ABACUS BELSIZE SCHOOL
JGA RESPONSE TO RESIDENTS GROUP COMMENTS

CL5602/dm/21rp
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INTRODUCTION

This technical note is a response to the Report on Fire Safety and Means of Escape for Abacus Belsize School prepared on behalf of Hampstead Community for Responsible Development (HCRD) in June 2019.

The report is a response to the Fire Exit Strategy page of the Design & Access (D&A) statement. When the D&A statement was issued, a review of the building had been undertaken. However, some of the fire strategy principles of the building were still in development and the key fire strategy principles and solutions were not captured in the D&A statement.

The report on Fire Safety and Means of Escape by the HCRD is shown in the Appendix. See below for our responses to comments:

RESPONSE TO COMMENTS

1. The fire strategy for the school is being developed on the basis of one stair being discounted due to a fire. The remaining stairs provide sufficient capacity for the predicted occupancy of the building above ground. Occupants at every level will have access to a second stair.

2. We understand the escape route at second floor is not conventional, however propose it to be suitable for the following reasons: -

    a. The main stair will be enclosed in 30 minute fire rated construction, therefore there will be sufficient separation between the stair and the escape route while occupants are escaping the building.
    b. An increased standard of fire alarm and detection will be provided throughout the school, which will alert occupants in the building at an earlier stage to a fire.
    c. A fire in the specialist practical room would not make both escape routes unusable as the rooms will be separated from the corridor leading to the stair by fire resistant construction.
    d. A robust management plan will need to be in place to ensure this route is available at all times.
    e. The high number of fire trained staff in the building will be able to manage the evacuation of children and direct them to a safe route.
    f. All doors on the secondary escape route will be wide enough for a wheelchair user.

3. Locations for refuges had not been finalised at the time the planning application had been submitted. Refuges will either be provided within the stair cores, within protected corridors accessing the stairs, or be formed by compartmentation so that parts of the building are separated by fire resistant construction.

4. Following recent discussions with Ridge and Partners Architects, the external escape stair has been redesigned to be at least 1.8m away from the external wall of the building, removing the need to fire rate the windows. A refuge will also be provided to this stair.

5. Although BB100 recommends that occupants should always be able to escape away from a fire, it also states that in certain conditions a single direction of escape can be accepted providing reasonable safety. BB100 also accepts that where alterations to existing buildings are planned, particularly in buildings with historic interest, adherence to the guidance in the document might be unduly restrictive.

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As many features in the building are listed, two directions of escape cannot be achieved from some areas of the building. However, where applicable, reasonable alternatives have been proposed.

6. A wheelchair escape strategy will be developed as part of the management plan. It will be based on wheelchair occupants waiting in refuges located in places of relative safety, from where they can be assisted in escaping the building.

7. BB100 does not state that escape routes cannot be shared between a school and another occupancy. Provided the access control measures do not adversely affect the fire strategy of either building, this still allows safe means of escape. This should be achievable as the school and community space will be under the same management.

8. BB100 recommends schools undertake a risk assessment to identify whether or not sprinklers should be included for property protection purposes. Buildings Regulations requires buildings to be designed for life safety, not for property protection. In Abacus school, sprinklers are not needed for life safety as there will be sufficient exits provided at each floor and a high standard of alarm and detection.

9. An evacuation lift is not required to support the fire strategy. Wheelchair user escape will be conducted as per point 6 above.

10. Sufficient fire vehicle perimeter access is achieved to the main building from Rosslyn Hill and Downshire Hill. Sufficient hose cover to the smaller building can be achieved from a fire vehicle parking position in the lower playground, accessed from Downshire hill.

APPENDIX A – HCRD COMMENTS

HAMPSTEAD POLICE STATION.

Abacus Belsize -Planning Application -2019/2375/P

REPORT ON FIRE SAFETY AND MEANS OF ESCAPE on behalf of HCRD

In the design of a Primary School safe means of escape is a fundamental requirement to be fully assessed during the design process, with full evaluation and sign off. Reference should be made to the Building Regulations part B1. It has not been demonstrated the basic functional requirements of B1 have been met. The guidance is the minimum requirement, which should be enhanced where children are present. Similarly it has not been demonstrated that the requirements of DfSA publication BB100 have been met.

Submitted documents do not appear to include a detailed Means of Escape Analysis by a qualified Fire Safety Engineer. Sole reference to vital safety matters is made in the applicants single page diagrammatic Fire Exit Strategy, contained within the Design and Access Statement. Listed building status can preclude an appropriate design and a simple design and access statement is not considered as adequate to cover such a building. The design appears to demonstrate a lack of understanding of the risks involved with escaping children, and in turn demonstrate that fire has not been a full consideration, more of an afterthought.
Best practice requires a comprehensive strategy to demonstrate the building's fitness for purpose, in this vital regard. Listed building and other constraints may preclude resolution of these matters and cannot be left for attention until after the planning process.

APPLICANTS FIRE EXIT STRATEGY

In the absence of any supporting documentation, other than the diagrammatic fire exit strategy, the proposal appears to be fundamentally flawed.

1. The main stair is not a protected escape stair as it has multiple rooms accessed on to it, at lower levels, and it therefore cannot be relied upon as a primary escape stair.

2. There is no safe primary stair or directly accessible secondary escape stair from the second floor. The latter can only be accessed via two intervening rooms, a configuration which cannot be certified as safe for use. Occupants could mistakenly make their way into a smoke filled staircase. The design demonstrates that the human behaviour element has not been considered. There is no certainty that the secondary escape route would be kept free at all times, and be useable by a wheelchair user. It cannot be guaranteed, in practice, that the alternative escape route will be maintained and schools are known to struggle to manage escape routes appropriately. A fire in the specialist practical room could render both escape routes unusable.
BB100's principle is that a pupils can turn his/her back to the fire and escape in the opposite direction -this is not possible here.

3. No adequate wheelchair user refuges are provided/shown for use in the event of fire, outside of the path of escape. The stair landings shown appear inadequate for this purpose and lobby use is unsuitable by virtue of limited space with the potential for impeding other escapers. This is a fundamental requirement of BB100.

4. The external escape stair to the main hall may be un-usable in event of a fire as it is situated immediately adjacent to a window which could be fire and smoke affected. Furthermore there is no disabled refuge to this stair.

5. Reliance is placed on single means of escape from various rooms instead of incorporating dual escape even where practical, against the underlying philosophy of BB100.

6. No full wheelchair user escape strategy is apparent in regard to various rooms.

7. There are shared escape routes with business use.

8. No reference is made to a sprinkler system, strongly advised in March 2007 DCSF Policy, which is best practice, and asked for under BB100. This is not a low risk building.

9. No reference is made to the lift being to evacuation standards to enable it to be employed for wheelchair user escape.

10. No references are made to access and facilities for fire and rescue services. The provisions of B5 is a material consideration at planning, especially where the fire service may be committed to the building for S&R operations.

CONCLUSIONS

The above failings go to the heart of the fitness for purpose of the proposal and the inadequate attempts, within the listed building constraints, to fully address primary safety issues.
A full fire strategy report including the means of escape strategy should have been carried out by a professional and submitted with the application.
Whilst the Grenfell tragedy relates to a high rise residential building, broader lessons have been learnt from that disaster.
Any planning committee, presented with a scheme, should be satisfied that the fire strategy for the proposal represents best practice, and is not the subject of arbitrary compromises, whether as a result of use of an unsuitable building, or through absence of full consideration. This could not be of more importance than in connection with a school building for the use of young children.

Prepared on behalf of HCRD. June 2019