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Re: Proposed 38 number residential development at Grange Road, Rathfarnham, Dublin 14

Dear Paul,

I give hereunder our report on the fire safety & access and use design strategy employed for the above development and which have generally been allowed for in the designs and layouts to date.

Scope:

The following report outlines the main principals employed in the fire safety (Part B) design and the access and use (Part M) design strategy of the proposed works to demonstrate that the fire safety/ access and use objectives of the Building Regulations 1997-2010 can be achieved in respect of the project and purely to assist the Building Control and Fire Authorities in their consideration of the proposal at Planning Stage.

It is not the intention or indeed necessary at this stage to cover each design issue in detail to demonstrate full and complete compliance with all relevant regulations. This detailed assessment will form part of the Fire Safety Certificate & Disabled Access Certificate Applications.

It is accepted that to meet fully all necessary requirements, minor alterations and amendments may be required in specific areas and that these, (if any) will be identified and addressed at the Fire Safety & Disability Access Certificates Stages, however it is understood that any such alterations will not detract from the overall architectural design for the project.

Project Description:

The proposed development is a 3 storey apartment building over basement. The apartments are served by 4 separate single stairways which also connect to the basement.

Fire Safety & Disabled Access Certificate Applications are required for the proposed development and shall be applied.

The project is considered as purpose groups 1(c) under TGD-B.

Building Regulations 1997-2006, Part B: Fire Safety:

B1 Means of Escape:

"A building shall be so designed and constructed that there are adequate means of escape in case of fire from the building to a place of safety outside the building, capable of being safely and effectively used."

The main design basis for the means of escape will be TGD-B:2006+A1:2020 & BS5588: Part 1: 1990 (apartments).

Internal Apartment Layouts:

No inner rooms are provided and the apartments on the second floor are served by a protected entrance hallway. In addition the cooking equipment will be located 1.8m away from the escape from the private balconies.

Common Escape Routes:

Each block is served by a single protected stair. The main principles proposed are:

- The protected corridors serving the bedrooms shall be provided with smoke ventilation via a smoke shaft.
- Travel distances from the apartments to the storey exits shall be maximum 4.5m.
- Stairway shall be provided as a protected shaft.

Basement:

The basement shall be served by 4 escape routes, as follows:

- Main stairways serving each apartment block.

The common stairways serving the apartments shall be provided with double lobby approach with the outer lobby provided with 0.4sqm smoke vent to the outside.

General Requirements:

Fire doors, Automatic Fire Detection and Alarm systems, Emergency lighting systems etc. shall all be installed to specification as per designs at later stage.

B2 Internal Linings:

The main design basis for the internal linings will be TGD-B, 2006.

Although not relevant at this stage, the general principals of Section B2, TGD-B Fire will form the basis of compliance.

B3 Internal Fire Spread, Structure

"A building shall be so designed and constructed that, in the event of fire, its stability will be maintained for a reasonable period."

The main design basis for the structure will be TGD-B, 2006.

The height of the top floor will be less than 20 m above the relevant ground level, therefore all structural elements, i.e. columns, beams, protected shafts, compartment walls / floors, etc. will be designed to the required fire resistance, i.e. 60 mins in accordance with TGD-B.

The apartments will be provided as separate compartments.

Stairs, ducts etc. running through compartments to be designed as protected shafts.

B4 External Fire Spread:

"The external walls and roof of a building shall be so designed that they afford adequate resistance to the spread of fire to and from neighboring buildings."

The main design basis for external fire spread will be TGD-B, 2006. Note: the height of the building is <18m.

Full assessment at fire safety certificate stage will be undertaken, however due to location of the building we would expect to achieve compliance with the relevant regulation.

B5 Access and facilities for the fire service:

"A building shall be so designed and constructed that there is adequate provision for access for fire appliances and such other facilities as may be reasonably required to assist the fire service in the protection of life and property".

The main design basis for access and facilities for the fire services will be TGD-B, 2006.

Natural smoke ventilation shall be provided to the basement at a rate of 2.5% of the overall floor and will be distributed to achieve cross ventilation.

Access for the fire services shall be provided on 3 sides which meets the requirements of TGD-B. A full assessment will be carried out at fire safety certificate stage.

The above outlines the design principals for the project and how it is proposed to demonstrate compliance with the performance requirements, of the Building Regulations, Fire for consideration of the application at Planning Stage.

Should Planning Permission be granted a detailed Fire Safety Certificate Application will be prepared, based on the design strategy and details outlined in this report.

Building Regulations 1997-2010, Part M: Access & Use:

M1 ACCESS AND USE:

The main design basis for the access and use of the building will be

- TGD-B, 2010.
- Buildings for everyone
- BS8300

Access to the building:

Level access is to be provided at ground floor level.

Accessible car park spaces will be provided in the basement car park..

Internal arrangements/facilities:

New internal lifts and ambulant stairway will give access to the upper floors.

M3 SANITARY FACILITIES

Accessible visitor WC will be provided to comply with TGD-M.

The above outlines the design principles for the project and how it is proposed to demonstrate compliance with the performance requirements, of the Building Regulations, Access and use for consideration of the application at Planning Stage.

Should Planning Permission be granted a detailed Disability Access Certificate Application will be prepared, based on the design strategy and details outlined in this report.

Yours Sincerely,



Ger Hodson
(on behalf of GSP FIRE LTD.)