BLACKETT MAGUIRE+ GOLDSMITH

27 July 2018

Health Infrastructure
C/- Root Partnerships
Level 2, 14 Martin Place
SYDNEY NSW 2000

Attention: Tina Zheng
Email: zheng.t@rootparthnerships.com.au

Dear Alan,

RE: CAMPBELLTOWN HOSPITAL REDEVELOPMENT
BCA COMPLIANCE CAPABILITY STATEMENT FOR EIS / SSD APPLICATION

Blackett Maguire + Goldsmith Pty Ltd have been commissioned by Health Infrastructure to carry out a high level assessment of the proposed Campbelltown Hospital Redevelopment against the requirements of the National Construction Code Series (Volume 1) - Building Code of Australia (BCA) 2016.

It is understood that the proposed development will be subject to a SSD Application to be submitted the Department of Planning and this BCA Capability Statement will form part of the submission for consideration as part of the determination.

Our assessment of the SSD Documentation is based on the following:

- National Construction Code Series (Volume 1) Building Code of Australia 2016 (BCA) (including Amendment No. 1 adopted in March 2018);
- Guide to the Building Code of Australia 2016 (BCA Guide);
- Environmental Planning and Assessment Act 1979 (EP&A);
- Environmental Planning and Assessment Regulation 2000 (EP&AR);
- Schematic Architectural Drawings prepared by Billard Leece Partnership.

1.0 BUILDING DESCRIPTION

The proposed Campbelltown Hospital Redevelopment comprises the following

- Demolition of existing structures;
- Partial excavation of the site (due to the sloping topography);
- The construction of a new 13 storey (two of these levels are partially below ground) Clinical Services Building containing:
  - An Emergency Department;
  - Operating Theatres;
  - Intensive Care Unit;
  - Mental Health;
  - Birthing and Speciality Care Nursery;
  - Surgical and Medical Beds;
  - Helipad facilities; and
  - An Ambulance Bay.
- Construction of a new Hospital Spine and connections to existing hospital buildings;

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- Construction of augmented and new internal hospital access roads and links, including a connection to Appin Road and Therry Road;
- Construction of an at-grade car park;
- Tree removal; and
- Associated building services.

2.0 STATEMENT OBJECTIVES:

The objectives of this statement are to:

- Confirm that a preliminary high level review of the SSD Architectural Documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier; and
- Confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to clause 145 of the Environmental Planning & Assessment Regulation 2000.

3.0 REGULATORY FRAMEWORK:

Pursuant to Section 6.28 (formerly 109R) of the Environmental Planning & Assessment Act 1979 (Development by the Crown) the proposed development is required to be subject to compliance with the relevant requirements of the BCA as in force at the time of the invitation for the head contractor tender of the project.

4.0 BUILDING CODE OF AUSTRALIA 2016 COMPLIANCE:

Arising from our preliminary assessment of the proposed development against the Deemed-to-Satisfy provisions and Performance Requirements of National Construction Code Series – Volume 1 – Building code of Australia 2016, the following key compliance matters are noted.

The principal building characteristics as defined by the BCA are as follows:

BCA Classification:	Class 9a (Health-care Building) Class 5 (Professional consultation) Class 6 (Retail space)
Storeys Contained	The total number of storeys contained is thirteen (13)
Rise in Storeys:	The building has a rise in storeys of thirteen (13).
Effective Height:	> 25m & > 50m
Type of Construction:	Type A Construction
Sprinkler System Installed Throughout	Yes – New building is proposed to be protected throughout with an Automatic Fire Suppression System.
Importance Level	Importance Level 4
Climate Zone:	Energy Efficiency Zone 6

+ **Maximum Floor Area:**	Max 5,000m^2 compartments for Class 9a Health Care buildings. *Note: 2,000m² compartments applies to all Patient Care Areas within the building.*
+ **Maximum Volume:**	Max 30,000m^3 compartments for Class 9a Health Care buildings.

The high level preliminary BCA desktop assessment has been carried out against the provisions of the BCA. It is noted that the proposed development must comply with the relevant requirements of BCA and this can be achieved by complying with the following:

a) Complying with the Deemed-to-satisfy (DTS) Provisions; or

b) Formulating a Performance Solution which –

   i) Complies with the Performance Requirements; or

   ii) Be at least equivalent to the DTS provisions; or

c) A combination of the above.

4.1 Effective Height

Based on the rise in storeys of the proposed Acute Services Building, the building has an effective height exceeding 50m. As a result of the building having an effective height exceeding 50m, the following items are required to be incorporated into the design of the building:

+ Provision of a dedicated Fire Control Room which is accessed from two paths of travel.
+ Provision of a Grade 1 Water Supply for the Sprinkler System.
+ Provision of on-site water storage tanks for the Automatic Fire Suppression System and Fire Hydrant System.
+ Provision of a ring main for the Fire Hydrant System.
+ Provision of Fire Brigade Relay Pumps to enable relay boosting of each 50m pressure gauge.
+ Provision of a Zone Smoke Control System throughout the entire building.

It is noted that the proposed SSD Architectural Design is capable of achieving compliance with the above requirements.

4.2 Importance Level

The new Acute Services building will be required to be designed and constructed in accordance with the requirements of Importance Level 4 (post disaster operations) including structure and services as detailed in Clause B1.2 of the BCA.

This will be certified by the appropriate Design Consultants prior to the issue of the Crown Certification.

4.3 Type of Construction

The new Acute Services building will be required to be designed and constructed in accordance with the requirements of Type A Construction.

4.4 Fire & Smoke Compartmentation

Fire & Smoke separation is to be in accordance with BCA specifications C2.5 and C3.4.

Patient care areas also need to be fire compartmented into 2000m^2 fire compartments with fire walls having an FRL of 120/120/120.

Ward and Treatment Areas are required to be designed in accordance with the following table.

<table>
<tr><th colspan="2">Area Use</th><th colspan="3">Max. Compartment Size</th></tr>
<tr><td rowspan="4">Patient Care Area
(max 2,000m²)</td><td rowspan="2">Ward Area</td><td>Where total floor area is less than 500m²:</td><td>Where total floor area is greater than 500m², but less than 1000m²:</td><td>Where total floor area is greater than 1000m²:</td></tr>
<tr><td>Separate from other areas with Smoke Walls</td><td>Separate with smoke walls into areas less than 500m²</td><td>Separate with smoke walls with an FRL of not less 60/60/60 into areas less than 1000m²</td></tr>
<tr><td rowspan="2">Treatment Area</td><td colspan="2">Where total floor area is less than 1000m²:</td><td colspan="2">Where total floor area is greater than 1000m²:</td></tr>
<tr><td colspan="2">Separate from other areas with Smoke Walls</td><td colspan="2">Separate with smoke walls into areas less than 1000m²</td></tr>
<tr><td colspan="5">Note: Walls identified above which are required to achieve an FRL or be smoke separated must be of non-combustible construction i.e. no timber framed stud walls.</td></tr>
</table>

It is considered likely that fire and smoke compartment sizes throughout patient care areas may exceed the maximum limitations of Clause C2.5 in order to for the building design to align with clinical planning requirements of the LHD.

Any excessive fire and smoke compartment sizes will be required assessed as part of a Performance Assessment to be undertaken by a qualified Fire Safety Engineer.

4.5 Egress

The minimum number of exits has been provided from each storey of the building. Further review of egress from the Helipad Level will be required to be undertaken as the design develops in order to ensure compliance.

Egress travel distances from all areas used by patients must be within a maximum distance of 12m to an exit or to a point of choice of two alternative exits in which case a maximum travel distance of 30m is permitted to the nearest exit.

Egress from the non-patient care areas is permitted to extend to 20m to a point of choice and a maximum distance of 40m to an alternative exit.

The maximum travel distance between alternative exits from within patient areas cannot exceed 45m.

The maximum travel distance between alternative from non patient care areas is 60m.

It is noted that it is likely having regard to the need to design the building to align with clinical planning requirements of the LHD that travel distance to an exit and between alternative exits in a number of instances throughout the building may be subject of a Performance Solution to be undertaken by a qualified Fire Safety Engineer.

4.6 Access for People with a Disability

The new Acute Services Building will comply with BCA Part D3 and the Access to Premises Standards 2010 in terms of access and facilities for people with disabilities.

This will in essence ensure the design satisfies the requirements of the DDA.

Access for persons with disabilities must be provided, at a minimum, to and within all areas normally used by the occupants. This includes to and within all beds, throughout all patient care areas, staff areas and communal areas.

Access need not be provided to:

- An area where access would be inappropriate because of the particular purpose for which the area is used.
- An area that would pose a health or safety risk for people with a disability.
- Any path of travel providing access only to an area exempted by (a) or (b).

An Access Consultant will be engaged to review all of the Detailed Design Documentation as it progresses to ensure compliance.

5.0 ESSENTIAL FIRE SAFETY MEASURES

The following essential fire safety measures will be required to be installed throughout the building:

Essential Fire and Other Safety Measures	Standard of Performance
Access Panels, Doors & Hoppers	BCA Clause C3.13 AS 1530.4 - 2005
Alarm Signalling Equipment	AS1670.3 – 2004
Automatic Fail Safe Devices	BCA Clause D2.21
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a AS 1670.1 - 2015.
Automatic Fire Suppression System	BCA Spec. E1.5 AS2118.1 – 1999 / AS 2118.1 - 2017
Emergency Lighting	BCA Clause E4.4 AS 2293.1 - 2005
Emergency Lifts	BCA Clause E3.4 AS 1735.2 - 2001
Emergency Evacuation Plan	AS 3745 - 2002
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 AS 2293.1 – 2005
Fire Dampers	BCA Clause C3.15 AS 1668.1 - 2015 & AS 1682.1 & 2 – 2015
Fire Doors	BCA Clause C2.12, C2.13, C3.5, C3.8 AS 1905.1 – 2005
Fire Hose Reels	BCA Clause E1.4 AS 2441 – 2005
Fire Hydrant Systems	Clause E1.3 AS 2419.1 - 2005

Essential Fire and Other Safety Measures	Standard of Performance
Fire Seals	BCA Clause C3.15 AS 1530.4 – 2005 & AS 4072.1 – 2005
Fire Walls	BCA Spec. C1.1
Lightweight Construction	BCA Clause C1.8 AS 1530.3 – 1999
Manual Call Points	BCA Section E
Mechanical Air Handling Systems (automatic shutdown)	BCA Clause E2.2 AS/NZS 1668.1 - 2015 & AS 1668.2 – 2012
Paths of Travel	EP & A Regulation Clause 186
Portable Fire Extinguishers	BCA Clause E1.6 AS 2444 – 2001
Pressurisation Systems (Fire Isolated Stairways and associated Passageways)	BCA Clause E2.2 AS/NZS 1668.1 - 2015 & AS 1668.2 – 2015
Required Exit Doors (power operated)	BCA Clause D2.19(d)
Smoke Dampers	AS/NZS 1668.1 – 2015
Smoke Doors	BCA Spec. C3.4 & C2.5
Smoke Seals	BCA Spec C3.4
Smoke Walls	BCA Spec. C2.5
Smoke Hazard Management System – (Zone Smoke Control System)	BCA Clause E2.2 AS/NZS 1668.1 - 2015 & AS 1668.2 – 2012
Sound System & Intercom System for Emergency Purposes	BCA Clause E4.9 & AS 1670.1 - 2004
Wall-Wetting Sprinklers	BCA Clause C3.4 AS 2118.2 – 1995
Warning & Operational signs	Section 183 of the EP & A Regulations 2000, AS 1905.1 - 2005, BCA Clause D2.23.

6.0 CONCLUSION:

This report contains a high level assessment of the referenced SSD Architectural Drawings for the proposed Campbelltown Hospital Redevelopment against the requirements of the Building Code of Australia 2016 (BCA) and the Access to Premises Standards.

Arising from our assessment we are satisfied that the project design is capable of satisfying the requirements of the BCA2016 and Access Standards subject to the above. As the nominated Crown Certifier for the project, Blackett Maguire + Goldsmith will review all stages of documentation to ensure compliance with the requirements of the Building Code of Australia.

We trust that the above has been of assistance. If you questions regarding any of the above or would like to discuss any matter in further detail, please do not hesitate to contact the undersigned on 9211 7777 or 0499 088 065.

Regards,

Adam Durnford
Associate Director
A1 Accredited Certifier (BPB1821)
Blackett Maguire + Goldsmith