



**Report on a Programme of Archaeological Works at the
Cowdray Ruins, Midhurst, West Sussex**

July 2019

NON-TECHNICAL SUMMARY

This document sets out the results from a programme of archaeological works carried out by West Sussex Archaeology Ltd on behalf of the Cowdray Heritage Trust at the Cowdray Ruins, Midhurst, West Sussex. The works were carried out in April 2019 in order to evaluate three areas in front of the Ruins to inform applications for Scheduled Monument Consent for the erection of marquees.

The results revealed the foundations of the north and south flanking walls to the west front of the Tudor mansion, the remains of part of its 18th driveway, a Tudor culvert, and a small 18th century rubbish-filled pit. A number of modern services were also located.

It is recommended that the area under Trench 1 is suitable for the erection of marquees, and that the area under Trench 2 is also suitable, providing stakes are kept to a depth of no more than 0.4m. The area under Trench 3 is also considered suitable from an archaeological perspective, providing any stakes are kept to the south of the foundations of the southern flanking wall, found in the trench's northern extension. However the presence of several modern services passing across, or to the east of, Trench 3's eastern half, leads to a recommendation that this area is avoided, unless the services are first accurately located.

BACKGROUND

Topographical Background

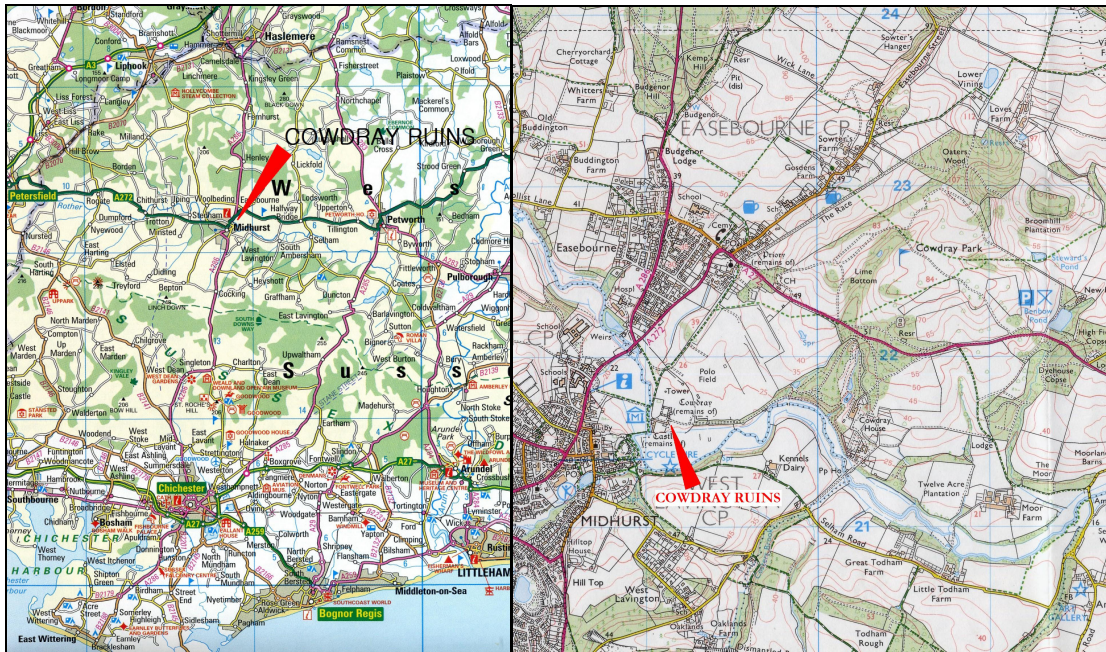


Figure 1 Site location. © Crown copyright. All rights reserved. License number: AL100036068

1. The Cowdray ruins lie to the immediate north-east of the town of Midhurst in West Sussex, at 20m aOD, OS grid reference SU 8916 2172. The underlying geology of the site is Lower Greensand (Selham Ironshot).

Project Background

1. The Cowdray Heritage Trust are looking to erect marquees on the lawn in front of the Ruins in three locations as part of a proposed programme of public events (see Figure 2). The sites of these marquees lie within the Scheduled area of the Cowdray Ruins (No.29300/1017500), and as such Scheduled Monument Consent, for which the Trust have applied (No.S00212272), is required for their associated ground fixings.
2. In order to determine whether any remains associated with the Tudor mansion, or its predecessor, or any other archaeological remains, exist within the footprint of these proposed works, the Cowdray Heritage Trust commissioned West Sussex Archaeology Ltd to excavate three archaeological evaluation trenches on the sites of the marquees, under Class 7 Consent from Historic England, following their request for further information regarding the application, in accordance with a Written Scheme of Investigation (WSA 2019) agreed with Historic England. The results from these archaeological works will be used to determine the Scheduled Monument Consent application.

3. This report details the results of that archaeological work, which was carried out from the 23rd – 25th April 2019 by George Anelay of West Sussex Archaeology Ltd.

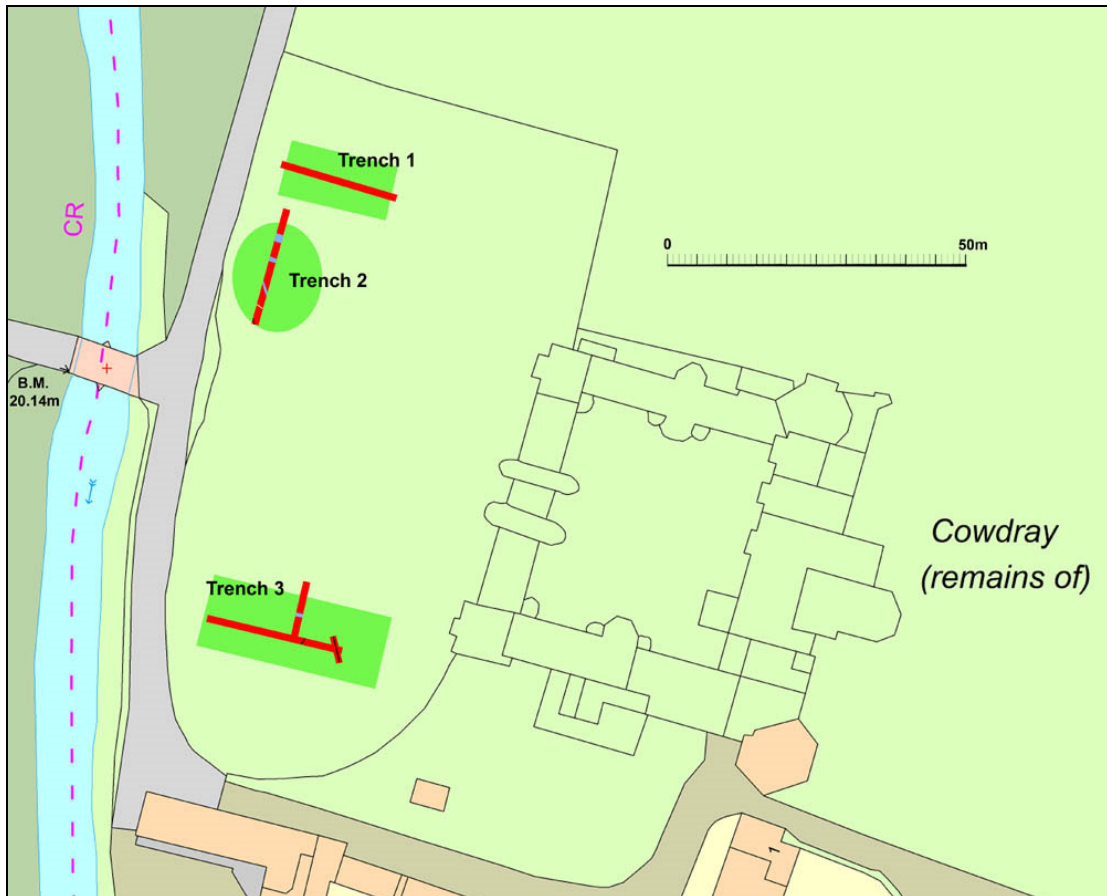


Figure 2 Plan of the proposed marquee locations (in green) and trench positions (in red) © Crown copyright. All rights reserved. License number: AL100036068

Historical Background

1. Towards the end of the 13th century, the Bohun family moved from their castle on St. Anns Hill, to a new residence across the River Rother, possibly moated (Salzman 1973, p.49). This was presumably demolished in advance of the current ruined mansion, which is said to have been begun by Sir David Owen in 1492. He is believed to have constructed the majority of the northern and eastern wings, while his successor, Sir William Fitzwilliam completed the quadrangle by building the western and southern ranges, after his purchase of the property in 1529. The building was left ruinous after a fire in 1793 (Howard 2009).
2. In April 2005, as part of works to conserve the Ruins, a geophysical survey was undertaken across the site, which revealed remains of an uncertain nature under the lawns to the west of the west front (Bartlett 2005). A number of these lie under the sites of the proposed marquees.

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Figure 3 The 2005 magnetometer survey © Crown copyright. All rights reserved. License number: AL100036068

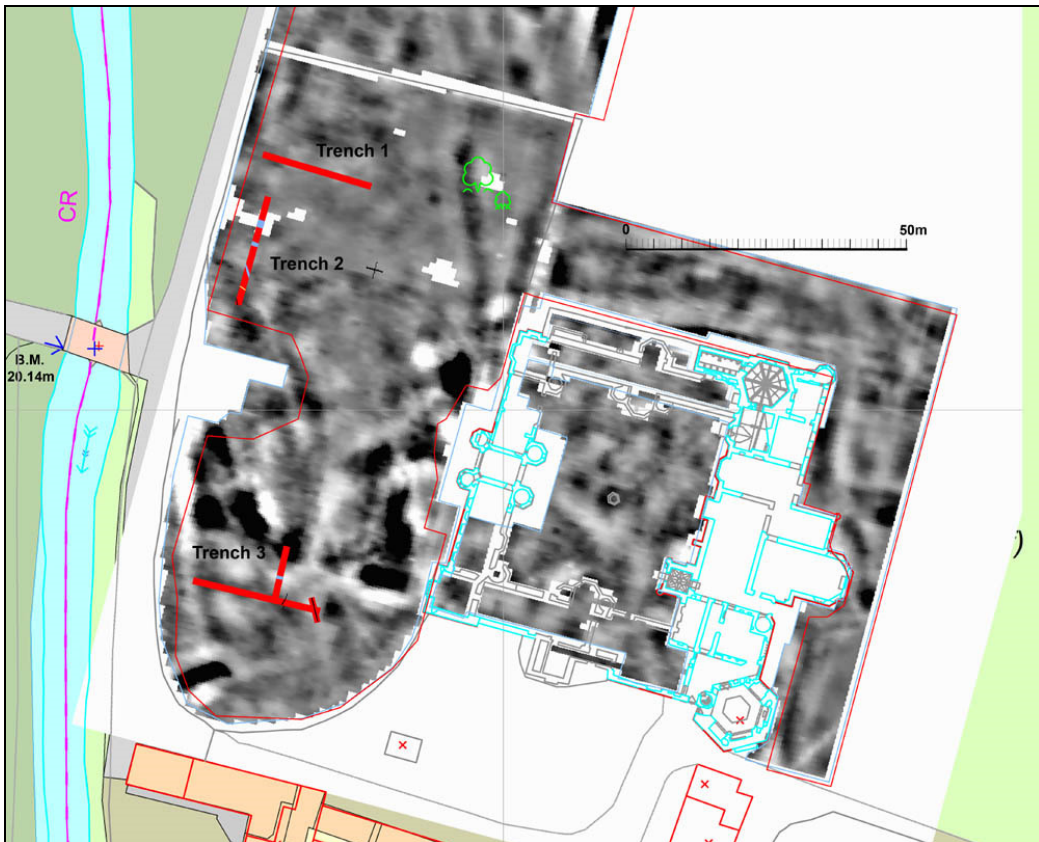


Figure 4 The 2005 resistivity survey © Crown copyright. All rights reserved. License number: AL100036068

RESULTS

1. Three trenches were excavated over the proposed locations of the marquees. Trenches 1 & 2 were 20m long and 1m wide, while Trench 3 was 23m long and 1m wide, with a northern extension, 15m from its western end, extending for 10m to the north, and again 1m wide. Trench 3 had been intended to be 30m long, but concerns over the exact location of gas pipes, known to run across the site, led to its shortening.
2. Trench 1 did not contain any archaeological features, artefacts or modern services, however the layers within it demonstrated that the ground in this location had been substantially raised in the past. The underlying Lower Greensand geology was not encountered anywhere within the trench, the deepest point of which reached 1.35m below the current surface. Instead succeeding layers of material had been laid down to raise the surface, sloping down from the east towards the river to the west. The deepest layers encountered, at the extreme eastern end of the trench, sloped at the steepest angle, suggesting that the edge of the infilled area may lie nearby, at short distance to the east of the end of the excavated trench.
3. The presence of brick and tile fragments within the lowest of the layers (11) of Trench 1, indicates that the depositing of all this material is likely to have taken place in the post-medieval period, possibly as part of the works involved in constructing the Tudor mansion. Layers 11 and 9 were composed of similar grey clay silt with frequent brick and tile fragments, while Layers 10 & 8 were of similar orange-brown clay sand, with only occasional such fragments. Capping these was a thin layer of Lower Greensand stone chippings (7), overlain by a grey-brown silt (6), again with frequent brick and tile fragments. Levelling the surface of these underlying layers, were three further deposits of silt (5, 4 & 3), capped by topsoil (1 & 2).



Figure 5 Trench 1, looking north-west.

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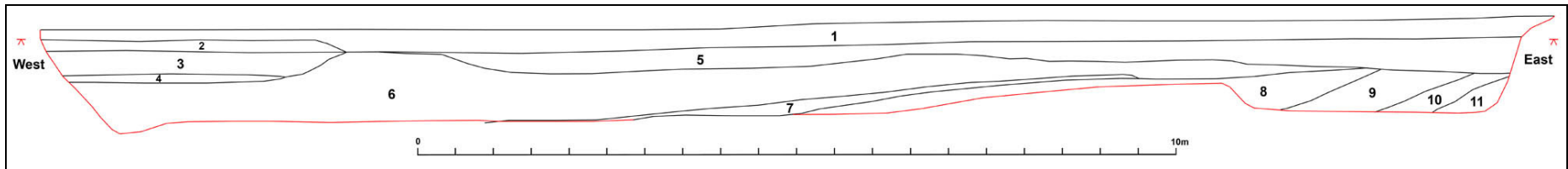


Figure 6 The north face of Trench 1

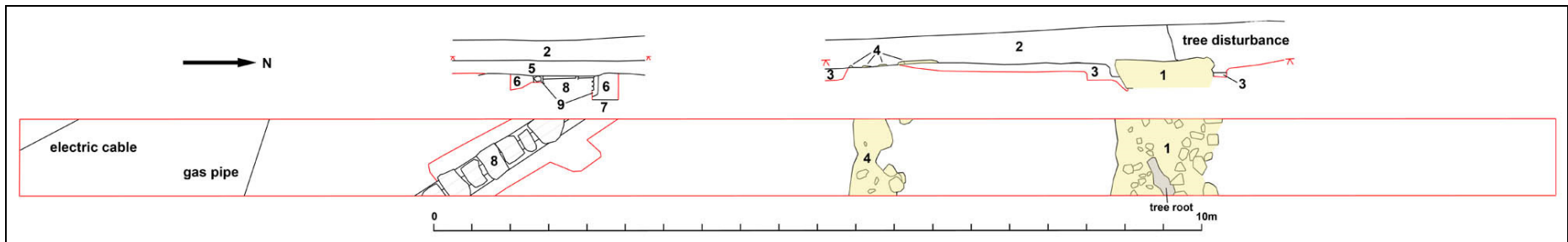


Figure 7 Plan of Trench 2, with sections over the features discussed

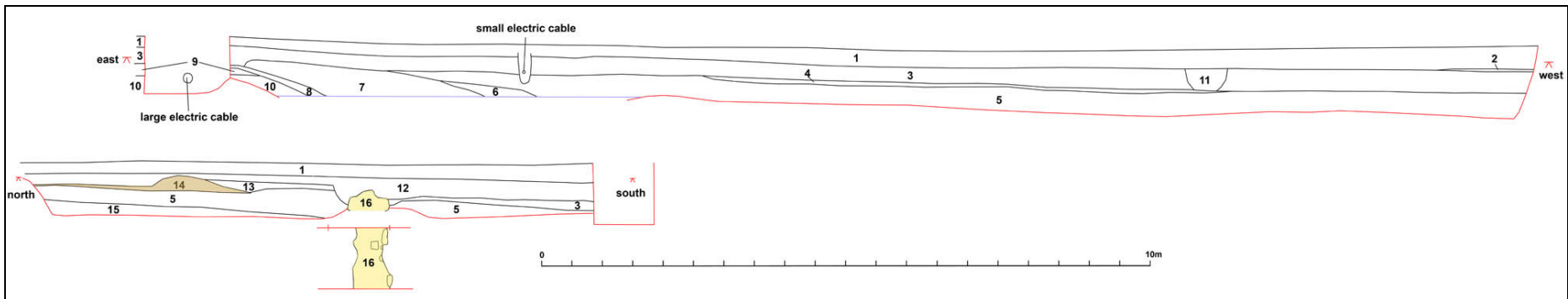


Figure 8 The south face of Trench 3 and the east face of its northern extension, with plan of the wall foundation (16)

4. Trench 2 contained three archaeological features, together with an electric cable and a gas pipe, both the latter being towards the southern end of the trench. The northern of the archaeological features consisted of a wall foundation (1), c.1.3m wide and c.0.4m deep, composed of undressed Lower Greensand stones, set in a yellow lime mortar. This foundation had been dug into the surface of a grey-brown clay silt (3), presumably the upper surface of the underlying make-up layers observed in Trench 1. The wall it once supported has been completely demolished, with its remains covered by the existing topsoil (2), to a depth of c.0.45m. It is probable that this wall is that shown on an early 18th century map of the Cowdray mansion, one of two framing its west face (see Fig. 10). It appears to have been demolished later in the 18th century, since it does not appear on a subsequent map of 1783 (see Fig. 11)
5. To the south of this foundation (1), at a distance of c.3m, a spread of Lower Greensand stones and yellow lime mortar was recorded (4), c.0.5m thick and up to 1.2m wide, sitting upon the surface of the underlying make-up layer (3). It is unclear as to what this represents, it is unlikely to be another wall foundation, due to its shallow depth and ephemeral nature, and it is possible that it might be linked with the demolition of the wall to the north (1).



Figure 9 The wall foundation (1), the spread of stones and mortar (4) and the brick and stone culvert (8) in Trench 2

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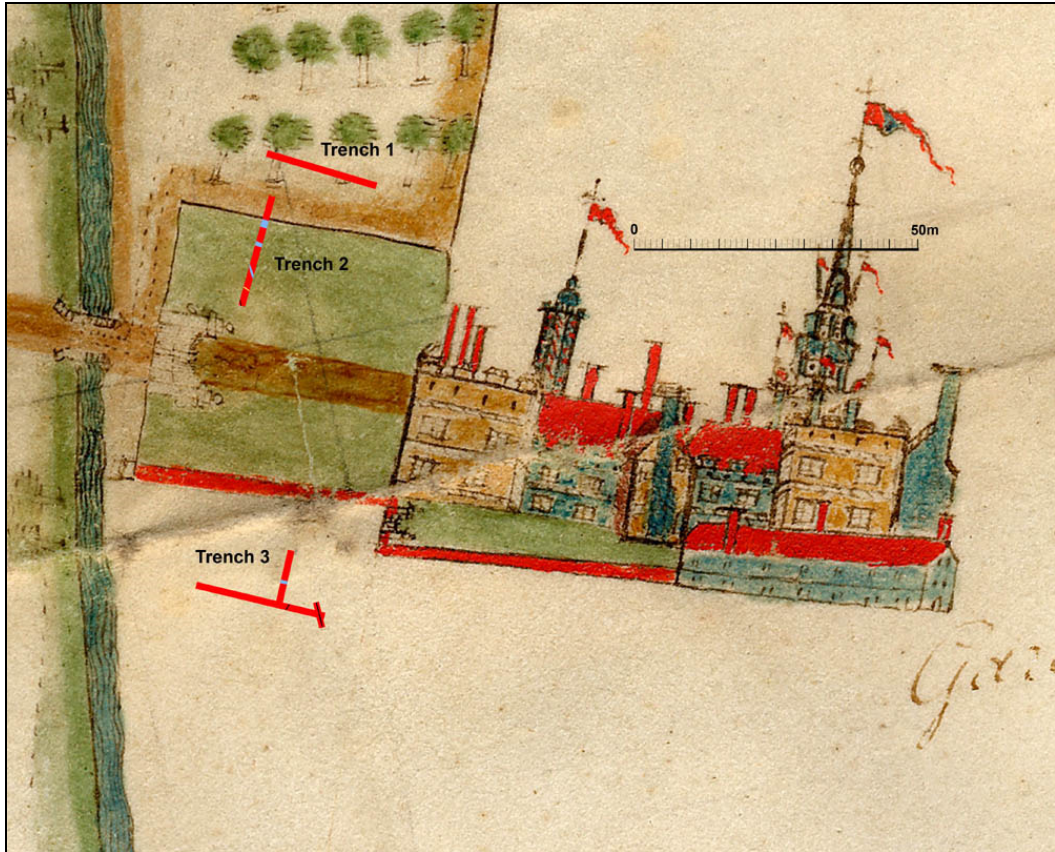


Figure 10 Map of 1712 showing the Cowdray mansion

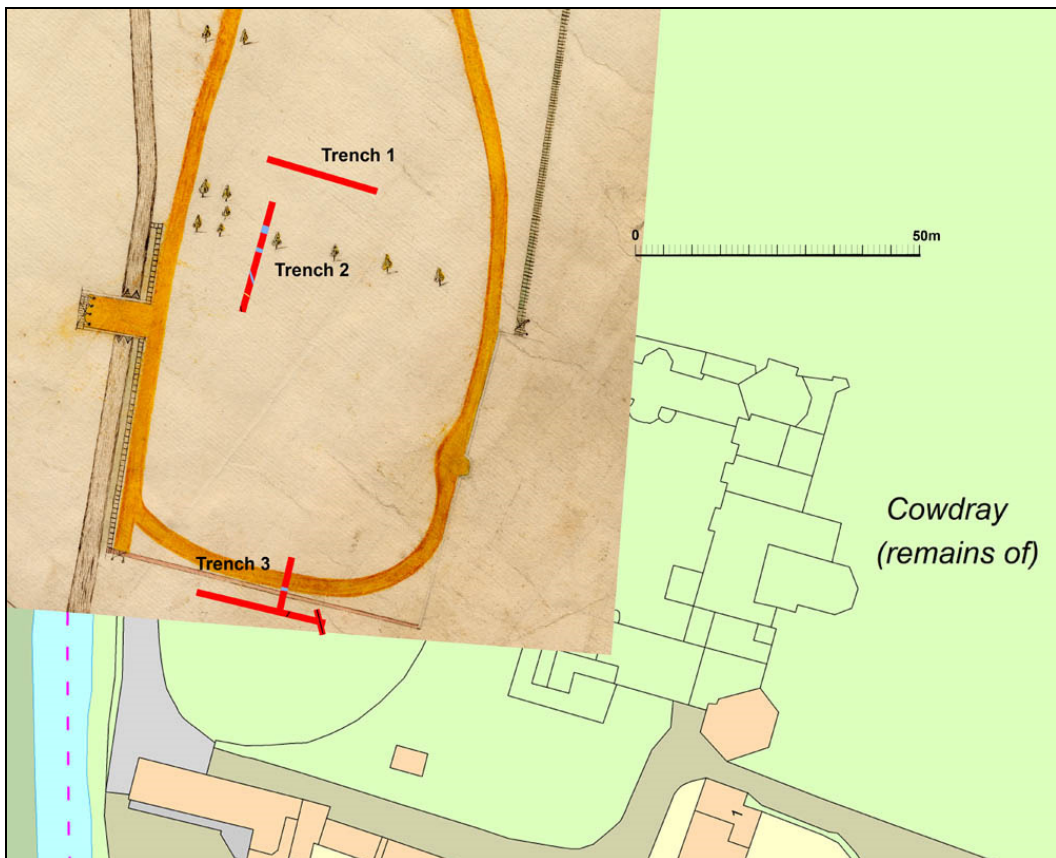


Figure 11 Map of 1783 showing the drive to the Cowdray Mansion. © Crown copyright. All rights reserved. License number: AL100036068

- The third archaeological feature within Trench 2 was a stone-capped brick culvert (8) running north-west to south east. It had been placed within a trench (9), c.0.55m wide, cut into a grey clay layer (6), containing frequent brick fragments, which in turn overlies a layer, (7), almost entirely composed of fragmented brick. Once the culvert had been inserted within the trench, it had been covered by a layer of yellow-brown sandy silt (5), with occasional brick and tile fragments, presumably forming the upper part of the make-up layers observed elsewhere, and underlying the existing topsoil (2). The culvert itself consisted of a side walls composed of three courses of bricks (5 x 10 x 22cm), capped with slabs of Lower Greensand stones, and lined at the base with peg tiles (27 x 16 x 1.3cm). The tops of the culvert capping stones lay c.0.45m below the current surface. It is likely that the culvert was for the discharge of rain-water away from the mansion to the west, towards the river.



Figure 12 Detail of the brick and stone culvert in Trench 2, after the capping stones have been removed, looking north-west

- Trench 3 again contained three archaeological features, together with two electric cables, the latter being towards the eastern end of the trench. The main east-west trench was found to consist of a similar build-up of layers as in Trench 1, with the underlying geology again not encountered even at its deepest point, c.1.2m below the current ground surface. At the eastern end of the trench, these layers, as in Trench 1, were observed to slope upwards more steeply, before seemingly levelling off at its extreme end, where two deposits (9 & 10) were more horizontal. Layer 10 was a grey-brown silt containing occasional tile fragments and oyster shells, while Layer 9 above was an orange brown

sandy silt, with a few fragments of tile. It is possible that these two represent the historic ground surface that existed before the raising of the land.



Figure 13 Trench 3, looking south-west

8. Layers 9 & 10 were overlain by a succession of make-up layers to the west, the lowest of which was composed of crushed chalk (8), below a reddish clay silt, containing abundant brick, tile and mortar fragments (7). Above this was a layer of grey-brown silt containing frequent Lower Greensand chippings (6), under an orange-grey clay (5) and a thin spread of yellow-orange clay-silt (4). These were all capped by a dark brown silt containing frequent charcoal (3), which may represent the last of the levelling layers. Cut into the latter was a small pit (11), part of which lay within the excavated trench. It measured c.0.7m in diameter and was c.0.4m deep, and within its fill was an assemblage of bottle glass and pottery, including three complete mallet-shaped wine bottles, a complete salt-glazed beer bottle and a small crudely made ceramic jar. The whole assemblage dates to the first half of the 18th century, and is probably contemporary kitchen waste. This pit, together with all the layers beneath, were capped by the modern topsoil (1).
9. The lower deposits within the northern extension to Trench 3 marked a continuation of those within the main trench, with Layers 3 & 5 observed continuing to the north. Beneath these, at the northern end of the extension trench, was a layer of grey clay-silt (15), containing frequent medium to large Lower Greensand blocks, presumably another make-up deposit.



Figure 14 Pit 11 artefacts: one of three identical wine bottles, (left image, unknown provenance, c.1725-1750); the beer bottle (central image, possibly from the Fulham pottery, late 17th – mid 18th century); and the ceramic jar (right image, unknown date & provenance)

10. Cut into the surface of Layers 3 & 5 was an east-west running wall foundation (16) composed of undressed Lower Greensand blocks, brick and tile, set in a yellow lime mortar, c.0.55m wide, c.0.35m deep and lying c.0.45m below the current ground surface. This is almost certainly the base of a wall visible in this location on the map of 1783 and on the Grimm drawing of 1782 (see Fig.16). It is perhaps significant that Layer 3, to the south of this wall, does not extend onto its north side, probably indicating the different histories of the two areas, with the latter being linked to the service buildings that lay to the south of the mansion, while the former lay within the much more important formal approach to the main entrance.



Figure 15 The spread of flint gravel (14) and wall foundation (16) beyond, within the Trench 3 extension

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11. To the west of this wall foundation (16), a spread of flint gravel (14), up to c.0.2m thick, extending for c.3.5m and sitting upon Layer 5, is likely to be the remains of the looping drive again seen on the 1783 map and 1782 Grimm drawing. This lay only c.0.25m below the current ground surface. Above these was a succession of yellow-orange sandy-silts (13 & 12) topped by the modern topsoil (1), all of which would appear to have been laid down following the demolition of the wall (16) and the dis-use of the drive.
12. The spoil heaps from all the trenches were searched using a metal-detector, each producing assemblages dominated by lead waste, presumably either discarded during the dismantling of the medieval building, or the Tudor mansion. The spoil from Trench 1 contained: six iron nails (21g); thirty-one pieces of lead waste (389g), of which two were window cane; one musket ball (31g, 17mm diameter); and one pistol ball (14g, 135mm diameter). The spoil from Trench 2 contained: five iron nails (21g); eighteen pieces of lead waste (273g), of which two were window cane; one section of copper alloy tubing (16g); and one whetstone (264g, 170mm long, 40mm diameter). The spoil from Trench 3 contained: twenty-one iron nails (223g); one iron bar (164g, 185mm long, 12mm wide and 9mm thick); nineteen pieces of lead waste (177g), of which four were window cane; one copper alloy pin (3g, 53mm long); one copper alloy ring (4g, 32mm diameter); one copper alloy decorative fitting (2g); and one worn copper alloy jetton (probably Hans Krauwinckel II, 1586-1635).



Figure 16 Drawing by S.H.Grimm in 1782 of the west front of the Cowdray mansion, showing the wall (to the right) and the gravel drive

CONCLUSION

1. The results from the trenching enables a tentative outline of the development of the land to the west of the Cowdray Ruins. It would appear that prior to, or during, the construction of the Tudor mansion, the ground to the west was levelled, possibly as a part of a scheme to re-direct the flow of the River Rother and drain the land between it and the house. This levelling was achieved through the laying down of successive layers of clay and silts, the eastern edge of which lies c.25m to the west of the mansion. The presence of significant quantities of brick, roof tile and stone fragments, would suggest that the levelling material included some at least of the remains of the earlier medieval buildings on the site. Such medieval structures presumably lay to the east of the levelled area, either closer to the present ruins, or beneath them.
2. It would appear from the earliest surviving map of the Cowdray mansion, dating to 1712, that its western elevation was flanked by two walls running east-west, either side of a central causeway approaching the main entrance. The foundations found within Trenches 1 & 3 are almost certainly those of these two walls. The southern is, admittedly, shown to the north of Trench 3 in Figure 10, but this is likely to be the result of the map-makers decision to illustrate the mansion as an elevation, rather than in plan; the wall in question clearly running off the southern corner of the building, which would, in practice, place it exactly where the foundation was found in Trench 3. It is not known whether these walls formed part of the original design of the mansion, but at some point in the later 18th century, it would seem that the northern was demolished, possibly at the same time that the approach was altered, with the formation of the looping drive seen on the 1783 map, which enters and exits the land in front of the mansion from the north. The remains of a part of this drive were found within Trench 3. The brick and stone culvert found within Trench 2 is almost certainly original to the Tudor mansion, and probably took rainwater from its rooves into the River Rother. The only other archaeological feature revealed by the trenching was the small pit filled with bottles within Trench 3. This lay in the area to the south of the entrance approach to the mansion, as defined by its two flanking walls, an area likely to have been associated with its kitchens and other service buildings. The pit was probably infilled with household rubbish in the mid-18th century.
3. In addition to the evidence for archaeological remains on the site, a complex array of modern service trenches was revealed. Plans obtained from the gas and electric utilities indicate that several gas and electric services run across the area in front of the west side of the ruins. One of these gas pipes was found towards the southern end of Trench 2 (0.65m depth), while a major electric cable was found in both Trench 2 (0.65m depth) and Trench 3 (0.6m depth), with a smaller one also within Trench 3 (0.4m depth). While the plans obtained from the

utilities are representative, rather than determinative, it would appear, when uniting this data with that from the excavated trenches, that: the larger electric cable runs from the southern end of Trench 2, diagonally across the site, to the eastern end of Trench 3, towards the range of buildings to the south; the smaller electric cable runs from these buildings, across Trench 3, and then past the north-western corner of the Ruins on its way to the Conduit House; while one of the gas pipes runs across Trench 2, probably towards the south-west corner of the Ruins. The electric cables are comparatively straightforward to locate, being visible on the magnetometer survey and being easily traceable using a CAT scanner. The gas are more problematic, being largely undetectable by either. The gas pipe found in Trench 2 was broadly in the location shown on the utilities plan, however a second was meant to cross the north extension to Trench 3, but was not located, suggesting that its true course may not be the same as that on the plan provided. Both gas pipes are indicated as passing between the end of Trench 3 and the south-west corner of the ruins.

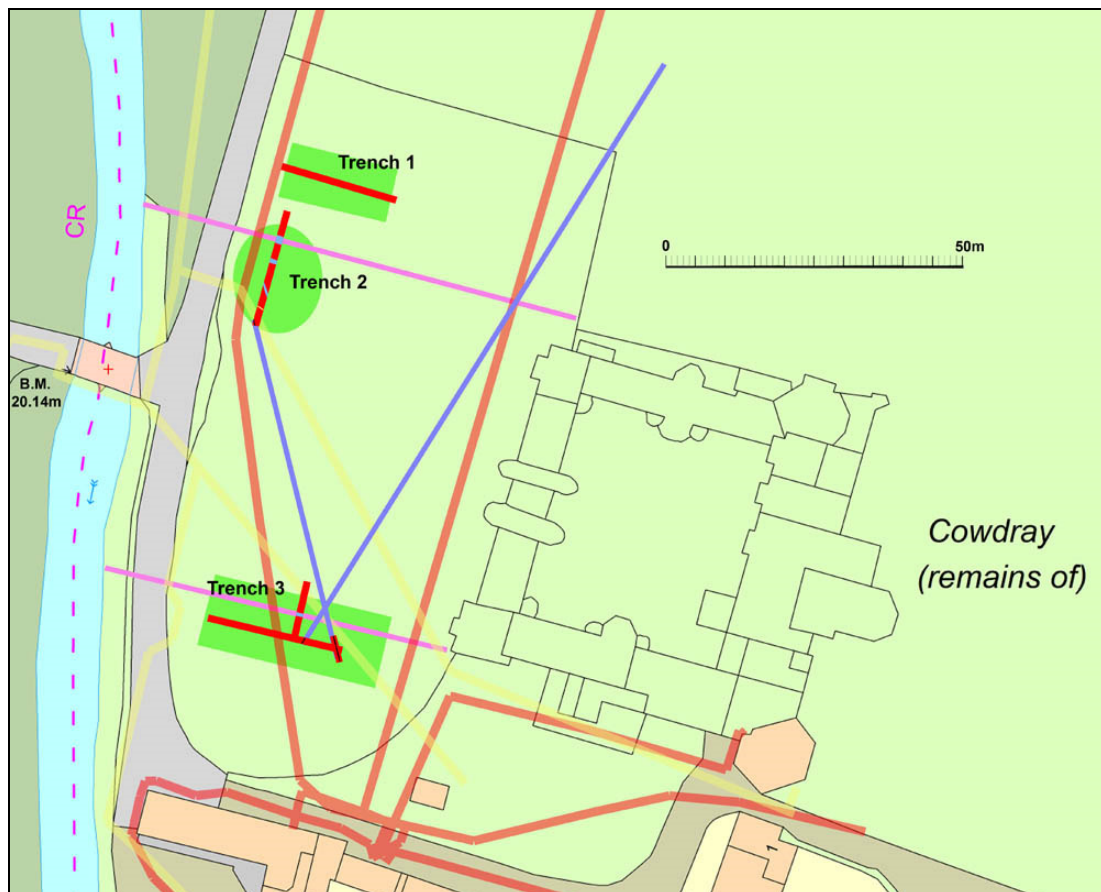


Figure 17 Plan showing: the line of the services as provided by the utilities maps (electric in red, and gas in yellow); the actual line of the electric, as seen within the excavated trenches and on the magnetometer survey (in blue); the location of the two flanking walls to the Tudor mansion (in purple); and the positions of the proposed marquee locations (in green) © Crown copyright. All rights reserved. License number: AL100036068

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4. The purpose of the archaeological trenching described above, was to investigate the potential impact of the positioning of marquees within three areas to the west of the Cowdray Ruins. The results have indicated that that below Trench 1 is likely to be free from any significant deposits. Here the ground would appear to consist entirely of make-up layers associated with the construction of the Tudor mansion, and any earlier features will therefore be deeply buried (below 1.2m), and no trace of any later features was recorded. The only *caveat* would be to avoid drifting to the west, were the large electric cable passes between Trench 1 and the existing railings, and to the east, where the make-up layers appear to end.
5. Trench 2, while containing archaeological features relating to the Tudor mansion, namely the foundations of the northern flanking wall to the west front, and a brick and stone culvert, showed that the overlying topsoil is thick enough to permit marquee/tent stakes up to 0.4m long, without damaging the remains below. Care should however be exercised in not exceeding this depth, partly due to the necessity to avoid damage to any archaeological remains, and partly because of the presence of the gas and electrical services located at the southern end of the trench.
6. Trench 3 presents a more complicated picture. The main trench revealed no archaeological features of significance, save for the single small pit filled with 18th rubbish, the top of which lay c.0.3m below the current ground surface. However its northern extension contained the foundation to the southern flanking wall to the west front (0.45m depth), and the remains of the 18th century gravel drive (0.25m depth). While it is considered acceptable to hammer marquee/tent stakes into the latter, it would be less so with the former, due to its less forgiving composition. It is recommended, therefore, from an archaeological perspective, that any marquees/tents are kept to the south or north of this wall foundation.
7. The greatest difficulty with the erection of marquees/tents in the location of Trench 3 does not, however, come from the presence of such archaeological remains, but as result of the known electric and presumed gas services that cross this area. It is highly likely that the repeated insertion of stakes, to a depth exceeding the 0.4 – 0.65m at which these services lie, will at some point result in a direct contact, with potentially serious consequences. It is therefore recommended that either these services are accurately located, marked and avoided, or that any marquees/tents are placed elsewhere.

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