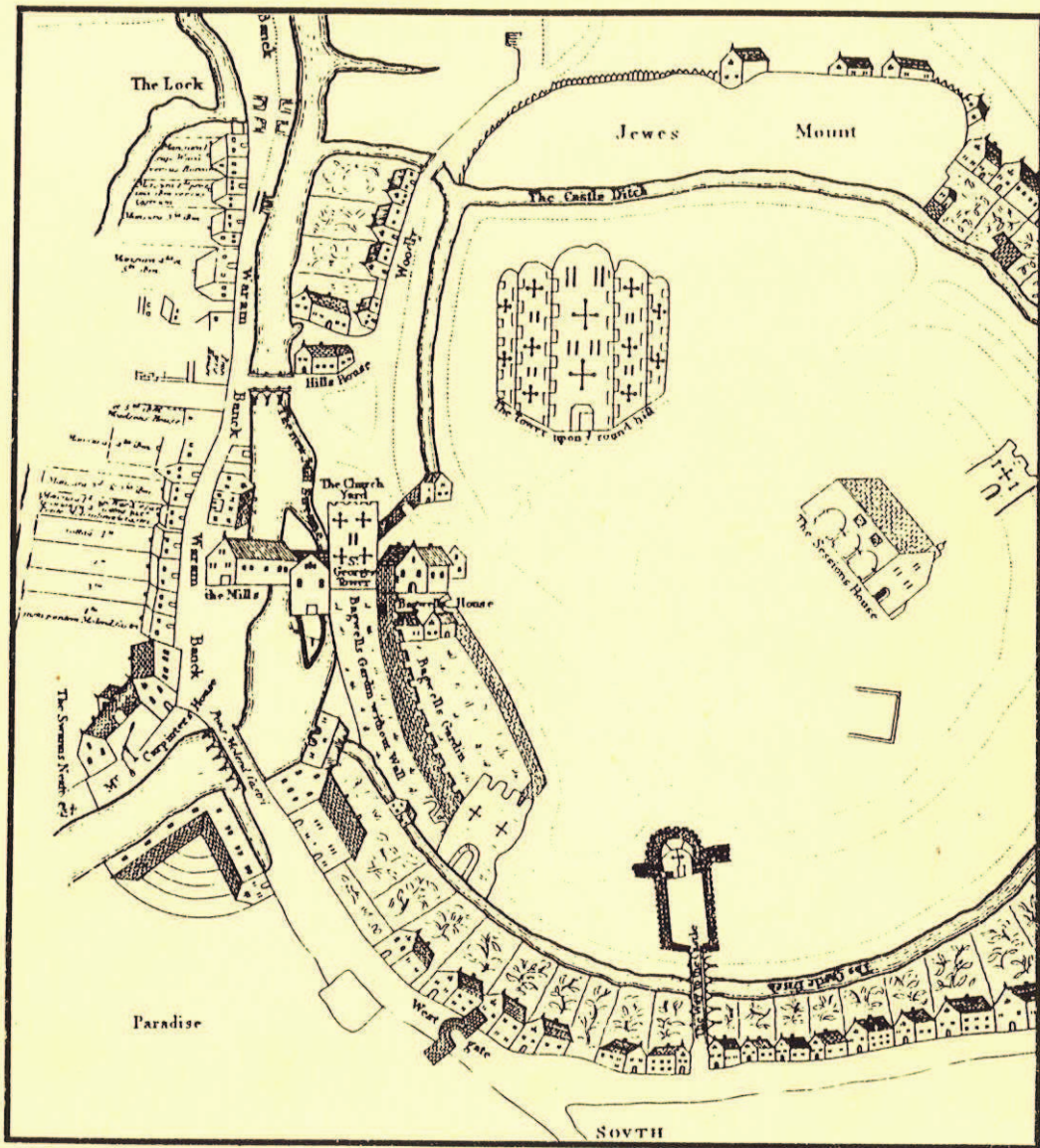


FORMER TWA DEPOT PARADISE STREET OXFORD

AN ARCHAEOLOGICAL EVALUATION



JULY 1991

THE OXFORD ARCHAEOLOGICAL UNIT



PARADISE STREET, OXFORD.

FORMER TWA DEPOT, (PARADISE ST BUSINESS CENTRE)

ARCHAEOLOGICAL EVALUATION JULY 1991

Summary An archaeological field evaluation in advance of development at Paradise Street, Oxford, exposed two stone-sided watercourses. One followed the line of the castle ditch shown on 17th-century plans, the other veered away from it obliquely as if providing a water supply to houses on the the abutments of the Swan Bridge. Beneath the silts of the castle ditch was a wattle-sided watercourse which may have been on the midline of the medieval ditch. It is conjectured that the water in the main ditch was flowing towards a building shown in 1617 with two culverts opening into the Castle Mill Stream, and which may therefore have housed the sluices which would be needed to control water level in the ditch.

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INTRODUCTION

In July 1991 an assessment was carried out by the Oxford Archaeological Unit (OAU) on behalf of Oxfordshire County Council. The research was based on a specification provided by the Deputy County Archaeologist, responding to proposals for redevelopment of the site as offices for the Council itself. The site is the former Thames Water Authority depot on Paradise Street, immediately adjoining the wall of Oxford Prison (Fig.1).

TOPOGRAPHY

The site lies on the E side of the Castle Mill Stream branch of the Thames, fronting onto Paradise St and the abutment of the

Swan Bridge, with the wall of Oxford Prison to the N including St Georges Tower and the site of the medieval castle. On the E the site adjoins a small electricity substation and a car park for the Simon Community Hostel.

The site is approximately 0.75 hectares, at a height of approximately 57 m O.D. It has been used for light industrial activity for around the past 50 years and previously as a garden.

The natural subsoil on the site was gravel, the same as the gravel peninsula on which Oxford is built. This was not visible in Trench 1 because it had been removed when the Castle Moat had been created.

ARCHAEOLOGICAL BACKGROUND

The County Archaeologist has outlined the background of previous investigations in this area.

The term 'Paradise' comes from the name given by the Franciscan friars to one of their garden, part of the extramural property which they began to acquire in the 1240s. As a route, however, the line of Paradise St must be nearly two centuries older than this, because it led from the medieval west gate of the town over Castle Mill Bridge (Swan Bridge) towards Osney and the west. This route must have been established c. 1072 when the castle was planted on the line of the previous west route of the town, and thereafter it would have carried most of the traffic in this direction until Hythe bridge was built in c. 1200. Road surfaces on this route were seen during drainage operations in the 1970s (PRN 6513).

The site under evaluation lies between this route and the castle, across part of the width of the Castle Ditch. The ditch fill itself was seen most recently in contractor's excavations for the Simon Hostel in 1979 (PRN 6089). The most informative plan of the area is that of 1617, which was drawn to identify a number of properties which were in dispute at that time following the transfer of the castle from the crown to Christ Church two years previously (VCH IV, 298). The college claimed that the width of the castle ditch, including the counterscarp of the inside and various cottages built on the outer bank of the ditch, was included in their acquisition. They were successful in several subsidiary claims, but the commissioners decided that the ditch belonged to the City, which means that sites within its area should appear in the various printed works relating to city property, such as H. E. Salter, Oxford City Properties and the Schedule of the the Property of the Mayor, Aldermen and Citizens of Oxford. There is no reference to the present site however, which is particularly surprising because it is clear that there are several buildings on the property, one of which appears to be a sluice house where the ditch opens into the Castle Mill Stream, the maintenance of which must have been a matter of importance between the town and the castle.

In view of the commissioner's decision it is clear that the ditch was traditionally part of the 'waste' of city, probably from as early as 1199 when the burgesses acquired the fee farm of the

borough of Oxford from the king in return for an annual payment. A further search for documentary references therefore takes us back into the medieval period. The property seems to have been in the parish of St Thomas, and although the medieval cartulary of Oseney Abbey includes the bulk of the property in St Thomas' parish, H. E. Salter has not recognised any charter relating to this site (Cart. Osen. II 380). Perhaps it is amongst the many unidentified charters which he publishes, but is also possible that the building shown in 1615 on the N abutment of Swan Bridge was built after the Dissolution and therefore might not appear in any of the cartularies.

A brief prepared by the County Archaeologist notes that an excavation on the S side of Paradise Street revealed traces of cob buildings dated to the 12th century, but then a hiatus in building evidence until the late medieval period. The upkeep of Swan Bridge was regarded as the King's responsibility in the 13th century, and it is depicted on Agas' map of 1578. There are buildings depicted on both sides of the road, and also a building on the site of the supposed sluice house shown in 1617. By the latter date a ditch or inlet has appeared on the S side of the bridge, between it and the building, and it is this inlet which is argued below as the outfall of the stone culvert found in Trench 2 of the present evaluation.

ASSESSMENT STRATEGY (see Fig.2)

The assessment strategy set out by the County Archaeologist was based on a single trench in the centre of the site, which would have caused serious inconvenience. An alternative layout suggested by the County Architects was adopted, with two trenches aligned across the castle ditch, which contribute to a profile of the archaeological deposits of the ditch as a whole. The sample was approximately 2% of the surface area of the site. Trench 1 to the NE and Trench 2 to the S were each started with a small 360 degree mechanical excavator down to a depth of 1.2 and 1.4 m. respectively, to a maximum length of 3.8 m. and 3.4 m. and width of 2.8 m. and 2.5 m. (Fig. 2).

The layers were excavated by hand below the depth of mechanical excavation to determine their nature and depth and to recover dating evidence. The spoil from the mechanical excavation was monitored to recover finds. The features encountered were planned and their sections drawn when they were excavated.

RESULTS (Figs. 2, 3)

Archaeological Deposits (see also Appendix 1 for detailed descriptions)

Trench 1 contained modern garden deposits (105, 107 etc.) over moat silt (107-111 etc.) with the footings for the Prison wall abutted by a later wall (114). There were two, possibly three, revetments for late canalised water courses on the line of the castle moat. The deepest was a wattle revettement (123), followed by a single squared timber and then a battered wall of three courses (116). The wattle bank was the S side of a channel

while the others were apparently N banks. (fig.3)

Trench 2 contained, under the garden deposits (202), dumped deposits 203-206 overlying the S bank of the moat, with finds of 18th-century and later date suggesting cleaning of the bank or demolition and levelling of the site.

Beneath the dumped material was a large stone culvert or drain oblique to the main ditch line, which may have fed the inlet of the river on the S side of the bridge shown on the 1617 map of the Castle.

Finds

In total 57 sherds of pottery and tile and 32 pieces of bone were recovered.

The pottery in Trench 1 ranged in date from early 19th-century at the top down to late medieval or early post-medieval in the deeper levels associated with wall 116. There was no dating evidence with the deeper channel reveted by wattles 123.

There was much less pottery in Trench 2, but a small group from the destruction levels of culvert 208 suggested an 18th-century date for its abandonment, and there was a strap handle from a medieval jug, perhaps 13th-century from a S Oxfordshire source, in 207 which had been cut for the insertion of the culvert.

COMMENTS ON THE RESULTS

This is the first time that a prior archaeological evaluation has been carried out on the line of the castle ditch at Oxford, and the results are of considerable interest. OAU submitted a low bid for the work on the assumption that the trenches would find relatively undifferentiated fill layers. This view resulted from a watching brief on the Simon Hostel site which adjoins to the west, and the extensive salvage excavations which were done on the E barbican ditch and the eastern side of the castle ditch when the Westgate Centre and the new County Hall were built in the 1970s. This work had shown no special treatment of the bottom of the ditch, and the evidence of stone-lined channels in both trenches was therefore a surprise. It may prompt a reconsideration of how the water in the ditch was being managed, and could mean that the term 'ditch' is no longer relevant, since the evidence of water management may be sufficient now to describe it as a true 'moat'.

The topographical sources (e.g. cover, Figs. 1, 4 and 5) show that the site is on the outer half of the ditch in its medieval form, because the line of the present prison wall is clearly the result of encroachment, bringing it to near the centre line of the original ditch (Fig. 1). The sources suggest that by the 16th century the water in the ditch was confined to a stream in the bottom, fed by a head of water created by the castle mill. Two culverts beneath a building just below the mill shown on the 1617 plan are strongly suggestive that this was a

sluice house, giving the option of raising the water level in the ditch as a whole (Cover).

None of the sources suggest that the ditch had been seriously obstructed by dumping of rubbish, as seems to have occurred around the town ditch, so there is no particular reason to think that it had the same degree of scouring as the town ditch in the preparation for the siege of 1646. Indeed it seems possible that the outline of Thos. Bagwell's garden is broadly unchanged by the Civil War, meaning that the stone retaining wall in Trench 1 (116) could have been fronting this garden on the outside of the castle wall. So the ditch could already have been reduced to half its width by the beginning of the 17th century, well before the building of the castle in the late 18th century.

The lowest course of stonework of Wall 116 is at 54.95 m. OD, which is identical to the floor of the Trench 2 culvert leading out obliquely towards Paradise Street (Fig. 3). In the absence of any substantial dating evidence, the construction techniques and stone type of the Trench 2 culvert would indicate a medieval date perhaps as early as the single sherd from behind it (ie 13th-century) and this would suggest that the water level in the main ditch was already being maintained at a level which would cause water to flow in this side channel.

Does this mean that there was a barrage with sluices at the end of the castle ditch in medieval times? The history of sieges at Oxford would argue that the ability to inundate the castle ditches would have been recognised as a major defensive factor from at least as early as the 1130s, and since the evidence of sluices appears well before the emergencies of the 17-century Civil War it is likely that they were an established part of the medieval castle. Perhaps therefore the small building shown on the line of the water in the castle ditch was a sluice-house for the side channel, because it is in the right relationship to the S wall tower in the prison for it to have been at the intersection of the side culvert with the main ditch channel.

On the new evidence it seems likely that the model of a managed stream in the bottom of the ditch would work for much of the life of the medieval castle, and the wattlework seen at the deepest level in Trench 1 was retaining the outer edge of such a stream.

RELIABILITY OF FIELD INVESTIGATION

This two-per-cent sample has produced structures more significant than had been expected, and it is important to decide whether this is a coincidence or whether any other trench location would have been equally productive. The logical basis for such a decision is as follows:

The important results relate to water management, and it is possible that

- 1 there could be further side culverts each feeding properties lining Paradise St;

2 the main water channel may follow the line of the prison wall, and show itself to be stone-lined throughout its length;

3 The building shown in the area of the intersection of the two channels may survive

4 the building fronting the street and the bridge from the 17th century onwards may survive

5 the so-called sluice-house and associated barrage may survive

The net result is that the results of the assessment trenches may slightly overstate the extent of major structure on the site, but not disproportionately, and the potential of finding further significant structures distributed over the site cannot be ignored.

RECOMMENDATIONS

In view of the general disruption which normally arises in the diversion of a major sewer, and the ground disturbance needed to clear obstructions to normal builders' piling operations, it is clear that most if not all of the structures identified above will be affected by the redevelopment on this site. It is however possible to recognise two areas where this threat affects structures which could be said to be of particular significance in relation to the castle, ie the two putative sluice houses. Each is likely to have the remains of one or more phases of timber sluice mechanism, which would be well preserved by the same waterlogged conditions which preserved the wattles in Trench 1.

In the particular case of the Paradise St site therefore it is possible to see two priorities for further archaeological investigation:

Recommendation 1 Excavation to find the intersection of the stone culvert with the main watercourse, and any sluice/sluice-house;

Recommendation 2 Excavation of the site of the supposed main sluice house and any associated earth barrage forming the bank of the Castle Mill Stream, where it lies within the corridor of the proposed sewer diversion.

In both cases there would be a case for prior excavation. The fieldwork for Item 2 could probably be done at any time, subject to relocation of some parking spaces.

Item 1 would need to wait until the existing business centre buildings had been demolished, but if as seems likely the demolition came before the rerouting of the main sewer, then Item 1 could be done while the sewerage works were under way, with no delay to the main contract.

ILLUSTRATIONS

- Cover Detail from a plan of Oxford Castle dated 1617 (VCH Oxon IV, 298).
- Fig. 1 Location of the site, based on OS 1:500 dated 1876
- Fig. 2 Plan of trenches and principal archaeological features.
- Fig. 3 Sections through moat deposits: A. composite N-S section through Trench 1 deposits; B. N-S section through Trench 2 deposits (section of culvert fill 211 etc drawn at rt. angle to line of culvert).
- Fig. 4 Ralph Agas' map of Oxford from N, 1578: detail of castle area.
- Fig. 5 David Loggan's map of Oxford, again seen from N, 1675: detail of castle area.

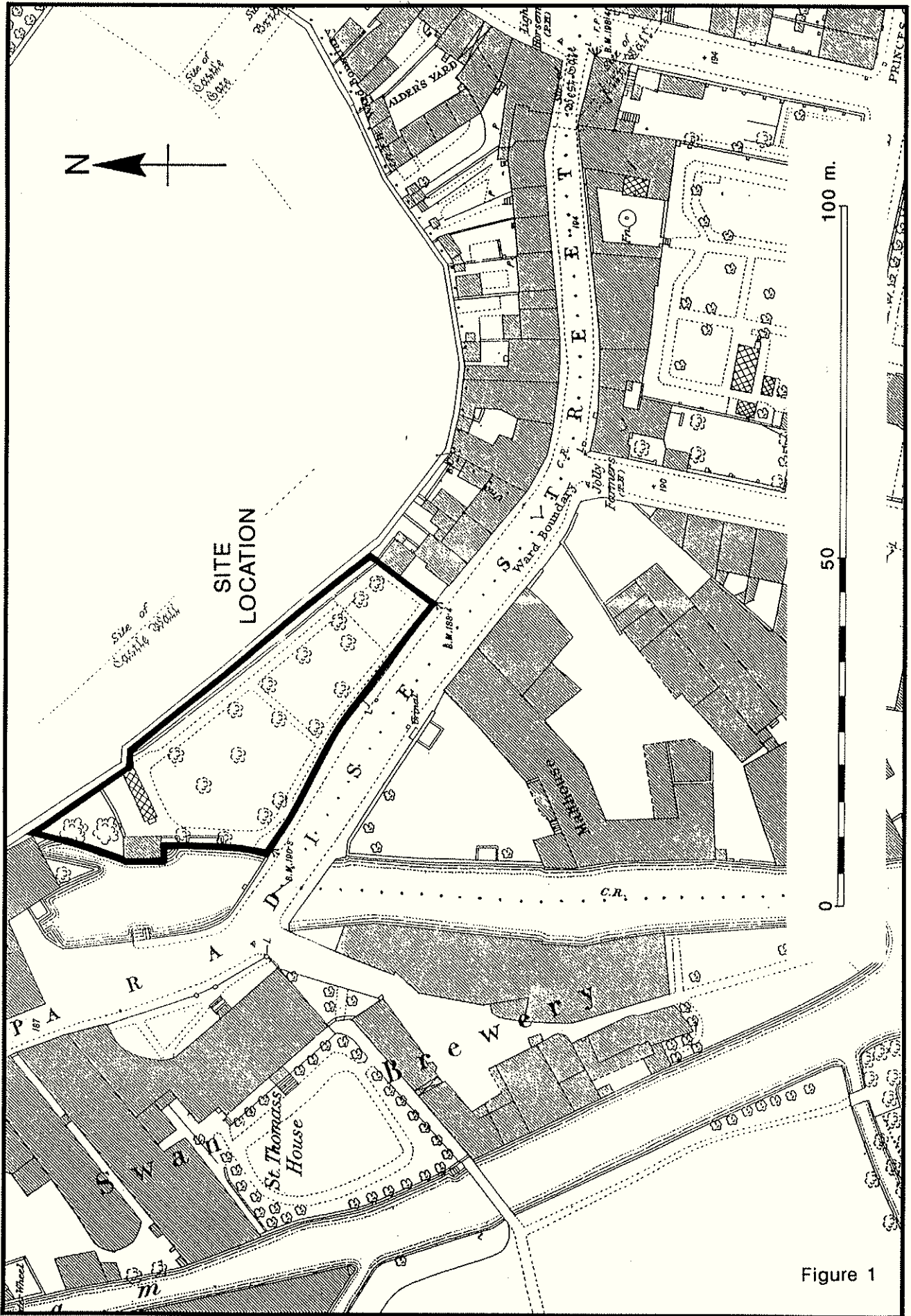


Figure 1

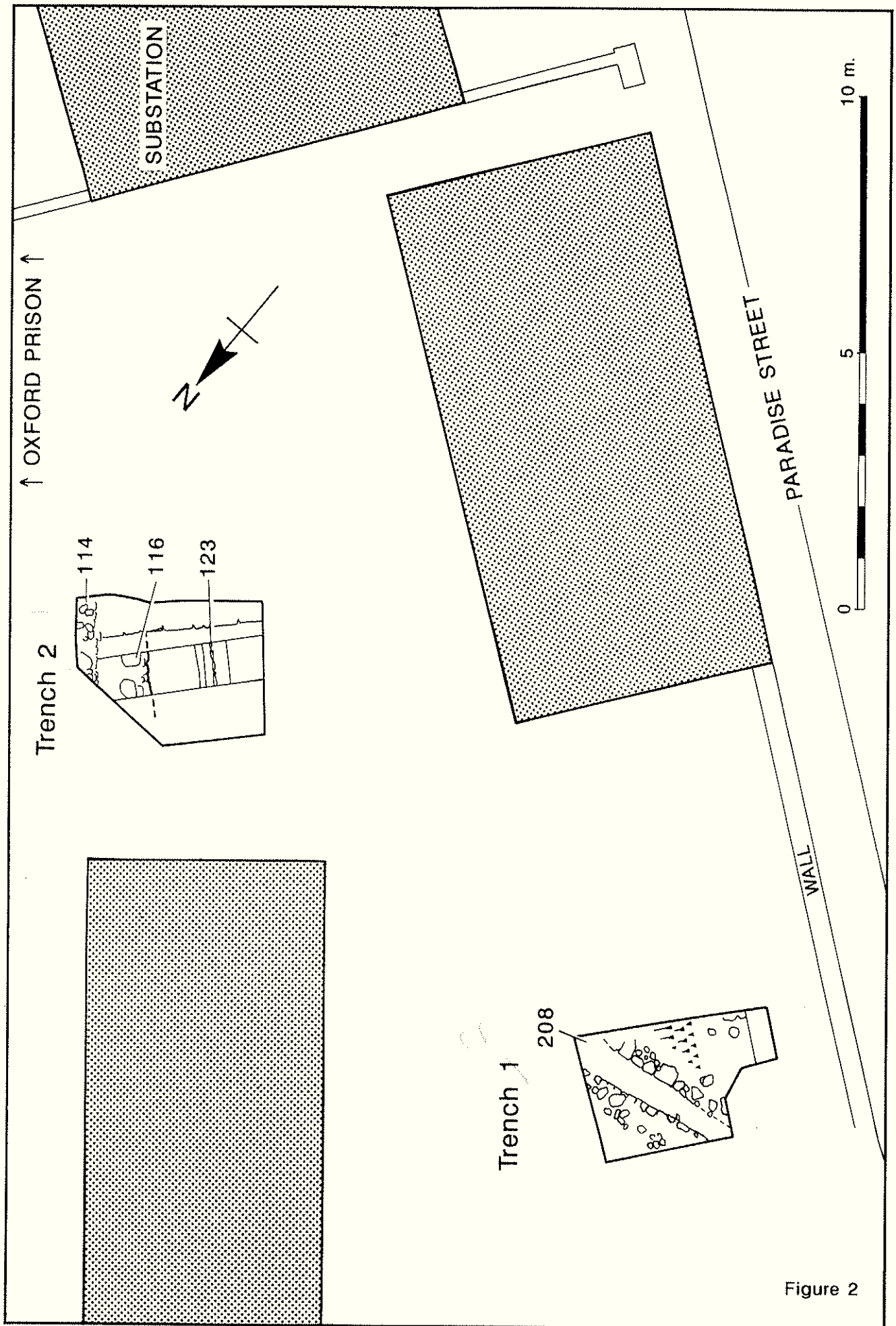
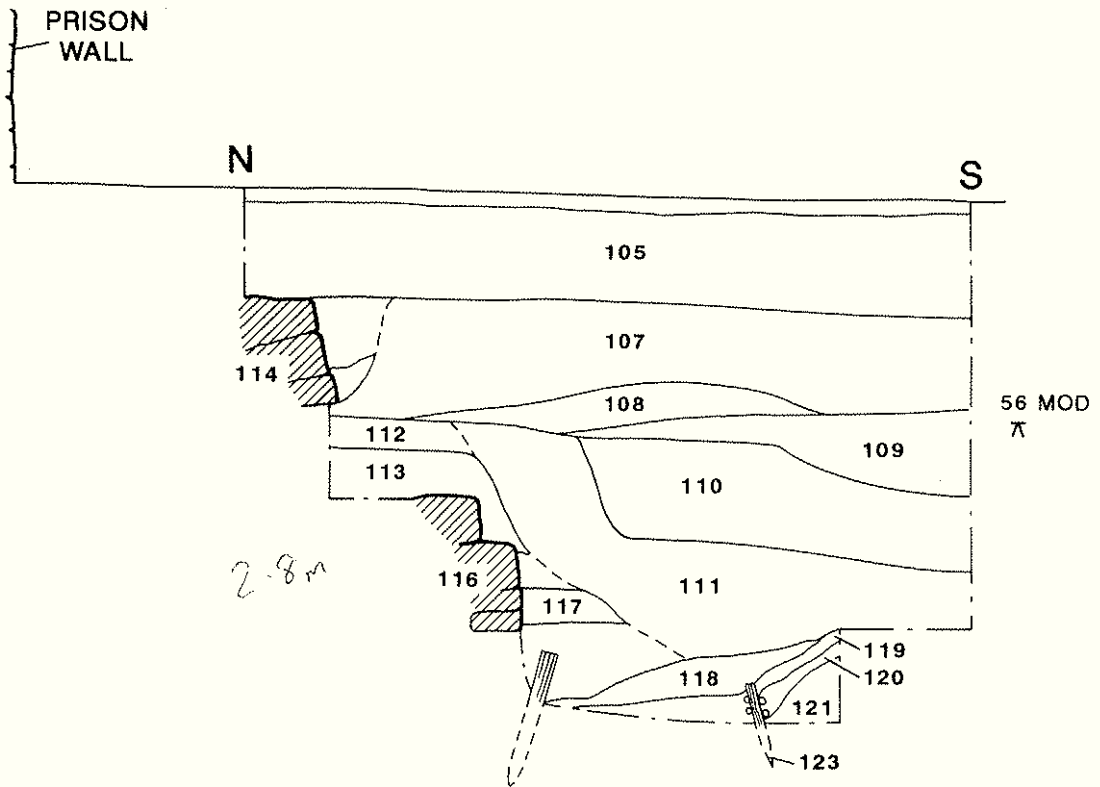


Figure 2

Trench 1



Trench 2

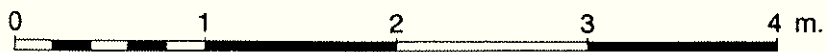
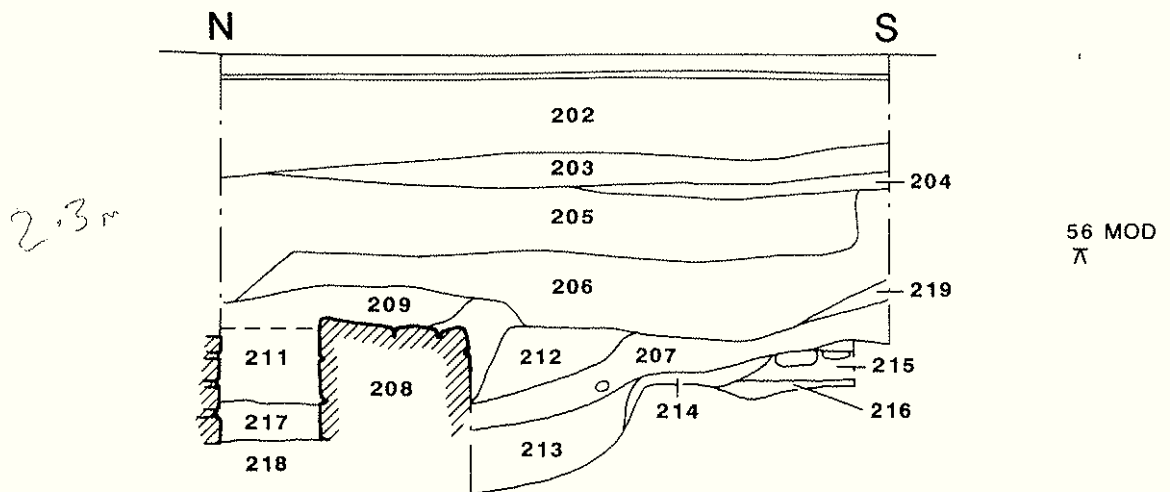


Figure 3

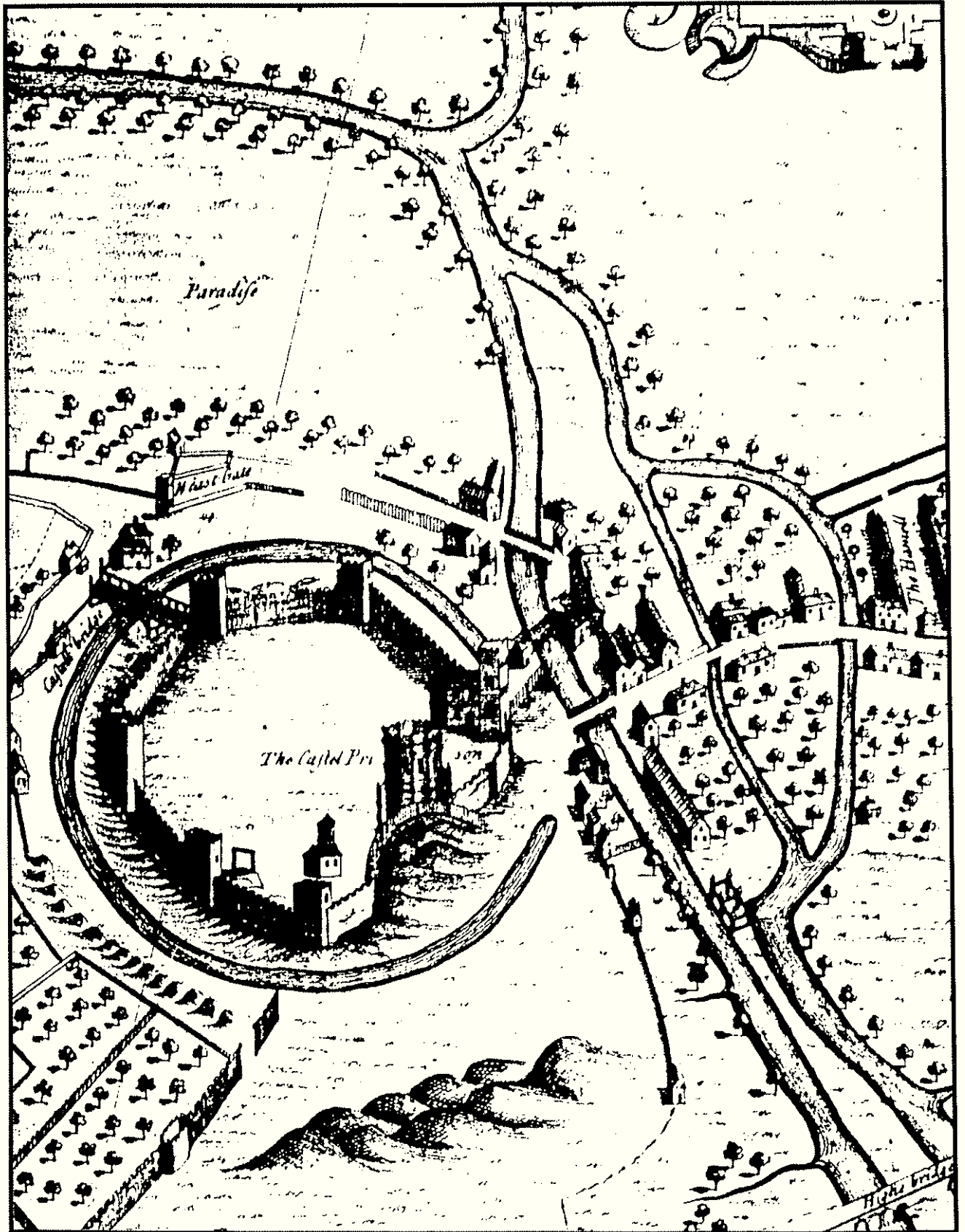


Figure 4

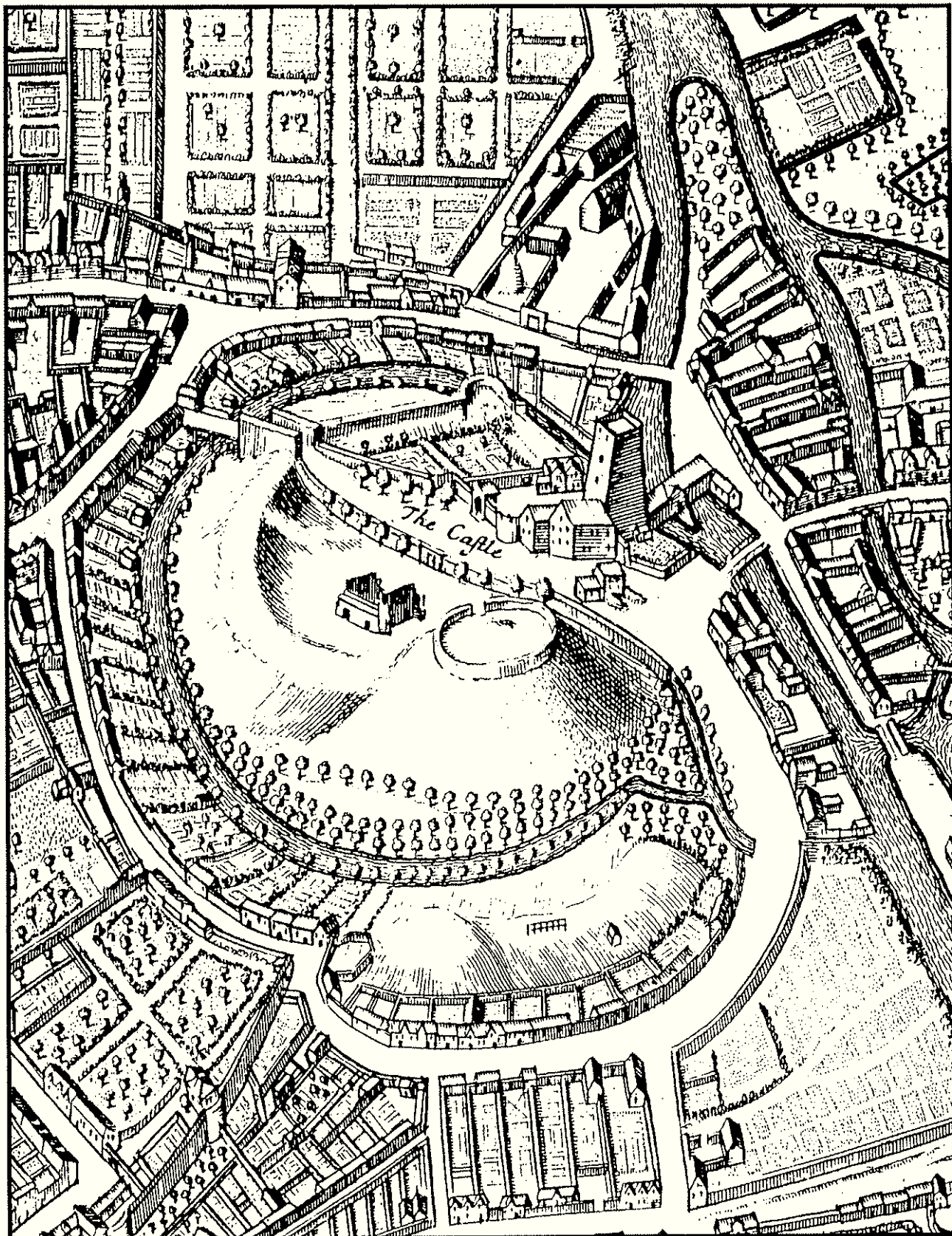


Figure 5

Appendix 1

Trench descriptions

Trench 1

This trench was 3.8 m long and 2.8 m wide. It was excavated to a depth of 2.8 m, 1.4 m was removed by mechanical excavator and the remainder was hand excavated. The trench was 1 m S of the base of Oxford prison wall.

The area of the trench was currently used as a car park and the uppermost layer was a tarmac surface 101. Below this was evidence of gardens: two paths 102 and 103 made of rubble and gravel inside limestone kerbs. These were surrounded by garden soil 105.

Below this were silt deposits 107 to 109. These were probably cut by the construction of wall 114 which are the footings for the prison wall and a wall 115 constructed at right angles to and abutting 114. 115 had been robbed and only one course of footings remained. These stones were quite large and were probably left in situ because their size made them too difficult to move.

The silt layers extended for some depth becoming progressively more waterlogged, 110 and 111. These layers overlay peaty layers 112 and 113 on the top of a roughly coursed bank revettement 116 which had a slight batter of 70 degrees. This revettement was also abutted by 117 a peaty layer at the base of the revettement. An upright squared timber was directly underneath 116 and this may represent an earlier bank revettement of wood on the same line as 116. The silting pattern of the layers above 116 also suggest a channel/ water course with its N edge on the line of 116.

There was evidence for one earlier bank revettement to the S of 116. This was a line of wattle 123 containing a peaty bank 121 which was overlaid by a pale grey clay 120 and a peaty layer 119. This channel was filled by grey-brown peaty silts 118 and 122.

Trench 2

This trench was 3.4 m long and 2.5 m wide. It was mechanically excavated to a depth of 1.4 m and then hand excavated to a total depth of 2.3 m.

The car park surface over this trench was concrete 200 over limestone hardcore 201. This overlaid garden soil 202. this overlaid a series of silty (dumped?) layers 203 to 206.

These layers overlaid the destruction layer 209 over a large drain or culvert 208 aligned NE-SW. 208 was 1.8 m wide and in excess of 0.80 m deep. It narrowed noticeably to the S. The top layers of the walls were of flat slabs of stone possibly for levelling the walls for flagstone capping. No evidence was seen for a roof for the drain. Its fills 211 and 217 were hand excavated but few finds were recovered. The floor of the drain 218 was of mortar and iron-panned gravel.

To the S of the drain were gravelly silt layers overlying a natural gravel bank. 212 overlaid 207 which extended over all the layers over the bank. The deepest and furthest N bank was

filled/overlain by 213. This overlay 214 a very gravelly layer containing some large blocks of limestone which overlay a flat area of natural gravel. To the S of this were two layers 215 and 216 which may have formed a bank of redeposited material on top of the natural gravel.



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