BLACKETT MAGUIRE+ GOLDSMITH

BCA Assessment Report

Sydney South West Private Hospital
Liverpool NSW

Prepared for Healthscope Pty Ltd
C/- Woods Bagot

Revision 01

26th August 2010

Project No.: 100313

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REPORT STATUS				
DATE	**REVISION**	**STATUS**	**AUTHOR**	**REVIEWED**
26/8/10	01	Part 3A Major Project Application Submission	SR	DB

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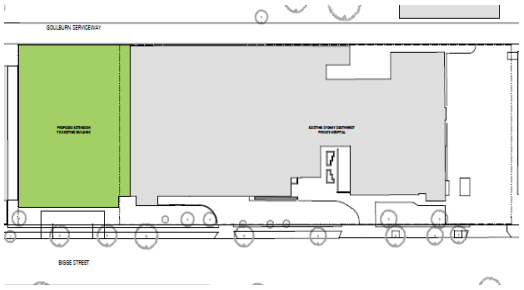
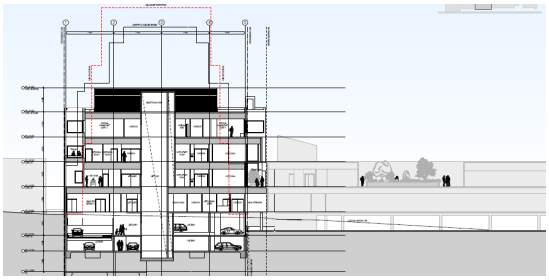
1.0. INTRODUCTION

1.1 BACKGROUND & PROPOSAL

Blackett Maguire + Goldsmith Pty Ltd (BM+G) have been commissioned by Healthscope to review the DA architectural design documentation against the requirements of BCA and prepare a BCA compliance report for submission with the Major Project Application to the Department of Planning.

The property is known as Sydney South West Private Hospital in Liverpool.

The existing hospital building consists of 3 storeys Class 9a health care building with associated ground level open deck and external car parking. Healthscope have recently acquired the adjacent site to the south and plan to carry out extensions to the existing building.

	
Woods Bagot Site Plan	**Woods Bagot Section Plan**

The proposed development comprises the construction of a new extension to northern end of the existing three (3) storey hospital building and is understood that to entail the following;

- Level 02 Basement – Fire Services Plant room,
- Level 01 Basement – Car parking
- Ground Level – Car parking (partially below ground)
- Level 01 – Medical Centre & Operating Theatres
- Level 02 – Inpatient Units
- Level 03 – Mental Health Units
- Level 04 – Medical Consultant Suites
- Rooftop – Plant room, and
- Other building and site works associated with the development

The walls between the existing and new parts of the building will need to be inspected by a structural engineer and upgraded (where necessary) to achieve a minimum Fire Resistance Level (FRL) separation of 120/120/120 minutes between the old and the new parts. As such the following assessment for the proposed new development is considered to not reduce the existing levels of fire safety within the existing building. All new building works will either be designed to comply with either the Deemed-to-Satisfy Provisions or Relevant Performance Requirements of the Building Code of Australia 2010 (BCA).

The following comments are based on our review of the architectural drawing numbers A1000(D), A1001(A), A1100(B), A2200(K), A2201(K), A2202(K), A2204(K), A2205(K), A2206(K), A2207(I), A2208(E), A3000(E), A3001(E),A3002(E), A3003(E), A3004(E), A3100(E) & A3101(E) & A9502(D), prepared by Woods Bagot Pty Limited and dated 16 August 2010.

1.2 AIM

The aim of this compliance report is to:-

1. Undertake an assessment of the referenced architectural design documentation against the deemed-to-satisfy provisions of the BCA

2. Accompany submission of the Major Project Application to the Department of Planning to enable the consent authority to be satisfied that subsequent compliance with the fire & life safety, health & amenity, accessibility and energy efficiency requirements of the BCA, will not give rise to design changes to the building which may necessitate the submission of an application under Section 75W of the Environmental Planning and Assessment Act, 1979.

3. Enable the certifying authority to satisfy its statutory obligations under Clause 145 of the Environmental Planning and Assessment Regulation, 2000.

4. Enable the certifying authority to satisfy its statutory obligations under Clause 17 & 18 of the Building Professionals Regulation 2007.

5. Enable the certifying authority to satisfy its statutory obligations under Clause 143(3) of the Environmental Planning and Assessment Regulation, 2000. Clause 143 of the *Environmental Planning & Assessment Regulation 2000* states that:

   (1) A certifying authority must not issue a construction certificate for building work under a development consent that authorises a change of building use unless:

   (a) it is satisfied that the fire protection and structural capacity of the building will be appropriate to its new use, and

   (b) it is satisfied that the building will comply with such of the Category 1 fire safety provisions as are applicable to the new use,

   assuming that the building work is carried out in accordance with the plans and specifications to which the construction certificate relates and any conditions to which the construction certificate is subject.

   (2) Subclause (1) (b) does not apply to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4).

   (3) In the case of building work that involves the alteration, enlargement or extension of an existing building in circumstances in which no change of building use is proposed, a certifying authority must not issue a construction certificate for the work unless it is satisfied that, on completion of the building work, the fire protection and structural capacity of the building will not be reduced, assuming that the building work is carried out in accordance with the plans and specifications to which the construction certificate relates and any conditions to which the construction certificate is subject.

   (4) This clause does not apply to building work required by a consent authority as a condition of a development consent that authorises a change of building use.

Subclauses (1), (2) & (4) are not applicable to the proposed development as there is no change of use proposed. With respect to subclause (3), we are of the opinion that on completion of the proposed development the fire protection and structural capacity of the existing building will not be reduced, subject to:

- the compliance issues outlined under **Section 2.0** of this report being addressed; and
- the new building work is carried out in accordance with the plans and specifications to which the application relates and is constructed in accordance with the BCA; and
- a certificate of structural adequacy is obtained from a structural engineer confirming that the existing building has the structural capacity to withstand the loads proposed by the new extensions.

It should be noted that the compliance statement is not intended to identify all issues of compliance or non-compliance with the BCA with such other issues to be appropriately addressed prior to issue of the Construction Certificate.

1.3 PROJECT TEAM

The following BM+G Team Members have contributed to this Report:

- David Blackett – Accredited Certifier
- Steven Rodriguez – Accredited Certifier

1.4 DOCUMENTATION

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

- Building Code of Australia 2010 (BCA)
- Guide to the Building Code of Australia 2010
- Email correspondence dated 20 August 2010 prepared by Woods Bagot
- Information/documentation provided by the Client including the drawings referenced in Section 1.1 of this report above

1.5 LIMITATIONS & EXCLUSIONS

The limitations and exclusions of this report are as follows:

- The following assessment is based upon a visual inspection of the existing building and a review of the architectural documentation. It is considered that the final architectural design will need to be reviewed having regards to our comments in our Preliminary BCA Assessment Report - Key Compliance Issues - Revision 02, dated 12 August 2010.
- Our comments relate to the relevant BCA Issues associated with Sections B, C, D, E, F & J of the Building Code of Australia only.
- No assessment has been undertaken with respect to the Disability Discrimination Act 1992 (DDA). The building owner should be satisfied that their obligations under the DDA have been addressed.

  Please note that whilst the BCA specifies a minimum standard of compliance with AS1428.1 and Part D3 of the BCA for access and facilities for people with disabilities, compliance with such requirements may not necessarily preclude the possibility of a future complaint made under the Disability Discrimination Act 1992 (DDA). The DDA is a complaint based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the building owner should be satisfied that their obligations under the DDA have been addressed.

  In this regard it is understood that the services of an accessibility consultant will be engaged to provide design compliance advise prior to the construction certificate stage.
- The Report does not address matters in relation to the following:
  i. Local Government Act and Regulations.
  ii. Occupational Health and Safety Act and Regulations.
  iii. WorkCover Authority requirements.
  iv. Water, drainage, gas, telecommunications and electricity supply authority requirements.
  v. Health Care Facilities Guidelines.
  vi. Disability Discrimination Act 1992.
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1.6 TERMINOLOGY

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

Construction Certificate – Building Approval issued by the Certifying Authority pursuant to Part 4A of the Environmental Planning & Assessment regulation 1979.

Fire Resistance Level (FRL) - means the grading periods in minutes for the following criteria-

(a) structural adequacy; and
(b) integrity; and
(c) insulation,
and expressed in that order.

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

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

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

Occupation Certificate – Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 4A of the Environmental Planning & Assessment regulation 1979.

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

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

Compliance with the Performance Requirements can only be achieved by-

(a) complying with the Deemed-to-Satisfy Provisions; or
(b) formulating an Alternative Solution which-
  (i) complies with the Performance Requirements; or
  (ii) is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
(c) a combination of (a) and (b).

Sole occupancy unit - means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and can include a dwelling and/or office suite.

2.0. BCA ASSESSMENT

The following comprises a review of the proposed development against the Deemed-to-Satisfy (DTS) provisions & Performance Requirements of the Building Code of Australia 2010 (BCA).

Section A – General Provisions:

1. In summary, the key building characteristics for the new works have been identified as follows:

BCA Classification:	Class 5 (Medical Professional Suites) – Levels 1 (part) & Level 4 Class 7a (Carparking) – Basement 01 & Ground Level Class 9a (Hospital) – Level 1 (part), Level 2 & Level 3
Rise in Storeys:	Four (4)*
Storeys Contained	Eight (8)
Classification	Type A Construction
Effective Height:	> 12m & < 25m (33.220-17.500 = Approx. 15.72m)
Floor Area:	4,414.5msq *(as per Drawing No. A9502(D)*

Note 1: Scaled elevations required for further verification of rise in storeys in particularly along Grid Lines 4-5 where the Ground Level car park is partially above ground level will be required at the Construction Certificate stage.

Note 2: The building under current design does not have an effective height greater than 25m.

Section B – Structural Provisions:

The proposed development will generally satisfy the Performance Requirements of Section B of the BCA subject to the implementation of the following:

1. Structural engineer is to review the building and provide certification to the effect that the existing building structure is structurally adequate and will be capable of withstanding the proposed new works and address the requirements of Clause 143(3) of the Environmental Planning & Assessment Regulation 2000. This will include a review of the existing Northern wall which will become a fire wall and may require rectification upgrade works to maintain adequate separation.

2. Structural engineer will provide details, specifications and design certification for the proposed new building works to satisfy Performance Requirements BP1.1 - BP1.3 of the BCA.

Section C – Fire Resistance and Compartmentation:

The proposed development will generally satisfy the DTS provisions of Section C of the BCA subject to the implementation of the following:

1. All new surface finishes, assemblies and linings are to comply with clause C1.10 (Specification C1.10 & C1.10a) with regard to Fire Hazard Properties.

2. The FRL of the existing external walls is considered to be compliant with the DTS provisions of the BCA with respect to Type A Construction.

3. The roof structure is required to achieve a minimum FRL of 120/120/120 given that the building is not proposed to be sprinkler protected throughout.

4. The Class 9a part of the building will be compartmented into fire compartments, fire rated zones and smoke compartments in accordance with the BCA. The DTS provisions of the BCA Clause C2.5 require compartmentation within the Class 9a part of a building at maximum thresholds as follows:

   - Fire Compartmentation of *Patient Care Areas* – max. 2,000m^2 (120/120/120 FRL)
   - Fire Rated/Separated Zones for *Ward Areas* – max. 1,000m^2 (60/60/60 FRL)
   - Smoke Compartmentation of *Ward Areas* – max. 500m^2 (Spec.C2.5)
   - Smoke Compartmentation of *Treatment Areas* – max. 1000m^2 (Spec.C2.5)

   Note: The size of the proposed compartments appear to be compliant however smoke/fire compartmentation plans showing new/(existing adjacent) zones and floor areas for each part will be required at the Construction Certificate stage. It is also noted that in most locations the walls may need to be designed as both fire/smoke walls and as such provisions accounted for accordingly e.g. walls between existing and new building parts etc.

5. The Fire Walls above required for "Fire Compartmentation" including the wall between the existing and the new building parts, are required to be constructed / upgraded in accordance with BCA Cl. C2.7(a)& (c) and achieve a minimum FRL of 120/120/120. It also noted that the *Ward / Treatment Areas* on Levels 01, 02 and 03 will be constructed as Fire Walls with 120/120/120 FRL's (in lieu of 60/60/60) as the doorways within the walls are being relied upon as **Horizontal Exits**.

6. Spandrel separation (either vertical or horizontal) will be required to be provided between floors of consecutive storeys to minimise the risk of fire spreading from one floor to another in accordance with BCA Clause C2.6, given that the building will not be sprinkler protected throughout

7. Any rooms used for medical record storage (>10m^2) are to be 60/60/60 FRL fire separated.

8. There are several openings proposed within the southern elevation which will be situated within 3m of the adjacent northern allotment boundary / fire source feature which will be requiring protection in accordance with BCA Clause C3.4 e.g. fixed or automatic closing glazing with external drenchers etc.

9. The design will also incorporate a number of situations of exposure between adjoining fire compartments at the same level (between the existing and the new building parts). In this regard external walls and openings within such walls where exposed between adjoining fire compartments in both the existing and the proposed building parts will be protected in accordance with BCA Clauses C3.3 & C3.4.

10. Any door openings within the fire walls and fire rated walls required above are required to be protected with self closing --/120/30 fire doors.

11. Load bearing internal walls and load bearing fire walls will be of masonry or concrete construction.

12. Non load bearing internal wall required to have an FRL and non loadbearing walls of shafts will be non combustible construction throughout.

13. All fire rated shafts i.e. lift, services and stair shafts will need to be enclosed at the top and bottom by construction achieving a minimum FRL of -/120/120.

14. The doorways to the lift will be protected by -/60/- fire doors that comply with AS 1735.11.

Section D – Access and Egress:

The proposed development will generally satisfy the Performance Requirements of Section D of the BCA subject to the implementation of the following:

1. Each basement level requires a minimum of two (2) exits to comply with BCA Clause D1.2. In this regard we note that the lower Basement Level 02 will be subject to a fire engineered alternative solution addressing BCA Performance Requirements DP4 and EP2.2.

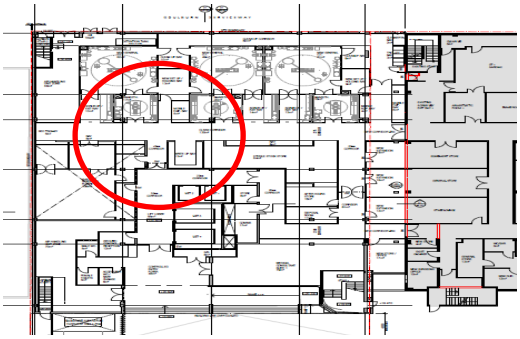
2. All new stairways are required to be within fire isolated shafts in accordance with BCA Clause D1.3 and achieve respective FRL's in accordance with BCA Specification C1.1.

3. Travel distances within each respective floor and distance between alternative exits are required to comply with the following provisions:

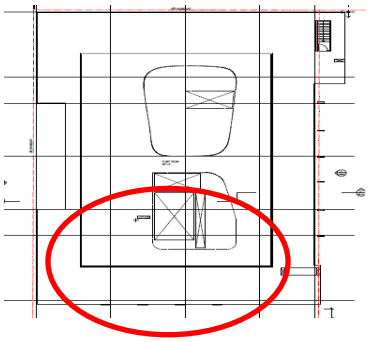
- maximum 12m to a point of choice and 30m to an alternative exit in the Class 9a part
- maximum 45m between alternative exits the Class 9a part
- maximum 20m to a point of choice and 40m to an alternative exit in the Class 5 part
- maximum 60m between alternative exits in the Class 5 part

In this regard we note the following locations where further consideration in design may be required at the Construction Certificate Stage. Alternatively it is noted that the option for a fire engineered alternative solution from a fire safety engineer may be envisaged at the Construction Certificate stage by addressing BCA Performance Requirements DP4 & EP2.2

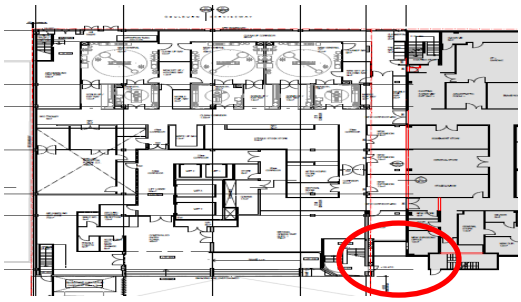
- Level 01 - excessive travel distances identified along the north-eastern side of the ground floor may be addressed by considering implantation of horizontal exits etc.



- Rooftop Plant room – excessive travel distances due to the roofed plant room structure and the provision of a single stairway will be addressed by implementation of a secondary exit ladder designed in accordance with the provisions of AS1657 – Refer to denoted location below.



4. Discharge of the new/existing fire isolated exits along the western side will, in part, necessitate passing <6m from openings in the external walls of the building. In this regard it is noted that the openings will be protected internally and be either fixed or automatic closing; and walls will be required to achieve a minimum FRL of 60/60/60 (rated in both directions). Refer to denoted location below.



5. Windows proposed within the fire stair (circled above) will be located within 6m of adjacent windows in the external walls of the building and as such will be protected in accordance with BCA Clauses C3.4 / C3.8

6. Latch hardware to all exit doors throughout the new building part will comply with the DTS provisions of Part D2.21 of the BCA 2010.

7. Smoke doors will swing in both directions where egress travel 'is required' in both directions through the doorway.

8. The corridors within the Class 9a and Class 5 part (where provided with common egress paths e.g. Level 01) will have a minimum unobstructed width not less than 1800mm in accordance with BCA Clause D1.6.

9. The doorways in the patient care areas will have a minimum unobstructed opening of:

- 1200mm if the doorway provided access to or from a corridor of width <2200mm,
- 1070mm if the doorway provided access to or from a corridor of width >2200mm, and
- Horizontal exits serving the patient care areas will have a minimum unobstructed width of 1250mm.

10. The landings within the fire isolated stairways serving the Class 9a part of the building will be sufficient to move a stretcher, 2m long and 600mm wide, at a gradient not more than the gradient of the stairs, with at least one end of the stretcher on the landing while changing direction between flights, to comply with the requirements of BCA Clause D2.14.

11. The fire hydrant pump room located in the Lower Basement 02 Level which opens directly into the fire stair contrary to BCA Clause D1.7(a), will be required to be provided with an air lock to achieve compliance in this regard.

12. Numbers of persons accommodated are considered compliant within the building based on the 10msq per person rule as per BCA Table D1.13.

13. The automatic sliding doors forming part of the required exit on Level 01 are to open manually under force of not more than 110N if there is mal-function or failure to the door, and automatically open upon activation of the buildings fire alarm, as per the requirements of BCA Clause D2.19.

14. Access and facilities for people with disabilities to and within the building will be provided to satisfy the requirements of BCA, AS1428 series and DDA. The requirements of access and facilities for people with disabilities will be the subject of a report from an independent access consultant.

Section E – Essential Fire Safety Measures

The proposal will generally satisfy the Performance Requirements of Section E of the BCA subject to implementation of the following:

1. Based on the information provided to date and on the understanding that the buildings effective height will not be greater than 25m with the current design, the following is a list of Essential Fire and Other Safety Measures applicable to the 'new' building parts.

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 (*throughout the Class 5 & 9a parts)*	BCA Spec. E2.2a & AS 1670.1 - 2004.
Automatic Fire Suppression Systems (*throughout the Class 7a carpark)**	BCA Spec. E1.5 & AS 2118.1-1999
Building Occupant Warning System	BCA Spec E1.5 Cl. 8 and/or Cl. 3.22 of AS 1670.1 – 2004
Emergency Lifts	BCA Clause E3.4 & AS 1735.2 - 2001
Emergency Lighting	BCA Clause E4.4 & AS2293.1 - 2005
Sound Systems & Intercom Systems for Emergency Purposes (EWIS)	BCA Clause E4.9 & AS 1670.4 – 2004 & AS 4428.4 - 2004
Emergency Evacuation Plan	AS 3745 - 2002
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 and AS 2293.1 - 2005
Fire Dampers	BCA Clause C3.15, AS 1668.1 - 1998 & AS 1682.1 & 2 - 1990
Fire Doors	BCA Clause C2.12, C2.13, C3.2, C3.4, C3.5, C3.6 & C3.7, C3.8, C3.11 and AS 1905.1 – 2005
Fire Hose Reels	BCA Clause E1.4 & AS 2441 – 2005
Fire Hydrant Systems	Clause E1.3 & AS 2419.1 - 2005
Fire Seals	BCA Clause C3.15, AS 1530.4 – 2005 & AS 4072.1 - 2005
Lightweight Construction	BCA Clause C1.8 & AS 1530.3 – 1999
Manual Call Points *(Break Glass Alarms)*	BCA Spec E2.2a Clause 4
Mechanical Air Handling Systems *(Automatic shutdown of air conditioning systems within the Class 9a part & Manual Override of Car park exhaust)*	BCA Clause E2.2, AS/NZS 1668.1 - 1998 & AS 1668.2 – 1991
Paths of Travel	BCA Section D & EP & A Regulation Clause 186
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 – 2001
Pressurising Systems (*Stair Pressurisation system to the fire isolated exits serving the new building)*	BCA Clause E2.2 & AS/NZS 1668.1 - 1998
Required Exit Doors (power operated)	BCA Clause D2.19(d)
Smoke Hazard Management Systems – Zone Smoke Control System (*throughout the new Class 9a part)**	BCA Part E2 & AS/NZS 1668.1 - 1998
Smoke Dampers	AS/NZS 1668.1 - 1998
Smoke Doors	BCA Spec. C2.5 & C3.4
Stand-by Power Systems	BCA Clause E1.3, E3.4, E4.2 & E4.5 and AS 3000 – 2000
External Wall-Wetting Sprinklers	BCA Clause C3.4 & AS 2118.2 - 1995
Warning & Operational signs	Clause 183 of the EP & A Reg 2000, AS 1905.1 - 2005, BCA Clause D2.23 & E3.3

Notes:

- *The above list of required essential fire safety measures may be subject to modification should fire engineering analysis be proposed to address the key compliance issues in Section D above.*
- *The BCA requires for a building with an effective height less than 25m and containing Class 9a parts, to either be provided with a zone smoke control system or a sprinkler system. In this regard it is proposed to install a Zone Smoke Control System throughout the Class 9a/5 parts of the 'new' building works - Mechanical engineer to provide design advice regarding separation between protected and non protected areas to achieve compliance in this regard.*
- *Not less than two (2) emergency lifts will be required in the building to serve the Class 9a parts in accordance with AS1735.1 & 2. A stretcher facility is also required in at least one (1) lift due to the buildings effective height exceeding 12m.*
- *The lift pit with depth not >3m will be accessed via the lowest landing doors for maintenance in accordance with the BCA.*
- *The existing ground floor carpark level appears to have been designed / constructed initially as an open deck carpark due to the omittance of ventilation systems and sprinklers. Notwithstanding it is noted that the new extension may exacerbate existing deficiencies and may warrant the installation of both systems throughout the entire car parking areas – Mechanical Engineer to verify at the Construction Certificate stage.*
- *The fire hydrant booster assembly located at the main entry along Bigge Street had several deficiencies noted and will require upgrade under the new works. Booster inlet/outlets will require upgrading to accommodate new building and current requirements. Signage, block plans, anti- tamper straps, Storz couplings amongst others will need consideration – Hydraulic Engineer to verify at the Construction Certificate stage.*
- *The rooftop plant room and the lower basement level plant room require fire safety services to be extended throughout e.g. sprinklers, fire hose reels, fire hydrants etc.*
- *A combination of ionisation and photoelectric smoke detectors will be required along the paths of travel of the Class 9a parts in accordance with BCA Spec E2.2.*
- *Manual Call points are to be distributed along evacuation routes so that no point of the floor is more than 30m from a manual call point.*
- *Total Floor area of the 'whole building' has been calculated at under 18,000msq (TBC by architect at the Construction Certificate Stage) and as such the provisions for a fire control centre are not required.*

Section F – Health and Amenity

The proposed development will generally satisfy the Performance Requirements of Section F of the BCA subject to implementation of the following:

1. Levels 1-3 of the new Class 9a part will be provided with at least one slop-hopper or other device to facilitate emptying of containers of sewerage or dirty water together with flushing apparatus, tap & grating.

2. All operating theatres and delivery rooms will have a ceiling height not less than 3000mm in accordance with the DTS provisions of Part F3. All other patient care areas and corridors and passageways will have a ceiling height not less then 2400mm.

3. It has been assumed that sanitary facility provisions for the future use of the medical suites have been accounted for (TBC).

4. Ventilation of all parts of the building will be in accordance with BCA with respect to natural and or mechanical ventilation to comply with AS1668.1 & 2.

5. Carparking areas to be provided with a system of ventilation/exhaust complying with AS1668.2-1991. Basement plant rooms and rooftop plant rooms also require ventilation provisions to be considered.

6. Stormwater drainage for the new building works will comply with AS 3500 & Council requirements where applicable.

7. Artificial lighting is required throughout the building and is to comply with AS/NZS 1680.1.

8. All patient sleeping rooms within the ward areas will have provision of natural lighting with 3.0m setbacks as required as per BCA cl. F4.2(b).

9. Toilets will be provided throughout the building will be provided to comply with the ratio requirements of Part F2 of the BCA. This includes sanitary facilities for people with disabilities

Section J – Energy Efficiency Requirements:

The proposed new building works will generally satisfy the DTS provisions of Section J of the BCA subject to the following:

1. Energy efficiency design measures will be implemented into the 'new' building design to satisfy the requirements under BCA Parts J1, J2, J3, J5, J6, J7 and J8 for Climate Zone 5 as follows;
    - building fabric (insulation)
    - external glazing
    - building sealing to doors, exhaust vents and windows
    - efficiency of the running of air conditioning systems and mechanical ventilation systems with respect to insulation of ductwork, timer switches, etc
    - performance of glazing
    - artificial lighting & power controls (interior and exterior lighting)
    - hot water systems
    - access and maintenance of energy efficiency systems

    It is understood that the services of an ESD consultant may be engaged to provide specialist advice and cost effective recommendations for compliance, together with a report which will be required to be submitted prior to issue of the Construction Certificate, which details how compliance is to be achieved.

3.0. CONCLUSION

In view of the above assessment we can confirm that subject to the above measures being undertaken, that compliance with the Performance Requirements of the BCA is readily achievable. In addition, it is considered that such matters can adequately be addressed in the preparation of the Construction Certificate documentation without giving rise to any inconsistencies with the Major Project Development Approval.

Consistent with reasonable approach, we also consider any necessary upgrade works as outlined above to be appropriate for the purposes of Clauses 143(3) of the EP & A Regulation 2000.

We trust that the above submission is of assistance to the Department of Planning and we are confident that any design modifications required to the building in order to satisfy the fire and life safety and health and amenity requirements of the BCA will not necessitate the need for submission of a further application under Section 75W of the Environmental Planning & Assessment Act 1979

Should you wish to discuss any of the above matters in greater detail, please do not hesitate to contact the undersigned on 02 9211 7777.

Yours sincerely,

Steven Rodriguez
Building Regulations Consultant
Blackett Maguire + Goldsmith Pty Ltd