



DHL Stage 2, Warehouse 1 & 2

Elizabeth Drive, Badgerys Creek

Regulatory Compliance Report

BCA Assessment

Prepared for: DHL Supply Chain

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1. EXECUTIVE SUMMARY

The proposed development is Stage 2 (Warehouse 1 & 2) of the proposed Industrial Estate at Badgerys Creek, consisting of 2 warehouse buildings, associated carparking, roads and landscaping.

Summary of Compliance Matter to be Addressed

As Registered Certifiers relevant building surveyor we have reviewed the concept architectural design documents prepared by SBA Architects (refer appendix A) for compliance with the building assessment provisions currently outlined in BCA 2022.

This report has been prepared to assess the project against the Building Code of Australia to enable issuance of construction approvals. Further assessment of the design will be undertaken as the design develops to ensure compliance is achieved prior to approval being issued

Deviations from the Deemed-to-Satisfy Provisions

The assessment of the schematic design documentation has revealed that the following areas deviate from the deemed-to-satisfy provisions of the BCA. These items are to be addressed to ensure compliance is achieved, either through design amendment to achieve compliance with the deemed-to-satisfy provisions, or through a performance solution demonstrating compliance with the Performance Requirements of the BCA:

No.	Description	Relevant DTS Clauses'	Performance Requirements
Fire Safety Items			
1	<p>Perimeter Access</p> <p>Warehouses 01 and 02 are provided with access around all 4 sides however exceed the 18m maximum outlined in C3D5 of the BCA.</p> <ul style="list-style-type: none"> ▪ Warehouse 02 – 30m plus the 6m for the vehicle = 36m at the worst point ▪ Warehouse 01 – 30m plus the 6m for the vehicle = 36m at the worst point <p>Note – although the above nominated the worst point by dimension, the departure occurs around the perimeter of the building where loading docks are located (recessed or non-recessed). The only DTS part of the design has been determined to be the southern elevation.</p>	C3D4 & C3D5	C1P9
2	<p>Extended Travel Distance</p> <p>Travel distances exceed the DTS requirements of the BCA. These are to be amended as part of the design or addressed through a performance solution.</p> <p>Warehouse 01</p> <ul style="list-style-type: none"> ▪ Up to 100m in lieu of 40m to an exit where two exits are available. Note this assessment was carried out with some consideration for an internal racking system. Racking design is required for an accurate assessment ▪ 207m between alternative exits in lieu of 60m 	D2D5, D2D6 & G6D4	D1P4 & E2P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<p>Carparking – WH 01</p> <ul style="list-style-type: none"> ▪ Up to 43m in lieu of 40m to an exit where two exits are available ▪ 80m between alternative exits in lieu of 60m <p>Warehouse 02</p> <ul style="list-style-type: none"> ▪ Up to 100m in lieu of 40m to an exit where two exits are available. Note this assessment was carried out with some consideration for an internal racking system. Racking design is required for an accurate assessment ▪ 199m between alternative exits in lieu of 60m <p>Carparking – WH 02</p> <ul style="list-style-type: none"> ▪ Up to 43m in lieu of 40m to an exit where two exits are available ▪ 83m between alternative exits in lieu of 60m 		
3	<p>Travel via Non-Fire Isolated Stairs</p> <p>Carpark – WH 01</p> <ul style="list-style-type: none"> ▪ 96m in total in lieu of 80m and 43m from the bottom of stairs in lieu of 40m <p>Carpark – WH 02</p> <ul style="list-style-type: none"> ▪ 99m in total in lieu of 80m and 43m from the bottom of stairs in lieu of 40m 	D2D14	D1P4 & E2P2
4	<p>Pedestrian Ramp</p> <p>The design team propose the use of a vehicular ramps as pedestrian ramps for the purpose of egress must be addressed through a performance-based solution.</p>	D3D11	D1P4
5	<p>Booster Location</p> <p>The following departures are identified against AS2419.1-2021</p> <ul style="list-style-type: none"> ▪ The proposed building contains multiple Principal Pedestrian Entrances due to the nature of the design and use ▪ The proposed location is not adjacent to the principal vehicle access. 	E1D2	E1P3
6	<p>Hose Reel Location</p> <ul style="list-style-type: none"> ▪ Hose reels have only been documented on the ground-floor offices and are located more than 4m from an exit (5m) ▪ The design team proposes the use of 50m FHR to afford coverage throughout the warehouse and to be addressed through a performance solution. 	E1D3	E1P1
7	<p>Exit Mounting Height</p> <p>Due to the height in the warehouses directional exit signs will be located above 2.7m which deviates from the provisions of AS2293.1-2018</p>	E4D6	E4P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
8	Smoke Hazard Management The project design team propose to omit the smoke exhaust requirements within the car park. The team proposes to rationalise the smoke exhaust rates within the warehouse	E2D10	E2P2
Accessibility Items			
9	Access to Buildings Access to the first floor of the dock offices has not been provided	D4D2, D4D4	D1P1 & D1P2
10	Turning Spaces Insufficient turn space is afforded in the offices	D4D2, D4D4	D1P1
11	Exemptions Any exemptions must be submitted through an accredited access consultant demonstrating compliance with the provisions of D4D5 for all stakeholder review and approval. The exemptions must be requested by or on behalf of the owner with written consent.	D4D5	-

The feasibility and any additional requirements that will apply as a result of the performance solution will need to be confirmed by the professional preparing the performance solution. Any performance solution will need to be prepared by a suitably qualified/accredited professional.

2. INTRODUCTION

The proposed development comprises of the Stage 2 (Warehouse 1 & 2) of the proposed Industrial Estate at Badgerys Creek, consisting of 2 warehouse buildings, associated carparking, roads and landscaping.

This report is based upon the review of the design documentation listed in Appendix A of this Report.

The report is intended as an overview of the relevant provisions of the Building Code of Australia for assistance only. Detailed drawings and associated review will still be required as the final design is developed.

The applicable legislation governing the design of buildings is the Environmental Planning and Assessment Act 1979. This Act requires that all new building works must be designed to comply with the BCA.

The version of the BCA applicable to the development, is version that in place at the time of the application to the Registered Certifier for the Construction Certificate. For the purposes of this Report, BCA 2022 has been utilised as it is anticipated that BCA 2022 will apply to the project based on project timeframes.

Project Brief –

This report supports a State Significant Development Application (SSDA) (SSD-70817958) submitted to the Department of Planning, Housing and Infrastructure (DPHI) on behalf of DHL Supply Chain (Australia) Pty Ltd (DHL). DHL is seeking to secure consent for the construction and operation of warehouse and logistics facilities, including two warehouses and associated landscaping works within part of Lot 1 DP 1306448 at 1953-2109 Elizabeth Drive, Badgerys Creek. This SSDA represents the second of two (2) SSDAs proposed by DHL and will apply to the northern half of the DHL Masterplan site.

The project vision is to develop a world class warehouse and logistics facility which is fully integrated with its green infrastructure and Connection to Country. Having been informed by key landscape and Connecting to Country themes, the development of the site can deliver on the objectives that contribute to the Aerotropolis Vision which is to:

- Achieve a landscape led approach and starting with Country- the project has been guided by Cultural Design Principals and local leaders in the Aboriginal community.
- Create a new global gateway which will be a regionally and nationally significant employment area by providing for warehouse and logistics land uses in a highly sought-after location adjacent to the new Western Sydney Airport.
- Design a cool, green new city with a landscape approach that increases urban tree canopy, provides useable open space areas throughout and restores key riparian corridors on the site.
- Transitioning to an Aerotropolis through a sustainable, orderly and transformational development in the Western Sydney Aerotropolis,
- Retaining a green, biodiverse landscape informed by Country and an indigenous lens on maintenance and land management.

Background –

The DHL Masterplan site occupies 26.55 hectares (**ha**) of the larger 280.4-ha site at 1953-2109 Elizabeth Drive, Badgerys Creek, which is known as “Burrah Park site”. The wider Burrah Park site is currently the subject of an SSD for a concept plan, stage one early works, site enabling works, civil infrastructure, and detailed proposal for stage one industrial built form. It is identified as SSD-70316465 and known as the **concept plan**.

SSD-70316465: 1953-2109 Elizabeth Drive ‘Burrah Park’

SSD-70316465 is an SSDA which was issued SEARs on the 22 May 2024 and has been formally submitted onto the Major Projects Website on 11th December 2024. SSD-70316465 seeks consent for the staged development of land within the Northern Gateway Precinct of the Aerotropolis at 1953-2109 Elizabeth Drive, Badgerys Creek.

The projects applicant, Roberts Jones Development Pty Ltd, is seeking consent for the staged development of a warehouse and logistics estate that includes a concept master plan and Stage 1 development comprising estate wide earthworks, infrastructure, services, road access, landscaping, and industrial built form.

DHL intend to develop part of the site for a logistics facility, the subject of this SSDA.

SSDA 70818708: DHL Stage 1

DHL Stage 1 site occupies the southern portion of the DHL Masterplan Site and is the subject of this SSDA 70818708. It has a total site area of 13.1 hectares and includes the total developable area of 11.9 hectares (noted as approximately 12 hectares in most consultant reports) and the estate road area 1.24 hectares.

This SSDA relates to the DHL Stage 2 site and occupies the northern portion of the DHL Masterplan and has a total developable area of 13.3 hectares.

Site Description –

The subject site is located within part of Lot 1 DP1306448, at 1953-2109 Elizabeth Drive, Badgerys Creek. The site is approximately 25 hectares in size and situated north of the new Western Sydney Airport. It is located within the Penrith local government area (**LGA**) and is approximately 12.5km from Penrith Central Business District (**CBD**), 27km from Parramatta CBD, and 47km from Sydney CBD. The site is owned by Roberts Jones Development Pty Ltd.

The site is currently used for agricultural purposes and is largely cleared of vegetation with areas of dispersed grass and scattered natural and/or planted tree growth. The site contains several farm dams, primarily within the central and southern areas. The location context and aerial plans are depicted in Figure 1 and 2.

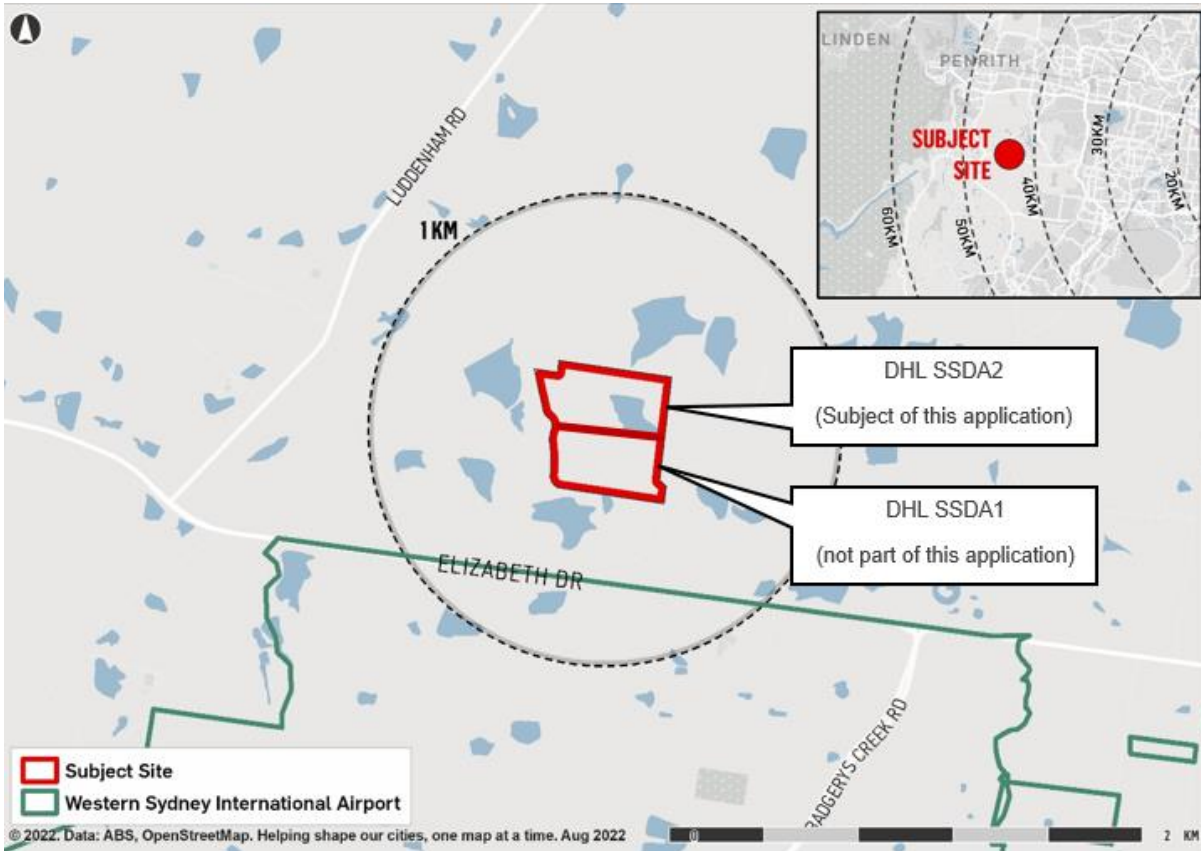


Figure 1 – Location Context Area Plan



Figure 2 – Site Location Plan

Planning Approvals Strategy:

Development consent is sought under Section 4.12(8) and Division 4.4. of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* and Division 5 of the *Environmental Planning and Assessment Regulation 2021 (EP&A Regulation)* for the construction and operation of a warehouse and logistics facility (**the Project**) under Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)*.

Project Description:

Specifically, the SSDA seeks consent for:

Staged construction of warehouse buildings for use as a logistics centre with 24 hour/ day, seven days a week operation, comprising the following:

- Construction of two warehouses;
- Building fit out;
- Construction of hardstand, loading and carparking;
- Landscaping works; and
- Signage.

Secretary's Environmental Assessment Requirements:

The Department of Planning, Housing and Infrastructure (DHPI) provided industry specific Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development on 22 May 2024.

This report has been prepared to accompany the EIS. It addresses the relevant requirements of the SEARs for the project. A summary of the relevant SEARs is listed below.

SEARs Reference	Key Assessment Requirement	Section where SEARs is addressed in this Report	Comment
4. Built Form and Urban Design	Building Code of Australia Compliance Report	Whole Report	-

3. COMPLIANCE WITH THE BCA

The Building Code of Australia is a performance based document, whereby compliance is achieved by complying with the Governing Requirements and the Performance Requirements.

Performance Requirements are satisfied by one of the following:

- 1) A Performance Solution
- 2) A Deemed-to-Satisfy Solution
- 3) A combination of (1) and (2)

4. DOCUMENTATION OF PERFORMANCE SOLUTIONS

A Performance Solution must demonstrate compliance with all relevant Performance Requirements, or the solution must be at least equivalent to the Deemed-to-Satisfy provisions.

Compliance with the Performance Requirements is to be demonstrated through one or a combination of the following:

- a) Evidence of suitability in accordance with Part A5 of the BCA that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.
- b) A Verification Method including the following:
 - i. The Verification Methods provided in the NCC.
 - ii. Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements
- c) Expert Judgement
- d) Comparison with the Deemed-to-Satisfy Provisions

Where a Performance Solution is proposed as the method to achieve compliance, the following steps must be undertaken:

- a) Prepare a performance-based design brief in consultation with relevant stakeholders
- b) Carry out analysis, using one or more of the assessment methods nominated above, as proposed by the performance-based design brief.
- c) Evaluate results from (b) against the acceptance criteria in the performance-based design brief
- d) Prepare a final report that includes:
 - i. All Performance Requirements and/or Deemed-to-Satisfy Provisions identified as applicable
 - ii. Identification of all assessment methods used
 - iii. Details of required steps above
 - iv. Confirmation that the Performance Requirement has been met; and
 - v. Details of conditions or limitations, if an exist, regarding the Performance Solution.

5. PRELIMINARIES

5.1. BUILDING ASSESSMENT DATA

Summary of Construction Determination:

Part of Project	Warehouse 01/Office/Dock Offices	Warehouse 02/Office/Dock Offices	Carpark 01	Carpark 02
Classification	7b*	7b*	7a	7a
Number of Storeys	2	2	2	2
Rise In Storeys	2	2	2	2
Type of Construction	C	C	C	C
Effective Height (m)	3.6m*	3.6m*	2.8m*	2.8m*

Note:

1. The effective height of the project includes all stories included in the rise in stories of the project,
2. Effective height for Warehouse WH01 has been based on RL69.600-66.000,

3. Effective height for Carpark WH01 has been based on RL68.800-66.000,
4. Effective height for Warehouse WH02 has been based on RL69.600-66.000,
5. Effective height for Carpark WH02 has been based on RL68.800-66.000,
6. The office and dock office areas were less than 10% the total floor area and therefore assessed as ancillary to the primary 7b use.

Summary of the floor areas and relevant populations where applicable: -

Part of Project	BCA Classification	Approx. Floor Area (m ²)	Approximate Volume (m ³)	Assumed Population
Warehouse 01/ Office 01/Dock Office	7b	31,954+1,000+45 4 33,408m²	LIB	1066 + 100 + 46 1212
Warehouse 02/ Office 02/Dock Office	7b	31,954+1,000+45 4 33,408m²	LIB	1066 + 100 + 46 1212
Carpark 01	7a	7,226m²	LIB	241
Carpark 02	7a	7,226m²	LIB	241

Notes:

- *The above populations have been based on floor areas and calculations in accordance with Table D2D18 (prev. Table D1.13) of the BCA.*
- *The above population must be reviewed and confirmed by the client or alternatively, the proposed population is to be provided by the client based on the intended use and documented operational requirements.*

Occupiable Outdoor Areas

BCA 2022 introduced specific provisions regarding occupiable outdoor areas. These provisions outline requirements with regards to fire ratings, egress provisions and coverage from essential services and are contained in this report.

An occupiable outdoor area is defined in the BCA as follows:

'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'*

5.2. COPY OF CERTIFICATE OF TITLE

A copy of the Certificate of Title and associated plan of subdivision is required. Where it is proposed to construct any part of the building over, under or within an easement, the consent of the relevant authority and Council is required prior to the issue of the Construction Certificate.

6. STRUCTURE

6.1. STRUCTURAL PROVISIONS (BCA B1)

New structural works are to comply with the applicable requirements of BCA Part B1, including AS/NZS 1170.0-2002, AS/NZS 1170-1-2002, AS/NZS 1170.2-2021 and AS 1170.4-2007.

Depending on the importance level of the building as determined by AS/NZS 1170.0-2002, the non structural elements of the building, including partitions (and non-structural fire walls), ceilings, services and racking/shelving may be required to comply with the seismic restraint requirements of AS 1170.4-2007. Where this is required, certification will be required confirming that the design of the seismic restraints comply with AS 1170.4-2002. This may be provided by a specialist seismic consultant or by the architect and services design engineers.

It is noted that BCA 2019 introduced a new Verification Method, B1V2 (previously BV2), which is a pathway available to verify compliance with BCA Performance Requirement B1P1 (1)(c) (previously BP1.1(a)(iii)).

Glazing is to comply with AS1288-2021, and AS2047-2014.

Prior to the issue of the Construction Certificate structural certification is required to be provided by a Professional Engineer registered on the National Engineering Register.

7. ENERGY EFFICIENCY

The residential (Class 2) portions of the building are subject to BASIX, and a BASIX Certificate will be required prior to the issuance of the Construction Certificate for the works. It is noted that some provisions outlined in the BCA still apply in addition to BASIX.

7.1. SECTION J (JP1 ENERGY EFFICIENCY)

Efficient energy use must be achieved appropriate to the function and use of the building, level of human comfort, solar radiation, energy source of the services and sealing of the building envelope. To achieve this JV1, JV2, JV3, JV4 and JV5 verification methods have been introduced as options available to achieve compliance.

It is noted that a deemed to satisfy pathway is still available.

The proposed site will be located in a climate zone 6.

Certification from an appropriately qualified engineer should be provided for either option with a report / computations outlining how compliance is achieved.

Verification Methods

The Verification Methods available to demonstrate compliance with the BCA on a performance basis are as follows:

J1V1 (previously JV1) NABERS Energy for Offices

- To achieve compliance with J1P1 (previously JP1) a class 5 building must achieve a minimum of 5.5 NABERS Energy for Offices Base Building Commitment Agreement.
- The energy model demonstrates the base buildings greenhouse gas emissions are not more than 67% of the 5.5 star level when excluding:
 - Tenant supplementary heating and cooling systems
 - External lighting; and
 - Car park services.
 - A thermal comfort level between predicted mean vote of -1 to +1 is achieved across not less than 95% of the floor area of all occupied zones for not less than 98% of annual hours of operation.

- The building also need to comply with additional requirements of Spec 33 (previously JVa).

The calculation method must comply with ANSI/ASHRAE Standard 140

J1V2 (previously JV3) Green Star

To achieve compliance with J1P1 (previously JP1) for Class 3,4,5,6, 7, 8, 9 and common area of Class 2 buildings Green Star can be used as a verification method when the calculation method complies with ANSI/ASHRAE Standard 140, Specification 34 (previously Spec JVb) and when:

- The building complies with simulation requirements and is registered for a Green Star – Design & As-Built rating; and
- The annual greenhouse gas emissions of the proposed building are less than 90% of the annual greenhouse gas emissions of the reference building; and
- In the proposed building, a thermal comfort level of between predicted mean vote of -1 to +1 is achieve across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building; and

J1V3 (previously JV3) Verification Using a Reference Building

To achieve compliance with JP1 for Class 3,4,5,6, 7, 8, 9 and common area of Class 2 buildings verification using a reference building can be used when the calculation method complies with ANSI/ASHRAE Standard, Specification 34 (previously Spec JVb) and when:

- It is determined that the annual greenhouse gas emissions of the proposed building are not more than the annual greenhouse gas emissions of a reference building when
 - the proposed building is modelled with the proposed services; and
 - the proposed building is modelled with the same services as the reference building.
- The proposed building thermal comfort level is to be between predicted mean vote of -1 to +1 across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation; and
- The building achieves the additional requirements in Specification 33 (previously Spec JVa); and
- The greenhouse gas emissions of the proposed building may be offset by renewable energy generated and use on site and another process such as reclaimed energy used on site.

J1V4 (previously JV4) Building Envelope Sealing

Compliance with J1P1(e) (previously JP1) and J1P2 (previously JP2) is verified for building envelope sealing when the envelope is sealed at an air

- permeability rate, tested in accordance with Method 1 of AS/NZS ISO 9972, of not more than—For a class 2 building or a class 4 part of a building, 10m³/hr.m² at 50 Pa reference pressure; or
- For a class 5, 6, 8, 9a or 9b building other than a ward area in climate zones 1, 7 and 8, 5 m³/hr.m² at 50 Pa reference pressure; or
- For class 3 or 9c building, or a class 9a ward area in climate zones 1, 3, 4, 6, 7 and 8 5m³/hr.m² at 50 Pa reference pressure.

Part J3 and performance solution that uses on of the other NCC assessment Methods which verifies that compliance with JP1 (e) will be achieve can also be used as verification methods.

In a sole-occupancy unit of a Class 2 building or a Class 4 part of a building, where an air permeability rate of not more than 5 m³/hr.m² at 50 Pa reference pressure is achieved—

- a) a mechanical ventilation system must be provided that—
 - i. can be manually overridden; and

- ii. provides outdoor air, either—
 - A. continuously; or
 - B. intermittently, where the system has controls that enable operation for not less than 25 per cent of each 4 hour segment; and
- iii. provides a flow rate not less than that achieved with the following formula:

$$Q = (0.05 \times A + 3.5 \times (N + 1)) / p$$
 (refer J1V4 for full articulation of equation.)
- b) any space with a solid-fuel burning combustion appliance must be ventilated with permanent openings directly to outside with a free area of not less than half of the cross-sectional area of the appliance's flue; and
- c) any space with a gas-fueled combustion appliance must be ventilated in accordance with—
 - i. clause 6.4 of AS/NZS 5601.1; and
 - ii. clause 6.4.5 of AS/NZS 5601.1.

The volume of the space is considered to be 1 m³ for determining ventilation requirements.

8. ACCESS FOR PEOPLE WITH DISABILITIES

The development is required to comply with the accessibility provisions contained within:

- The Building Code of Australia 2022;
- Disability (Access to Premises – Buildings) Standards 2010;
- AS1428.1-2009 General Requirements for Access – New Building Work;
- AS1428.4.1 -2009 Tactile Ground Surface Indicators
- AS2890.6-2009 Car Parking for People with Disabilities

Note: With the introduction of the Commonwealth *Disability Discrimination Act (DDA)* in 1992 (enacted in 1993), all organisations have a responsibility to provide equitable and dignified access to goods, services and premises used by occupants. Organisations and individuals since its introduction, are required to work to the objects of the Act which are to eliminate, as far as possible, discrimination against persons on the ground of disability in the **areas of work, accommodation, education, access to premises, clubs and sports, and the provision of goods, facilities, services and land, existing laws and the administration of Commonwealth laws and programs.**

This report assesses against the requirements contained with the Building Code of Australia (and documents referred to therein) and is not considered to be a full assessment against the Disability Discrimination Act.

A comprehensive assessment is required to be undertaken of the proposed design by an accredited access consultant and certified prior to the issue of a construction certificate.

8.1. GENERAL BUILDING ACCESS REQUIREMENTS (BCA D4D2 (PREVIOUSLY D3.1))

Access for people with disabilities shall be provided to and within the building in accordance with the requirements of Clause D4D3, D4D4 and D4D5 (previously D3.2, D3.3 and D3.4) of the BCA 2022 and AS 1428.1. Parts of the building required to be accessible shall comply with the requirements of:-

- AS1428.1-2009 General Requirements for Access – New Building Work;
- AS1428.4.1 -2009 Tactile Ground Surface Indicators
- AS2890.6-2009 Car Parking for People with Disabilities

Access for persons with a disability is to be provided as follows:

Car parks (Class 7a buildings)

To and within any level containing accessible car parking spaces.

Warehouse and production/Manufacturing facilities

To and within all areas normally used by the occupants,

Where the uses of these areas could be deemed inappropriate, confirmation is required as the appropriateness of the areas in question by the owners or tenant. Where an exemption is sought from providing access under clause D4D5 (previously D3.4), this is to be applied for as part of the application for building work approval.

8.2. PROVISION FOR ACCESS TO BUILDINGS (BCA CLAUSE D4D3 (PREVIOUSLY D3.2))

The BCA prescribes access to be provided to and within the building as follows:

- Via the principle pedestrian entry and at least 50% of all other entrances from the allotment boundary
- From designated car parking spaces for the use of occupants with a disability.
- From another accessible building connected by a pedestrian link.
- All areas used by the occupants.

In buildings over 500m² in floor area, a non-accessible entrance must not be located more than 50m from an accessible entrance.

Where a pedestrian entry contains multiple doors, the following is required;

- Entrance containing not more than 3 doors, at least one of the doorways must be accessible.
- Where an entrance contains more than 3 doors, not less than 50% of the doorways must be accessible.

A door is considered to be accessible if it is automatic (open and closing) or is more than 850mm in clear opening width and contains the required door circulation space.

8.3. ACCESSIBILITY WITHIN BUILDING (BCA CLAUSE D4D4 (PREVIOUSLY D3.3))

A building required to be accessible is required to be equipped with either a AS 1428.1 compliant lift or AS 1428.1 compliant ramp, (but the maximum vertical rise of a ramp must not exceed 3.6m).

An exemption to not provide either a lift or ramp exists for class 5, 6, 7b, or 8 buildings, where a building contains;

- a) Less than 3 storeys; and
- b) Floor area of each storey (excluding the entrance level) is not more than 200m².

Within the building the following are required;

- Door circulation space as per AS1428.1 Clause 13.3
- Doorways must have a clear opening of 850mm;
- Passing spaces (1.8m wide passages) must be provided at maximum of 20m intervals
- Within 2.0m of end access ways/corridors, turning areas spaces are required to be provided.
- Carpet pile height of not more than 11mm to an adjacent surface and backing <4mm
- Any glazing capable of being mistaken for a doorway or opening must be clearly marked (or contain chair rail, hand rail or transom as per AS 1288 requirements)

The design would generally comply with the prescriptive provisions of the BCA with additional ongoing review being undertaken as to door widths, circulation, etc. Further details are to be provided or access to these areas is to be assessed by an access consultant.

8.4. CAR PARKING (BCA CLAUSE D4D6 (PREVIOUSLY D3.5))

Accessible car parking spaces are required to comply with AS 2890.6-2009 at the rate of 1 for every 100 parking spaces or part thereof.

The development is proposed to contain 229 car parking spaces (per car park) which requires a minimum of (3) accessible spaces per car park. The current drawings indicate compliance with this requirement.

A 'shared zone' of minimum 5400mm x 2400mm is required adjacent to accessible car parking spaces, protected with a bollard.

8.5. TACTILE INDICATORS (BCA CLAUSE D4D9 (PREVIOUSLY D3.8))

Tactile indicators are required to be provided to warn occupants of all stairs (except Fire Isolated stairs) and ramps regardless of public nature or private environment and where an overhead obstruction occurs less than 2.0m above the finished floor level.

8.6. STAIRS (BCA CLAUSE D4D4 (PREVIOUSLY CLAUSE D3.3 INTER ALIA AS1428.1))

Stairs shall be constructed as follows:

- a) Where the intersection is at the property boundary, the stair shall be set back by a minimum of 900mm so that the handrail and TGSIs do not protrude into the transverse path of travel.
- b) Where the intersection is at an internal corridor, the stair shall be set back one tread width plus 300mm (nominally 700mm as per AS 1428.1-2009 Fig 26(b)), so the handrails do not protrude into transverse path of travel.
- c) Stairs shall have opaque risers.
- d) Stair nosing shall not project beyond the face of the riser and the riser may be vertical or have a splay backwards up to a maximum 25mm.
- e) Stair nosing profiles shall;
 - Have a sharp intersection;
 - Be rounded up to 5mm radius; or
 - Be chamfered up to 5mm x 5mm
- f) All stairs, including fire isolated stairs shall, at the nosing of each tread have a strip not less than 50mm and not more than 75mm deep across the full width of the path of travel. The strip may be set back a maximum of 15mm from the front of the nosing. The strip shall have a minimum luminance contrast of 30% to the background. Where the luminous contrasting strip is affixed to the surface of the tread, any change in level shall not exceed a difference of 5mm.

8.7. ACCESSIBLE SANITARY FACILITIES (BCA CLAUSE F4D5, F4D6, F4D7 (PREVIOUSLY F2.4))

Unisex Accessible Sanitary Facilities

An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only and provided in accordance with AS 1428.1-2009 and must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary products and as per following.

Building Type	Minimum accessible unisex sanitary compartments to be provided
Office, industrial, assembly building, schools, health care except for within a ward area of a Class 9a health-care building	a) 1 on every storey containing sanitary compartments; and b) Where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.

Ambulant Facilities

At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1-2009 must be provided for use by males and females.

Where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations.

An accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not provided with a passenger lift or ramp complying with AS 1428.1-2009

8.8. SIGNAGE (BCA CLAUSE D4D7 (PREVIOUSLY D3.6))

As part of the detailed design package, specifications will need to be developed indicating:

- Sanitary Facility Identification Signs (note that they are to comply with BCA Specification 15 (previously Spe. D3.6) and include the use of Braille, Tactile, etc and be placed on the wall on the latch side of the facility);
- Directional / Way Finding signs to the Lifts, Sanitary Facilities, etc;
- Hearing Augmentation System;
- Identify each door required by BCA Clause E4D5 (previously E4.5) to be provided with an exit sign, stating 'EXIT' and 'Level' number
- Braille and tactile signs must be illuminated to ensure *luminance contrast* requirements are met at all times during which the sign is required to be read.

8.9. HEARING AUGMENTATION (BCA CLAUSE D4D8 (PREVIOUSLY D3.7))

A hearing augmentation system shall be installed throughout the building in accordance with the requirements of Clause D4D8 (previously D3.7) of the BCA, where ever in a 9b building, auditorium conference room, meeting room etc. contain a PA system not used for emergency purposed or any ticket office or teller's booth or reception where the public is screened from the service provider.

8.10. LIFTS (BCA CLAUSE E3D7, E3D8 (PREVIOUSLY E3.6))

Lifts compliant to BCA E3D7, E3D8, and E3D9 (previously E3.6, E3.7) must be provided, where required to be provided, with a minimum size of 1400 x 1600mm or 1100mm x 1400mm (whichever is appropriate) in size – with appropriate handrails and auditory commands.

9. APPENDIX A – REFERENCE DOCUMENTATION

The following documentation was used in the assessment and preparation of this report:

SSDA STAGE 2 - DRAWING LIST	
Sheet Number	Sheet Name
DA001	COVER SHEET
DA002	WAREHOUSE 3D PERSPECTIVE
DA003	WAREHOUSE 3D PERSPECTIVE
DA004	WAREHOUSE 3D PERSPECTIVES
DA005	OFFICE 3D PERSPECTIVE
DA006	OFFICE 3D PERSPECTIVE
DA007	OFFICE 3D PERSPECTIVE
DA008	OFFICE 3D PERSPECTIVE
DA010	LOCATION PLAN & REGIONAL CONTEXT
DA050	SITE ANALYSIS
DA100	MASTERPLAN STAGING & DEVELOPMENT SUMMARY
DA101	GF PLAN - STAGE 2
DA102	CARPARKING LAYOUT - WH 01
DA103	CARPARKING LAYOUT - WH 02
DA105	ROOF PLAN - STAGE 2
DA200	ELEVATIONS & SECTION - STAGE 2
DA201	ELEVATIONS - WAREHOUSE 01
DA202	ELEVATIONS - WAREHOUSE 02
DA210	ELEVATIONS 3D & MATERIALS
DA300	SECTIONS - WAREHOUSE 01
DA301	SECTIONS - WAREHOUSE 02
DA400-A	OFFICE 01 - FLOOR PLANS
DA400-B	OFFICE 01 - ELEVATIONS
DA401-A	OFFICE 02 - FLOOR PLANS
DA401-B	OFFICE 02 - ELEVATIONS
DA410	DOCK OFFICE PLANS (TYPICAL)
DA500	SIGNAGE PLAN
DA600	SHADOW DIAGRAMS

10. APPENDIX B – DRAFT FIRE SAFETY SCHEDULE

No.	Measure	Particulars of Measure <i>(including where the requirement for the measure is set out or described i.e. in building plans or in a performance solution report)</i>	Currently Implemented (Yes/No)	Proposed (Yes/No)
STATUTORY FIRE SAFETY MEASURES				
1.	Access Panels, Doors and Hoppers	BCA 2022 Clause C4D14		
2.	Automatic Fail Safe Devices	BCA 2022 Clause D3D24 & D3D26		
3.	Automatic Fire Detection and Alarm System	BCA 2022 Clause E2D3, E2D5, E2D7, E2D8, E2D9, E2D10, E2D11, E2D13, E2D14, E2D15, E2D16, E2D17, E2D19, E2D20, Spec 20 Clause S20C3/S20C4/S20C5, AS 1670.1 – 2018, AS/NZS 1668.1 – 2015, AS 3786-2014		
4.	Automatic Fire Suppression System (sprinklers)	BCA 2022 Clause C3D4, E1D5, E1D7, E1D8, E1D9, E1D10, E1D11, E1D13, E2D8, E2D9, E2D10, E2D11, E2D13, E2D14, E2D15, E2D16, E2D17, E2D19, E2D20, G3D8, Spec 17, Spec 31 & AS 2118.1 – 2017 Amdt 1 & 2, AS 2118.6 – 2012 (Combined sprinkler & hydrant) Residential: BCA 2022 Clause E1D6 Spec. 17/18, and <ul style="list-style-type: none"> ▪ AS 2118.1; or ▪ AS 2118.4, as applicable; or ▪ FPAA101D; or ▪ FPAA101H 		
5.	Emergency Lighting	BCA 2022 Clause E4D2, E4D4 & AS/NZS 2293.1 – 2018		
6.	Exit Signs	BCA 2022 Clauses E4D5, E4D6 & E4D8 and AS/NZS 2293.1 – 2018		
7.	Fire Control Centres and Rooms	BCA 2022 Spec. 19		
8.	Fire Dampers	BCA 2022 Clause C3D13, C4D15, Spec 11, D2D12, E2D3, E2.3, F4.12, Spec E2.2, E2D21, Spec 21, Spec 31 & AS 1668.1 – 2015		
9.	Fire Hose Reel Systems	BCA 2022 Clause E1D3 & AS 2441 – 2005 Amdt 1		
10.	Fire Hydrant Systems	BCA 2022 Clause C3D13, E1D2, Spec 18, I3D9 & AS 2419.1 – 2021		
11.	Fire Seals protecting fire resisting components of the building	BCA 2022 Clause C4D15, C4D16, Spec 13, Spec 14, & AS 1530.4 –2014		

12.	Mechanical Air Handling System (nominate installed systems here e.g. zone smoke, smoke exhaust, pressurisation)	BCA 2022 Clause E2D3, E2D4, E2D6, E2D7, E2D8, E2D9, E2D10, E2D11, E2D12, E2D13, E2D14, E2D15, E2D16, E2D17, E2D18, E2D19, E2D20, G3D8, Spec 21, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012		
13.	Perimeter Vehicular Access for emergency vehicles	BCA 2022 Clause C3D5		
14.	Portable Fire Extinguishers	BCA 2022 Clause E1D14 & I3D11, AS 2444 – 2001		
15.	Smoke Detectors and Heat Detectors	BCA 2022 Clause E2D3, E2D5, E2D7, E2D8, E2D9, E2D10, E2D11, E2D13, E2D14, E2D15, E2D16, E2D17, E2D19, E2D20, Spec 20 Clause S20C3/S20C4/S20C5, AS 1670.1 – 2018, AS/NZS 1668.1 – 2015		
16.	Warning and Operational Signs	EP&A (Development Certification and Fire Safety) Regulation 2021 Clause 108, BCA 2022 Clause C4D7, D2.23, E3D4, NSW I4D14 & AS 1905.1 – 2015		
OTHER FIRE SAFETY MEASURES				
17.	Building Occupant Warning System	BCA 2022 Spec 17 & Spec 20 Clause S20C7 & AS 1670.1 – 2015 – Clause 3.22		
18.	Emergency Evacuation Plan	Fire Engineering Report XXXX Revision XX prepared by XXXX dated XXXX and AS 3745 – 2002		
19.	Paths of Travel	EP&A (Development Certification & Fire Safety) Reg 2021 Section 108, 109		

11. APPENDIX C – BCA CLAUSE BY CLAUSE ASSESSMENT

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C2D2 (prev. C1.1)	Type of construction required	<p>Type C construction is required, i.e. fire ratings as follows. Refer Appendix D for full schedule of required fire ratings;</p> <p>Where part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part must-</p> <ul style="list-style-type: none"> (i) have an FRL not less than that required by other provisions of this Specification; and (ii) if located within the same fire compartment as the part it supports have an FRL in respect of structural adequacy the greater of that required (iii) be non-combustible – <ul style="list-style-type: none"> (A) if required by other provisions of this Specification; or (B) if that part it support is required to be non-combustible. <p><u>Specification 5 (previously C1.1)</u></p> <p>The method of attachment or installing a finish, lining, ancillary element or service installation to the building element must not reduce the fire-resistance of that element to below that required.</p> <p>General concessions:-</p> <p>A non-combustible structure situated on a roof need not comply with the provisions of Specification 5</p>	<p>Type C Construction required throughout in accordance with Spec 5.</p> <p>As Warehouse 1 & 2 are connected by a super awning, they will be assessed as a single building. The boundary running through the centre of the site (through the super awning) is an indicative tenancy boundary split, and will not be assessed as a fire source feature (as it is not an allotment boundary).</p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		<p>(previously Spec C1.1) if it only contains lift motor equipment or contains one or more of the following:-</p> <ul style="list-style-type: none"> (i) Hot water or other water tanks (ii) Ventilating ductwork, ventilating fans and their motors, (iii) Air-conditioning chillers, window cleaning equipment, (iv) Other service units that are non-combustible and do not contain flammable or combustible liquids or gases. <p>A requirement for an external wall to have an FRL does not apply to a curtain wall or panel wall which is of non-combustible construction and fully protected by automatic external wall-wetting sprinklers.</p> <p>A mezzanine and its supports need not have an FRL or be non-combustible provided that the total floor area of all the mezzanines in the same room does not exceed 1/3 of the floor area of the room or 200m², whichever is the lesser, and the FRL of each wall and column that supports any other part of the building within 6 m of the mezzanine is increased by the amount as listed in Spec 5 Table S5C7 (previously Spec C1.1 Table 2.6).</p> <p>Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building, except that these provisions need not apply to –</p>		

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		(i) The top of a shaft extending beyond the roof covering, other than one enclosing a fire-isolated stairway or ramp; or (ii) The bottom of a shaft if it is non-combustible and laid directly on the ground; Where a fire wall is proposed, it is noted that the wall is to achieve a structural rating regardless of whether it is loadbearing or not.		
C2D3 (prev. C1.2)	Calculation of rise in storeys	The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space – (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary;	Rise of 2	Note
C2D4 (prev. C1.3)	Buildings of multiple classification	In a building of multiple classification, the Type of Construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 (previously Table C1,1) on the basis that the classification applying to the top story applies to all storeys.	Building is comprised of the following: <ul style="list-style-type: none"> ▪ Warehouse 1 and 2 – class 7b ▪ Carparking – 7a The office component of warehouse 3 and 4 has been considered ancillary to the primary use as less than 10% the floor area.	Note
C2D5 (prev. C1.4)	Mixed types of construction	A building may be of mixed Types of construction where it is separated by fire walls that comply with the requirements of Clause C3D8 (previously C2.7), and the Type of construction for each portion separated by the fire walls is determined in accordance with C2D2 or C2D4 (previously C1.1 or C1.3).	Type C Construction required throughout	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C2D6 (prev. C1.5)	Two storey Class 2, 3 or 9c buildings	A building having a rise in storeys of 2 may be of Type C construction if- <ul style="list-style-type: none"> (a) it is a Class 2 or 3 building or a mixture of these classes and each sole-occupancy unit has – <ul style="list-style-type: none"> (i) access to at least 2 exits; or (ii) its own direct access to a road or open space; or (b) if it is a Class 9c building protected throughout with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 (previously Spec E1.5) and complies with the maximum compartment size specified in Table C3D3 (previously Table C2.2) for Type C construction. 	This is a class 7a and 7b as noted in C2D4 above	Not Applicable
C2D7 (prev. C1.6)	Class 4 parts of buildings	A Class 4 part of the building requires the same FRL for building elements and the same construction separating the Class 4 part from the remainder of the building as a Class 2 part in the same Type of construction.	This is a class 7a and 7b as noted in C2D4 above	Not Applicable
C2D8 (prev. C1.7)	Open spectator stands and indoor sports stadiums	May be Type C depending on design.	This is not an open spectator stand	Not Applicable
C2D9 (prev. C1.8)	Lightweight construction	Lightweight construction must comply with Specification 6 (previously Spec C1.8) if it is used in in a wall system – <ul style="list-style-type: none"> (i) that is required to have an FRL; or (ii) for a lift shaft, stair shaft, or service shaft or an external wall bounding a public corridor 	The current drawings to not indicate if fire rated lightweight construction has been proposed. Further review of this element will be required prior to the relevant Construction Certificate.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		including a non fire-isolated passageway or the non fire-isolated ramp, in a spectator stand, sports stadium, cinema or theatre, railway station, bus station or airport terminal.		
C2D10 (prev. C1.9)	Non-combustible building elements	<p>In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible;</p> <ul style="list-style-type: none"> (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. <p>A shaft, being a lift, ventilation pipe, garbage, or similar shaft that is not for the discharge of hot productions of combustion, that is non-loadbearing, must be of non-combustible construction –</p> <ul style="list-style-type: none"> (i) a building required to be of Type A Construction; and (ii) a building required to be of Type B construction, subject to C3D11 (previously C2,10), in:- <ul style="list-style-type: none"> (A) a Class 2, 3 of 9 building; and (B) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. <p>A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification 5 (previously C1.1).</p>	<p>The provisions of this clause do not apply to Type C buildings.</p> <p>However, the use of AS1530.1-1994 products are recommended. Test reports on proposed products to be provided for review and comment.</p> <p>Where permitted, any Aluminium Composite Panels must not be on the NSW Product Ban</p>	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		<p>The BCA 2022 has included additional items that are not required to comply with the above, including glazing, fixings, packers, paints, sealants to joints, adhesives and the like.</p> <p>Furthermore, the BCA now considers the following items as non-combustible, therefore non-combustibility does not need to be demonstrated to achieve compliance. These items are concrete, steel, masonry, aluminium, autoclaved aerated concrete, iron, terracotta, porcelain, ceramic, natural stone, copper, zinc, lead, bronze, brass</p>		
C2D11 (prev. C1.10)	Fire Hazard Properties	Details to be provided or noted on drawings in respect of fire hazard properties.	<p>As the building will be required to be provided with sprinkler system complying with C3D4 of the BCA the below lining provisions will be applicable.</p> <p>The fire hazard properties of fixed surface linings and mechanical ductwork pursuant to Specification 7 of the Building Code of Australia apply as follows:</p> <p><u><i>Sprinkler Protected Areas</i></u></p> <p>a) Floor Coverings – Critical radiant Flux not less than (1.2) kW/m²</p> <p>b) Wall and Ceiling Linings – Material Group No. (1, 2 or 3) excluding fire stairs which must not be less than 1</p> <p>Rigid and flexible air handling ductwork must comply with AS4254 Parts 1 & 2 2012.</p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			Floor linings and floor coverings used in lift cars must have a critical radiant flux not less than 2.2, and wall and ceiling linings must be a Material Group No. 1 or 2.	
NSW C2D11 (prev. NSW C1.10)	Fire Hazard Properties	<p>A material used to cover closed back upholstered seats in Class 9b buildings used as an entertainment venue, and a proscenium curtain required by Specification 32 (previously H1.3) in a public hall or the like, should comply with the fire hazard properties in Specification C1.10.</p> <p>Paint or fire-retardant coatings must not be used in order to make a material comply with a required fire hazard property, except in respect of a material referred to in NSW Specification 7 (previously Spec C1.10), NSW Table S7C7 (previously NSW Table 4) and to which Notes 4 & 5 are applicable.</p>	This is a class 7a and 7b as noted in C2D4 above	Not Applicable
C2D12 (prev. C1.11)	Performance of external walls in fire	Concrete external panel walls in buildings up to 2 storeys that could collapse as complete panels are to be constructed in accordance with Specification 8 (prev. Spec C1.11).	Certification to be provided from the NER structural engineer which confirms compliance with Spec C2D12 prior to the issuance of the relevant Construction Certificate.	Compliance Readily Achievable
C2D13 (prev. C1.13)	Fire-protected timber: Concession	<p>Fire-protected timber may be used whenever an element is required to be non-combustible, provided-</p> <p>(a) the building is-</p> <p>(i) a separate building; or</p> <p>(ii) a part of a building-</p>	The drawings provided do not include the use of any fire protected timber.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		(A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and (b) the building has an effective height of not more than 25m ; and (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17 (previously Spec E1.5); and (d) any insulation in the cavity of the timber building element required to have an FRL is non-combustible; and (e) cavity barriers are provided in accordance with Specification 9 (prev. Spec C1.13);		
C2D14 (prev. C1.14)	Ancillary elements	An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible. Any elements not nominated in this clause which are attached to a component that is required to be non-combustible are also required to be non-combustible.	The following ancillary elements may be fixed to an external wall that is required to be non-combustible: a) An ancillary element that is non-combustible. b) A gutter, downpipe or other plumbing fixture or fitting. c) A flashing.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			d) A grate or grille not more than 2 m ² 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. Please provide fire hazard properties reports for any proposed signs and confirm their extent prior to the issuance of the relevant CC.	
C2D15	Fixing of bonded laminated cladding panels	In a building required to be Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.	This is building is a Type C construction as noted in C2D5 above	Not Applicable
C3D3 (prev. C2.2)	General floor area and volume limitations	The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area/ volume.	Warehouse 01 & 02 exceed the permitted limitation for area and volume.	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			<p>The respective car parking buildings are attached.</p> <p>All buildings exceed the area and volume limits for Type C construction outlined in Table C3D3. As such buildings are considered large isolated buildings.</p>	
C3D4 (prev. C2.3)	Large isolated buildings (Category 2)	The size of fire compartment in a building may exceed that specified in Table C3D3 (previously C2.2) if the building is provided with the additional provisions required by this clause.	<p>The building exceeds the area / volume limitations of the BCA provisions noted above, the building is then considered a large isolated building. Both Warehouse 01 and 02 also exceed 18,000m² and therefore the below provisions are applicable:</p> <ul style="list-style-type: none"> ▪ Automatic sprinkler protection to AS2118.1-2017 and BCA Specification E1D4 throughout the development / smoke detection and alarm system in accordance with AS1670.1-2018, ▪ Perimeter emergency vehicular access 6m wide located within 18m of the entire building perimeter in accordance with BCA Clause C3D5, ▪ Smoke exhaust or smoke and heat vents required throughout the development as building exceeds 18,000m² or 108,000m³ in volume ▪ Provision of a fire hydrant ring main pursuant to AS2419.1-2021 	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			<p>Perimeter access exceeds 18m the provisions of the C3D5. Refer to comments in C3D5.</p> <p>Warehouse 01 and 02 are considered a single building as they are united by the super awning in the centre.</p> <p>The car parking buildings exceed the maximum floor area of Type C construction therefore must also comply with C3D4 provisions. Warehouse 1 and 2. The warehouses and their respective car parking are proposed to be united by means of an awning connection. This will therefore require all large isolated building provisions to be installed within the car parking.</p>	
C3D5 (prev. C2.4)	Requirements for open space and vehicular access (Category 2)	<p>Where a building is considered large isolated and requires open space and/or vehicular access, it must comply with the provisions of this clause.</p> <p>Open space must be located wholly on the allotment except that a road, river or public place adjoining the allotment (except for the farthest 6m) may be used and is to include vehicular access in accordance with this clause. Open space is not to be used for storage or processing of materials, nor is it to be built upon except for guard houses, service structures or the like that do not impose on firefighting operations.</p> <p>Vehicular access must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the whole building. It must have an unobstructed width of 6m with the farthest point not being more than 18m from the closed part of the</p>	<p>Warehouses 01 and 02 are provided with access around all 4 sides however exceed the 18m maximum outlined in C3D5 of the BCA.</p> <ul style="list-style-type: none"> ▪ Warehouse 02 – 30m plus the 6m for the vehicle = 36m at the worst point ▪ Warehouse 01 – 30m plus the 6m for the vehicle = 36m at the worst point <p>Note – although the above nominated the worst point by dimension, the departure occurs around the perimeter of the building where loading docks are located (recessed or non-recessed) as a result of the length of trucks. The only DTS part of the design has been determined to be the southern elevation.</p>	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		building. Pedestrian access is required from the vehicular access to the building.	To be confirmed if the carpark areas have loadbearing capacity for FRNSW vehicles.	
C3D6 (prev. C2.5)	Class 9 buildings	A Class 9a health-care building or Class 9c building must comply with the fire/smoke separation requirements of this clause. Class 9b early childhood centres are required to be fire separated from the remainder of the building, and each storey of the early childhood centre is required to have at least 2 fire compartments	This is not a class 9a or 9c	Not Applicable
C3D6 (prev. NSW C2.5)	Class 9 buildings	Class 9c buildings have differing requirements in relation to fire /smoke separation.	This is not a class 9a or 9c	Not Applicable
C3D7 (prev. C2.6)	Vertical separation of openings in external walls	Details to be provided regarding spandrels or balconies to unsprinklered Type A buildings in accordance with this clause. Vertical spandrels are required to be a minimum of 900mm in height with a minimum of 600mm above the FFL, and horizontal spandrels are required to extend 1,100mm from the external wall. Spandrels are to extend the width of the opening plus 450mm on each side.	This building is not Type A	Not Applicable
C3D8 (prev. C2.7)	Separation by fire walls	Construction of fire walls/separation of buildings/separation of fire compartments shall be carried out in accordance with this clause where applicable.	No firewalls currently proposed or required based on design.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C3D9 (prev. C2.8)	Separation of classifications in the same storey	Where a building has parts of different classifications located alongside one another in the same storey each building element in that storey must have the FRL prescribed in Specification 5 (previously Spec C1.1) for that element for the classifications concerned or the parts must be separated in that storey by a fire wall complying with this clause.	<p>The office space of each warehouse is connected via a non-fire isolated stair. However, each office space is less than 10% the total floor area and therefore considered to be ancillary to the primary use.</p> <p>The car park and the warehouse are considered a united building pursuant to Part A7.</p> <p>The building is proposed to be constructed to the highest FRL in accordance with Spec 5 for a Type C building.</p> <p>Separation is not proposed by means of a fire wall between classifications.</p>	Compliance Readily Achievable
C3D10 (prev. C2.9)	Separation of classifications in different storeys	Where a building has different classifications situated one above another in adjoining storeys they must be separated in accordance with this clause. The FRL required for separating floors is determined by the classification of the lower storey.	The floor is not required to achieve an FRL for Type C construction.	-
C3D11 (prev. C2.10)	Separation of lift shafts	Lifts connecting more than 2 storeys (3 if sprinklers installed) or any lift in a patient care in a Class 9a health-care building or a resident use area in a Class 9c building to be located in a fire rated shaft.	The lifts within the office areas serve 2 storeys only and therefore are not required to be located within a fire-isolated shaft.	Complies
C3D12 (prev. C2.11)	Stairways and lifts in one shaft	A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.	Lifts and stairs are separate in the current design.	Complies
C3D13 (prev. C2.12)	Separation of equipment	Equipment such as lift motors/lift control panels, emergency generators used to sustain emergency equipment operating in the emergency mode, central	The current documentation does not identify any of the below elements. Where any of the below or other services which sustain essential	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
		smoke control plant, boilers, certain battery systems installed in the building should be separated from the remainder of the building by construction achieving an FRL of 120/120/120.	services in fire mode – they will need to be separated from the remainder of the building with 120/120/120 construction with -/120/30 self-closing fire doors: <ul style="list-style-type: none"> ▪ Emergency Power Supply, ▪ Emergency Generators, ▪ Electricity Supply, ▪ Boilers, ▪ Batteries (that has a total voltage of 12 volts or more and storage capacity of 200kWh or more) ▪ Hydrant Pump Rooms, ▪ Sprinkler Pump Rooms, ▪ Fire Control Room 	
C3D14 (prev. C2.13)	Electricity supply system	An electricity substation, main switchboards, electrical conductors, and emergency equipment to be separated from the remainder of the building by construction achieving an FRL of 120/120/120.	The current documentation does not identify any of the below elements. Where any of the below or other services which sustain essential services in fire mode – they will need to be separated from the remainder of the building with 120/120/120 construction with -/120/30 self-closing fire doors: <ul style="list-style-type: none"> ▪ Substations, ▪ Mains switch boards 	Compliance Readily Achievable
C3D15 (prev. C2.14)	Public corridors in Class 2 and 3 buildings	Corridors that are more than 40m in length are to be provided with smoke-proof construction so as to not have portions that are more than 40m.	This is not a class 2 or 3	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C4D3 (prev. C3.2)	Protection of openings in external walls.	Openings that exposed to and within 3 m of a side or rear boundary, or 6 m of the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level, or 6m from another building on the allotment that is not Class 10 should be protected in accordance with this clause.	Openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, if the distance between the opening and the fire-source feature to which it is exposed is less than— <ul style="list-style-type: none"> a) 3 m from a side or rear boundary of the allotment; or b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or c) 6 m from another building on the allotment that is not Class 10, and if wall-wetting sprinklers are used, they are located externally and the opening must not occupy more than 1/3 of the area of the external wall of the storey in which it is located.	Complies
C4D4 (prev. C3.3)	Separation of external walls and openings in different fire compartments	The distance between parts of the external wall and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4 (previously Table C3.3) unless the openings are protected in accordance with C4D5 (previously C3.4).	No firewalls are required	Not Applicable
C4D5 (prev. C3.4)	Acceptable methods of protection	Where protection is required, doorways, windows and other openings must be protected in accordance with this clause.	C4D3 and C4D4 are not applicable	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C4D6 (prev. C3.5)	Doorways in fire walls	The aggregate width of doors in a fire wall is not to exceed half of the length of the fire wall. Openings in a fire wall are to be protected by doors or shutters that achieve the FRL required for the wall, except that the insulation level may be 30.	No fire walls proposed	Not Applicable
C4D7 (prev. C3.6)	Sliding fire doors	Where a doorway in a fire wall is fitted with a sliding fire door which is open when the building is in use it is to be fitted with an electromagnetic device that releases on detection, fire alarm or power failure. The closing mechanism, signage and warning devices/signage are to comply with the requirements of this clause.	No sliding fire doors have been proposed	Not Applicable
C4D8 (prev. C3.7)	Protection of doorways in horizontal exits	A doorway that is part of a horizontal exit must be protected in accordance with this clause.	No horizontal exits have been proposed	Not Applicable
C4D9 (prev. C3.8)	Openings in fire-isolated exits	Openings into fire-isolated exits to be protected in accordance with this clause.	No fire isolated stairs proposed or required	Not Applicable
C4D10 (prev. C3.9)	Service penetrations in fire-isolated exits	Fire-isolated exits must not be penetrated by any services other than those prescribed under this clause	See comment in C4D9	Not Applicable
C4D11 (prev. C3.10)	Openings in fire isolated lift shafts	Openings in fire-isolated lift shafts should be protected in accordance with this clause.	Lift shafts not required to be fire rated as they survey only 2 storeys	Not Applicable
C4D12 (prev. C3.11)	Bounding construction: Class 2, 3 and 4 buildings	Openings in bounding construction should be protected in accordance with this clause	This is not a class 2,3 or 4 building	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
NSW C4D12 (prev. NSW C3.11)	Bounding construction: Class 2, 3, 4 and 9b buildings	Protection for a doorway required to be protected should be provided in accordance with this clause. Class 9b buildings used as an entertainment venue should have openings in construction required to separate one space from another protected in accordance with C4D5 (previously C3.4).	This is not a class 9B building	Not Applicable
C4D13 (prev. C3.12)	Openings in floors and ceilings for services	In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be protected in accordance with this clause.	The floors in Type C construction do not require an FRL. A service which passes through Type C Construction must be protected by a shaft that will not reduce the fire performance of the building elements it penetrates. This would become applicable with a room is required to be separated for C3D13 or C3D14 purposes.	
C4D14 (prev. C3.13)	Openings in shafts	In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be protected in accordance with this clause.	This building is Type C	Not Applicable
C4D15 (prev. C3.15)	Openings for service installations	Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that installation must comply with this clause.	The current design does require any fire separation. Once the compartmentation is finalised further review of this element and the associated test reports will be required.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
C4D16 (prev. C3.16)	Construction joints	Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in accordance with this clause.	Must be protected identical to the tested prototype in accordance with AS1530.4-2014. This detail is to be reviewed at CC Stage.	Compliance Readily Achievable
C4D17 (prev. C3.17)	Columns protected with lightweight construction to achieve an FRL	A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly or the construction which has achieved the required FRL or resistance to the incipient spread of fire.	This has not been currently documented. Where this is proposed the installation must be identical to the tested prototype.	Compliance Readily Achievable
Spec 5	Fire-Resisting Construction		<p>Type C Construction required throughout in accordance with Spec 5.</p> <p>The respective warehouses and the car parking are deemed as separate buildings, and a fire source feature to one another. The proposed design must demonstrate compliance or alternatively be addressed in a performance solution to omit or reduce any of these protection requirements.</p> <p><i>Fire source feature is defined as;</i></p> <p><i>a) The far boundary of a road, river, lake or the like adjoining an allotment,</i></p> <p><i>b) The side or rear boundary of the allotment,</i></p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			<i>The external wall of another building on the allotment which is not a class 10 building.</i>	
Spec 6	Structural Tests for Lightweight Construction		The current drawings to not indicate if fire rated lightweight construction has been proposed. Further review of this element will be required prior to the relevant Construction Certificate.	Compliance Readily Achievable
Spec 7	Fire Hazard Properties		<p>As the building will be required to be provided with sprinkler system complying with C3D4 of the BCA the below lining provisions will be applicable.</p> <p>The fire hazard properties of fixed surface linings and mechanical ductwork pursuant to Specification 7 of the Building Code of Australia apply as follows:</p> <p><u><i>Sprinkler Protected Areas</i></u></p> <p>c) Floor Coverings – Critical radiant Flux not less than (1.2) kW/m²</p> <p>d) Wall and Ceiling Linings – Material Group No. (1, 2 or 3) excluding fire stairs which must not be less than 1</p> <p>Rigid and flexible air handling ductwork must comply with AS4254 Parts 1 & 2 2012 & 2021.</p> <p>Floor linings and floor coverings used in lift cars must have a critical radiant flux not less than</p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART C – FIRE RESISTANCE				
			2.2, and wall and ceiling linings must be a Material Group No. 1 or 2.	
Spec 8	Performance of External Walls in Fire		Certification to be provided from the NER structural engineer which confirms compliance with Spec 8 prior to the issuance of the relevant Construction Certificate.	Compliance Readily Achievable
Spec 9	Cavity barriers for fire-protected timber		No fire protected timber proposed	Not Applicable
Spec 10	Fire-protected timber		No fire protected timber proposed	Not Applicable
Spec 11	Smoke-Proof Walls in Health-Care and Aged Care Buildings		Not a class 9a or 9c	Not Applicable
Spec 12	Fire Doors, Smoke Doors, Fire Windows and Shutters		C4D3, C4D4 and C4D5 are not applicable.	Not Applicable
Spec 13	Penetration of Walls, Floors and Ceilings by Services		The current design does require any fire separation. Once the compartmentation is finalised further review of this element and the associated test reports will be required.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
D2D3 (prev. D1.2)	Number of exits required	Numbers of exits to comply with this clause.	The number of exits provided comply with the provisions of this clause.	Complies
D2D4 (prev. D1.3)	When fire-isolated stairways and ramps are required	<p>Fire-isolated stairways and ramps are required to be provided where detailed in this clause.</p> <p>Class 2 and 3 buildings: every stairway/ramp serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than 3 consecutive storeys in a Class 2 building or 2 consecutive storeys in a Class 3 building;</p> <p>One extra storey of any classification may be included if –</p> <ul style="list-style-type: none"> (i) it is only for the accommodation of motor vehicles or for other ancillary purposes; or (ii) the building has a sprinkler system complying with Specification E1.5 installed throughout; or (iii) the required exit does not provide access to or egress for, and is separated from the extra storey by construction having- <ul style="list-style-type: none"> • an FRL of -/60/60, if non-loadbearing; and • an FRL of 90/90/90 if loadbearing; and • no opening that could permit the passage of fire or smoke <p>Class 5, 6, 7, 8 or 9 building; every stairway/ramp serving as a required exit must be fire-isolated unless:</p> <ul style="list-style-type: none"> (i) in a class 9a health-building – it connects, passes through or passes by not more than 2 	<p>Stairs that do not connect to more than 2 storeys will be sprinkler protected.</p> <p>Stairs may be non-fire isolated as documented.</p>	Complies

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		consecutive storeys in areas other than patient care areas; or (ii) it is part of an open spectator stand; or (iii) in any other case except in a Class 9b early childhood centre or Class 9c building, it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if – (A) the building has a sprinkler system complying with Specification 17 (previously Spec E1.5) installed throughout; or (B) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having- (aa) an FRL of -/60/60, if non-loadbearing; and (bb) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or Type C construction, if loadbearing and (cc) no opening that could permit the passage of fire or smoke		
D2D5 (prev. D1.4)	Exit travel distances	Class 2 and 3 parts – the entrance doorway of any sole occupancy unit must not be more than 6m from an exit or a point of choice, or 20m from a single exit serving the storey at the level of egress to road or open space. Class 5, 6, 7, 8, 9a and 9c parts - No point on a floor must be more than 20 m from an exit, or a point from	The DTS provisions for travel distance are noted below: no point on the floor must be more than 20m to a single exit or point of choice and where two exits are provided, a maximum of 40m to one of those exits	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		<p>which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40m.</p> <p>Class 9a parts – in a patient care area, no point on the floor must be more than 12m from a point from which travel in two different directions is available, with a maximum travel distance to the closest exit of 30m.</p>	<p>Warehouse 01</p> <ul style="list-style-type: none"> ▪ Up to 100m in lieu of 40m to an exit where two exits are available. Note this assessment was carried out with some consideration for an internal racking system. Racking design is required for an accurate assessment ▪ 207m between alternative exits in lieu of 60m <p>Carparking – WH 01</p> <ul style="list-style-type: none"> ▪ Up to 43m in lieu of 40m to an exit where two exits are available ▪ 80m between alternative exits in lieu of 60m <p>Warehouse 02</p> <ul style="list-style-type: none"> ▪ Up to 100m in lieu of 40m to an exit where two exits are available. Note this assessment was carried out with some consideration for an internal racking system. Racking design is required for an accurate assessment ▪ 199m between alternative exits in lieu of 60m 	

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
			<p>Carparking – WH 02</p> <ul style="list-style-type: none"> ▪ Up to 43m in lieu of 40m to an exit where two exits are available ▪ 83m between alternative exits in lieu of 60m <p>Further review of this element to be conducted once the design is finalised.</p>	
D2D6 (prev. D1.5)	Distance between alternative exits	Exits required as alternative means of egress must be located not less than 9m apart and located so that the alternative paths of travel do not converge such that they become less than 6m apart.	<p>Exits shall be located to not be more than 60m apart and not closer than 9m</p> <p>Refer to D2D5 comments regarding any departures.</p>	No – Design Amendment or Performance Solution Required
D2D7 (prev. D1.6 (a))	Height of exits, paths of travel to exits and doorways	A required exit or path of travel to an exit are required to be a minimum unobstructed height of not less than 2m, except that the unobstructed height of a doorway may be reduced to not less than 1,980mm.	Further information to be provided prior to the issue of a construction certificate	Compliance Readily Achievable
D2D8 (prev. D1.6 (b), (c), (d), (e))	Width of exits and paths of travel to exits	<p>The unobstructed width of each required exit or path of travel (except for ladders provided in accordance with D2D21, D3D23 or I3D5) must not be less than:</p> <ul style="list-style-type: none"> ▪ 1m; or ▪ 1.8m in a passageway, corridor or ramp normally used for the transportation of patients in beds in a ward or treatment area; and ▪ In a public corridor in a class 9c aged care building: 1.5m and 	<p>Required exits and paths of travel to an exit must satisfy –</p> <ul style="list-style-type: none"> ▪ Minimum dimensions of 1000mm and 2000mm height ▪ Doorways are permitted to contain a clear opening width of the required width of the exit minus 250mm, with a height of 1980mm as part of egress requirements. Please note the access for persons with disabilities must be afforded a doorway with a clear width 	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status																												
PART D - ACCESS AND EGRESS																																
		<p>1.8m for the full width of the doorway providing access into a sole occupancy unit or communal bathroom.</p> <p>If the storey accommodates more than 100 people but less than 200 people, the aggregate unobstructed egress width of each exit is to be 1m plus 250mm for every 25 people (or part thereof) in excess of 100.</p> <p>If the storey accommodates more than 200 people, the aggregate unobstructed egress width of each exit is to be 2m plus, for paths to road or open space with a gradient of more than than 1:12, 500mm for every 60 persons (or part thereof) in excess of 200 people. In all other cases, 2m plus 500mm for every 75 persons (or part thereof) in excess of 200 people.</p>	<p>of 850mm (i.e. minimum 920 mm doors).</p> <p>The following table summarises the aggregate exit widths required by Clause D2D8 of the BCA pursuant to the population determined by Clause D2D18 of the BCA:</p> <table border="1"> <thead> <tr> <th>Storey</th> <th>Population pursuant to D2D18</th> <th>Aggregate Exit Width Required</th> <th>Aggregate Exit Width Provided</th> </tr> </thead> <tbody> <tr> <td>WH1 & WH1 Office GF</td> <td>1050</td> <td>8m</td> <td>19m</td> </tr> <tr> <td>WH1 Office L1</td> <td>48</td> <td>1m</td> <td>2m</td> </tr> <tr> <td>WH1 Car Parking L1</td> <td>125</td> <td>1.5m</td> <td>3m</td> </tr> <tr> <td>WH2 & WH2 Office GF</td> <td>910</td> <td>7m</td> <td>15m</td> </tr> <tr> <td>WH2 Office L1</td> <td>48</td> <td>1m</td> <td>2m</td> </tr> <tr> <td>WH2 Car Parking L1</td> <td>125</td> <td>1.5m</td> <td>3m</td> </tr> </tbody> </table> <p>Ground Floor Carparking was not assessed as the perimeter of the building is open for egress</p>	Storey	Population pursuant to D2D18	Aggregate Exit Width Required	Aggregate Exit Width Provided	WH1 & WH1 Office GF	1050	8m	19m	WH1 Office L1	48	1m	2m	WH1 Car Parking L1	125	1.5m	3m	WH2 & WH2 Office GF	910	7m	15m	WH2 Office L1	48	1m	2m	WH2 Car Parking L1	125	1.5m	3m	
Storey	Population pursuant to D2D18	Aggregate Exit Width Required	Aggregate Exit Width Provided																													
WH1 & WH1 Office GF	1050	8m	19m																													
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WH1 Car Parking L1	125	1.5m	3m																													
WH2 & WH2 Office GF	910	7m	15m																													
WH2 Office L1	48	1m	2m																													
WH2 Car Parking L1	125	1.5m	3m																													
D2D8 (prev. NSW D1.6)	Width of exits and paths of travel to exits	In a required exit or path of travel to an exit there are further requirements for Class 9b buildings used as entertainment venues.	This building is a class 7a and 7b.	Not Applicable																												

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
D2D9 (prev. D1.6 (f))	Width of doorways in exits or paths of travel to exits	Doorways in a required exit or path of travel must have an unobstructed width of: <ul style="list-style-type: none"> a) in patient care areas through which patients would normally be transported in beds— <ul style="list-style-type: none"> i. if the doorway provides access to, or from, a corridor of width— <ul style="list-style-type: none"> A. less than 2.2 m – 1200 mm; or B. 2.2m or greater – 1070 mm; and ii. where the doorway referred to in (i) is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 800 mm wide; or b) in patient care areas in a horizontal exit – 1250 mm; or c) the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or d) in a Class 9c building, 800 mm, except— <ul style="list-style-type: none"> i. in resident use areas the minimum unobstructed width must be 870 mm; and ii. for doorways leading from a public corridor to a sole-occupancy unit the minimum unobstructed width must be 1070 mm; and iii. where the doorway is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 870 mm wide in 	Compliance Readily Achievable	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		resident use areas and 800 mm wide in non-resident use area; or e) in any other case except where it opens to a sanitary compartment or bathroom – 750 mm wide		
D2D9 (prev. NSW D1.6 (f))	Width of doorways in exits or paths of travel to exits	Doorways in a required exit or path of travel must have an unobstructed width of not less than 1m and not more than 3m.		Complies
D2D10 (prev. D1.6 (g))	Exit width not to diminish in direction of travel	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space.	Complies	Complies
D2.11 (prev. D1.6 (h) and (i))	Determination and measurement of exits and paths of travel to exits	Widths of stairways and ramps are to be measured clear of handrails, barriers and the like and are to extend without interruption (except for ceiling cornices) to a height of not less than 2m vertically.	Considered as part of our assessment.	Note
D2D12 (prev. D1.7)	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; Where a path of travel from the point of discharge of a fire-isolated <i>exit</i> necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 and any openings protected internally in accordance with C4D5 (previously C3.4), for a distance of 3 m above or below, as appropriate,	This has not been proposed	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		the level of the path of travel, or for the height of the wall, whichever is the lesser.		
D2D13 (prev. D1.8)	External stairways or ramps in lieu of fire-isolated exits	An external stairway or ramp may serve as a required exit in lieu of fire-isolated exit serving a storey below an effective height of 25m in accordance with this clause for prescriptive compliance.	This has not been proposed	Not Applicable
D2D14 (prev. D1.9)	Travel by non-fire-isolated stairways or ramps	A non fire-isolated stair serving as a required exit must provide a continuous means of travel by its own flights and landings to a level at which egress to a road or open space is available.	<p>This has not been proposed</p> <p>For class 7a and 7b the total distance must be less than 80m and not more than 20m from the stairs to the discharge point.</p> <p>The following areas are notably not complying with the above provisions:</p> <p><u>Carpark – WH 01</u></p> <ul style="list-style-type: none"> ▪ 96m in total in lieu of 80m and 43m from the bottom of stairs in lieu of 40m <p><u>Carpark – WH 02</u></p> <ul style="list-style-type: none"> ▪ 99m in total in lieu of 80m and 43m from the bottom of stairs in lieu of 40m 	No – Design Amendment or Performance Solution Required
D2D15 (prev. D1.10)	Discharge from exits	The discharge point of the fire isolated exits is required to be connected to the road by a minimum 1 m wide path and where there is a change of level, the path must contain a complying stair or ramp.	The discharge point from all exits will require a bollard or other suitable barrier protection to ensure the egress path is not obstructed.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		The BCA also specifies that exits must not be blocked at a point of discharge and where necessary suitable barriers must be provided to prevent vehicles from blocking the exit or access to it.		
D2D15 (prev. NSW D1.10)	Discharge from exits	In a Class 9b building used as an entertainment venue, at least half of the required number of exits from each storey or mezzanine, and at least half of the aggregate width of such exits must discharge otherwise than through the main entrance, or the area immediately adjacent to the main entrance to the building.	This building is class 7a and 7b	Not Applicable
D2D16 (prev. D1.11)	Horizontal exits	<p>Except in a Class 9a or 9c building, horizontal exits shall not comprise of more than half of the exits serving a fire compartment.</p> <p>In a Class 9a health care or a Class 9c building, horizontal exits may be counted as required exits where they lead to compartments that have at least one exit that is not a horizontal exit.</p> <p>A clear area on the side of the fire wall to which occupants are evacuating must be provided to accommodate all occupants that the horizontal exit is serving. An area of 0.5m² per person, and/or 2.5m² per patient/resident in a Class 9a or 9c is to be provided</p> <p>Horizontal exits must not be counted as required exits in a Class 9b building used as an early childhood centre, primary or secondary school.</p>	No horizontal exits have been proposed	Not Applicable
D2D17 (prev. D1.12)	Non-required stairways, ramps or escalators	An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp to comply with this clause for prescriptive compliance.	Stairs are required.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
			No ramps of escalators currently shown	
D2D21 (prev. D1.16)	Plant rooms and lift motor rooms: Concession	A ladder may be used in lieu of a stairway to provide egress in accordance with the requirements of this clause for prescriptive compliance.	The drawings do not currently indicate that roof access is proposed and there is not plant shown.	Not Applicable
D2D22 (prev. D1.17)	Access to lift pits	Access to lift pits must meet the requirements of this clause for prescriptive compliance	No lift pits documented.	
D2.23 (prev. D1.18)	Egress from primary schools	Every part of a Class 9b primary school must be wholly within a storey that provides direct egress to a road or open space. This does not apply to a building with a rise in storeys of not more than 4 where the only use in the building is Class 9b primary school.	No early childcare proposed	Not Applicable
D3D2 (prev. NSW D2.1)	Application of Part		Not Applicable – building not a class 2, 3 or 9b	Not Applicable
D3D3 (prev. D2.2)	Fire-isolated stairways and ramps	A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.	This has not been proposed	Not Applicable
D3D4 (prev. D2.3)	Non-fire-isolated stairways and ramps	The non fire-isolated stairs are required to be designed in accordance with the requirements of this clause for prescriptive compliance.	Building does not have a rise in storeys of more than 2.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
D3D5 (prev. D2.4)	Separation of rising and descending stair flights	If a stairway serving as an exit is required to be fire-isolated there must be no direct connection between a flight rising from a storey below the lowest level of access to a road/open space and a flight descending from a storey above that level. Any construction separating the flights is to be non-combustible and smoke proof in accordance with the requirements of Specification 11 Clause S11C2 (previously Clause 2 of Specification C2.5).	Exits are not required to be fire-isolated	Not Applicable
D3D6 (prev. D2.5)	Open access ramps and balconies	Where an open access ramp or balcony is provided to meet the smoke hazard management requirements of E2D4 to E2D13 (previously Table E2.2a) it should comply with the requirements of this clause.	This has not been proposed.	Not Applicable
D3D7 (prev. D2.6)	Smoke lobbies	Smoke lobbies required under D2D12 (previously D1.7) should comply with the prescriptive requirements of this clause. Smoke lobbies are to be pressurised as part of the exit if the exit is required to be pressurised under E2D3.	D2D12 is not applicable to this project and no smoke lobbies have been proposed.	Not Applicable
D3D8 (prev. D2.7)	Installations in exits and paths of travel	Proposed services or equipment comprising electricity meters, distribution boards, central telecommunication distribution boards / equipment, electrical motors or other motors serving equipment in the building, can be installed in corridors or the like leading to a required exits if the services or equipment are enclosed with non-combustible construction or appropriate fire-protective covering and doorways suitably sealed against smoke spread from the enclosure.	No fire stairs, ramp or passage proposed	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		Gas or other fuel services are not permitted in a required exit. Details are to be provided with the construction documentation.		
D3D9 (prev. D2.8)	Enclosure of space under stairs and ramps	Spaces below fire-isolated stairs and non fire-isolated stairs should be dealt with in accordance with this clause.	No enclosures proposed under stairs or ramps	Not Applicable
D3D10 (prev. D2.9)	Width of stairways and ramps	A required stairway or ramp that exceeds 2m in width is counted as having a width of only 2m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2m.	No exits currently over 2m for this provision to apply.	Not Applicable
D3D11 (prev. D2.10)	Pedestrian ramps	Fire-isolated ramps can be substituted for a fire-isolated stairway.	The design team propose the use of a vehicular ramps as pedestrian ramps for the purpose of egress must be addressed through a performance-based solution.	No – Design Amendment or Performance Solution Required
D3D12 (prev. D2.11)	Fire-isolated passageways	The enclosing construction of a fire-isolated passageway must have an FRL when tested for a fire outside the passageway in another part of the building where that passageway discharges from a fire-isolated stairway not less than that required for the stairway.	This has not been proposed.	Not Applicable
D3D13 (prev. D2.12)	Roof as open space	If an exit discharges to a roof of a building, the roof must have an FRL of not less than 120/120/120 and not have any rooflights or other openings within 3m of the path of travel of person using the exit to reach a road or open space.	This has not been proposed.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status														
PART D - ACCESS AND EGRESS																		
D3D14 (prev. D2.13)	Goings and risers	Goings and risers are to be designed to comply with this clause, including opening sizes, going and riser dimensions and non-slip finish or non-skid nosings.	Goings and risers are to be designed to comply with this clause, including opening sizes, going and riser dimensions and non-slip finish or non-skid nosing's. Drawings to be provided for review prior to CC.	Compliance Readily Achievable														
D3D14 (prev. NSW D2.13)	Goings and risers	Class 9b buildings used as entertainment venue have further requirements to be met under this clause.	This building is a class 7a and 7b	Not Applicable														
D3D15 (prev. D2.14)	Landings	In a stairway landings should comply with this clause.	Drawings to be provided for review prior to CC. Slip resistance must meet the requirements of Table D2.14.	Compliance Readily Achievable														
			<table border="1"> <thead> <tr> <th rowspan="2">Application</th> <th colspan="2">Surface Conditions</th> </tr> <tr> <th>Dry</th> <th>Wet</th> </tr> </thead> <tbody> <tr> <td>Ramp steeper than 1:14</td> <td>P4 or R11</td> <td>P5 or R12</td> </tr> <tr> <td>Ramp steeper than 1:20 but not steeper than 1:14</td> <td>P3 or R10</td> <td>P4 or R11</td> </tr> <tr> <td>Tread or landing surface</td> <td>P3 or R10</td> <td>P4 or R11</td> </tr> </tbody> </table>	Application	Surface Conditions		Dry	Wet	Ramp steeper than 1:14	P4 or R11	P5 or R12	Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11	Tread or landing surface	P3 or R10	P4 or R11	
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Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
D3D16 (prev. D2.15)	Thresholds	Thresholds of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf and can be varied in accordance with this clause.	Thresholds of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf and can be varied in accordance with this clause. To be reviewed once drawings resolved prior to CC.	
D3D16 (prev. NSW D2.15)	Thresholds	In Class 9b buildings used as an entertainment venues the threshold of a doorsill should comply with this clause as applicable. In other cases the threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless:- (i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) The door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.	This building is a class 7a and 7b	Not Applicable
D3D17 (prev. D2.16 (a), (b), (c))	Barriers to prevent falls	A continuous barrier must be provided along the side of— <ul style="list-style-type: none"> ▪ a roof to which general access is provided; and ▪ a stairway or ramp; and ▪ a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and ▪ any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. 	Compliance in these areas is required.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		The barrier provided is to comply with the requirements of D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21 (previously D2.16)		
D3D18 (prev. Table D2.16 (a))	Height of Barriers	<p>The height of a barrier required by D3D17 must be not less than the following:</p> <ul style="list-style-type: none"> ▪ For stairways or ramps with a gradient of 1:20 or steeper – 865 mm. ▪ For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length – 865 mm. ▪ In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier – 700 mm. ▪ For all other locations – 1 m. <p>A transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.</p>	<p>Balustrading to a minimum height of 1000mm with a maximum opening of 124mm in any direction should be provided adjacent to balconies, landings, corridors etc where located adjacent to a change in level exceeding 1000mm, or where it is possible to fall through an openable window located more than 4m above the surface beneath.</p> <p>Where it is possible to fall more than 4m to the surface below, the balustrade shall not contain any horizontal or near horizontal members that facilitate climbing between 150 – 760mm above the floor.</p> <p>Drawings to be provided for review prior to CC.</p>	Compliance Readily Achievable
D3D18 (prev. NSW D2.16a)	Height of Barriers	<p>In a Class 9b building used as an entertainment venue, the height prescribed for guardrails in NSW I4D41 or NSW I5D9.</p> <p>In a Class 9b building used as an entertainment venue, for stairways and ramps and the floor of any access path, balcony, landing or the like the barrier must be a minimum height of 1m when provided inside the building and 1,200mm when provided externally to the building.</p>	This building is a class 7a and 7b	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
D3D19 (prev. Table D2.16 (a))	Openings in barriers	<p>Openings in barriers are not to permit a 125mm sphere to pass through.</p> <p>Where a required barrier is fixed to the vertical face forming an edge of a balcony, landing or the like, the gap between the barrier and the face must not exceed 40mm.</p> <p>In a fire isolated stairway (except those serving early childhood centres) in class 7 (except carparks) and class 8 buildings, openings must not allow a 300mm sphere to pass through, or, where rails are used, a 150mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the bottom rail and, the opening between rails must not be more than 460mm.</p>	<p>The current documentation does not contain sufficient detail to enable assessment.</p> <p>Documentation to be provided for all balustrade types that demonstrates compliance.</p>	Compliance Readily Achievable
D3D20 (prev. Table D2.16 (a))	Barrier climbability	A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor.	<p>The current documentation does not contain sufficient detail to enable assessment.</p> <p>Documentation to be provided for all balustrade types that demonstrates compliance.</p>	Compliance Readily Achievable
D3D21 (prev. D2.16(d))	Wire barriers	Wire barriers are to comply with the requirements of this clause.	Not proposed in the current design.	Not Applicable
D3D22 (prev. D2.17)	Handrails	<p>Handrails are required along at least one side of the stairways or ramps, or on both sides of stairs or ramps with a total width of more than 2m.</p> <p>In a Class 9b building used as a primary school or a building that contains an early childhood centre, have</p>	<p>Handrails should generally be provided at a minimum height of 865mm alongside of all ramps and stairs.</p> <p>The public stairs and ramps located along an accessible path of travel should be designed in accordance with the requirements of AS1428.1</p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		one handrail fixed at a height of not less than 865 mm; and in addition to the above, have a handrail— fixed at a height between 665 mm and 750 mm in a primary school; and with a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b early childhood centre; and	for persons with disabilities. This requires a handrail on each side of the stair and ramp and for the handrail to extend approximately 550mm – 600mm past the last tread / end of ramp. Drawings to be provided for review prior to CC.	
D3D23 (prev. D2.18)	Fixed platforms, walkways, stairways and ladders	Compliance with the requirements of this clause	AS1657 areas have not been identified on the drawings. The above standard may be applied to fixed platforms, walkways, stairways, lander and any going and risers if they only serve machinery rooms, boilers, plant rooms and the like.	Compliance Readily Achievable
D3D24 (prev. D2.19)	Doorways and doors	A doorway serving as a required exit or forming part of a required exit must not be fitted with a revolving door, roller shutter or tilt-up door. Sliding doors must also not be fitted unless it leads directly to a road or open space and the door provided that it is capable of being opened manually under a force of not more than 110 N. A doorway serving as a required exit or forming part of a required exit is fitted with a door which is power-operated:	A doorway serving as a required exit or forming part of a required exit must not be fitted with a revolving door, roller shutter or tilt-up door. Sliding doors must also not be fitted unless it leads directly to a road or open space and the door provided that it is capable of being opened manually under a force of not more than 110 N. A doorway serving as a required exit or forming part of a required exit is fitted with a door which is power-operated:	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		(a) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (b) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door.	(a) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (b) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door. Further review at CC stage once all door locations have been finalised.	
D3D24 (prev. NSW D2.19)	Doorways and doors	In a Class 9b building used as an entertainment venue doorways and doors should comply with this requirement.	This building is a class 7a and 7b	Not Applicable
D3D25 (prev. D2.20)	Swinging doors	A swinging door in a required exit or forming part of a required exit must not encroach at any part of its swing by more than 500mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and when fully open, by more than 100 mm on the required width of the required exit. The measurement of encroachment in each case is to include door handles or other furniture or attachments to the door. The door must swing in the direction of egress unless it is fitted with a device for holding it in the open position; or it serves a sanitary	Doors must swing in the direction of egress. Further review at CC stage once all door locations have been finalised.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
		compartment or airlock (in which case it may swing in either direction); and must not otherwise impede the path or direction of egress.		
D3D26 (prev. D2.21)	Operation of latch	<p>All the doors in the required exits, or doors forming part of the required exits, must be readily openable without a key from the side that faces a person seeking egress, by a single hand downward or pushing action on a single device which is located between 900mm and 1.1m from the floor.</p> <p>The above provision would not apply to sole occupancy unit doors or doors fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler or detection system installed in the building.</p>	Single action hardware or appropriate push mechanism required to egress doors.	Compliance Readily Achievable
D3D26 (prev. NSW D2.21)	Operation of latch	<p>In a Class 9b building, other than a school, an early childhood centre or a building used for religious purposes, requirements relating to operation of latches are differing.</p> <p>Further differing requirements are also applicable to a Class 9b building used as an entertainment venue.</p>	This building is a class 7a and 7b	Not Applicable
D3D27 (prev. D2.22)	Re-entry from fire-isolated exits	Doors of a fire-isolated exit must not be locked from inside to comply with the requirements of this clause where they serve a Class 9a health care building, a class 9b early childhood centre, a class 9c building or a fire isolated exit serving a storey above an effective height of 25m, throughout the exit	No fire stairs proposed	Not Applicable
D3D31 (prev.	Doors in path of travel in a place of	As applicable	This is not an entertainment venue	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART D - ACCESS AND EGRESS				
NSW D2.101)	public entertainment			
D3D28 (prev. D2.23)	Signs on doors	Signs on doors to alert persons that the operation of the doors must not be impaired, must be installed where it can be readily see on or adjacent to required doors/exits in accordance with this clause.	Details to be provided.	Compliance Readily Achievable
D3D29 (prev. D2.24)	Protection of openable windows	Window openings, where applicable, must be provided with protection in bedrooms in a Class 2 or 3 buildings, or Class 4 part of a building, or Class 9b early childhood buildings in accordance with this clause.	Openable windows are not proposed based on the current design. Further review required prior to the issue of a construction certificate.	Compliance Readily Achievable
D3D30 (prev. D2.25)	Timber stairways; Concession	Notwithstanding the requirements of D3D3 (a) (previously D2.2 (a)) timber treads, risers, landings and associated support can comply with this clause.	Understood this has not been proposed.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E1D2 (prev. E1.3)	Fire hydrants (Category 2)	A fire hydrant system must be provided in accordance with this clause to serve the whole building and must also be installed in accordance with AS2419.1 - 2021. Where internal hydrants are provided, they must only serve the storey in which they are located.	A fire hydrant system must be provided in accordance with this clause to serve the whole building and must also be installed in accordance with AS2419.1. Where internal hydrants are provided, they must only serve the storey in which they are located. Key matters to note –	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
			<ul style="list-style-type: none"> ▪ The current drawings do not indicate the locations of the internal or external hydrants. ▪ The proposed building contains multiple Principal Pedestrian Entrances due to the nature of the design and use ▪ The proposed location is not adjacent to the principal vehicle access. ▪ If internal hydrants, other than those located within 4m of an exit are proposed for the purpose of coverage, the plans must be submitted to FRNSW for consultant. 	
E1D3 (prev. E1.4)	Fire hose reels	A hose reel system must be provided to serve the whole Building. The hose reel system must be installed in accordance with this clause and AS2441.	<p>A Fire Hose Reel System is required to BCA Clause E1D3 and AS2441-2005.</p> <p>Fire hose reels must be located adjacent to internal fire hydrants other than those located with fire isolated exits. Where coverage cannot be achieved, further fire hose reels are to be located within 4m of exits. Where these are exhausted and coverage is not yet achieved, additional fire hose reels shall be located internally as required to provide coverage. Fire hose reel coverage within the building based on a 36m hose length and 4m of water spray.</p> <p>Fire hose reel cupboards must not contain any other services such as water meters, etc., and</p>	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
			<p>doors to fire hose reel cupboards are not to impede the path of egress.</p> <p>Fire Hose reel are not to extend through Fire and Smoke Walls except as prescribed by the BCA being:</p> <ul style="list-style-type: none"> ▪ Doorways opening into areas separated from the remainder of the building for the following purposes: <ul style="list-style-type: none"> - separating equipment or electrical supply systems (C3D13 & C3D14) - openings in shafts (C4D14) <p>Pumps and Water Storage facilities are only required where pressure and flows cannot be achieved in accordance with clause 6.1 of AS2441-2005.</p> <p>Hose reels have only been documented on the first-floor offices and are located more than 4m from an exit (5m)</p> <p>Further review of this element to be completed once all hose reel and exit locations have been finalised.</p> <p>The design team proposes the use of 50m FHR to afford coverage throughout the warehouse and to be addressed through a performance solution.</p>	

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E1D4 (prev. E1.5)	Sprinklers (Category 2)	A sprinkler system must be installed in a building or part where required by E1D5 to E1D12 (previously Table E1.5) and comply with Specifications 17 and 18 (previously Spec E1.5 and Spec E1.5a) as applicable.	A sprinkler system complying with E1D4, Spec 17 and AS2118.1-2017 is required to be provided throughout as buildings have been considered LIB's.	Compliance Readily Achievable
E1D5 (prev. Table E1.5)	Where sprinklers are required: all classifications	Sprinklers are required throughout all buildings if any part of the building has an effective height of more than 25m, including an open deck carpark within a multi-classified building.	The building does not exceed 25m in effective height	Not Applicable
E1D6 (prev. Table E1.5)	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	In a Class 2 or 3 building, or any building containing a Class 2 or 3 part, sprinklers are required throughout the building if any part has a rise in storeys of 4 or more and an effective height of not more than 25m.	Building is a class 7a and 7b	Not Applicable
E1D7 (prev. Table E1.5)	Where sprinklers are required: Class 3 building used as a residential care building	Sprinklers are required throughout a building containing a Class 3 part used as a residential care building and any fire compartment containing a Class 3 part used for residential care.	Building is a class 7a and 7b	Not Applicable
E1D8 (prev. Table E1.5)	Where sprinklers are required: Class 6 building	In a class 6 building, sprinklers are required in fire compartments where they have a floor area of more than 3,500m ² and/or a volume of more than 21,000m ³ .	Building is a class 7a and 7b	Not Applicable
E1D9 (prev. Table E1.5)	Where sprinklers are required: Class 7a building, other	In a class 7a building (other than an open deck carpark), sprinklers are required in fire compartments where more than 40 vehicles are accommodated.	Class 7a portions is part of a Large Isolated Building and required to be sprinklered accordingly.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
	than an open deck carpark			
E1D10 (prev. Table E1.5)	Where sprinklers are required: Class 9a health care building used as a residential care building, Class 9c buildings	In a Class 9a health-care building used as a residential care building, sprinklers are required throughout the building and in any fire compartment containing a Class 9a part used for residential care. In a Class 9c building, sprinklers are required throughout the building and in any fire compartment containing a Class 9c part.	Building is a class 7a and 7b	Not Applicable
E1D11 (prev. Table E1.5)	Where sprinklers are required: Class 9b buildings	In a Class 9b building, other than an early childhood centre, see Part I1. In a building containing a Class 9b early childhood centre, sprinklers are required throughout the whole building, including any part of another class.	Building is a class 7a and 7b	Not Applicable
E1D12 (prev. Table E1.5)	Where sprinklers are required: additional requirements	For sprinkler requirements for atriums, see Part G3. For sprinkler requirements for large isolated buildings, see C3D4.	This building contains no atriums.	Not Applicable
E1D13 (prev. Table E1.5)	Where sprinklers are required: occupancies of excessive hazard	In occupancies of excessive hazard, sprinklers are required in fire compartments with a floor area of more than 2,000m ² and/or a volume of more than 12,000m ³ .	Consideration is required for the sprinkler design to comply with the Hazards associated with the proposed design.	Compliance Readily Achievable
E1D14 (prev. E1.6)	Portable fire extinguishers	Portable fire extinguishers are to comply with this provision and sections 1, 2, 3 and 4 of AS2444.	The provision of portable fire extinguishers is required to BCA Clause E1D14 and AS2444 – 2001.	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E1D15 (prev. E1.8)	Fire control centres/rooms (Category 2)	Fire control centre facility in accordance with Specification 19 (previously Spec E1.8) must be provided in a building with an effective height of more than 25m and a Class 6, 7, 8 or 9 building with a total floor area of more than 18,000m ² .	<p>A fire control centre is required to both warehouses as they exceed a floor area of 18000m². This must comply with Spec 19.</p> <p>The drawings currently indicate the FIP is located in the office. RL's to be confirmed for review of Spec 19 (is there a change in level more than 300mm)</p>	Compliance Readily Achievable
E1D16 (prev. E1.9)	Fire precautions during construction	In a building under construction: <ol style="list-style-type: none"> a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and b) after the building has reached an effective height of 12 m— <ol style="list-style-type: none"> (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storey's; and (ii) any required booster connections must be installed. 	<p>In a building under construction:</p> <ol style="list-style-type: none"> a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each story adjacent to each required exit or temporary stairway or exit; and <p>Prior to the commencement of construction, the builder must nominate a date for inspection of these services in accordance with the construction programme. Once the inspection has been carried out, the licenced plumber will need to certify the installation of the systems to the appropriate standards.</p>	Compliance Readily Achievable
E1D17 (prev. E1.10)	Provision for special hazards	Suitable additional provision to be made as appropriate.	Suitable additional provision to be made as appropriate.	

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
			Details on the intended use of all spaces to be confirmed for further review on this element.	
Spec 17	Fire sprinkler systems		Refer to comments in E1D4 above	-
Spec 19	Fire control centers		Refer to comments in E1D15 above	-
E2D2 (prev. E2.2)	Application of Requirements (Category 2)	Smoke hazard management is to be provided to the building in accordance with Clauses E2D3 through E2D20 as applicable.	Details to be provided in accordance with this clause. Open Deck Car Park has been proposed. The architect must confirm each storey is cross ventilated	Further Information Required
E2D3 (prev. E2.2)	General	<p>Any proposed air handling systems that do not form part of the smoke hazard management but recycles air from one fire compartment to another is to be designed and installed to AS 1668.1 and the requirements of this clause.</p> <p>A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic pressurisation for fire isolated exits.</p>	<p>The following Smoke hazard management systems are required for the LIB which exceeds 18000m²:</p> <ul style="list-style-type: none"> Automatic Smoke Exhaust System activated by Automatic Smoke Detection & Alarm System in accordance with the requirements of BCA Spec E2.2b <p>A fire indicator panel is required as part of the detection system. This panel is to be located within 4m of the main entry and should be incorporated within the fire control centre. Any variation to the prescriptive provisions will require a performance-based solution prepared by an accredited fire engineer to verify the performance requirements of the BCA.</p>	

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E2D4 (prev. Table E2.2a)	Fire-isolated exits	<p>A fire isolated exit is required to be provided with an automatic air pressurisation system for fire isolated exits in accordance with AS 1668.1 or open access ramps and balconies in accordance with D3D6.</p> <p>Any automatic air pressurisation system must serve the entire exit.</p> <p>This applies for fire isolated exits serving:</p> <ul style="list-style-type: none"> ▪ any storey above an effective height of 25m; or ▪ more than 2 below ground storeys, not counted in the rise in storeys; or ▪ an atrium; or ▪ a class 9a with a rise in storeys of more than 2; or ▪ a class 9c building with a rise in storeys of more than 2; or ▪ a class 3 building used as a residential care building with a rise in storeys of more than 2; and <p>a required fire isolated passageway or fire isolated ramp with a length of travel of more than 60m to a road or open space.</p>	There are no fire isolated exits.	Not Applicable
E2D5 (prev. Table E2.2a)	Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building.	An automatic smoke detection and alarm system complying with Specification 20 must be provided to a Class 2 or 3 building which is more than 25m in effective height and a Class 2, 3 or 4 part of a building, in a building which is more than 25m in effective height.	The buildings effective height is less than 25m	Not Applicable
E2D6 (prev.	Buildings more than 25m in	A Class 5, 6, 7b, 9 or 9b building or part of a building must be provided with a zone pressurisation system	The buildings effective height is less than 25m	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
Table E2.2a)	effective height: Class 5, 6, 7b, 8 or 9b buildings	between vertically separated fire compartments in accordance with AS 1668.1, if the building is more than 25m in effective height. This does not apply to a building that has a fire compartment containing a Class 5, 6, 7b, 8 or 9b part (or a combination of these classes in the same fire compartment) where there is only one fire compartment containing these classifications in an otherwise Class 2, 3, 9a or 9c building. 'Vertically separated fire compartments' are fire compartments above and below each other, and not fire compartments within the same storey.		
E2D7 (prev. Table E2.2a)	Buildings more than 25m in effective height: Class 9a buildings	A Class 9a building must be provided with an automatic smoke detection and alarm system complying with Specification 20; and a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building is more than 25m in effective height.	The buildings effective height is less than 25m	Not Applicable
E2D8 (prev. Table E2.2a)	Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	In a Class 2 and 3 building or part of a building, or Class 4 part of a building, if the building is not more than 25 m in effective height— <ol style="list-style-type: none"> a) it must be provided with an automatic smoke detection and alarm system complying with Specification 20; and b) where a required fire-isolated stairway serving the Class 2 or 3 parts also serves one or more storeys of Class 5, 6, 7 (other than an open-deck carpark), 8 or 9b parts— <ol style="list-style-type: none"> i. the fire-isolated stairway, including any associated fire-isolated passageway or 	Building is class 7a and 7b	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
		fire-isolated ramp, must be provided with an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or ii. the Class 5, 6, 7 (other than an open-deck carpark), 8 and 9b parts must be provided with— A. an automatic smoke detection and alarm system complying with Specification 20; or B. a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; and c) where a required fire-isolated stairway serving the Class 4 part also serves one or more storeys of Class 5, 6, 7 (other than an open-deck carpark), 8 or 9b parts— i. a system complying with (b)(i) or (b)(ii) must be installed; or ii. a smoke alarm or detector system complying with Specification 20 must be provided except that alarms or detectors need only be installed adjacent to each doorway into each fire-isolated stairway (set back iii. horizontally from the doorway by a distance of not more than 1.5 m) to initiate a building occupant warning system for the Class 4 part		
E2D9 (prev.)	Buildings not more than 25m in	A building not more than 25 m in effective height that—	N/A	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
Table E2.2a)	effective height: Class 5, 6, 7b, 8 and 9b buildings	a) is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or b) is Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; c) has a rise in storeys of more than 2, and contains a Class 5 or 9b school part, and a Class 6, 7b, 8 or 9b (other than a school) part, must be provided with the following: <ul style="list-style-type: none"> ▪ in each required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or ▪ a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building has more than one fire compartment; or ▪ an automatic smoke detection and alarm system complying with Specification 20; or ▪ a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. 		
E2D10 (prev. Table E2.2a)	Buildings not more than 25m in effective height: large isolate buildings subject to C3D4	In a Class 7 or 8 building of not more than 25 m in effective height, and which does not exceed 18 000m ² in floor area nor exceed 108 000m ³ in volume, the building must be provided with—	The proposed building exceeds the limitations and will require a smoke exhaust system in accordance with Spec 21 to be installed throughout.	No – Design Amendment or Performance Solution Required

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
		<p>a) a sprinkler system complying with Specification 17, and provided with perimeter vehicular access complying with C3D5(2); or</p> <p>b) an automatic fire detection and alarm system complying with AS 1670.1 and monitored in accordance with S20C8; or</p> <p>c) an automatic smoke exhaust system in accordance with Specification 21; or</p> <p>d) automatic smoke-and-heat vents in accordance with Specification 22; or</p> <p>e) natural smoke venting, with ventilation openings distributed as evenly as practicable and comprising permanent openings at roof level with a free area not less than 1.5% of floor area and low level openings which may be permanent or readily openable with a free area not less than 1.5% of floor area.</p> <p>In a Class 5, 6, 7, 8 or 9 building of not more than 25 m in effective height, and which exceeds 18 000m² in floor area or 108 000m³ in volume, the building must be provided with—</p> <p>a) if the ceiling height of the fire compartment is not more than 12 m—</p> <ol style="list-style-type: none"> i. an automatic smoke exhaust system in accordance with Specification 21; or ii. automatic smoke-and-heat vents in accordance with Specification 22; or <p>b) if the ceiling height of the fire compartment is more than 12 m, an automatic smoke exhaust system in accordance with Specification 21.</p>	<p>The project design team propose to omit the smoke exhaust requirements within the car park.</p> <p>The team proposes to rationalise the smoke exhaust rates within the warehouse</p>	

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
		For the purposes of the above, reference to 'the building' being provided with specified measures, means to the nominated classes within the building.		
E2D12 (prev. Table E2.2a)	Class 7a buildings	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	Open Deck Car Parks will not require compliance with Part E2.	Not Applicable.
E2D21 (prev. E2.3)	Provision for special hazards	Additional smoke hazard management measures may be necessary due to the— a) special characteristics of the building; or b) special function or use of the building; or c) special type or quantity of materials stored, displayed or used in a building; or d) special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20.	See comments in E1D17	-
Spec 20	Smoke Detection and Alarm Systems		See comments in E2D3 above	-
Spec 21	Smoke Exhaust Systems		See comments in E2D3 above	-
Spec 22	Smoke-and-Heat Vents		See comments in E2D3 above	Not Applicable
Spec 23	Residential Fire safety systems		This is not residential	Not Applicable
E3D2 (prev. E3.1)	Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24 (previously Spec E3.1)	Lifts must be installed in accordance with Spec E3D2	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E3D3 (prev. E3.2)	Stretcher facility in lifts	<p>A stretcher facility must be provided in at least one emergency lift required by E3D5 (previously E3.4) or where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12m, in at least one of those lifts to serve each floor served by the lifts.</p> <p>A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600mm wide x 2000 mm long x 1400 mm high above the floor level.</p>	As emergency lifts are not required and the effective height of the building does not exceed 12m, stretcher facilities are not required	Not Applicable
E3D4 (prev.E3.3)	Warning against use of lifts in fire	Warning signs against the use of lifts in case of fire should be displayed and comply with the details provided in this clause.	Warning signs against the use of lifts in case of fire should be displayed and comply with the details provided in this clause.	Compliance Readily Achievable
E3D5 (prev. E3.4)	Emergency lifts (Category 2)	<p>At least one emergency lift complying with this clause should be provided in a building with an effective height of more than 25m, and in a Class 9a building in which patient care areas are located at a level that does not have direct egress to a road or open space.</p> <p>Where more than one passenger lift is provided, at least two emergency lifts are to be provided that serve all storeys served by lifts and where the passenger lifts are in separate shafts, the emergency lifts are to be in separate shafts.</p> <p>Details to be provided showing compliance with these clauses</p>	Emergency lifts are not required to this building as the effective height is less than 25m and is not a class 9a.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E3D6 (prev. E3.5)	Landings	Access and egress to and from the liftwell landings must comply with the DTS provisions of Section D.	Access and egress to and from the lift well landings must comply with the DTS provisions of Section D. Further review required prior to CC	Compliance Readily Achievable
E3D7 (prev. E3.6, Table E3.6a, E3.6b))	Passenger lift types and their limitations	In an accessible building, every passenger lift must be one of the lift types nominated in this clause, subject to the limitations (if any) nominated.		Compliance Readily Achievable
E3D8 (prev. Table E3.6a, E3.6b)	Accessible features required for passenger lifts	In accessible buildings passenger lifts must comply with this clause. Details to be provided showing compliance with this clause.		Compliance Readily Achievable
E3D9 (prev. E3.7)	Fire service controls	Where lifts serve any storey above an effective height of 12m, details to be provided showing compliance with these clause.	The lifts do not serve a storey above 12m	Not Applicable
E3D10 (prev. E3.8)	Residential care buildings	Where residents in a Class 9c residential care building are on levels which do not have direct access to a road or open space the building must be provided with either a lift or ramp to meet the requirements of this clause.	This is not a class 9c building	Not Applicable
E3D11 (prev. E3.9)	Fire service recall control switch	Fire service recall switches required by E3D9 (prev. E3.7) shall comply with this clause.	As clause E3D9 is not applicable either is this	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
E3D12 (prev. E3.10)	Lift car fire service drive control switch	The lift car fire service drive control switch required by E3.7 should comply with the requirements of this clause.	As clause E3D9 is not applicable either is this	Not Applicable
Spec 24	Lift Installations		Further review required prior to CC	
E4D2 to E4D4 (prev. E4.2 to E4.4)	Emergency lighting requirements	Emergency lighting must be provided in accordance with this clause. Emergency lighting is required to comply with AS/NZS 2293.1-2018.	Emergency Lighting to be provided in accordance with BCA Part E4 and AS/NZS 2293.1-2018, including the potential use of photo luminescent exit signs	Compliance Readily Achievable
E4D6 (prev. NSW E4.6)	Direction signs	Where an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit, Exit signs should be provided in a Class 9b building used as an entertainment venue, to any external egress path to a road where the exit does not open directly onto a road.	Due to the height in the warehouse direction exit signs will be located above 2.7m which deviates from the provisions of AS2293.1-2018 Racking to be factored into positioning to ensure visibility is maintained	Compliance Readily Achievable
E4D5 to E4D8 (prev. E4.5 to E4.8)	Exit signs	Exit signage to be provided in accordance with these clauses.	Exit Signs indicating exit location paths of travel to exits to be provided in accordance with BCA Part E4 and AS/NZS 2293.1-2018, including the potential use of photo luminescent exit signs	Compliance Readily Achievable
E4D9 (prev. E4.9)	Emergency warning and intercommunication systems	An emergency warning and intercom system complying where applicable with AS 1670.4 should comply with the requirements of this clause.	EWIS is not required to be provided in the proposal as not over 25m and note a class 3,9a or 9b	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART E - SERVICES AND EQUIPMENT				
Spec 25	Photoluminescent exit signs		Understood this will not be proposed on this project	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F1D3 (prev. F1.1)	Stormwater drainage	Stormwater drainage must comply with AS/NZS 3500.3	Stormwater drainage must comply with AS3500.3-2021. Certification to be provided prior to CC.	
F1D4 (new)	Exposed joints	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must be protected in accordance with Section 2.9 of AS 4654.2, and not be located beneath or run through a planter box, water feature or similar part of the building	Design documentation to include these details for further review prior to the issue of a construction certificate.	Compliance Readily Achievable
F1D5 (prev. F1.4)	External waterproofing membranes	Waterproofing membranes for external above ground use must comply with AS 4654.1 and AS 4654.2	Waterproofing membranes for external above ground use must comply with AS 4654.1 and AS 4654.2. Certification to be provided prior to CC.	Compliance Readily Achievable
F1D6 (prev. F1.9)	Damp-proofing	Damp-proofing is required to be provided in accordance with the requirements of this provision.	Where damp-proofing is provided it must consist of a material that complies with AS2904 or AS3660.1	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F1D7 (prev. F1.10)	Damp-proofing of floors on the ground	Damp-proofing is required to be provided in accordance with the requirements of this provision.	Damp-proofing is required to be provided in accordance with the requirements of this provision.	Compliance Readily Achievable
F1D8 (prev. F1.12)	Sub-floor ventilation	<p>The sub-floor space between the suspended floor of a building and the ground must be provided with cross ventilation, be cleared of all debris and graded to prevent ponding and provided with evenly spaced ventilation openings.</p> <p>Subfloor spaces must be provided with openings in external walls and internal subfloor walls in accordance with Table F1D8 for the climatic zones given in Figure F1D8; and have clearance between the ground surface and the underside of the lowest horizontal member in the subfloor in accordance with Table F1D8.</p>	Subfloor spaces have not been indicated on the plans	Not Applicable
F2D2 (prev. F1.7)	Wet area construction	Waterproofing of wet areas are required to comply with this clause.	Waterproofing of wet areas are required to comply with AS3740	Compliance Readily Achievable
F2D3 (prev. F1.7)	Rooms containing urinals	Where urinals are installed they are to comply with the requirements of this clause.	Waterproofing of wet areas are required to comply with AS3740	Compliance Readily Achievable
F2D4 (prev. F1.11)	Floor wastes	In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste and the floor graded to the floor waste to permit drainage of water.	This is not a class 2,3 or 4	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F3D2 (prev. F1.5)	Roof coverings	Roof coverings are to be provided, with materials and installation complying with the requirements of this clause.	Roof coverings are to be provided, with materials and installation complying with the requirements of this clause. Metal Sheeting – AS 1562.1 Plastic Sheeting – AS 1562.3	Compliance Readily Achievable
F3D3 (prev. F1.6)	Sarking	Sarking-type materials used for weatherproofing of roofs and walls are required to comply with AS/NZS 4200 Parts 1 and 2	Sarking-type materials used for weatherproofing of roofs and walls are required to comply with AS/NZS 4200 Parts 1 and 2	Compliance Readily Achievable
F3D4 (prev. F1.13)	Glazed assemblies	Windows. Sliding and swinging glazed doors with a frame, adjustable louvres, shopfronts and window walls with one piece framing are to comply with the requirements of AS 2047 with regards to resistance to water penetration.	This does not apply to class 7 buildings	Not Applicable
F3D5 (new)	Wall cladding	External wall cladding must comply with one or a combination of the following: a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. b) Autoclaved aerated concrete: AS 5146.3. c) Metal wall cladding: AS 1562.1.	Where the cladding is not proposed to be one of these materials, it is to be assessed as a performance solution to BCA Performance Requirement F1P4	No – Design Amendment or Performance Solution Required
F4D2 (prev. F2.1)	Facilities in residential buildings	Facilities in residential buildings should be provided in accordance with the requirements of this clause.	This is not applicable to class 7	Not Applicable
F4D4 (prev. F2.3)	Facilities in Class 3 to 9 buildings	Sanitary facilities must be provided in accordance with this clause and Table F2.3. It is noted that occupancy levels have been assumed from the floor areas in accordance with D1.13 and notes on compliance with these numbers has been given.	Facilities are to be clearly designated for male and female – this is reflected on the drawings in the office however has not been indicated in the dock manger offices	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F4D5 (prev. F2.4)	Accessible sanitary facilities	In a building required to be accessible facilities should be provided in accordance with this clause.	<p>Refer to Appendix E for the assessment table.</p> <p>Populations to be confirmed. The assessment in Appendix E outlines the population that is accommodated by the amenities.</p> <p>Ambulant facilities to be provided in each bank of male and female amenities</p>	Compliance Readily Achievable
F4D6 (prev. Table F2.4a)	Accessible unisex sanitary compartments	Where required by F4D5, the number and location of accessible unisex sanitary facilities are to be provided in accordance with this clause.	Where gender neutral facilities are proposed, they can only be counted as one WC and basin facility for each sex where they comply with all requirements relating to accessible unisex sanitary facilities.	Compliance Readily Achievable
F4D7 (prev. Table F2.4b)	Accessible unisex showers	Where required by F4D5, the number of accessible unisex showers are to be provided in accordance with this clause.	No showers proposed.	Not Applicable
F4D8 (prev. F2.5)	Construction of sanitary compartments	Each toilet to have separated cubical or enclosure, and extend: <ol style="list-style-type: none"> a) from floor level to the ceiling in the case of a unisex facility; or b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or c) 1.8 m above the floor in all other cases 	<p>Sanitary compartments must have doors and partitions that separate adjacent compartments.</p> <p>Details on the height of the walls to be included in the CC documentation</p>	Compliance Readily Achievable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
		<p>The door to a fully enclosed sanitary compartment must open outwards, slide, or be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway.</p> <p>Doorway.</p> <p>In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.</p>		
F4D10 (prev. F2.7)	Microbial (legionella) control	Hot water, warm water and cooling water systems should comply with this clause in Class 2, 3 or 4 parts of a building.	This is not a class 2, 3 or 4	Not Applicable
F4D10 (prev. NSW F2.7)	Microbial (legionella) control	<p>This clause has deliberately been left blank.</p> <p>F4D10 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010.</p>	Not a class 2, 3 or 4	Not Applicable
F4D11 (prev. F2.8)	Waste management	Slop-hoppers and other facilities to be provided in Class 9a/9c buildings in accordance with this clause.	This is not a class 9a or 9c	Not Applicable
F4D12 (prev. F2.9)	Accessible adult change facilities	Accessible adult change facilities to be provided in accordance with this clause.	a) a class 6 building that is a shopping centre having an design occupancy of not less	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
			than 3,500 persons allowed and contains a minimum of 2 SOU's; or b) Class 9b sporting venue with a design occupancy of not less than 35,000 spectators or contains a swimming pool with a perimeter not less than 70m c) Museum, art gallery, theatre with a design occupancy of not less than 1,500 patrons d) A domestic or international airport terminal. The above provisions are not applicable to this project and therefore NA	
Spec 27	Accessible Adult Change facilities		See above comment on this element	Not Applicable
F5D2 (prev. F3.1)	Height or rooms and other spaces	The minimum ceiling height requirements are to comply with the requirements of this provision.	Ceiling heights must not be less than 2.4m in habitable areas and 2.1 in corridors. Based on the elevation RL's this appears to have been achieved however, the final CC drawings are to be reviewed to confirm internal ceiling heights satisfy the provisions of this clause.	Compliance Readily Achievable
F6D2 to F6D4 (prev. F4.1 to F4.3)	Provision of natural light	Natural light must be provided to Class 2, 3, 4 (part), 9a, 9b and 9c buildings in accordance with these clauses.	Not class 2,3,4 or 9	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F6D5 (prev. F4.4)	Artificial lighting	Artificial lighting is to be provided in accordance with AS/NZS1680.0 and in accordance with this clause	Artificial lighting complying with AS/NZS1680.0-2009 is to be incorporated with the final detailed design to be developed to confirm this.	Compliance Readily Achievable
F6D6 to F6D8 (prev. F4.5 to F4.7)	Ventilation of rooms	Ventilation is to be provided by natural or mechanical means in accordance with this provision and Clause F6D7 (previously F4.6).	Natural Ventilation is required to be provided to rooms at a rate of 5% of the floor area in openings. Alternatively, mechanical ventilation is required in accordance with AS1668.2-2012 These provisions also apply to areas considered as occupiable outdoor areas.	Compliance Readily Achievable
F6D6 (prev. NSW F4.5)	Ventilation of rooms	AS/NZS 3666.1 is deleted in NSW as this is regulated elsewhere.	Natural Ventilation is required to be provided to rooms at a rate of 5% of the floor area in openings. Alternatively, mechanical ventilation is required in accordance with AS1668.2-2012	Compliance Readily Achievable
F6D9 & F6D10 (prev. F4.8 & 9)	Restriction on location of sanitary compartments / Airlocks	A room containing a closet pan or urinal must not open directly into a room used for public assembly or a workplace normally occupied by more than one person.	Amenities in the offices and dock offices are via airlocks or corridors and therefore comply with the provisions of this clause. Airlocks incorporated for amenities in dock offices to satisfy the provisions of F6D9	Compliance Readily Achievable
F6D11 (prev. F4.11)	Car park ventilation	Each storey of the carpark must have a system of ventilation complying with AS1668.2 or an adequate system of permanent natural ventilation.	The proposed design is a an open deck car park. The mechanical engineer and architect will need to provide further information prior to the issue of a construction certificate.	Further Information Required.

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART F - HEALTH AND AMENITY				
F6D12 (prev. F4.12)	Kitchen local exhaust ventilation	A commercial kitchen must be provided with a kitchen exhaust hood complying with this clause.	No commercial kitchen proposed.	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
PART G - ANCILLARY PROVISIONS				
G1D2 (prev. G1.1)	Swimming pools	<p>A swimming pool with a depth of water more than 300mm which is associated with a Class 2 or 3 building or Class 4 part of a building, must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with AS 1926.1 and AS 1926.2.</p> <p>Water recirculation systems should comply with AS 1926.3.</p>	Not applicable	Not Applicable
G1D2 (prev. NSW G1.1)	Swimming pools	<p>NSW G1D2(2) applies to the technical construction requirements for barriers to restrict access to swimming pools, subject to—</p> <ul style="list-style-type: none"> a) out-of-ground pool walls and the walls of above ground pools, including inflatable pools, not being considered to be effective barriers; and b) the reference in clause 2.3.1 of AS 1926.1 to a barrier within a property including a boundary barrier. <p>A swimming pool with a depth of water more than 300 mm and which is associated with a Class 2 or 3</p>	Not applicable	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
		building or Class 4 part of a building, must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with— <ul style="list-style-type: none"> a) AS 1926 Parts 1 and 2; or b) if the swimming pool is a spa pool— <ul style="list-style-type: none"> i. the requirements of (a); or ii. clause 9 of the Swimming Pools Regulation 2018. A water recirculation system in a swimming pool with a depth of water more than 300 mm must comply with AS 1926.3		
G1D3 (prev. G1.2)	Refrigerated chambers, strong-rooms and vaults	Refrigerated/cooler chamber, strongroom/vault should comply with the requirements of this clause.	Not applicable – the design does not propose the installation	Not Applicable
G1D4 (prev. G1.3)	Outdoor play spaces	Outdoor play spaces in a Class 9b early childhood centre should comply with the requirements with this clause.	Not applicable	Not Applicable
G1D5 (prev. NSW G1.101)	Provision for cleaning windows	A building must provide a safe manner of cleaning any windows located 3 or more storeys above ground level in accordance with this clause.	Not applicable	Not Applicable
G2D2 (prev. G2.2)	Installation of appliances	A combustion appliance and its associated components, including an open fire-place, chimney, flue, chute, hopper or the like should comply with the requirements of this clause.	Not applicable	Not Applicable
G2D3 (prev. G2.3)	Open fireplaces	An open fireplace, solid-fuel burning appliance in which the fuel-burning compartment is not enclosed should comply with the requirements of this clause.	Not applicable	Not Applicable

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
G2D4 (prev. G2.4)	Incinerator rooms	Where an incinerator is installed in a building it should comply with the requirements at this clause.	Not applicable	Not Applicable
G3D2 to G3D8 (prev. G3.2 to G3.8)	Atrium construction	Atriums should comply with the requirements of this clause and Specification 31 (previously Spec G3.8) as applicable.	Not applicable	Not Applicable
G4D2 to G4D8 (prev. G4.2 to G4.9)	Construction in alpine areas	Any building constructed in an alpine area should comply with the requirements of these clauses.	Not applicable	Not Applicable
G5D3 & G5D4 (prev. G5.1 & 2)	Construction in bush fire zones	Construction to Class 2 or 3 buildings or a Class 10a building or deck associated with a Class 2 or 3 building should comply with the requirements of these clauses.	Not applicable	Not Applicable
G5D2 – G5D4 (prev. NSW G5.1 – G5.2)	Construction in bushfire prone areas	Construction to Class 2 or 3 buildings, Class 4 part of buildings, Class 9 building that is a special fire protection purpose or a Class 10a building or deck associated with the above buildings should comply with the requirements of these clauses.	Not applicable	Not Applicable
G6D1 (prev. G6.1)	Application of Part	This part applies to buildings containing an occupiable outdoor area. An occupiable outdoor area is defined a space on a roof, balcony or similar part of a building that is open to the sky, to which access is provided, other than access only for maintenance, and that is not open space or directly connected with open space.	This part applies to buildings containing an occupiable outdoor area. An occupiable outdoor area is defined as a space on a roof, balcony or similar part of a building that is open to the sky, to which access is provided, other than access only for maintenance, and that is not open space or directly connected with open space.	Note

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
		Except for G6D2 (previously G6.2), the deemed to satisfy provisions do not apply to an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4 part of a building, or an occupiable outdoor area with an area less than 10m ² .	Based on the above the provisions of this clause apply to mezzanine portion of the carparks	
G6D2 to G6D9 (prev. G6.2-G6.9)	Fire hazard properties, fire separation, provisions for escape, construction of exits, fire fighting equipment, lift installations, visibility in an emergency, light and ventilation	A reference to a storey/room as applicable includes an occupiable outdoor area for the purposes of these clauses.	<p>The provisions of C2D11 apply to the internal linings associated with the canopies on the mezzanine level of the carparks.</p> <p>Details of the proposed materials to be provided for review prior to CC.</p> <p>Refer to carpark egress comments in D2D5 of this assessment</p> <p>The mezzanine level of the carpark is counted as a storey for the purposes of Part E1.</p> <p>No lift access required to the mezzanine level of the carpark as D3 is not applicable to a class 7a level that does not include accessible parking bays</p> <p>Appropriate exit signage and lighting to be provided.</p> <p>Artificial lighting complying with AS/NZS1680.0-2009 is to be incorporated with</p>	Note –Assessment Considered in the relevant parts.

Clause	Description	Requirement	Assessment INCLUDE ASSESSMENT AND SNIPPETS	Status
			<p>the final detailed design to be developed to confirm this.</p> <p>No amenities proposed in the carpark.</p>	
G6D10 (prev. G6.10)	Fire orders	A reference to a storey includes an occupiable outdoor area for the purposes of G4D8 (previously G4.9).	G4D8 is not applicable	Not Applicable
G7D2	Liveable Housing Design	Each Class 2 sole-occupancy unit in a Class 2 building must comply with the ABCB Standard for Liveable Housing Design, except for Part 1.	Building is a class 7a and 7b	Not Applicable
Part G7	Livable Housing Design	This Part has deliberately been left blank. Part G7 does not apply in NSW as livable housing design requirements do not apply to sole-occupancy units in a Class 2 building in NSW.	Building is a class 7a and 7b	Not Applicable

12. APPENDIX D – FIRE RESISTANCE LEVELS

The table below represents the Fire resistance levels required in accordance with BCA 2022:

Type C Construction

Table S5C24a: Type C Construction: FRL of parts of external walls

Distance from a fire source feature	FRL (in minutes): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5m	90/90/90	90/90/90	90/90/90	90/90/90
1.5 to less than 3m	-/-/	60/60/60	60/60/60	60/60/60
3m or more	-/-/	-/-/	-/-/	-/-/

Table S5C24b: Type C Construction: FRL of external columns not incorporated in an external wall

Column type	FRL (in minutes): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5m	90/-/	90/-/	90/-/	90/-/
1.5 to less than 3m	-/-/	60/-/	60/-/	60/-/
3m or more	-/-/	-/-/	-/-/	-/-/

Table S5C24c: Type C Construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-loadbearing	90/90/90	90/90/90	90/90/90	90/90/90

Table S5C24d: Type C Construction: FRL of internal walls

Location	FRL (in minutes): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Bounding public corridors, public lobbies and the like	60/60/60	-/-/	-/-/	-/-/
Between or bounding sole-occupancy units	60/60/60	-/-/	-/-/	-/-/
Bounding a stair if required to be fire rated	60/60/60	60/60/60	60/60/60	60/60/60

Table S5C24e: Type C Construction: FRL of roof

Location	FRL (in minutes): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Roofs	-/-/	-/-/	-/-/	-/-/

Carparks

- 1) Notwithstanding S5C21, a carpark may comply with this clause if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and is—
 - a) a separate building; or
 - b) a part of a building, and if occupying only part of a storey, is separated from the remaining part by a fire wall.

- 2) For the purposes of this clause, a carpark—
 - a) includes—
 - i. an administration area associated with the functioning of the carpark; and
 - ii. where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but
 - b) excludes—
 - c)
 - i. except for (a), any area of another classification, or other part of a Class 7 building not used for carparking; and
 - ii. a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

- 3) For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable:
 - a) External walls:
 - i. Less than 1.5 m from a fire-source feature to which it is exposed:
 - A. Loadbearing: 60/60/60.
 - B. Non-loadbearing: -/60/60.
 - ii. 1.5 m or more from a fire-source feature to which it is exposed: -/-/-.
 - b) Internal walls: -/-/
 - c) Fire walls:
 - i. From the direction used as a carpark: 60/60/60.
 - ii. From the direction not used as a carpark: 90/90/90.
 - d) Columns:
 - i. Steel column less than 1.5m from a fire source feature—
 - A. 60/-/-; or
 - B. an ESA/M of not greater than 26 m²/tonne.
 - ii. Any other columns not less than 1.5m from a fire source feature: 60/-/
 - iii. Any other column not covered by (i) or (ii): -/-/-.

e) Beams:

- i. Steel floor beam, less than 1.5m from a fire source feature, in continuous contact with a concrete floor slab—
 - A. 60/-/-; or
 - B. an ESA/M of not greater than 30 m²/tonne.
- ii. Any other beam: 60/-/-.
- iii. More than 1.5m from a fire source feature: -/-/-

f) Roof, floor slab and vehicle ramp: -/-/-.

4) For the purposes of (3), ESA/M means the ratio of exposed surface area to mass per unit length