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BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT

RPAC REVIEW FOR ST CATHERINE's SCHOOL

26 ALBION STREET, WAVERLY NSW 2024

DATE ► 14 June 2019

REPORT NO. ► 5053 REV # 05

PREPARED FOR ► SANDRICK PROJECT DIRECTIONS

PREPARED BY ► AE&D

BCA / Certifiers

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REVISION STATUS				
REVISION	**DATE**	**STATUS**	**WRITTEN**	**CHECKED**
5053 Rev 00	14.04.14	Initial BCA review	JS	MZ
5053 Rev 01	28.07.14	BCA Review for DA Submission	JS	TJ
5053 Rev 02	12.01.18	BCA Review for DA Submission	JS	TJ
5053 Rev 03	23.01.18	BCA Review for DA Submission- minor revisions – no plan change	JS	TJ
5053 Rev 04	06.06.19	BCA Review for S4.55 Changes as highlighted in cloud	JS	TJ
5053 Rev 05	14.06.19	BCA Review for S4.55 Changes as highlighted in cloud and to include amendments based on client comments	JS	TJ

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1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

AED has been commissioned by St Catherine's School, Sydney, to assist with the preparation of an application for Development Consent for the school, which is located at 26 Albion Street, Waverley.

It is important to note that this report has been prepared based on the revised masterplan staging for the project and we confirm that this report reflects that stage 1 is now to be broken into Phase A and Phase B. We further note that this report has assessed the BCA implications of those two stages to indicate impacts where stage 1 phase A is completed and occupied prior to stage 1 phase B being completed and then occupied.

The DA seeks approval for the school's new Research, Performing Arts and Aquatic Centre (RPAC) building.

The primary purpose of this report is to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

1.1 Recommendations

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments, additional information **OR** by way of an Alternative Solution:

BCA Clause	Deemed-to-Satisfy Provision to be addressed
C2.7 Separation by fire walls	Compliance issue: There is no vertical separation between the research centre and the sports centre to consider each a separate building. Therefore a performance based solution would be required to justify the provision of vertical/horizontal fire separation in lieu of vertical separation.
C3.2 Protection of openings in external walls	The following openings are within 6m from another building on the same allotment: • The openings of the RPAC building are less than 6-metres from the Dame Joan building. Hence protection of openings will be required as per C3.4, or addressed via performance based design. Openings within the Dame Joan building also require protection as per clause C3.4, or be addressed via a performance based solution. • The openings of the Research Centre located on level 4 (i.e. voids between columns in the external wall are less than 6-metres from the Sports Centre and exposed). This issue may be addressed via either deemed to satisfy design or a performance based solution.
D1.2 Number of exits required *NSW D1.2(d)(vii)*	Compliance issues: The design contains the following issue: • The phase A design for level 6 shows the second exit path from this storey through to the Research Centre to the north and not yet constructed. As such this storey now only has a single exit being the stair 26. The fire engineer is to review this issue to see if it can be addressed via a performance based solution. • The pool plant area on level 1 requires a vertical rise more than 1.5-m and as such is deemed as a basement. This area is only served by a single exit. This is to be addressed via a performance based solution or a second exit provided.
D1.3 When fire-isolated	Compliance issues: • The proposed main open stair (that discharge at the main entry at

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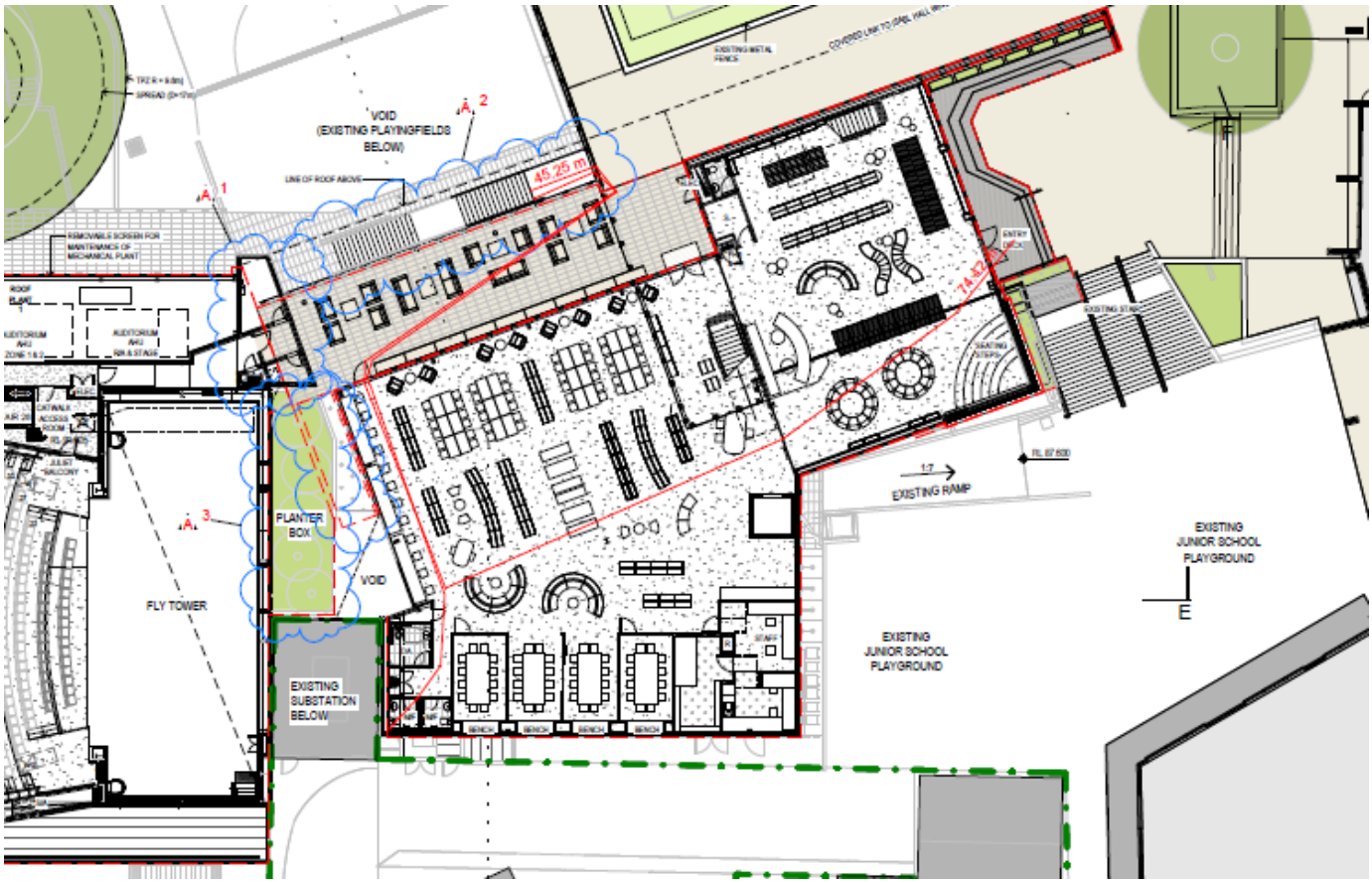
BCA Clause	Deemed-to-Satisfy Provision to be addressed
stairways and ramps are required	Macpherson St), connects or passes by more than 3 levels in the main part of the building due to occupants egressing past the pool area on levels 3 and 2 and the various areas, when discharging from level 6. A performance based solution for the design of the egress pathways is proposed to address this issue. The fire engineer has indicated this will be based on the provision of sprinklers, smoke exhaust and fire/smoke separation. • The egress stair from the class 9b area on level 6 requires occupants to egress via an open stair that connects or passes by more than 3 storeys (Research Centre area). As such this issue will be addressed via a performance based solution.
D1.4 Exit travel distances	The distances of travel are currently excessive as follows: • On level 2 phase A the pool store room has not been provided with a door. • At level 6 phase B occupants are required to travel more than 40-m to get to the egress stair to the west of the Research Centre, circa 46-m from the male toilets in the south east corner to the stair see below for a mark up on plan. This will need to be addressed via a performance based solution. • From the level 1 pool handler room it is more than 20-m to a point of choice, circa 23.5-m, this is required to be addressed via a performance based solution.



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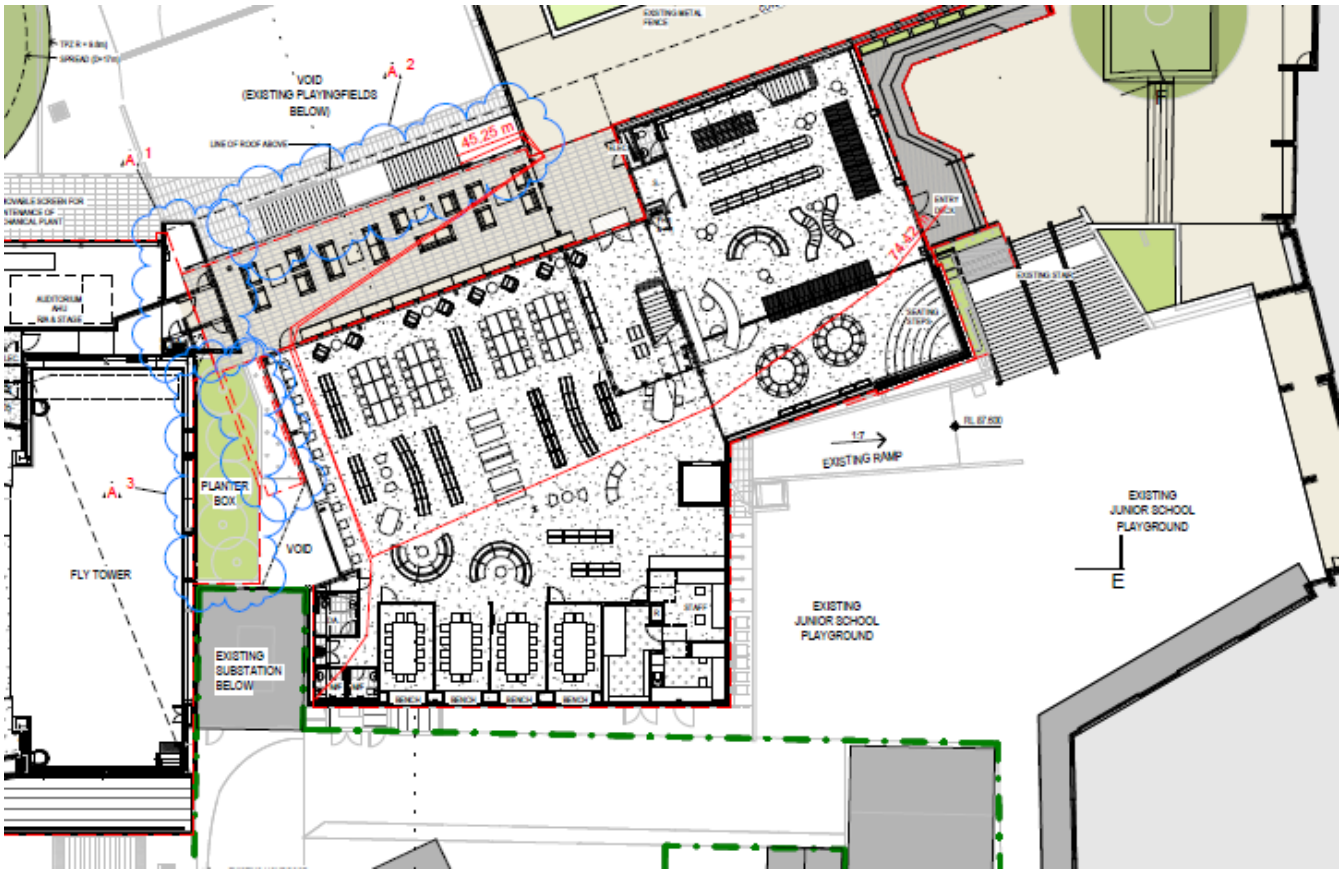
BCA Clause	Deemed-to-Satisfy Provision to be addressed
D1.5 Distance between alternative exits	Compliance issues: • The distance between alternative exits on level 2 (measured around the east side of the swimming pool) is approximately 65-m in lieu of 60-m maximum i.e. between the door in the east façade and the stair up to level 3. A performance based solution is required to address this issue. • The distance between alternative exits (measured via the point of choice) on level 1 is approximately 67-m in lieu of 60-m maximum i.e. between the two exits in the south façade when measuring via the point of choice for occupants egressing from the bike store on the east side. A performance based solution is required to address this issue. • On level 6 phase B it is more than 60-m between exits, circa 75-m measured back via the point of choice, see below for a mark up on plan. This will need to be addressed via a performance based solution.



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BCA Clause	Deemed-to-Satisfy Provision to be addressed
D1.6 Dimensions of exits and paths of travel to exits *NSW D1.6(f)(vi)and(i)*	<u>Compliance issues:</u> • Egress widths on the eastern external side of the building for the auditorium are currently not in accordance with the deemed to satisfy provisions, as the required cumulative egress width is not proposed (currently a 3-m wide egress path has been provided however 4-mm of exits discharge on the east side). The provision of egress width to the eastern side of the building is to be the subject of assessment by a fire engineer, based on active fire systems including fast response sprinkler protection and smoke exhaust. • All doors within/serving the entrainment venue need to be 1-m in width, the door to the stair in the south west corner on level 6 appears less than 1-m clear width. The same issue occurs for the gates under the Research Centre which could be used for occupants evacuating from the auditorium, as well as the door in the west wall of the multipurpose hall at level 4 and the swing door in the south façade, level 2 at the main entry. • The path of travel within the area near the door of the storeroom, North West side of the junior research center, level 6, is less than 1-m clear width, as is the path between kitchen benches, level 4. • Confirmation is required that the existing kiosk on Macpherson St is to be removed as part of this project so it doesn't compromise egress widths.
D1.9 Travel by non-fire-isolated stairways or ramps	<u>Compliance issues:</u> • When occupants reach the base of the stairs at level 4, underneath the Research Centre, they do not discharge into a location where they are within 20-m of a door that opens to a road or open space, as egress to the east of the building at this level leads occupants into a covered area which is more than 20-m in length before open space is achieved, to the west is a courtyard area which has a pathway between the courtyard and the street that is not open to the sky and requires occupants to pass beneath an overhead section of an existing adjacent building. As such a performance based solution is proposed to address this issue. • The non-fire-isolated stairway serving the east end of level 3 parts of the auditorium discharges at level 4 at a location that is more than 20m from a road/open space contrary to this clause. As such a performance based solution is proposed to address this issue. • The egress stair from the northern end of the pool area at level 2 discharges occupants to open space, however they then need to egress back under either the Research Centre or the future bridge link to reach a public road, this issue to be addressed via a performance based solution.

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BCA Clause	Deemed-to-Satisfy Provision to be addressed
D1.10 Discharge from exits *Note NSW D1.10*	Compliance issue: • The discharge from the Jo Karaolis Sports Centre exits will now necessitate occupants to pass beneath the Research Centre undercroft or via a covered link adjacent the chapel, rather than to open space. This will be addressed via a performance based solution.
E1.3 Fire hydrants	Compliance issues: The hydrant booster is currently indicated external to the building however it is within 10-m of the building and as such would not be compliant with AS 2419.1 – 2005. This issue will be required to be addressed via a performance based solution. We also note that some fire hydrants are not within 4-m of required exits. These are to be relocated or addressed via a performance based solution, some examples of which are listed below: ➢ West side of the junior research centre level 6 – phase B ➢ Level 2 – main entry area ➢ Level 1 north east corner. A full review of the fire hydrants should be undertaken by the hydraulic consultant at the Construction Certificate stage. Design requirement : A fire hydrant system must be provided in accordance with E1.3 and AS 2419.1-2005. The egress passageway from the hydrant pump room to the street must be fire isolated as per AS 2419.1-2005.
E1.4 Fire hose reels	Compliance issues: We also note that some fire hose reels are not within 4-m of required exits. These are to be relocated or addressed via a performance based solution, some examples of which are listed below ➢ West side of the junior research centre level 6 – phase B ➢ Level 2 – main entry area ➢ Level 1 north east corner. A full review of the fire hose reels should be undertaken by the hydraulic consultant at the Construction Certificate stage. Design requirement : A fire hose reel system must be provided in accordance with E1.4 and AS 2441-2005.

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1.0 INTRODUCTION

AED has been commissioned by St Catherine's School Sydney, to assist with the preparation of an application for Development Consent for the school, which is located at 26 Albion Street, Waverley. The DA seeks approval for the school's new Research, Performing Arts and Aquatic Centre (RPAC) building.

The primary purpose of this report is to identify the major areas of non-compliance contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA 2016, and to provide compliance recommendations to overcome the DTS non-compliances.

This report provides a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

1.2 Basis of Report

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

- Architectural plans prepared by Architectural plans prepared by PD Mayoh Pty Ltd, Project Number 1212:

No.	Title	Drawing No.	Revision	Date
1.	Cover Sheet & Staging Diagram	A.000	E	27/05/2019
2.	Level 2 - Phase A	4.55(1A)101	A	27/05/2019
3.	Level 3 – Phase A	4.55(1A)102	A	27/05/2019
4.	Level 4 – Phase A	4.55(1A)103	A	27/05/2019
5.	Level 5 -Phase A	4.55(1A)104	A	24/05/2019
6.	Level 6 – Phase A	4.55(1A)105	A	27/05/2019
7.	Level 7 – Phase A	4.55(1A)106	A	27/05/2019
8.	Roof Plan – Phase A	4.55(1A)107	A	27/05/2019
9.	Level 4 – Phase B	4.55(1B)103	A	27/05/2019
10.	Level 5 – Phase B	4.55(1B)104	A	27/05/2019
11.	Level 6 – Phase B	4.55(1B)105	A	27/05/2019
12.	Level 7 – Phase B	4.55(1B)106	A	27/05/2019
13.	Roof Plan – Phase B	4.55(1B)107	A	27/05/2019
14.	Elevations – South & East	4.55A150	A	27/05/2019
15.	Elevations – North & West	4.55A151	A	27/05/2019
16.	Section A, B & C	4.55A160	A	27/05/2019
17.	Sections D, E & F	4.55A161	A	27/05/2019
18.	Master Plan – Level 5	A.MP.024	E	27/05/2019

- The Building Code of Australia 2016 prepared by the Australian Building Codes Board.
- The Guide to the BCA 2016, prepared by the Australian Building Codes Board.

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1.3 Purpose of the Report

The purpose of this report is to:

- Provide a Building Code of Australia (BCA) assessment of the proposed development against the Deemed-to-Satisfy (DTS) Provisions of the BCA 2016 with specific regard to Section C (Fire Resistance), Section D (Access and Egress), Section E (Services and Equipment), Section F (Health and Amenity), Section G (Ancillary Provisions), Section H (Special Use Buildings) and Section J (Energy Efficiency) of the BCA 2016; and
- To identify the DTS non-compliances with the BCA 2016 that could affect the proposed development; and
- Make compliance recommendations to address the identified DTS non-compliances with the BCA 2016, specifically by either recommending design changes to accommodate DTS compliance **OR** suggesting Alternative Solutions to demonstrate compliance with the relevant Performance Requirements of the BCA.

1.4 Limitations of the Report

This report excludes any works not outlined above, however specifically excludes the following:

- Reporting on hazardous materials, OH&S matters or site contamination;
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistance levels of the building **OR** assessment of plumbing and drainage installations, including stormwater;
- Consideration of any fire services operations (including hydraulic, electrical or other systems);
- Assessment of plumbing and drainage installations, including stormwater;
- Assessment of mechanical plant operations, electrical systems or security systems;
- Consideration of energy or water authority requirements;
- Consideration of Council's local planning policies;
- Environmental or planning issues;
- Requirements of statutory authorities;
- Sections G2-G5, or H2 of the BCA are not considered;
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out.
- This assessment does not consider BCA Part D3, F2.4 and E3.6. A separate access report is understood to be provided.

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2.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the Masterplan and RPAC development under the Building Code of Australia 2016 (BCA) in respect to the compliance assessment:

BCA Building Classifications:	Class 5 – office Class 7a - Carpark) Class 9b - multi-purpose hall, classrooms, swimming pool Class 9b – Auditorium – “Entertainment Venue”
Building rise in storeys:	7 (determined in accordance with C1.2 of the BCA)
Type of Construction:	A (determined in accordance with C1.1 of the BCA)
General Floor area limitations:	Refer to clause C2.2 of this report.
Effective Height (m):	More than 12-m and less than 25-m.

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3.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design.

BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
SECTION B: STRUCTURE					
Part B1 Structural Provisions				X	• Consulting structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all new building elements will comply with Section B of the BCA. • Termite protection to be provided as per AS 3660.1-2000 to any new works or confirmation that no new primary building elements are to be of timber. • All new glazing to comply with AS 1288- 2006 and AS 2047-1999.
SECTION C: FIRE RESISTANCE					
Part C1: Fire Resistance & Stability					
C1.1 Type of construction required				X	Refer to Spec C1.1 and Attachment B for Schedule of FRLs for Type A Construction. These are to be certified by the architect and structural engineer, based on the proposed design. Please note that specification C1.1 also requires design compliance with the following: 1. Where a combustible material is used as a finish or lining to a wall or roof, or sunscreen, or awning, to a building element required to have an FRL the material must be exempted or comply with the fire hazard properties prescribed under C1.10 and must not otherwise constitute an undue risk of fire spread via the façade of the building or compromise egress from the building. 2. Fire isolated shafts are required to be enclosed at the top and bottom of the shaft with fire rated construction as per specification C1.1. This fire rating is required in two directions. 3. External walls, common walls and the flooring and floor framing of lift pits must be non- combustible construction. 4. Internal lightweight walls to be fire rated, as well as non-load bearing lift, ventilating, pipe, garbage or similar shaft wall must be of non-combustible construction. 5. The roof of the building does not need an FRL, provided the roof covering is non-combustible (as per the concession in Clause 3.5 of Specification C1.1 of the BCA) and sprinkler protection is provided throughout. 6. Floors require an FRL of 120/120/120.
C1.2			X		Refer to Section 2.0 of this report for further details

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
Calculation of rise in storeys					
C1.3 Buildings of multiple classifications			X		Noted. Informational clause only.
C1.4 Mixed types of construction			X		Refer to Section 2.0 of this report for further details
C1.5 Two storey Class 2, 3 or 9c buildings			X		Not applicable.
C1.6 Class 4 parts of buildings			X		Not applicable.
C1.7 Open spectator stands and indoor sports stadiums			X		Not applicable.
C1.8 Lightweight construction				X	If lightweight construction is used to achieve an FRL, such as enclosing structural steel elements in fire rated plasterboard, it must comply with Specification C1.8.
C1.9			X		Clause deleted.
C1.10 Fire Hazard Properties *NSW C1.10, Clauses NSW C1.10(a)(v),* *NSW C1.10(b) and* *NSW C1.10(c)(xiii)*				X	Fire hazard properties of all new materials must comply with BCA Clause C1.10. Specifically, all new floor materials, floor coverings, wall and ceiling lining materials must comply with Specification C1.10 of the BCA and all new materials/assemblies must comply with Specification C1.10 of the BCA except where an exemption from these requirements is provided for in BCA Clause C1.10. In a class 9b building used as an entertainment venue, materials used as a finish, lining or attachment to - • cover closed back upholstered seats in the public area where smoking is permitted or flame is exposed in connection with the preparation of meals, the SFI <6 and SDI <5. • If used as a curtain, blind or similar decor in the public area, the FI <6. • If used as a curtain, blind or similar decor in the public area must have a label affixed to a representative sample of each different material indicating, in legible characters- - Name of manufacturer; - Trade name and description of materials composition; - Retardant treatment and name of applicator and date of

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
					application; - AS 1530.2 and AS/NZS 1530.3 test number and its FI, SFI and SDI; and - Approved methods of cleaning. - A proscenium curtain required by Specification H1.3 must achieve a SDI of <5.
C1.11 Performance of external walls in fire			X		Not applicable.
C1.12 Non-combustible materials			X		Noted. Informational clause only.
Part C2: Compartmentation & Separation					
C2.2 General floor area and volume limitations				X	Fire separation of the building will be required in accordance with C2.7, with maximum fire compartment sizes to comply with table C2.2, clause D1.11, table E2.2b and any fire engineering requirements. Full details to be provided at the construction certificate stage.
C2.3 Large isolated buildings			X		Not applicable.
C2.4 Requirements for open spaces and vehicular access			X		Not applicable.
C2.5 Class 9a & 9c buildings			X		Not applicable.
C2.6 Vertical separation of openings in external walls			X		Not applicable, as sprinkler protection throughout is proposed.
C2.7 Separation by fire walls		X		X	<u>Compliance issue:</u> • There is no vertical separation between the research centre and the sports centre to consider each a separate building. Therefore a performance based solution would be required to justify the provision of vertical/horizontal fire separation in lieu of vertical separation. <u>Design requirements :</u> • Two hour fire walls as per specification C1.1, table 3, is required to fire separate the RPAC building from the adjacent Dame Joan Building as well as the Sports Centre buildings, as per the requirements of this clause.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
C2.8 Separation of classifications in the same storey			X		Due to the building containing only class 5, 7a and 9b, there is no requirement for additional fire separation between classes on the same level, as all classes require equivalent FRL's.
C2.9 Separation of classifications in different storeys				X	Fire separation of floors is to be as per specification C1.1, i.e. FRL of 120/120/120 required.
C2.10 Separation of lifts shafts				X	• New lifts that connect more than 3 storeys must be located in a fire rated shaft in accordance with the fire ratings detailed in specification C1.1 for that class. • Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C3
C2.11 Stairways and lifts in one shaft	X				Lifts and stairways are not proposed to be in the same shaft.
C2.12 Separation of equipment				X	• Any lift motor room/s require separating construction between the lift shaft and the lift motor room with an FRL of 120/120/120 and the lift motor room doors be self-closing fire doors with an FRL of -/120/30. A lift installation without a machine room (motor room) need not comply with the separating construction requirements of C2.12. • The boiler room is to be 2 hour fire separated, where water is boiled to 100 degrees Celsius. • Any central smoke control plant is required to be two hour fire rated as per this clause. • Note: As the building is to be sprinkler protected there is no requirement for fire separation of the on-site fire pumps
C2.13 Electricity supply system				X	• Any proposed main switch room which houses equipment which is required to operate in the emergency mode, must be fire separated from the remainder of the building in accordance with this Clause i.e. in construction achieving a FRL of not less than 120/120/120 with the access doorway provided with a self-closing fire door achieving a FRL of not less than -/120/30. Compliance with sub-clauses (c) and (d) is also required. • Any proposed substation must be two hour fire separated where within the building.
C2.14 Public corridors in Class			X		Not applicable

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
2 & 3 buildings					
Part C3: Protection of Openings					
C3.2 Protection of openings in external walls				X	The following openings are within 6m from another building on the same allotment: • The openings of the RPAC building are less than 6-metres from the Dame Joan building. Hence protection of openings will be required as per C3.4, or addressed via performance based design. Openings within the Dame Joan building also require protection as per clause C3.4, or be addressed via a performance based solution. • The openings of the Research Centre located on level 4 (i.e. voids between columns in the external wall are less than 6-metres from the Sports Centre and exposed). This issue may be addressed via either deemed to satisfy design or a performance based solution.
C3.3 Separation of external walls and associated openings in different fire compartments			X		This clause does not apply. RPAC is to be constructed as a separate building.
C3.4 Acceptable methods of protection				X	The openings required to be fire rated in clause C3.2 above must be fire rated as per one of the options listed below: **Doors** ▪ a self-or auto-closing 60 minute fire door. ▪ self or auto-closing doors with internal or external wall wetting sprinklers as appropriate. **Windows** ▪ windows with internal or external wall wetting sprinklers with the windows being fixed in the closed position or auto-closing. ▪ -/60/- fire windows. ▪ -/60/- fire shutters **Other openings** Internal or external wall wetting sprinklers as appropriate or construction having an FRL of not less than --/60/-- or via a performance based solution.
C3.5 Doorways in fire walls				X	Any doors in fire walls must have a fire rating equivalent to that of the walls within which they are located.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
C3.6 Sliding fire doors			X		Not applicable.
C3.7 Protection of doorways in horizontal exits				X	The horizontal exit doors in the south wall of the auditorium must have a fire rating equivalent to that of the walls within which they are located, i.e. -/120/30, see also comments in clause D1.11.
C3.8 Openings in fire isolated exits			X		Not applicable
C3.9 Service penetrations in fire-isolated exits			X		Not applicable
C3.10 Openings in fire-isolated lift shafts				X	• Lifts landing doors to fire isolates shafts are required to be fire doors with an FRL of -/60/- and comply with AS 1735.11 and are to be set to remain closed except when discharging or receiving, passengers etc. • Lift call panels, lift indicator panels and the like are required to be backed by construction having an FRL of not less than -/60/60 if it exceeds 35,000mm^2 in area where serving fire isolated shafts.
C3.11 Bounding construction: Class 2, 3, 4 and 9b buildings				X	In the part of the building used as an entertainment venue, the doorways in bounding construction must be protected, i.e. -/120/30 self-closing fire doors, see comments in clause D.11 below.
C3.12 Openings in floors and ceilings for services				X	Services proposed to pass through a floor requiring to have an FRL must be protected within a fire resisting shaft or in accordance with the requirements of Clause C3.15.
C3.13 Openings in shafts				X	Openings to shafts are to be protected as per the requirements of this clause.
C3.14			X		Blank clause
C3.15 Openings for service installations				X	Where services pass through an element which is required to achieve a FRL (other than an external wall or roof), the service must be protected in accordance with this Clause (as relevant to the subject service). i.e. PVC pipe penetrations can be protected with fire collars, mechanical penetrations to be fitted with fire damper etc.
C3.16 Construction joints				X	Construction joints to be fire sealed as required.
C3.17				X	Any columns to be protected with lightweight construction to be

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
Columns protected in lightweight construction to achieve an FRL					compliant with this clause.
SECTION D: ACCESS & EGRESS					
Part D1: Provision for Escape					
D1.2 Number of exits required *NSW D1.2(d)(vii)*		X		X	• Not less than 1 exit is required from each storey that is under 25m in effective height. • Not less than 2 exits are required from each storey in a secondary school with a rise in storeys of 2 or more. • Not less than 2 exits are required from each storey or mezzanine that accommodates more than 50 persons in a class 9b building. • Not less than 2 exits must be provided from basements if egress involves a vertical rise of 1.5m. • In NSW, not less than 2 exits must be provided in any storey or mezzanine within an auditorium in an entertainment venue. Compliance issue: The design contains the following issue: • The phase A design for level 6 shows the second exit path from this storey through to the Research Centre to the north and not yet constructed. As such this storey now only has a single exit being the stair 26. The fire engineer is to review this issue to see if it can be addressed via a performance based solution. • The pool plant area on level 1 requires a vertical rise more than 1.5-m and as such is deemed as a basement. This area is only served by a single exit. This is to be addressed via a performance based solution or a second exit provided.
D1.3 When fire-isolated stairways and ramps are required		X			Compliance issues: • The proposed main open stair (that discharge at the main entry at Macpherson St), connects or passes by more than 3 levels in the main part of the building due to occupants egressing past the pool area on levels 3 and 2 and the various areas, when discharging from level 6. A performance based solution for the design of the egress pathways is proposed to address this issue. The fire

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					engineer has indicated this will be based on the provision of sprinklers, smoke exhaust and fire/smoke separation. • The egress stair from the class 9b area on level 6 requires occupants to egress via an open stair that connects or passes by more than 3 storeys (Research Centre area). As such this issue will be addressed via a performance based solution. <u>Design comment :</u> The southern egress stairs serving level 1 have been assessed as being fire isolated as only a single handrail is provided, if this is incorrect please advise as travel distances would be affected.
D1.4 Exit travel distances		X		X	The distances of travel are currently excessive as follows: • On level 2 phase A the pool store room has not been provided with a door. • At level 6 phase B occupants are required to travel more than 40-m to get to the egress stair to the west of the Research Centre, circa 46-m from the male toilets in the south east corner to the stair executive summary for the mark up plan. This will need to be addressed via a performance based solution. • From the level 1 pool handler room it is more than 20-m to a point of choice, circa 23.5-m, this is required to be addressed via a performance based solution. <u>Design comment :</u> • Level 2 - from the rear of the toilet 2 area of the pool it was previously more than 20-m to a point of choice (approximately 27-m). This has been addressed via the revised deign.
D1.5 Distance between alternative exits		X			<u>Compliance issues:</u> • The distance between alternative exits on level 2 (measured around the east side of the swimming pool) is approximately 65-m in lieu of 60-m maximum i.e. between the door in the east façade and the stair up to level 3. A performance based solution is required to address this issue. • The distance between alternative exits (measured via the point of choice) on level 1 is approximately 67-m in lieu of 60-m maximum i.e. between the two exits in the south façade when measuring via the point of choice for occupants egressing from the bike store on the east side. A performance based solution is required to address this issue. • On level 6 phase B it is more than 60-m between exits, circa 75-m measured back via the point of choice, see executive summary for a mark up on plan. This will need to be

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					addressed via a performance based solution.
D1.6 Dimensions of exits and paths of travel to exits *NSW D1.6(f)(vi)and(i)*		X			<u>Compliance issues:</u> • Egress widths on the eastern external side of the building for the auditorium are currently not in accordance with the deemed to satisfy provisions, as the required cumulative egress width is not proposed (currently a 3-m wide egress path has been provided however 4-mm of exits discharge on the east side). The provision of egress width to the eastern side of the building is to be the subject of assessment by a fire engineer, based on active fire systems including fast response sprinkler protection and smoke exhaust. • All doors within/serving the entrainment venue need to be 1-m in width, the door to the stair in the south west corner on level 6 appears less than 1-m clear width. The same issue occurs for the gates under the Research Centre which could be used for occupants evacuating from the auditorium, as well as the door in the west wall of the multipurpose hall at level 4 and the swing door in the south façade, level 2 at the main entry. • The path of travel within the area near the door of the storeroom, North West side of the junior research center, level 6, is less than 1-m clear width, as is the path between kitchen benches, level 4. • Confirmation is required that the existing kiosk on Macpherson St is to be removed as part of this project so it doesn't compromise egress widths. <u>Design requirements :</u> X • All paths of travel are to be not less than 1 meter clear width. • All doorways within and used by the public for the entertainment venue are to be a minimum of 1-m clear width and 1980-mm clear height. • All other doorways to be not less than 750mm (clear of door hardware) as per D1.6(f) and 1980-mm clear height, other than doors required for access for people with disabilities as per Part D3 (see separate access consultant's report – i.e. 850-mm clear for access).
D1.7 Travel via fire isolated exits			X		Not applicable.
D1.8			X		Not applicable. There are no external stairs being used in lieu of

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
External stairways or ramps in lieu of fire-isolated exits					fire isolated exits.
D1.9 Travel by non-fire-isolated stairways or ramps		X			Compliance issues: • When occupants reach the base of the stairs at level 4, underneath the Research Centre, they do not discharge into a location where they are within 20-m of a door that opens to a road or open space, as egress to the east of the building at this level leads occupants into a covered area which is more than 20-m in length before open space is achieved, to the west is a courtyard area which has a pathway between the courtyard and the street that is not open to the sky and requires occupants to pass beneath an overhead section of an existing adjacent building. As such a performance based solution is proposed to address this issue. • The non-fire-isolated stairway serving the east end of level 3 parts of the auditorium discharges at level 4 at a location that is more than 20m from a road/open space contrary to this clause. As such a performance based solution is proposed to address this issue. • The egress stair from the northern end of the pool area at level 2 discharges occupants to open space, however they then need to egress back under either the Research Centre or the future bridge link to reach a public road, this issue to be addressed via a performance based solution.
D1.10 Discharge from exits *Note NSW D1.10*		X		X	Compliance issue: • The discharge from the Jo Karaolis Sports Centre exits will now necessitate occupants to pass beneath the Research Centre undercroft or via a covered link adjacent the chapel, rather than to open space. This will be addressed via a performance based solution. Design requirements : • The path of travel between the discharge point of the exits and the street must be via a gradient not steeper than 1:8 or stair compliant with the BCA.
D1.11 Horizontal exits				X	The entertainment venue is to be two hour fire separated from the remainder of the class 9b areas, to allow for the egress from the south east doors to be deemed as horizontal exits.
D1.12 Non-required stairways, ramps or escalators			X		There are no 'non-required' stairs or ramps proposed within the subject building.
D1.13 Number of persons accommodated			X		Noted. Informational clause only.

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D1.14 Measurement of distances			X		Noted. Informational clause only.
D1.15 Method of measurement			X		Noted. Informational clause only.
D1.16 Plant rooms and lift machine rooms: Concession			X		Noted. Informational clause only.
D1.17 Access to lift pits				X	Where lift pits are not more than 3m deep, access to the lift pit(s) shall be through the lowest landing doors. Where lift pits are more than 3m deep, D1.17(b) shall be complied with.
Part D2: Construction of Exits					
D2.1 Application of Part			X		Noted. Informational clause only.
D2.2 Fire-isolated stairways and ramps			X		Not applicable.
D2.3 Non-fire-isolated stairways and ramps				X	New non-fire isolated stairways "*must be constructed according to D2.2, or only of-* *(a) reinforced or prestressed concrete; or* *(b) steel in no part less than 6 mm thick; or* *(c) timber that—* *(i) has a finished thickness of not less than 44 mm; and* *(ii) has an average density of not less than 800 kg/m3 at a moisture content of 12%;* *and* *(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue*".
D2.4 Separation of rising and descending stair flights			X		Not applicable
D2.5 Open access ramps and balconies			X		Not applicable
D2.6			X		Not applicable

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Smoke lobbies					
D2.7 Installations in exits and paths of travel				X	Any new and existing electricity meters, distribution boards; telecommunications distribution boards or equipment; electrical motors or other motors corridors/hallways/lobbies or the like must be enclosed with non-combustible construction or a fire protective covering with doorways suitably sealed against smoke spread.
D2.8 Enclosure of space under stairs and ramps				X	Any enclosures beneath non-fire isolated egress stairs must be 60 minute fire rated, with a -/60/30 self-closing fire door.
D2.9 Width of stairways				X	Any stairs wider than 2-m will require additional handrails at maximum 2-m widths to allow for the stair width to be fully utilized, e.g. the stair north east corner of the auditorium on level 4.
D2.10 Pedestrian ramps				X	Any ramps are required to have a surface with a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013.
D2.11 Fire-isolated passageways			X		Not applicable.
D2.12 Roof as open space				X	The roof of the swimming pool will require a minimum FRL of 120/120/120.
D2.13 Goings & risers *NSW D2.13*				X	• New stairs must comply, the goings would need to be between 250mm and 355mm and the risers between 115mm high and 190mm high. The goings and risers must be (constant) uniform throughout each flight and each tread must have a non-slip finish or an adequate non-skid strip near the edge of the nosing's with the stairs complying with the 2R + G requirements of this clause also; and • Each tread must have a non-slip finish or an adequate non-skid strip near the edge of the nosing's, and conspicuous edges shall be applied to the treads of steps used by occupants of the Theatre.
D2.14 Landings				X	The landing to the proposed stair must not be less than 750mm long and have a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013 Slip resistance classification of new pedestrian surface materials. All new landings must have a non-slip finish or an adequate non-skid strip near the edge of the landings, with conspicuous edges applied to the landings used by occupants of the Theatre.
D2.15 Thresholds				X	• New door thresholds must not incorporate a step or ramp at any point closer to the doorways than the width of the door leaves unless the door sill is to open space and is provided

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
NSW D2.15					with a threshold ramp. • The door sills serving the auditorium exit doorways shall be not more than 50 mm above the finished floor level to which the doorway opens.
D2.16 Balustrades and other barriers *NSW D2.16*				X	• Balustrades must be not less than 1m high above balconies and landings and not less than 865 mm high above the nosing's of stairs. • Balustrades in areas other than fire-isolated stairs must comply with D2.16(g) and (h)(ii). • Balustrades to stairs other than fire-stairs must not contain any openings that would permit a 125 mm sphere to pass through it and for stairs, the opening is measured above the nosing line. • For floors more than 4m above the surface beneath, the balustrade must not incorporate any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that could facilitate climbing. • Any balustrades serving the auditorium shall measure 1m in height for balustrades provided inside the building (inclusive of 1m height above the nosing's of internal stair treads), and 1200mm in height for all external balustrading used by occupants.
D2.17 Handrails				X	• Handrails shall be provided along at least one side of the flight and be fixed at a height of not less than 865mm; measured above the nosing's of stair treads and the floor surface of the ramp, landing or the like. It should be noted that the handrail must not encroach into the required width of an exit. Where a stair exceeds 2-metres in width handrails are required to both sides. • See comments in the access consultant's report also.
D2.18 Fixed platforms, walkways and ladders				X	Access to the plant rooms is allowed to be as per AS 1657-2013, as per the concessional provisions of this clause.
D2.19 Doorways & doors				X	• A doorway or opening within sight of the audience but not intended for egress must have a notice displayed clearly indicating its purpose and such a notice must not be internally illuminated – Auditorium area. • The entertainment venue must only be fitted with swing doors which open in the direction of egress with doors hung in two folds where the unobstructed width of the doorway is more than 1m. It is permissible under NSW D2.19(b)(v)(D) to have a sliding door on the provision that it leads directly to open space and forms part of the main entry, that it is capable of swinging in the direction of egress when pressure is applied to the inside face of the door and the door is

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					provided with signage to warn persons seeking egress on the potential for swinging the door in an emergency, the above would apply to the sliding door at level 2, south façade.
D2.20 Swinging doors				X	All exit doors to swing in direction of egress.
D2.21 Operation of latch *Note NSW D2.21*				X	• All new doors must be readily openable without a key from the side that faces a person seeking egress, by single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m above the floor (non-public areas). • The doors serving the class 9b assembly area where accommodating more than 100 persons must be provided with panic bars, other than where only serving a school component of the building. Doors to the swimming pool area would require compliance (panic bars) as this area is to be open to the public. • The doors serving the entertainment venue must comply with the requirements of NSW variation D2.21(d), i.e. panic bars to all doors other than a main entry door which must comply with sub-clause (d)(ii).
D2.22 Re-entry from fire-isolated exits			X		Not applicable
D2.23 Signs on doors				X	Signage will be required to the horizontal exit, “FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN” in letters not less than 20-mm, as per this clause.
D2.24 Protection of openable windows				X	Any openable windows more than 4-m above ground level (measured at floor level) must have a sill height not more than 865-mm above the floor, or have a barrier compliant with sub-clause (d) where lower than 865-mm.
D2.25 Timber stairways concessions			X		Not applicable
Part D3: Access for People with Disabilities – Please refer to the specialist Access Consultant Report					
SECTION E: SERVICES & EQUIPMENT					
Part E1: Fire Fighting Equipment					

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E1.3 Fire hydrants		X			Compliance issues: The hydrant booster is currently indicated external to the building however it is within 10-m of the building and as such would not be compliant with AS 2419.1 – 2005. This issue will be required to be addressed via a performance based solution. We also note that some fire hydrants are not within 4-m of required exits. These are to be relocated or addressed via a performance based solution, some examples of which are listed below: ➢ West side of the junior research centre level 6 – phase B ➢ Level 2 – main entry area ➢ Level 1 north east corner. A full review of the fire hydrants should be undertaken by the hydraulic consultant at the Construction Certificate stage. Design requirement : A fire hydrant system must be provided in accordance with E1.3 and AS 2419.1-2005. The egress passageway from the hydrant pump room to the street must be fire isolated as per AS 2419.1-2005.
E1.4 Fire hose reels		X		X	Compliance issues: We also note that some fire hose reels are not within 4-m of required exits. These are to be relocated or addressed via a performance based solution, some examples of which are listed below ➢ West side of the junior research centre level 6 – phase B ➢ Level 2 – main entry area ➢ Level 1 north east corner. A full review of the fire hose reels should be undertaken by the hydraulic consultant at the Construction Certificate stage. Design requirement : A fire hose reel system must be provided in accordance with E1.4 and AS 2441-2005.
E1.5 Sprinklers				X	A sprinkler system is proposed throughout, as per Specification E1.5 and AS 2118.1 – 1999. Confirmation to be provided that the sprinkler valves are located in a position that has direct egress to a public road.
E1.6 Portable fire extinguishers				X	Portable fire extinguishers must be provided in accordance with Table E1.6 of the BCA and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444-2001.
E1.8 Fire control centres			X		Not applicable.

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E1.9 Fire precautions during construction				X	During construction, not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required/temporary exit. Fire hydrant and hose reel coverage must also be provided as per this clause.
E1.10 Provision for special hazards			X		Not applicable.
Part E2: Smoke Hazard Management					
E2.2 General requirements				X	**Stages and backstages – NSW Table E2.2b** The stage to the Auditorium has a floor area of more than 150m^2, NSW Table E2.2b requires an automatic smoke exhaust system complying with Specification E2.2b (including Figure 2.1) be provided over the stage. **Automatic shutdown – NSW Table E2.2b** In accordance with NSW Table E2.2b, any air-handling system to any class 9b assembly buildings which do not form part of the smoke hazard management system, must be provided with automatic shutdown upon activation of: • smoke detectors installed complying with Clause 5 of Specification E2.2a; and • any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5. **Mechanical ventilation** • The Class 7a carpark on level 1 to the RPAC development must be provided with a mechanical ventilation system in accordance with AS 1668.2-2012, must comply with Clause 5.5 of AS/NZS 1668.1-2015 and; • Fans with metal blades suitable for operation at normal temperature may be used; and the electrical power and control cabling need not be fire rated. • Where the class 9b area has fire compartments greater than 2000m2, smoke exhaust will be required throughout (other than to the swimming pool area which is exempted). We also note that smoke exhaust provisions will be determined as part of the fire engineering assessment for the development.

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E2.3 Provision for special hazards			X		Not applicable. It is not considered that the subject building comprises any special hazards.
Part E3: Lift Installations					
E3.1 Lift installations				X	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Spec E3.1.
E3.2 Stretcher facility in lifts				X	The new lift that travels above an effective height of 12m must be provided with a stretcher facility in accordance with this clause.
E3.3 Warning against the use of lifts in fire				X	Warning signs indicating “DO NOT USE LIFTS IF THERE IS A FIRE” shall be displayed near every call button for a passenger lift or group of lifts throughout a building as per E3.3. Building to comply.
E3.4 Emergency lifts			X		Emergency lifts are not required as the effective height of the new RPAC building is less than 25m.
E3.5 Landings				X	Access and egress to and from lift well landings must comply with Clause D1.17 of the BCA.
E3.6 Passenger lifts			X		See separate access report.
E3.7 Fire Service Controls				X	Where lifts serve any storey above an effective height of 12m, the following must be provided*:* (a) A fire control switch complying with E3.9 for – (i) A group of lifts; or (ii) A single lift not in a group that serves the storey. (b) A lift cat fire service control switch complying with E3.10 for every lift.
E3.8 Aged Care Buildings			X		Not applicable - The subject building is not a Class 9c aged care building.
E3.9 Fire service recall operation switch				X	Where lifts serve any storey above an effective height of 12m the lifts must be provided with one fire service recall control switch required by E3.7 that activates the fire service recall operation. The switch must be installed to the requirements of Clause E3.9.
E3.10 Lift car fire service drive control switch				X	Where lifts serve any storey above an effective height of 12m the lift car fire service drive control switch required by E3.7 must be activated from within the lift car. The switch must be installed as per the requirements of Clause E3.10.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
Part E4: Emergency Lighting, Exit Signs and Warning Systems					
E4.2 Emergency lighting requirements				X	An emergency lighting system must be installed throughout the building in accordance with E4.2 of the BCA and AS 2293.1-2005.
E4.3 Measurement of distance			X		Noted. Informational clause only.
E4.4 Design and operation of emergency lighting				X	The emergency lighting system must comply with AS 2293.1-2005.
E4.5 Exit signs				X	Exit signs must be installed throughout the building in accordance with E4.5 of the BCA and AS 2293.1.
E4.6 Direction signs *NSW E4.6*				X	If an exit is not readily apparent to persons occupying or visiting the building then exit direction signs must be installed in appropriate positions in corridors, hallways, lobbies etc indicating the direction to a required exit. Direction signs must be installed throughout the building in accordance with E4.6 of the BCA and AS 2293.1-2005. Exit signs will be required to the RPAC entertainment venue to all the external egress paths where the exit doesn't open directly to the street.
E4.7 Class 2 & 3 buildings & Class 4 parts: Exemptions			X		Not applicable
E4.8 Design & operation of exit signs				X	The exit sign system must comply with AS 2293.1-2005. It should be noted that this standard requires the 'running man' symbol, in lieu of the word "EXIT".
E4.9 Sound systems and intercom systems for emergency purposes (SSISEP)				X	The building must be provided with a SSISEP in accordance with AS 1670.4 - 2015.
SECTION F: HEALTH & AMENITY					
Part F1: Damp & Weatherproofing					
F1.1 Stormwater drainage				X	New stormwater drainage must comply with AS/NZS 3500.3.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
F1.4 External above ground membranes				X	Waterproofing membranes for external above ground use must comply with AS 4654 Parts 1 and 2.
F1.5 Roof coverings				X	New metal sheet roofing must comply with AS 1562.1-1992.
F1.6 Sarking				X	New sarking-type materials used for weatherproofing must comply with AS/NZS 4200 Parts 1 and 2-1994.
F1.7 Waterproofing of wet areas in buildings				X	Wet areas must be water resistant in accordance with AS 3740-2010 and F1.7 of the BCA.
F1.9 Damp-proofing				X	Where a new damp-proof course is provided, it must consist of a material that complies with AS/NZS 2904; or impervious termite shields in accordance with AS 3660.1.
F1.10 Damp-proofing of floors on the ground				X	If a new 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 2870-1996, except damp-proofing need not be provided if- • 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.
F1.11 Provision of floor wastes			X		Not applicable.
F1.12 Sub floor ventilation			X		Not applicable.
F1.13 Glazed assemblies				X	New glazed assemblies in an external wall must comply with AS 2047-2014 requirements for resistance to water penetration.
Part F2: Sanitary & Other Facilities					
F2.1 Facilities in residential buildings			X		Not applicable.
F2.2 Calculation of number of occupants and facilities			X		Noted. Informational clause only.
F2.3 Facilities for Class 3 to 9	X				The DA consent advises that student numbers would increase to a maximum of 1200 students, this results in an additional 150 being accommodated in the future. We have also been advised

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
buildings					that the staff population would increase by a maximum of 10 due to this student increase. We have reviewed the toilets within the RPAC building and it can accommodate this occupant load. Where the facility is proposed to be used for the public, the school will be required to manage access to toilets for the public within the overall school site, noting for instance that adjacent buildings (Dame Joan and Sports Centre) also have a number of toilets facilities available to complement the ones provided within the RPAC building. We also note that the DA consent restricts the way the pool area and auditorium can be used by external groups and the times are mainly outside of school hours, the pool and auditorium also cannot be used for external activities at the same time. We have reviewed the clients indicative use profile as part of this assessment and based on the above can confirm that toilets provided are compliant.
F2.4 Facilities for people with disabilities			X		See separate access report.
F2.5 Construction of sanitary compartments				X	The door to a fully enclosed sanitary compartment must: (i) Open outwards; or (ii) Slide; or (iii) Be readily removable from the outside of the sanitary compartment unless there is a clear space of at least 1.2m between the closet pan within the sanitary compartment and the doorway, measured in accordance with Figure F2.5.
F2.6 Interpretation: Urinals and washbasins			X		Noted. Informational clause only.
F2.7 Microbial (legionella) control			X		N/A Clause Deleted in NSW.
F2.8 Waste management			X		Not applicable to subject building.
Part F3: Room Sizes					
F3.1 Height of rooms and other spaces				X	The new works are required to be provided with floor to ceiling heights in accordance with this Clause. Generally, **2400mm for habitable rooms** including any plant area, and **2100mm for non-habitable rooms**. In the class 9b parts, provide not less than 2.4m ceiling height if not proposing to accommodate more than 100 persons, however

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
					if accommodating in excess of 100 persons ceiling heights of 2.7m are required.
Part F4: Light & Ventilation					
F4.1 Provision of natural light				X	All new classrooms serving the class 9b school must be provided with natural lighting.
F4.2 Methods and extent of natural lighting				X	Natural lighting is to be provided in accordance with this clause, to any general purpose classrooms.
F4.3 Natural light borrowed from adjoining room			X		Informational clause
F4.4 Artificial lighting				X	Artificial lighting (complying with AS/NZS 1680.0 – 2009) must be provided throughout the building as per this clause. See Part H for the additional entertainment venue lighting requirements.
F4.5 Ventilation of rooms				X	All rooms in the buildings are to be provided either with adequate natural ventilation **OR** a mechanical ventilation or air-conditioning system complying with AS 1668.2 – 2012.
F4.6 Natural ventilation			X		Noted. Informational clause. Natural ventilation must come through permanent openings or operable windows which have an operable size of not less than 5% of the floor area of the room which they serve.
F4.7 Ventilation borrowed from adjoining room			X		Noted. Informational clause. Natural ventilation is allowed to be 'borrowed' from other rooms.
F4.8 Restriction of position of water closets and urinals	X				Complies
F4.9 Airlocks				X	See F4.8.
F4.11 Carparks				X	The carpark must be provided with mechanical ventilation in accordance with AS1668.2-2012.
F4.12 Kitchen local exhaust ventilation				X	Any new commercial kitchens must comply with this clause where applicable.
Part F5: Sound Transmission					

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
F5.2 Determination of airborne sound insulation ratings			X		Not applicable.
F5.3 Determination of impact sound insulation ratings			X		Not applicable.
F5.4 Sound insulation rating of floors			X		Not applicable.
F5.5 Sound insulation rating of walls			X		Not applicable.
F5.6 Sound insulation rating of services			X		Not applicable.
F5.7 Sound isolation of pumps			X		Not applicable.
SECTION I: MAINTENANCE					
NSW I1.1 Essential fire safety measures				X	Essential fire or other fire safety measures must be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.
SECTION G: ANCILLARY PROVISIONS					
Part G1: Minor Structures and Components					
NSW G1.1 Swimming pools				X	• The proposed swimming pool must have compliant barriers to restrict access to the swimming pool as per the Swimming Pool Act 1992, the Swimming Pools Regulation 2008 and AS 1926.1 - 2012. • Swimming pool recirculation is to be provided as per AS 1926.3 – 2010.
NSW G1.101 Provision for cleaning windows				X	The building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.
SECTION H: SPECIAL USE BUILDINGS					
H1.4				X	In a seating area, the gradient of the floor surface must be not

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
Seating area					steeper than 1 in 8, or the floor must be stepped so that – • a line joining the nosings of consecutive steps does not exceed an angle of 30º to the horizontal; and • the height of each step in the stepped floor is not more than 600 mm; and • the height of any opening in such step is not more than 125 mm; and • if an aisle divides the stepped floor and the difference in level between any 2 consecutive steps exceeds 23 mm but not more than 40mm – an intermediate step must be provided; and • where the step exceeds 400 mm – 2 equally spaced intermediate steps must be provided in the aisle; and • the going of intermediate steps must be not less than 270mm; and • the clearance between rows of fixed seats for viewing sport activities must not be less than 300 mm if the distance to the aisle is not more than 3.5, or 500mm if the distance to an aisle is more than 3.5m.
H1.7 Aisle lights in theatres				X	If general lighting is dimmed or extinguished during public occupation and the floor is stepped at a slope more than 1 in 12, the aisle lights must be provided to illuminate the full length of the aisle and tread of each step.
The following NSW Part H101 clause requirements are applicable to the Lyric Auditorium and its associated parts only, deemed by the Environmental Planning and Assessment Regulation definitions section to form an 'entertainment venue'.					
NSW H101.1 Application of part				X	NSW Part H101 applies to entertainment venues in replacement of Part H1
NSW H101.2 Fire separation				X	See comments in clause D1.11.
NSW H101.3 Foyer space	X				Foyer space is required to be provided on the basis of at least 0.25 sqm for each person that the auditorium accommodates.
NSW H101.4 Sprinkler systems in common foyers			X		Not applicable
NSW H101.5 Conventional stages			X		A conventional stage is proposed.
NSW H101.5.1 Extent of stage area				X	The stair connecting the level 4 stage and the level 3 area below is to be separated via the stair having construction not less than 60/60/60 FRL.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
NSW H101.5.3 Large stages				X	The stage has a floor area of more than 150-m^2. Therefore the following is required: • The stage must have installed directly above the stage a suitable sprinkler system complying with Specification E1.5; and • The proscenium opening protected by a safety curtain that complies with NSW H101.10; (or an alternative solution) • Must have a line of open drenchers or open sprinklers provided above the proscenium opening on the stage side and in such a position as to be able to discharge over the inside face of the safety curtain.
NSW H101.5.4 Fire separation of stages				X	The stage must be separated from the backstage and the auditorium (with the exception of the proscenium opening) by construction having an FRL of not less than 60/60/60.
NSW H101.7 Flying scenery				X	A fly tower is noted on the design above the stage. As such the design requirements of NSW H101.7 will apply.
NSW H101.8 Load notice				X	A notice is required to be displayed in a conspicuous and permanent location in a position adjacent to the stage floor indicating the actual distributed and concentrated load for which the stage floor has been designed. The notice must be in legible letters and figures at least 50mm high and contrasting to the background.
NSW H101.10 Safety curtains				X	A safety curtain is required by NSW H101.5.3, therefore the safety curtain must comply with the requirements of this clause or be addressed via an alternative solution.
NSW H101.11.2 Chairs used for seating				X	Refer to the specific chair dimensional requirements and lateral clearance requirements of this clause.
NSW H101.11.4 Chairs in auditoriums – Sloping floors				X	Chairs in the auditorium having a stepped floor must be securely fastened to the floor.
NSW H101.11.6 Aisles and cross-overs				X	Aisles and cross overs must comply with this clause.
NSW H101.11.7 Platforms and steps				X	Platform and step dimensional requirements of this clause must be complied with in the spectator seating area.
NSW H101.12.1 Seating to be fastened				X	The seats in the auditorium must be securely fastened to the floor.
NSW H101.12.3				X	The depth of each row of seating must be as per Column 2 of Table H101.12 depending on the number of seats in each row

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
Depths of seating rows					as specified in Column 1.
NSW H101.12.4 Clearance between rows				X	The minimum lateral clearance between each row of seating must, in respect of a row containing a number of seats specified in Column 1 of Table H101.12, must be not less than the clearance specified in Column 3 of that table.
NSW H101.12.5 Chairs used for seating				X	Chairs used for seating to comply with NSW H101.11.2(a) and (b).
NSW H101.12.6 Egress doorways	X				Complies
NSW H101.12.7 Clear areas				X	Clear areas required to be provided in accordance with this clause.
NSW H101.12.8 Minimum clear space				X	Minimum clear space requirements to comply with this clause.
NSW H101.13 Provision of guardrails				X	Guardrails required to comply with the requirements of this clause.
NSW H101.13.1 Location				X	Guardrails must be provided along the front edge of cross-overs.
NSW H101.13.2 Fixed back seats				X	Refer to the specific requirements of this clause, noting that guardrails that extend the full width of the seating, must be provided at least 500 mm above the platform, unless, fixed seat backs at the next lower level extend at least 500 mm above the level of the stepped platform.
NSW H101.13.3 Steps between platforms				X	Refer to the specific requirements of this clause, noting that guardrails shall be provided: • where there is more than one intervening step in an aisle; and • at platform ends that do not incorporate a wall that extends at least 660 mm above the level of the platform.
NSW H101.14 Guardrails				X	Guardrails to be provided as requested by the requirements of this clause.
NSW H101.14.1 Guardrails - Continental seating				X	Refer to the specific requirements of this clause, noting that a guardrail provided in front of a row of chairs must be not less than the distance specified in Column 2 of Table H101.12 for the number of chairs in that row and the minimum lateral tolerance between the front of each chair in that tow and the guardrail must be not less than the clearance in Columns 3 of Table H101.12 for the number of chairs in that row.

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
NSW H101.16 Storerooms				X	Storerooms must be separated with construction having an FRL of 60/60/60.
NSW H101.17 Projection suites				X	Confirmation to be provided at CC stage that the control room will not be a projection suite, i.e. cinematograph films of 35-mm will not be shown.
NSW H101.19.1 Main switchboard				X	The switchboard containing the main isolation switch must: • be located in a position that is readily accessible to authorized persons, and to the Fire Brigade, in case of emergency; and • be enclosed in construction having an FRL not less than 60/60/60.
NSW H101.19.2 Circuit protection				X	Protection of a final sub-circuit originating at a switchboard or distribution board must be by means of circuit breakers.
NSW H101.19.3 Separate sub-mains				X	Refer to the specific requirements of this clause, noting a separate and independent sub-main, originating from the switchboard, may be required, should the entertainment venue portion of the building be separated from the remainder of the building, or where the entertainment venue has its mains supply in common with that of another building.
NSW H101.20.1 Lighting switches				X	• Any switch controlling the lighting system must not be accessible; and • where during normal use, the lighting may be dimmed or switched off, an override switch to switch on all general lighting instantaneously must be installed within the auditorium in a position accessible to management.
NSW H101.20.2 Lighting levels				X	Refer to the specific requirements of this clause relevant to the provision of sufficient emergency lighting or lighting time delay capabilities, to enable the general lighting lamps to restrike immediately upon the restoration of the primary electricity supply.
NSW H101.20.3 Provision of aisle lighting				X	Refer to the specific requirements of this clause relevant to the provision of aisle lighting, where the general lighting may be dimmed or extinguished.
NSW H101.20.4 Aisle lighting power supply				X	Where aisle lighting is installed in a seat frame, it must be supplied at a voltage of not more than 32 volts AC or 115 volts DC.
NSW H101.20.5 Aisle lighting alternative power supply				X	Refer to the specific requirements of this clause, noting that aisle lighting must be provided with an alternative electricity supply.
SECTION J: ENERGY EFFICIENCY					

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NSW SUBSECTION J(B) ENERGY EFFICIENCY - CLASS 3 AND CLASS 5-9 BUILDINGS					
Part J0: Energy Efficiency					
J0.1 Application of Section J			X		Noted: informational
J0.2 Heating and cooling loads of sole-occupancy units of a Class 2 building or Class 4 part			X		See NSW J(A)1.2.
J0.3 Ceiling fans			X		Not applicable.
Part J1: Building Fabric					
J1.1 Application of Part			X		This Part applicable to any new works.
J1.2 Insulation				X	Where 'required' must comply with J1.2 and AS/NZS 4859.1
J1.3 Roof and ceiling construction				X	Where a new roof/ceiling is part of the envelope, the R value specified in Table J1.3 must be achieved
J1.4 Rooflights				X	Any new roof light must be provided in accordance with this clause.
J1.5 Walls				X	New walls which are part of the envelope must satisfy one of the options in Table J1.5a or Table J1.5b
J1.6 Floors				X	New floor slabs must be insulated as per table J1.6
Part J2 **External Glazing**					
J2.1 Application of part				X	Will apply to the new works.
J2.2 Application of glazing provisions				X	J2.4 is applicable to the new works.

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J2.4 Glazing				X	New glazing to comply with the requirements of J2.4.
J2.5 Shading				X	To comply with J2.4 as applicable
Part J3 - Building Sealing					
J3.1 Application of part				X	This will apply to the new works.
J3.4 Window and doors				X	Seals to restrict air infiltration to new windows and doors must be provided as required (note exceptions listed in J3.4 (b), and requirements for sealing of main entrance in J3.4 (d)
J3.5 Exhaust fans				X	New exhaust fans to be fitted with dampers where serving a conditioned space
J3.6 Construction of roofs, walls and floor				X	Note requirements – new construction to generally minimize air leakage, and be lined internally with gaps sealed by cornices or caulking etc
Part J5 - Air-conditioning and Ventilation Systems					
J5.2 Air-conditioning and ventilation systems				X	Compliance required. The designer of any new AC/Mech Ventilation systems must confirm compliance with this Clause
J5.3 Time Switch				X	New time switches must be provided in accordance with this Clause
J5.4 Heating and chilling systems				X	The designer of the systems must confirm compliance with this Clause where new works provided.
J5.5 Miscellaneous exhaust systems				X	The designer of the systems must confirm compliance with this Clause where new works provided.
Part J6: Artificial lighting and power					
J1.6 Application of the Part				X	Applies to the new works.
J6.2 Interior Artificial Lighting				X	New lighting must comply with J6.2. The designer of the lighting systems must confirm compliance with this Clause

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BCA DEEMED-TO-SATISFY PROVISION	Complies	Does Not Comply	NA or Informational	Compliance Required	COMMENTS
J6.3 Interior Artificial Lighting and Power Control				X	New lighting must comply with J6.3. The designer of the lighting systems must confirm compliance with this Clause
J6.4 Interior and decorative lighting				X	New lighting must comply with J6.4. The designer of the lighting systems must confirm compliance with this Clause
J6.5 Artificial Lighting around the Perimeter of the Building				X	New lighting must comply with J6.5. The designer of the lighting systems must confirm compliance with this Clause
J6.6 Boiling Water and Chilled Water Storage Units				X	Any new Boiling Water and Chilled Water Storage Units must comply with J6.6 The designer of the lighting systems must confirm compliance with this Clause
Part J7: Hot water supply and swimming pool and spa pool plant					
J7.2 Hot water supply				X	A new hot water supply for food preparation and sanitary purposes must be designed and installed in accordance with Section 8 of AS/NZS 3500.4-2003.
J7.3 Swimming pool heating and pumping				X	The new swimming pool must comply with the requirements of this clause.
J7.4 Spa pool heating and pumping				X	Any new spa pool heating and pumping must comply with this clause.
Part J8: Access for maintenance and facilities for monitoring					
J8.1 Application of Part				X	This applies to all new works
J8.2 Access for maintenance				X	Access for maintenance is required in accordance with NSW clause J8.2.
J8.3 Facilities for energy monitoring				X	The building must have the facility to record individual energy consumption as per J8.3(b).

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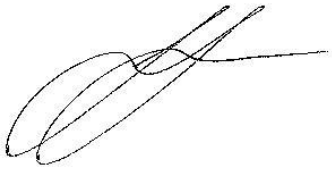
4.0 CONCLUSION

This report provides a Building Code of Australia 2016 (BCA) compliance assessment of the proposed RPAC building for St Catherine's School Sydney, located at 26 Albion Street, Waverley.

The primary purpose of this report was to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

This report provided a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

Further, if compliance with the Deemed-to-Satisfy Provisions is not achievable or desirable, Alternative Solutions could be further developed and verified by a Fire Safety Engineer.

 Report prepared By: Jason Storer Director Grade A1 – BPB No. BPB0394 A1 - Accredited Building Surveyor **for AE&D Group**	 Approved By: Trenton Jones Director MAAC G.DIP Build Surv (UWS) Dip Env Health and Bld Surv (SIT) Grade A1 – BPB No. BPB0203 A1 - Accredited Building Surveyor for **AE&D Group**

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5.0 ATTACHMENT A - INSPECTION & MAINTENANCE

5.1 Fire Safety Measures

The fire safety measures within the building must be maintained to ensure correct operation at all times the building is occupied. All firefighting equipment should be tagged when tested/inspected and log books kept up-to-date for all smoke detection, warning systems and sprinkler systems (where installed).

An annual fire safety certificate must be submitted to the local consent authority and the NSW Fire Brigade each year indicating satisfactory performance of the fire safety measures contained within the building. The annual fire safety statement should be displayed in a prominent place within the building (i.e. the main entry foyer)

The correct operation and maintenance of the buildings fire safety measures is critical in affording an adequate level of fire safety.

5.2 Good Housekeeping

The ongoing management of the building should ensure good housekeeping procedures. The following matters should be considered by building management:

- Ensure exits and paths of travel to exits remain unobstructed (in particular stairways)
- Avoid storage of materials in unoccupied areas
- Limit storage of flammable/combustible materials to designated and approved areas
- Prevent chocking open fire/smoke doors
- Prevent storage of materials that could hinder access to firefighting equipment

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3. TYPE A FIRE-RESISTING CONSTRUCTION

3.1 Fire-resistance of building elements

In a building *required* to be of Type A construction—

(a) each building element listed in Table 3 and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and

(b) *external walls*, *common walls* and the flooring and floor framing of lift pits must be *non-combustible*; and

(c) any *internal wall required* to have an FRL with respect to *integrity* and *insulation* must extend to—

  (i) the underside of the floor next above; or

  (ii) the underside of a roof complying with Table 3; or

  (iii) if under Clause 3.5 the roof is not required to comply with Table 3, the underside of the non-combustible roof covering and, except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or

  (iv) a ceiling that is immediately below the roof and has a *resistance to the incipient spread of fire* to the roof space between the ceiling and the roof of not less than 60 minutes; and

(d) a *loadbearing internal wall* and a *loadbearing fire wall* (including those that are part of a *loadbearing shaft*) must be of

  (i) concrete; or

  (ii) masonry; or

(e) a non-*loadbearing*—

  (i) internal wall required to be fire-resisting; and

  (ii) lift, ventilating, pipe, garbage, or similar *shaft* that is not for the discharge of hot products of combustion, must be of *non-combustible* construction; and

(f) the FRLs specified in **Table 3** for an external column apply also to those parts of an internal column that face and are within 1.5 m of a *window* and are exposed through that *window* to a *fire-source feature*.

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Table 3 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 therein) or other external building element, where the distance from any *fire-source feature* to which it is exposed is—				
For *loadbearing* parts—				
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/ 60/ 60	120/ 90/ 90	180/180/120	240/240/180
3 m or more	90/ 60/ 30	120/ 60/ 30	180/120/ 90	240/180/ 90
For non-*loadbearing* parts—				
less than 1.5 m	–/ 90/ 90	–/120/120	–/180/180	–/240/240
1.5 to less than 3 m	–/ 60/ 60	–/ 90/ 90	–/180/120	–/240/180
3 m 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

Table 3 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS— continued

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
INTERNAL WALLS—				
Fire-resisting lift and stair *shafts*—				
Loadbearing	90/ 90/ 90	120/120/120	180/120/120	240/120/120
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 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

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3.2 Concessions for floors A floor need not comply with Table 3 if—

(a) it is laid directly on the ground; or

(b) in a Class 2, 3, 5 or 9 building, the space below is not a *storey*, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose; or

(c) it is a timber *stage* floor in a Class 9b building laid over a floor having the *required* FRL and the space below the *stage* is not used as a dressing room, store room, or the like; or

(d) it is within a *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part; or

(e) it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the *required* FRL.

3.3 Floor loading of Class 5 and 9b buildings: Concession

If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa—

(a) the floor next above (including floor beams) may have an FRL of 90/90/90; or

(b) the roof, if that is next above (including roof beams) may have an FRL of 90/60/30.

3.4 Roof superimposed on concrete slab: Concession

A roof superimposed on a concrete slab roof need not comply with Clause 3.1 as to *fire-resisting construction* if—

(a) the superimposed roof and any construction between it and the concrete slab roof are *non-combustible* throughout; and

(b) the concrete slab roof complies with Table 3.

3.5 Roof: Concession

A roof need not comply with Table 3 if its covering is *non-combustible* and the building—

(a) has a sprinkler system complying with Specification E1.5 installed throughout; or

(b) has a *rise in storeys* of 3 or less; or

(c) is of Class2 or 3; or

(d) has an *effective height* of not more than 25 m and the ceiling immediately below the roof has a *resistance to the incipient spread of fire* to the roof space of not less than 60 minutes.

3.6 Rooflights

If a roof is *required* to have an FRL or its covering is *required* to be *non-combustible*, rooflights or the like installed in that roof must—

(a) have an aggregate area of not more than 20% of the roof surface; and

(b) be not less than 3 m from—

  (i) any boundary of the allotment other than the boundary with a road or public place; and

  (ii) any part of the building which projects above the roof unless that part has the FRL *required* of a *fire wall* and any openings in that part of the wall for 6 m vertically above the rooflight or the like are protected in accordance with C3.4; and

  (iii) any rooflight or the like in an adjoining *sole-occupancy unit* if the walls bounding the unit are *required* to have an FRL; and

  (iv) any rooflight or the like in an adjoining fire-separated section of the building; and

(c) if a ceiling with a *resistance to the incipient spread of fire* is *required*, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space.

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3.7 Internal columns and walls: Concession

For a building with an *effective height* of not more than 25 m and having a roof without an FRL in accordance with Clause 3.5, in the *storey* immediately below that roof, internal columns other than those referred to in Clause 3.1(f) and *internal walls* other than *fire walls* and *shaft* walls may have—

(a) in a Class 2 or 3 building: FRL 60/60/60; or

(b) in a Class 5, 6, 7, 8 or 9 building—

  (i) with *rise in storeys* exceeding 3: FRL 60/60/60

  (ii) with *rise in storeys* not exceeding 3: no FRL.

3.8 Open spectator stands and indoor sports stadiums: Concession

In an open spectator stand or indoor sports stadium, the following building elements need not have the FRL specified in Table 3:

(a) The roof if it is non-combustible.

(b) Columns and loadbearing walls supporting only the roof if they are noncombustible.

(c) Any non-loadbearing part of an external wall less than 3 m—

  (i) from any fire-source feature to which it is exposed if it has an FRL of not less than –/60/60 and is non-combustible; or

  (ii) from an external wall of another open spectator stand if it is non-combustible.

3.9 Carparks

(a) Notwithstanding Clause 3.1, a carpark may comply with Table 3.9 if it is an open deck carpark or is protected with a sprinkler system complying with Specification E1.5 and is—

  (i) a separate building; or

  (ii) a part of a building—

    (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or

    (B) which is located above or below another classification, and the floor separating the classifications complies with C2.9; or

    (C) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3 for a Class 7 part other than a carpark; or

    (D) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3.9.

(b) For the purposes of this Clause, a carpark—

  (i) includes—

    (A) an administration area associated with the functioning of the carpark; and

    (B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but

  (ii) excludes—

    (A) except for (b)(i), any area of another classification, or other part of a Class 7 building not used for carparking; and

    (B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

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