

# **Roof Plan**

Scale 1:100

This drawing is based on survey information by Global Surveys. Measured Building Survey. Dated Dec 2017. Provided by Hertfordshire Constabulary Nov 2021

### FIRE STRATEGY NOTES

1. **BASIS:** The existing building (no fire strategy records available) and, for new elements, The Building Regulations Approved Document B, 2019 edition, (purpose group 3: Office - other uses are considered to be ancillary.) BS9999 may be used as an alternative, subject to the Fire Engineer's Report. The basement has been separately categorised as purpose group 7b.

2. **VERIFICATION:** The principles of this fire strategy drawing have yet to be approved by Building Control. A Fire Engineer has been appointed to provide a Fire Strategy Report to assist with the approval process.

FIRE RESISTANCE TO ELEMENTS OF STRUCTURE: Elements of structure are existing - no change to their fire protection is envisaged. If the building were new, 60 minutes would generally be required\*. Any repairs / new protection to existing elements is to achieve 60 minutes fire resistance. Apart from elements which only support roofs, provided they do not restrain fire resistant walls.

- 4. **OCCUPANCY:** The following are maximum occupancies for the purposes of the fire strategy, based on the widths of the staircases and escape doors: (It has been advised that the actual occupancies will be significantly less.) Basement: 60
- Ground floor: 110. First and second floors: 190 combined total.
- 5. **ESCAPE DOOR WIDTHS:** Door and corridor widths generally remain as existing. New internal doors are generally to provide a minimum opening width of 750mm, 850mm to corridors / staircases. (These are minimums for the purpose of the fire strategy, actual widths to be as shown / scheduled.). Newly formed external doors are to provide a minimum opening width of 850mm.
- 6. **COMPARTMENT WALLS / FLOORS**: It is assumed that all the floors are 60 minute compartment floors, hence the stair and lift shafts are protected shafts.
- 7. **CAVITY BARRIERS:** To ceiling voids exceeding 20m in length (Approved Document B, Section 9) provided there is no timber or other materials present with a fire performance rating worse than C-s3,d2. (The ceiling void to the topmost level, ie below the roof, is permitted to have timber present.) Otherwise, where timber, etc is present, voids are not to exceed 10m without a cavity barrier.

To raised floor voids exceeding 20m in length (Approved Document B, Section 9) provided there is no timber or other materials present with a fire performance rating worse than C-s3,d2. Otherwise to voids which exceed 10m in length.

- 8. **SERVICE SHAFTS:** Service shafts between floors are to be protected shafts with 60 minutes fire resistance.
- To be in accordance with Building Regs. Approved Doc. B, section 10.
- for full details.
- 11. FIRE SERVICE VEHICLE ACCESS: Access for fire engines is
- 12. **FIRE SERVICE PERSONNEL ACCESS:** To the front elevation and via the side gate (which will be kept secure, access arrangements tba.) to the rear doors and rear basement access stair.
- 13. BASEMENT SPRINKLER SYSTEM: The existing system is to be maintained. It is thought that it was installed as part of a hybrid fire safety design with sprinklers to make up for limited ventilation. See M&E drawings / specification for full details.
- 14. **BASEMENT VENTILATION SYSTEM:** The existing system consists of natural ventilation openings supplemented by two mechanical extract fans to the rear. The only modification is to block the grille to the South-East corner and to replace the nearby solid roller shutter to the vehicle entrance ramp with an open grille shutter. See the Basement Fire Plan for details of the openings. The shortfall of around 6m<sup>2</sup> is to be compensated by an upgrade to the mechanical extract system so as to provide a hybrid solution - See MEP drawings / specification for details of
- 15. FIRE ALARM AND DETECTION SYSTEM: New automatic system to BS 5839:1 L2 standard including smoke detection to outer rooms which relate to inner rooms. See M&E drawings / specification for full details.
- class 1 (European class C-s3, d2).
- 17. **FIRE FIGHTING EQUIPMENT:** Fire extinguishers etc. to be established by HC's Fire Safety Risk Assessor.
- 19. **FIRE HYDRANT / FIRE MAINS:** No change is proposed to the current provision.
- 20. **SMOKE CONTROL:** No specific measures.
- 21. FIRE RISK ASSESSMENTS: Fire Risk Assessments are to be carried out by HC to determine if any additional special measures are required locally.

1:100 Scale Bar

FIRE STRATEGY KEY Existing 1 hour fire resistant protected lobby

New 1 hour fire resistant wall / existing wall assumed to be 1 hour fire resistance extending up to underside of slab/ roof/

capping above New 1/2 hour fire resistant wall / existing \_\_\_\_\_ wall assumed to be 1/2 hour fire resistance extending up to underside of slab / roof /

capping above Existing wall construction assumed to provide fire resistance (1 hour to walls)

Fire Exit Door/ Route

As above but FD30s rated

As above but FD60 rated

As above but FD60s rated

to BS 5499

Emergency break glass call point

Exit sign, over door or as otherwise

indicated, to BS 5499 with running man

Fire exit 'keep clear' sign to outside of door

Fire escape route

Refuge with Comms point

FD30 rated, certified fire door to BS 476:part 22, with closer and with 'fire door keep shut' signs to BS 5499 to both sides of door and to both sides of both leaves of double doors (closers omitted to service riser / cupboard and cleaners / store doors but 'fire door keep locked' signs to be used). Doors to circulation routes to incorporate vision

loop

9. PENETRATIONS THROUGH FIRE RESISTING CONSTRUCTION:

10. **EMERGENCY LIGHTING:** To BS requirements including to external escape routes - see electrical drawings. See M&E drawings / specification

available to the front elevation (George Street).

- 16. **INTERNAL WALL AND CEILING FINISHES:** To circulation spaces, stairways and escape routes, class 0 (European class B-s3, d2) to rooms not more than 30sqm, class 3 (European class D-s3, d2), to other rooms,
- 18. FIRE RESISTANCE TO EXTERNAL WALLS: No change to existing. See plan for requirement for walls to the extension.

DDELIM TENDED ISSUE fire	22.04.22	.IP
PRELIM - TENDER ISSUE - fire rating removed to external plant area door	22.04.22	JP
DRAFT - Updated as per meeting	19.04.22	JP

	with fire eng.		
	DRAFT - Updated as per initial comments	12.04.22	JF
	DRAFT - For F Engs Approval	23.03.22	CE
EV	DESCRIPTION	DATE	В

### WATFORD POLICE STATION **3 GEORGE STREET** WATFORD WD18 0BX

Proposed **Roof Plan** Fire Strategy

VGA PROJECT NUMBER				
7664				
DRAWING NO				
WPS-VGA-GS-RF-DR-A-00 384				
DRAWN / DATE CB / MAR 22	CHECKED / DATE AR / MAR 22	SCALE 1:100 at A	<b>A</b> 1	

## **PRELIMINARY**

Written dimensions to be taken. Do not scale off the drawings. Any discrepancies written or scaled should be brought to the attention of the architect immediately. All drawings should be read together and in conjunction with relevant related specifications, room data sheets and all other consultant's information.

T: +44 (0) 1438 316 331 architects@vincent-gorbing.co.uk vincent-gorbing.co.uk

A1 ORIGINAL SCALE 50mm



22/04/2022 - 09:43:33

A1 ORIGINAL SCALE