



# **Building Code of Australia**

## **Assessment Report**

**182-198 Victoria Rd & 28-30 Faversham St  
Marrickville NSW**





Client: Toga Wicks Park Developments Pty Ltd

Report Number: RE183926

Revision: 06

11 NOVEMBER 2019

## REPORT REVISION HISTORY

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01 Draft	23.01.19	Draft issued for comment <b>Prepared by</b> Chris Michaels Executive Director
02	07.02.19	Issued for DA submission <b>Prepared by</b> Chris Michaels Executive Director 
03	12.02.19	Minor corrections <b>Prepared by</b> Chris Michaels Executive Director 
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05	24.10.19	Updated due to revised plans <b>Prepared by</b> Chris Michaels Executive Director Draft
06	11.11.19	Updated due to revised plans & Toga comments <b>Prepared by</b> Chris Michaels Executive Director 



182-198 Victoria Rd &  
28-30 Faversham St, Marrickville  
BCA Assessment Report  
Project 183986  
11 November 2019

#### **Certification**

This report has been authorised by City Plan Services P/L, with input from a number of other expert consultants. To the best of our knowledge the accuracy of the information contained herein is neither false nor misleading. The comments have been based upon information and facts that were correct at the time of writing.

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## 1. EXECUTIVE SUMMARY

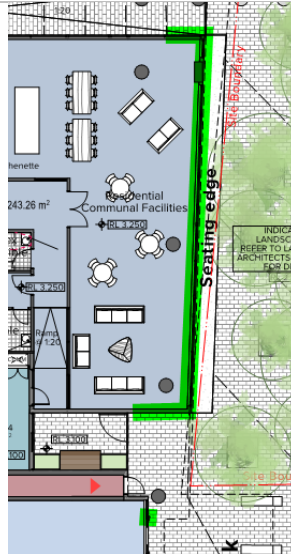
This report serves as an assessment for compliance with the Building Code of Australia for the construction of residential and retail development at 182-198 Victoria Road and 28-30 Faversham Street Marrickville. This report has been prepared, on behalf of Toga Wicks Park Developments Pty Ltd, to establish compliance to the Building Code of Australia and relevant Acts and Regulations of the development application documentation for the proposed works.

The design as proposed is capable of complying with the Building Code of Australia and will be subject to construction documentation that will provide appropriate details to demonstrate compliance. This report has identified areas of non-compliance with the deemed-to-satisfy provisions and indicates the design intent to demonstrate compliance with the Performance Requirements of the BCA. Whilst the performance-based solutions are to be design developed, it is my view that the solutions will not impact on the current design.

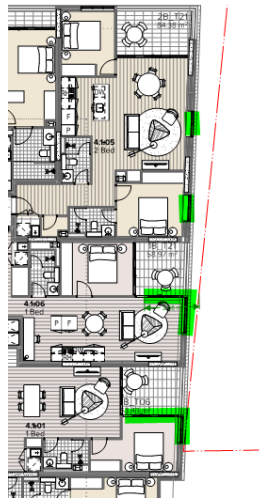
The following is a summary table of non-compliance with the deemed-to-satisfy provisions of the BCA, which are proposed to be justified by performance solution.

*Table 1: Summary of Non-Compliance Issues with Deemed-to-Satisfy Provisions of the BCA.*

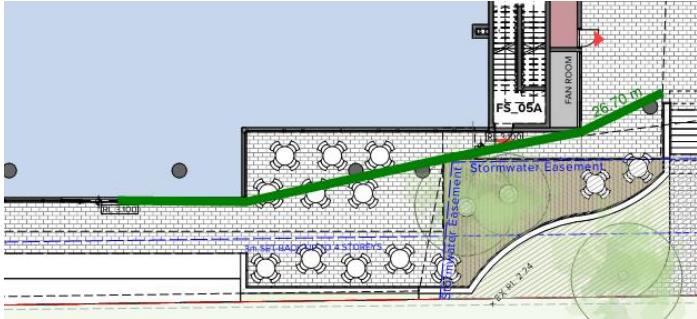
Item Number	BCA Clause	Performance Requirements	Issue
1	C2.7	CP1	The fire wall separating the travellers form Basement 1 is proposed to incorporate glazing which will not have the required FRL.
2	C3.2	CP2	The following openings are located less than 3m from the allotment boundary and are require protection in accordance with Clause C3.4. (a) Ground floor glazing/openings in the east elevation



(b) Level 1 to Level 11 glazing/openings in east elevation of Building 4

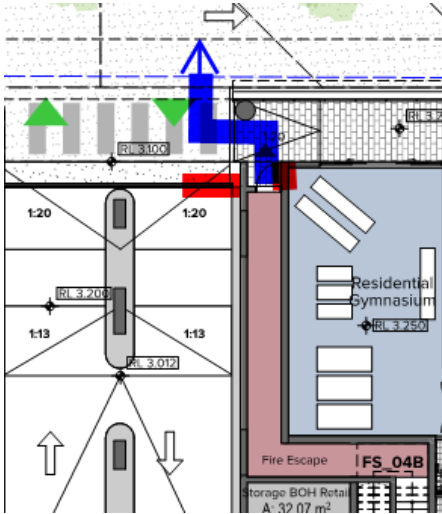


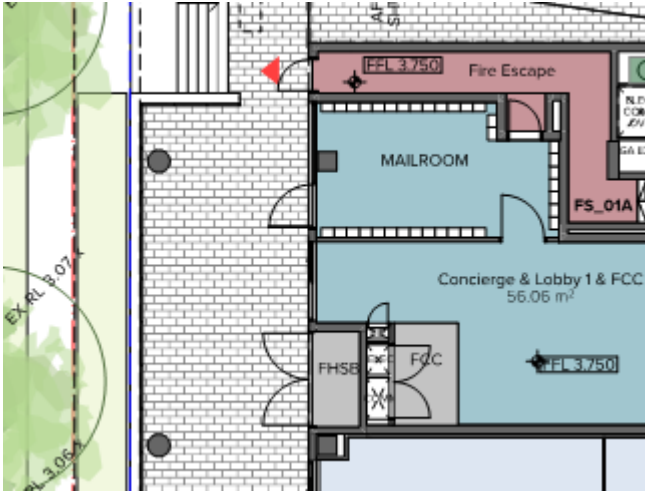
A fire engineered performance solution is proposed demonstrating compliance with the performance requirements of the BCA. The adjoining through site link is to be burdened by an easement in favour of council resulting in a condition that a building on the adjoining site cannot be built within 6 m of the subject building.

Item Number	BCA Clause	Performance Requirements	Issue
3	Clause 3.1 of Spec C1.1	CP1 & CP2	The retail fire compartment is proposed to have reduced FRL (2 hrs).
4	D1.2	DP4	<p>Each part of the building must have access to at least two exits. The following areas have access to one exit:</p> <ul style="list-style-type: none"> <li>(a) Some Ground Floor retail tenancies</li> <li>(a) Ground Floor residential lobbies</li> <li>(b) Ground Floor plant rooms</li> <li>(c) Building 1</li> <li>(d) Building 2</li> </ul>
5	D1.2	DP4	<p>The egress from the ground floor Retail 5 south exit door is not to open space (space open above to the sky). Egress is to a covered colonnade to which travel to complying open space is approximately 26 m. Note that egress to the park is not deemed to satisfy.</p> 
6	D1.2	DP4	<p>Exits are required to be connected to the road or open space. An open space is a space on the allotment open to the sky and connected directly with a public road. The discharge of some exits involve travel via the adjoining property to the east. Performance justification will be required and will necessitate an easement right of way over the adjoining property.</p>
7	DP1.4	DP4	<p>The following areas contain extended travel distances that are proposed to be performance justified:</p> <ul style="list-style-type: none"> <li>(a) Building 1, Level 1 to 5 – Unit entry doors up to 7.5 m to exit.</li> <li>(b) Building 2, Level 1 to 5 – Unit entry doors up to 7.9 m to exit.</li> </ul>



Item Number	BCA Clause	Performance Requirements	Issue
			<ul style="list-style-type: none"> <li>(c) Building 4 Level 1 to 11 – Unit entry doors up to 8.0 m to a point of choice.</li> <li>(d) Building 5 Level 1 to 11 – Unit entry doors up to 8.4 m to a point of choice.</li> </ul>
8	DP1.4	DP4	<p>The following basement and Ground Floor areas contain extended travel distances that are proposed to be performance justified:</p> <ul style="list-style-type: none"> <li>(a) Basement 01 &amp; 02 - maximum 60 m to the nearest exit.</li> <li>(b) Ground floor – The Supermarket has extended travel distances of up to 46 m to the nearest exit. This will be extended further on internal fitout.</li> </ul>
9	DP1.5	DP4	<p>The following non-compliances are proposed to be addressed by performance solution:</p> <ul style="list-style-type: none"> <li>(a) Basement 01 &amp; 02 – Maximum 102 m between alternative exits</li> <li>(b) Ground floor – The distance between alternative exits from west end of Retail 5 is up to 73 m and fitout of the retail tenancy is likely to extend these travel distances further.</li> <li>(c) Level 1 outdoor Common area – Distance between alternative exits is up to 83 m.</li> <li>(d) Building 4 Level 1 to 11 – Distance between alternative exits is 7.4 m.</li> <li>(e) Building 5 Level 1 to 11 – Distance between alternative exits is 4.7 m.</li> </ul>
10	D1.7	DP5	<p>Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or into a covered area that—</p> <ul style="list-style-type: none"> <li>(A) adjoins a road or <i>open space</i>; and</li> <li>(B) is open for at least 1/3 of its perimeter; and</li> <li>(C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</li> </ul>

Item Number	BCA Clause	Performance Requirements	Issue
			<p>(D) provides an unimpeded path of travel from the point of discharge to the road or <i>open space</i> of not more than 6 m.</p> <p>The following stairs do not comply with this requirement:</p> <ul style="list-style-type: none"> <li>Building 2 FS02 discharging to west – The distance to open space is 7.7 m.</li> <li>Building 5 FS05A stair discharging to south - The distance to open space is over 7.5 m.</li> </ul>
11	D1.7	DP5 & CP2	<p>Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 and any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. The vehicular way entry door will not contain deemed to satisfy protection.</p> 
12	D2.19	DP2	<p>The after hours shutter/gate to the retail malls are exits and will not comply with this clause travellers, into the carpark will not comply with this clause.</p>

Item Number	BCA Clause	Performance Requirements	Issue
13	D2.21	DP2	The afterhours shutter/gate to the retail malls are exits and will not comply with this clause. The auto sliding door on Basement 01 providing egress from the travellers, into the carpark will not comply with this clause.
14	E1.3	EP1.3	It is proposed to utilise AS2419.1-2017 as the design standard.
15	Spec E1.8	EP1.6	<p>A fire control centre, for building between 25 – 50 m in effective height is required in accordance with this clause. The fire control centre is located in Lobby 1. Access to the fire control centre from the street involves a vertical rise of more than 300 mm therefore performance justification is required.</p> 
16	E2.2	EP2.2	The fire compartment containing the class 6 portion is not proposed to be provided with smoke exhaust in accordance with BCA Spec E2.2b.

Item Number	BCA Clause	Performance Requirements	Issue
17	E2.2	EP2.2	Fire isolated stairs are proposed to be pressurised, as required, except that the basement stair portion of the fire isolated stairs are not proposed to be pressured.
18	F4.1 – F4.3	FP4.1	Windows to habitable rooms in the eastern elevation, in close proximity to the east boundary, do not comply with the setback requirements of this clause.

## **2. INTRODUCTION**

### **2.1. General**

This report serves as an assessment for compliance with the Building Code of Australia for the construction of residential and retail development at 182-198 Victoria Road and 28-30 Faversham Street Marrickville.

### **2.2. Purpose of Report**

This report has been prepared, on behalf of Toga Wicks Park Developments Pty Ltd, to establish compliance to the Building Code of Australia and relevant Acts and Regulations of the development application documentation for the proposed works.

### **2.3. Report Basis**

The following information has been directly referenced or relied upon in the preparation of this report:

- (a) Architectural plans prepared by Turner, as identified in the attached Appendix 1.
- (b) The Building Code of Australia 2016 Amendment 1, inclusive of NSW variations (See Note 1).
- (c) Environmental Planning and Assessment Act 1979.
- (d) Environmental Planning and Assessment Regulation 2000.

Note1: Building Code of Australia (BCA) 2016 Amendment 1 was adopted in NSW on 12 March 2018. The amendment of the BCA in force at the date of lodgement of a Construction Certificate is the version called up by Clause 98 of the Environmental Planning & Assessment Regulation 2000 for the purpose of the building design..

### **2.4. Exclusions and Limitations**

This report does not consider the following, except where specifically mentioned:

- Structural design.
- The Disability Discrimination Act 1992 (access for people with disabilities has been assessed in accordance with Part D3 of the BCA, however additional measures may be required to be provided subject to the Disability Discrimination Act 1992)
- Disability (Access to Premises – Building) Standards 2010.

### **3. BUILDING CODE OF AUSTRALIA ASSESSMENT**

#### **3.1. Classification (A3.2)**

The proposed building consists of:

Basement 01 to 02	Class 7a Carpark
Ground Level	Class 2 Residential Class 6 Retail
Level 01 to 11	Class 2 Residential

#### **3.2. Effective Height (A1.1)**

The proposed building will have an effective height of 36.93 m (Level 11 RL 39.95 – Ground Floor RL 3.02).

#### **3.3. Rise in Storeys (C1.2)**

The proposed building will consist of a rise in storeys of twelve (12).

#### **3.4. Type of Construction (C1.1)**

Type A construction in accordance with Specification C1.1 of the BCA, is the applicable type of construction.

## 4. BUILDING CODE OF AUSTRALIA ASSESSMENT

### 4.1. Structure (BCA Section B)

BCA Clause	Title	Assessment and Comment	Status
B1.1	Resistance to actions	The structural design is to be completed by a Structural Engineer to meet the requirements of this provision.	Capable of Complying
B1.2	Determination of individual actions	The structural design is to be completed by a Structural Engineer to meet the requirements of this provision.	Capable of Complying
B1.4	Determination of structural resistance of materials & forms of construction	<p>The structural resistance of the following materials and forms of construction for the following elements are to be in accordance with the standards nominated in this clause:</p> <ul style="list-style-type: none"> <li>(a) Masonry</li> <li>(b) Concrete construction</li> <li>(c) Steel construction</li> <li>(d) Composite steel and concrete</li> <li>(e) Aluminium construction</li> <li>(f) Timber construction</li> <li>(g) Piling</li> <li>(h) Glazing assemblies</li> <li>(i) Termite risk management</li> <li>(j) Roof construction</li> <li>(k) Particleboard structural flooring</li> <li>(l) Garage doors</li> <li>(m) Lift shafts</li> </ul>	Capable of Complying
B1.5	Structural Software	Structural software used in computer aided design is to comply with the requirements of this provision.	Capable of Complying
B1.6	Construction of buildings in flood hazard areas	A Class 2, 3, 4, 9a or 9c building is required to comply with the ABCB standards for Construction of Buildings in Flood Hazard Areas.	Capable of Complying

## 4.2. Fire Resistance (BCA Section C)

BCA Clause	Title	Assessment and Comment	Status
C1.1	Type of construction required	The type of fire resisting construction applicable is Type A construction. The minimum FRL's are to be achieved.	Capable of Complying
C1.2	Calculation in rise in storeys	The building contains a rise in storeys of twelve (12).	Capable of Complying
C1.8	Lightweight construction	Any proposed lightweight construction is to comply with Specification C1.8.	Capable of Complying
C1.9	Non-combustible building elements	<ol style="list-style-type: none"> <li>1. In a building required to be Type A or B construction, the following building elements and their components must be non-combustible: <ol style="list-style-type: none"> <li>(b) External walls and common walls, including all components incorporated in them including the façade covering, framing and insulation.</li> <li>(c) The flooring and floor framing of lift pits.</li> <li>(d) Non-loadbearing internal walls where they are required to be fire-resisting.</li> </ol> </li> <li>2. 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.</li> <li>3. A loadbearing internal wall and loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification C1.1.</li> <li>4. The requirements of (1) and (2) do not apply to gaskets, caulking, sealants and dampproof courses.</li> <li>5. The following materials may be used wherever a non-combustible material is required: <ol style="list-style-type: none"> <li>(e) Plasterboard.</li> <li>(f) Perforated gypsum lath with a normal paper finish.</li> <li>(g) Fibrous-plaster sheet.</li> </ol> </li> </ol>	Capable of Complying

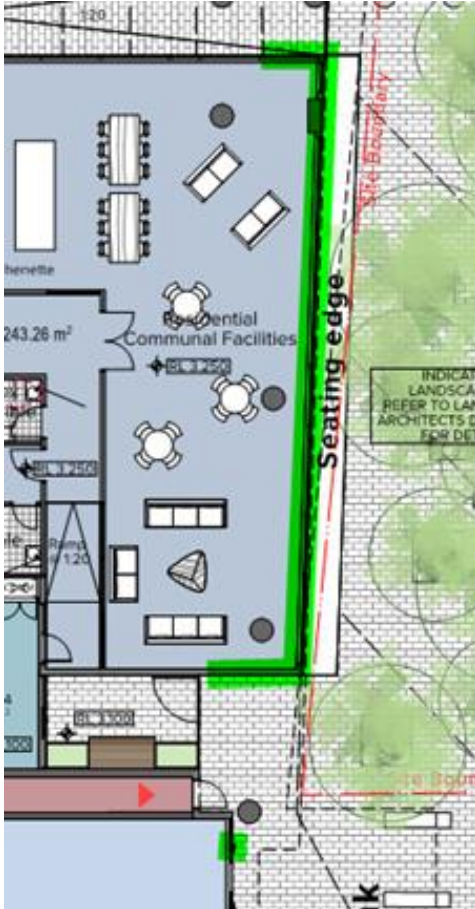


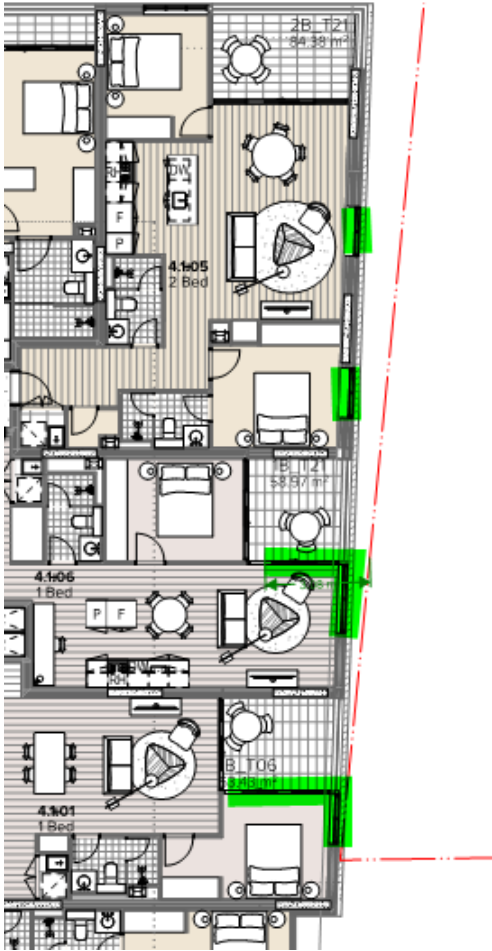
BCA Clause	Title	Assessment and Comment	Status
		<ul style="list-style-type: none"> <li>(h) Fire-reinforced cement sheeting.</li> <li>(i) Pre-finished metal sheeting having a combustible surface finish not exceeding 1mm thickness and where the Spread-of-Flame Index of the product is not greater than 0.</li> <li>(j) Bonded lamination materials where –               <ul style="list-style-type: none"> <li>(i) Each lamina, including any core, is non-combustible; and</li> <li>(ii) Each adhesive layer does not exceed 1mm in thickness and the total thickness of the adhesive layers does not exceed 2mm; and</li> <li>(iii) The Spread of Flame Index and the Smoke-Developed Index of the bonded laminated materials as a whole do not exceed 0 and 3 respectively.</li> </ul> </li> </ul>	
C1.10	Fire hazard properties	Proposed building elements, internal linings, materials and assemblies are to be selected to comply with the required fire hazard properties of Specification C1.10. Evidence of compliance (test certificates) shall be obtained from the supplier or manufacturer.	Capable of Complying
C1.14	Ancillary Elements	<p>An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following:</p> <ol style="list-style-type: none"> <li>1. An ancillary element that is non-combustible.</li> <li>2. A gutter, downpipe or other plumbing fixture or fitting.</li> <li>3. A flashing.</li> <li>4. A grate or grille not more than 2m<sup>2</sup> in area associated with a building service.</li> <li>5. An electrical switch, socket-outlet, cover plate or the like.</li> <li>6. A light fitting.</li> <li>7. A required sign.</li> <li>8. A sign other than one provided under (1) or (7) that-</li> </ol>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		<p>(a) Achieves a ground number of 1 or 2; and</p> <p>(b) Does not extend beyond one storey; and</p> <p>(c) Does not extend beyond one fire compartment; and</p> <p>(d) Is separated vertically from other signs permitted under (8) by at least 2 storeys.</p> <p>9. An awning, sunshade, canopy, blind or shading hood other than one provided under (1) that –</p> <p>(a) Meets the requirements of Table 4 of Specification C1.10 as for an internal element; and</p> <p>(b) Serves a storey –</p> <p>(i) At ground level; or</p> <p>(ii) Immediately above a storey at ground level; and</p> <p>(iii) Does not serve an exit, where it would render the exit unusable in a fire.</p> <p>10. A part of a security, intercom or announcement system.</p> <p>11. Wiring.</p> <p>12. A paint, lacquer or a similar finish.</p> <p>13. A gasket, caulking, sealant or adhesive directly associated with (1) to (11).</p>	
C2.2	General floor area and volume limitations	<p>The following maximum fire compartmentation floor area and volume limitations apply to the Class 6 fire compartments:</p> <p>Floor area – 5,000 m<sup>2</sup></p> <p>Volume – 48,000 m<sup>3</sup></p> <p>The building complies with the general floor area and volume limitations identified by this clause.</p> <p>The retail fire compartment has a floor area of 4,110 m<sup>2</sup> and therefore complies. The residential zones on the ground floor have a floor areas of 411 m<sup>2</sup>.</p> <p>Should the residential lobbies and residential communal facility be assessed as part of the retail</p>	Complies

BCA Clause	Title	Assessment and Comment	Status
		fire compartment, the compartment area is still under 5,000 m <sup>2</sup> .	
C2.6	Vertical separation of openings in external walls	The building is required to be protected with sprinklers throughout and therefore spandrel separation is not required.	Note
C2.7	Separation by fire walls	<p>The following fire walls are required:</p> <ol style="list-style-type: none"> <li>1. Fire wall on Ground Floor separating carpark entry ramp from remainder of Ground Floor.</li> <li>2. Fire wall at basement 1 separating the travellers from the remainder of Basement 1.</li> <li>3. A fire wall may be provided to separate the Ground Floor Residential zones from the Retail zones. Alternatively, the Ground Floor Residential zones may form part of retail fire compartment.</li> </ol> <p>Fire walls are to be designed in accordance with this clause except the fire wall separating the travellers from basement 1 is proposed to be incorporate glazing. This proposed to be addressed by performance justification.</p>	Performance Solution
C2.8	Separation of classifications in the same storey	<p>If a building has parts of different classifications located alongside one another in the same storey,</p> <ul style="list-style-type: none"> <li>▪ each building element in that storey must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or</li> <li>▪ the parts must be separated in that storey by a fire wall.</li> </ul> <p>Refer to comment sin C2.7 above.</p>	Capable of Complying
C2.9	Separation of classifications in different storeys	The floors between parts of different classifications must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
C2.10	Separation of lift shafts	<p>The lift shafts are required to be separated from the rest of the building with walls having an FRL of not less than that required by Table 3 of Specification C1.1.</p> <p>Emergency lifts are to be contained in shafts that have an FRL of at least 120/120/120.</p>	Capable of Complying
C2.11	Stairways and lifts in one shaft	The stairs and lifts are in different shafts.	Complies
C2.12	Separation of equipment	<p>The following rooms are required to be fire separated from the remainder of the building by 120/120/120 FRL construction:</p> <ul style="list-style-type: none"> <li>▪ Lift motor rooms and lift control panels.</li> <li>▪ Emergency Generators.</li> <li>▪ Central smoke control plant.</li> <li>▪ Hydrant pumps.</li> <li>▪ Boilers.</li> <li>▪ Battery rooms.</li> </ul>	Capable of Complying
C2.13	Electricity supply system	<p>The internal electricity substation is required to be fire separated from the remainder of the building. The BCA requires 2 hr separation.</p> <p>Any main switchboard located in the building which sustains emergency equipment operating in emergency mode, is required to be fire separated from the remainder of the building by 2 hr fire resisting construction.</p> <p>Construction should achieve an FRL of 120/120/120, doorways are required achieve an FRL of -/120/30 and to be self-closing and all penetrations in enclosures are to be appropriately fire stopped.</p> <p>All switchboards in the electrical distribution system, which sustain the electricity supply to the emergency equipment, must provide full segregation by way of enclosed metal partitions designed to prevent the spread of any fault from non-emergency equipment switchgear to the emergency equipment switchgear.</p>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		Electrical conductors and switchboards are required to comply with this clause.	
C2.14	Public corridors in Class 2 & 3 buildings	The building does not contain public corridors more than 40 m in length.	Complies
C3.2	Protection of openings in external walls	<p>The following openings are located less than 3m from the allotment boundary and are require protection in accordance with Clause C3.4.</p> <p>(c) Ground floor glazing/openings in the east elevation</p> 	Performance Solution

BCA Clause	Title	Assessment and Comment	Status
		<p>(d) Level 1 to Level 11 glazing/openings in east elevation of Building 4</p>  <p>A fire engineered performance solution is proposed demonstrating compliance with the performance requirements of the BCA. The adjoining through site link is to be burdened by an easement in favour of council resulting in a condition that a building on the adjoining site cannot be built within 6 m of the subject building.</p>	

BCA Clause	Title	Assessment and Comment	Status
C3.3	Separation of external walls and associated openings in different fire compartments	<p>Separation of openings between the carpark ramp and the remainder of the ground floor is not required due to the orientation of the openings.</p> <p>Should the Ground Floor Class 2 residential zones be fire separated from the remainder of the Ground floor (in lieu of adopting the Class 6 retail fire ratings) separation of external walls and opening will be required between the separate fire compartments.</p>	Complies
C3.4	Acceptable method of protection	<p>Windows requiring protection must be protected by one of the means:</p> <ul style="list-style-type: none"> <li>▪ External wall-wetting sprinklers with windows that are automatically or permanently fixed in the closed position.</li> <li>▪ -/60/- fire windows (Automatic or permanently fixed in the closed position)</li> <li>▪ -/60/- automatic fire shutters</li> <li>▪ Doorways which require protection can be protected externally with wall wetting sprinklers with doors that are self-closing or automatic closing, or</li> <li>▪ -/60/30 fire doors which are self-closing or automatic closing.</li> </ul> <p>Fire doors, fire windows and fire shutters are required to comply with Specification C3.4.</p>	Capable of Complying
C3.5	Doorways in fire walls	The fire walls do not contain doorways.	Note
C3.6	Sliding fire doors	The sliding fire doors are not proposed.	Note
C3.7	Protection of doorways in horizontal exits	The building does not contain horizontal exits.	Note
C3.8	Openings in fire isolated exits	The fire-isolated exits are required to be protected by -/60/30 self-closing fire doors.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
C3.9	Service penetrations in fire isolated exits	Service are not to penetrate through fire isolated exits unless permitted by this clause.	Capable of Complying
C3.10	Fire isolated lift shafts	<p>The lift doors are required to be -/60/- fire doors and comply with this provision.</p> <p>A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than -/60/60 if it exceeds 35 000 mm<sup>2</sup> in area.</p>	Capable of Complying
NSW C3.11	Bounding construction	<p>Doors from sole occupancy units opening into enclosed public corridors are required to be protected by -/60/30 self-closing fire doors.</p> <p>A doorway from any other room not within a SOU, must be protected by -/60/30 self-closing fire doors if it opens to a public corridor, public lobby or the like within the residential portion of the building. Doorways for garbage room enclosure within the public corridors would also be required to comply with the above requirements.</p>	Capable of Complying
C3.12	Openings in floors and ceilings for services.	Fire separation between floors is required to be maintained where services penetrate though floors unless the services are located in fire rated shafts.	Capable of Complying
C3.15	Openings for service installations	Services that penetrate a building element that is required to have an FRL must be protected utilising one of the options listed under this clause.	Capable of Complying
C3.16	Construction joints	Construction joints in building elements required to be fire resistant are required to be protected in accordance with this clause.	Capable of Complying
C3.17	Columns protected with lightweight construction to achieve an FRL	Any columns protected with lightweight construction to achieve an FRL must be installed in a manner that's identical to the tested prototype.	Capable of Complying



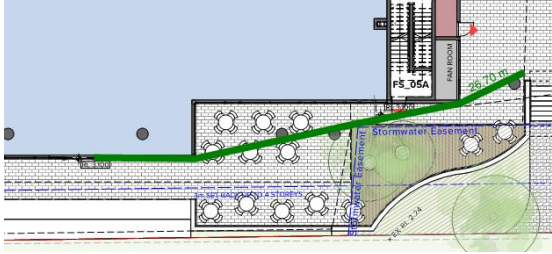
#### 4.3. Fire-Resisting Construction (Specification C1.1)

BCA Clause	Title	Assessment and Comment	Status
2.1	Exposure to fire source features	The requirements of this provision apply to the subject building.	Capable of Complying
2.2	Fire protection for support of another part	When determining FRL's applicable to a particular building element, the requirements of this clause are required to be complied with.	Capable of Complying
2.3	Lintels	Lintels are to be protected as required by the requirements of this clause.	Capable of Complying
2.4	Method of attachment not to reduce the fire resistance of building elements	The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.	Capable of Complying
2.5	General concessions	Roof top plan rooms need not have an FRL if they are non-combustible and they only contain equipment specified in this clause.	Capable of Complying
2.6	Mezzanine floors: concession	The building does not contain mezzanine's that are subject to this provision.	Capable of Complying
2.7	Enclosure of shafts	Fire rated shafts are to be enclosed at the top and bottom in accordance with the requirements of this clause.	Capable of Complying
3.1	Fire resistance of building elements	<p>Generally building elements are required to achieve the following FRL's;</p> <p>Carpark: 2 hrs</p> <p>Residential: 1½ hrs</p> <p>Retail: 3 hrs</p> <p>A loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be of concrete or masonry.</p> <p>The retail fire compartment is proposed to have reduced FRL (2 hrs) through performance justification</p>	Performance Solution

BCA Clause	Title	Assessment and Comment	Status
3.5	Roof: Concession	The roof is not required to achieve an FRL as the building: <ul style="list-style-type: none"> <li>▪ has a sprinkler system complying with Specification E1.5 installed throughout; or</li> <li>▪ is of Class 2 or 3.</li> </ul>	Complies
3.6	Roof lights	The location of roof lights complies.	Complies

#### 4.4. Access and Egress (BCA Section D)

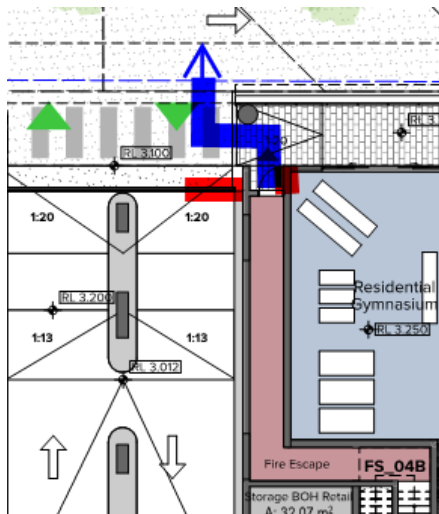
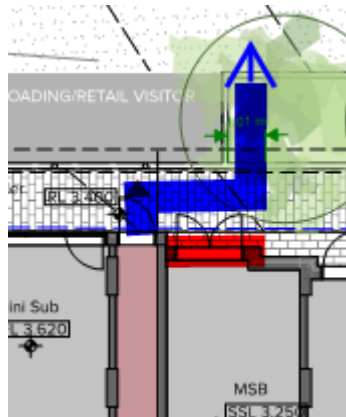
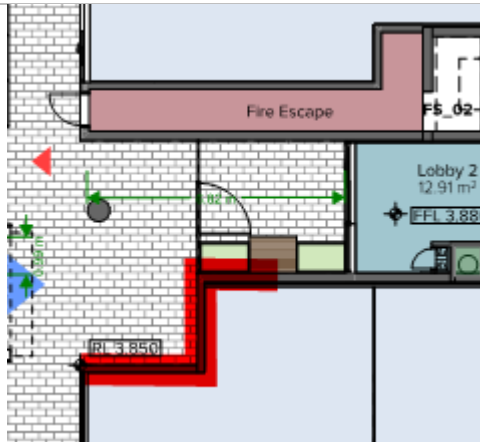
BCA Clause	Title	Assessment and Comment	Status
D1.2	Number of exits required	<p>Each part of the building must have access to at least two exits. The following areas have access to one exit and are proposed to be performance justified.</p> <ul style="list-style-type: none"> <li>(a) Some Ground Floor retail tenancies</li> <li>(b) Ground Floor residential lobbies</li> <li>(c) Ground Floor plant rooms</li> <li>(d) Building 1</li> <li>(e) Building 2.</li> </ul> <p>Performance justification is proposed.</p> <p>The egress from the ground floor Retail 3 south exit door is not to open space (space open above to the sky). Egress is to a covered colonnade to which travel to complying open space is</p>	Performance Solution

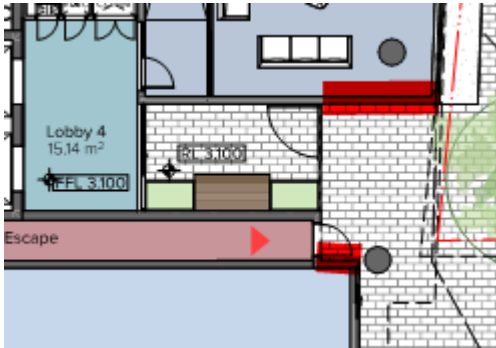
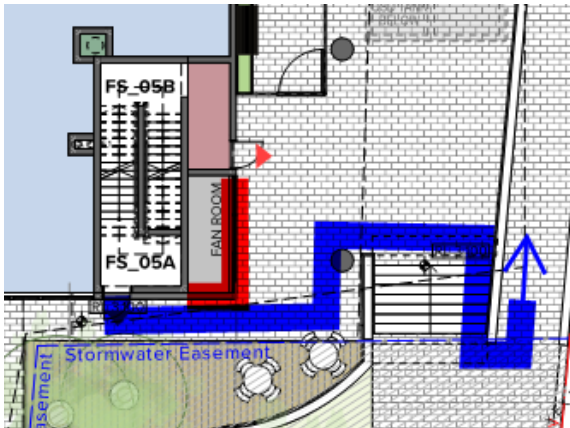
BCA Clause	Title	Assessment and Comment	Status
		<p>approximately 26 m. Note that egress to the park is not deemed-to-satisfy.</p>  <p>Performance justification is proposed.</p> <p>Exits are required to be connected to the road or open space. An open space is a space on the allotment open to the sky and connected directly with a public road. The discharge of some exits involve travel via the adjoining property to the east. Performance justification will be required and will necessitate an easement right of way over the adjoining property.</p>	
D1.3	When fire isolated exits are required	<p>Every required exit serving a building must be fire isolated if the exit stair connects and/or pass through more than 3 consecutive storeys. The tower stairs are required to be fire isolated stairs. Since the basement stairs are connected to the tower stairs in Ground Floor, the basement stairs are also required to be fire separated.</p>	Capable of Complying
D1.4	Exit travel distances	<p><b>Class 2 part</b> - The entrance doorway of any sole-occupancy unit must be not be more than 6m from an exit or from a point from which travel in different directions is available or 20m from a single exit serving the storey at the level of egress to a road or open space.</p> <p>No point on the floor of a room which is not in a sole-occupancy unit must be more than 20m from an exit or from a point at which travel in different directions to 2 exits is available.</p>	Performance Solution

BCA Clause	Title	Assessment and Comment	Status
		<p>The following areas contain extended travel distances that are proposed to be performance justified:</p> <ul style="list-style-type: none"> <li>(f) Building 1, Level 1 to 5 – Unit entry doors up to 7.5 m to exit.</li> <li>(g) Building 2, Level 1 to 5 – Unit entry doors up to 7.9 m to exit.</li> <li>(h) Building 4 Level 1 to 11 – Unit entry doors up to 8.0 m to a point of choice.</li> <li>(i) Building 5 Level 1 to 11 – Unit entry doors up to 8.4 m to a point of choice.</li> </ul> <p>Performance justification is proposed.</p> <p><b>Class 5, 6 and 7a parts</b> - No point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40m.</p> <p>The design contains the following extended travel distances in the Basements and Ground Level.</p> <ul style="list-style-type: none"> <li>(a) Basement 01 &amp; 02 - maximum 60 m to the nearest exit.</li> <li>(b) Ground floor – The Supermarket has extended travel distances of up to 46 m to the nearest exit. This will be extended further on internal fitout.</li> </ul> <p>The access points to Wicks Park cannot be considered as DTS exits as Wicks Park is not a road.</p>	
D1.5	Distance between alternative exits	<p>Exits that are required to serve as alternative means of egress must not be more than 45m apart in a residential building and not more than 60m in all other parts.</p> <p>Exits required as alternative means of egress must be located not less than 9m apart and located so that the alternative paths of travel do not converge such that they become less than 6m apart.</p>	Performance Solution

BCA Clause	Title	Assessment and Comment	Status
		<p>The following non-compliances are proposed to be addressed by performance solution:</p> <ul style="list-style-type: none"> <li>(a) Basement 01 &amp; 02 – Maximum 102 m between alternative exits</li> <li>(b) Ground floor – The distance between alternative exits from west end of Retail 5 is up to 73 m and fitout of the retail tenancy is likely to extend these travel distances further.</li> <li>(c) Level 1 outdoor Common area – Distance between alternative exits is up to 83 m.</li> <li>(d) Building 4 Level 1 to 11 – Distance between alternative exits is 7.4 m.</li> <li>(e) Building 5 Level 1 to 11 – Distance between alternative exits is 4.7 m.</li> </ul>	
NSW D1.6	Dimensions of exits and paths of travel to exits	<p>A required exit or path of travel to an exit are required to be a minimum unobstructed height of not less than 2m and minimum width of 1m.</p> <p>The aggregate exit width on the Ground floor is cable of complying.</p> <p>Suitable bollards would be required adjacent to the doorways of fire-stairs within the basement carpark, to restrict cars from blocking the exit.</p>	Capable of Complying
D1.7	Travel via fire isolated exits	<p>A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from:</p> <ul style="list-style-type: none"> <li>▪ a public corridor, public lobby or the like; or</li> <li>▪ a sole-occupancy unit occupying all of a storey; or</li> <li>▪ a sanitary compartment, airlock or the like.</li> </ul> <p>Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or into a covered area that—</p> <p>(A) adjoins a road or <i>open space</i>; and</p>	Performance Solution

BCA Clause	Title	Assessment and Comment	Status
		<p>(B) is open for at least 1/3 of its perimeter; and</p> <p>(C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</p> <p>(D) provides an unimpeded path of travel from the point of discharge to the road or <i>open space</i> of not more than 6 m.</p> <p>The following stairs do not comply with this requirement:</p> <p>(a) Building 2 FS02 discharging to west – The distance to open space is 7.7 m.</p> <p>(b) Building 5 FS05A stair discharging to south - The distance to open space is over 7.5m.</p> <p>Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 and any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. The following walls have been identified (in red) that require protection. The vehicular way entry door will not contain deemed to satisfy protection and will be performance justified.</p>	



BCA Clause	Title	Assessment and Comment	Status
		 	
D1.8	External Stairs or ramps in lieu of Fire-isolated exits	External stairs are not provided in lieu of fire isolated exits.	Note
D1.10	Discharge from exits	<p>The discharge point of the fire isolated exits is required to be connected to the road by a path that is not less than the exit width to which the external path serves.</p> <p>Where there is a change of level, the path must contain a complying stair or ramp.</p> <p>The discharge of the following alternative exits is as far apart as practicable.</p>	Capable of Complying
D1.11	Horizontal exits	Horizontal exits are not proposed.	Note



BCA Clause	Title	Assessment and Comment	Status
D1.12	Non-required stairways, ramps or escalators	Non-required stairways, ramps are not proposed.  The travellers connect two storeys.	Complies
D1.13	Number of persons accommodated	Populations have been assessed in accordance with Table D1.13.	Note
D1.16	Plant rooms and lift rooms: concession	Enclosed plant rooms are not accessed by ladders	Note
D1.17	Access to lift pits	Access to lift pits must be in accordance with this clause.	Capable of Complying
D2.2	Fire-isolated stairways and ramps	A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage to or impair the fire-resistance of the shaft.	Capable of Complying
D2.4	Separation of rising and descending stair flights	Rising and descending fire-isolated stairs are required to be separated with non-combustible construction and smoke proof construction in accordance with Clause 2 of Specification C2.5.	Capable of Complying
D2.7	Installation in exits and paths of travel	Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp.  Gas or other fuel services must not be installed in a required exit.  Electrical or telecommunications cupboards opening onto a corridor or the like must be of non-combustible construction and smoke sealed from	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		the corridor (including metal lining to inside face of door and smoke seals to door).  Only electrical wiring associated with services specified in this clause, are permitted to be installed in a fire isolated exit.	
D2.8	Enclosure of space under stairs and ramps	The space below the required fire-isolated stairways must not be enclosed to form a cupboard or similar enclosed space.	Capable of Complying
D2.9	Width of stairways	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.	Capable of Complying
D2.10	Pedestrian ramps	A ramp must—  (i) where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS 1428.1; or  (ii) in any other case, have a gradient not steeper than 1:8.  The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586.	Capable of Complying
D2.11	Fire-isolated passageways	The fire rating of fire-isolated passageways is required to be achieved from the outside.	Capable of Complying
D2.12	Roof as open space	If an exit discharges to a roof of a building, the roof must—  (a) have an FRL of not less than 120/120/120; and  (b) not have any rooflights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space.	Capable of Complying
NSW D2.13	Goings & risers	Goings and risers are to be designed to comply with this clause including:	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		<ul style="list-style-type: none"> <li>going and riser dimensions; and</li> <li>non-slip finish or non-skid nosings.</li> </ul>	
D2.14	Landings	Landings are to be designed in accordance with this clause.	Capable of Complying
NSW D2.15	Thresholds	<p>Thresholds are to comply with this clause.</p> <p>The fire stair FS04 discharging west of the vehicular ramp shall not discharge onto a kerb ramp, perpendicular to the slope. A minor design change is proposed.</p>	Capable of Complying
NSW D2.16	Barriers to prevent falls	Balustrades are to be designed to comply with this clause.	Capable of Complying
D2.17	Handrails	Handrails to stairs and ramps are to be design in accordance with this clause.	Capable of Complying
D2.18	Fixed platforms, walkways, stairways & ladders	Fixed platforms, walkways, stairways & ladders are to be design in accordance with this clause.	Capable of Complying
NSW D2.19	Doorways and doors	<p>A doorway serving as a required exit or forming part of a required exit must be designed in accordance with this clause.</p> <p>The after hours shutter/gate to the retail malls are exits and will not comply with this clause. Performance justification is proposed.</p>	Performance solution
D2.20	Swinging doors	Proposed swinging doors are required to be designed in accordance with this clause in relation to direction of swing; encroachment on stairways, ramps and passageways; and hold open devices.	Capable of Complying
NSW D2.21	Operation of latch	All the doors in the required exits, doors forming part of the required exits, and doors within paths of travel must be readily openable in accordance with this clause.	Performance solution

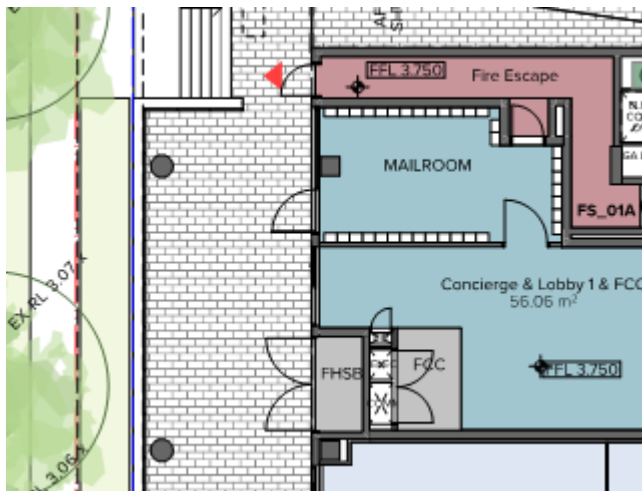
BCA Clause	Title	Assessment and Comment	Status
		<p>The afterhours shutter/gate to the retail malls are exits and will not comply with this clause.</p> <p>The auto sliding door on Basement 01 providing egress from the travelators, into the carpark will not comply with this clause.</p> <p>Performance justification is proposed.</p>	
D2.22	Re-entry from fire-isolated exits	<p>Doors of a fire-isolated exit must not be locked from the inside a fire-isolated exit serving any storey above an effective height of 25 m, throughout the exit.</p> <p>This requirement does not apply to a door fitted with a fail-safe device that automatically unlocks the door upon the activation of a fire alarm and:</p> <ul style="list-style-type: none"> <li>▪ on at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or</li> <li>▪ an intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is fixed adjacent to such doors explaining its purpose and method of operation.</li> </ul>	Capable of Complying
D2.23	Signs on doors	<p>A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to the following:</p> <ul style="list-style-type: none"> <li>▪ A required fire door providing direct access to a fire-isolated exit,</li> <li>▪ A required smoke door,</li> <li>▪ A fire door forming part of a horizontal exit;</li> <li>▪ A smoke door that swings in both directions;</li> <li>▪ door leading from a fire isolated exit to a road or open space,</li> </ul> <p>Signage is required to be in capital letters not less than 20 mm high in a colour contrasting with the background and state:</p>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		<p>1. for an automatic door held open by an automatic hold-open device:</p> <p><b>FIRE SAFETY DOOR- DO NOT OBSTRUCT</b></p> <p>or</p> <p>2. for a self-closing door:</p> <p><b>FIRE SAFETY DOOR</b> <b>DO NOT OBSTRUCT</b> <b>DO NOT KEEP OPEN</b></p> <p>or</p> <p>3. for a door discharging from a fire-isolated exit:</p> <p><b>FIRE SAFETY DOOR- DO NOT OBSTRUCT.</b></p>	
D2.24	Protection of openable windows	<p>A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in a bedroom in a Class 2, 3 or 4 building or a Class 9b early childhood centre.</p> <p>Where the lowest level of the window opening is less than 1.7 m above the floor the openable portion of the window must be protected with;</p> <ul style="list-style-type: none"> <li>▪ a device to restrict the window opening; or</li> <li>▪ a screen with secure fittings.</li> </ul> <p>A device or screen must not permit a 125mm sphere to pass through the window opening or screen and resist an outward horizontal action of 250 N against the following:</p> <ul style="list-style-type: none"> <li>▪ window restrained by a device; or</li> <li>▪ screen protecting the opening; and</li> <li>▪ have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.</li> </ul> <p>A barrier with a height not less than 865 mm above the floor is required to an openable window when a child resistant screen release mechanism provided and for openable windows 4m or more above the surface beneath. The barrier must not permit a 125mm sphere to pass through it and</p>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.	
D3.1 to 3.12	Access for people with disabilities requirements	Refer to separate access report by others.	Note

#### 4.5. Services and Equipment (BCA Section E)

BCA Clause	Title	Assessment & Comment	Status
E1.3	Fire hydrants	<p>A fire hydrant system must be provided in accordance with this clause to serve the whole building and must also be installed in accordance with AS2419.1-2005. Where internal hydrants are provided, they must only serve the storey in which they are located.</p> <p>It is proposed to utilise AS2419.1-2017 as the design standard. Performance justification is required.</p>	Performance Solution
E1.4	Fire hose reels	A hose reel system must be provided to serve the carpark and Ground floor retail and associated uses. The hose reel system must be installed in accordance with this clause and AS2441.	Capable of Complying
E1.5	Sprinklers	A sprinkler system must be installed throughout the whole building and must comply with Specification E1.5.	Capable of Complying
E1.6	Portable fire extinguishers	Portable fire extinguishers are to comply with this provision and sections 1, 2, 3 and 4 of AS2444.	Capable of Complying
E1.8	Fire control centres	A fire control centre, for building between 25 – 50 m in effective height is required in accordance with this clause. The fire control centre is located in Lobby 1. Access to the fire control centre from the street involves a vertical rise of more than 300 mm therefore performance justification is required.	Performance solution

BCA Clause	Title	Assessment & Comment	Status
			
E1.9	Fire precautions during construction	<p>In a building under construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit.</p> <p>After the building has reached an effective height of 12 m the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storey's and any required booster connections must be installed.</p>	Capable of Complying
E2.2	General requirements	<p>The following smoke hazard management measures are required:</p> <ul style="list-style-type: none"> <li>• Pressurisation of fire isolated stairs. Fire isolated stairs are proposed to be pressurised, as required, except that the basement stair portion of the fire isolated stairs are not proposed to be pressured.</li> <li>• Automatic smoke detection and alarm system for the Class 2 residential portion.</li> <li>• Sprinkler system throughout the whole building</li> <li>• A smoke control system in the carpark in accordance with Table E2.2a.</li> </ul>	Performance Solution

BCA Clause	Title	Assessment & Comment	Status
		<ul style="list-style-type: none"> <li>The fire compartment containing the class 6 portion is required to be provided with smoke exhaust in accordance with BCA Spec E2.2b. It is not proposed to provide smoke exhaust in accordance with BCA Spec E2.2b. This is to be performance justified.</li> <li>Smoke detectors to activate air pressurisation system; zone smoke control; air handing system shutdown; or smoke exhaust, in accordance with Spec E2.2a.</li> <li>A building occupant warning system in accordance with Spec E2.2a.</li> </ul> <p>An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must:</p> <ul style="list-style-type: none"> <li>be designed and installed to operate as a smoke control system in accordance with AS/NZS 1668.1-2015; or</li> <li>incorporate smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</li> <li>be arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with Clause 4.10 of AS/NZS 1668.1-2015; and for the purposes of this provision, each SOU in the Class 2 part is treated as a separate fire compartment.</li> </ul> <p>Miscellaneous air-handling systems covered by Sections 5 and 11 of AS/NZS 1668.1-2015 serving more than one fire compartment (other than a car park ventilation system) and not forming part of a smoke hazard management system must comply with that Section of the Standard.</p>	



BCA Clause	Title	Assessment & Comment	Status
E3.1	Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1.	Capable of Complying
E3.2	Stretcher facility in lifts	A stretcher facility must be provided in accordance with the requirements of this clause and must be above to accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level.	Capable of Complying
E3.3	Warning against use of lifts in fire	Warning signs must be displayed near every call button for a passenger lift or group of lifts except a small lift such as a dumb-waiter or the like that is for the transport of goods only.  Signage is to be in accordance with this clause and must comply with the details and dimensions of Figure E3.3.	Capable of Complying
E3.4	Emergency lifts	Each lift is to be an emergency lift complying with this clause and Spec E3.1.	Capable of Complying
E3.5	Landings	Access and egress to and from lift well landings must comply with the DTS provision of Section D.	Complies
E3.6	Passenger lifts	The lifts are required to be accessible in accordance with this clause.	Capable of Complying
E3.7	Fire service controls	Fire service controls are required to every lift serving any storey above an effective height of 12m. Fire service controls are required to comply with the requirements of this provision.	Capable of Complying
E3.9	Fire service recall operation switch	Each group of lifts must be provided with one fire service recall control switch where fire service controls are required by E3.7. Fire recall operation switches are to comply with the requirements of this provision.	Capable of Complying
E3.10	Lift car fire service drive control switch	Lift car fire service drive control switch required by E3.7 must be activated from within the car and the switch must comply with the requirements of this clause.	Capable of Complying

BCA Clause	Title	Assessment & Comment	Status
E4.2	Emergency lighting requirements	Emergency lighting must be provided in accordance with this clause. Emergency lighting is required to comply with AS2293.1-2005.	Capable of Complying
E4.5	Exit signs	An exit signage must be provided in accordance with this clause.  Exit signage is required to comply with AS2293.1-2005 and be clearly visible at all times.	Capable of Complying
NSW E4.6	Direction signs	If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.	Capable of Complying
E4.8	Design and operation of exit signs	Exit signs are to comply with AS2293.1-2005.	Capable of Complying
E4.9	Sound systems and intercom systems for emergency purposes	A sound system and intercom system for emergency purposes complying where applicable with AS1670.4-2015 must be installed in the building.	Capable of Complying

#### 4.6. Health and Amenity (BCA Section F)

BCA Clause	Title	Assessment and Comment	Status
F1.0	Deem to satisfy provisions	Performance requirement FP1.4, for the prevention of the penetration of water through external walls, is required to be complied with.	Capable of Complying
F1.1	Stormwater drainage	Stormwater drainage is required to be designed to comply with AS/NZS3500.3-2015.	Capable of Complying
F1.4	External above ground membranes	Waterproofing membranes for external above ground use must comply with AS4654.1-2012 & AS4654.2-2012.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
F1.5	Roof coverings	Lightweight metal roof sheeting is to comply with AS1562.1.	Capable of Complying
F1.6	Sarking	Sarking-type materials used for weatherproofing of roofs and walls are required to comply with AS/NZS 4200 Parts 1 and 2.	Capable of Complying
F1.7	Waterproofing of wet areas in buildings	Waterproofing of wet areas are required to comply with this clause.	Capable of Complying
F1.9	Damp-proofing	Damp proofing is required to be provided in accordance with this clause.	Capable of Complying
F1.10	Damp-proofing of floor on ground	Damp proofing is required to be provided in accordance with this clause.	Capable of Complying
F1.11	Provision of floor wastes	The floor of each bathroom and laundry in the residential sole occupancy units are to be provided with a floor waste.	Capable of Complying
F1.13	Glazed assemblies	Glazed assemblies to comply with AS 2047 as applicable.	Capable of Complying
F2.1	Facilities in residential buildings	<p>The residential portion of the building is to be provided with appropriate facilities in accordance with Table F2.1. Generally, provision of the following facilities within each unit will comply:</p> <ul style="list-style-type: none"> <li>▪ A bath or shower; and</li> <li>▪ A closet pan &amp; wash basin; and</li> <li>▪ Kitchen; and</li> <li>▪ Wash tub and space for washing machine and drier</li> </ul> <p>Sanitary facilities are provided as required.</p> <p>The caretaker's sanitary facility is part the arcade amenities area.</p>	Capable of Complying
F2.3	Facilities in Class 3 to 9 buildings	Sanitary facilities must be provided in accordance with this clause and Table F2.3.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		<p>On determining the population of the Ground Floor, a detailed sanitary facility calculation will be provided. The number of sanitary facilities will be highly influenced by the number of café/restaurant patrons.</p> <p>Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.</p>	
F2.4	Facilities for people with disabilities	Refer to separate access report by others.	Capable of Complying
F2.5	Construction of sanitary compartments	<p>The construction of sanitary compartments is required to comply with this requirement.</p> <p>Doorways located less than 1.2m from the closet pan are required to swing outwards, slide or be capable of being removed from the outside (lift off hinges).</p>	Capable of Complying
F2.6	Interpretation: Urinals and washbasins	<p>A urinal may be - an individual stall or wall-hung urinal; or each 600mm length of a continuous urinal trough, or a closet pan used in place of a urinal.</p> <p>A washbasin may be an individual basin or a part of a hand washing trough served by a single water tap.</p>	Note
F3.1	Height of rooms and other spaces	The minimum ceiling height requirements are to comply with the requirements of this provision.	Capable of Complying
F4.1-F4.3	Provision of natural light	<p>Natural lighting must be provided in all habitable rooms of the residential units.</p> <p>Windows to habitable rooms in the eastern elevation, in close proximity to the east boundary, do not comply with the setback requirements of this clause. Performance justification is required.</p>	Performance Solution
F4.4	Artificial lighting	Artificial lighting is to be provided in accordance with AS/NZS1680.0 and in accordance with this clause to the common room.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
F4.5-4.7	Ventilation of rooms	Ventilation is to be provided by natural or mechanical means in accordance with this provision and Clause F4.6.  The building has adequate openings to achieve compliance with natural ventilation.	Capable of Complying
F4.8	Restriction on the position of water closets and urinals	A room containing a closet pan or urinal must not open directly into a room used for public assembly or a workplace normally occupied by more than one person.	Capable of Complying
F4.9	Airlocks	If the room containing a closet pan or urinal must not open directly into rooms identified in F4.8 above then an airlock of not less than 1.1 m <sup>2</sup> and fitted with self-closing doors at all access doorways or the room containing the closet pan or urinal must be provided with mechanical ventilation and the doorway to the room adequately screened from view.  Mechanical ventilation of the bathrooms is to be provided.	Capable of Complying
F4.11	Car park exhaust	Each storey of the carpark must have a system of ventilation complying with AS1668.2 or permanent natural ventilation in accordance with Section 4 of AS1668.4.	Capable of Complying
F4.12	Kitchen local exhaust	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1-1998 and AS 1668.2-1991 as required by this clause.	Capable of Complying
F5.1	Application of part	The sound insulation requirements of F5.2, F5.3, F5.4, F5.5, F5.6 & F5.7 only apply to the Class 2, component of the building.	Note
F5.2	Determination of airborne sound insulation ratings	A form of construction required to have an airborne sound insulation rating must: <ul style="list-style-type: none"> <li>have the required value for weighted sound reduction index (<math>R_w</math>) or weighted sound reduction index with spectrum adaptation term (<math>R_w + C_{tr}</math>) determined in accordance with</li> </ul>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		AS/NZS 1276.1 or ISO 717.1 using results from laboratory measurements; or <ul style="list-style-type: none"> <li>an acceptable form of construction under Spec F5.2.</li> </ul>	
F5.3	Determination of impact sound insulation ratings	<p>A floor in a building required to have an impact sound insulation rating must:</p> <ul style="list-style-type: none"> <li>have the required value for weighted normalised impact sound pressure level (<math>L_{n,w}</math>) determined in accordance with AS/ISO 717.2 using results from laboratory measurements; or</li> <li>comply with Specification F5.2.</li> </ul> <p>A wall in a building required to have an impact sound insulation rating in the Class 2 or 3 part must be of discontinuous construction. For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and</p> <ul style="list-style-type: none"> <li>for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and</li> <li>for other than masonry, there is no mechanical linkage between leaves except at the periphery.</li> </ul>	Capable of Complying
F5.4	Sound insulation rating of floor	<p>A floor in a Class 2 or 3 building must have an <math>R_w + C_{tr}</math> (airborne) not less than 50 and an <math>L_{n,w}</math> (impact) not more than 62 if it separates—</p> <p>(a) sole-occupancy units; or</p> <p>(b) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.</p>	Capable of Complying
F5.5	Sound insulation of walls	<p>The walls in the Class 2 part of the building must:</p> <ul style="list-style-type: none"> <li>have an <math>R_w + C_{tr}</math> (airborne) not less than 50 if it separates SOU's; and</li> <li>have an <math>R_w + C_{tr}</math> (airborne) not less than 50 if it separates a SOU from a plant room, public corridor, public lobby or the like; and</li> <li>have complying discontinuous construction if it separates a bathroom, sanitary</li> </ul>	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
		<p>compartment, laundry or kitchen in one SOU from a habitable room (other than a kitchen) in another, or a SOU from a plantroom.</p> <p>A door may be incorporated in a wall that separates a SOU from a stairway, public corridor, public lobby or the like, provided the door assembly has an <math>R_w</math> not less than 30. The doors opening to the external balconies are not required to have sound insulation rating.</p> <p>Where a wall required to have sound insulation has a floor above, the wall must continue to the underside of the floor above or a ceiling that provides the sound insulation required for the wall.</p> <p>Where a wall required to have sound insulation has a roof above, the wall must continue to the underside of the roof above or a ceiling that provides the sound insulation required for the wall.</p>	
F5.6	Sound insulation rating of services	Services that serves or pass through more than one SOU must achieve the required ratings specified by this clause.	Capable of Complying
F5.7	Sound isolation of pumps	A flexible coupling must be installed at the point of connection between service pipes in a building and any circulating or other pump.	Capable of Complying

#### 4.7. Ancillary Provisions (BCA Section G)

BCA Clause	Title	Assessment and comment	Status
NSW G1.101	Provision for the cleaning of windows	The method of provision for the cleaning of windows is required to be in accordance with this clause (windows 3 or more storeys above the ground).	Capable of Complying

## 4.8. Energy Efficiency (BCA Section J – Class 3 and 5 to 9 Buildings)

### 4.8.1. External Fabric (Part J1)

BCA Clause	Title	Assessment and Comment	Status
J1.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 3 and 5 to 9 building in accordance with this clause.	Capable of Complying
J1.2	Thermal Construction - General	Required insulation, reflective insulation and bulk insulation is to be installed in accordance with this clause and AS/NZS 4859.1.	Capable of Complying
J1.3	Roof and Ceiling Construction	<p>A roof or ceiling that is part of the envelope must achieve the Total R-Value specified in Table J1.3a for the direction of heat flow.</p> <p>Climate Zone 5 requires a minimum total R-Value of 3.2 measured downwards.</p> <p>A roof that:</p> <ul style="list-style-type: none"> <li>is required to achieve a minimum Total R-Value; and</li> <li>has metal sheet roofing fixed to metal purlins, metal rafters or metal battens; and</li> <li>does not have a ceiling lining or has a ceiling lining fixed directly to those metal purlins, metal rafters or metal battens (see Specification J1.3 Figure 2(c) and (f)),</li> </ul> <p>must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed between the metal sheet roofing and its supporting member.</p>	Capable of Complying
J1.4	Roof Lights	The rooflights are required to comply with the requirements of this provision.	Capable of Complying
J1.5	Walls	<p>Each part of an external wall that is part of the envelope must satisfy one of the options in Table J1.5a.</p> <p>Any internal wall forming part of the envelope must achieve the total R-value in Table J1.5b.</p>	Capable of Complying



BCA Clause	Title	Assessment and Comment	Status
		<p>A wall that:</p> <ul style="list-style-type: none"> <li>is required to achieve a minimum Total R-Value; and</li> <li>has lightweight external cladding such as weatherboards, fibre cement or metal sheeting fixed to a metal frame; and</li> <li>does not have a wall lining or has a wall lining that is fixed directly to the metal frame,</li> </ul> <p>must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed between the external cladding and the metal frame.</p>	
J1.6	Floors	<p>A floor that is part of the envelope of the building, including a floor above or below a car park or a plant room:</p> <ul style="list-style-type: none"> <li>must achieve the Total R-Value specified in Table J1.6; and</li> <li>with an in-slab heating or cooling system, must be insulated around the vertical edge of its perimeter with insulation having an R-Value of not less than 1.0.</li> </ul> <p>The minimum Total R-Value required in (i) may be reduced by R0.5 provided R0.75 is added to the Total R-Value required for the roof and ceiling construction.</p> <p>Some concrete slab on ground require insulation installed around the vertical edge of its perimeter as specified in this clause</p>	Capable of Complying

#### 4.8.2. External Glazing (Part J2)

BCA Clause	Title	Assessment and Comment	Status
J2.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 3 & 5 to 9 building in accordance with this clause.	Capable of Complying

BCA Clause	Title	Assessment and Comment	Status
J2.4	Glazing	Glazing must be designed in accordance with J2.4 to achieve the aggregate air-conditioning energy value.	Capable of Complying
J2.5	Shading	Required shading must be designed in accordance with the requirements of this condition.	Capable of Complying

#### 4.8.3. Building Sealing (Part J3)

BCA Clause	Status	Assessment and Comment	Status
J3.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 3 & 5 to 9 building in accordance with this clause.	Capable of Complying
J3.2	Chimneys and flues	Solid fuel burning appliances are not proposed and the requirements of this provision do not apply.	Capable of Complying
J3.3	Roof Light	The rooflights are required to comply with the requirements of this provision.	Capable of Complying
J3.4	Windows and doors	<p>Windows and doors forming part of the envelope are required to be sealed to restrict air infiltration. The requirements of this provision do not apply to:</p> <ul style="list-style-type: none"> <li>▪ Windows complying with AS2047,</li> <li>▪ A fire or smoke door,</li> <li>▪ Roller shutter doors.</li> </ul> <p>The bottom edge of a swing door required to be sealed must have a draft protection device and the other edges of doors or windows must have a foam or rubber compression strip, fibrous seal or the like.</p> <p>An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, revolving door or the like, other than</p>	Capable of Complying

BCA Clause	Status	Assessment and Comment	Status
		where the conditioned space has a floor area of not more than 50 m <sup>2</sup> .	
J3.5	Exhaust Fans	A miscellaneous exhaust fan must be fitted with a sealing device such as a self-closing damper or the like when serving a: <ul style="list-style-type: none"> <li>conditioned space; or</li> <li>a habitable room in climate zone 4, 6, 7 &amp; 8.</li> </ul>	Capable of Complying
J3.6	Construction of roofs, walls and floors	Roofs, ceilings, walls, floors and any openings are required to be designed and constructed to minimise air leakage in accordance with this clause.	Capable of Complying
J3.7	Evaporative Coolers	Evaporative coolers are not proposed.	Capable of Complying

#### 4.8.4. Air Conditioning and Ventilation Systems (Part J5)

BCA Clause	Status	Assessment and Comment	Status
J5.2	Air Conditioning systems	Any proposed air-conditioning systems are required to comply with the requirements of this provision.	Capable of Complying
J5.3	Mechanical ventilation systems	Any proposed mechanical ventilation systems are required to comply with the requirements of this provision.	Capable of Complying
J5.4	Miscellaneous exhaust system	A miscellaneous exhaust system is required to comply with this clause	Capable of Complying

#### 4.8.5. Artificial Lighting and Power (Part J6)

BCA Clause	Status	Assessment and Comment	Status
J6.2	Artificial lighting	Artificial lighting is to be designed in accordance with this provision.	Capable of Complying

BCA Clause	Status	Assessment and Comment	Status
J6.3	Interior artificial lighting and power control	Artificial lighting and power control are to be designed and provided in accordance with this provision.	Capable of Complying
J6.4	Interior decorative and display lighting	Interior decorative and display lighting, such as for foyer mural or art display, must be controlled in accordance with this clause.	Capable of Complying
J6.5	Artificial lighting around the perimeter of a building	Artificial lighting around the perimeter of a building must be designed to comply with this clause.	Capable of Complying
J6.6	Boiling water and chilled water storage units	Power supply to a boiling water or chilled water storage unit is required to be controlled by a time switch in accordance with Spec J6.	Capable of Complying

#### 4.8.6. Heated Water Supply (Part J7)

BCA Clause	Status	Assessment and Comment	Status
J7.2	Hot Water Supply	A hot water supply system for food preparation and sanitary purposes, other than a solar hot water supply system in climate zones 1, 2 and 3, must be designed and installed in accordance with Section 8 of AS/NZS 3500.4.	Capable of Complying

#### 4.8.7. Facilities for Energy Monitoring (Part J8)

BCA Clause	Status	Assessment and Comment	Status
J8.3	Facilities for energy monitoring	<ol style="list-style-type: none"> <li>1. A building or sole-occupancy unit with a floor area of more than 500m<sup>2</sup> must have the facility to record the consumption of gas and electricity.</li> <li>2. A building with a floor area of more than 2,500m<sup>2</sup> must have the facility to record individually the energy consumption of: <ol style="list-style-type: none"> <li>(a) air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and</li> <li>(b) artificial lighting; and</li> </ol> </li> </ol>	Capable of Complying

BCA Clause	Status	Assessment and Comment	Status
		(c) appliance power; and (d) central hot water supply; and (e) internal transport devices including lifts, escalators and travellers where there is more than one serving the building; and (f) other ancillary plant. 3. The provisions of (b) do not apply to a Class 2 building with a floor area of more than 2,500m <sup>2</sup> where the total area of the common areas is less than 500m <sup>2</sup> .	

#### 4.9. Energy Efficiency (BCA Section J – Class 2 and 4 Buildings)

The provisions of this Section J(A) are designed to complement the requirements of BASIX which are implemented via a Development Consent or Complying Development as applicable. BASIX is a web-based planning tool design to assess the potential performance of certain residential buildings against a range of sustainability indices.

##### 4.9.1. Building Fabric (NSW Part J(A)1)

BCA Clause	Status	Assessment and Comment	Status
NSW J(A)1.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to thermal insulation in a Class 2 building or Class 4 part of a building where a development consent specifies that insulation is to be provided.  The DTS provisions for thermal breaks apply to all Class 2 buildings and Class 4 parts.	Capable of Complying
NSW J(A)1.2	Compliance with BCA	The sole occupancy units of a Class 2 building and a Class 4 part of the building must comply with the national BCA provisions of J02(b) to (e). Refer to J1.2, J1.3, J1.5 & J1.6 below.	Capable of Complying
J1.2	Thermal construction — general	Thermal insulation is required to be installed in accordance with AS/NZS 4859.1 and the general requirements of this clause.  Reflective & bulk insulation is to be installed in accordance with this clause.	Capable of Complying
J1.3(c)	Roof and ceiling construction –	Ceiling insulation is to comply with this clause, other than where the house energy rating	Capable of Complying

BCA Clause	Status	Assessment and Comment	Status
	compensating for a loss of ceiling insulation	software used can automatically compensate for a loss of ceiling insulation.	
J1.3 (d)	Roof and ceiling construction – thermal breaks	A thermal break is required to be provided between external cladding and framing in accordance with J1.3(d).	Capable of Complying
J1.5(c)	Walls - thermal breaks	A thermal break is required to be provided between external cladding and framing in accordance with J1.5(c)	Capable of Complying
J1.6 (c) & (d)	Floors – floor edge insulation	Floor edge insulation is to comply with this clause	Capable of Complying

#### 4.9.2. Building Sealing (NSW Part J(A)2)

BCA Clause	Status	Assessment and Comment	Status
NSW J(A)2.1	Application of part	<p>The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building, but exclude the following:</p> <ul style="list-style-type: none"> <li>a building in climate zones 2 and 5 where the only means of air-conditioning is by using an evaporative cooler; and</li> <li>a building ventilation opening that is necessary for the safe operation of a gas appliance.</li> <li>parts of those buildings that cannot be fully enclosed</li> </ul>	Capable of Complying
NSW J(A)2.2	Compliance with BCA provisions	<p>The following national provisions apply to the requirements of this clause:</p> <ul style="list-style-type: none"> <li>J3.2 Chimneys and flues</li> <li>J3.3 Roof Lights</li> <li>J3.4 External Doors and windows</li> <li>J3.5 Exhaust fans</li> <li>J3.6 Construction of roofs, walls and floors</li> <li>J3.7 Evaporative coolers</li> </ul>	Capable of Complying

BCA Clause	Status	Assessment and Comment	Status
J3.2	Chimneys and Flues	Where provided, chimneys are required to be provided with a damper or flap to seal the chimney of flue.  Open solid-fuel burning appliances are not proposed.	Capable of Complying
J3.3	Roof lights	Roof lights are required to be sealed or capable of being sealed, where serving a conditioned space or a habitable room in climate zones 4, 6, 7 & 8.	Capable of Complying
J3.4	External doors and windows	External windows and doors are required to be sealed to restrict air infiltration in accordance with this clause. The requirements of this provision do not apply where external windows and doors are designed in accordance with AS2047, to fire doors or louvered windows or doors.  An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, revolving door or the like, other than:  1. where the conditioned space has a floor area of not more than 50 m <sup>2</sup> ; or  2. where a café, restaurant, open front shop or the like has:  (a) a 3 m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and  (b) at all other entrances to the café, restaurant, open front shop or the like, self-closing doors.	Capable of Complying
J3.5	Exhaust fans	An exhaust fan must be fitted with a sealing device to prevent air infiltration in a conditioned space and in climate zones 4, 6, 7 and 8.	Capable of Complying
J3.6	Construction of roofs, walls and floors	Roofs, external walls, external floors and any openings are required to be designed and constructed to minimise air leakage.	Capable of Complying
J3.7	Evaporative Coolers	Evaporative coolers are not proposed.	Note

#### 4.9.3. Air-Conditioning and Ventilating System (NSW Part J(A)3)

BCA Clause	Status	Assessment and Comment	Status
NSW J(A)3.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building.	Capable of Complying
NSW J(A)3.2	Compliance with BCA provisions	Class 2 buildings and Class 4 parts of buildings must comply with the following national BCA provisions: <ul style="list-style-type: none"> <li>J5.2 (a) to (d) &amp; (f) to (g) Air-conditioning systems</li> <li>J5.3 Mechanical ventilation systems</li> <li>J5.4 Miscellaneous exhaust systems</li> </ul>	Capable of Complying
J5.2	Air conditioning systems	The air conditioning system would be required to be designed in accordance with the requirements of this provision (a) to (d) & (f) to (g).	Capable of Complying
J5.3	Mechanical ventilation systems	The mechanical design would be required to be designed in accordance with the requirements of this provision.	Capable of Complying
J5.4	Miscellaneous exhaust systems	The mechanical design would be required to be designed in accordance with the requirements of this provision.	Capable of Complying

#### 4.9.4. Heated Water Supply (NSW Part J(A)4)

BCA Clause	Status	Assessment and Comment	Status
NSW J(A)4.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building.	Note
NSW J(A)4.2	Compliance with the BCA provisions	Class 2 buildings and Class 4 parts of buildings must comply with the national BCA provisions of J7.2.	Note
J7.2	Heated water supply	A heated water supply system for food preparation & sanitary purposes must be designed & installed in accordance with Part B2 of NCC Volume 3 – Plumbing Code of Australia.	Capable of Complying



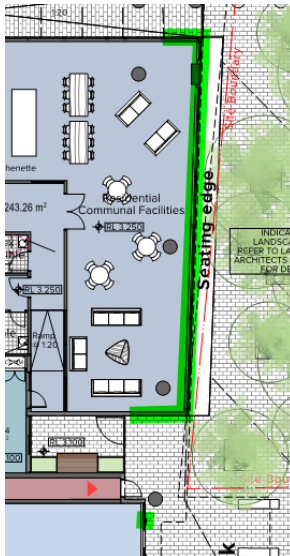
#### 4.9.5. Facilities for Energy Monitoring (NSW Part J(A)5)

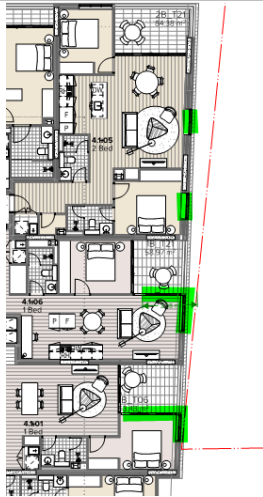
BCA Clause	Status	Assessment and Comment	Status
NSW J(A)5.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building except within a sole occupancy unit.	Note
NSW J(A)5.3	Access for maintenance	Class 2 buildings must comply with the national provision of J8.3.	Note
J8.3	Facilities for energy monitoring	<p>The building or sole-occupancy unit with a floor area of more than 500m<sup>2</sup> must have the facility to record the consumption of gas and electricity.</p> <p>A building with a floor area of more than 2,500m<sup>2</sup> must have the facility to record individually the energy consumption of services identified in this clause.</p>	Capable of Complying

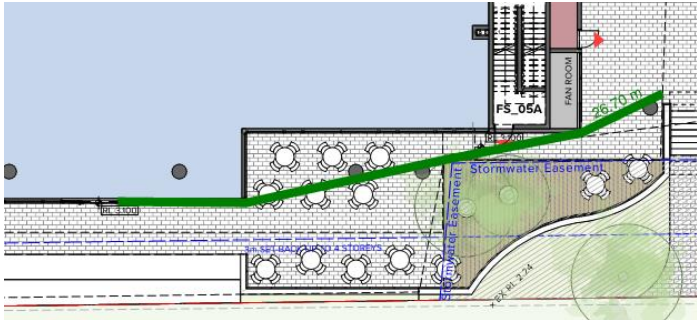
## 5. SUMMARY OF NON-COMPLIANCE ISSUES

The following is a summary table of non-compliance with the deemed-to-satisfy provisions of the BCA, that are intended to be justified by performance solution.

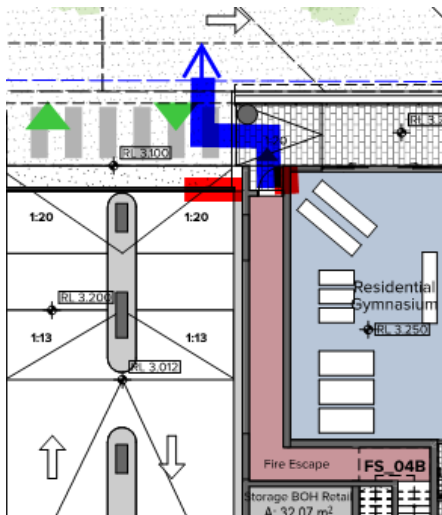
Table 2: Summary of Non-Compliance Issues with Deemed-to-Satisfy Provisions of the BCA.

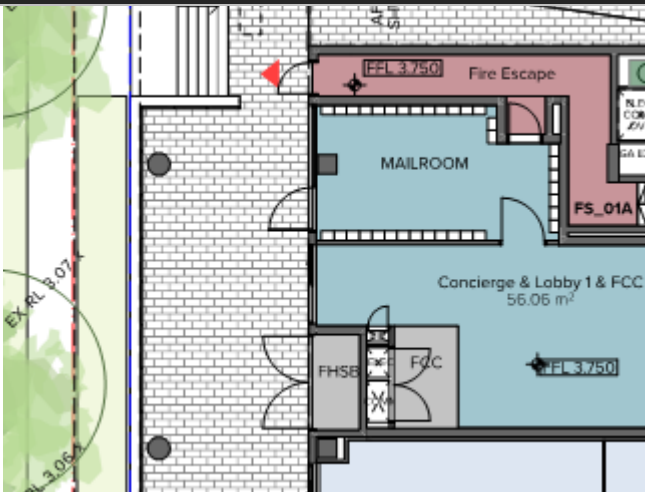
Item Number	BCA Clause	Performance Requirements	Issue
1	C2.7	CP1	The fire wall separating the travellers form Basement 1 is proposed to incorporate glazing which will not have the required FRL.
2	C3.2	CP2	<p>The following openings are located less than 3m from the allotment boundary and are require protection in accordance with Clause C3.4.</p> <p>(c) Ground floor glazing/openings in the east elevation</p>  <p>(d) Level 1 to Level 11 glazing/openings in east elevation of Building 4</p>

Item Number	BCA Clause	Performance Requirements	Issue
			 <p>A fire engineered performance solution is proposed demonstrating compliance with the performance requirements of the BCA. The adjoining through site link is to be burdened by an easement in favour of council resulting in a condition that a building on the adjoining site cannot be built within 6 m of the subject building.</p>
3	Clause 3.1 of Spec C1.1	CP1 & CP2	The retail fire compartment is proposed to have reduced FRL (2 hrs).
4	D1.2	DP4	<p>Each part of the building must have access to at least two exits. The following areas have access to one exit and are proposed to be performance justified.</p> <ul style="list-style-type: none"> <li>(e) Some Ground Floor retail tenancies</li> <li>(f) Ground Floor residential lobbies</li> <li>(g) Ground Floor plant rooms</li> <li>(h) Building 1</li> <li>(i) Building 2</li> </ul>
5	D1.2	DP4	The egress from the ground floor Retail 3 south exit door is not to open space (space open above to the sky). Egress is to a covered

Item Number	BCA Clause	Performance Requirements	Issue
			<p>colonnade to which travel to complying open space is approximately 26 m. Note that egress to the park is not deemed-to-satisfy.</p> 
6	D1.2	DP4	<p>Exits are required to be connected to the road or open space. An open space is a space on the allotment open to the sky and connected directly with a public road. The discharge of some exits involve travel via the adjoining property to the east. Performance justification will be required and will necessitate an easement right of way over the adjoining property.</p>
7	DP1.4	DP4	<p>The following areas contain extended travel distances that are proposed to be performance justified:</p> <ul style="list-style-type: none"> <li>(j) Building 1, Level 1 to 5 – Unit entry doors up to 7.5 m to exit.</li> <li>(k) Building 2, Level 1 to 5 – Unit entry doors up to 7.9 m to exit.</li> <li>(l) Building 4 Level 1 to 11 – Unit entry doors up to 8.0 m to a point of choice.</li> <li>(m) Building 5 Level 1 to 11 – Unit entry doors up to 8.4 m to a point of choice.</li> </ul> <p>Performance justification is proposed.</p>
8	DP1.4	DP4	<p>The following basement and Ground Floor areas contain extended travel distances that are proposed to be performance justified:</p> <ul style="list-style-type: none"> <li>(n) Basement 01 &amp; 02 - maximum 60 m to the nearest exit.</li> <li>(o) Ground floor – The Supermarket has extended travel distances of up to 46m to the nearest exit. This will be extended further on internal fitout.</li> </ul>

Item Number	BCA Clause	Performance Requirements	Issue
9	DP1.5	DP4	<p>The following non-compliances are proposed to be addressed by performance solution:</p> <ul style="list-style-type: none"> <li>(p) Basement 01 &amp; 02 – Maximum 102 m between alternative exits</li> <li>(b) Ground floor – The distance between alternative exits from west end of Retail 5 is up to 73 m and fitout of the retail tenancy is likely to extend these travel distances further.</li> <li>(c) Level 1 outdoor Common area – Distance between alternative exits is up to 83 m.</li> <li>(d) Building 4 Level 1 to 11 – Distance between alternative exits is 7.4 m.</li> <li>(e) Building 5 Level 1 to 11 – Distance between alternative exits is 4.7 m.</li> </ul>
10	D1.7	DP5	<p>Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or into a covered area that—</p> <ul style="list-style-type: none"> <li>(A) adjoins a road or <i>open space</i>; and</li> <li>(B) is open for at least 1/3 of its perimeter; and</li> <li>(C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</li> <li>(D) provides an unimpeded path of travel from the point of discharge to the road or <i>open space</i> of not more than 6 m.</li> </ul> <p>The following stairs do not comply with this requirement:</p> <ul style="list-style-type: none"> <li>• Building 2 FS02 discharging to west – The distance to open space is 7.7 m.</li> <li>• Building 5 FS05A stair discharging to south - The distance to open space is over 7.5 m.</li> </ul>
11	D1.7	DP5 & CP2	<p>Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 and any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level</p>

Item Number	BCA Clause	Performance Requirements	Issue
			<p>of the path of travel, or for the height of the wall, whichever is the lesser. The vehicular way entry door will not contain deemed to satisfy protection.</p> 
12	D2.19	DP2	The after hours shutter/gate to the retail malls are exits and will not comply with this clause. Travellators, into the carpark will not comply with this clause.
13	D2.21	DP2	The afterhours shutter/gate to the retail malls are exits and will not comply with this clause. The auto sliding door on Basement 01 providing egress from the travellators, into the carpark will not comply with this clause.
14	E1.3	EP1.3	It is proposed to utilise AS2419.1-2017 as the design standard.
15	Spec E1.8	EP1.6	A fire control centre, for building between 25 – 50 m in effective height is required in accordance with this clause. The fire control centre is located in Lobby 1. Access to the fire control centre from the street involves a vertical rise of more than 300 mm therefore performance justification is required.

Item Number	BCA Clause	Performance Requirements	Issue
			
16	E2.2	EP2.2	The fire compartment containing the class 6 portion is not proposed to be provided with smoke exhaust in accordance with BCA Spec E2.2b.
17	E2.2	EP2.2	Fire isolated stairs are proposed to be pressurised, as required, except that the basement stair portion of the fire isolated stairs are not proposed to be pressurised.
18	F4.1 – F4.3	FP4.1	Windows to habitable rooms in the eastern elevation, in close proximity to the east boundary, do not comply with the setback requirements of this clause.

## 6. CONCLUSION

The design as proposed is capable of complying with the Building Code of Australia and will be subject to construction documentation that will provide appropriate details to demonstrate compliance. This report has identified areas of non-compliance with the deemed-to-satisfy provisions and indicates the design intent to demonstrate compliance with the Performance Requirements of the BCA. Whilst the performance-based solutions are to be design developed, it is my view that the solutions will not impact on the current design.

## ATTACHMENT 1

Assessed plans prepared by Turner.

Plan Title	Drawing No	Revision	Date
Site and Context – Site analysis plan	A-DA-003	3	11/11/19
Site and Context - Demolition plan	A-DA-004	3	11/11/19
GA Plans - Basement 2	A-DA-008	3	11/11/19
GA Plans - Basement 1	A-DA-009	3	11/11/19
GA Plans – Ground Level	A-DA-010	5	11/11/19
GA Plans – Level 1	A-DA-011	3	11/11/19
GA Plans - Level 02	A-DA-012	4	11/11/19
GA Plans - Level 03	A-DA-013	4	11/11/19
GA Plans - Level 04	A-DA-014	4	11/11/19
GA Plans - Level 05	A-DA-015	4	11/11/19
GA Plans - Level 06	A-DA-016	4	11/11/19
GA Plans - Level 07	A-DA-017	4	11/11/19
GA Plans - Level 08	A-DA-018	4	11/11/19
GA Plans - Level 09	A-DA-019	4	11/11/19
GA Plans - Level 10	A-DA-020	4	11/11/19
GA Plans - Level 11	A-DA-021	4	11/11/19
GA Plans – Roof Level	A-DA-024	5	11/11/19
GA Elevations – North Elevation - Shareway	A-DA-050	3	11/11/19
GA Elevations – West Elevation – Victoria Road	A-DA-051	3	11/11/19
GA Elevations – South Elevation – Wicks Park	A-DA-052	3	11/11/19
GA Elevations – East Elevation – Through Site Link	A-DA-053	3	11/11/19
GA Sections – Section AA	A-DA-060	3	11/11/19
GA Sections – Section BB	A-DA-061	3	11/11/19
GA Sections – Section CC	A-DA-062	3	11/11/19
GA Sections – Section DD	A-DA-063	3	11/11/19



Plan Title	Drawing No	Revision	Date
GA Sections – Section EE	A-DA-064	3	11/11/19
Adaptable Apartment Plans	A-DA-150	3	11/11/19
Adaptable Apartment Plans	A-DA-151	3	11/11/19
Adaptable Apartment Plans	A-DA-152	3	11/11/19
Adaptable Apartment Plans	A-DA-153	3	11/11/19
Adaptable Apartment Plans	A-DA-154	3	11/11/19
Adaptable Apartment Plans	A-DA-155	3	11/11/19
Adaptable Apartment Plans	A-DA-156	3	11/11/19
Adaptable Apartment Plans	A-DA-157	3	11/11/19
Adaptable Apartment Plans	A-DA-158	3	11/11/19