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Contact: Daire Fleming

15 December 2016

Department of Planning & Environment
C/- Rebecca Groth
GPO Box 39
Sydney NSW 2001
E: Rebecca.Groth@planning.nsw.gov.au

Attention: Mrs Rebecca Groth

Dear Madam

Re:

**Sydney Theatre Company Internal fitout and Refurbishment Works
Hickson Road, Dawes Point (SSD 7561)**

I refer to the above development proposal's Environmental Impact Statement (EIS) which is currently on public exhibition. Fire & Rescue NSW (FRNSW) has reviewed the following specific documents that are attached to the EIS exhibition:

- i. The 'Building Code of Australia (BCA) Assessment Report - SEARS' (authored by Blackett Maguire and Goldsmith [REF: 160313], Rev:5, dated 2 November 2016),
- ii. The 'Appendix 1: Clause - by - clause Building Code of Australia (BCA) Assessment' (authored by Blackett Maguire and Goldsmith [REF: 160313], Rev:5, dated 2 November 2016), and
- iii. The 'SEARS - Fire Engineering Report' (authored by ARUP, Report No. 250601, Issue 2. dated 4 November 2016).

Comments/Observations

FRNSW notes that the development is located within a FRNSW Fire District pursuant to Section 5 of the Fire Brigades Act 1989 (the Act). Section 6 of the Act imposes a duty upon the Commissioner of FRNSW to take all practicable measures for preventing and extinguishing fires and saving life and property in case of fire.

To fulfil our statutory duties, FRNSW would undertake firefighting operations in the event that the proposed development was subjected to a fire incident (either an internal structure fire or an external fire threat) In terms of prioritising our statutory duties FRNSW would undertake actions that initially focussed on life safety (Nb including members of the public and firefighters) and then property protection.

FRNSW standard operational guidelines do not permit vehicle access on to the Wharfs on which the Sydney Theatre Company is located given concerns associated with the structural adequacy to support the imposed loads of FRNSW vehicles.

FRNSW notes that the BCA Report identifies that the proposed development will include a number of different classifications being Class 5 (Office/Administration), Class 6 (Café/Restaurant/Bar), Class 7b/8 (Storage/Workshops), Class 9b (Assembly Building) and Class 9b (Entertainment Venue). Due to the building's rise in storeys, Section 7.0 of the BCA Report identifies that the proposed building is required to be 'Type A' Construction (i.e. Clause C1.1 and Table 1.1 of the deemed to satisfy [DtS] provisions of the BCA).

The BCA Report also highlights that it is proposed to rationalise the fire resistance levels to 60 mins in lieu of Type A construction requirements and that this departure from the relevant DtS provisions of the Code is to be addressed by a fire engineered solution that is intended to meet the relevant performance requirements. It is FRNSW's understanding that a minimum fire resistance level of 60/60/60 is proposed as advised during the emergency services meeting No 2 on 12 December 2016. Given the state heritage significance of the existing structure together with the anticipated use and potential difficulties that may arise in relation to fire brigade intervention and firefighting, FRNSW recommend that the fast response sprinkler system be installed throughout the development with no exceptions. The current proposal suggests that specific areas will be exempt from the installation of the fast response system (See Section 3.2.3 of the Fire Engineering Report).

The proposed fire strategy focuses on compartmentation and occupant egress (Nb occupants may include disabled occupants which will be required to be considered as part of the assessment– see Part D3 of the Appendix 1 'Building Code of Australia Assessment Report' – Access for Persons with a Disability).

In the building's proposed configuration with the workshop being at the front of the development there is potential for a fire to cause significant property loss and increase the risk to occupants evacuating the Wharves.

Without enhancement of the essential fire safety measures throughout the development and given the limited access, FRNSW ability to protect property at risk and fulfil our statutory duties would be severely constrained.

Within the context of enhancing the proposed development's design so that FRNSW capability to fulfil our statutory duties is maximised, thereby minimising the potential for life and property loss, the following recommendations are submitted for consideration:



Recommendations

1. That the maximum compartment size is to be maintained within 2000m² floor area to limit the risk to occupants and fire fighters in the event of an emergency. FRNSW recommend that adequate compliant separation be provided between compartments to limit fire/smoke spread throughout the development. Limiting the compartment sizes will provide a sufficient period of time to afford first responders with an opportunity to protect property on arrival.
2. That a full quantitative egress strategy of the Wharves together with the public domain be undertaken to assess the time taken to evacuate the area in the event of an incident that requires full and immediate evacuation such as a hazmat or terrorist act. FRNSW have concerns regarding timely access to the Wharf area during an emergency incident. It is expected that a staged evacuation of the precinct may not be acceptable in the event of such an incident and that there may be significant delays regarding accessing the area during mass occupant evacuation from the area.
3. That a fast response sprinkler system be installed throughout the development with no exceptions. The current proposal suggests that specific areas will be exempt from the installation of the fast response system (See Section 3.2.3 of the Fire Engineering Report). Additional enhancement of the system above these requirements would be welcomed by FRNSW.
4. That the fire hydrant system is designed in accordance with the requirements of Australian Standard [AS] 2419.1 – 2005), consideration may need to be given to the relocation of the hydrant boosters to improve fire fighter access.
5. That the smoke hazard management system comply with the NCC requirements and that no reduced exhaust rates or make up air rates be accepted given the nature and public use of the development. This will ensure that the system will meet the deemed to satisfy requirements as a minimum benchmark. Additional enhancement of the system above these requirements would be welcomed by FRNSW.
6. That the facility's emergency plan consider the specific needs of disabled occupants and that appropriate evacuation management measures are implemented to ensure that all occupants can be safely evacuated.



For further information, please contact Daire Fleming of the Fire Safety Advisory Unit, referencing FRNSW file number BFS16/2630 (12178)). Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours faithfully



Daire Fleming
Manager
Fire Safety Advisory Unit
Community Safety Directorate

