



## BCA CROWN CERTIFICATE

Pursuant to Section 6.28 of the Environmental Planning & Assessment Act 1979

<b>CERTIFICATE NO.:</b>	CRO-18149
<b>DATE OF CERTIFICATE:</b>	03 October 2019
<b>SUBJECT LAND:</b>	
Lot & DP	Lot 4 DP 858938
Address	Bowral & District Hospital 97-103 Bowral Street Bowral NSW 2576
<b>LOCAL GOVERNMENT AREA:</b>	Wingecarribee Shire Council
<b>APPLICANT:</b>	
Company	ADCO Constructions Pty Ltd
Address	Level 2, 7-9 West Street, North Sydney NSW 2060
Phone/Email	Phone: 02 8437 5000 Email: <a href="mailto:elamond@adcoconstruct.com.au">elamond@adcoconstruct.com.au</a>
<b>OWNER:</b>	
Name	Health Infrastructure
Address	14/77 Pacific Hwy North Sydney NSW 2060
Phone / Email	Phone: 02 9978 5402
<b>PLANNING APPROVAL:</b>	
DA No.:	SSD 8980
Date of Determination	21 February 2019
<b>DESCRIPTION OF DEVELOPMENT:</b>	<b>Crown Certificate #2;</b> Remainder of works associated with the redevelopment of the existing Bowral & District Hospital.
<b>BCA CLASSIFICATION:</b>	Class 9a
<b>REFERENCED DOCUMENTATION:</b>	As listed in Schedule 1

### STATUTORY CERTIFICATION:

Pursuant to the provisions of Section 6.28 of the Environmental Planning and Assessment Act 1979, Blackett Maguire + Goldsmith Pty Ltd hereby certifies that the building works have been designed in accordance with the Building Code of Australia 2019, subject to the attached Conditions.

### CONDITIONS:

As listed in Schedule 2

### PERSON UNDERTAKING CERTIFICATION OF DESIGN ON BEHALF OF THE CROWN:

SIGNATURE

Accredited Certifier in NSW  
Accreditation No.

David Blackett  
BPE0032

Date: 03 October 2019



## SCHEDULE 1

### SCHEDULE OF DOCUMENTATION

+ Architectural Plans prepared by MSJ Architect:

DRAWING NUMBER	REV	DATE	DRAWING NUMBER	REV	DATE
00002	16	21 June 2019	02000	15	21 June 2019
02001	15	21 June 2019	02002	15	21 June 2019
02003	15	21 June 2019	10001	J	19 July 2019
10002	J	14 August 2019	10003	H	9 August 2019
10004	G	9 August 2019	10005	E	9 August 2019
20001	20	9 August 2019	20002	20	12 July 2019
20003	22	12 July 2019	20004	21	12 July 2019
30002	B	31 May 2019	30003	C	21 June 2019
30004	E	24 July 2019	30005	C	21 June 2019
30006	C	21 June 2019	30007	B	31 May 2019
30008	B	31 May 2019	30009	C	21 June 2019
30010	B	31 May 2019	30011	C	21 June 2019
30012	B	31 May 2019	30013	B	24 July 2019
30014	B	31 May 2019	30015	A	24 July 2019
30016	1		38001	7	14 June 2019
38002	4	21 June 2019			

+ Other documents:

ITEM	DOCUMENTATION	PREPARED BY	DATE
1.	HI endorsement for the FER	Health Infrastructure	2 October 2019
2.	Certificate of Design – External Walls	MSJ Architecture	1 September 2019
3.	Pre-Construction Dilapidation Report	Henry & Hymas	9 April 2019
4.	Certificate of Design – Electrical Power Supply	Wood & Grieve Engineers	17 April 2019
5.	Certificate of Design - Communication (Telstra)	Wood & Grieve Engineers	17 April 2019
6.	Services Connection Offer	Endeavour Energy	23 November 2017
7.	NBN development application submission	ADCO Constructions	28 August 2019
8.	Section 68 modification approval	Wingecarribee Shire Council	26 June 2018
9.	Statement of Compliance – Community Communication Strategy	NSW Planning	17 April 2019
10.	Construction Traffic Management Plan	AAA Traffic Control	7 March 2019
11.	Stormwater and Sediment Erosion Control Plan	Enstruct Group	23 August 2019
12.	Certificate of Design – Construction Soil and Water Management Plan	Enstruct Group	23 August 2019
13.	Certificate of Design – Stormwater	Enstruct	23 August 2019
14.	Acoustic Assessment	Wood & Grieve Engineers	18 April 2019
15.	Correspondence regarding Truck Routes	AAA Traffic Control	2 April 2019
16.	Transport Assessment	GTA Consultants	11 October 2019
17.	Certificate of Compliance – Traffic	GTA Consultants	4 September 2019
18.	Statement of Compliance – Bicycle parking/ End of Trip Facilities	ADCO Constructions	3 September 2019
19.	Correspondence regarding Public Domain Works	Capital Insight	8 August 2019
20.	Correspondence regarding Tree Replacement Plan	Site Image Landscape Architects	29 July 2019
21.	Certificate of Design – Tree Replacement	Site Image Landscape Architects	15 August 2019



ITEM	DOCUMENTATION	PREPARED BY	DATE
22.	Approval for Parking Modifications and bus zone and shelter relocation	Wingecarribee Shire Council	26 July 2018
23.	Independent Audit Program	NGH Environmental	16 July 2019
24.	Certificate of Design – Architectural	MSJ Architects	22 August 2019
25.	Architectural Specification	MSJ Architects	17 July 2019
26.	Certificate of Design – ACP Panels	ADCO Constructions	19 March 2019
27.	Certificate of Design – No timber elements	ADCO Constructions	19 March 2019
28.	Certificate of Design – Structural	Henry & Hymas	23 August 2019
29.	Certificate of Design – Hydraulic Services, Fire Hydrants, Fire Hose Reel	Axis Consulting Services	12 August 2019
30.	Certificate of Design – Electrical	Wood & Grieve Engineers	8 August 2019
31.	Certificate of Design – Mechanical	Fredon Air (NSW)	22 August 2019
32.	Certificate of Design – Mechanical	Wood & Grieve Engineers	15 March 2019
33.	Certificate of Design – Fire Services	Fine Line Fire Protection	29 August 2019
34.	Fire Hydrant Coverage Plans	Acor Consultants	29 July 2019
35.	Fire Hose Reel Coverage Plans	Acor Consultants	29 July 2019
36.	Certificate of Design – Vertical Transportation	Wood & Grieve Engineers	20 March 2019
37.	Fire Engineering Report – SHIF0105/R002 Rev C	Umow Lai	9 August 2019
38.	Certificate of Design – Access	iAccess Consultants	14 June 2019
39.	Access Report	iAccess Consultants	14 June 2019
40.	Section J Report	Wood & Grieve Engineers	12 December 2018
41.	Statement of Compliance – Food Preparation/ Kitchen area	MSJ Architects	15 August 2019
42.	FEBQ v3	Umow Lai	24/07/2019
43.	FEBQ Cover Letter	FRNSW	26 July 2019



## SCHEDULE 2

### CONDITIONS OF BCA CROWN CERTIFICATE

This Crown Certificate has been issued subject to the following conditions:

1. All sarking is to comply with BCA2016 or be incorporated into the Fire Engineering Report, details to be provided.
2. This Crown Certificate does not certify compliance with the conditions of Development Consent. The building works should not commence until the Crown is satisfied that the conditions of development consent that are a pre-requisite to commencement have been appropriately addressed where relevant.
3. There is to be no impact, disruption, impediment or modification to existing active or passive fire safety systems or egress arrangements within the existing hospital building as a direct or indirect result of the proposed works without prior consultation and approval by the LHD (as applicable) and the crown certifier (BM+G).
4. All building works associated with the subject development are to be carried out in accordance with the requirements of the Blackett Maguire + Goldsmith BCA Assessment Report Revision 1 dated 10 April 2019.
5. All building works associated with the subject development are to be carried out in accordance with the approved documentation listed above in Schedule 1.

Any departure from the documentation cannot be undertaken without the review and approval by Blackett Maguire + Goldsmith.

6. Where there is any conflict between the Design Documentation and the advice provided by Blackett Maguire + Goldsmith, the advice issued takes precedence unless approved by Blackett Maguire + Goldsmith.
7. Any changes to the Architectural Documentation that may affect compliance with the Building Code of Australia or the referenced Australian Standards are to be appropriately disclosed to Blackett Maguire + Goldsmith for review.
8. Blackett Maguire + Goldsmith are to be contacted throughout the project for routine site inspections to ensure that the works are being carried out in accordance with the approved documentation.



### SCHEDULE 3

#### FIRE SAFETY SCHEDULE

*Issued under Clause 168 of the Environmental Planning & Assessment Regulation 2000*

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule, which, for the purposes of Clause 168 of the Environmental Planning and Assessment Regulation 2000, is deemed to be the current fire safety schedule for the building.

#### SCHEDULE

STATUTORY FIRE SAFETY MEASURE	DESIGN/INSTALLATION STANDARD	EXISTING	PROPOSED
Access Panels, Doors & Hoppers	BCA Clause C3.13 & AS 1530.4 – 2014		✓
Alarm Signalling Equipment	AS1670.3 – 2018		✓
Automatic Fail-Safe Devices	BCA Clause D2.21		✓
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a & AS 1670.1 – 2018 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Automatic Fire Suppression Systems <i>Designed to OH1 with fast response sprinkler heads provided</i>	BCA Spec. E1.5 & AS 2118.1-2017 Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Emergency Lifts	BCA Clause E3.4 & AS 1735.2 – 2001		✓
Emergency Lighting	BCA Clause E4.4 & AS 2293.1 – 2018		✓
EWIS	BCA Clause E4.9 & AS 1670.4 – 2018 & AS 4428.4 – 2004		✓
Emergency Evacuation Plan	AS 3745 – 2010 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 and AS 2293.1 – 2018		✓
Fire Blankets	AS 3504 – 1995 & AS 2444 – 2001		✓
Fire Dampers	BCA Clause C3.15, AS 1668.1 – 2015 & AS 1682.1 & 2 – 1990		✓
Fire Doors	BCA Clause C2.12, C2.13, C3.2, C3.4, C3.5, & C3.7, C3.8, and AS 1905.1 – 2015		✓
Fire Hose Reels	BCA Clause E1.4 & AS 2441 – 2005 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Fire Hydrant Systems	Clause E1.3 & AS 2419.1 – 2005 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Fire Seals	BCA Clause C3.15, AS 1530.4 & AS4072.1 – 2005		✓
Fire walls	BCA Spec. C2.5		✓
Lightweight Fire Resisting Construction	BCA Clause C1.8 & AS 1530.4 – 2014		✓
Mechanical Air Handling Systems (auto-shutdown)	BCA Clause E2.2, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012		✓
Paths of Travel	EP & A Regulation Clause 186 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 – 2001		✓
Required Exit Doors (power operated)	BCA Clause D2.19(b)		✓
Smoke Dampers	AS/NZS 1668.1 – 2015		✓
Smoke Doors	BCA Spec. C3.4 & C2.5		✓
Smoke Walls	BCA Spec. C2.5		✓



STATUTORY FIRE SAFETY MEASURE	DESIGN/INSTALLATION STANDARD	EXISTING	PROPOSED
Stand-by Power Systems	BCA Clause E1.3, E3.4, E4.2 & E4.5 and AS 3000 – 2018		✓
Wall-Wetting Sprinklers	BCA Clause C3.4 & AS 2118.2 – 2010 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
Warning & Operational signs	Section 183 of the EP & A Regulations 2000, AS 1905.1 – 2015, BCA Clause C3.6, D2.23, D3.6, E3.3 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓

FIRE ENGINEERING SUMMARY			
FIRE ENGINEERING REPORT SHIF0105/R002 REV C DATED 9/8/19 PREPARED BY UMOW LAI			
DEPARTURE FROM DTS PROVISIONS	PERFORMANCE REQUIREMENT	EXISTING	PROPOSED
1. Extended travel distances within the plant room to a single exit, up to 30 m in lieu of 20 m.	DP4, EP2.2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
2. Travel distances in the Level 01 operating theatres exceed the BCA DTS limits, including a maximum of: <ul style="list-style-type: none"> <li>Up to 33m to an exit in lieu of 30m.</li> <li>Up to 68m between exits in lieu of 45m.</li> </ul>	DP4, EP2.2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
3. Horizontal exit configuration requires passing through more than one fire compartment to reach a non-horizontal exit	DP4 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
4. Non-required non-fire isolated stairways are not permitted in patient care areas. The open stair at Ground floor leading to the link bridge does not comply with D1.12.	DP4 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
5. Exit doors between fire compartments swing in one direction in lieu of both directions	DP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
6. It is proposed to reduce the FRL of shelf angles providing support of brickwork from 120 minutes to 60 minutes.	CP1 & CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
7. Steel columns located within the perimeter of the Level 3 plant room supporting the roof only are not protected in accordance with the BCA DTS requirements.	CP1 & CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
8. The new link bridge is proposed to be constructed with unprotected steel and be smoke separated from the new building.	CP1 & CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
9. The BCA DTS provisions do not specifically nominate a fire treatment method where the perimeter floor slab meets with the external wall. It is proposed to provide a smoke seal with non-combustible material.	CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
10. It is proposed to allow selected unprotected steel roof elements to penetrate through fire walls.	CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓



<b>FIRE ENGINEERING SUMMARY</b>			
<b>FIRE ENGINEERING REPORT SHIF0105/R002 REV C DATED 9/8/19 PREPARED BY UMOW LAI</b>			
<b>DEPARTURE FROM DTS PROVISIONS</b>	<b>PERFORMANCE REQUIREMENT</b>	<b>EXISTING</b>	<b>PROPOSED</b>
11. Protection of external wall openings in different fire compartments to be achieved in the following manner: <ul style="list-style-type: none"> <li>• Fire rated construction FRL 120 provided to one compartment only in lieu of FRL 60 (or equivalent) provided to both compartments.</li> <li>• Protection achieved with wall wetting sprinklers located on both sides of one compartment opening in lieu of protecting both compartment openings.</li> </ul>	CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
12. Where pivot smoke doors are provided (to swing in two directions) smoke leakage performance in accordance with AS6905 is to be achieved.	CP3 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
13. It is proposed for the medical gas services to penetrate more than 2x fire compartments and be fire stopped in accordance with BCA Spec C3.15.	CP2 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
14. Fire hydrant booster is to be located not within sight of the Main Building Entry	EP1.3 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
15. Fire hose reel coverage achieved to a number of rooms by crossing a fire door.	EP1.1 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓
16. Sprinkler heads proposed to be flush mounted in specific infection control areas such a operating theatres and isolation rooms, which do not meet the fast response RTI requirement.	EP1.4 and Fire Engineering Report SHIF0105/R002 (C) prepared by UMOW Lai dated 9/8/2019		✓



## **SCHEDULE 4**

### INSPECTION REQUIREMENTS

#### **REQUIRED INSPECTIONS – CC#2 MAIN WORKS**

Please ensure that our office is contacted to undertake the following inspections throughout the construction program: