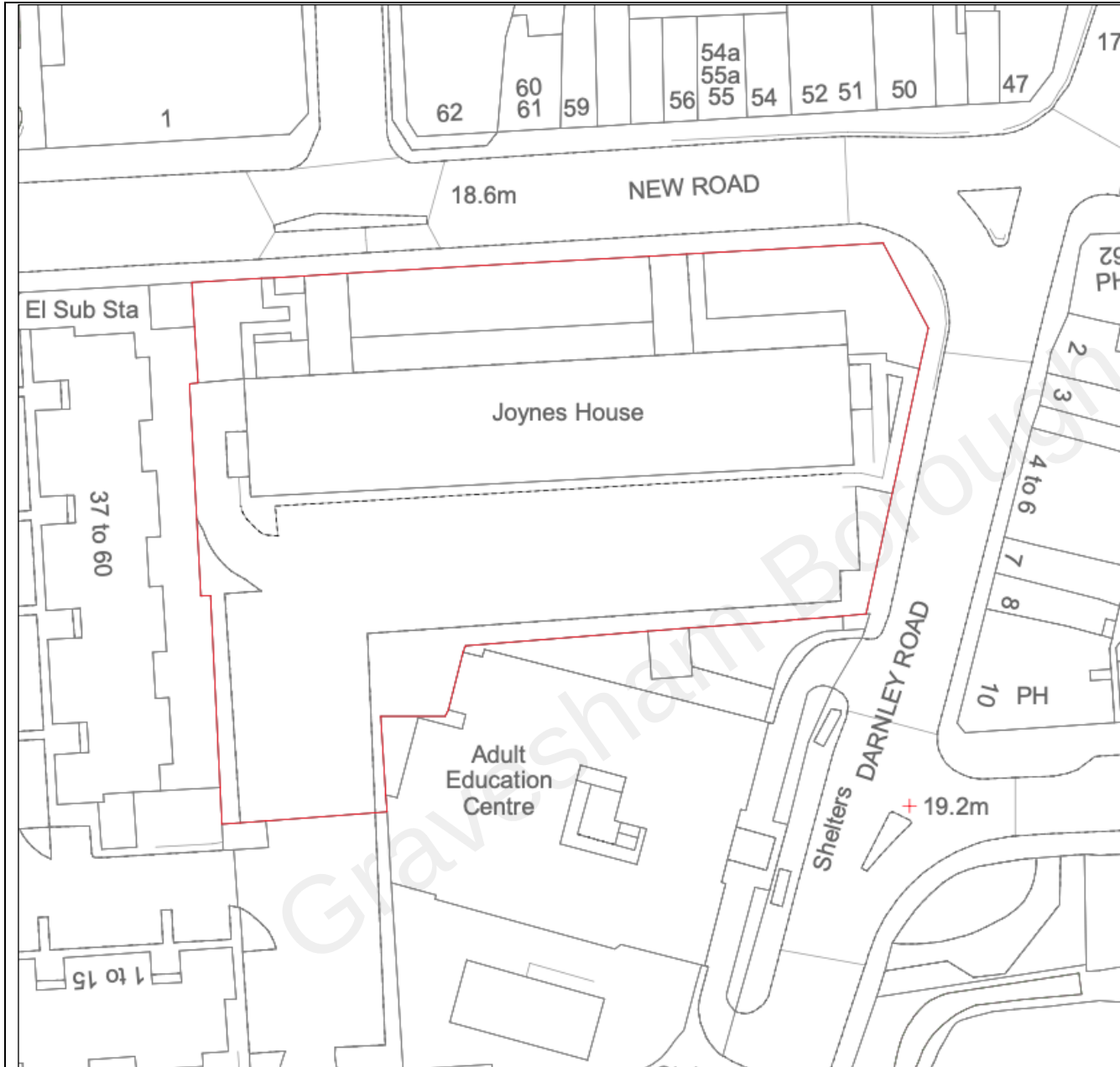


Fire statement form

Application information	
1. Site address line 1	Joynes House
Site address line 2	New Road,
Site address line 3	
Town	Gravesend
County	Kent
Site postcode (optional)	DA11 0AJ
2. Description of proposed development including any change of use (as stated on the application form):	To add two additional storeys (5 th and 6 th floors) for use as residential apartments (applying Class AA permitted development rights).
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	Gary Ferrand MA EngTech FIFireE MIFSM Principal Fire Safety Consultant Fire Safety South East Limited Year of gaining IFE Fire Risk Registration: 2011 Membership Grade: Fellow – present. 1994-2011 Membership Grade: Member Year of gaining IFE Fire Risk Assessor (Life Safety) accreditation: 2020 Qualifications: MA (University of Exeter) 2005 Safety for Executives (IOSH) 2009 NEBOSH Diploma (IOSH) 1998 Modules A-D FSOC Fire Safety Studies (Fire Service College) 2005 Executive Leadership Programme (Warwick Business School) 2010 Incident Command Management – accredited at Level 4, 2011 Incident Command Gold Command 2010-2016 Multi Agency Gold Incident Course (MAGIC) 2012

	The author spent 30 years enforcing fire safety legislation in different Fire & Rescue Authorities. He was a Fire & Rescue Service Principal Officer and led the NFCC Business Safety Group to consistently apply enforcement work across all FRAs in the UK. He has worked privately as a consultant with large and medium-sized clients working on small, medium, large and bespoke complex developments over the previous 6 years. He is a Fellow of the IFE, holds the EngTech qualification and has been recognised formally by the NFCC (previously CFOA) for his contribution to fire safety nationally.
4. State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this. Guide: no more than 200 words	No consultations relating to fire safety at the time of submission.
5. Site layout plan with block numbering as per building schedule referred to in 6. (consistent with other plans drawings and information submitted in connection with the application)	
Site layout plan is: inserted in the form	



The principles, concepts and approach relating to fire safety that have been applied to the development

6. Building schedule

[illegible]

		Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
		Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

7. Specific technical complexities

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above

Guide: no more than 500 words

As the building has storeys more than 4.5 m above ground level, to ensure the safest possible emergency egress from the apartments. There will be 24 apartments comprising 22 x 1 bedroom apartments and 2 x 2 bedroom apartments. All apartments will have an open-plan design with inner room bedrooms. None of the apartments has a total travel distance from any point in the flat to the entrance door which exceeds 20m. The apartments will be fitted with an AWFSS (Automatic Water Fire Suppression System) and a Category LD1 fire detection and fire alarm system in accordance with BS 5839-6:2013. Cooking facilities will be sited away from the flat entrance door and the escape route.

These single level apartments will have a ceiling height greater than 2.25m and will not exceed 16m x 12m in dimension, but they will be greater than 8m x 4m and will not have enclosed kitchens. The justification for this deviation from the British Standard will be supported by a deterministic or comparative assessment using smoke modelling and a fire dynamics simulation which will demonstrate that conditions would be no worse than a code-compliant solution.

The escape corridors will be sub-divided to separate both stairways and the extended dead-end portion of the escape corridors on both floors will be provided with a smoke control system which provides either of the following:

- AOVs to the exterior of the building (minimum free area of 1.5m²) in the corridor directly adjacent to the stair at as high a level as is practicable, and an AOV that is sited at as high a level as is practicable on the top storey of the stairway (minimum free area of 1m²); or
- a smoke shaft in the corridor, and an AOV at as high a level as is practicable on the top storey of the stairway (minimum free area of 1m²); or
- a mechanical smoke ventilation system that is fitted in the protected corridor, directly adjacent to the staircase enclosure, and an AOV that is sited at as high a level as is practicable on the top storey of the stairway (minimum free area of 1m²); or
- a pressure differential system.

Any electric vehicle charging facilities added to this site as a consequence of this development (for use by residents) will be provided in accordance with Kent County Council's Electric Infrastructure Guidance. Any charging points will be installed in line with the National Fire Chiefs Council (NFCC) guidance and guidance published by the Fire Protection Association (RISCAuthority).

There will be no green walls or green roof provided at the site.

There will be no photovoltaic panels attached to the roof of the property.

8. Issues which might affect the fire safety of the development

Explain how any issues which might affect the fire safety of the development have been addressed.

Guide: no more than 500 words

- All balconies will only contain materials achieving a fire rating of class A2-s1, d0 or better, in accordance with 'BS EN 13501-1:2018 - Fire classification of construction products and building elements'.
- The external wall systems will only contain materials achieving class A2-s1, d0 or better, in accordance with 'BS EN 13501-1:2018 - Fire classification of construction products and building elements'.
- The separation of unprotected openings (windows which are coincident or adjacent to other unprotected openings) will be resolved within the design fire strategy (Space Separation), but at the time of the submission of this statement there appear to be no openings which would present a risk of external fire spread.
- The block will accommodate a 'stay put' approach to evacuation. Only the occupants in an apartment directly affected by a fire, or an alarm of fire, will be required to evacuate. The residents of adjoining apartments will not be expected to evacuate due to the high degree of fire separation provided between the apartments (unless instructed to do so by Fire & Rescue personnel). Any persons present in the common areas at the time of a fire will adopt a 'simultaneous' evacuation strategy.
- The apartments will each be provided with a fire detection and alarm system (Category LD1 standard) that meets the requirements of; BS 5839-6:2019 – '*Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic buildings*'.
- The stairway cores and the common corridors will be provided with fire detection systems (Category L5) that meets the requirements of; 'BS 5839-1:2017 - *Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in non-domestic premises*'. The systems will interface with, and activate, appropriate mechanical smoke ventilation systems located in the common corridors and the AOVs located in the stairway cores.

- The stair cores in the building will each be provided with an automatic opening vent (AOV), of at least 1.0m² in area, at the head of each stairway, activated by the fire detection system located within the communal areas. These ventilation systems will be installed in accordance with: 'BS 7346-8:2013 – *Components for smoke control systems – Code of practice for planning, design, installation, commissioning and maintenance*'.
- As there are common escape corridors with extended travel distances (greater than 7.5m in one direction) there will be a mechanical smoke ventilation system to maintain tenable conditions within the corridors for occupants during any emergency escape. The block will be fitted with a sprinkler system in accordance with BS 9251 or BS EN 12845.

9. Local development document policies relating to fire safety

Explain how any policies relating to fire safety in relevant local development documents have been taken into account.

Guide: no more than 500 words

The Town and Country Planning Act 1971 (Commencement No. 62) (Kent) Order 1980 – there are no relevant policy requirements within this plan.
Gravesham Borough Council: Local Plan Core Strategy 2014 - there are no relevant policy requirements within this strategy.

Emergency road vehicle access and water supplies for firefighting purposes

10. Fire service site plan

Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?

Guide: no more than 200 words

The Fire & Rescue Service site plan (provided in Section 14 below) illustrates the locations of the proposed arrangements for Fire & Rescue Service access and facilities by the means of;

- An orange, dashed line – the most likely (but not exclusive) approach route to the site, for Fire & Rescue Service vehicles from Thames Side Fire Station, being the closest to the development at a distance of 1.5 miles.
- Red RVP – the most likely location for the siting of the initial appliance for firefighting purposes, e.g., for a fire involving a single apartment.
- Solid blue circles – the location of the dry-riser inlet connection points, within 18m of fire appliance siting location.
- Red directional arrows – the main firefighting personnel access points to the building.
- A black letter 'H' in a yellow square – the location of fire hydrants in the immediate area.

BS 9991:2015 and Approved Document B, Volume 1 (2019 edition incorporating the 2020 amendments) have informed the proposed arrangements for the Fire & Rescue Service access and facilities.

11. Emergency road vehicle access

Specify emergency road vehicle access to the site entrances indicated on the site plan

Guide: no more than 200 words

Fire & Rescue Service emergency vehicles would typically, but not exclusively, generally approach the site from the South, being the direction of the location of the nearest fire station. The emergency vehicles would leave the Fire Station and approach from Darnley Road. A direct journey of approximately 1.5 miles. Access to all block is possible via the car park entrance at St James's Road which is sufficient in width to allow access for a standard fire appliance and a high-reach aerial appliance.

Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed?

yes

12. Siting of fire appliances

Guide: no more than 200 words

The initial attendance of fire appliances will be sited at the South and North elevations of the building, providing access to the apartments located on the site. Aerial appliances, if required, would typically be sited at the corner/s of the building (the corner affected by the fire). The development provides sufficient, clear, and unobstructed access to suitable areas adjacent to the proposed development site.

BS 9991:2015 and Approved Document B, Volume 1 (2019 edition incorporating 2020 amendments) have informed the proposed arrangements for the Fire & Rescue Service access and facilities.

13. Suitability of water supply for the scale of development proposed

Guide: no more than 200 words

The development is provided with public fire hydrants within close proximity (see Site Plan in Section 13). The distance from the development site entrance point, located at the North elevation, to the nearest hydrant is approximately 65 metres. There are no suitable open water supplies within a practical distance of the development site. As the blocks will be provided with dry rising main (within the firefighting shaft – the central stair core), there should be a public or private fire hydrant within 90m of the dry rising main inlet.

Nature of water supply:

hydrant- public

Does the proposed development rely on existing hydrants and if so are they currently usable / operable?

yes

14. Fire service site plan

Fire service site plan is:
inserted in the form



The central core stair will also serve as the firefighting shaft serving all floors, the access is at the same location as the dry riser inlet (denoted by the blue circle). This will include the provision of a firefighting lobby which will accommodate a dry rising main outlet at each level.

There is no designated assembly point shown on the plan above as the evacuation strategy will be Stay Put.

Fire statement completed by	
15. Signature	
16. Date	06/07/2022

Gravesham Borough Council