

Job No. 2020/1067

Tuesday, June 30, 2020

Scentre Design and Construction Pty Limited
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Sydney NSW 2000

Email: cterkalas@scentregroup.com

Attention: Christopher Terkalas

**RE: Westfield Hurstville – Rooftop dining, entertainment and leisure precinct
Preliminary BCA Assessment R1.3**

EXIT WIDTH ASSESMENT

Existing adjoining Cinema (no works proposed)

Level	Class	Approx GFA (m ²)	Population Density @ (m ² / person)	Population	Tenancy population & Exit Width required via own auditorium exits	Required Exit Width	Exit width provided
Cinema	9b		VMAX – 365 CINEMA 3 – 220 CINEMA 4 – 158 CINEMA 5 – 158 CINEMA 6 – 170 CINEMA 7 – 157 CINEMA 8 - 153 Total 1381		1765 Total Population	15.5m	16.5m We note that the fire stair at grid KK : 2 has not been counted as an exit for the cinema
Cinema Foyer	9b	461m ²	1.2m ² /pp Total 384				



Restaurant precinct

Level	Space	Class	Approx GFA (m ²)	Population Density @ (m ² / person)	Population	Tenancy Exit Width required	Tenancy Exit width provided
Level 4 (P5)	Recreation with Ancillary Amusement	9b	850m ²	3m ² /pp	284	3m	3m exit direct to open to sky carpark
	Restaurant Assume 60% seating, 40% BOH and kitchen	6	654m ²	1m ² /pp	654 + 44 + 345 + 24 + 150 Total 1217	11m Total	8.5m to the open carpark 1m Fire stair Total shortfall of 2.5m
			436m ²	10m ² /pp			
	LSA	6	345m ²	1m ² /pp			
	Kiosk	6	240m ²	10m ² /pp			
	Open space above (Discharges from above)	9b	450m ²	3m ² /pp			
Level 5 (P6)	Restaurant Assume 60% seating, 40% BOH and kitchen	6	297m ²	1m ² /pp	297 +	3m	3m exit direct to open to sky carpark
			198m ²	10m ² /pp	20 Total 317		

CHANGE OF BUILDING USE - FIRE PROTECTION AND STRUCTURAL ADEQUACY

Because a change in use is involved under the application, Clause 143 (1) of the EPAR requires that the fire protection, structural capacity and Category 1 Fire Safety provisions must be applicable to the new use of the building.

The key requirements and required actions are listed below:

Item	DtS Clause	Description	Requirement	Action
1.	B1.1, B1.2 and B1.4	Resistance to actions, determination of individual actions and determination of structural resistance of materials and forms of construction	The structural adequacy of the building must be appropriate to the new use.	A statement must be provided by a practising structural engineer as to the structural adequacy of the building.
2.	E1.3	Fire Hydrants	The hydrant system is required to achieve the requirements of BCA 2016 and AS 2419-2005.	All existing infrastructure serving the proposed development must be capable of complying with the 2005 requirements. An audit of the existing system will be required noting shortfalls against current code requirement.



Item	DtS Clause	Description	Requirement	Action
				Upgrade may involve a combination of prescriptive and performance based compliance.
3.	E1.4	Sprinklers	The sprinkler system is required to achieve the requirements of BCA 2016 and AS2118.1 – 1999	An audit of the existing system will be required noting shortfalls against current code requirements. Upgrade may involve a combination of prescriptive and performance based compliance.
4.	E2.2	Smoke Exhaust	The building has been previously assessed a large isolated building. As such all areas are required to be provided with an automatic smoke exhaust system.	It is likely that this requirement will be dealt with via an Alternative Solution

NO REDUCTION IN THE EXISTING LEVEL OF SAFETY PERMITTED

There are a number of existing building features that will be affected by the proposed development. The new work must not reduce the existing level of safety. These include:

- **Existing retail smoke exhaust:** The existing retail smoke exhaust system will be affected by the proposed development. This system will need to be reconfigured to accommodate the proposed development.

ISSUES REQUIRING AMENDMENT TO PLANS AND/OR UPGRADE AS A RESULT OF THE PROPOSED WORKS

- Hydrant and Hose reel locations to be shown on plans.
- Determine the FRL of the existing car park slab.
- Egress
 - The restaurant precinct is required to be served by 11m of exit width
- All existing fire stairs serving new and affected areas must facilitate safe egress. In some instances this may involve upgrade and/or make good to existing compliance issues such as:
 - Unauthorised services in fire stairs.
 - Non complying door hardware.
 - Lack of contrasting nosing.
 - Discharge of exits.
 - Fire doors that have fallen into disrepair including self-closing device.
 - Provision of handrails.



COMPLIANCE ISSUES PROPOSED TO BE ADDRESSED BY THE STRUCTURAL ENGINEER

BCA Clause	Description	Issue	Performance Requirements
B1.2 & B1.4	Earthquake requirements for existing structure	The existing structure located under the ELP will not comply with the earthquake provisions of AS3600 – 2018. It is proposed to utilise AS3826 for the upgrade.	BP1.1

COMPLIANCE ISSUES PROPOSED TO BE ADDRESSED BY THE FIRE SAFETY ENGINEER

BCA Clause	Description	Issue	Performance Requirements
C1.1	Type of construction required	Reduction in FRL to accommodate the existing slab.	CP1 & CP2
D1.4	Exit Travel Distance	Travel distances to an exit will exceed 40m in the following area: • Roof top – restaurants 70m	DP4 & EP2.2
D1.5	Distance between alternative exits	Travel distance between alternative exits exceeds the permissible 60m in the following areas: • Roof top – restaurants (120m)	DP4 & EP2.2
D2.12	Roof as open space	The roof top carpark is required to serve as roof as open space. The roof is not directly connected to the road and requires the occupants to descend a via fire isolated stairs.	DP5 & EP2.2
E2.2	General requirements	Automatic Smoke Exhaust compliance is proposed to be achieved on a performance basis by a fire engineered alternative solution.	EP2.2

If you have any queries please do not hesitate to contact me on (02) 9283 6555.

Kind regards,

Luke Denny
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