21 September 2018

St Basil's
130 Croydon Street
LAKEMBA NSW 2195

Attention: Nick Baldas
Email: nbaldas@stbasils.org.au

Dear Nick,

RE: 62-82 Harrow Road, BEXLEY NSW 2207
BCA COMPLIANCE STATEMENT FOR DA SUBMISSION

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 Development Application to Randwick Council for the proposed integrated aged care facility at 62- 82 Harrow Road, Bexley (the 'Site') against the Building Code of Australia 2016 Amendment 1 (BCA).

1.0 PROPOSED DEVELOPMENT

The DA seeks approval for the demolition of the existing minor structures and construction of a multi-level Class 9c Residential Aged Care Facility (RACF) and Class 7a basement car park.

2.0 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 pursuant to clause 145 of the *Environmental Planning & Assessment Regulation 2000*.

c) accompany the Development Application submission to enable the Consent Authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the *Environmental Planning and 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. The development will be subject further assessment following receipt of more detailed documentation at Construction Certificate stage.

This statement has been prepared pursuant to clause 18 of the *Building Professionals Regulation 2007*.

3.0 RELEVANT VERSION OF THE BCA

Pursuant to clause 145(1)(b) the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time the application for the Construction Certificate was made. The current version of the BCA is the BCA 2016 Amendment 1, with BCA 2019 coming into effect in May 2019. For the purpose of this compliance statement, it is assumed that the Construction Certificate Application will be lodged prior May 2019, and as such the proposed development will be subject to compliance with the BCA 2016 Amendment 1.

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4.0 REFERENCED DOCUMENTATION

This report has been prepared based on a review of the preliminary DA architectural plans prepared by Peddle Thorp & Walker P/L:

Drawing	Revision	Date
A-DA-01	01	18.09.18
A-DA-03	01	18.09.18
A-DA-04	01	18.09.18
A-DA-05	01	18.09.18
A-DA-06	01	18.09.18
A-DA-07	01	18.09.18
A-DA-08	01	18.09.18
A-DA-09	01	18.09.18
A-DA-10	01	18.09.18
A-DA-11	01	18.09.18
A-DA-12	01	18.09.18
A-DA-13	01	18.09.18
A-DA-14	01	18.09.18
A-DA-15	01	18.09.18

5.0 BUILDING CLASSIFICATION

The new building works have been classified as follows:

BCA CLASSIFICATION:	Class 9c (Residential Aged Care Facility) Class 7a (Basement Carpark)
RISE IN STOREYS:	4 (Four)
STOREYS CONTAINED:	6 (Six)
TYPE OF CONSTRUCTION:	A
IMPORTANCE LEVEL (STRUCTURAL):	2 – *Structural engineer to confirm.*
SPRINKLER PROTECTED THROUGHOUT:	Yes
EFFECTIVE HEIGHT:	13.801m (RL 47.521 – RL 33.720)
MAX. FIRE COMPARTMENT SIZE (RACF):	RACF (Class 9c) - 8,000m^2 & 48,000m^3 Basement Carpark (Class 7a) - 5,000m^2 & 30,000m^3
CLIMATE ZONE:	Zone 5

6.0 BCA ASSESSMENT – KEY ISSUES

The following comprises a summary of the key compliance issues that will need to be addressed prior to issue of the Construction Certificate:

6.1 SECTION B - STRUCTURAL PROVISIONS

B1

New building works are to comply with the structural provisions of the BCA 2016 Amendment 1 and referenced standards including AS 1170.

The Importance Level provisions of BCA (Section B) are to be acknowledged by the Structural Engineer and addressed to the degree necessary.

New building works to the existing building must be compliant with earthquake provisions of AS1170.4 – Earthquake Actions in Australia.

6.2 SECTION C - FIRE RESISTANCE

C1.9

Non-Combustible Building Elements: External walls in a building of Type A construction are required to comprise non-combustible, or deemed non-combustible elements throughout. This includes:

- Any external wall claddings.
- Any framing or integral formwork systems. I.e. timber framing, dincel formwork, etc.
- Any external linings or trims. I.e. external UPVC window linings, timber window blades, etc.
- Any sarking or insulation contained within the wall assembly.

This is not an exhaustive list, and any element incorporated within any external wall assembly must be identified and provided for review. Any departures from non-combustibility or deemed non-combustible materials under this clause (C1.9[e]) will require consideration under a fire engineered performance solution, or alternatively, through compliance demonstrated under CV3.

C2.5

Class 9c Buildings: A Class 9c building must be divided into areas not more than 500m^2 by smoke-proof walls complying with Specification C2.5. Ancillary use areas containing equipment or materials that are a high potential fire hazard must be separated from the sole-occupancy units by smoke proof walls complying with Specification C2.5 – *We understand a fire engineered performance solution will be proposed to justify smoke compartment sizes up to 550m^2.*

C3.3

Separation of External Walls and Associated Openings in Different Fire Compartments: Any external walls and associated openings exposed to the external walls of adjacent fire compartments must be protected with FRL 60/60/60 construction with openings protected in accordance with C3.4.

C3.15	Openings for Service Installations: Where service installations penetrate the walls or floors required to have an FRL with respect to integrity and insulation they are to be protected by fire seals having an FRL of the building element concerned. Fire seals are required to comply with Specification C3.15, or be identical with a prototype of a system tested to AS 1530.4.

6.3 SECTION D1 & D2 – PROVISION FOR ESCAPE AND CONSTRUCTION OF EXITS

D1.2	Number of Exits Required: The building has two or more exits provided to all areas as required by this part.
D1.4	Exit Travel Distances: Exit travel distances within the Class 9c (RACF) and Class 7a (Basement Carpark) are required to be not more than 20m to a point of choice between alternative exits and 40m to the nearest one. – *Travel distances in various areas will need to be addressed as a fire engineered performance solution, and are deemed within the acceptable range to do so.*
D1.5	Distance Between Alternative Exits: Distances between alternative exits must be not greater than 60m in a Class 9c and 7a – *Travel distances in various areas will need to be addressed as a fire engineered performance solution, and are deemed within the acceptable range to do so.*
D1.6	Dimensions of Paths of Travel to an Exit: The minimum clear height through all egress paths is required to be no less than 2m, and a minimum of 1m wide (this width dimension is measured clear of any obstructions such as handrails and joinery). In a required exit or path of travel to an exit there is concession for the unobstructed width of a doorway to be reduced to 850mm min in lieu of 1m, and the unobstructed height for an exit doorway can be reduced to 1,980mm min. The minimum width of paths of travel must be not less than 1m wide generally (this width dimension is measured clear of any obstructions such as handrails and joinery), 1.5m for all public corridors and 1.8m in front of doorways to resident rooms and communal bathrooms. Doorways to resident rooms are to be not less than 1070mm and all other resident use areas must be not less than 870mm. *We understand two instances of a reduced corridor width within the Ground Floor will be rationalised under an architectural performance solution. The two corridors are located within the Day Room, and Air-Lock G-035*
D1.7	Travel via Fire-Isolated Exits: Each fire isolated exit must discharge directly to open space. Any unprotected external walls within a perpendicular distance of 6m from the path of discharge will need to achieve FRL 60/60/60 – *We understand a fire engineered performance solution will be proposed to justify the discharge of fire stairs requiring travel within 6m of unprotected external walls and openings. This will rely on the provision of alternative directions of travel on discharge from the exit.*
D1.8	External Stairways or Ramps In lieu of Fire-Isolated Exits: Any external stairs in lieu for fire-isolated exits must be non-combustible throughout, and protected with FRL 60/60/60 if within 6m of any part of the external walls of the building served.
D2.12	Roof as Open Space: The roof of the basement carpark effectively functions as open space for the level above and hence is required to achieve FRL 120/120/120 construction with any openings for services or the like fire stopped in accordance with Clause C3.15. No openings are permitted in the Basement roof slab within 3m of the path of discharge from any exit.
D2.13 / D2.14 / D2.16 / D2.17	Stairways, Balustrades, and Handrails: Stairways, balustrades and handrails to achieve the minimum requirements of the BCA. Floor finishes will be required to achieve the correct slip resistance in accordance with AS 4586-2013, and associated handbooks HB197 and HB198. This will need to be confirmed compliant at Occupation stage and as such, the selection of materials will need to be considered in relation to these requirements. Handrails must be provided along both sides of every passageway or corridor used by residents and must be continuous in length, where practical.

D2.19 / D2.20 / D2.21	Doors and Latching: All egress doorways must swing in the direction of egress and must be readily openable without a key from the side that faces a person seeking egress, by a single handed downward or pushing action on a single device which is located between 900mm and 1100mm from the floor. – *Where door swings cannot achieve the prescriptive requirements due to operational reasons, they will be subject to a fire engineered performance solution.*

6.4 PART D3 – ACCESS FOR PEOPLE WITH A DISABILITY

Part D3	Access for People with a Disability: The extent of access required depends on the classification of the building. Buildings and parts of buildings must be accessible as set out in Table D3.1 unless exempted by Clause D3.4. The building is required to comply with AS1428.1-2009. We understand an Access Consultant is engaged to provide advice in this regard.

6.5 PART E – SERVICES AND EQUIPMENT

E1.3	Fire Hydrants: Fire hydrant coverage is required to be provided to the all buildings in accordance with AS2419.1-2005.
E1.4	Fire Hose Reels: Fire hose reel coverage is required to be provided to the basement carpark only in accordance with AS2441-2005.
E1.5	Sprinklers: Sprinkler coverage is required to be provided to the Class 9c RACF and Class 7a Basement Carpark in accordance with AS 2118.1 – 2017.
E1.6	Fire Extinguishers: To be provided and designed in accordance with AS 2444-2001.
E2.2a	Smoke Hazard Management: In the Class 9c RACF, any air-handling systems (excluding non-ducted systems not exceeding a capacity of 1000L/s) must shut down on fire trip on the activation of a smoke detector or sprinkler head in accordance with AS 1668.1 - 2015. Building to be provided with a Building Occupant Warning System and an Automatic Fire Detection and Alarm System complying with AS 1670.1-2015. Stairway pressurisation is required to be provided to all fire-isolated exits within the building in accordance with AS 1668.1 - 2015. This does not apply to external stairways in lieu of fire-isolated exits. Remote automatic indication of each zone must be given in each smoke zone by means of either mimic panels with an illuminated display, or annunciator panels with alpha numeric display. Manual call points must be provided in paths of travel so that no point on the floor is more than 30m from a manual call point.
Part E3	Lift INSTALLATIONS: At least one lift serving the RACF building must have the spatial provisions to accommodate a raised stretcher in accordance with E3.2(b).
E4.2-E4.8	Emergency Lighting and Exits Signs: Emergency lighting and exit signage to be provided in accordance with E4.2-E4.5 complying with AS 2293.1 - 2005.

6.6 PART F – HEALTH AND AMENITY

F1	Damp and Weatherproofing: Damp and weatherproofing to comply with the prescriptive requirements of clauses F1.1-F1.13.
F2.1	Facilities in Residential Buildings: Sanitary facilities, such as closet pans, showers, and baths are required to be provided in accordance with Table F2.1. Once clinical washing basin must be provided for each 16 residents or part thereof. These must be provided within corridors. A kitchen and laundry facilities are also required to be provided within the development.
F2.3	Sanitary Facilities: Sanitary facilities are only required to be provided in accordance with the requirements for Class 9 employees. Based on the provision of facilities as shown on plan, compliance is readily achievable. This will be further developed during detailed design.

F2.4	Accessible Sanitary Facilities: We understand an Access Consultant has been engaged to determine compliance in this regard.
Part F3	Ceiling Heights: The floor to ceiling heights in the Class 9c building must be not less than 2.4m in habitable rooms, corridors and passageways, and 2.1m in kitchens, laundries, and bathrooms. In addition, the floor to ceiling heights of car parking areas must be not less than 2.2m.
Part F4	Part F4 – Light and Ventilation: Artificial lighting systems are required to comply with Clause F4.4 and AS 1680. All mechanical or air-conditioning installations must be undertaken in accordance with Clauses F4.5(b) and AS 1668.2.-2012. Natural lighting must be provided to all rooms used for sleeping purposes. The window sill must be no more than 1m above the finished floor level of each room, and must be a horizontal distance of no more than 3m from the adjoining allotment, another building, or another wall of the same building.
Part F5	Sound Transmission and Insulation: The walls within the Class 9c part of the building that are required to have an impact sound insulation rating must be identical with a prototype that is no less resistant to the transmission of sound when testing in accordance with Specification F5.5. The floors are also required to be provided with airborne and impact sound insulation.

6.7 PART J – ENERGY EFFICIENCY

Section J	Energy Efficiency: The building works are subject to compliance with the Energy Efficiency Provisions of Section J relating to: + J1: Building Fabric + J2: External Glazing + J3: Building Sealing + J5: Air-conditioning and ventilation systems + J6: Artificial lighting and power + J7: Hot water supply + J8: Access for maintenance

7.0 FIRE SAFETY SCHEDULE

The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final Fire Safety Engineering Review to confirm the works are permissible.

Statutory Fire Safety Measure	Design / Installation Standard
Access Panels, Doors & Hoppers	BCA Clause C3.13 & AS 1530.4 – 2014 and Manufacturer's specifications
Alarm Signalling Equipment	AS 1670.3 – 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 Systems	BCA Spec. E1.5 & AS 2118.1 – 2017
Building Occupant Warning System activated by the Sprinkler System	BCA Spec. E1.5, Clause 8 and Clause 3.22 of AS 1670.1 – 2015
Emergency Lighting	BCA Clause E4.4 & AS 2293.1 – 2005
Emergency Evacuation Plan	AS 3745-2010
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8; and AS 2293.1 – 2005
Fire Blankets	AS 3504 – 1995 & AS2444 – 2001
Fire Dampers	BCA Clause C3.15, AS 1668.1 – 2015 & AS 1682.1 & 2 – 1990 and manufacturer's specification
Fire Doors	BCA Clause C2.12, C2.13, C3.4, C3.5, C3.7, C3.8; and AS 1905.1 – 2015 and manufacturer's specification
Fire Hose Reels + Class 7a Carpark Only	BCA Clause E1.4 & AS 2441 – 2005
Fire Hydrant Systems	BCA Clause E1.3 & AS 2419.1 – 2005
Fire Seals	BCA Clause C3.15, AS 1530.4 – 2014 & AS 4072.1 – 2005 and manufacturer's specification
Lightweight Construction	BCA Clause C1.8 & AS 1530.4 – 2014 and manufacturer's specification
Mechanical Air Handling Systems + Class 9c part (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
Pressurising Systems + Stair Pressurisation to Fire-Isolated Stairs serving the Class 9c part.	BCA Clause E2.2 & AS/NZS 1668.1 – 2015
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
Wall-Wetting Sprinklers – *Potentially required by the fire engineered design.*	BCA Clause C3.4 & AS 2118.2 – 2010.
Warning & Operational Signs	Section 183 of the EP&A Regulation 2000, AS 1905.1 – 2015, BCA Clause D2.23, D3.6, E3.3.
Fire engineered Alternative Solutions relating to: + *To be developed with the design.*	BCA Performance Requirements ... Fire Safety Engineering Report prepared by ..... Report No. .... Revision .... dated .....

8.0 PERFORMANCE SOLUTIONS

PRELIMINARY FIRE ENGINEERING BRIEF

1.	**C2.5**	**RACF:** Ground Floor: To justify smoke compartments of up to 550m^2.
2.	**D2.20 / Spec C3.4**	RACF: To justify fire and smoke doors swinging against the direction of egress.
3.	**Spec C3.4**	RACF: To justify smoke leakage through two-way swing smoke doors.
4.	**D1.4**	**Basement Carpark** Basement 2: Up to 66m to an exit. Basement 2: Up to 30m to a point of choice between two exits. Basement 1: Up to 57m to an exit. Basement 1: Up to 30m to a point of choice between two exits. **RACF:** Level 3: Up to 48m to an exit.
5.	**D1.5**	**Basement Carpark** Basement Carpark: Up to 98m between alternative exits. **RACF:** Level 3: Up to 68m between alternative exits.
6.	**D1.7**	To justify the discharge of fire-isolated exits from the building requiring travel past unprotected external walls in certain instances. This will be reliant on the availability of alternative discharge paths in opposite directions.

ARCHITECTURAL PERFORMANCE SOLUTIONS

1.	**D1.6**	To justify two instances of a reduced corridor width of less than 1.5m on the Ground Floor.

9.0 CONCLUSION

This report contains an assessment of the referenced architectural documentation for the proposed development located at 62-82 Harrow Rd, Bexley, against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2016 Amendment 1.

In view of the above assessment we can confirm that subject to the above measures being appropriately addressed by the project design team, compliance with the provisions 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 Development Approval.

If you have any questions or require further information, please do not hesitate to contact me on 0400 819 326.
Regards

Michael Potts
Senior Building Surveyor
Blackett Maguire + Goldsmith
A1 Accredited Certifier (NSW) – BPB No. 2516