



360 Certification
greg@360certification.net

PO Box 94
Spit Junction NSW 2088

1 March 2019

Skywood Climbing Pty Ltd

Attention: Mr Yossi Sundakov-Krumins
12 St Mary's Street
BALMAIN EAST NSW 2041

**RE: C2019024 - BCA REPORT – RECREATION CENTRE (INDOOR)
PROPERTY: T1, 1-3 MOORE ROAD FRESHWATER NSW**

Please find enclosed our BCA Report for consideration by Council, to support a development application for the proposed indoor climbing centre [*recreational centre(indoor)*] at the above property.

Should you require further information in relation to the above, please do not hesitate to contact me on 0422 688 491.

Regards,

Greg Evans
Director
Accredited Certifier BPB 1870
360 Certification

**BCA REPORT
RECREATIONAL CENTRE (INDOOR)
CLIMBING CENTRE**



T1, 1-3 MOORE ROAD FRESHWATER NSW

Report No. C2019024

Revision. 1

1 March 2019

TABLE OF CONTENTS

| CONTENTS | Page No |
|----------------------------------------------------------------|----------------|
| 1.0 – EXECUTIVE SUMMARY | 4 |
| 1.1 – RECOMMENDED DTS WORKS | 4 |
| 1.2 – REPORT REVISION | 7 |
| 2.0 – PROPERTY DESCRIPTION | 8 |
| 2.1 – BUILDING LOCATION | 8 |
| 2.2 – BASIS OF ASSESSMENT | 9 |
| 2.2 – REPORT PURPOSE | 10 |
| 2.3 – REPORT METHODOLOGY | 10 |
| 2.4 – EXCLUSIONS | 10 |
| 2.5 – BUILDING DESCRIPTION | 11 |
| 2.6 – DTS FIRE RATINGS CLASS 6 OR 9B – TABLE 3 S.C1.1 | 12 |
| 2.7 – CATEGORY 1 FIRE SAFETY PROVISIONS | 13 |
| 3.0 - BUILDING CODE OF AUSTRALIA ASSESSMENT | 15 |
| 3.1 – FIRE RESISTANCE AND STABILITY (SECTION B & C, BCA) | 15 |
| 3.2 – ACCESS & EGRESS (SECTION D, BCA) | 19 |
| 3.3 – SERVICES AND EQUIPMENT (SECTION E, BCA) | 24 |
| 3.5 – HEALTH & AMENITY (PART F1, F2, F3, F4 & F5, BCA) | 28 |
| 3.6 – ENERGY EFFICIENCY (PART J, NCC) | 31 |
| 4.0 – FIRE SAFETY MEASURES | 32 |
| 4.1 – FIRE SAFETY MEASURES | 32 |
| 5.0 – CONCLUSION | 33 |
| 6.0 – SUPPORTING DOCUMENTATION | 34 |

© Mosman Certifiers Pty Ltd. All rights reserved.

360 Certification (Mosman Certifiers Pty Ltd) has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of 360 Certification.

360 Certification undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and 360 Certification's experience, having regard to assumptions that 360 Certification can reasonably be expected to make in accordance with sound professional principles. 360 Certification accepts no liability for information provided by the Client and other third parties used to prepare this document or as the basis of the analysis. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

2.0 – PROPERTY DESCRIPTION

1.0 – Executive Summary

This BCA 2016 (Amendment 1) report has been prepared to support a development application for the change of use and the *change of building use* (as defined by the Act), and associated internal alterations, of T1, 1-3 Moore Road Freshwater NSW to an indoor climbing centre [*recreational centre (indoor)*].

The assessment of the documentation has revealed that the building is primarily capable of complying with the *Deemed-to-Satisfy* [herein 'DTS'] provisions of the Building Code of Australia 2016 (Volume 1, Amendment 1, Class 2-9 Buildings) [herein 'BCA 2016'], and where necessary the Performance Requirements, subject to the installation of works detailed within Items 1.1 and 1.2 of this report.

1.1 – Recommended DTS Works

| No. | Description | DTS Clause |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 1 | <p>The fire hazard properties of the new floor, wall and ceiling linings must comply with this clause.</p> <p>Wall and ceilings are assumed to be plasterboard, which complies with this clause. Floors in non-sprinklered buildings must achieve a Critical Radiant Flux (CRF kW/m²) not less than 2.2 and a maximum smoke development rate of not less than 750 percent minutes.</p> <p>If acoustic linings are proposed, they must also comply with this clause.</p> | C1.10 |
| 2 | <p>New penetrations in the existing concrete or masonry fire rated floors, walls or ceilings must comply with this clause and not reduce the fire performance of the ceiling</p> | C3.12, C3.13, C3.15, Spec, C3.15. |
| 3 | <p>The door hardware to the building is likely be replaced, excluding the rear door, which has a panic bar that complies with this clause.</p> <p>All new door hardware must: be readily openable without a key from the side that faces a person seeking egress, by— (i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area <i>required</i> to be <i>accessible</i> by Part D3— (A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm.</p> | D2.21 |
| 4 | <p>All new works must comply with BCA 2016. Disabled access is required and provided to level 1, subject to the self-closers on the entry doors being replaced with self-closers that have the 1 of 5 rating so as not to require any more than 20 Newtons of force to open the doors.</p> <p>Disabled access to level 2 is required but not provided. The proponent has indicated that they intend to seek a performance solution to provide all disabled accessible facilities and spaces on level 1.</p> | D3.3 |

2.0 – PROPERTY DESCRIPTION

| | | |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 5 | <p>Accessible signage will be required to the front and rear doorways provided with an exit sign as per Clause E4.5.</p> <p>The braille and tactile signage complying with Specification D3.6 must identify each door <i>required</i> by E4.5 to be provided with an <i>exit</i> sign and state—</p> <p>(A) "Exit"; and</p> <p>(B) "Level" ; and either (aa) the floor level number; or (bb) a floor level descriptor; or</p> <p>(cc) a combination of (aa) and (bb).</p> | D3.6 |
| 6 | <p>A hearing augmentation will be required where an built amplification system, other than one used only for emergency warning, is installed.</p> <p>Further details are required at construction certificate stage to confirm if an inbuilt amplification system is proposed.</p> | D3.7 |
| 7 | <p>The subject tenancy requires hose reels as the building, which is one fire compartment, is greater than 500m². Further details of the hose reels are required to ensure adequate coverage.</p> | E1.4 |
| 8 | <p><u>Clause E2.2(a)(i):</u> The building requires a smoke detection system in accordance with Clause 4 & 6 of Spec. E2.2a, AS 1670.1-2015. The building does not have a smoke detection system. The tenancy will require smoke detection as per this clause.</p> <p><u>Clause E2.2(a)(ii)</u> The building does not have a Class 6 fire compartment greater than 2,000m². As such, the Class 6 part does not require smoke detection per this clause.</p> <p><u>NSW Table E2.2b.</u> The proposed recreational centre (indoor) is Class 9b, which is subject to NSW Table E2.2b. Specifically, this requires that a building or part of a building used as an assembly building, must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS/NZS 1668.1), which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and (ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p> <p>The tenancy will be serviced by natural and mechanical ventilation. It is assumed that the ventilation will be ducted mechanical ventilation system or a A/C system greater than 1000 l/s.</p> <p>As such, the building will require an extended spacing smoke detection and alarm system in accordance with Clause 5 of Specification E2.2a that is interfaced with the mechanical ventilation system or the A/C system, so that if smoke is detected, the systems automatically shutdown.</p> <p><u>Clause E2.2(b)</u></p> | E2.2 |

2.0 – PROPERTY DESCRIPTION

| | | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| | <p>Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> <p><u>Clause E2.2(c)</u> Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> <p><u>Clause E2.2(d)</u> Not applicable as no smoke control or stair pressurisation to the subject tenancy.</p> | |
| 9 | Emergency lighting will be adjusted and generally comply with this clause. If required, additional emergency lighting must comply with EV4.1 and/or E4.2, E4.4 and AS 2293.1-2005, with 0.2 lux on paths of travel and 1.0 lux on the stairs. | E4.2, E4.4 |
| 10 | The exit signage generally will comply with NSW E4.6 and AS 2293.1-2005. Exit signage will be required to above or adjacent to Exit 1, 2 and 3. | E4.5 |
| 11 | The proposed mechanical ventilation system must comply with AS 1668.2-2012. If the existing mechanical system is proposed the system must re-certified as complying with AS 1668.2-2015 for the new use. The system must also automatically shut down as per NSW Table E2.2b. Alternatively, the proponent has indicated that they may seek the deletion of the smoke NSW requirement via a performance solution based on fire engineering analysis. | F4.5 |
| 12 | The toilet door of the unisex toilet on the first floor must be by an airlock, hallway or other room with a floor area of not less than 1.1 m ² and fitted with self-closing doors at all access doorways; or the <i>sanitary compartment</i> must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view. | F4.8 |

1.2 – Fire Engineering / Performance Solutions

| No. | Description | DTS Clause | Performance Requirement | | | | | | | | | | | | | | | | | | |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|--|------|----|----|---|---|---|--------|--|--|------|----|----|---|---|---|------|--|
| 1 | <p>The building is greater than 500m². As such, fire hydrant coverage is required.</p> <p>The existing building relies ordinance 70 hydrants with the booster located next to the loading dock.</p> <p>The proponent has indicated that they intend to seek a fire engineered performance solution at construction certificate stage to allow the existing hydrants to be utilised, due to the low fuel load and low occupant numbers.</p> | E1.3 | | | | | | | | | | | | | | | | | | | |
| 2 | <p>Based on the occupant loads of 50 people including staff, equal males and females, the following facilities are required.</p> <p>Employees: < 10 (5 males & 5 Females)</p> <table><tr><th colspan="3">Male</th></tr><tr><td>WC's</td><td>UR</td><td>WB</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><th colspan="3">Female</th></tr><tr><td>WC's</td><td>UR</td><td>WB</td></tr><tr><td>1</td><td>-</td><td>1</td></tr></table> | Male | | | WC's | UR | WB | 1 | 0 | 1 | Female | | | WC's | UR | WB | 1 | - | 1 | F2.3 | |
| Male | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 1 | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | | | | | | | | | | | | | | | | | | | |
| 1 | - | 1 | | | | | | | | | | | | | | | | | | | |

2.0 – PROPERTY DESCRIPTION

| | <p>This is adequately covered with one unisex accessible toilet and shower, which is counted once for each sex as per Clause F2.2(c).</p> <p>Participants: 40 (20 males & 20 Females).</p> <table border="1"> <tr> <th colspan="4">Male</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>1</td><td>2</td><td>2</td><td>2</td></tr> <tr> <th colspan="4">Female</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>2</td><td>--</td><td>2</td><td>2</td></tr> </table> <p>Currently proposed for participants.</p> <table border="1"> <tr> <th colspan="4">Male</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>1</td><td>0</td><td>1</td><td>1</td></tr> <tr> <th colspan="4">Female</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>2</td><td>N/A</td><td>2</td><td>1</td></tr> </table> <p>In consideration of the above, the proponent has indicated that they intend to address this via a performance solution that demonstrates that the proposed four toilets and shower is sufficient for the maximum 50 occupants, as they will also have access to the common facilities in the mall area.</p> | Male | | | | WC's | UR | WB | SH | 1 | 2 | 2 | 2 | Female | | | | WC's | UR | WB | SH | 2 | -- | 2 | 2 | Male | | | | WC's | UR | WB | SH | 1 | 0 | 1 | 1 | Female | | | | WC's | UR | WB | SH | 2 | N/A | 2 | 1 | | |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|--|--|------|----|----|----|---|---|---|---|--------|--|--|--|------|----|----|----|---|----|---|---|------|--|--|--|------|----|----|----|---|---|---|---|--------|--|--|--|------|----|----|----|---|-----|---|---|--|--|
| Male | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | -- | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Male | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | N/A | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

1.3 – Report Revision

| Revision | Date | Comments | Prepared & Approved |
|------------|---------------|------------------------|--------------------------------------------------------------|
| DRAFT | 01 March 2019 | First Draft of report. | Greg Evans, Accredited Certifier BPB 1870, 360 Certification |
| Revision 1 | 01 March 2019 | Final Revision. | Greg Evans, Accredited Certifier BPB 1870, 360 Certification |

2.0 – PROPERTY DESCRIPTION

2.0 – Property Description

2.1 – Building Location

The existing building is located at T1, 1-3 Moore Road Freshwater and is part of Strata Plan 23069.

The site is rectangular. Moore Road adjoins the north-eastern boundary. Albert Street adjoins the north-western boundary. Moore Lane adjoins the south-western boundary. A low-rise residential building adjoins the south-western boundary.

Vehicle access to the lower carpark is via Moore Road. Vehicle access to the roof carpark is via the ramp from Moore Lane.

The primary pedestrian entry to the property is via Albert Street. The primary pedestrian entry to T1 is via common external concourse.

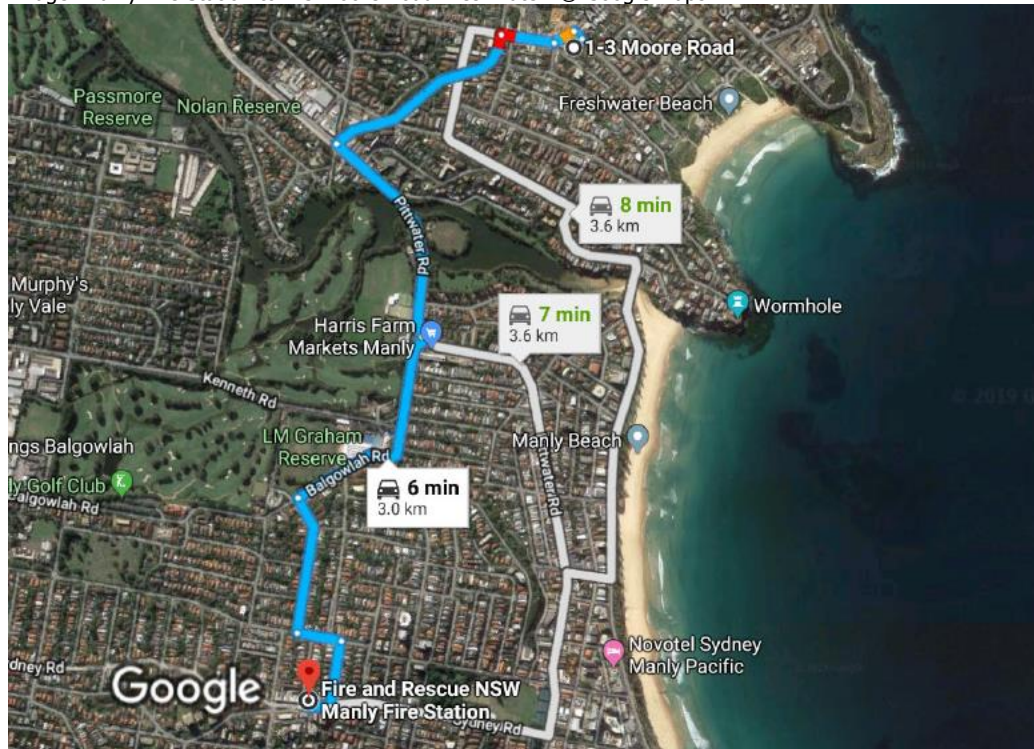
Image: Site plan of Shop T1, 1-3 Moore Road Freshwater. © Google maps 2018.



Imagery ©2019 Google, Map data ©2019 Google 20 m

2.0 – PROPERTY DESCRIPTION

Image: Manly Fire Station to 1-3 Moore Road Freshwater. © Google Maps.



2.2 – Basis of Assessment

This BCA report has been prepared based on the following-

- I. Site inspection of the property;
- II. The *Deemed-to-Satisfy* provisions of the *Building Code of Australia 2016 (Volume 1, **Amendment 1**, Class 2-9 Buildings)* including NSW Variations and relevant Australian Standards;
- III. Floor plans by Cullen Feng, Project 1904, SK01.2A, dated 22 February 2019;
- IV. This report is NOT a fire upgrade strategy in the context of Clause 94 of *Environmental Planning & Assessment Regulations 2000*;
- V. Clauses 143, 162D of the *Environmental Planning & Assessment Regulations 2000*, and where required Category 1 Fire Safety Provisions’;
- VI. The building is an NOT an *Entertainment Venue* as defined by the *EP & A Regulations 2000*.

2.0 – PROPERTY DESCRIPTION

2.2 – Report purpose

This BCA 2016 (Amendment 1) report has been prepared to support a development application for the change of use and the *change of building use* (as defined by the Act), of T1, 1-3 Moore Road Freshwater NSW to an indoor climbing centre [*recreational centre (indoor)*]. The BCA report will:

- a) compare the proposed building works against the DTS provisions of BCA 2016 including NSW Variations and relevant Australian Standards;
- b) identify DTS breaches that can be altered to comply with the DTS provisions of BCA 2016;
- c) identify DTS breaches and relevant performance requirements to be considered for Performance Solutions by the fire engineering and other consultants.

2.3 – Report methodology

This building code report initially relies upon the plans, surveys, and site inspections of the subject property, and a review of the structure against *Deemed-to-Satisfy* provisions of BCA 2016 and adopted Australian Standards.

Consideration is given to the Performance Requirements of BCA 2016 where appropriate. Where relevant the assessment can include the following categories –

- Structural;
- Fire resistance and compartmentation;
- Occupant Access/Egress;
- Fire Safety/Protection Services
- Health & Amenity;
- Energy Efficiency.

2.4 – Exclusions

This report does not imply, nor make reference to structural design or operating capability or design of any electrical, fire, hydraulic or mechanical services.

Furthermore, limited reference is made to the Disability (Access to Premises — Buildings) Standards 2010 and the *Disability Discrimination Act 1992 (Cth)*. As such, we recommend that as the proposal develops and details finalised, that independent advice be sought from an appropriately qualified access consultant to confirm that the proposed design can comply with the relevant standards.

2.0 – PROPERTY DESCRIPTION

2.5 - Building Description

| Use/Classifications | Part | Description | Class |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|
| | Basement | Carpark | 7a |
| | Ground floor | Commercial (Bakery & Pizza shop). | 6 |
| | Level 1 | Commercial (shops, offices, food and drink premises). T1 <i>recreational centre (indoor)</i> . | 5, 6, and 9b |
| | Level 2 | Commercial (shops, offices, food and drink premises). T1 <i>recreational centre (indoor)</i> . | 5, 6, and 9b |
| | Second floor (roof) | Carpark | 7a |
| | | | |
| Rise in Storeys | The existing building has a rise in storeys of three (3) as the roof top carpark is not considered a <i>storey</i> by definition, as the roof is not covered other than the stairs shafts that lead to the roof level. | | |
| Storeys contained | The building contains three storeys. | | |
| Type of Construction | The building requires Type 'A' construction. | | |
| Effective Height | The building has an effective height of approximately 7 metres. Note: Assumed heights used as some measurements not available. | | |
| Floor Area | The floor area of the site is about 1,800m ² . The main floor area of the subject tenancy is approximately 650m ² . The second floor part of the tenancy approximately is 150m ² . | | |
| Volume | The volume of the tenancy is approximately 14,000m ³ . | | |
| Change of Building Use | Yes. The proposed indoor climbing facility with cause a change in use in planning law to a <i>recreational centre (indoor)</i> and a <i>change in building use</i> , as defined by the Act, from an NSW Class 6 part to Class 9b. | | |
| Fire Compartments | The first floor and second floor of the subject tenancy is considered on fire compartment. The remaining parts of the building have not been assessed. | | |
| Occupants Loads | 50 including staff. | | |

2.0 – PROPERTY DESCRIPTION

2.6 – DTS Fire Ratings Class 6 or 9b – Table 4 S.C1.1

Table 4 TYPE B CONSTRUCTION: FRL OF BUILDING ELEMENTS

| Building element | Class of building—FRL: (in minutes) | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------|-------------|-------------|
| | <i>Structural adequacy/Integrity/Insulation</i> | | | |
| | 2, 3 or 4 part | 5, 7a or 9 | 6 | 7b or 8 |
| EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is— | | | | |
| For <i>loadbearing</i> parts— | | | | |
| less than 1.5 m | 90/ 90/ 90 | 120/120/120 | 180/180/180 | 240/240/240 |
| 1.5 to less than 3 m | 90/ 60/ 30 | 120/ 90/ 60 | 180/120/ 90 | 240/180/120 |
| 3 to less than 9 m | 90/ 30/ 30 | 120/ 30/ 30 | 180/ 90/ 60 | 240/ 90/ 60 |
| 9 to less than 18 m | 90/ 30/— | 120/ 30/— | 180/ 60/— | 240/ 60/— |
| 18 m or more | —/—/— | —/—/— | —/—/— | —/—/— |
| For non- <i>loadbearing</i> parts— | | | | |
| less than 1.5 m | —/ 90/ 90 | —/120/120 | —/180/180 | —/240/240 |
| 1.5 to less than 3 m | —/ 60/ 30 | —/ 90/ 60 | —/120/ 90 | —/180/120 |
| 3 m or more | —/—/— | —/—/— | —/—/— | —/—/— |
| EXTERNAL COLUMN not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is— | | | | |
| For <i>loadbearing</i> columns— | | | | |
| less than 18 m | 90/—/— | 120/—/— | 180/—/— | 240/—/— |
| 18 m or more | —/—/— | —/—/— | —/—/— | —/—/— |
| For non- <i>loadbearing</i> columns— | | | | |
| | —/—/— | —/—/— | —/—/— | —/—/— |
| COMMON WALLS and FIRE WALLS— | 90/ 90 / 90 | 120/120/120 | 180/180/180 | 240/240/240 |

Table 4 TYPE B CONSTRUCTION: FRL OF BUILDING ELEMENTS — continued

| Building element | Class of building—FRL: (in minutes) | | | |
|-----------------------------------------------------------------|-------------------------------------------------|-------------|-------------|-------------|
| | <i>Structural adequacy/Integrity/Insulation</i> | | | |
| | 2, 3 or 4 part | 5, 7a or 9 | 6 | 7b or 8 |
| INTERNAL WALLS— | | | | |
| <i>Fire-resisting</i> lift and stair <i>shafts</i> — | | | | |
| <i>Loadbearing</i> | 90/ 90/ 90 | 120/120/120 | 180/120/120 | 240/120/120 |
| <i>Fire-resisting</i> stair <i>shafts</i> — | | | | |
| Non- <i>loadbearing</i> | —/ 90/ 90 | —/120/120 | —/120/120 | —/120/120 |
| Bounding <i>public corridors</i> , public lobbies and the like— | | | | |
| <i>Loadbearing</i> | 60/ 60/ 60 | 120/—/— | 180/—/— | 240/—/— |
| Non- <i>loadbearing</i> | —/ 60/ 60 | —/—/— | —/—/— | —/—/— |
| Between or bounding <i>sole-occupancy units</i> — | | | | |
| <i>Loadbearing</i> | 60/ 60/ 60 | 120/—/— | 180/—/— | 240/—/— |
| Non- <i>loadbearing</i> | —/ 60/ 60 | —/—/— | —/—/— | —/—/— |
| OTHER LOADBEARING INTERNAL WALLS and COLUMNS— | | | | |
| | 60/—/— | 120/—/— | 180/—/— | 240/—/— |
| ROOFS | —/—/— | —/—/— | —/—/— | —/—/— |

2.0 – PROPERTY DESCRIPTION

2.7 – Category 1 Fire Safety Provisions

A *change of building use* is a change of BCA Classification under *Environmental Planning & Assessment Act 1979*. Pursuant to clause 131 (*Complying Development Certificate applications*) or clause 143 (*Construction Certificate applications*) of the *Environmental Planning & Assessment Regulations 2000*, a *change of building use* requires compliance with CATEGORY 1 Fire Safety Provisions.

The proposed new use of the commercial space as an indoor climbing facility or *recreational facility (indoor)*, results in a *change in building use*, and a change in use in planning law, as the previous use was Class 6 and it will now be Class 9b. As such, the CATEGORY 1 Fire Safety Provisions have been reviewed as follows:

| CAT 1 Fire Safety Measure | Description | Compliance Yes/No | Notes |
|----------------------------------|---------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EP1.3 | Hydrants | Yes | <p>The building is greater than 500m². As such, fire hydrant coverage is required.</p> <p>The existing building relies ordinance 70 hydrants with the booster located next to the loading dock.</p> <p>The proponent has indicated that they intend to seek a fire engineered performance solution at construction certificate stage to allow the existing hydrants to be utilised, due to the low fuel load and low occupant numbers.</p> |
| EP1.4 | Sprinklers | N/A | None installed, required or proposed. |
| EP1.6 | Fire brigade intervention facilities. | N/A | The building does not require or proposed a fire control centre. |
| EP2.1 | Smoke Detection | N/A | The proposed recreational centre (indoor) does not have sleeping accommodation. As such, this does not apply to the building. |
| EP2.2 | Untenable conditions | <p>Subject to works</p> <p>N/A</p> <p>Subject to works</p> | <p><u>Clause E2.2(a)(i):</u> The building requires a smoke detection system in accordance with Clause 4 & 6 of Spec. E2.2a, AS 1670.1-2015. The building does not have a smoke detection system. The tenancy will require smoke detection as per this clause.</p> <p><u>Clause E2.2(a)(ii)</u> The building does not have a Class 6 fire compartment greater than 2,000m². As such, the Class 6 part does not require smoke detection per this clause.</p> <p><u>NSW Table E2.2b.</u> The proposed recreational centre (indoor) is Class 9b, which is subject to NSW Table E2.2b. Specifically, this requires that a building or part of a building used as an assembly building, must be provided with automatic shutdown of any air-handling system (other than nonducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems</p> |

2.0 – PROPERTY DESCRIPTION

| | | | |
|---------------|---------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <p>installed in accordance with Sections 5 and 6 of AS/NZS 1668.1), which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and (ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p> <p>The tenancy will be serviced by natural and mechanical ventilation. It is assumed that the ventilation will be ducted mechanical ventilation system or a A/C system greater than 1000 l/s.</p> <p>As such, the building will require an extended spacing smoke detection and alarm system in accordance with Clause 5 of Specification E2.2a that is interfaced with the mechanical ventilation system or the A/C system, so that if smoke is detected, the systems automatically shutdown.</p> |
| | | N/A | <p><u>Clause E2.2(b)</u> Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> |
| | | N/A | <p><u>Clause E2.2(c)</u> Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> |
| | | N/A | <p><u>Clause E2.2(d)</u> Not applicable as no smoke control or stair pressurisation to the subject tenancy.</p> <p>***** Based on the above discussions, the subject tenancy will comply with EP2.2.</p> |
| EP3.1 | Stretcher facilities lifts | Yes | Not required as the building has an effective height of less than 12m |
| P2.3.2 | Fire Detection and Early Waring | N/A | Not a Class 1 building. |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

3.0 - Building Code of Australia Assessment

3.1 – Fire Resistance and Stability (Section B & C, BCA)

| Clause | Description | Clause Requirements/Comments | Compliance Yes/No |
|----------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Part B | Structural Provisions | | |
| B1.0 | Deemed-to-satisfy provisions | Part applicable. | Note only. |
| B1.1 | Resistance to actions. | Only internal structural works to wall climbing equipment that will comply with this clause. | Yes |
| B1.2 | Determination of individual actions. | Only internal structural works to wall climbing equipment that will comply with this clause. | Yes |
| B1.3 | ***** | Blank clause. | N/A |
| B1.4 | Determination of structural resistance of materials and forms of construction. | Only internal structural works to wall climbing equipment that will comply with this clause. | Yes |
| B1.5 | Structural software. | Note only. | Note only. |
| B1.6 | Construction of buildings in flood hazard areas. | Property not a high flood hazard area. | N/A |
| Clause | Description | Clause Requirements/Comments | Compliance Yes/No |
| Part C1 | Fire Resistance and Stability | | |
| C1.0 | DtS Provisions. | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Note only |
| C1.1 | Type of construction required. | The building requires and appears to have been constructed to Type A construction. Any variations to main building elements must be non-combustible and often concrete, masonry or fire protected steel in accordance with Part C and Clause 2 & 3 of spec. C1.1. | Yes |
| C1.2 | Calculation of rise in storeys. | The building has a <i>rise-in-storeys</i> of 3. | Note |
| C1.3 | Buildings of multiple classifications. | The building has multiple classifications, however, for the purpose of this clause only, the building is considered a three storey class 9b building that requires Type 'A' construction. | Note |
| C1.4 | Mixed type of construction. | The building is not separated into different parts with different forms of construction. | N/A |
| C1.5 | Two storey Class 2, 3 or 9c buildings. | Not applicable as not a Class 2, 3 or 9c building. | N/A |
| C1.6 | Class 4 parts of buildings. | Assumed no Class 4 parts. | N/A |
| C1.7 | Open spectator stands and indoor sports stadiums. | Not applicable as not an open spectator stands or indoor sports stadiums. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| C1.8 | Lightweight fire rated construction. | No lightweight fire rated construction identified or proposed to the tenancy. | N/A |
| C1.9 | Non-combustible building elements | All parts of the external walls are required to be non-combustible. All shafts must be non-combustible. Load bearing internal walls and shafts are to comply with specification C1.1. Attachments to the external walls must comply with C1.14. Detailed assessment must be undertaken at construction certificate stage to ensure compliance especially with any metal cladded walls with fibro sheeting that are proposed to be installed over the AFS walls. | Yes |
| C1.10 | Fire hazard properties NSW Variations NSW C1.10(a)(v) NSW C1.10(b) NSW C1.10(c)(xiii). | The fire hazard properties of the new floor, wall and ceiling linings must comply with this clause. Wall and ceilings are assumed to be plasterboard, which complies with this clause. Floors in non-sprinklered buildings must achieve a Critical Radiant Flux (CRF kW/m ²) not less than 2.2 and a maximum smoke development rate of not less than 750 percent minutes. | Subject to works |
| C1.11 | Performance of external walls in fire. | Not applicable as pre-cast or concrete tilt-up panels not installed. | N/A |
| C1.12 | **** | Deleted Clause | N/A |
| C1.13 | Fire-protected timber: Concession | Not applicable as not a Class 2, 3 or 5 building with fire protected timber. | N/A |
| C1.14 | Ancillary Elements | Not applicable as no ancillary elements proposed to be installed to external façade of the building and existing elements brick or concrete. | Yes |
| Part C2 | Compartmentation and Separation | | |
| C2.0 | DtS Provisions. | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Note only |
| C2.1 | Application of Part. | Applicable. | Applicable |
| C2.2 | General floor area and volume limitations. | The floor area of the site is about 1,800m ² . The main floor area of the subject tenancy is approximately 650m ² . The second floor part of the tenancy approximately is 150m ² . The volume of the tenancy is approximately 14,000m ³ . | Yes |
| C2.3 | Large isolated buildings. | Not a large isolated building. | N/A |
| C2.4 | Requirements for open space and vehicular access. | Not a large isolated building. | N/A |
| C2.5 | Class 9a and 9c buildings. | Not a Class 9a, or 9c building. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | NSW Variations NSW C2.5(b). | | |
| C2.6 | Vertical separation of openings in external walls. | No changes to the spandrels around the tenancy, which appear to comply with this clause. The remaining spandrels have not been assessed. | Yes |
| C2.7 | Separation by fire walls. | The subject tenancy appears fire separated from the adjoining internal tenancies. It is assumed these concrete and masonry walls achieve an FRL of 120 to 180 minutes, which complies with this clause. The subject tenancy is not fire separated from the open courtyard on level 1 and open balconies on level 2. | Yes |
| C2.8 | Separation of classifications in the same storey. | The building has different BCA classifications on the first and second floors. The building is assumed to achieve an FRL of 120 minutes due to being constructed from masonry and concrete. The recreational centre (indoor) would require an FRL of 120 minutes, which complies with this clause. No changes to the superstructure proposed. | Yes |
| C2.9 | Separation of classifications in the different storey. | The building has different BCA classifications on the first and second floors. The building is assumed to achieve an FRL of 120 minutes due to being constructed from masonry and concrete. The recreational centre (indoor) would require an FRL of 120 minutes, which complies with this clause. No changes to the superstructure proposed. | Yes |
| C2.10 | Separation of lift shafts. | No lift shafts proposed to be altered or added as part of the development. | N/A |
| C2.11 | Stairways and lifts in one shaft. | No lift shafts proposed to be altered or added as part of the development. | N/A |
| C2.12 | Separation of equipment. | No equipment as part of this fit-out requiring fire separation as per this clause. | N/A |
| C2.13 | Electricity supply system. | No equipment as part of this development requiring fire separation as per this clause. | N/A |
| C2.14 | Public corridors in Class 2 and Class 3 buildings. | Not Class 2 or 3 Building or part thereof. | N/A |
| Part C3 | Protection of Openings | | |
| C3.0 | DtS Provisions. | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Note only |
| C3.1 | Application of part. | Applicable Yes or No. | Note only |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|-------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| C3.2 | Protection of openings in external walls. | No changes to the external walls of the building. | N/A |
| C3.3 | Separation of external walls and associated openings in different fire compartments. | No changes to the existing fire compartment configurations, which requires further assessment. The recreational centre (indoor) may be exposed to other fire compartments at the external wall. | Further assessment required at CC stage. |
| C3.4 | Acceptable methods of protection. | No protection required due to Clause C3.2, however, some protection may be required due to C3.3, which requires further assessment at construction certificate stage. | Further assessment required at CC stage. |
| C3.5 | Doorways in fire walls. | No doorways in the <i>fire walls</i> separating the recreational centre indoor from the other tenancies. | N/A |
| C3.6 | Sliding fire doors. | No sliding fire doors proposed or required as part of the internal fit-out. | N/A |
| C3.7 | Protection of doorways in horizontal exits. | No horizontal exits proposed or required as part of the internal fit-out. | N/A |
| C3.8 | Openings in fire isolated exits. | No changes to the fire isolated exits, which appear to have fire doors. | Yes |
| C3.9 | Service penetrations in fire isolated exits. | No changes to the fire isolated exits, which appear to be fire separated. | Yes |
| C3.10 | Openings in fire isolated lift shafts. | No changes to fire isolated lifts as part of the tenancy fit-out. | N/A |
| C3.11 | Bounding construction: Class 2, 3, 4 & 9b buildings NSW Variation NSW C3.11(d). | Not a class 2, 3, 4 or 9b building used as an <i>entertainment venue</i> . | N/A |
| C3.12 | Openings in floors and ceilings for services. | New penetrations in the existing concrete or masonry fire rated floors, walls or ceilings must comply with this clause and not reduce the fire performance of the ceiling. | Subject to works |
| C3.13 | Openings in shafts. | Any new penetrations to existing shafts must be fire stopped as per this clause. | Subject to works |
| C3.14 | ***** | Blank clause. | N/A |
| C3.15 | Openings for service installations | New penetrations in the existing concrete or masonry fire rated floors, walls or ceilings must comply with this clause and not reduce the fire performance of the ceiling. | Subject to works |
| C3.16 | Construction joints. | Existing construction joints observed generally comply with this clause. New construction joints will comply with this clause. | Yes |
| C3.17 | Columns protected with lightweight construction to achieve an FRL. | No columns proposed to be protected with lightweight fire rated construction. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

3.2 – Access & Egress (Section D, BCA)

| Clause | Description | Clause Requirements/Comments | Compliance Yes/No |
|----------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Part D1 | Provisions for Escape | | |
| D1.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Note only. |
| D1.1 | Application of Part | Part applicable | Note only. |
| D1.2 | Number of exits required NSW Variation NSW D1.2(d)(vii). | <p>The recreational centre (indoor) is serviced by the following exits.</p> <p>Level 1 – Exit 1: The common open mall / walkway, where the mall is open to the sky.</p> <p>Level 1 – Exit 2: The doorway to the fire isolated stair that discharges to the north-western façade.</p> <p>Level 2 – Exit 3: The doorway leading to the fire isolated stair.</p> <p>In this instance, the proprietors of the recreational centre (indoor) have indicated that they expect to have a maximum of 50 persons, including staff.</p> | Yes |
| D1.3 | When fire-isolated stairways and ramps are required. | No changes to the fire isolated stairs as part of the proposed works. The existing fire stairs that connect three storeys are fire isolated as required. | Yes |
| D1.4 | Exit travel distances | The exit travel distances comply with this clause, as occupants are within 20m to an exit or 20m to a point of choice of two exits, with one of those exits within 40m. | Yes |
| D1.5 | Distance between alternative exits | The distance between alternative exits on the first floor is more than 9m and less than 60m as required by this clause. | Yes |
| D1.6 | Dimensions of exits and paths of travel NSW Variations D1.6(f)(vi). | <p>The dimensions of paths of travel to the exits is generally 1m in width as required.</p> <p>The aggregate egress width as per this clause permits over 400 occupants, which is significantly more than the 50 occupants proposed.</p> | Yes |
| D1.7 | Travel via fire-isolated exits | No changes to the fire isolated stairs proposed. The discharge of the north-western façade complies with this clause. The discharge of the remaining fire stairs have not been assessed. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| D1.8 | External stairways or ramps in lieu of fire-isolated exits | No external stair in lieu of fire-isolated stair required or proposed. | Yes |
| D1.9 | Travel by non-fire-isolated stairways or ramps. | The internal stair within the subject tenancy is not being utilised as an exit. | N/A |
| D1.10 | Discharge from exits NSW Variation NSW D1.10(f). | The discharge from the exits complies this this clause. | Yes |
| D1.11 | Horizontal exits. | No horizontal exits required or proposed. | N/A |
| D1.12 | Non-required stairways, ramps or escalators. | The internal stair within the subject tenancy is not being utilised as an exit, and only connects two storeys as permitted by this clause. | Yes |
| D1.13 | Number of persons accommodated. NSW Variation NSW Table D1.13. | The recreational centre (indoor) is proposed to have a maximum 50 occupants, as calculated by Clause D1.13(c), which permits occupant numbers to be calculated by " <i>any other suitable means of assessing its capacity</i> ". | Yes |
| D1.14 | Measurement of distances | The nearest part of the exit in this building is the nearest part of the doorways to the fire isolated stairs, or when open to the sky if walking onto the external balcony / courtyard area of the mall. | Note only. |
| D1.15 | Method of measurement | Note only. | Note only. |
| D1.16 | Plant rooms and lift machine rooms: Concession. | No works to plant rooms proposed or required. | N/A |
| D1.17 | Access to lift pits | No lifts proposed or required as part of the fit out. | N/A |
| Part D2 | Construction of Exits | | |
| D2.0 | DtS Provisions. | Applicable <i>performance requirements for building solutions</i> . | Note only. |
| D2.1 | Application of part NSW Variation NSW D1.2(c). | D2.13, D2.14(a), D2.16, D2.17(d), D2.17(e) and D2.18, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building. | Note only. |
| D2.2 | Fire-isolated stairways and ramps. | No changes to the fire isolated stairs, which appear to be concrete or masonry brickwork. | Yes |
| D2.3 | Non-fire-isolated stairways and ramps. | No changes to the internal non fire isolated stair, which complies with this clause as constructed with concrete, masonry, steel. | Yes |
| D2.4 | Separation of rising and descending stair flights. | No rising and descending stair flights. | N/A |
| D2.5 | Open access ramps and balconies. | No open access ramps or balconies used in the path of egress to comply with the smoke hazard management requirements. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|-------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| D2.6 | Smoke lobbies. | No smoke lobbies proposed or required. | N/A |
| D2.7 | Installations in exits and paths of travel. | The new sub-electrical distribution board is NOT in the path of travel to an exit and therefore does not require compliance with this clause. | N/A |
| D2.8 | Enclosure of space under stairs and ramps. | No cupboard space proposed beneath the internal non fire isolated stair. | N/A |
| D2.9 | Width of stairways. | No stairs greater than 2m in width. | N/A |
| D2.10 | Pedestrian ramps. | No pedestrian ramps installed serving as an exit. | N/A |
| D2.11 | Fire-isolated passageways. | No changes to the fire isolated passageways, which appear to comply with this clause as constructed from concrete and masonry. | Yes |
| D2.12 | Roof as open space. | Roof not utilised as open space as per this clause. | N/A |
| D2.13 | Goings and risers. NSW Variation NSW 2.13(a)(ix), (x), xi | No changes to the existing stairs throughout the building. As such, a detailed assessment has not been undertaken of these stairs. Any changes to the stairs will require the slip resistance to be re-applied as per Table D2.14. | Yes |

Image: Slip resistance of stairs and landings.

Table D2.14 SLIP-RESISTANCE CLASSIFICATION

| Application | Surface conditions | |
|--------------------------------------------------|--------------------|-----------|
| | Dry | Wet |
| Ramp steeper than 1:14 | P4 or R11 | P5 or R12 |
| Ramp steeper than 1:20 but not steeper than 1:14 | P3 or R10 | P4 or R11 |
| Tread or landing surface | P3 or R10 | P4 or R11 |
| Nosing or landing edge strip | P3 | P4 |

| | | | |
|-------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| D2.14 | Landings. | If modified, the intermediate landings of the stairs must also have the required slip resistance as detailed in the table above. | Yes |
| D2.15 | Thresholds. NSW Variation NSW D2.15(d)(e). | The threshold of the primary entry on level 1 is level/flush and therefore complies with this clause. Other thresholds have not been assessed. Any changes to the floor level must be not more than 35mm so that a 1:8 threshold ramp can be used at the doorway. If floor height results in a difference of 35mm to 190mm, a 1:10 step ramp is required to 1428.1-2009. | Yes |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| D2.16 | Balustrades or other barriers. NSW Variation D2.16(g)(iv) & (v). | The balustrades to the stairs are not proposed to be altered and have not been assessed. Any changes must be a minimum 1m on the first floor and 865mm above the nosing of stairs. No gaps between the balusters must more than 125mm. | Yes |
| D2.17 | Handrails. | The changes to the hand rails proposed. If proposed, any changes must comply with this clause and potentially AS 1428.1-2009. | Yes |
| D2.18 | Fixed platforms, walkways' stairways and ladders. | No machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like utilising this concession as part of the proposed works. | N/A |
| D2.19 | Doorways and doors. NSW Variation NSW D2.19(b)(v). | The subject tenancy does not have revolving doors, roller shutters, tilt-up doors, collapsible gates, accordion doors, turnstiles, rigid barriers. | N/A |
| D2.20 | Swinging doors. | Exit 1, being the open mall has no doorways. The doorways to the fire isolated stairs swing in the direction of travel and therefore complies with this clause. | Yes |
| D2.21 | Operation of latch. NSW Variation NSW D2.21(c)&(d). NOTE: Door closers must not result in a force to open the door at any point of more than 20 newtons as per AS 1428.1-2009. | The door hardware to the tenancy must: be readily openable without a key from the side that faces a person seeking egress, by— (i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area <i>required</i> to be <i>accessible</i> by Part D3 — (A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm. | Subject to works |
| D2.22 | Re-entry from fire-isolated exits. | The building is not greater than 25m in effective height. | N/A |
| D2.23 | Signs on doors. | No changes to the fire isolated stairs proposed. The signage has not been assessed but is located on most doors when inspected. | Yes |
| D2.24 | Protection of openable windows. | Not a class 2, 3, 4 or 9b early childhood centre. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| D2.25 | Timber stairway: Concession. | No timber stairway required to use this clause. | N/A |
| NSW D2.101 | Doors in path of travel in an entertainment venue. | Not an entertainment venue. | N/A |
| Part D3 | Access for People with Disabilities | | |
| D3.0 | DtS Provisions. | Applicable <i>performance requirements for building solutions</i> . | Note only. |
| D3.1 | General building access requirements. | <p>Disabled access must be provided to and within all areas normally used by the occupants. This includes the ground floor and may include the first floor.</p> <p>The 'affected part', is not applicable as per the <i>Disability (Access to Premises – Buildings) Standards 2010</i>, as the proprietor of the business is the lessee for part of the building only and they are proposed to apply for the <i>construction certificate</i>.</p> | Part applies |
| D3.2 | Access to buildings. | An accessway is required and provided to and through the principal pedestrian entrance of the tenancy. | Yes |
| D3.3 | Parts of buildings to be accessible. | <p>All new works must comply with BCA 2016. Disabled access is required and provided to level 1, subject to the self-closers on the entry doors being replaced with self-closers that have the 1 of 5 rating so as not to require any more than 20 Newtons of force to open the doors.</p> <p>Disabled access to level 2 is required but not provided. The proponent has indicated that they intend to seek a performance solution to provide all disabled accessible facilities and spaces on level 1.</p> | Subject to works and performance solution for level 2. |
| D3.4 | Exemptions. | Small service rooms and the like are exempt from requiring compliance with this clause. | Yes |
| D3.5 | Accessible car parking. | <p>No changes to the car parking proposed as part of the fit-out works.</p> <p>The building would require one accessible car parking space.</p> | Yes |
| D3.6 | Signage. | <p>Accessible signage will be required to doorways provided with an exit sign as per Clause E4.5.</p> <p>The braille and tactile signage complying with Specification D3.6</p> | Subject to works |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|-------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| | | must identify each door <i>required</i> by E4.5 to be provided with an <i>exit</i> sign and state— (A) "Exit"; and (B) "Level" ; and either (aa) the floor level number; or (bb) a floor level descriptor; or (cc) a combination of (aa) and (bb). | |
| D3.7 | Hearing augmentation. | A hearing augmentation will be required where an built amplification system, other than one used only for emergency warning, is installed. Further details are required at construction certificate stage to confirm if an inbuilt amplification system is proposed. | Subject to works if proposed. |
| D3.8 | Tactile indicators. | No Tactiles required or proposed as part of the fit-out works if level 2 is subject to a performance solution. | N/A |
| D3.9 | Wheelchair seating in Class 9b assembly buildings. | No fixed seating provided or required. | N/A |
| D3.10 | Swimming Pools. | No swimming pools. | N/A |
| D3.11 | Ramps. | No ramps existing, proposed or required as part of the tenancy fit-out. | N/A |
| D3.12 | Glazing on an accessway. | New internal glazing must comply with AS 1428.1-2009 for markings to ensure unintended human impact. | Yes |

3.3 – Services and Equipment (Section E, BCA)

| Clause & | Description | Requirements/Comments | Compliance Yes/No |
|----------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Part E1 | Fire Fighting Equipment | | |
| E1.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> | Note only |
| E1.1 | ***** | Blank clause. | N/A |
| E1.2 | ***** | Blank clause. | N/A |
| E1.3 | Fire hydrants. | The building is greater than 500m ² . As such, fire hydrant coverage is required. The existing building relies ordinance 70 hydrants with the booster located next to the loading dock. The proponent has indicated that they intend to seek a fire engineered performance solution at construction certificate stage to allow the existing hydrants to be utilised, due to the low fuel load and low occupant numbers. | Subject to fire engineering |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| E1.4 | Fire hose reels. | The subject tenancy requires hose reels as the building, which is one fire compartment, is greater than 500m ² . Further details of the hose reels are required to ensure adequate coverage. | Subject to works |
| E1.5 | Sprinklers NSW Variation NSW Table E1.5 | Sprinklers not required or proposed to the subject tenancy. | N/A |
| E1.6 | Portable fire extinguisher. | Portable fire extinguishers are not required and generally assumed to comply with this clause as per the AFSS for the building. | Yes |
| E1.7 | ***** | Blank clause. | N/A |
| E1.8 | Fire control centres. | The building does not require a fire control centre as it is less than 18,000 m ² or 25m in effective height | N/A |
| E1.9 | Fire precautions during construction. | While the works are undertaken, 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 <i>storey</i> adjacent to each <i>required exit</i> or temporary stairway or <i>exit</i> . | Yes |
| E1.10 | Provision for special hazards. | The building is not considered to be subject to special hazards as per this clause. | N/A |
| Part E2 | Smoke Hazard Management | | |
| E2.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> | Note only |
| E2.1 | Application of Part. | Part applies. | Applicable |
| E2.2 | General requirements. | <p><u>Clause E2.2(a)(i):</u> The building requires a smoke detection system in accordance with Clause 4 & 6 of Spec. E2.2a, AS 1670.1-2015. The building does not have a smoke detection system. The tenancy will require smoke detection as per this clause.</p> <p><u>Clause E2.2(a)(ii)</u> The building does not have a Class 6 fire compartment greater than 2,000m². As such, the Class 6 part does not require smoke detection per this clause.</p> <p><u>NSW Table E2.2b.</u> The proposed recreational centre (indoor) is Class 9b, which is subject to NSW Table E2.2b. Specifically, this requires that a building or part of a building used as an assembly building, must be provided with automatic shutdown of any air-handling system</p> | <p>Subject to works</p> <p>N/A</p> <p>Subject to works</p> |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| | | <p>(other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS/NZS 1668.1), which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and (ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p> <p>The tenancy will be serviced by natural and mechanical ventilation. It is assumed that the ventilation will be ducted mechanical ventilation system or a A/C system greater than 1000 l/s.</p> <p>As such, the building will require an extended spacing smoke detection and alarm system in accordance with Clause 5 of Specification E2.2a that is interfaced with the mechanical ventilation system or the A/C system, so that if smoke is detected, the systems automatically shutdown.</p> <p><u>Clause E2.2(b)</u> Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> <p><u>Clause E2.2(c)</u> Not applicable as the air handling unit is limited to the tenancy therefore does not connect fire compartments.</p> <p><u>Clause E2.2(d)</u> Not applicable as no smoke control or stair pressurisation to the subject tenancy.</p> | |
| E2.3 | Provision of special hazards. NSW variations NSW Table E2.2a NSW Table E2.2b | The building is not considered to be subject to the provision of special hazards. | N/A |
| Part E3 | Lift Installations | | |
| E3.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> . | N/A |
| E3.1 | Lift installations. | No lift proposed or required as part of the tenancy fit-out works. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | | |
|----------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| E3.2 | Stretcher facility in lifts. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.3 | Warnings against the use of lifts in fire. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.4 | Emergency lifts. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.5 | Landings. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.6 | Passenger lifts. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.7 | Fire service controls. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.8 | Aged care buildings. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.9 | Fire service recall operation switch. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| E3.10 | Lift car service drive control switch. | No lift proposed or required as part of the tenancy fit-out works. | N/A |
| Part E4 | Emergency Lighting, Exit Signs and Warning Systems | | |
| E4.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Note only. |
| E4.1 | ***** | Blank clause. | N/A |
| E4.2 | Emergency lighting requirements. | Emergency lighting will be adjusted and generally comply with this clause. If required, additional emergency lighting must comply with EV4.1 and/or E4.2, E4.4 and AS 2293.1-2005, with 0.2 lux on paths of travel and 1.0 lux on the stairs. | Subject to works |
| E4.3 | Measurement of distance. | Noted. | Note only. |
| E4.4 | Design and operation of emergency lighting. | The design and operational of emergency lighting will be in accordance with AS 2293.1-2005. | Yes |
| E4.5 | Exit signs. | The exit signage generally will comply with NSW E4.6 and AS 2293.1-2005. Exit signage will be required to above or adjacent to Exit 1, 2 and 3. | Subject to works |
| E4.6 | Direction signs. NSW Variation NSW E4.6 | Directional exit signs will not be required as Exit 1, 2 and 3 are readily apparent. | N/A |
| E4.7 | Class 2 & 3 buildings and Class 4 parts: Exemption. | The building is not a Class 2, 3, 4, building. | N/A |
| E4.8 | Design and operation of exit signs. | Where required, exit signage is to be augmented to comply with NSW E4.6 and AS 2293.1-2005. | Subject to works |
| E4.9 | Sound systems and intercom systems for emergency purposes. | The building does not require a sound systems and intercom systems for emergency purposes. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

3.5 – Health & Amenity (Part F1, F2, F3, F4 & F5, BCA)

| Clause | Description | Clause Requirements/Comments | Compliance Yes/No | | | | | | | | | | | | | | | | | | |
|----------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|--|------|----|----|---|---|---|--------|--|--|------|----|----|---|---|---|------------------|
| Part F1 | Damp and Waterproofing | | | | | | | | | | | | | | | | | | | | |
| F1.0 | DtS Provisions | Applicable <i>performance requirements for building solutions</i> . | | | | | | | | | | | | | | | | | | | |
| F1.1 | Stormwater drainage. | Stormwater not proposed to be impacted by the proposed works. | N/A | | | | | | | | | | | | | | | | | | |
| F1.2 | ***** | Blank clause | N/A | | | | | | | | | | | | | | | | | | |
| F1.3 | ***** | Blank clause | N/A | | | | | | | | | | | | | | | | | | |
| F1.4 | External above ground membranes. | No external membranes proposed as part of the tenancy works. | N/A | | | | | | | | | | | | | | | | | | |
| F1.5 | Roof coverings. | No new roof coverings proposed. No recommendation made to change the roof coverings. | N/A | | | | | | | | | | | | | | | | | | |
| F1.6 | Sarking | No new sarking proposed. | N/A | | | | | | | | | | | | | | | | | | |
| F1.7 | Waterproofing of wet areas in buildings. | If a new bathroom installed, it is to be waterproofed as per this clause. | Yes | | | | | | | | | | | | | | | | | | |
| F1.8 | ***** | Blank clause. | N/A | | | | | | | | | | | | | | | | | | |
| F1.9 | Damp-proofing | Existing damp proofing not proposed to be altered. | N/A | | | | | | | | | | | | | | | | | | |
| F1.10 | Damp-proofing of floors on the ground. | Existing damp proofing not proposed to be altered. | N/A | | | | | | | | | | | | | | | | | | |
| F1.11 | Provision of floor wastes. | Not a Class 2, 3 or 4 building. | N/A | | | | | | | | | | | | | | | | | | |
| F1.12 | Sub-floor ventilation. | Not proposed to be modified. | N/A | | | | | | | | | | | | | | | | | | |
| F1.13 | Glazed assemblies. | New glazed walls must be marked as per this clause and AS 1428.1-2009. | Yes | | | | | | | | | | | | | | | | | | |
| Part F2 | Sanitary and Other Facilities | | | | | | | | | | | | | | | | | | | | |
| F2.0 | DtS Provisions | Applicable <i>performance requirements for building solutions</i> . | | | | | | | | | | | | | | | | | | | |
| F2.1 | Facilities in residential buildings. | No residential part of the building. | N/A | | | | | | | | | | | | | | | | | | |
| F2.2 | Calculation of number of occupants and facilities. | The recreational centre (indoor) is proposed to have a maximum 50 occupants, as calculated by Clause D1.13(c), which permits occupant numbers to be calculated by " <i>any other suitable means of assessing its capacity</i> ". | Note only | | | | | | | | | | | | | | | | | | |
| F2.3 | Facilities in Class 2-9 buildings. | Based on the occupant loads of 50 people including staff, equal males and females, the following facilities are required. Employees: < 10 (5 males & 5 Females) <table border="1"><tr><th colspan="3">Male</th></tr><tr><td>WC's</td><td>UR</td><td>WB</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><th colspan="3">Female</th></tr><tr><td>WC's</td><td>UR</td><td>WB</td></tr><tr><td>1</td><td>-</td><td>1</td></tr></table> This is adequately covered with one unisex accessible toilet and shower. | Male | | | WC's | UR | WB | 1 | 0 | 1 | Female | | | WC's | UR | WB | 1 | - | 1 | Subject to works |
| Male | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 1 | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | | | | | | | | | | | | | | | | | | | |
| 1 | - | 1 | | | | | | | | | | | | | | | | | | | |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| | | <p>which is counted once for each sex as per Clause F2.2(c).</p> <p>Participants: 40 (20 males & 20 Females).</p> <table border="1"> <tr> <th colspan="4">Male</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>1</td><td>2</td><td>2</td><td>2</td></tr> <tr> <th colspan="4">Female</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>2</td><td>--</td><td>2</td><td>2</td></tr> </table> <p>Currently proposed for participants.</p> <table border="1"> <tr> <th colspan="4">Male</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>1</td><td>0</td><td>1</td><td>1</td></tr> <tr> <th colspan="4">Female</th></tr> <tr> <td>WC's</td><td>UR</td><td>WB</td><td>SH</td></tr> <tr> <td>2</td><td>N/A</td><td>2</td><td>1</td></tr> </table> <p>In consideration of the above, the proponent has indicated that they intend to address this via a performance solution that demonstrates that the proposed four toilets and shower is sufficient for the maximum 50 occupants, as they will also have access to the common facilities in the mall area.</p> | Male | | | | WC's | UR | WB | SH | 1 | 2 | 2 | 2 | Female | | | | WC's | UR | WB | SH | 2 | -- | 2 | 2 | Male | | | | WC's | UR | WB | SH | 1 | 0 | 1 | 1 | Female | | | | WC's | UR | WB | SH | 2 | N/A | 2 | 1 | |
|----------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--|--|--|------|----|----|----|---|---|---|---|--------|--|--|--|------|----|----|----|---|----|---|---|------|--|--|--|------|----|----|----|---|---|---|---|--------|--|--|--|------|----|----|----|---|-----|---|---|--|
| Male | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | -- | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Male | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Female | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WC's | UR | WB | SH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | N/A | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2.4 | Accessible sanitary facilities. | <p>The unisex disabled facility is proposed on level 1, with WC, basin and shower.</p> <p>A unisex ambulant toilet is required and provided.</p> | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2.5 | Construction of sanitary compartments. | <p>The door to a fully enclosed sanitary compartment must open outwards, slide or have lift off hinges, unless there is a clear space of 1.2m.</p> <p>Details to be provided and construction certificate stage. Also note ambulant toilet requirements.</p> | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2.6 | Interpretation: Urinals and washbasins. | A WC may be interchanged within a urinal. A urinal is 600mm part of a trough or single wall stall. | Noted | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2.7 | Microbial. NSW Variation NSW F2.7 | Not applicable in NSW. | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2.8 | Waste management. | Not Class 9a building. | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part F3 | Room Sizes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F3.0 | DtS Provisions | Applicable <i>performance requirements</i> for <i>building solutions</i> . | Applies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F3.1 | Height of rooms and other spaces. | The height of rooms complies with this clause. New ceiling heights must maintain 2.4m in general areas and 2.1m in bathrooms and non-habitable areas. | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

| Part F4 | Light and Ventilation | | |
|----------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| F4.0 | DtS Provisions | Applicable <i>performance requirements for building solutions.</i> | Applicable |
| F4.1 | Provision of natural light. | Natural light not required to be provided for the Class 9b building of this use. | N/A |
| F4.2 | Methods and extent of natural lighting. | Natural light not required to be provided for the Class 9b building of this use. | N/A |
| F4.3 | Natural light borrowed from adjoining room. | Natural light not required to be provided for the Class 9b building of this use. | N/A |
| F4.4 | Artificial lighting. | Artificial lighting is installed generally in accordance with Part J6 and AS 1680.0-2009. | Yes |
| F4.5 | Ventilation of rooms. NSW Variation F4.5(b). | The proposed mechanical ventilation system must comply with AS 1668.2-2012. If the existing mechanical system is proposed the system must re-certified as complying with AS 1668.2-2015 for the new use. The system must also automatically shut down as per NSW Table E2.2b. | Subject to works |
| F4.6 | Natural ventilation. | The premises has some natural ventilation via doors and windows, but not sufficient for level 1, hence the proposed mechanical ventilation system. | N/A |
| F4.7 | Ventilation borrowed from adjoining room. | Borrowed ventilation not relied upon. | N/A |
| F4.8 | Restriction of position of water closets and urinals. | The toilet doors on level 1, must be accessed by an airlock, hallway or other room with a floor area of not less than 1.1 m ² and fitted with self-closing doors at all access doorways; or the <i>sanitary compartment</i> must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view. | Subject to works |
| F4.9 | Airlocks. | The toilet doors within the tenancy are screened from view and have exhaust mechanical ventilation and therefore comply with Clause F4.9(a)(ii). | Yes |
| F4.10 | ***** | Blank clause. | N/A |
| F4.11 | Carparks | No changes to the car park ventilation as part of the tenancy fit out works | N/A |
| F4.12 | Kitchen and local exhaust ventilation. | No commercial kitchens. | N/A |

3.0 – BUILDING CODE OF AUSTRALIA ASSESSMENT

3.6 – Energy efficiency (Part J, NCC)

| Item | Comment |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Building Fabric | The existing building fabric is not proposed to be altered and is assumed to comply with the standards required at the time of construction. |
| Glazing | The existing building fabric is not proposed to be altered and is assumed to comply with the standards required at the time of construction. |
| Building Sealing | The subject tenancy must retain the seals to the front and rear doors, or the mechanical ventilation required by Part F4 must continue to provide sufficient pressurisation to prevent infiltration. |
| Air-Conditioning and Ventilation System | If modified, the air-conditioning and ventilation system to the subject tenancy must be designed to comply with Part J5 of the NCC. |
| Artificial Lighting and Power | The subject tenancy must maintain maximum lighting power levels and control systems as applicable. The design of lighting systems must comply with NCC Part J6. |
| Hot Water Supply | Modified hot water supply systems must be installed in accordance with Part J7 of the NCC and AS/NZS 3500.4. |
| Access for Maintenance | The subject tenancy must have the facility to record the consumption of gas and electricity. |

4.0 – FIRE SAFETY AND OTHER MEASURES

4.0 – Fire Safety Measures

4.1 – Fire Safety Measures

Existing and proposed fire services.

| No | Fire Safety Measure | Existing | Proposed | Standard of performance |
|----|--------------------------------------------------------------------------------------------------|----------|----------|-----------------------------------------------------------------------------------------------------------------|
| 1 | Automatic smoke detection and alarms system | -- | X | BCA Clause E2.2(a)(i), Clause 4 & 6 of Spec. E2.2a, AS 1670.1-2015. |
| 2 | Auto shutdown of mechanical ventilation system to the recreation centre (indoor). | -- | X | BCA Clause E2.2(a)(ii), NSW Table E2.2b, Clause 5 Spec. E2.2a, AS 1670.1-2015 or deletion via fire engineering. |
| 3 | Emergency Lighting | X | X | AS 2293.1 (1998) / 2005 |
| | Exit Signs | X | X | AS 2293.1 (1998) / 2005 |
| 4 | Fire Engineering - To permit use of ordinance 70 hydrants for the recreation centre (indoor). | -- | X | Fire Engineering Report |
| 5 | Fire Hydrant System | X | X | Ordinance 70, Fire Engineering Report. |
| 6 | Hose Reel System | X | X | AS 2441 (1988) / 2005 |
| 7 | Path of Travel | X | -- | BCA Part D1 and EP&A Reg 2000, Division 7 |
| 8 | Portable Fire Extinguishers | X | X | AS 2444 (1995) / 2005 |
| 9 | Wall Wetting Sprinkler and Drencher System | X | -- | BCA Clause C3.4 |
| 10 | Warning & Operational Signs | X | X | BCA Part D2.23, D3.6, and EP & A Reg 2000, Division 7 |

5.0 – CONCLUSION

5.0 – Conclusion

This BCA 2016 (Amendment 1) report has been prepared to support a development application for the change of use and the *change of building use* (as defined by the Act), and associated internal alterations, of T1, 1-3 Moore Road Freshwater NSW to an indoor climbing centre [*recreational centre (indoor)*].

The assessment of the documentation has revealed that the building is primarily capable of complying with the 'DTS' provisions of 'BCA 2016' and where necessary the Performance Requirements, subject to the installation of works detailed within Items 1.1 and 1.2 of this report.

Prepared by:

A handwritten signature in black ink, appearing to read 'G. Evans', with a stylized flourish at the end.

Greg Evans
Director
Accredited Certifier BPB 1870
360 Certification

Date: **1 March 2019**

6.0 – REFERENCES

6.0 – Supporting Documentation

See attached plans.

**** END OF REPORT ****