

Dover Castle, Water mains

Watching-brief report

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Plate I General view of Pit 2 in Harold's Road, looking south-east

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Scale, 1 metre

Watching-brief at Dover Castle, February 2014

1. Summary

Two small-scale excavations undertaken at Dover Castle to allow repairs to existing water mains in the Keep Yard and on Harold's Road near Palace Green, were the subject of an archaeological watching-brief. Although mostly cut through fills relating to previous modern service trenches, a small area of earlier, stratified deposits was revealed in the Harold's Road excavation (NGR 632538 141858). Here, natural chalk was exposed at a depth of 1.02m below present ground level, overlain by about 0.85m of post-medieval deposits which included three shallowly buried chalk surfaces. No closely datable finds were associated with any of these deposits.

2. Introduction

2.1 In connection with maintenance work at Dover Castle (Scheduled Ancient Monument 30281), the Canterbury Archaeological Trust was engaged to carry out a watching-brief during two small excavations to be made to allow repairs to existing water mains.

2.2 Commissioned by Roy Porter of English Heritage, the purpose of the watching-brief was to record anything of archaeological interest which might be exposed during the course of the excavations and to identify any unexpected remains deemed to be of sufficient importance to warrant preservation *in situ*. The two separate pits were dug at an existing mains valve site on the northern side of the Keep Yard (Figs 1 & 2, Pit 1) and at a damaged fire hydrant site in Harold's Road adjacent to the well house near Palace Green (Figs 1 & 3, Pit 2).

2.3 Although it seemed likely that installation of the original services would have led to damage or destruction of any archaeological features or deposits originally present, the general importance of the areas involved and the somewhat uncertain extent of previous services installation, required an archaeological watching-brief to be maintained during the course of all the new excavations.

2.4 Observation and recording work was undertaken by the writer on 24 and 25 February 2014, during weather conditions of light to moderate cloud-cover, with intervals of bright sunshine. The two pits were hand-dug by workmen, who afforded every assistance during the course of their work.

2.5 The excavated pits were both rectangular in shape, measuring around 1 metre across, and were cut to depths of between 1.05 and 1.25m. Traces of stratified archaeological deposits were only revealed in the side of Pit 2 (Harold's Road) and natural chalk bedrock was also revealed here (Plate II).

2.6 The field records generated by the watching brief included two site location plans, twelve recorded contexts and eight digital photographs (Plates I and II). No finds were recovered from either excavation. The archive is presently held by Canterbury Archaeological Trust (Dover Office) and will be transferred into the care of English Heritage shortly.

3. Historical and archaeological background

3.1 Dominating the historic town and Cinque Port from its cliff-top position, the medieval castle at Dover constitutes one of the finest in Europe. There seems to have been some sort of defended settlement on the hill from at least the late Anglo-Saxon period. It was during the 1180s, however, that Henry II

began a huge new building programme which was to eventually transform the basic Norman earth and timber fortress on Castle Hill into one of the greatest and most powerful Royal castles in northern Europe (Coad 1995, 46). The mid-thirteenth century saw the final completion of the medieval defences, after more than eighty years of work.

3.2 Further works followed in the post-medieval period. During the late eighteenth and nineteenth centuries extensive earthmoving was undertaken when the Castle was upgraded to take modern artillery (Coad and Lewis 1982, 145, 154, 179). There can be little doubt that significant areas of below-ground, stratified archaeology were removed or damaged during the course of these works. Subsequent trenching for a variety of domestic services will have caused further damage to any surviving buried deposits.

3.3 The location and extent of remaining below-ground archaeological deposits is not easily gauged and any new information that can be obtained is of considerable importance. One of the two small pits dug in 2014 contributed some further useful, if limited, information and showed the presence of stratified post-medieval deposits in the area of Palace Green (see below).

4. The excavated pits (Pits 1 and 2)

4.1 *Pit 1, Keep Yard water valve*, NGR 632474 141979 (Figs 1 & 2)

4.1.1 The faulty valve was located on the northern side of the Keep Yard, below the southern edge of the paving outside the entrance to Keep Yard Building 4 (public toilets), some 9 metres north of the Keep (NGR 632474 141979; Figs 1 & 2). This area falls within a highly important part of the castle. In the event, no finds, features or deposits of archaeological interest were revealed, the limits of the new excavation being entirely contained within the backfilling of earlier service trenches.

4.1.2 The excavated pit was roughly square in outline, about 1 metre across. It was taken to a maximum depth of 1.25m below present ground level (at *c.* 111m AOD) and exposed four service pipes, including the 6 inch steel water main with its faulty valve, contained within a late twentieth-century brick-lined access chamber. Three of the pipes, including the water main, were aligned north-east by south-west, running across the yard, whilst the other one was aligned approximately north-south. The water main was the deepest buried.

4.1.3 The trenches for the various services, especially the water main, had destroyed all trace of any stratified archaeological deposits that might once have existed in this area. Working conditions were generally difficult because water leaking from the main meant that the base of the pit was waterlogged.

4.1.4 In the excavated pit, a concrete surface (Context 4) supporting the brick chamber for the water valve was exposed at the base, 1.25m below ground level. Largely surrounding the chamber was a mixed soil deposit consisting of a light grey-brown clay, waterlogged towards base, with frequent small chalk lumps, occasional red and yellow brick fragments, occasional tarmac fragments, occasional flints and occasional concrete lumps. This deposit (Context 3) clearly represented the recent backfill of the water pipe trench and was about 0.55m thick.

4.1.5 Context 3 was overlain by a deposit of ballast and hardcore (Context 2), representing the backfilling of a more recent service trench containing two plastic pipes. This deposit was up to 0.70m thick and supported the present pavement, formed from re-used Victorian Yorkstone slabs between 0.05 and 0.10m thick.

4.2 Pit 2, Harold's Road water hydrant, Palace Green, NGR 632538 141858 (Figs 1 & 3)

4.2.1 Palace Green is the modern name given to the open space south of the Keep Yard and was formerly part of the Castle's middle ward. It represents another important area of the Castle. The damaged hydrant is located to the south of Palace Green proper, towards the south-eastern end of Harold's Road, immediately to the south-west of the 1790s well house (Figs 1 & 3; Plate I), NGR 632538 141858. Ground level here is at 107.12m above Ordnance Datum.

4.2.2 The excavated pit was rectangular in outline and measured 1.32m (NE–SW) by 1.12m (NW–SE). It was taken to a maximum depth of 1.05m and exposed the steel pipe for the water main (Plate II), with its damaged hydrant, contained within a small late twentieth-century brick-lined chamber. No other pipes were exposed but the eastern corner of the excavated pit revealed the back of another brick-built access chamber, also seemingly of later twentieth-century date.

4.2.3 In the excavation, a concrete surface supporting the brick chamber for the hydrant was exposed in the base, at a depth of 1.05m. Surrounding the chamber was a mixed soil deposit consisting of a light grey clay, containing frequent small chalk lumps, moderate numbers of flints, occasional red and yellow brick fragments, occasional tarmac fragments and occasional concrete lumps. This deposit (Context 12) clearly represented the recent backfill of the water pipe trench and was about 0.88m thick (Plate II).

4.2.4 Context 12 was overlain by a deposit of loose tarmac and crushed brick rubble (Context 11). This was between 0.10 and 0.20m thick and represented make-up supporting the modern tarmac road surface, here about 0.05m thick (Context 10).

4.2.5 Along the north-western side, adjacent to the north corner of the excavated pit, a length of the modern pipe trench filling (12) peeled away to reveal a narrow section of the stratified deposits through which the trench had been cut. This was briefly examined but effectively lay outside the area of Pit 2 (Plate II).

4.2.6 At the base of the exposed sequence, the top of the natural chalk (Context 17), was revealed at a depth of about 1.02m (c. 106.10m OD). Above this was a 0.15m thick layer of well-compacted chalk rubble containing occasional pieces of eighteenth- or nineteenth-century orange-red brick (Plate II, Context 16). In turn, this was sealed by a thick dump deposit of mixed light grey-brown clay, containing frequent small chalk lumps, moderate numbers of small sub-angular flints, some flint pebbles and moderate amounts of small red brick fragments (Plate II, Context 15).

4.2.7 Above the dump deposit (15), three successive layers of rammed chalk rubble separated by two grey loam layers (Plate II, Context 14) appeared to represent a series of walking surfaces separated by thin tread layers. The total thickness of these chalk surfaces was about 0.10m and the top of the highest one lay at a depth of 0.17m below present ground level.

5. Comments on recorded information

5.1 The two small-scale excavations undertaken in 2014 have shown that although there has been damage caused by a succession of earlier services trenches, stratified deposits of archaeological interest do still survive, at least in the Harold's Road area. These deposits, however, appear to be post-medieval rather than medieval in date and are likely to be associated with the large-scale earthmoving that occurred

across the site during the eighteenth and nineteenth centuries in order to upgrade the old defences (see above).

5.2 The sequence of deposits exposed in Harold's Road, including rammed chalk surfaces (Plate II), is reminiscent of similar post-medieval sequences previously recorded below Knight's Road (Parfitt 2013, pits 2 and 3).

5.3 The thick dump deposit recorded in the Harold's Road pit (Context 15) could represent up-cast associated with the digging of the adjacent well, c.1796; a process which will have generated a significant quantity of spoil.

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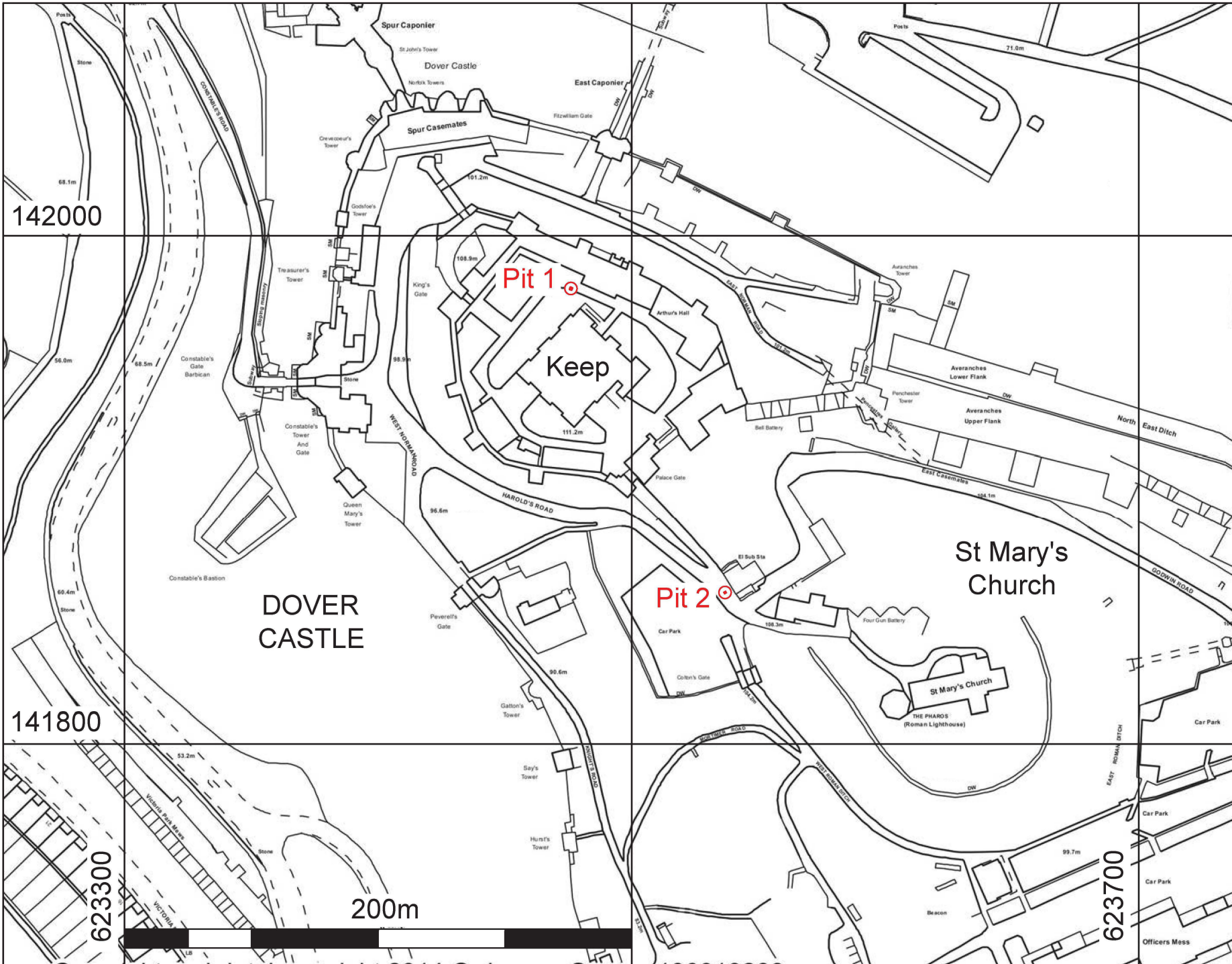
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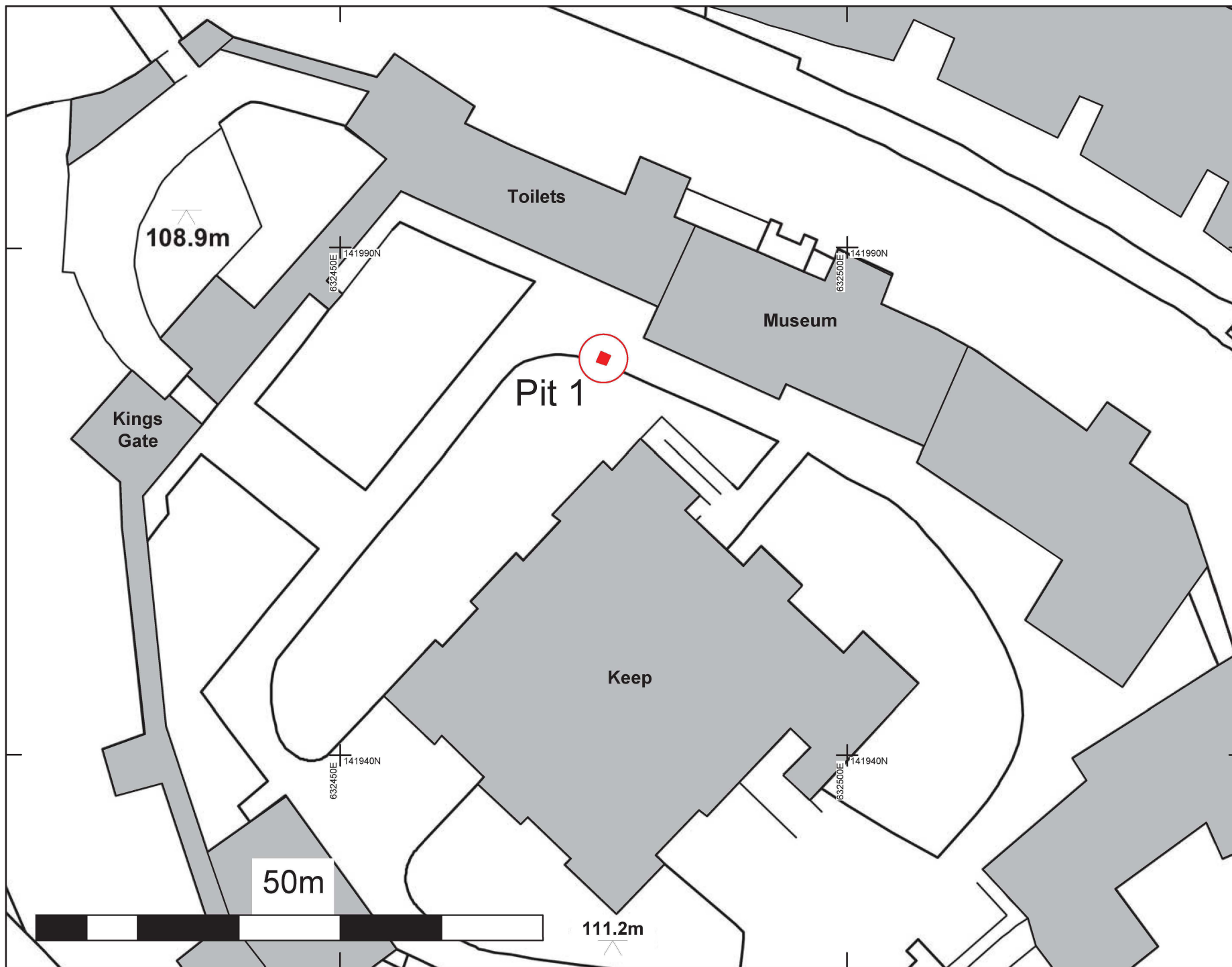
Fig.1



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Fig.1 General plan of Dover Castle showing the location of excavated pits

Fig.2



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Fig.2 Detailed plan showing position of Pit 1

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Fig.3



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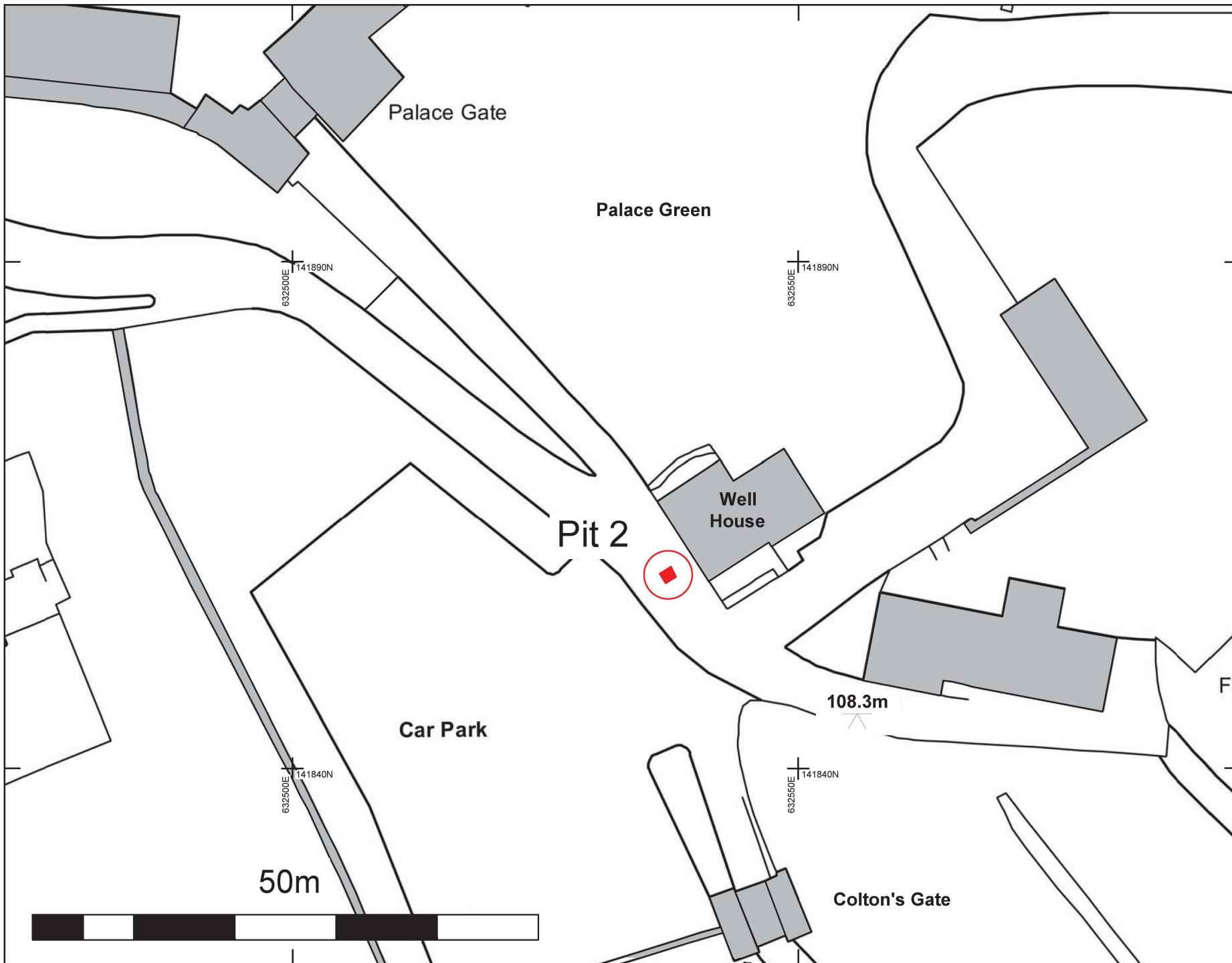


Fig. 3 Detailed plan showing position of Pit 2

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Plate II Detail of north-west face of Pit 2 showing stratified deposits exposed (Contexts 14, 15 & 16). Scale, 1 metre