GRS BUILDING REPORTS PTY LTD
ABN 33 077 900 497

PO Box 402, Dee Why • NSW • 2099
Mobile: 0417 247 447
E: graham@grsreports.com.au
W: www.grsreports.com.au

Station Beach Boat House Wharf Palm Beach

Address - 1191 Barrenjoey Road, Pam Beach

BCA Assessment Report for DA Submission

Prepared for: Blue Pacific Constructions
Project No: P056/Rev 6
17 February 2021

I N D E X

I N D E X

Page No.

REPORT REVISION STATUS		
REVISION	**DATE**	**STATUS**
1	23 February 2016	Preliminary (2017 DA)
2	4 July 2016	Final (2017 DA)
3	16 March 2020	Preliminary Pre-DA (2020 DA)
4	1 April 2020	Final (2020 DA)
5a	6 May 2020	Updated with Boundary Dimensions and Alternative Solutions noted
6	17 February 2021	Updated 2021 DA submission

Signature ……..

Graham Scheffers
GRS Building Reports Pty Ltd
Accreditation No. 0364 (BPB)
Date: 17 February 2021

Executive Summary

The building works proposed comprise the reconstruction of the existing building known as Station Beach Boathouse Wharf located at 1191 Barrenjoey Road, Palm Beach. The building is situated on land that is north of the Palm Beach Golf Course. It is understood the main structures are on Crown Land that is leased from Crown Lands by London Lakes Partnership with the car park and associated storage buildings located on land that is Licensed from Council to London Lakes Partnership.

The existing main building is two (2) storey. The majority of the Ground Floor is used as a cafe with access on the eastern side via a pathway and central doorway. The cafe opens to a covered balcony to the west that leads to a larger outdoor timber deck used as a seated area. There are 2 other business using the Ground Floor, i.e. small office on the southern side used for a Sea Plane office and several rooms on the northern side of the building used by Barrenjoey Boat Hire.

There is a timber wharf on the southern side, western and part of the eastern side of the Main Building that is used to access a jetty that is understood to be used by the Seaplane and Boat Hire businesses (i.e. not a public wharf). The wharf is west of the Crown Land boundary and parts of the timber wharf extend over the Crown Land boundary on the south and western sides of the Main Building.

The First Floor of the existing building is currently used as a residential flat with access via an internal stair from within the Barrenjoey Boat Hire tenancy on the Ground Floor. There is a covered timber deck along the entire western side of the First Floor. The southern portion of the First Floor is currently used for Yoga Classes with access via an external timber stair and the western timber deck.

There are a number of free-standing buildings used for ancillary purposes to the Main Building, such as store rooms, cool room, garbage bin storage and a kiosk.

The proposal incorporates reconstruction of the existing building/s to incorporate the following;

a) Ground Floor;
    - Use to be as a cafe, including food preparation area, freezer, coolroom and service area.
    - Proposed take-away bar area, bar area and accessible sanitary facility in lieu of previous Seaplane business and general sanitary facilities. Previous sanitary facilities relocated to new ancillary building.
    - Boat Hire office and storage with WC and kitchenette with cafe food preparation area extended.

b) First Floor;
    - Use as office for cafe with sanitary facilities, storeroom and small Sea Plane office.
    - Pitched roof to permit increased ceiling height to at least 2.4m height. Walkway and access stair to the south side. Northern access stair replaced.

c) Ancillary Building – Proposed to contain café, sanitary facilities, dry store, alcohol store, cleaners store and bin store room.

An assessment of the proposed building works having regard to the existing building has been undertaken in accordance with the relevant provisions of the Building Code of Australia 2019 Amendment 1 (BCA). Provisions where further clarification or documentation is necessary for submission with the Development Application and / or Construction Certificate Documentation is detailed in Annexure A of this Report.

Section 3.1 and Table 3.1 provides details of the fire rating required for Type C Construction. Generally no Fire Resistance Levels (FRL's) would apply to the building, subject to acceptance of the setbacks and comments in relation to Fire Source Feature and ancillary buildings as detailed in Sections 2.8 and 3.1 of this Report.

Section 3.2 outlines the requirements for sanitary facilities.

The following items are to be considered as Building (Alternative) Solutions and contained in Fire Engineering Report / Performance Reports prepared in conjunction with the Construction Certificate

DTS Clause	DTS Provision Departure	Performance Requirements
Table 5, Specification C1.1	The external walls of the building are within 3.0m of the eastern side boundary and are not proposed to be fire rated.	CP1, CP2
Clause C3.2 and C3.4	Openings to the Main Building are within 3.0m of the eastern side boundary and are not proposed to be protected.	CP2, CP8
E1.3	The area of the building including outdoor decking area has a floor area greater than 500m^2 a fire hydrant system is not proposed to be provided.	EP1.3
D3.1	The First Floor is greater than 200m^2 and is not proposed to be provided with access for people with a disability.	DP1

The Report includes the following Annexures:

1. Annexure A – BCA Clause by Clause Deemed-To-Satisfy Assessment (DtS) of the subject building.
2. Annexure B – Schedule of Essential Fire Safety Measures.

1. Introduction

1.1 Background

The building works proposed reconstruction of the existing building known as The Boathouse, Palm Beach located at Barrenjoey Road, Palm Beach.

GRS Building Reports Pty Ltd has been engaged by Blue Pacific Constructions to undertake a BCA Assessment Report for the subject building works for the purposes of developing the DA Design Drawings.

1.2 Aim

The aim of this Report is to:

1. Undertake an inspection of the existing building.
2. Undertake an assessment of the proposed building works for the purposes of submission with the DA in accordance with the relevant provisions of the Building Code of Australia 2019, (BCA), i.e. Undertake a BCA Clause-by-Clause assessment as detailed in Annexure A.
3. Recommend fire and life safety details to address the non-compliances with the BCA.
4. Identify existing and proposed Essential Fire Safety Measures applicable to the subject building as detailed in Annexure B.

1.3 Documentation

The following documentation was relied upon when preparing this Report:

- Building Code of Australia 2019, Amendment 1 (BCA).
- Architectural documentation prepared by Canvas Architecture & Design drawings, Nos DA00, DA01, DA02, DA03, DA04, DA05, DA06, DA07, DA09, DA10, DA11, DA12 and dated 31 January 2021.
- Survey Plans by C.M.S Surveyors Pty Ltd, Drawing Name 17534detail, Sheets 1 to 3, Issue 2.
- Access Review Report prepared by MGAC dated 17 February 2021, Rev 6 and Performance Assessment Report prepared by MGAC dated 10 February 2021.

1.4 Reporting Team

This Report was prepared on behalf of GRS Building Reports Pty Ltd by Graham Scheffers, an accredited Grade A1 Certifier (NSW BPB) and Building Code Consultant.

1.5 BCA Terms and Definitions

The following terms are based on BCA definitions;

- ***Fire Source Feature:*** means-
  - (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.
- ***Open Space*** means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.
- ***Sole Occupancy Unit (SOU)*** 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.

- ***Rise in Storeys*** means the greatest number of storeys calculated in accordance with C1.2.

1.6 Limitations and Exclusions

The limitations of this report are as follows:

- The Report is based on the new works only as detailed herein and is issued for the purpose of submission with the Development Application.
- The Building Certifier is to determine that the relevant documentation satisfies the BCA for the purposes of issuing a Construction Certificate. This BCA Report is an assessment of the DA architectural plans. The Report is not intended to provide verification that the entire design documents satisfy the BCA as this is beyond the scope of GRS Building Report Pty Ltd and must be undertaken for the Construction Certificate Stage.

The Report does not address issues in relation to the following:

1. The structural adequacy of the building including the fire resistance levels of any building elements (unless specifically referred to).
2. The design, maintenance or operation of any electrical, mechanical, hydraulic or fire protection services.
3. Review or acceptance of any Performance Solution Reports to address the Performance Requirements of the BCA. Where required these Reports are to be submitted and reviewed by the Registered Certifier at the time of consideration of the Construction Certificate.
4. Works outside the boundaries /lease area, building elements or services that extend outside the boundaries and works associated with external ancillary services, structures or civil works required by relevant authorities.
5. Development Consent conditions of approval issued by the Local Authority.
6. Environmental Planning and Assessment Act and Regulations, Local Government Act and Regulations unless where nominated.
7. Work Health and Safety Act and Regulations.
8. WorkCover Authority requirements.
9. Water, drainage, gas, telecommunications and electricity supply authority requirements.
10. The provisions of the BCA D3, Disability Discrimination Act, National Premises Standards as this is beyond the scope of this Report and is to be undertaken by an Access Consultant.
11. Council Policy relating to Access for People with Disabilities.
12. GRS Building Reports Pty Ltd cannot guarantee acceptance of this Report by the Statutory Authorities such as Local Council, Fire & Rescue NSW or other approval authorities.

2. Building Description

2.1 Building

The building works proposed comprise the reconstruction of the existing building known as Station Beach Boathouse Wharf located at 1191 Barrenjoey Road, Palm Beach. The building is situated on land that is north of the Palm Beach Golf Course. It is understood the main structures are on Crown Land that is leased from Crown Lands by London Lakes Partnership with the car park and associated storage buildings located on land that is Licensed from Council to London Lakes Partnership.

The existing main building is two (2) storey. The majority of the Ground Floor is used as a cafe with access on the eastern side via a pathway and central doorway. The cafe opens to a covered balcony to the west that leads to a larger outdoor timber deck used as a seated area. There are 2 other business using the Ground Floor, i.e. small office on the southern side used for a Sea Plane office and several rooms on the northern side of the building used by Barrenjoey Boat Hire.

There is a timber wharf on the southern side, western and part of the eastern side of the Main Building that is used to access a jetty that is understood to be used by the Seaplane and Boat Hire businesses (i.e. not a public wharf). The wharf is west of the Crown Land boundary and parts of the timber wharf extend over the Crown Land boundary on the south and western sides of the Main Building.

The First Floor of the existing building is currently used as a residential flat with access via an internal stair from within the Barrenjoey Boat Hire tenancy on the Ground Floor. There is a covered timber deck along the entire western side of the First Floor. The southern portion of the First Floor is currently used for Yoga Classes with access via an external timber stair and the western timber deck.

There are a number of free-standing buildings used for ancillary purposes to the Main Building, such as store rooms, cool room, garbage bin storage and a kiosk.

The proposal incorporates reconstruction of the existing building/s to incorporate the following;

a) Ground Floor;
   - Use to be as a cafe, including food preparation area, freezer, coolroom and service area.
   - Proposed take-away bar area, bar area and accessible sanitary facility in lieu of previous Seaplane business and general sanitary facilities. Previous sanitary facilities relocated to new ancillary building.
   - Boat Hire office and storage with WC and kitchenette with cafe food preparation area extended.

b) First Floor;
   - Use as office for cafe with sanitary facilities, storeroom and small Sea Plane office.
   - Pitched roof to permit increased ceiling height to at least 2.4m height. Walkway and access stair to the south side. Northern access stair replaced.

c) Ancillary Building – Proposed to contain café, sanitary facilities, dry store, alcohol store, cleaners store and bin store room.

2.2 Classification

For the purposes of the BCA, the buildings are classified as follows based on the proposed use:

- Class 5 (Office)
- Class 6 (Cafe, Shop & Kiosk)
- Class 9b (Function Room)
- Class 10a (Ancillary Building)

Note: Assessment of Ground Floor cafe includes use as function room on occasions.

2.3 Climate Zone (energy efficiency)

Development Site is in Energy Efficiency Zone 5.

2.4 Rise in Storeys

The main building has a rise in storeys of two (2) and the freestanding ancillary building has a rise in storeys of one (1).

2.5 Type of Construction

The buildings are required to be of Type C Construction.

2.6 Effective Height

The buildings have an effective height of less than 25m.

2.7 Floor Area / Volume

Maximum size of fire compartment.

Classification		**Type C**
5 or 9b	Max floor area	3,000m²
	Max volume	18,000m³
6, 7 or 8	Max floor area	2,000m²
	Max volume	12,000m³

2.8 Fire Source Feature

The Main Building is understood to be located on land that is Leased from Crown Lands with the car park and Ancillary Building Licensed from Council. Whilst this is detailed on the site plan and survey plans reviewed, the following is a summary of the review: -

a) The Main Building is on Lot 298 DP 721522. The external walls appear to be within 3.0m of the eastern boundary, therefore require the relevant FRL's and window / doors protected [Viz: BCA Specification C1.1 Table 5 and Clauses C3.2, C3.4.]. A Performance Solution could address this.

b) The wharf (decking) areas are less than 3.0m from the boundary of Lot 298, however given these boundaries are a river, lake or the like; therefore this would not qualify as a Fire Source Feature. Notwithstanding this there is a choice of egress on the northern or southern side of the Main building therefore no FRL need apply [Viz: Clause 2.5 (f) of BCA Specification C1.1.]

c) The Ancillary building is on Lot 7005 DP 1117451. The external walls are more than 3.0m from the nearest boundary. The building is to be on an area Licenced land managed by council for the crown. This licenced is not considered a boundary and any future adjacent building (albeit unlikely) if within 3m or 6m of the subject Ancillary building, would need to be considered under BCA Specification C1.1 and the existing reviewed to confirm any upgrade would be necessary.

The Main Building distances to the nearest Crown Site Boundary are estimated to be:

- Northern - > 3.0 metres (i.e. approx. 9.74m from Crown boundary to wall).
- Southern - < 3.0 metres (i.e. approx. 2.72m from Crown boundary to wall).
- Eastern - < 3.0 metres (i.e. approx. Nil setback to Lease boundary & > 3.0m to ancillary building)
- Eastern - > 3.0 metres (i.e. from Ancillary Building).
- Western - > 6.0 metres (i.e. from wall to boundary).

The Ancillary Building distances to the nearest Crown / Lease Site Boundary are estimated to be:

- Northern - > 3.0 metres (i.e. from Crown / Lease boundary).
- Southern - < 3.0 metres (i.e. approx. 402mm from Lease boundary to wall).
- Eastern - > 3.0 metres (i.e. approx. 3.2m setback).
- Western - > 3.0 metres (i.e. from Main Building wall & Crown / Lease boundary).

Crown Site Boundary is not considered to be regarded as a Fire Source Feature as the areas adjacent to these boundaries are not typical of normal circumstances where the boundary is common to adjacent allotments that are likely to be developed. A Fire Source Feature is as defined in Item 1.5 of this Report. On this basis it is unlikely that there would be adjacent buildings other than those ancillary to the current Main Building, therefore whilst the above setbacks are nominated the only setback that is of significance is the setback between the Main Building and proposed ancillary buildings. As the ancillary building is a single building and ancillary to the main building, this may be assumed to have a Class 6 use (or possibly 10a). The ancillary proposed building is therefore for Class 6 use are required to be of Type C Construction that requires a setback of 3.0m or more so that the external walls of either the Main Building or ancillary buildings are not be exposed to a Fire Source Feature and does not require a Fire Resistance Level.

3. BCA Assessment

An assessment of the proposed building works has been undertaken in accordance with the provisions of the Building Code of Australia 2019, (BCA).

A detailed assessment is contained in Annexure A. To assist with DA Design Development items marked 'DNC", or '?' in Annexure A are areas of non-compliances with the BCA that have been identified. Where compliance with the BCA DtS provisions is not readily achieved for some of these issues and are not fire or life safety, they are noted herein to be submitted with the DA for acceptance by Council. Recommendations to fire and life safety related issues of non-compliance are included for review by Council with the DA. Where compliance is not able to satisfy the BCA DtS provisions this may need to be included in an Alternative Solution Report for consideration at the Construction Certificate Stage.

Section 3.1 below details the relevant Fire Resistance Levels and Section 3.2 provides a table of requirements for Sanitary facilities.

3.1 Section C – Fire Resistance Levels

As a result of the proposed works, the building is required to be of Type C Construction as set out in Specification C1.1 and Table 3 of the BCA.

Clause C1.1 – Fire Resisting Construction: Building elements are required to contain a certain Fire Resistance Level (FRL) in accordance with Specification C1.1 and Table 5 of the BCA as follows:

BUILDING ELEMENT	Class 5, 9b	Class 6
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any fire-source feature to which it is exposed is –		
For loadbearing parts-		
less than 1.5m	90/90/90	90/90/90
1.5m to less than 3m	60/60/60	60/60/60
3m or more	-/-/-	-/-/-
EXTERNAL COLUMN not incorporated in an external wall, where the distance from any fire source feature to which it is exposed is –		
Less than 1.5m	90/-/-	90/-/-
1.5 to less than 3m	60/-/-	60/-/-
3m or more	-/-/-	-/-/-
COMMON WALLS & FIRE WALLS-	90/90/90	90/90/90
INTERNAL WALLS, ie Bounding a stair if required to be fire rated.	60/60/60	60/60/60

Table 3.1 – Fire Resistance Levels

The following additional information is provided:

(a) External walls required to be provided with an FRL need only be rated from outside.

(b) A building element and any beam of column incorporated in it must have an FRL not less than that listed in the table for the particular Class of building concerned.

(c) The provisions of BCA Clause C3.2 / Specification C1.1 [Volume 2] for Class 6 or BCA Clause 3.7.1.6 (e) [Volume 1] for Class 10a buildings may apply to the ancillary buildings in so far as the setback from the Main Building. That is, if 3.0m setback or greater no FRL's apply.

3.2 Sanitary Facilities.

(a) Number of Persons.

The population is understood to be as follows: -

- Patrons - 152
- Boat hire staff - 2
- Sea plane staff - 2
- Office admin staff - 6
- Cafe staff - 12

Based on 152 patrons for the cafe the BCA therefore calculates this as being 76 males & 76 females. It is advised that there are 18 staff i.e. 9 males & 9 females for the cafe and office. This includes Ground and First floor areas. The main sanitary facilities are proposed in the Ancillary Building. A single unisex facility is proposed in the First Floor office area.

There is intermittently 1 staff person for the First Floor Seaplane Office that is proposed to be provided with a single unisex facility.

There are 2 staff for the Boat Hire business that is proposed with a single unisex sanitary facility.

(b) Number of Facilities Required for Patrons.

Based on 152 patrons for the cafe the BCA therefore calculates this as being 76 males & 76 females.

Requirements for sanitary facilities are relatively similar if the cafe is used as either a cafe or for functions. The number of facilities is to include assessment of the worst case scenario, i.e. Class 9b function room.

Employees and the public may share the same facilities for Class 6 and Class 9b buildings provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public.

The number of sanitary facilities therefore required for use by the public is as follows: -

	Required (Patrons)	Required (Staff)	Proposed Facilities (Ground Floor – Café and Rear Deck Area)	Complies
Male WC	1	1	1 + 1# = 2	Yes
Male Urinal (2)	2	1	2	Yes
Male basin	2	1	1 + 1* = 2	Yes
Female WC	3	1	2 + 1* = 3	Yes
Female basin	2	1	1 + 1* = 2	Yes
Access WC	1	1	1	Yes

Table 3.2 – Sanitary Facilities Assessment (Ground Floor Cafe / Function Use)

- Note 1. Where designated with (*). In calculating the number of sanitary facilities to be provided, a required unisex accessible wc may counted once for each sex. This has been included in the calculations.
- Note 2. A urinal may be either an individual stall or wall hung urinal, or each 600mm length of trough, or a closet pan in place of a urinal.

(c) Number of Facilities Required for Staff.

Th total staff for the Ground Floor cafe, First Floor administration, Boat Hire business Seaplane Office is 22. The BCA therefore calculates this as being 11 males & 11 females.

The total number of sanitary facilities therefore required for use by the staff to all areas of the building is as follows: -

	Required (Staff)
Male WC	1
Male Urinal (2)	1
Male basin	1
Female WC	1
Female basin	1
Access WC	1

Table 3.3 – Sanitary Facilities Assessment (Total Staff Use)

The design has incorporated a single unisex sanitary facility in each of the separate uses, i.e. First Floor administration, Boat Hire business Seaplane Office. It is also noted that the public facilities may be shared by staff and there is flexibility in the proposed sanitary facilities to allow for some of this.

(d) Sanitary Facilities Comments:

The proposed number of sanitary facilities for patrons and staff is considered to readily achieve compliance with the BCA with respect to the number of facilities required.

The following additional details are provided for review and assessment by the Design Team and Access Consultant:

- At each location where 1 or more sanitary facilities are provided, there must be at least 1 accessible unisex sanitary facility and a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 for use by males and females. This is designated with (#). These facilities have been included in the calculations.
- An assessment to the current BCA (AS1428.1-2009) requirements for accessible facilities has not been undertaken for the proposed facilities as this is not part of the works proposed and is beyond the scope of this report, therefore this is to be included in any Access Report for the building to clarify requirements for these facilities.
- Adequate means of disposal of sanitary towels must be provided in facilities for females.
- Accessible sanitary facilities including washbasin, shelf or bench top, means of disposing sanitary towels must be inside the unisex toilet compartment rather than outside in a public area.
- An accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1. BCA Clause D3.3 (f) states:

  "D3.3 (f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—

  (i) containing not more than 3 storeys; and

  (ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m^2; …"

4. Conclusion

An assessment of the proposal has been undertaken in accordance with the provisions of the Building Code of Australia 2019 (BCA) and relevant provisions of the Environmental Planning and Assessment Regulation 2000. This assessment is contained in Annexure A. To assist with the Development Application; items marked 'CR", or '?' in Annexure A are areas where additional information or clarification may be provided for consideration at the Construction Certificate Documentation Stage.

The following items are to be considered as Building (Alternative) Solutions and contained in Fire Engineering Report / Performance Reports prepared in conjunction with the Construction Certificate

DTS Clause	DTS Provision Departure	Performance Requirements
Table 5, Specification C1.1	The external walls of the building are within 3.0m of the eastern side boundary and are not proposed to be fire rated.	CP1, CP2
Clause C3.2 and C3.4	Openings to the Main Building are within 3.0m of the eastern side boundary and are not proposed to be protected.	CP2, CP8
E1.3	The area of the building including outdoor decking area has a floor area greater than 500m^2 a fire hydrant system is not proposed to be provided.	EP1.3
D3.1	The First Floor is greater than 200m^2 and is not proposed to be provided with access for people with a disability.	DP1

Annexure A also contains an assessment of the proposed works. It should be noted the new works are subject to compliance with the BCA to be reviewed and confirmed by the Accredited Certifier prior to issuing the Construction Certificate.

It is therefore concluded that the proposal is capable of readily achieving compliance with the BCA either by satisfying the BCA Deemed-to-Satisfy Provisions or addressed in a Building (Alternative) Solution Report for consideration at the Construction Certificate Stage.

ANNEXURE A (DtS Assessment)

Building Code of Australia 2019

Deemed-To-Satisfy Assessment (Clause by Clause)

(Class 2-9 Buildings)

Classification of Building or Part:	5, 6 or 9b Note: 10a (Ancillary Building)
Rise in Storeys:	Two (2) – Main Building One (1) – Ancillary Building
Type of Construction:	Type C
Effective height	< 25m

Key:

Complies The building works proposed generally complies with this Clause or there are no significant deficiencies.

DNC The works proposed does not comply with this Clause or proposed works impacts on the existing building.

? Further documentation/ investigation required.

CR Certification or verification required that the building works proposed complies with this Clause prior to BCA Certification being issued.

(**Note: BCA Certification will require Structural, architectural and services drawings, specification with certification nominating all relevant BCA Clauses and the Australian Standards including the year of the standard**).

NA This Clause is not applicable to the building works proposed or to this assessment.

Noted The contents of this Clause is noted for reference.

AS. Alternative Solution using Performance Requirements is relevant in relation to the works proposed.

Section A	**General Provisions**	
Part A3.2	**CLASSIFICATION**	5 (First Floor), 6 or 9b (Ground Floor) or 10a (Ancillary Building)

Section B	**Structure**	**Comment**
Part B1	**STRUCTURAL PROVISIONS**	
B1.1	**Resistance to actions** Resistance must be greater than the most critical action resulting from different combinations of actions, where • The most critical action effect on a building is in accordance with B1.2 and general design procedures of AS/NZS1170.0-2002; and • The resistance of a building is determined in accordance with B1.4.	**CR subject to Structural Engineering drawings, specification and certification of the works at Construction Certificate stage**.

Section B	Structure	Comment
B1.2	**Determination of individual actions** The magnitude of individual actions must be determined in accordance with various action, eg: • Permanent actions, including design of building, unit weight of the construction, AS/NZS1170.1-2002; and • Imposed actions, including known imposed loads, construction activity actions, AS/NZS1170.1-2002; and • Wind, snow and earthquake actions, including applicable annual probability of design event determined by Tables B1.2a & B1.2b, AS/NZS1170.2-2011, AS1170.3-2003, AS1170.4-2007; and • Other actions detailed	**CR subject to Structural Engineering drawings, specification and certification of the works at Construction Certificate stage**.
B1.3	Clause deleted.	
B1.4	**Determination of Structural Resistance of Materials and Forms of Construction** • Masonry: AS3700-2011, • Concrete Construction: AS3600-2018 • Steel construction – Steel structures: AS4100-1998, Cold formed structures: AS/NZS4600-2018, Residential & low-rise steel: NASH Standard. • Composite steel structures: AS2327.1-2017 • Aluminium construction: AS/NZS1664.1-1997 or AS/NZS1664.2-1997 • Timber construction – design of structures: AS1720.1-2010, Timber structures: AS1684 Parts 2, 3 or 4-2010. • Piling: AS2159-2009 • Glazing Assemblies – AS2047–2014 or AS1288-2006. • Termite risk management – AS3660.1-2014 • Roof construction – Plastic sheeting: AS/NZS1562.3-1996, AS/NZS4256 Parts 1, 2, 3-1994 & 5-1996; Roofing tiles AS2049-2002, AS2050-2018; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3-1996; Metal Roofing: AS1562.1-2018. • Particleboard structural flooring: AS1860.2 -2006. • Garage doors & other large access doors in openings not > 3m in height determined as being in wind region C or D in accordance with AS/NZS 1170.2-2011, AS/NZS4505-2012. • Lift Shafts (where FRL not required): must be enclosed with non-perforated materials, and be of non-brittle material and glazing must comply with Table B1.4 or not fail the deflection criteria required by Cl 6 (c) (iii) of Specification C1.8.	**CR subject to Architectural and Structural Engineering drawings, specification and certification of the works at Construction Certificate stage**.
B1.5	**Structural Software** Must comply with ABCB protocols. Only applies to structural software used to design steel or timber trussed roof and floor systems and framed building systems for buildings within certain geometric limits. Does not apply to design software for individual frame members such as electronic tables similar to those provided in AS1684 or NASH Residential and Low-Rise Steel Framing Part 2.	Noted

B1.6	**Construction of buildings in Flood Hazard Areas** Class 2, 3, 9a (health-care), 9c (aged care) or Class 4 part of a building in a flood hazard area must comply with ABCB Standard for Construction of Buildings in Flood Hazard Areas.	Noted

Section C	**Fire Resistance**	**Comment**
Part C1	**FIRE RESITANCE AND STABILITY**	
C1.1	**Type of Construction**	Type C
C1.2	**Calculation of Rise In Storeys**:- Greatest number of storeys at any part of the external walls of the building above the finished ground at that part	Two (2) – Main Building One (1) – Ancillary Building
C1.3	**Buildings of Multiple Classification:-** Type of construction required is determined by the classification of the top storey applies to all storeys	Noted.
C1.4	**Mixed Types of Construction:-** Separation of the building by a fire wall (complying with clause C2.7) may permit mixed type of construction for a building.	Noted. Entire building to satisfy FRL's required for designated Type of Construction, i.e. Type C.
C1.5	**Two Storey Class 2, 3 or 9c buildings:-** A building with a rise in storeys of 2 may be Type C construction where: • Each SOU of Class 2 or 3 building has access to at least 2 exits; or its own access to road or open space; • Class 9c building not exceeding 3,000m^2 FA	NA
C1.6	**Class 4 Parts of Buildings**:- Class 4 part of a building requires the same FRL and fire separation from the remaining parts as a Class 2 part in similar circumstances.	NA
C1.7	**Open Spectator Stands & Indoor Sports Stadiums**:- May be of Type C Construction if: • Only 1 tier of seating; • Non-combustible material; and • Only sanitary facilities/change rooms below the tiers.	NA
C1.8	**Lightweight Construction**:- May be used for fire rating of elements if it is in accordance with Specification C1.8.	NA

Section C	Fire Resistance	Comment
C1.9	**Non-combustible Building Elements:-** In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) Non-loadbearing internal walls where they are required to be fire-resisting. 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— (i) a building required to be of Type A construction; and (ii) a building required to be of Type B construction, subject to C2.10, in— • a Class 2, 3 or 9 building; and • a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.	NA
C1.10	**Early Fire Hazard Properties**:- Materials and assemblies used in the building must comply with the requirements of Specification C1.10.	**CR. Details of proposed internal floor, wall and ceilings required to confirm details of Fire Hazard Properties at Construction Certificate Stage.**
C1.11	**Performance of External Walls**:- Concrete external walls that could collapse as complete panels in building of 2 storeys or less must comply with Specification C1.11.	NA
C1.12	**Non-Combustible Material** – the following materials may be used where non-combustible materials are required: • Plasterboard; • Perforated gypsum; • Fibrous plaster sheeting; • Fire reinforced cement sheeting; • Pre-finished metal sheeting; • Bonded laminate materials	Noted
C1.13	**Fire Protected Timber: Concession –** Fire-protected timber may be used in a Class 2, 3 or 5 building where an element is required to be non-combustible if; • The building is a separate building, or a part of a building separated from the remainder by a Fire Wall or similar construction; and • The building has an effective height not more than 25m, and. • The building has a sprinkler system throughout (as per E1.5), and • Any insulation installed in the cavity of the timber element required to have an FRL is non-combustible, and • Cavity barriers are protected in accordance with Spec C1.13.	Noted
Part C2	**FIRE RESISTANCE**	

<table>
<tr><th>Section C</th><th>Fire Resistance</th><th>Comment</th></tr>
<tr><td>C2.2</td><td>General Floor Area Limitations:
<table><tr><th colspan="2">Classification</th><th>Type C</th></tr><tr><td rowspan="2">5 or 9b</td><td>Max floor area</td><td>3,000m²</td></tr><tr><td>Max volume</td><td>18,000m³</td></tr><tr><td rowspan="2">6</td><td>Max floor area</td><td>2,000m²</td></tr><tr><td>Max volume</td><td>12,000m³</td></tr></table>Table C2.2 – Floor Area and Volume Limitations</td><td>Complies</td></tr>
<tr><td>C2.3</td><td>Large Isolated Buildings:-
Larger fire compartments may be permissible in certain circumstances, e.g. Class 6 or 9b building may exceed floor area and volume limitations of Table C2.2 subject to being provided with a sprinkler system throughout and perimeter vehicle access complying with C2.4 (b).
Buildings closer than 3m are regarded as one building and must collectively comply with clause C2.3.</td><td>NA</td></tr>
<tr><td>C2.4</td><td>Requirements for open space:-
Open space and vehicular access capable of supporting emergency vehicles, area 6m wide and not more than 18m from the building.</td><td>NA</td></tr>
<tr><td>C2.5</td><td>Class 9a and class 9c buildings:-
Requirements for compartmentation for the control of smoke and fire within health care and aged care building must comply with the requirements of this clause and also specification C2.5</td><td>NA</td></tr>
<tr><td>C2.6</td><td>Vertical separation of openings in external walls:-
Applicable to buildings of Type A construction and not sprinkler protected.
Openings in external walls of a building of Type A Construction must be separated from openings in the storey next below either by 900mm high vertical spandrel panels or 1100mm horizontal projections no less than 450mm beyond the relevant openings.
Spandrel construction must be fire rated to achieve an FRL of 60/60/60.</td><td>NA</td></tr>
<tr><td>C2.7</td><td>Separation by fire walls:-
A part of a building separated by a fire wall may be considered a separate building for the purposes of Parts C, D and E.
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 Cl C2.7 (a) and Specification C1.1 and extends to the underside of a floor having an FRL required for a fire wall or the roof covering.</td><td>NA</td></tr>
<tr><td>C2.8</td><td>Separation of classifications in the same storey:-
Building parts to be separated in the storey by a fire wall or each building element to adopt the higher FRL as required in Specification C1.1 of the BCA.</td><td>NA. Same FRL’s applies throughout due to being Type C Construction.</td></tr>
</table>

Section C	Fire Resistance	Comment
C2.9	**Separation of classifications in different storeys**:- The separating floors must have an FRL; • Type A Construction – not less than that required for the lower storey use. • Type B or C Construction – if one of the adjoin parts of Class 2, 3 or 4 a) Resistance to the incipient spread of fire to the space above itself of not less than 60 minutes, or b) Construction having an FRL of 30/30/30, or c) Ceiling with fire protective covering (eg 13mm fire grade plasterboard).	NA. Same FRL's applies throughout due to being Type C Construction.
C2.10	**Separation of lift shafts**:- Lift to be enclosed in a fire rated shaft when connecting more than 2 storeys (or more than 3 storeys in a sprinklered building).	NA
C2.11	**Stairways and lifts in one shaft**:- Not to be in the same shaft if either is to be fire isolated.	NA
C2.12	**Separation of equipment**:- Lift motors, emergency generators, smoke control exhaust fans, boilers or batteries are to be enclosed by construction achieving an FRL of 120/120/120.	**CR. Details to be confirmed at CC Stage**
C2.13	**Electricity supply system**:- If the electrical substation is to be located within the building it must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors. The main switchboard that houses the emergency equipment operating in emergency mode must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors.	**CR. Details to be confirmed at CC Stage**
C2.14	**Public corridors in Class 2 & 3 buildings**:- Public corridor >40m long to be divided into intervals of <40m by smoke proof walls complying with C2.5 (d).	NA
PART C3	**PROTECTION OF OPENINGS**	
C3.2	**Protection of openings in external walls**:- Openings in external walls that are required to have an FRL are to be protected if they are exposed to a fire source feature in accordance with Clause C3.4 if: • Wall is less than 3m from a side or rear boundary; • Less than 6m from the far boundary of a road, if not located in a storey at or near ground level; or • Less than 6m from another building on the same allotment	AS. See also comments at Section 2.8 of this Report, i.e. External walls containing openings < 3m from the eastern boundary and / or fire source feature and are not proposed to be protected.
C3.3	**Separation of openings in different fire compartments**:- External walls of different fire compartments are to be separated by a fire wall with FRL not less than 60/60/60 and any openings within the prescribed distances to be protected in accordance with Clause C3.4.	NA

Section C	Fire Resistance	Comment
C3.4	**Acceptable methods of protection**:- Fixed fire rated glass; self-closing or automatic closing windows with drenchers; automatic fire shutters; automatic closing fire rated windows. Doors to be self-closing or automatic closing.	AS. See also comments at Section 2.8 of this Report, i.e. External walls containing openings < 3m from the eastern boundary and / or fire source feature and are not proposed to be protected.
C3.5	**Doorways in fire walls**:- Doorways in a fire wall (that is not part of an horizontal exit) must not exceed ½ the length of the fire wall, and • Have the FRL required for the fire wall, and • Be self-closing or automatic closing upon activation of a smoke/fire detector	NA.
C3.6	**Sliding fire doors in fire walls**:- If open when the building is in use they must fail safe in the closed position and be provided with warning devices and flashing lights	NA.
C3. 7	**Protection of doorways in horizontal exits**:- To be self-closing or automatic closing fire doors	NA
C3.8	**Openings in fire isolated exits**:- To be -/60/30 self-closing fire doors Windows in external walls of fire-isolated exits to be protected in accordance with C3.4 if within 6.0m and exposed to another opening in the same building.	NA
C3.9	**Service penetrations in fire Isolated exits**:- Fire isolated exits must not be penetrated by services other than electrical wiring permitted by clause D 2.7; mechanical ducting for pressurization systems; and water supply pipes for fire hydrants, etc.	NA
C3.10	**Openings in fire isolated lift shafts**:- • Doors to be -/60/- fire doors in accordance with AS 1735.11; • Lift indicator panels to be constructed with -/60/60 backing if the lift exceeds 35,000mm^2	NA.
C3.11	**Bounding construction Class 2, 3 and 4 buildings**:- Doors from sole occupancy units, and doors from rooms not within a SOU that open to an enclosed public corridor are to be: • -/60/30 for Type A construction; • tight fitting self-closing solid core doors not less than 35mm thick for Type B and C construction The path of travel from a sole occupancy unit must be protected if there is no alternative exit and passes an external wall of another sole occupancy unit or room.	NA.
C3.12	**Openings in floors for services**:- To be enclosed in fire rated shaft with FRL in accordance with Specification C1.1	NA.
C3.13	**Openings in shafts**:- Openings to shafts must be protected with a self-closing -/60/30 fire door or hopper.	NA.

Section C	Fire Resistance	Comment
C3.15	**Openings for service installations**:- Electrical, plumbing, mechanical ventilation shafts not to impair the FRL of fire rated building elements	NA
C3.16	**Construction Joints**:- Fire retardant materials to be provided to construction joints to be identical with prototype tested in accordance with AS1530.4 to achieve the required FRL	NA
C3.17	**Columns protected with lightweight construction to achieve an FRL**	NA
Specification C1.1	**Fire Resisting Construction:-** The building is required to be designed in accordance with Table 5 (Type C Construction) of the BCA	**AS. See Section 2.8 of this Report in relation to setbacks relative to a Fire Source Feature, i.e. External walls < 3m from the eastern boundary and / or fire source feature and are not proposed to be fire rated.** **Details to be in CC documentation.**

Section D	Access and Egress	Comment
PART D1	**PROVISION FOR ESCAPE**	
D1.1	**Application of part**:- DTS provisions do not apply to internal parts of a SOU in Class 2, 3 or 4	Noted.
D1.2	**Number of exits required**:- Every building must have a least one exit from each storey, and a minimum of 2 exits are required in particular circumstances. Without passing through another sole occupancy unit every occupant of a storey or part must have access to either an exit, or at least 2 exits if 2 or more are required.	**? Complies subject to at least 2 exits required from enclosed part of cafe as this is able to accommodate more than 50 persons and is used for functions such as receptions and the like on occasions. See also D1.6 for aggregate egress width, D2.19 for door operation and D2.21 for door latches. Details to be in CC documentation.**
D1.3	**When Fire isolated exits are required**:- Generally, every required exit must be fire isolated if it connects, passes by or passes through: • more than 3 storeys of a class 2; • more than 2 storeys of a classes 3 to 9. And one additional storey may be included if it is solely for motor vehicles or other ancillary purposes.	NA

Section D	Access and Egress	Comment
D1.4	**Exit Travel Distances**:- Class 2, 3 buildings – Entrance doorway of SOU to be not more than 6m from an exit, or 6m from a point of choice between 2 exits. A single exit serving the storey at the level of egress to a road or open space may be 20m. Class 5 – 9 buildings. No point on a floor must be more than 20m from an exit or a point from which travel in different directions to 2 exits is available, in which case the maximum travel distance to 1 of those exits not to exceed 40m. Class 5/6 building – the distance to a single exit serving the storey at the level of access to a road or open space may be increased to 30m.	**CR. Egress for each level to be measured to open space, i.e. area on allotment open to the sky that connects with roadway or the like as follows;** • **Egress from Ground Floor to have width as per Clause D1.6 below.** • **Egress from First Floor (including deck) to be no more than 20.m to either external stair or external exit door leading to external stair. Details to be included with Construction Certificate**.
D1.5	**Distances between alternative exits**:- Exits required as alternative exits must be distributed as uniformly as possible; not less than 9m apart; not more than 60m apart (45m apart for class 2, 3 and 9a health care); located so alternative paths do not converge to less than 6m.	**CR. Details to be included with Construction Certificate**.
D1.6	**Dimensions of exits**:- • Unobstructed height of an exit not less than 2m (1980mm for doorways); • 1m minimum width of a single exit; and increased where applicable for populations, eg; • if the storey or mezzanine accommodates more than 200 persons the aggregate unobstructed width of the exit must not be less than 1m plus 250mm for every person in excess of 100 • door width to be a minimum of 750mm clear width except 850mm clear unobstructed area (in accordance with AS 1428.1) • width of exit must not diminish in direction of travel to an exit • required width of a stairway or ramp is to be measured clear of all obstructions and extend a minimum 2m above line of nosings or ramp	**CR. Cafe seating is for 152 persons plus staff, therefore requires an aggregate clear egress width of at least 2.0m. Proposed at least 1.0m through main entry doors and 1.0m via main deck that leads to northern or southern timber deck / walkway.** **CR. First Floor is to be provided with stairways having a 1.0m clear width measured between handrails and 2.0m clear height above stair nosings.** **Details to confirm widths and heights are achieved to be included in Construction Certificate documentation.**
D1.7	**Travel via fire isolated exits**:- Door must not discharge directly into fire isolated exit unless it is from public corridor, etc; SOU occupying all of the storey; or a sanitary compartment. Must discharge directly to the road or open space, and not pass within 6m of openings within the wall of the same building, unless that part of the wall has an FRL of 60/60/60 and any doors are protected in accordance with C3.4. If > 2 doors open into exit – pressurisation; or smoke lobbies to be provided.	NA
D1.8	**External stairways or ramps in lieu of a fire isolated exit**:- External stairs may be used instead of a fire isolated exit in buildings under 25m in effective height.	NA

Section D	Access and Egress	Comment
D1.9	**Travel by non fire isolated stairways or ramps**:- • must provide continuous means of travel by its own flights of stairs to the level at which egress to a road or open space is provided; • Class 2, 3 or 4: distance between SOU and point of egress to road/open space not to exceed 60m, or 30m if Type C construction. • Non fire-isolated stair in a Class 2 building must discharge not more than 15m from an exit door leading to open space. • Class 5-9: stair to discharge at a point no more than 20m from a door providing egress to a road or open space; or 40m from one of 2 exits if travel is in opposite directions. Total distance travelled – 80m maximum.	**CR. First Floor proposed with external egress stair. Details to be included with Construction Certificate documentation.**
D1.10	**Discharge from exits**:- • Not to be blocked at the point of discharge • Path of travel to the road to be via a stair or by a ramp with gradients no steeper than 1:8 (or 1:14 of ramp required for disabled access).	**CR. Details of bollards or the like to minimise the risk of exits or paths of travel for egress being blocked by parked vehicles to be included in Construction Certificate documentation.**
D1.11	**Horizontal exits**:- Not counted as required exits between SOUs or in a class 9b primary/secondary school, early child hood centre.	NA
D1.12	**Non-Required stairways ramps and escalators**:- Generally, unsprinklered buildings can connect 3 stories in a class 2 building and 2 storeys in a class 3-9 building.	Noted
D1.13	**Number of persons accommodated**:- In accordance with Table D1.13, unless confirmation from building owner is more accurate.	Noted
D1.14	**Measurement of distances**:- Identifies the nearest part of the exit to measure travel distance	Noted
D1.15	**Method of measurement**:- Specifies the method of measuring the distance of travel to an exit	Noted

Section D	Access and Egress	Comment
D1.16	**Plant rooms, lift machine rooms and electrical network substations: Concession**:- A ladder may be used in lieu of a stair for egress from: • A plant room with a floor area not more than 100m^2; or • All but 1 point of egress from a plant room, a lift machine room or a Class 8 electrical network substation with a with a floor area of not more than 200m^2 where 2 or more points of egress are provided a ladder may be used from all but one of those exits. Such ladders; • may form part of an exit provided that in the case of a fire-isolated stairway is contained within the shaft. • may discharge within a storey subject to being part of the path of travel, and • must comply with AS 1657-1992 for plant rooms or Class 8 electrical network substations, and • for a lift machine room, where access is to a secondary floor within the room may be a fixed rung type ladder to comply with AS1657 provided; (a) height between floors is not greater than 2.8m, (b) ladder is inclined not less than 65º and not more than 75º to the horizontal, (c) distance between front face of ladder and any adjacent structure is not less than • 960mm for 65º • 760mm for 75º • Distance determined by interpolation for angles between 65º and 75º. • clear space not less than 600mm between foot of ladder and any equipment.	**CR. Details of access to plant rooms to be confirmed. Details to be in Construction Certificate documentation**
D1.17	**Access to lift pits**:- Where the pit depth is < 3m access to be through the lowest landing doors. Where the pit depth is > 3m access to be through an access doorway: • In lieu of D1.6, doorway to be level with pit floor and not less than 600mm wide by 1980mm high (reduced to 1500mm if necessary to comply with following dot point). • No part of lift car or platform encroach on pit doorway entrance when car is on fully compressed buffer. • Stairway complying with AS1657. • In lieu of D2.21, doors must be horizontal sliding or outwards opening hinged; self-closing; self-locking from the outside; marked on landing side with letters not < 35mm high stating DANGER LIFTWELL – ENTRY OF UNAUTHORISED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES.	NA.
PART D2	**CONSTRUCTION OF EXITS**	
D2.1	**Application of Part**:- Except for clauses D2.13, D2.14(a) and D2.16 do not apply to the internal part of a class 2 and 3 buildings (with the addition of D2.18 for class 2)	Noted

Section D	Access and Egress	Comment
D2.2	**Fire-Isolated stairways & ramps**:- Must be within fire resisting shaft and be constructed of non-combustible materials	NA.
D2.3	**Non-Fire-Isolated stairways and ramps**:- Rise in Storeys > 2, to be constructed from either: • Reinforced or prestressed concrete • 6mm thick steel • 44mm thick timber & an average density of not less than 800 kg/m^3 at a moisture content of 12%	NA
D2.4	**Separation of rising and descending stair flights**:- A required fire isolated stair must have no direct connection between a flight of stairs rising from below the level of access to the road and a flight of stairs descending from a storey above that level.	NA.
D2.5	**Open access ramps and balconies**:- Where an open access balcony is provided for smoke hazard management it must: • have ventilation openings to the outside air; • not be enclosed on its open sides above 1m except by eg. Grills that are >75% fee air space	NA
D2.6	**Smoke lobbies**:- Where a smoke lobby is required by Clause D1.7 it must: • have floor area 6m2 minimum; • be separated by walls impervious to smoke; • be fitted with smoke doors; • be pressurised if the adjoining exit are so required.	NA
D2.7	**Installations in exits and paths of travel**:- • Access to service shafts must not be from fire exit (unless for fire fighting services); • No openings to ducts conveying hot products of combustion; • Gas or fuel services not permitted within exit • Electrical or service equipment not permitted within fire exit – however can be in a path of travel to an exit if provided with fire protective covering and smoke seals	**CR. Services (i.e. EDB's) in common corridors / stairs or paths of travel to be suitably protected. Details to be in Construction Certificate documentation**
D2.8	**Enclosure of space under stairs and ramps**:- • No enclosures/cupboards permitted in a fire stair; • Space below a non-fire isolated stair to remain unenclosed, unless construction with FRL of 60/60/60 with -/60/30 fire door.	**CR. If enclosures proposed they must be fire rated. Details to be in Construction Certificate documentation**
D2.9	**Width of stairways**:- A stairway that exceeds 2m in width is counted as having a width of only 2m unless divided by handrail.	Noted

Section D	Access and Egress	Comment
D2.10	**Pedestrian ramps**:- Ramp serving as a required exit must: Be maximum 1:14 gradient if required for disabled access (in accordance with AS 1428.1); Maximum 1:8 gradient in other cases; Floor surfaces to have slip resistance classification in accordance with Table D2.14 and AS4586-2013	**CR. External ramps nominated as having gradients of 1:14. Details required in Construction Certificate documentation.**
D2.11	**Fire Isolated passageways**:- To achieve the same FRL as required for a fire isolated stair (or otherwise a minimum FRL of 60/60/60)	NA.
D2.12	**Roof as open space**:- If an exit discharges to a roof of a building, the roof must: Have an FRL of 120/120/120, & Not have rooflights or other openings within 3m of the path of travel	NA.
D2.13	**Treads and risers**:- • Minimum 2 risers and maximum of 18 risers in any flight; • Riser 115mm minimum, 190mm maximum dimensions – treads 250mm going to 355 maximum going. 2R+G 550mm min and 700 maximum. • Goings and risers to be constant throughout. Constant means within each flight that variations between; a) adjacent risers, or between adjacent goings is no more than 5mm, and b) the largest and smallest riser, or largest and smallest going does not exceed 10mm. • Risers not to permit a 125mm sphere to pass through; • Treads to have slip resistance classification in accordance with Table D2.14 and AS4586-2013; • No winders in lieu of a quarter landing	**CR. Details to be provided with Construction Certificate documentation.**
D2.14	**Landings**:- In a stairway – maximum gradient of 1:50 and minimum of 750mm long. Landings to have slip resistance classification in accordance with Table D2.14 and AS4586-2013; Class 9a buildings – area of any landing to be sufficient to move a stretcher 2m long and 600mm wide at a gradient of the stairs gradient; or a clear width of not less than 1.6m and clear length of 2.7m	**CR. Details to be provided with Construction Certificate documentation.**
D2.15	**Thresholds**:- No step or ramp at any point closer to the doorway than the width of the door leaf, unless: • Door opens to road or open space (and door sill not more than 190mm high); • Health care and aged care buildings have concessions	**CR. Details of levels required for doorways in Construction Certificate documentation.**

Section D	Access and Egress	Comment
D2.16	**Balustrades**:- A continuous barrier/balustrade to be provided along the side of any roof to with public access is provided, any stairway or ramp, any floor, corridor, hallway, balcony, veranda, mezzanine, access bridge or the like and along the side of any access path to a building if it is not bounded by a wall and the surface beneath is more than 4m for an openable window and 1m in any other case. Balustrade height to be at least 1.0m above level surfaces, 865mm above stair nosings and gaps to be not greater than 125mm (ie 125mm sphere must not pass through it). Where the floor is more than 4m above the surface beneath any horizontal elements between 150mm and 760mm must not facilitate climbing. Barriers/balustrades for fire-isolated stairs to be constructed so as not to provide rail at not more 150mm above the stair, landing and mezzanine floor, openings of not more than 300mm for balusters and not more than 460mm openings where rails provided.	**CR. Balustrades to timber deck areas are to be at least 1.0m, 865mm above stair nosings and must not contain gaps more than 125mm. Details to be provided with Construction Certificate documentation.**
D2.17	**Handrails**:- • Located on at least one side of ramp or stairs; • Located on two sides of stairs when in excess of 2m in width (and where required by Clause D3.3 and AS1428.1); • 865mm above the stair nosings (second handrail at 750mm for class 9b primary school buildings); • continuous between stair flight landings.	**CR. Handrail to at least 1 side of the ramps and stairs are required. Details to be provided with Construction Certificate documentation.**
D2.18	**Fixed platforms, walkways stairways and ladders**: Treads, risers, handrails and balustrades in plant rooms, lift motor rooms or non-habitable parts of a class 2/4 SOU etc to comply with AS 1657	NA
D2.19	**Doorways and doors**:- Doors in exits (or in patient care areas of class 9a) must not be fitted with roller door; roller shutter or tilt up door. Can only be fitted with a sliding door if it leads directly to open space and the door is able to be opened manually under a force of not more than 110N. If fitted with a power operated door must be opened manually under a force of not more than 110N and automatic fail safe open device on power failure or on activation of a smoke detector in the fire compartment served by the door.	**CR Sliding door opening from cafe to rear (western timber deck) may be considered to open 'direct' to open space and must be openable manually under a force of not more than 110N. See also Cl D2.21 re: Door latching**
D2.20	**Swinging doors**:- Must not encroach more than 500mm into the required width of the stair, or when fully open not more than 100mm into the width of the exit. Door in exit to swing in the direction of egress unless the door serves a part of the building having an area not more than 200m^2 and the door is fitted with a hold open device.	**CR. Doors to final exits to swing in the direction of egress. Details to be provided with Construction Certificate documentation.**

Section D	Access and Egress	Comment
D2.21	**Operation of latch**:- Exit doors and doors in the path of travel to an exit to be provided with lever latch handle device located between 900mm and 1100mm above the floor and openable with a single handed downward action without recourse to a key and if serving an area required to be accessible by Part D3 of the BCA and: • be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and • have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not < 35mm and not > 45mm. Concessions apply to a Class 5, 6, 7 or 8 building or part with a floor area not more than 200m^2 or other areas subject to certain other conditions being met.	**CR. Details to be provided with Construction Certificate documentation.**
D2.22	**Re-entry from fire isolated exits**:- Doors in a fire isolated exit within a class 9a health care building, a class 9c aged care building or a building with effective height of > 25m must not be locked from the inside to prevent re-entry	NA
D2.23	**Signs on doors**:- Signage is required to fire/smoke doors to alert persons that the operation of some doors must not be impaired.	NA.
D2.24	**Protection of openable windows**:- (a) A window opening must be provided with protection if the floor below the window is 2m or more above the surface beneath in a Class 9b early childhood centre or in a bedroom of a Class 2, 3 or 4 part. (b) Where the lower level of the window opening is less than 1.7m above the floor, a window must be protected with a device to restrict the window opening or a screen with secure fittings. (c) A barrier with a height not less than 865mm above the floor is required to an openable window:- • In addition to window protection when a child resistant screen release mechanism is required, & • For openable windows 4m or more above the surface of the window if not included in (a) above. (d) A barrier required by (c), except for (e) above must not permit a 125mm sphere to pass through and must have no horizontal or near elements between 150mm and 760mm above the floor that facilitates climbing. (e) A barrier required by (c) to an openable window in:- • Fire-isolated stairs/ramps and other areas used primarily for emergency purposes, excluding external stairs/ramps, and • Class 7 (other than carparks) and Class 8 buildings and parts containing those classes; Must not permit a 300mm sphere to pass through it.	**CR. No residential use proposed and no windows are at First Floor that is more than 4.0m above adjacent ground level. Details to be provided with Construction Certificate documentation.**

Section D	Access and Egress	Comment
D2.25	**Timber Stairways: Concession –** Notwithstanding D2.2, timber treads, landings and supporting framework may be used in a fire-isolated exit if it is at least 44mm thick timber & an average density of not less than 800 kg/m^3 at a moisture content of 12%, subject to:- • The building has a sprinkler system throughout including in the fire-isolated exit (as per E1.5), and • Fire protection (ie 13mm fire grade plasterboard of fire protective covering) is provided to the underside of stair flights and landings located immediately above a landing i. which is at or near the level of egress, or ii. provides direct egress to a carpark.	Noted
NSW D2.101	**Doors in path of travel in an entertainment venue** In a Class 9B entertainment venue a doorway in a path of travel must comply with NSW Clause D2.19 (B) (V)	NA
PART D3	**ACCESS FOR PEOPLE WITH DISABILITIES**	
D3.1	**General building access requirements**:- Buildings are required to be accessible in accordance with AS 1428.1-2009:	**?. Access is required;** **To all areas of the building normally used by the occupants except where exempt in Clauses D3.2, D3.3 or D3.4.**
D3.2	**Access to buildings** Access is required from: • the main points of pedestrian entry at the allotment boundary. If building is > 500m^2 the secondary entrance must be accessible if more than 50m from the accessible entrance. • other accessible buildings connected by a pedestrian link. • any required accessible carparking space. In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances including the principal entrance.	**?. Access is required from the main points of a pedestrian entry at the allotment boundary and from any accessible carparking space on the allotment. Access must be through the principal pedestrian entrance with door latch circulation space in accordance with AS1428.1-2009.** **Subject to assessment by Access Consultant for compliance.**

Section D	Access and Egress	Comment
D3.3	**Parts to be accessible**:- Ramps and stairways, except where exempt by D3.4, are to satisfy: - • for a ramp, except fire-isolated ramp, Clause 10 of AS1428.1-2009, and • for a stairway, except fire-isolated stairway, Clause 11 of AS1428.1-2009, and • for a fire-isolated stairway, Clause 11.1 (f) and (g) of AS1428.1-2009. Lift access must comply with clause E3.6. A ramp of lift need not be provided to serve a storey of level other than the entrance storey in a Class 5, 6, 7b or 8 building containing > 3 storeys and with a floor area of each storey excluding the entrance storey, of not > 200m^2. Accessways must have passing spaces, turning spaces as required. Carpet pile height to be in accordance with AS1428.1-2009, except as modified by Cl D3.3 (g) and (h). Ramp of passenger lift need not be provided to a storey above Ground Level in a building of Class 5, 6, 7b or 8 (containing not more than 3 storeys) if the floor area of that storey is not > 200m^2.	**?. Access to main entry door of cafe, internal part of cafe and portion of covered timber deck currently provided. BCA applies to new works including circulation spaces, gradients, door latches etc to be in accordance with AS1428.1-2009, including stairway handrails.** **AS. Access consultant to address First Floor Class 5 use where floor area is more than 200m^2. And access for people with a disability is not proposed to be provided.** **Details to be provided with Construction Certificate documentation.**
D3.4	**Exemptions**:- Not necessary to provide access to: An area that would pose a health or safety risk; or, any area that is inappropriate due to its use and any path of travel providing access to one of these areas.	Noted. Exemption likely to apply to parts of building.
D3.5	**Car Parking**:- Spaces to be provided in accordance with AS/NZS 2890.6-2009 at the rate specified in Table D3.5.	**?. BCA for new works requires a Carparking space for people with disabilities to be provided at the rate of 1 space per 50 carspaces or as required by Council Policy. As a result of the carparking being on lease land (i.e. not on the Crown allotment containing main building), the provisions of the BCA would not normally apply except where necessary by Council Policy. Details to be provided with Construction Certificate documentation.**
D 3.6	**Signage**:- Clear and legible Braille and tactile signage complying with Spec D3.6 is required to identify each accessible sanitary facility, each accessible space with a hearing augmentation system and each door required by E4.5 having an exit sign. Signage / symbols in accordance with AS1428.1-2009.	**CR. Details to be provided with Construction Certificate documentation.**
D 3.7	**Hearing augmentation**:- Where an inbuilt amplification system (other than one used for emergency warning) is provided a hearing augmentation system is to be provided in the following locations: • an auditorium, conference room, meeting room or room for judicatory purposes, or • in a room in a class 9b building, or • ticket office, tellers booths, reception area or the like where the public screened from the service provider	NA

Section D	Access and Egress	Comment
D 3.8	**Tactile indicators**:- TGSI required: • when "public" are approaching a stair, escalator, travelator, and ramp (other than step ramp), • overhead obstructions less than 2m high • paths of travel meeting a vehicular way adjacent to the main entrance of the building – if there is no kerb or kerb ramp at that point. • TGSI required to comply with AS/NZS 1428.4.1-2009	**CR. TGSI's required to ramps and stairs. TGSI not required to fire-isolated stair or stair that is exempt (Ref D3.4).** **Details to be provided with Construction Certificate documentation.**
D3.9	**Wheelchair seating spaces in a Class 9b assembly buildings**:- Where fixed seating is provided in a Class 9b assembly building, wheelchair seating in accordance with AS1428.1-2009 must be provided with the number and grouping in accordance with Table D3.9.	NA
D3.10	**Swimming pools**: - Not less than 1 means of accessible water entry/exit in accordance with Spec D3.10 must be provided for each swimming pool required by Table D3.1.	NA
D3.11	**Ramps**: - An accessway must not have a series of ramps that have a combined vertical rise of more than 3.6m and a landing for a step ramp must not overlap a landing for another step ramp.	NA
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 opening must be clearly marked in accordance with AS1428.1-2009	**CR. Details to be provided with Construction Certificate documentation.**

Section E	Services and Equipment	Comment
PART E1	**FIRE FIGHTING EQUIPMENT**	
E1.3	**Fire Hydrants**:- Hydrant system required to serve a building with a floor area >500m^2 and where the fire brigade is available to attend the fire. System must satisfy AS2419.1 – 2005.	**AS. Main Building including outdoor area is more than 500m^2, therefore fire hydrant would be required, unless documented in a Fire Engineering Report. Details to be provided with Construction Certificate documentation.**

Section E	Services and Equipment	Comment
E1.4	**Hose Reels**:- Fire hose reel system to be provided (in accordance with AS 2441 – 2005) to: • does not apply to Class 2, 3 building or Class 4 part of a building, • serve the whole building where internal fire hydrant have been installed; • serve any fire compartment >500m^2 (where internal hydrants are not installed); • Hose reels to be located: (a) Externally; or (b) Internally within 4m of an exit; or (c) Internally adjacent to a fire hydrant (other than one in fire isolated exit); or (d) Combination of the above • Achieve system coverage and (a) Need not be adjacent to every fire hydrant, (b) Need not be adjacent to every exit, (c) System coverage not achieved by (a) and (b), additional fire hose reels may be located in paths of travel to an exit. • Hose reels not to pass through fire or smoke doors	NA. Building is less than 500m^2, therefore fire hose reel system is not required.
E1.5	**Sprinklers**:- Sprinkler system complying with AS 2118 to be provided in accordance with BCA Specification E1.5 to: • Buildings >25m effective height; • Carparks accommodating > 40 vehicles; • Class 2 or 3 building with a RIS of 4 or more; • Class 6 buildings with large fire compartments; • Class 9c aged care buildings; • Some large isolated buildings; • Occupancies of excessive hazard	NA.
E1.6	**Portable Extinguishers**:- To be installed to AS2444-2001	**CR. Details to be provided with Construction Certificate documentation.**
E1.7	Deliberately left blank	Noted
E1.8	**Fire Control Centres**:- Required in a building > 25m effective height or in a class 6, 7, 8 or 9 building that exceeds 18,000m^2 in floor area	NA
E1.9	**Fire precautions during construction**:- • Fire extinguisher at each exit (temporary) form each storey; • Booster connections, hydrants and FHR to be operational when building >12m effective height	**CR. Details to be provided with Construction Certificate documentation.**
E1.10	**Provision for special hazards**	**CR. Storage requirements of any hazardous goods and the like to be verified. Details to be provided with Construction Certificate documentation.**
PART E2	**SMOKE HAZARD MANAGEMENT**	

Section E	Services and Equipment	Comment
E2.1	**Application of Part**:- DTS provisions to not apply to open deck carparks, and the smoke and heat vent provisions do not apply to storerooms and the like of less than $30m^2$	Noted
E2.2	**General requirements for smoke hazard management** (including Tables E2.2a & E2.2b). NSW Table E2.2b Specific provisions for smoke hazard management, i.e. Auto-Shutdown of Air Conditioning. A building or part of a building used as an assembly building (e.g. Class 9b) must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS/NZS 1668.1) which does not form part of the smoke hazard management system, on the activation of: - • Smoke Detectors installed complying with Clause 6 of BCA Specification E2.2a; and • Any other installed Fire Detection and Alarm System, including a Sprinkler System complying with BCA Specification E1.5.	NA. Class 5, 6 and 9b Building has storeys 2 only. **CR or NA (Auto Shutdown) subject to provision of air handling system to Ground Floor Class 9b area. Details to be provided with Construction Certificate documentation.**
E2.3	**Provision for special hazard**:- Additional measures to be provided due to the special characteristics, function; use; type of materials stored; or special mix of classifications within a building	NA
PART E3	**LIFT INSTALLATIONS**	
E3.1	Repealed	Noted
E3.2	**Stretcher facility in lifts are required in**:- • Buildings with an effective height > 12m; • In at least one "emergency lift" One lift is required to provide a clear space of not less than 600mm wide x 2m long x 1400mm high above the lift car floor level	NA.
E3.3	**Warning against use of lifts in fire**:- Signs to be provided at each lift landing located near every call button complying with figure E3.3	NA.
E3.4	**Emergency lifts**:- Required in some class 9a buildings and also buildings with effective height >25m	NA
E3.5	**Landings**:- Access and egress to and from liftwell landings must comply with BCA Part D	NA.
E3.6	**Facilities for people with disabilities**:- Passenger lifts to comply with the relevant Australian Standard listed in Table E3.6a and have accessible features as listed in Table E3.6b, and must not rely on constant pressure for its operation if the lift car is fully enclosed.	NA. Refer to Access Reports.

Section E	Services and Equipment	Comment
E3.7	**Fire Service Controls**:- Passenger lift cars serving any storey above an effective height of 12m, must be provided with fire service control switch in accordance with E3.9 and lift car fire service drive control switch in accordance with E3.10.	NA.
E3.8	**Aged Care Buildings**:- Where residents are on levels which do not have access to the road or open space the building must have either: • Stretcher facility lift; or • Ramp complying with AS 1428.1	NA
E3.9	**Fire Service Recall Operation Switch** Where required, switch. Labelling, key and operation procedures for a fire service recall control switch are to be provided.	NA.
E3.10	**Lift Car Fire Service Drive Control Switch** Where required switch initiation, labelling and operation for the fire service drive control switch is to be provided.	NA.
PART E4	**EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS**	
E4.1	Repealed	Noted
E4.2	**Emergency Lighting**:- Required (in accordance with AS 2293.1) in: • Every fire isolated exit; • every storey >300m^2 in area • path of travel to an exit and in any room with floor area > 100m^2 that does not open to a corridor/space with emergency lighting and any room having a floor area in excess of 300m^2; • any room with floor area >300m^2; • any room or space to which there is public access in every storey in a Class 6 or 9b building if that storey has a floor area >300m^2, or any point more than 20m from a doorway leading directly to stairway of open space; • every non-fire isolated stairway	**CR or NA if Each storey is less than 300m^2, there is no internal required egress stair and there is no point more than 20m from an exit / open space. Details to be provided with Construction Certificate documentation.**
E4.3	**Measurement of distances**:- Using the shortest path of travel.	Noted
E4.4	**Design and operation of emergency lighting**:- To comply with AS 2293.1-2018	NA
E4.5	**Exit signs**:- Clearly visible to persons approaching an exit, above doors: • to enclosed or external stairs, passageways and ramps • to external access balcony, • from an enclosed stair, passageway or ramp at the level of discharge to the road; • acting as horizontal exits; • serving as or forming part of a required exit in a storey with emergency lighting.	**CR or NA if Each storey is less than 300m^2, there is no internal required egress stair and there is no point more than 20m from an exit. Details to be provided with Construction Certificate documentation.**

Section E	Services and Equipment	Comment
E4.6	**Direction signs**:- Where an exit is not apparent exit signs with directional arrows are required	**CR or NA if Each storey is less than 300m^2, there is no internal required egress stair and there is no point more than 20m from an exit. Details to be provided with Construction Certificate documentation.**
E4.7	**Class 2 and 3 Buildings and Class 4 parts exemptions:-** Illuminated exit signs not applicable to: • doors of SOUs of class 2, 3 or 4; • class 2 building where "EXIT" is clearly labelled on the side remote from the exit/balcony	Noted
E4.8	**Design and operation of exit signs**:- To comply with AS 2293.1-2018 or photoluminescent exit sign in accordance with BCA Specification E4.8.	Noted
E4.9	**Sound systems and intercom systems for emergency purposes**:- To be installed to comply with AS 1670.4 in: • buildings with effective height >25m; • class 3 residential part of a school or aged/ disabled children accommodation with RIS > 2; • class 3 residential aged care; • class 9a with floor area > 1000m2 or RIS >2; • class 9b school with RIS 3 • class 9b theatre, public hall, etc with floor area >1000m2 or RIS >2	NA.

Section F	Health and Amenity	Comment
PART F1	**DAMP & WEATHER PROOFING**	
F1.1	**Stormwater drainage**:- Collection of stormwater drainage is to comply with the consent authority's requirements and also AS/NZS3500.3-2015	**CR. Details to be provided with Construction Certificate documentation.**
F1.5	**Roof coverings**:- Plastic sheeting: AS/NZS1562.3-1996, AS/NZS4256 Parts 1, 2, 3-1994 & 5-1996; Roofing tiles AS2049-2002, AS2050-2018; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3-1996; Metal Roofing: AS1562.1-2018	**CR. Details to be provided with Construction Certificate documentation.**
F1.6	**Sarking**:- Where used for weatherproofing for roofs and walls must comply with AS/NZS 4200 parts 1 & 2 - 2017	**CR. Details to be provided with Construction Certificate documentation.**
F1.7	**Waterproofing of wet areas in buildings**:- The floor surface or substrate to proposed bathrooms, shower areas and toilets must be provided with a waterproofing membrane in accordance with AS 3740-2010. In addition the junction between the floor surface and the walls are required to be impervious to water.	**CR. Details to be provided with Construction Certificate documentation.**
F1.8	Deliberately left blank	

<table>
<tr><th>Section F</th><th>Health and Amenity</th><th>Comment</th></tr>
<tr><td>F1.9</td><td>Damp-proofing:-
The building must be provided with a damp proof course that prevents moisture from the ground from reaching the internal elements of the building.
To be installed in accordance with AS/NZS 2904-1995 or AS3660.1- 2014. Some concessions apply to class 7 and 8 and 10 buildings.</td><td>CR. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>F1.10</td><td>Damp-proofing of floors on the ground:-
Vapour barrier to be in accordance with AS 2870-2011.</td><td>CR. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>F1.11</td><td>Provision of floor wastes:-
Class 2, 3 or 4 part to have floor wastes in bathrooms, laundries located at any level above an SOU / public space.</td><td>NA.</td></tr>
<tr><td>F1.12</td><td>Sub-floor ventilation:-
The sub-floor space between a suspended floor and the ground must be in accordance with the following:
(a) The sub-floor space must—
(i)be cleared of all building debris and vegetation; and
(ii)be cross-ventilated by means of openings; and
(iii)contain no dead air spaces; and
(iv)be graded to prevent surface water ponding; and
(v)have evenly spaced ventilation openings.
(b) In double leaf masonry walls, the cross ventilation openings specified in (a) must be provided in both leaves of the masonry, with inner-leaf openings being aligned with outer-leaf openings to allow an unobstructed flow of air.
I Internal walls constructed in sub-floor spaces must be provided with openings—
(i)having an unobstructed area equivalent to that required for the adjacent external openings; and
(ii)which are evenly distributed throughout such internal walls.
(d) The clearance between the ground surface and the underside of the floor, including any horizontal framing member, must be as per Table below.
(e) The sub-floor ventilation openings in internal and external walls must be as per Table below
(f) Where ventilation is obstructed by patios, or the like, additional ventilation must be provided to ensure that the overall level of ventilation is maintained.
(g) Where the ground or sub-floor space is excessively damp or subject to frequent flooding, in addition to the requirements of (a) to (f)—
(i)the area of sub-floor ventilation required in I must be increased by 50%; or
(ii)a sealed impervious membrane must be provided over the ground; or
(iii)Durability Class 1 or 2 timbers or H3 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4 must be used.
SUB-FLOOR VENTILATION AND CLEARANCE
<table>
<tr><th rowspan="2">Climate zone (see Figure F1.12)</th><th colspan="2">Minimum sub-floor ventilation (mm²/m of wall)</th><th colspan="2">Minimum height from ground surface (mm)</th></tr>
<tr><th>No membrane</th><th>Ground sealed with impervious membrane</th><th>Termite inspection not required</th><th>Termite inspection required (see note)</th></tr>
<tr><td>3</td><td>6000</td><td>3000</td><td>150</td><td>400</td></tr>
</table>
</td><td>CR. Details to be provided with Construction Certificate documentation.</td></tr>
</table>

Section F	Health and Amenity	Comment
F1.13	**Glazed Assemblies**:- Windows, sliding doors, adjustable louvres, shopfronts; window walls must comply with AS2047 -2014 if located in an external wall for resistance to water penetration. Some concessions apply to class 7 & 8.	**CR. Details to be provided with Construction Certificate documentation.**
PART F2	**SANITARY & OTHER FACILITIES**	
F2.1	**Facilities in residential buildings**:- Minimum facilities for class 2, 3 and 9c and class 4 parts must be provided in accordance with Table F2.1	NA.
F2.2	**Calculation of number of occupants and fixtures**:- Sanitary facilities to be determined by Clause D1.13 of the BCA unless the building owner can provide explicit occupant numbers.	Noted
F2.3	**Facilities in Class 3 to 9 Buildings**, Table F2.3:-	**CR. Number of proposed Sanitary Ground Floor Facilities are able to cater for 152 patrons and associated staff for cafe, and other areas of building. See Section 3.2 of this Report.** **Details to be provided with Construction Certificate documentation.**
F2.4	**Facilities for people with disabilities**:- Accessible sanitary facilities to be provided in accessible parts of the building as indicated in table F2.4 (a) in accordance with AS1428.1 – 2009, and: -. Accessible showers in accordance with table F2.4 (b), At each bank of toilets where there is 1 or more toilets in addition to an accessible unisex sanitary compartment at that bank, an ambulant facility suitable for males and females. Accessible unisex sanitary facility must contain a closet pan, washbasin, shelf or bench top and means of disposing sanitary towels. Accessible unisex sanitary facility must be entered without crossing an area reserved for one sex only. If 2 or more accessible unisex sanitary facilities provided, the number of left and right hand mirror image facilities must be as even as possible. If male and female toilets are at different locations, accessible unisex sanitary facilities are required at one of those locations only. Accessible unisex sanitary compartment or shower need not be provided on a storey not required to have a lift or ramp in accordance with BCA Cl D3.3 (small floor area)	**?. Accessible and Ambulant Facilities to be in accordance with AS1428.1-2009. Refer to Access Consultants Report. Details to be provided with Construction Certificate documentation.**
F2.5	**Construction of sanitary compartments**:- Doors to fully enclosed sanitary compartments must be constructed at least 1.2m from the pan, or be outward opening, or removal from the outside.	**CR. Individual WC's require doors to swing outwards, be sliding, or be readily removable from outside, unless 1.2m setback between doorway and WC. Details to be provided with Construction Certificate documentation.**

Section F	Health and Amenity	Comment
F2.6	**Interpretation** : urinals and wash basins:	Noted
F2.7	deleted	NA.
F2.8	**Waste Management**:- Slop-hoppers to be provided in class 9a and class 9c buildings	NA
PART F3	**ROOM SIZES**	
F3.1	**Height of rooms**:- • 2.4m high generally for habitable rooms and 2.1m high for non-habitable rooms, corridors, kitchen. Note: In rooms with a sloping ceiling, reduced heights apply. • Class 9b Classrooms or other parts that accommodate not more than 100 persons – 2.4m and parts that accommodate more than 100 persons – 2.7m. • Commercial kitchens minimum 2.4m high.	**CR. Ceiling height to be at least 2.4m to habitable rooms / commercial kitchen. Note: Class 9b areas proposed to be used by less than 100 persons.** **Details to be provided with Construction Certificate documentation.**
PART F4	**LIGHT AND VENTILATION**	
F4.1	**Provision of Natural light**:- • Class 2 and 4 – all habitable rooms; • Class 3 – all bedrooms and dormitories; • Class 9a/9c – all rooms used for sleeping; • Class 9b – classrooms for schools; playrooms for childhood centres	NA
F4.2	**Methods and extent of natural lighting**:- • Provided by windows with light transmission and are open to sky or face a courtyard; • Setbacks to obstructions/boundary generally 1m – exceptions apply to class 2, 3, 4, 9a and 9c	**CR. This will readily achieve compliance for new works. If natural lighting proposed must be via windows required that are not less than 10% of the floor area of the room, or by rooflights that are not less than 3% of the floor area of the room. See also F4.4. Details to be provided with Construction Certificate documentation.**
F4.3	**Natural light borrowed from adjoining room**:- Applies in some instances in class 2, 3 and class 4 parts	NA
F4.4	**Artificial lighting**:- Artificial lighting must be provided to the building to all rooms that are frequently occupied and all corridors, lobbies, internal stairways and circulation spaces and paths of egress. The lighting system must comply with AS/NZS 1680 – 2009.	**CR. Required for office, corridors, stairways, fully enclosed rooms such as kitchen wash/prep area, sanitary facilities, Boat hire kitchenette and other areas occupied. Details to be provided with Construction Certificate documentation.**

Section F	Health and Amenity	Comment
F4.5	**Ventilation of rooms**:- A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupies by a person for any purpose must have either natural or mechanical ventilation. Mechanical Ventilation for occupants of the building is required to comply with AS 1668.2 – 2012 and AS/NZS 3666.1 – 2011	**CR. Required to office areas, fully enclosed rooms such as kitchen wash/prep area, sanitary facilities, Boat hire kitchenette and other areas occupied. Natural ventilation via openable windows, doors or louvres required that are not less than 5% of the floor area of the room, or Mechanical Ventilation in accordance with AS1668.2-2012. Details to be provided with Construction Certificate documentation..**
F4.6	**Natural ventilation**:- Relates to methods of providing natural ventilation through openings in the building, ie openings 5% of floor area of room.	**CR. Natural ventilation via openable windows, doors or louvres required that are not less than 5% of the floor area of the room. Details to be provided with Construction Certificate documentation.**
F4.7	**Ventilation borrowed from adjoining rooms**:- Ventilation can be borrowed if both rooms are within the same SOU or an enclosed veranda is common property	Noted
F4.8	**Restriction on position of water closets and urinals**:- A room containing a closet pan/urinal must not open directly into a kitchen; pantry; restaurant; public dining room; dormitory in a class 3; public assembly room; workplace used by more than 1 person	**?. Sanitary facilities proposed for Boat Hire areas need to be provided with air lock to separate kitchenette from WC. Details to be provided with Construction Certificate documentation.**
F4.9	**Airlocks**: Airlocks, mechanical ventilation and screens can be utilised where WCs open into rooms as indicated in clause F4.8.	**CR. Details to be provided with Construction Certificate documentation..**
F4.10	Repealed	
F4.11	**Carparks**:- Every storey of a carpark, except an open deck carpark, must be provided with either mechanical ventilation complying with AS1668.2 of permanent natural ventilation.	NA.
F4.12	**Kitchen local exhaust ventilation**:- Commercial kitchen to be provided with kitchen exhaust hood complying with AS/NZS1668.1 and AS1668.2 where:- • Any cooking apparatus has a total max. electrical power input > 8kW or a total gas power input exceeding 29MJ/h; or • The total max. power input to >1 apparatus exceeds 0.5kW electrical power or 1.8MJ gas per m^2 of floor area of the room or enclosure.	**CR. Details to be provided with Construction Certificate documentation..**
PART F5	**SOUND TRANSMISSION AND INSULATION**	
F5.1	**Application of Part**: The DTS provisions of this part apply to class 2, 3 and 9c buildings	NA. Applies to Class 2, 3 or 9c parts of building only.
F5.2	**Determination of airborne sound insulation ratings**:-	NA
F5.3	**Determination of impact sound insulation ratings**:-	NA
F5.4	**Sound Insulation of floors**:-	NA

Section F	Health and Amenity	Comment
F5.5	**Sound insulation rating of walls**:-	NA
F5.6	**Sound insulating rating of services**:-	NA
F5.7	**Sound isolation of Pumps**:- Flexible coupling must be used at the point of connection between service pipes in a building and any pump.	NA

Section G	Ancillary Provisions	Comment
G1.2	**Refrigerated chambers, strongrooms or vaults**:- Provides min. safety provisions for refrigerated chambers, etc of sufficient size for a person to enter, must have- • Door capable of being opened from inside without key, • Lighting controlled by a switch located adjacent to the entrance door inside the room, • Indicator lamp outside the room which is illuminated when the interior lights are switched on, • An alarm located outside but controlled from inside that achieves a sound pressure level of 90dB(A) when measured 3m from the sounding device. • Door with clear width of 600mm and height of 1.5m.	**CR. Details to be provided with Construction Certificate documentation..**
G2	**Heating Appliances** Provides minimum installation requirements for heating appliances (eg stove, heater or similar)	NA
G3	**Atrium Construction**	
G3.1	**Application of part** Applies to buildings with atrium connecting 3 or more storeys	NA
G4	**Alpine Areas**	NA
G5	**Construction in Bushfire Zones**	NA, unless required by DA.

Section H	Theatres, Stages and Public Halls	Comment
H1.1	**Application of part** H1.4 and H1.7 applies to every enclosed Class 9b building (ie school assembly building, church or community hall and the like).	NA

Section J	Energy Efficiency	Comment
PART J1	**Building Fabric** Applies to Conditioned Space areas other than Residential. Due to the NSW Variations only the following applies to the Residential areas; • J1.2 - Thermal Construction. • J1.3 (d) & J1.5 (c) – Thermal Breaks. • J1.3 (c) – Compensation for loss of ceiling insulation. • J1.6 (c) & J1.6 (d) – Floor edge insulation	**CR. Construction of roof, ceiling and external walls to satisfy Section J.** **Details to be provided with Construction Certificate documentation.**

Section J	Energy Efficiency	Comment
Part J2	**External Glazing - Fabric -** Applies to Conditioned Space areas other than Residential. Due to the NSW Variations only the BASIX Provisions applies to the Residential areas.	**CR. Proposed glazing to satisfy Section J.** **Details to be provided with Construction Certificate documentation.**
PART J3	**BUILDING SEALING**	
J3.1	**Application of part** Applies to Commercial areas and due to NSW Variations Clauses J3.2 to J3.7 applies to Residential areas also.	Noted
J3.2	**Chimneys and Flues**	NA
J3.3	**Roof Lights** A roof light serving a conditioned space or habitable room in Climate zones 4 to 8 must be sealed or capable of being sealed, constructed with; • An imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or • A weatherproof seal; or A shutter system readily operated either manually, mechanically or electronically by the occupant.	NA
J3.4	**Windows and Doors** A seal to restrict air infiltration is to be fitted to each edge of the proposed external doors, openable external windows or the like that form part of the envelope of the *'conditioned space'* of the building, ie: • These requirements do not apply to a window complying with AS 2047-1999, and • For an external swing door, the bottom edge seal must be a draft protection device, and • For other edges of an external door or the edges of an openable window or other such opening, may be a foam or rubber compressible strip, fibrous sea, etc. The external entrance doors must be provided with a self-closing device with the exception of a single set of main entrance to the café.	**CR. Details to be provided with Construction Certificate documentation.**
J3.5	**Exhaust Fans** Miscellaneous exhaust fans where proposed are to be fitted with a sealing device such as self-closing damper or the like when serving the envelope of the *'conditioned space'* of the building.	**CR. Details to be provided with Construction Certificate documentation.**
J3.6	**Construction of Roofs, Walls and Floors** Roofs, external walls, external floors and any opening such as a window, door or the like to the building must be constructed to minimize air leakage when forming part of the envelope of the *'conditioned space'* of the. This necessitates construction around openings are to be: • enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or • sealed by caulking, skirting, architraves, cornices or the like.	**CR. Details to be provided with Construction Certificate documentation.**
J3.7	**Evaporative Coolers** Any evaporative cooler installed to serve the building must be fitted with a self-closing damper or the like.	**CR. Details to be provided with Construction Certificate documentation.**

Section J	Energy Efficiency	Comment
J4	**Air Movement**	NA
J5	**Air-conditioning and Ventilation Systems** Due to the NSW Variations Clauses J5.2 (a to (d) and (f) to (g), J5.3 and J5.4 applies Part J5 Provisions applies to Commercial parts.	**CR. Subject to Mechanical Consultant Report to be provided with Construction Certificate documentation.**
J6	**Artificial Lighting and Power** Due to the NSW Variations only the BASIX Provisions applies to Class 2 parts Part J6 Provisions applies to Commercial parts.	**CR. Subject to Electrical Consultant Report to be provided with Construction Certificate documentation.**
J7	**Hot Water Supply** Due to the NSW Variations only the BASIX Provisions applies to Class 2 parts. Clause 7.2 applies to Commercial parts.	**CR. Subject to Hydraulic Consultant Report. Details to be provided with Construction Certificate documentation.**
J8	**Facilities for Energy Monitoring** (a) A building or SOU with a floor area > 500m2 must have the facility to record the consumption of gas or electricity. (b) A building with a floor area > 2,500m2 must have the facility to record individual energy consumption of; • air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans, • artificial lighting, and • appliance power, and • central hot water supply, and • Internal transport devices including lifts, escalators and travelators where there is > 1 serving the building, and • Other ancillary plant. (c) The provisions of (b) do not apply to a Class 2 building with a floor area > 2,500m^2 where the total area of the common areas is < 500m^2.	NA

ANNEXURE B (Fire Safety Schedule)

Schedule of Essential Fire Safety Measures (Existing and Proposed)

The building is currently provided with the following existing essential fire safety measures and it is recommended that the building be provided with the following proposed essential fire safety measures, capable of performing and being maintained to the standard listed in the Schedule below. For the purposes of Clause 168 of the Environmental Planning and Assessment Regulation 2000, these standards will be considered to be the current fire safety schedule for the building.

SCHEDULE

Measure	Design/ Installation Standard	Existing Installation	Proposed Installation
Mechanical Ventilation (auto-shutdown)	NSW Table E2.2b and Clause 6 of BCA Specification E2.2a	**-**	**Tbc**
Paths of Travel	EP&A Reg 2000 Clause 186	**?**	✓
Portable Fire Extinguishers	BCA Clause E1.6 & AS2444 – 2001	**?**	✓

Tbc – Requirements for Mechanical Ventilation auto shutdown to be confirmed based provisions of air handling system to Ground Floor Class 9b area.

The above list may be subject to variation with any Alternative Fire Engineered Solution Report, e.g. Fire Hydrant, External Walls and Protection of Openings in External Walls.