

15 September 2025  
Our Ref: 24026-L01-02

**Arada**

148A Elizabeth Street  
Sydney NSW 2000

**Attention:** Simon Lee  
Email: [s.lee@arada.com](mailto:s.lee@arada.com)

Dear Simon

## **RESIDENTIAL DEVELOPMENT – 16-20 CARRINGTON ROAD, CASTLE HILL FIRE ENGINEERING STATEMENT (FOR DA SUBMISSION)**

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### **INTRODUCTION**

The works relate to the construction of a proposed Residential Development located at 16-20 Carrington Road, Castle Hill.

This statement 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 statement is to assist in the design development process and to assist the Consent Authority in the determination of the DA submission.

### **DESCRIPTION OF DEVELOPMENT**

The development will comprise 431 residential sole-occupancy units within 3 buildings constructed over a common podium and basement car parking levels. The development will be bounded by Carrington Road to the north, Fishburn Crescent to the south, Sexton Avenue to the east, and Middleton Avenue to the west.

In summary, the development will comprise:

- Basements 01 & 02 – car parking, ancillary
- Lower Ground – car parking, residential lobbies, residential units, ancillary
- Ground Level – loading dock, residential lobbies, residential units, external courtyard, ancillary
- Upper Ground Level – residential units, lounge, ancillary
- Levels 01 to 06 – residential units
- Level 07 – residential units, communal terrace (Building B)
- Levels 08 & 09 – residential units
- Level 10 – residential units, communal terrace (Building C)
- Level 11 – residential units, roof (Building C)
- Levels 12 to 15 – residential units (Building A & B)
- Level 16 – residential units, plant (Building B)
- Level 17 – residential units, roof (Building B)
- Level 18 – communal terrace, plant (Building A)
- Roof Level – Building A

**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

## NCC ASSESSMENT DATA

With reference to the BCA Assessment Report prepared for the development by Nest Consulting Group (Ref: 24010.4-BCA, Issue No. 4, dated 15 September 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 (residential units) Class 7a (car parking) Class 7b (storage) Class 8 (maintenance workshop)
Rise in Storeys	21
No. of Levels Contained	23
Minimum Type of Construction Required	Type A
Effective Height	Greater than 50 m (~65.1 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-110-005	1	GA Plans: Basement 02	03-09-2025
DA-110-006	1	GA Plans: Basement 01	03-09-2025
DA-110-007	1	GA Plans: Lower Ground	03-09-2025
DA-110-008	1	GA Plans: Ground Level	03-09-2025
DA-110-009	1	GA Plans: Upper Ground Level	03-09-2025
DA-110-010	Q	GA Plans: Level 01	21-08-2025
DA-110-011	P	GA Plans: Level 02	21-08-2025
DA-110-012	P	GA Plans: Level 03	21-08-2025
DA-110-013	P	GA Plans: Level 04	21-08-2025
DA-110-014	P	GA Plans: Level 05	21-08-2025
DA-110-015	P	GA Plans: Level 06	21-08-2025
DA-110-016	R	GA Plans: Level 07	21-08-2025
DA-110-017	P	GA Plans: Level 08	21-08-2025
DA-110-018	P	GA Plans: Level 09	21-08-2025
DA-110-019	R	GA Plans: Level 10	21-08-2025
DA-110-020	Q	GA Plans: Level 11	21-08-2025
DA-110-021	P	GA Plans: Level 12	21-08-2025
DA-110-022	Q	GA Plans: Level 13	21-08-2025
DA-110-023	R	GA Plans: Level 14	21-08-2025
DA-110-024	N	GA Plans: Level 15	21-08-2025
DA-110-025	N	GA Plans: Level 16	21-08-2025

Drawing No.	Issue	Title	Date
DA-110-026	N	GA Plans: Level 17	21-08-2025
DA-110-027	1	GA Plans: Level 18	03-09-2025
DA-110-028	N	GA Plans: Roof Level	21-08-2025
DA-210-101	F	North Elevation	14-08-2025
DA-210-201	F	East Elevation	14-08-2025
DA-210-301	G	South Elevation	14-08-2025
DA-210-401	F	West Elevation	14-08-2025
DA-220-101	F	Building C – North Elevation	14-08-2025
DA-220-201	F	Buildings A & C – East Elevation	14-08-2025
DA-220-301	F	Buildings A & B – South Elevation	14-08-2025
DA-220-401	F	Buildings B & C – West Elevation	14-08-2025
DA-310-101	E	Section AA	21-08-2025
DA-310-201	E	Section BB	21-08-2025

## 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 BCA Assessment Report prepared for the development by Nest Consulting Group (Ref: 24010.4-BCA, Issue No. 4, dated 15 September 2025), it is likely that Performance Solutions are proposed to be developed to address departures to the following Dts provisions of the NCC:

1. Enclosure of shafts (omission of fire rating to base of garbage chute shafts) – NCC Clause C2D2, NCC Specification 5 (S5C8)
2. Roof lights (located less than 3 m from adjacent parts of building) – NCC Specification 5 (S5C16)
3. Separation of classifications in the same storey (reduced FRL to Class 7b parts) – NCC Clause C3D9
4. Public corridors in Class 2 buildings (corridors > 40 m) – NCC Clause C3D15
5. Bounding construction (glazing within fire rated bounding walls) – NCC Clause C4D12
6. Number of exits required (single exit from ancillary areas) – NCC Clause D2D3
7. Exit travel distances (car parking areas) – NCC Clause D2D5
8. Exit travel distances (residential areas) – NCC Clause D2D5
9. Exit travel distances (ancillary and communal use areas) – NCC Clause D2D5
10. Distance between alternative exits (car parking areas) – NCC Clause D2D6
11. Distance between alternative exits (residential areas) – NCC Clause D2D6
12. Travel via fire-isolated exits (discharge into covered area < 1/3 open) – NCC Clause D2D12
13. Discharge from exits (alternative exits not located as far apart as practicable) – NCC Clause D2D15
14. Fire hydrants (location of fire brigade booster assembly) – NCC Clause E1D2
15. Fire control centres (location of fire control room) – NCC Specification 19
16. Stretcher facility in lifts (omission of stretcher facility in private lift to Unit 1506) – NCC Clause E3D3

*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

*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).*

## 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).

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