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DEVELOPMENT APPLICATION

To:	Jeremy Hung	Project:	138668
Company:	JQZ		
Email:	Jeremy.Hung@jqz.com.au	Version:	C
Date:	16 July 2019		
Subject:	11-17 Columbia Lane, Homebush, NSW		

To whom it may concern,

This letter is to advise that Holmes Fire has been engaged by JQZ to provide fire engineering services for the proposed development, to be located at 11-17 Columbia Lane, Homebush, NSW.

1 INTRODUCTION

The project relates to the development of a residential high-rise comprising four levels of basement carparking and residential Sole Occupancy Units (SOUs) in two towers on Ground Floor to Level 25. The building is over 25 m in effective height and has a floor area of greater than 6,000 m². The building will be protected by a sprinkler system throughout.

A preliminary Building Code of Australia, 2019 (BCA)[1] assessment has been undertaken by Philip Chun, dated 11 July 2019. This assessment identified a number of non-compliances with the Deemed-to-Satisfy Provisions of the BCA that will be addressed by Holmes Fire.

2 PROPOSED PERFORMANCE SOLUTIONS

Holmes Fire will address the identified non-compliances using performance based fire engineering solutions at Construction Certificate stage. The performance based solutions will comply with the relevant Performance Requirements of the BCA. The design approach will be in line with the International Fire Engineering Guidelines[2] and other acceptable guideline documents.

The Performance Solution designs will be developed in line with BCA Clause A2.2, as applicable; i.e. complying with the relevant Performance Requirements or by equivalence comparison with the Deemed-to-Satisfy Provisions.

[1] Australian Building Codes Board, National Construction Code Series 2019, Volume 1, Building Code of Australia, Class 2 to Class 9 Buildings. Australian Building Codes Board, CAN, Australia, 2019.

[2] National Research Council of Canada; International Code Council, United States of America; Department of Building and Housing, New Zealand; and Australian Building Codes Board, International Fire Engineering Guidelines, Edition 2005, Australian Building Codes Board, 2005.

The identified non-compliances and proposed approach of the Performance Solution for each issue is listed below. Holmes Fire understands that all other aspects of the building will comply with the Deemed-to-Satisfy Provisions of the BCA.

- BCA Clause C2.14 requires all public corridors in a Class 2 building that are more than 40 m in length to be divided at intervals of nor more than 40 m with smoke-proof walls complying with Clause 2 of Specification C2.5. The proposed building has public corridors with a maximum length of 76 m on Level 1-3 and 5. A Performance Solution using a comparative approach will be provided to address Performance Requirement E2.2.
- BCA Clause C3.2 requires openings within 3 m of a side or rear boundary to be protected in accordance with Clause C3.4. There are a number of openings within 3 m of the southern and western boundaries that are not proposed to be protected. A Performance Solution using a comparative approach will be provided to address Performance Requirements CP2 and CP8.
- BCA Clause D1.4(a)(i)(A) requires that the maximum travel distance from the entry door of a residential SOU to a point of choice of exits is to be no greater than 6 m. The travel distance from SOUs on Level 7 is up to 23 m to a point of choice of exits, and up to 15 m on other levels. A Performance Solution using a comparative approach will be provided to address Performance Requirement DP4.
- BCA Clause D1.4(a)(ii) requires that the travel distance to a point of choice of exits in residential areas other than SOUs does not exceed 20 m. The travel distance from the communal open space on Level 13 is 24 m to a point of choice of exits. A Performance Solution using a comparative approach will be provided to address Performance Requirements DP4.
- BCA Clause D1.4(c)(i) requires that the maximum travel distance in the carpark areas is permitted to be 20 m to a point of choice and 40 m to an exit where two or more exits are available. The travel distance in the basement carparks is up to 38 m to a point of choice of exits (Basement 1) and 56 m to an exit (Basement 1, 2, and 3). A Performance Solution using a comparative approach will be provided to address Performance Requirements DP4 and EP2.2.
- BCA Clause D1.5(c)(iii) requires that exits that are required as alternative means of egress must be not more than 60 m apart in a common space in a Class 2 building and Class 7a carpark. The distance between alternative exits in the basement carpark is up to 82 m (Basement 2). Furthermore, the distance between alternative exits in the communal area on Level 6 is 63 m. A Performance Solution using a comparative approach will be provided to address Performance Requirements DP4 and EP2.2.
- BCA Clause E1.3 requires that the hydrant pump room is provided with a door leading to a road or open space. The hydrant pump room has a door opening into the loading dock. A Performance Solution using a comparative approach will be provided to address Performance Requirement EP1.3.

Based on Holmes Fire's review of the project documentation, it is considered that performance-based fire engineering can be utilised to demonstrate compliance with the Performance Requirements of the BCA without major changes to the current design. Additional non-compliances may be identified as the design is

further developed, however it is considered that there are no significant issues that would affect the building layout.

The information contained within this letter is based on the architectural drawings prepared by Mosca Pserras Architects as listed below.

Dwg no.	Title	Date	Issue
AP04	Basement 3 & 4	02.07.2019	P25
AP05	Basement 2	02.07.2019	P25
AP06	Basement 1	02.07.2019	P25
AP07	Ground Floor	02.07.2019	P25
AP08	Level 1	02.07.2019	P25
AP09	Level 2-6	02.07.2019	P25
AP10	Level 7	02.07.2019	P25
AP11	Level 8	02.07.2019	P25
AP12	Level 9-12	02.07.2019	P25
AP14	Levels 14-16	02.07.2019	P25
AP15	Level 17	02.07.2019	P25
AP16	Levels 18-21	02.07.2019	P25
AP17	Level 22	02.07.2019	P25
AP18	Levels 23	02.07.2019	P25
AP19	Level 24	02.07.2019	P25
AP20	Level 25	02.07.2019	P25

Please do not hesitate to contact Holmes Fire, should there be any queries about the above.

Regards,

Sarnia Rusbridge
Project Director

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