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6 September 2024

**Gardoxi Pty Ltd (Norwest)
C/- H&E architects
Suite 4.02, 80 Cooper Street,
Surry Hills NSW 2010**

Attention: Megan Naylor

**Re: Fire Engineering DA Support Letter
Project No: JN23-00149 Version: 1
Project: 40 Myoora Road, Terry Hills**

1 Background

- 1.1 This letter has been prepared by RED Fire Engineers to support the Development Application (DA), from a fire engineering perspective, for the proposed building located at 40 Myoora Road, Terry Hills NSW 2084.
- 1.2 The project consists of a new food and beverage enclave. It has dual street frontages, which includes Mona Vale Road to the east and Myoora Road to the west. The building contains three storeys with class 6 (restaurant), class 7a (carpark) and class 7b storage.
- 1.3 A preliminary BCA compliance review, against the National Construction Code Series 2022 Volume One Building Code of Australia (BCA) Class 2 to Class 9 Buildings, of the proposed design has been undertaken by Philip Chun during the concept design stage (ref# 24-221697 dated 23.08.2024) based on the architectural plans provided by H&E architects. Based on this review, the development is anticipated to have potential BCA Deemed-to-Satisfy (DtS) departures as listed in Table 1.
- 1.4 The departures listed below are proposed to be addressed as a fire engineering Performance Solution. Additional fire engineering Performance Solutions may be

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identified during the detailed design and developed in consultation with the design team and the BCA Consultant as the design progresses.

Table 1: Description of Potential BCA DtS Departures

Item	Description of Deemed-to-Satisfy departures	DtS Provisions	Relevant Performance Requirements
1	The sprinkler protected carpark forms its own fire compartment in an otherwise type C construction building. The lift shafts have been deemed fire walls in the separation from above and the lift landing doors openings in that separation requiring -/90/30 doors. While the lift shafts can comply, proprietary lift landing doors in the fire separation can only achieve -/60/-.	C3D8, C4D6, C4D11 and spec 5	C1P2
2	Separation between the carpark roller shutter entry and the mechanical plant louvres which are perpendicular to each other are not wholly protected in accordance with the DtS provisions.	C4D4	C1P2
3	Protection of openings in a fire rated wall will not achieve the integrity and/or insulation criteria in the following areas: <ul style="list-style-type: none"> Roller shutter to storeroom at entry level Glass door and wall to the carpark stairway and lift at entry level. Glass door and wall separating restaurant 02 from restaurant 03 fire compartments. 	C4D6	C1P2
4	Travel distances are exceeded in the following areas: <ul style="list-style-type: none"> 30m to a point of choice instead of 20m from the restaurant 02 office store. 48m instead of 40m from restaurant 02 office storeroom. 	D2D5	D1P4 and E2P2
5	Travel distances are exceeded in the following areas of the basement: <ul style="list-style-type: none"> 46m to the nearest exit instead of 40m. Up to 83m between alternative exits. 	D2D5 and D2D6	D1P4 and E2P2
6	Clear widths in the kitchen fitouts for restaurants 01, 02 and 03 will not always achieve 1000mm clear in the path of travel.	D2D8	D1P4 and D1P6
7	Hose reel coverage is not proposed to be provided to the fire separated lift lobby within the basement carpark.	E1D3	E1P1



- 1.5 As part of the fire engineering process relevant stakeholders including Fire & Rescue NSW (FRNSW) and the principal certifier will be approached for comments. Proposed calculations (where applicable) and assessment methods will be documented in the Performance Based Design Brief (PBDB) for agreement and detailed assessment documented within the Fire Engineering Report (FER). Based on our experience, RED Fire Engineers is of the opinion that the abovementioned BCA Dts departures can be addressed as a Performance Solution to demonstrate compliance with the relevant Performance Requirements of the BCA without major changes to the proposed design. Additional fire safety measures may be required subject to consultation with FRNSW and the stakeholders during the detailed design stage.
- 1.6 Specific details of the Required Fire Safety Measures proposed to address the BCA Dts departures will be listed after a comprehensive fire engineering assessment is completed. The fire engineering Performance Solutions will be developed as part of the on-going design and development process.

2 Documentation

- 2.1 The relevant documents and drawings on which this letter is based are listed in Table 1.

Table 1: Relevant documentation

Organisation	Title	Project number/ ref	Date	Revision
Philip Chun	BCA report	24-221697	23/08/2024	R01
H+E Architects	Site plan – proposed	DA1-0500	03/09/2024	11
	GA – Entry and carparking	DA1-1010	03/09/2024	12
	GA – basement and restaurant 01	DA1-1011	03/09/2024	12
	GA – restaurant 01 and 02	DA1-1013	03/09/2024	11
	GA – Restaurant 03	DA1-1022	03/09/2024	12
	GA – Landscaped open area and Mona Vale Road	DA1-1024	03/09/2024	03
	Detail plan – Restaurant 01 – kitchen and bar	DA1-1200	03/09/2024	03
	Detail plan – Restaurant 02 and 03– kitchen and bar	DA1-1201	03/09/2024	03



3 Conclusion

- 3.1 Based on our experience, RED Fire Engineers is of the opinion that a Performance Solution to demonstrate compliance with the relevant Performance Requirements of the BCA can be developed for the project without major changes to the proposed design.
- 3.2 If you have any queries in regard to the above, please do not hesitate to contact the undersigned.

Yours sincerely,

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