

3 July 2026
Our Ref: 25558-L01-04

Goodman Property Services (Aust) Pty Ltd
The Hayesbery
1 - 11 Hayes Road
Rosebery NSW 2018

Attention: Luke Ridley (Luke.Ridley@goodman.com)

Dear Luke

**SSDA APPLICATION (SSD 120888992) | FIRE SAFETY ENGINEERING
STATEMENT | PROJECT SILVERBACK - PRECINCT 2, OAKDALE EAST -
BUILDING 2B & LOT 2C**

This statement has been prepared by Innova Services Australia to address the following Development Applications:

- Concept Plan Amendments (Mod 6): Amendments to State Significant Development Application 37486043 (as modified) in accordance with Section 4.24 of the Environmental Planning & Assessment Act 1979.
- Detailed Application (Proposed Works): State Significant Development Application (SSDA) No. 120888992 based on Industry-specific Secretary's Environmental Assessment Requirements (SEARs) received dated 8 May 2026.

The proposed development is being undertaken by Goodman Property Services (Aust) Pty Ltd (Applicant) on behalf of BGMG 14 Pty Ltd (ACN 661 888 884) as trustee of BGMG 1 Oakdale East Trust No.2 (Owner). The development is located at 2-10 Old Wallgrove Road, Horsley Park (the Site). The folio identifier number is Lot 109 of Deposited Plan 1293112.

Sydney | Suite 1802, 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



Figure 1: Render (Source: SBA)

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The below further outlines the respective works the Development Applications seek approval for.

Concept Plan Amendments | State Significant Development Application SSD - 37486043 (Mod 6)

As part of the proposed works under SSD No. 120888992, the following amendments are proposed to the Concept approval and Stage 1 Infrastructure works approved under SSDA 37486043:

- Amendment to approved Masterplan and Subdivision plan to accommodate revised Precinct 2-5 layout which will consolidate Precincts 2, 4 and 5, resulting in a total of three (3) precincts. (Precinct 1, 2 & 3).
- Amendment of Stage 2 infrastructure scope to accommodate revised and consolidated Precinct 2-5 layout
- Amendment of Development Controls, including those prescribed under Condition A9 & A10 of the consent, specifically:
 - Building Height
 - Maximum GLA
- Increase maximum permissible vehicle from a 30 m super B-double to a 36.5m B-triple (Condition D14)

This application, inclusive of the amendments to the Concept approval under SSD 37486043, seeks to facilitate the development of Building 2A, 2B & Lot 2C and associated Internal infrastructure changes

Detailed Application | State Significant Development Application SSD-120888992

The SSDA seeks approval for the construction, fit-out, operation and use of 2 warehouse buildings and associated internal site infrastructure works to accommodate the proposed building layouts. Specifically, this includes:

- **Warehouses and Distribution Building – Building 2B & Lot 2C**
 - 24/7 warehouse and distribution use for an automated mail and parcel processing and sorting facility.
 - Construction, operation, fit-out (office and warehouse) and use of approximately 142,157 sqm of warehouse and office GLA across two levels spanning a proposed ridge height of 25.0m (excluding rooftop plant, roof access stairs and solar).
 - Warehouse fit-out includes automation and sortation equipment along with associated mezzanine structures.
 - Building 2B will include hardstand, heavy rigid parking, guardhouses, dock offices, loading bays, landscaping, electric vehicle charging, goods collection lockers, solar panels six lithium-ion battery energy storage systems (BESS) external to the main warehouse building and fleet workshop, weighbridges, fleet workshop, dock temperature control with external units, emergency generators, refuelling bay, truck wash and signage.
 - Dangerous goods (DGs) are proposed to be stored at the site, which are below the threshold quantities under Chapter 3 of the *State Environmental Planning Policy (Resilience and Hazard) 2021*
 - Ground Improvements to Warehouse 2B building footprint (i.e. pilling), including a 200mm thick layer of Cement Treated Fine Crushed Rock (CTFCR) placed under the entire warehouse footprint.

- **Internal Estate Infrastructure**

- Bulk Earthworks to Precinct 2 (formally Precinct 2, 4 & 5)
 - Approximately 550,000m³ fill importation required as either virgin excavated natural material (VENM), excavated natural material (ENM) or Resource Recovery Order under Section 286A of the *Protection of the Environment Operations Act 1997* (PoEO Act 1997) Importation proposed to be 24 hours, 7 days a week during the Fill Importation program
 - Export any unsuitable material (i.e Topsoil and Clay)
- Retaining Walls (including importation of Engineered backfill)
- Stormwater Basin D (including fit-out)
- Construction and associated Easement to Drain of Stage 1 stormwater discharge line through Building 2B to Basin C
- Stage 1 road and servicing amendments to reflect revised Precinct 2, 4 & 5 building layout
- Noise barriers
- Lead-in services including additional 11kv feeder via the extension of HV feeders from existing Endeavour Energy switching stations within Roberts Road and Capicure Drive

- **Other**

- Expansion and on-going management of DA 347.1/2021 Containment Cell
- Subdivision of Precinct 2, 4 & 5 to suit revised precinct plan and ultimate lot layout

Related Applications/Activities

Fairfield City Council Development Application DA 347.1/2021 (as modified) – Rehabilitation Works

A Fairfield City Council Development Application DA 347.1/2021 (as modified) has previously been approved over the site facilitating Bulk Earthworks and Rehabilitation (including an initial Containment Cell) Works at the Site to provide relative levels suitable for future industrial development.

These levels are:

- Precinct 2 (western portion): BE 77.5
- Precinct 2 (eastern portion): BE 71.5
- Precinct 3: BE 77.0
- Precinct 4: BE 70.0

Proposed SSD-120888992 assumes these levels and works in respect of assessment of environmental impacts previously assessed in accordance with Clause 4.63 (a) *Environmental Planning & Assessment Act 1979*. Further re-assessment is therefore not required.

DA 347.1/2021 assessed the Environmental Impacts associated with the required rehabilitation to achieve the above Bulk Earthworks levels.

Notwithstanding, DA 347.1/2021 (as modified) is currently unable to be fulfilled as the consent approves a shortfall of:

- Fill importation required to achieve the above FCC approved rehab levels
- Contamination cell size required to fulfill rehabilitation obligations under the Fairfield City Council consent and associated Rehabilitation Action Plan.

SSD-120888992 assess and seeks approval to address these shortfalls as part of the Environmental Impact Assessment.

The information provided below relates to Building 2B and Lot 2C. Building 2A is addressed within a separate statement.

DESCRIPTION

Property Name: Building 2B & Lot 2C

Property Address: 2–10 Old Wallgrove Road, Horsley Park NSW

Legal Description: Lot 109 in Deposited Plan 1293112

Description of works: Construction, fit-out and operation of a 24/7 warehouse and distribution facility for parcel processing, operating as an automated mail and parcel sorting facility. The proposed development comprises approximately 142,157 sqm of warehouse and office gross leasable area across two levels with a proposed ridge height of 25.0 m excluding rooftop plant, roof access stairs and solar installations.

The warehouse fit-out includes automation and sortation equipment together with approximately 52,000 sqm of mezzanine areas creating approximately 142,157 sqm GFA. Associated works include hardstand areas, heavy rigid vehicle parking, guardhouses, dock offices, loading bays, landscaping, electric vehicle charging infrastructure, solar panels, weighbridges, fleet workshop, refuelling bay, truck wash, signage and dangerous goods storage below threshold quantities prescribed under Chapter 3 of the State Environmental Planning Policy (Resilience and Hazard) 2021. Ground improvement works including piling are also proposed within the Building 2B footprint.

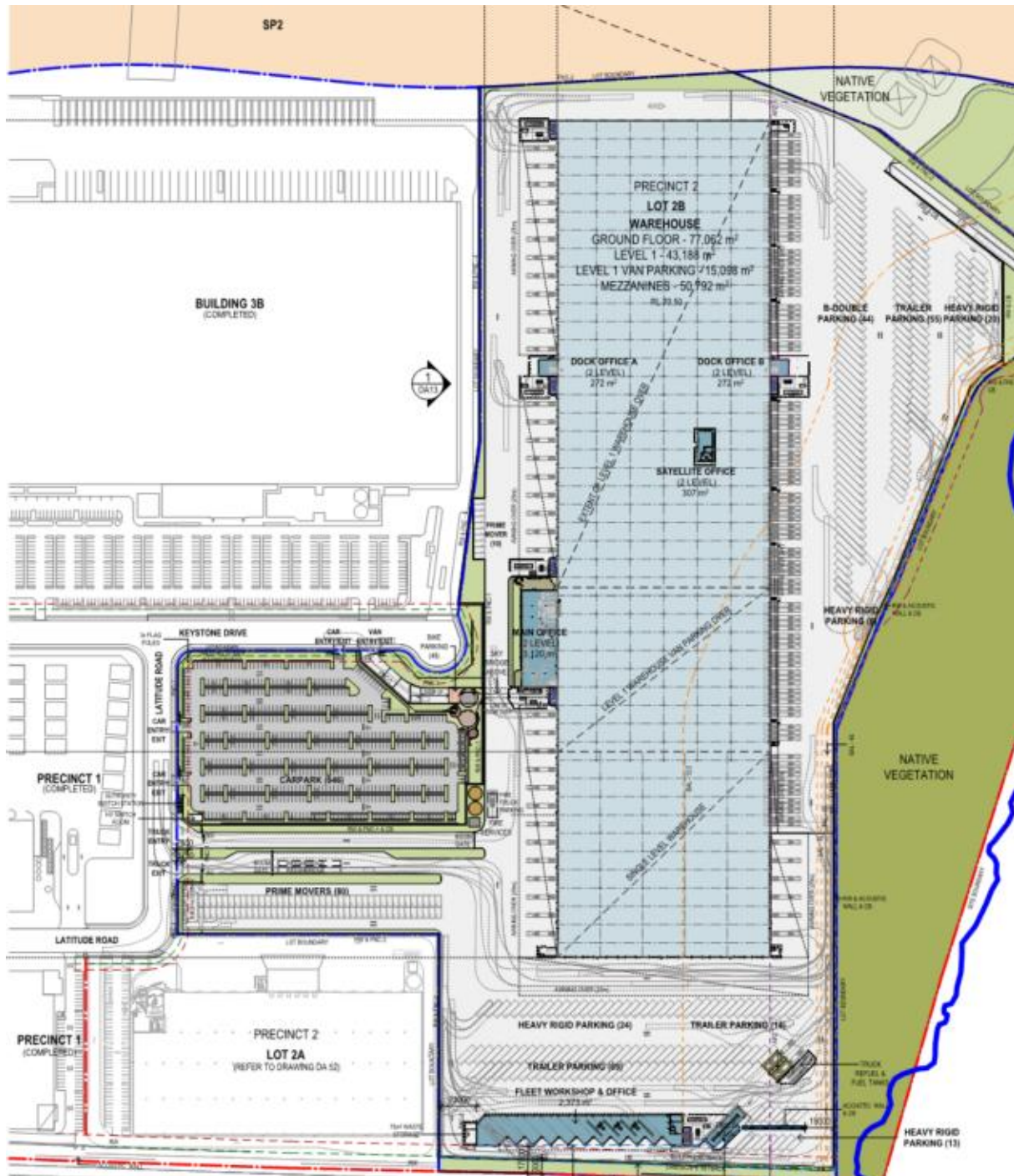


Figure 2: Site Plan (Source: SBA)

NCC CLASSIFYING DATA

For the purpose of determining the applicable DtS Provisions and therefore the minimum compliance requirements the relevant classifying data is described in Table 1.

Table 1: Relevant NCC Assessment Data

BCA Reference	
Classification	Main Warehouse/Office - Class 5, Class 7a, Class 8, Class 7b, Class 10a Fleet Workshop/Gatehouse - Class 5 and Class 8
Rise in Storeys	Main Warehouse/Office - Six (6) Fleet Workshop/Gatehouse - One (1)
No. of Levels Contained	Main Warehouse/Office - Four (4) Fleet Workshop/Gatehouse - One (1)
Minimum Type of Construction Required	Warehouse/Office Building (subject to Performance Solution) - Type A Fleet Workshop and Gatehouse - Type C
Effective Height	Warehouse/Office Building - 17.5 m (RL 88.0 – RL 70.5) Fleet Workshop and Gatehouse – N/A
Maximum Fire Compartment Size	Warehouse/Office Building - Large Isolated Building (~141,732 sq.m) Fleet Workshop and Gatehouse – 2,378 sq.m

REFERENCED DOCUMENTS

The following documents, legislation, and technical resources have been reviewed and referenced in the preparation of this report. They inform the technical basis, regulatory framework, and supporting analysis that underpin the development of this fire safety strategy. These sources ensure alignment with current codes, statutory obligations, and project-specific requirements.

- Australian Building Codes Board. (2022). National Construction Code 2022, Volume One: Building Code of Australia Class 2 to 9 buildings, Amendment 2. <https://ncc.abcb.gov.au>
- New South Wales Government. (1979). Environmental Planning and Assessment Act 1979 (NSW). <https://legislation.nsw.gov.au>
- New South Wales Government. (2021). Environmental Planning and Assessment Regulation 2021 (NSW). <https://legislation.nsw.gov.au>
- New South Wales Government. (2021). Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 (NSW). <https://legislation.nsw.gov.au>
- Australian Building Codes Board. (2021). Australian Fire Engineering Guidelines (AFEG) (2021 ed.). <https://www.abcb.gov.au>
- Australian Building Codes Board. (2022). Guide to the National Construction Code 2022. <https://ncc.abcb.gov.au>
- BCA Report Ref: 260145 (dated 25 May 2025) prepared by BMG [unpublished BCA report]
- SBA Architectural plans pp 1-29 dated 21 May 2026 [unpublished architectural plans].

ACHIEVING COMPLIANCE WITH THE NCC

The following section outlines the process by which Performance Solutions are developed and assessed for the main warehouse / office. It is intended to provide stakeholders with clarity on how potential non-conforming design elements are evaluated to ensure compliance with the NCC and to confirm that equivalent levels of safety and performance are achieved.

Where elements of the design cannot fully comply with the Deemed-to-Satisfy (DtS) provisions of the NCC, compliance is instead demonstrated through a Performance Solution in accordance with Clause A2G1.

The Performance Solution process provides a structured and transparent framework to confirm that the proposed design achieves an equivalent, or greater, level of safety and performance than that required under the DtS provisions. In summary, the process involves the following key stages:

- Identifying the relevant Performance Requirements with reference to the element that does not comply with the DtS provisions. Related provisions in other sections of the NCC are reviewed to ensure the proposed solution maintains overall consistency and intent.
- A Performance-Based Design Brief (PBDB) is prepared in consultation with the certifying authority, Fire & Rescue NSW, and other key stakeholders. The brief establishes the performance objectives, the applicable Performance Requirements, and the acceptance criteria against which compliance will be assessed. These criteria are defined to demonstrate that the proposed solution provides an outcome at least equivalent to the DtS benchmark in terms of life safety, property protection, and fire brigade intervention.
- Appropriate Assessment Methods are selected in accordance with A2G2(2) of the NCC. Depending on the issue under consideration, this may include one or more of the following:
 - Verification Methods (either NCC-listed or other accepted engineering protocols);
 - Quantitative or qualitative fire engineering analysis;
 - Expert judgement supported by evidence of suitability (Part A5); or
 - Direct comparison with DtS provisions.

These analyses are undertaken to demonstrate that the acceptance criteria are met and that the solution maintains a level of performance consistent with NCC objectives.

- The findings are compiled in a Fire Engineering Report (FER), which documents:
 - The applicable Performance Requirements and relevant DtS provisions;
 - The assessment methodology adopted;
 - The results of the analysis and how compliance is demonstrated; and
 - Any management measures or limitations that must be maintained during operation.

This process ensures that any aspect of the development that departs from the DtS provisions can be justified and approved.

OVERVIEW OF NCC BCA VOLUME 1 DTS NON-CONFORMANCES

Table 2 outlines the NCC BCA DtS non-conformances identified at this stage of design development, based on review by the design team, together with our experience on buildings of a similar size and nature.

The list is not intended to be exhaustive or limiting. Additional DtS non-conformances may be identified as the design is further developed and coordinated, which may require additional Performance Solutions. However, the identified matters are considered sufficient at this stage for the purpose of determining the planning application.

At this stage, where not listed herein, the building is otherwise assumed to achieve compliance with the relevant DtS provisions, codes, reports and Standards.

Table 2: Indicative NCC/BCA DtS Non-Conformances to be subject to Performance Solutions

No.	DtS Provision/s	Variations to DtS Provisions	Performance Requirements
1.	C2D14 Building Identification Signage	C2D14 states, amongst other requirements, that a sign must achieve a Group Number of 1 or 2. The building identification signage may be constructed of materials achieving a Group 4 rating.	C1P2, C1P4
2.	C2D2, S5C11, C4D14 Fire Resisting Construction	Tables S5C11a to S5C11g of Specification 5 require certain building parts to have a time grading of 240 minutes for structural adequacy, integrity and insulation (as the case requires). This includes members incorporated in the floor (S5C11(1)(a)) and external columns incorporated in the external wall ((S5C11(3)). Likewise, S5C17 requires columns immediately below the roof to have an FRL of 60/-/-. The following non-conformances have been identified: - The warehouse structure achieves a FRL of 240/240/240 however it is designed in accordance with Australian Standard, AS 2327:2017 <i>Composite Structures – Composite Steel-Concrete Construction in Buildings</i> which permits some members to be unprotected. This means that not all parts of are fire rated, contrary to the provisions of S5C11(1)(a) which requires the floor, and any member incorporated in it to have a FRL. - Perimeter columns of the single storey warehouse parts and Level 1 warehouse may have an ESA/M of less than 26 m²/tonne in lieu of an FRL of 240/180/90. - Openings between the warehouse and office may be separated by fire shutters that do not achieve the 30-minute insulation rating (contrary to C4D14). - The FRL requirements for the skybridge and vehicular access ramp will be reviewed as part of the fire engineering assessment.	C1P1, C1P2, C1P8
3.	S5C8 inter alia S5C11 (Table S5C11g) Fire resisting construction (fire isolated stairs)	S5C8 states that the top of a shaft must be enclosed by fire rated construction. S5C11 (Table S5C11g) of requires the columns supporting the fire isolated stairs to achieve a FRL of 240/-/-. The fire isolated stairs do not conform with the DtS provisions as follows: - The shaft lid of the fire isolated stairs has an FRL when tested for a fire outside the stair in another part of the building i.e. in a single direction from the outside in. - The fire-isolated stair shafts are formed by precast concrete panels that provide the fire-resisting enclosure, with the steel columns located behind and shielded by these panels within the stair. The columns are inherently protected by a	C1P1, C1P2

No.	DtS Provision/s	Variations to DtS Provisions	Performance Requirements
		fire from the building side only i.e. there is no applied fire rating to the columns. Columns supporting the fire isolated passageway lids may pass through the fire rated lid.	
4.	C3D4 / C3D5 Perimeter Access Path	C3D4/C3D5 requires vehicular access as a continuous means of passage for emergency vehicles around the perimeter of the building. The access path must have a width of no less than 6 m and be located within 18m of the building and unobstructed overhead. Non-conformances may include: - Pinch points along the access path are anticipated at access control point. - The perimeter access pathway travels beneath the connecting bridgelink/s.	C1P9
5.	C4D15 / C4D16 Construction Joints, Service Openings and Penetrations	C4D15 and Specification 13 require that building services penetrating fire-rated elements be fire-stopped in accordance with AS 1530.4 or AS 4072, while C4D16 requires construction joints and similar gaps to be protected by tested systems. In this building, several elements are required to achieve a 240-minute FRL. However, there are no tested or prescriptive systems available that provide 240 minutes for all service types, such as hydraulic lines and communications cabling. Accordingly, the services penetrations and construction joints may instead be protected by systems capable of achieving at least 120 minutes integrity and insulation.	C1P2, C1P8
6.	D2D5, D2D6, D2D14, E2D10, and E4D6 Egress, Smoke Hazard Management, Signage	Several mutually inclusive non-conformances are considered: Travel distance to choice/exit (D2D5(3)(a)): DtS is a maximum of 20 m to a point of choice and 40 m to an exit; the design shall exhibit up to 30 m and 100 m respectively in the warehouse. Distance between exits (D2D6): DtS is a maximum of 60 m; the design shall exhibit up to 200 m in the warehouse. Travel from non-fire isolated stairs (D2D14): The stairs serving the Satellite Offices and PUD office do not provide a continuous path of travel to a road or open space, with discharge points located in excess of 40 m from the final exit. Distances from discharge points range from approximately 65 m to 75 m, with similar conditions applying to mezzanine levels discharging to the warehouse floor. As a result, the total travel distance via non-fire-isolated exits exceeds 80 m from the Satellite Offices, PUD office and mezzanine levels. Smoke hazard management (E2D10): Requires exhaust zoned to $\leq 2,000 \text{ m}^2$ throughout; an engineered system is proposed to serve the warehouse space only.	D1P4, D1P5, E2P2, E4P2
7.	D2D12 Stair Discharge	Fire isolated stairs, and external stairs in lieu of fire stairs may discharge into the loading docks, which does not satisfy the requirements of D2D12(2). D2D12(2) permits internal discharge only where the area is predominantly open to the exterior (i.e. at least two-thirds open for carparks or pedestrian areas, or one-third open where adjoining a road or open space) and provides a short, direct path to open space. Likewise fire isolated stairs may pass within 6 m of openings in the external wall.	D1P5, E2P2

No.	DtS Provision/s	Variations to DtS Provisions	Performance Requirements
8.	D2D15/D3D13 Building Re-entry	The Level 1 warehouse exits discharge to an external walkway that does not provide a direct path to a road or open space. Egress to a road requires re-entry into the building via enclosed fire stairs, resulting in a discontinuous path of travel contrary to the DtS requirements.	
9.	D3D24 Egress via Roller Shutters	D3D24 requires that a required exit must not be fitted with a roller shutter unless, among other conditions, the part of the building served by the shutter has a floor area of not more than 200 m ² . Egress from the fleet workshop may be provided via a roller shutter/s.	D1P2
10.	E1D2, E1D4 Fire Hydrant Design + Booster Locations	E1D2 requires compliance with AS 2419.1:2021. While AS 2419.1 generally applies to buildings ≤108,000 m ³ , the building exceeds this volume and is therefore outside its prescriptive scope. The following matters arise: ▪ Coverage within the warehouse relies on multiple hose lengths, in lieu of the standard ≤70 m external / ≤40 m internal coverage. ▪ Internal fire hydrants must be installed on the storey they serve. A number of the mezzanine levels may be served by hydrant valves at Ground Level. ▪ The booster assembly is not adjacent to the site boundary, nor within 20 m of the principal pedestrian entrance, contrary to Section 7.3.1. ▪ The block plan requires scaling to A0 to accommodate the building footprint, rather than 1:250 as nominated in Section 11.5(e). Similarly, E1D4 requires the sprinkler system to be provided in accordance with AS 2118.1:2017, including the installation of a booster assembly as per AS 2419.1:2021. The sprinkler booster is not adjacent to the site boundary, nor within 20 m of the principal pedestrian entrance.	E1P3, E1P4
11.	E1D3 Fire Hose Reels	E1D3 states that a fire hose reel system must achieve the coverage specified in AS 2441:2005 throughout any fire compartment with a floor area greater than 500 m ² . Clause 10.2(a) of AS 2441:2005 states that all points on a floor shall be within reach of a 4 m hose stream issuing from a nozzle at the end of the hose laid on floor and that the hose length shall not exceed 36 m. Coverage will be achieved through the use of 50 m (54 m coverage) hose reels.	E1P1
12.	E1D4 Sprinklers (Low-Voltage Rooms)	E1D4 Specification 17 of the NCC, states in part, that an automatic fire sprinkler system must comply with AS 2118.1. AS 2118.1 only permits the omission of sprinklers from high voltage rooms. It is permitted to omit sprinklers from the switch/communication (comms) room, despite the room/s containing low voltage equipment only.	E1P4

PREVENTATIVE AND PROTECTIVE MEASURES | FIRE SAFETY STRATEGY

This fire safety strategy is provided in support of the planning permit application to demonstrate that a compliant fire safety outcome can be achieved for the proposed development.

The strategy outlines the intended fire safety framework and confirms that compliance with the NCC can be achieved through a combination of Deemed-to-Satisfy (DtS) provisions and, where necessary, Performance Solutions developed at a later stage.

This document does not seek approval of any Performance Solution. Any departures from the DtS provisions will be identified, assessed, and documented in a Fire Engineering Report (FER) prepared as part of the construction certificate approval process, in consultation with the Building Certifier and Fire & Rescue NSW (FRNSW).

Unless specifically varied through a Performance Solution:

- the building will be designed to comply with the DtS provisions of NCC 2022 Volume One; and
- referenced fire safety systems will be designed and installed in accordance with the relevant Australian Standards.

Where Performance Solutions are required, they will be developed in accordance with the NCC performance-based framework and assessed against the applicable Performance Requirements.

1.0 Structural fire resistance

The building will be provided with fire-resisting construction appropriate to its use, form, and scale.

The primary structure shall achieve a FRL of up to 240 minutes applying AS/NZS 2327. However, it is anticipated that portions of the structure, including the Level 1 warehouse, bridgelinks, mezzanine, and office elements, may be suitable for assessment using performance-based structural fire engineering methods. Any assessment will be undertaken at the construction certificate stage and documented in the FER.

External wall materials shall be non-combustible and achieve the required fire hazard properties in accordance with the NCC DtS provisions, with the exception of building identification signage.

Any building signage that does not comply with these provisions shall be subject to a performance solution to demonstrate that the risk of fire spread and impact to occupant safety and fire brigade intervention is not greater than that permitted under a DtS-compliant design. Namely, non-conforming signage shall be provided with suitable protection (e.g. an apron or equivalent measure) to prevent detachment or falling debris from impacting occupants discharging below.

At this stage, it is confirmed that a compliant structural fire resistance outcome can be achieved, subject to detailed design, analysis, and certification.

2.0 Fire separation and compartmentation

Fire separation between major building uses (including the warehouse and office areas), vulnerable spaces, and emergency equipment rooms will be provided generally in accordance with the NCC, with the extent and fire resistance levels to be confirmed during detailed design.

Where required, performance solutions may be adopted to address the form of separation, including the use of alternative measures such as fire-rated shutters or wall-wetting sprinkler systems in lieu of conventional fire-resisting construction.

The final configuration of fire-resisting elements will be documented and certified at the construction certificate stage.

3.0 Fire brigade access and facilities

Fire brigade vehicle access, appliance positioning, and firefighter access will be provided generally in accordance with FRNSW Fire Safety Guideline 'Access for fire brigade vehicles and firefighters'¹ and the NCC.

Full perimeter access is proposed, generally as shown on the architectural drawings. While this remains subject to FRNSW review, the design approach is not without precedent and is considered capable of supporting fire brigade intervention, subject to appropriate wayfinding, hardstand/access provisions, and any further requirements arising through consultation.

The design provides for continuous perimeter access and suitable clearances to support fire brigade operations.

Any overhead elements, including bridge links crossing access paths or at pinch points, have been designed and coordinated to ensure they do not obstruct or impede fire brigade access, equipment movement, hose deployment, appliance positioning, wayfinding, or firefighting operations (>4.5 m overhead clearance).

The final arrangement will be subject to confirmation through detailed design and consultation with FRNSW.

4.0 Means of egress

The building will be provided with egress in accordance with the NCC.

Where site constraints, building scale, or functional requirements necessitate departures from the DTS provisions (such as travel distances and exit configurations), these will be addressed through a Performance Solution at the construction certificate stage.

Final travel distances will be confirmed at that stage; however, the following performance-based travel distance allowances are considered appropriate for a building of this scale:

- Maximum distance to a point of choice between exits ≤ 30 m;
- Maximum distance to the nearest exit: ≤ 100 m;
- Separation between alternative exits: ≤ 200 m.

To achieve these distances, the egress strategy may incorporate a combination of fire-isolated passageways, fire-isolated stairs, external stairs in lieu of fire-isolated stairs, and external walkways. Fire-isolated passageways will be constructed to provide an FRL consistent with their function as a protected path of travel.

At Level 1, occupants discharge to an external perimeter walkway protected from radiant heat by an approximately 2 m high -/120/120 concrete wall. The walkway provides a continuous path of travel to fire-isolated stairs or external stairs, which then discharge to a point of safety.

The egress path is to be continuous and clearly identifiable, supported by wayfinding signage and management controls to maintain it clear of obstructions and combustible storage. Appropriate protection will be provided where the path passes in proximity to external wall openings or other hazards.

Tenability along the discharge path, including re-entry points and fire-isolated stairs, will be demonstrated as suitable for occupant egress and fire brigade access.

Where roller shutters form part of the egress strategy, the following shall apply:

- **During Business Hours:** shutters shall be secured in the open position using a device that cannot be modified, altered, or tampered without tools.
- **After Business Hours:** shutters shall be provided with an emergency egress push-button device adjacent to the shutter. The push-button shall:
 - a. be located in clear view of the person seeking egress and within 2 m of the approach side of the shutter;
 - b. be positioned between 900 mm and 1,100 mm above finished floor level (AFFL);

¹ FRNSW (2020), Fire Safety Guidelines, Access for fire brigade vehicles, Fire safety Branch, Community Safety Directorate, Version 05.01, 17 November 2020, Sydney NSW.

- c. be identified by signage securely fixed adjacent to the shutter stating “PUSH TO OPEN” (or similar); and
- d. be connected to a battery back up.

Power supply to the roller shutter shall be provided by either:

- a. essential power with fire-rated wiring; or

Note: For clarity, this requirement does not extend to the motor, nor the wiring within the motor/s, control panel/s and associated equipment operating the door/s. Additionally, the motor and equipment driving the roller shutter itself does not need to be fire-isolated from occupied spaces.

- b. a secondary battery backup power supply capable of operating the shutter for a minimum of 1 hour. The battery backup shall be connected to a local audible alarm to indicate battery depletion or fault.

The roller shutter shall also be capable of being opened manually via a chain hoist operable under a force of not more than 110 N.

Note: The above-mentioned requirements apply only to the doors and roller shutters that form part of the identified Performance Solution / non-conforming egress arrangement. These requirements will not apply generally to all roller shutters throughout the building, unless separately identified as forming part of the Performance Solution.

5.0 Fire-fighting equipment

The building will be provided with fire-fighting equipment in accordance with the NCC and relevant Australian Standards, including:

- Fire hydrants with infrastructure generally designed and installed in accordance with AS 2419.1:2021 and subject to the Performance Solution. Required flow rates are to be generally consistent with the pressure and flow provisions of AS 2419.1:2021, unless further review identifies special hazards, authority requirements, or other project-specific conditions requiring additional assessment, design measures, or amendment to the Performance Solution.

The opportunity to explore coverage multiple hose lengths will be sought where this assists with perimeter coverage from external hydrant positioning and the broader fire brigade access strategy. This includes reliance, where appropriate, on external positions for fire brigade set-up at both ground level and from the Level 1 external walkway.

Associated wayfinding information, including block plans and directional signage where required, should be provided to clearly identify the preferred hydrant locations and support effective fire brigade intervention.

- Fire Hose Reels with infrastructure designed and installed in accordance with E1D3, AS 2444:2001, AS/NZS 1221:1997 and subject to the Performance Solution i.e. extended hose length coverage.
- Sprinklers with fast response heads and designed and installed in accordance with AS 2118.1:2017 and subject to the Performance Solution. Where required by the storage hazard, commodity classification, storage arrangement, equipment layout or tenant fitout, the sprinkler design may also rely on relevant FM Global Data Sheets, NFPA 13, or other recognised design guidance, subject to being addressed by the Performance Solution and

The sprinkler booster assembly is anticipated to be located in close proximity to the associated sprinkler infrastructure and provided with sufficient hardstand to enable fire brigade appliances to set up operations and maintain access around the site, including the ability to continue along the perimeter access path during firefighting operations.

- Portable Fire Extinguishers are to be provided in accordance with AS 2444:2001 and subject to the Performance Solution.

The final design, coverage, and layout will be confirmed during detailed design and certification.

6.0 Fire detection, alarm, and occupant warning

The building will be provided with fire detection and occupant warning systems. Detection will be appropriate to the building use and geometry, with system configuration and type selection to be confirmed during detailed design with:

- Detection within the warehouse in accordance with AS 1670.1 and the approved fire engineering strategy. The form of detection may comprise ceiling-mounted point detection, aspirating smoke detection, beam detection, or other suitable detection technology, subject to the ceiling height, roof geometry, airflow conditions, access for testing and maintenance, expected fire signatures, and environmental conditions. Detection spacing, sensitivity, zoning, and alarm configuration shall be confirmed during design development.
- Detection within the office in accordance with AS 1670.1 and subject to the Performance Solution. Spacing shall be as detailed in Clause 5.1.2 of AS 1670.1 i.e. arranged within 5 m of a wall and 10 m in each other direction.

Note: The extent and configuration of the detection system, including detector spacing and coverage, shall be determined during design development and will be subject to confirmation of the extent and location of travel distance non-conformances within the building.

- Occupant warning system incorporating voice messaging and Visual Alarm Devices in the warehouse as necessary in accordance with AS 1670.1:2018;
- Integration to initiate smoke exhaust, air handling and plant shutdown, and other fire mode operations where required.
- The Fire Detection, Control and Indicating Equipment (FDCIE) and Fire Fan Control Panel (FFCP) shall be located at a centralised and readily accessible position within the development. The initial nominated location is within the office area associated with the warehouse, subject to confirmation through detailed design.

Alternatively, a dedicated fire control centre may be provided adjacent to the primary building services infrastructure, where this is demonstrated to improve accessibility, coordination of fire safety systems, and overall fire brigade operation.

The final location shall ensure that fire brigade personnel are able to readily identify, access and utilise the control interfaces upon arrival, supported by appropriate wayfinding information and building layout.

7.0 Smoke management

Smoke management i.e smoke exhaust measures will be provided in accordance with the NCC and AS 1668.1.

Any smoke exhaust or smoke control systems that vary from DtS provisions will be assessed and documented as part of a Performance Solution at the construction certificate stage. The system is assumed to comprise of shared smoke-exhaust risers provided generally along the spine of the warehouse floor plate, enabling the floor to be divided into not less than two (2) independent smoke-exhaust zones each level. To support this arrangement, the exhaust risers are to be constructed as fire-rated shafts penetrating through the floor plate, with motorised fire dampers installed at each level. The dampers will be configured so that:

- a fire on the Ground Floor closes all Level 1 dampers; and
- a fire on Level 1 closes all Ground Floor dampers.

The shared risers are expected to convey in the order of 10–15 m³/s of exhaust flow through the floor plate (per riser), subject to detailed mechanical and fire engineering design. This configuration enables each zone to operate independently while maintaining a common riser system.

Make-up air will likely be provided via permanent or automatically actuated façade openings, sized and controlled to match the exhaust capacities of the respective zones.

Any openings, penetrations, or other forms of communication between Ground Floor and Level 1 will need to be reviewed as part of the smoke-control strategy. Where required, local baffles, smoke separation, or other treatment may be necessary around penetrations through the floor plate to limit smoke transfer between levels and support the intended zone operation.

8.0 Emergency lighting, signage, and management

Emergency lighting and exit signage will be provided in accordance with the Part E4 of the NCC and AS/NZS 2293.1.

Emergency management and evacuation procedures will be developed in accordance with the NCC and finalised prior to occupation.

The final configuration, extent, and specification of all fire safety measures will be established through the FER prepared as part of the Performance Solution documentation. This report will form the basis for regulatory approval and coordination with the Certifier and Fire & Rescue NSW during detailed design, ensuring the development achieves full compliance with the NCC Performance Requirements.

ENDORSEMENT

An assessment of the development application has been undertaken by a Certifier – Fire Safety.

The assessment indicates that the design is capable of complying with the relevant Performance Requirements of the NCC BCA. Compliance with the Performance Requirements may be achieved via either, or a combination of the following approaches:

- Some aspects of the design may become DtS by way of design development
- A performance solution may indicate comparison of the design with the BCA DtS provisions
- A performance solution may indicate direct compliance with the Performance Requirements.

It is considered that the preparation of any Performance Solution and corresponding preventative measures that are likely to be documented therein are unlikely to result in inconsistency of the detailed construction plans and specifications with the Development Consent.

We trust this is sufficient for your needs at this time. Should you require any additional information with please do not hesitate to contact the undersigned via email trent@innovaservices.com.au or on 0424 590 503.

Yours faithfully

Innova Services Australia Pty Ltd



Trent De Maria

Director

Certifier – Fire Safety (BDC3412)
MFireSafetyEng, MEnvBusMgt, B.App.Sc, GradDip FS&RE, GradCert
Perf.BasedBdg&FireCodes, GradCert PIM, GradCert Bdg&PIng