RAF Cardington
Bedfordshire

Archaeological Evaluation Report

Oxford Archaeology

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JOHN SAMUELS ARCHAEOLOGICAL CONSULTANTS

RAF CARDINGTON
BEDFORDSHIRE

NGR: TL 0790 4720 (centred)

ARCHAEOLOGICAL EVALUATION REPORT

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SUMMARY

In June 2004 Oxford Archaeology (OA) carried out a field evaluation at RAF Cardington (NGR: TL 0790 4720), commissioned by John Samuels Archaeological Consultants (JSAC) on behalf of Bellway Homes. RAF Cardington is situated to the south of Bedford overlooking the valley of the River Great Ouse. The proposed development site covers an area of approximately 46.75 hectares.

Evaluation trenching was initially targeted to examine those areas of the site identified within an earlier desk based assessment, prepared by JSAC in 2004, as having been subject to the least disturbance from its former use as a military air base. On this basis, three areas were identified for examination, Areas A, C and D.

A total of 19 trenches were excavated within Area A. These revealed a limited number of undated archaeological features, predominantly characterised by surviving ditches considered likely to represent the remains of peripheral field systems. The recovery of a residual worked flint blade of Mesolithic/early Neolithic date also attests to occupation activity of this period within the general area of the site.

A total of seven trenches were excavated within Area C. These revealed high levels of modern disturbance. Only two undated features, comprising a ditch and pit were recorded in this area. The pit is considered to be of uncertain archaeological origin.

A total of eight trenches were excavated within Area D. These revealed evidence of moderate levels of modern disturbance, dumping deposits being shown to have in places sealed former topsoil horizons. A pair of parallel ditches of late Iron Age/Roman origin were recorded at the western extent of the area and a further pit type feature of dubious archaeological origin being recorded at its centre.

The evaluation has demonstrated that a low level of surviving below ground archaeological activity is present within those areas of the development site defined as having experienced low levels of later modern disturbance. The overall emphasis of recorded features suggests they are linear in character, and the general lack of any associated artefactual material would suggest that they may represent evidence of more peripheral activity, possibly the surviving remnants of field systems of uncertain age. These may be associated with sites of direct settlement, cropmark and artefactual evidence for which is known/conjectured to exist immediately outside of the development area, both to its north, east and south west.

The recorded archaeological remains in general are poorly preserved, having been shown to have been subject to both truncation through agricultural practices and modern disturbance. Such disturbance was shown to be more extensive over Areas C and D.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 In June 2004 Oxford Archaeology (OA) carried out a field evaluation at RAF Cardington (NGR: TL 0790 4720), commissioned by John Samuels Archaeological Consultants (JSAC) on behalf of Bellway Homes, in respect of a planning application for the development of residential housing. The results of this evaluation are to provide a basis of information upon which a determination of the planning application can be made at Public Inquiry.

1.1.2 RAF Cardington is situated to the south of Bedford overlooking the valley of the River Great Ouse (Fig. 1). The study area lies adjacent to the A600 with Shortstown housing development to the west and Cardington Village to the east. The proposed development area covers an area of approximately 46.75 hectares.

1.2 Geology and topography

1.1.3 The site is situated on slowly permeable calcareous clays of the Evesham 3 association, overlying Jurassic and Cretaceous clays on the higher ground. The lower parts of the site appear to have loamy soils overlying gravels associated with the local valleys. The site lies at approximately 35 m OD.

1.1.4 Current land use is a mixture of former military buildings, areas of grass, hard standing and rubble associated with recent demolition works.

1.3 Archaeological and historical background

1.1.5 The development area has been the subject of a desk based assessment (JSAC 2004), which provides a detailed description of the historical and archaeological background of the site and its immediate environs. The following is a summarised account of the results of this assessment and should be read in conjunction with it.

1.1.6 The area to the south of Bedford has seen human activity since early times. There are traces of Palaeolithic, Neolithic, Bronze Age, Iron Age, Romano-British and medieval remains in the general vicinity. Present evidence indicates that up to the medieval period settlement and associated occupation activity was concentrated on the low lying gravel soils within the valleys rather than on the heavier clay soils of the higher ground over which much of the site is situated.

1.1.7 The existing settlements appear to date mainly from the Anglo-Saxon period. It is considered that the proposed development area itself was used as agricultural land during the medieval and early modern periods. Much of the proposed development area has since been built on and there has been previous ground disturbance in several of the currently grassed areas.

1.1.8 There is little known evidence of earlier activity from within the area of the proposed development site. Fieldwalking has revealed evidence of Roman occupation 150 m to the south west of the site, and aerial photography has revealed cropmarks within the vicinity thought likely to relate to occupation and settlement activity dating to the Iron Age/Roman period.

1.4 Previous archaeological investigation

1.1.9 As part of evaluating the archaeological potential of the site, an initial non-invasive geophysical survey was undertaken within the development area by GSB Prospection Ltd in April 2004, commissioned by JSAC on behalf of Bellway Homes (GSB 2004). A brief summary of the results of this investigation is presented below.

1.1.10 Detailed gradiometer survey was undertaken within five areas of the site considered suitable for survey. With the exception of Areas 4 and 5, all other areas examined by this survey formed the later focus for invasive trenching as reported in this document. Overall, the survey produced results indicating that nothing of archaeological significance was present within the five areas evaluated. Modern disturbance was shown to be present in all areas and a number of anomalies suggested to represent the former presence of roads within Area 3 (evaluation Area D), possibly associated with the aircraft hangers at the southern end of the site, were identified.

2 Aims of the Evaluation

1.1.11 The aims of the evaluation were to:

- determine, as far as reasonably practicable, the presence, location, extent, date, character, and condition of any archaeological features and deposits.
- establish the ecofactual and environmental potential of archaeological deposits and features.
- make available the results of the investigation.

3 Strategy

1.1.12 Evaluation trenching was initially targeted to examine those areas of the site identified within the desk based assessment as having been subject to the least disturbance from its former use as a military air base. On this basis, three areas were identified for examination, Areas A, C and D (Fig. 2).

1.1.13 Area A was an area of flat ground situated at the north east corner of the development area (5.89 hectares). This area was heavily planted with mature and semi-mature trees, scrub and saplings.

1.1.14 Area C comprised a gently sloping piece of land, sloping south to north, situated within the eastern extent of the fenced former air base (1.32 hectares). This remained

as an area of open grassland with some existing hard-standing infrastructure.

1.1.15 Area D, situated within the southern extent of the fenced former air base, again comprised gently sloping ground, sloping west to east (1.2 hectares). This again remained as an area of open grassland with some mature trees.

1.1.16 Pre-excavation strategy proposals as detailed within a *Brief* issued by the Heritage and Environment Section (HES) of Bedfordshire County Council required the use of a 5% trenching sample within all areas of low disturbance on site. On this basis, initial trenching requirements within all three areas, using trenches measuring 50 m long by 1.8 m wide, were to be as detailed below;

1.1.17 Area A - 34 trenches

1.1.18 Area C - 7 trenches

1.1.19 Area D - 9 trenches

4 Methodology

1.1.20 A final total of 34 trenches, of the 50 originally intended, were excavated across the site (Fig. 2). The presence of services and ecological constraints (Great Crested Newts, Lizards and Tree Preservation Orders) meant that 16 of the originally proposed trenches had to be abandoned. Similarly, the above constraints also required where necessary the alteration of trench lengths and orientation (Fig. 2).

1.1.21 The trenches were excavated under constant archaeological supervision by 360° tracked mechanical excavators equipped with toothless ditching/grading buckets. Trenches were excavated to the top of the first archaeological horizon, or were this was absent, to the top of the underlying natural geology. Spoil heaps were monitored for finds.

1.1.22 Subject to the removal of initial topsoil (Areas A and D) and subsequent to grass strimming and topsoil removal (Area C) all trenches were CAT scanned for the presence of services. Where services were located both by pre-excavation scanning and during machine excavation these were treated as 'live' and left undisturbed within trenches.

1.1.23 The trenches were cleaned by hand and features sampled to determine their extent, nature, and for the retrieval of finds and environmental samples. Trenches were planned at a scale of 1:50 and sections drawn at a scale of 1:20 or 1:10 as appropriate. Trenches and sections were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OA Fieldwork Manual* (ed. D Wilkinson, 1992).

5 Finds

1.1.24 Finds were recovered by hand during the course of the excavation and bagged by

context in accordance with the *OA Fieldwork Manual* (OA 1992).

6 PRESENTATION OF RESULTS

1.1.25 A general description of the soils, ground conditions, stratigraphic sequence and distribution of archaeological deposits is given below. Trenches containing recorded archaeological features are described in detail in Section 6.6 below. Trenches that were recorded to contain no archaeological features or deposits are listed in Appendix 1 and are not otherwise described.

1.1.26 The trench descriptions are followed by a description of the finds and a summary and discussion of the results.

1.1.27 A table detailing individual contexts is given in Appendix 1.

6.1 Results: General

6.2 Soils and ground conditions

1.1.28 The site is situated on slowly permeable calcareous clays of the Evesham 3 association, overlying Jurassic and Cretaceous clays (JSAC 2004). Ground conditions were good, and despite intermittent rain, the site drained well.

6.3 The stratigraphic sequence

1.1.29 The stratigraphic sequence was fairly consistent across the site, although there was a slight variation in the natural geology between Areas A and Areas C and D. Invariably the topsoil was a brown silty clay loam ranging in thickness from between 0.2 m to 0.4 m. The topsoil was found to overlie a sequence of successive subsoil deposits. The subsoil was a mixture of the natural geology and the overlying topsoil. These deposits were undoubtedly created as a result of plough action over previous centuries, in some instances judging from the evidence of ridge and furrow activity, dating to the medieval period.

1.1.30 In Area A the natural geology was a light clay with sandy gravel, and this area occupied the lowest part of the site. Areas C and D occupied slightly higher ground and here the geology comprised a heavy clay with a lower proportion of mixed gravel.

1.1.31 Areas C and D were shown to have been subject to modern disturbance, characterised by the presence of dumped deposits, service runs, land drains, rubbish pitting and structural foundations. This was shown to be more extensive within Area C. Area A by comparison demonstrated little modern disturbance of below ground deposits.

1.1.32 In general, the preservation of recorded archaeological deposits was poor. Despite later modern disturbance, the shallow nature of surviving features would suggest that extensive truncation has occurred. This is likely to be attributable to agricultural practice (ploughing) on the site dating from medieval times.

6.4 Distribution of archaeological deposits

1.1.33 The majority of the evaluation trenches were empty, and are not described beyond the stratigraphic sequence, above.

1.1.34 As outlined above (see paragraph 6.4.3) features of modern origin, characterised by the presence of land drains etc, were recorded across all areas.

1.1.35 Features of potential archaeological origin were present in Trenches 1, 2, 5, 6, 11, 12, 13, 14 and 19 (Area A), 38 and 41 (Area D), 43, 44, 48 and 49 (Area C) and these are described in detail below (Figs. 3 to 7).

6.5 Description of deposits

Area A

Trench 1 (Fig. 3)

1.1.36 Trench 1 was oriented north-west to south-east and measured 32 m long. The natural geology was observed at a depth of *c* 0.68 m below ground level (bgl). The natural geology (106) was composed of silty sand and gravel. Layer 106 was cut by a ditch (104) (oriented north to south) which terminated at its northern end. Ditch 104 was 2.2 m in length and measured 1 m wide. This feature had a regular cut with sides sloping at 45° to a 'V' shaped base. Ditch 104 was filled by a single brown sandy silt deposit (103) which was 0.24 m thick and contained iron-stone inclusions. No finds were recovered from this deposit. The ditch and the natural geology were sealed below two naturally derived and plough mixed subsoil deposits (105 and 102) with a combined thickness of 0.6 m. The sequence was sealed by a mid brown sandy loam topsoil deposit up to 0.16 m thick (101). A single worked flint blade was recovered from the excavated topsoil spoil of the trench.

Trench 2 (Fig. 4)

1.1.37 Trench 2 was oriented east to west and measured 30 m long. The natural geology was observed at a depth of *c* 0.65 m bgl. The natural geology (203) was cut by a single ditch feature (207). This ditch was oriented roughly north to south and survived within the trench for a length of 1.9 m running beyond the northern baulk. Ditch 207 was 1.9 m wide and it was cut to a surviving depth of 0.55 m. The ditch contained three distinct fills. The basal fill (206) was a friable, greyish brown silty clay 0.1 m thick. Fill 206 was overlain by a reddish brown silty clay up to 0.2 m thick. The

uppermost fill of ditch 207 was a greyish brown silty clay (204) that was up to 0.3 m thick and 1.4 m wide. No finds were recovered from any of the ditch fills. The ditch and the natural were sealed beneath a naturally derived and plough mixed subsoil deposit comprising a compact, reddish brown silty clay subsoil up to 0.3 m thick. The trench sequence was sealed by a compact, brown sandy loam topsoil up to 0.38 m thick.

Trench 5 (Fig. 5)

1.1.38 Trench 5 was oriented north-west to south-east and measured 30 m long. The natural geology was encountered at 0.49 m bgl. The natural geology (507) was cut by a small ditch at the northern end of the trench and by several ephemeral furrows from relict ridge and furrow agricultural practice. Ditch 504, was a shallow linear feature, orientated north-east to south-west with a concave base measuring 0.84 m wide and 0.28 m deep. The ditch was filled by a single reddish grey-brown friable silty clay deposit (503). No finds were recovered from this feature.

1.1.39 The furrows recorded within the trench were in general very ephemeral. They were orientated north-east to south-west and measured 1.2 m wide. Feature 505, interpreted as a furrow, may equally represent the remains of later disturbance/land division.

1.1.40 The natural geology, the furrows and ditch 504 were sealed beneath a 0.3 m thick layer of mid yellowish brown clayey silt subsoil (502). This in turn was sealed beneath the modern topsoil (501).

Trench 6 (Fig. 6)

1.1.41 Trench 6 was oriented north to south and measured 38 m long. The natural geology (605) was encountered at 0.7 m bgl. The natural geology was cut by a ditch (604) and a pit (606).

1.1.42 Ditch 604, orientated east to west, had concave sides and a concave base. This feature was 0.7 m wide and up to 0.22 m deep and filled with a single fill (603). Fill 603 was a deposit of dark greyish brown silty clay that contained no finds.

1.1.43 At the north end of the trench was a circular pit (606). The pit had a recorded diameter of 1.1 m and a depth of 0.54 m. The sides were steep, breaking on to a concave base. Pit 606 was filled by two distinct fills; the basal fill (607) was a greyish brown silty clay up to 0.32 m thick. This deposit was sealed beneath a yellowish brown silty loam (608) up to 0.22 m thick. Neither fill produced any finds.

1.1.44 All of the features and the geology were sealed by a naturally derived, plough mixed subsoil comprising a yellowish brown silty clay up to 0.2 m thick; the subsoil in turn was sealed beneath a substantial 0.5 m depth of topsoil.

Trench 11 (Fig. 7)

1.1.45 Trench 11 was orientated north to south and measured 50 m in length. The natural

geology (1105) was encountered at 0.5 m bgl. The natural was cut by single linear ditch feature (1104). Ditch 1104 was orientated roughly north-east to south-west and measured 1.6 m wide and 0.4 m deep. The ditch had regular 45° sides and a shallow, concave base and was filled by a single deposit (1103). Fill 1103 was a greyish to orangey brown silty clay very similar to the overlying subsoil, and indeed, probably represents either the overlying deposit filling the settled ditch, or perhaps a relict furrow. No finds were produced from this fill.

1.1.46 The natural geology and the furrow/ditch feature were sealed beneath a layer of subsoil (1102). This deposit was similar in composition to the natural geology; a mixed light orangey brown clay and orangey brown sandy clay (though the subsoil contained a higher loam content). The sequence in this trench was sealed beneath a 0.25 m depth of topsoil.

Trench 12 (Fig. 8)

1.1.47 Trench 12 was oriented north-west to south-east and measured 49 m long. The natural geology (1203) was encountered 0.5 m bgl. The natural was cut by two inter-cutting linear features (1204 and 1206) orientated north to south.

1.1.48 Ditch 1206, identified running along the middle of the trench, was 0.8 m wide and 0.26 m deep. The sides of this feature were regular and broke on to a shallow concave base. Ditch 1206 was filled by a single deposit (1207) which was a mid greenish brown silty clay that produced no finds. Fill 1207 was cut by ditch 1204 which was slightly deeper than ditch 1206. Ditch 1204 was 0.9 m wide and 0.32 m deep and was also filled by a single deposit of mid greenish brown silty clay with manganese oxide inclusions. No finds were recovered. These ditches suggest a field boundary originally represented by ditch 1206 and later, perhaps after complete or partial silting up, redefined by the construction of ditch 1204.

1.1.49 The features recorded within Trench 12 were sealed beneath a layer of subsoil (1202). This deposit was composed of a mid yellowish brown, silty clay up to 0.2 m thick. This deposit was in turn sealed by a 0.3 m depth of topsoil.

Trench 13 (Fig. 9)

1.1.50 Trench 13 was oriented north-west to south-east and measured 32 m long. The natural geology (1308) was encountered at 0.5 m bgl. The natural geology was cut by two pit features (1303 and 1306) of uncertain date.

1.1.51 Pit 1303 was located at the south-east end of the trench. The pit had a diameter measuring 1 m and a depth of 0.4 m. The sides of the pit were steeply sloped and broke relatively sharply on to a flat base. The pit was filled with two distinct fills which appear to show a filling bias from the south-west (see Fig. 9). The earliest fill (1304) fills approximately 60% of the pit. The fill was a mid yellowish brown clay containing up to 25% charcoal fleck inclusions. Fill 1304 was overlain by a similar fill of mid grey colour (1305). Neither fill contained any dateable finds, although the excavator suspected a modern date based on the condition of recorded charcoal

inclusions.

1.1.52 Pit 1306 was smaller than pit 1303 measuring 0.64 m in diameter and 0.22 m deep. The sides and base of this feature were regular and formed a bowl shaped cut. The pit was filled by a deposit of mid brown clay with a small proportion of flint pebble inclusions (1307). No finds were recovered.

1.1.53 The pits and the natural geology were overlain by a light brown clayey silt subsoil that in turn was sealed by 0.3 m depth of topsoil.

Trench 14 (Fig. 10)

1.1.54 Trench 14 was oriented roughly north to south and measured 50 m in length. The natural geology (1407) was encountered at 0.5 m bgl.

1.1.55 The natural geology was cut by a single irregularly shaped pit located near the middle of the trench. Pit 1403 had a diameter of *c* 1.2 m (although in places this was a little as 0.9 m). The pit had irregular sides and an irregular base and measured 0.4 m deep. Three deposits filled this feature; fill 1404 was the earliest of the fills and measured 0.1 m thick. Fill 1404 comprised a dark grey clay with occasional charcoal flecking and occasional pebbles, no finds were recovered. This was overlain by deposit 1405 comprising a mid greyish brown clay up to 0.2 m thick that produced no dateable artefacts. The latest fill of pit 1403 was a dark brown tenacious silty clay (1406), up to 0.3 m thick, containing small manganese inclusions but which produced no finds evidence.

1.1.56 The archaeology and natural geology were sealed beneath a light brown silty clay subsoil (1402), sealed in turn by a 0.32 m depth of topsoil (1401).

Trench 19 (Fig. 11)

1.1.57 Trench 19 was oriented north to south and was 12 m long. The natural geology was encountered at 0.4 m bgl.

1.1.58 The natural geology (1906) was cut by an ephemeral north-west to south-east aligned plough furrow (1902). Furrow 1902 was observed to be cutting across a further linear feature (1904). Feature 1904 was a shallow, regularly cut bowl shape ditch/gully up to 0.24 m deep and 0.55 m wide. The ditch/gully was filled by a single deposit of compact light grey silt (1905) that contained no finds. The archaeology and geology was overlain by 0.36 m depth of topsoil.

Area D

Trench 38 (Fig. 12)

1.1.59 Trench 38 was oriented north to south and measured 46 m in length, this trench was cut across Trench 37. The natural geology was observed at 0.6 m bgl.

1.1.60 The natural geology (3804) was cut by modern service runs and a single pit feature (3803) of uncertain archaeological origin. Pit 3803 was an irregular sub-oval shallow

depression with a maximum depth of 0.12 m. The pit was filled by 3802, a deposit of blueish grey sandy clay with rarely occurring charcoal flecks and some gravel. No finds were produced within this deposit.

1.1.61 The natural geology was sealed by a *c* 0.22 m deep buried soil horizon (3805), similar in composition to that described below in Trench 41. This deposit was impacted and sealed by an irregular area of modern concrete and rubble observed at the north end of the trench which lay within a made ground deposit comprising mid yellowish brown clay with brick and rubble (3801) up to 0.45 m thick. This was in turn sealed by a 0.14 m depth of modern topsoil.

Trench 41 (Fig. 13)

1.1.62 Trench 41 was oriented north-east to south-west and measured 25 m in length. The north-east and south-west ends were not excavated because of the presence of live services. The natural geology (4108) was observed at 0.78 m bgl.

1.1.63 The natural geology was cut by two parallel ditches (4104 and 4106). Ditch 4104 was a regular north-west to south-east aligned linear feature with 45° sides and a flat base. The ditch was 1.5 m wide and 0.22 m deep. Feature 4104 was filled by a single fill (4105) which was a mid yellowish brown silty clay with occasional gravel. This deposit produced a single pottery sherd of late Iron Age/early Roman date and fragmentary remains of a single sheep/goat long bone.

1.1.64 Approximately 0.6 m to the north-west of ditch 4104 was ditch 4106. Ditch 4106 was less deep and less steep than 4104, measuring 1.46 m wide and 0.14 m deep, and contained a single fill (4107) of mid yellowish brown silty clay and gravel. The fill of this feature contained a single pottery sherd of Roman date and two fragments of ceramic building material.

1.1.65 A deposit interpreted as a buried soil horizon (4103) sealed the ditches and was composed of a mid brown clayey loam up to 0.32 m thick.

1.1.66 Sealing this horizon was a layer of gravel and rubble within a matrix of mid yellowish brown silty clay up to 0.44 m thick (4101). This layer represents a deposit of localised made ground, similarly observed in Trench 38. This was sealed by 0.22 m depth of topsoil.

Area C

Trench 43 (Fig. 14)

1.1.67 Trench 43 was oriented north-west to south east and measured 49 m in length. The natural geology was encountered at 0.6 m bgl.

1.1.68 The natural geology (4303) was cut by shallow ditch (4304) and at the northern end of the trench a modern gully feature (4306).

1.1.69 Ditch 4304 was a north to south aligned ditch terminating at its southern end near the

mid point of the trench. Two sections were excavated across this feature revealing a shallow profile up to 0.06 m deep and 0.6 m wide. The ditch was filled by a mid yellowish brown silty clay (4305) that produced no finds.

1.1.70 Gully 4306 was located towards the northern end of the trench and was orientated east to west. The gully was 0.46 m wide and up to 0.34 m deep. The cut was steep sided and 'V' shaped at its base. The gully was filled by a single deposit of loose, blueish grey sandy silt that did not contain any archaeological finds. The gully was shown to cut the subsoil (4301) and is believed to represent the remains of a modern land drain. An exactly similar feature (4503) was recorded at the northern end of Trench 45.

1.1.71 The natural and ditch 4304 was overlain by a 0.2 m depth of brown, silty clay subsoil (4301) that in turn was sealed by 0.35 m depth of topsoil.

Trench 44 (Fig. 15)

1.1.72 Trench 44 was oriented east to west and measured 44 m long. The natural geology (4403) was encountered at a depth of 0.65 m bgl.

1.1.73 The natural geology was cut by both modern intrusions and two linear features (4404 and 4406), both of which are considered to be of modern origin.

1.1.74 Ditch 4404 was orientated north to south and ran across the width of the trench. This feature was 1.1 m wide with gently sloping sides and a flat base up to 0.25 deep. The single fill of this feature (4402) was a greyish brown sandy loam. Undiagnostic fragments of ceramic building material and a ferrous object were recovered from its fill. These are considered to be modern in origin.

1.1.75 Ditch 4406 was similar to ditch 4404, though deeper and better defined. The ditch was aligned north to south and measured 1.2 m wide at the top. The ditch had concave sides and base and was filled by a single fill (4407). Deposit 4407 was a brown silty clay that produced no finds. The ditch was shown to have been cut from directly beneath the existing topsoil (4400) and to cut through a modern disturbance deposit on its north eastern side (4405) and subsoil (4401) on its south western side. The ditch is therefore considered to be modern in origin.

1.1.76 The natural and ditch 4404 were overlain by a 0.55 m deep compact layer of subsoil, demonstrated to have been cut by ditch 4406. The subsoil and fill of ditch 4406 were in turn sealed by a 0.2 m depth of topsoil (4400).

Trench 48 (Fig. 16)

1.1.77 Trench 48 was oriented east to west and measured 52 m in length. The natural geology (4807) was encountered at a depth of 1 m bgl.

1.1.78 This trench contained much modern activity. Beneath the topsoil was a layer of mixed rubble (4802) containing concrete. This layer was up to 1 m thick and overlay a concrete wall (4803). The wall and the overlying rubble probably represent the

remnants of former airfield buildings.

1.1.79 Below the rubble horizon, was a layer of buried topsoil (4804) up to 0.46 m thick, containing deposits of rubble and concrete.

1.1.80 An amorphous curvilinear feature (4806) was observed within the natural geology at the western end of the trench. Prior to excavation it was believed that this feature may extend into the north western end of Trench 49, however, excavation demonstrated that it terminated within the trench. The profile of this feature was shallow with concave sides and an irregular base. Feature 4806 was very poorly defined and indistinct, measuring approximately 0.7 m wide and 0.08 m deep. The fill (4805) was very similar in composition to the natural geology, an orangey brown silty clay, and no finds were produced.

1.1.81 Excavation of this feature would suggest that it is most likely geological in origin.

Trench 49 (Fig. 17)

1.1.82 Trench 49 was oriented north west to south east and measured 29 m long. The natural geology (4904) was encountered at a depth of 0.6 m bgl.

1.1.83 The natural geology was cut by a single pit/tree throw (4903) situated approximately at the centre of the trench.

1.1.84 Pit/tree throw 4903 was only partially exposed within the trench, being approximately ovoid in plan (*c* 1.6 m wide in section) and surviving to a depth of 0.30 m. The feature contained a single reddish brown silty clay fill (4902) that contained no dating evidence.

1.1.85 The natural and pit/tree throw 4903 was overlain by a 0.36 m depth of mid brown, silty clay subsoil (4901) that in turn was sealed by 0.24 m depth of topsoil.

7 FINDS

***Flint by* Rebecca Delaney**

1.1.86 A single flint blade (4 g) was recovered from residual spoil contexts derived from Trench 1. The flint blade is in a very fresh condition with a light cortication. The proximal end has been snapped prior to recovery and the distal end forms a point. The parallel negative blade scars on the dorsal surface suggest the piece has been struck from a blade core. There is possible usewear along the right hand edge. The blade is likely to date from the Mesolithic or Early Neolithic periods.

***Pottery by* Paul Booth**

1.1.87 A total of two small and heavily abraded sherds of pottery were recovered weighing a total of 8 g. A single sherd, dated to the late Iron Age/early Roman period was recovered from the fill of ditch 4104, with a further single sherd, dated to the Roman period, being recovered from the fill of ditch 4106.

***Animal bone by* Jen Kitch**

1.1.88 A total of four fragments (3 g) were recovered from ditch 4104, all of which derive from a single poorly preserved long bone of a medium sized mammal, probably a sheep/goat.

***Other Finds by* Steven Weaver**

Ceramic Building Material

1.1.89 A total of four heavily worn sherds of undiagnostic ceramic building material, weighing a total of 50 g, was recovered. The material derived from ditch 4106 (Area D) and ditch 4404 (Area C), both of which contained two sherds respectively. The material recovered from ditch 4106 has the potential to be Roman in origin on the basis of associated pottery recovered from its fill. The material recovered from ditch 4404 is considered to be modern in origin.

Metalwork

1.1.90 A single undiagnostic ferrous object weighing a total of 155 g was recovered from the fill of ditch 4404. This is considered to be modern in origin.

8 Discussion and Interpretation

8.1 Reliability of field investigation

1.1.91 The field evaluation was carried out under controlled conditions and the results are considered reliable. Ground conditions were fair and features, where present, were clearly visible. Surviving archaeological features appear to have been affected by later plough truncation and as such may not be complete in form in most cases.

8.2 Overall interpretation

Summary of results

Area A

1.1.92 The evaluation has demonstrated the presence of surviving archaeological activity within Area A, although the date and character of this activity remains uncertain. Occupation activity is predominantly characterised by a series of ditched features generally orientated on a north to south and north west to south east alignment, although a single pit was recorded. The absence of any associated finds evidence from all excavated features does not allow for any dating or phasing of the recorded activity to be made. This absence, the exception being the recovery of the residual worked flint blade of prehistoric date, suggests that the features recorded within Area

A are representative of activity that lies on the periphery (possibly field boundaries etc.) of any potentially associated settled occupation. Such evidence possibly being suggested by known cropmarks of probable Iron Age/Roman date situated immediately to the north and east of the evaluated area (JSAC 2004; Figures 5 and 6).

1.1.93 The recovery of the single flint blade of Mesolithic/early Neolithic date recorded within the spoil of Trench 1 is indicative of activity in the general environs of Area A at this time, further evidence of which is known to survive both to the north and west of the site. The presence of the worked flint blade cannot in itself be considered as indicative of direct occupation activity on the site in this period given that it has been recovered from within a residual context, likely deriving from a process of casual loss and later disturbance through agricultural activity.

1.1.94 Unlike Areas C and D very little modern disturbance was revealed within this area.

Area C

1.1.95 In general, with the exception of ditch 4304, the features recorded within this area predominantly reflect evidence of later modern disturbance. The ditch (4304), which remains undated, should, given its proximity to Area A, be considered within the same context as those features described above and recorded in Area A. As such, the ditch is again thought to reflect evidence of peripheral occupation activity, the precise character, date and significance of which remains uncertain.

Area D

1.1.96 The features recorded within this area (Trench 41) indicate the presence of occupation activity dating to the late Iron Age/Roman period. The recorded ditches have the potential to correlate well with the north west to south east aligned linear anomaly recorded by geophysical survey in Area 3, previously interpreted to represent the remains of a former road. Evaluation within this area did not identify/confirm the presence of any of the other anomalies previously identified by geophysical survey.

1.1.97 The poor preservation and paucity of the associated finds evidence recovered from the excavated features does not allow for a clear interpretation to be made regarding their true character, date and extent of the activity represented. A lack of any further archaeological features/deposits within this area that could be identified with any confidence (feature 3801 being of dubious archaeological origin) would indicate the sites lack of potential to contain any further associated occupation/settlement evidence east of the recorded ditches.

1.1.98 The possibility that potentially associated occupation/settlement evidence may lie further to the west, south or north of the evaluated area cannot be excluded. The relative paucity of artefactual material recovered from the excavated features does suggest however, that the activity represented within Area C is likely to be peripheral to any main focus of occupation/settlement, such potential evidence being known to

be present *c* 300 m to the south west of the site (JSAC 2004; SMR number 1181, Figure 6). The recorded ditches may possibly represent a partial remnant of associated field systems.

1.1.99 The recorded evidence, albeit slight, does lend further support to the suggestion that the heavier clay soils were beginning to be exploited in the Roman period.

Significance

1.1.100 The evaluation has demonstrated that a low level of surviving below ground archaeological activity is present within those areas of the development site defined as having experienced low levels of later modern disturbance. With the exception of two ditches revealed in Area D, suggestive of activity dating to the late Iron Age/Roman period, the recorded features examined across the remainder of the site are undated. In this instance, very little further detailed interpretation can be provided regarding the precise date, function and character of the surviving archaeological remains. The overall emphasis of recorded features to be linear in character, and the general lack of any associated artefactual material, suggests that they may represent evidence of more peripheral activity, possibly the surviving remnants of field systems. These are likely to have been associated with sites of direct settlement, cropmark and artefactual evidence for which is known/conjectured to exist immediately outside of the development area both to its north, east and south west.

1.1.101 The recorded archaeological remains in general are poorly preserved, having been shown to have been subject to both truncation through agricultural practices and modern disturbance. Such disturbance being shown to be more extensive over Areas C and D.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
001								
	101	Layer		0.3	Modern ploughsoil	flint blade	1/4g	Meso/ Neo
	102	Layer		0.22	Subsoil			
	103	Fill		0.67	fill of 1004			
	104	Fill	0.68	0.6	Ditch			
	105	Layer		0.42	Subsoil			
	106	Layer			Natural gravel			
002								
	201	Layer		0.35	Modern ploughsoil			
	202	Layer		0.3	Subsoil			
	203	Layer			Natural			
	204	Fill		0.3	fill of 207			
	205	Fill		0.2	fill of 207			
	206	Fill		0.1	fill of 207			
	207	Cut	1.5	0.55	Ditch terminus			
003								
	301	Layer		0.29	Topsoil			
	302	Layer		0.2	Subsoil			
	303	Layer			Natural gravel			
004								
	401	Layer		0.3	Topsoil			
	402	Layer		0.4	Subsoil			
	403	Layer			Natural sand			
005								
	501	Layer		0.26	Topsoil			
	502	Layer		0.3	Subsoil			
	503	Fill		0.28	fill of 504			
	504	Cut	0.84	0.28	ditch			
	505	Cut	1.2	0.1	furrow			
	506	Fill		0.1	fill of 505			

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
006								
	601	Layer		0.52	Topsoil			
	602	Layer		0.2	Subsoil			
	603	Fill		0.22	fill of 604			
	604	Cut	0.68	0.22	Ditch			
	605	Layer			Natural sand and gravel			
	606	Cut	1.05	0.52	Pit			
	607	Fill		0.18	fill of 606			
	608	Fill		0.32	fill of 606			
007								
	701	Layer		0.4	Topsoil			
	702	Layer		0.21	Subsoil			
	703	Layer		0.48	Clay make-up layer			
	704	Cut		0.2	Construction cut			
	705	Fill		0.05	foundation layer-fill of 704			
	706	Fill		0.15	Brick path-fill of 704			
	707	Fill		0.16	Tarmac and topsoil			
	708	Layer			Natural clay and gravel			
	709	Cut			Modern disturbance			
008								
	801	Layer		0.23	Topsoil			
	802	Layer		0.2	Subsoil			
	803	Layer		0.2	Alluvium			
	804	Layer			Natural sand			
009								
	901	Layer		0.3	Topsoil			
	902	Layer		0.2	Subsoil			
	903	Layer			Natural sand and gravel			
010								
	1001	Layer		0.32	Topsoil			
	1002	Layer		0.15	Subsoil			
	1003	Layer		0.17	Alluvium			

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
	1004	Layer			Natural sand and gravel			
011								
	1101	Layer		0.25	Topsoil			
	1102	Layer		0.2	Subsoil			
	1103	Fill		0.35	fill of 1104			
	1104	Cut	1.52	0.35	Ditch			
	1105	Layer			Natural sandy clay			
012								
	1201	Layer		0.3	Topsoil			
	1202	Layer		0.2	Subsoil			
	1203	Layer			Natural clay			
	1204	Cut	0.9	0.32	Ditch			
	1205	Fill		0.32	fill of 1204			
	1206	Cut	0.8	0.26	Ditch			
	1207	Fill		0.26	fill of 1206			
013								
	1301	Layer		0.32	Topsoil			
	1302	Layer		0.21	Subsoil			
	1303	Cut	0.98	0.38	Pit			
	1304	Fill		0.38	fill of 1303			
	1305	Fill		0.32	fill of 1303			
	1306	Cut		0.2	Pit			
	1307	Fill	0.65	0.2	fill of 1306			
	1308	Layer			Natural clay			
014								
	1401	Layer		0.2	Topsoil			
	1402	Layer		0.3	Subsoil			
	1403	Cut	1.2	0.4	Pit			
	1404	Fill		0.1	fill of 1403			
	1405	Fill		0.2	fill of 1403			
	1406	Fill		0.3	fill of 1403			
015								
	1501	Layer		0.3	Topsoil			

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
	1502	Layer			Natural sand and gravel			
016								
	1601	Layer		0.25	Topsoil			
	1602	Layer		0.3	Subsoil			
	1603	Layer			Natural sandy clay			
017								
	1701	Layer		0.25	Topsoil			
	1702	Layer		0.25	Subsoil			
	1703	Fill		0.1	fill of 1704			
	1704	Cut	1.0	0.1	Furrow			
	1705	Layer			Natural sandy clay			
	1706	Cut			Modern intrusion			
018								
	1801	Layer		0.2	Topsoil			
	1802	Layer		0.2	Subsoil			
	1803	Layer			Natural clay			
	1804	Fill		0.23	fill of 1805			
	1805	Cut		0.23	Furrow			
	1806	Fill		0.2	fill of 1807			
	1807	Cut		0.2	Furrow			
	1808	Layer			Modern Path			
	1809	Layer		0.2	Modern make-up layer			
019								
	1901	Layer		0.36	Topsoil			
	1902	Cut	0.85	0.6	Furrow			
	1903	Fill		0.6	fill 0f 1902			
	1904	Cut	0.75	0.24	Ditch			
	1905	Fill		0.24	fill of 1904			
	1906	Layer			Natural sand and gravel			
035								
	3500	Layer		0.21	Topsoil			
	3501	Layer		0.22	Subsoil			
	3502	Layer		0.16	Burnt deposit			
	3503	Fill		0.2	Brick path fill of 3505			

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
	3504	Layer			Natural clay			
	3505	Cut	14.0	0.2	Modern construction cut			
036								
	3600	Layer		0.2	Topsoil			
	3601	Layer		0.2	Subsoil			
	3602	Layer			Natural clay			
037								
	3700	Layer		0.26	Topsoil			
	3701	Layer		0.2	Subsoil			
	3702	Layer			Natural sand and gravel			
038								
	3800	Layer		0.14	Made ground			
	3801	Layer		0.45	Demolition layer			
	3802	Fill		0.14	fill of 3803			
	3803	Cut	0.8	0.14	Pit			
	3804	Layer			Natural sandy clay			
	3805	Layer		0.22	Buried soil horizon			
039								
	3900	Layer		0.15	Topsoil			
	3901	Layer		0.30	Demolition layer			
	3902	Layer		0.33	Subsoil			
	3903	Layer		0.21	Subsoil/land surface			
	3904	Layer			Natural sandy clay			
040								
	4000	Layer		0.16	Topsoil			
	4001	Layer		0.41	Subsoil			
	4002	Layer			Natural sand and gravel			
041								
	4100	Layer		0.22	Topsoil			
	4101	Layer		0.44	Demolition layer			
	4102	Layer		0.10	Subsoil			
	4103	Layer		0.22	Alluvium			
	4104	Cut	0.6	0.22	Ditch			
	4105	Fill		0.22	fill of 4104	pot, bone	1/4g	LIA/

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
							4/3g	Roman
	4106	Cut	0.6	0.14	Ditch			
	4107	Fill		0.14	fill of 4106	pot, CBM	1/4g 2/4g	Roman
	4108	Layer			Natural sandy loam			
042								
	4200	Layer		0.11	Topsoil			
	4201	Layer		0.33	Demolition layer			
	4202	Layer		0.25	Subsoil			
	4203	Layer			Natural sandy clay			
043								
	4300	Layer		0.35	Topsoil			
	4301	Layer		0.20	Subsoil			
	4302	Layer		0.32	same as 4301			
	4303	Layer			Natural clay			
	4304	Cut	0.64	0.25	Ditch			
	4305	Fill		0.25	fill of 4304			
	4306	Cut	0.46	0.34	Gully			
	4307	Fill		0.34	fill of 4306			
044								
	4400	Layer		0.2	Topsoil			
	4401	Layer		0.55	Disturbed subsoil			
	4402	Fill		0.25	fill of 4404	CBM, Fe	2/35g 1/155 g	Modern?
	4403	Layer			Natural clay			
	4404	Cut	1.05	0.25	Ditch			
	4405	Cut			Modern disturbance			
	4406	Layer	1.18	0.4	Ditch			
	4407	Fill		0.4	fill of 4406			
	4408	Cut			Make-up for concrete			
045								
	4500	Layer		0.25	Topsoil			
	4501	Layer		0.25	Subsoil/colluvium			

Trench	*Ctxt No*	*Type*	*Width (m)*	*Thick. (m)*	*Comment*	*Finds*	*No./ wt*	*Date*
	4502	Layer			Natural clay, sand and gravel			
	4503	Cut			Modern gully			
046								
	4600	Layer		0.26	Demolition layer			
	4601	Layer		0.30	Subsoil			
	4602	Layer			Natural clay, sand and gravel			
047								
	4700	Layer		0.3	Topsoil			
	4701	Layer		0.26	Demolition layer			
	4702	Fill		0.07	Concrete surface			
	4703	Fill		0.14	Rubble make-up layer			
	4704	Cut		0.18	Construction cut			
	4705	Layer		0.48	Redeposited natural			
	4706	Layer		0.18	Natural clay			
	4707	Layer		0.22	Modern redeposited natural			
	4708	Cut			Modern posthole			
	4709	Fill			fill of 4710			
	4710	Cut			Modern posthole			
048								
	4801	Layer		0.25	Topsoil			
	4802	Layer			Modern make-up layer			
	4803	Struct.			Concrete wall			
	4804	Layer		0.45	Buried topsoil			
	4805	Fill		0.08	fill of 4806			
	4806	Cut	0.7	0.08	Gully			
	4807	Layer			Natural clay			
049								
	4900	Layer		0.24	Topsoil			
	4901	Layer		0.36	Subsoil			
	4902	Fill		0.3	fill of 4903			
	4903	Cut	1.6	0.3	Treethrow			
	4904	Layer			Natural clay			

Appendix 2 Bibliography and references

GSB 2004 *Geophysical Survey Report 2004/35, Former RAF Cardington, Bedfordshire.* GSB Prospection Ltd, Client report.

HES 2004 *Brief for a Programme of Archaeological Investigation of Land at the former RAF Cardington, Bedfordshire*, Heritage and Environment Section, Culture and Environment Group, Bedfordshire County Council.

JSAC 2004 *A Desk-based Archaeological Assessment at the former RAF Cardington/ Shortstown, Bedford*, John Samuels Archaeological Consultants, March 2004, Client report.

OA 1992 *OA Fieldwork Manual* (ed. D Wilkinson, 1992).

Appendix 3 Summary of site details

Site name: RAF Cardington
Site code: RAFCA 04
Grid reference: TL 0790 4720
Type of evaluation: Trial trenching
Date and duration of project: 09/06/04 10 days
Area of site: 27.65 ha
Summary of results: Evaluation trenching was initially targeted to examine those areas of the site identified within an earlier desk based assessment, prepared by JSAC in 2004, as having been subject to the least disturbance from its former use as a military air base. On this basis, three areas were identified for examination, Areas A, C and D.

A total of 19 trenches were excavated within Area A. These revealed a limited number of undated archaeological features, predominantly characterised by surviving ditches considered likely to represent the remains of peripheral field systems. The recovery of a residual worked flint blade of Mesolithic/early Neolithic date also attests to occupation activity of this period within the general area of the site.

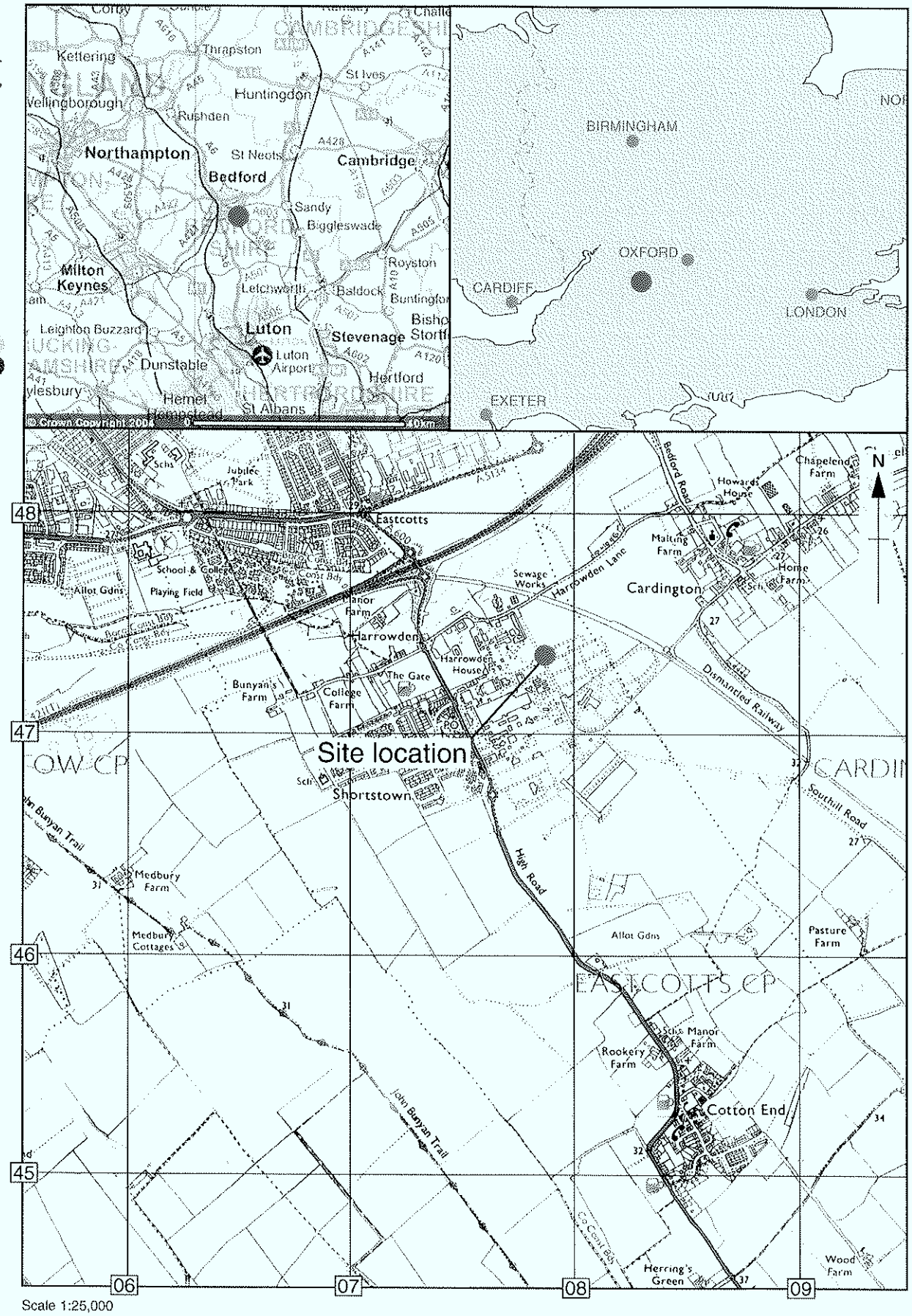
A total of seven trenches were excavated within Area C. These revealed high levels of modern disturbance. Only two undated features, comprising a ditch and pit were recorded in this area. The pit is considered to be of uncertain archaeological origin.

A total of eight trenches were excavated within Area D. These revealed evidence of moderate levels of modern disturbance, dumping deposits being shown to have in places sealed former topsoil horizons. A pair of parallel ditches of late Iron Age/Roman origin were recorded at the western extent of the area and a further pit type feature of dubious archaeological origin being recorded at its centre.

The evaluation has demonstrated that a low level of surviving below ground archaeological activity is present within those areas of the development site defined as having experienced low levels of later modern disturbance. The overall emphasis of recorded features suggests they are linear in character, and the general lack of any associated artefactual material would suggest that they may represent evidence of more peripheral activity, possibly the surviving remnants of field systems of uncertain age. These may be associated with sites of direct occupation/settlement, cropmark and artefactual evidence for which is known/conjectured to exist immediately outside of the development area, both to its north, east and south west.

The recorded archaeological remains in general are poorly preserved, having been shown to have been subject to both truncation through agricultural practices and modern disturbance. Such disturbance was shown to be more extensive over Areas C and D.
Location of archive: The archive is currently held at OA, Janus House, Osney Mead,

Oxford, OX2 0ES, and will be deposited with Bedford Museum in due course, under the following accession number: BEDFM 2004.118



Scale 1:25,000

Figure 1: Site location

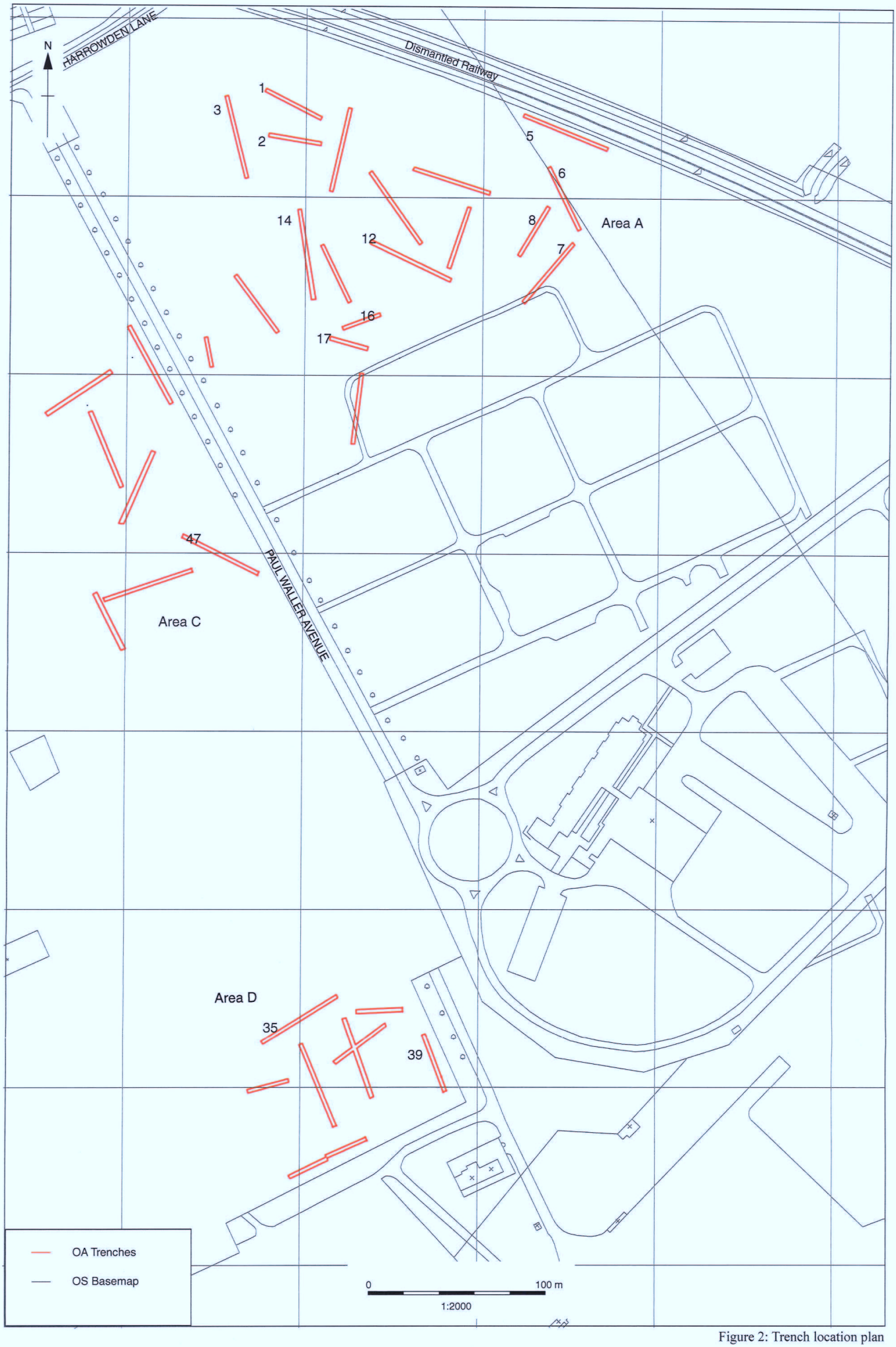
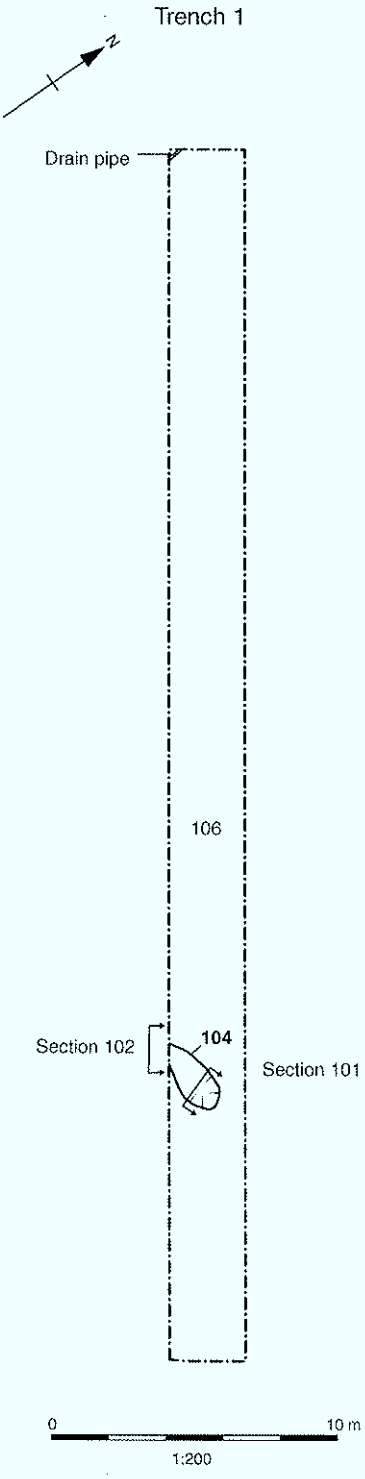
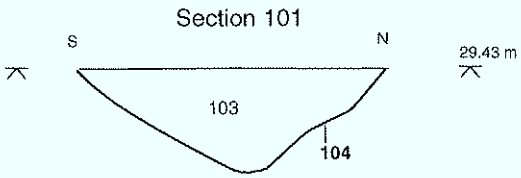


Figure 2: Trench location plan





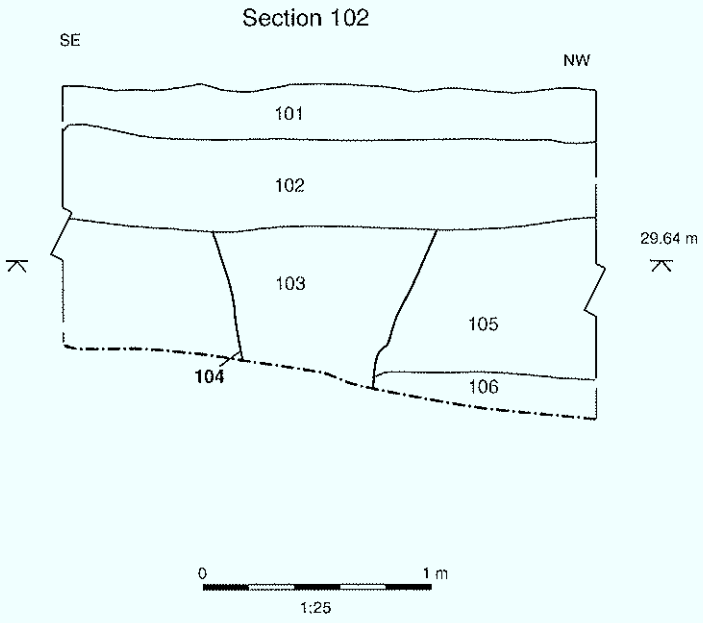
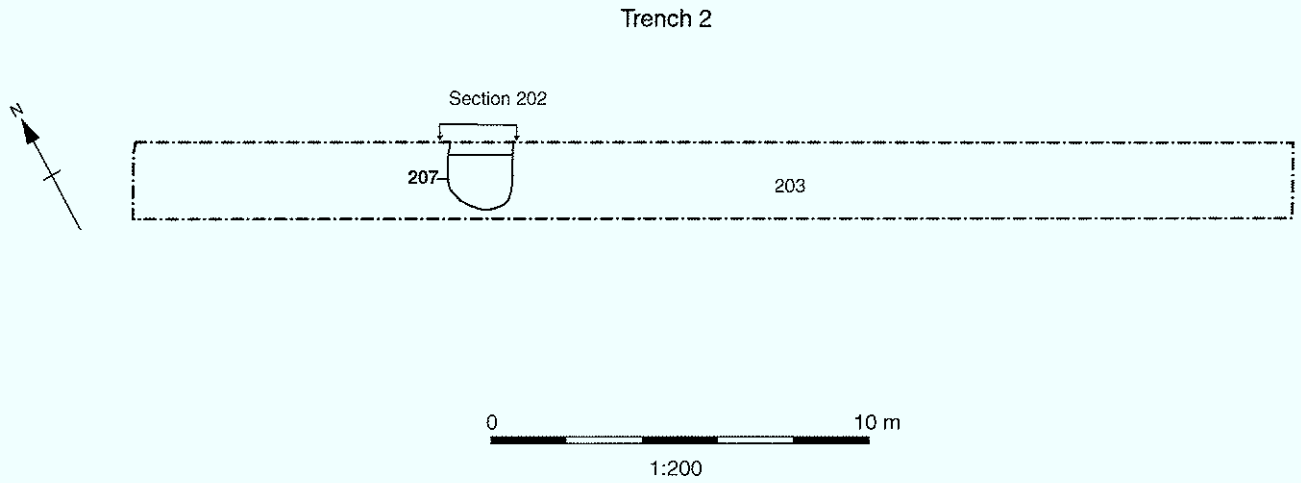


Figure 3: Trench 1, plan and sections



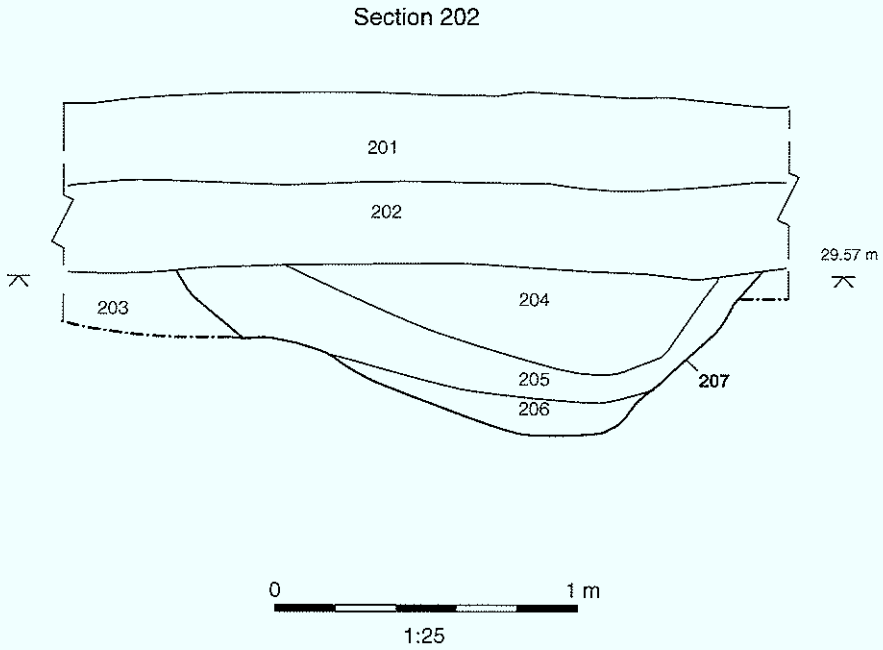


Figure 4: Trench 2, plan and section

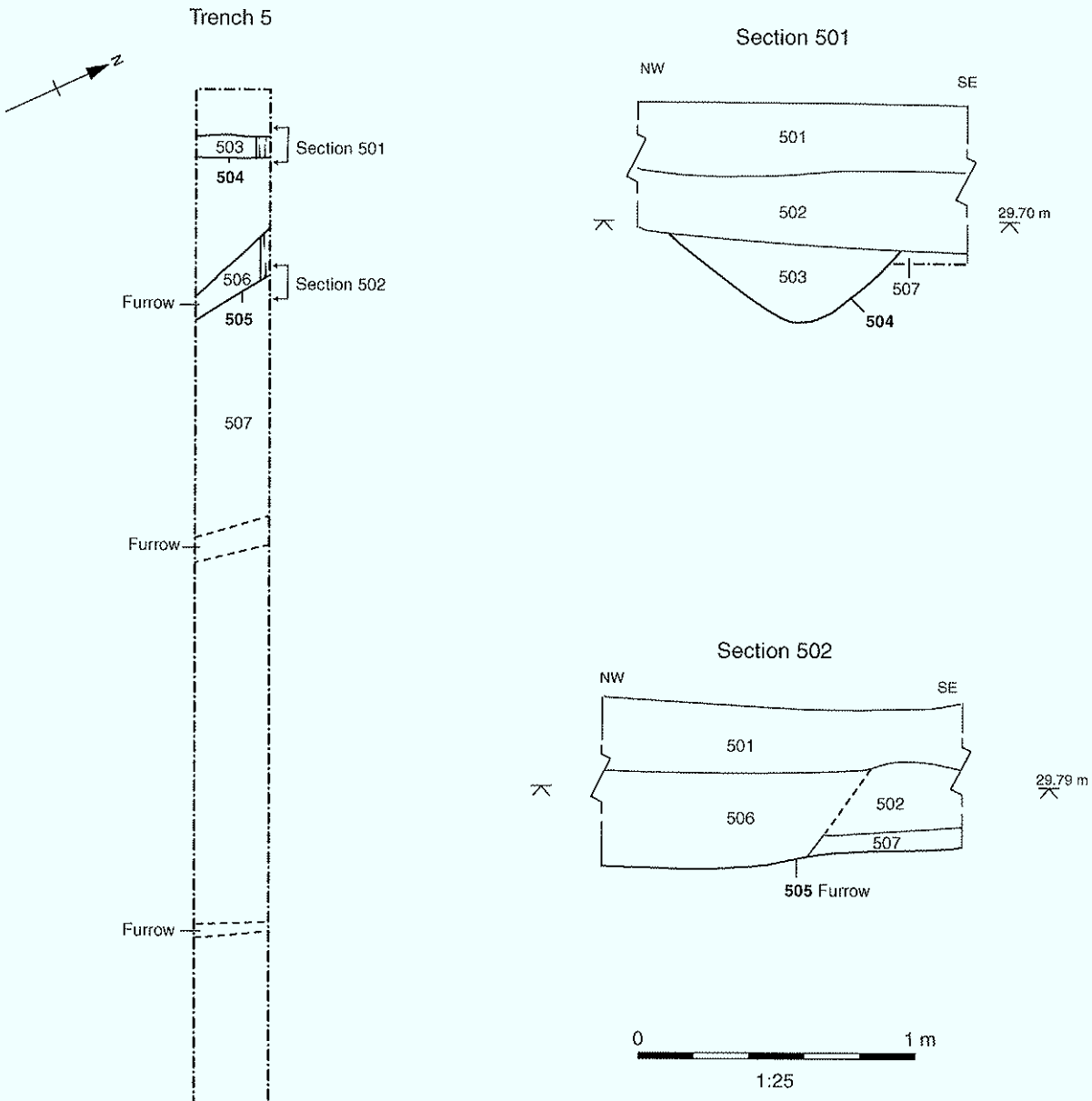


Figure 5: Trench 5, plan and sections

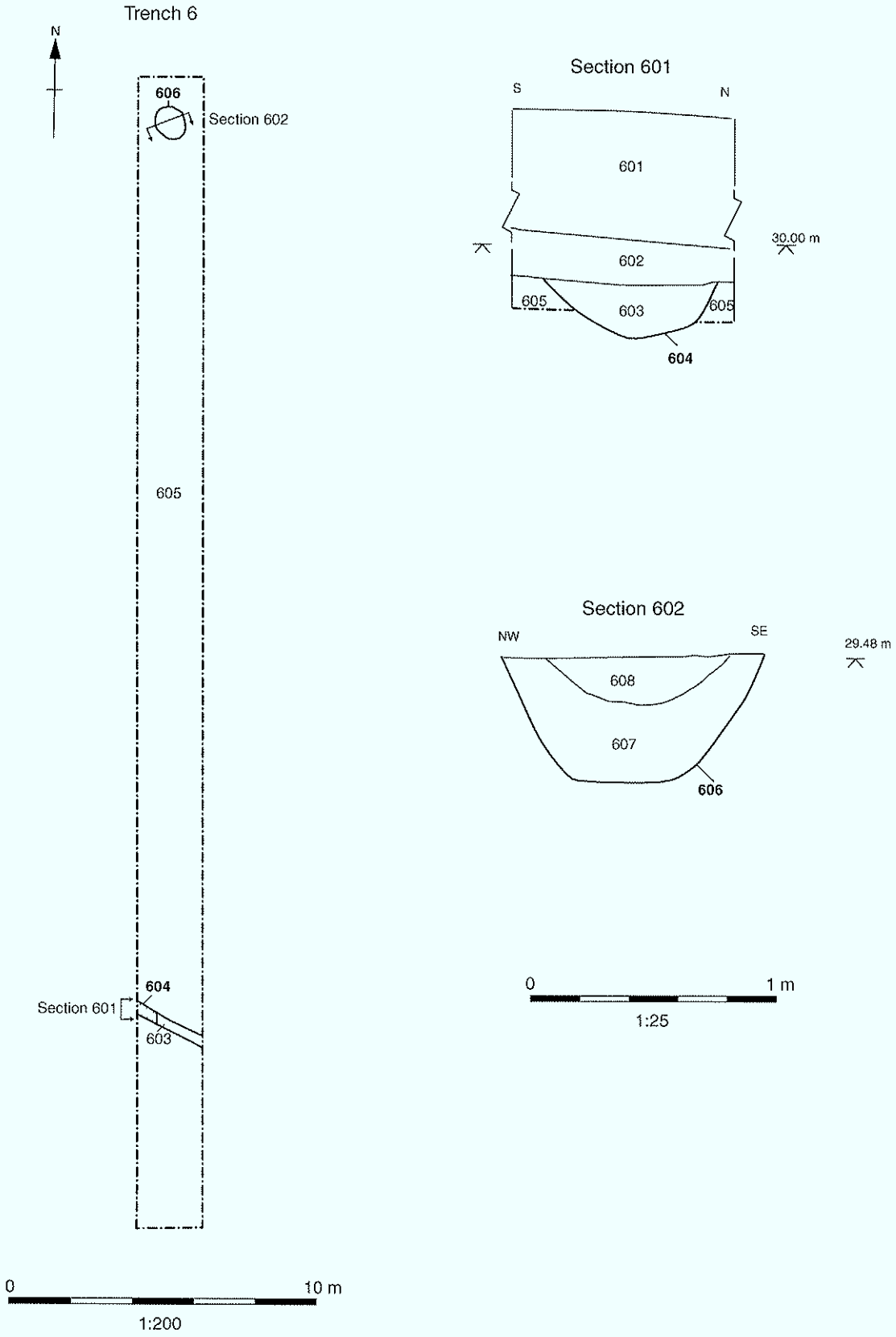
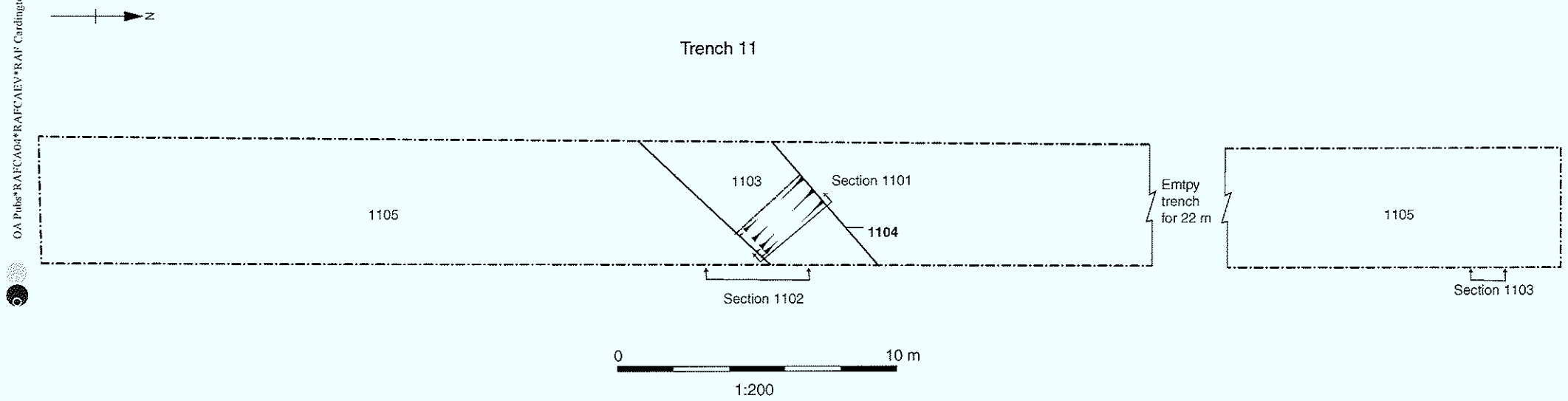


Figure 6: Trench 6, plan and sections



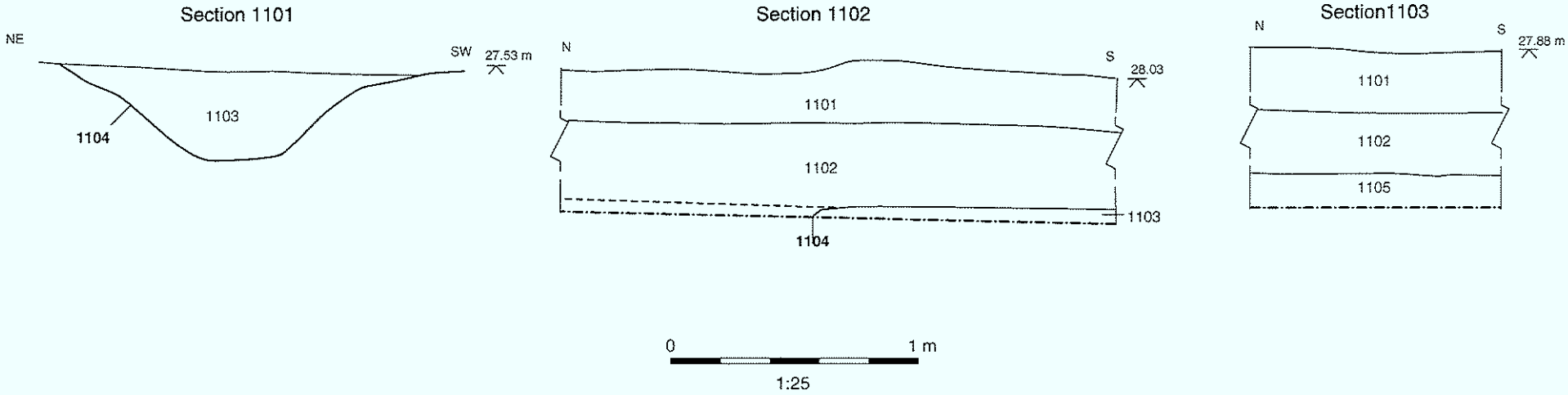
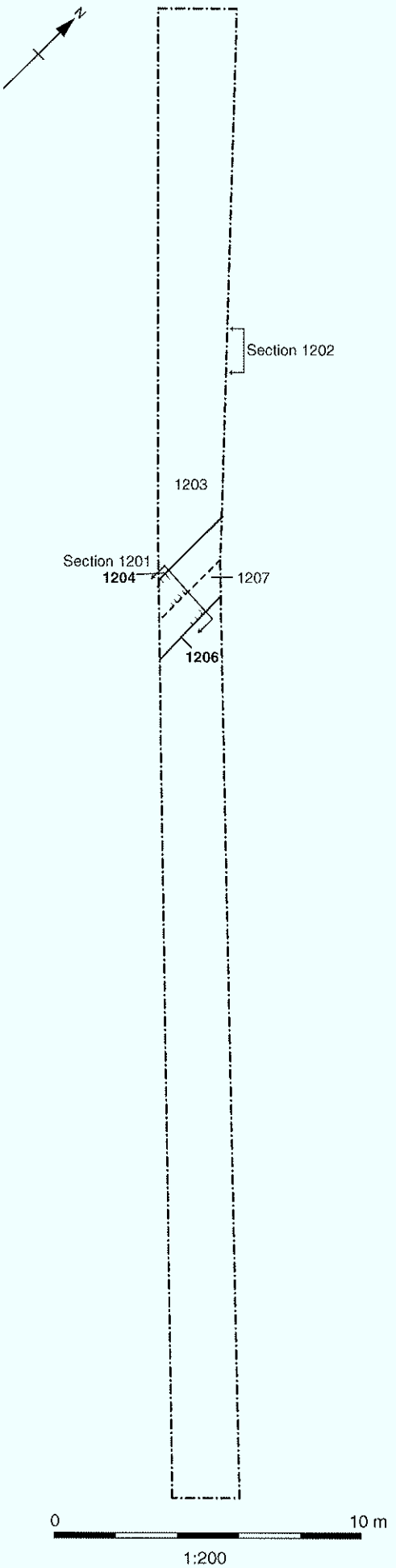
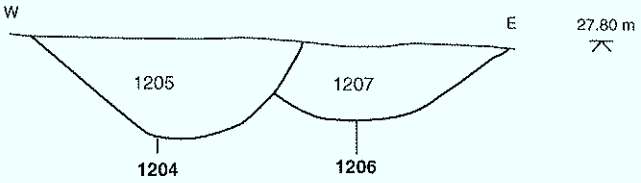


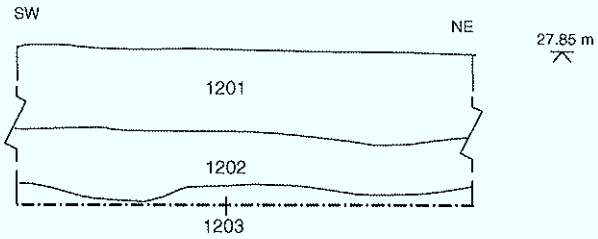
Figure 7: Trench 11, plan and section



Section 1201



Section 1202



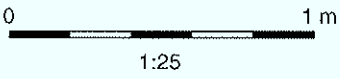
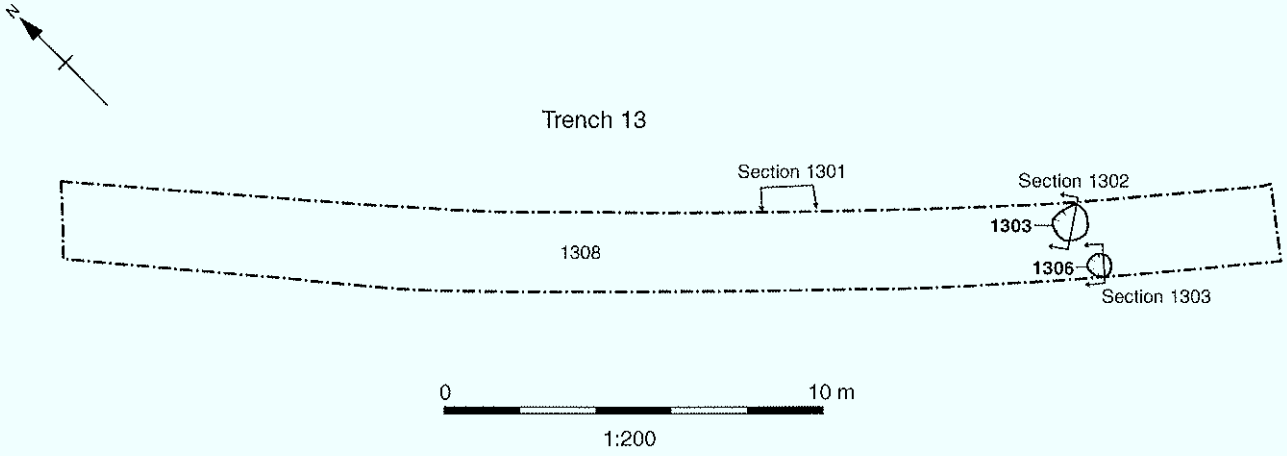
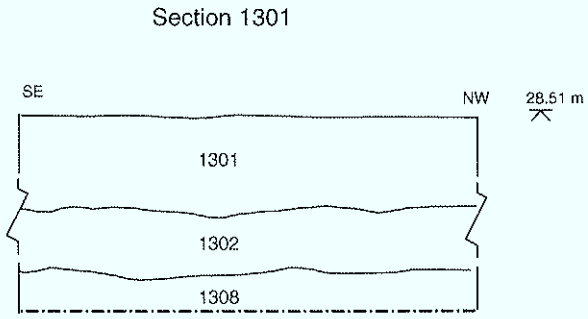
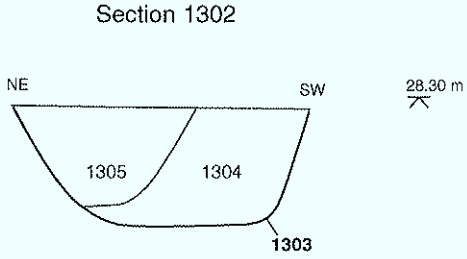
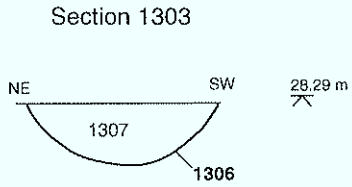


Figure 8: Trench 12, plan and section









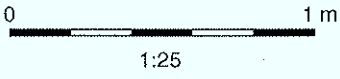
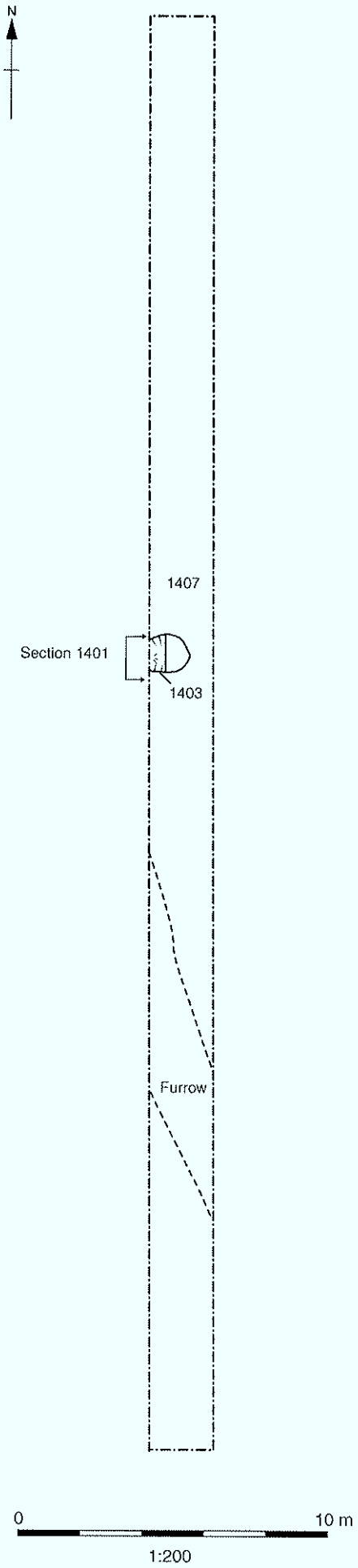


Figure 9: Trench 13, plan and section



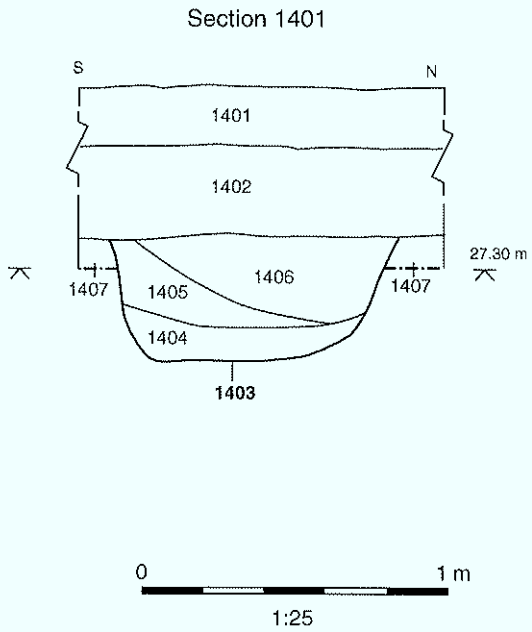


Figure 10: Trench 14, plan and section

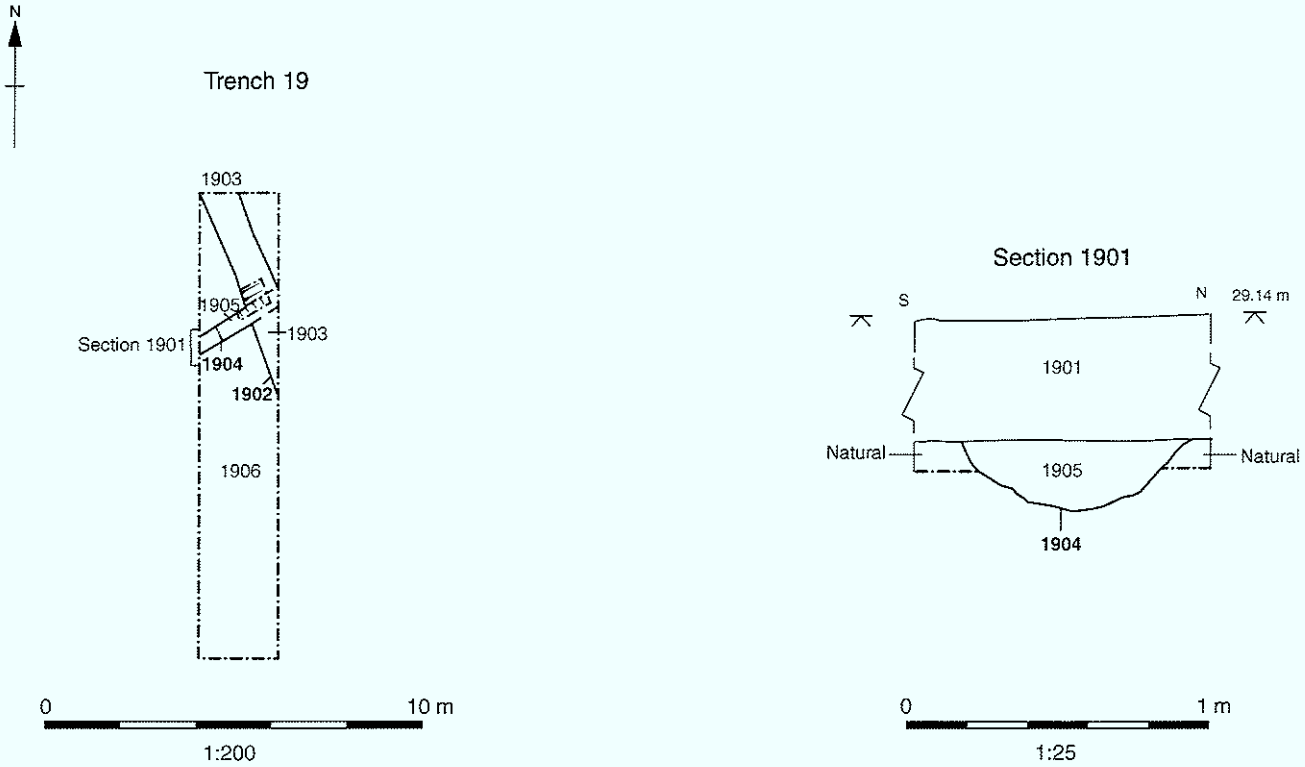
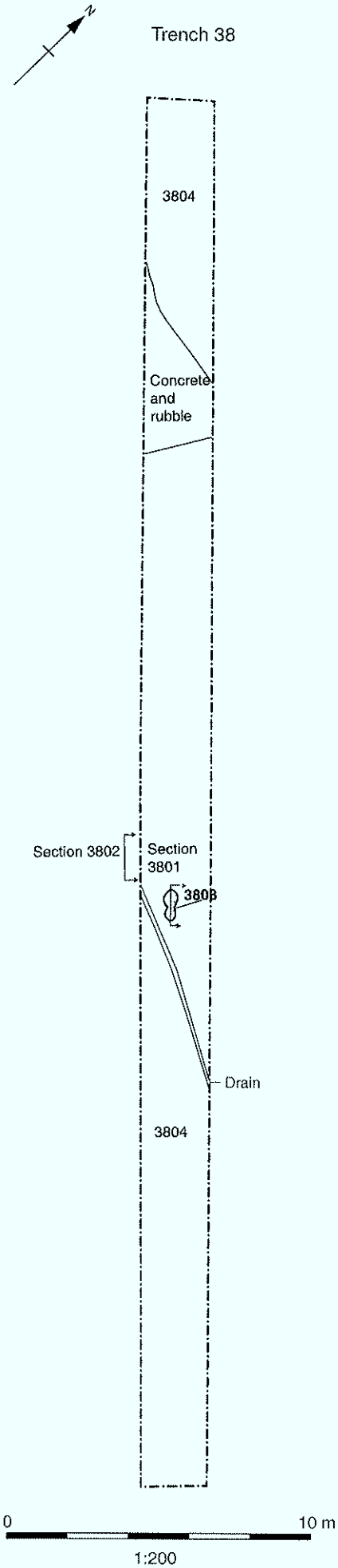
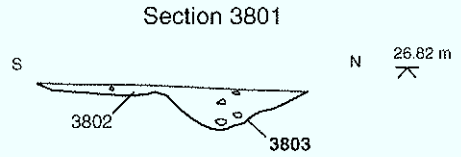


Figure 11: Trench 19, plans and sections





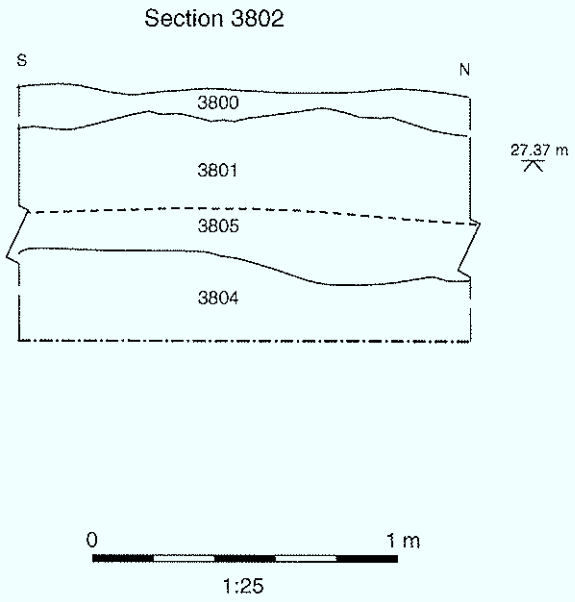


Figure 12: Trench 38, plan and sections

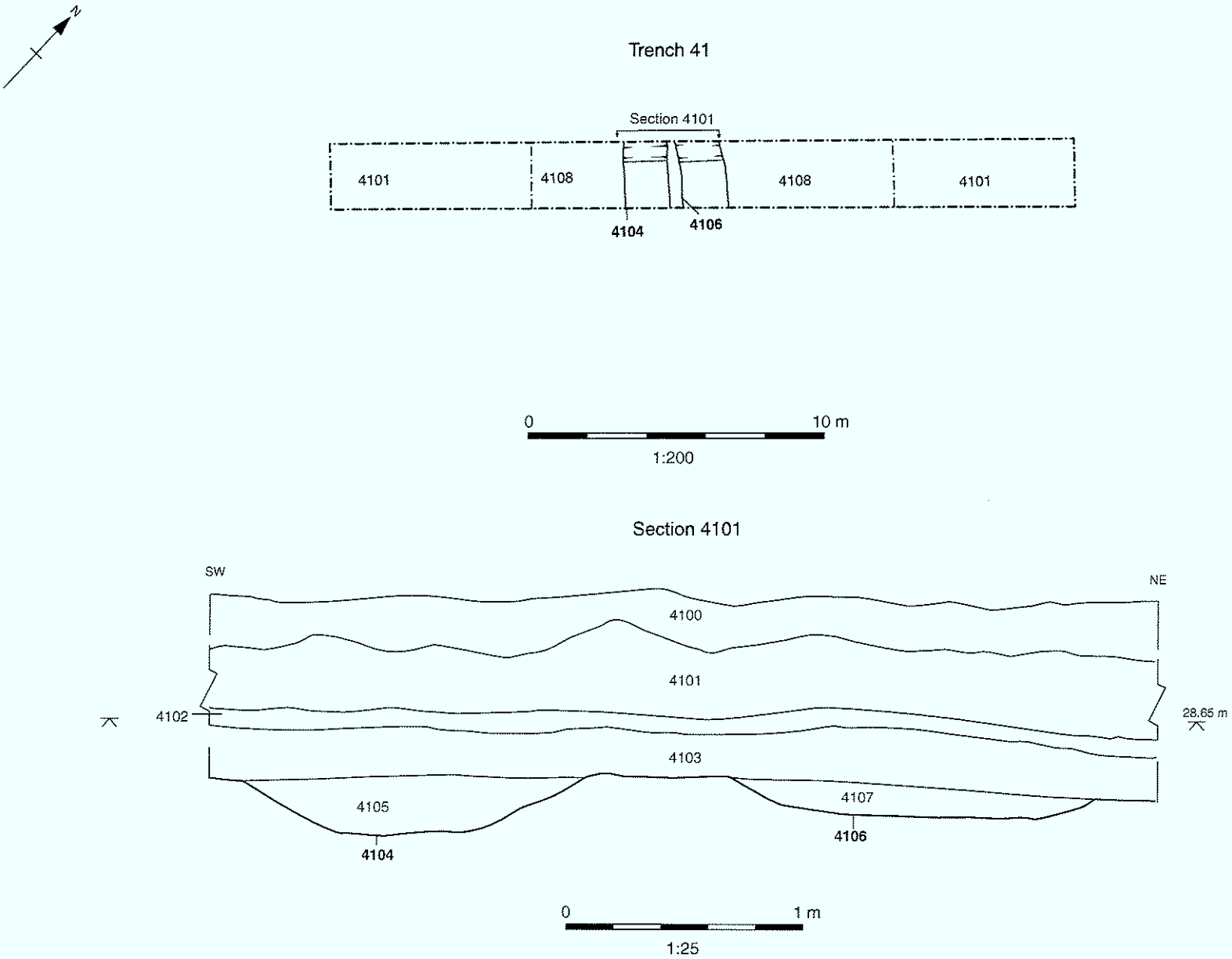


Figure 13: Trench 41, plan and section

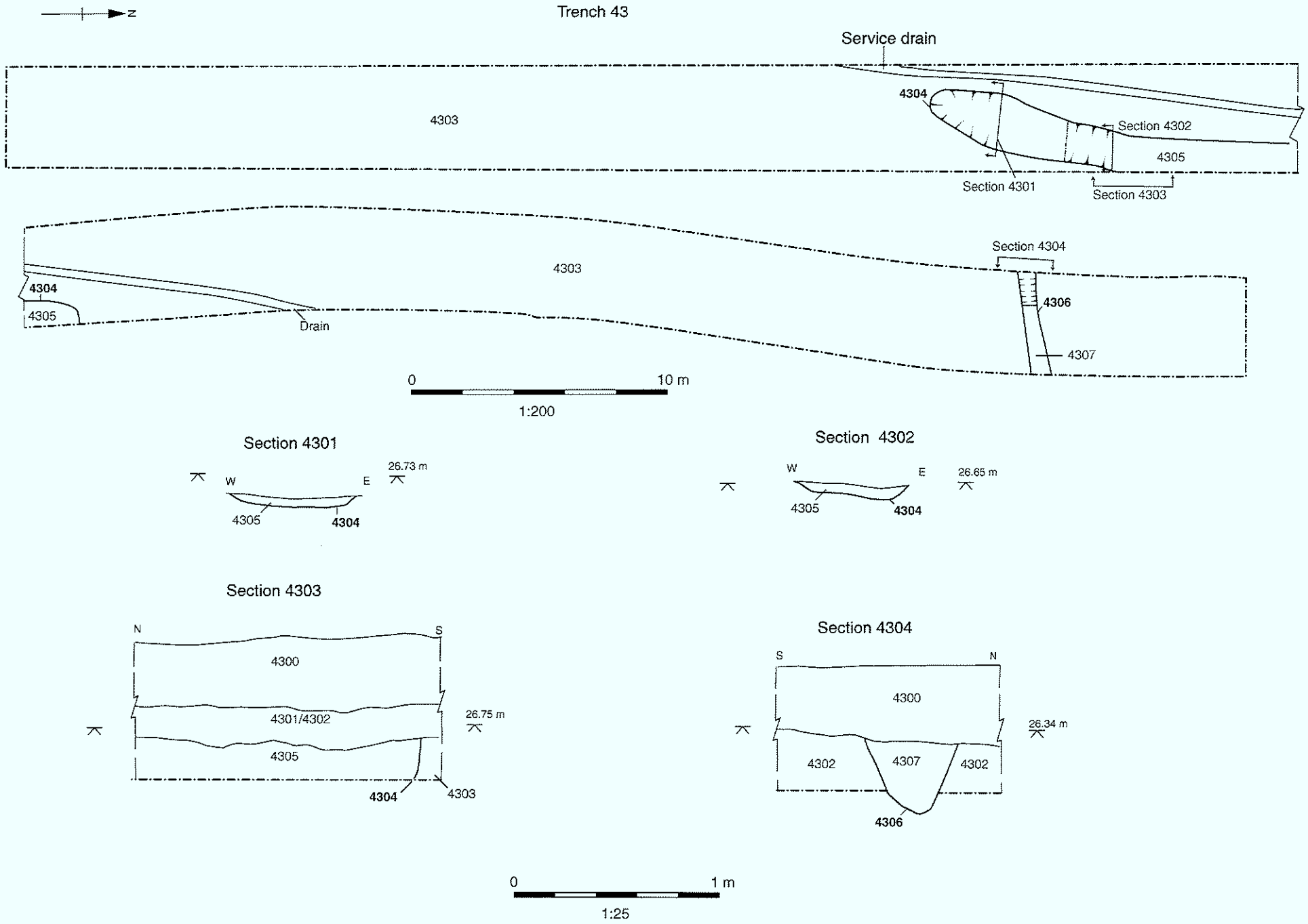


Figure 14: Trench 43, plan and sections

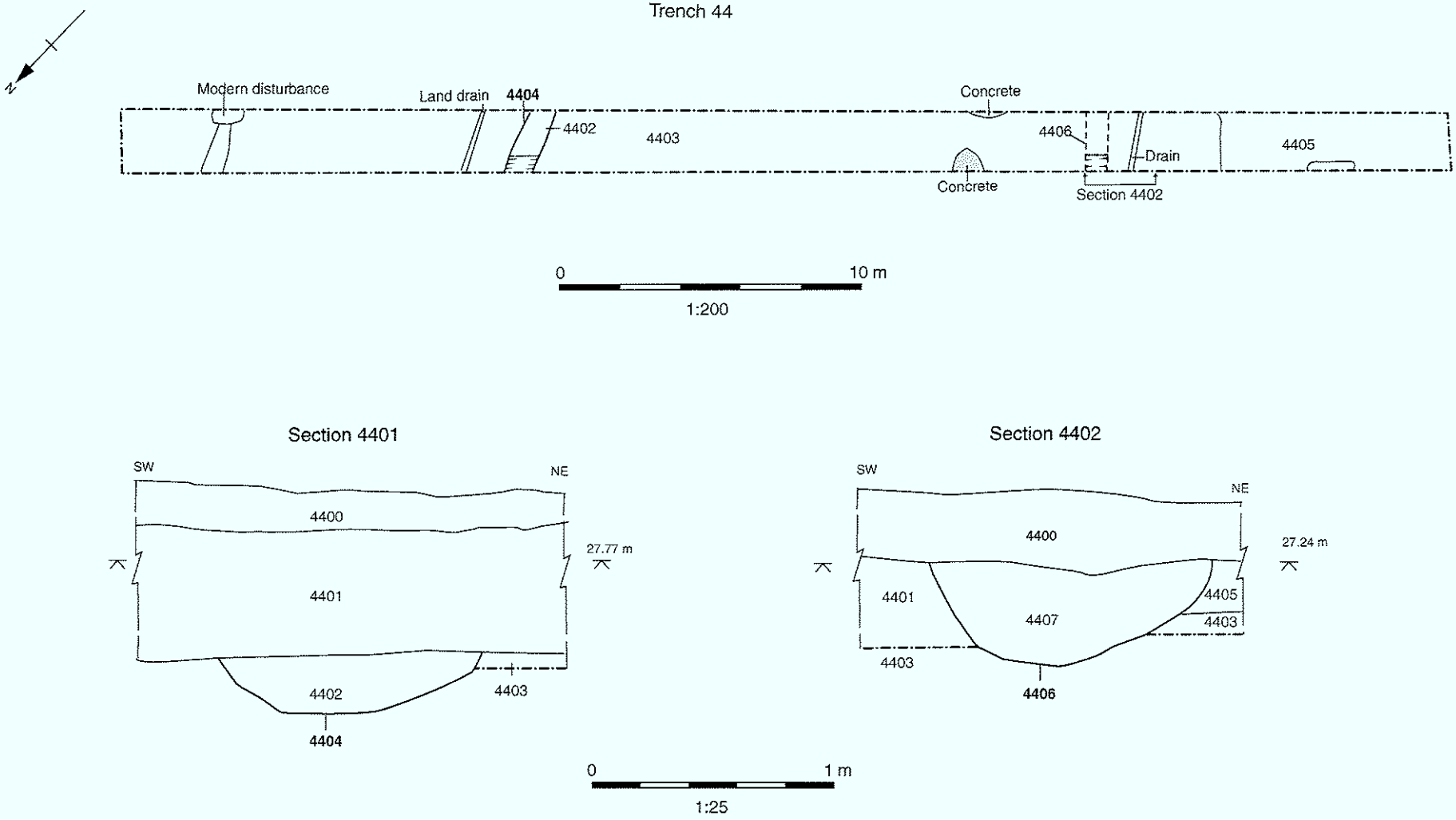


Figure 15: Trench 44, plan and sections

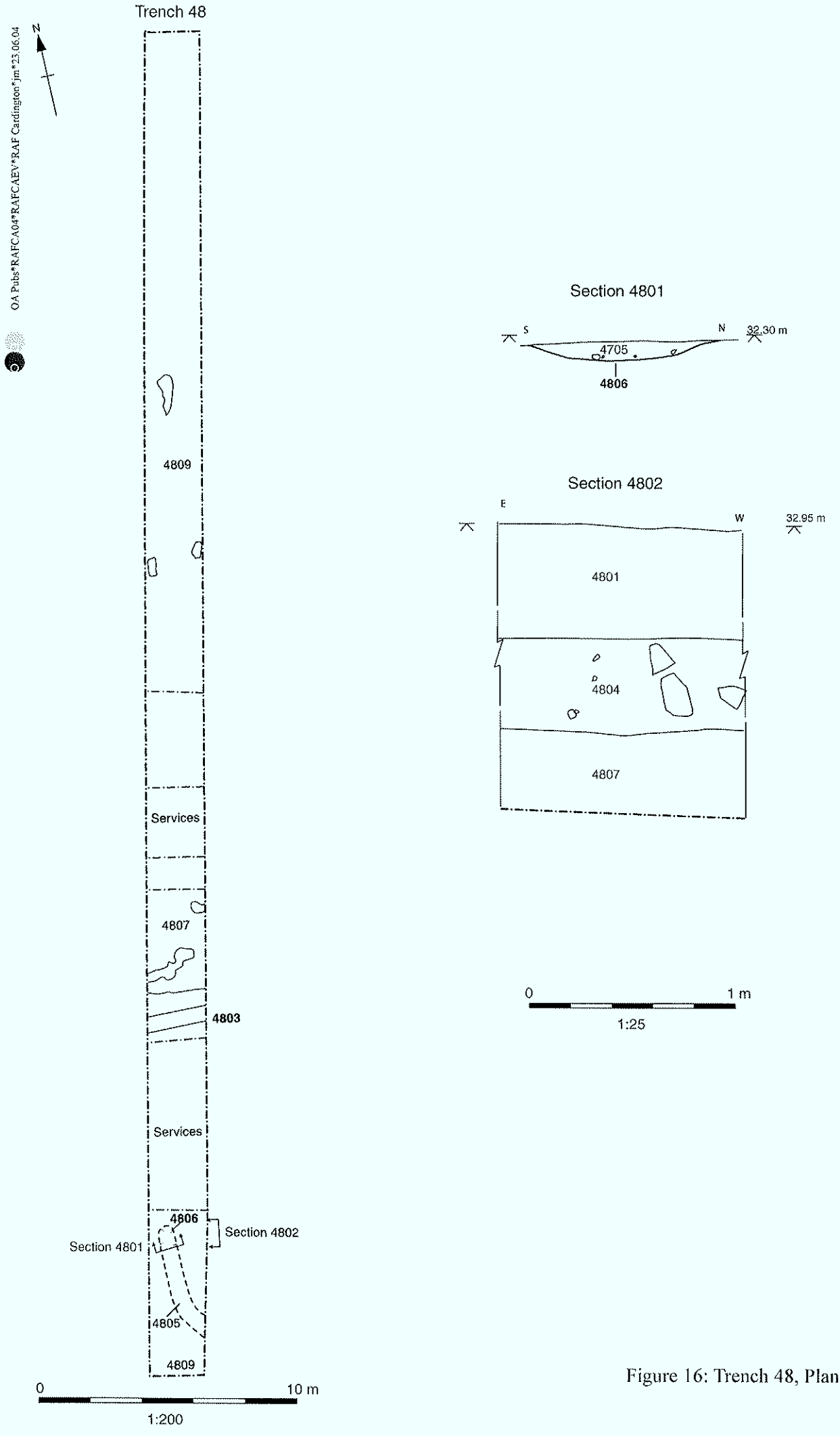
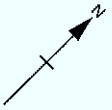
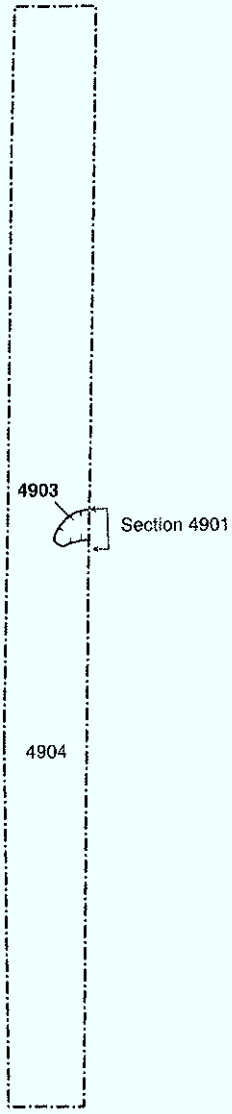


Figure 16: Trench 48, Plan and sections



Trench 49



Section 4901

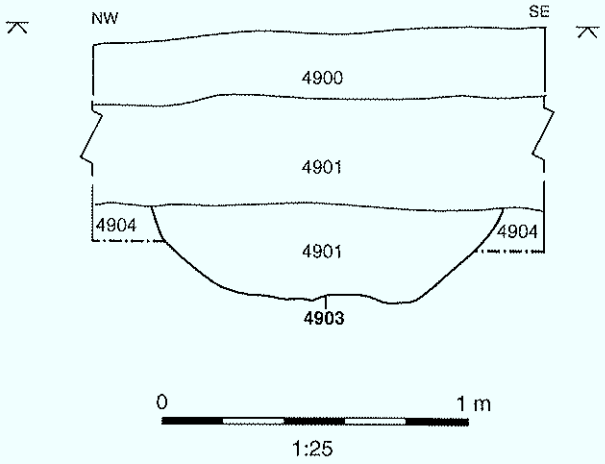


Figure 17: Trench 49, plan and section

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