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17 January 2025

ESR Australia & New Zealand
Level 12, 135 King Street
Sydney 2000 NSW

Attention: Grace Macdonald

RE: Environmental Impact Statement – 3 Johnston Crescent, Horsley Park (SSD-71144719)

Introduction

This document has been prepared in response to Fire + Rescue NSW (FRNSW) advice statement on the Environmental Impact Statement (EIS) review of SSD Application 71144719 for the Horsley Logistics Park Stage 2.

FRNSW statement dated 27/1/2024 (Ref: FRN20/887 BFS24/7501 8000039305) has made several recommendations relative to the development's ability to ensure first responders have the ability to render safe an incident.

Fire Engineering Advice

The following information is provided by Affinity Fire Engineering to provide confidence to NSW Department of Planning and Environment that the proposed works adhere to the expectations of FRNSW and meet the requirements of their relevant Guidelines:

FRNSW Comment

1. Compliance is demonstrated with FRNSW fire safety guideline - Access for fire brigade vehicles and firefighters. Perimeter Vehicle Access must be provided at ground level and of an obvious and appropriate hardstand material.[1]

Affinity Fire Engineering Response

Affinity Fire Engineering can confirm that the vehicular perimeter access road around the development has been designed in accordance with the FRNSW Fire Safety Guideline "Access for fire brigade vehicles and firefighters v5.01". We are of the opinion that the design, as currently documented, is capable of compliance with the FRNSW Guidelines and is in accordance with standard BCA conditions of consent.

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Further to the above, we can confirm that all portions of the roadway acting as part of the vehicular perimeter access road shall be constructed to achieve the minimum loadbearing requirements for a fire appliance as detailed in Section 9 of the FRNSW Fire Safety Guideline "Access for fire brigade vehicles and firefighters v5.01".

FRNSW Comment

> 2. It is the experience of FRNSW that the water demand for fire infrastructure servicing a development of this scope is unlikely to be supplied by mains water alone. FRNSW recommend that suitable design considerations are considered for the placement of tanks and other firefighting infrastructure if required.

Affinity Fire Engineering Response

The development is provided with the following fire safety systems to assist in fire suppression and fire brigade operations:

- An automatic fire sprinkler system designed in accordance with AS2118.1:2017.
- A fire hydrant system designed in accordance with AS2419.1:2021.

Fire Sprinkler System

The automatic fire sprinkler system is provided through each of the two (2) buildings. The water feed for the fire sprinkler system is from the onsite water storage tank located on the south-eastern corner of Warehouse A. The water tanks are supplemented by the two (2) diesel pumps located within the fire pump room; located directly to the south of the fire sprinkler water tank.

Fire Hydrant System

The site is served by a single fire hydrant system. The fire hydrant system is fed from the pressurised town main feed, with a street connection and booster assembly located on the eastern side of the site adjacent the Office B1. Being fed from the pressurised town mains connection the system will not require any onsite water tanks to obtain the required 30L/s and there is adequate pressure in the mains to achieve compliant system pressure without the need for onsite pumps.

The hydrant system will incorporate separate ring mains around each of the warehouse buildings as per the requirements of AS2419.1:2021.

FRNSW Comment

> 3. That thorough analysis of the Fire Brigade Intervention Model is conducted to ensure that appropriate water supply is provided for hydrant and sprinkler systems.

Affinity Fire Engineering Response

The fire sprinkler system and fire hydrant systems are provided with water flow requirements and durations in accordance with the regulatory requirements of AS2118.1:2017 and AS2419.1:2021 respectively. This results in a water supply duration of 60 minutes for the fire sprinkler system and 240 minutes for the fire hydrant system; noting that due to the fire hydrant system connection to the town main, there is essentially an unlimited duration of water supply for the hydrant system.

FRNSW Comment

4. Implement the applicable provisions of AS2419 Appendix C (informative).

Affinity Fire Engineering Response

The fire hydrant system will incorporate the requirements of AS2419.1:2021 Appendix C. This will be completed by the project hydraulic engineer and assessed for suitability within the Fire Engineering Report.

Furthermore, given the buildings both exceed 108,000m^3 in volume, the use of the AS2419.1:2021 fire hydrant standard requires a performance solution and consultation with FRNSW. This will be completed prior to the relevant CC whereby the fire hydrant system design is assessed within the fire engineering report and subject to FRNSW review and commentary in line with Legislative requirements.

FRNSW Comment

5. Prior to occupation or commissioning an Emergency Plan (EP) is developed for the site in accordance with HIPAP No.1.[2]

Affinity Fire Engineering Response

An Emergency Plan can be prepared prior to Occupation Certificate. This requirement can be dealt with as a Condition of Consent.

FRNSW Comment

6. Prior to occupation or commissioning an Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.[3]

Affinity Fire Engineering Response

An Emergency Services Information Package can be prepared prior to Occupation Certificate. This requirement can be dealt with as a Condition of Consent.

Conclusion

Affinity Fire Engineering subsequently confirm that the design meets the Fire + Rescue NSW requirements and is capable of compliance with the Performance Requirements of the BCA.

We trust that the above information is sufficient for Consent Authority's needs with respect to fire safety design and compliance with the relevant building regulations in this regard.

Yours faithfully

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