

AN ARCHAEOLOGICAL INVESTIGATION OF THE
STABLE COURTYARD

AT
HAFOD
CEREDIGION

REPORT NO. 41072

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STABLE COURTYARD

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SUMMARY

Four trenches and four test pits were excavated in the stable yard, Hafod. The excavations revealed that stratified archaeological deposits up to 0.5m thick and dating from the late 18th-century to the 20th century survive across the yard. Deposits are well preserved. Recent use of the stables and yard by work horses has caused little if any damage to the buried archaeology.

INTRODUCTION

Forest Enterprise Partnership has recently submitted a planning application to restore and convert the stables at Hafod, Ceredigion (SN75907330). Because of concerns that new works and reuse would damage buried archaeological remains, Forest Enterprise and the Hafod Trust commissioned Archaeoleg Cambria Archaeology to undertake an archaeological investigation. The purpose of the investigation was to ascertain the character and depth of archaeological deposits and to assess the impact on the deposits that may result from: the reuse of existing drains and or the excavation of new drains; the increased pedestrian use throughout the survey area; access to and from the stables by work horses; vehicles (cars and small commercial vehicles) parking at the southwest corner of the bothy and occasional access to the stables. The report contains an assessment of the fragility and vulnerability of the archaeological remains - the impact assessment. During the winter of 1999-2000 the stables had been used to house work horses. It was noted that the horses' hooves had cut up the turf surface of the yard, but it was not known to what extent they had damaged sub-surface deposits.

In 1999, the stable yard and the stables were reported on by N Ludlow in 'Hafod Mansion: an archaeological audit' a report commissioned by the Hafod Trust. The following extracts are from that report:

Stable yard

Description: The eastern of the two service yards northeast of the house site; it occupies an area of 30 metres ².

The southern wall is complete to the level of its flat coping and is 2.7 metres high; it originally formed the north wall of a conservatory. A doorway with a Classical, semicircular-headed surround, in blue engineering brick, was later inserted through the wall, probably under John Waddingham during the 1880s. The remainder of the wall is featureless although an area of random masonry towards the east end of its north face may represent blocking or alteration, and a flue that formerly heated the wall for the conservatory is apparently present, but was not observed in 1999. The wall formed the south wall of a stable and coach-house range shown on the 1855 and 1870 sale plans; these had gone by the 1880s and there is no physical evidence for their internal walls on the north face, but a linear east-west low earthwork bank, 3 metres north of the wall, represents the north wall of the range.

The yard shares its west wall, which formerly represented the west wall of a range of service buildings. These buildings are here called the west range. The north-south wall between the two yards survives to the level of its flat coping and at 4 metres, is higher than the south wall. It is clear from examination of the 1855 and 1870 sale plans that the wall represents the west wall of a north-south range of service buildings including the dairy and wash-house, and a plethora of blocked openings, including doorways, is visible on its east face. Rather less are visible on the west face, but the central, blocked square-headed doorway with a 'Gibbs surround' is a prominent feature and may be a survival from the pre-1839 wall; there is a blocked doorway with a similar surround at the north end, now forming the end wall of the Bothy. The blockings also include first-floor level windows, some of which are truncated, demonstrating that the wall was lowered and given its present coping after the buildings went out of use, probably under James Waddingham between 1906 and 1932 - the range was still standing in 1906 and is shown on the Ordnance Survey Second Edition.

The east side of the yard is now represented by stable-block.

Management Recommendations: The service yard walls are in fair-good condition with only routine maintenance implications; however, the east half of the south wall is largely obscured by nearby vegetation, in an area where flues from the conservatory may possibly be present. The interior of the yard, now heavily grassed obscuring its surface material, has no defined land-use and represents an area of high archaeological potential with former building ranges along the west and south sides, and a further former building represented by earthworks; the interior thus has high potential for geophysical survey and evaluation. No further action should be taken until a strategic programme of archaeological evaluation has been formulated.

Stable block

Description: The present stable block was a de novo construction under John Waddingham in 1882, commemorated in a date-stone 'J. W., 1882', on the eastern side of the eastern service yard. The building retained nothing from the earlier range of stables and sheds on the site, which are shown on the sale plans of 1855 and 1870 and had probably been built between 1839 and 1841.

It is an 'L'-shaped block comprising east-west and north-south wings of equal size, with overall measurements of 20 metres from north to south and 23 metres from east to west, and walls averaging 3.5 metres in height. Walls are in shale/slate rubble, with Staffordshire engineering brick quoins and surrounds, and the roofs are slated gables with contemporary louvered ventilators.

The northern, east-west wing comprises 5 bays alternately pierced by doors and windows in the south wall, all with semicircular heads; the central window is two-light. The north wall is pierced by a similar two-light window in the east bay,

and a segmental-headed door in the east bay east wall; this east bay is divided from the remainder of the wing, and from the southern wing, by internal walls. This wing housed the stables themselves, from which the stalls have survived from 1882; they are of good quality with iron columns and rails above timber partitions. The west bay features an inserted fireplace in the north wall.

The southern, north-south wing comprises four bays divided into two equal spaces by an internal wall; the west wall is pierced, from north to south, by a door, a window, and two open arches; all have semicircular heads. The east wall, and the gable end walls, are blind.

Management Recommendations: The stable block is in good condition without immediate maintenance implications, and is still in use as a store; it lies in an area with no defined land-use. It has been recently listed. Any future usage should include the retention of all original features and fixtures, and the preservation in situ of the internal fittings from 1882, where this is possible.

THE ARCHAEOLOGICAL INVESTIGATION

The trial trenches

Four main trenches were hand-excavated. They were positioned to provide a good sample of buried deposits in areas potentially at most risk from future disturbance and to obtain a representative sample of archaeological deposits across the yard (Fig. 1). Possible buried features have been located by J Macve of the Hafod Trust (Fig. 2). Notes were compiled by Linda and Roger Hallett in conjunction with Mr D Edwards for the Friends of Hafod in 1999 on oral testimony describing the stables in their final period of use. In these it was stated that a stone cobble floor of the cart bays in the east wing of the stable block led out onto a cobbled apron which adjoined the entire stable block frontage, and that the central area within the cobbled apron was surfaced with shale. A inspection chamber located to the south of the yard for the drains constructed by Waddingham in the late 19th-century shows that a main drain runs back towards the stables, perhaps passing under the gateway in the south wall, though this is by no means certain.

The trenches were positioned with the intention of locating some of these features. Each trench was initially excavated down to the latest surface. Following recording of revealed deposits a portion of each trench (generally 1m x 1m) was excavated down to natural deposits or down to substantial archaeological deposits. In addition, four test trenches were excavated across the courtyard in order to examine the nature of the latest yard surface.

Trenches were located on the previously undertaken 'Hafod Mansion: an archaeological audit' survey (Fig. 1). Plans were made at 1:20 scale. Sections were drawn at 1:10 scale in order to distinguish thin layers of metalling. Each archaeological entity was recorded using Cambria Archaeology's single context recording system. Black and white and colour photography was used. All heights were related to OS data. Artefacts which were

not obviously modern and contained in superficial upper deposits were retained. The trenches were back-filled following excavation.

Trench 1 (Fig. 3; Photo. 1)

This measured 3m by 1m and was excavated across the edge of the yard's entrance track. The northeastern end of the trench lay across the southern edge of the track. The southwestern end lay close to the former wall of the demolished west range. Following removal of the thin and superficial layer of turf and soil (01) a layer of compacted track metalling (02) was discovered at the northeastern end of the trench and a band of loose stone rubble (03) running across the trench which was probably the surface of the reduced eastern wall of the west range. Either side of this line of rubble lay a compacted surface (04) comprising shattered stone and mortar in a silty-clay matrix. A 1m square sondage was excavated at the northwestern end of the trench through the metalling layer (02) down to a depth of 0.3m. Below the metalling, which was 50mm thick, lay a 200mm thick, compacted deposit of broken stone, crushed brick and mortar in a silty clay matrix (05). This is probably the same as layer 04 recorded on the surface to the south. A thin layer of silt (06) lay beneath deposit 05 and over layer 07, which consisted of a very compact deposit of a creamy-orange sandy mortar. This in turn overlay a concave band of pitched stones (09) butting up against which was a hard metalled surface of crushed stone in a sandy-mortar and clay matrix (08). Excavation ceased at this level, as further work would have necessitated the destruction of the pitched stones and surface 08.

The band of pitched stones formed a slight gully and was almost certainly an open drain or eaves drip external to the west range. The metalled surface butting the pitched stones probably represented the edge of a track or yard surface contemporaneous with the west range. Above this, layer 07 is also track or yard surface, perhaps a repair to the earlier surface. Its construction effectively sealed the pitched-stone drain. The accumulation of silt 06 over layer 07 perhaps indicates a period when the west range was no longer being maintained. Certainly the rubble (05) that seals the silt seems to be a demolition deposit, perhaps derived from the west range. Layer 02 seems to be modern track metalling. According to an annotated map supplied by Jennie Macve the west range was intact down to 1960, was ruined by 1975 and gone by 1980 (information from vertical aerial photographs of those dates). It is therefore highly likely that all the deposits stratigraphically later than layer 06 have accumulated in the last 20-30 years.

Deposits in this trench are very robust and have not suffered any damage during recent use of the yard. However, data from Test Pit 1 indicate that internal floor surfaces of the former west range are close to the surface and therefore similar shallow deposits may lie immediately to the west of this trench.

Trench 2 (Fig. 4; Photos. 2 and 3)

This trench was excavated with its northern end against the southern stable wall and projected 5m out into the courtyard. It was 1m wide. A 1m square sondage was excavated down to natural deposits 0.5m below ground surface at the southern end of the trench. The surface deposit (01), which had been cut up by horses' hooves, was found to be very

superficial and thin (30-50mm), consisting of turf and topsoil. Below it was a very compacted layer (02) of silty-clay mixed with a grey-white mortar and containing small randomly scattered shale slabs and smaller stones. On the surface this layer divided into three distinct bands: nearest the stables was the loosest (but nevertheless compact) surface, in the centre of the trench the layer was very hard and had a worn or eroded appearance, at the southern end the layer was less compacted and hard than in the centre. It is assumed that the central very hard band was the result of compacting by horses and other traffic. In the sondage, layer 02 was found to be 100mm thick. Below 02 lay a very thin (10mm) deposit of gravel and silts bound together by mortar (03), which was founded on layer 04, a 100-180mm thick deposit of orange-brown silty clay which contained small shale slabs, smaller stones and fragments of mortar. Below this layer 05 comprised a 80mm thick deposit of medium-sized rounded and angular stones bound together with a greyish white mortar. Layer 06, below 05, was 100mm thick and consisted of a creamy brown sandy mortar with occasional small fragments of shale. Small sherds of window glass, crushed wood and a single pottery sherd were found on the surface of this layer. Layer 06 was founded on cobble stones (07). These had a flattened- rather than a rounded-profile. Undisturbed geological deposits comprising shattered shale and gravels in a silty-clay matrix (08) were sealed by the cobble stones.

The stratigraphic sequence revealed in Trench 2 is relatively simple and represents successive surfaces built up within the stable yard. Layer 02 was clearly laid down to serve the extant, 1882, stable block. This layer and preceding surfaces provided a free-draining and non-slip surface for horses. It is possible that earlier surfaces predate 1882, and may relate to earlier phases of use of the yard. It is uncertain whether the cobble stones (07) at the base of the deposits was a deliberately laid surface or whether they were an element of the natural gravels that had been disturbed and moved by workers' feet during construction into resembling a laid surface. There was no trace of the cobble apron reported by L and R Hallett.

Although the recently accumulated turf has been cut up and disturbed by horses, the upper, underlying archaeological deposits are robust have suffered no obvious damage during recent use of the yard.

Trench 3 (Fig. 5; Photos. 4 and 5)

Trench 3 was excavated against the wall of the cart house wing of the stables on the eastern side of the yard. It measured 3m by 1m. A 1m square sondage was dug at the western end of the trench. The surface deposit (01) of turf, loose stones and roofing slate fragments had been disturbed and cut up by horses' hooves. Below this superficial deposit lay a very disturbed layer of machine crushed and sorted limestone stones (02) of a uniform size (60 x 60mm). Below these stones lay a mid brown - grey-white compact sandy mortar layer (03), 30mm thick, containing small shale slabs and other stones. This was founded on a 130-250mm thick make-up deposit of yellowish brown silty-clay containing cobbles, pieces of angular shale and mortar fragments (04). This make-up layer sealed a well-built drain (08) which ran parallel to the west wall of the stables, some 2m out from it. The drain lay in a wide cut (07). The base of the drain consisted of shale

slabs on which rested two mortared courses of red brick side walls. The drain was capped with shale slabs. Internally the drain measured 200mm in width and 180mm in depth. Capping stones and brick walls were left *in situ* during the investigation; the internal dimensions and constructional details were obtained by examination through gaps between the capping stones. The foundation trench had been filled with deposits 05 and 06 prior to the construction of the make-up layer 04. The drain was cut through natural deposits similar to those found in Trench 2.

The sequence of layers and features in Trench 3 is relatively straightforward. It is likely that the drain and the overlying surface represented by layers 03 and 04 were constructed contemporaneously with or soon after the building of the stables in 1882. It is possible that the drain served the down-pipe located in the corner of the stables to the north of the trench. Later, more superficial deposits (01 and 02) are modern. During the excavation no trace of water was observed flowing in the drain, even though at times during the excavation the weather conditions were very wet.

The recently accumulated turf and other material has been cut up and damaged by horses, as has the uppermost underlying deposit (a loose layer of stones - 02). Below this archaeological deposits are fairly robust and do not seem to have suffered any damage during recent use of the yard.

Trench 4 (Fig. 6; Photo. 6)

Trench 4 measured 5m by 1m and was excavated some 3m away from the south wall of the yard in front of the gateway through the wall. A 1m square sondage was dug in the centre of this trench down to 350mm below the ground surface when excavation ceased on encountering a pitched-stone floor. The surface deposit of this trench (01) was thin (50mm) and loose and very mixed, consisting of turf, soil, loose stones and sand. The latter was derived from the remains of a sand dump close to the trench - presumably from a relatively recent episode of repair/maintenance. At the western end of the trench, below layer 01, a band of stony rubble (12) represents the remains of the demolished east wall of the west range. To the east of this wall and across the rest of the trench surface deposits have been divided into three distinct layers, but it is likely that if excavated they will be discovered to be one context. At the western end adjacent to the wall (12) lay a deposit that predominantly comprised stone, broken brick and roofing slate fragments (11). Towards the centre of the trench layer 10 formed a low (100mm high) but distinct causeway that ran from the gateway towards the centre of the yard. This layer consisted of pieces of shale and broken mortar in a sandy silt matrix. The eastern end of the trench consisted of pieces of shale, broken and whole bricks and mortar fragments in an orange-brown silty-clay (02). In the sondage, layer 02 was found to be 100mm thick. Beneath it lay a thin (10mm) and discontinuous layer of gravel and stones in a silty-clay matrix (03). This lay on a 100mm thick, compact deposit of blueish-grey sand containing gravel and stones (04). Below 04 lay a uneven 100mm thick deposit of grey-white mortar containing small shale slabs and other stones (05). Removal of layer 05 revealed, on the southern side of the sondage, a pitched stone surface (06) defined by a kerb of larger stones. On the edge of the southern side of the trench a drain was encountered. Because of its location

interpretation of this feature was not easy; it seemed to be entering the pitch-stone floor immediately to the south of the trench, but it also seemed to be partly built into the overlying layer (05). Perhaps a drain built in association with the floor was reused when layer 05 was constructed. A surface formed from compacted mortar and crushed shale (07) butted up against the pitched-stone surface. Excavation ceased at this level. Whilst recording the sections of the sondage, a cut (08) was noted on the south side of the trench. This seemed to be a small pit of unknown function. It was filled with material (09) very similar in character to that through which it was cut (02 and 10), and is clearly very late in the stratigraphic sequence.

Given the known history of the site it is likely that the earliest recognised deposits in Trench 4 - the pitched-stone surface (06) and the mortar and shale layer (07) - represent floors of the old stables demolished by Waddingham in the late 19th-century, with the interface between the two surfaces marking an internal division. Layers 05 and 04, and perhaps 03 are yard surfaces almost certainly laid down following the demolition of the old stables and probably serving the west range and the gateway through the south wall of the yard. Above these, layers 02, 10, 11 almost certainly derive from the demolition of the west range and therefore date to the last 20-30 years. The pitched-stone surface and kerb and change of surface may be evidence of a runnel in front of horse stalls - the distance of the kerb from the south wall of the yard is consistent with this - or evidence of some other internal building arrangement. Although a drain was discovered that may have served these stables which were demolished in the late 19th century, there was no trace of a later-period drainage system. However, the drain to such a system could easily lie either side of the 1m square sondage.

The upper archaeological deposits in this trench are relatively recent, very robust and serve to protect underlying layers. They have suffered no damage during recent use of the yard.

The test pits

Test pits 2, 3 and 4 were all excavated towards the centre of the yard. The lowest point of the yard is towards the centre, and it is therefore likely that surface drains, if present, were located here. The yard centre is certainly slightly wetter than the rest of the yard, but everywhere is very free-draining and even during heavy rain no standing water was noted at any location. No evidence for drains was discovered in the test pits. Test Pit 1 was excavated on the western side of the yard in the area of the west range.

Test Pit 1 (Fig. 7; Photo. 7)

Test Pit 1 measured approximately 3m by 1.5m and was excavated on the western side of the courtyard in the area of the west range. Surface deposits (01) consisted of a very loose and very thin turf which had been cut up by horses' hooves. Removal of this revealed a floor composed of blue engineering brick (02) with a sandstone slab threshold (03) to the east which included a metal door pivot. To the east of the threshold, and external to the west range, lay a surface (04) of mixed mortar and clay containing crushed shale and gravel. The west side of the brick floor terminated in a straight line against a deposit of

loose mortar with crushed shale and other stone (05). Excavation did not continue beyond these levels.

Clearly the deposits revealed in this test pit are part of the latest floors and other features of the west range that survived into latter part of the 20th century.

The turf in the area of this test pit has been severely cut up by horses. The underlying deposits do not seem to have suffered any direct damage from this recent use of the yard by the horses. Damage to some bricks was noted, but this may not be recent. However, the brick floor and related features are just a few millimetres below the ground surface and continuing damage to the turf will only serve to promote frost-damage and other forms of damage to the underlying deposits.

Test Pit 2 (Fig. 7; Photo. 8)

Test Pit 2 measured 1m by 1m. The thin and loose turf (01) has been cut up by horses' hooves. Below this layer two similar and probably roughly contemporaneous deposits were encountered. On the south side of the pit a compacted layer (02) of silty-clay-loam containing gravel and occasional small stones was encountered. A deposit (03) of compacted silt-clay with mortar fragments and small shale slabs and other stones lay to the north side. Excavation did not continue beyond these levels.

Although layer 03 would have provided a better metalled yard surface than 02, it is likely that both performed a similar function and probably represent episodes of casual resurfacing of the yard during the latter phases of its use.

Although the surface turf has been cut up by horses, no obvious damage to the underlying deposits was noted. The thickness of these deposits was not established.

Test Pit 3 (Fig. 7; Photo. 9)

This measured 1m by 1m. The thin and loose turf (01) has been cut up by horses' hooves. Sealed by the turf lay a fairly loose deposit of gravel and angular stones in a silty matrix (02). Removal of this across half the pit revealed that it was 50mm thick. It had been laid over a compacted layer of grey silty-clay which contained small shale slabs and other stones (03). Excavation did not continue beyond these levels.

Although the deposits encountered in Test Pit 3 were of a slightly different character than those in Test Pit 2, their function was no doubt similar, and although layer 03 would have provided a better metalled yard surface than 02, it is likely that both performed a similar function and probably represent episodes of casual resurfacing of the yard during the latter phases of its use.

Although the surface turf has been cut up by horses, no obvious damage to the underlying deposits was noted. Apart from layer 02, the thickness of these deposits was not established.

Test Pit 4 (Fig. 7; Photo. 10)

This measured 1.9m by 1m. The thin and loose turf (01) has been cut up by horses' hooves. A deposit of mortar containing shale slabs and other stones (02) lay directly beneath turf at the northern end of the pit. This overlay, but did not completely cover, a pitched-stone surface (03). At the southern end of the pit lay a deposit of compacted silt-clay containing small angular stones and occasional larger stones (04). It was not clear whether the silt-clay layer had been cut away for the insertion of the pitched-stone surface, or whether the silt-clay and the pitched stones were deposited at roughly the same time. Excavation did not continue beyond these levels.

The character and location of the deposits encountered in Test Pit 4 indicate that they are external yard surfaces. Owing to the small-scale of the excavations it is not possible to conclude whether the pitched-stone surface (and its later resurfacing by the mortar and stone layer 02) represented a path across the yard, an area of hard standing around an installation such as a water pump, or simply casual patching and mending of the yard's surface.

Although the surface turf has been cut up by horses, no obvious damage to the underlying deposits was noted. Apart from layer 02, the thickness of these deposits was not established.

IMPACT ASSESSMENT

It is clear from the archaeological investigation that complex stratified deposits lie right across the stable yard. The excavation of new drainage trenches and/or the opening of old drains for maintenance will clearly destroy some of the stratified deposits.

Across much of the yard the upper archaeological surfaces (excluding turf and the thin accumulation of soil) were found to be fairly robust, and had been constructed to accommodate horse and cart traffic. In some areas a relatively recent demolition deposit of stone, brick and mortar sealed underlying layers. Only on the western side of the yard, where the west range stood, were shallow, less robust surfaces uncovered. An increase in pedestrian traffic in the stable yard will have little effect on any of the buried deposits. Use of the yard by work horses in the winter of 1999/2000 resulted in the cutting up of the turf and thin soil, but apart from damage to the upper layers in Trench 3, very little disturbance to the surfaces of the upper archaeological deposits was detected. However, the shallow surfaces detected on the western side of the yard must be considered vulnerable if continued use of the yard by horses is maintained. Prolonged use by horses, particularly in wet weather, may also result in damage to buried surfaces in other parts of the yard. The hard access track to the yard is suitable for vehicular use, and that part of the yard closest to the stables will not suffer damage during occasional use in dry weather. However, prolonged use by vehicles of other parts of the yard, particularly in wet conditions will result in rutting and consequent damage to the upper archaeological deposits.

RECOMMENDATIONS

Drainage

The proposed drainage system should be designed so that no new drains will be cut across the stable yard, and excavations in the yard to maintain/reuse existing drains should be avoided if possible. There are currently two existing septic tanks/cess pits that could serve to stables. The one to the south of the stable yard would require the cutting of a new drain across the yard. The one near to the mansion site would have to be served by a very long drainage run from the stables - most of this would be along a track, but the final section would cut through part of the mansion remains. A new location for a septic tank should therefore be investigated, one which would avoid damaging the archaeological deposits in the yard and yet not having long drainage runs which may also be potentially damaging.

Surface treatment

It is recommended that the yard is used only for pedestrians, access for horses to and from the stables and occasional use by light vehicles. In order to minimise damage to archaeological deposits and to restore a degree of formality to the stable yard the following is recommended:

An apron of hard-standing is created approximately 4-5m out from the stables. This surface should attempt to replicate layer 02 found in Trench 2. A thickness of 100mm should be sufficient to protect underlying deposits. An intervention layer should not be used as this may impede drainage. This surface would be suitable for use by pedestrians, horses and, occasionally, by vehicles.

The remainder of the yard should be put down to grass. In order to form a reasonably level surface and to protect shallow deposits a layer of topsoil up to a maximum of 100mm should be laid. A kerb should be constructed in order to present a hard-edged, formal junction between the hard-standing and the grass. This kerb should be constructed in such a manner so as to avoid damage to underlying deposits. The grassed area of the yard should be used only by pedestrians.

APPENDIX 1
ARCHIVE DEPOSITION

The excavation archive has been deposited with the National Monuments Record, housed with RCAHMW, Aberystwyth.

The following categories of material are present in the archive:

- A.1 Final report
- A.4 Report on disc

- B.1 Context records - paper

- C.1 Catalogue of drawings
- C.2 Site drawings

- D.1 Catalogue of photographs
- D.2 Colour slides
- D.3 Black and white negatives and prints

APPENDIX 2

HAFOD: STABLE COURTYARD

SPECIFICATION FOR AN ARCHAEOLOGICAL INVESTIGATION

Background

Restoration of the Hafod mansion stables and conversion to other uses has been proposed. Use of the stable courtyard by pedestrians, vehicles and work horses may have a detrimental impact on buried surfaces. It is therefore proposed to excavate a series of trenches in and close to the stable courtyard in order to determine the extent and condition of former surfaces and sub-surfaces and to assess the potential impact that changes of use may have on buried archaeological deposits.

A engineering survey of the drainage system is planned to run concurrently with the archaeological investigations. Ground-breaking may not be required for this survey. Examination trenches, if required, will be hand-excavated by the archaeologists and recorded to the same specification as the archaeological trenches.

This specification has been prepared in accordance with *Hafod - Archaeological Guidelines*.

Archaeological investigation

Four main trenches will be hand-excavated - two at 3m x 1m and two at 5m x 1m. Their exact locations will be decided in the field, but they will be positioned to provide a good sample of buried deposits in areas potentially at most risk from future disturbance (see enclosed location plan). Possible buried features have been located by J Macve and there is a tradition that the courtyard consisted of an 'apron of set stone with the middle being shale'. The trenches will be positioned to locate some these features. Each trench will initially be excavated down to the latest surface. Following recording of revealed deposits a portion of each trench (probably 1m x 1m) will be excavated down to a depth of 1m or to natural deposits, whichever is encountered first. In addition, four or five 1m x 1m test trenches will be excavated across the courtyard (their position to be determined in the field) in order to examine the nature of the latest surface. It is anticipated that these test trenches will not be excavated below the latest surface.

Trenches will be located on the previously undertaken survey Mansion Survey. All layers and deposits will be fully excavated. Plans will be made at 1:20 scale. Sections will be drawn at 1:10 scale in order to distinguish thin layers of metalling. Each archaeological entity will be recorded using Cambria Archaeology's single context recording system. Black and white and colour photography will be used. All heights will be related to OS data. Artefacts will be retained and provision made for their analysis. Any deposits encountered that may contain useful palaeoenvironmental evidence will be sampled. The trenches will be back-filled following excavation.

HAFOD: STABLE YARD - ARCHAEOLOGICAL INVESTIGATION
ARCHAEOLEG CAMBRIA ARCHAEOLOGY

Reporting

Six copies of the report detailing all the findings of the investigations will be provided. The report will contain recommendations to the future management of the site. Copies of the report will be lodged with the National Monuments Record and the regional SMR. An archive of the investigation will be prepared. This will be lodged with the National Monuments Record.

K Murphy. Archaeoleg Cambria Archaeology. 3 May 2000

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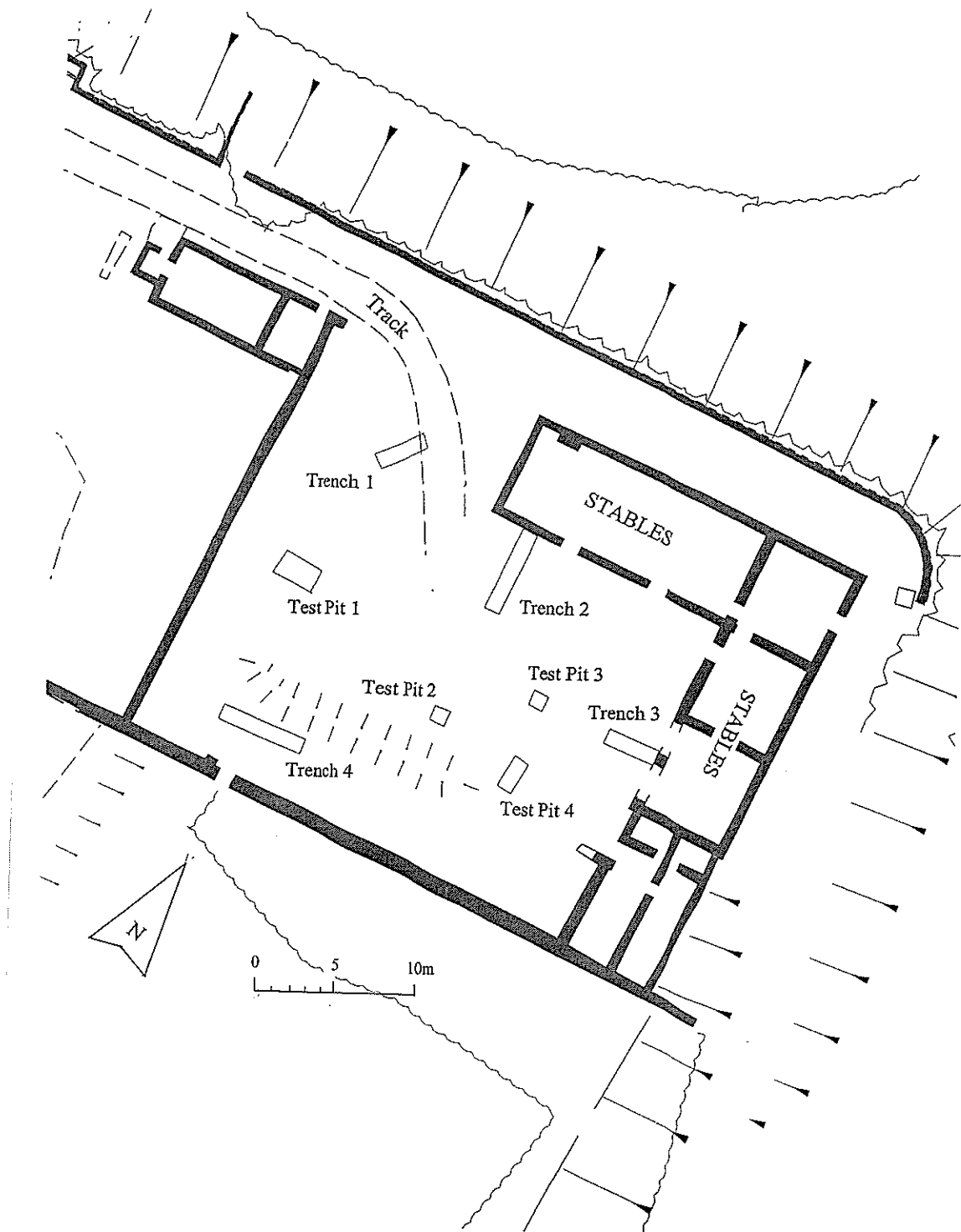


Figure 1. Map of the stable yard showing the location of the archaeological trenches.

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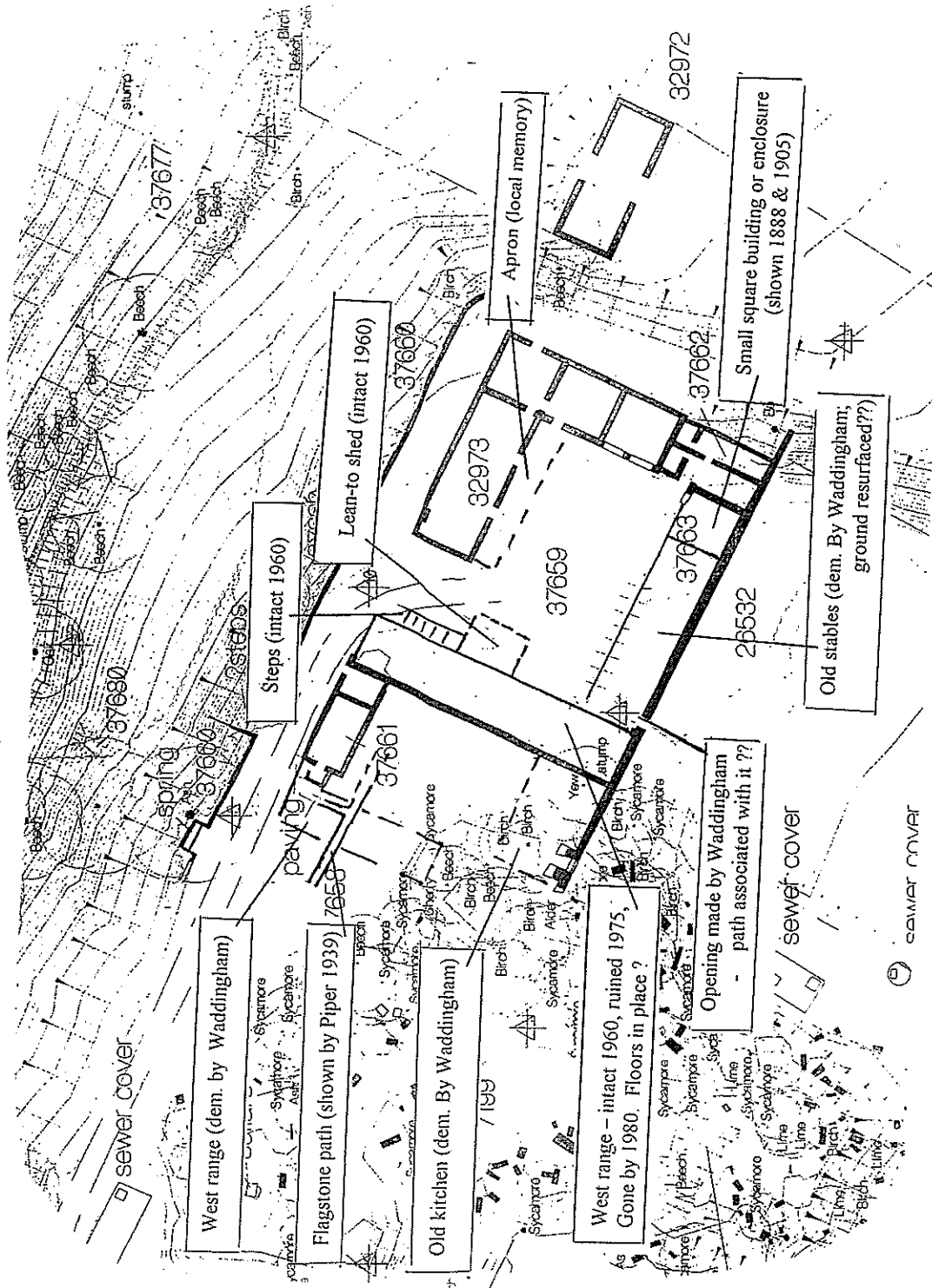


Figure 2. Survey drawing of the stable yard with annotations by J Macve (Hafod Trust) showing positions of former buildings.

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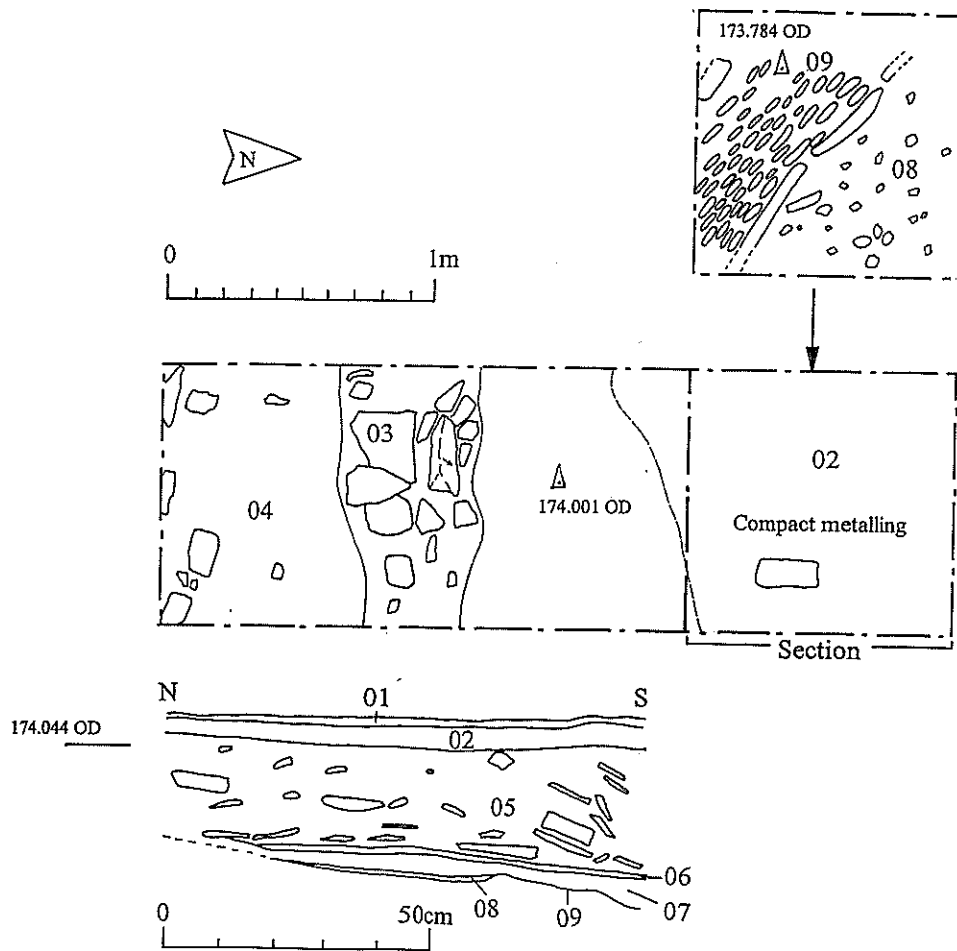


Figure 3. Plans and section of Trench 1.

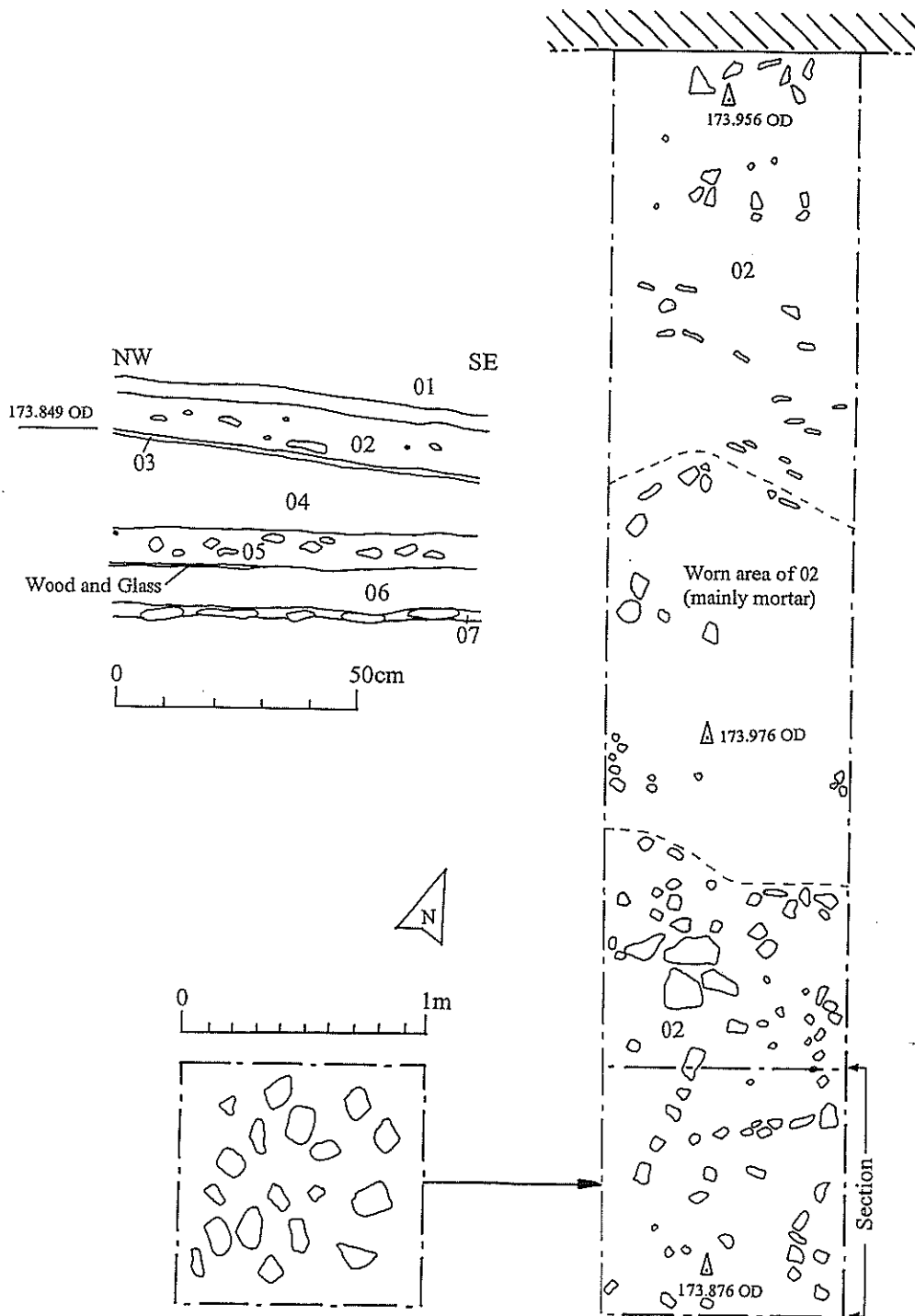


Figure 4. Plans and sections of Trench 2.

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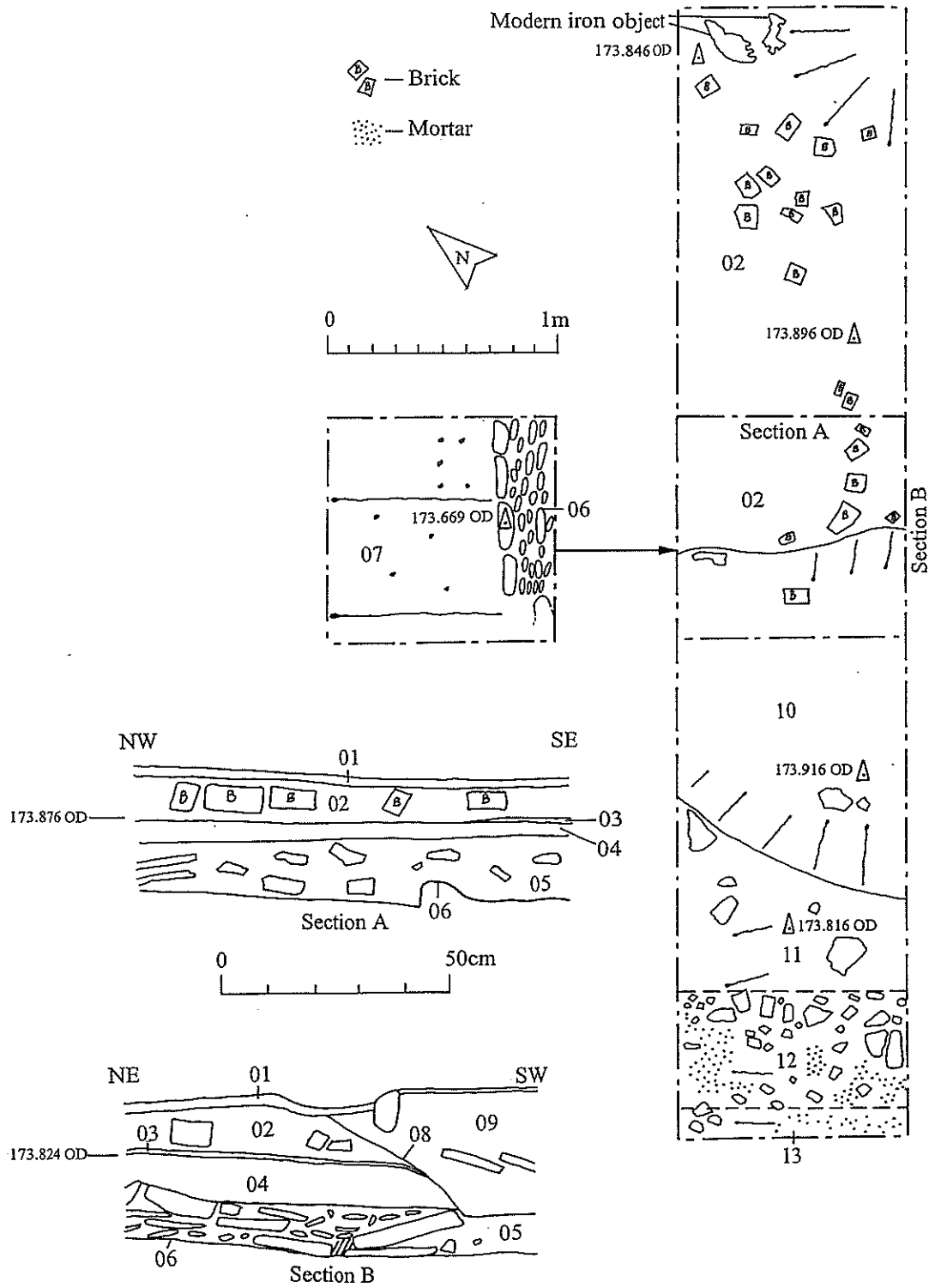


Figure 6. Plans and sections of Trench 4.

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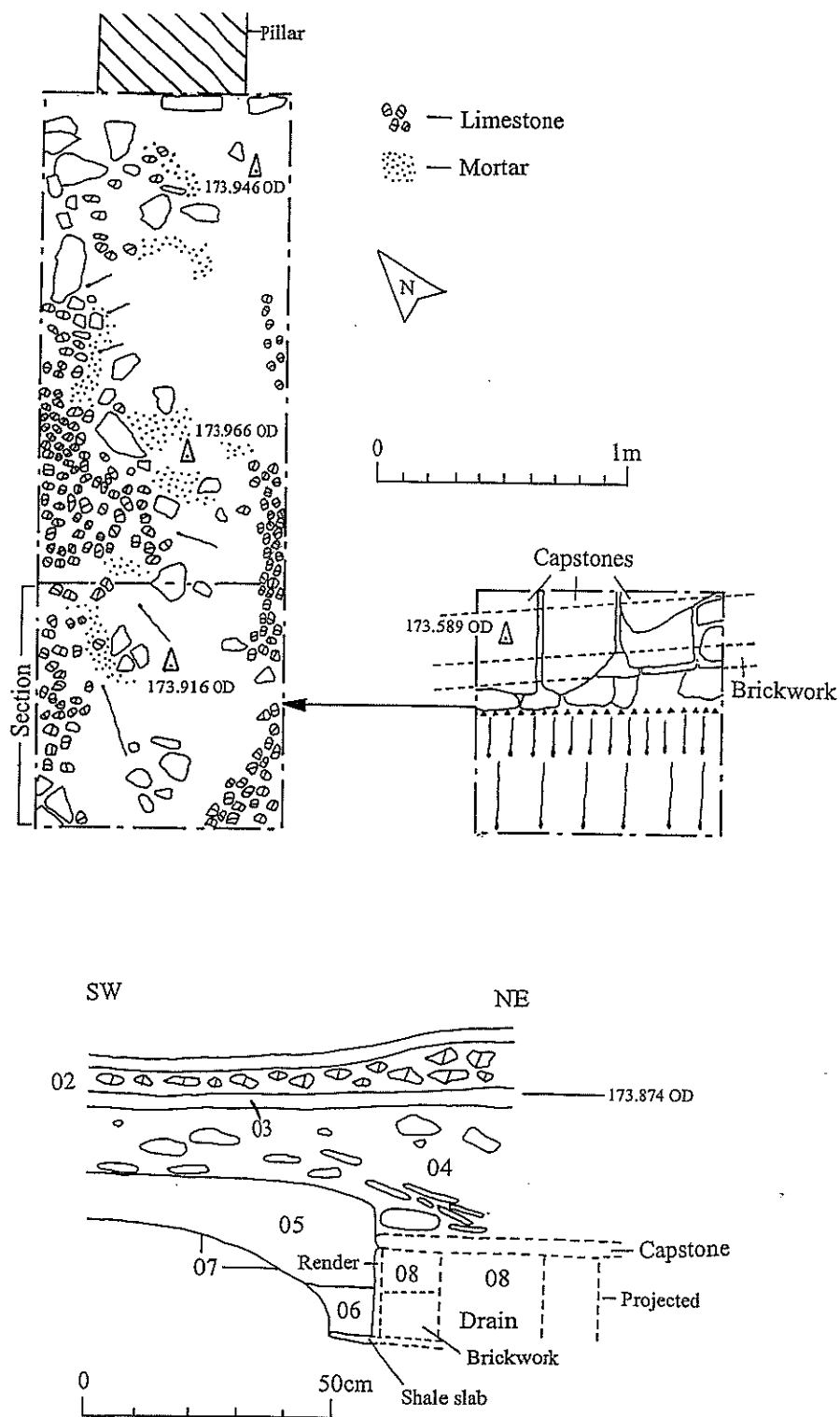


Figure 5. Plans and sections of Trench 3.

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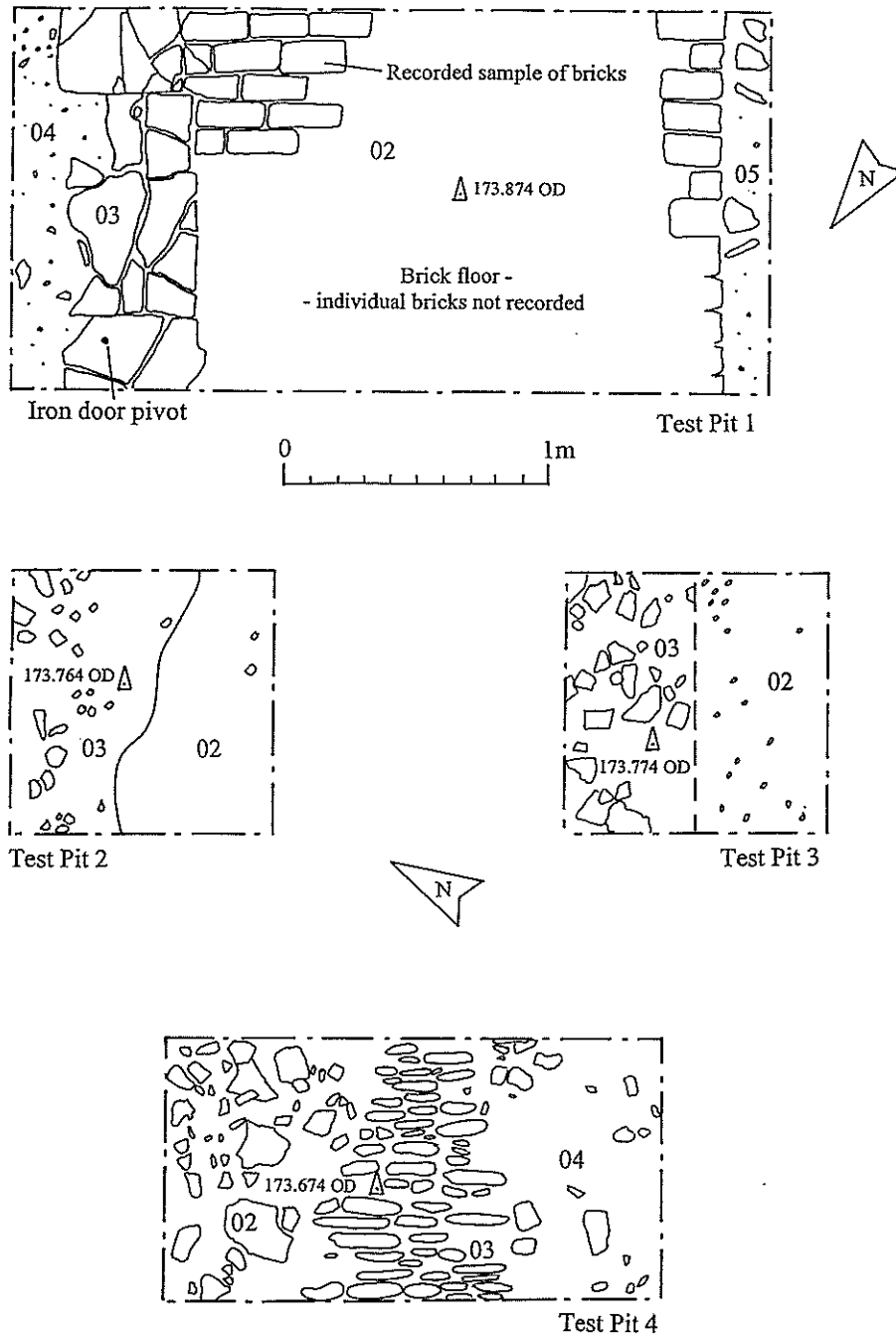


Figure 7. Plans of Test Pits 1 - 4.

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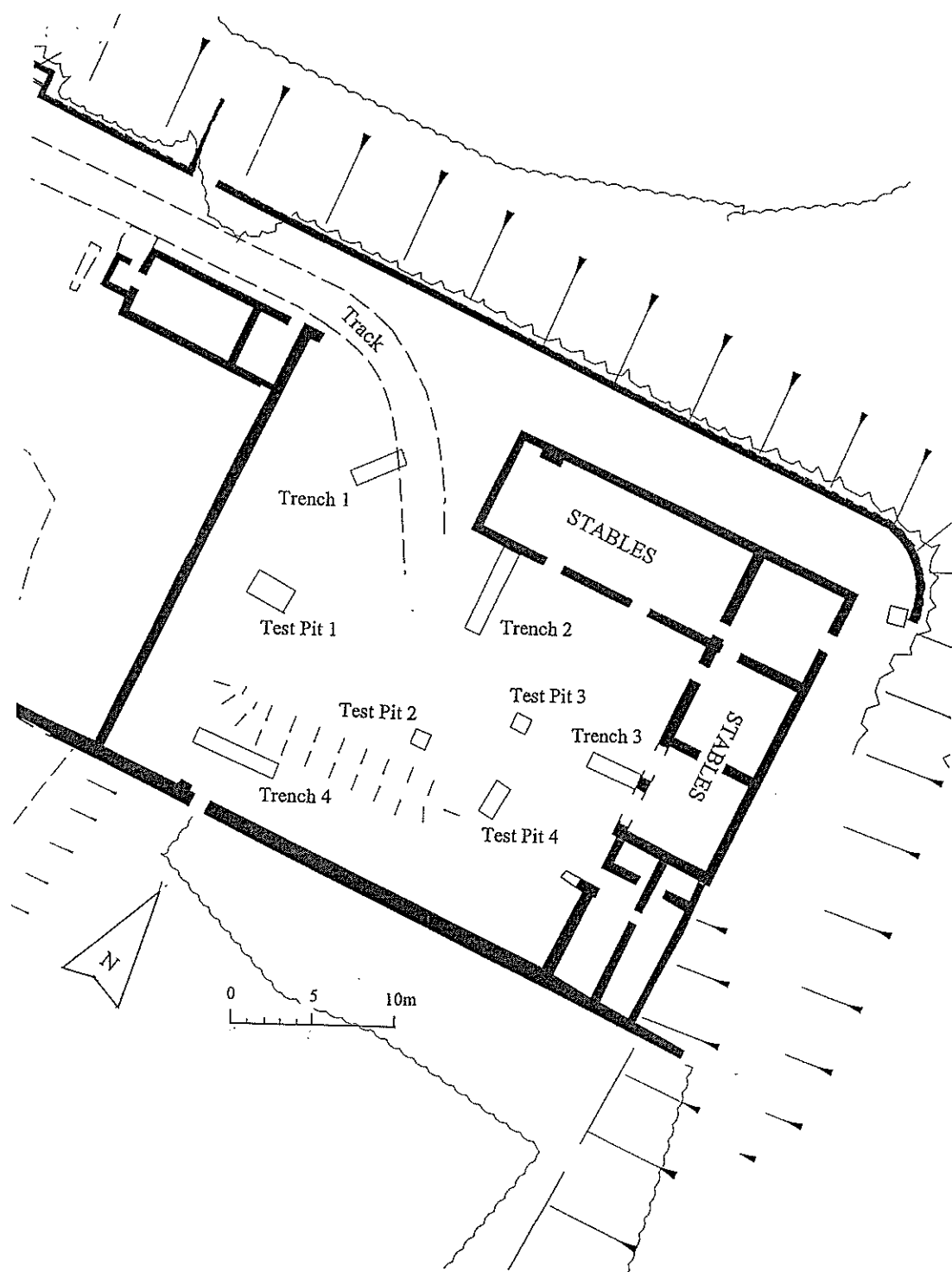


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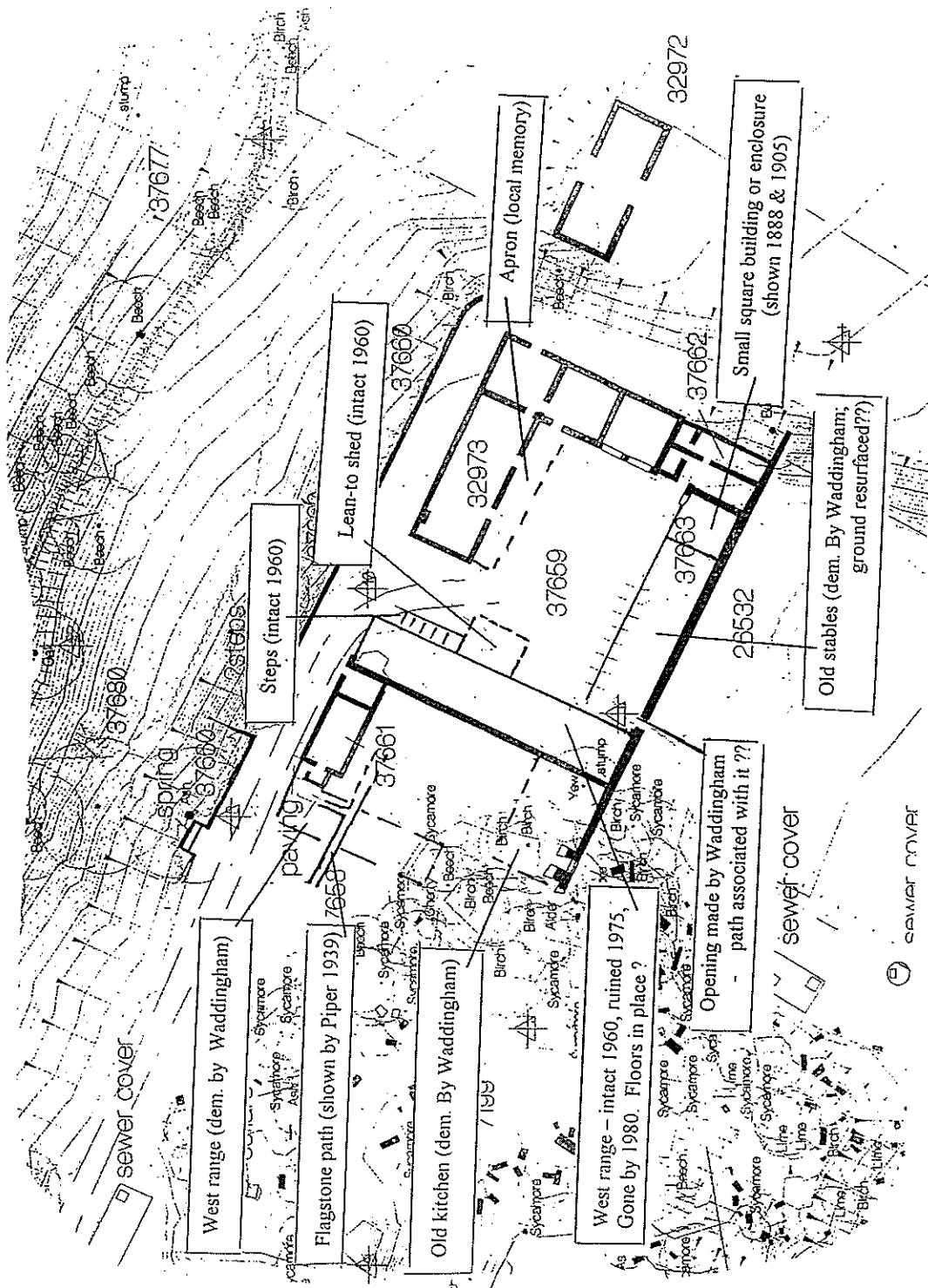


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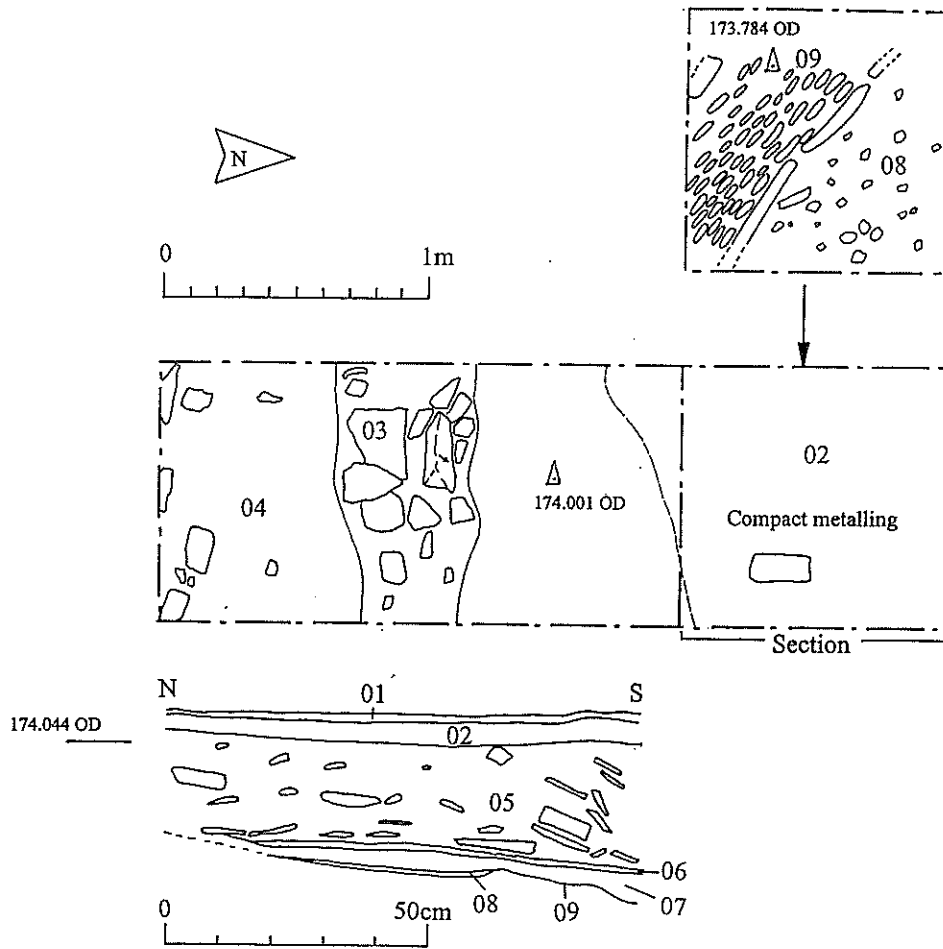


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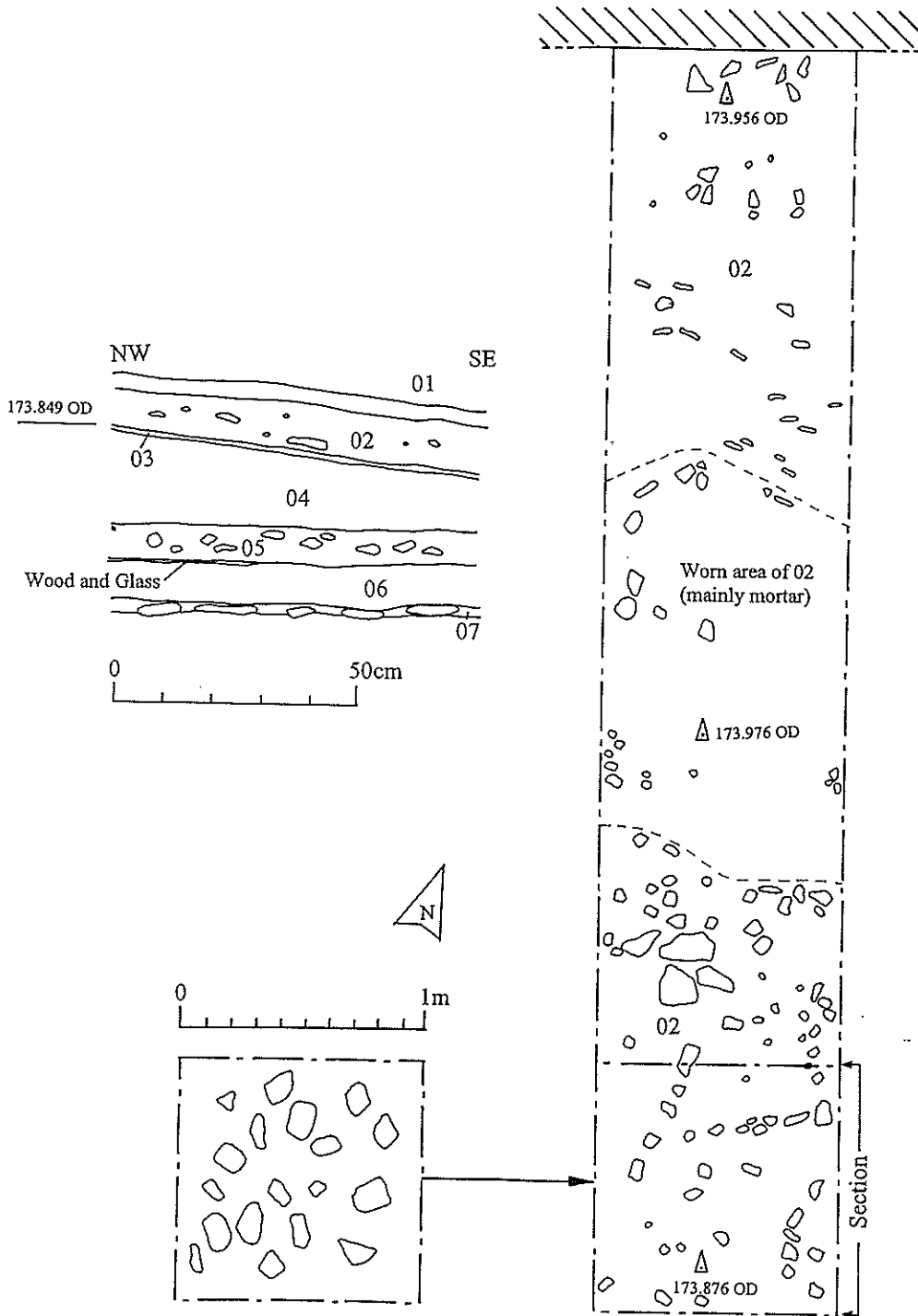


Figure 4. Plans and sections of Trench 2.

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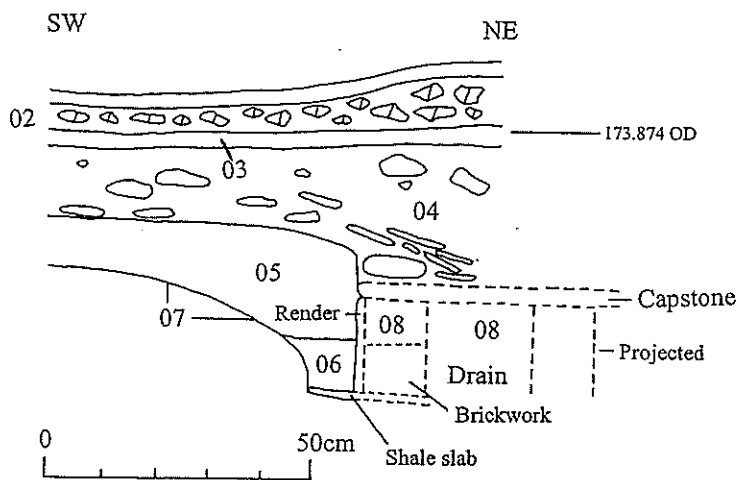
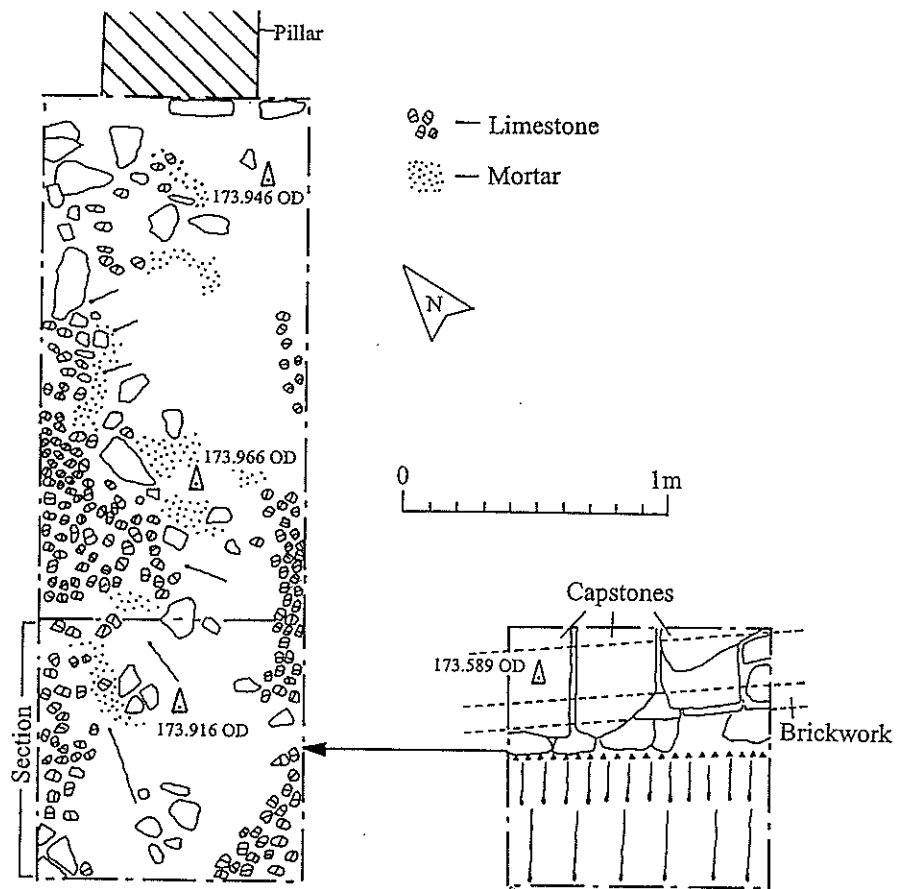


Figure 5. Plans and sections of Trench 3.

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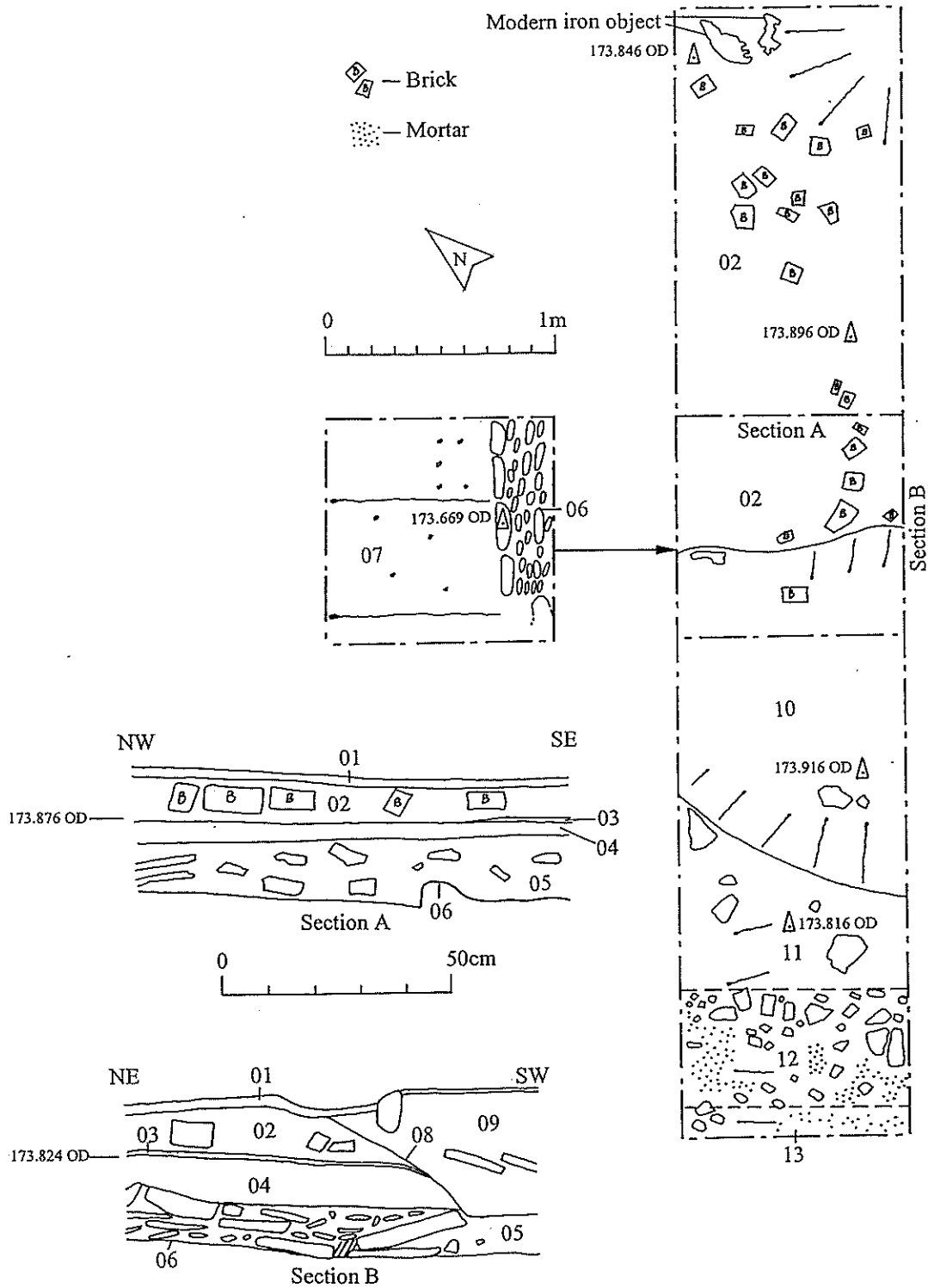


Figure 6. Plans and sections of Trench 4.

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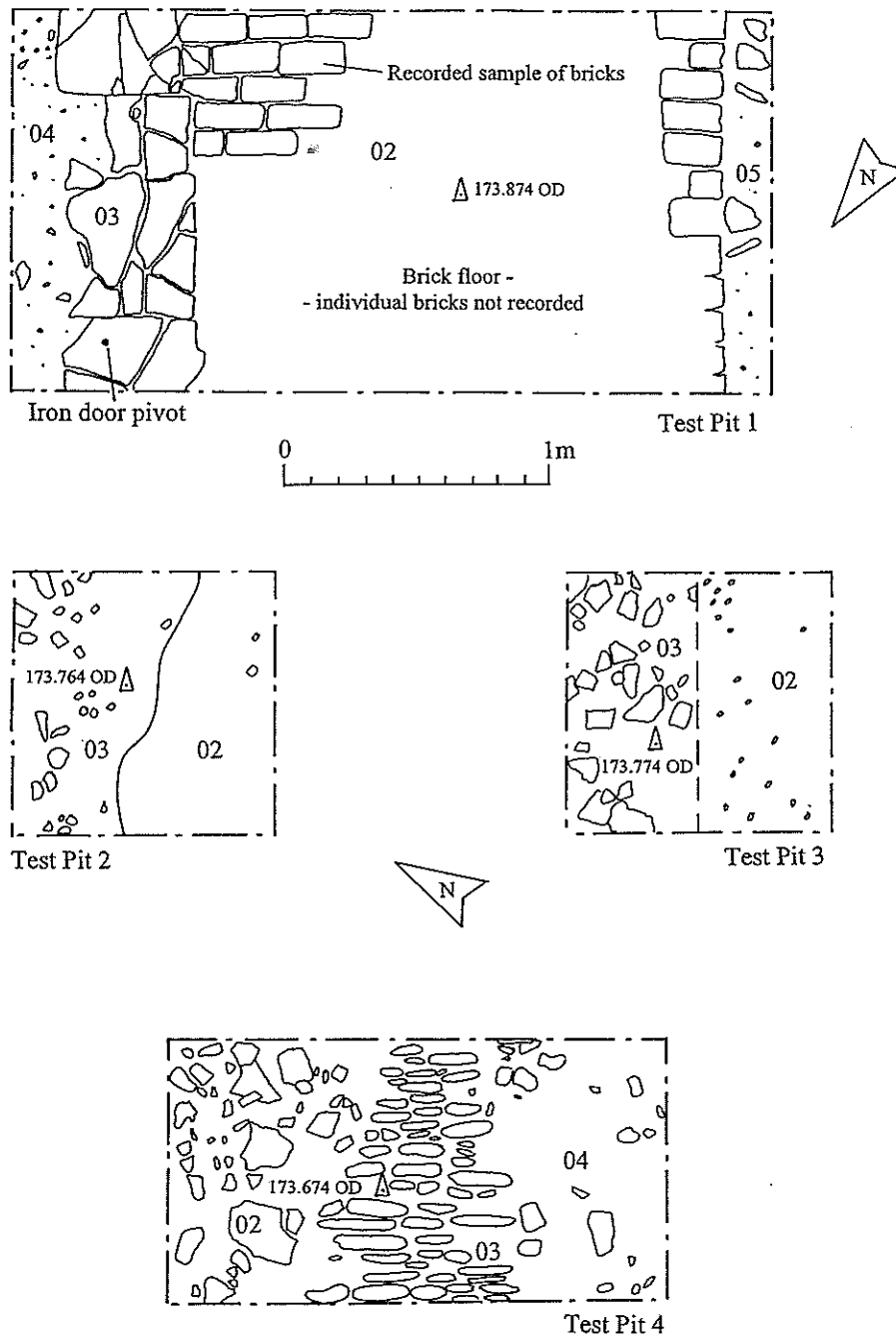


Figure 7. Plans of Test Pits 1 - 4.

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Photograph 1. Trench 1 after the excavation of the sondage showing the pitched-stone drain (09) and layer (08).



Photograph 2. Trench 2 after the excavation of the sondage showing the cobble layer (07).

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Photograph 3. Trench 2 after removal of the turf showing layer 02.

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Photograph 4. Trench 3 after removal of the turf showing stony layer 02 and layer 03.

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Photograph 5. Trench 3 showing the brick and stone drain.



Photograph 6. Trench 4 showing the pitched-stone floor (06) with the drain above.

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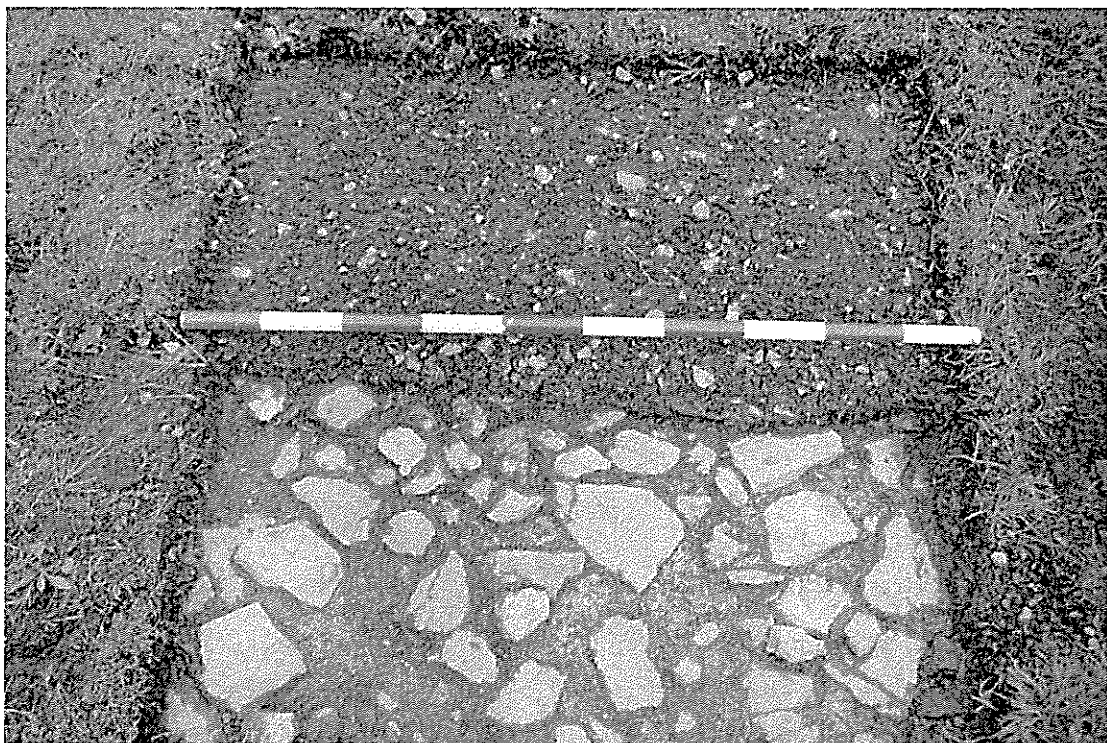


Photograph 7. Test Pit1 showing brick floor and threshold immediately below the turf.

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Photograph 8. Test Pit 2 showing layers 02 and 03.

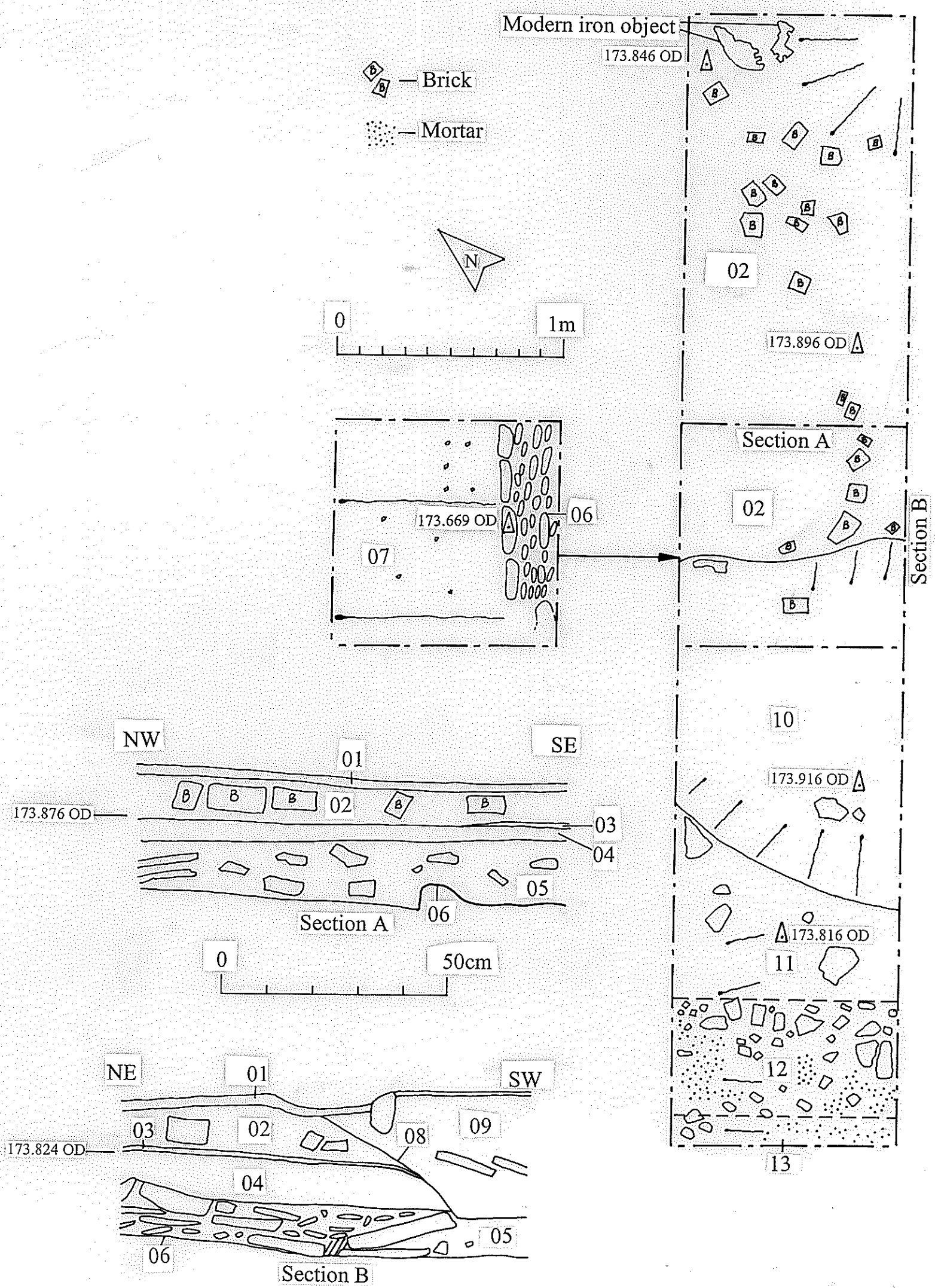


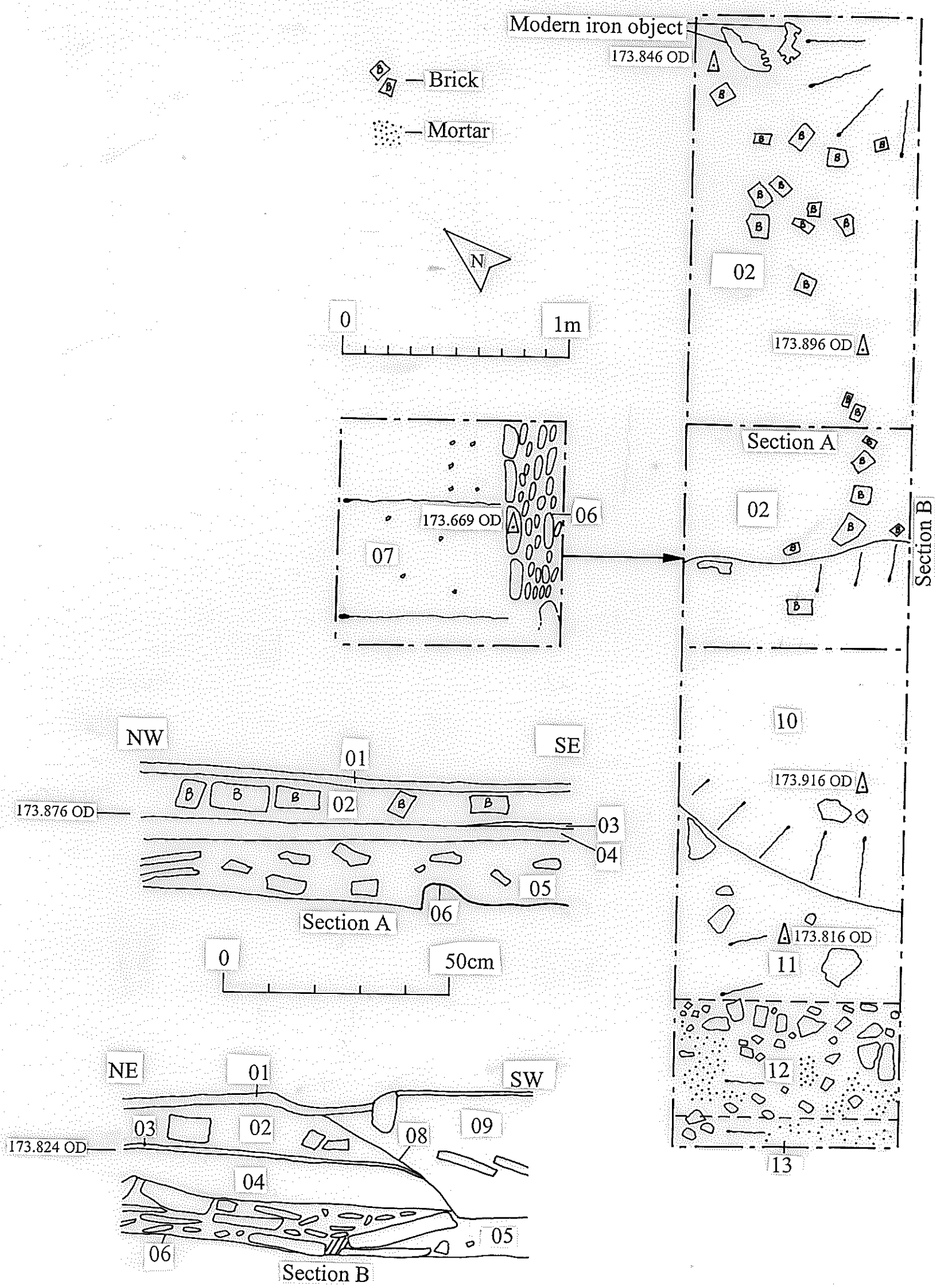
Photograph 9. Test Pit 3 with layer 02 removed across half the trench revealing layer 03 below.

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Photograph 10. Test Pit 4 showing the mortar and stone layer (02), pitched-stone surface (03) and layer 04 to the right.



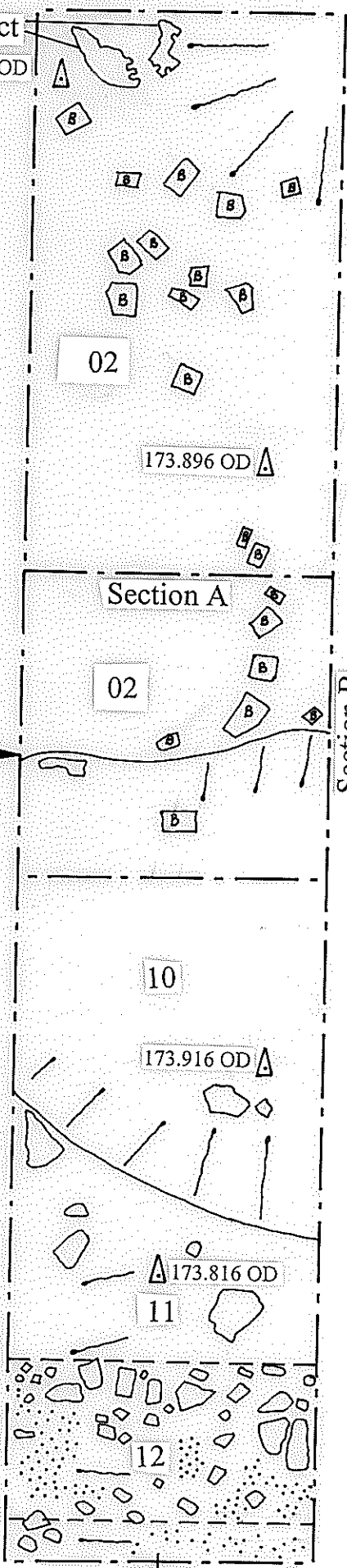
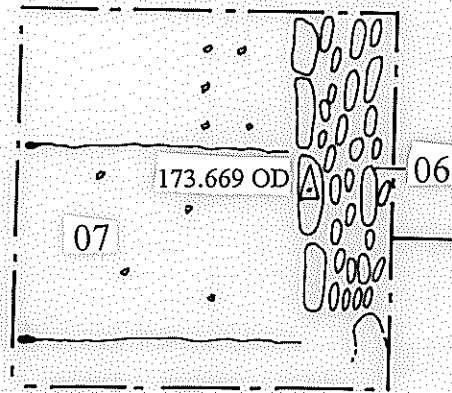
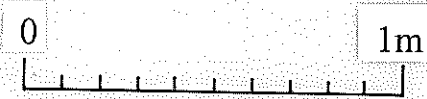
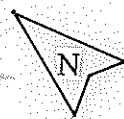


Modern iron object

173.846 OD

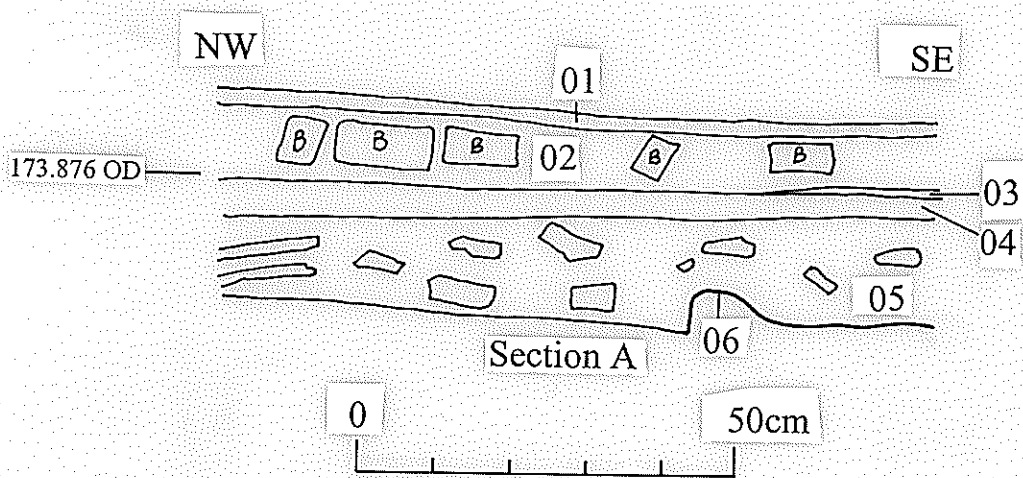
B — Brick

••• — Mortar

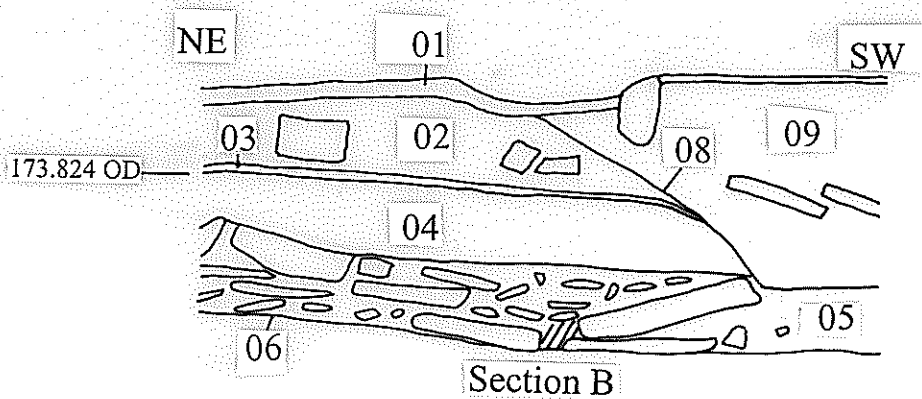


Section A

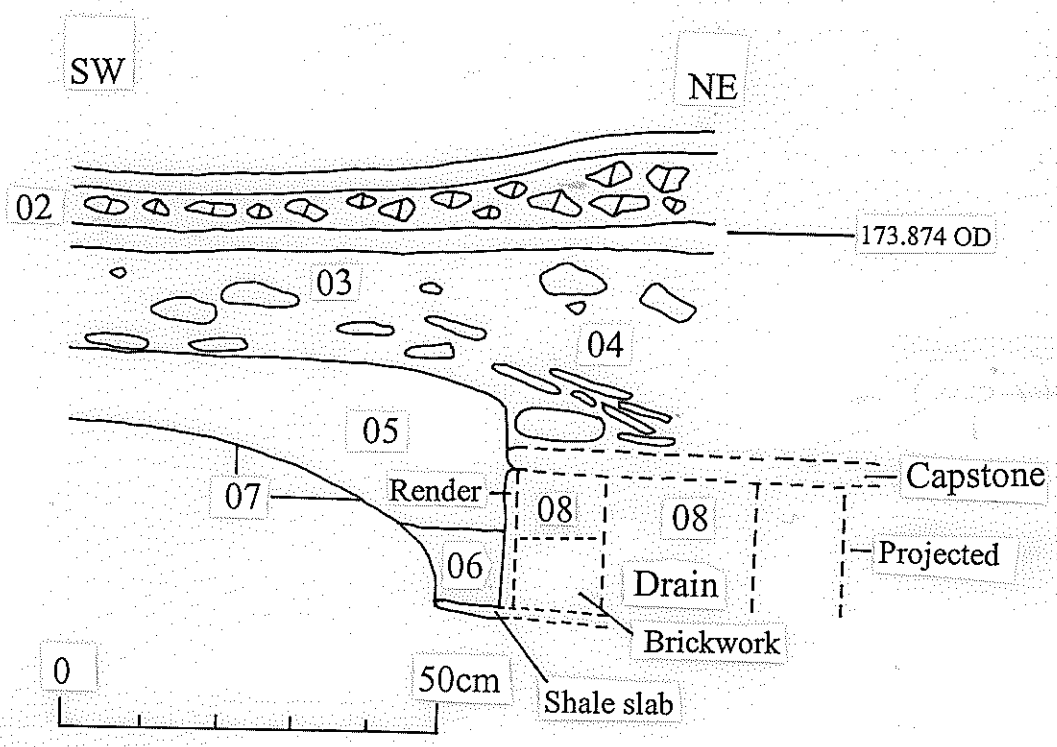
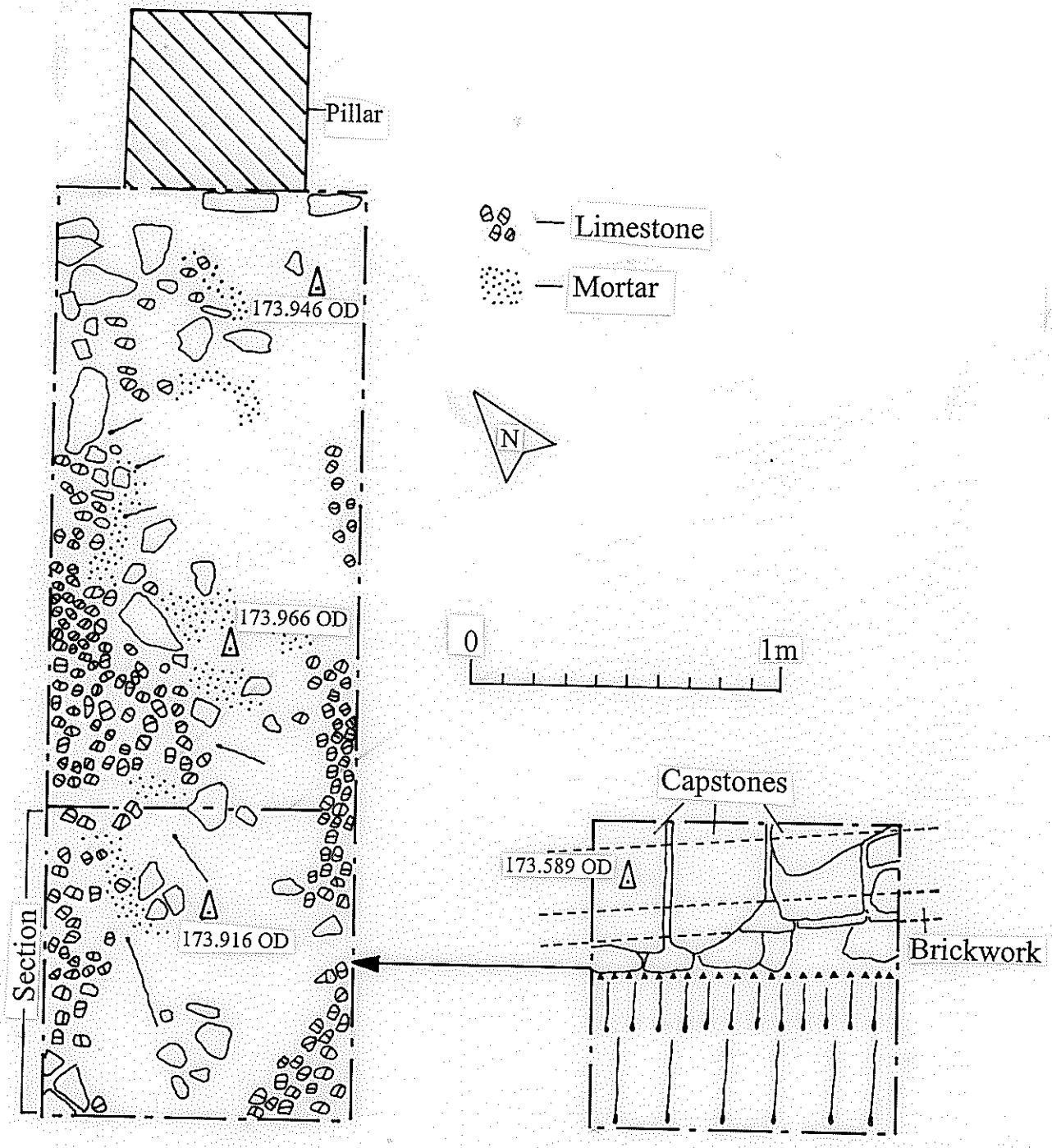
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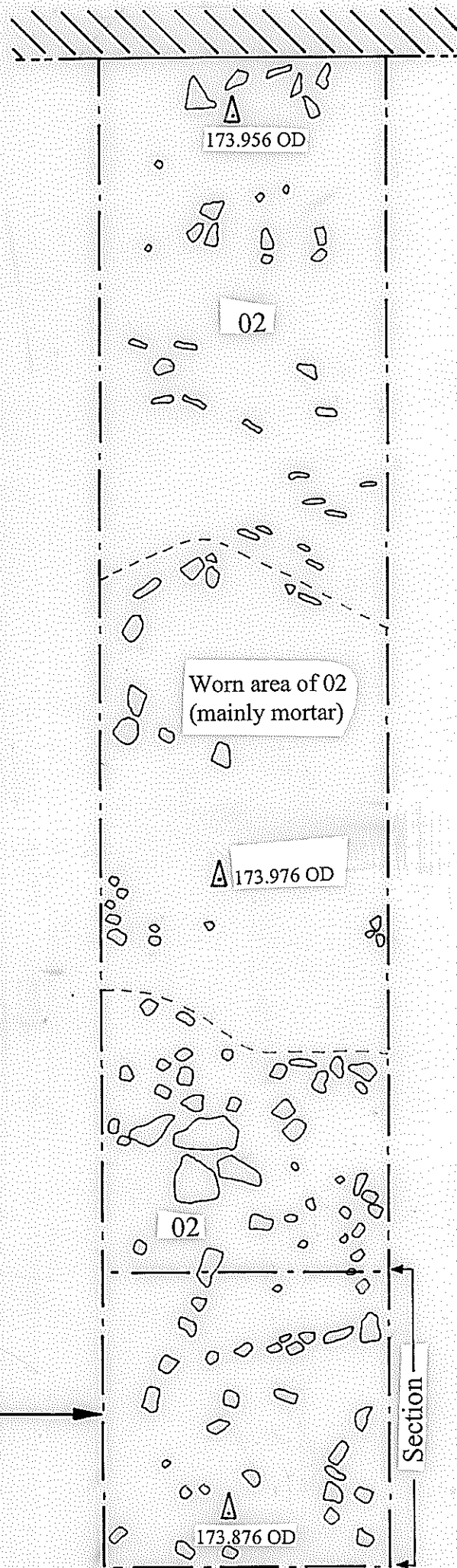
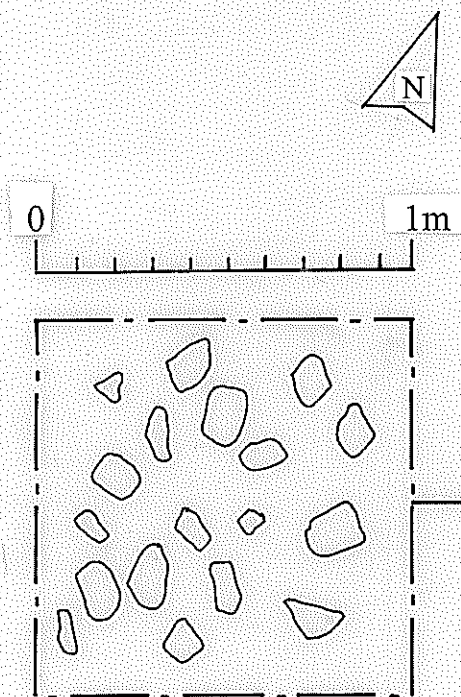
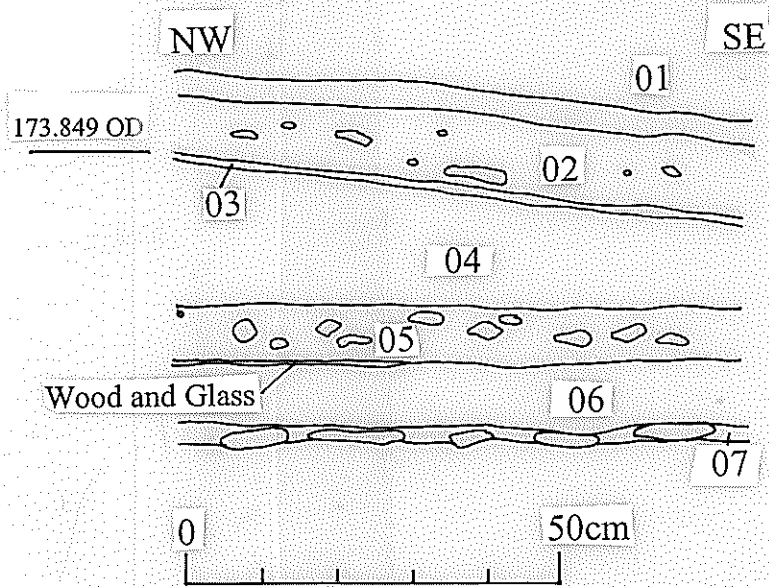


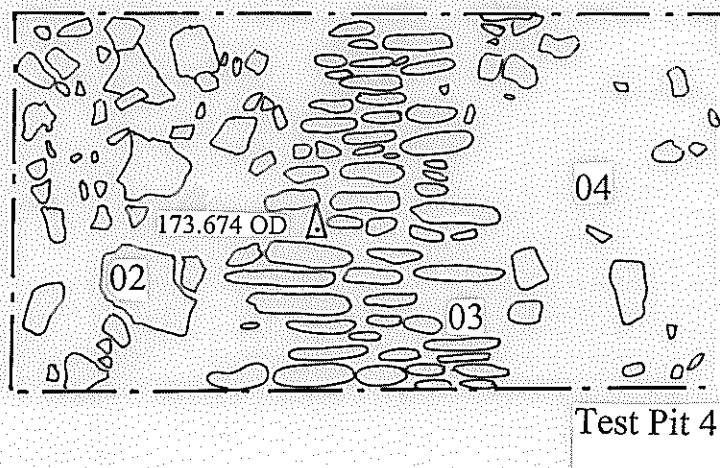
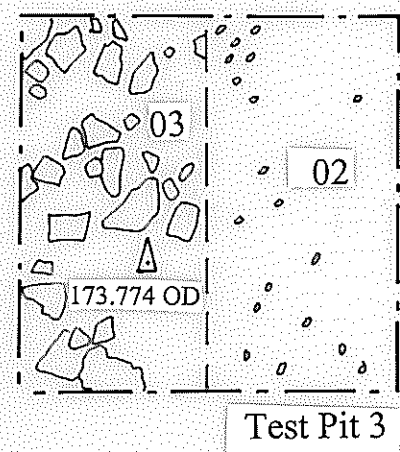
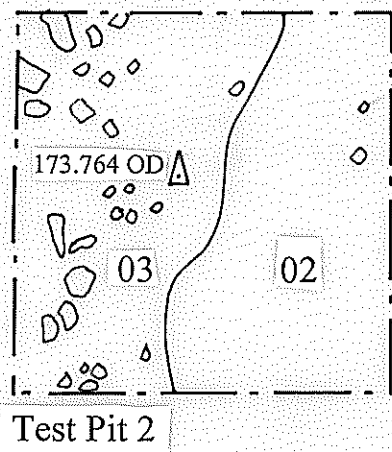
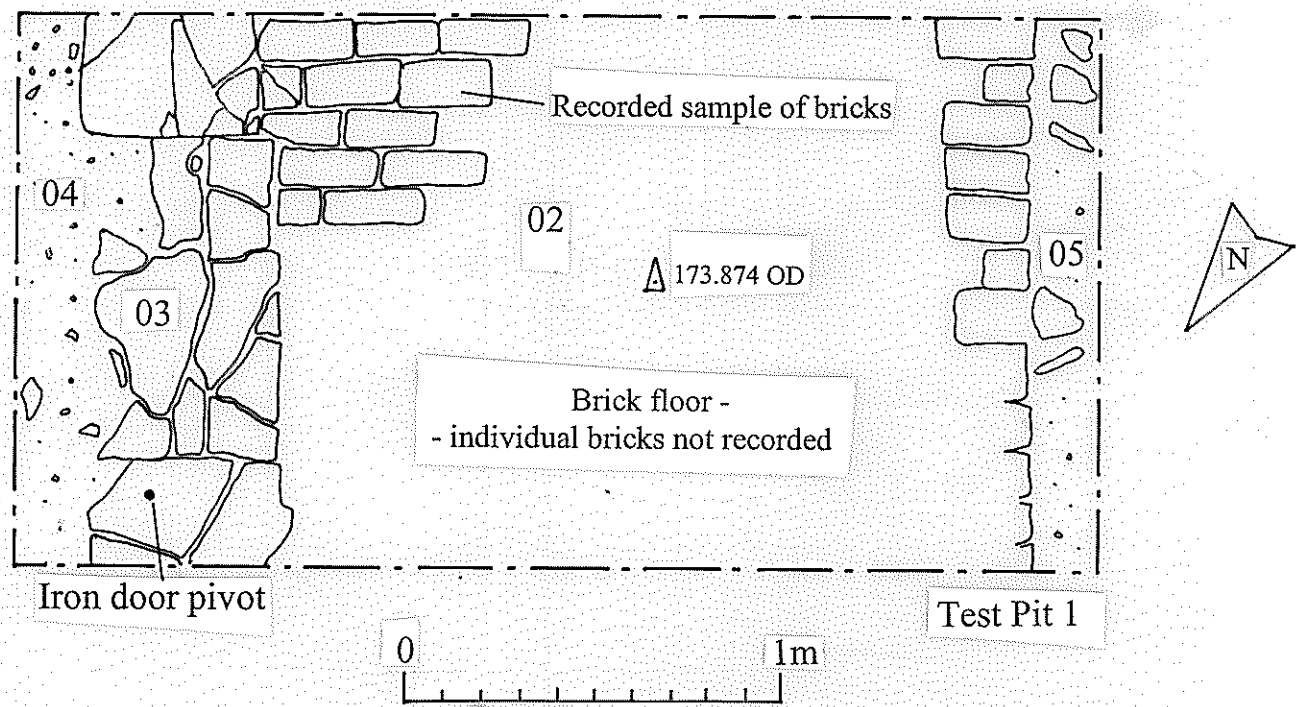
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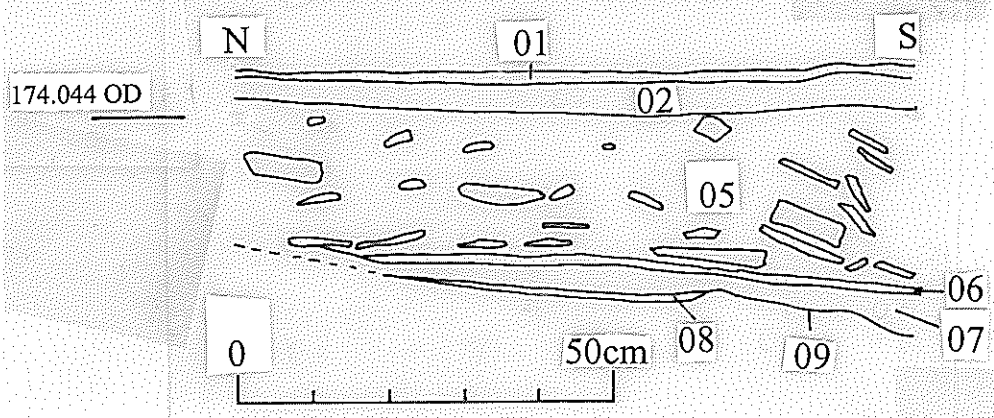
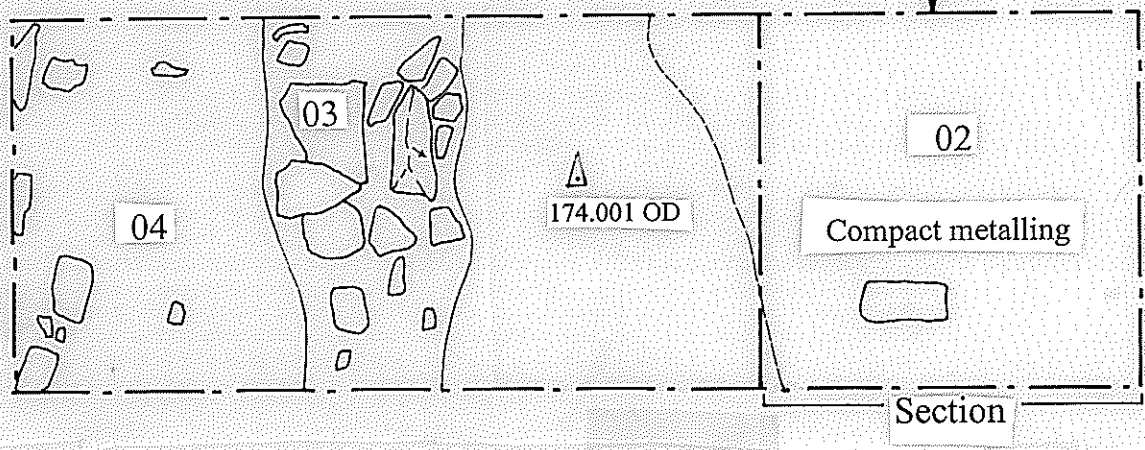
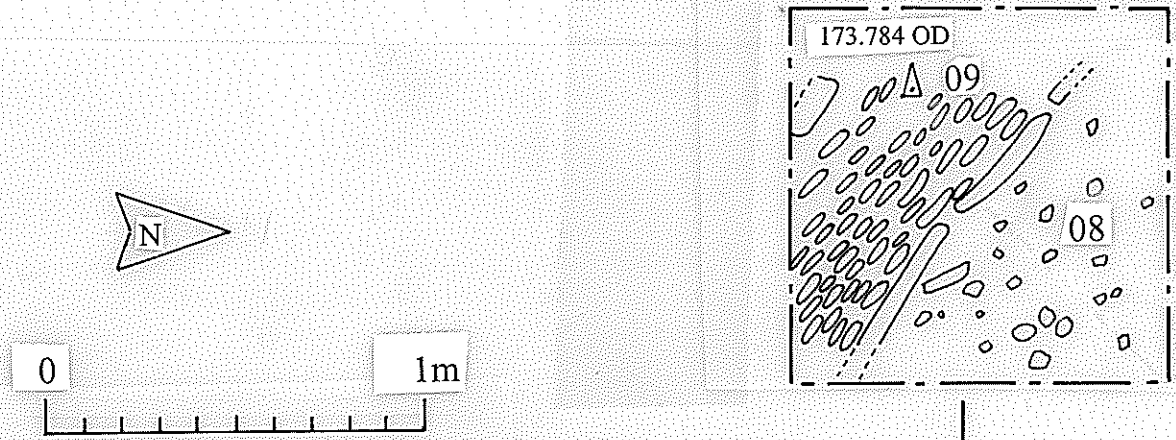
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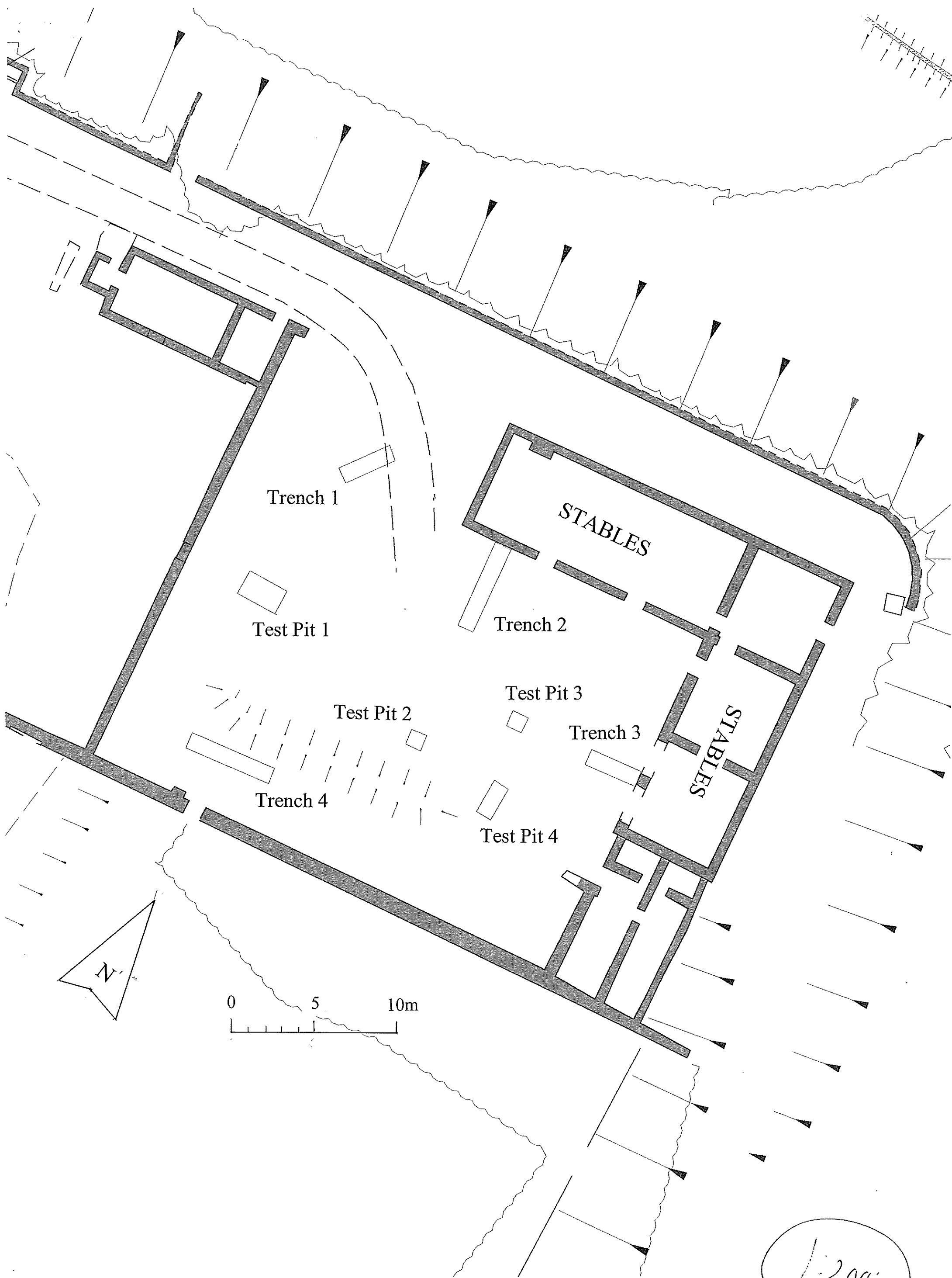






Track





Trench 1

Test Pit 1

STABLES

Trench 2

Test Pit 3

Test Pit 2

Trench 3

STABLES

Trench 4

Test Pit 4

N

0 5 10m

1:200