

19 December 2024

Attention: Bruno Deans

RTL Marrickville Property Trust ('RTL Co.')

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Sydney NSW 2000

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Project name: The Timberyards by RTL Co.

Project address: Multiple Lots Bound By Victoria Road, Sydenham Road, Farr Street And Mitchell Street

Document reference: S24141-SSDA-001-B.docx

State Significant Development Application (SSDA) | Fire Engineering | Letter of Support

The Timberyards by RTL Co.

This SSDA Fire Engineering Support Letter has been prepared by Minerva Group (NSW) Pty Ltd to accompany a detailed State Significant Development Application (SSDA) for a mixed use, rental housing precinct at Marrickville Timberyards site which bounded By Victoria Road, Sydenham Road, Farr Street and Mitchell Street. The legal description of the site is outlined in Table 1 below.

Table 1 Legal Description of the site

Lot/DP	Property Address	Lot/DP	Property Address	Lot/DP	Property Address
1/724487	119A Sydenham Rd	1/572829	35 Farr St	3/252507	19 Farr St
1/972534	121 Sydenham Rd	12/4590	14 Mitchell St	4/252507	21 Farr St
B/439802	129 Sydenham Rd	13/4590	10 Mitchell St	5/252507	23 Farr St
A/439802	131 Sydenham Rd	14/4590	8 Mitchell St	6/252507	25 Farr St
D/377270	133 Sydenham Rd	15/4590	183 Victoria Rd	7/252507	27 Farr St
1/700223	135 Sydenham Rd	16/4590	4 Mitchell St	8/252507	29 Farr St
B/343286	7 Farr St	17/4590	2 Mitchell St	9/252507	31 Farr St
A/304426	9 Farr St	3/4590	165 Victoria Rd	1/583801	33 Farr St
A/304426	11 Farr St	2/4590	167 Victoria Rd	C/301985	175 Victoria Rd
1/78883	13 Farr St	1/4590	169 Victoria Rd	D/301985	183 Victoria Rd
1/252507	15 Farr St	A/301985	171 Victoria Rd	E/301985	175 Victoria Rd

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2/252507	17 Farr St	B/301985	173 Victoria Rd	A/166330	183 Victoria Rd
345/587262	191 Victoria Rd	1/315293	183 Victoria Rd	20/667441	183 Victoria Rd

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-76927247).

This report concludes that the proposed development is suitable, warrants approval, satisfies SEARs Item 4 – Built Form and Urban Design, and our preliminary Fire Engineering analysis confirms that building can meet the functional requirements of the Building Code of Australia with respect to:

- Mitigating fire spread to adjacent structures; and
- Providing for occupant life safety; and
- Facilitating fire brigade intervention

On receipt of SSDA approval, the Design Team will continue to evaluate the design in accordance with the process outlined in BCA Part A2 with respect to liaison with relevant stakeholders and preparation of a Performance Solution Report (by a registered Certifier – Fire Safety) for construction approval.

This statement of support confirms that building design can comply with the relevant Performance Requirements of the Building Code of Australia (BCA), subject to further analysis by the fire engineering team as the design develops.

If there are any queries regarding this report, please do not hesitate to contact the undersigned.

Written by



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Approved by



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1. Introduction

1.1. Project Description

This Fire Engineering SSDA support letter has been prepared on behalf of Varsity Assets Management Pty Ltd (Developer) on behalf of RTL Investments 2 Pty Ltd as trustee for RTL Marrickville Property Trust ('RTL Co.') (the Applicant) to support a State Significant Development Application (SSDA) for the proposed *Timberyards* development. The SSDA (SSD-76927247) seeks consent for a diverse rental housing precinct comprising build-to-rent (BTR), co-living and affordable housing. The precinct development comprises seven buildings ranging from eight to thirteen storeys, with open space that includes a pocket park, through site links and communal open spaces. Specifically, consent is sought for the following:

- Site preparation (including remediation), demolition and bulk excavation for basement parking;
- Residential accommodation (shop top housing, residential flat buildings and mixed use buildings) that includes BTR, co-living and affordable housing;
- Retail premises on the ground floor within the MU1 zoned land and extending up to 25m into the R4 zoned land;
- Publicly accessible recreation area (pocket park) and through site links;
- Neighbourhood shop (within the R4 zoned land);
- Associated landscaping and public domain works; and
- Augmentation of, and connection to, existing utilities as required.

A detailed description of the proposal is provided in the Environmental Impact assessment (EIS) by Ethos Urban. The development is declared State Significant by virtue of being a BTR development on land in Greater Sydney with an Estimated Development Cost (EDC) of greater than \$50 million, with the tenanted component representing greater than 60% of the EDC (Schedule 1, *State Environmental Planning Policy (Planning Systems) 2021*).

1.2. Project Vision

RTL Co. aim to deliver Sydney's premier neo-industrial residential neighbourhood - a global benchmark for imaginative urbanism. The Timberyards aims to seamlessly integrate diverse residential offerings into the distinctive character of Marrickville, fostering a sense of pride among residents and the local community. The project will deliver a wide range of rental living solutions, complemented by recreation spaces and local retail, all underpinned by Connection to Country and environmentally sustainable design principles.

1.3. Site Description

The site is known as the 'Timberyards', located in Marrickville within the Inner West Local Government Area (LGA). The site comprises 39 lots with legal identification listed in the table below, and has a total area of 22,770m² or, for the purpose of calculation of floor space, an area of 22,564m² (excluding the SP2-zoned Victoria Road widening land, which is within the site boundary). The site is located within Precinct 47: Victoria Road in the *Marrickville Development Control Plan 2011* (MDCP 2011). The site is primarily contained in the Timber Yards sub-precinct of Precinct 47, with the lots fronting Victoria Road falling within the Victoria Road Corridor sub-precinct.

The site is approximately 700m walking distance to the newly opened Sydenham Metro Station, with 7-minute travel time to the Sydney CBD.

The site currently comprises primarily industrial and light industrial uses, with residential dwellings to a minor portion of the site on Farr Street (western boundary) and Victoria Road (eastern boundary). The site also has frontage to Sydenham Road to the south and Mitchell Street to the north (and encompassing a small lane off Mitchell Street). An aerial map is provided at Figure 1 below.

Lot/DP	Property Address	Lot/DP	Property Address	Lot/DP	Property Address
1/724487	119A Sydenham Rd	1/572829	35 Farr St	3/252507	19 Farr St
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 The site

Figure 1 Aerial site map

Source: Nearmap, Ethos Urban

2. Purpose

This Fire Engineering SSDA support letter has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Housing and Infrastructure (DPHI) for the subject SSDA, with specific SEAR(s) identified in the table below.

Table 2 – SEARs Requirements

SEAR	SEAR description	Report section
4. Built Form and Urban Design	- Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach. - Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality. - Demonstrate how the building design will deliver a high-quality development, including consideration of façade design, articulation, activation, roof design, materials, finishes, colours, any signage and integration of services. - Assess how the development complies with the relevant accessibility requirements.	Section 3, 4 and 5

3. Methodology

The methodology outlined in the International Fire Engineering Guidelines (IFEG) will be adopted for the fire engineering assessment. The IFEG outline the process by which Fire Engineering analysis is undertaken when assessing deviations from the DtS Provision of the BCA. This step-by-step process enables fire safety professionals to undertake a consistent approach such that the inputs for the Performance Solution are transparent and the outcomes can be understood by the community.

3.1. Fire Engineering Brief (FEB)

In accordance with the IFEG, the fire engineer should prepare a Fire Engineering Brief (FEB) for every project. The FEB must include the objectives, proposed trial designs, methods of analysis, and acceptance criteria for any Performance Solutions proposed.

3.2. Fire Engineering Report (FER)

Upon acceptance of the FEB, the IFEG requires the preparation of a detailed Fire Engineering Report (FER). The FER should contain all relevant design calculations and justifications to demonstrate that the Performance Solutions comply with the Performance Requirements of the BCA. Once stakeholder approval is obtained, the report may be submitted to the PCA Consultant for approval.

4. Summary of proposed Performance Solutions

4.1. Relevant documentation

Our fire engineering review is based on the following documents:

- BCA ASSESSMENT REPORT 2022 prepared by Jensen Hughes (Ref: 20241219-119655-BCA-r1 | Revision 1 | dated 19/12/2024)
- Architectural Drawings provided by Turner Studio, dated 06/12/2024

4.2. Summary of proposed Performance Solutions

The following table outlines the Performance Solutions which will be supported through fire engineering analysis during later stages of the project, as taken from the Jensen Hughes (Ref: 20241219-119655-BCA-r1 | Revision 1 | dated 19/12/2024).

Table 3: Summary of proposed Performance Solutions

BCA Reference	Details of non-compliance
C2D2, Specification 5	Rationalise Fire Resistance Levels (FRLs) Rationalise the FRLs in the basement and ground floor retail storeys. Rationalised FRLs are proposed as follows: • Above ground retail - to permit a 2-hour FRL in lieu of 3 hours. • Communal areas in residential areas – to permit 90 minutes FRL lieu of 2 hours.
C3C8	Fire Walls – Separation of Buildings ‘Building A’ will be fire separated from ‘Building B’, however, there is no fire wall separation on the basement. This would permit ‘Building A’ to be assessed as a building under 25m in effective height. A performance solution is feasible with the following items addressed: • Basement level to have completely separate exit routes • Lifts to be provided with fire rated lobbies including fire rated doors on magnetic hold open devices. • All services penetrations to be fire stopped etc (to be addressed at the next stage of design). • Still requires sprinklers, EWIS, stair press, etc. • BCA consultant to confirm the effective height is less than 25m when measured in isolation (Refer to Section 2.3 of this report for confirmation). <i>Note: Subject to further detailed analysis</i>
C4D3	Protection of Openings Openings in Building D & E are within 3m from the southern boundary.

BCA Reference	Details of non-compliance
S5C8	Shafts To permit a fire-isolated stair without the fire rated roof / lid in Building B1.
D2D4, D2D12	Building C – Central Stair The central fire stair in Building C is not currently fire separated from the remainder of the building on Ground Floor (the stair is open between the final riser and the carpark). In addition, two retail tenancies open up into the stairway.
S5C16	Roof Lights BCA Clause S5C16 would apply, and roof lights must not be less than 3m from: - any part of the building which projects above the roof unless that part has the FRL required of a fire wall and - any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C4D5. There are skylights that would not comply with the above provisions in the following locations: - Below the sole occupancy unit's balconies located on Ground Floor of Building D (retail). - Voids / openings above Hardware Lane with residential SOUs above. The application of this Clause for these voids has been deemed appropriate to the circumstances. Note that these openings need natural lighting and ventilation into all habitable rooms in the residential SOUs.
D2D3	Number of Exits A single exit has been provided to the upper ground floor commercial tenancy in Building E in lieu of a minimum of 2 (two) exits. <i>Note: Subject to further detailed analysis</i>

BCA Reference	Details of non-compliance
D2D5, D2D6	Travel Distance The following travel distance non-compliances have been identified: • Basement car park – 30/60/90 • Basement car park – 33/54/87 • Ground Floor carpark storage under Building A – 17/36/86 • Ground Floor car park – 19/51/70 • Loading Dock – Up to 40m to a point of choice. Add a new stair from the loading dock to the driveway. Provide compliant walkway to the public road. • Upper Ground Floor Building E Office – 23m to a single exit in lieu of 20m to not less than two exits. • Building B2 – Distance between exits is up to 60m in lieu of 45m (the building is > 25m effective height). • Upper Ground Floor podium level above the carpark – Up to 85m between exits in lieu of 60m. • Building A – 20m in lieu of 12m from a sole occupancy unit to the only exit. • Building B1 – 25m to a point of choice from external steps in lieu of 20m. • Building B1 – Level 10 plant room is up to 30m to a point of choice in lieu of 20m. • Building B2 – Up to 60m between alternative exits in lieu of 45m. • Building C – 14m in lieu of 12m from a sole occupancy unit to a point of choice. • Building D – 25m in lieu of 20m to a single exit on the upper residential storeys from the lobby / common area (typical). • Building D – 15m in lieu of 12m from a sole occupancy unit to the only exit. • Building F – 15m in lieu of 12m from a sole occupancy unit to a single exit. <i>Note: Subject to further detailed analysis</i>
D2D6(b)	Distance Between Alternative Exits According to the deemed-to-satisfy provisions of the BCA, exits cannot be less than 9m apart. The following locations have alternative exits less than 9m apart: • Building B (Lobby B1) • Building E (Lobby E1 & E2).

BCA Reference	Details of non-compliance
D2D8	Egress Widths The following egress widths are below 1m: • Various pinch points between fixed furniture on the Building B rooftop, down to 850 in lieu of 1m. • Other – plant rooms and the like. Service Engineers to confirm egress widths of their respective plant rooms once layouts are confirmed. <i>Note: Subject to further detailed analysis</i>
D2D12, D2D15	Exit Discharge – Open Space Occupants discharging from the fire-isolated stairways must travel under the Class 10 building or back under Building CD in lieu of open space.
D2D12(2)	Exit Discharge – Enclosed Space The discharge point of the fire-isolated passage does not meet the requirements of BCA Clause D2D12(2), i.e., the passage discharges within the confines of the building and is not open for at least 2/3 of its perimeter. This occurs in the following locations: • Building B2, B3 • Building C • Building G • Other – TBC <i>Subject to further detailed analysis</i>
D2D12(3)	Exit Discharge – Protection of Occupants Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building. This occurs in the following locations: • Building B1 • Building B3 • Building C • Building D • Other – TBC <i>Note: Subject to further detailed analysis</i>

BCA Reference	Details of non-compliance
D2D13	External / Open Stairways A detailed review of the external stairways in lieu of fire-isolated stairs is required as the design progresses. Open stairs have been proposed in the following buildings: • Building A • Building C, D • Building E • Building F • Building G <i>Note: Subject to further detailed analysis</i>
D2D15	Exit Discharge – Distance between Alternate Exits Alternate exits do not discharge as far apart as practicable. This occurs in the following locations: • Building B1 • Building B2 • Building E
D3D25	Door Swing To permit a door to swing against the direction of travel in the following locations: • Ground Floor Building A/B northwestern exit door.
E1D2, Cl 7.3 of AS 2418.1	Hydrant Booster The Hydrant Booster is not within sight of the entry to the building (multiple buildings on site – assuming that a single booster will service the site).
C4D3, C4D5	Protection of Openings The openings between Building B and Building C that are within 6m of each building shall be protected in accordance with BCA Clause C4D5. <i>Note: Subject to further detailed analysis</i>

BCA Reference	Details of non-compliance
C4D15	Smoke Corridors In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with S11C2. This is currently not provided in the following locations: • Building B1 • Building B2 • Building B3 • Building C • Building D (this common corridor is very close to 40m. Please provide dimensions). • Building E <i>Note: Subject to further detailed analysis, smoke corridors could be extended up to 50m as a performance solution.</i>
D3D25	Door Swing The following doors do not swing in the direction of egress: • Basement 1 southern exit door adjacent Lobby B3. • Ground Floor Building B2 BOH corridor from the loading dock to Warehouse Place. • Ground Floor Building E community room, retail & residential lobbies. • Ground Floor substation • Ground and Upper Ground communal rooms. • Upper Ground Floor, Building B1 (Lobby B1). • There are some entry / exit doors in the Ground Level retail tenancies that swing against the direction of egress. It is unknown if the retail tenancies will be split up, hence exit locations have not been confirmed. <i>Note: Subject to further detailed analysis</i>
C2D2, C2D3	Effective Height of 'Building A' It has been proposed to split 'Building A' from 'Building B' on a performance basis in order to keep 'Building A' under 25m in effective height. The proposed method of measurement of effective height is described in Section 2.3 of this report.

BCA Reference	Details of non-compliance
C2D10, C2D14	Non-Combustibility Further design development is required to assess the external facade and its attachments in accordance with BCA Clause C2D10 and C2D14. Note that solid aluminium attachments are not exempted under C2D14. CodeMark Certificates, test reports and potentially Fire Safety Engineering may be required. <i>Note: Subject to further detailed analysis</i>
C3D8, C3D9, C4D12	Fire Separation Between Classifications How will the larger Class 9b communal areas be separated from the remainder of the building, i.e., separated from the Class 2/3 lobbies and the like? Fire Resistance Levels (FRLs), bounding construction and fire walls will need to be further discussed. <i>Note: Subject to further detailed analysis</i>
E1D17, E2D21	EV Charging It is proposed to have electric vehicles charging stations which is considered to be non-compliant with BCA Clause E1D17 - Special hazards. <i>Note: Subject to further detailed analysis</i>
E1D17, E2D21	EV Storage It is proposed to have electric vehicles bike storage areas in the lobby's and the like which is considered to be non-compliant with BCA Clause E1D17 - Special hazards. <i>Note: Subject to further detailed analysis</i>

5. Conclusion

The fire safety design will generally satisfy the Performance Requirements of the Building Code of Australia by complying with the Deemed-to-Satisfy Provisions. There are some aspects of the design that will require the use of Performance-Based fire engineering to achieve compliance with the relevant Performance Requirements of the BCA.

Subject to approval from the Principal Certifying Authority and relevant stakeholders, the proposed Performance Solutions outlined in Table 3 above will be demonstrated as meeting the Performance Requirements of the BCA during later phases of the design process without any significant amendments to the existing design being submitted for SSDA.

This document is for the purposes of supporting the proposed design for SSDA. It shall not be used for Construction Documentation and compliance with the Performance Requirements of the BCA will need to be verified through a formal fire engineering assessment by a Certifier – Fire Safety during later stages of the design process.