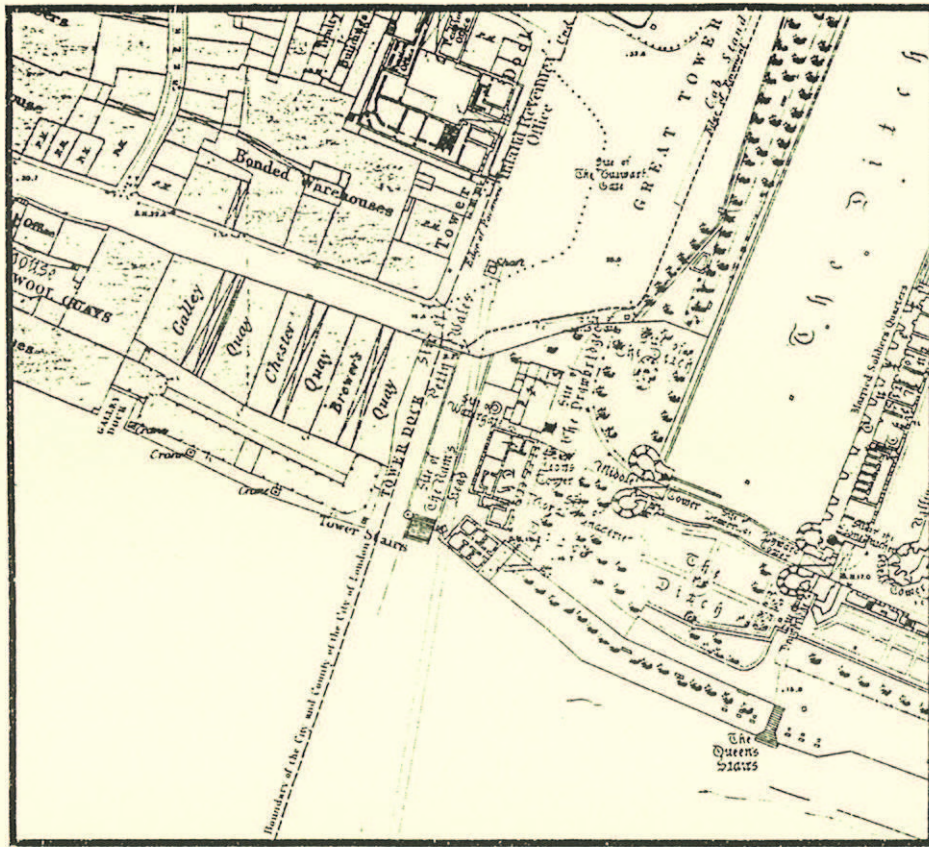


Tower Pier Approach Tower Hamlets, London

Archaeological Watching Brief



Oxford Archaeological Unit

1994

TOWER PIER APPROACH
TQ 33418055
TOWER HAMLETS, LONDON
REPORT OF ARCHAEOLOGICAL WATCHING BRIEF
SITE CODE: TPT 94

OXFORD ARCHAEOLOGICAL UNIT
MAY 1994

SUMMARY

The Oxford Archaeological Unit (OAU) was commissioned by Alan Baxter Associates to undertake a watching brief on building works at Tower Pier Approach, immediately to the west of the Tower of London. The site lies within the area of the Tower Liberties, and is owned by the Tower. The construction work comprised the excavation of 14 pits for concrete pads to support a covered walkway. Most of the pits were shallow, but several had to be excavated to considerable depth because of unstable ground. Archaeological features consisting of brick walls were noted in several of these deep pits. This report describes the archaeology, and relates it to work on Tower Hill West undertaken by the Department for Greater London Archaeology (North) in 1985. It is suggested that the brickwork relates to the Lion Tower or its bulwark and the Tower Dock. As such the features form part of the historic fabric of the Tower of London.

INTRODUCTION

The Oxford Archaeological Unit (OAU) was commissioned by Alan Baxter Associates to undertake a watching brief on construction work at Tower Pier Approach, immediately to the west of the Tower of London at the south end of Tower Hill West (Fig. 1). The construction work comprised the erection of a covered walkway to the Thames waterfront. The existing concrete surface was broken out as the first stage of work, leaving a compacted rubble working surface. Fourteen foundation pits then had to be mechanically excavated with a JCB using a toothed ditching bucket. The pits measured approximately 2.3 m x 1 m, and were intended to be shallow (c. 0.5 m deep). The ground was found to be unstable in several of the pits, however, and this necessitated deeper excavation. This work exposed brick masonry in several places.

English Heritage requested that the first areas of masonry to be exposed should be recorded, and further suggested that a watching brief should be maintained on the rest of the pits (approximately half of them had already been dug at this stage). The watching brief recording began in early March 1994, and was completed in April 1994. This report describes the results, and assesses their significance within the historical context of the Tower of London.

METHODOLOGY

The site was first visited by Graham Keevill of the OAU on 7 March 1994. Subsequent visits occurred on 17 and 21 March 1994, and on 13 April 1994. Records were made of all deposits and structures observed. The positions of observed pits were noted in plan and section, while photographs were also taken. The depth of some of the excavations, and the very unstable nature of the fills, meant that some deposits could not be recorded in detail. The most significant discoveries, however, were fully recorded at all stages.

Each pit was assigned a 'trench' number, from 1-14 (see Fig. 2). Context numbers were then assigned to features, structures and deposits in a continuous sequence as necessary. Some of the pits did not contain significant archaeological deposits, and therefore did not need detailed recording. The most significant results came from pits 6 (with related information in pits 2-5), 8 (with related information in pit 9), and 13.

It became clear during the watching brief that most of the brickwork related to structures of the Tower of London. In particular, the Lion Tower bulwark, built c. 1480 and largely demolished during and after the Great Fire of 1666, was known to lie in the area, while the site also lies on the west side of the Lion Tower moat and on the east side of Tower Dock. The Department of Greater London Archaeology (North) (now part of the Museum of London Archaeology Service) had excavated parts of the bulwark and associated structures on Tower Hill West in 1985 during a programme of relandscaping. The site and post-excavation records and reports for this project (site code THW 85) were consulted at the Museum of London archive on 13 April 1994, again by Graham Keevill. The OAU is grateful to Alan Thompson and the Museum of London for help in this respect.

Results

Pit 6 and related information (Fig. 3)

Brick masonry was exposed immediately below the working surface in, and formed the west edge of, pit 6. The masonry consisted of a north-south wall (2) running parallel to the extant west boundary wall of the approach, and with the east face 0.35 m from the standing wall. A 0.23 m-wide offset was found 0.8 m down from the working surface, with a second 0.18 m-wide offset 1.4 m from the surface (ie 0.6 m below the first offset).

An east-west wall (3) was bonded into 2 at the south end of the pit. Wall 3 was carried over the lower offset. The top of wall 3 lay 0.38 m below the working surface. There was some evidence for truncation of 3 (possible removal of one or more course of bricks), but it seemed that the wall had not been built to the same height as 2. A further feature of wall 3 was that it terminated at the east edge of the pit (immediately below the metal pipe shown on Fig. 3). This was a built termination (ie. the wall had not been cut through).

Both walls continued beyond the maximum depth of excavation (1. m below the working surface). The bricks were hard-fired with yellow-red exterior surfaces. They were typically 220 mm long, c. 120 mm wide, and 60 mm thick. The mortar was light grey and hard. A series of rubble deposits had been dumped against the masonry. The uppermost layers (4 and 5), filling the top 0.9 m of the pit, were obviously modern, and contained large quantities of concrete, bricks and drain pipe fragments in an extremely loose matrix. The lower levels (6 and 7) were slightly more compacted, and generally contained less coarse rubble. Unfortunately there were no finds from the lower levels.

There was some evidence for an earlier surface level in the pit. A cement scar was noted on the face of wall 2 at a depth of 0.32 m. The level of the scar probably corresponded with the original top surface of wall 3.

Wall 2 was noted in several of the other pits along the western side of the approach, notably 2-4. Excavation did not proceed as far as the second offset level in these pits. A water pipe was revealed in pit 1; the pipe extended from the north face and turned through 90° to exit through the west face. The service trench probably truncated the wall.

Pits 8 and 9 (Figs 4 and 5)

Excavation of the northernmost pit (8) on the east side of the Approach revealed brick masonry lying obliquely to the north-south axis of the pit and the eastern boundary wall (context 20) of the site. Only a corner of the masonry was actually exposed within the pit (see Fig. 4, context 18), but the extremely loose fill which had to be removed fell away from the pit's east face to reveal more of the masonry. Thus it was shown that the masonry continued under the eastern boundary wall (see Fig. 4).

The masonry was of a single build. The west face of wall 18 stood 0.12 m proud of wall 22. The south face of wall 18 appeared to return and continue eastward beyond the line of the extant boundary wall (20). This could only be tested by probing through the extremely loose fill (29) against the south face of 18, however, and the physical limitations on recording meant that it could not be proved absolutely that the south face was a built feature rather than a secondary intrusion/cut. Most of the bricks in the face appeared to retain original surfaces, but some were extremely thin (see Fig. 5). This could of course have been a constructional feature.

The north corner of wall 18 incorporated a chamfered stop. This appeared to comprise moulded bricks, although the lowest bricks (incorporating the step) may have been cut to shape.

Wall 22 largely followed the coursing of wall 18. There were some minute variations, but these appeared to result from slight variations in the thickness of the bonding matrix. The major feature of wall 22 was an original opening 0.51 m north of the junction with wall 18 (see Fig. 5). The opening survived to a height of 0.38 m (five courses of brickwork), above which it had been truncated.

The bricks typically measured 220 mm x 110 mm x 55 mm. The fabric was a fairly soft, dark reddish orange, while the mortar was a pale grey to buff, fairly hard sand/lime matrix. The bond of both walls was a simple stretcher pattern, although there was inconsistency in the laying of this within wall 22, and between 18 and 22. Recording wall 18, however, was made difficult by the trench props. The walls were left intact, and no samples were taken.

The pit had been dug to a depth of 2 m (although the bottom of the pit had begun to fill with loose rubble when the section was drawn). Loose deposits of building rubble (brick and tile) lay against the masonry (contexts 29 and 30 - see Fig. 5), but these could not be examined in great detail because of their instability. A sample of brick and tiles was taken from layer 29. Both rubble deposits were in a loose matrix of fairly light grey sandy mortar. A similar but more compact layer (28) overlay 29. These three layers together levelled up and covered the brick walls (18 and 22). There was then a succession of fairly loose rubble layers (25-27 and 31) up to the top of the pit. A modern metal service pipe (24) ran along the east edge of the pit.

Pit 9 lay 3.5 m south of pit 8. It was notable that the sequence of deposits was different in the two pits. The upper levels in pit 9 (contexts 25-7) were broadly similar to the layers in pit 8 (not recorded in detail), but neither any trace of masonry nor the lower, loose mortar rubble layers were present in pit 9. It was noted, however, that the extant eastern boundary wall sat on two offset foundation courses to a depth of 0.4 m below the working surface. Assuming that the same foundation depth was present

throughout, this means that the boundary wall would be separated from the brick masonry (18, 22) in pit 8 by approximately 0.4 m.

Pit 13 (Fig. 6)

Brick masonry was exposed in the west face of pit 13. The fill in this pit was so loose that inspection of the faces had to be undertaken very rapidly for safety reasons. The west face was drawn in section as accurately as possible, and a rough plan was made. The sequence of deposits was recorded in note form at the same time as the section was drawn, and was subsequently transferred to context sheets.

The primary feature in the pit was a 0.25 m-wide brick masonry wall (13), surviving to a height of 0.65 m above the base of the pit. The wall was aligned east-west, and was exposed in section only; the faces could not be examined. It appeared that the wall had been built in a simple stretcher bond; the length of the individual bricks therefore could not be determined, but they were 115 mm wide and 65-70 mm thick with fairly soft, dark, red-brown exterior surfaces.

It is presumed that the wall continued westwards, but how far is not known. There was no equivalent masonry in pit 6 to the west. The wall certainly did not carry on across the pit, however, as there was no sign of it either in plan at the base of the pit, or in the east section. The wall seems to have returned northwards on the west edge of the pit, and a large greensand block (15) appeared to be a surviving quoin at the east end of wall 13. Three layers/lenses of mortar, clay, and mortar again (11, 12 and 13 respectively) running northwards along the pit face (but not extending into the pit in plan) were interpreted as fills of a robber trench which had removed the return wall for 13.

A layer of silty clay (10) with some small fragments of rubble butted against the south side of wall 13. Layer 10 was sealed by a 0.16 m-thick layer of brick rubble (9) which just ran over the top of wall 13. The remainder of the pit was filled with a loose rubble (8) incorporating much brick and concrete. This appeared to be the only layer present in the other faces of the pit, although it was not possible to examine these in detail because of their instability.

DISCUSSION

The 1985 excavations by the Department of Greater London Archaeology (DGLA) to the north of Tower Pier Approach revealed substantial brick masonry structures which quite clearly belonged to the Bulwark. This structure was built c. 1480 as an outwork north and west of the Lion Tower. Much of the Bulwark was demolished during the Great Fire of 1666 in an attempt to create a fire-break to protect the Tower (Parnell 1988). Parts of the masonry, however, survived in a ruinous condition and were depicted in Johanas Spilberg's view of the Tower of 1689.

The DGLA excavations revealed what appeared to be bastions at the north end of the Bulwark, parallel walls representing the west side of the Bulwark, and cellared structures built against the western wall (Hutchinson 1989). The masonry survived in good condition immediately below the modern make-up (later post-medieval deposits had been truncated by road construction etc).

The west wall was exposed in two places, approximately 14 m apart. The alignment provided by these exposures joins up with the north end of the Tower Dock's east side (ie on the opposite side of the Approach to the brick masonry exposed in pit 8). This means that walls 18 and 22 in pit 8 could not be part of the defensive wall as such, unless there was a drastic change of alignment immediately north of the Approach. This seems unlikely, especially in view of the alignment of walls 18 and 22.

There seems to be little doubt that walls 18 and 22 are at least broadly contemporary with the Bulwark. The bricks certainly appear to be of the same type. It is conceivable that the masonry in pit 8 is equivalent to the cellared buildings against the west wall recorded in 1985. The opening in wall 22, and the apparent return (door jamb?) in wall 18 may be significant in this respect. It must be admitted, however, that the alignment of the walls appears to be incorrect. If the western defence did join with the east side of the dock, cellared buildings within the Approach should in theory be aligned parallel to it. Walls 18 and 22, however, are some 12° askew. Poor laying-out of the building during construction could explain this, but it seems unlikely.

An alternative interpretation would see walls 18 and 22 associated with the moat to the west of the Lion Tower. This was built in the late 13th century during the expansion of the Tower by the construction of the Outer Ward and moat. The Lion Tower had its own stone-lined moat to the west (Parnell 1993, 40-1). The contemporary Middle Tower to the east was lined with brick, one of the earliest uses of the material. Walls 18 and 22 lie approximately 2.5 m behind the presumed face of the Lion Tower moat. It seems unlikely that the walls form the rear face of the moat lining, but it is conceivable that they belong to a (cellared?) building cut back into the lining.

The bricks of wall 13 in pit 13 appeared to be typologically early and could be late medieval. The wall ran eastwards (ie perpendicular to the Tower Dock) and returned northwards. It seems very likely that the wall formed part of a cellared structure built against the Bulwark. This location is documented as the site of the Ram's Head inn (see OS 1:1056 map, 1873, reproduced here as Fig. 1B, from Godfrey 1987).

The remaining structures, walls 2 and 3 in pit 6 and the other exposures of wall 2 to the north, clearly relate to the Tower Dock. The north-south wall clearly formed the east side of the dock, and the offsets created a very substantial structure. The base of the wall was not found, but must lie well below the bottom of the pit. Wall 3 was tied in to wall 2, and could either be a simple tie-back, or part of a cellared structure contemporary with the dock.

The character of the brickwork in both walls was different to that of wall 13, 18 and 22. The fabric was harder, the colour was lighter, and the bricks appeared to be more regularly formed. It seemed on these grounds that the masonry was later in date than 13, 18 and 22, but the Tower Dock is shown on plans at least as far as the 16th century (eg Hayward and Gascoyne's survey of 1597). It is possible that the dock walls were substantially rebuilt. The Great Fire and associated demolitions (including of the Bulwark) would provide a good context for this.

CONCLUSION

The watching brief recorded elements of the Tower of London's historic fabric. This included the east wall of the Tower Dock (possibly a post-medieval reconstruction), a structure associated with the Lion Tower moat or the Lion Gate bulwark, and a structure which can be associated with the historically-documented Ram's Head inn. All of the structures were left undamaged *in situ*.

REFERENCES

- Godfrey A 1987, *The Monument and Pool of London 1873 - London Sheet 7.76* (OS 1:1056 map reduced to 1:1760, 1 yard to 1 mile)
- Hutchinson M 1989, *Excavations at Tower Hill 1985* (Museum of London archive report, draft)
- Parnell G 1988, *H M Tower of London: The Bulwark - Documentary Evidence* (typescript note in Tower Hill 1985 archive, Museum of London)
- Parnell G 1993, *The Tower of London* (English Heritage/Batsford)

Graham D Keevill BA MIFA
Oxford Archaeological Unit
May 1994

Based upon the Ordnance Survey's 1:1250 map of 1993 with the permission of the Controller of Her Majesty's Stationery Office. © Crown copyright

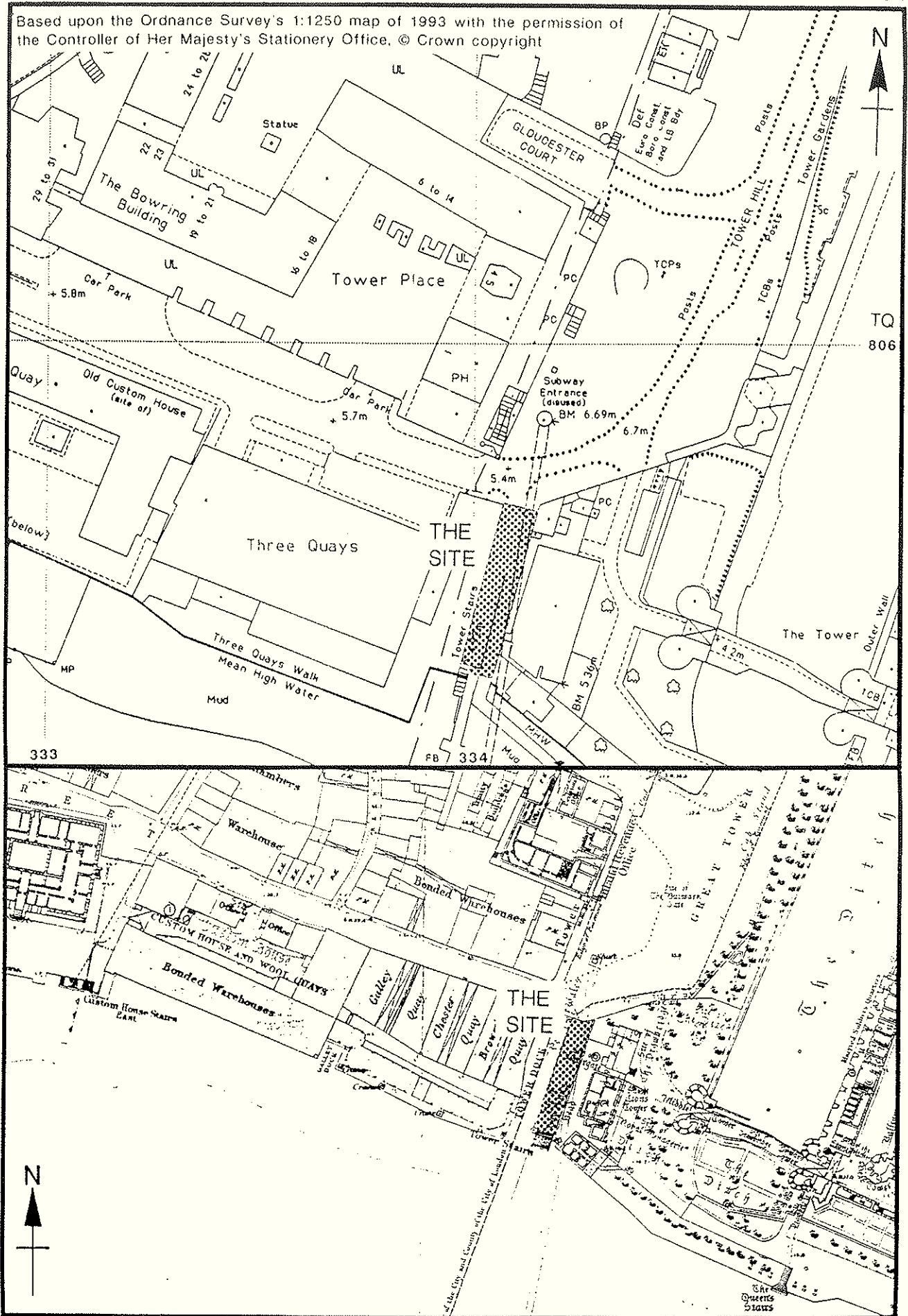
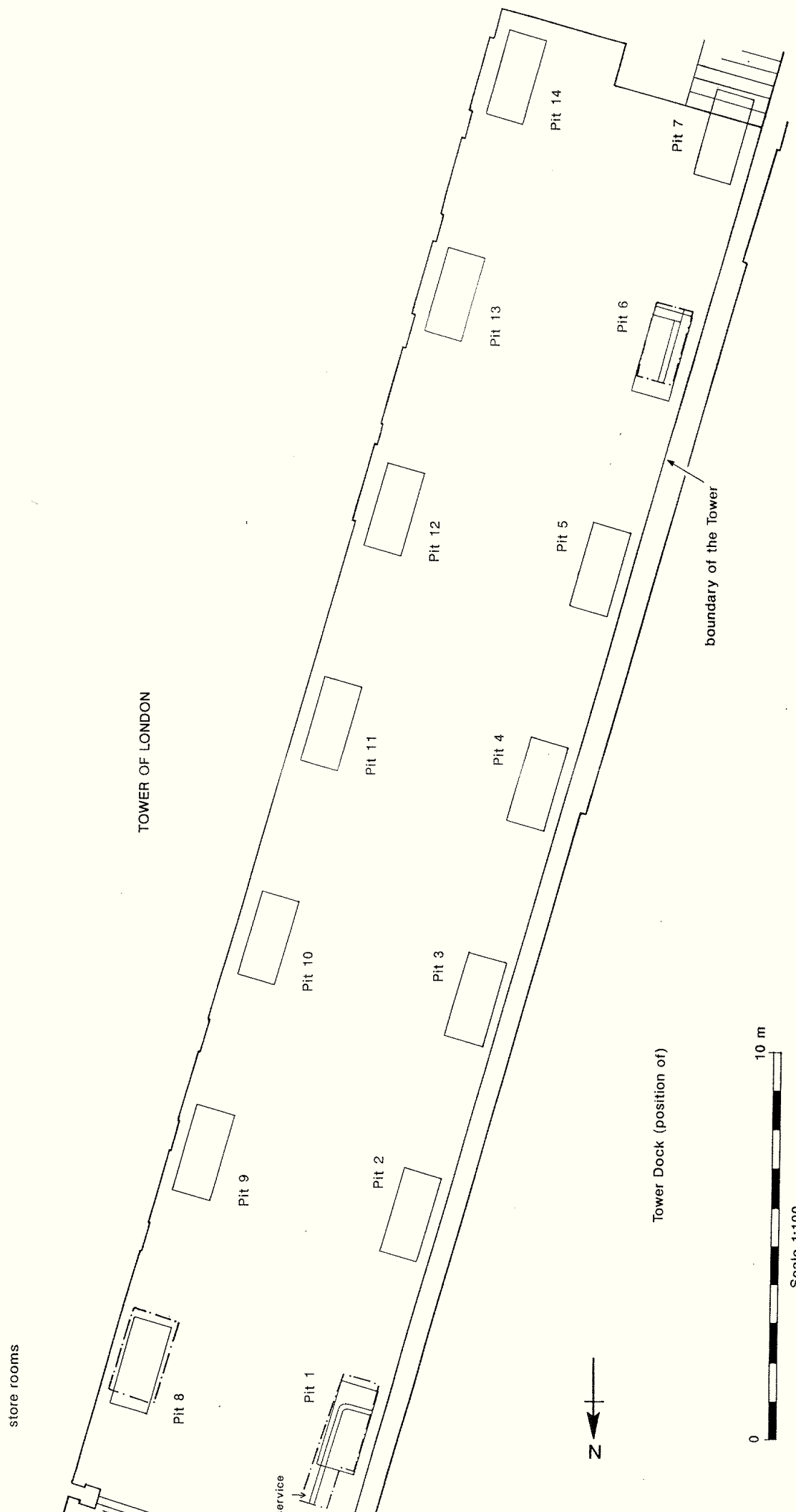


Figure 1A and 1B



Pit 6, plan

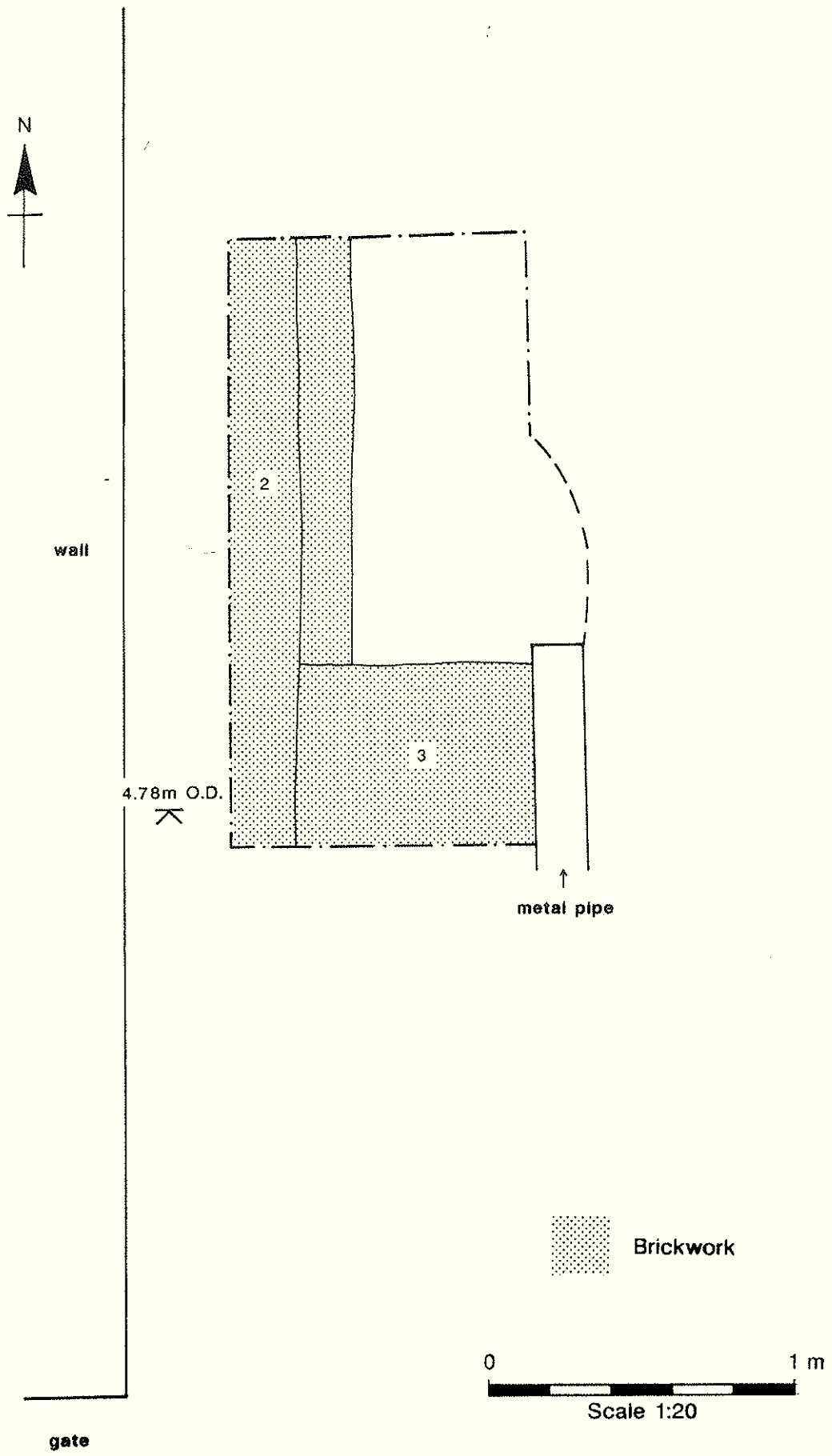


Figure 3

Pit 8, plan

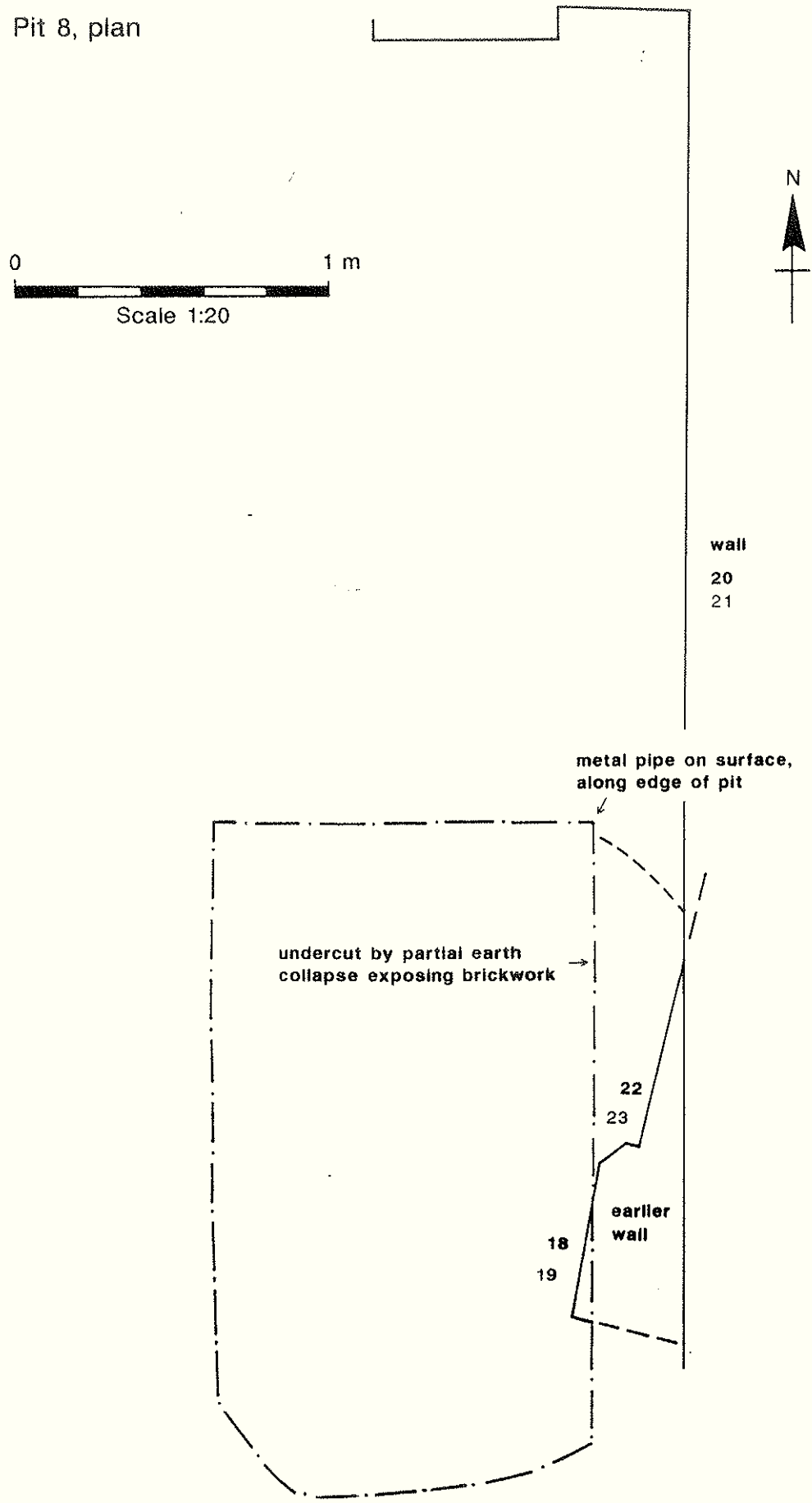


Figure 4

Pit 8, section

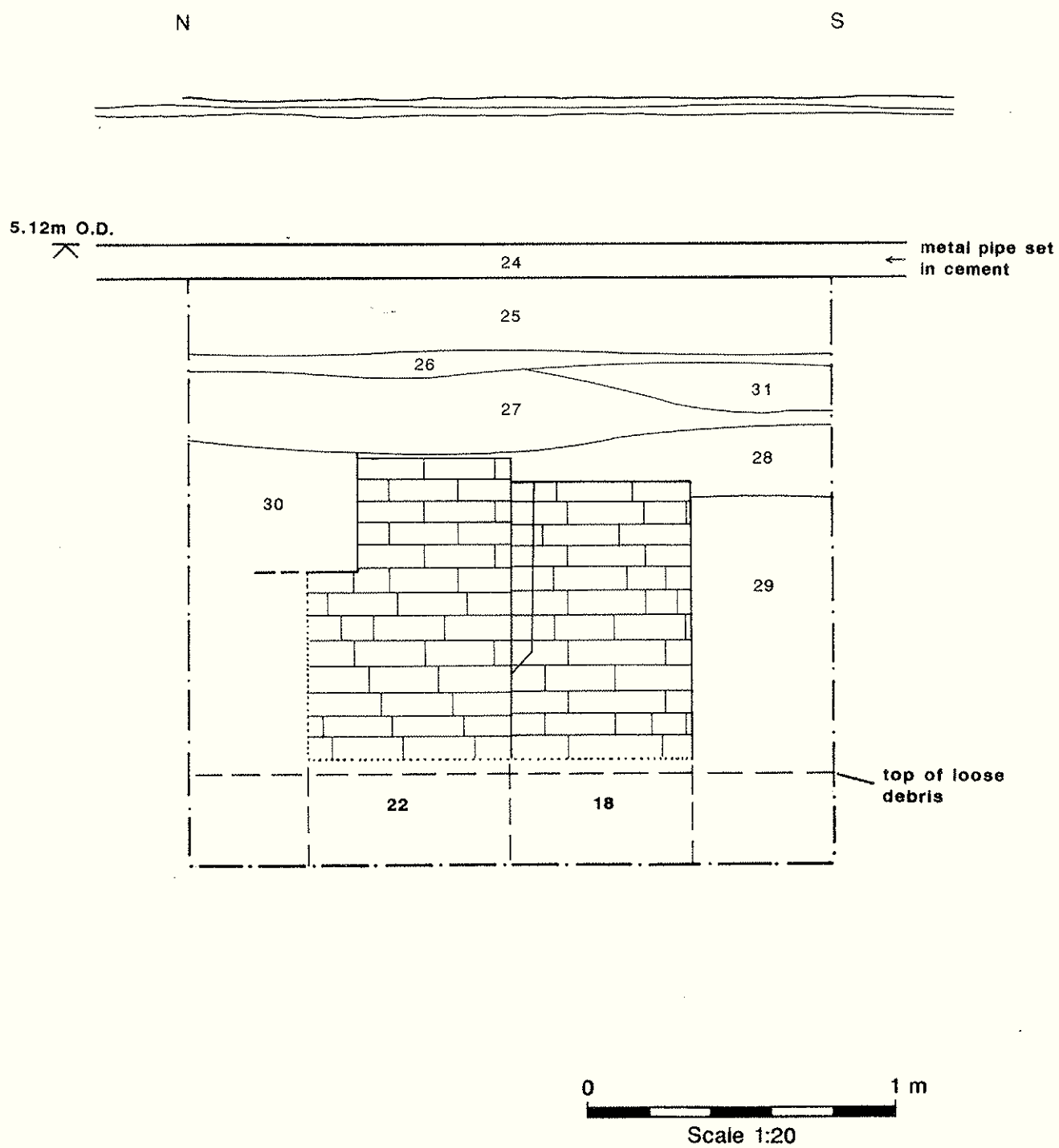


Figure 5

Pit 13, section

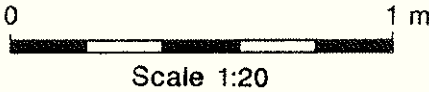
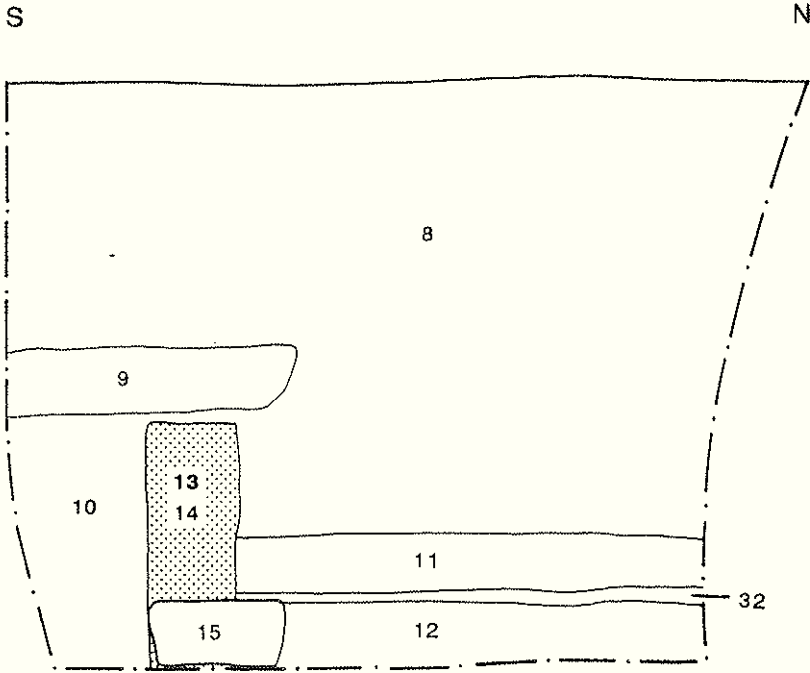


Figure 6



The Oxford Archaeological Unit

46 Hythe Bridge Street

Oxford OX1 2EP

tel. (0865) 243888 fax. (0865) 793496