04 November 2025

Left Field Group C/- Lighthouse Project Group
Suite 302, 100 Walker Street
North Sydney NSW 2060

Attn: Oscar Guzman

Dear Oscar,

REFERENCE: 22-24 RAGLAN STREET, MANLY NSW 2095
RESIDENTIAL FLAT BUILDING
BUILDING CODE OF AUSTRALIA (BCA) CAPABILITY STATEMENT

Concise Certification Pty Ltd have been commissioned by Left Field Group C/- Lighthouse Project Group to undertake a detailed desktop assessment of the proposed development at the above premises, against the requirements of the National Construction Code Series (Volume 1) - Building Code of Australia 2022 Amendment 2 (BCA).

It is understood that the proposed development will be the subject of a Development Application (DA) and this BCA Capability Statement has been prepared in support of the submission to Council for its consideration as part of the Development Application (DA) pursuant to S4.16 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The following Concise Certification Pty Ltd Team Members have contributed to this assessment:

- Darko Kardum (Senior Building Surveyor) – Report Author
- Steven Rodriguez (Director / A1 Registered Certifier - Unrestricted) – Report Peer Review
- Luke Oldfield (Director / A1 Registered Certifier - Unrestricted) – Quality Assurance

Our assessment of the concept design documentation was based on the following:

- National Construction Code Series – Volume 1 – Building Code of Australia 2022 (BCA)
- National Construction Code Series – Guide to the Building Code of Australia 2022
- Environmental Planning & Assessment Act 1979
- Environmental Planning & Assessment Regulation 2021
- Environmental Planning and Assessment (Development Certification & Fire Safety) Regulation 2021
- Access to Premises - Building Standards 2010
- Architectural Plans prepared by Carlisle Architects:

Plan Number	Revision	Date
DA-02	B	24/10/2025
DA-03	B	24/10/2025
DA-04	B	24/10/2025
DA-05	B	24/10/2025
DA-06	B	24/10/2025
DA-07	B	24/10/2025
DA-08	B	24/10/2025
DA-09	B	24/10/2025
DA-10	B	24/10/2025
DA-11	B	24/10/2025
DA-20	B	24/10/2025
DA-21	B	24/10/2025
DA-22	B	24/10/2025
DA-23	B	24/10/2025
DA-30	B	24/10/2025

DA-31	B	24/10/2025
DA-32	B	24/10/2025

STATEMENT OBJECTIVES:

The key objectives of the report are as follows:

- Undertake a high-level assessment of the proposed development against the deemed to satisfy provisions of the National Construction Code Series – Volume 1 – **Building Code of Australia 2022 Amendment 2**.
- Identify any Deemed-to-Satisfy compliance departures that require further resolution/attention for by either way of design change or Performance Based Solutions prior to the submission of the Construction Certificate application.
- Identify essential fire safety measures and building works that are applicable to the subject building and that may be requiring upgrade to comply with the provisions of Section 14, 19 & 79 of the Environmental Planning and Assessment (Development Certifiers & Fire Safety) Regulation 2021(formally known as Clauses 143, 145 & 166).
- Enable the certifying authority to satisfy its statutory obligations under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.
- Identify essential fire safety measures and building works that are applicable to the proposed development in accordance with Section 79 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.
- Verify that the referenced documentation has been reviewed by an appropriately qualified Building Surveyor and A1 Registered Certifier and compliance with the BCA / Access to Premises – Building Standard 2010 is readily achievable.
- Issue a collaborated fire engineering summary outlining the key compliance matters identified by the design team as deemed to satisfy departures requiring consideration by the project Fire Safety Engineer in order to assist in the preparation of the Fire Engineering Brief & Fire Engineering Brief Questionnaire (where required) to Fire & Rescue NSW).
- Verify that the referenced documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Accessibility Consultant and demonstrate that compliance with the BCA / Access to Premises – Building Standard 2010 is readily achievable.
- Enable the Registered Certifier to satisfy its statutory obligations under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, whilst also taking into due consideration the provisions under Sections 28 and 29 of Part 3 of the Building and Development Certifiers Act 2018 and Clauses 24 and 25 of Part 4 of the Building and Development Certifiers Regulation 2020.
- Accompany the original submission of the **Modified Development Application (DA)** to Council to enable the Consent Authority to be satisfied that the building design is capable of complying with the BCA and that subsequent compliance with the Fire & Life Safety, Accessibility, Health & Amenity and Energy Efficiency requirements of the BCA, will not give rise to design changes to the building which may necessitate the submission of further applications under Section 4.55 (Modifications) of the Environmental Planning and Assessment Act, 1979.

This Capability Statement is not intended to identify all issues of compliance or non-compliance with the BCA with such other issues to be appropriately addressed prior to issue of the Construction Certificate approval. Rather this Capability Statement serves to confirm that the design can be readily addressed without the need for redesign and/or resubmission to the Local Consent Authority.

The findings of this BCA Report do not relieve the PCA of their statutory obligations under the EP&A Act & BPB Act and they are to be satisfied that the proposal meets their requirements prior to approval.

SITE & BUILDING DESCRIPTION:

The existing site, the subject of this capability statement, is located at 22-24 Raglan Street, Manly NSW 2095 and is legally identified as Lot 100 in DP 1009880.

The site is generally rectangular in shape and has approximate site area of 715m^2, The subject site has a single street frontage being 22 Raglan Street to the South and the east side of the site adjoins a three story (3) Commercial Office building, whilst the western side adjoins a Three (3) storey residential apartment / Retail building. The Northern side adjoins existing two (2) two storey residential dwellings.

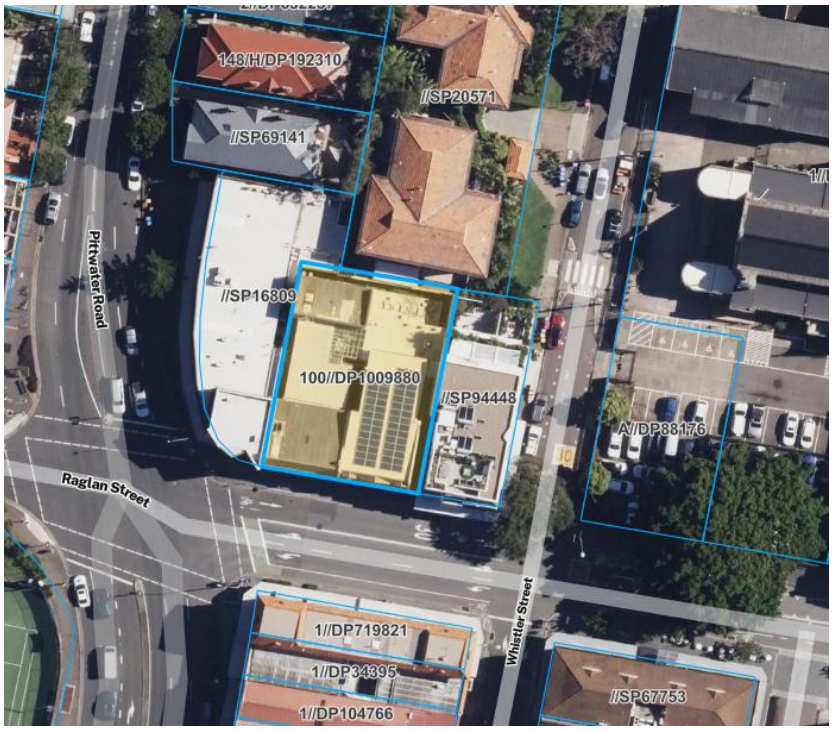

Figure 1 – Satellite Image (Source: Spatial Information "Explorer" October 2025)

The site is currently occupied by a backpackers hostel which is proposed to be demolished to make way for the 9-storey residential shop top housing development including provision of affordable housing, with Fifteen (15) Residential Sole Occupancy units, retail & Carparking on the ground floor and basement Carparking.

Figure 2 – Ground Floor Plan - (Source: Carlisle Architects)

RELEVANT VERSION OF THE BCA:

Pursuant to Section 69 of the Environmental Planning and Assessment Regulation 2021 and Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, all new building work must comply with the current provisions of the National Construction Code Series (Volume 1) Building Code of Australia (BCA).

At the date of this assessment, it is understood that a Part 6 Construction Certificate Application for the entrance floor (principal pedestrian entrance) may not be registered and accepted on the NSW Planning Portal prior to the 1st May 2026 Pursuant to clause 19 Environmental Planning & Assessment Act (development Certification and Fire Safety) Regulation 2021.

In this regard, the relevant rendition of the BCA for the development may be BCA 2025 in lieu of the current BCA 2022 Amendment 2 and although the draft provision of BCA 2025 have been considered, re-assessment of the design will be required to be carried out upon formal release of this BCA Edition from the Australian Building Codes Board (ABCB) and prior to further determination at the Construction Certificate stages. At this stage, the relevant rendition of the BCA is BCA 2022 amendment 2.

BUILDING CODE OF AUSTRALIA 2022 AMENDMENT 2 COMPLIANCE:

Arising from our preliminary assessment of the proposed development against the Deemed-to-Satisfy provisions and Performance Requirements of National Construction Code Series (Volume 1 - Amendment 2) – Building Code of Australia 2022, the following key characteristics are noted.

KEY BUILDING CHARACTERISTICS:

The principal building characteristics as defined by the BCA are noted as follows:

BUILDING CHARACTERISTICS	
– **BCA CLASSIFICATION:**	Class 2 (Residential SOU's), Class 6 (Retail), Class 7a (Carpark)
– **RISE IN STOREYS:**	Eight (8)
– **STOREYS CONTAINED:**	Nine (9)
– **TYPE OF CONSTRUCTION:**	Type A Construction
– **EFFECTIVE HEIGHT:**	>12m & <25m (RL28.7 – RL5.73 = 22.97m)
– **FIRE COMPARTMENTS SIZES:**	Complies
– **CLIMATE ZONE:**	Climate Zone 5
– **MINIMUM FIRE SERVICES:**	Sprinklers (AS2118.1-2017 or AS2118.4-2012), Hydrants (AS2419.1-2021), Fire Hose Reels (AS2441-2005) Smoke Detection (AS1670.1-2018)*, Smoke Alarms (AS3786-2014)*, Extinguishers (AS2444-2001), Stretcher Lifts (BCA Clause E3D3), Drenchers (AS2118.2-2021), Fire Doors (AS1905.1-2015), Fire Seals (AS1530.1-2014), Emergency Lights & Exit Signs (AS2293.1-2018) + Fire Safety Engineering – refer to Appendix for detailed Preliminary Fire Safety Schedule
– **SPECIAL CONSIDERATIONS:**	Coastal Construction – (Materials to be compatible for corrosion where the site is within proximity of breaking surf), Electric Vehicle Charges, Roof top Solar Panels, Battery Energy Storage Systems, Car lift, Egress Discharge Arrangements,

***Note 1:** The Standard of Performance above are subject to change under BCA 2025 – e.g. Smoke Detection (AS1670.1-2021, Smoke Alarms (AS3786-2023), etc*

***Note 2:** The Effective Height has been calculated excluding the roof top level as this level is not considered a Storey based on the BCA definition of a Storey which does not include stairways and does not include a storey that is not situated between one floor and the floor next above or roof above. Should these areas change, a reassessment of the design is required at the Construction Certificate application stage.*

Furthermore, the Effective Height has been determined from the lowest point on the floor of lowest storey included in the Rise in Storeys which was determined to be RL 5.73. The driveway ramp was not including as this is not considered to be a floor for the purposes of effective height and other BCA matters such as travel distances, etc etc as this is a ramp with a gradient of 1:4.

***Note 3**: The floor area of storage areas within the Basement Carpark Levels are considered to occupy less than 10% of the floor area of the storey they are situated within and therefore, these areas adopt the classification of the Class 7a.*

Confirmation is to be provided by the architect and should these areas change, a reassessment of the design is required at the Construction Certificate application stage.

FIRE SOURCE FEATURES:

The site is situated over a single allotment and the distances from the nearest Fire Source Features / allotment boundaries are as follows:

FIRE SOURCE FEATURE	DISTANCE TO FIRE SOURCE FEATURE
– **NORTH SIDE**	<3m from the rear allotment boundary – Approximately 1.8m
– **SOUTH SIDE**	>6m from the far boundary of Raglan Street – Approximately 18m
– **EASTERN SIDE**	<3m from the side allotment boundary – Approximately 0m
– **WESTERN SIDE**	<3m from the side allotment boundary – Approximately 0m

Note: *Refer to BCA Specification 5 and Clause C4D5 for further commentary regarding fire source features and requirements for fire protection etc.*

FLOOR AREA / VOLUME:

The maximum permissible fire compartment sizes for the different classification in the development must comply with the limitations of BCA Table C3D3 as detailed for each classification detailed below:

CLASSIFICATIONS	FIRE COMPARTMENT SIZES	COMPLIES
– **CLASS 2 – (Residential SOU's)**	NA*	Yes
– **CLASS 7a - (Carpark)**	NA*	Yes
– **CLASS 6 - (RETAIL)**	Maximum 5,000m² and 30,000m³	Yes

Note*: Fire compartmentation limitations do not apply to Class 2 Residential SOU's and sprinkler protected carpark.*

DESIGNATED EXITS

The following details the proposed Designated Exits from the building are as follows:

LEVEL	DESIGNATED EXITS
– **BASEMENT FLOOR**	1x Fire Stair and 1x Non -Fire Isolated Stair
– **GROUND FLOOR**	Main Entry Lobby Exit, Perimeter Exit Door from the Side Passage, Perimeter Exit Door from Retail Unit.
– **LEVEL 01 – LEVEL 07**	1 x Fire Stair
– **ROOF TOP**	1x Fire Stair

Note*: Refer to Section D of the BCA regarding number of exits and other egress arrangement commentary.*

SUMMARY OF KEY COMPLIANCE MATTERS:

Section A – Classification of Buildings & Structures:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section A of the BCA subject to compliance with the following:

1. BCA cl. A2G2 – Performance Solutions: Given Performance Solutions are proposed, compliance will be achieved by demonstrating compliance with the relevant Performance Requirements or the solution is at least equivalent to the Deemed-to-satisfy provisions.

2. BCA cl. A6G2 – Determining of Building Classifications: The classification of a building or part of a building is determined by the purpose for which it is designed, constructed or adapted to be used.

   Furthermore, each part of a building must be classified separately according to its use and where these parts have different purposes – if not more than 10% of the floor area of a storey – being the minor use, is used for a purpose which is a different classification applying to the major use, the classification of the major use may apply to the whole storey.

   ***In this regard** it is understood the building's is Classified as a Class 2 (Residential Sole Occupancy Units), Class 6 (Retail) & Class 7a (Carpark)*.

   ***Note 1:** The floor area of storage space within the Basement Level is considered to not occupy more than 10% of the floor area of the storey and therefore, the basement area hold the BCA classification of Class 7a being the other main classification of this storey. This is to be confirmed by the Architect and should these areas change, a reassessment of the design is required at the Construction Certificate application stage. There will be an ancillary plant and other areas which will adopt the relevant Classifications in the parts of the building they are situated within*

   ***Note 2:** The Registered Certifier will need to review the classifications above and provide their concurrence accordingly at the Construction Certificate stage.*

Section B – Structural Provisions:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section B of the BCA subject to compliance with the following:

3. BCA cl. B1D2 – B1D4 – Building Resistance & Determination to Actions & Determining of Structural Resistance of Materials and Forms of Construction: Structural resistance of materials and forms of construction must comply with BCA Clauses B1D2 – B1D4.

   ***Note 1:** Where it is proposed to not achieve a minimum 200mm thick reinforced concrete slab throughout the residential levels (when required by AS3600-2018), this will need to be disclosed by the project structural engineer and addressed under a Performance Based Page 9 of 85 Solution by a C10 Fire Safety Engineer*

   ***Note 2:** Where it is proposed to incorporate permanent Polymer Formwork wall type systems such as Dincel/AFS/Ritek etc, the use of these wall/load bearing systems are to be disclosed by the project structural engineer and addressed under a Performance Based Solution by a qualified Fire Safety Engineer.*

   ***Note 3:** Where structural steel columns, beams and braces are proposed, a colour coded mark-up plan to show the location of these structural members and details on the method of fire protection proposed to achieve the required min FRL's are to be provided with the Construction Certificate application. Any structural steel members are to also be fire rated accordingly and any departures addressed under a Performance Based Solution prepared by a qualified Fire Safety Engineer*

   ***Note 4:** Stair pressurisation shafts, services shafts etc which also form barriers need to be designed accordingly to meet product specifications for human impact and comply with AS1170.1 -2002*

   ***Fire Engineered Performance Solution:** Where required, It is understood that the design team will engage an Accredited Fire Safety Engineer to develop a Performance Solution to rationalise the extent of FRL protection by demonstrating compliance with all relevant BCA Performance Requirement (C1P1/C1P2).*

   ***Note 5:** Structural plans, specifications and design certification are to be prepared by a suitably qualified designer (Registered Structural Engineer) and submitted to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

Section C – Fire Resistance and Compartmentation:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section C of the BCA subject to compliance with the following:

4. BCA cl. C2D2 & C2D3 Type of Construction and Rise in Storeys: The building will be **Type A Construction** by virtue of the Rise in Storeys of the building being assessed as **Eight (8).**

5. BCA cl. C2D10 Non-combustible Building Elements: The provisions of this clause are intended to provide a series of requirements and concessions for the use of non-combustible building elements and these provisions are specified below;

    a) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:

        (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.

        (ii) The flooring and floor framing of lift pits.

        (iii) Non-loadbearing internal walls where they are required to be fire-resisting.

    b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in—

        (i) a building required to be of Type A construction; and

        (ii) a building required to be of Type B construction, subject to C2.10, in—

            A. a Class 2, 3 or 9 building; and

            B. a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.

    c) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification C1.1.

    d) The requirements of (a) and (b) do not apply to gaskets, caulking, sealants & damp-proof courses.

    Subclauses 4, 5 and 6 of this clause detail materials that are permitted/exempted from being non-combustible and the designers are to ensure that all materials specified comply with this criteria accordingly.

    ***In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

    a) Insulation/Sarking - There may be insulation and sarking materials located in the external walls in bounding construction fire rated walls, etc, which will need to meet the non-combustible criteria of Clause C2D10 provisions and details of the material used and test reports are to be furnished at the Construction Certificate stage confirming that all components are non-combustible in accordance with AS1530.1-1994 or are compliant with the concessions under BCA cl.C2D10

    b) Attachments - There may be external Metal, Composite &/or FC cladding, waterproofing membranes, battens, window shrouds, that form part of or are attached to the external wall which may not strictly comply with the concessions under BCA cl.C2D10 and/or AS1530.1-1994 for combustibility and test reports are to be furnished at the Construction Certificate stage confirming that all components of the walls and linings are non-combustible.

    c) Render Finishes -There may be polymer type Render coatings or any other linings which may not strictly comply with the concessions under BCA cl.C2D10 and/or AS1530.1 for combustibility and test reports or Codemark Certificates are to be furnished at the Construction Certificate stage confirming the product and system is non-combustible.

    ***Fire Engineered Performance Solution:** Where any part of the external walls is not AS1530.1-1994 tested or does not fall within the definition of non-combustible or exempted under C2D10 or C2D14 of the BCA, It is understood that the design team will engage an Accredited Fire Safety Engineer to develop a Performance Based Solution to rationalise combustibility provisions and the report will need to demonstrate compliance with all relevant BCA Performance Requirements (C1P2 & C1P4).*

    ***Note 1:** Refer to C2D10, sub-clauses (4), (5) & (6) which provides provide a list of materials and assemblies which are either exempted or permitted to be used in line with the provisions above.*

Note 2: *Our office does not endorse the use of any Aluminium Panels and/or any other combustible materials wall componentry and all external wall assembly materials must be supported by testing in accordance with AS1530.1 -1994. Any Performance Solutions for external walls permitted by the Registered Certifier, must consider AS5113-2016 and FRNSW requirements. The use of external claddings or permanent polymer formwork walls must be supported by Codemark Certification or the like and cross section wall details are required.*

Note 3: *Any performance solutions for external walls must consider AS5113-2016 and FRNSW requirements. The use of external claddings or permanent polymer formwork walls must be supported by Codemark Certification or the like and cross section wall details are required.*

Note 4: *The Supporting Fire Test and/or Design Certification to the satisfaction of the Accredited Certifier are to be provided with the Construction Certificate application.*

Note 5: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier*

6. BCA cl. C2D11 – Early Fire Hazard Properties: Floor, wall & ceiling linings, sarking, and any other linings and attachments are required to comply with the requirements under Clause & Specification 7. In this regard we provide the following notes which are to be read in conjunction with the tables in the BCA:

   - All reflective foils such as sarking/insulations need to achieve compliance and have a flammability index of not greater than 5 and if required to be non-combustible in Type B or A construction, they must not exceed 1mm thicknesses or be supported by testing againstAS1530.1-1994.
   - All insulation materials (including sarking, mineral wool and other fabricated batt, poly or the like products) located in external walls and other walls required to be non-combustible, must be tested to comply with AS1530.1 or be addressed under Performance Solutions (in line with recent ABCB Practice Notes).
   - Ceiling and wall linings are to have a Material Group Number of 1, 2 or 3 in sprinklered protected buildings and 1 or 2 in non-sprinkler protected buildings other than corridors where materials with a Group number 1 is required.
   - Timber feature wall or ceiling linings (or the like) are to comply with the Material Group Ratings under Table S7C4 and are also to have a Material Group Number of 1 in corridors and Group number 1 or 2 elsewhere in non-sprinkler protected buildings.
   - Flooring such as carpets, vinyls, floating floors etc need to achieve a Critical Radiant Flux of not less than 1.2 (where sprinklers are installed) and no less than 2.2 (where no sprinklers are installed).

In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer:*

(a) Poly/Plastic Pedestal Pavers supports - Where plastic/poly pedestal pavers are proposed to be used on balconies, roof top and common areas, these may not comply with the required Fire Hazard Properties in accordance with Specification 7 of the BCA 2022 and will require justification via a performance based solution.

Fire Engineered Performance Solution*: Where any wall and floor linings to no achieve the fire hazard properties of the BCA, It is understood that the design team may engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the Early Fire Hazard Properties of the pedestal pavers supports by demonstrating compliance with BCA Performance Requirement C1P2, C1P4*

Note 1: *Refer to C2D11, Subclause 3 of this clause provide a list of materials and assemblies exempt from the provisions above.*

Note 2: *Refer to Specification 7 which sets out the requirements for all fire hazard properties of linings, materials and assemblies in Class 2-9 buildings as set out in Table S7C2.*

Note 3: *The Supporting Fire Test and Design Certification to the satisfaction of the Registered Certifier are to be provided with the Construction Certificate application.*

Note 4: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of any Performance Based Design Brief and Fire Safety*

Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.

7. BCA cl. C2D14 – Ancillary Elements: The provisions of this clause are intended to clarify that the Ancillary Elements listed under this clause may be applied to an external wall that is required to be non-combustible. The provisions of this clause are specified below;

   An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following:

   a) An ancillary element that is non-combustible.
   b) A gutter, downpipe or other plumbing fixture or fitting.
   c) A flashing.
   d) A grate or grille not more than 2 m² in area associated with a building service.
   e) An electrical switch, socket-outlet, cover plate or the like.
   f) A light fitting.
   g) A required sign.
   h) A sign other than one provided under (a) or (g) that—
      (i) achieves a group number of 1 or 2; and
      (ii) does not extend beyond one storey; and
      (iii) does not extend beyond one fire compartment; and
      (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys.
   i) An awning, sunshade, canopy, blind or shading hood other one provided under (a) that—
      (i) meets the requirements of Table S7C7 of Specification 7 as for an internal element; and
      (ii) serves a storey—
         A. at ground level; or
         B. immediately above a storey at ground level; and
      (iii) does not serve an exit, where it would render the exit unusable in a fire.
   j) A part of a security, intercom or announcement system.
   k) Wiring.
   l) Waterproofing material installed in accordance with AS4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface.

   m) Collars, sleeves and insulation associated with services installations
   n) Screens applied to vents, weepholes and gaps complying with AS3959
   o) Wiper and brush seals associated with doors, windows and other openings.
   p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o).

   ***In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

   a) Waterproof Membranes on External Walls - BCA Clauses C2D14 permits external waterproofing materials to be applied to an adjacent floor surface and roof surface including vertical upturns and below ground membranes projecting above natural ground floor to a maximum height of 250mm. The design details identify waterproofing application to the slab edges and external walls that are above ground (in addition to waterproofing of planter boxes) which deviate from the above clause and will require justification via a Performance Based solution for the final Construction Certificate stage to the satisfaction of the Registered Certifier

   b) External Signs - Any proposed light boxes or building signs affixed to the external walls will require justification via performance based solutions;

   c) Balcony Soffit Linings - Any proposed balcony soffit linings that are attached to the external walls will also need to be non-combustible.

   d) External Pergola/Awnings - There may be awning / shade structures projecting from the building (i.e. adjustable Louvered Roof) which are ancillary elements needing to comply with the provisions above. Please note that glass awning/sunshades/Vergolas, etc etc are not exempted from being

non-combustible under BCA Clause C2D14 and these may require justification via performance based solutions.

Fire Engineered Performance Solution: *Where any part of the external walls is not AS1530.1-1994 tested or does not fall within the definition of non-combustible or exempted under C2D10 or D2D14 of the BCA, it is understood that the design team will engage an Accredited Fire Safety Engineer to develop a Performance Based Solution to rationalise combustibility provisions and the report will need to demonstrate compliance with all relevant BCA Performance Requirement C1P2 & C1P4.*

Note 1: *C2D14 does not apply to ancillary elements installed to the internal face or lining of an external wall. These ancillary elements are subject to the Fire Hazard Properties of C2D11. Refer to Specification 7 which sets out the requirements for all fire hazard properties of linings, materials and assemblies in Class 2-9 buildings as set out in Table S7C2;*

Note 2: *C2D14 does not restrict the external mounting of domestic air conditioning condensers on an external wall;*

Note 3: *The Supporting Fire Test and Design Certification to the satisfaction of the Registered Certifier are to be provided with the Construction Certificate application;*

Note 4: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

8. BCA cl. C3D8, C3D9 & C3D10 – Separation of Classifications on the same and in different storeys: Where parts of different classifications are situated above one another in adjoining storeys, or beside each other on the same storey, consideration for fire separation between the adjoining parts must be considered and the respective FRL's proposed (as prescribed under Spec 5 for the classification's considered).

In this regard, the following areas *have been identified as matters which may be requiring further design consideration;*

a) *Basement and level 1- The floor between the Basement, Ground is required to achieve a minimum FRL of 120/120/120;*

b) *Ground Floor – The Class 7a Carparking area and the Class 6 Retail is to be fire separated via fire walls achieving a minimum FRL of 180/180/18 unless the whole of the ground floor achieves the higher FRL of 180/180/180;*

c) *Level 1 to Roof - The floors there above between the remainder of the Class 2 (Apartments) would only be required to achieve a minimum FRL of 90/90/90 and must also achieve a minimum thickness of 200mm including all set down to wet areas and balconies.*

Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

9. BCA cl. C3D11 – Separation of Lift Shafts: Any lift connecting more than 2 storeys, or more than 3 storeys in a sprinkler protected building, (other than lifts wholly within an atrium) must be separated from the remainder of the building with construction achieving a minimum FRL in accordance with Specification 5 of the BCA for the classification concerned.

Given the proposed passenger lift connects more than a total of three (3) consecutive storeys, the lift shaft is required to be fire rated under this clause. Lift landing doors are to be protected in accordance with BCA cl. C4D10 achieving a minimum FRL of --/60/-- and achieve a minimum FRL of 90/90/90 in the Class 2 parts and a minimum of 120/120/120 in the Class 7a parts accordingly.

Lift landing doors are to be protected in accordance with BCA cl. C4D10 and achieve a minimum FRL of ---/60/--. The doors are to be installed in strict accordance with the fire test reports and the reveals between the lift door and the concrete shaft must also be fire rated to achieve the minimum FRL as required by Spec 5 of the BCA.

Note 1: *Fire ratings will need to be commensurate to the classifications of the areas they connect or pass by i.e. 90/90/90 in the residential levels & 120/120/120 in the carpark levels or as required by the Fire Safety Engineers Fire Safety Strategy.*

Note 2: *Architectural details, Lift design details, Specifications, Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

10. BCA cl. C3D13 – Separation of Equipment: Any lift motor or lift control panels, emergency generators sustaining central smoke control plant, boilers or battery storage enclosures are required to be fire separated from the remainder of the building by construction having a minimum FRL of 120/120/120. Doors to the enclosure are to be self-closing --/120/30 fire doors.

    Subclause (2) of this clause offers exemptions for the separation of certain plant equipment or rooms and AS2419.1-2021 outlines the requirements for separation of on-site fire hydrant pumps where proposed.

    Note 1: *Consideration for the need for fire separation of any server/comms room where it is proposed to have Batteries/UPS's/Storage with a battery system with a voltage exceeding 12 Volts or more, or a storage capacity exceeding 200kWh or more. Electrical Engineer/Contractor/IT contractor to advise further in this regard.*

    Note 2: *There is to be a suitable portable fire extinguisher located between 2m and 10m of the MSB room and the Fire Rating details are to be detailed on the Construction Certificate drawings.*

    Note 3: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

11. BCA cl. C3D14 – Electricity Supply Systems: Any electrical substations, electrical conductors, or main switchboards that sustain emergency equipment operating in emergency mode are required to be fire separated from the remainder of the building by construction having a minimum FRL of 120/120/120. Doors to the enclosure are to be self-closing --/120/30 fire doors.

    Note 1: *Consideration for the need for fire separation of the MSB if it is proposed to provide power supply to any essential services such as (but not limited to) fire hydrant/sprinkler pumps, smoke control systems, emergency lifts and/or other essential services referenced in this Clause.*

    Note 2: *Additionally, there is to be a suitable portable fire extinguisher located between 2m and 10m of the room. Fire rating details are to be noted on the drawings.*

    Note 3: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

12. BCA cl. C3D15 – Public corridors in Class 2 and 3 buildings: In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40m with smoke-proof walls complying with Specification S11C2.

    In this regard*, there were no public Corridors identified that exceed the illimitations of this Clause*

13. BCA cl. C4D3 – Protection of Openings in External Walls: Any openings within the external walls that are located within 3m of a side or rear allotment boundary, 6m from an adjoining building on the same allotment or 6m from the far boundary of an adjoining roadway are required to be protected externally in accordance with Clause C3D5. Openings may also be protected by non-translucent construction achieving an FRL of 30 mins such as blade walls or the like.

    In this regard, the following *areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

    a) *Ground Floor – The opening in the vertical plane between building elements along the vehicular driveway is located within 3m of the Eastern allotment Boundary;*

    b) *Ground Floor – The door openings to Basement Stair 2 are located within 3m of the Northern & Western allotment boundaries;*

    c) *Ground floor Bin Room – The door openings to the Bin Room is within 3m of the Western Allotment Boundary*

d) *Level 1 & Level 02, Units 01 & 04 – The window opening to bedroom 1 is located within 3m of the Western allotment boundary;*

e) *Level 1 & Level 02, Units 02 & 05 – The window openings to bedrooms 1 & 2 are located within 3m of the Eastern allotment boundary.*

Fire Engineered Performance Solution: *It is understood that the design team may engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the extent of protection required to the affected openings by demonstrating compliance with all relevant BCA Performance Requirement (C1P2, C1P8).*

Note: *Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.*

14. BCA Specification 5 – Fire Resisting Construction: The building/s are of Type A Construction and as such all new building elements will need to comply with the FRL's detailed in BCA Specification 5, Section S5C11 – Tables S5C 11a to S5C11g and Clauses S5C12 to S5C20 (as applicable).

Fire Engineered Performance Solution: *It is understood that the design team may engage an Accredited Fire Safety Engineer to develop a Performance Based Solution to rationalise the extent of FRL protection where required and the report will need to demonstrate compliance with all relevant BCA Performance Requirement (C1P1/C1P2). Additionally, where slab set downs within the residential wet areas are proposed and the slab thicknesses cannot achieve 200mm thick (as required by AS3600-2018), the report will need to also demonstrate compliance with all relevant BCA Performance Requirement B1P1.*

Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of any Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

12. BCA Spec. 5 - Subclause S5C16 - Fire Resisting Construction/Roof Lights - The specification requires roof lights to comply with subsection S5C16 and the provisions within restricts the size of the roof light to be no more than 20% of the roof surface and restricts the proximity of roof lights from the boundaries and/or other roof lights in other fire separated areas to no less than 3m and to any part of the same building which projects above the roof unless the wall has an FRL of a Fire Wall and any openings in that part of the wall for a vertical rise of 6m above the roof is protected in accordance the Clause C4D5 of the BCA.

In this regard, the following areas *have been identified as matters which may be requiring further design consideration;*

a) *Roof top – The skylights on the roof must not be located within 3 m of any external walls and openings of the same building projecting above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C4D5.*

Note: *Architectural details, specifications and design certifications are to be prepared by a suitably qualified design practitioner (Registered Architect) and submitted to the satisfaction of the Registered Certifier with the Construction Certificate application.*

Section D – Access and Egress:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section D of the BCA subject to the compliance with the following:

15. BCA cl. D2D3– Number of Exits Required: The building is required to be provided with a minimum of one (1) exits from each storey and not less than 2 exists from each Basement level.

In this regard, *it is noted that the number of exits provide comply with the egress provision of D2D3.*

Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

16. BCA cl. D2D5 – Exit Travel Distances: Egress travel distances must comply with the respective classifications accordingly.

Class 2 (Residential SOU's Part) - The exit travel distances from the entrance doorway of the residential sole occupancy units to an exit generally need to be no more than 6 metres to a point of choice of two exits or not be more than 20 metres to a single exit serving a storey at the level of egress to the road or open space. Concessions for extended egress travel distances of up to 12m (in lieu of the 6m discussed above) are permissible based on a Sprinkler system being proposed that is in accordance with BCA Spec 17 & 18.

Class 6 & 7a (Retail / Carpark / Plant Room / Common Area) Parts - The exit travel distances in in these areas are required to be not more than 20 metres to a single exit, or no more than 20m to an exit or a point where travel in different directions to two or more exits is provided. Where alternative exits are available, the total distance to one of the two exits may be increased to 40m accordingly.

***In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

a) Ground Floor - Egress travel distance from the rear landscaped area is up to 43m (in lieu of 40m) to one of the two exits;

***Fire Engineered Performance Solution:** It is understood that the client may engaged the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the extended Travel distances by demonstrating compliance with BCA all relevant Performance Requirements (D1P4 & E2P2).*

***Note:** Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

17. BCA cl. D2D6 – Distances Between Alternative Exits: The distance between alternative exits within the building must not exceed 60 metres and/or be located less than 9m apart. The alternative path of travel exits must not converge such that they become less than 6m apart.

***In this regard**, it is noted that egress travel distances between exits comply with the egress provision of D2D6.*

***Note:** Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

18. BCA cl. D2D7 – Height of Exit, Paths of Travel to Exits and Doorways: The unobstructed height throughout an exit or a path of travel to an exit must be not less than 2 metres, except for doorways which may be reduced to not less than 1980mm.

***In this regard,** it is considered that the proposed design of the building generally complies with the egress dimension provisions of D2D7 with the exception of the following areas identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer at the Construction Certificate Stage;*

(a) Basement Level – The area below the Exit Stair and Vehicular Driveway Ramp is less than 2.0m in height and either these areas are to be made inaccessible, or these departures will need to be addressed via a Fire Engineered Performance Based Solution at Construction Certificate stage.

***Fire Engineered Performance Solution:** It is understood that the client may engaged the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise reduce unobstructed ceiling distances by demonstrating compliance with BCA all relevant Performance Requirements (D1P4, D1P6 & E2P2).*

***Note:** Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

19. BCA cl. D2D8 – Widths of Exits and Paths of Travel to Exits: The unobstructed with of exits or path of travel to exits and the total aggregate widths for stairways and doorways must take into consideration the total population loads of each storey as determined under D2D8 accordingly.

    The exit stairways and passageways must achieve a minimum unobstructed width of 1.0m and this includes a measurement between handrails and the opposing walls.

    In addition, a minimum of 1.0m is to be provided around all plant equipment and other equipment within the service rooms and to all common external ramps, stairs and walkways.

    As part of the following assessment total population numbers that are considered in the assessment is Max. 50 persons per level.

    In this regard, *it is considered that the proposed design of the building generally complies with the egress dimension provisions of D2D8 and D2D18 with the exception of the following areas identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

    (a) Basement Level - The space between the Basement Stair 2 and the Northern Elevation external wall is less than 1.0m and access to this space will either need to be restricted or addressed via a performance based solution;

    (b) Basement Level - The storage cages in the basement (i.e. units 6 & 13) are less than 1.0m in width and will either need to be increased to a minimum of 1.0m or addressed via performance based solution;

    (c) Basement Level – There may be reduced egress widths around pumps and plant equipment in lieu of minimum1.0m required in the plant rooms and where this occurs, this will need to be addressed via a performance based solution;

    (d) Ground Floor– The stair providing access to the rear landscaped area will need to be provided with a handrail and this may reduce egress widths to be less than the minimum 1.0m required.

    Fire Engineered Performance Solution: *It is understood that the design team may engaged the services of a Fire Safety Engineer to consider a Performance Based Solution to rationalise the reduced egress widths by demonstrating compliance with all relevant BCA Performance Requirements (D1P4/D1P6).*

    Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

20. BCA cl. D2D12 – Travel Via Fire Isolated Exits: 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 and/or to an eclosed areas which meets certain criteria of this clause.

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

    a) Fire Stairs Discharge Location – The fire stairs from the basement and the fire stairs serving the residential parts directly discharge into a covered area (in lieu of discharging directly to a road or open space) which may not be open for 1/3 of its perimeter and may not have a minimum unobstructed ceiling height of 3m throughout.

    Fire Engineered Performance Solution: *It is understood that the design team may engage and Accredited Fire Safety Engineer to develop a Performance Based Solution to rationalise the fire stair arrangements and the extent of fire separation required and the report will need to demonstrate compliance with all relevant BCA Performance Requirement (D1P4, D1P5 & E2P2).*

    Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

21. BCA cl D2D14 – Travel by Non-Fire Isolated Stairways or Ramp: A non-fire isolated stairway must provide a continuous means of travel by its own flights and landings from every storey served to the level of discharge

Class 2 part – The travel distance from the discharge of the stairway to the road or open space must not be more than 15m from a doorway providing egress to a road or open space or 30m from one of two such doorways if travel to each of them is in opposite directions. Furthermore, the total distance of travel via a non-fire isolated stairway from the entrance doorway of the residential sole occupancy units must not exceed 60m.

Class 7a parts - The travel distance from the discharge of the stairway to the road or open space must not be more than 20m from a doorway providing egress to a road or open space or 40m from one of two such doorways if travel to each of them is in opposite directions. The total travel distance is to be not more than 80m from any point of the floor.

***In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

a) Ground Floor - Egress travel distance from discharge point of the Basement Stair 2 is up to 28m (in lieu of 20m) to the door providing access to the road or open space;

***Fire Engineered Performance Solution:** It is understood that the client may engaged the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the extended Travel distances by demonstrating compliance with BCA all relevant Performance Requirements (D1P4 & E2P2).*

***Note:** Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

22. BCA cl. D2D15 – Discharge from Exits: Upon egress occupants must have suitable paths of travel including compliant stairways and ramps (where required) between the building and the Roadway. Graded surfaces must not be steeper than 1:8 and pedestrian egress ramps require handrails and non-slip finishes. Where also required for accessibility, the paths of travel are to comply with BCA Part D4 & AS1428.1-2021.

Exits must also be provided with safety bollards to ensure they are not obstructed by vehicles or other obstructions where considered necessary.

***In this regard, the following areas** have been identified as matters which may be requiring further design consideration at the Construction Certificate Stage;*

a) Ground Floor Exit Discharge Location – The exit discharge to the road or opens space from the two (2) exits serving the basement levels are not as far as practical and this arrangement will require addressing via a performance based solution.

***Fire Engineered Performance Solution:** It is understood that the client will engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the egress discharge arrangements by demonstrating compliance with BCA all relevant Performance Requirements (D1P4, E2P2).*

***Note:** Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

23. BCA cl. D3D14 – Treads and Risers: The stairs must comply with the tread, riser and going dimensions of this clause and the nosing of the stairs must be provided with a non-slip treads and meet the provisions of AS1428.1-2009.

The following will apply in relation to the construction of all stairways:

- Stairway must have not more than 18 and not less than 2 risers in each flight.
- Goings and risers within the stair flights must be constant throughout each flight.
- Off-set treads between flights are to be provided – refer to AS1428.1-2021.

- Goings and risers are to be in accordance with BCA Table D3D14
- Risers must be solid construction with no gaps and treads must have non slip finishes and stair nosing's in accordance with BCA Part D4 and AS4586-2013 and AS1428.1-2021

Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

24. BCA cl. D3D22 – Handrails: A handrail is required along one side of all proposed stairways and ramps located a minimum of 865mm above the line of the stair nosing and 1.0m above ramps and landings greater than 500mm. The handrail must also be continuous between flights.

    Internal & External delineated access and egress paths between the building entrances/exits and to the boundary providing access to the road must have handrails provided if the gradients are steeper than 1:20.

    Note 1: *Please note the additional handrail requirements for stairs required to be accessible under AS1428.1-2021. Project Access Consultant to review all stairways and handrail details and prepare a report for submission to the Registered certifier at the Construction Certificate stage.*

    Note 2: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

25. BCA cl. D3D24 – Doorways, BCA cl. D3D26 - Operation of Latch: Designated exit doors must be a swing door, power operated sliding door and have compliance door latch hardware. These doors are not permitted to be a roller shutter or the like unless it serves certain areas.

    Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

26. BCA cl. D3D29 – Protection of Openable Windows: Each window opening serving a bedroom in a residential building must be provided with a means of protection if the floor below the window is 2m or more above the surface beneath.

    - Where the lowest level of an openable window is less than 1.7m above the floor, then a window opening is required to be protected either with a device to restrict the window opening to a max. 125mm; or be provided with structurally suitable screens with secure fittings.
    - The device or screen must be designed to resist a 125mm sphere to pass through the opening or screen and resist an outward horizontal action of 250N against the window restrained by the device or the screen protecting the opening and have a child release mechanism if the screen or device removed, unlocked or overridden.
    - Further to the above, a barrier such as a balustrade, window sill or the like with a height not less than 865mm above the floor surface is required to all openable windows where the level of the floor is 4m or more above the surface beneath and the barrier is of this nature must not permit a 125mm sphere to pass through it and have any horizontal or near horizontal members between 150mm and 760mm above the floor and must not facilitate climbing.

    Note: *Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act) are to be provided to the satisfaction of the Registered Certifier at the Construction Certificate application stage.*

27. BCA Part D4 – Access for People with a Disability: Access and facilities for people with disabilities will need to be provided to satisfy the requirements of Part D3 of the BCA & AS1428.1-2021, and the Access to Premises – Buildings Standards 2010 satisfying the client's obligations under the DDA. Clauses that directly related to compliance with this part are D3D11, D3D16, D3D22, D4D2, D4D3, D4D4, D4D7, D4D10, D4D11, D4D13, Spec 16, E3D10, F4D5 and the definitions in Schedule 1.

    Pursuant to Clause D4D2, the subject building holds Class 2 and Class 7a Classifications must be accessible and access must be provided to and within all areas normally used by the occupants as noted below.

Class of Building	Access Requirements
Class 2	From the pedestrian entrance to the entrance door of all the residential units. Access is also required to all communal areas (e.g. outdoor terraces, communal rooms, Bike/Storeroom and garbage room within the basement levels and all other common areas, terraces, balconies and the like).
Class 6 & 7a	To and within all areas normally used by the occupants.

Accessibility Compliance Report: *It is understood that an access consultant will be engaged to review the proposal and provide an Accessibility compliance / Performance Solution Report to accompany the Construction certificate application submission to ensure that all aspects of the DDA, AS1428.1-2021 and Part D4 of the BCA have been addressed. Adaptable Housing/ADG provisions will also need to be considered and Pre-post adaptation plans will need to accompany the Construction Certificate application to the satisfaction of the Registered Certifier.*

Note 1: *Architectural details are to incorporate all recommendations of the latest rendition of the Accessibility compliance and / BCA Performance Solution Report.*

Note 2: *Architectural details and design certification to the satisfaction of the Registered Certifier carrying our certification work are to be provided with the Construction certificate application incorporating all recommendations of the latest rendition of the Accessibility compliance and / BCA Performance Solution Report.*

Note 3: *Architectural details, Specifications, and design certifications together with the Access compliance report are to be prepared by a suitably qualified design practitioner (Registered Architect & Access Consultant) and submitted to the satisfaction of the Registered Certifier with the Construction Certificate application. Where A Performance Solution is proposed, a copy of the Access Report prepared by an Accredited Access Consultant from the Association of Access Consultants is to also be provided and accompanied by a BCA Performance Based Design Brief.*

Section E – Essential Fire Safety Measures:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section E of the BCA subject to the compliance with the following:

Refer to **Appendix** for a table of the relevant Essential Fire and Other Safety Measures applicable to the building which is to be read in conjunction with the following;

28. BCA cl. E1D2 – Fire Hydrants: A Hydrant system is required to be installed in accordance with AS 2419.1 – 2021 and any applicable FRNSW Position Statements and Guidelines.

    The system includes a Booster Assembly located within the driveway entrance and internal fire hydrants located in fire stairs where fire stairs are installed.

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

    a) *Fire Brigade Booster Assembly -The location of the Booster Assembly is considered to be within the building and not the façade, the valves do not face the street as required by AS2419.1-2021 and this booster location and arrangement will need to be addressed via a Performance based solution.*

    b) *Hydrant Landing Valve Locations – Hydrants are to be located on each storey and installed within the fire stairs ensuring egress paths are not reduced to under 1.0m – unless otherwise addressed via a Performance Based Solution;*

    c) *Coverage Plans – Fire Hydrant Sweep diagrams are to be provided to confirm coverage throughout at the Construction Certificate Stage;*

    d) *Design Departures – The fire services engineers are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards;*

Fire Engineered Performance Solution: *It is understood that the client will engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the hydrant system arrangements by demonstrating compliance with all relevant BCA Performance Requirements (E1P3).*

Note 1: *The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.*

Note 2: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided.*

29. BCA cl. E1D3 – Hose Reels: A fire hose reel system is required to serve a building (excluding the Class 2 parts) where one or more internal fire hydrants are installed or in a building where the floor area of the fire compartment is greater than 500m² and the system is to be designed to comply with AS 2441 – 2005.

    Hose reels are required to be located within 4 metres of an exit or adjacent to internal Hydrants (other than hydrants located in fire isolated exits).

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;*

    a) *Fire Hose Reel Coverage – Fire Hose Reel coverage is required to all areas of the basement level & Ground Floor level (including services plant room, and waste room) without passing through fire doors.*

    b) *Fire Hose Reel Coverage Plans – Detailed sweep coverage plans with dimensions are to accompany the Construction Certificate application.*

    c) *Fire Hose Reel Design Departures – Any departures associated with the systems Standard of Performance (AS2441.1-2005) needs to be identified by the Registered Design Practitioner/Competent Fire Safety Practitioner for the Registered Certifier and Fire Safety Engineers consideration.*

    Note 1: *The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.*

    Note 2: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided.*

30. BCA cl. E1D4, E1D5, E1D6, E1D8 & Specification 17 & Specification 18 – Sprinklers : The building is required to be sprinkler protected throughout as it has a rise in storeys greater than three (3).

    The building is required to be provided with a sprinkler system which will comply with AS2118.1-2017 (incorporating Amendment's 1 and 2).

    The sprinkler valve room which contains the Main Stop Valve needs to be accessed directly from open space.

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

    a) *Sprinkler Booster Location – The location of the Booster Assembly is considered to be within the building, and this arrangement will need to be addressed via a Performance based solution.;*

b) *Fire Sprinkler Valve Location – The sprinkler stop valve is required to be accessible directly from the roadway and as it is proposed to be located in the Services Room in the Basement, this will require justification via a Performance Based Solution.*

c) *Fire Sprinkler Clearances –Sprinkler heads proposed to the storage areas for clearances purposes may require addressing via a fire engineered Performance Based Solution and fire services consultant to confirm sprinkler clearance requirements at the Construction Certificate stage;*

d) *Design Departures – The fire services engineers are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards;*

Fire Engineered Performance Solution: *It is understood that the client will engage the services of a Fire Safety Engineer to consider a Performance Based Solution to rationalise the departures with the sprinkler system arrangements by demonstrating compliance with all relevant BCA Performance Requirements (E1P4).*

Note 1: *The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.*

Note 2: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided.*

31. BCA cl. E1D14 – Portable Fire Extinguishers: Portable fire extinguishers are to be installed in accordance with Clause E1D14 and Sections 1, 2, 3 & 4 of AS 2444-2001 to serve the building.

Note 1: *In this regard, the drawings do not currently denote location of the portable fire extinguishers that are required to be provided within 10m of each SOU door. Refer to E1D14 for type of extinguishers required*

Note 2: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided.*

32. BCA cl. E1D17 – Provision for Special Hazards: Suitable additional provision must be made if special problems of fighting fire could arise because of the nature or quantity of materials stored, displayed or used in a building or on the allotment; or the location of the building in relation to a water supply for fire-fighting purposes.

In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

a) *Photovoltaic/Solar Panels – Photovoltaic panels are proposed on the Roof and these need to be identified in the FEBQ/FER. Where battery storage systems are also proposed, these may need to be contained in separate fire rated enclosures and also identified in the FEBQ/FER..*

b) *Electric Vehicle charging Facilities – The provision of any electric vehicle charging facilities in the carparks needs to be identified in the FEBQ/FER.*

c) *Impulse/Jet Fans – The use of Impulse/jet fans could affect operation of the carpark fire systems and the firefighting operations of FRNSW. As such, consideration to FRNSW guidelines will need to be considered. https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/impulse_fans_in_carparks.pdf.*

Fire Engineered Performance Solution: *It is understood that the client will engage the services of a Fire Safety Engineer to prepare a Performance Based Solution to rationalise several DTS departures and these Special Hazards provisions need consideration accordingly.*

Note: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided*

33. BCA cl. E2D3, E2D8 & Specification 20 & 21 and NSW Variations E2D16 & E2D19 – Smoke Hazard Management: The building is required to be provided with the following smoke hazard management provisions.

Automatic Fire Detection & Alarm System and Building Occupant Warning System is required throughout the building in accordance with AS1670.1-2018 (Including Amendments). Detectors may be multi-criterion/combined smoke & heat alarms if desired and Smoke detectors in the SOU's are to be spaced according to AS3786-2014 criteria.

An Occupant Warning System must be provided throughout the building including the basement, residential and external communal areas in accordance with AS1670.1-2018 (Including Amendments)

A **Fire Panel (FDCIE**) needs to be installed at the main **entry** of the building and a system monitoring system with a direct communication link to the Fire Brigades is required in accordance with AS1670.3 and AS2118.1-2017.

In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer*

(a) *Smoke Detection Systems –Detection systems are typically required throughout all common areas in the Carpark and Residential Corridors as a compensatory measure to DTS deviations within the Fire Engineering Strategies for the building;*

(b) *Smoke Alarms Systems –Smoke alarms within the SOU's are to strictly comply with Specification 20 and Subclause S20C3 and be located in hallways between bedrooms and any other areas or located in front of bedroom doors where there is no hallway and must not be located near ceiling fans or supply AC vents. Smoke alarms are to be interconnected within each respective unit and be located 300mm from intersecting walls.*

(c) *Fire Indicator Panel – Given the building requires a Sprinkler System, an FIP with ASE will be required at the Designated Principal Building Entrance. Given there are two blocks (Block A and Block B) it may be a requirement to have a sub FIP. Location of the FIP/s must ensure its location is suitably selected to ensure evacuation of the building from residents does not hinder firefighting operations.*

(d) *Smoke Hazard management Design Departures – Any departures associated with the systems Standard of Performance (/AS2118.1-2017 / AS1670.1-2018 / AS3786 -2014 / AS1668) needs to be identified by the Competent Fire Safety Practitioner for the design team and Registered Certifiers consideration*

Fire Engineered Performance Solution: *Where any part of design is proposed to deviate (subject to design engineers' advice) the design team will engage an Accredited Fire Safety Engineer to develop a Performance Based Solution to rationalise certain aspects of the Smoke Hazard Management System designs and the report will need to demonstrate compliance with all relevant BCA Performance Requirements (E2P2).*

Note 1: *The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.*

Note 2: *Architectural & Fire Services Details, Specifications, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report*

prepared by an Accredited Certifier – Fire Safety and who is also Registered Design Practitioner, is to also be provided.

34. BCA cl. E3D3 – Stretcher Lift: Given the building has an affective height of greater than 12 metres, Stretcher Lifts are required to serve lifts at each storey. As such the lift is required to have a clear space of not less than 600mm wide x 2000mm long x 1400mm high. Accessible provisions are also required.

    Note: *Architectural details, Lift design details, specifications and design certifications are to be prepared by a suitably qualified design practitioner (Architects & Vertical transport Registered Design Practitioners) and submitted to the satisfaction of the Registered Certifier with the Construction Certificate application confirming the stretcher facility achieves a minimum 2.0m depth.*

35. BCA cl. E4D2 to E4D4 – Emergency Lighting: Emergency Lighting is required in the building in accordance with AS 2293.1 -2018 (including amendments).

    All stairs are to ensure adequate lux levels are provided throughout the stairs and landings in the event of an emergency and all floor areas requiring coverage are to have suitably located emergency lighting provisions installed.

    Note: *Electrical Details and Specifications are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

36. BCA cl. E4D5 to E4D8 – Exit Signs: Illuminated Exit signs must be clearly visible to persons approaching the exit and must be installed on, above or adjacent to each door providing egress from a building. Signs are required to comply with AS 2293.1-2018 (including amendments)..

    Exist signs are not to be of the tinted/dark type signs unless otherwise addressed via a Performance Based Solution.

    Note: *Electrical Details and Specifications are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

BCA SECTION F – HEALTH & AMENITY:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section F of the BCA subject to the compliance with the following:

37. BCA cl. F1D3 – Stormwater Drainage: Stormwater drainage must be installed as per AS3500.3 -2021.

    In addition to the above, compliance with the other Parts of AS3500 must also be complied with together with the relevant provisions of the National Construction Series – Volume 3 – Plumbing Code of Australia.

    Note: *Hydraulic / Civil Details and Specifications are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

38. BCA cl. F1D5 – External Above Ground Membranes: Waterproofing membranes for external above ground use must comply with AS4654 Parts 1 and 2 -2012.

    Poly paver / Pedestal Paver systems require performance based solutions as the pavers do not provide the required 1:80 falls required by the Standards.

    Note 1: *F1D4 and F1D5 do not apply to a roof designed to comply with F3D2 (a) to (d). Also, F1D3 to F1D5 do not apply to a balcony, podium or singular horizontal surface part of a building where the flooring is of timber decking or other perforated flooring; or which is located directly above ground – refer to F1D2 Application of Part for further guidance in this regard.*

    Note 2: *Architectural, Hydraulic and Waterproofing Details and Specification are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Where design departures are proposed, a Performance Based Solutions addressing BCA performance Requirement F1P2 is to be prepared, and a copy of the Report is to also be provided.*

39. BCA cl. F2D2– Waterproofing of Wet Areas: Wet areas in the building are required to comply with **Specification 26 and comply with AS 3740-2021**.

Class 2 buildings must have building elements in a wet area (bathroom, shower, laundry, powder room) that are water resistant or waterproofed in accordance with Specification 26 and AS3740-2021.

Please ensure the new standard is reviewed to ensure appropriate details are adopted in the proposed design, noting 1:80 falls are now required throughout all internal wet areas (including laundries), and 1:100 falls in the concrete substrate structure.

Note 1: *Refer to definitions for explanations of Water resistant and Waterproofed and also Specification 26 for further requirements that need to be complied with.*

Note 2: *Drainage/Puddle floor waste flanges are required to ALL floor wastes. Shower roses which are ceiling mounted require waterproofing application to extend to the full height to the wall and ceilings to be water resistant. Falls to floor wastes in all internal wet areas are to be 1:80.*

Note 3: *Third party Water proofing consultants are to be engaged to assist the Architect with detailing compliance requirements.*

Note 4: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

40. BCA cl. F2D4 – Floor Wastes: All bathroom & laundry facilities within Class 2, 3 or 4 Residential Sole Occupancy Units are to have floors that are graded to a floor waste to permit the drainage of water. It is recommend that floor wastes also be considered in Class 5-9 building – considering the Plumbing code of Australia and AS3500.

Where a floor waste is required to be installed;

(a) the minimum continuous fall of a floor plane to the waste must be 1:80; and

(b) the maximum continuous fall of a floor plane to the waste must be 1:50.

Note 1: *Drainage/Puddle floor waste flanges are required to ALL internal and external floor wastes.*

Note 2: *Architectural & Hydraulic Details and Specification are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

41. BCA cl. F3D2 – Roof Coverings: All new roofing must be covered with

- Metal roof sheeting comply with AS 1562.1 -2018; or
- An external waterproofing membrane complying with F1D5 and AS4654 Parts 1 and 2 -2012

Note: *Architectural Details and Specification are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

42. BCA cl. F3D3 – Sarking: Sarking must be installed to roof and walls for weatherproofing as per AS4200.1-2017 & AS4200.2 - 2017. Damp proofing between external abutting walls of any adjacent buildings is also to be considered.

Note 1: *Sarking Type Materials are defined as a material such as a reflective insulation or other flexible membrane of a type normally used for the purpose of waterproofing, vapour management or thermal reflectance.*

Note 2: *Sarking type materials in Type B or Type A Construction must not exceed 1mm thickness and have a Flammability Index not greater than 5 to be installed on external walls of buildings and if this is not complied with, the sarking Type Materials must be non-combustible and tested in accordance with AS1530.1-1994 as required by BCA Clause C2D10.*

Note 3: *Architectural Details and Specification are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

43. BCA Clause F3D1, F3D2, F3D3, F3D4 & F3D5 – Roof & Wall Cladding / External Wall Weatherproofing: The buildings external walls and roof elements are to be designed to prevent the risk of water (including surface water and rainwater) from entering the building and causing musty, damp and unhealthy conditions or damaging building elements by corrosion or other degradation.

    It is also intended to prevent water redirected away from the outside of the building damaging nearby properties.

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;*

    a) *In order to comply with the deemed to satisfy provisions, the architect and façade engineers must design the building envelope and surrounding surfaces in accordance with Clauses F3D2, F3D3, F3D4 & F3D5 and where this cannot be achieved, a Performance based solution addressing BCA Performance Requirement F3P1 is required.*

    BCA Performance Solution: *Façade Engineer to prepare a report to assess water and moisture ingress via the external walls and roof whilst considering BCA Clauses F3D1, F3D2, F3D3, F3D4 and F3D5 and also develop a Performance Based Solution to address BCA Performance Requirement F3P1as it is unlikely that the external wall cladding will comply with these provisions accordingly.*

    Note 1: *External cladding that does not consist of the above options will need to be subject to performance based solutions.*

    Note 2: *External wall claddings in buildings of Type A Construction must be non-combustible and tested in accordance with AS1530.1-1994 as required by BCA Clause C2D10.*

    Note 3: *External waterproofing membranes in accordance with F1D5 and AS4654.1 or 2 - 2013 are not permissible for vertical or near vertical surfaces and relate to horizontal surfaces only.*

    Note 4: *Architectural and/or Façade Engineering Details, Specifications are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Where design departures are proposed, a Performance Based Solution addressing BCA performance Requirement F3P1, is to be prepared by the Façade engineer and a copy of the Report is to also be provided.*

44. BCA cl. F4D2 – Facilities in Residential Buildings: Each Class 2 SOU is to be provided with their own private facilities which includes a bath/shower, closet pan & wash basin, laundry tub, and space for a washing machine and dryer.

    In this regard*, it is considered that the proposed design of the building generally complies with provision of clause F4D2 accordingly.*

    Note: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

45. BCA cl. F4D8 – Construction of Sanitary Compartments: The door to fully enclosed sanitary facilities must open outwards, slide or be readily removable from the outside unless there is a clear space of 1.2 metres measured in accordance with BCA Figure F4D9 between the closet pan within the sanitary compartment and the doorway.

    Note: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

46. BCA cl. F5D2 – Height of Rooms and Other Spaces: The floor to ceiling heights in the Class 2 Residential part of the building must not be less than 2.4 metres in habitable rooms and 2.1 metres in kitchens, laundries, and bathrooms. Notwithstanding, ADG Guidelines necessitate higher ceiling heights of 2.7m and commitments made under these guidelines will need to consider compliance accordingly. Notations showing finished ceiling heights are recommended on the Construction Certificate drawings.

    The floor to ceiling height in the Class 7a car parking areas must be not less than 2.2 metres to comply with BCA minimum requirements and AS2890.1 the carparking design standard. NB: Accessible parking spaces require 2.5m above the designated spots. Floor to ceiling heights in the remainder must be 2.4 metres generally in retail space and store areas, toilets and corridors etc may be 2.1-metres.

    In this regard, the following areas *have been identified as matters which may be requiring further design consideration or justification via a Performance Based Solution;*

    (a) Basement Level Storage Cages– The minimum sprinkler head clearances required for sprinklers within the storage cages may reduce the head heigh clearance of the room to be less than the minimum 2.1m and this will be required addressing via performance based solution.

    (b) Basement level Stairs & Ramps – The areas below the vehicular driveway ramps and below the exit stairs may has a reduced ceiling height clearance to be less than the minimum 2.1m an this will need to be addressed via a performance based solution.

    BCA Performance Solution*: It is understood that the applicant may engaged the services of a BCA Consultant to prepare a Performance Based Solution in accordance with Clause A2G2 to rationalise the departures above by demonstrating compliance with all relevant BCA Performance Requirements (F5P1).*

    Note 1: *Services design details are to be reviewed and confirmation is to be provided that services are not encroaching below the minimum head height clearances at the Construction Certificate stage.*

    Note 2: *Architectural Details and Specifications are to be provided ensuring they cross reference any Fire Engineering requirements. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Performance Solution Report is to also be provided.*

47. BCA cl. F6D2 – Provision of Natural Light: Natural light is required to be provided to all habitable rooms in accordance with F6D2 and all other areas can be provided with artificial lighting in accordance with BCA Clause F6D5. Refer to F6D3 for methods of Natural Light compliance where required.

    The definition of Habitable Room includes a bedroom, living/dining room, study, kitchen, etc and in this regard we note compliance is readily achieved.

    Note: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

48. BCA cl. F6D5 – Artificial Lighting: Artificial lighting is required where it is necessary to minimise the hazard to occupants during an emergency evacuation. In this regard, we note that artificial lighting is required throughout the building in accordance with AS/NZS 1680.0-2009.

    Note: *Electrical Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Electrician) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

49. BCA cl. F6D6 & F6D7 – Ventilation of Rooms & Natural Ventilation: The building is required to be provided with either mechanical ventilation complying with AS1668.2-2012 or natural ventilation achieving 5% of the floor area of the room served.

    Note: *Architectural & Mechanical Details and Specifications are to be prepared by a suitably Registered design practitioners (Registered Architect and Mechanical Services Engineers) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners*

Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.

50. BCA Part F7 - Determination of Impact Sound Insulation Ratings: A report from an acoustic consultant is to be submitted prior to the issue of the Construction Certificate to confirm the design complies with the requirements of Part F7.

Note: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect and/or Acoustic Consultant) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

BCA SECTION G – HEALTH & AMENITY:

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section G of the BCA subject to the compliance with the following:

51. BCA Part G1D2 (NSW) Swimming Pools (G1.1): A swimming pool or body of water with a depth of greater than 300mm and which is associated with a Class 2 building must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with AS1926.1 Parts 1 and 2 – 2012.

Filtration and water recirculation provisions must also comply with AS1926.3 and a safety resuscitation chart is to be erected in a suitable location within the enclosure

In this regard, the following areas have been identified as matters which may be requiring consideration at the Construction Certificate application stage:

(a) *Private and Common Pool Barriers – Barriers are to be designed to the pool standards and a minimum of 1200mm between the enclosure and common areas/ plant areas are to be provided.*

NB: The external walls of the above ground portion of a swimming pool cannot be used as a barrier/pool fence.

(b) *Climbable Elements – Detailed drawings are to be provided to the PCA for review to ensure no planter boxes, handrails or the like create climbable elements into pool enclosure - Architect to ensure strict compliance with AS1926.1-2012.*

(c) *E1 Registered Certifier's Compliance Statement – We recommend an E1 registered Certifier be engaged to review the plans and provide design advice and a design compliance statement to confirm the proposed barriers comply with the BCA and AS1926.1.*

Note: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Compliance Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

52. BCA cl. G1D5 (NSW) – Provision for Cleaning of Windows (G1.01): A building must provide a safe manner of cleaning windows located 3 or more storeys above ground level. In this regard, the windows must be able to be cleaned from within the building, or provisions made for cleaning of windows by a method complying with the OH&S Act 2000 and regulations made under the Act e.g. roof anchors etc.

Note: *Architectural Details and Design Certifications are to the satisfaction of the Registered Certifier are to be provided with the Construction Certificate application.*

53. BCA Part G6 – Occupiable Outdoor Areas (Part G6): The provisions of this clause specify the requirements for Occupiable Outdoor Areas which are defines as follows;

Occupiable outdoor area means a space on a roof, balcony or similar part of a building—
(a) that is open to the sky; and
(b) to which access is provided, other than access only for maintenance; and
(c) that is not *open space* or directly connected with *open space*.

Occupiable Outdoor Area Definition (Source: NCC/BCA Schedule 3)

In this regard, the following provisions are to be considered for the Level 02 and Level 10 balconies, common open space and roof top level terrace spaces accordingly.

- Fire Hazard properties to any feature linings (facades); and
- Fire separation between storeys – (readily achieved by virtue of the concrete roof deck); and
- Egress stairs and provisions for escape – (readily achieved by virtue of the stairs serving these areas within the building however re-entry provisions are to be noted); and
- Fire Fighting services including hydrants, hose reels, extinguishers, emergency lighting fire services must be provided to provide coverage to these areas as per the requirements of this Part (assumed compliant however coverage plans are required).
- Lift installations – (readily compliant by virtue of lift access to roof); and
- Light and ventilation as required meaning in this instance artificial lighting will be required (complies).

Note 1: *Notwithstanding provisions above, AS2419.1-2021 still requires fire hydrant coverage and AS2118.1-2017 still requires sprinkler coverage to outdoor balconies of the Class 2 Parts and details need to ensure these areas are appropriately covered.*

Note 2: *Architectural Details and Specifications are to be prepared by a suitably Registered design practitioner (Registered Architect) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.*

BCA SECTION J – ENERGY EFFICIENCY

The proposed development will generally satisfy the DTS provisions & Performance Requirements of Section J of the BCA subject to the compliance with the following:

54. BCA Section J Energy Efficiency (Section J): The Class 2 Building part will be subject to the Building Sustainability Index (**BASIX)** which will require the recommendations on the certificate to be *clearly demonstrated on the Construction Certificate drawings.*

In addition, the DTS requirements of NSW Variations of Section J (Energy Efficiency) of the BCA will need to apply to the proposed Class 2 parts of the development. Refer to NSW Variation Clauses J2D2(2), J3D5, J3D6 J4D2, J4D3, J3D10(3), J3D10(5), J3D10(6), J5D2 to J5D5, J6D2 to J6D13, J8D2 & Part B2 of the PCA, J9D3, J9D4 and J9D5.

For a Class 3 to 9 buildings, other than a sole-occupancy unit of a Class 2 building or part of a building, Performance RequirementJ1P1 is satisfied by complying with—

- Part J4, for the building fabric; and
- Part J5, for building sealing; and
- Part J6, for air-conditioning and ventilation; and
- Part J7, for artificial lighting and power; and
- Part J8, for heated water supply and swimming pool and spa pool plant; and
- J9D3, for facilities for energy monitoring

The building is located in **Climate Zone 5** and the relevant provisions of the BCA are to be applied to each classification concerned adoringly.

Note 1: *In order to demonstrate compliance, it is understood that a Section J report and Verification report from an qualified ESD Consultant will be submitted with the Construction Application.*

Note 2: *Architectural & ESD Consultant Details and Specifications prepared by a suitably Registered design practitioner (Registered Architect & ESD Consultant) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier*

CONCLUSION:

This report contains an assessment of the referenced architectural documentation for the proposed development located at 22-24 Raglan Street Manly , against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia.

In this regard, the relevant rendition of the BCA for the development may be BCA 2025 and although the draft provision of BCA 2025 have been considered, re-assessment of the design will be required to be carried out upon formal release of this BCA Edition from the Australian Building Codes Board (ABCB) and prior to further determination at the Construction Certificate stages.

The detailed desktop assessment of the building was carried out against the technical provisions of the BCA 2022 Amendment 2. It is noted that the proposed development must comply with the relevant requirements and this can be achieved by complying with the following:

a) Complying with the Deemed-to-satisfy (DTS) Provisions; or

b) Formulating a Performance Solution which considers one or more of the BCA Assessment methods and which –

   i) Complies with the Performance Requirements; or

   ii) Is shown to be at least equivalent to the DTS provisions; or

c) A combination of the above.

In accordance with the above, Concise Certification can verify that the proposed building design will entail a combination of compliance with the DTS provisions and Performance Requirements of the BCA, by virtue of the justification of Performance Based Solutions prepared by an Accredited Fire Safety Engineer, Access Consultant, ESD Consultant and Façade Engineer, however the findings of these report at the Construction Certificate Stage should not in any way detrimentally alter the design presented to Council as part of the Development Application (DA) application.

In view of the above assessment we can confirm that subject to the above measures being appropriately addressed by the project Fire Safety Engineer, Access Consultant, Design Consultants and other key Stakeholders, that compliance with the BCA is readily achievable.

We trust that the above submission is of assistance to the Department of Planning, Housing and Infrastructure and we are confident that any design modifications required to the building in order to satisfy the fire and life safety, accessibility requirements, health & amenity requirements and the energy efficiency provisions of the BCA will not necessitate the need for submission of a further application under Section 4.55 of the Environmental Planning & Assessment Act 1979.

Should you require further assistance or clarification please do not hesitate to contact the undersigned at darko@concise.com.au or on 0431 194 363.

Kind Regards,

Darko Kardum
Senior Building Surveyor
Concise Certification Pty Ltd

Refer to Attached Appendix - Fire Safety Schedule

APPENDIX: PRELIMINARY FIRE SAFETY SCHEDULE

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule, which, for the purposes of Part 10 and Part 11 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, which will be deemed to be the current fire safety schedule for the building.

Statutory Fire Safety Measure	Design/Installation Standard
Alarm Signalling Equipment	BCA 2022 (A2) - Clause E1D4, Specifications 17 & 18 & 20, AS 1670.3 – 2018* and Manufacturer's Specification
Automatic Fire Detection and Alarm System	BCA 2022 (A2) - Clause E2D3, E2D8 BCA Specification 20, AS 1670.1 – 2018* & Manufacturer's Specifications + Fire Engineered Performance Based Solution
Automatic Fire Suppressions System	BCA 2022 (A2) - Clause E1D4, E1D6,& E1D9 Specifications 17 & 18 AS 2118.1 – 2017 or AS 2118.4-2012, Manufacturer's Specifications + Fire Engineered Performance Based Solution
Building Occupant Warning System	BCA 2022 (A2) - Clause E2D8, BCA Specification 20 and AS 1670.1 – 2018* and Manufacturer's Specifications + Fire Engineered Performance Based Solution
Emergency Lighting	BCA 2022 (A2) - Clause E4D2, E4D3 & E4D4 & AS 2293.1 - 2018 and Manufacturer's Specifications
Exit Signs	BCA 2022 (A2) - Clauses E4D5, E4D6 & E4D8 (and AS 2293.1 – 2018 and Manufacturer's Specifications
Fire & Smoke Dampers	BCA 2022 (A2) - Clause C4D15, AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 and Manufacturer's Specifications
Fire Doors	BCA 2022 (A2) - Clause C3D13, C3D14, C4D5, C4D11, C4D12, D3D9 and AS 1905.1 – 2015, AS 1530.4-2014 and Manufacturer's Specifications + Fire Engineered Performance Based Solution
Fire Hose Reels	BCA 2022 (A2) - Clause E1D3 & AS 2441 – 2005 and Manufacturer's Specifications
Fire Hydrant Systems	BCA 2022 (A2) - Clause E1D2 & AS 2419.1 – 2021 Manufacturer's Specifications + Fire Engineered Performance Based Solution
Fire Resisting Elements & Structures	BCA 2022 (A2) – Clause C2D2 & Specification 5, AS 1530.4-2014 + Fire Engineered Performance Based Solution
Fire Seals – *Protecting openings in fire-resisting components of the building*	BCA 2022 (A2) - Clause C4D15 & AS 1530.4 – 2014 & AS 4072.1 – 2005, Manufacturer's Specifications
Lightweight Construction – *Including Cavity Fire Stopping*	BCA 2022 (A2) - Clause C2D9 Specification 5 & 6 & AS 1530.4 – 2014 and Manufacturer's Specifications
Mechanical Air Handling Systems – *Carpark Exhaust Systems*	BCA 2022 (A2) - Clause E2D3, E2D12, F6D11, & Specification 20 AS/NZS 1668.1 – 2015, AS 1668.2 – 2012*, AS1670.1-2018* and Manufacturers Specifications
Paths of Travel – *Fire Exits and Fire Exit Doors*	BCA 2022 (A2) – Part D2 & Section 109 of the EP&A (Development Certification and Fire Safety) Regulation + Fire Engineered Performance Based Solution
Portable Fire Extinguishers	BCA 2022 (A2) - Clause E1D14 & AS 2444 – 2001
Smoke and Heat Alarms – *Located within Sole Occupancy Units*	BCA 2022 (A2) – Clause E2D8 and Specification 20 and AS3786-2014* and Manufacturer's Specification
Wall-Wetting Sprinklers – *Where proposed to protect Openings*	BCA 2022 (A2) - Clause C4D5, & AS 2118.2 – 2021 and Manufacturer's Specification + Fire Engineered Performance Based Solution
Warning & Operational Signs	BCA 2022 (A2) BCA 2022 - Clauses D4D7 and E3D4 + Fire Engineered Performance Based Solution

Statutory Fire Safety Measure	Design/Installation Standard
– *Fire Safety Notices, Braille Signage, Lift Warning Signs, Fire Services Block Plans & other*	
Fire Engineered Performance Solutions (Refer to Summary in table in the report above)	The relevant Performance Requirements associated with the proposed Fire Engineered Performance Solutions: - C1P1, C1P2, C1P4 & C1P8 - D1P2, D1P4 & D1P5 - E1P3, E1P2, E1P4 & E2P2

***Note 1:** The Standard of Performance above are subject to change under BCA 2025 – e.g. Smoke Detection (AS1670.1-2021, AS1670.3-2021, AS3786-2023, AS1668.2-2024, etc).*

***Note 2:** The above Performance Based Solutions include fire safety provisions and pursuant to Section 27 of the EP&A (Development Certification and Fire Safety) Regulation 2021, formal Fire Engineering Brief and Report referrals to Fire & Rescue NSW will be require prior to the Construction Certificate application stages.*