15 minutes; it also must achieve energy control requirements that comply to Clause J6.7 (b) and (c).		CRA – Refer Annexure C
J6.8:	Escalators and moving walkways	Escalators and moving walkways must have the ability to slow to between 0.2 m/s and 0.05 m/s when unused for more than 15 minutes.		CRA – Refer Annexure C
Part J7 – Heated Water Supply				
J7.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted
J7.2:	Heated water supply system	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia.		CRA – Refer Annexure C
Part J8 – Facilities for Energy Monitoring				
J8.0:	Deemed-to-Satisfy Provisions	Informational	Noted	Noted

Section J: Energy Efficiency (Class 5 & 6)				
J8.1:	Application of Part	Informational	Noted	Noted
J8.3:	Facilities for energy monitoring	> A building with a floor area of more than 500m^2 must have an energy meter configured to record the time-of-use consumption of gas and electricity. > A building with a floor area of more than 2,500m^2 must have the energy meters configured to enable individual time-of-use energy consumption data recording, in accordance with (c), of the energy consumption of –: o air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and o artificial lighting; and o appliance power; and o central hot water supply; and o internal transport devices including lifts, escalators and moving walkways where there is more than one serving the building; and o other ancillary plant. > Energy meters required by (b) must be interlinked by a communication system that collates the time-of-use energy consumption data to a single interface monitoring system where it can be stored, analysed and reviewed. > The provisions of (b) do not apply to a Class 2 building with a floor area of more than 2500 m^2 where the total area of the common areas is less than 500 m^2.		CRA – Refer Annexure C

CLPP02

Attachment 1

ANNEXURE C BCA COMPLIANCE SPECIFICATION

Annexure C – BCA Compliance Specification

The following BCA matters are to be addressed by specific BCA Design Certificate to be issued by the relevant architectural, services and engineering consultants at the Construction Certificate Stage. This schedule should be forwarded to all consultants to obtain verification that these items have and will be included in the design documentation / specifications:

Architectural Design Certification

1. The FRL's of building elements for the proposed works have been designed in accordance with Table 5 of Specification C1.1 of BCA2019 for a building of Type C Construction.
2. Any lightweight construction used to achieve required fire resistance levels will comply with Specification C1.8 of BCA2019.
3. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works will comply with the fire hazard properties of Clause C1.10 and Specification C1.10 of BCA2019.
4. Any ancillary elements fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible will comply with Clause C1.14 of BCA2019.
5. Openings in the external walls that are required to have an FRL will be in located in accordance with Clause C3.2 and C3.3 of BCA2019 or protected in accordance with Clause C3.4 of BCA2019.
6. Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation will be protected in accordance with BCA Clause C3.16.
7. A lintel will have the FRL required for the part of the building in which it is situated, unless it does not contribute to the support of a fire door, fire window or fire shutter, and it spans an opening in masonry which is not more than 150 mm thick and is not more than 3m wide if the masonry is non-loadbearing; or not more than 1.8m wide if the masonry is loadbearing and part of a solid wall or one of the leaves of a cavity wall, or it spans an opening in a non-loadbearing wall of the Class 2 or 3 building, in accordance with Specification C1.1 Clause 2.3 BCA2019.
8. All attachments to the external façade of the building will be fixed in a way that does not affect the fire resistance of that element in accordance with Clause 2.4 of Specification C1.1 of BCA2019.
9. Travel distances to exits will be in accordance with Clause D1.4 of BCA2019.
10. The alternative exits will be distributed uniformly around the storey and will not be less than 9m apart, and not more that 60m, in accordance with Clause D1.5 of BCA2019.
11. The dimensions of exits and paths of travel to exits will be provided in accordance with Clause D1.6 of BCA2019.
12. Discharge from exits will be in accordance with Clause D1.10 of BCA2019.
13. The construction of any EDB's and telecommunications distribution boards will be in accordance with Clause D2.7 of BCA2019 with the enclosure bounded by non-combustible construction or fire protective covering and smoke seals provided around the perimeter of the non-combustible doors and any openings sealed with non-combustible mastic to prevent smoke spreading from the enclosure.
14. The enclosing walls and ceiling under the non-fire-isolated stairway will achieve an FRL of 60/60/60 and have a self-closing -/60/30 fire door, in accordance with Clause D2.8 of BCA2019.
15. New pedestrian ramps will comply with AS 1428.1:2009, Clause D2.10 and Part D3 of BCA2019. The floor surface of a ramp must have a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.

16. Stair geometry to the new stairways will be in accordance with Clause D2.13 of BCA2019. Stair treads are to have a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.
17. Landings and door thresholds throughout the development will be provided in accordance with Clause D2.14 and D2.15 of BCA2019. Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013 where the edge ledge to a flight below.
18. The handrails and balustrades to all stairs and throughout the building will be in accordance with Clause D2.16, and D2.17 of BCA2019.
19. The doorways and doors will be in accordance with Clause D2.19 and D2.20 of BCA2019.
20. Door latching mechanisms will be in accordance with Clause D2.21 of BCA2019
21. The new works will be accessible in accordance with Clause D3.1 and table D3.1, D3.2, D3.3 of BCA2019, and with AS 1428.1:2009, with particular note to door circulation spaces, accessway widths, turning spaces and floor coverings, in accordance with Part D3 of BCA2019.
22. Any proposed accessible carparking will be in accordance with Clause D3.5, and Table D3.5 of BCA2019.
23. Braille and tactile signage will in accordance with Clause D3.6, and Specification D3.6 of BCA2019.
24. Tactile ground surface indicators will be provided in accordance with Clause D3.8 of BCA2019 and AS/NZS 1428.4.1:2009.
25. 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, will be clearly marked in accordance with AS 1428.1:2009 and Clause D3.12 of BCA2019.
26. Any sarking proposed will be installed in accordance with Clause F1.6 of BCA2019.
27. Any waterproofing of all wet areas to the building will be carried out in accordance with Clause F1.7 of BCA2019 and AS 3740:2010.
28. Any new damp proofing of the proposed structure will be carried out in accordance with Clause F1.9 and F1.10 of BCA2019.
29. All new glazing to be installed throughout the development will be in accordance with Clause F1.13 of BCA2019 and AS 1288:2006 / AS 2047:2014.
30. Sanitary facilities will be provided in the building in accordance with, Clause F2.3 and Table F2.3 of BCA2019.
31. Accessible sanitary facilities will be provided in the building or on the property in accordance with Clause F2.4, Table F2.4 (a) of BCA2019 and AS1428.1:2009.
32. The construction of the sanitary facilities will be in accordance with Clause F2.5 of BCA2019.
33. Ceiling heights to the new areas will be in accordance with Clause F3.1 of BCA2019.
34. Water closets and urinals will be located in accordance with Clause F4.8 of BCA2019.
35. The sanitary compartments will be either be provided with mechanical exhaust ventilation or an airlock in accordance with Clause F4.9 of BCA2019.
36. Any proposed refrigerated or cooling chamber, strongroom or vault will be in accordance with Clause G1.2.
37. Any proposed or existing open fireplaces or fuel-burning appliances with an open fuel-burning compartment will be in accordance with Clause G2.3 of BCA2019.

38. Essential fire or other safety measures must be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.
39. Building Fabric and Thermal Construction will be in accordance with Part J1 of BCA2019.
40. Glazing will be in accordance with Part J1 of BCA2019.
41. Building sealing will be in accordance with Part J3 of BCA2019.
42. Facilities for Energy Monitoring will be provided in accordance with Clause J8.3 of BCA2019.

Electrical Services Design Certification:

43. Emergency lighting will be installed throughout the development in accordance with Clause E4.2, E4.4 of BCA2019 and AS/NZS 2293.1:2018.
44. Exit signage will be installed in accordance with Clause E4.5, E4.7, and E4.8 of BCA2019 and AS/NZS 2293.1:2018.
45. Artificial lighting will be installed throughout the development in accordance Clause F4.4 of BCA2019 and AS/NZS 1680.0:2009.
46. Lighting power and controls will be installed in accordance with Part J6 of BCA2019.

Hydraulic Services Design Certification:

47. Storm water drainage will be provided in accordance with Clause F1.1 of BCA2019 and AS/NZS 3500.3:2018
48. Portable fire extinguishers will be installed in accordance with Clause E1.6 of BCA2019 and AS 2444:2001.
49. The heated water supply systems will be designed and installed to NCC Volume 3 – Plumbing code and Clause J7.2 of BCA2019.

Mechanical Services Design Certification:

50. Where not naturally ventilated the building will be mechanically ventilated in accordance with Clause F4.5 of BCA2019 and AS 1668.2:2012.
51. The commercial kitchen will be provided with a kitchen exhaust hood in accordance with Clause F4.12 of BCA2019, and AS 1668.1:2015 and AS 1668.2:2012.
52. Any proposed air-conditioning and ventilations systems will be designed and installed in accordance with Part J5 of BCA2019

Structural Engineers Design Certification:

53. The material and forms of construction for the proposed works will be in accordance with Clause B1.2, B1.4 and B1.6 of BCA2019 as follows:
54. Dead and Live Loads – AS/NZS 1170.1:2002
55. Wind Loads – AS/NZS 1170.2:2011
56. Earthquake actions – AS 1170.4:2007
57. Masonry – AS 3700:2018
58. Concrete Construction – AS 3600:2018
59. Steel Construction AS 4100:1998
60. Aluminium Construction – AS/NZS 1664.1 or 2:1997
61. Timber Construction – AS 1720.1:2010

62. The FRL's of the structural elements for the proposed works have been designed in accordance with Specification C1.1 of BCA2019, including Table 5, for a building of Type C Construction.

63. Any lightweight construction used to achieve required fire resistance levels will comply with Specification C1.8 of BCA2019.

Lift Services Design Certification:

64. Warning signage in accordance with Clause E3.3 of BCA2019 will be provided to any proposed accessible passenger lift to advise not to use the lifts in a fire.

65. Access and egress to the lift landings will comply with the Deemed-to-Satisfy Provisions of D3 of the BCA2019 and will be suitable to accommodate disabled persons.

66. The type of lifts will also be suitable to accommodate persons with a disability in accordance with Clause E3.6, Table E3.6a, and will have accessible features in accordance with Table E3.6b of BCA2019.

67. The lifts will comply with AS 1735.12:1999 in accordance with Clause E3.6 of BCA2019.

68. All electric passenger lifts and electrohydraulic passenger lifts shall comply with Specification E3.1 of BCA2019.

NSW Specification Design Certificate:

69. The existing inground swimming pool associated with the office and café building must comply with the Swimming Pools Act 1992, Swimming Pools Regulation 2008 and AS 1926.1:2012.