

Technical Note			
Project Number	MA21107	Date	18/01/2022
Responses to the HSE Consultation – OFR Responses			

1 INTRODUCTION

OFR Consultants (OFR) have been appointed by Latimer Developments Ltd to provide fire engineering services for the proposed new Boddingtons Development in Manchester. As part of these services OFR have developed a fire safety strategy that includes the provision of a Fire Statement forming part of the Planning Application (reference: 132416/FO/2021).

This note provides OFR's responses to the HSE Consultation to the Local Planning Authority (reference: pgo-0676, dated 11/01/2022).

2 RESPONSES

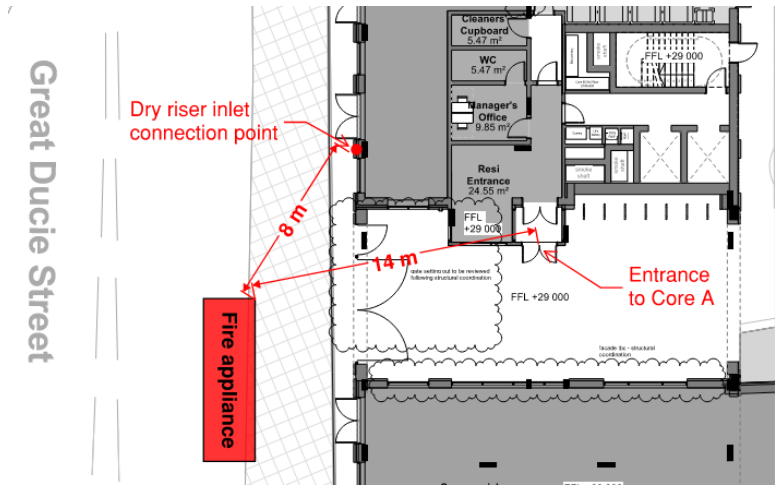
No. ¹	HSE Comment	OFR Response
1. Access		
1.1	In section 12 of the fire statement, fire engine access provided from the access road for Block B states the fire engines can get within 21 meters of the entrances to the stair cores. Fire engine access should be within 18 meters (the length of a single standard fire hose), and in sight of these entrances Resolving this issue could impact on landscaping and the design, appearance and materials used.	The access arrangements have been reviewed and access will be provided within 18 m of the entrances to the stair cores and in sight of the entrances. This is shown in the figure in 1.2. It should be noted that Block B has a storey greater than 50 m above ground level and therefore a wet rising main is provided to both cores. This removes the need for fire-fighters to connect hose to rising main within the stair cores.

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2.1	The southern smoke shaft outlet from Block B is located on the 20 th floor roof garden. The area around this should be kept clear of planters or other objects. The door between the roof garden and corridor should be of a standard and materials that prevent smoke from a fire on the roof garden (or exiting the smoke shaft in the roof garden) from entering the stair. Resolving this issue may impact on the design, appearance and materials used.	The smoke shaft outlets will be located such that there are no objects that could affect the discharge of smoke to atmosphere, the elements surrounding them will be designed to prevent any risk of catching fire from the smoke discharge. The extract point will also be located to minimise the potential for smoke ingress back into the building. Smoke modelling utilising CFD will be undertaken as necessary as part the validation of the smoke ventilation performance.
2.2	The plan drawings show flat windows in close proximity, and at right angles to the widows of other flats (for example B1 5 and B1 6 and also B1 1 and B1 8 on the 7 th to 10 th floors). This proximity and angle may allow fire or smoke to exit a flat window and enter an adjacent flat window. Resolving this issue may affect land use planning considerations such as the appearance of the building.	Applicable guidance to address the requirements of B4 of Schedule 1 to the Building Regulations does not require assess the fire spread from unprotected areas within the same building. Only to neighbouring buildings. However, we have undertaken an initial analysis assessing the potential for fire spread via radiant heat from the opening to another in these situations. This has been assessed using the guidance and methodologies in BR 187: <i>External fire spread – Building separation and boundary distances Second edition</i> . In both scenarios the radiant heat flux at the receiving window is less than the 12.6 kW/m ² recommended in the guidance. The assessment will be included in a fire strategy report and submitted to the Building Control Body as part of the approvals process.
2.3	There does not appear to be access for fire fighters to the photovoltaic cells at either roof level. This should be provided using adequate means which may impact on the appearance of the building.	Access will be available in accordance with the normal access arrangements for maintenance of the photovoltaic cells. For level 27 this will be accommodated via the access hatch provided with the AOV at the top of the stair, for level 17 the panels will be accessed via the glazed door connecting the roof with the lift lobby.
2.4	Fire engine access to Block A is stated to be from Great Ducie Street, passing under the first floor of Block A. The LPA may wish to consult with the local Fire Rescue Service to ascertain the headroom their fire appliances require as it	The fire appliance will park on Great Ducie Street and will not pass under Block A to access the entrance to the core. Parking on Great Ducie Street. This allows

	may be more than 3.7m. This may impact on the design, appearance and materials used.	access to within 18 m of the dry riser inlet connection point (which will also be visible and clearly signed) and within 18 m of the entrance to the Block A core. See figure below. 
2.5	It is noted that at roof levels it may be intended to install photovoltaic cells near the smoke shaft outlets. These should be a suitable distance, horizontally and vertically, from the smoke shaft outlet to prevent any heat from the smoke shaft causing them to ignite. Resolving this issue may impact on the design, appearance, and materials.	Noted, this will be addressed as part of the detailed design and coordination of services.
2.6	In section 7 of the fire statement, it is noted that corridors and stairs will be fitted with enhanced ventilation. It is noted that there does not appear to be a smoke shaft outlet for the southern smoke shaft in Block A.	There will be a smoke shaft outlet on the roof, and this has been captured on the revised plans (drawing ref: A3564-ASA-XX-XX-DR-A-0212 P08).

¹ The numbering follows that of the HSE response