

6 October 2025  
Our Ref: 25110-L01-02

**Creative Vision**

Level 2, 14 Railway Parade  
Burwood NSW 2134

**Attention:** Boomika Madaiah  
Email: [boomika@cvision.com.au](mailto:boomika@cvision.com.au)

Dear Boomika

## **MIXED-USE DEVELOPMENT - 135 BADGERYS CREEK ROAD, BRADFIELD FIRE ENGINEERING STATEMENT (FOR SSDA SUBMISSION)**

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### **INTRODUCTION**

This Fire Engineering Statement has been prepared on behalf of the Bradfield Corporation Pty Ltd (the Applicant) by Innova Services Australia Pty Ltd. It is submitted to the Department of Planning, Housing and Infrastructure (DPHI) in support of a State Significant Development Application (SSDA) on land at 135 Badgerys Creek Road, Bradfield (the site).

This document provides advice with regards to the proposed use of Performance Solutions to address identified fire safety related departures to the Deemed to Satisfy (DtS) provisions of the National Construction Code 2022 Volume One (Amendment 2) – Building Code of Australia Class 2 to 9 Buildings (NCC).

The purpose of this document is to assist in the design development process and to assist the Department of Planning, Housing and Infrastructure (DPHI) in the determination of the SSDA submission.

### **SITE DESCRIPTION**

The site is located at 135 Badgerys Creek Road, Bradfield and is approximately 2.02ha in area. It is legally described as Lot 7 DP 243457 and is located approximately 250m to the future Bradfield Metro Station and 4km to the Western Sydney Airport. An aerial image of the site is provided in Figure 1.

The site shares a western frontage with Badgerys Creek Road. The eastern boundary of the site adjoins the State government-led Bradfield City Centre which is set to be a vibrant 24/7 global city, driving advancements in industry and will support 10,000 more homes and 20,000 new jobs in Western Sydney.

As defined by the Aerotropolis Precinct Plan, the site is located within the Aerotropolis Core Precinct which is envisioned as an attractive place for workers, residents and visitors. The Aerotropolis Core Precinct will leverage the positive economic impact of the adjacent Western Sydney Airport and Bradfield City Centre. It will attract business hubs, research and development, professional services and creative industries in addition to providing residential development within walking distance of the Bradfield Metro station and proximity to blue and green infrastructure.

**Sydney** | Suite 18.02, Level 18  
227 Elizabeth Street  
Sydney NSW 2000  
PO Box 4788, Forest Lake QLD 4078

**Brisbane** | Unit 5, Level 1  
445 Upper Edward Street  
Spring Hill QLD 4000  
PO Box 4788, Forest Lake QLD 4078



 The Site

**Figure 1: Site Aerial Map**

Source: Nearmap / edited by Ethos Urban

## PROPOSED DEVELOPMENT

The proposed development will seek consent for the redevelopment of the site, comprising:

- Enabling works including vegetation removal and earthworks;
- The construction of three buildings, comprising:
  - Residential use, including approximately 400 apartment units;
  - Hotel use, including approximately 450 hotel rooms;
  - Commercial use, including supermarket, food and drink and other commercial uses;
  - Medical centre use;
  - Childcare centre use;
- Construction of two basement structures, including approximately 800 carparking spaces;
- Public domain upgrades, including:
  - Construction of an internal road;
  - A public plaza;
- Rehabilitation and augmentation of the existing riparian corridor;
- Landscaping embellishments on the ground level and within the built form; and
- Services augmentation as required.

## NCC ASSESSMENT DATA

With reference to the Regulatory Compliance Report, BCA Assessment, prepared by Certatude (Revision 3.0, dated 3 October 2025), the relevant NCC Assessment Data for the subject development is summarised in Table 1.

**Table 1: Relevant NCC Assessment Data**

NCC Reference	NCC Assessment
Classification	Class 2, 3, 5, 6, 7a, 7b, 8, 9b
Rise in Storeys	13
No. of Levels Contained	15
Minimum Type of Construction Required	Type A
Effective Height	Greater than 25 m (~43.19 m)
Maximum Fire Compartment Size	As applicable for Type A construction

## REFERENCED DRAWINGS

**Table 2: List of Referenced Architectural Drawings**

Drawing No.	Issue	Title	Date
DA-0000	A	Cover Sheet	22-09-2025
DA-0200	A	Site Analysis	22-09-2025
DA-0300	A	Proposed Site Plan	22-09-2025
DA-10B3	A	General Floor Plan – Basement 02	22-09-2025
DA-10B2	A	General Floor Plan – Basement 01	22-09-2025
DA-10B1	A	General Floor Plan – Lower Ground	22-09-2025
DA-10M1	A	General Roof Plan – Mezzanine	22-09-2025
DA-1000	A	General Floor Plan – Ground	22-09-2025
DA-1001	A	General Floor Plan – Level 01	22-09-2025
DA-1002	A	General Floor Plan – Level 02	22-09-2025
DA-1003	A	General Floor Plan – Level 03	22-09-2025
DA-1004	A	General Floor Plan – Level 04	22-09-2025
DA-1005	A	General Floor Plan – Level 05-08	22-09-2025
DA-1009	A	General Floor Plan – Level 09	22-09-2025
DA-1010	A	General Floor Plan – Level 10	22-09-2025
DA-1011	A	General Floor Plan – Level 11	22-09-2025
DA-1012	A	General Floor Plan – Roof	22-09-2025
DA-2000	A	BLDG A,B – North Elevation	22-09-2025
DA-2001	A	BLDG A,B – South Elevation	22-09-2025
DA-2002	A	BLDG B – West Elevations	22-09-2025
DA-2003	A	BLDG C – North Elevation	22-09-2025
DA-2004	A	BLDG C – East & West Elevations	22-09-2025
DA-2005	A	BLDG C – South Elevation	22-09-2025

Drawing No.	Issue	Title	Date
DA-2006	A	BLDG A,B – East Elevation	22-09-2025
DA-2007	A	BLDG A – West Elevation	22-09-2025
DA-3000	A	Section A	22-09-2025
DA-3001	A	Section B1	22-09-2025
DA-3002	A	Section B2	22-09-2025

## ACHIEVING COMPLIANCE WITH THE NCC

Compliance with the NCC is achieved by satisfying the Performance Requirements. Clause A2G1(2) of the NCC states that the Performance Requirements can be satisfied by one of the following:

- (a) *Performance Solution.*
- (b) *Deemed-to-Satisfy Solution.*
- (c) *A combination of (a) and (b).*

Clause A2G2(1) of the NCC states that a Performance Solution is achieved by demonstrating:

- (a) *compliance with all relevant Performance Requirements; or*
- (b) *the solution is at least equivalent to the Deemed-to-Satisfy Provisions.*

Clause A2G2(2) of the NCC states that a Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of the following Assessment Methods:

- (a) *Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.*
- (b) *A Verification Method including the following -*
  - (i) *the Verification Methods in the NCC.*
  - (ii) *Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.*
- (c) *Expert judgment.*
- (d) *Comparison with the Deemed-to-Satisfy Provisions.*

Clause A2G2(3) of the NCC states Where a Performance Requirement is satisfied entirely by a Performance Solution, in order to comply with (1) the following method must be used to determine the Performance Requirement or Performance Requirements:

- (a) *Identify the relevant Performance Requirements from the Section or Part to which the Performance Solution applies.*
- (b) *Identify Performance Requirements from other Sections or Parts that are relevant to any aspects of the Performance Solution proposed or that are affected by the application of the Performance Solution.*

Clause A2G2(4) of the NCC states Where a Performance Solution is proposed to be satisfied by a Performance Solution, the following steps must be undertaken:

- (a) *Prepare a performance-based design brief in consultation with relevant stakeholders.*
- (b) *Carry out analysis, using one or more of the Assessment Methods listed in (2), as proposed by the performance-based design brief.*
- (c) *Evaluate results from (b) against the acceptance criteria in the performance-based design brief.*
- (d) *Prepare a final report that includes-*
  - (i) *All Performance Requirements and/or Deemed-to-Satisfy Provisions identified through A2G2(3) or A2.4(3) as applicable; and*
  - (ii) *Identification of all Assessment Methods used; and*
  - (iii) *Details of step (a) to (c); and*
  - (iv) *Confirmation that the Performance Requirement has been met; and*
  - (v) *Details of conditions or limitations, if any exist regarding the Performance Solution.*

## IDENTIFIED DEPARTURES TO DTS PROVISIONS OF NCC

With reference to the Regulatory Compliance Report, BCA Assessment, prepared by Certatude (Revision 3.0, dated 3 October 2025), it is likely that Performance Solutions are proposed to be developed to address departures to the following DTS provisions of the NCC:

1. *Fire-resisting construction (reduced FRL to building elements to Class 7b parts) – NCC Clauses C3D8, C3D9 & C4D13, NCC Specification 5*
2. *Enclosure of shafts (omission of fire rating to base of garbage chute shafts) – NCC Specification 5 (S5C8)*
3. *Fire-resisting construction (fire seal to perimeter slab edges) – NCC Specification 5*
4. *Fire-resisting construction (fire seal between bounding & external walls) – NCC Specification 5*
5. *Public corridors in Class 2 and 3 buildings (corridors > 40 m) – NCC Clause C3D15*
6. *Separation between adjacent fire compartments (exposure between compartments) – NCC Clauses C4D4, C4D5*
7. *Number of exits required (single exit from mezzanine level) – NCC Clause D2D3*
8. *Exit travel distances – NCC Clause D2D5*
9. *Distance between alternative exits – NCC Clause D2D6*
10. *Travel via fire-isolated exits (discharge into covered areas < 2/3 open) – NSW NCC Clause D2D12*
11. *Travel via fire-isolated exits (exposure to path of travel) – NSW NCC Clause D2D12*
12. *Travel via fire-isolated exits (omission of airlocks) – NSW NCC Clause D2D12*
13. *Discharge from exits (alternative exits discharge adjacent to each other) – NCC Clause D2D15*
14. *Roof as open space (exposure to path of travel) – NCC Clause D3D13*
15. *Doorways and doors / Operation of latch (egress through roller shutters) – NCC Clauses D3D24, D3D26*
16. *Fire hydrants (access to fire pump room) – NCC Clause E1D2*
17. *Fire hydrants / Fire sprinkler systems (access to fire brigade booster assembly) – NCC Clauses E1D2, E1D4*
18. *Fire hose reels (omission of coverage from small fire rated rooms) – NCC Clause E1D3*
19. *Class 7a buildings (use of Jet Fans in car parking areas) – NCC Clause E2D13*
20. *Smoke hazard management (omission of zone pressurisation) – NCC Clause E2D6*
21. *Smoke exhaust systems (rationalisation to smoke exhaust design) – NCC Specification 21*

*Note: At this stage of the design, the identified departures to the DTS provisions of the NCC are not exhaustive, and additional departures resulting in the development of additional Performance Solutions may arise throughout the detailed design process leading up to when a Construction Certificate is issued. This is routine practice for development of this scale and nature, and the level of detail that this statement has been prepared to is appropriate to this stage of the project lifecycle.*

## REQUIRED FIRE SAFETY SYSTEMS

The following fire safety systems will be required to be installed throughout the subject development:

- Fire hydrants – NCC Clause E1D2, AS 2419.1-2021
- Fire hose reels – NCC Clause E1D3, AS 2441-2005
- Fire sprinklers – NCC Specification 17, AS 2118.1-2017, AS 2118.6-2012
- Portable fire extinguishers – NCC Clause E1D14, AS 2444-2001
- Automatic smoke detection and alarm system – NCC Specification 20, AS 1670.1-2018
- Stair pressurization systems – NCC Clause E2D4, AS 1668.1-2015
- Emergency lighting and exit signs – NCC Clauses E4D2, E4D4, E4D5 & E4D8, AS/NZS 2293.1-2018
- Emergency lifts – NCC Clause E3D5
- Emergency warning and intercom systems – NCC Clause E4D9, AS 1670.1-2018
- Automatic smoke exhaust systems – NCC Clause E2D14, NCC Specification 21

*Note: The above list may change or vary during the detailed design process and / or as a result of the future Fire Engineering Assessment and liaison with Fire & Rescue NSW (FRNSW). FRNSW is welcome to provide input during the Public Exhibition of this SSDA. Any feedback Agency stakeholders will be addressed as part of the Response to Submissions package for this project.*

## **CONCLUSION**

Innova Services Australia Pty Ltd has reviewed the proposed design and the identified departures to the DTS provisions of the NCC and advise that Performance Solutions can be developed that will be capable of demonstrating compliance with the relevant Performance Requirements of the NCC. The appropriate stage for this to occur would be post-approval design development before a Construction Certificate is issued.

The Fire Engineering process will require liaison with relevant stakeholders during the detailed design process, including Fire & Rescue NSW (FRNSW). This process may result in changes to the design to ensure an acceptable outcome for all relevant stakeholders. FRNSW is requested to consider this statement with appropriate regard for matters that can be readily resolved before a Construction Certificate is issued rather than before this SSDA is determined. This will ensure adequate design coordination without prejudicing assessment timeframes for this project.

Should you require any additional information with regards to the above please do not hesitate to contact the undersigned.

Yours Faithfully

**Innova Services Australia Pty Ltd**



Jason Powell

**Director**

Certifier – Fire Safety (BDC0801)  
MIEAust, CPEng, NER