

ARCHAEOLOGICAL INVESTIGATIONS AT
KIRTLING TOWERS
MOAT, CAMBRIDGESHIRE
-- AN INTERIM REPORT --

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Archaeological works were conducted in accordance with the Scheduled Monument Consent (HSD9/2/397 pt4, 26 August 1991) for the trial trenching of the inner south-eastern edge of the moat at Kirtling Towers, Cambridgeshire (National Monument No. 13608).

The purpose of this archaeological investigation was to assess the likely impact to any surviving archaeological deposits of a proposed reduction of the area of banking by 1 to 1.5 metres within an area 25m by 14m of the inner south-eastern corner of the moat (Figure 1). A further goal was to provide preliminary dating evidence for the construction of the moat and any prior or subsequent occupation of the site that could be obtained from this limited investigation.

The research design considered the specific problem of the reduction of the inner moat bank only, however. The most expedient and secure approach required the machine excavation of a trench oriented east/west approximately 5m from the northern edge of the assessment area (Figure 2). This trench (Trench 1) would be excavated to natural thereby exposing the full sequence associated with the inner moat edge. A second trench (Trench 2), perpendicular to Trench 1 and intersecting it 7.50m from the moat edge, was to be machine dug to pre-Tudor deposits (if any). The pre-Tudor deposits were then to be dug by hand to natural. A further test-pit (TP-A) was to be dug on the south-east corner to test for possible remains of Tudor ornamental masonry.

Investigation Results:

The excavation of Trench 1 (11.30m by 2.10m) did not encounter pre-Tudor deposits until within 0.20m of natural, but did offer an excellent section through a revetted bank and an additional phase of upcast from a phase of expansion of the moat (Figure 3a). The sequence through this area of the site begins with approximately 0.20m of post-medieval make-up (probably 19th and 20th century; [026]). This overlies a deposit (0.45m thick; [035]) of upcast natural which lies behind, and seals, a double post revetted bank of upcast natural ([037], [038], [039], [040], [041], [042], [043]) with small brick fragments. The two deposits are separated by a layer of medium brown-grey clayey-silt ([036]). This bank, and the upcast behind it, sealed a very humic occupation layer ([024]) with a reasonable amount of Saxo-Norman pottery (Thetford Ware, c. 10th-11th century) and bone. This deposit lay directly over an old land surface ([025]) which graded into natural Boulder Clay.

This primary old land surface, in a localized area at the junction of Trench 1 and 2, produced a number of Roman sherds (the majority from a single pot). There was no clearly associated features with the Roman sherds but for a pit ([047]) which was cut into the buried soil at the

northern end of Trench 2 (Figure 3b) and was overlain by [024]. This pit produced no finds and is probably associated with the Saxo-Norman phase, but the fills were of a very different character.

Trench 2 (16.80m by 2.10m) was dug by machine to the Saxo-Norman deposit and the lower buried soil ([024]/[025]), which was then excavated by hand. This deposit did not extend along the whole of Trench 2, however, but graded to an old land surface approximately 3.00m south of the intersection with Trench 1 (Figure 3b). This gradation, and a proposed division within the old land surface, were very difficult to assess due to the rapid desiccation of the section. The rest of the section was dominated by the second deposit of upcast natural ([035]) which was cut by two modern land-drains ([051] and [045]) and two brick foundations ([048] and [052]).

The southernmost brick foundation ([052]) was probably all that remained of what was likely a Tudor masonry ornament (the one that we were looking for in TP-A). All that remained, though, was a deep 'U' shaped foundation filled with unmortared bricks (5X10cm) laid on edge (Figure 3b). The other brick foundation, found very high in the section, represented a brick garden wall or walk-way (also 5X10cm brick).

Test-pit A (2.00m by 2.10m) produced no structural features at all, but a section through the upcast natural. A layer at the base of TP-A may have been the developed soil overlying the primary bank, but the edges of this section were too badly damaged by root disturbance to obtain a clear section. It is most likely that the test-pit was too small to have exposed a significant section, and the Scheduled Monument Consent did not allow for the further destruction that an extension of this test-pit would require. The eastern extension of the bank should be further assessed as part of on-going works.

The most significant feature is the revetted bank with its two sets of post-pipes ([037], [038], [039], [040]) and possible plank brace ([041], [042]; Figure 3a). The posts that made-up this revetment must have survived until quite recently inasmuch that in the base of the easternmost post-pipe ([039]) was a complete late 19th or early 20th century wine bottle. Local information has it that surviving posts were removed from the western moat at the beginning of this century (P. Johnson, pers comm) offering a possible explanation of the post-medieval fills in the post-pipes.

The revetted bank must have been constructed as a primary retaining feature for the upcast bank from the digging of the moat ([035]). The deposit separating the revetted bank and the upcast could have been associated with the mucking-out of the initial ditch dug for the revetted bank. There is little reason to suspect that the revetted bank, the upcast deposit ([036]) and the upcast bank ([035]) were not all created within the same year.

No clearly datable finds were recovered from the deposits associated with the construction of the moat ([035], [036], [043]), but all contained some brick fragments. Therefore, the deposits must be 14th century or later. In that the foundations of what are almost certainly Tudor garden walls and ornamental foundations ([032], [048], [052]) cut into the latest phase of the upcast bank, the deposits are not later. This phasing confirms that the moat must be post-14th century.

Substantiating this phasing of the moat is the fact that the Saxo-Norman deposit, and the pre-10th/11th century buried soil, extended level without deviation to be cut by the edge of the moat along both sections (Trench 1 and 2). This with the fact that it is sealed by the revetted bank confirms that the pre-Tudor deposits are not associated with any phase of the moat's construction.

Therefore, there is a very real possibility the moat represents a grand landscape gesture by Lord North as part of the development of his house and gardens and not a defensive structure. There remains the possibility that the brick is from pre-Tudor (i.e. 14th-15th century) occupation on the site. There is no evidence from these investigations, however, that the moat could be anything but Tudor.

The section through Trench 2 (Figure 3b) also demonstrates that the moat probably was always three sided, adding to its questionable defensive nature. No evidence of an internal revetted bank exists in the west facing section (Figure 3b) though there is a slight dip at the south end of Trench 2. The edge of the old ground surface ([025]) is cut along the return and overlain by bank weathering. This suggests that the short return which now exists on the south-east side was either a later addition, or was insubstantial enough as to not require a retaining bank. Again, this cannot be said conclusively from these investigations (further work would be required along the line of the return).

This phasing calls into question the nature and extent of all pre-Tudor occupation of the site. The size and condition of the Roman sherds suggests that they are from a nearby settlement rather than associated with a field system, though the location could be anywhere in the vicinity. The humic, Saxo-Norman deposit is obviously associated with some form of settlement. There was no further indication, however, as to where that settlement was, though clearly nearby, or what its extent and character might be.

There remains the possibility that there was a c. 10th/11th century phase to the site which may have included defensive structures, of which the Saxo-Norman deposit is associated. There also remains the possibility that the mound supported a Saxon defensive structure without a moat. All of this remains conjectural, however, and these investigations provided no evidence for any of these possibilities but for ephemeral Saxo-Norman occupation layer.

Another likely scenario is that the earlier 10th-11th century deposits are associated with the smaller moat and probable medieval features approximately 200m to the south (all within the Scheduled Monument). That the moat is Tudor and the southern and, in particular, south-eastern end is just cutting into these earlier deposits.

Summary:

The primary brief of these investigations was to determine the archaeological impact of the reduction of the bank along the south-eastern inner edge of the moat. This has been achieved, but other secondary questions remain unanswered. The nature of the natural (Boulder Clay), the high clay content of the deposits, and the weather made interpretation extremely difficult. The more insubstantial relationships in the two sections must remain somewhat conjectural, therefore.

The area of assessment was also far too small to say anything conclusively about the date and relationship between phases of occupation on this site. There is evidence that the earliest phase is Roman, and probably associated with a nearby settlement. The site certainly has a Saxo-Norman phase ([024]), but it is unclear as to whether this phase is associated with any of the earthworks on the site. The revetted bank and upcast from the construction of the moat must be of Tudor date, however, inasmuch as its fill contains frequent brick fragments. No evidence (either primary or residual) suggests that the pre-Tudor phases are associated with any phase of the moat's construction.

What is clear from these investigations is that more extensive archaeological works would be required to determine conclusively the full date and character of all surviving phases of the site.

Recommendations:

The primary consideration of these investigations was to determine whether a reduction of the inner moat bank, starting 12.00m in from the inner eastern edge of the moat sloping to 1.00m to 1.50m at the moat edge within the area proposed, would cause unacceptable archaeological damage. It is now clear that no pre-Tudor earthworks exists within the proposed area of reduction. However, the Saxo-Norman deposits, the primary revetted bank and upcast from the construction of the moat do survive and the impact of the reduction on these deposits must be considered.

The historical significance of the moat has potentially shifted from a Saxon or Medieval feature to what is most probably Tudor and associated with Lord North's c. 1530 house. The revetted bank, therefore, takes on an altered significance: the original bank forms a major feature of the original

Tudor landscape. Given this scenario, we would have to argue that the revetted bank should be retained. Its preservation will also ensure that of all of the pre-Tudor deposits.

This proposal does allow, however, for a reduction of the area by 0.40m to the top of the bank (3.80m in from the eastern edge of the moat at the present waterline), and then a grading from this point to the water's edge. It would also be necessary to limit planting along this edge to a few very shallow rooting bushes, lawn and non-bedding flowers.

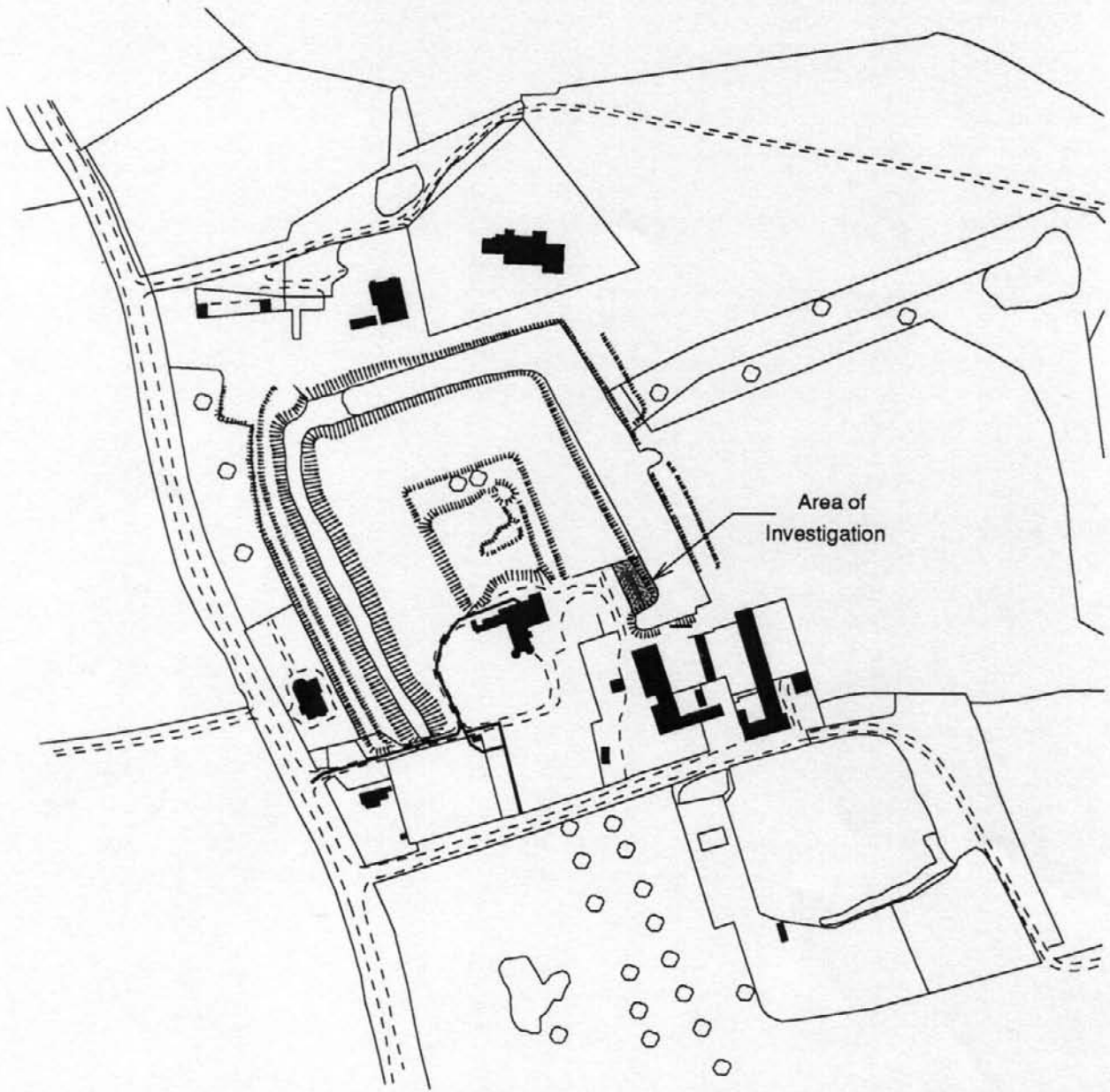
This would allow for the reduction of the height of the moat edge and provide at least a significant part of the view of the moat that was originally required without causing damage to any Tudor or pre-Tudor deposits. It would also partially reinstate the original Tudor slope to the moat edge.

Kirtling Towers

TL6890 5780



Figure 1



Area of Investigation

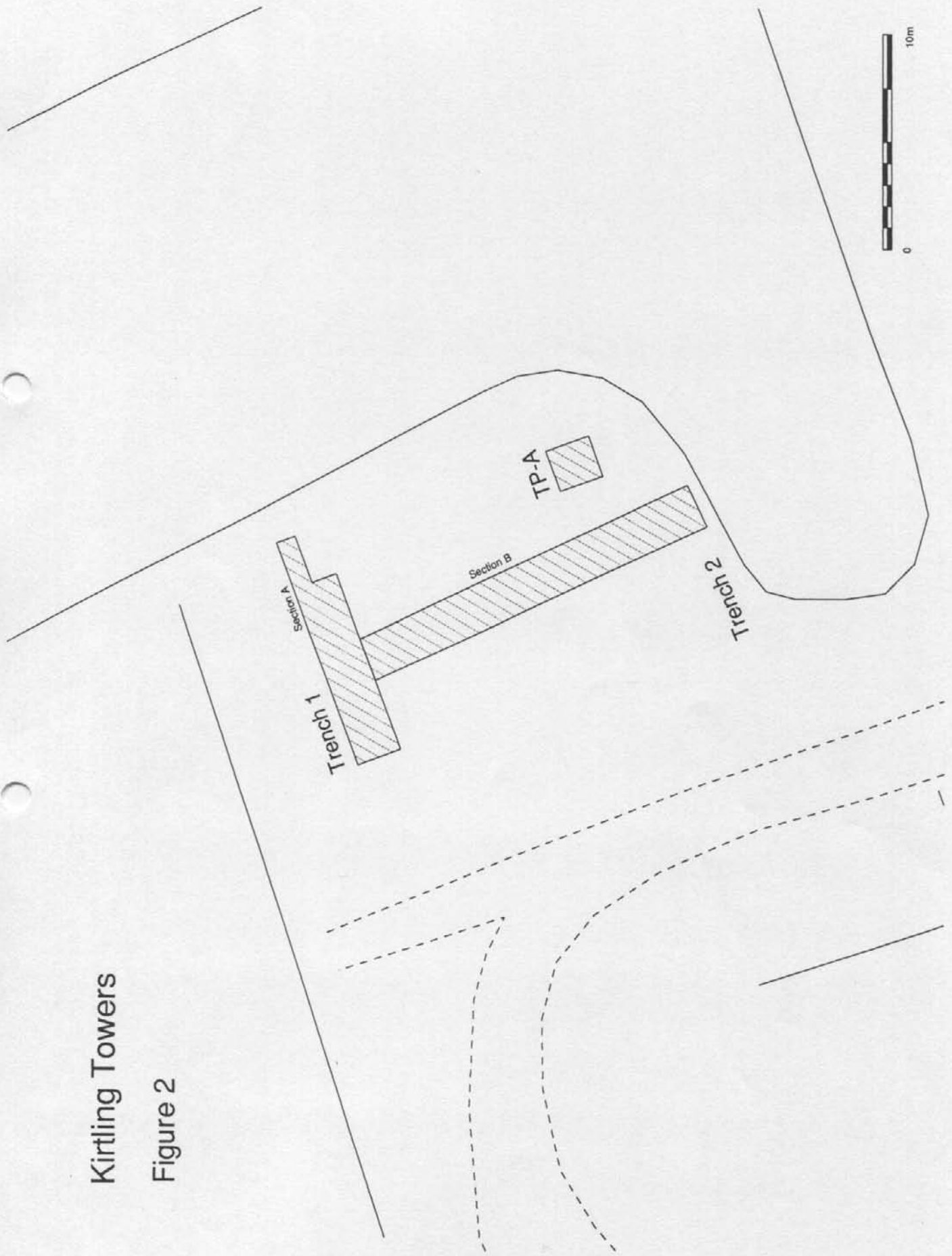


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Kirtling Towers

Figure 2



Context List

- [001] - [023] Service Trenches
- [024] Very loose, mottled, very dark grey-brown silt. Occasional small chalk pea-gravel, frequent charcoal flecks and lenses and some patches of lighter clayey-silt. Very humic. Frequent pot and bone.
- [025] Dark olive grey silty-clay (70:30) with frequent iron-oxide formation, very occasional flint gravel and stones and occasional charcoal flecks. Deposit is fairly compact. Occasional bone and pot.
- [026] Dark grey clayey-silt (10:90) with some chalk and flint gravel (0.5-3.0cm). Frequent small brick fragments and occasional large brick and tile fragments. Occasional large brick masonry fragments. Brick, tile, post-medieval pot, glass and masonry fragments.
- [035] Light olive-grey silty-clay (60:40) with frequent chalk gravel and some chalk and flint stones. Very mixed and compact with occasional small to medium brick fragments. Occasional brick
- [036] Medium brown-grey clayey-silt (15:85) with some chalk pea-gravel. Occasional very small brick fragments (<0.5cm) and occasional charcoal flecks in lower deposit. Occasional brick
- [037] Mixed deposit of [036] and [043].
- [038] Post-pipe for inner revetment.
- [039] Mid brown-grey clayey-silt (20:80) with frequent small chalk and brick fragments. Occasional small rounded flint gravel. Brick fragments and a glass wine bottle.
- [040] Post-pipe for outer revetment.
- [041] Mid grey-brown silt with some clay (<5%), frequent small chalk pea-gravel, and occasional very small brick fragments. Lower fill is very mixed with patches of natural.
- [042] Possible retaining plate set on side of bank facing moat.
- [043] Same as [035] but fewer and smaller brick fragments.
- [044] Mid brown-grey silty-clay with moderate chalk pebbles, occasional sub-angular flints, and occasional charcoal flecks.
- [045] **Reuse**
- [046] Dark brown-grey clayey-silt with occasional sub-rounded and angular flint gravel, small chalk pea-grit and moderate charcoal flecks.
- [047] Possible cut of shallow medieval pit.
- [048] Red brick (5X22X10cm) bonded structure with hard whitish yellow sandy mortar. Four courses remaining but no foundation. Probable garden wall.

CAU (DRAFT)

- [049] Cut for base of [048].
- [050] Mixed grey and orange mottled silty-clay with charcoal flecks, brick fragments, and small sub-angular flint gravel.
- [051] Vertical cut through the section. Modern land drain.
- [052] Unbonded red brick (5X10cm) structure. Bricks are laid on edge and closely packed in rough rows, but left unbonded. Possible foundation for garden ornament.
- [053] Cut for [052].
- [054] Pale brown-grey silty-clay with frequent small brick fragments, frequent small chalk fragments and moderate charcoal fragments. Fill around [048].
- [055] Medium brown-grey clayey-silt (15:85) with some chalk pea-gravel. Occasional very small brick fragments (<0.5cm) and occasional charcoal flecks in lower deposit. May be equivalent to [036]. Occasional brick