

A Jensen Hughes Company

17 August 2022

Andrew Pender
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Dear Andrew,

Re: St Aloysius College, Rozelle | 2A-2B Gordon Street

Reference is made to our engagement to undertake a review of the proposal building works against the Deemed-to-Satisfy Provisions of the Building Code of Australia 2019 (Amendment 1). As part of the proposed building works there will be a fitout undertaken within the classrooms of the subject building.

The proposal will contain the fitout of four (4) classrooms within the existing building perimeter with minimal modifications being made to the building structure, these proposed classrooms will be classified as Class 9b Building. The existing storey is provided with access to two stairways which will allow for travel distances and number of exits being maintained in accordance with BCA Part D1.

Although access to the storey is not provided with lift access it would be required that a level of access shall be maintained throughout the storey in accordance with the provisions of AS1429.1-2009. The current configurations of the doorways to this storey would not allow for the required clear widths and latchside circulation being provided. However, to accommodate this due to the lack of lift access being provided a Performance Solution would be sought to allow for these doorways to remain as non-accessible. This will be based upon other accessible classrooms being available and a management plans regarding any accessible needs for students or teachers.

The population of the proposal would not be considered to increase the population loading for the school and that existing sanitary compartments and egress paths would be capable of maintaining the level of compliance in accordance with the BCA for the number of students and teachers provided.

This report has been based on the design plans as listed below:

Architectural Plans Prepared by PMDL			
Drawing Number	Issue	Date	Title
SK104	-	Sept 2022	Plan- L1 - Parish Hal

In addition to the requirements for new works to comply with the current provisions of BCA2019, it is necessary to review the existing building, particularly those parts which are being relied upon for the new works component and to ascertain whether any upgrading is required to satisfy Clause 64 of the Environmental Planning and Assessment Regulation 2021.

Clause 64 of the Environmental Planning and Assessment Regulation, 2021 –

1. This section applies to the determination of a development application that involves the rebuilding or alteration of an existing building if—

- (a) the proposed building work and previous building work together represent more than half of the total volume of the building, or
- (b) the measures contained in the building are inadequate—
 - (i) to protect persons using the building, if there is a fire, or
 - (ii) to facilitate safe egress of persons using the building from the building, if there is a fire, or
 - (iii) to restrict the spread of fire from the building to other buildings nearby.
- 2. The consent authority must consider whether it is appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia.

When reviewing the works being carried out it is noted that they will be a minor fitout of the existing structure and would not increase the spread of fire throughout the building or to adjacent buildings. However, in review of the existing building structure it is noted that there is a lack of separation being provided between the Ground and First Floor and therefore would be considered that the measures contained within the building would not adequately protect persons using the building in a fire due to a lack of fire protection between the storeys being maintained.

In accordance with the DTS provisions of the current Building Code of Australia, it would be required that the floor separating the storeys must maintained an FRL of 30/30/30. The existing floor is of Heritage Significance and would not maintain the required FRL; however, due to the Heritage nature of the building it introduces difficulties with the ability to upgrade the ceiling. Therefore, as part of a reasonable upgrade strategy it would be proposed to introduce smoke detectors throughout the building in accordance with AS1670.1 and maintain a Building Occupant Warning System.

The installation is such a system throughout the building would allow for early detection and warning throughout the building to allow for the occupants of the building to egress safely in a quicker time frame. In a DTS compliant building of this nature there would be no requirement to have a detection system for occupant warning and only relying upon the fire separation being maintained. It would be considered that the lack of separation would be offset by the provision of the early detection as getting the occupants clear of the building in an earlier time would not have such reliance upon the 30mins of separation usually required.

When giving consideration to the Performance Requirements of the BCA which would be raised by Clause 64 of the Environmental Planning and Assessment Regulation, 2021 it would be noted that Section C, D and E Performance Requirements would be applicable. It would be noted that the provisions of Section D and E would be met and exceeded when compared to a DTS construction due to no detection being provided, therefore the proposed would provide safer egress in a timelier manner. In considering Section C Performance Requirements, it is noted that the structural stability during a fire (CP1) and spread of fire (CP2) would not specifically be met due to the lack of separation being maintained. However, it would be considered that the early detection and egress provisions would accommodate these provisions due to the small size of the building, the reduced population and the number of exits being provided. The occupants would be able to egress the building much quicker than a possibly large DTS building with a single exit and no detection system.

Therefore, it would be requested by the Consent Authority to allow for this to be considered as a reasonable upgrade strategy within the building to offset the need to upgrade the fire separation between the storeys due to the Heritage constraints.

Additionally, within the northern external wall there are openings that are found to be located within proximity to adjacent buildings on the site and would not provide measures that would restrict the spread of fire. When reviewing the external wall of the adjacent building, this is found to be approximately 2200mm from the subject building, but this portion of the building is only a single storey; there is a two-storey portion but this is considered to be located a much more considerable distance. The openings within the subject building are located at the first-floor level and would not be considered to be exposed to the adjacent

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building to impact any fire spread to this building. In the event of any fire within the subject building any heat or fire passing through this window would not be within proximity to the other building

With regards to this item, the Performance Requirements of Section C would be relevant in particular CP2 for spread of fire. However, as noted above any fire event would not be likely to extend between the buildings due to the lack location of the openings not being exposed to another external wall or other openings.

Therefore, it would be requested by the Consent Authority to allow for these openings to remain as existing due to any works being required having an external impact on the Heritage Significance of the building and proximity of any external walls or openings in the adjacent building being a sufficient distance.

Furthermore, as part of the new works being undertaken it is proposed to upgrade the existing emergency lighting and exit signage and an upgrade of existing stair handrail/barriers throughout the egress paths for compliance with the latest revision of the BCA. This will assist in the egress of the occupants from the building and allow for a faster discharge from the subject building.

Based on these works being undertaken it is considered that this would facilitate egress of the occupants in the event of a fire in accordance with the requirements of Clause 64 greater then a comparison to a DTS compliant building of this nature due to the early detection and would be considered a reasonable upgrade based upon the physical works being provided within the building that will maintain a suitable level of fire and life safety of the occupants within the building.

The plans assessed were developed to a standard suitable for submission as a development application and do not contain all the details necessary to allow a CC to be issued. As such, this assessment was limited to the major items of the BCA with the view of identifying any items that may result in a modified development consent being required, or additional key items that need to be included in the design.

The architectural design documentation as referred to in report has been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation complies or is capable of complying with that Code pending discretion being applied from the Consent Authority regarding the Clause 64 of the Environmental Planning and Assessment Regulation.

If you require any further information or explanation of the above, please do not hesitate to contact the undersigned.

Yours faithfully,

Benjamin Long

Senior Building Regulations Consultant

BCA Logic Pty Ltd

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