



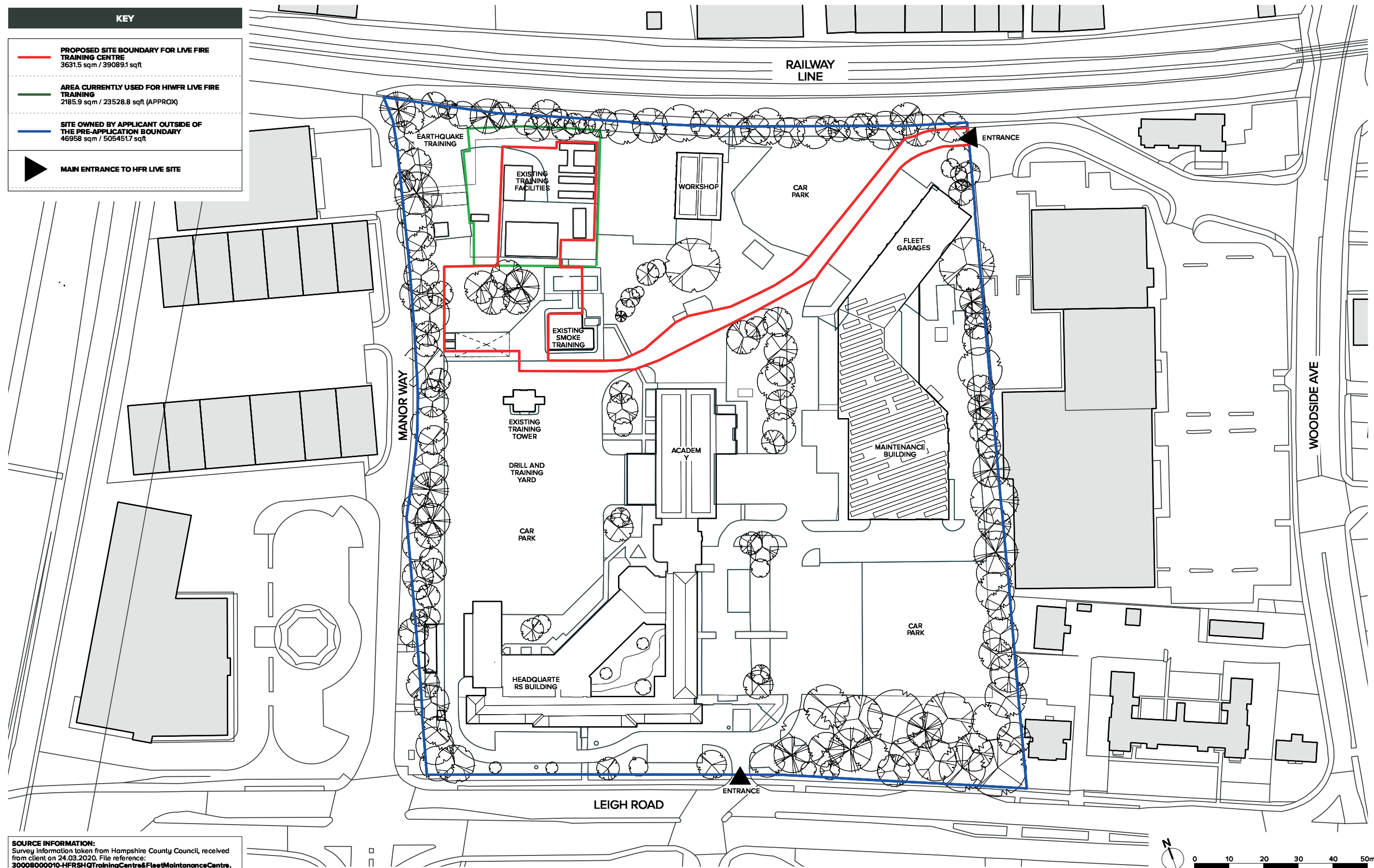
**Hampshire
& Isle of Wight**
FIRE & RESCUE SERVICE

LEIGH ROAD, EASTLEIGH, SO50 9SJ

LIVE FIRE TRAINING FACILITY: DESIGN AND ACCESS STATEMENT

JULY 2022

cube_design



PROPOSED SITE PLAN

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1.0 INTRODUCTION

This planning application is submitted for the development of the new Hampshire & Isle of Wight Fire & Rescue Service fire building to be located at the Eastleigh Headquarters facility.

The building provides an essential part of the training for Hampshire & Isle of Wight Fire & Rescue Service brigade. It simulates and enables training of the officers for major fires in varying circumstances. It provides an opportunity for the officers to test in safe and regulated environments but in ‘realistic’ situations.

It is a concrete structure which can withstand significant temperatures and is fuelled by burners, which are environmentally controlled.

The proposal replaces existing facilities, which are well beyond their lifespan. The existing facility is old and requires extensive maintenance to upkeep and ensure compliance.

Environmentally, Hampshire & Isle of Wight Fire & Rescue Service have decided that they need to replace the live training facility with a state or the art provision which can protect the environment and more importantly, their employees and key staff in undertaking their duties. This application considers the replacement of the facilities.

This proposal follows a pre application submission in December 2020 and comments received in April 2021.

The address of the application is:

Leigh Road
Eastleigh
SO50 9SJ

2.0 EXISTING SITE

Hampshire Fire & Rescue Headquarters is located at Eastleigh. The site is a major site where there are a number of blue light services located.

The overall site area is 2350 sqm.

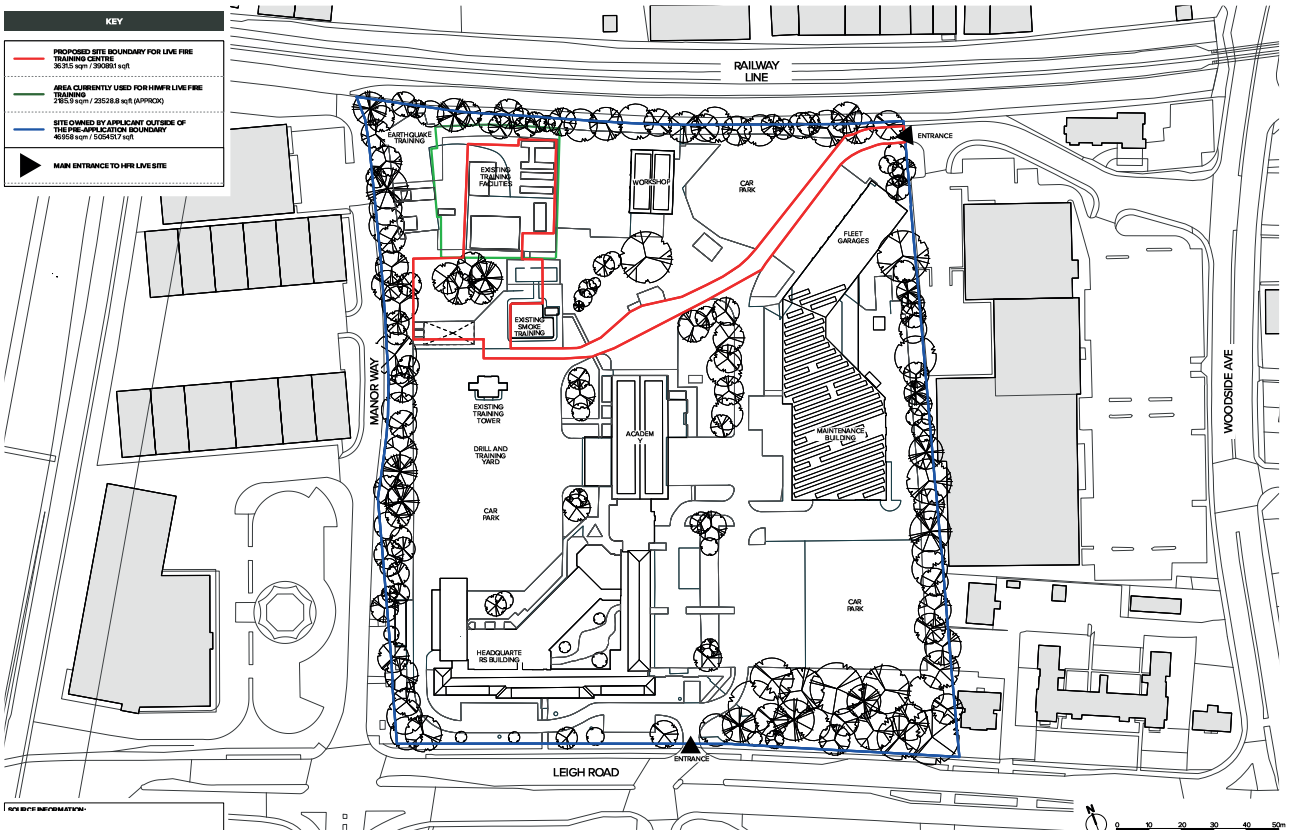
Recently, a planning application has been submitted for the location of a police facility on the site, reference: 8687512. This incorporates the facilities of administration offices and 40 car parking spaces.

cube_design have been instructed by Hampshire Fire & Rescue to submit a pre-application and to consider a new Hot Villa (training facility) to be located on site. An unit exists on the site; however, it is in significant need of repair, due to the training that is undertaken at the facility.

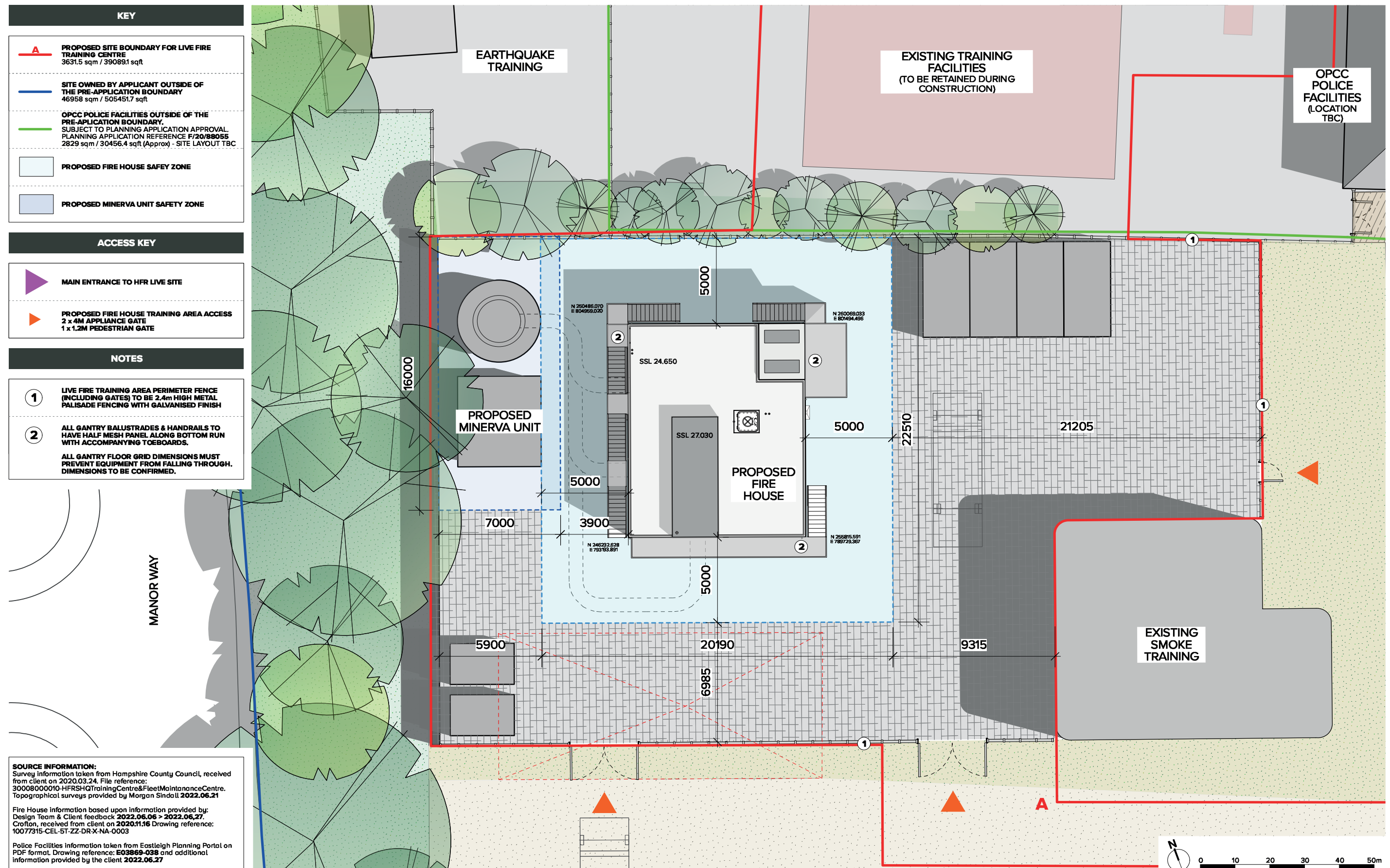
In this corner of the existing site, there is a training gantry, earthquake training facility and road traffic instance facilities with a full foam tank located.

Access is provided through the main infrastructure to this area of the site. The number of vehicle journeys to the site will remain as present, as this is an existing facility.

The facility is located in the area identified with a red boundary below:



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Proposed Location Plan

3.0 PROPOSALS AND PROPOSED LOCATION

The proposal is to locate a Live Fire Building on the site as part of the available training facilities. This will be supported by a series of demonstration units, together with burner units and a filtration / chimney environmental unit.

The Live Fire building is a concrete structure three storeys in height with an upper roof to peak level. It is designed to simulate accommodation and building structures at two and three storeys. It enables the training of Service personnel, and is a functional building. The proposed Live Fire building will replace the existing facility, which is in disrepair - please see the attached photographs.

The new facility will meet all requirements with regards to environmental, acoustics and energy consumption. It is approximately 20 metres by 22 metres in plan format for the overall hard standing and support areas; and 10.530 metres tall.

Additional buildings to support the Live Fire Building include the demonstration units and also the burners. This is all contained in the areas shown on the plan overleaf. There also needs to be serviced areas for Fire Service/ appliance access.

The proposed location for the facility is on the site of the road traffic training area and a grassed areas of the site, linking across towards the earthquake / gantry training. Access will be provided from the main site location.

The safety zones provide the following:

- Distancing to the boundary of a minimum of 5 metres on all corners
- The location of a gantry and pipework to the filtration unit
- A series of buildings, which provide storage
- An area immediately in front of and around the buildings to allow for appliance access
- A controlled and secure area around the building itself
- A Minerva Unit located close to the boundary to the site.

The facilities are purely for training and part of the emergency critical educational delivery for the academy, which is based on site.

The proposals are to replace an existing facility, which exists on site, but is in much needed replacement.

The new building will offer a modern facility, which will be more environmentally conscious of the fumes resulting from the burners and of the overall sustainable and air quality product.

There will be no impact with regards to traffic movements as the footfall and vehicle movements attend site already. There are 40 extra spaces provided for the Police area in this location, as part of a separate planning application. The proposals incorporate a 'live fire'

training building to be located on the site of Hampshire & Isle of Wight Fire & Rescue Service Headquarters.

This live Carbonaceous Fire Training Facility forms a key part of Fire fighters Training in Hampshire and the surrounding areas. Hampshire and Isle of Wight Fire service currently have a large backlog of Live Fire training due to interruptions from Covid and a large number of new recruits courses as required due to the age of the existing fire service personnel profile. The new facility is a training facility for real live fire carcinogenic burn – which will burn clean Oriented Strand Board (OSB) and untreated clean new pallets to create Real Fires for trainees to learn how to tackle fires and experience the resultant smoke and heat. The new facility will replace an existing area of units on site that is at the end of its life as well as removing the fire fighting foam training pad which will be integrated into the new live fire facility. The old structures were made from steel shipping containers that degrade due to the intense regular training fires.

The building will be constructed from Pre-cast Concrete which will ensure the facility is structurally stable and has much longer life than its steel predecessor.

The internal burn areas will receive insulating/protecting heat resistant tile lining system that will keep the heat in the rooms and protect the structure. Approx. 8 burn areas will be provided through out 3 floors.

A duct will rise through the building to assist in moving smoke around in the structure, as well as a secondary cold smoke generator and system we could use to fully smoke out the unit if required but this is to be a live fire facility (not just a cold smoke BA training facility)

A new 'Minerva' Smoke scrubber to be atmospheric from above all openings and not a drawn system which would affect the burn. This will provide a smoke capture 'Hood' to each opening and associated ductwork that will capture and prevent all smoke from escaping. Smoke will be drawn into the mechanism of the 'Minerva' which will clean the smoke and capture all solids within a liquid. The liquid will be disposed off by a licenced waste carrier every 3 months. No waste water will leave the sealed system to local drains, all waste will be removed from site via tanker.

The Fire House is split into distinct areas:

- industrial open space on ground floor with a roller shutter – think MOT testing bay etc. and a staircase from externally at first floor level which you drop into the top of the space from above to allow entrance into a plane of heat from above to assist in creating a basement fire scenario training also.
- First floor has a layout that creates a studio/flats off a central hallway scenario.
- Top floor layout simulates office accommodation, reception and meeting rooms/offices and a demonstration live fire area for the initial familiarisation for new recruits.
- Ships training will be carried out from the roof and down into the structure utilising vertical, raking ladders and bulkhead door and

hatches.

- An integrated split level flat with scissor stair is integrated in the facility with an extra exit onto the roof (a geographical and poignant scenario for us to train on as we lost firefighters in this setup in Shirley Towers in our history).
- dry riser and high-rise scenario based training in the main internal staircase.

Access and Egress at each level and therefore roof access and external walkways/canopies and edge protection etc on the main roof area, as well as external landing platforms for the loading and unloading of burn areas at first and second floor levels to reduce the risk for the personnel loading and unloading the facility burn areas.

4.0 PROPOSED MATERIALS

The building will be constructed from Pre-cast Concrete which will ensure the facility is structurally stable and has much longer life than its steel predecessor.

Please see attached materials precedent sheet and the details completed on the planning application form.

SCHEDULE OF AREAS

	(GIFA)	Total (GIFA)
Ground Floor	120	
First Floor	120	
Second Floor	120	
Third Floor	16	376sqm