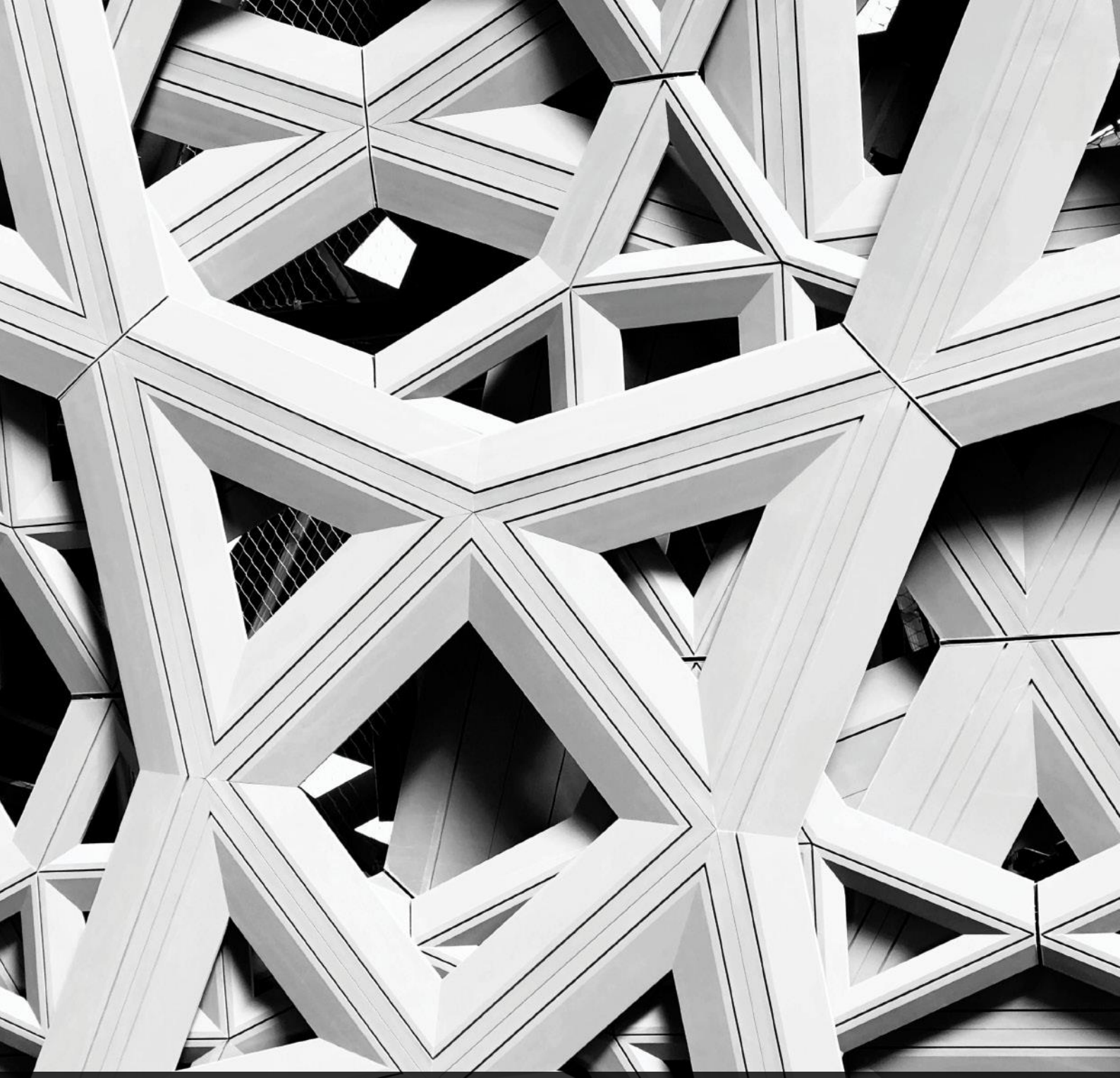


BCA Capability Statement

Hardi Aged Care
Gordon Street, Manly Vale

Prepared for:
Hardi Aged Care

Revision 1
30 September, 2024
Reference: 240327

bmplusg.com.au

Contents

BCA Capability Statement

+ To	Hardi c/- John W Flower Architects
+ Attention	John Flower
+Sent	Email
+ From	Brian Maguire
+ Subject	Hardi Aged Care, Manly Vale
+ Project No.	240327
+ Date	30 September 2024
+ Pages	14

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 (DA) to Northern Beaches Council for the proposed alterations and additions to the existing Nursing Home against the Building Code of Australia 2022 (BCA).

The proposed development comprises the alterations and additions to the existing Nursing Home building at the corner of Condamine St and Gordon Street Manly Vale. The alterations are described as follows:

- New Porte Cochere and access to the main entry from Gordon Street
- New Terrace above the Porte Cochere
- New ambulance access
- New cover to the managers car space with landscaped roof
- Revised internal Entry area
- Upgraded garden area to Condamine Street
- New roof extension to the western face adjacent to the Garden Area noted above

1.1 Capability Statement Objectives

The objectives of this statement are to:

- Confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- Confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to section 19 of the *Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021*.
- 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*.

1.2 Relevant Version of the BCA

Pursuant to Section 19 of the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021* the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the day on which the application for the Construction Certificate is made. The current version of the BCA is BCA 2022, with the next revision of the BCA coming into effect 1 May 2025. As it is understood the Construction Certificate application will be lodged before 1 May 2025, this report assesses the design against compliance with the requirements of BCA 2022.

Where the building is a multi-storey building and multiple Construction Certificates will be issued under the same development consent, the relevant version of the BCA may be 'locked in' based on the day in which the application is made for the Construction Certificate which involves the *entrance floor*.

1.3 Referenced Documentation

This report has been prepared based on a review of the preliminary DA architectural plans prepared by John W Flower Architect and also the Fire Safety Statement for the building (partially complete dated July 2024):

+ Drawing No.	+ Revision	+ Date
2305 04.1	A	20/12/2023
2305 04.2	A	20/12/2023
2305 04.3	A	20/12/2023
2305 04.4	A	20/12/2023
2305 04.5	A	20/12/2023
2305 04.6	A	20/12/2023
2305 04.7	A	20/12/2023
2305 04.10	A	20/12/2023

1.4 Building Classification

The new building works have been classified as follows:

+ **BCA Classification(s)**	9a (Class 10 awnings; BBQ structure; 2.4m high acoustic fence)
+ **Rise in Storeys**	Three (3)
+ **Storeys Contained**	Three (3)
+ **Type of Construction**	Type A Construction
+ **Importance Level (Structural)**	Assume 2 – *To be confirmed by structural engineer*
+ **Sprinkler Protected**	Yes
+ **Effective Height**	<12m
+ **Max. Fire Compartment Size**	Class 7a: 5,000m^2 & 30,000m^3 ***Note:*** *Maximum fire compartment sizes do not apply to levels containing only Class 2 SOUs.*
+ **Climate Zone**	Zone 5 (area)

2.0 BCA Assessment – Key Issues

We note the following BCA compliance matters with relation to proposed building works are capable of complying with the BCA. Please note that this is not a full list of BCA clauses, they are the key requirements that relate to the proposed work and the below should be read in conjunction with the BCA.

2.1 Section B – Structure

Part B1	+ New building works are to comply with the structural provisions of the BCA 2022 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. + As the works relate to alterations to an existing building, the Structural Engineer is to certify that the structural capacity of the existing building will not be reduced by the new works.

2.2 Section C – Fire Resistance

C2D10	**Non-Combustible Building Elements:** All materials and or components incorporated in an external wall must be non-combustible. This includes but not limited to: + Any external wall claddings. + Any framing or integral formwork systems, i.e. timber framing, sacrificial 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 approved prior to the issue of a Construction Certificate
C2D11 & Spec. 7	**Fire Hazard Properties:** A schedule of all wall, floor, and ceiling linings along with associated test reports are to be provided for review to ensure compliance with the fire hazard property requirements of the BCA. Noting: + Minimum Group Numbers apply to wall and ceiling linings. AS 5637 test reports must be provided to determine compliance. + Minimum Critical Radiant Flux values apply to floor linings. AS ISO 9239.1 test reports must be provided to determine compliance

TABLE S7C3 OF SPECIFICATION 7– CRITICAL RADIANT FLUX OF FLOOR LININGS AND FLOOR COVERINGS

+ Class of building	+ Building not fitted with a sprinkler system	+ Building fitted with a sprinkler system (other than a FPAA101D or FPAA101H system)	+ Fire-isolated exits and fire control rooms
Class 9a - Patient care areas	4.5 kW/m2	2.2 kW/m2	4.5 kW/m2
Class 9a - Areas other than patient care areas	2.2 kW/m2	1.2 kW/m2	4.5 kW/m2

TABLE S7C4 OF SPECIFICATION 7 – WALL AND CEILING LINING MATERIALS (MATERIALS GROUPS PERMITTED)

+ Class of building	+ Fire-isolated exits and fire control rooms	+ Public corridors	+ Specific areas	+ Other areas
Class 3 or 9a, Sprinklered Accommodation for the aged, people with a disability, children and health-care buildings	Walls: 1 Ceilings: 1	Walls: 1, 2 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2, 3	Walls: 1, 2, 3 Ceilings: 1, 2,3

C2D14	**Ancillary Elements:** An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible, unless it is in accordance with this clause.
C3D3	**General Floor Area and Volume Limitations:** The building is to achieve fire compartment sizes not in excess of the DtS requirements of this clause. The following maximum fire compartment sizes apply to the building: + Class 9a: 2,000m^2 & 30,000m^3 The floor area and volume size of the Class 7a car park complies with the requirements of this part.
C3D9 & C3D10	**Separation of Classifications:** Separate classifications will either need to be separated by a fire wall achieving the higher FRL requirement between the two classes, or alternatively the higher FRL must apply to both areas subject to Spec 5.
C3D13	**Separation of Equipment:** Equipment as listed below must be separated from the remainder of the building with construction that achieves an FRL of 120/120/120 (or that required by Spec 5, whichever is greater) and doorways being self-closing -/120/30 fire doors: + Lift motors and lift control panels; or + A battery or batteries installed in the building that have a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours. Confirmation is required as to whether any of the above will be applicable to this development.
C4D3 & C4D5	Protection of Openings in External Walls: Openings that are less than 3m from the allotment boundary are required to be protected in accordance with BCA Clause C4D5. It is noted that there are currently no openings within 3m from the allotment boundary or 6m from an otherwise considered fire source feature. **Comment:** No action is required for this scope of works.
Spec. 5	**Fire-Resisting Construction:** The building is required to comply with Table 3 as relevant to FRLs required for buildings of Type A Construction. **Comment:** The new columns to the new awnings can receive a concession with respect to the need for fire rating, i.e. they constitute a balcony, verandah or the like. The function of the awning is for weather protection for an ambulance parking and also to cater for the new ramp entry into the building. Any new loadbearing internal walls or columns are required to be fire rated (and loadbearing walls are required to be masonry).

Spec. 12	Fire Doors, Smoke Doors, Fire Windows and Shutters: Fire doors and smoke doors must comply with the requirements of this specification. In this instance however, no further action is required as a result of the proposed scope of works.

2.3 Section D – Access and Egress

D2D3	**Number of exits required:** The building comprises an effective height of <25m. Therefore, a single exit from the Class 2 storeys is acceptable. Noting that the below ground basement car park.
D2D4	**When Fire-Isolated Stairways and Ramps are Required:** This clause sets out the requirements for stairways and ramps to be fire-isolated in buildings. It is generally permitted for a required stair to connect up to 3 storeys in a sprinkler protected building, provided that the sprinkler system is not a FPAA101D system. The main central stair is required to be fire-isolated, and we understand it has been designed as such. **Comment:** No further action is required with respect to assessing the building against the new scope of works.
D2D5	**Exit Travel Distances:** Exit travel distances within the building are required to be not more than 20m to a point of choice between alternative exits and 40m to the nearest one from the Class 7a and the non-patient care areas of the Class 9a building areas and 12m to a point of choice within the patient care areas of the Class 9a **Comment:** No further action is required with respect to assessing the building against the new scope of works.
D2D7/ D2D8/ D2D9/ D2D10/ D2D11	**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) or 1.8m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area. **Comment:** No further action is required with respect to assessing the building against the new scope of works.
D3D14/ D3D15/ D3D16/ D3D22	**Stairways, Balustrades, and Handrails:** Stairways, balustrades and handrails are to be upgraded to achieve compliance with the current provisions of the BCA and AS 1428.1-2009. Floor finishes will be required to achieve the correct slip resistance in accordance with AS 4586, 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. **Comment:** in relation to the new work it is considered that compliance with the DTS provisions of the BCA is readily achievable. A structural engineer will be involved in confirmed compliance with the AS1170 suite of standards for crowd loading to the degree necessary.
D3D25/ D3D26	**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.
Part D4	**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 Clause D4D2 unless exempted by Clause D4D5. The building is required to comply with AS1428.1-2009. **Comment**: The main entry will be upgraded to comply with AS1428.1-2009, i.e. ramps, stairs and main entry door. The access into the new reception is to comply with the requirements of this

	standard, and therefore the entry door is to be upgraded where necessary to ensure compliance with the unobstructed width of 850mm. Sufficient circulation space will be provided to ensure compliance with the Standard is achieved. In this regard it is understood that a Disability Upgrade report will be provided by an Accredited Access Consultant on behalf of Hardi Aged care to address access from the public road into the upgraded new entry.

2.4 Section E – Services and Equipment

E1D1	**Fire Hydrants:** Fire hydrant coverage is required to be confirmed throughout the building in accordance with AS2419.1 – 2021. Design consultant to confirm compliance at the Construction Certificate stage.
E1D3	**Fire Hose Reels:** Fire hose reel coverage is required to be provided throughout the building (class 9a) to comply with AS 2441 – 2005. Design consultant to confirm coverage complies throughout the affected floors at the Construction Certificate stage.
E1D4 – E1D13	**Sprinklers:** An automatic fire sprinkler system is required to be provided to the building, given the building is an operating aged care nursing home and was a statutory requirement in 2012 to be upgraded. It is understood that the sprinkler system has been installed to AS2118.4-2012. **Comment:** The proposed works do not trigger any further upgrade in this regard. Sprinklers are to be modified to the degree necessary where impacted upon by the new work, and dependant upon which sprinkler system is installed (Part 1 or Part 4, noting that this is not stated on the AFSS), sprinklers may need to be extended into the new covered areas. An FPAS accredited fire sprinkler designer is to comment in this regard prior to the issue of the Construction Certificate.
E2D4 – E2D20	**Smoke Hazard Management:** The following smoke hazard management systems are to be installed to the building and will be required throughout: + An Automatic Fire Detection and Alarm System complying with AS 1670.1 – 2018 and S20C6. + Stairway Pressurisation complying with AS 1668.1 – 2015 to Stairs 1 & 2 + Automatic shut-down of mechanical air handling systems upon fire trip in accordance with Section 5 and 6 of AS 1668.1.
E2D21	**Provisions for Special Hazards:** It is not considered that the new works necessitate any further action in this regard.
E4D2 - E4D8	**Emergency Lighting and Exits Signs:** Emergency lighting and exit signage to be provided in accordance with E4D2 E4D5 complying with AS 2293.1 – 2018.
E4D9	**Emergency Warning & Intercom Systems (EWIS):** In a Class 9a building having a floor area of more than 1000m2 and emergency warning intercom system complying with AS 1670.4 must be installed. No further action is required.

2.5 Section F – Health and Amenity

Part F1	**Damp and Weatherproofing:** Damp and weatherproofing to comply with the prescriptive requirements of clauses F1D1-F1D8.
Part F4	**Sanitary Facilities:** There is no proposed works to sanitary facilities in this proposal that triggers the need for an assessment for the provision of existing Sanitary facilities. No further action is required.
F5D2	**Ceiling Heights:** The floor to ceiling heights must be as follows: + *a* patient care area -2.4 m; + an operating theatre or delivery room - 3 m; and + a treatment room, clinic, waiting room, passageway, corridor, or the like - 2.4 m. + Bathrooms, sanitary compartments, tea preparations rooms, pantries, store rooms or the like – 2.1m, + A commercial kitchen – 2.4m, + Above a stairway, ramp, landing or the like – 2m.
Part F6	**Light and Ventilation:** Artificial lighting systems are required to comply with Clause F6D5 and AS 1680. All mechanical or air-conditioning installations must be undertaken in accordance with AS 1668.2.-2012. Natural light is required to be provided to all bedrooms. Note, there is no changes proposed to the bedrooms in the facility.
Part F5	**Sound Transmission and Insulation**: Not applicable for a Class 9a building.

2.6 Section J – Energy Efficiency

Section J	**Energy Efficiency:** The *new building works* (only) are subject to compliance with the Energy Efficiency Provisions of BCA 2022 Section J relating to: + Part J2: Energy Efficiency + Part J3: N/A for Class 9a + Part J4: Building Fabric + Part J5: Building Sealing + Part J6: Air-Conditioning and Ventilation + Part J7: Artificial Lighting and Power + Part J8: Heated Water Supply and Swimming Pool and Spa Pool Plant + Part J9: Energy Monitoring and On-Site Distributed Energy Resources The Construction Certificate documentation from the architect, mechanical, electrical, and hydraulic engineers are to incorporate details demonstrating compliance with the above provisions (as applicable to their respective disciplines).

2.7 Disability (Access to Premises Building) Standards 2010

DDA	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 D4D1 to D4D13; + BCA clauses E3D7 & E3D8; + BCA clauses F4D3, F4D5 to F4D7 and F4D12. Detailed documentation demonstrating compliance with the above BCA provisions and AS 1428.1-2009 will be required for assessment at Construction Certificate stage. In the event that DtS compliance is not achieved, a redesign will be required or a Performance Solution will need to be documented by an appropriately qualified Access Consultant. 'Affected' Part Upgrade Requirements The following items are noted regarding upgrading the principal pedestrian entry and the path of travel to the new works: + Main entry and reception area.
D4D2	**General Building Access Requirements** + Access is required to be provided to the main entry from the street, and to the new reception room. No other areas are required to be assessed given the works are only proposed to the exterior of the building.
D4D6	**Accessible Parking:** there is no proposed car parking spaces in this Development Application. Unless required by the consent authority, no further action is necessary to address this item
D4D12	**Ramps:** Ramps are readily able to meet compliance with AS 1428.1 – 2009.
F4D5	**Accessible Sanitary Facilities:** There is no proposed works to sanitary facilities in this proposal. Assessment for the provision of Unisex Accessible Sanitary Facilities and facilities suitable for use for persons with an ambulant disability is not triggered by the scope of works in this development.

3.0 Statutory Upgrade Requirements

E4D9

The following statutory upgrade triggers apply to the subject building works:

- Pursuant to Clause 143 of the Environmental Planning and Assessment Regulation 2000, a certifier must not issue a construction certificate for building work that authorises the alteration, enlargement, or extension of an existing building (where no change of use is proposed), unless on completion of the building work, the fire protection and structural capacity of the building will not be reduced.
- Pursuant to Cl. 162D of the Environmental Planning and Assessment Regulation 2000, If a Certifier becomes aware of any significant fire safety issues in the process of determining a CC, OC there are two options:
  - Address the significant fire safety issue in the proposed development, or
  - Notify Council of the significant fire safety issue (noting Council may then issue a Fire Safety Order on the building compelling the building owner to rectify the issue).

Note: Category 1 fire safety measures mean the following:

+ Fire Hydrants	+ Fire Detection and Alarm System	+ Safe Evacuation Routes
+ Sprinkler System	+ Fire Control Centre	+ Emergency Lifts

In relation to the above two statutory upgrade triggers, the following upgrade works are required to existing elements of the building where proposed to be retained either in full or in part:

Fire Compartmentation and Separation:

- It is not considered necessary to assess the existing floor structure between storeys (where proposed to be retained) for any further upgrade to comply with the requirements of BCA Performance Requirement CP2.
- It is not considered necessary to assess the existing external walls for the purposes of upgrading to current day BCA compliance.

Fire Services:

- The existing fire hydrant system is considered satisfactory with respect to the scope of works proposed with this Development Application.
- The existing sprinkler system is considered satisfactory with respect to the scope of works proposed with this Development Application
- The existing fire detection and alarm system and building occupant warning system is considered satisfactory with respect to the scope of works proposed with this Development Application
- Exit signage and emergency lighting is considered satisfactory.

Note: All new works must comply with the BCA. The above list is to be read in addition to Section 2.0 which relates to all new works proposed.

4.0 Preliminary 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 compliance review.

+ Statutory Fire Safety Measure	+ Design/Installation Standard	+ Existing	+ Proposed
Alarm Signalling Equipment	AS 1670.3 – 2004	✓	
Automatic Fail Safe Devices	BCA 2022 Clause D3D26		✓
Automatic Fire Detection & Alarm System	Existing: AS 1670.1-2004, AS4428.1-2998 *New: BCA 2022 Spec. 20 & 23* *AS 1670.1 – 2018*	✓	✓
Automatic Fire Suppression Systems	Existing: AS2118 *New: BCA 2022 Spec. 17 & 18* *AS 2118.1 – 2017* **or** *AS 2118.4 – 2012*	✓	✓
Emergency Lighting / Exit signs	AS 2293.1 – 1998	✓	
Emergency Warning Intercom System (EWIS)	AS2220-1998	✓	
Fire Blankets	AS 2444 – 1998	✓	
Fire Doors	AS 1905.1 – 1997 Manufacturer's Specification	✓	
Fire Hose Reels	BCA 2022 Clause E1D3 AS 2441 – 1998	✓	
Fire Hydrant Systems (External Hydrants) (Street Hydrants)	AS 2419.1 – 1994	✓	
Fire Seals	BCA 2022 Clause C4D15 AS 1530.4 – 2014 & AS 4072.1 – 2014 Manufacturer's Specification		✓
Portable Fire Extinguishers	AS 2444 – 1995	✓	
Required Exit Doors (Power Operated)	BCA 2022 Clause D3D24(2)		✓
Smoke Doors	BCA C2.5	✓	
Warning & Operational Signs	EP&A (DCFS) Regulation 2021 Section 108	✓	✓

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

5.0 Conclusion

This report contains an assessment of the referenced architectural documentation for the proposed alterations to the existing Nursing Home development located at the corner of Gordon St and Pittwater Road, Manly Vale against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2022.

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.

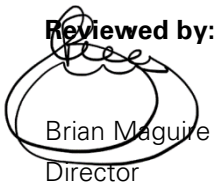
In addition, it is considered that such matters can adequately be addressed in the preparation of the Construction Certificate documentation without giving rise to any inconsistencies with the Development Approval.

Should you require further assistance or clarification please do not hesitate to contact the undersigned on 02 9211 7777 or ...

Prepared by:

Charbel Gabriel
Building Surveyor
BM + G Pty Ltd

Reviewed by:



Brian Maguire
Director
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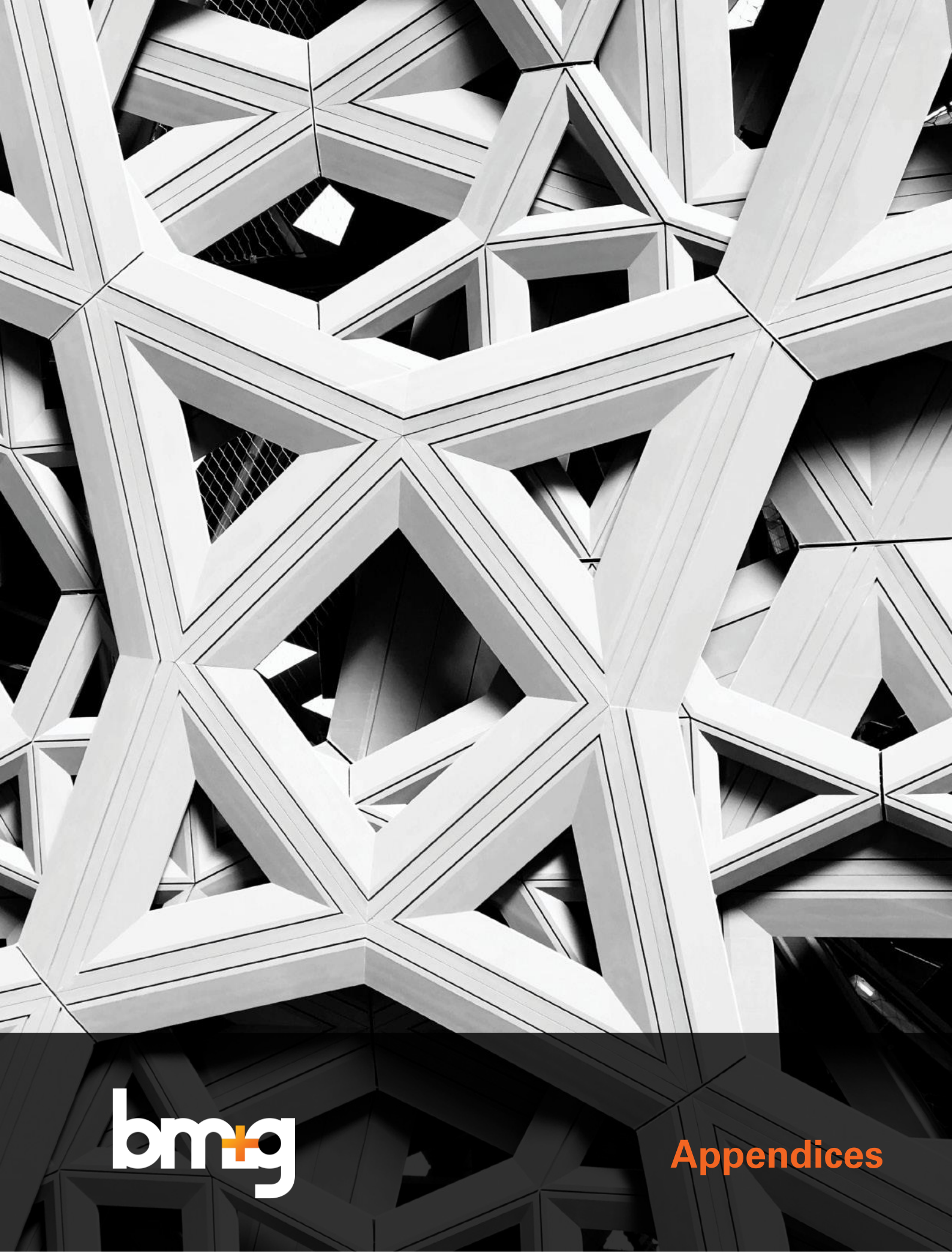

Appendices