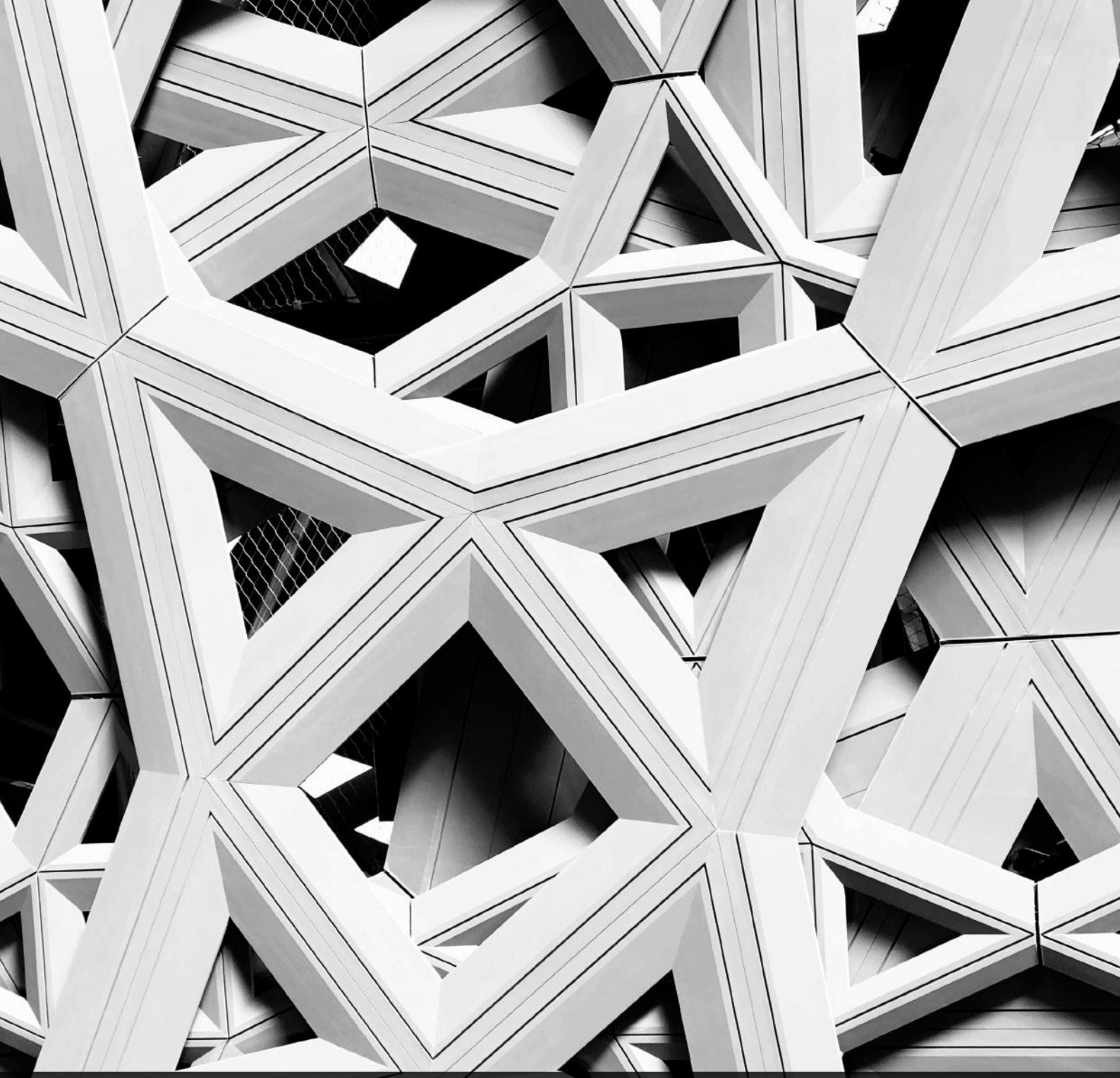

BCA Assessment Report

For DA submission

Manly Wharf – Balustrades, Pizza Oven & Child's Play Area
East & West Esplanade, Manly NSW

Prepared for:
Artemus Group

Revision 2
20 September 2024

Reference: S240072

bm+g

bmplusg.com.au

Contents

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+ Date	20 September 2024
+ Revision	2
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+ Author	Jack Gunning & Michael Potts
+ Reviewed	Michael Potts & Antonio Canuto

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+ Revision	1	**+ Date**	06/09/2024
+ Status	Final DA submission		

+ Revision	2	**+ Date**	20/09/2024
+ Status	Final DA submission		

1.0 Description of Project

1.1 Proposal

BM+G have been commissioned by Artemus Group C/- Lewis Advisory to undertake an assessment of the DA documentation of the balustrades, pizza oven and child's play area at Manly Wharf Hotel against the relevant provisions of the Building Code of Australia 2022 (BCA).

The proposed development seeks approval for the addition of minor elements. This includes:

- Removal of existing climbable and unsafe balustrades and the timber and concrete bench seats around the water's edge.
- Removal of timber balustrades that define the edge between the public promenade and the outdoor seating areas of The Bavarian and The Manly Wharf Hotel.
- Installation of new retractable glass balustrades to replace all removed balustrading.
- Installation of a pizza preparation area including the replacement of an existing gas fired pizza oven with two solid fuel pizza ovens and one solid fuel grill in the existing Manly Wharf Hotel kitchen. The pizza ovens and grill will rely on the existing mechanical exhaust plant with no new penetrations required through the roof of the existing building.
- Extension of Manly Wharf Bar deck by 84 sqm and construction of a children's play area.

1.2 The Site

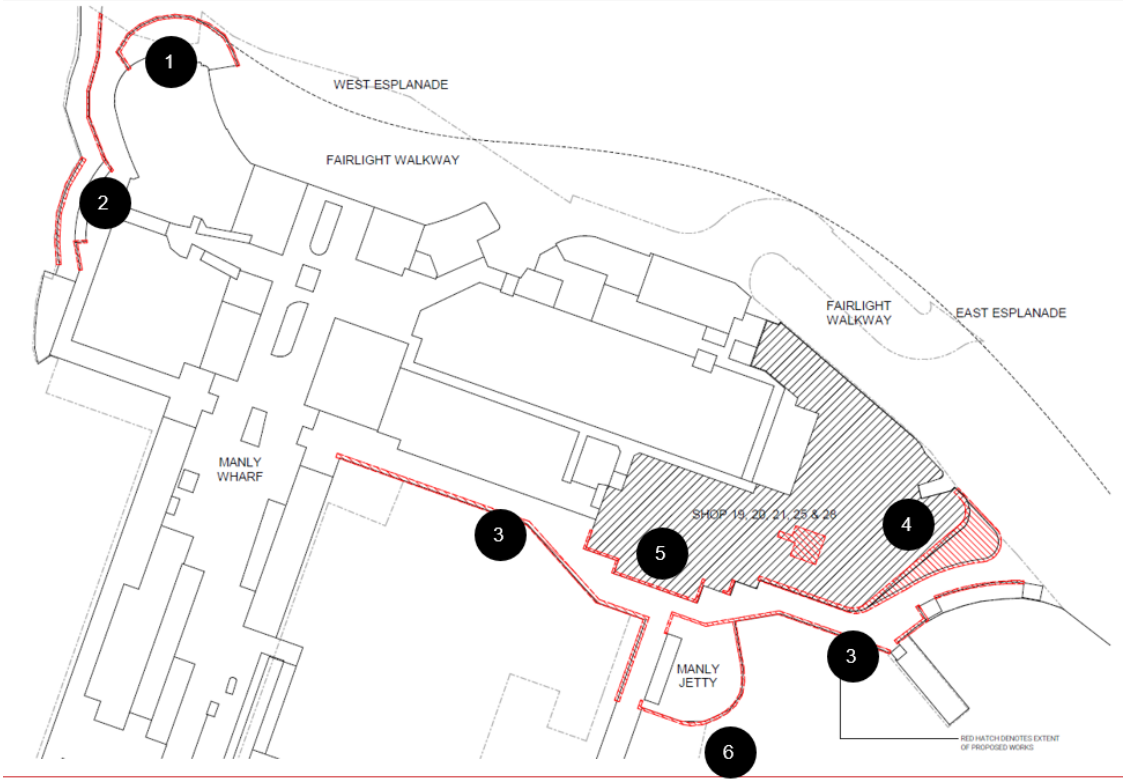


Figure 1 – The Site
Source: Little Boat Projects

1.3 Site Context

Manly Wharf features a variety of food and dining venues ranging from cafes, takeaway and casual dining options. Licensed establishments with late night trading hours include the Manly Wharf Hotel, Hugos, The Bavarian and El Camino Cantina.

Manly Wharf is located at the junction of East and West Esplanade, and The Corso leading to Manly Beach. Food and dining establishments line The Corso and the northern side of East Esplanade and extend along North and South Steyne facing Manly Beach. There are a variety of licensed premises with entertainment and late night trading hours that contribute to Manly's vibrant night time economy. These include 4 Pines Brewpub, Ivanhoe Hotel, New Brighton Hotel and the Hotel Steyne.

Figure 3 Manly Wharf and surrounds
Source: SIXmaps

1.4 Aim

The aim of this report is to:

- Undertake an assessment of the proposed works against the deemed-to-satisfy provisions of the BCA.
- Provide a BCA assessment for the purpose of a Development Application.
- Determine matters which need to be resolved at Construction Certificate stage.
- Identify matters relating to the existing building that are required to be addressed as a result of the statutory upgrade triggers applicable to the works under the Environmental Planning and Assessment Regulations 2021.

1.5 Project Team

The following BM+G team members have contributed to this Report:

- **Michael Potts** – Project Director (Director) | Building Surveyor-Unrestricted
- **Jack Gunning** – Assistant (Cadet Building Surveyor)
- **Antonio Canuto** – Peer Review (Associate Director) | Building Surveyor-Unrestricted

1.6 Referenced Documentation

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

- Building Code of Australia 2022 (BCA)
- The Guide to the Building Code of Australia 2022
- Architectural Plans prepared by Little Boat Projects numbered:

+ Drawing No.	+ Revision	+ Date
DA.101	2	03.09.24
DA.102A	1	03.09.24
DA.102B	3	11.09.24
DA.103A	1	03.09.24

+ Drawing No.	+ Revision	+ Date
DA.103B	2	03.09.24
DA.104	2	03.09.24
DA.105	2	03.09.24
DA.205	1	26.08.24

- Architectural Plans prepared by Svalson numbered:

+ Drawing No.	+ Revision	+ Date
14.GC Sheet 1	04	08.03.18
14.GC Sheet 2	04	08.03.18
14.GC Sheet 3	04	08.03.18
14.GC Sheet 4	04	08.03.18

+ Drawing No.	+ Revision	+ Date
Lä2.S.S.R.I Sheet 1	01+	10.10.22
Lä2.S.S.R.I Sheet 2	01+	10.10.22
Lä2.S.S.R.I Sheet 3	01+	10.10.22

1.7 Regulatory Framework

- Pursuant to Section 19(1) of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 all new building work must comply with the current BCA however the existing features of an existing building need not comply with the BCA unless upgrade is required by other clauses of the legislation.
- Pursuant to Section 60 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, if a Certifier becomes aware of any significant fire safety issues in the process of determining a CDC, 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 potentially then issue a Fire Safety Order on the building compelling the building owner to rectify the issue).

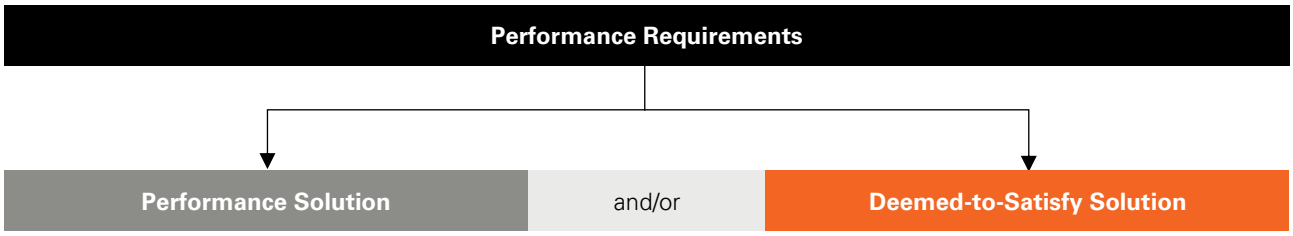
+ Pursuant to Section 14 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, a certifier must not issue a construction certificate for alteration building work unless, on completion of the building work, the fire protection and structural capacity of the building will not be reduced.

+ The assessment has been undertaken in accordance with Clause 24 and 25 of the Building and Development Certifiers Regulation 2020. BM+G are the proposed Registered Certifier and the advice provided in this Report is limited to whether submitted documentation complies with the Building Code of Australia or a legislative requirement.

1.8 Relevant Version of the NCC Building Code of Australia

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 the Construction Certificate application will likely be lodged before 1 May 2025, this report assesses the design against compliance with the requirements of BCA 2022.

1.9 Compliance with the National Construction Code



Compliance with the NCC is achieved by complying with:

+ the Governing Requirements of the NCC; and

+ the Performance Requirements.

Performance Requirements are satisfied by one of the following, as shown in the Figure below:

+ A Performance Solution.

+ A Deemed-to-Satisfy Solution.

+ A combination of the above two options.

Where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*, the following steps must be undertaken:

+ Prepare a performance-based design brief in consultation with relevant stakeholders.

- Carry out analysis, using one or more of the Assessment Methods listed in A2G2(2), as proposed by the performance-based design brief.
- Evaluation the results against the acceptance criteria in the performance-based design brief.
- Prepare a final report that includes:
  - All Performance Requirements and/or Deemed-to-Satisfy provisions identified through A2.2(3) or A2G4(3) as applicable; and
  - Identification of all Assessment Methods used; and
  - Details of steps (a) to (c); and
  - Confirmation that the Performance Requirement has been met; and
  - Details of conditions or limitations, if any exist, regarding the Performance Solution.

1.10 Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- This report is prepared in accordance with the Conflicts of Interest provisions of Part 4 of the Building and Development Certifiers Regulation 2020. BM+G confirm that this report is prepared specifically to address the requirements of Clause 25(5) and (9) of the Regulation with respect to the role of the Registered Certifier. This assessment report is not to be construed as extending any further into providing design advice, which would be contrary to the aims of this legislation.
- No assessment has been undertaken with respect to the Disability Discrimination Act 1992 (DDA). The building owner needs 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 (Parts 1-3) and Part D4 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 DDA 1992. 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.
- No assessment has been undertaken with respect to the following areas of the NCC:
  - Structural
  - Weatherproofing
  - Waterproofing
  - Acoustic
  - Passive Fire Protection
  - DDA / Accessibility
  - Section J / ESD
  - Fire Safety Engineering
- This report does not constitute a detailed assessment of the architectural documentation against the requirements of Section J. It is understood that a suitably qualified consultant will be engaged to determine compliance in this regard.
- BM+G has not undertaken an assessment of any Performance Solution Reports at the time of the preparation of this report.
- The Report does not address matters in relation to the following Local Government Act and Regulations:
  - Work Health and Safety Act and Regulations.
  - Work Cover Authority requirements.
  - Water, drainage, gas, telecommunications and electricity supply authority requirements.
  - Disability Discrimination Act 1992.
- BM+G cannot guarantee acceptance of this report by Local Council, Fire & Rescue NSW or other approval authorities.

- This report may not be relied upon under the provisions of the Design and Building Practitioners Act & Regulation for the purposes of issuing a Design Compliance Declaration.
- No part of this document may be reproduced in any form or by any means without written permission from BM+G. This report is based solely on client instructions, and therefore should not be used by any third party without prior knowledge of such instructions.

1.11 Report 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.

Climatic Zone – Means an area defined in Figure 2 and in Table 2 (of BCA Schedule 3) for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Construction Certificate – Building Approval issued by the Certifying Authority pursuant to Part 6 of the EP&A Act 1979.

Construction Type – The construction type is a measure of a buildings ability to resist a fire. The minimum type of fire-resisting construction of a building must be that specified in Table C2D2 and Specification 5, except as allowed for:

- certain Class 2, 3 or 9c buildings in C2D6; and
- a Class 4 part of a building located on the top storey in C2D4(2); and
- open spectator stands and indoor sports stadiums in C2D8.

Note: *Type A construction is the most fire-resistant and Type C the least fire-resistant of the types of construction.*

Deemed-to-Satisfy (DTS) Provisions of the BCA – Means the prescriptive provisions of the BCA which are deemed to satisfy the performance requirements.

Effective Height – The vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift, or other equipment, water tanks or similar service units).

Exit – Any, or any combination of the following if they provide egress to a road or open space:

- An internal or external stairway.
- A ramp.
- A fire-isolated passageway.
- A doorway opening to a road or open space.

Fire Compartment – The total space of the building; or when referred to in

- The Performance Requirements – any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
- The Deemed-to-Satisfy Provisions – any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant part.

Fire Resistance Level (FRL) – The grading periods in minutes for the following criteria:

- structural adequacy; and
- integrity; and
- 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.

National Construction Code Series (NCC) – The NCC was introduced 1 May 2011 by the Council of Australian Governments (COAG). The BCA Volume One (Class 2 to 9 Buildings) is now referenced as the National Construction Code Series Volume One — BCA.

Occupiable outdoor area means a space on a roof, balcony or similar part of a building:

- that is open to the sky; and
- to which access is provided, other than access only for maintenance; and
- that is not open space or directly connected with open space.

Occupation Certificate (OC) – Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 6 of the EPA Act 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.

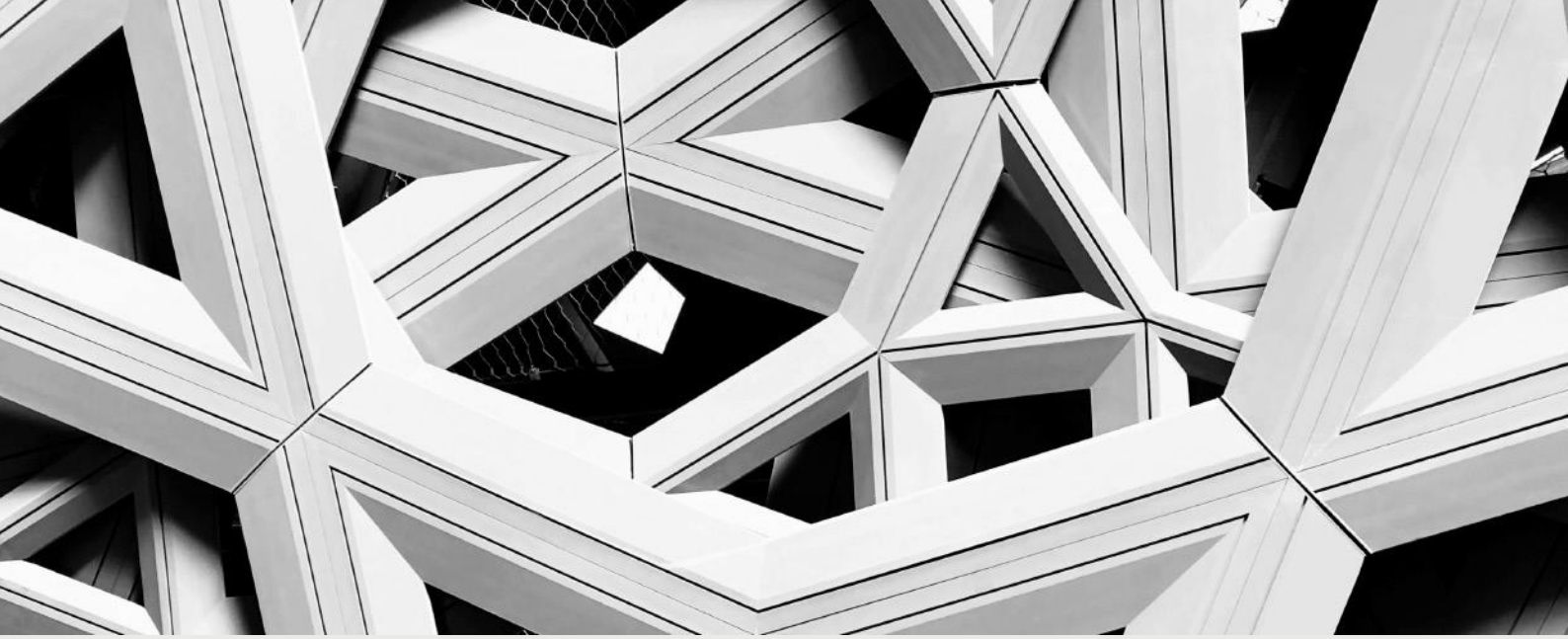
Performance-based Design Brief – Means the process and the associated report that defines the scope of work for the performance-based analysis, the technical basis for analysis, and the criteria for acceptance of any relevant Performance Solution as agreed by stakeholders.

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-

- complying with the Deemed-to-Satisfy Provisions; or
- formulating an Alternative Solution which-
  - complies with the Performance Requirements; or
  - is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
- a combination of the above.

Performance Solution – Means a method of complying with the performance requirements other than by a Deemed-To-Satisfy Solution.



2.0 Building Characteristics

2.1 Proposed Development

The proposed development consists of the alterations and additions associated with Manly Wharf to add balustrades along the wharf seating areas, two wood fired pizza ovens & a children's play area at the Manly Wharf Hotel.

The building is classified as follows:

BCA Classifications:	Existing: Class 5, 6, 7a, 9b Proposed alterations to Manly Wharf Hotel: Class 6 & 10b
Rise in Storeys:	Two (2) – *see note 1*
Storeys Contained:	Three (3)
Type of Construction:	Type B Construction
Importance Level (Structural)	3
Sprinkler Protected Throughout	Yes – *assumed to be throughout.*
Effective Height	<12m
Floor Area	~12,500m^2 for the entire Manly Wharf
Climate Zone	Zone 5

Note 1: We understand when the top storey was constructed circa 8-10 years ago there was a determination that the building had a rise in storeys of 2. Based on our review, we cannot see a reason to dispute this. We assume this determination was made due to the basement storey entrance (portion above finished ground level) being remote from the other external walls of the building in accordance with C2D3(1).

2.2 Fire Compartment Floor Area Limitations

Maximum size of fire compartment/atria is:

+ Classification		+ Type B
6, 7	**Max. floor area**	3,500m^2
	Max. volume	21,000m^3
5, 9b	**Max. floor area**	5,500m^2
	Max. volume	33,000m^3

2.3 Distance to Fire Source Features

Based upon a review of the plans, it is noted that each elevation of the building is located within the following distances from fire source features on the site.

+ Elevation	+ Fire Source Feature	+ Distance
North	**Far side of the road – East Esplanade**	>6m
East	**Side boundary**	>6m
West	***Water***	>6m
South	***Water***	>6m

Note: 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.

3.0 BCA Assessment

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.

3.1 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 structural engineer will need to certify that the structural capacity of the existing building will not be reduced as a result of the new works and that the building is considered structurally adequate for its intended use. + In addition to the above, the loadbearing capacity of existing balustrades (where retained) should be reviewed, particularly with respect to loadings under 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.

3.2 Section C – Fire Resistance

C2D2 / Spec 5	**Type of Construction Required:** The new building parts are required to comply with the requirements of Type B Construction as stated within Specification 5. The table below provides an overview of the requirements of each. Refer to Table 2 of Appendix 1 for the FRL requirements of Type B Construction. **Type B Construction:** + Load-bearing external walls and columns need not achieve an FRL if >18m from a boundary / separate building. + Non load-bearing external walls (and columns incorporated within) need not achieve an FRL if >3m from a boundary or separate building. + Floors must be protected in accordance with Spec 5, subject to complying with S5C3. + Roof must be of non-combustible construction. + Internal columns on the floor immediately below the roof need not achieve an FRL.
C2D10 / C2D14	**Non-Combustible Building Elements:** All materials and or components incorporated in an external wall or fire-rated 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. Refer to Table 1 in Appendix 1 for the elements required to be non-combustible. **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. **Comment:** External wall disclosure statement to be provided at Construction Certificate stage.
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 Refer to Table 3 and 4 in Appendix 1 below for the required fire hazard properties. **Comment:** Details to be developed during the Construction Certificate stage.
Spec. 5	**Fire-Resisting Construction:** The new building works are required to comply with the requirements detailed within Specification 5 for Type B Construction. **Comment:** Details to be developed during the Construction Certificate stage.

3.3 Section D – Access and Egress

D2D3	**Number of Exits Required:** The building is required to be provided with 2 exits to each storey. **Comment:** Complies
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 Class 5 ,6, 7 areas. **Comment:** The travel distances within the wharf bar deck and pizza oven area comply.
D2D6	**Distance Between Alternative Exits:** The maximum distance permitted between alternative exits in Class 5, 6, 7 areas is 60m. This must be measured back through the point of choice. Alternative egress paths are not permitted to converge to less than 6m, and alternative exits must be located more than 9m apart. **Comment:** The distances between alternate exits within the wharf bar deck and pizza oven area comply.
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). Aggregate exit widths must be achieved which are driven by occupancy numbers of each floor. **Comment:** Details to be developed through the construction certificate stage.
D3D14/ D3D15/ D3D16/ D3D20/ D3D22	**Stairways, Balustrades, and Handrails:** <u>Stairways:</u> + A stairway must have no more than 18, nor less than 2, risers in each flight. + Landings must be not less than 750mm in length.

	+ In a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°. Balustrades: + All balustrades must achieve a minimum height of 1m above finished floor level. + Balustrades (except for fire-isolated stairs) must not permit a 125mm sphere to pass through any opening. + Balustrades in fire-isolated exits must comprise no gap larger than 150mm between nosing line (or landing) and bottom rail. Other openings in the balustrade must not exceed 460mm. If the fire-isolated exit also functions as a circulation stair, the 125mm gap requirement applies in lieu of these reduced provisions. + A barrier required by D3D17, located on a floor more than 1m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150mm and 760mm above the floor. This does not apply to fire isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than – - external stairways; and - external ramps; and Handrails: + Handrails must be located on both sides of all stairways and ramps except for fire-isolated stairs. Handrails must comply with AS 1428.1 as relevant. + Handrails must fixed at a minimum height of 865mm and be continuous between stair flight landings and have no on or above them that may break the hand hold. If in a required exit serving an accessible area, must comply with AS 1428.1. **Comment:** Details to be developed during the Construction Certificate stage.
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. **Comment:** Details to be developed during the Construction Certificate stage however it is understood that the new access gate will be amended to swing in the opposite direction with the flow of egress.
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 Table D3.1 unless exempted by Clause D4D5 The building is required to comply with AS1428.1-2009. **Comment**: Subject to a separate assessment by the Access Consultant.

3.4 Section E – Services and Equipment

E1D1	**Fire Hydrants:** Fire hydrant coverage is required to be provided to the building in accordance with AS2419.1 – 2021. **Comment:** Design statement to be provided at Construction Certificate stage to confirm coverage to the altered area.
E1D3	**Fire Hose Reels:** Where required to be provided, fire hose reels are to comply with AS 2441 – 2005. **Comment:** Design statement to be provided at Construction Certificate stage to confirm coverage to the altered area.

E1D4 – E1D13	**Sprinklers:** An automatic fire sprinkler system is required to be provided in accordance with AS 2118.1 – 2017. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance. Note: Sprinklers to be provided within the duct where it extends horizontally for more than 4m.
E1D14	**Fire Extinguishers:** To be provided and designed in accordance with AS 2444-2001. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance.
E2D3/ E2D9/ E2D12/ E2D15	**Smoke Hazard Management:** The following smoke hazard management systems are to be installed to the building and will be required throughout: + E2D9: An Automatic Fire Detection and Alarm System and Building Occupant Warning System complying with AS 1670.1 – 2018 and S20C4. + E2D15: Maintain any required smoke hazard management system complying with AS 1668.1 – 2015. Note, the smoke exhaust system in the former Aldi tenancy is no longer required for the proposed class 6 pub as it is within a fire compartment <3,500m2 (where the building RIS is not more than 2 and the building is sprinkler protected). + Automatic shut-down of mechanical air handling systems upon fire trip in accordance with Section 5 and 6 of AS 1668.1. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance as relevant to the scope of works.
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. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance as relevant to the scope of works.
E4D9	**Emergency Warning & Intercom Systems (EWIS):** An Emergency Warning and Intercom System is required to be provided in accordance with AS 1670.4 – 2018. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance as relevant to the scope of works.

3.5 Section F – Health and Amenity

Part F5	**Ceiling Heights:** The floor to ceiling heights must be as follows: The minimum ceiling heights in a Class 5 / 6 / 7 building are as follows: + Generally – 2.4m. + Corridor, passageways, or the like – 2.1m. In any building: + 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. **Comment:** Compliance is achievable based on the section plans. Reflected ceiling plans to be provided at Construction Certificate stage to verify compliance.

Part F6	**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 F6D6 and AS 1668.2.-2012. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance.
F6D12	**Kitchen Local Exhaust Ventilation:** A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where— + any cooking apparatus has— - a total maximum electrical power input exceeding 8 kW; or - a total gas power input exceeding 29 MJ/hour; or + the total maximum power input to more than one apparatus exceeds, per m2 of floor area of the room or enclosure— - 0.5 kW electrical power; or - 1.8 MJ/hour gas. **Comment:** Design statement to be provided at Construction Certificate stage to confirm compliance for the proposed kitchen exhaust.

3.6 Section F – Energy Efficiency

Part J	**Energy Efficiency:** The new building works subject to compliance with the Energy Efficiency Provisions of BCA 2022 Section J relating to: + J1: Energy Efficiency Performance Requirements + J2: Energy Efficiency + J3: Elemental Provisions for a Class 2 Building and a Class 4 Part + J4: Building Fabric + J5: Building Sealing + J6: Air-Conditioning and Ventilation + J7: Artificial Lighting and Power + J8: Heated Water Supply and Swimming Pool and Spa Pool Plant + J9: Energy Monitoring and On-Site Distributed Energy Resources **Comment:** 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).

4.0 Conclusion

This report contains an assessment of the referenced architectural documentation for the proposed alterations and additions associated with Manly Wharf to add balustrades along the wharf seating areas, a wood fire oven & a children play area against the deemed-to-satisfy provisions of the Building Code of Australia 2022.

Arising from the assessment, key compliance issues have been identified that require further resolution, either by way of fire engineered Performance Solutions or plan amendments prior to the Construction Certificate stage.

Notwithstanding the above, it is considered that the proposed development can readily achieve compliance with the BCA subject to resolution of the matters identified in this report.

Appendices

+ Appendix 1 – References Tables

Table 1

+ Building Element	+ Type B Construction
External wall	Non-combustible
Common wall	Non-combustible
Floor and floor framing of lift pit	Non-combustible
All loadbearing internal walls (including those of shafts)	Concrete, masonry or fire-protected timber
Loadbearing fire walls	Concrete, masonry or fire-protected timber
Non-loadbearing internal walls required to be fire-resistant	Non-combustible
Non-loadbearing lift, ventilating, pipe, garbage and the like shafts which do not discharge hot products of combustion.	Non-combustible (subject to conditions outlined in C2D10)

Table 2: Fire-Resisting Construction – Type B Construction

TYPE B CONSTRUCTION: FRL OF BUILDING ELEMENTS				
+ Building Element	+ Class of Building - FRL: (in minutes) Structural adequacy/integrity/insulation			
	2, 3 or 4 part	**5, 7a or 9**	**6**	**7b or 8**
EXTERNAL WALL – (Including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is:				
For loadbearing parts:				
Less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3m	90/60/30	120/90/60	180/120/90	240/180/120
3 to less than 9m	90/30/30	120/30/30	180/90/60	240/90/60
9 to less than 18m	90/30/-	120/30/-	180/60/-	240/60/-
18m or more	–/–/–	–/–/–	–/–/–	–/–/–
For non-loadbearing parts:				
less than 1.5m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 to less than 3m	–/60/30	–/90/60	–/180/90	–/180/120
3m or more	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN - Not incorporated in an external wall				
For loadbearing columns:				
Less than 18m	90/–/–	120/–/–	180/–/–	240/–/–
18m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-loadbearing columns:	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS				
Fire-resisting lift and stair shafts				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120s
Non-loadbearing	–/90/90	–/120/120	–/120/120	–/120/120
Bounding public corridors, public lobbies and the like:				
Loadbearing	60/60/60	120/–/–	180/–/–	240/–/–
Non-loadbearing	–/60/60	–/–/–	–/–/–	–/–/–
Between or bounding sole-occupancy units:				
Loadbearing	60/60/60	120/–/–	180/–/–	240/–/–
Non-loadbearing	–/60/60	–/–/–	–/–/–	–/–/–
OTHER LOADBEARING INTERNAL WALLS AND COLUMNS	60/–/—	120/–/–	180/–/–	240/–/–
ROOFS	60/–/—	120/–/–	180/–/–	240/–/–

Notes:

1. Any wall required to have an FRL with respect to integrity and insulation must extend to the underside of the floor next above if that floor has an FRL of at least 30/30/30; or the underside of a ceiling with a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or the underside of a non-combustible roof covering; or 400mm above the roof covering if it is combustible.
2. Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part must typically achieve the same FRL. Where that part is also required to be non-combustible, the supporting part must also be non-combustible.
3. The method of attaching or installing a finish, lining, ancillary element, or service installation to a building must not reduce the fire-resistance of that element to below that required.
4. A loadbearing internal wall and a loadbearing fire wall must be constructed from concrete, masonry, or a combination of the two.
5. In the storey immediately below the roof, internal columns and internal walls other than fire walls and shaft walls need not comply with S5C21.
6. Any lightweight construction in a fire wall or an internal wall required to have an FRL is to comply with Specification 6.
7. Non-loadbearing parts of an external wall that are more than 18m from a fire source feature need not be fire rated.

+ Appendix 2 – Annual Fire Safety Statement

Fire Safety Statement

Part 12 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021

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Please note:
Information to assist building owners to complete each section of the statement is provided on pages 3, 4 and 5.

Section 1: Type of statement

This is (mark applicable box): ☒ an annual fire safety statement (complete the declaration at Section 8 of this form)
☐ a supplementary fire safety statement (complete the declaration at Section 9 of this form)

Section 2: Description of the building or part of the building

This statement applies to: ☒ the whole building ☐ part of the building

Address (Street No., Street Name, Suburb and Postcode)

Lot 7010, East Esplanade, Manly, NSW, 2095

Lot No. (if known)	DP/SP (if known)	Building name (if applicable)
Lot 1	DP 809933	Manly Wharf

Provide a brief description of the building or part (building use, number of storeys, construction type etc)

2 Storeys above ground
1 storey below ground

Section 3: Name and address of the owner(s) of the building or part of the building

Full Name (Given Name/s and Family Name) *

TMG Developments Pty Ltd

* Where the owner is not a person/s but an entity including a company or trust insert the full name of that entity.

Address (Street No., Street Name, Suburb and Postcode)

Level 4/55 Grafton Street, Bondi Junction NSW

Section 4: Fire safety measures

Fire safety measure	Minimum standard of performance	Date(s) assessed	AFFS *
Portable Fire Extinguisher & Fire Blankets	AS2444-2001	2-10-2023	F049889A
Automatic Fire Detection & Alarms	AS1670.1-2004 & BCA Specification E2.2a clause 4 and 5 and AS1670.1-2015 (to new Level 1 works)	2-10-2023	F049889A
Automatic Fire Sprinklers	AS2118.1-1999 & BCA Specification E1.5 and Fire Engineering Report No. S16124, Revision FER2.0 from MCD Fire Engineering dated 21/10/16 (to new Level 1 works)	2-10-2023	F049889A
Building Occupant Warning System	AS1670.1-2004 BCA Clause 5 of Spec E2.2a and Clause 3.22 of AS1670.1-2015 to new Level 1 works	2-10-2023	F049889A
Fire Doors	AS1905.1-1997 & BCA Specification C3.4 and AS1905.1-2005 (to new Level 1 works)	2-10-2023	F022052A
Smoke Doors and Shutters	AS 1530.7-2014 and AS 6905-2007 BCA Specification C3.4 - 2019	2-10-2023	F022052A

Fire Safety Statement

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Emergency Lighting	AS2293.1-2005	2-10-2023	F049889A
Exit Signs	AS2293.1-2005	2-10-2023	F049889A
Fire Hose Reel System	AS24441-1988, AS2441-2005 to new works including Level 1.	2-10-2023	F049889A
Fire Hydrant Installations	Original Installation to Ordinance 70, AS2419.1-2005 to new works including Level 1 works and Hydrant Booster.	2-10-2023	F049889A
Fire & Smoke Control in Multi Compartment Buildings	AS/NZ 1668.1-1998	2-10-2023	F053402A
Fire Dampers	BCA Clause C3.15 and AS/NZS 1668.1-1998 (AS 1682.1-1990 and AS 1682.2-1990)	2-10-2023	F053402A
Fire Seals protecting openings in fire resisting components of the building	Clause 22.13 and Clause 55.5 of Ordinance No 70 of the Local Government Act 1919 to original installation, AS4072.1-2005 & AS1530.4-2014 to new works	2-10-2023	F022052A
Lightweight construction (fire rated) to walls bounding 2 x ground floor lobbies leading up to Level 1 to fire separate it from ground floor	BCA Specification C1.8, AS 1530.4-2014	2-10-2023	F022052A
Mechanical air handling system (automatic shutdown of air-handling system)	BCA Clause E2.2, AS/NZ 1668.1-1999 and AS/NZ 1668.1-2005 for Level 1 works.	2-10-2023	F053402A
Mechanical air handling system (automatic smoke exhaust system)	BCA Specification E2.2B & AS/NZ 1668.1-1998 and Fire Safety Engineering Report No. 75148.2 from Warrington Fire Research Australia dated 19/10/04.	2-10-2023	F053402A
External wall wetting sprinklers to Entry Lobby B	BCA Clause C3.4 and AS2118.1-1999	2-10-2023	F049889A
Warning and operational signs	BCA2016 Clause D2.23.	2-10-2023	F049889A
Smoke detectors for automatic closing operation of fire doors	BCA Clause C3.5 and AS1670.1-2004 and AS1670.1-2015 (to new Level 1 works)	2-10-2023	F049889A
Fire resisting construction (applied coatings for steel – Intumescent Paint)	AS 1530.4-2014 & AS 4100	2-10-2023	F022052A
Fire Engineering Report	Fire Engineering Report No. S16124, Revision FER2.0 from MCD Fire Engineering dated 21/10/16.	2-10-2023	F049889A

* See notes on page 4 about how to correctly identify an accredited practitioner (fire safety) (APFS). Also, new rows can be added if required.

Section 5: Inspection of fire exits and paths of travel to fire exits (Part 15)

Part of the building inspected	Date(s) inspected	APFS *
Whole Building	2-10-2023	F022052A

* See notes on page 4 about how to correctly identify an accredited practitioner (fire safety) (APFS). Also, new rows can be added if required.

Fire Safety Statement

Part 15 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021

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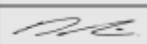
Section 6: Name and contact details of each accredited practitioner (fire safety) (APFS)*

Full name (Given Name/s and Family Name)	Address	Phone	APFS*	Signature
Dimitri Kafkakis	19/538 Gardeners Road, Alexandria, NSW, 2015	(02) 9124 8888	F049889A	
Anthony Zacher	8b 26 Powers Road Seven Hills NSW 2147	0406 964 905	F022052A	
David Price	Level 1/ 283 Victoria Road Gladesville NSW 2111	(02)98177666	F053402A	

* Where applicable – see notes on page 4 for further information.

Section 7: Details of the person making the declaration in section 8 or 9

Full name (Given Name/s and Family Name)

Organisation (if applicable) | Title/Position (if applicable)

Address (Street No, Street Name, Suburb and Postcode)

Phone | Email

The person making the declaration in section 8 or 9 must not be an APFS listed in section 6 or their employer/employee or direct associate.

Section 8: Annual fire safety statement declaration

I, (insert full name) being the: ☐ owner ☐ owner's agent

declare that:

a) **each** essential fire safety measure specified in this statement has been assessed by an accredited practitioner (fire safety) as capable of performing:

   i. for an essential fire safety measure specified in the fire safety schedule, to a standard no less than that specified in the schedule, or

   ii. for an essential fire safety measure applicable to the building but not specified in the fire safety schedule, to a standard no less than that to which the measure was originally designed and implemented, and

b) the building has been inspected by an accredited practitioner (fire safety) and was found, when it was inspected, to be in a condition that did not disclose grounds for a prosecution under Part 15 of the Regulation.

Owner/Agent Signature | Date issued

Section 9: Supplementary fire safety statement declaration

I, Click here (insert full name) being the: ☐ owner ☐ owner's agent

declare that each critical fire safety measure specified in this statement has been assessed by an accredited practitioner (fire safety) as capable of performing to at least the standard required by the current fire safety schedule for the building.

Owner/Agent Signature | Date issued