

1 December 2022

University of Newcastle  
C/O - Newpolis Pty Ltd T/as Lyons  
Level 3, 246 Bourke St  
Melbourne, VIC

Attention: Ross Heywood

Dear Ross,

**RE: UNIVERSITY OF NEWCASTLE CENTRAL COAST CAMPUS  
SSD CAPABILITY STATEMENT**

This statement has been prepared to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation that will accompany the SSD stage for the University of Newcastle Central Coast Campus located at 305 Mann Street, Gosford NSW 2250 against the relevant provisions of the Building Code of Australia 2019, Volume 1 (BCA 2019)/Building Code of Australia 2022, Preview (BCA 2022).



*Figure 1: Proposed Central Coast Campus*

**PROPOSED DEVELOPMENT**

Blackett Maguire + Goldsmith Pty Ltd have been commissioned by the University of Newcastle C/- Lyons to undertake a Building Code of Australia (BCA) assessment of the SSD stage for the Central Coast Campus located at 305 Mann Street, Gosford NSW 2250 against the relevant provisions of the Building Code of Australia 2019, Volume 1 (BCA 2019)/Building Code of Australia 2022, Preview (BCA 2022).

The five-storey educational campus comprises a variety of traditional and innovative learning and community spaces. Whilst teaching and learning spaces occupy much of the building; a variety of retail shops, cafés, industry engagement and flexible workspaces are also proposed. Additional facilities to be provided include secure underground car parking, electric vehicle charging, end of trip facilities, bicycle storage and a tiered landscape forecourt.

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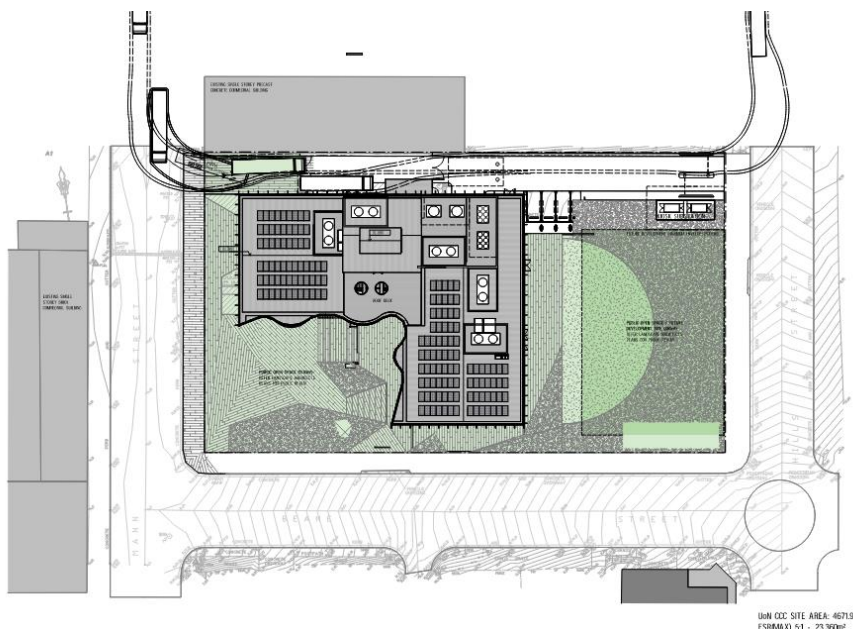


Figure 2: Site Plan

## COMPLIANCE STATEMENT OBJECTIVES

The objectives of this statement are to:

- a) Confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- b) Confirm that the proposed new building works can readily achieve compliance with the BCA requirements pursuant to clause 6.28 of the *Environmental Planning & Assessment Act 1979*.

It should be noted that it is not the intent of this statement to identify all BCA provisions that apply to the subject development, rather to confirm that the works are capable of achieving compliance. The development will be subject further assessment following receipt of more detailed documentation at the relevant Crown Certificate stage.

## REFERENCED DOCUMENTATION

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

- + Building Code of Australia 2019 (Amendment 1), Volume 1 (BCA 2019).
- + Building Code of Australia 2022, Preview (BCA 2022).
- + Guide to the Building Code of Australia 2019 (Amendment 1).
- + Architectural Plans prepared by Lyons dated 25 November 2022.

DRAWING No.	REVISION	DATE	DRAWING No.	REVISION	DATE
A-0101	8	25.11.2022	SDA-A-3000	10	25.11.2022
SDA-A-3001	8	25.11.2022	SDA-A-3002	8	25.11.2022
SDA-A-3003	8	25.11.2022	SDA-A-3004	8	25.11.2022
SDA-A-4000	2	25.11.2022	A-5001	7	25.11.2022



## BUILDING CLASSIFICATIONS

The following table and figure present a summary of relevant building classifications for the proposed development namely the items for potential inclusion into the project.

<b>BCA Classification:</b>	Class 5 (Workspace Innovation hub) Class 6 (Retail) Class 7a (Carpark), Class 7b (Storage) Class 8 (Laboratory) & 9b (Assembly Building)
<b>Rise in Storeys:</b>	Five (5)
<b>Storeys Contained:</b>	Five (5)
<b>Type of Construction:</b>	Type A Construction
<b>Importance Level (Structural):</b>	3
<b>Sprinkler Protected Throughout:</b>	Yes
<b>Effective Height:</b>	Less than 25m (RL 32000 – RL 14750 = 17.25m)
<b>Floor Area:</b>	Approx. 3,840m <sup>2</sup>
<b>Max. Fire Compartment Size:</b>	3,840m <sup>2</sup> . Volume - TBC
<b>Climate Zone:</b>	Zone 5

## FIRE COMPARTMENT FLOOR AREA LIMITATIONS

Maximum size of fire compartment / atria is:

Classification		Type A	Type B	Type C
6, 7, 8 or 9a	Max. floor area	5,000m <sup>2</sup>	3,500m <sup>2</sup>	2,000m <sup>2</sup>
	Max. volume	30,000m <sup>3</sup>	21,000m <sup>3</sup>	21,000m <sup>3</sup>
5, 9b or 9c	Max. floor area	8,000m <sup>2</sup>	5,500m <sup>2</sup>	3,000m <sup>2</sup>
	Max. volume	48,000m <sup>3</sup>	33,000m <sup>3</sup>	18,000m <sup>3</sup>

## 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	Side Boundary	7m
East	Another building other than a 10a building	10m
West	Far side of the road	22m
South	Far side of the road	22m

\*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



## SUMMARY OF KEY BCA COMPLIANCE ISSUES

Arising from our review, whilst compliance with the requirements of the BCA is readily achievable via either a Deemed to Satisfy and/or a Performance Based approach, the following comprises a summary of the key BCA compliance issues that will need to be addressed prior to issue of the Crown Certificate:

### BCA MATTERS REQUIRING INFORMATION TO BE PROVIDED AND OR PLAN AMENDMENTS

CLAUSE	COMMENT
<b>C2D2</b>  <i>BCA 2019 Reference</i> C1.1	<u>Type of Construction Required</u> All new works to be designed to comply with the requirements of Specification 5 (Spec C1.1 of BCA 2019) of the BCA. Design certification to be provide along with the application for Crown Certificate.
<b>C2D10 &amp; C2D14</b>  <i>BCA 2019 Reference</i> C1.9 & C1.14	<u>Non-Combustibility external wall construction &amp; Ancillary Elements</u> Detail to be provided and shown on architectural documentation with respect of the proposed materials and types of ancillary elements attached to the external walls. External wall schedule and relevant test reports/certificates demonstrating compliance with this clause to be provided along with the application for Crown Certificate.
<b>C3D3</b>  <i>BCA 2019 Reference</i> C2.2	<u>Max fire compartment sizes</u> Compartmentation plan to be developed showing the maximum fire compartment sizes, whilst compliance is readily achievable based on the limitations of this clause the location of the fire compartmentation is to be finalised during the SD phase.
<b>C3D13 &amp; C3D14</b>  <i>BCA 2019 Reference</i> C2.12 & C2.13	<u>Separation of Equipment and services</u> Services consultant to review and confirm requirements for Architect with respect of rooms and equipment requiring separation under this clause. Final details to be shown on the architectural documentation to be submitted along with the Crown Certificate application
<b>D2D3</b>  <i>BCA 2019 Reference</i> D1.2	<u>Number of required exits</u> Number of persons accommodated to the roof deck is to be confirmed where more than 50 persons are capable of being accommodated either the arrangement is to be addressed in the Fire Engineering Strategy and or an additional exit is to be provided.
<b>D2D5 &amp; D2D6</b>  <i>BCA 2019 Reference</i> D1.4 & D1.5	<u>Exit Travel Distances</u> Compliance readily achieved throughout having regards to travel distances it is noted that the egress strategy for the building will comprise a mixture of DTS and Performance Based solutions
<b>D2D12</b>  <i>BCA 2019 Reference</i> D1.7	<u>Travel via Fire-Isolated Exits</u> Protection required under this clause to be shown on the architectural documentation having regards to the discharge from the required fire isolated stairways, where passing within 6m measured at a right angle protection is to be detailed on plans to be submitted along with the SD phase for further assessment
<b>D2D15</b>  <i>BCA 2019 Reference</i> D1.10	<u>Discharge from exits</u> Bollards or other suitable barriers will be provided to egress doors opening into driveways and carpark areas and the like which could potentially be obstructed by vehicles. Gradients of all ramps and the like forming part of the path of travel to the adjoining road will need to be documented on the architectural plans to be submitted in the SD phase. The proposed laneway/vehicular ramp forming part of the path of travel to the adjoining road where comprising a ramp it is not to exceed 1:8 and will need to be provided with handrails complying with D3D22 of the BCA.
<b>D3D9</b>  <i>BCA 2019 Reference</i> D2.8	<u>Enclosures below Stairs/Ramps</u> Where enclosures are proposed below the required stairs, suitable fire rating in accordance with the requirements of this clause will be required. To be detailed on documentation submitted along with the SD phase for further assessment.



CLAUSE	COMMENT
<b>D3D14, D3D15 &amp; D3D22</b>  <i>BCA 2019 Reference</i> D2.13, D2.14 & D2.17	<p><u>Stair Construction &amp; Handrails</u></p> <p>Whilst compliance is readily achieved based on information provided to date, stair details to be developed and submitted along with the SD phase for further assessment</p> <p>Where it is proposed to omit TGSIs from the stairways within the building this will need to be addressed by way of a Performance Solution in consultation with the projects Access Consultant</p>
<b>D3D17</b>  <i>BCA 2019 Reference</i> D2.16	<p><u>Balustrades</u></p> <p>Details to be provided for review and comment having regards to the balustrade design for the building, this will be subject to further assessment and review during the SD phase.</p>
<b>D3D24, D3D25 &amp; D3D26</b>  <i>BCA 2019 Reference</i> D2.19, D2.20 & D2.21	<p><u>Door construction including type latching, swing</u></p> <p>All doors located along a path of travel are required to be free egress at all times for a person seeking egress from the building, compliance is readily achievable this will need to be further coordinated during the SD phase. In the assembly areas where multifunctional and accommodating functions and the like, push type hardware is to be documented to ensure compliance with this clause during event mode.</p> <p>Required exits are to be swung in the direction of egress currently the exits are shown to swing in the direction of egress to be monitored for compliance during SD phase.</p>
<b>Part D4 &amp; AS1428.1-2009</b>  <i>BCA 2019 Reference</i> Part D3 & AS1428.1-2009	<p><u>Access for People with a Disability</u></p> <p>Refer independent Access Consultant report – Further coordination with BM+G is required with respect of any proposed performance solutions. We note that the design is expected to be subject to a number of Performance Based design aspects which will need to be further developed in the SD phase.</p>
<b>E1D2 &amp; E1D3</b>  <i>BCA 2019 Reference</i> E1.3 & E1.4	<p><u>Fire Hydrant and Fire Hose Reel</u></p> <p>Details demonstrating compliance with respect of outlet locations will need to be provided along with the SD phase. Further coordination is required to ensure no encroachments on the required egress width and the like.</p> <p>Adequate allowances are to be made by the services consultants in the design to ensure compliance with respect of spatial and clearance requirements around any proposed pumpset.</p>
<b>E1D4</b>  <i>BCA 2019 Reference</i> E1.5	<p><u>Sprinkler System</u></p> <p>The building will be sprinkler protected throughout.</p> <p>The location of infrastructure associated with the sprinkler system is to be shown on the architectural documentation and needs to be coordinated during the SD phase.</p> <p>Adequate allowances are to be made by the services consultants in the design to ensure compliance with respect of spatial and clearance requirements around pump set and the like.</p>
<b>Specification 20 &amp; E4D9</b>  <i>BCA 2019 Reference</i> Specification E2.2a & E4.9	<p><u>Smoke Hazard Mgmt. &amp; Detection &amp; EWIS</u></p> <p>The building is required to be provided with the following smoke hazard management systems,</p> <ul style="list-style-type: none"> <li>+ Smoke detection and alarm system throughout</li> <li>+ Stair pressurisation to the required egress stairways</li> <li>+ Smoke exhaust</li> <li>+ Auto shutdown of air handling systems</li> <li>+ Emergency Warning and Intercom System</li> </ul> <p>The above may be subject to change however based on the proposed fire engineering strategy. Fire panel locations to be coordinated in the SD phase.</p>
<b>F3P1</b>  <i>BCA 2019 Reference</i> FP1.4	<p><u>Weatherproofing</u></p> <p>The design of seamless door thresholds as required between external and internal areas, is to comply with AS 4654-2012.1 &amp; 2 and the sub-sill is recessed, the design will need to incorporate a linear grate and drain system before the sub-sill or with an integrated sub-sill to mitigate water ingress into the building unless otherwise varied under the F3P1 performance solution report</p>



CLAUSE	COMMENT
	Note: An F3P1 performance solution report will need to be provided for review and comment by the façade consultant.
<b>F4D4</b>  BCA 2019 Reference F2.3	<u>Sanitary Facilities</u> F4D4 of the BCA requires separate student and staff sanitary compartments to be provided. However it is noted that this is proposed to be addressed by way of Performance Solution
<b>Part G3</b>  BCA 2019 Reference Part G3	<u>Atrium Construction</u> The central atrium will be subject to the development of a fire engineered strategy, and we understand will include additional passive separation around the void area. To be developed in consultation with BM+G during the SD phase.
<b>Part G6</b>  BCA 2019 Reference Part G6	<u>Outdoor Occupiable Areas</u> Outdoor occupiable areas are subject to additional compliance requirements under the BCA including with respect of fire services coverage, egress requirements, fire hazard properties and the like. Compliance is readily achievable having regards to the proposed works, however the rooftop terrace will be subject to compliance with the requirements of this clause.
<b>Part I1</b>  BCA 2019 Reference Part H1	<u>Class 9b Buildings</u> Additional requirements apply to a 9b building having regards to the design of seating areas including bench seating design as specified in Part I1 of the BCA Whilst compliance is readily achievable, this will be subject to further assessment as part of the SD phase.
<b>Section J</b>  BCA 2019 Reference Section J	<u>Energy Efficiency</u> Independent Section J/J1V3 consultant to be engaged to provide advice with respect of compliance. Where a J1V3 approach is proposed a copy of the report is to be provided to BM+G for review and comment.

#### FIRE SAFETY ENGINEERED ALTERNATIVE SOLUTIONS

CLAUSE	COMMENT
<b>C2D2, C3D9 &amp; C3D10</b>  BCA 2019 Reference C1.1, C2.8 & C2.9	<u>Fire Rating, Separation between classifications</u> <ul style="list-style-type: none"> <li>+ Rationalise the use of CLT timber construction,</li> <li>+ Rationalise reduction of FRL's to 120min throughout in lieu of 180/240 respectively for the class 6/7b/8 part,</li> <li>+ Rationalise smoke separation to the slab edge in lieu of fire separation,</li> <li>+ Use of drencher protected glazing in lieu of fire rated construction to the proposed fire isolated exits.</li> <li>+ Glazed flooring system (skylights) to Lv.4</li> </ul>
<b>C2D11</b>  BCA 2019 Reference C1.10	<u>Fire Hazard Properties</u> To permit the CLT construction to the internal linings namely the exposed timber elements. Extent to be confirmed.
<b>C4D15 &amp; C4D16</b>  BCA 2019 Reference C3.15 & C3.16	<u>Protection of services and construction joints</u> To permit the use of passive fire products not tested in CLT construction including both CLT floors and any proposed construction joints.
<b>D2D3</b>  BCA 2019 Reference	<u>Number of required exits</u> A single exit serving the roof top balcony space where accommodating more than 50 persons



CLAUSE	COMMENT
D1.2	
<b>D2D5 &amp; D2D6</b> <i>BCA 2019 Reference</i> D1.4 & D1.5	<u><i>Exit Travel Distances</i></u> Extended travel distances – to be further coordinated during SD phase
<b>D2D12</b> <i>BCA 2019 Reference</i> D1.7	<u><i>Travel via Fire-Isolated Exits</i></u> Rationalise protection to the external walls where there are alternative egress paths available in different directions - TBC
<b>D2D17</b> <i>BCA 2019 Reference</i> D1.12	<u><i>Non-required Non-Fire Isolated stairways</i></u> To permit four (4) storeys being connected by the internal on-required non-fire isolated stairway.
<b>E1D2</b> <i>BCA 2019 Reference</i> E1.3	<u><i>Fire Hydrants</i></u> Location of the proposed hydrant booster will need to be confirmed and addressed under the Fire Engineered Strategy as it is not at the principle vehicular entrance or within sight of the main entrance.
<b>E1D3</b> <i>BCA 2019 Reference</i> E1.4	<u><i>Fire Hose Reels</i></u> To omit coverage to small fire separated rooms where proposed such as comms rooms and the like.
<b>E1D4</b> <i>BCA 2019 Reference</i> E1.5	<u><i>Sprinkler System</i></u> Location of the proposed sprinkler booster will need to be confirmed and addressed under the Fire Engineered Strategy as it is not both at the principle vehicular entrance and not within site of the main entrance.
<b>Part G3</b> <i>BCA 2019 Reference</i> Part G3	<u><i>Atrium Construction</i></u> The central atrium will be subject to the development of a fire engineered strategy to be further developed during the SD phase



## FIRE SAFETY SCHEDULE

The following comprises a preliminary fire safety schedule containing statutory fire safety measures that will apply to the new building.

Statutory Fire Safety Measure	Design / Installation Standard
Alarm Signalling Equipment	AS 1670.3 – 2018
Automatic Fail Safe Devices	BCA Clause D3D26
Automatic Fire Detection & Alarm System	BCA Specification 20 AS 1670.1 – 2018
Automatic Fire Suppression Systems	BCA Specification 17 AS 2118.1 – 2017 or AS 2118.4, 6 – 2012
Emergency Lighting	BCA Clause E4D4 & AS 2293.1 – 2018
Emergency Evacuation Plan	AS 3745-2010 Schedule 3A of the EP&A Regulation 2000 (EV's)
Exit Signs	BCA Clauses E4D5, E4D6 & E4D8 AS 2293.1 – 2018
Fire Blankets	BCA Clause E1D14 AS 3504 – 2006 & AS 2444 – 2001
Fire Dampers	BCA Clause C4D15 & Specification 11 AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 Manufacturer's specifications
Fire Doors	BCA Clauses C3D13, C3D14, C4D3, C4D5, C4D6, C4D7, C4D8, C4D9 & C4D12 AS 1905.1 – 2015 Manufacturer's specifications
Fire Hose Reels	BCA Clause E1D3 AS 2441 – 2005
Fire Hydrant Systems	Clause E1D2 AS 2419.1 – 2005
Fire Seals	BCA Clause C4D15 AS 1530.4 – 2014 & AS 4072.1 – 2005 Manufacturers' specifications
Lightweight Construction	BCA Clause C2D9 AS 1530.4 – 2014 Manufacturer's specifications
Mechanical Air Handling Systems (Autoshutdown)	BCA Clause E2D3 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012
Paths of Travel	EP&A (DC&FS) Reg. 2021 Clause 109
Portable Fire Extinguishers	BCA Clause E1D14 AS 2444 – 2001
Pressurising Systems	BCA Clause E2D3 AS/NZS 1668.1 – 2015
Required Exit Doors (power operated)	BCA Clause D3D24





<b>Statutory Fire Safety Measure</b>	<b>Design / Installation Standard</b>
Smoke Hazard Management Systems (Smoke Exhaust)	BCA Part E2 AS/NZS 1668.1 – 2015
Emergency Warning and Intercom System (EWIS)	BCA Clause E4D9, S31C19 AS 1670.4 – 2018
Stand-by Power Systems	BCA Clauses E1D2, E3D5, E4D2 & E4D5 AS 3000 – 2018
Wall-Wetting Sprinklers	BCA Clause C4D5 AS 2118.2 – 2010
Warning & Operational Signs	EP&A (DC&FS) Reg. 2021 Clause 108 BCA Clause C4D7, D3D28, D4D7, E3D4 & NSW I4D14 AS 1905.1 – 2015
Fire engineered Alternative Solutions relating to: + +	BCA Performance Requirements ... Fire Safety Engineering Report prepared by ..... Report No. .... Revision .... dated .....

Please note that the above schedule will need to be revised prior to issue of the Crown Certificate to reference any proposed Fire Engineering Report and incorporate any additional measures required by the proposed Performance Solutions.

#### **DISABILITY (ACCESS TO PREMISES-BUILDINGS) STANDARDS 2010**

The Disability (Access to Premises-Buildings) Standards 2010 (the Access to Premises Standards) requires the building to comply with the Access Code (BCA Part D4 & AS 1428.1-2009).

With respect to the proposed new building, compliance with the Access Code is achieved if the building complies with:

- + BCA clauses D4D2 to D2D13 (D3.1 to D3.12);
- + BCA clause E3D7 (E3.6);
- + BCA clauses F4D3 and F4D5 (F2.2 and F2.4).

Having regards to the proposed works we note that an independent access consultant has been engaged. A copy of the DDA/Access report is to be provided along with the SSD application and Crown Certificate applications.



## CONCLUSION

This report confirms that BM+G have undertaken a review of the architectural plans for the SSD stage of the development of Central Coast Campus against the deemed-to-satisfy provisions of the Building Code of Australia 2019 and Building Code of Australia 2022.

It is our experience that such compliance matters raised in this report are not uncommon for a development of this nature and that they can be readily addressed at the Crown Certificate stage. In this instance, we are of the opinion that any amendments required to the design documentation in order to comply with the BCA can be addressed in the preparation of the detailed documentation for Crown Certificate without giving rise to significant changes to the proposal as submitted for State Significant Development application.

Arising from our review, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA.

Yours sincerely,

Jake Hofner  
**Senior Building Surveyor**  
**Blackett Maguire + Goldsmith**  
Building Surveyor – Unrestricted (NSW)

Beth Simmons  
**Cadet Building Surveyor**  
**Blackett Maguire + Goldsmith**