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REPORT CONCERNING THE CAUSE AND CIRCUMSTANCES OF THE FIRE AT VER MEADOWS CARAVAN PARK, REDBOURN, AL3 7RQ ON 12 JULY 2025

FOR

HERTFORDSHIRE COUNTY COUNCIL

BY

DR J H BURGOYNE & PARTNERS LLP

FILE REFERENCE: 720086

25 JULY 2025

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1 INTRODUCTION

On 12 July 2025 a fire involving numerous static and mobile caravans occurred at Ver Meadows Caravan Park (a travellers' site). On 14 July 2025, we received instructions from Hertfordshire Fire and Rescue Service to investigate the cause and circumstances of this fire for Hertfordshire County Council. In accordance with those instructions a scene inspection was carried out on 15 July 2025. Whilst at the scene we liaised with Hertfordshire Fire and Rescue Service (the Fire Service). In drafting this report, consideration was given to recordings of two 999 calls reporting the fire, statements made by the Fire Service crews who attended the incident, and photographs of the scene taken by the Police during their investigation into the cause of the fire, which was carried out together with the Fire Service. This report summarises the findings from the investigation, and is illustrated with a selection of scene photographs taken during the scene inspection and those obtained from the Fire Service.

2 BACKGROUND

Ver Meadows Caravan Park was a travellers' site comprising fifteen plots, and a warden's building (see photographs 1-5). The plots were served by sanitation units (each sanitation unit generally served two plots) comprising small brick constructions with laundry and bathroom facilities. The power and water to each plot were also supplied *via* the sanitation units, as discussed in more detail below.

At the time of writing, there are no available first-hand witness accounts from any residents of the caravan park. However, the two 999 calls that were made to the emergency services were received a few seconds apart at 15.06 hours. One caller, who was on his way back to the park when he spoke to the 999 operator, had reportedly had a call to inform him of the fire, and he reported that the fire was on plot 10 but he was not aware of what was involved. The other caller

reported that number 10 Ver Meadows was on fire and stated that '*a mobile home is on fire*'. The caller was not aware if anybody was inside [the caravan] and, after a few moments, the caller reported that the fire had spread to the fence. There was a discussion about the presence of gas cylinders although the caller did not know where the nearest cylinders were in relation to the fire.

On the basis of the statements of fire fighters, and the information obtained from the incident log, it is understood that the first appliances were mobilised at 15.07 hours, and GH11P1 (St Albans) and GH01P1 (Hemel Hempstead) arrived on site within a few seconds of each other at 15.14 and 15.15 hours respectively. There were difficulties getting appliances on to the site owing to the number of vehicles exiting via the only access road. On arrival, it was apparent that there were already multiple caravans involved in the fire. However, on investigation, one firefighter identified an area using *What3words?* where there was a heap of burned and decaying materials (which has been taken to mean a pile of smouldering debris where most of the combustible materials were already exhausted) and most of the surrounding area was on fire. This location corresponds to the corner of plot 10 (see photograph 6) behind the sanitation unit.

Crews ensured the caravans that were not involved in the fire were unoccupied, they rescued a number of dogs/pets, and took steps to remove some of the propane cylinders which were present throughout the site. There were issues with the water supply, because there was no functioning fire hydrant on site, and at one stage fire fighters withdrew until the water supply could be restored. A water bowser was deployed as part of the response.

A still image reportedly from a social media account has been provided and appears to show the early stages of the fire, but this has not been independently verified. The image appears to show a well-developed fire behind one of the sanitation units (see photograph 7). Based on the scene inspection, it is possible that the photograph shows, but cannot be definitively confirmed as, plot 10 and corresponds to the location of a mobile caravan (see photograph 8).

3 INVESTIGATION

Photographs of the fire scene taken on 13 July 2025 during the investigation undertaken by the Fire Service and the Police have been provided. Based on a comparison of the Police photographs with what was observed during the scene inspection, it is apparent that some caravans and vehicles had been removed from site following the Police investigation but before our attendance.

At the time of inspection, the warden's building was undamaged, and plots 1 and 8 contained no caravans (the caravans from plot 8 had been removed after the fire and it is uncertain whether there were any caravans on plot 1 at the time of the fire). Vehicles and caravans on plots 7 and 15 had largely escaped serious fire damage. Static caravans on plots 2, 5 and 14 had sustained varying degrees of radiant heat damage. One or more caravans on plots 3, 4, 5, 6, 9, 10, 11, 12 and 13 and their contents were effectively destroyed (see photographs 2-5).

All the electricity supplies to plots on the site were routed via a main distribution board in the warden's building. A steel wire armoured cable was routed from the main distribution board, underground to each plot, where it terminated in a galvanised junction box within a steel cupboard attached to the exterior of the corresponding sanitation unit (see photograph 9). Downstream of the junction box, the configuration of the installations serving the plots varied. However, with reference to photographs 9 and 10, which relate to plot 9 where the arrangement was largely similar to that seen at plot 10 (discussed below), tails[1] from the junction box were routed through the wall, into the sanitation unit, where they terminated at an electricity meter attached to the interior wall. A second set of tails were then routed back through the wall into the cupboard where they terminated at a consumer unit.

The consumer unit serving plot 9 (see photographs 9 and 11) was of a modern metal-cased design, and was labelled as having been inspected in May 2025, a couple of months prior to the fire. The installations in plots 6, 8 and 14 all[2] included similar or the same modern metal clad consumer units which were labelled as having been inspected in May 2025. In addition, many of the other plots, where the external steel cupboards were fire damaged, were served by consumer units of a similar, or the same, design, although any labels to indicate when they had been inspected were destroyed. The consumer unit serving plot 15 was the only one which was found to differ[3]. However, the consumer unit for plot 15 was undamaged, and there was nothing to suggest that this was associated with the cause of the fire.

Typically the consumer unit for each plot served circuits inside the sanitation unit including fan heaters, sockets, and lighting, and external waterproof sockets (sometimes referred to as 'commando sockets') for powering caravans.

[1] Tails are individual conductors, one live and one neutral, which typically connect to an electricity meter.
[2] These were areas where the electrical installation remained intact and was accessible.
[3] The consumer unit serving this plot was made of plastic, and had last been inspected in 2019 with a reinspection due in 2024.

Where the caravans and vehicles had been destroyed, there was no remaining pattern of damage to indicate the area of origin of the fire. However, the available circumstantial information (comprising the 999 call, the information from the Fire Service and the social media post) indicated that the fire had originated on plot 10 in the vicinity of a mobile caravan. With reference to Figure 1, there were two caravans on plot 10, a static caravan, and a mobile caravan behind the sanitation unit (see also photograph 12). Accordingly, the investigation focussed on the sanitation unit, the electrical installation therein, and the mobile caravan.

Two power cables were routed from the sanitation unit (see photograph 12 and Figure 1). The first, an orange cable was routed away from the mobile caravan and ended at a slightly heat affected waterproof plug found to be loose on the ground. The second power supply was connected to an external waterproof socket on the outside of the sanitation unit and was routed towards the static caravan.

The interior of the sanitation unit was very severely fire damaged, with little combustible material remaining (see photograph 13). Many of the cables forming the fixed wiring inside the building had been destroyed and/or had fragmented as a result of exposure to heat from the fire. There was no evidence of any electrical arcing damage at the limited internal wiring that remained intact. The electricity meter, which had been attached to the wall of the sanitation unit, was largely destroyed, but there was no evidence of any localised heating at the meter terminations (see photograph 14), and no sign of electrical arcing damage at the tails where they were routed within the sanitation unit.

The external steel cupboard serving plot 10 was on the side of the sanitation unit facing towards the mobile caravan as indicated in photograph 12 and Figure 1. The cupboard contained the same equipment as that described above for plot 9, namely a junction box and a modern metal clad consumer unit (see photograph 15). There was no evidence of localised heating at any of the components of the junction box and the consumer unit, both of which contained significant amounts of unburned plastic (see, for example, photograph 16), and had suffered damage consistent with external fire attack. At the tails routed between the junction box and the meter, there was electrical arcing damage a short distance from the junction box (see photograph 17).

Above the external cupboard there was an external 13 A socket which was completely destroyed (see photograph 15). There was no suggestion (during the scene inspection or in the Police photographs) that anything was plugged into the socket, there was no remains of any plug pins

on the ground beneath the socket, and no sign of a cable trailed from the mobile caravan towards the socket.

I found no remains of any lithium ion battery casings amongst the debris of the mobile caravan.

The mobile caravan evidently contained a number of gas appliances, but the nearest gas cylinders were on the neighbouring plot 11, which appeared to have been separated by a fence prior to the fire (see photograph 12 and Figure 1). There were no signs of any gas regulators inserted into those cylinders, and there was no evidence (during the scene inspection or in the Police photographs) of any gas pipes or lines routed from the area of the cylinders (or from anywhere else on plot 10) towards the mobile caravan.

Appliances in the mobile caravan included an absorption fridge, a conventional electric fridge or freezer, a gas oven and hob, and a gas heater (see photograph 18). All the appliances had sustained very severe fire damage and, in general, they yielded no useful evidence. However, the oven did not appear to contain any food at the time of the fire (although given the extent of the damage, any such evidence may have been lost) and the controls for the hob rings all appeared to be in the same position, which was presumably *off*. Moreover, on the basis of the absence of any power or gas supply lines being routed to the caravan, none of the appliances were powered/fuelled at the material time.

Around the mobile caravan there were the remains of an old hot water immersion heater tank (the evidence indicates that this had not been in use at the material time because no immersion heater element was fitted), a building site transformer (not plugged in), and a fire basket of a type typically used in open fireplaces (see photograph 18). There were a few cigarette ends within the area of plot 10 and, more generally, there were cigarette ends present elsewhere on the caravan site.

4 DISCUSSION

The opinions expressed below are based on the evidence available to date. If new evidence, such as a witness account or smart phone footage of the early stages of the fire, becomes available then these views may have to be revised.

There was no remaining pattern of damage to the caravan park to indicate the area of origin of this fire. However, electrical arcing damage, such as that found on the meter tails inside the steel cupboard on the outside of the sanitation unit, can provide evidence for the area of origin of a fire.

In this regard, in general during a fire, electrical arcing damage occurs when the electrical insulation of a cable is destroyed by the developing fire. Once the insulation is destroyed, electrical conductors at different electrical potentials can come into contact, leading to a short circuit fault and localised melting (electrical arcing damage) at the point of contact between the conductors. The short circuit fault current typically results in the operation of the electrical protection (usually a fuse or a circuit breaker) protecting the cable. Once the protection has operated (blown / tripped) the cable is electrically isolated and no further electrical arcing can occur. Accordingly, electrical arcing damage can indicate where a cable was first attacked by a fire.

In this case the electrical arcing damage had occurred at meter tails within the external steel cupboard, rather than inside the sanitation unit close to the meter. The short circuit fault current had likely resulted in the operation of a 60 A circuit breaker at the main distribution board in the warden's building. This evidence indicates that the external meter cupboard was subject to fire attack or radiant heat before a fire developed within the sanitation unit. This is most readily explained by either a fire developing within the external cupboard, or a fire at or in the area of the mobile caravan.

With regard to a fire starting inside the external cupboard, there was no evidence of a causative fault at the junction box and the consumer unit within the cupboard. These items were complete (i.e. none of the components were missing), and the damage to these items can be accounted for by external fire attack. Accordingly the equipment in the external cupboard, which may have been the responsibility of Hertfordshire County Council, can be ruled out as a cause of this fire.

The electrical evidence is consistent with the available circumstantial information, including the 999 calls, the photograph on social media, and the information from Fire Officers, that the fire had originated on plot 10 at, or in the area of, the mobile caravan adjacent to the sanitation unit.

In considering the possible causes within the mobile caravan, there is no evidence to suggest that the caravan had a live power supply or gas supply at the material time and, on this basis, the fire was not caused by a fault at an energised electrical appliance or a faulty gas appliance / ignition of a gas leak.

In theory the fire could have been caused by a battery powered appliance, specifically one powered by a lithium ion battery that had been recently charged. However, there was no positive

evidence, such as lithium ion battery casings amongst the remains of the caravan, to support this possibility.

The only remaining possibility is that the fire was a result of a human act. In this regard the remains of items that might indicate the cause, such as cigarette ends or candles, are frequently destroyed by a developing fire, and, in this case, the physical evidence did not allow the precise nature of the act that led to the fire to be determined. However, possibilities include a deliberate act (although, it should be emphasised that there was no positive physical evidence to support this possibility), a carelessly discarded lit cigarette end inside or outside the caravan, an accident with a lit candle, and the burning of waste/combustible materials in the fire basket found adjacent to the caravan.

5 FURTHER WORK

There are reports on the internet[4] relating to an electrical engineer's report which reportedly highlighted safety issues with the electrical installation at the site, relating to the lack of regular inspection of the electrical installations. If required the contents of this report can be considered, along with the results of any electrical inspections at the site (which appear to have taken place a few months before the fire, in May 2025) and further comments provided.

Another internet article[5] indicates that there was a fire hydrant on site, although from a photograph therein it appears to have been largely buried beneath soil and debris. If required the hydrant can be examined and tested together with the Fire Service personnel.

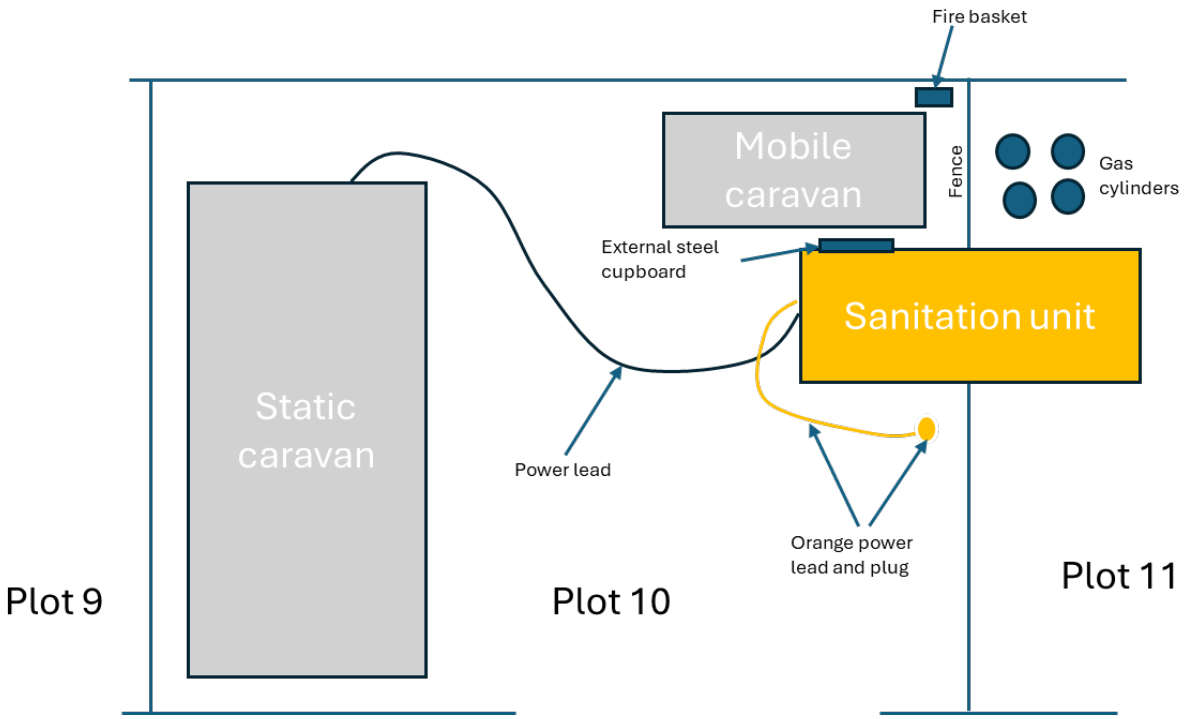
Yours faithfully

Burgoynes

DR J H BURGOYNE & PARTNERS LLP

[4] https://www.travellerstimes.org.uk/news/2024/08/herts-county-council-and-national-scandal-councils-supplying-electricity-traveller
[5] https://www.travellerstimes.org.uk/news/2025/07/ive-lost-everything-ver-meadows-fire-victim-speaks-out

FIGURE 1
A schematic plan of plot 10


Fire basket
Mobile caravan
Fence
Gas cylinders
External steel cupboard
Sanitation unit
Static caravan
Power lead
Orange power lead and plug
Plot 9
Plot 10
Plot 11

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PHOTOGRAPHS
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Photograph 1:
A view from the main entrance to Ver Meadows Caravan Park showing the warden's building.

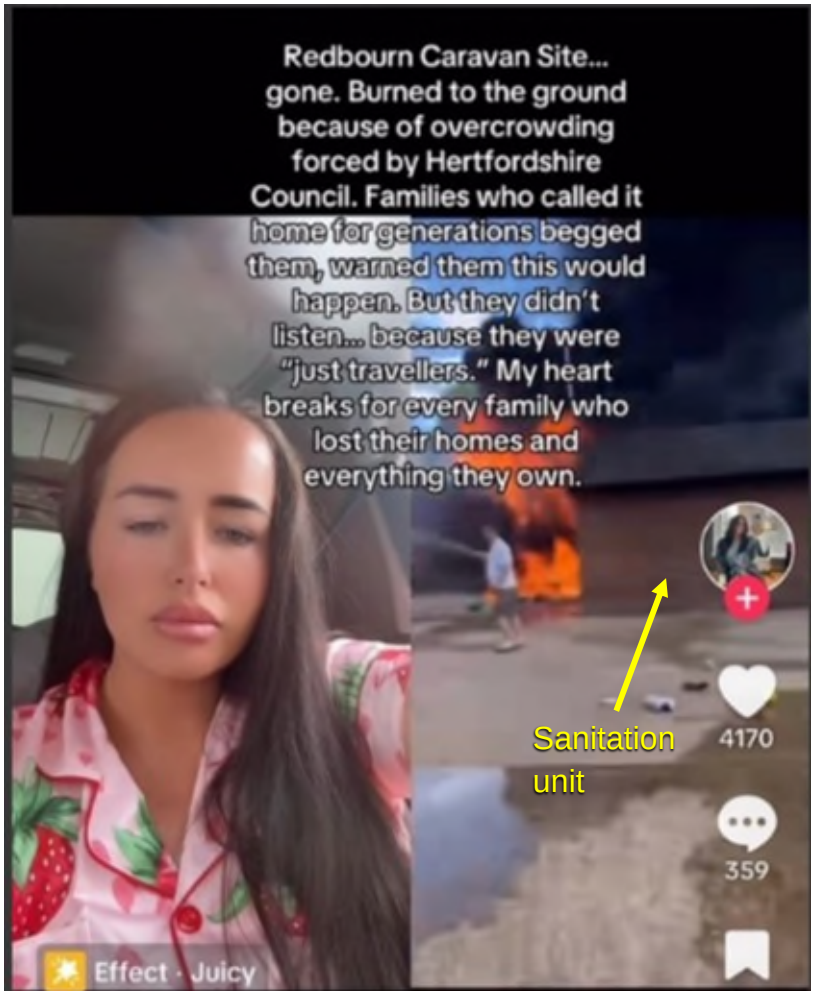
Photograph 2:
A view towards the north end of the site (the plot numbers are indicated in yellow).

Photograph 3:
A view of plot 10 and the surrounding area.

Photograph 4:
A view of plot 11 and the surrounding area.

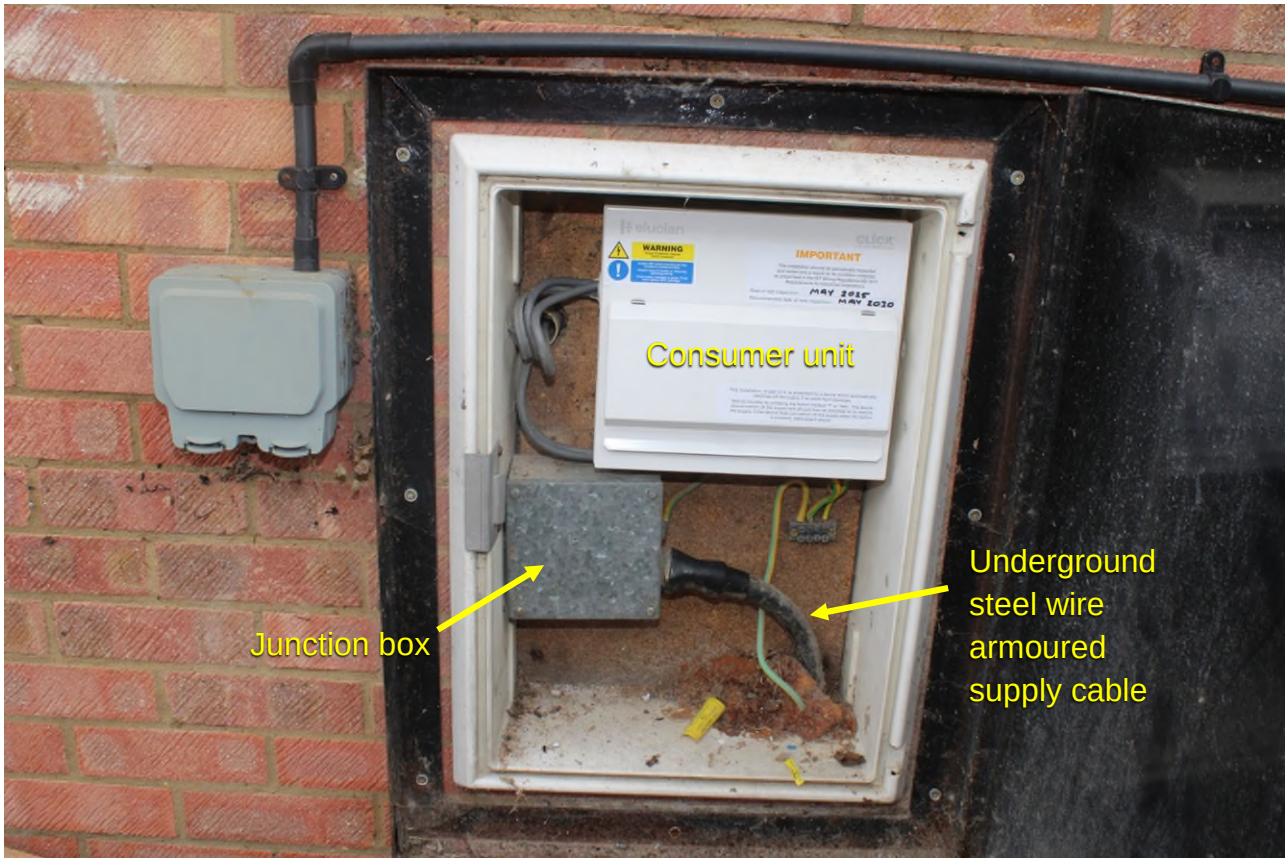
Photograph 5:
A view of the south end of the site.

Photograph 6:
A view of the reported location of What3words *jumpy.guides.visa,* which corresponds to plot 10; this is where the fire is believed to have originated.



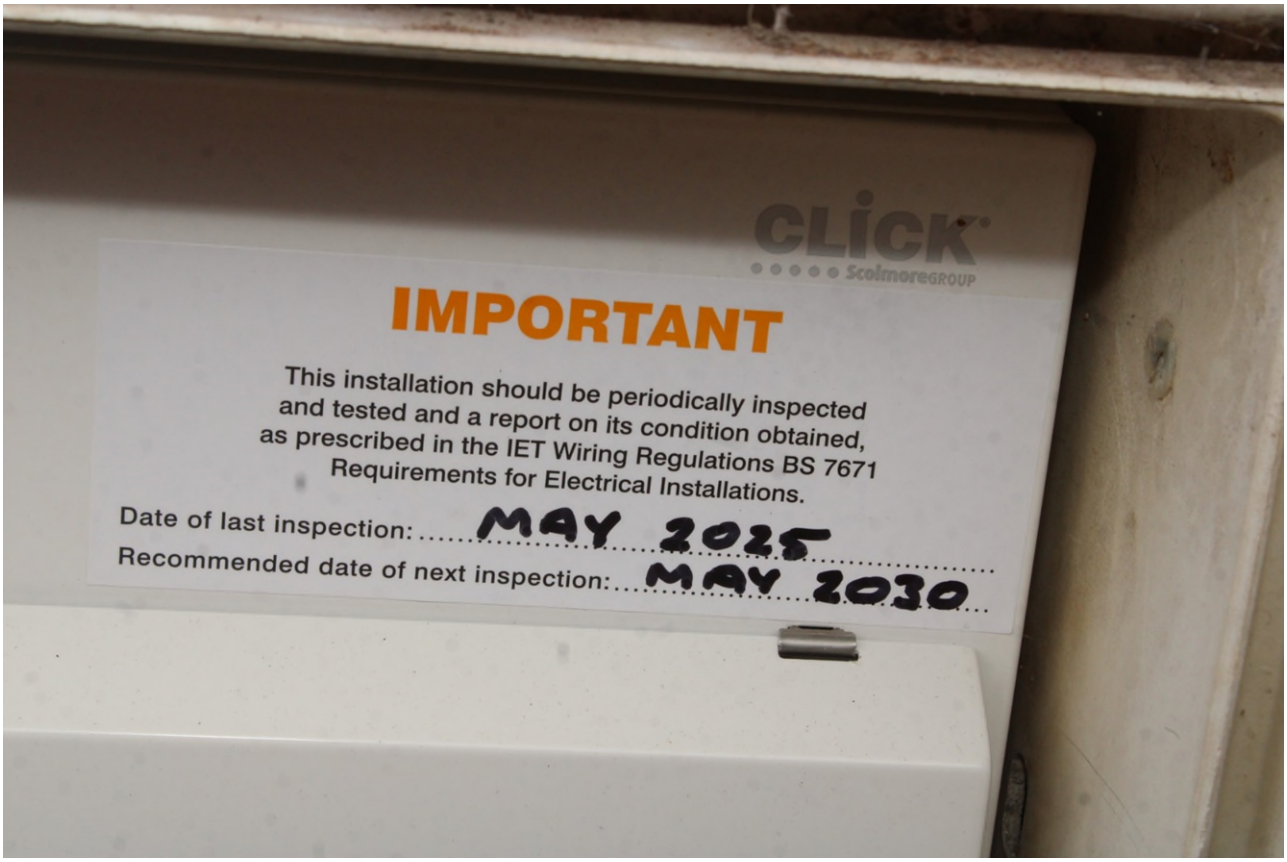
Photograph 7:
A screen capture of a social media post which appears to show the fire in progress (annotations are in yellow).

Photograph 8:
A view of plot 10 from the access road.



Photograph 9:
A view of the external steel cupboard, showing the key components of the electrical installation.

Photograph 10:
The electricity meter inside the sanitation unit for plot 9. The meter tails are in a plastic conduit beneath the meter.

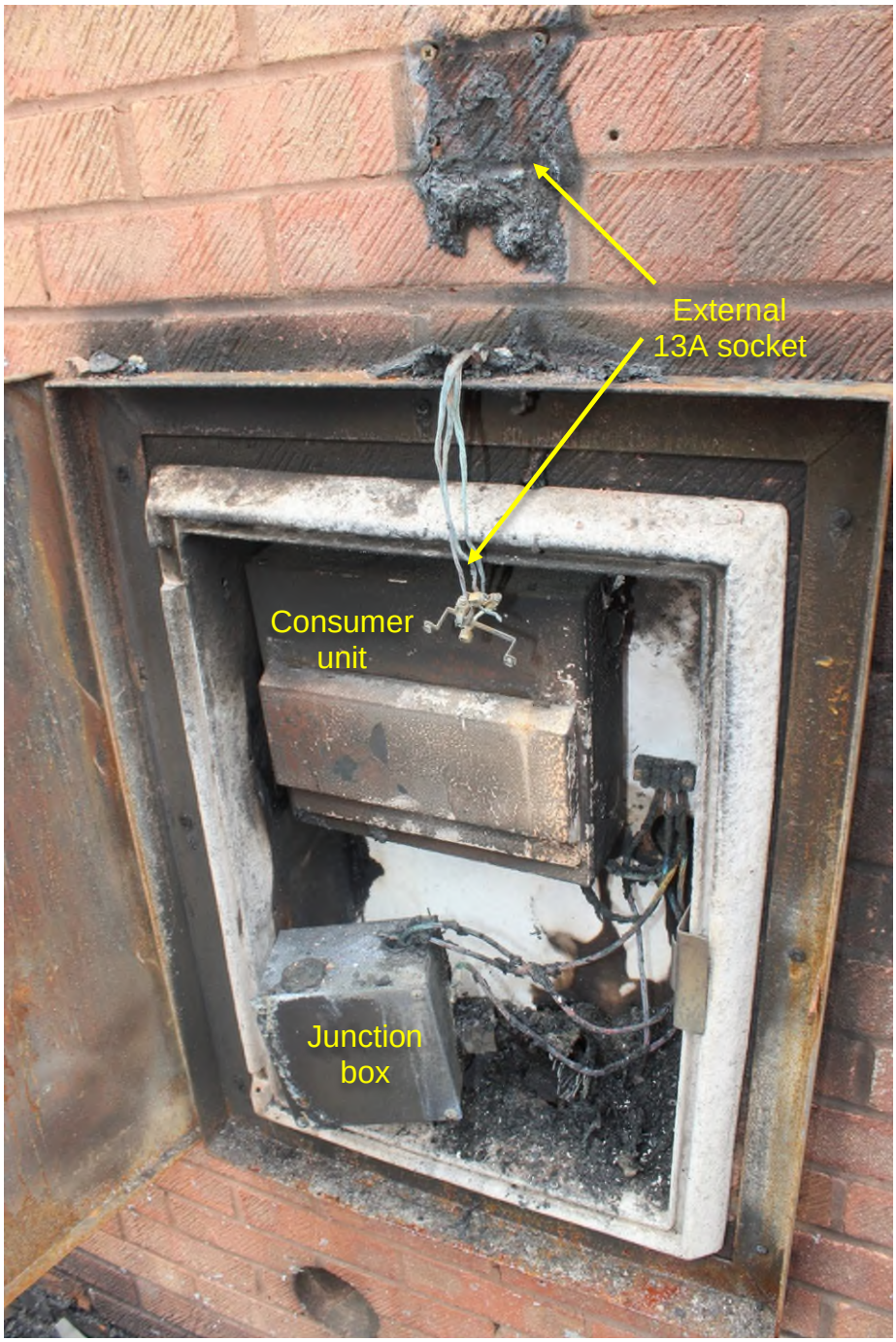


Photograph 11:
The label on the consumer unit serving plot 9 indicating that it was last inspected in May 2025.

Photograph 12:
The mobile caravan on plot 10 (left) which was alongside the sanitation unit (right).

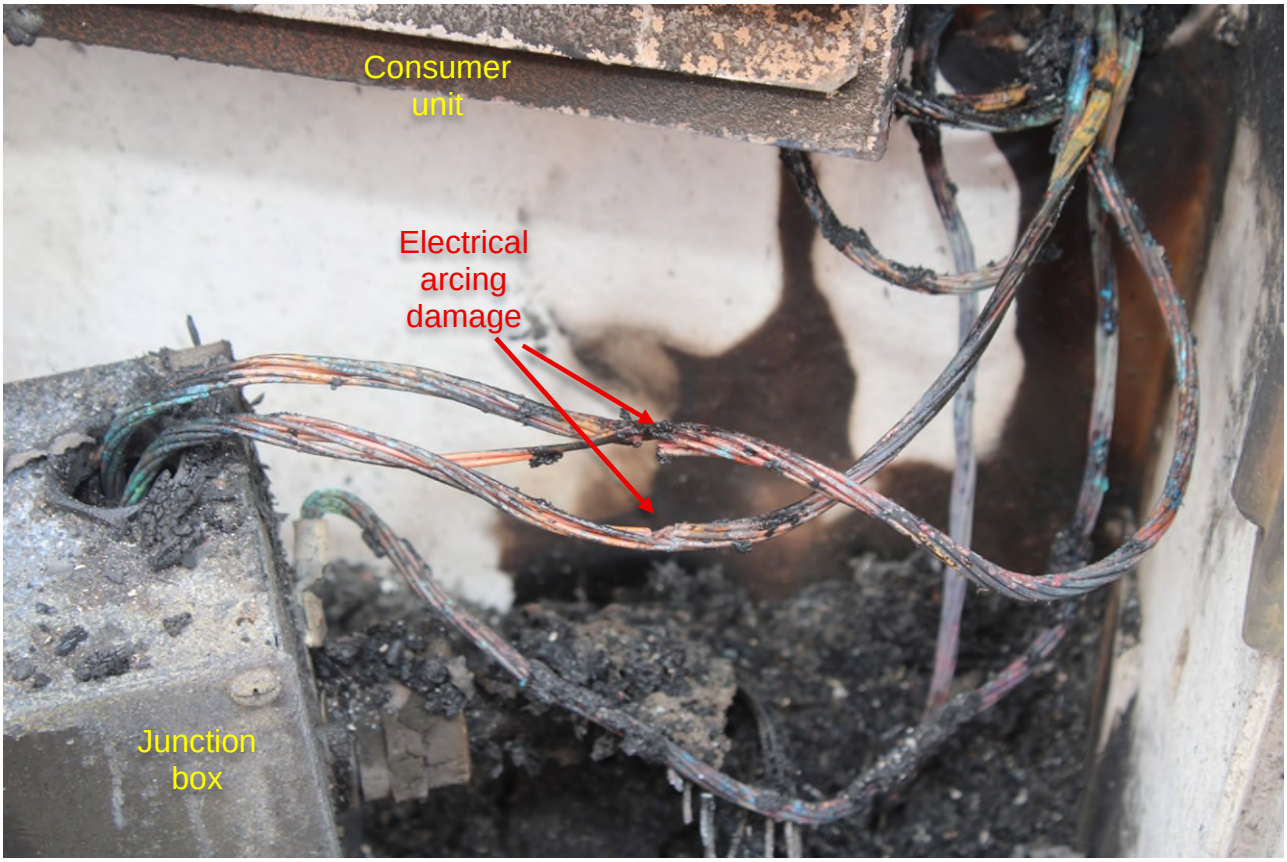
Photograph 13:
A view of the inside of the sanitation unit serving plot 10.

Photograph 14:
The remains of the electricity meter, inside the sanitation unit.



Photograph 15:
A view of the equipment inside the steel cupboard on the external face of the sanitation unit wall.

Photograph 16:
A view of the remaining plastic inside the consumer unit.



Photograph 17:
A view of the electrical arcing damage a short distance from the junction box.

Photograph 18:
A view of a selection of the appliances in the mobile caravan.