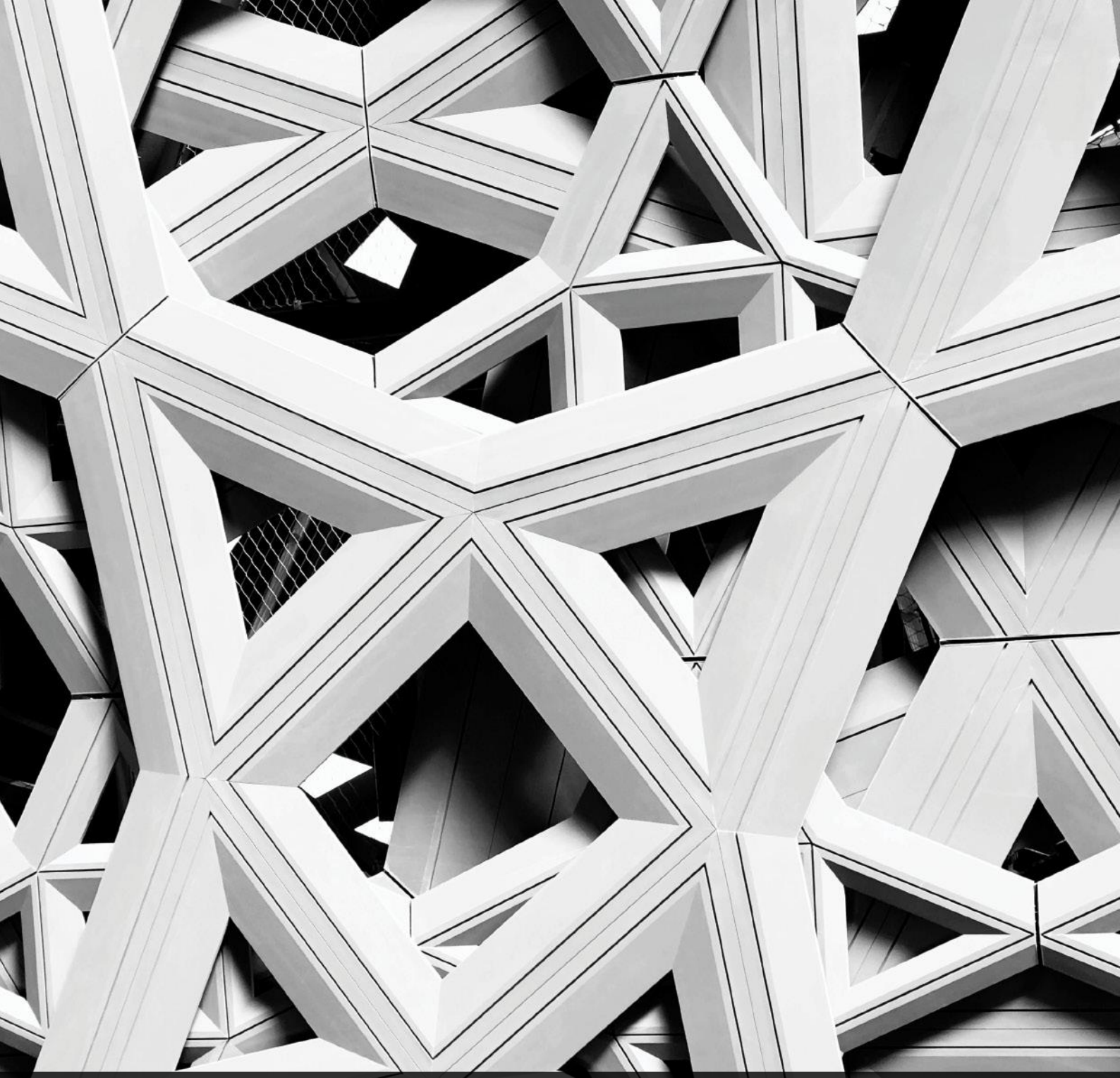


BCA Assessment Report

Indigenous Centre of Excellence and Carpark

Western Sydney University – Parramatta Campus

Prepared for:

WSU

Revision 8

6th of August, 2025

Reference: S240084

bmplusg.com.au

Executive Summary

The following comprises a summary of the key compliance issues identified under the clause-by-clause assessment in Section 3.0 and 4.0 of this report that will be required to be addressed prior to the BCA Crown Certificate for the project.

A. Key matters requiring additional information at BCA Crown Certificate Stage:

+	BCA (DTS) Clause	+ Description
1.	C3D8 Part I4	Fire compartmentation plans are to be developed as the design progresses for the building. Specifically note that: + Entertainment Venues, including the cinema and multi-purpose hall (auditorium, stage, and backstage) are to be fire separated from the remainder of the building (60-minute construction). + Fire separation required between the storerooms and the remainder of the building (60-minute construction). + Level 3 is to be fire separated from the remainder of the building (120-minute construction). + Floors will require 120/120/120 FRL (regardless of if floors are shared within the same fire compartment). The current fire separation of the Entertainment Venues appears to be inadequate. Fire compartmentation plans to be provided for review.
2.	C4D13, E1D4, NSW E2D19	Details of the proposed sub floor space to be reviewed as the design progresses including what is proposed to be contained within the space (including if services coverage is provided), and how access to the space is to be achieved.
3.	D2D8	Anticipated populations and egress widths have been revised on the basis of the JCB occupancy markup. Further information required regarding the maximum anticipated population within the Level 1 literature library hub. Where the population within this space exceeds 19 people (thus over 200 people accommodated on this storey), a performance solution will be required to rationalise egress widths from this level.
4.	D2D12	The current design is capable of compliance. Details to be provided for the following as the design progresses in relation to the fire-isolated stair serving Level 3: + External fire-rated walls within 6m of the discharge path from the exit. + Provision of airlock between service corridor/plant space and fire-isolated passageway/stair on Ground Level and Level 3. + Fire rating of passageway leading from the fire-isolated stair to open space on Ground Level (unless addressed via a fire engineered solution). Note: Where a Performance Solution is proposed for the open stair connecting into Level 3, the D2D12 requirements will not apply to the open stair.
5.	Part D4	Access-related items have not been considered as part of this assessment. A separate report from an access consultant will be required.
6.	Part E1	Refer to BMG markups on Warren Smith Consulting Engineers fire services drawings.
7.	Part E4	Refer to BMG markups on Steensen Varming electrical drawings.
8.	Part G3	Level 2 and Level 3 are to be fire separated so no more than 3 storeys are connected in a sprinkler-protected building to avoid atrium provisions. Further details are required of the fire separation between levels for our review, including the fire separation around the open stair.

B. Matters requiring fire safety engineered performance solutions:

+ BCA (DTS) Clause		+ Description
1.	**C2D2, Spec 5, C4D16**	Permit the gap between the floor slabs and the curtain wall (slab-edge) to be fire sealed on a performance basis in lieu of a DtS tested system. Note: Façade report nominates a curtain wall to the outdoor maker area. Architect to confirm selected façade system to confirm if this Performance Solution is applicable.
2.	**C2D13, Spec 10**	The building is proposed to be constructed from Mass Engineered Timber: + Selected elements to not be encapsulated with a fire protective covering. E.g., Columns, beams, floors. + Assessment of non-tested systems e.g., fire rated penetrations, 2-way floor/wall systems, lightweight terminating at CLT.
3.	**C4D3, Spec 5**	Fire-rated construction is not provided to both the ICoE building and the existing Central Energy Plant where they are within 6m of each other.
4.	**D2D4**	The open stair serving all levels is not fully contained within a fire-rated shaft.
5.	**D2D5**	Exit travel distances proposed to be extended as follows: <u>Level 1</u> + 27m to a point of choice in lieu of 20m <u>Level 1 Plant Room</u> + 27m to a point of choice in lieu of 20m + 50m to an exit in lieu of 40m <u>Level 2</u> + 28m to a point of choice in lieu of 20m <u>Level 3</u> + 30m to a point of choice in lieu of 20m
6.	**D2D6**	Distances between alternative exits are proposed to be extended as follows: <u>Level 2 Plant/Catwalks</u> + 64m between alternative exits in lieu of 60m
7.	**D2D12**	Fire stair serving all storeys discharges internally on Ground Level.
8.	**D2D14, D2D21**	The non-fire-isolated stair serving Level 3 and ladder serving the Level 2 plant room do not have a continuous path of travel from the storey served to the level of discharge.
9.	**D2D21**	Permit the theatre catwalks, which is not a plant room <200m^2, to utilise the plant room ladder for egress.
10.	**E1D2**	Potential performance solution where additional internal fire hydrants are required remote from exits to achieve coverage.
11.	**E1D2/E1D4**	Subject to the new booster assembly location, a performance solution may be required to permit the assembly to be further than 20m from the building's principal pedestrian entrance.
12.	**NSW E2D16, NSW E2D18, NSW E2D19**	Rationalisation of the required smoke exhaust system (i.e. smoke exhaust rates, reservoir sizes etc) to: + Building generally due to gallery / exhibition / event / non-classroom uses (potential omission of smoke exhaust) + Theatre stage and auditorium Fire engineer to review and provide comment.
13.	**NSW I4D2, NSW I4D44, NSW 14D47**	Potential rationalisation of Part I4 entertainment venue fire separation requirements (e.g. to the [non-fire-rated] sliding door into the theatre).

C. Other matters requiring performance solutions:

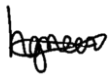
+ BCA (DTS) Clause		+ Description
1.	**B1P2**	Structural performance solution for the calculation method to support CLT (in lieu of Australian Standards)
2.	**D1P1**	TBC Access Report by others
3.	**F3P1**	A performance solution report is required to be prepared to Performance Requirement F3P1 in relation to weatherproofing of external walls. This will be required from the Façade Engineer.
4.	**F4D4**	Performance solution is required where gender neutral facilities are proposed.
5.	**J1V3**	Performance solution (JV3 assessment) – TBC

+ Contents

+ Report Status

+ Date	06.08.2025
+ Revision	8
+ Status	SSDA Submission – Revised Drawings
+ Author	Hayden Green
+ Reviewed	Rick Beardwood

Prepared by:



Hayden Green
BM+G
Building Surveyor

Reviewed by:

Rick Beardwood
BM+G
Senior Building Surveyor | QLD Team Manager

+ Revision History

+ Revision	0	+ Date	10.04.24
+ Status	Concept Assessment (For Review)		
+ Revision	1	+ Date	13.05.24
+ Status	Concept Assessment – Incorporating Stakeholder Comments		
+ Revision	2	+ Date	28.05.24
+ Status	Concept Assessment – Including Clarification of Building Classification		
+ Revision	3	+ Date	26.06.24
+ Status	Concept Assessment – Incorporating Stakeholder comments		
+ Revision	4	+ Date	13.08.2024
+ Status	Schematic Design Assessment		
+ Revision	5	+ Date	23.10.2024
+ Status	80% Design Development Assessment		
+ Revision	6	+ Date	27.03.2025
+ Status	SSDA Submission Drawings		
+ Revision	7	+ Date	02.06.2025
+ Status	SSDA Submission – Incorporating Temporary Carpark		
+ Revision	8	+ Date	06.08.2025
+ Status	SSDA Submission – Revised Drawings		

1.0 Introduction

1.1 Executive Summary

This statement has been prepared to verify that BM+G Pty Ltd have undertaken a review of the project documentation that will accompany the State Significant Development Application to the Department of Planning, Housing and Infrastructure (DPHI) for the proposed Indigenous Centre of Excellence and associated temporary carpark against the Building Code of Australia 2022 (BCA). The capability statement for the carpark project previously prepared by BM+G Pty Ltd has been provided in Appendix 3 with the cumulative impacts of the carpark also being assessed within this report.

1.2 Background

BM+G Pty Ltd have been commissioned by Western Sydney University to undertake an assessment of the Indigenous Centre of Excellence building and temporary carpark at 171 Victoria Road, Parramatta (WSU Parramatta South Campus) against the relevant provisions of the Building Code of Australia 2022 (BCA).

An assessment of BCA compliance with respect to the new works is included within Section 3.0.

This assessment is subject to the Planning Secretary's Environmental Assessment Requirements (SEAR) application no. SSD-64916225 dated 21/11/2023 issued by the Department of Planning, Housing and Infrastructure. In particular, it has been prepared to satisfy item 4 of the relevant SEARs document.

1.3 Aim

The aim of this report is to:

- Undertake an assessment of the proposed development against the deemed-to-satisfy provisions of the BCA.
- Identify matters that require plan amendments in order to achieve compliance with the BCA.
- Identify matters that are to be required to be addressed by Performance Solutions.
- Enable the Public Authority to satisfy its statutory obligations under Section 6.28 of the Environmental Planning and Assessment Act, 1979.
- Confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to section 19 of the Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021.
- Accompany the State Significant Development Application (SSDA) submission to enable the Consent Authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the Environmental Planning and Assessment Act 1979.

1.4 Project Team

The following bm+g team members have contributed to this Report:

+ **Hayden Green** – Report Preparation | Building Surveyor – Assistant
+ **Rick Beardwood** – Peer Review | Building Surveyor – Unrestricted

1.5 Site Overview

The Western Sydney University South Parramatta Campus is located within the City of Parramatta Local Government Area (LGA).

The site is legally described as Lot 100 and 101 in DP 816829 and is contained within the northern portion of the wider site campus. The site location and project boundary is identified in Figure 1.

Figure 1 Western Sydney University Parramatta South Campus locational context

Source: Nearmap/Ethos Urban

The site is located approximately 3km east of the Parramatta CBD and is also located adjacent to the recently completed Parramatta Light Rail Corridor, with direct access to the Yallamundi Light Rail stop.

1.6 Referenced Documentation

The following documentation has been reviewed, referenced and/or relied upon in the preparation of this report:

- Building Code of Australia 2022 (BCA)
- The Guide to the Building Code of Australia 2022
- 80% Draft Design Development Electrical Plans prepared by Steensen Varming issued 10.10.2024
- 80% Draft Design Development Fire Services Plans prepared by WSCE issued 10.10.2024
- 80% Draft Design Development Hydraulic Services Plans prepared by WSCE issued 10.10.2024
- 80% Draft Design Development Mechanical Plans prepared by Steensen Varming issued 10.10.2024
- 80% Draft Design Development Structural Plans prepared by TTW Engineers issued 10.10.2024
- Landscaping SSDA Submission Documentation prepared by Jane Irwin Landscape Architecture issued 28.02.2025
- Civil SSDA Submission Documentation prepared by TTW issued 27.02.2025
- Architectural Plans prepared by Jackson Clements Burrows Architects (JCB) for SSDA Submission issued July 2025 as follows:

+ Drawing No.	+ Revision	+ Drawing No.	+ Revision	+ Drawing No.	+ Revision
DA 0-000	5	DA 2-101	4	DA 10-102	2
DA 0-101	3	DA 2-102	4	DA 10-103	2
DA 0-102	4	DA 3-101	3	DA 10-104	2
DA 0-103	4	DA 3-102	2	DA 10-105	2
DA 0-201	3	DA 3-103	2	DA 10-106	2
DA 1-102	3	DA 3-104	2	DA 10-107	2
DA 1-103	3	DA 3-105	2	DA 10-108	2
DA 1-104	3	DA 3-106	1	DA 10-109	2
DA 1-105	3	DA 9-102	3	DA 10-110	1
DA 1-106	4	DA 10-101	2		

- Carpark Plans prepared by TTW Engineers for SSDA Submission issued 02 May 2025 as follows:

+ Drawing No.	+ Revision	+ Drawing No.	+ Revision	+ Drawing No.	+ Revision
CI-00001	T4	CI-01012	T4	CI-04012	T4
CI-00002	T4	CI-02011	T3	CI-04021	T4
CI-00003	T4	CI-02021	T1	CI-4041	T4
CI-00011	T4	CI-03011	T5	CI-07011	T4
CI-00012	T3	CI-03012	T5	CI-07012	T4
CI-01011	T4	CI-04011	T4		

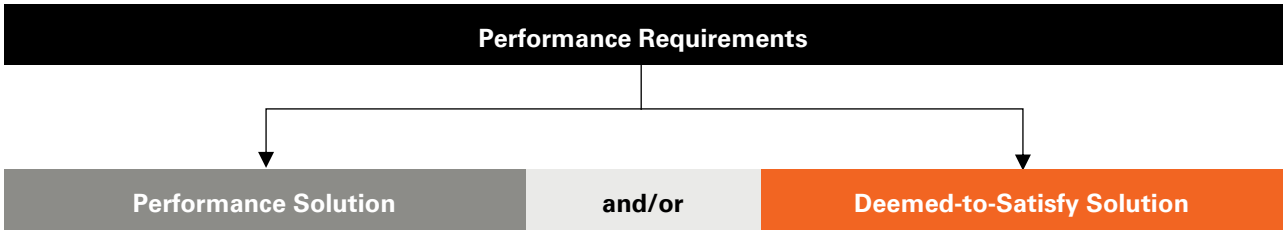
1.7 Regulatory Framework

Pursuant to S6.28 of the Environmental Planning and Assessment Act 1979, the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time of the date of invitation for tenders to carry out the building work.

1.8 Relevant Version of the Building Code of Australia

Pursuant to Section 6.28 of the Environmental Planning and Assessment Act 1979, the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time of the date of invitation for tenders to carry out the Crown building work. The current BCA that is in force is BCA 2022, with BCA 2025 coming in to force 1 May 2025. As the invitation to tender has been lodged after 1 May 2023, this report assesses the design against compliance with the requirements of BCA 2022.

1.9 Compliance with the National Construction Code



Compliance with the NCC is achieved by complying with:

- the Governing Requirements of the NCC; and
- the Performance Requirements.

Performance Requirements are satisfied by one of the following, as shown in the Figure below:

- A Performance Solution.
- A Deemed-to-Satisfy Solution.
- A combination of the above two options.

Where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*, the following steps must be undertaken:

- Prepare a performance-based design brief in consultation with relevant stakeholders.
- Carry out analysis, using one or more of the Assessment Methods listed in A2G2(2), as proposed by the performance-based design brief.
- Evaluation the results against the acceptance criteria in the performance-based design brief.
- Prepare a final report that includes:
  - All Performance Requirements and/or Deemed-to-Satisfy provisions identified through A2G2(3) or A2G4(3) as applicable; and
  - Identification of all Assessment Methods used; and

- Details of steps (a) to (c); and
- Confirmation that the Performance Requirement has been met; and
- Details of conditions or limitations, if any exist, regarding the Performance Solution.

1.10 Limitations and Exclusions

The limitations and exclusions of this report are as follows:

+ No assessment has been undertaken with respect to the Disability Discrimination Act 1992 (DDA). The building owner needs be satisfied that their obligations under the DDA have been addressed.
+ Please note that whilst the BCA specifies a minimum standard of compliance with AS1428 (Parts 1-3) and Part D4 of the BCA for access and facilities for people with disabilities, compliance with such requirements may not necessarily preclude the possibility of a future complaint made under the DDA 1992. The DDA is a complaint-based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the building owner should be satisfied that their obligations under the DDA have been addressed.
+ No assessment has been undertaken with respect to SEPP (Housing) 2021. It is understood that suitably qualified consultants will be engaged to determine the relevance of any Council planning requirements or SEPP requirements and provided detailed assessment reports where applicable.
+ No assessment has been undertaken with respect to the following areas of the NCC:
    - Structural
    - Weatherproofing
    - Waterproofing
    - Acoustic
    - Passive Fire Protection
    - DDA / Accessibility
    - Section J / ESD
    - Fire Safety Engineering
+ Where relevant to this development, it is assumed that these assessments will be undertaken by others.
+ This report does not consider BCA Part G5 (Volume 1) which makes provision for construction of buildings in bushfire-prone areas, therefore no assessment has been undertaken in consideration of RFS, Planning for Bushfire Protection and AS 3959. Where Part G is applicable to the site, then it is required that assessment / due diligence is undertaken by a specialist consultant to verify compliance.
+ This report does not constitute a detailed assessment of the architectural documentation against the requirements of Section J. It is understood that a suitably qualified consultant will be engaged to determine compliance in this regard.
+ BM+G has not undertaken an assessment of any Performance Solution Reports at the time of the preparation of this report.
+ The Report does not address matters in relation to the following Local Government Act and Regulations:
    - Work Health and Safety Act and Regulations.
    - Work Cover Authority requirements.
    - Water, drainage, gas, telecommunications and electricity supply authority requirements.
    - Disability Discrimination Act 1992.
+ BM+G Pty Ltd cannot guarantee acceptance of this report by Local Council, Fire & Rescue NSW or other approval authorities.
+ This report may not be relied upon under the provisions of the Design and Building Practitioners Act & Regulation for the purposes of issuing a Design Compliance Declaration.
+ This report is based solely on client instructions, and therefore should not be used by any third party without prior knowledge of such instructions.

1.11 Report Terminology

BCA Completion Certificate – A certificate issued at the completion of works which confirms the building is suitable for occupation in accordance with its classification under the BCA.

BCA Crown Certificate – A certificate issued against building works carried out by or on behalf of the Crown which verifies that the works comply with the requirements of the BCA prior to works commencing, subject to S6.28 of the Environmental Planning and Assessment Act 1979.

Building Code of Australia – Document published on behalf of the Australian Building Codes Board. The BCA is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia and is adopted in NSW under the provisions of the Environmental Planning & Assessment Act & Regulation.

Climatic Zone – Means an area defined in Figure 2 and in Table 2 (of BCA Schedule 3) for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Construction Certificate – Building Approval issued by the Certifying Authority pursuant to Part 6 of the EP&A Act 1979.

Construction Type – The construction type is a measure of a buildings ability to resist a fire. The minimum type of fire-resisting construction of a building must be that specified in Table C2D2 and Specification 5, except as allowed for:

- certain Class 2, 3 or 9c buildings in C2D6; and
- a Class 4 part of a building located on the top storey in C2D4(2); and
- open spectator stands and indoor sports stadiums in C2D8.

Note: *Type A construction is the most fire-resistant and Type C the least fire-resistant of the types of construction.*

Deemed-to-Satisfy (DTS) Provisions of the BCA – Means the prescriptive provisions of the BCA which are deemed to satisfy the performance requirements.

Effective Height – The vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift, or other equipment, water tanks or similar service units).

Entertainment Venue – Means a building used as a cinema, theatre or concert hall or an indoor sports stadium.

Exit – Any, or any combination of the following if they provide egress to a road or open space:

- An internal or external stairway.
- A ramp.
- A fire-isolated passageway.
- A doorway opening to a road or open space.

Fire Compartment – The total space of the building; or when referred to in

- The Performance Requirements – any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
- The Deemed-to-Satisfy Provisions – any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant part.

Fire Resistance Level (FRL) – The grading periods in minutes for the following criteria:

- structural adequacy; and
- integrity; and
- insulation.

and expressed in that order.

Fire Source Feature (FSF) – The far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.

Health-care building: A building whose occupants or patients undergoing medical treatment generally need physical assistance to evacuate the building during an emergency and includes—

- a public or private hospital; or
- a nursing home or similar facility for sick or disabled persons needing full-time care; or
- a clinic, day surgery or procedure unit where the effects of the predominant treatment administered involve patients becoming non-ambulatory and requiring supervised medical care on the premises for some time after the treatment.

Horizontal exit: A required doorway between 2 parts of a building separated from each other by a **fire wall**.

National Construction Code Series (NCC) – The NCC was introduced 1 May 2011 by the Council of Australian Governments (COAG). The BCA Volume One (Class 2 to 9 Buildings) is now referenced as the National Construction Code Series Volume One — BCA.

Occupiable outdoor area means a space on a roof, balcony or similar part of a building:

- that is open to the sky; and
- to which access is provided, other than access only for maintenance; and
- that is not open space or directly connected with open space.

Occupation Certificate (OC) – Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 6 of the EPA Act 1979.

Open Space – Means a space on the allotment, or a roof or other part of the building suitably protected from fire, open to the sky and connected directly with a public road.

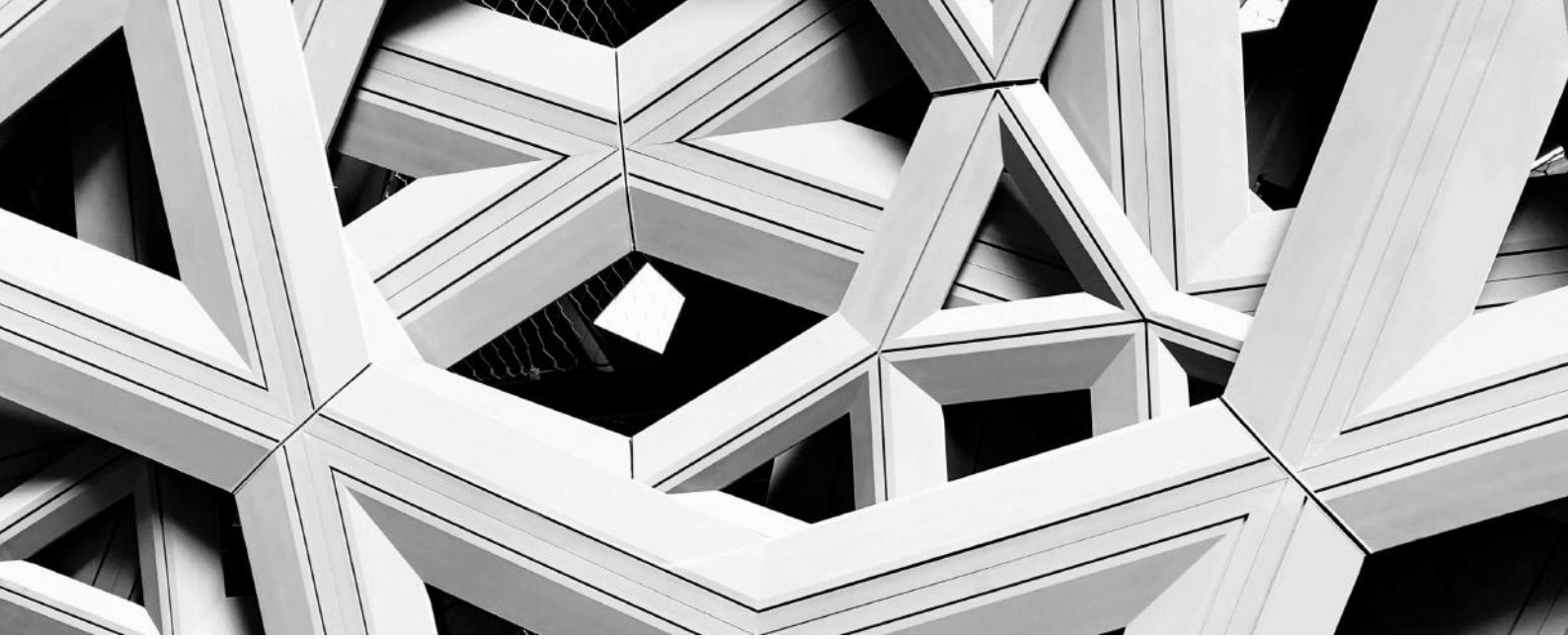
Performance-based Design Brief – Means the process and the associated report that defines the scope of work for the performance-based analysis, the technical basis for analysis, and the criteria for acceptance of any relevant Performance Solution as agreed by stakeholders.

Performance Requirements of the BCA – A Building Solution will comply with the BCA if it satisfies the Performance Requirements. A Performance requirement states the level of performance that a Building Solution must meet.

Compliance with the Performance Requirements can only be achieved by-

- complying with the Deemed-to-Satisfy Provisions; or
- formulating an Alternative Solution which-
  - complies with the Performance Requirements; or
  - is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
- a combination of the above.

Performance Solution – Means a method of complying with the performance requirements other than by a Deemed-To-Satisfy Solution.



2.0 Building Characteristics

2.1 Proposed Development

The Applicant seeks development consent for the construction of a new state-of-the-art Indigenous Centre of Excellence as a new tertiary education facility on campus. The Indigenous Centre of Excellence project is funded by the NSW Government's Western Sydney Infrastructure Grants Program in association with Western Sydney University. The new Indigenous Centre of Excellence will be an important asset for both the University and local community alike, providing a space for the commitment to advancing Indigenous education, leadership, and reconciliation.

This State Significant Development Application (SSDA) specifically seeks detailed approval for the following works:

- Site preparation including demolition of the existing car park, tree removal and installation of inground utility infrastructure services.
- Construction of a four-storey Indigenous Centre of Excellence encompassing the following facilities:
  - Outdoor amphitheatre,
  - Cinema and lecture theatre,
  - Artist studios and gallery exhibition space.
  - Teaching workspaces and general study areas,
  - Library and other educational research spaces,
  - Multi-functional recreational sports court, with ancillary amenities, and
  - Astronomy garden.
- Construction of hardstand paving and line marking to accommodate new parking areas, including:
  - 13 spaces on the existing P1 car park site, adjacent to the new dedicated arrival zone to the proposed ICoE,
  - 107 spaces proposed in new western car park to the west of Bridge Street, adjacent to the existing oval, and
  - 181 spaces proposed in new eastern car park on the southern side of Fifth Street, adjacent to the new ICoE.
- Landscaping works to provide outdoor educational and recreational spaces.

This report responds to the relevant SSD-64916225 Secretary's Environmental Assessment Requirement (SEARs), as well as addresses updated Amending SSD cumulative impacts associated with the revised car park scope.

The proposed development is classified as follows:

BCA Classifications:	Class 9b
Rise in Storeys:	4 (four) Note: Level 3 has been considered a storey due to the extent of the roof over.
Storeys Contained:	4 (four)
Type of Construction:	Type A Construction
Importance Level (Structural)	3
Sprinkler Protected Throughout	Yes
Effective Height	12.62m (FFL 9.000 – FFL 26.620)
Total Floor Area	~8533m^2
Largest Fire Compartment	Fire Compartment 1 (Ground Level, Level 1, Level 2) – 7,371 m^2 Fire Compartment 2 (Level 4) – 1,544 m^2 Fire compartment volume ~ 39,700 m^3
Climate Zone	Zone 6

2.2 Fire Compartment Floor Area Limitations

Maximum size of fire compartment/atria is:

Classification		Type A	Type B	Type C
5, 9b or 9c	Max. floor area	8,000m^2	5,500m^2	3,000m^2
	Max. volume	48,000m^3	33,000m^3	18,000m^3

2.3 Distance to Fire Source Features

Based upon a review of the plans, it is noted that each elevation of the building is located within the following distances from fire source features on the site.

Elevation	Fire Source Feature	Distance
North	Far side of the road	>6m
East	Far side of the road	>6m
West	Building on same allotment	~4.8m (Central Energy Plant) Note: Refer to C4D3 regarding separation of buildings.
South	Far side of the road	>6m

Note: Fire Source Feature (FSF) – The far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.

3.0 BCA Assessment

+ Legend	
Complies	The referenced documentation show compliance with this clause.
Compliance Readily Achievable	BM+G are satisfied that compliance is readily achievable, and compliance will be confirmed as the design progresses. Compliance is to be verified during construction and/or installation certification (or other forms of documentation) should be provided to the Certifying Authority demonstrating that compliance has been achieved.
Further Information Required	Compliance will be confirmed as the design progresses. Further details, should be submitted with the application for the BCA Crown Certificate.
Performance Solution	To demonstrate compliance with the Performance Requirements of the NCC, a Performance Solution will be implemented.
Note	Provisions contained within this BCA clause are provided for guidance, or are to be read in conjunction with other BCA clauses.

+ Clause	+ Reference	+ Comment
Section B	**Structure**	
Part B1	**Structural Provisions**	
B1D3 (Previously B1.2) Determination of Individual Actions	Structural engineering details prepared by an appropriately qualified structural engineer to be provided to demonstrate compliance with Part B1 in relation to the new structural elements of the building. Design Statement from a Professional Engineer to be provided confirming that the design achieves compliance with the following is required at the time of BCA Crown Certificate. Application, inclusive of reference to the following Australian Standards (where relevant): + AS 1170.0 – 2002 General Principles + AS 1170.1 – 2002, including certification for balustrading (dead and live loads) + AS 1170.2 – 2021, Wind loads + AS 1170.4 – 2007, Earthquake loads + AS 3700 – 2018, Masonry code + AS 3600 – 2018, Concrete code + AS 4100 – 2021, Steel Structures + AS 4600 – 2018, Cold formed steel. + AS 2047 – 2014, Windows in buildings + AS 1288 – 2021, Glass in buildings	**Compliance Readily Achievable:** A compliance certificate from a Structural Engineer registered on the NER is required for all structural works at the completion of building works and prior to the issuance of a BCA Completion Certificate. Provision must be made in the design by all consultants (i.e. non-structural.

+ Clause	+ Reference	+ Comment
B1D4 **(Previously B1.4)** Determination of Structural Resistance of Materials	The structural resistance of materials and forms of construction must be determined in accordance with the requirements of this clause.	**Compliance Readily Achievable:** Detail and design certification to be provided at the BCA Crown Certificate stage.
Section C	**Fire resistance**	
Part C2	**Fire Resistance and Stability**	
C2D2 **(Previously C1.1)** Type of Construction Required	The minimum type of fire-resisting construction of a building must be that specified in Table C2D2 and Specification C2D2 except as allowed for in this clause.	**Note:** Type A Construction applies to the building. Refer to Spec 5 of the BCA & APPENDIX 1 of this Report for the applicable FRLs to the project. Reference shall also be made to the project Fire Engineering Report.
C2D4 **(Previously C1.3)** Buildings of Multiple Classification	In a building of multiple classifications, the type of construction required for the building is the most fire-resisting type resulting from the application of Table C1.1 on the basis that the classification applying to the top storey applies to all storeys. This clause also contains exceptions in relation to Class 4 parts.	**Note:** Type A Construction is applicable to the development.
C2D9 **(Previously C1.8)** Lightweight Construction	Lightweight construction must comply with Specification 6 if used in a wall system that is required to have an FRL.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
C2D10 **(Previously C1.9)** Non-Combustible Building Elements	In a building of Type A or B construction, the following building elements and their components must be non-combustible. + External walls and common walls, including all components incorporated in them, including the façade covering, framing and insulation. + The flooring and floor framing of lift pits. + Non-loadbearing internal walls where they are required to be fire-resisting. This clause contains provisions for combustible materials that may be used wherever a non-combustible material is required under the BCA, including: + Combustible elements permitted within the external wall under C2D10(4). + Materials, where comprised entirely of itself, which are deemed non-combustible under C2D10(5).	**Further Information Required:** The current design is capable of compliance. Documentation for the following is to be provided as the design progresses: + Any external wall claddings. + Any framing or integral formwork systems. I.e. timber framing, sacrificial formwork, etc. + Any external linings or trims. I.e. external UPVC window linings, timber window blades, etc. + Any sarking or insulation contained within the wall assembly. An External Wall Disclosure statement is to be provided as the

+ Clause	+ Reference	+ Comment
	+ Materials which are permitted for use where non-combustible materials are required under C2D10(6). Note: Sarking type materials that do not exceed 1mm in thickness and have a Flammability Index not greater than 5 are permitted to be installed with an external wall.	design progresses which captures all elements within the external wall make-up along with supporting evidence of suitability. BM+G to provide a pro forma for use.
C2D11 **(Previously C1.10)** Early Fire Hazard Properties	The fire hazard properties of the outlined linings, materials and assemblies in a Class 2 to 9 building must comply with Specification 7. Refer below to extracts from Tables S7C3 and S7C4 of Spec 7. as relevant to wall, floor, an ceiling linings. For additional detailed requirements relating to additional building elements, refer to the relevant clause of Spec 7. as outlined below: + Floor linings and coverings – S7C3 + Wall linings and ceiling linings – S7C4 + Air-handling ductwork – S7C5. + Lift Cars – S7C6. + Fire control rooms and fire-isolated exits – S7C7 + Fixed seating and proscenium curtains in Class 9b theatres, public halls and the like – S7C7 + Escalators, moving walkways, and non-required non-fire-isolated stairways and ramps – S7C7. + Sarking-type materials – S7C7. + Attachments to internal floors, walls, and ceilings – S7C7. + Other materials – S7C7 <u>NSW Variations:</u> The following additional linings, materials, and assemblies must comply with Specification 7: + An entertainment venue, a material used to cover closed back upholstered seats; and + A public hall or the like, a proscenium curtain required by Specification 32.	**Further Information Required:** The current design is capable of compliance. A schedule of all wall, floor, and ceiling linings along with associated test reports are to be provided as the design progresses for the fire hazard property requirements of the BCA. Noting: + Minimum Group Numbers apply to wall and ceiling linings. AS 5637 test reports must be provided to determine compliance. + Minimum Critical Radiant Flux values apply to floor linings. AS ISO 9239.1 test reports must be provided to determine compliance. Test Reports from Accredited Testing Laboratories are required to be provided. Pursuant to Clause A5G6, reports from a professional engineer as to the 'likely performance' will not be accepted. All specified materials and products must be tested to the required standards.

+ Clause	+ Reference	+ Comment

+ Table S7C3 of Specification 7– Critical Radiant Flux of Floor Linings and Floor Coverings

+ Class of building	+ Building not fitted with a sprinkler system	+ Building fitted with a sprinkler system (other than a FPAA101D or FPAA101H system)	+ Fire-isolated exits and fire control rooms
Class 2, 3, 5, 6, 7, 8 or 9b, excluding— Class 3 accommodation for the aged; and Class 9b as specified below	2.2 kW/m2	1.2 kW/m2	2.2 kW/m2
Class 9b - Auditorium or audience seating area used mainly for indoor swimming or ice skating	1.2 kW/m2	1.2 kW/m2	2.2 kW/m2
Class 9b - Auditorium or audience seating area used mainly for other sports or multi-purpose functions.	2.2 kW/m2	1.2 kW/m2	2.2 kW/m2

+ Table S7C4 of Specification 7 – Wall and Ceiling Lining Materials (Materials Groups Permitted)

+ Class of building	+ Fire-isolated exits and fire control rooms	+ Public corridors	+ Specific areas	+ Other areas
Class 5, 6, 7, 8 or 9b schools, Sprinklered	Walls: 1 Ceilings: 1	Walls: 1, 2, 3 Ceilings: 1, 2, 3	Walls: 1, 2, 3 Ceilings: 1, 2, 3	Walls: 1, 2, 3 Ceilings: 1 ,2, 3
Class 9b other than schools, Sprinklered	Walls: 1 Ceilings: 1	Walls: 1, 2 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2, 3	Walls: 1, 2, 3 Ceilings: 1, 2, 3

C2D13 (previously C1.13)

Fire-protected timber: Concession

Fire-protected timber may be used wherever an element is required to be non-combustible, provided—

+ the building is—
  - a separate building; or
  - a part of a building—
    - which only occupies part of a storey, and is separated from the remaining part by a fire wall; or
    - 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
+ the building has an effective height of not more than 25 m; and
+ the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17; and
+ any insulation installed in the cavity of the timber building element to have an FRL is non-combustible; and cavity barriers are provided in accordance with Specification 9.

Performance Solution

The building is proposed to be constructed from Mass Engineered Timber, selected elements of which will not be fire protected.

Performance solution to be developed with Fire Engineer. Further information also required to which elements will not be encapsulated with fire protective coverings. Variations to tested systems will also need to be reviewed and addressed by the fire engineer.

+ Clause	+ Reference	+ Comment
C2D14 **(Previously 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 unless it is one of the following: + An ancillary element that is non-combustible. + A gutter, downpipe or other plumbing fixture or fitting. + A flashing. + A grate, grille or similar cover not more than 2 m2 in area associated with a building service. + An electrical switch, socket-outlet, cover plate or the like. + A light fitting + A required sign. + A sign other than one provided under (a) or (g) that— + achieves a group number of 1 or 2; and - does not extend beyond one storey; and - does not extend beyond one fire compartment; and - is separated vertically from other signs permitted under (h) by at least 2 storeys. + An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— + meets the relevant requirements of Table S7C7 as for an internal element; and + serves a storey— - at ground level; or - immediately above a storey at ground level; and + does not serve an exit, where it would render the exit unusable in a fire. + A part of a security, intercom or announcement system. + Wiring. + Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface. + Collars, sleeves and insulation associated with service installations. + Screens applied to vents, weepholes and gaps complying with AS 3959.	**Further Information Required:** The current design is capable of compliance. Documentation is to be provided as the design progresses for the following: + External signage + Window Shades + Decorative battens or the like + Any other element forming an ancillary element to the external wall. An External Wall Disclosure statement is to be provided which captures all elements attached to the external face, or internal parts of, the external wall make-up along with supporting evidence of suitability. BM+G to provide a pro forma for use.

+ Clause	+ Reference	+ Comment
	+ Wiper and brush seals associated with doors, windows or other openings. + A gasket, caulking, sealant or adhesive directly associated with (a) to (o).	
C2D15 **(new for BCA 2022)** Fixing of bonded laminated cladding panels	In a building required to be of 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. An externally located bonded laminated panel need not comply with this requirement if it is one of the following: + A laminated glass system. + Layered plasterboard product. + Perforated gypsum lath with a normal paper finish. + Fibrous-plaster sheet. + Fibre-reinforced cement sheeting. + A component of a garage door.	**Note** It does not appear that bonded laminated panels are proposed for the façade or attachments to the façade.
Part C3	**Fire Compartmentation and Separation**	
C3D3 **(Previously C2.2)** General Floor Area Limitations	Limitations on the area and volume of fire compartments in Class 9 buildings as required by sub-clauses (a), (b) & (c) must be adhered to unless excepted by Clause C3D2 or C3D4.	**Complies:** The fire compartment floor areas have been measured as follows: + Fire compartment 1 (Ground Level – Level 2) – 7,371 m^2 + Fire Compartment 2 (Level 4) – 1,544 m^2 Fire compartment floor areas are within the specified limitations. Fire compartment volumes have been confirmed by the architect as being less than 48,000 m^3 and so the large-isolated building provisions are not triggered.
C3D8 **(Previously C2.7)** Separation by Fire Walls	Construction- A fire wall must be in accordance with the following: + The fire wall has the relevant FRL prescribed by Spec 5. + Unless permitted by Part C4, must not reduce the FRL prescribed by 5. + Building elements (other than roof battens of 75x50 or sarking-type material) must not pass through a fire wall unless the FRL of the wall can be maintained. Separation of fire compartments- A part of a building, separated from the remainder by a fire wall, may be treated as a separate fire	**Further Information Required:** Fire compartmentation plans are to be developed as the design progresses for the building. Specifically note that: + Entertainment Venues, including the cinema and multi-purpose hall (auditorium, stage, and backstage) are to be fire separated from the remainder of the building (60-minute construction). + Fire separation required between the storerooms and

+ Clause	+ Reference	+ Comment	
	compartment if the fire wall extends to the underside of: + A floor having an FRL required for a fire wall; or + The roof covering.	the remainder of the building (60-minute construction). + Level 3 is to be fire separated from the remainder of the building (120-minute construction). + Floors will require 120/120/120 FRL (regardless of if floors are shared within the same fire compartment). The current fire separation of the Entertainment Venues appears to be inadequate. Fire compartmentation plans to be provided for review.	
C3D9 **(Previously C2.8)** Separation of Classifications in the Same Storey	Each building element in that storey must have the higher FRL prescribed in Specification 5 or have those parts of the building separated by a fire wall.	**Noted:** Only one classification is provided throughout the building. Class 9b requires 120-minute FRLs.	
C3D10 **(Previously C2.9)** Separation of Classifications in Different Storeys	Parts of different classification that are situated one above the other in adjoining storeys must be separated as follows: + Type A construction – The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification 5 for the classification of the lower storey.	**Noted:** Only one classification is provided throughout the building. Class 9b requires 120-minute FRLs.	
C3D11 **(Previously C2.10)** Separation of Lift Shafts	This clause applies to all classes of buildings and specifies the protection requirements for openings for lift shafts and lift landing doors. The requirements are set out in sub-clauses (1), (2) (3) & (4) which relate to openings in Type A, B and C construction. Also note the Deemed to Satisfy Provisions of Part C4.	**Compliance Readily Achievable:** Lift is required to be provided within a fire-isolated lift shaft. Details of fire-rated construction to lift shaft required.	
C3D13 **(Previously C2.12)** Separation of Equipment	Equipment as listed below must be separated from the remainder of the building with construction that achieves an FRL of 120/120/120 (or that required by Spec 5, whichever is greater) and doorways being self-closing -/120/30 fire doors: + Lift motors and lift control panels; or + Emergency generators used to sustain emergency equipment operating in the emergency mode; or + Central smoke control plant; or + Boilers; or + A battery or batteries installed in the building that have a voltage exceeding 12 volts and a capacity exceeding 200kWh.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.	

+ Clause	+ Reference	+ Comment	
	+ Separation of on-site fire pumps must comply with the requirements of AS 2419.1.		
C3D14 **(Previously C2.13)** Electricity Supply System	An electrical substation located within a building or a main switchroom which sustains emergency equipment, must: + Be separated from the building by construction achieving an FRL of 120/120/120; and + Have any doorway protected with a self-closing fire door achieving an FRL of -/120/30. + Electrical conductors within a building must be protected in accordance with sub-clause (3).	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.	
Part C4	**Protection of Openings**		
C4D2 **(Previously C3.1)** Application of Part	Openings listed in C4D2(1) need not comply with the Deemed-to-Satisfy Provisions of Part C4.	Note: As the project falls under NCC 2022, all fire rated products must be tested to AS 1530.4 – 2014. Test Reports to previous revisions of the standard will no longer be accepted.	
C4D3 **(Previously C3.2)** Protection of Openings in External Walls	Openings in an external wall required to have an FRL must be protected in accordance with C4D5 if the opening is less than: + 3m from a side or rear boundary; or + 6m from the far boundary of a road, river, lake or the like adjoining the allotment if not located at or near ground level; or + Less than 6m from another building on the allotment that is not Class 10.	**Performance Solution:** Fire-rated construction is not provided to both the ICoE building and the existing Central Energy Plant where they are within 6m of each other. A Performance Solution will be implemented by the fire engineer to address this departure.	
C4D5 **(Previously C3.4)** Acceptable Methods of Protection	Where protection is required, doorways, windows and other openings must be protected as follows: + Doorways – - Internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or - -/60/30 fire doors that are self-closing or automatic closing. + Windows – - Internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or	**Note:** Refer to clause C4D3 above.	

+ Clause	+ Reference	+ Comment
	- -/60/- automatic closing fire shutters. + Other openings – - Excluding voids – internal or external wall-wetting sprinklers, as appropriate; or - Construction having FRL not less than -/60/-.	
C4D6 **(Previously C3.5)** Doorways in Fire Walls	Openings in fire walls, that are not part of a horizontal exit, must be protected in accordance with one of the methods set out in this clause. Doorways in fire walls, that are not part of a horizontal exit, must: + In aggregate door width, not exceed ½ of the length of the fire wall. + Be protected by fire doors achieving the FRL required for the wall in accordance with Spec 5 for Type A Construction. + Be self-closing or automatically close on the activation of a smoke detector and applicable sprinkler system.	**Further Information Required:** The current design is capable of compliance. Details of fire compartmentation strategy to be finalised as the design progresses. Where there is a 2-hour fire wall to separate the stair from Level 3, a -/120/30 fire door will be required.
C4D8 **(Previously C3.7)** Protection of Doorways in Horizontal Exits	A doorway that is part of a horizontal exit must be protected by: + A fire door with an FRL as required for the wall under Spec 5, except that the door must have an insulation level of at least 30; or; + Be self-closing, or automatic-closing activated by heat or smoke detector activation and the activation of an applicable sprinkler system.	**Further Information Required:** The current design is capable of compliance. Details of fire compartmentation strategy to be finalised as the design progresses.
C4D9 **(Previously C3.8)** Openings in Fire Isolated Exits	Doorways that open to fire-isolated exits (excluding those that open to a road or open space), must be protected by -/60/30 self-closing, or automatic closing fire doors. A window in an external wall of a fire-isolated exit must be protected in accordance with C4D5 if it is exposed to and within 6m of another opening in wall of the same building. (excludes openings in the same fire-isolated exit)	**Note:** See comments in D2D4 below.
C4D10 **(Previously C3.9)** Service Penetrations in Fire Isolated Exits	Fire isolated exits may only be penetrated by: + Electrical wiring permitted by D3D8 (6). + Ducting associated with a pressurisation system which: - is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and	**Further Information Required:** The current design is capable of compliance. Details of fire compartmentation strategy to be finalised as the design progresses.

+ Clause	+ Reference	+ Comment	
	- does not open into any other part of the building; or + Water supply and test drain pipes for fire services.		
C4D11 **(Previously C3.10)** Openings in Fire Isolated Lift Shafts	Doorways - Lift shafts required to be fire-isolated must be protected by -/60/- self-closing fire doors complying with AS1735.11. Lift Indicator Panels – If exceeding 35,000mm^2, lift indicator panels must be backed by no less than FRL-/60/60 construction.	**Compliance Readily Achievable:** Details of fire-rated lift landing doors to be provided as the design progresses.	
C4D13 **(Previously C3.12)** Openings in Floors and Ceilings for Services	Where a service passes through: + A floor required to have an FRL (integrity and insulation), or; + A ceiling required to have a resistance to the incipient spread of fire, That service must be protected: + In a building of Type A construction, by a shaft complying with Spec 5, and; + The performance of any *required* fire-protective floor covering must not be reduced by service penetrations.	**Further Information Required:** The current design is capable of compliance. Details of fire compartmentation strategy to be finalised as the design progresses. Although Levels Ground to Level 2 will be within the same compartment, the floor must be fire rated with any penetrations protected. Details of the proposed sub floor space to be reviewed as the design progresses including how access to the space is to be achieved.	
C4D14 **(Previously C3.13)** Openings in Shafts	In a building of Type A Construction, service shafts must be protected by: + A fire door, hopper or access panel achieving FRL -60/30. + If in a sanitary compartment - a non-combustible door and frame achieving an FRL of -/30/30. + If the shaft is a garbage shaft – a non-combustible door or hopper.	**Further Information Required:** The current design is capable of compliance. Details of fire compartmentation strategy to be finalised as the design progresses.	
C4D15 **(Previously C3.15)** Openings for Service Installations	When a service penetrates a building element that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that penetration must: + Be identical to a tested prototype assembly, tested in accordance with AS4072.1 and AS1530.4. + In the case of ventilating or air-conditioning ducts/equipment, the installation must comply with AS1668.1.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.	

+ Clause	+ Reference	+ Comment	
C4D16 **(Previously 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 a manner- + identical with a prototype tested in accordance with AS 1530.4 and AS 4072.1 to achieve the required FRL, or + that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.	
Part C Specifications			
Spec. 5 **(Previously Spec C1.1)** Fire-Resisting Construction	The new building works are required to comply with the requirements detailed within Specification 5 for Type A Construction.	**Performance Solution:** Potential Performance Solutions required to permit the gap between the floor slabs and the curtain wall (slab-edge) to be fire sealed on a performance basis in lieu of a tested DtS system. Note: Façade report nominates a curtain wall to the outdoor maker area. Architect to confirm selected façade system to confirm if this Performance Solution is applicable. Roofs to Type A construction buildings are to be non-combustible. Details of the proposed roof sheeting will be required as the design progresses. This may also potentially be addressed under a fire engineered Performance Solution.	
Spec. 12 **(Previously Spec C3.4)** Fire Doors and Smoke Doors	Fire doors must comply with AS1905.1 and not fail the period specified for integrity in the required FRL due to glazed parts. Smoke doors must be constructed to prevent the free passage of smoke from one side of the doorway to the other. If they are glazed, there must be minimal danger of a person being injured by walking in to them. A smoke door must be constructed as follows- + The door must swing in direction of egress, or both directions. + The leaves are capable of resisting smoke at 200°C for 30 minutes. Solid core leaves of minimum 35mm thick satisfy. + The leaves are fitted with smoke seals. + The leaves are normally in the closed position, or the leaves are closed automatically through interface with smoke detectors present on each side of the doorway no more than 1.5m	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	

+ Clause	+ Reference	+ Comment
	horizontal distance from the doorway. In the event of a power failure, the leaves must fail-safe to the closed position. + The leaves return to the fully closed position after each manual opening. + Any glazing part complies with AS1288. If a glazed panel may be mistake for an unobstructed exit, identification via opaque construction must be present.	
Section D	**Access and Egress**	
Part D2	**Provision for Escape**	
D2D3 **(Previously D1.2)** Number of Exits Required	In addition to horizontal exits, following buildings/areas are required to be provided with two exits- + Class 9- - Any storey or mezzanine that accommodates more than 50 persons, calculated under D2D18. - (NSW Variation) Any storey or mezzanine within an auditorium in an entertainment venue. - In a Class 9 building, the above requirements do not apply to a part of a storey that- ▪ Is a plant room, machinery room, storeroom, lift-machine room or the like; and ▪ Is provided with direct egress to a road or open space or a fire-isolated exit complying with D2D12(2); and ▪ Satisfies D2D5 by the provision of 1 exit.	**Complies:** 2 exits are required from every storey which accommodates more than 50 people. The current design appears to comply with this clause.
D2D4 **(Previously D1.3)** When Fire Isolated Exits are Required	Class 9 Buildings – Every stairway or ramp serving as a required exit must be fire-isolated unless – + In any other case, except in a class 9b early childhood centre or a Class 9c – it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if – - The building has a sprinkler system; or - The required exit does not provided access to or egress from the additional storey, and is fire and smoke separated.	**Performance Solution:** The stairs serving Ground Level to Level 3 are required to be fully contained within a fire-rated shaft under a DtS arrangement. Fire engineer is to address the non-fire-isolated stairs which aren't fully contained within a fire-isolated shaft via a Performance Solution.

+ Clause	+ Reference	+ Comment
D2D5 **(Previously D1.4)** Exit Travel Distances	For Class 9b buildings: + Maximum 20m to an exit or to a point of choice between alternative exits. + Maximum distance to one of those exits is 40m.	**Performance Solution:** Exit travel distances have been assessed and are extended as follows: <u>Level 1</u> + 27m to a point of choice in lieu of 20m <u>Level 1 Plant Room</u> + 27m to a point of choice in lieu of 20m + 50m to an exit in lieu of 40m <u>Level 2</u> + 28m to a point of choice in lieu of 20m <u>Level 3</u> + 30m to a point of choice in lieu of 20m
D2D6 **(Previously D1.5)** Distances Between Alternative Exits	Exits that are required as alternative means of egress must be- + Distributed as uniformly as practical within the storey served. + Located so that unobstructed access to 2 exits is available from all points. + Not less than 9m apart + Not more than - In all other cases – 60m. Located so that alternative paths of travel do not converge <6m.	**Performance Solution:** Distances between alternative exits are proposed to be extended as follows: <u>Level 2 Plant/Catwalks</u> + 64m between alternative exits in lieu of 60m
D2D7 **(Previously D1.6(a))** Dimensions of Exits	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
D2D8 **(Previously D1.6(b), (c), (d) and (e))** Width of exits, paths of travel to exits and doorways	The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— + 1m; or If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— + 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or	**Further Information Required:** Refer to table below for egress width requirements. These have been revised based on the occupancy markup provided by JCB. Note that exits from the Ground Level theatre, including paths of travel to the road, are to be nominated to confirm compliance with this clause. Further information is also required regarding the maximum anticipated population within the Level 1 literature library hub. Where the population within this

+ Clause	+ Reference	+ Comment
	If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— + 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or + in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200. (NSW Variation) In a Class 9b building used as an entertainment venue— + the aggregate width must be not less than 2 m plus 500 mm for every 50 persons or part in excess of 200; and + D2D8(1), (2) and (3) do not apply; and + where or more paths of travel merge, the width of the combined path of travel must be not less than the sum of the required widths of those paths of travel; and + the required widths of those paths of travel connecting the exits from the building to a public road or open space must comply with (c).	space exceeds 19 people, a performance solution will be required to rationalise egress widths from this level. Theatre catwalks to also achieve a minimum 1m clearance.

Assessment of Aggregate Exit Widths:

+ Level	+ Occupant numbers	+ Required Agg. Egress Width	+ Proposed Agg. Egress Width	+ Complies
GL General	457	5m	>5m	Yes
GL Theatre	459	5m	>5m	Yes
L1 Teaching Area	TBC (Not more than 200 permitted)	TBC	2m	TBC
L1 Cinema/Plant	90	1m	2m	Yes
L2 General	210	3m	4m	Yes
L3 General	155	2m	2m	Yes

D2D9 **(Previously D1.6(f))** Width of doorway in exits or paths of travel to exits	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than— + the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or + in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.

+ Clause	+ Reference	+ Comment	
	(NSW Variation) In a Class 9b building used as an entertainment venue— + in parts of the building used by the public, the width of the required exit or path of travel, and the unobstructed width of each doorway must not be less than 1 m and not more than 3 m; and + in other parts of the building, doorways must comply with NSW D2D9.		
D2D10 (Previously 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, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
D2D11 (Previously D1.6(h) and (i)) Determination and measurement of exits and paths of travel to exits	For the purposes of D2D7 to D2D10 the following apply: + The required width of a stairway or ramp in a required exit or path of travel to an exit must— - be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and - extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing. + To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
D2D12 (Previously D1.7) Travel via Fire Isolated Exits	A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from a public corridor/lobby, sole-occupancy unit occupying all of a storey or a sanitary compartment/airlock. Each fire isolated stairway or ramp must provide independent egress from each storey served and must discharge to – + A road or open space; or + To a point in a space within the building that is only used for pedestrian movement or car parking that is open a minimum of 2/3 of its perimeter and from which a path of travel under 20m is available to a road or open space; or	**Performance Solution:** Fire engineered performance solution is required for the fire stair serving all storeys which discharges internally on Ground Level. **Further Information Required:** Details to be provided for the following as the design progresses in relation to the fire-isolated stair serving Level 3: + External fire-rated walls within 6m of the discharge path from the exit	

+ Clause	+ Reference	+ Comment
	+ A covered area that adjoins a road or open space, is open for a minimum of 1/3 of its perimeter, has an unobstructed height of at least 3m throughout and provides a path of travel the point of discharge to a road or open space within 6m. In a fire-isolated ramp must be provided at any change in floor level less than 600mm. A ramp for changes of level in a fire isolated passageway is required in a Class 9 building. Where a path of travel from the point of discharge of a fire isolated exit necessitates passing within 6m of any part of an external wall of the same building, that part of the wall must have – + an FRL of not less than 60/60/60; and + Any openings protected internally in accordance with BCA Clause C4D5, For a distance of 3m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser.	+ Provision of airlock between service corridor/plant space and fire-isolated passageway on Ground Level. + Fire rating of passageway leading from the fire-isolated stair on Ground Level (unless addressed via a fire engineered solution). Note: Where a Performance Solution is proposed for the open stair connecting into Level 3, the D2D12 requirements will not apply to the open stair, only the fire-isolated stair.
D2D14 **(Previously D1.9)** Travel by Non-Fire Isolated Stairways or Ramps	In a Class 9 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated stairway or ramp must not exceed 80m. A required non-fire isolated stairway or non-fire-isolated ramp must discharge at a point not more than- + Class 9b – 20m from a doorway or fire-isolated exit providing egress to road or open space, or 40m from one of 2 such exits if travel to each is in opposite or approximate opposite directions.	**Performance Solution:** The non-fire-isolated stair serving Level 3 does not have a continuous path of travel from the storey served to the level of discharge. A fire engineered performance solution should be prepared to address this departure. **Compliance Readily Achievable:** The currently documented non-fire isolated stairways are capable of complying with this clause. Noting the total travel distance to open space via the open stair serving Level 3 must not exceed 80m.
D2D15 **(Previously D1.10)** **NSW D2D15** Discharge From Exits	The path of travel to the road from a required exit leading to open space must have an unobstructed exit width of that of the required exit, or if larger, 1m. If the discharge point of the exit is at a different level from the road, a stairway or ramp achieving no more than 1:14 must be provided. The discharge point of alternative exits must be located as far apart as practical and be suitably protected from vehicles potentially blocking the exit.	**Compliance Readily Achievable:** The current design is capable of compliance. Note: Currently the exit width is diminished by corridors to the theatre, which reduces the population capacity of the exits.

+ Clause	+ Reference	+ Comment	
	(NSW Variation) 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.		
D2D18 **(Previously D1.13)** Number of Persons Accommodated	Outlines the number of persons accommodated in a storey as per Table D2D18 of BCA 2022.	Noted. Populations have been calculated in accordance with NSW Table D2D18. An updated population schedule may be provided by the Architect to confirm population numbers throughout.	
D2D21 **(Previously D1.16)** Plant Rooms & Lift Motor Rooms Concession	A ladder may be used in lieu of a stairway to provide egress from a plant room with a floor area of not more than 100m^2 or all but one point of egress from a plant room or a lift machine room with a floor area not more than 200m^2. Sub-clause (2) sets out the parameters for the ladders permitted to be used in this circumstance.	**Performance Solution:** Performance solution required to permit the following: + Theatre catwalks, which is not a plant room <200m^2, utilise the plant room ladder for egress. + Level 2 plant room ladder does not have a continuous path of travel from the storey served to the level of discharge Note: The ladder has been considered a path of travel to an exit.	
D2D22 **(Previously D1.17)** Access to Lifts Pits	Access to lift pits with a depth of under 3m must be provided through the lowest landing doors. If a lift pit exceeds 3m in depth, access must be provided in accordance with sub-clause (b).	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
Part D3	**Construction of Exits**		
D3D2 **(Previously D2.1)** Application of Part	In Class 9b entertainment venues — + Clauses NSW D3D14(1)(i), (j), and (k), NSW D3D16(d), NSW D3D18(1)(d), and NSW D3D24(2)(e) apply to only those parts of the building used by the public; and + the general requirements of Part D3 apply to all other parts of the building.	**Note:** See below comments.	
D3D3 **(Previously D2.2)** Fire Isolated Stairways & Ramps	A stairway or ramp, including landings that are required to be within a fire-resisting shaft must be constructed of non-combustible materials to protect the structural integrity of the shaft.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	

+ Clause	+ Reference	+ Comment	
D3D4 **(Previously D2.3)** Non-Fire-Isolated Stairways and Ramps	In a building with a rise in storeys of more than 2, required non-fire-isolated stairways and ramps must be either constructed in accordance with the below: + Reinforced or prestressed concrete; or + Steel at least 6mm thick at all points; or + Timber that has a finished thickness of at least 44mm, has an average density of at least 800 kg/m^3 at a moisture content of 12% and has not been joined by means of glue unless it has been laminated and glued with resorcinol/phenol formaldehyde, or + Non-combustible materials, that if there were a local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
D3D8 **(Previously D2.7)** Installations in Exits and Paths of Travel	If installed in a path of travel to an exit, electrical distribution boards, communication cupboards and the like containing motors, etc. are to be enclosed with non-combustible construction (or a fire protective covering), and doors are to be provided with smoke seals to the perimeter.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
D3D9 **(Previously D2.8)** Enclosure of Space Under Stairs and Ramps	The space below a required fire-isolated stairway or ramp in a fire-isolated shaft must not be enclosed to form a cupboard or other enclosed space. If the required stairway or ramp is non-fire-isolated, (including an external stairway) any cupboard underneath must have an FRL of 60/60/60, with a self-closing -/60/30 door.	**Note:** No storage areas appear to be proposed under the non-fire isolated stairs.	
D3D10 **(Previously D2.9)** Width of Required Stairways and Ramps	A required stairway or ramp that exceeds 2m in width is considered as having a width of only 2m unless it is divided by a handrail or barrier and each division has a width not more than 2m.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
D3D12 **(Previously 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 of- + If the passageway discharges from a fire-isolated stairway or ramp – not less than that required for the stairway or ramp shaft; or + In any other case – not less than 60/60/60.	**Further information Required:** Compliance with this clause is capable of compliance. Details to be provided of any fire-isolated passageways as the design progress, notably for the passageway leading from the fire-isolated stairs serving Level 3. This fire-isolated passageway is to be enclosed in fire-rated construction with an FRL not less than that required for the stair.	

+ Clause	+ Reference	+ Comment
	Notwithstanding the above, the top construction of a fire-isolated passageway need not have an FRL if the walls of the fire-isolated passageway extend to the underside of- + A non-combustible roof covering; or + A ceiling having a resistance to the incipient spread of fire of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the fire compartment.	
D3D14 **(Previously D2.13)** Goings and Risers	The stairs must comply with the tread, riser and going dimensions of this clause and the nosing of the stairs must be provided with a non-slip treads and meet the provisions of AS1428.1-2009. The following will apply in relation to the construction of all stairways: + Stairway must have not more than 18 and not less than 2 risers in each flight. + Goings and risers within the stair flights must be constant throughout. + Risers must be solid construction with no gaps and treads must have non slip finishes and stair nosings. + Goings and risers are to be in accordance with BCA Table D3D14 (NSW Variation) In a Class 9b building used as an entertainment venue, the must be provided: + not more than one helical stairway serving as a required exit and that stairway must— - have a width of not less than 1500 mm; and - be of constant radius; and - be constructed so that each tread, when measured 500 mm in from its narrow end, has a width of at least 280 mm; and + In a curved stairway serving as a required exit — an internal radius of not less than twice the width of the stair. + Conspicuous edges must be provided to the treads of steps	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses. Note: See Part I and NSW Variations for specific Theatre and Lecture stairs.

+ Application	+ Surface Conditions	
	+ Dry	+ Wet
Tread or landing surface	P3/R10	P4/R11
Nosing or landing strip	P3	P4

+ Clause	+ Reference	+ Comment
D3D16 **(Previously D2.15)** Thresholds	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 – + (NSW Variation) In a Class 9b building used as an entertainment venue, the door sill of a doorway opening to a road, open space, external stair landing or external balcony is not more than 50 mm above the finished floor level to which the doorway opens; + In other cases – - the doorway opens to a road or open space, external stair landing or external balcony; and - 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.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses. Theatre catwalk stair to be provided with a top landing at least the width of the door leaf. Note: See NSW Variation requirements applicable to Theatre doors.
D3D17 **(Previously D2.16(a), (b) and (c))** Barriers to Prevent Falls	A continuous barrier must be provided along the side of— + 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. The above requirements of do not apply to— + the perimeter of a stage, rigging loft, loading dock or the like; or + areas referred to in D3D23; or + a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or + a barrier provided to an openable window covered by D3D29.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
D3D18 **(Previously D2.16a)** Height of Barriers	The height of a barrier required by D3D17 must be not less than the following: + 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.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses. Note: See NSW Variation requirements applicable to Theatre barriers.

+ Clause	+ Reference	+ Comment
	+ In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, - 1m; or - 700mm where the horizontal projection extends not less than 1m outwards from the top of the barrier; or - (NSW Variation) in a Class 9b building used as an entertainment venue, the height prescribed for guardrails in NSW I4D41 or NSW I5D9. + (NSW Variation) 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— - 1 m when provided inside the building; and - 1200 mm when provided externally to the building. + For all other locations — 1 m. For a barrier provided from D3D17 — + barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and + 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.	
D3D19 **(Previously D2.16a)** Openings in Barriers	Openings in a required balustrade must not allow a 125 mm sphere to pass through unless in a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes. This is to the exception of fire-isolated stairs and ramps serving a Class 9b early childhood centre, or generally external stairways, which must still comply with the 125mm gap requirement. In a fire-isolated stairway, fire-isolated ramps or other areas used primarily for emergency purposes openings in a required balustrade – + must not allow a 300mm sphere to pass through; or + where rails are used – - a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
	and the floor of the landing, balcony, or the like; and - the opening between rails must not be more than 460 mm. The maximum 125 mm balustrade opening for a stairway, such as a non-fire isolated stairway, is measured above the nosing line of the stair treads. Where a required balustrade is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the balustrade and the face must not exceed 40 mm. The opening is measured horizontally from the edge of the surface to the nearest internal face of the balustrade	
D3D20 **(Previously D2.16a)** Barrier Climbability	A barrier required by D3D17, located on a floor more than 1m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150mm and 760mm above the floor. This does not apply to – + Fire isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than – - external stairways; and - external ramps; and + Class 7 (other than carparks) and Class 8 buildings	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
D3D22 **(Previously D2.17)** Handrails	Handrails must be located along at least one side of a ramp or flight unless the width is 2m or more requiring handrails on both sides. Handrails must fixed at a minimum height of 865mm and be continuous between stair flight landings and have no on or above them that may break the hand hold. If in a required exit serving an accessible area, must comply with AS 1428.1.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses. Handrails serving open stair to be made continuous around stair landings. Noting that where the handrails are serving an accessible area, they must comply with AS 1428.1 – 2009.
D3D23 **(Previously D2.18)** Fixed Platforms, Walkways Stairways and Ladders	A fixed platform, walkway, stairway, ladder, any going and riser, any balustrade or other barrier attached thereto may comply with AS1657 if it only serves a machinery or plant room.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
D3D24 **(Previously D2.19)** Doorways and Doors	A power-operated door in a path of travel to a required exit must be able to be opened manually under a maximum force of 110 N if there is a malfunction. (NSW Variation) A Class 9b building used as an entertainment venue must not be fitted with a rigid barrier such as a collapsible gate, accordion door or turnstile. If fitted with a door, it must be a swing door that opens in the direction of egress, and must consist of doors hung in two folds with an unobstructed width of more than 1m. A doorway opening within sight of the audience not intended for egress, must have a notice displayed clearly indicating its purpose and such a notice must be internally illuminated. A sliding fire door may be fitted where it leads directly to a road or open space forming a main entrance, and it is capable of swinging in the direction of egress from pressure applied to the inside face of door. Additionally, the door must be provided with signage clearly indicating to persons seeking egress the potential for swinging the door open in an emergency.	**Further Information Required:** The current design is capable of compliance. Doors and doorway details to be provided for assessment. Note: See NSW Variation requirements applicable to Theatre doors.
D3D25 **(Previously D2.20)** Swinging Doors	A swinging door forming part of a required exit must not encroach the required width of a required exit by way of the swing of the door, or the door itself including associated hardware whilst in the open position. A swinging door must not swing against the direction of egress unless + it serves a building or part with a *floor area* not more than 200m^2, it is the only *required exit* from the building or part and it is fitted with a device for holding it in the open position; or + it serves a *sanitary compartment* or airlock (in which case it may swing in either direction);	**Compliance Readily Achievable:** All exit doorways (doors into fire stairways, to open space or horizontal exits) must open in the direction of egress. Noting the doors serving the outdoor function space, where used as exits, are required to swing in the direction of egress.
D3D26 **(Previously D2.21)** Operation of Latch	A door in a path of travel to an exit must be readily openable via the provision of single downward lever action hardware located between 900mm and 1.1m from FFL in area required to be accessible, otherwise single pushing action hardware between 900mm and 1.2m form FFL is permitted. These requirements do not apply to a door serving: + a vault, strong-room, sanitary compartment, or the like; or + a space which is otherwise inaccessible to persons at all times when the door is locked; or	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.

+ Clause	+ Reference	+ Comment	
	In addition, provided that the door can be immediately unlocked by a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire.		
D3D28 **(Previously D2.23)** Signs on Doors	It is a requirement that signs to alert persons that the operation of smoke doors, fire doors, and doors discharging from fire isolated exits, must not be impaired must be installed where they can be readily seen.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	

+ A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to, a—
  - A required fire door providing direct access to a fire-isolated exit; and
  - A required smoke door, on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on either the wall adjacent to the doorway or both sides of the door; and
  - Fire door forming part of a horizontal exit; and
  - Smoke door that swings in both directions; and
  - Door leading from a fire isolated *exit* to a road or *open space*, on each side of the door.
+ A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state—

Any new self-closing fire and/or smoke doors leading into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

Any new automatic closing fire and/or smoke doors which are held on hold open devices that leads into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

In addition to the above, the doors which provide access to the fire isolated exits and also the Horizontal Exits must have signage provided adjacent to the entry doorway which states the following (ref Clause 109 of EP&A DCFS Reg 2021):

+ Clause	+ Reference	+ Comment
Part D4	**Access for People with Disabilities**	
D4D2 **(Previously D3.1)** General Building Access Requirements	The extent of access required depends on the classification of the building. Buildings and parts of buildings must be accessible as set out in this clause. Commercial parts. Access is required to and within all areas normally used by the occupants, including the ancillary class 7a part. A building, or part thereof, must comply with the requirements of BCA Part 4 if accessibility is deemed to be applicable under D4D2, unless otherwise exempted under Clause D4D5.	Noted Access report to be provided by others.
D4D3 **(Previously D3.2)** Access to Buildings	Accessways must be provided to accessible buildings from the main points of pedestrian entry at the allotment boundary and any accessible car parking space or accessible associated buildings connected by a pedestrian link. An accessway must be provided to a building required to be accessible- + From the main points of a pedestrian entry at the allotment boundary; and + From another accessible building connected by a pedestrian link; and + From any required accessible car parking space on the allotment. In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances including the principal pedestrian entry.	Noted Access report to be provided by others.
D4D4 **(Previously D3.3)** Parts of buildings to be accessible	The works are required to comply with the requirements of AS 1428.1-2009.	Noted Access report to be provided by others.
D4D5 **(Previously D3.4)** Concessions	The following areas, and any path of travel providing access only to these areas, are not required to be accessible: + An area deemed inappropriate to access due to the areas particular use + An area that would pose a health or safety risk for people with a disability.	Noted Access report to be provided by others.

+ Clause	+ Reference	+ Comment
D4D6 **(Previously D3.5)** Accessible carparking	Accessible carparking spaces – + Must be provided in accordance with the ratios set out in this clause. + Must comply with AS 2890.6-2009	Noted Access report to be provided by others.
D4D7 **(Previously D3.6)** Signage	In a building required to be accessible, braille and tactile signage must be provided to all: + Required accessible sanitary facilities + Spaces with hearing augmentation + Ambulant sanitary facilities + Non-accessible pedestrian entrances + Each door required to be provided with an exit sign Braille and tactile signage is to comply with sub-clause (a) and Specification 15.	Noted Access report to be provided by others.
D4D8 **(Previously D3.7)** Hearing Augmentation	A hearing augmentation system must be provided where an inbuilt amplification system (excluding emergency warning systems) is present in the following areas: + In a room in a Class 9b + In an auditorium, conference room, meeting room, or judicatory room, + In a ticket office, teller's booth, reception area of the like where the public is screened by the service provider. A hearing augmentation system is required to comply in the following way: + An induction loop – it must serve >80% of the floor area of the spaced served by the inbuilt amplification system; or + A system requiring the use of receivers or the like. It must be available to not less than 95% of the floor of the space served and provide the applicable number of receivers; - 500 people – 1 receiver for every 25 persons and a minimum of 2 receivers; and - 500-1000 people – 20 receivers plus 1 receiver for every 33 people in excess of 500; and - 1000-2000 people – 35 receivers plus 1 receiver for every 50 people in excess of 1000; and - >2000 people – 55 receivers plus 1 receiver for every 100 people in excess of 2000. Any screen or scoreboard capable of displaying public announcements must be	Noted Access report to be provided by others.

+ Clause	+ Reference	+ Comment
	capable of supplementing any public address system.	
D4D9 **(Previously D3.8)** Tactile Indicators	Tactile ground surface indicators must be provided to: + A stairway, other than a fire-isolated stairway; and + An escalator or passenger conveyor; and + A ramp other than a fire-isolated ramp; and + In the absence of a suitable barrier- - An overhead obstruction <2m above floor level; and - An accessway meeting a vehicular way adjacent to any pedestrian entrance to a building.	Noted Access report to be provided by others.
D4D10 **(Previously D3.9)** Wheelchair Seating Spaces in Class 9b Assembly Buildings	Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 must be provided in accordance with the requirements of this clause.	Noted Access report to be provided by others.
D4D12 **(Previously D3.11)** Ramps	Ramps may be used as part of an accessway where there is a change of level and must comply with the requirements set out in AS1428.1	Noted Access report to be provided by others.
D4D13 **(Previously D3.12)** Glazing on an Accessway	Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line.	Noted Access report to be provided by others.
Section E	**Services and Equipment**	
Part E1	**Fire Fighting Equipment**	
E1D2 **(Previously E1.3)** Fire Hydrants	A Hydrant system is required to be installed in accordance with AS 2419.1 – 2021 given the total floor area of the building exceeding 500m^2. Note: The below comprises a limited summary of requirements under AS 2419.1 – 2021. Refer to the full standard for all applicable requirements.	**Performance Solution**: Fire engineered performance solution may be required for the following: + Where additional internal fire hydrants are proposed remote from exits to achieve compliant coverage.

+ Clause	+ Reference	+ Comment
	+ Internal Hydrants Any Internal Hydrants are to be located within the fire isolated exits or within 4m of the top riser of the non-fire isolated exits (external stairs in lieu of fire stairs). In addition, if floor coverage cannot be achieved a Performance Solution is required to locate hydrants >4m from an exit in Class 5-9 buildings. **+ External Hydrants** External hydrants are required to be located: + Not less than 10m from: - Any high voltage electrical distribution equipment such as transformers an distribution boards - Any electric vehicle charging station regardless of voltage - Any stored quantity of dangerous goods - Any external combustible storage + Not less than 3m from the vent terminal of any gas assembly or gas measurement systems + Not less than 3m from the discharge outlet of any building exhaust system when operating in fire mode.	+ To permit the booster assembly to be further than 20m from the building's principal pedestrian entrance (subject to confirmation on the proposed location). **Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses. Further details required for the existing University Hydrant system e.g., ring main, booster, pump rooms, if the proposed building is to be served by the existing system.
E1D3 (Previously E1.4) Fire Hose Reels	A fire hose reel system must be provided to serve a building where one or more internal fire hydrants are installed or in a building with a floor area greater than 500m². Fire Hose Reels are to be located within 4m of an exit, or located adjacent to an internal hydrant (other than one within a fire isolated exit). Where system coverage is not achieved by the above, additional FHR may be located in paths of travel to an exit. Fire hose reels must be located internally, externally or in any combination to achieve the system coverage specified in AS 2441. Fire hose reels must not pass through any fire or smoke doors except if it is a doorway referred to in BCA Clause C3D6 (1)(e), C3D6(5)(d), C3D13, C3D14 or C4D14. Fire hose reels must only serve the storey on which they are located except for an SOU or not more than 2 storeys for a Class 9 may be served by a single fire hose reel located at the level of egress.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.

+ Clause	+ Reference	+ Comment	
E1D4 **(Previously E1.5)** Sprinklers	A sprinkler system must be installed in a building or part of a building where required by Clause E1D5 – E1D12 as applicable, and comply with Spec 17 and 18 as applicable.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses. Note a performance solution may be required to permit the booster assembly to be further than 20m from the building's principal pedestrian entrance subject to confirmation on the proposed location. Details of the proposed sub floor space to be reviewed as the design progresses including what is proposed to be contained within the space (including if services coverage is provided).	
E1D12 **(Previously 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.	**Noted**	
E1D14 **(Previously 1.6 and Table E1.6)** Portable Fire Extinguishers	Portable fire extinguishers must be provided as listed in Table E1D14 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.	
E1D16 **(Previously E1.9)** Fire Precautions During Construction	In buildings under construction at least 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 a required exit and if the building has reached an effective height of 12m the required hydrant and hose reel systems must be installed, as set out in (b)(ii) and be operational and any required booster connections must be installed.	**Note:** Contractor to Note	
E1D17 **(Previously E1.10)** Provisions for Special Hazards	Suitable additional provisions must be made for fire-fighting if unique problems could arise due to; + The nature or quantity of materials stored, displayed or used in a building on the allotment; or + The location of the building in relation to a water supply for firefighting purposed.	**Further Information Required:** Further information on any special hazards are required (if any).	

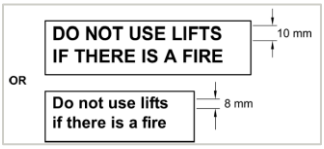
+ Clause	+ Reference	+ Comment
Part E1 Specifications		
Spec. 17 **(Previously Spec. E1.5)** Fire Sprinkler Systems	**+ Application of Sprinkler Standards** Subject to the requirements of this specification, an automatic fire sprinkler system must comply with the applicable standard as listed in S17C2. **+ Quick Response Sprinklers** Quick response sprinklers may be installed only if they are suitable for the type of application proposed and it is demonstrated that the sprinkler system is designed to accommodate their use. **+ Sprinkler Valve Enclosures** Sprinkler alarm valves must be located in a secure room or enclosure which has direct egress to a road or open space. All sprinkler valve rooms and enclosures must be secured with a system suitable for use by the fire brigade. **+ Water Supply** A required sprinkler system must be provided with at least one water supply. **+ Building Occupant Warning System** A required sprinkler system, except a FPAA101D sprinkler system, must be connected to and activate a building occupant warning system complying with S20C7. **+ Connection to Other Systems** Where a smoke hazard management system is installed and is actuated by smoke detectors, the sprinkler system must, wherever practicable, be arranged to also activate the smoke hazard management system. **+ Anti Tamper Devices** Where a sprinkler system is installed— + over any stage area in a theatre, public hall or the like, visual and audible status indication of sprinkler valves must be provided at the location normally used by the stage manager; or + in a space housing lift electrical and control equipment (including machine rooms, secondary floors and sheave rooms), any valves provided to control sprinklers in these spaces must be located adjacent to the space.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
	+ Any valves provided to control sprinklers required by (1) must be fitted with anti-tamper monitoring devices connected to a monitoring panel. **+ Sprinkler Systems in Lifts** Where sprinklers are installed in a space housing lift electrical and control equipment, including machine rooms, secondary floors and sheave rooms, sprinklers in these spaces must— + have heads protected from accidental damage by way of a guard that will not impair the performance of the head; and + be capable of being isolated and drained, either separately or collectively, without isolating any other sprinklers within the building. Valves provided to control sprinklers referred to in (1) must be installed in accordance with S17C10(2).	
Part E2	**Smoke Hazard Management**	
E2D3 **(Previously E2.2)** General Requirements	+ An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must be designed and installed— - to operate as a smoke control system in accordance with AS 1668.1; or - such that it— ▪ incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and ▪ is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. + Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.

+ Clause	+ Reference	+ Comment	
	must comply with these Sections of the Standard. + 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 air pressurisation for fire-isolated exits.		
E2D4 **(Previously Table E2.2a)** Fire-isolated exits	+ A part of a building listed below must be provided with - An automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1 or; - Open access ramps of balconies in accordance with D3D6 + The above requirements apply to— - The required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp serving— ▪ An atrium to which Part G3 applies - A required fire-isolated passageway or fire-isolated ramp with a length of travel more than 60m to a road or open space. + An automatic air pressurisation system for a fire-isolated exit must serve the entire exit.	**Compliance Readily Achievable:** Level 2 and Level 3 are understood to be fire separated so the Part G3 atrium provisions are not applicable. Therefore, the stairs serving Level 3 will not require a pressurisation system.	
E2D9 **(Previously Table E2.2a)** Buildings not more than 25m in effective height 5, 6, 7b, 8 and 9b buildings	A building not more than 25m in effective height that – + is Class 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or + 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 meet be provided with the one of the following: + 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	**Compliance Readily Achievable:** It is understood sprinklers will be installed to comply with this clause given they are a required system.	

+ Clause	+ Reference	+ Comment
	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.	
NSW E2D16 **(Previously Table E2.2a)** Class 9b assembly buildings: all	The following provisions apply to all Class 9b assembly buildings: + A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with S20C6; and (ii) any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. + Stages and backstages: For the purposes of this clause, where a stage is separated from the auditorium by a proscenium wall incorporating a proscenium opening, a backstage room or area that is not separated from the stage by construction having an FRL of not less than 60/60/60, is taken to form part of the stage. A building or part of a building used as an assembly building which has a stage with a floor area of more than 50 m2 and not more than 150 m2 must, over the stage, be provided with— (A) an automatic smoke exhaust system complying with Specification 21 (including Figure S21C2); or (B) roof mounted automatic smoke-and-heat vents complying with NSW I4D59, in a single storey building or the top storey of a multi storey building. A building or part of a building used as an assembly building which has a stage with a floor area of more than 150 m2 must, over the stage, be provided with an automatic smoke exhaust system complying with	**Performance Solution:** The floor within the multi-purpose hall used for performances is classified as a stage under the NCC. Therefore, as the stage is greater than 50m^2 in floor area, a smoke exhaust system is required above the stage within the auditorium. Performance solution to rationalise the smoke exhaust requirements. (fire engineer to advise). Note: The backstage area, where not separated from the stage, is taken to form part of the stage.

+ Clause	+ Reference	+ Comment
	Specification 21 (including Figure S21C2). A building or part of a building used as an assembly building which has a stage equipped with means of flying scenery must, over the stage, be provided with an automatic smoke exhaust system complying with Specification 21 (including Figure S21C2).	
NSW E2D18 **(Previously Table E2.2a)** Class 9b – assembly buildings: exhibition halls, museums and art galleries	A building or part of a building used as an exhibition hall, museum, art gallery or the like, must be provided with— + where the floor area is more than 3500 m2, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and— + an automatic smoke exhaust system complying with Specification 21; or + roof mounted automatic smoke-and-heat vents complying with Specification 22 , in a single storey building or the top storey of a multi storey building.	**Performance Solution:** The building contains an exhibition hall in a fire compartment greater than 3500m^2. It is understood a performance solution is proposed to rationalise the smoke exhaust requirements (i.e. smoke exhaust rates, reservoir sizes etc), including the possible omission of the system.
NSW E2D19 **(Previously Table E2.2a)** Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)	(1) Unless otherwise described in (2), in a building or part of a building used as an assembly building (excluding the art gallery) where the floor area of a fire compartment is more than 2000 m2, the fire compartment must be provided with— + an automatic smoke exhaust system complying with Specification 21; or + roof mounted automatic smoke-and-heat vents complying with Specification 22, in a single storey building or the top storey of a multi storey building; or + if the floor area of the fire compartment is not more than 5000 m2 and the building has a rise in storeys of not more than 2— – 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. (2) The following buildings are exempt from the provisions of (1): + Sporting complexes, other than indoor sports stadiums with total spectator seating for more than 1000 persons. + Churches and other places used solely for religious worship. + School classrooms.	**Performance Solution:** The building contains an event (non-classroom) use in a fire compartment greater than 2000m^2. It is understood a performance solution is proposed to rationalise the smoke exhaust requirements (i.e. smoke exhaust rates, reservoir sizes etc), including the possible omission of the system. **Further Information Required:** Details of the proposed sub floor space to be reviewed as the design progresses including what is proposed to be contained within the space (including if services coverage is provided).

+ Clause	+ Reference	+ Comment
E2D21 **(Previously Table E2.2a)** Provision for special hazards	Additional smoke hazard management measures may be necessary due to the— + Special characteristics of the building; or + Special function or use of the building; or + Special type or quantity of material stored, displayed or used in a building; or + Special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20.	**Further Information Required:** Assumed no special hazards are present.
Part E3	**Lift Installations**	
E3D3 **(Previously E3.2)** Stretcher Facilities in Lifts	Stretcher facilities, complying with this clause, must be provided in lifts in at least one emergency lift as required by E3D5 or in building where lifts serve any storey above an effective height of 12m. 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 2000mm long x 1400mm high above the floor level.	**Compliance Readily Achievable:** Stretcher facilities in lift is required. The current design is capable of compliance. Details and design certification to be provided as the design progresses.
E3D4 **(Previously E3.3)** Warning Against Use of Lifts in Fire	Warning signs required be provided must be displayed where they can be readily seen and must comply with the details and dimensions of Figure E3D4 below.  	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
E3D6 **(Previously E3.5)** Landings	Access and egress to and from lift well landings must comply with the *Deemed-to-Satisfy Provisions* of Parts D2, D3 and D4.	**Compliance Readily Achievable:** The current design is capable of compliance.
E3D7 **(Previously E3.6, Table E3.6a, Table E3.6b)** Passenger Lift types and their limitations	In an accessible building, every passenger lift must be one of the types identified in this clause, have accessible features in accordance with Table E3D8 and not rely on a constant pressure device for its operation if the lift car is fully enclosed.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.
E3D9 **(Previously E3.7)** Fire Service Controls	In passenger lifts designed in accordance with AS 1735 Parts 1 and 2, all lift cars serving any storey above an effective height of 12m must be provided with fire service controls.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.

+ Clause	+ Reference	+ Comment	
E3D11 (Previously E3.9) Fire Service Recall Operation Switch	Each group of lifts must be provided with one fire service control switch (required by Clause E3D9 above) that activates the fire service recall operation. This clause details the switch, the labelling, the key and operation procedures for a fire service recall operation.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
E3D12 (Previously E3.10) Lift Car Fire Service Drive Control Switch	The lift car fire service drive control switch required by E3D9 must be activated from within the lift car. This clause details the switch, the initiation, the labelling and operation for the fire service drive control switch.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
Part E4	**Emergency Lighting, Exit Signage and Warning Systems**		
E4D2 (Previously E4.2) Emergency Lighting	This clause details when emergency lighting must be installed in Class 2 to 9 buildings. The requirements for buildings and parts of buildings are detailed in sub-clauses (a) to (i) and each sub-clause must be considered as more than one may apply to any single building.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
E4D3 (Previously E4.3) Measurement of Distances	Distance, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Noted	
E4D4 (Previously E4.4) Design and Operation of Emergency Lighting	Every required emergency lighting system must comply with AS2293.1 - 2018	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
E4D5 (Previously E4.5) Exit Signs	An exit sign must be clearly visible to persons approaching the exit and must be installed on, above or adjacent to each door providing egress from a building. Sub-clauses (a) to (d) set out the situations where exit signs are required to be installed.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
E4D6 (Previously E4.6) Direction Signs	If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	
E4D8 (Previously E4.8) Design and Operation of Exit Signs	Every required exit sign must comply with AS/NZS 2293.1 - 2018 and be clearly visible at all times when the building is occupied by any person having the legal right of entry into the building.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	

+ Clause	+ Reference	+ Comment
E4D9 **(Previously E4.9)** Emergency Warning Intercom System (EWIS)	Emergency Warning Intercom System (EWIS) complying with AS 1670.4 - 2018 must be installed— + In a Class 9b building used as a school and having a rise in storeys of more than 3 or used as a theatre, public hall, or the like, having a floor area more than 1,000m^2 or a rise in storeys >2.	**Compliance Readily Achievable:** The building has a rise in storeys more than 3 and so will require an EWIS system. The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.
Section F	**Health and Amenity**	
Part F1	**Surface water management, rising damp and external waterproofing**	
F1D3 **(Previously F1.1)** Stormwater Drainage	Stormwater drainage must comply with AS/NZ 3500.3 – 2021 Note: This clause does not apply to a balconies, podiums or the like— + where the flooring is of timber decking or other perforated flooring; or + which is located directly above ground.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.
F1D4 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. Note: This clause do not apply to— + a balcony, podium or similar horizontal surface part of a building— - where the flooring is of timber decking or other perforated flooring; or - which is located directly above ground. - A roof with a covering complying with F3D2(a) to (d).	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.
F1D5 **(Previously F1.4)** External waterproofing membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— + consisting of materials complying with AS 4654.1; and + designed and installed in accordance with AS 4654.2.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage. This is also applicable to the L4 areas.

+ Clause	+ Reference	+ Comment
	Note: The requirements of this clause do not apply to— + a balcony, podium or similar horizontal surface part of a building— - where the flooring is of timber decking or other perforated flooring; or - which is located directly above ground. + A roof with a covering complying with F3D2(a) to (d).	
F1D6 **(Previously F1.9)** Damp-proofing	Moisture from the ground must be prevented from reaching— + the lowest floor timbers and the walls above the lowest floor joists; and + the walls above the damp-proof course; and + the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. Where a damp-proof course is provided, it must consist of— + a material that complies with AS/NZS 2904; or + impervious sheet material in accordance with AS 3660.1.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.
F1D7 **(Previously F1.10)** Damp-proofing of floors on the ground	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. The above requirements of do not apply where— + weatherproofing is not required; + or the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.
Part F2	**Wet Areas and Overflow Protection**	
F2D2 **(Previously F1.7)** Wet area construction	This clause requires that wet areas in Class 2 to 9 buildings must be waterproofed. It prescribes the standards to which the work must be carried on the construction of rooms containing urinals and their installation.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
F2D3 **(Previously F1.7(b) and (c))** Rooms containing urinals	Where a urinal is installed within a building, this clause contains design requirements around the requirements for floor wastes and impervious wall and floor surfaces.	Noted
F2D4 **(Previously F1.11)** Floor wastes	(1) 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. (2) Where a floor waste is installed— (a) the minimum continuous fall of a floor plane to the waste must be 1:80; and (b) the maximum continuous fall of a floor plane to the waste must be 1:50.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.
Part F3	**Roof and Wall Cladding**	
F3P1 **(Previously FP1.4)** Weather-proofing	A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause— + unhealthy or dangerous conditions, or loss of amenity for occupants; and + undue dampness or deterioration of building elements. Note: There are limited Deemed-to-Satisfy Provisions for this Performance Requirement in respect of external walls (see Clause F3D5).	**Performance Solution:** A performance solution report is required to be prepared to Performance Requirement F3P1 in relation to weatherproofing of external walls. This may be through Verification Method F3V1, or an alternative suitable method. This will be required from the Façade Engineer.
F3D2 **(Previously F1.5)** Roof coverings	A roof must be covered with— + roof tiles complying with AS 2049, fixed in accordance with AS 2050; or + metal sheet roofing complying with AS 1562.1; or + plastic sheet roofing designed and installed in accordance with AS 1562.3; or + terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or + an external waterproofing membrane complying with F1D5.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.
F3D3 **(Previously F1.6)** Sarking	Sarking-type materials used for weatherproofing of roofs must comply with AS/NZS 4200 parts 1 and 2	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
F3D4 **(Previously F1.13)** Glazed assemblies	The following glazed assemblies in an *external wall*, must comply with AS 2047 requirements for resistance to water penetration: + Windows. + Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. + Adjustable louvres. + Shopfronts. + Window walls with one piece framing. The following glazed assemblies need not comply: + All glazed assemblies not in an external wall. + Revolving doors. + Fixed louvres. + Skylights, roof lights and windows in other than the vertical plane. + Sliding and swinging glazed doors without a frame. + Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. + Second-hand windows, re-used windows and recycled windows. Heritage windows.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
F3D5 Wall cladding	External wall cladding must comply with one or a combination of the following: + Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. + Autoclaved aerated concrete: AS 5146.3. + Metal wall cladding: AS 1562.1. The following buildings need not comply: + A Class 7 or 8 building where in the particular case there is no necessity for compliance. + A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. + An open spectator stand or open deck carpark.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses.

+ Clause	+ Reference	+ Comment
Part F4	**Sanitary and Other Facilities**	
F4D3 **(Previously F2.2)** Calculation of Number of Occupants and Fixtures	This clause sets out the requirements for the calculation of the number of occupants and the number of sanitary facilities required to be installed in Class 2 to 9 buildings.	**Note:** See D2D18 above for the estimated populations throughout.
F4D4 **(Previously F2.3)** Facilities in Class 3 to 9 buildings	This clause provides the requirements for sanitary facilities to be installed in Class 3, 5, 6, 7, 8 buildings. When accessible sanitary facilities are provided, they account once for each sex. Unisex sanitary compartments (other than strictly unisex accessible sanitary facilities) are not permitted for use, other than solely by staff in circumstances where not more than 10 persons are employed. Class 9b theatres must be provided with one shower for each 10 participants or part thereof.	**Further Information Required:** The current design is capable of compliance. An updated population schedule is required to confirm compliance for the revised layouts. Note: Performance Solution will be required if gender neutral facilities are to be proposed. 3 showers are also required for the theatre participants.

+ Ground Level – Total

Occupancy Class as per F4D4

	Closet Pans		Urinals		Washbasins		Complies
	Required	Proposed	Required	Proposed	Required	Proposed	Yes/No
250 Male Patrons	2	7	5	7	3	11	Yes
60 Male Students	2		2		3		
10 Male Staff	1		0		1		
250 Female Patrons	6	15	-	-	3	14	Yes
60 Female Students	4		-	-	3		
10 Female Staff	1		-	-	1		
Male Theatre / staff	TBC	TBC	TBC	TBC	TBC	TBC	TBC
Female Theatre / staff	TBC	TBC	-	-	TBC	TBC	TBC

+ Clause	+ Reference	+ Comment

+ Level 1 Total

Occupancy Class as per F4D4

	Closet Pans		Urinals		Washbasins		Complies
	Required	Proposed	Required	Proposed	Required	Proposed	Yes/No
75 Male Students	2	4	2	2	2	4	Yes
10 Male Staff	1		0		1		
75 Female Students	4	6	-	-	3	5	Yes
10 Female Staff	2		-	-	1		

+ Level 2 – Total

Occupancy Class as per F4D4

	Closet Pans		Urinals		Washbasins		Complies
	Required	Proposed	Required	Proposed	Required	Proposed	Yes/No
55 Male Students	2	3	2	2	3	4	Yes
10 Male Staff	1		0		1		
55 Female Students	4	6	-	-	3	5	Yes
10 Female Staff	2		-	-	1		

+ Level 3 – Total

Occupancy Class as per F4D4

	Closet Pans		Urinals		Washbasins		Complies
	Required	Proposed	Required	Proposed	Required	Proposed	Yes/No
50 Male Spectators	1	3	1	2	1	5	No
40 Male Students	2		1		2		
5 Male Staff	1		0		1		
50 Female Spectators	2	5	-	-	1	5	No
40 Female Students	3		-	-	2		
5 Female Staff	1		-	-	1		

+ Clause	+ Reference	+ Comment	
Note 1: The accessible toilet facilities have been counted once for each sex in accordance with BCA clause F4D3.			
F4D8 **(Previously F2.5)** Construction of Sanitary Compartments	Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend – + from floor level to the ceiling in the case of a unisex facility; or + a height of not less than 1.5m above the floor if primary school children are the principal users; or + 1.8m above the floor in all other cases. The door to a fully enclosed sanitary compartment must open outwards; or 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.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
F4D9 **(Previously F2.6)** Interpretation: Urinals and Wash Basins	A urinal may be an individual stall or wall-hung urinal, each 600mm length of a continuous urinal trough or a closet pan used in place of a urinal. A washbasin may be an individual basin or a part of a hand washing trough served by a single water tap.	Noted	
Part F1	**Room Heights**		
F5D2 **(Previously F3.2)** Height of Rooms and Other Spaces.	The ceiling heights are prescribed and should be checked for all classes and parts during assessment or the design process. The minimum ceiling heights in a Class 9b building are as follows: + School classroom, or other assembly building or part accommodating not more than 100 persons – 2.4m. + Theatre, public hall, or other assembly building or part accommodating more than 100 persons – 2.7m. In any building: + Bathrooms, sanitary compartments, tea preparations rooms, pantries, store rooms or the like – 2.1m, + A commercial kitchen – 2.4m, + Above a stairway, ramp, landing or the like – 2m.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.	

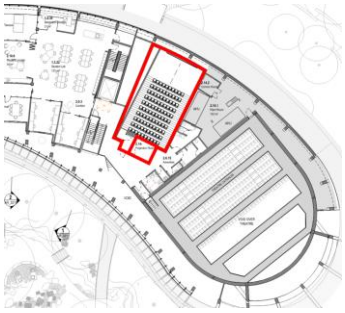
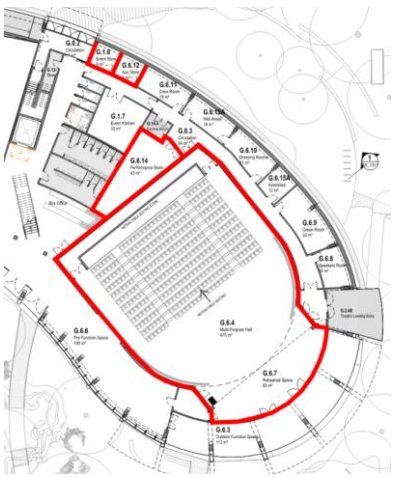
+ Clause	+ Reference	+ Comment
F6D1 **(Previously F4.1)** Natural Lighting	Natural lighting must be provided in: + Class 9b buildings — to all general purpose classrooms in primary or secondary schools and all playrooms or the like for the use of children in an early childhood centre.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.
F6D3/F6D4 **(Previously E4.2/F4.3)** Method and Extent of Achieving Natural Lighting	Windows or the like are to have an aggregate light transmitting area of not less than 10% of the floor area of the room. In a Class 2, 3 or 9 building or Class 4 part of a building, a required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must not be less than a horizontal distance from that boundary or wall that is the greater of— + generally — 1 m; and + 50% of the square root of the exterior height of the wall in which the window is located, measured in metres from its sill.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
F6D5 **(Previously F4.4)** Artificial Lighting	Artificial lighting must be provided in required stairways, passageways, and ramps and where natural light is insufficient. The artificial lighting system must comply with AS/NZS 1680.0. Windows or the like are to have an aggregate light transmitting area of not less than 10% of the floor area of the room. Artificial lighting must be provided where occupants seeking egress in an emergency, in— + Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. The system may provide a lesser level of illumination to the following spaces during times when the level of lighting would be inappropriate for the use: + A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting required by Part H1. + A museum, gallery or the like, where sensitive displays require low lighting levels.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate stage.

+ Clause	+ Reference	+ Comment	
F6D6 **(Previously F4.5)** Ventilation of Rooms	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have natural ventilation complying with F6D7 **or** a mechanical or air-conditioning system complying with AS1668.2 and AS/NZS 3666.1. Note: NSW F6D6 - a mechanical ventilation or air-conditioning system complying with AS 1668.2 – the reference to AS/NZS 3666.1 is deleted from the BCA in NSW as the need to comply with this standard is regulated under the relevant section of the Public Health Act 1991.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate stage.	
F6D7 **(Previously F4.6)** Natural Ventilation	Natural ventilation must consist of openings, windows, doors or other devices which can be opened— with a ventilating area not less than 5% of the floor area of the room required to be ventilated. Additionally, open to a suitably sized space open to the sky or an adjoining room in accordance with F6D8.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses. It is assumed the building will generally be mechanically vented except for level 4.	
F6D8 **(Previously F4.7)** Ventilation Borrowed From Adjoining Rooms	Natural ventilation to a room may come through a window, opening ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within a sole-occupancy unit or the enclosed verandah is common property and be carried out in accordance with the requirements of sub-clauses (a), (b) & (c).	Noted	
F6D9 **(Previously F4.8)** Restriction on Position of Water Closets and Urinals	A room containing a water closet pan or urinal must not open directly into a kitchen or pantry, public dining room or restaurant, a dormitory in a Class 3 building, a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand) or a workplace normally occupied by more than 1 person.	**Complies:** WCs are adequately located.	
F6D10 **(Previously F4.9)** Airlocks	Where prohibited under F6D9 from opening directly to another room— - access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m2 and fitted with self-closing doors at all access doorways; or - the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement to be provided at BCA Crown Certificate. stage. Note that all sanitary facilities appear to be screened from view.	

+ Clause	+ Reference	+ Comment
Section G	**Ancillary Provisions**	
Part G1	**Minor Structures and Components**	
NSW G1D5 (Previously NSW G1.101) Provision for Cleaning of Windows	A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level. A building satisfies this requirement where the windows can be cleaned wholly from within the building; or provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
Part G2	**Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues**	
G2D2 (Previously G2.2) Installation of Appliance	Domestic solid-fuel burning appliances must comply with AS/NZS 2918. Boilers and pressure vessels must comply with Specification 30.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
Part G3	**Atrium Construction**	
G3D1 Application	Application of Part	**Further Information Required:** Level 2 and Level 3 are to be fire separated so not more than 3 storeys are connected in a sprinkler-protected building to avoid atrium provisions. Further details are required of the fire separation between levels for our review, including the fire separation around the open stair.
Part G6	**Occupiable Outdoor Areas**	
G6D1 (Previously G6.1) Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of the BCA. The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. Except for G6D2, the Deemed-to-Satisfy Provisions of this Part do not apply to— + an occupiable outdoor area with an area less than $10m^2$.	**Compliance Readily Achievable:** The Outdoor Garden space and multi-purpose court on Level 3 are classified as an Occupiable Outdoor Area.

+ Clause	+ Reference	+ Comment
G6D2 **(Previously G6.2)** Fire Hazard Properties	Subject to the below, a lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element. The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: + Average specific extinction area. + Smoke-Developed Index. + Smoke development rate + Smoke growth rate index	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D3 **(Previously G6.3)** Fire Separation	For the purposes of the Deemed-to-Satisfy Provisions of C3D8, C3D9, C3D10, a reference to a storey includes an occupiable outdoor area, however a fire wall cannot be used to separate an occupiable outdoor area into different fire compartments.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D4 **(Previously G6.4)** Provision of Escape	For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D5 **(Previously G6.5)** Construction of Exits	For the purposes of the Deemed-to-Satisfy Provisions of Part D3, a reference to a storey or room includes an occupiable outdoor area.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D6 **(Previously G6.6)** Fire Fighting Equipment	Except for S17C7(2)(a), for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D7 **(Previously G6.7)** Lift Installations	For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.
G6D8 **(Previously G6.8)** Visibility in an Emergency, Exit Signs, and Warning Signs	For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	**Compliance Readily Achievable:** The current design is capable of compliance. Details and design certification to be provided as the design progresses. Note that exit and emergency lighting is to comply within occupiable outdoor areas as if they were internal areas.

+ Clause	+ Reference	+ Comment
Section I	**Special Use Buildings**	
Part I1	**Class 9b Buildings**	
I1D1 **(Previously H1.1)** Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to every Class 9b building or part of a building which is a school assembly, church or community hall with a stage and any backstage area with a total floor area of more than 300m^2 or a stage/backstage in any other building with a total floor area of more than 200m^2 or any other stage with an associated rigging loft. Parts I1D4 applies to all Class 9b buildings & I1D7 applies to all enclosed Class 9b buildings.	**Compliance Readily Achievable:** This section is applicable to the Lecture Theatre / Cinema room.
I1D4 **(Previously H1.4)** Seating Area	This clause outlines the requirements of a seating area in a theatre, stage and public hall. The gradient of the floor surface for the stand must be stepped so that— + a line joining the nosing's of consecutive steps does not exceed an angle of 30° to the horizontal; and + the height of each step in the stepped floor (if proposed) is not more than 600mm; and + any opening is not more than 125mm. Where an aisle divides the stepped floor and the difference in level between any 2 consecutive steps— + exceeds 230mm but not 400mm — an intermediate step must be provided in the aisle; and + exceeds 400mm — 2 equally spaced intermediate steps must be provided in the aisle; and + the going of intermediate steps must be not less than 270mm and such as to provide as nearly as practicable equal treads throughout the length of the aisle. The clearance between the proposed new rows of fixed seats must be not less than— + 300mm where the distance to an aisle is not more than 3.5 m; or + 500mm where the distance to an aisle is more than 3.5 m.	**Further Information Required:** The current design is capable of compliance. Further details required to the Lecture Theatre seating area which must comply with this clause.

+ Clause	+ Reference	+ Comment
I1D7 **(Previously H1.7)** Aisle Lights	In every enclosed Class 9b building, where the general lighting is dimmed or extinguished during occupation and the floor is stepped or inclined at a slope steeper, aisle lights must be provided to illuminate the full length of the aisle and tread of each step.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses (if provided to the Lecture / Cinema).
Part NSW I4	**Entertainment Venues Other than Temporary Structures and Drive-in Theatres**	
I4D1 **(Previously NSW H101.1)** Application of Part	This Part applies to every entertainment venue as described in the Environmental Planning and Assessment Regulation 2021.	**Note:** This part is applicable to both the GL multi-purpose hall and the L1 cinema which are classified as an Entertainment Venue.
I4D2 **(Previously NSW H101.2)** Fire Separation	If an Entertainment Venue forms part only of a building, then— + the whole of the entertainment venue; or + the part containing the stage, backstage area and auditorium must be separated from the other parts of the building by construction having an FRL of not less than 60/60/60.	**Further Information Required:** The Entertainment Venues are to be fire separated from the remainder of the building with 60-minute construction. Fire compartmentation details to be provided as the design progresses noting the current design is capable of compliance. It is understood fire separation is proposed as nominated in red below. Fire engineer to review and provide advice on potential rationalisation of fire separation requirements. *Level 1 Cinema*  *Ground Level Multi-Purpose Hall* 

+ Clause	+ Reference	+ Comment	
I4D3 **(Previously NSW H101.3)** Foyer Space	Where an entertainment venue is used principally for the purpose of— + exhibiting films; or + conducting live stage productions, Foyer space(excluding stairways and concession areas) must be provided on the basis of at least 0.25m2 for each person that the auditorium accommodates.	**Compliance Readily Achievable:** There appears to be sufficient Foyer spaces within the 'pre function zone'.	
I4D5 **(Previously NSW H101.5)** Conventional stages	This clause applies to a conventional stage, that is, a stage which is separated from the auditorium by a proscenium wall incorporating a proscenium opening.	**Noted:** The stage is a flat removeable type of stage and not a conventional stage as defined in the NCC.	
I4D10 **(Previously NSW H101.6)**	This clause applies to a stage that is not a conventional stage within the meaning of NSW H101.5.	**Noted:** This stage has been assessed as a 'non-conventional' stage.	
I4D11 **(Previously NSW H101.6.1)** Small stages	A stage which is more than 50 m^2 but not more than 150 m^2 in area must have at least 2 means of egress from the backstage area.	**Compliance Readily Achievable:** Details of the stage area to be confirmed as the design develops. Noting 2 means of egress are currently provided nonetheless.	
I4D12 **(Previously NSW H101.6.2)** Large Stages	A stage which is more than 150m^2 in area must have at least 2 means of egress from the backstage area.	Complies: Backstage area has been provided with two exits.	
I4D13 **(Previously NSW H101.7)** Flying Scenery	This clause applies to stages that are provided with flying scenery.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided of the rigging loft / flying scenery as the design progresses.	
I4D14 **(Previously NSW H101.8)** Load Notice	A notice indicating the actual distributed and concentrated load for which the stage floor has been designed must be conspicuously and permanently displayed in a position adjacent to the stage floor. The notice must be in legible letters and figures – + On at least 50mnm high; and + On a contrasting background	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
I4D17 **(Previously NSW H101.11)** Seating in Rows: application	This clause does not apply to continental seating or seating at tables.	Note. The theatre is no longer classified as continental seating due to the intervening aisles. Therefore, clauses I4D18 to I4D25 will apply.	

+ Clause	+ Reference	+ Comment
I4D18 Seating in Rows: number of seats	Subject to NSW I4D22, where seating is arranged in rows, the maximum number of seats in each row must not exceed— + 8 where there is an aisle at one end only of the row; or + 16 where there are aisles on both ends of the row.	**Compliance Readily Achievable:** Current design complies with this requirement.
I4D19 Seating in Rows: chairs used for seating	Chairs used for seating must— + where they have arms, be at least 500 mm from centre to centre; and + where they do not have arms, be at least 450 mm from centre to centre; and + have a minimum lateral clearance of at least 300 mm between— – the front of each chair and the back of the chair in front; or – if a guardrail is provided in front of the chairs, between the front of each chair and the guardrail; and + have a distance of at least 950 mm between the back of the chair and the back of the chair in front.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.
I4D20 Seating in Rows: chairs in auditoriums – level floors	Chairs in an auditorium that has a level floor must be— + securely fastened to the floor; or + secured together in groups of not less than 4 and not more than 16.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.
I4D21 Seating in Rows: chairs in auditoriums – sloping floors	Chairs in an auditorium having a sloping floor, or having stepped or inclined platforms, must be securely fastened to the floor or platform.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.
I4D22 Seating in Rows: radiating aisles in seating areas	Where seating is securely fastened to the floor and arranged in rows of concentric circles, semi-circles or segments of circles, with radiating aisles— + the number of seats in each row between 2 aisles must not exceed 24; and + each seat must— – have a minimum lateral clearance of at least 325 mm between the front of the seat and the back of the seat in front; and – have a distance of at least 975 mm between the back of the seat and the back of the seat in front; and + the rows may be curved or straight.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.

+ Clause	+ Reference	+ Comment
I4D23 Seating in Rows: aisles and cross-overs	Where aisles and cross-overs are provided— + each aisle must have a width of at least 1000 mm and each cross-over must have a width of at least 1500 mm; and + the floor of each aisle must not have a grade of more than 1 in 8 at any part; and + if there is a step from a row to an aisle or from a landing to an aisle, the step must not project into the aisle.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.
I4D24 Seating in Rows: platforms and steps	Where an aisle contains platforms or steps— + the platforms and steps must extend for the full width of the aisle; and + if there are no intervening steps between levels of platforms, the height of the platform riser must not be more than 200 mm; and + if there are one or more intervening steps between the levels of platforms— – each riser must be at least 100 mm but not more than 200 mm high; and – each going must be at least 250 mm deep; and – risers and goings must be uniform; and + goings which are more than 450 mm deep at platform level must have a grade of not more than 1 in 50; and + at the entrance from the aisle to each row there must be a clear level floor space, extending the full width of the aisle, of at least 300 mm, measured from the back of the row in front; and + any going projecting in front of a seat adjacent to an aisle must be protected by a guardrail.	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.
I4D25 Seating in Rows: stepped platforms	Where stepped platforms without chairs or stepped platforms with bench seats, are used for seating— + each platform must be at least 700 mm deep; and + each seating space must be at least 450 mm wide, measured along the front of the platform or bench seat; and + each seating space must be numbered consecutively; and + at the entrance from the aisle to each row there must be a clear level floor space, extending the full width of the aisle, of at least 300 mm, measured from the back of the row in front; and	**Compliance Readily Achievable:** Further details of auditorium and cinema seating required.

+ Clause	+ Reference	+ Comment	
	+ any going projecting in front of a seat adjacent to an aisle must be protected by a guardrail; and + in the case of stepped platforms with bench seats, there must be at least 300 mm between the back of each seat and the front of the platform behind, or the front of the bench seat behind, whichever is the closer.		
I4D26 **(Previously NSW H101.12)** Continental Seating: Application	NSW I4D27 to NSW I4D35 apply to continental seating.	**Noted:** The seating area in the Theatre does not meet the NCC definition of continental seating as the rows do not extend the full width of the auditorium because of the intervening aisles.	
I4D36 **(Previously NSWS H101.13)** Provision of Guardrails – Location	Guardrails must be provided— + along the fascia of each balcony or box; + if there is a stepped floor, along the front edge of each cross-over; and + where NSW H101.13.2 and NSW H101.13.3 apply.	**Compliance Readily Achievable:** The current design is capable of compliance. Details of guardrails to be provided as the design progresses.	
I4D37 **(Previously NSW H101.13.2)** Fixed Back Seats	If seats with fixed backs are provided, guardrails that extend for the full width of the seating, must be provided at least 500 mm above the platform unless— + fixed seat backs of the next lower level project at least 500 mm above the level of the stepped platform; and + there is only one riser between the platform and the next lower cross-over.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
I4D38 **(Previously NSW H101.13.3)** Steps Between Platforms	If— + there is more than one intervening step in an aisle between levels of platforms, a guardrail must be provided (at a vertical height of at least 660mm measured above the nosing of each tread and of the upper platform) to the sides of the aisle adjacent to those steps; and + there is more than one intervening step in an aisle between levels of platforms, and that aisle is along a wall, a continuous guardrail must be affixed to that wall at a height of at least 865mm above the nosing of each tread; and + the end of a platform or the back of the highest platform does not abut a wall that extends at least 660mm above the floor level of the platform, a guard rail not less than 660mm high must be provided—	**Compliance Readily Achievable:** The current design is capable of compliance. Details, including the dimensions of steps and platforms, to be provided as the design progresses.	

+ Clause	+ Reference	+ Comment	
	- at the ends of the platform, extending from the front of the first riser to the back of the highest platform; and - at the back of the highest platform, extending the full width of the platform; and + There is an inclined floor, the raised section of which is not bounded by walls at least 660mm high, a guard rail must be provided that extends around the perimeter of the raised section at a height of at least 660mm above the inclined floor level; and + seating at tables is provided on a stepped platform, a guardrail at least 500mm high must be provided along the front edge of the platform		
I4D39 **(Previously NSW H101.14)** Guardrails	NSW I4D40 to NSW I4D42 apply to seating areas.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
I4D40 **(Previously NSW H101.14.1)** Continental seating	Where a guardrail is provided in front of a row of chairs— + the distance between the back of each chair in that row, and the guardrail must be not less than the distance specified in Column 2 of NSW Table I4D29 for the number of chairs in that row; and + the minimum lateral clearance between the front of each chair in that row and the guardrail must be not less than the clearance specified in Column 3 of NSW Table I4D29 for the number of chairs in that row.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
I4D42 **(Previously NSW H101.14.3)** Cross-overs	A guardrail provided along the front edge of a cross-over on a stepped floor— + must be at least 750mm high; and + must extend for the full distance between aisles, or between a wall and an aisle, or for such other distance as considered necessary.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be provided as the design progresses.	
I4D43 **(Previously NSW H101.15)** Dressing Rooms	A dressing room or 2 or more adjoining dressing rooms, having a total floor area of more than 50m^2, must— + be separated from other parts of the building by construction having an FRL of not less than 60/60/60;	**Further Information Required:** Dressing rooms to be fire-separated from building remainder by FRL 60/60/60 fire-rated construction. Further details of fire-rated construction required to confirm compliance.	

+ Clause	+ Reference	+ Comment	
	+ have at least 2 means of egress as remote from each other as possible, one of which must discharge— - directly to a road or open space; or - through a fire-isolated exit to a road or open space.		
I4D44 **(Previously NSW H101.16)** Storerooms	A storeroom must be separated from other parts of the building by construction having an FRL of not less than 60/60/60.	**Further Information Required:** Store rooms to be fire separated to FRL 60/60/60. Further details of fire-rated construction required to confirm compliance.	
I4D45 **(Previously NSW H101.17)** Projection suites: Application	+ NSW I4D45 to NSW I4D48 apply to projection suites. + A projection suite must be provided in an entertainment venue intended to be used for the showing of films.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the design specification.	
I4D46 **(Previously NSW H101.17.1)** Projection suites: rooms to be provided	A projection suite in accordance with the staffing requirements of Schedule 72 of the Environmental Planning and Assessment Regulation 2021 must contain either— + a projection room and sanitary accommodation comprising at least 1 closet pan and 1 washbasin, where the projection suite is continually staffed; or + a projection room fitted with the following equipment— - an automatic fire suppression system in accordance with SSL Appraisal Specification FAS 102 or a sprinkler system complying with AS 2118; and - a smoke detection which will— ▪ comply with AS 1670.1; and ▪ be connected to a fire station or other approved monitoring service where arrangements are in place to initiate fire brigade response; and ▪ close down all shutters fitted to projection or observation ports; and activate sufficient general lighting to provide a minimum of 40 lux measured at floor level in any auditorium affected; and ▪ operate a public address system to automatically announce a suitable message from the management of the premises; and	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the design specification.	

+ Clause	+ Reference	+ Comment	
	▪ activate an audible alarm to immediately indicate to management the presence of smoke in the projection room.		
I4D47 **(Previously NSW H101.17.2)** Projection suites: fire separation	A projection suite must be separated from all other internal parts of the building in which it is located by construction having an FRL of not less than 60/60/60.	**Further Information Required:** The projection room serving the cinema is to be fire-separated with 60-minute construction, including from the rest of the cinema. Further details of fire-rated construction required to confirm compliance.	
I4D48 **(Previously NSW H101.17.3)** Projection suites: concession for protection of some openings	If a projection or observation port is not more than 0.1m^2 in area— + A metal shutter not less than 1.5mm thick may be fitted thereto instead of the protection required under NSW C4D12; and + Any metal shutter or protection system must be equipped with a device to permit the closing of the shutter or the protection system from easily accessible operating positions adjacent to each egress doorway from the projection room.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the design specification.	
I4D51 **(Previously NSW H101.19.1)** Main Switchboard	The switchboard containing the main isolation switch must- + Be located in a position that is readily accessible to authorised persons, and to the fire brigade in the case of an emergency; and + Be enclosed by construction having an FRL of not less than 60/60/60.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.	
I4D52 **(Previously NSW H101.19.2)** Circuit Protection	Protection of a final sub-circuit originating at a switchboard or distribution board must be by means of circuit breakers.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.	
I4D53 **(Previously NSW H101.19.3)** Separate Sub-Mains	Where an entertainment venue has its mains supply in common with that of another building or where it is a part of a building— + the entertainment venue must be served by a separate and independent sub-main from the main switchboard; and + each such sub-main, the consumer's main and the supply authority's conductors within the building must be protected against fire by means of—	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.	

+ Clause	+ Reference	+ Comment
	- mineral-insulated metal-sheathed cables or other cables that provide at least 2 hours' fire protection; or - heavy-duty PVC conduit or metallic pipe, concrete encased in walls or slabs with a minimum of 50mm cover; or - heavy-duty PVC conduit or metallic pipe, buried at least 500mm below ground level, for underground cabling.	
I4D54 **(Previously NSW 101.20.1)** Lighting Switches	Any switch controlling the lighting system must not be accessible. Where, during normal use, general lighting may be dimmed or switched off, an override switch to switch on all the general lighting instantaneously must be installed in the auditorium in a position accessible to management.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.
I4D55 **(Previously NSW H101.20.2)** Lighting Levels	Where the lamps utilised in the general lighting are of a type that will not relight immediately after the restoration of the primary electricity supply to those lamps— + a time delay or other suitable means must be provided to maintain the emergency lighting for a period not less than that necessary to allow the general lighting lamps to restrike; or + lamps of a type that will provide immediate lighting must be installed and— - arranged in such a manner as to ensure visual conditions not inferior to those required to be provided by the emergency lighting; and - capable of being switched in common with the general lighting and of being controlled also by the override switch required by NSW H101.20.1(b).	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.
I4D56 **(Previously NSW H101.20.3)** Provision of Aisle Lighting	Where general lighting is to be either dimmed or extinguished when the public is in attendance and where the floor is stepped or at an inclination greater than 1 in 12, aisle lights must be provided to illuminate the length of each aisle and the tread of each step therein.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.
I4D57 **(Previously NSW H101.20.4)** Aisle Lighting Power Supply	Where an aisle light is installed in a seat frame, it must be supplied at a voltage of not more than 32 volts AC or 115 volts DC.	**Compliance Readily Achievable:** The current design is capable of compliance. The requirements of this clause to be listed in the electrical design specification.

+ Clause	+ Reference	+ Comment	
I4D58 **(Previously NSW H101.20.5)** Aisle Lighting Alternative Power Supply	Aisle lighting must be provided with an alternative electricity supply that— + is capable of being automatically energised in the event of failure of the primary lighting electricity supply; and + complies with the provisions applying to emergency lighting.	**Compliance Readily Achievable:** The current design is capable of compliance. Details to be included into the electrical design.	
I4D59 **(Previously NSW H101.22)** Automatic smoke-and-heat vents for stages	An automatic smoke-and-heat vent system required by NSW E2D16(c) for stages and backstages must— + be capable of automatic operation by the inclusion of a heat sensing device designed to activate the system at a temperature of not more than 71°C; and + be capable of being released manually from positions at either side of the stage and of being fully activated from either position; and + have a notice, prominently displayed at each position referred to in (b), clearly indicating the method of activation; and + have an openable area of not less than 10 percent of the total area of the stage.	**Further Information Required:** The current design is capable of compliance. Details to be provided of smoke and heat vent system as the design progresses.	
I4D60 **(Previously NSW H101.23)** Solid fuel burning stoves and open fire places	Solid fuel burning stoves and open fire places must not be installed in premises designed for the purpose of— + exhibiting films; or + conducting live theatre productions.	**Further Information Required:** The current design is capable of compliance. Confirmation required no solid fuel burning stoves and open fire places are proposed as the design progresses.	
I4D61 **(Previously NSW H101.24.1)** Fuel Gas Cylinders - General	Fuel gas cylinders must— + be housed in an enclosure that is located outside the building; and + Comply with the ventilation requirements of AS 1596.	**Further Information Required:** The current design is capable of compliance. Confirmation required if fuel gas cylinders are proposed as the design progresses.	
I4D62 **(Previously NSW H101.24.2)** Fuel gas cylinders: enclosures	An enclosure referred to in NSW I4D61— + must be located not less than 3 m from any window, door, vent or other opening; and + if located 3 m or more from a building must— - have a concrete base; and - be constructed from heavy-gauge chain-wire mesh or other suitable material; and - be at least 1.8m high; and - be so designed as to securely contain the gas cylinders in a single line; and	**Note:** Refer to Clause I4D61. Where no fuel gas cylinder is proposed, the requirements of this clause will not be applicable.	

+ Clause	+ Reference	+ Comment
	- be so designed as to allow cross ventilation; and + if located less than 3m from a building must— - have a concrete base; and - have 3 sides constructed from concrete or masonry; and - have a concrete roof; and - be so designed as to securely contain the gas cylinders in a single line; and - have a hinged, heavy-gauge chain-wire door capable of being secured against unauthorised entry; and - have its roof at least 600mm above the uppermost fitting of any fuel gas cylinder housed therein.	
Section J	**Energy Efficiency**	
J1V3 **(Previously JV3)**	Verification using referenced building.	**Compliance Readily Achievable:** The current design is capable of compliance. We understand that a JV3 report may be provided to achieve compliance in accordance with Section J.
Part J3 Elemental Provisions for a SOU of a Class 2 building or Class 4 part	This Part contains Deemed-to-Satisfy Provisions (elemental) for compliance with Part J1. It sets out provisions for the insulation of building fabric and the energy efficiency of domestic services of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.
Part J4 **(Previously J1)** Building Fabric	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the building envelope including roofs, ceilings, roof lights, walls, glazing and floors.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.
Part J5 **(Previously J3)** Building Sealing	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the sealing of a building's glazing, doors, exhaust fans and the like in order to increase thermal comfort for occupants and reduce the energy consumption of any installed air-conditioning systems.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.

+ Clause	+ Reference	+ Comment	
Part J6 **(Previously J5)** Air-conditioning and ventilation	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out the provisions for the efficiency and control of air-conditioning, space heating and ventilation equipment, the efficiency, sealing and insulation requirements for ductwork systems containing fans, and for the efficiency and insulation of pipework and pump systems.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
Part J7 **(Previously J6)** Artificial lighting and power	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the design and configuration of artificial lighting and power, boiling and chilled water units, lifts and escalators and moving walkways.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
Part J9 **(Previously J8)** Energy monitoring and on-site distributed energy resources	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions that enable the monitoring of energy use (other than for billing purposes) and facilitate easy retrofit of renewable energy and electric vehicle charging equipment.	**Compliance Readily Achievable:** The current design is capable of compliance. Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	

4.0 Conclusion

This report contains an assessment of the referenced architectural documentation for the proposed Indigenous Centre of Excellence building at Western Sydney University (Parramatta Campus) against the deemed-to-satisfy provisions of the Building Code of Australia 2022.

Notwithstanding the above, it is considered that the proposed development can readily achieve compliance with the BCA subject to resolution of the matters identified in the Section 3.0 and 4.0 of this report.

Appendices

+ Appendix 1 – Fire Resisting Construction Requirements

TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS				
+ Building Element	+ Class of Building - FRL: (in minutes) Structural adequacy/integrity/insulation			
	2, 3 or 4 part	**5, 7a or 9**	**6**	**7b or 8**
EXTERNAL WALL – (Including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is**:**				
For loadbearing parts:				
Less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3m	90/60/60	120/90/90	180/180/120	240/240/180
3m or more	90/60/30	120/60/30	180/120/90	240/180/90
For non-loadbearing parts:				
less than 1.5m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 to less than 3m	–/60/60	–/90/90	–/180/120	–/240/180
3m or more	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN - Not incorporated in an external wall				
For loadbearing columns	90/–/–	120/–/–	180/–/–	240/–/–
For non-loadbearing columns	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS				
Fire-resisting lift and stair shafts				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120s
Non-loadbearing	–/90/90	–/120/120	–/120/120	–/120/120
Bounding public corridors, public lobbies and the like:				
Loadbearing	90/90/90	120/–/–	180/–/–	240/–/–
Non-loadbearing	–/60/60	–/–/–	–/–/–	–/–/–
Between or bounding sole-occupancy units:				
Loadbearing	90/90/90	120/–/–	180/–/–	240/–/–
Non-loadbearing	–/60/60	–/–/–	–/–/–	–/–/–
Ventilating, pipe, garbage, and the like shafts not used for the discharge of hot products of combustion:				
Loadbearing	90/90/90	120/90/90	180/120/120	240/120/120
Non-loadbearing	–/90/90	–/90/90	–/120/120	–/120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES, AND:				
COLUMNS	90/–/–	120/–/–	180/–/–	240/–/–

FLOORS	90/90/90	120/120/120	180/180/180	240/240/240
ROOFS	90/60/30	120/60/30	180/60/30	240/90/60

Notes:

1. Any lightweight construction in a fire wall or an internal wall required to have an FRL is to comply with Specification 11.
2. Where a 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 typically achieve the same FRL. Where that part is also required to be non-combustible, the supporting part must also be non-combustible.
3. A loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from; concrete or masonry.
4. The method of attaching or installing a finish, lining, ancillary element, or service installation to a building must not reduce the fire-resistance of that element to below that required.
5. Fire rated shafts are required to be enclosed at the top and bottom by construction having an FRL of not less than what the shaft requires (in both directions)
6. The concession granted under S5C15 results in the roof of the building not being required to be fire rated (the building is provided throughout with sprinklers). Notwithstanding, the Atrium provisions override this general concession in BCA Specification 5.
7. Lift shafts are required to be enclosed at the top of the shaft with fire rated construction having an FRL of 120/120/120.
8. Fire isolated exits are to be provided with a fire rated "lid" that achieves an FRL of 120/120/120.
9. Where roof lights are proposed they are required to be located not less than 3 metres from a roof light in an adjoining fire separated part; and must not be more than 20% of the area of the roof.
10. Any loadbearing internal walls or loadbearing fire walls are to be masonry or concrete.
11. External walls must be non-combustible construction. Non-loadbearing parts of an external wall that are more than 3m from a fire source feature need not be fire rated.
12. Internal columns in this building (being less than 25m in effective height) that are in the storey immediately below the roof, can be constructed as follows:
    a. Building with a rise in storeys exceeding 3 – FRL 60/60/60
    b. *Building with a rise in storeys not exceeding 3 – no FRL*

+ Appendix 2 – Fire Safety Schedule

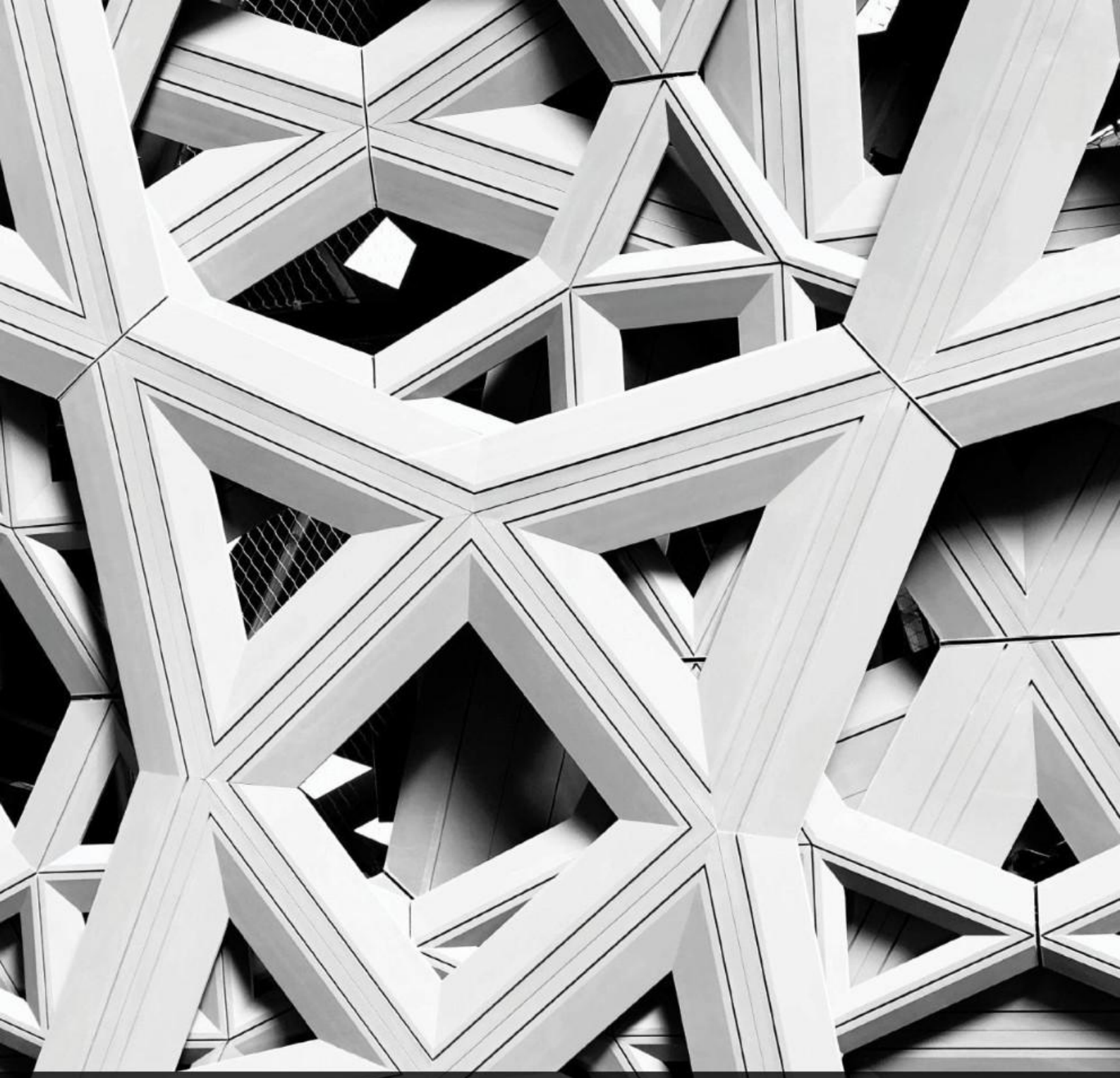
The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final Fire Safety Engineering Review to confirm the works are permissible and do not contradict the base building Performance Solutions.

+ Statutory Fire Safety Measure	+ Design/Installation Standard	+ Existing	+ Proposed
Access Panels, Doors & Hoppers	BCA 2022 Clause C4D14 AS 1530.4 – 2014 Manufacturer's Specifications		✓
Alarm Signalling Equipment	AS 1670.3 – 2018		✓
Automatic Fail Safe Devices	BCA 2022 Clause D3D26		✓
Automatic Fire Detection & Alarm System	BCA 2022 Spec. 20 & 23 AS 1670.1 – 2018		✓
Automatic Fire Suppression Systems	BCA 2022 Spec. 17 & 18 AS 2118.1 – 2017 or AS 2118.4, 6 – 2012		✓
Building Occupant Warning System activated by the Sprinkler System	BCA 2022 Spec. 17 Clause 8 and / or Clause 3.22 of AS 1670.1 – 2018		✓
Emergency Lighting	BCA 2022 Clauses E4D2 & E4D4 AS 2293.1 – 2018		✓
Emergency Warning Intercom System (EWIS)	BCA 2022 Clause E4D9 & Spec. 31 S31C19 AS 1670.4 - 2018		✓
Exit Signs	BCA 2022 Clauses E4D5, NSWE4D6 & E4D8 AS 2293.1 – 2018		✓
Fire Blankets	BCA 2022 Clause E1D14 AS 3504 – 1995 & AS 2444 – 2001		✓
Fire Dampers	BCA 2022 Clause C4D15 AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 Manufacturer's Specification		✓
Fire Doors	BCA 2022 Clauses C3D13, C3D14, C4D3, C4D5, C4D6, C4D7, C4D8 & C4D12 AS 1905.1 – 2015 Manufacturer's Specification		✓
Fire Hose Reels	BCA 2022 Clause E1D3 AS 2441 – 2005		✓
Fire Hydrant Systems (External Hydrants) (Street Hydrants)	BCA 2022 Clause E1D2 AS 2419.1 – 2021		✓

Fire Seals	BCA 2022 Clause C4D15 AS 1530.4 – 2014 & AS 4072.1 – 2014 Manufacturer's Specification		✓
Lightweight Construction	BCA 2022 Clause C2D9 AS 1530.4 – 2014 Manufacturer's Specification		✓
Mechanical Air Handling Systems (Automatic Shutdown)	BCA 2022 Clause E2D3 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012		✓
Portable Fire Extinguishers	BCA 2022 Clause E1D14 AS 2444 – 2001		✓
Required Exit Doors (Power Operated)	BCA 2022 Clause D3D24(2)		✓
Smoke Hazard Management Systems + Smoke Exhaust	BCA 2022 Part E2 AS/NZS 1668.1 –2015		✓
Smoke Dampers	BCA 2022 Spec. 11 AS/NZS 1668.1 – 2015		✓
Stand-by Power Systems	BCA 2022 Spec. 31 AS 3000 – 2018		✓
Wall-Wetting Sprinklers	BCA 2022 Clause C4D5 AS 2118.2 – 2010		✓
Warning & Operational Signs	BCA 2022 Clause C4D7, D3D26, D3D28, D4D7, E4D4 & I4D14 AS 1905.1 – 2015 EP&A (DCFS) Regulation 2021 Section 108		✓
Fire Engineered Performance Solutions TBC	BCA 2022 Performance Requirements TBC		✓

+ Appendix 3 – Temporary Carpark Compliance Statement

Refer to BCA Compliance statement below.



BCA Compliance Statement

Western Sydney University

Parramatta South Campus – Temporary Carpark

Prepared for:
Western Sydney University

Revision 0
16 October 2024
Reference: S240332

bmplusg.com.au

Contents

BCA Compliance Statement

To	Western Sydney University
Attention	Stuart Pullens
Email	s.pullens@westernsydney.edu.au
From	Nini Quach
Subject	Issued for client review
Project No.	S240332
Date	16 October 2024
Pages	5

This statement has been prepared to verify that BM+G have undertaken a review of the design documentation to confirm that Temporary Carparking at Western Sydney University – Parramatta South Campus can be undertaken as Exempt Development against the Building Code of Australia 2022 (BCA).

1.0 Background & Proposed Development

The proposed project located at Western Sydney University Paramatta South Campus consists of the addition of a temporary on -grade carpark to accommodate staff and students required as a result of the construction of the Indigenous Centre of Excellence Facility.

1.1 Capability Statement Objectives

The objectives of this statement are to:

+ Confirm that the proposed works satisfy the BCA related criteria for Exempt Development.
+ Confirm that the architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.

It should be noted that it is not the intent of this statement to identify all BCA provisions that apply to the subject development.

1.2 Relevant Version of the BCA

The current version of the BCA is the BCA 2022, with the next version of the BCA (BCA 2025) scheduled for adoption on 1 May 2025.

It is understood that the subject development will either be Tendered, or commenced, prior to 1 May 2025, in which case BCA 2022 (Vol.2) will apply to the development.

1.3 Referenced Documentation

This report has been prepared based on a review of:

- Accessible Parking confirmation email & Campus Parking Map – S.Pullen (WSU) dated 11.10.24
- Civil Plans prepared by TTW:

Drawing No.	Revision	Date	Drawing	Revision	Date
00001	T2	08.10.2024	03011	T2	08.10.2024
00002	T2	08.10.2024	03012	T2	08.10.2024
00003	T2	08.10.2024	04011	T2	08.10.2024
00011	T2	08.10.2024	04012	T2	08.10.2024
00012	T1	08.10.2024	04021	T2	08.10.2024
01011	T2	08.10.2024	07011	T2	08.10.2024
01012	T2	08.10.2024	07012	T2	08.10.2024
02011	T1	08.10.2024			

1.4 Building Classification

The new building works have been classified as follows:

BCA Classification	Class 10b (On-Grade Carpark) Note: NCC Vo. 2 applies to a Class 10b structure
Type of Construction	N/A
Sprinkler Protected	N/A – Class 10b
Importance Level (Structural)	TBC by Structural Engineer

2.0 BCA Assessment – Key Issues

We note the following BCA compliance matters with relation to proposed carpark works are capable of complying with the BCA. Please note that this is not a full list of BCA clauses, they are the key requirements that relate to the proposed work and the below should be read in conjunction with the BCA.

2.1 Part H1 – Structure

H1D3	**Site Preparation:** Any earth retaining structures associated with the construction of a building or Class 10 structure is to be designed and constructed in accordance with AS4678.

	Comment: Any proposed retaining walls or structures are to be designed and constructed in accordance with AS4678. Certification to be provided from an NER Registered Structural Engineer confirming compliance.

2.2 Part H2 – Damp and Weatherproofing

H2D2	**Drainage:** This clause sets out the requirements of any drainage proposed for the development. Performance RequirementH2P1 is satisfied for drainage if it is designed and constructed in accordance with AS/NZS 3500.3; or provided the stormwater drainage system otherwise complies with (a), Part 3.3 of the ABCB Housing Provisions for drainage **Comment:** Certification is to be provided from the Civil Engineer confirming compliance with AS3500.3 and City of Parramatta stormwater drainage requirements.

2.3 Part H5 – Safe Movement and Access

H5D2	**Stairway and Ramp Construction:** Any proposed stairway and ramps are to comply with the requirements of Part 11.2 of the ABCB Housing Provisions. **Comment:** It is understood that there are no stairs or ramp proposed as part of the temporary carpark works.
H5D3	**Barriers and Handrails:** Barriers are required where the fall to the level below is more than 1m in height. The minimum height of a balustrade is 1m above the floor of the landing, walkway or the like; and 865mm above the floor of a stairway or a ramp. **Comment:** Where there is a fall more than 1m in height, a balustrade complying with the requirements of Part 11.2 of the ABCB Housing Provisions is to be provided.

2.4 Parts D4 – Access for People with Disabilities (NCC Vol.1)

D4D6	**Accessible Parking:** This clause provides details of the number of accessible carparking spaces required in a carpark depending on the classification of the building. Note: NCC Vol.1 Access for People with Disabilities provisions in Part D4 have been considered as the carpark is used in association with the university campus (and not a dwelling). **Comment:** It is understood that there are no accessible parking spaces proposed to be provided in the carparking spaces in the Temporary Carpark given that alternative accessible parking spaces are provided throughout the campus – refer to Campus Parking Map, provided by S.Pullen WSU dated 11.10.2024.

3.0 Conclusion

This report contains a review of the referenced documentation for the proposed alterations against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volumes 1 & 2) Building Code of Australia 2022.

Arising from our review, we are satisfied that subject to the above matters being appropriately adhered to:

+ the works will meet the relevant deemed to satisfy provisions of the BCA; and
+ the works will not cause the existing building to contravene the BCA.

Should you require further assistance or clarification please do not hesitate to contact the undersigned on 02 9211 7777 or

Prepared by:

Nini Quach
Building Surveyor
BM+G

Reviewed by:

Dean Goldsmith
Director
BM+G
Building Surveyor-Unrestricted (NSW)
BDC No.: 0178 MAIBS, AIBS National Accreditation