Northern Archaeological Associates

A1 DISHFORTH TO BARTON

PHASE 2 EVALUATION TRENCHING

POST-EXCAVATION ASSESSMENT REPORT

for

A1 D2B JOINT VENTURE

NAA 06/155

January 2007

Marwood House, Harmire Enterprise Park, Barnard Castle, Co. Durham DL12 8BN

NYCC HER	
SNY	11853
ENY	4089-4093
CNY	5567
Parish	Linear Schemes
Rec'd	23/02/2007

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Summary

This report presents the results of a second phase of archaeological trial trenching undertaken as part of a programme of evaluation along the route of the proposed upgrade of the A1 dual carriageway to motorway status between Dishforth and Barton, North Yorkshire Two trenches were excavated within the Scheduled area of Cataractonium *Roman town and fort at Catterick Bridge (SE 2256 9895) An additional ten trenches were excavated in four areas along the route between Baldersby and Killerby (SE 355 766 to SE 252 957) The trenches at Catterick Bridge were excavated in order to determine the location and dimensions of the Roman defensive ditch lying to the south of the town wall, the nature of the deposits filling it, and the extent and nature of archaeological remains extending south outside the town defences Elsewhere, the trenches were located over a series of anomalies possibly representing archaeological features which had been identified durmg extensive geophysical survey along most parts of the route of the proposed scheme The work was carried out by Northern Archaeological Associates for the A1 D2B Joint Venture and was undertaken during September and October 2006*

Excavation of the trial trenches was carried out with the main objective of determining whether the geophysical survey had provided an accurate indication of the presence or absence of archaeological features along the route of the proposed development Other objectives were to determine the date, function and state of preservation of any archaeological deposits encountered in order to inform the mitigation strategy for the road scheme

The results from this phase of trial trenching again indicated that the geophysical survey component of the evaluation had in general provided a good indication of the presence or absence of archaeological features along different parts of the route At Catterick Bridge (Field 174), one trench identified the position of part of the inner edge of the Roman town's defensive ditch A deposit of Anglian artefacts near to the base of the ditch fill indicated both the presence of Anglian activity in the vicinity and that the ditch had been maintained into the early post-Roman period The second trench immediately beyond the outer edge of the ditch identified a possible robbed-out wall/footing and a small ditch, demonstrating the presence of some Roman extra-mural activity in this area

Two trenches excavated near Baldersby (Field 23) identified linear ditches and a gully running on a similar alignment to enclosures recorded immediately to the east by geophysical survey One feature cut a pit containing Roman pottery and a Roman jet ring Combined with topsoil finds of Roman pottery this suggested that the wider enclosure complex was of Roman date

Three trenches were excavated in a field at Roxby House near Pickhill (Field 58) One did not identify the targeted geophysical anomaly which is likely to have had a geological origin A second trench confirmed the presence of a small ring-ditch containing worked flints and probably representing the site of a levelled prehistoric round-barrow The third trench confirmed the presence of a linear ditched boundary with an attached small rectilinear enclosure The latter feature contained an assemblage of Roman pottery

A trench excavated in a field near Holtby (Field 141) demonstrated that a targeted geophysical anomaly was of natural origin However, the trench also identified well-preserved remains of ridge and furrow cultivation surviving below-ground in this area

Three trenches were excavated adjacent to the edge of a former basin at Killerby (Areas AS1 and AS2) One trench did not identify archaeological features The other two identified man-made pits Those within one of the trenches remained undated Pits within the second trench produced an assemblage of auroch, *red deer and dog bones The presence of* auroch *bones indicated an early prehistoric date, since this species is believed to have become extinct in Britain during the Bronze Age, while the recovered red deer antler had been cut using a flint tool If these remains pre-date the Bronze Age, the dog bones could represent a very early example of domestication There is potential for waterlogged environmental remains to be preserved within the base of the adjacent former basin despite modern drainage works A fourth trench at Killerby (Area AS3) confirmed the presence of a linear ditch identified by geophysical survey, but did not produce any dating evidence*

A moderate finds assemblage was recovered from this phase of work, although a large component of this consisted of residual Roman finds overlying the Anglian material in the town ditch at Catterick Bridge There were, however, several significant groups of finds These included the group of Anglian artefacts from Catterick, groups of Roman finds from Baldersby and Roxby House, and groups of animal bone, carbonised plant remains and pollen of probably earlier prehistoric date from Killerby

Several parts of the finds archive will require further analysis or recording for inclusion within the final consolidated archive and publication reports for the project These include the worked flints, Roman, Anglian and medieval pottery, the small finds, coins, pollen and animal bones However, it is recommended that, should the larger development be undertaken, that this proposed further analysis not be undertaken at this stage but deferred and included with that for other assemblages of material recovered from the wider project

The identification of auroch *bones within one of the two pits in Trench B14, combined with its palaeoenvironmental context, is of significance, raising the possibility that the site is of Mesolithic date Dating of these features would help to determine the significance of the excavated remains and to formulate an appropriate mitigation strategy to further record and sample associated deposits during the development It is therefore recommended that a minimum of three bone and charcoal samples from these features be submitted for radiocarbon dating in advance of any development in this area Given the importance of the discovery both of new sites and individual artefacts, preparation of a final report to publication standard will be required, either as a free-standing document or for incorporation into a final report after completion of fieldwork during construction of the new motorway*

1.0 INTRODUCTION

1 1 This report presents the results of a second phase of archaeological trial trenching undertaken as part of a programme of evaluation along the route of the proposed upgrade of the A1 dual carriageway to motorway status between Dishforth and Barton, North Yorkshire Two trenches were excavated withm the Scheduled area of *Cataractonium* Roman town and fort at Catterick Bridge (SE 2256 9895) An additional ten trenches were excavated m four areas along the route between Baldersby and Killerby (SE 355 766 to SE 252 957) (Figure 1)

1 2 A previous programme of boreholes, assessment excavation and palaeoarchaeological coring was undertaken in 2005 in respect of upgrade works to the A1 at Catterick Bridge, North Yorkshire The results of this work have previously been reported upon and discussed with representatives of English Heritage. The archaeological assessment and evaluation confirmed the general design approach which is being adopted for the motorway upgrade in this area However, there remained some specific design issues which required further information, in particular regarding the underlying archaeological remains in the area to the west and south of Fort Bridge The assessment excavations m 2005 had confirmed that there had been considerable disturbance m the area of the eastern abutment of Fort Bridge However, within a second excavation further to the south archaeological deposits were found to extend to a depth greater than 1.20m below the modern ground surface, and it was considered possible that this trench lay on the line of the Roman town ditch It is known that the Roman town wall and accompanying ditch cross the A1 transversely and it is anticipated that these defences will survive to be observed withm the eastem cutting edge. The aim of the 2006 archaeological works in this area was to establish an achievable design for the road cutting which minimises its impact upon archaeology. The excavations at Catterick Bridge lay within Scheduled area of Cataractonium Roman fort and town (Scheduled Monument No 34733) and were undertaken under Scheduled Monument Consent granted by English Heritage

1 3 Trenches excavated withm other parts of the route were located over a series of anomalies possibly representing archaeological features which had been identified during extensive geophysical survey along most parts of the route of the proposed road scheme (ASUD 2005; 2006a) Detailed trench locations were selected by the project archaeology team leader, Blaise Vyner, in consultation with the contractor (Northern Archaeological Associates) and also in discussion with the Project Archaeology Liason Group

1 4 The report includes recommendations for a further programme of analysis in order to prepare a final, ordered research archive and contribution to the final publication report for the overall motorway project. Specialist assessments of the various

categories of finds recovered are included as a series of appendices at the end of the report.

1 5 The excavation and post-excavation assessment work was carried out by Northern Archaeological Associates (NAA) for the A1 D2B Joint Venture The trial trenching was carried out during September and October 2006

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

2.1 The trial trenches described within this report were located within a number of fields adjacent to the A1 and spread over a distance of some 23km between Field 23 to the south, located near Baldersby (SE 355 766), and Field 174 at Catterick Bridge (SE 2256 9895)

2 2 The route of the modern A1 within the area of the proposed upgrade generally runs along the slightly higher ground at the western edge of the Vale of Mowbray, overlooking the lower-lying valley of the River Swale to the east At Catterick Bridge it crosses the Swale before climbing onto the higher ground overlooking the northern end of the Vale

2 3 Field 23 was located at the eastern side of the existing A1 to the south-west of Baldersby, centred at (SE 355 766) and located within the Baldersby civil parish in Harrogate district Field 58 was located at the eastern side of the A1 immediately to the north of Roxby House, centred at SE 332 827 and located within Pickhill with Roxby civil parish in Hambleton District Field 141 was located at the western side of the A1 opposite Angleham House and some 0 6km north of Holtby Hall, centred at SE 268 929 and located within Ainderby Mires with Holtby civil parish in Hambleton District Areas AS1–3 were located at the eastern side of the A1 to the south-west of Killerby Hall, centred at SE 254 955 and located within Killerby civil parish in Hambleton District. Field 174 is located at the eastern side of the A1 at Catterick Bridge, centred at SE 227 987 and located within Brough with St Giles civil parish in Richmondshire District.

2.4 The underlying geology for Fields 23, 58 and 141 consists of undifferentiated Permian and Triassic sandstones In Field 23 these are overlain by boulder clay and moraine drift, replaced by glacial sands and gravels in Fields 58 and 141 (Institute of Geological Sciences 1977; 1979) The soils in Fields 23 and 58 are mapped as being of the Escrick 2 Association, coarse and fine loamy soils developed in glaciofluvial drift, well drained and easily worked for arable (Soil Survey of England and Wales 1983, Jarvis *et al* 1984, 188-90) The soils in the area of Field 141 are mapped as being of the Wick 1 Association, deep well drained coarse loamy typical brown earths, well drained and well suited for cultivation (Jarvis *et al* 1984, 302-5) The underlying geology for Areas AS1 - 3 consists of Permian Magnesian

limestone overlain by glacial sand and gravel (Institute of Geological Sciences 1977; 1979). The soils in the area are again mapped as being of the Wick 1 Association

2 5 Catterick Bridge overlies the boundary between undifferentiated Millstone Grit to the north and east and the overlying Permian Lower Magnesian Limestone to the south-west (Institute of Geological Sciences 1970a) On the higher ground to the south of the river and including Field 174 the drift geology is predominantly Boulder Clay overlain by soils of the Brickfield 2 Association, less well drained but suited to both arable and pastoral use (Institute of geological Sciences 1970b, Jarvis *et al* 1984, 121-3)

3.0 ARCHAEOLOGICAL BACKGROUND

3.1 The archaeology of the Vale of Mowbray and more specifically the Swale-Ure Washlands has been comprehensively reviewed elsewhere (Manby *et al* 2003, Vyner 2004) and is only summarised here

3 2 There is relatively little evidence across the area as a whole for Mesolithic activity Mesolithic flint scatters indicative of some form of occupation have been recovered at Little Holtby to the north of Leeming and also at Catterick Aerodrome (BHWB 1995, Andy Platell, pers. comm), but elsewhere the period is only indicated by a thin distribution of lithic material, mainly residual.

3.3 Earlier Neolithic activity is mainly evidenced across the area by occasional scatters of lithic material To the south of the development area, groups of pits containing early Neolithic Grimston Ware pottery were excavated near Marton-le-Moor during upgrading of the A1 (Speed, in prep a). Similar features have been excavated at Nosterfield (Vyner, forthcoming) Earlier Neolithic monuments such as causewayed enclosures and chambered long cairns seem to be absent from the area.

3 4 Middle Neolithic activity is better represented, with cursus monuments at Thornborough and Scorton and a possible additional example at Hutton Moor Pits of middle Neolithic date have been excavated at Marton-le-Moor and a possible palisaded enclosure, pits and a small 'house' recorded at Hollow Banks Farm, Scorton (Speed, m prep a; forthcoming). Lithic and axe finds are known from across the area

3 5 Later Neolithic evidence mainly comprises a series of major 'ritual' complexes including The Devil's Arrows megahthic stone row at Boroughbridge, the three Thornborough henges, and other large henge monuments at Nunwick, Cana Barn and Hutton Moor, the latter lying adjacent to the southern end of the proposed development Further to the north, another group of later Neolithic monuments have been recorded on either bank of the Swale at Catterick, mcluding a probable large henge at Catterick racecourse (Moloney *et al* 2003), timber circles at Catterick

Aerodrome (Andy Platell, pers comm) and a mim-henge and associated pit alignments at Hollow Banks Farm, Scorton (Speed, forthcoming)

3 6 Earlier Bronze Age activity across the area is mamly indicated by a number of burial mounds, mainly located slightly to the east of the Neolithic ritual monument complexes on the higher ground followed by the modem A1 and reflected by a number of 'Howe' place-names. A scatter of Bronze Age metal artefacts has been recovered from across the area, mcluding a spearhead recovered from Field 39 near Baldersby during Phase 1 of the current project, but no evidence for later Bronze Age settlement has been recorded in the area

3 7 Evidence for pre-Roman Iron Age activity in the area is also limited although it is gradually becoming evident that large-scale agricultural landscapes interspersed with small settlement sites were present in the area to the south of the Ure (Speed, in prep b) on the gravel terraces adjacent to the Swale (Moloney *et al* 2003, Speed, forthcoming, Copp and Roe 1996, 1997) and at Scotch Corner (Abramson 1995; Casey *et al* 1995). Phase 1 of the current project has identified an Iron Age enclosure system within Field 101 to the south of Leeming and a possible settlement site within Field 199 to the north of Brompton (NAA 2006d)

3 8 The major evidence for Roman activity m the area is dominated by the line of Dere Street (now largely followed by the A1) and its associated line of forts and associated settlements at Roecliffe/Aldborough, Healam Bridge and Catterick Bridge Dere Street seems to have followed the line of an already ancient communication route, and its continuing importance was reflected by the success of the settlements at Aldborough and Catterick Bridge, both of which developed into fully-fledged Roman towns, Aldborough attaining the status of a tribal capital At Catterick, a second extensive roadside settlement developed around a separate focus at Bainesse Away from the road corridor, many pre-existing Iron Age agricultural settlements seem to have continued to flourish, and a number developed into fully Romanised establishments perhaps deserving the description of 'villa' Such sites have been identified at Middleham, Well, Langwith House, Snape and North Stainley, and perhaps at Catterick Aerodrome. Roman occupation on many of these sites seems to have been in decline by the 4th century

3 9 In the Early Medieval period, the landscape presumably continued to be occupied and farmed in a similar pattem, although evidence for this is sparse, with settlement structures only having been identified at Catterick The burial evidence is more extensive, with several cemeteries at Catterick/Scorton, Ripon and Cloven Hill to the north of Leeming. From the 8th century onwards settlement seems to have avoided Dere Street, although it clearly continued to have significance as a major north-south route. The burial of a Viking woman was found on the line of Dere Street near Leeming sometime before 1848 (Hylton Longstaff 1848) Catterick was an important early royal and religious centre in the 7th century, but the religious focus had moved to Ripon by around 670.

3 10 The medieval settlement pattern through the project area seems to have become established by the late Anglo-Saxon period However, less is known about medieval settlement and land-use in the area than for other parts of Yorkshire due to an absence of major religious houses, castles or important manorial centres, with correspondingly limited contemporary documentary evidence or antiquarian interest

3 11 Due to the scattered nature of the sites described within this report, a more detailed description of the archaeological background to each location is described at the beginning of each Field within Sections 6 - 10 (Excavation Results) below.

4.0 AIMS AND OBJECTIVES

4.1 The aims and objectives of the Phase 2 evaluation at Catterick Bridge were

- to determine the location, width and depth of the Roman defensive ditch lying to the south of the town wall
- to determine the nature of the deposits in-filling the Roman ditch
- to determine the extent and nature of archaeological remains extending south outside the town defences
- to inform the mitigation strategy for the development

4.2 The aims and objectives of the Phase 2 evaluation within other areas were

- to determine whether the geophysical survey provided an accurate indication of the presence or absence of below-ground features
- to determine whether specific anomalies identified during the geophysical survey were of archaeological origin
- to determine the date and function of any archaeological anomalies
- to determine the state of preservation of any archaeological deposits
- to inform the mitigation strategy for the development

5.0 METHODOLOGY

5.1 The location of each trench position was surveyed using a Lieca TC 500 total station linked to a Fujitsu Stylistic 1200 pen computer using PenMap software. Information was transferred to AutoCAD 2000iLT software and related to the National Grid

5 2 The area of each trench was scanned for metal objects using a metal detector, operated by an experienced metal detector user, prior to and following stripping (including the spoil heaps) Only pre-modern metal finds were retained for specialist assessment

5 3 All trenches were excavated mechanically with a back-acting excavator equipped with a wide blade toothless ditching bucket and operating under the direct supervision of a monitoring archaeologist Excavation in this manner ceased when either archaeological deposits considered to be significant by the monitoring archaeologist or natural geological deposits were encountered Topsoil was removed to the edge of each trench and kept separate from subsoil where this needed to be removed The trenches were reinstated upon the conclusion of the work

5 4 Trench surfaces were cleaned by hand in order to determine the presence or absence of archaeological features Hand excavation of selected archaeological features was undertaken to evaluate depth, dimension and preservation of archaeology, and to ensure recovery of sufficient artefactual and environmental evidence to enable dating and assessment of the archaeology to be achieved In particular, excavation concentrated on intersections of features to enable phasing and on achieving a sample of different types of features encountered during the evaluation The site code was A1DB

5 5 All archaeological features were photographed and recorded at an appropriate scale Sections were normally drawn at a scale of 1.10. Archaeological plans were normally drawn at a scale of 1.20. A representative section of all trenches containing no archaeological features was recorded Levels were tied in to Ordnance Datum

5 6 A written description of features was recorded on *pro forma* sheets using the NAA context recording system A photographic record of the trenches was taken using monochrome prints and colour slide at a format of 35inm

5 7 Forty-litre bulk palaeoenvironmental samples were taken from appropriate deposits (such as ditch and pit fills) and submitted for assessment Recovery and sampling of environmental remains was in accordance with guidelines prepared by the English Heritage (2002b).

5 8 Secure contexts were sampled for radiocarbon dating purposes as appropriate (whether on site or as sub-samples of processed bulk samples). Samples will be processed subsequent to this initial post-excavation assessment.

5 9 Pottery and animal bone were collected as bulk samples whilst significant artefacts were three-dimensionally recorded prior to processing Upon completion of the fieldwork, all finds were cleaned, identified, marked (where appropriate) and recorded All finds recovered were appropriately packaged and stored under optimum conditions Fmds recovery and storage strategies were in accordance with the NAA finds recording system and with published guidelines (English Heritage 1995, Watkmson and Neal 1998). The finds were submitted for post-excavation assessment in accordance with *The Management of Archaeological Projects* 2 (English Heritage 1991), subsequently referred to as MAP2.

6.0 CATTERICK FIELD 174 EXCAVATION RESULTS

6 1 As described above, the trenches excavated within the access trackway to Field 174 (Figure 2) were intended to further investigate deposits identified withm 2005 Trench AE3 which possibly formed part of the fill of the Roman town defensive ditch, and also to investigate the extent of any archaeological remains outside it to the south

6 2 E J W Hildyard investigated the town defences in 1939 with a series of trenches excavated within the racecourse to the east of the 2006 work He recorded the stone wall but did not identify an accompanying ditch (Wilson 2002i, 27) In 1958 Hildyard recorded what he believed to be an 18m wide ditch m front of the wall some 30m north-west of the 2006 investigation, although unfortunately few of the records survive and the published account does not included any details of this feature (Wilson 2002i, 94 and fig. 49) Wilson has discussed the evidence for the possible various phases of the town defences (2002ii, 458-9) and argues a later 3rd or early 4th century date for the stone wall (2002i, 98)

6.3 Trench AE3 excavated in 2005 adjacent to the access trackway into the northern end of Field 174 identified the presence of stratified Roman deposits extending to a depth of more than 1 4m below the modem ground level (NAA 2006a) The full depth of archaeology could not be examined due to the small size of the trench

6.4 The line of the Roman town wall m the area immediately to the south-east of the 2006 investigation is marked by a small but pronounced earthwork bank running across the south-facing slope At the base of the slope there is a shallow linear hollow approximately 20m wide mnning eastwards into the Racecourse Trench ET2 was located at the foot of the hill-slope within the northern edge of this hollow. Trench ET3 was located immediately beyond the southern edge of the hollow No previous excavation has taken place immediately to the south of (outside) the town defences in this area

Trench ET2 (Figure 3, Plate 1)

6 5 The trench position lay 0 2m to the west of 2005 Trench AE3 Trench ET2 measured 3m by 3m and was excavated to a maxunum depth of 2 40m, meaning that the trench had to be stepped with the lower deposits only examined withm a 1m wide section excavated across the centre of the trench from north to south The ground surface m the area of the trench lay at a level of 67.77-68.09m AOD, sloping slightly down to the south

6.6 The lowest deposit observed was stony yellow boulder clay [626] This occurred at a height of 65 68m AOD within a level area to the south-west, then sloped fairly steeply up to a level of 66.60m AOD to the north-east This profile suggested that the trench had been excavated against the base of the north-eastem side of the Roman town ditch (context [628]) The base of this cut was filled with a deposit of greyish brown sandy silt [627] containing small stones. This was up to 0.35m thick against the side of the cut but thinned to the south-west Romano finds including pottery, animal bone, nails, brick and tile fragments were recovered throughout this deposit, but the uppermost part included a group of post-Roman Anglian artefacts including a copper alloy cruciform brooch (see cover illustration), pottery sherds and two fragments of decorated bone of either Roman or Anglian date

6 7 Deposit [627] was overlain to the south-west by a dump of sandstone rubble [625] consisting of un-finished sub-angular blocks measuring up to 0 4m None bore any evidence of tool-marks or mortar This deposit ran down south-westwards from the edge of the ditch towards its centre, increasing up to 0 5m thick withm the confines of the trench The deposit included pottery, animal bone, ceramic building materials, an iron nail and a Roman coin The upper part of the ditch above this mbble was filled with a homogeneous deposit [623] consisting of greyish brown silty sand containing occasional small rounded stones. This produced a moderate assemblage of Roman pottery, animal bone, ceramic building materials, nails, an iron pin or needle and part of an Anglian wrist clasp. However, in view of the Anglian material within deposit [627] lower in the ditch, all of the Roman material was presumably residual m nature

6 8 Within the south-eastem part of the trench, fill [623] was overlain by a deposit of rounded cobbles [624] forming a layer up to 0 15m thick, with a sharply defined north-western edge. That this deposit was not identified within 2005 Trench AE3 immediately to the east suggested that it was linear m form and not more than 2m wide, running from north-east to south-west approximately at right angles to the underlying ditch

6 9 Cobbles [624] and the north-western part of deposit [623] were overlain by a soil layer [622], up to 0 25m thick and composed of mid greyish brown silty sand containing moderate rounded stones This layer produced a small assemblage of residual Roman pottery and part of a copper alloy ring Above this, the area of the

trench was sealed by modem trackway surface [621], composed of compacted blast-furnace slag and tarmac fragments and up to 0.4m thick at this location

Trench ET3 (Figure 4, Plate 2)

6 10 Trench ET3 was located immediately to the south of the possible defensive ditch in order to determine the presence and extent of any Roman deposits lying beyond the defences It measured 3m by 3m The modem ground surface in the area of the trench was at a level of 67.73-68 00m AOD.

6.11 The natural subsoil [606] within this trench comprised very stiff yellowish brown sandy boulder clay, the upper surface at a level of 67.14m AOD A sondage was excavated 0 7m into this deposit in order to verify its nature. The subsoil was cut by two archaeological features A probable wall-robbing trench [604] crossed the trench at a slight angle mnning approximately from east to west It was some 0 75m wide and cut 0 16m into the boulder clay with a slightly irregular profile generally with vertical sides and a flat base It was filled with mid to dark greyish brown silty sandy clay [605] containing 40% stones measuring up to some 0 40m (mostly rather smaller) This deposit produced a small assemblage of Roman pottery, animal bones and part of a Roman coin.

6 12 A second linear feature [607], probably a shallow ditch, crossed the southern edge of the trench, also aligned from east to west but converging towards feature [604] to the west Cut [607] was more than 0.85m wide (possibly some 1.2m overall) and cut 0 21m into the underlying boulder clay with a rather irregular shallow 'U'-shaped profile It was filled with mid brown silty sandy clay [608] containing occasional small stones and charcoal flecks This deposit produced an assemblage of Roman pottery, glass and animal bones Located within the top of the northern edge of the surviving fill adjacent to the eastern trench edge was a large fragment of human skull [602] comprising the upper jaw, face and frontal part of the cranial vault The skull was inverted and disarticulated, and had clearly been deposited as charnel rather forming part of an *in situ* burial

6 13 Features [604] and [607] were sealed by a 0 13m thick layer of dark yellowish brown silty sand [603] containing frequent small and occasional larger stones This layer produced an assemblage of Roman pottery and animal bones Layer [603] was m turn sealed by a layer up to 0 33m thick of what appeared to be a buried ploughsoil horizon [601] comprising mid to dark brown silty sand containing frequent small stones This deposit produced an assemblage of Roman pottery, ceramic building materials, nails and annual bones The area of the trench was again sealed by the modern trackway surface [600], here formed by a 0 3-0 5m thickness of extremely compacted blast-fumace slag, occasional lumps of tarmac, fragments of tarmac surfacing and modem turf cover.

Discussion

6.14 Trench ET2 confirmed the likely presence of the later Roman town ditch at this location, with the trench located within its north-eastern edge The modern surface topography, combined with Hildyard's observation in 1958, suggests that the ditch was some 18-20m wide Later Roman defensive ditches are typically very broad but proportionately shallow, forming part of a system of artillery-based defence Although there is no evidence that the town wall at *Cataractonium* was ever augmented with bastions for supporting artillery, a number of artillery projectiles have been recovered from sites throughout the town (Wilson 2002ii, Table 94) Since Trench ET2 was located at the very edge of the ditch, the apparent base seen in excavation may instead have been a step in the ditch-side, and its overall depth remains uncertain

6 15 The presence of a horizon of Anglian artefacts near the base of the ditch indicates that it was maintained up to the end of the Roman period and possibly beyond That all component parts of the cmciform brooch were present, and the relatively large sherd size and surviving carbonised encmstation of the Anglian pottery, suggests that this was the primary point of deposition for this group of material The presence of pottery sherds from several vessels, together with an absence of human bones, indicates that this material may not represent a burial within the ditch, which clearly remained as a substantial earthwork during the Early Medieval period

6 16 That the apparent trackway surface [624] overlying the m-filled ditch was laid-out in respect of the Roman townscape rather than the later medieval and post-medieval landscape perhaps suggesting an early medieval date for its creation

6 17 The results from Trench ET3, located immediately beyond the town ditch, indicated the presence of at least two phases of Romano-British activity represented by the two converging linear cut features, one possibly a robbed wall footing and the other probably a ditch No *in situ* archaeological stmctures survived m this location above the top of the natural boulder clay, possibly as a result of past agricultural activity The presence of the defences separating this location from the town means that the moderate finds assemblage recovered from these features may derive from extra-mural settlement nearby Nothing can be concluded from the presence of the partial human skull, which had arrived within the ditch as disarticulated charnel

7.0 BALDERSBY FIELD 23 EXCAVATION RESULTS

7 1 Field 23 is bounded to the west by the A1, to the south-east and east by the A61 and to the north by another field The field is generally level, m the area of the trenches sloping slightly down to the north from 42 5-42 0m **AOD**, and is under arable

7 2 Rapid fieldwalking of the westem half of Field 23 undertaken as part of the 1994-5 evaluation of the route identified three stuck flmt flakes and two sherds of Roman pottery (BHWB 1996) Due to the limited results no subsequent intensive fieldwalking, geophysical survey or evaluation trenching was undertaken in this field An extensive scatter of worked flint and a number of geophysical anomalies of possible archaeological origin were recorded to the south of the A61 withm Fields 19, 20 and an unnumbered field to the north of Field 20

7 3 Geotechnical investigations withm this field were not included in the programme of archaeological monitoring undertaken in 2005 (NAA 2006e), and the field was not included in the fieldwalking survey (Tees Valley Archaeology/Faber Maunsell 2006) The field is known to have attracted intensive metal-detection in 2005 outwith the A1 project but the results of this are unknown

7 4 Geophysical survey undertaken along a narrow strip at the westem edge of the field in 2005 (ASUD 2005) identified the presence of a number of anomalies likely to be of archaeological origin (Figure 5) These included a number of linear anomalies forming a series of possible rectilinear enclosures located towards the north-westem comer of the field, a possible circular feature some 45m in diameter within the north-western corner of the field Two roughly parallel linear anomalies some 15-25m apart and mnning the length of the western side of the field are most likely to have a modern origin but could conceivably represent the flanking ditches for Dere Street, although the Roman road is believed to he beneath the existing A1 in this area The proposed land-take within this field is restricted to a narrow strip adjacent to the existing A1 withm the north-westem part of the field, and two trial trenches were located withm this area, each measuring 20m by 3m and orientated from east to west at right angles to the A1.

Trench L7 (Figure 6)

7.5 The natural subsoil [634], a friable reddish brown silty sand till, was encountered at a level of 42 00-42.10m AOD It was directly overlain by some 0 35m of mid to dark brown slightly clayey silty sand modern ploughsoil [633] This produced a sherd of post-medieval pottery and an additional five fragments from an unglazed earthenware sherd of uncertain date.

7.6 The subsoil was cut by several archaeological features The southem end of a pit [636] was excavated within the westem half of the trench. The pit was possibly sub-rectangular in planform, with steep-sloping sides and a fairly flat base It measured more than 1 20m from north to south, 1 27m wide and had a surviving depth of 0 38m It was filled with a deposit [635] comprising lenses of brownish red redeposited subsoil, black fine silt (probably soot), mid brown silty sand and mid orange brown heat-affected silty sand. The upper part of the deposit included numerous heat-cracked and un-cracked cobbles, and frequent flecks and small lumps of charcoal were observed throughout A small assemblage of Romano-British

pottery and a complete jet finger ring (Plate 3) were recovered from near the eastern edge of the deposit

7.7 The southern end of pit [636] was truncated by a small linear gully [638] which crossed the trench from south-west to north-east with an observed length of 8 4m Gully [638] was 0 55m wide and 0 15m deep with a shallow 'U'-shaped profile It was filled with mid brown silty sand [637] containing occasional small pebbles and small flecks of charcoal. No finds were recovered.

7.8 The western end of the trench was crossed by a ditch [640] running from south-west to north-east on a similar alignment to, and some Im north-west of, gully [638] Ditch [640] was observed over a length of some 5m It was up to 2 55m wide and 0 70m deep with a shallow flat-based 'U'-shaped profile. It had a primary fill [641] 0 2m thick comprised of re-deposited natural till and presumably representing initial weathering of the sides of the freshly cut ditch Above this was some 0 2m of mottled light brown and grey sand [642] containing a small boulder and some small stones The upper part of the ditch was in-filled with mid brown sand [639] No finds were recovered from this feature.

Trench L8 (Figure 7)

7 9 Trench L8 was located near the north-western corner of the field to the north of Trench L7 The topsoil [631] and natural subsoil [632] were generally similar to that encountered m Trench L7, the subsoil surface being encountered at a level of 41 45-41 65m AOD

7.10 A single small ditch or gully was identified cutting the subsoil near the western end of the trench Ditch [629] was observed over a length of 3.2m crossing the trench from south-east to north-west approximately at right angles to the linear features identified in Trench L7 It was 0 70m wide and 0 14m deep with a shallow 'U'-shaped profile It was filled with reddish brown silty sand [630] containing occasional small stones No finds were recovered from the excavated segment

Discussion

7.11 The linear features encountered withm the two trenches, although not detected by the geophysical survey, were on alignments consistent with the enclosures recorded immediately to the east. None of these linear features produced dating evidence, although the contrasting alignment compared to the adjacent Roman road suggests that they (and the larger enclosure system) are likely to pre-date its constmction in the later 1st century AD

7 12 One of the two long parallel geophysical anomalies bisected the position of Trench L7 but the anticipated ditch was not identified during excavation. However, the position of pit [636] lay close to its projected line. The contents of the pit, together with sherds of Roman pottery from the topsoil in both trenches and the sherds

observed m 1994, indicated a Romano-British date for the feature. The date of this activity will be further refined once the pottery has been assessed Jet jewellery was primarily fashionable in Roman Britain from the later 2nd century AD onwards (Allason-Jones 2002, 125) The presence of a relatively high status object such as the jet ring on an otherwise apparently low-status agricultural site may be accounted for by the proximity of Dere Street. That the ring is complete perhaps suggests deliberate deposition as a votive offering.

8.0 PICKHILL FIELD 58 EXCAVATION RESULTS

8.1 The field was bounded to the west by the A1, to the north by Street Lane leading to Pickhill village Roxby House lies within the western side of the field The field surface was relatively level along the western edge of the field adjacent to the A1 at a height of some 37 5-37 7m AOD in the area where the trenches were located, but to the east sloped down gradually towards Sikes Beck. Trenches L9 and L10 ran down the southern and northern sides respectively of a slight earthwork depression within the western edge of the field, with Trench L11 located on more level ground to the north-east (Figure 8) At the time of excavation the western edge of the field where Trenches L9 and L10 were located had recently been ploughed and sown with a herb crop Trench L11 was located m stubble. Trench L9 measured 25m by 3m and Trenches L10 and L11 each measured 20m by 3m

8 2 The modern A1 in this area follows the line of Dere Street Roman road The proposed Roman Fort at Healam Bridge (SM 34736/02) lies some 0 9km to the north of Field 58, with a linear roadside settlement extending southwards to within 600m of the current site Archaeological evaluation trenching undertaken in 2005 within Field 60 immediately to the north of Field 58 did not identify archaeological features (NAA 2006c)

8 3 The northern part of this field to the north of Roxby House (the area evaluated in 2006) was not included within the 1994/5 evaluation works Within the area to the south of Roxby House, the find of a prehistoric stone axe had been recorded Fieldwalking identified only post-medieval surface finds but geophysical survey identified a number of pit-like and linear anomalies likely to be of archaeological origin Trial trenching identified a ditch adjacent and parallel to the A1 which produced Roman pottery (BHWB 1996)

8.4 The geophysical survey, carried out in a strip along the western edge of the field to the north of Roxby House, identified several anomalies of possible archaeological origin These included a long linear anomaly running from north-west to south-east, with a second linear anomaly running away from it to the north-east These features were consistent with former field boundaries Attached to the northern side of the latter boundary was a small rectilinear enclosure some 10m square Located to the

west of these features were two indistinct circular anomalies of possible archaeological origin

Trench L9 (not illustrated)

8.5 Trench L9 was orientated from north-west to south-east and was located so as to transect a large circular anomaly some 15m in diameter on the geophysical survey considered of possibly archaeological origin The modern ground surface at this location lay at a level of 37 64-37.76m AOD, sloping down slighfly to the north-west.

8 6 The area of the trench was covered by some 0 30-0 35m of dark brown slightly clayey silty sand topsoil [660] Directly below this at the south-eastern end of the trench was a natural deposit consisting of reddish brown clayey sand [661] containing numerous large stones. To the north this was overlain by some 0.1m of mid brown clayey fine sand and small rounded pebbles This also appeared to be a natural deposit, but, by analogy to Trench L10, is likely to have been of Bronze Age or later date (see below) A sondage excavated through this material towards the western end of the trench in the expected location of the northern side of the circular geophysical anomaly showed that it overlay a natural deposit of pea-grit, with no archaeological features present No finds were recovered from this trench

Trench L10 (Figure 9)

8.7 Trench L10 was orientated from north to south and was located so as to transect a smaller circular anomaly some 10m in diameter recorded by the geophysical survey The modern ground surface at this location lay at a level of 37 57-37 71m AOD, sloping down slightly to the south

8.8 The area of the trench was covered by some 0 30-0 35m of dark brown slightly clayey silty sand topsoil [653] which produced a small assemblage of eight sherds of medieval and post-medieval pottery. At the extreme northem end of the trench this overlay a natural deposit consisting of reddish brown clayey sand containing numerous large stones and analogous to that observed at the south-eastern end of Trench L9 Elsewhere within the trench it overlay a 0 05-0 15m thick layer of mid brown slightly clayey fine sand and small rounded pebbles [654], analogous to the layer observed within the north-westem part of Trench L9. This was observed within the sides of excavated features to overly a natural deposit [655] consisting of mid brown fine sands and pea grit, overlying a lens of purplish brown clay which in turn possibly overlay a deposit of clay and cobbles

8 9 A section excavated through layer [654] in the expected position of the circular geophysical anomaly revealed part of a small ditch curving from west to north-east, cut into the underlying natural deposits [655] (Plate 4) Ditch [652], observed over a length of 2 4m, was more than 1 5m wide (the top of the inner north-western side lay beyond the trench at this point) and 0 4-0.5m deep It had a flat-based 'V'-shaped

profile, the outer side being markedly steeper than the inner side It had a primary fill [651] running down the north-western (inner) side of the cut, up to 0 2m thick and consisting of mid brown clayey sand, cobbles and smaller stones Some flecks of charcoal were noted and the deposit produced 3 stmck flints The remainder of the ditch was filled with slightly reddish brown sandy clay [650] containing occasional rounded stones Again, some flecks of charcoal were noted but this deposit produced no finds.

8.10 The ring-ditch fill was sealed by layer [654], which was m turn cut by a shallow linear gully running the full length of the trench from north to south and observed over a length of some 20m Gully [643/649] was 1 2-1 5m wide and up to 0 28m deep where investigated with a shallow 'U'-shaped profile It was filled with mid brown silty clayey fine sand [644/648] containing occasional small rounded stones and occasional flecks of charcoal, but which did not produce any finds

Trench L11 (Figure 10)

8 11 Trench L11 was orientated from north to south and was located so as to transect a linear anomaly running from east to west, and also the interior and northern side of a small rectilinear enclosure attached to its northern side The modem ground surface at this location was level at a height of 37 57-37 65m AOD

8 12 The area of the trench was covered by some 0 20-0.35m of mid brown silty sand topsoil [647] Within the northern half of the trench, within and to the north of the small enclosure, this directly overlay deposits [659] consisting of reddish brown sandy clay and cobbles above lenses of clay, sand, pea grit and gravel At the southem end of the trench, to the south of the long linear boundary, the surface of the natural deposits occurred at a slightly lower layer and they were overlain by a layer of homogeneous reddish brown silty sand [662] some 0 30m thick which appeared to be a buried soil horizon

8 13 The long linear boundary was represented by a ditch [656] crossing the trench from east to west, cutting layer [662] to the south and natural clay-and-cobbles [659] to the north Ditch [656] was 3 3m wide but only 0 55m deep with a shallow, 'U'-shaped profile It had a primary fill against its southern side of light brown sand [657] The remainder of the cut was filled with mid brown sand [658] containing occasional stones The restricted extent of the primary fill hinted at the presence of a recut of the ditch, although this could not otherwise be identified. Neither fill produced any finds. The northem side of the small enclosure was represented in the trench by ditch [645] This crossed the trench from east to west, was 2 6m wide and 0 94m deep and had a slighfly stepped flat-based 'V'-shaped profile (Plate 5) It was filled with mid orange brown silty sand [646] containing frequent stones This deposit produced a small assemblage of Roman pottery and animal bones, the pottery being derived from near the base of the ditch No internal features were identified within the enclosure

Discussion

8.14 The circular anomaly targeted by Trench L9 did not represent an archaeological feature The southern side corresponded to a change in the natural subsoil within the trench, but no cause for the northern side could be identified.

8.15 The smaller circular anomaly targeted by Trench LI0 was confirmed to represent a small ring-ditch. The nature of the primary fill [651] of ditch [652], which appeared to be re-deposited natural subsoil, together with its profile, suggested that it represented material collapsed from a former central mound The feature is likely to represent the ring-ditch around a small barrow of likely early Bronze Age date, an interpretation supported by the presence of worked flints but no later material within the collapsed mound material The previous find of a prehistoric stone axe at Roxby House should perhaps be noted in the context of this feature.

8 16 The thin layer of mid brown slightly clayey fine sand and small rounded pebbles observed in both trenches L9 and LI0 presumably represented a colluvial deposit collected within the base of the natural hollow in this area. That it sealed ring ditch [652] indicated that it had accumulated during the later prehistoric or later period

8 17 Gully [643/649] m Trench LI0 remained undated Its profile was reminiscent of a medieval plough-furrow, although a vague linear trend on the geophysical survey probably consistent with former ridge and furrow cultivation is aligned from east to west

8 18 The results from Trench L11 confirmed the results of the geophysical survey in this part of the field The ditch enclosing the small enclosure was shown to be of Romano-British date by the assemblage of pottery recovered from the base of its fill, and the linear boundary to which it was attached was hence presumably of Romano-British or possibly Iron Age origin There is pollen evidence for the advent of cereal farming in the area during the Iron Age, dated by radiocarbon to 2341±33 BP (Wk-19437) (ASUD 2006b) It is possible that the larger field enclosures in the area date from this earlier period, since they are not laid-out with reference to Roman Dere Street In view of the absence of finds within the excavated section, it likely that the long boundary ditch had already become in-filled prior to deposition of the Roman pottery within the ditch of the small enclosure The function of the small enclosure was not determined The enclosure was too small to have contained a domestic structure although the presence of pottery and animal bones within the surrounding ditch suggested some form of domestic presence nearby

9.0 HOLTBY FIELD 141 EXCAVATION RESULTS

9 1 Field 141 is bounded to the east by the A1, with fields on the other sides A derelict cottage lies at the north-western corner and a complex of derelict farm buildings to

the south-west The field rose generally from all sides towards a small hill-crest located towards the north-eastern corner of the field The field was under stubble at the time of excavation

9 2 No evaluation was undertaken in this area in 1994/5 The field was not included in the 2005 fieldwalking programme nor the programme of monitoring of geotechnical investigations Geophysical survey undertaken within this field in 2006 primarily identified parallel linear anomalies aligned from south-east to north-west parallel to the A1 and consistent with former ridge and furrow cultivation (Figure 11) Other parallel linear anomalies aligned from south-west to north-east probably represented a different phase of agricultural activity A number of small (and one large) discrete anomalies were considered to possibly represent archaeological features

Trench L12 (Figure 12)

9 3 Trench L12 was located towards the north-eastern corner of the field, to the north-east of the hill-crest, and was located so as to transect an irregularly shaped large discrete anomaly identified by the geophysical survey The trench measured 20m by 3m and was aligned from north-east to south-west. The field surface in the area of the trench was almost level at a height of some 52 10m AOD

9 4 The trench was machine-stripped to a typical depth of 0 50m, onto the surface of yellowish brown or brownish yellow natural clayey sand [708] containing varying quantities of rounded pebbles and occasional larger cobbles A large lens of greyish brown sandy clay located within the south-western half of the trench corresponded to the targeted geophysical anomaly but appeared to be part of the natural subsoil

9 5 The subsoil surface was cut by a series of six parallel linear features crossing the trench from south-south-east to north-north-west and spaced 3 0-4 2m apart, centre to centre The alignment, form and spacing of these features was consistent with the ridge-and-furrow recorded by the geophysical survey In section in the trench side the ridges between the furrows could be seen to be well preserved, surviving to a height of up to 0 35m above the natural subsoil and composed of mid brown sandy silty clay [707] containing moderate quantities of rounded pebbles The bases of three of the furrows ([710], [712] and [714]) were hand-excavated where they cut up to 0 10m into the natural subsoil. They were filled with slightly reddish brown slightly sandy silty clay soil (respectively [709], [711] and [713]) containing occasional small rounded pebbles and some larger stones. No finds were recovered from any of these features

9 6 The ridge-and-furrow was sealed by some 0.25m of mid to dark brown slightly silty sandy clay modem ploughsoil [706] containing frequent rounded pebbles and occasional larger stones measuring up to 300mm No finds were made from the soil stripped from the trench, but five medieval and early post-medieval pottery sherds recovered from the field surface in the area of the trench were retained as context [715]

Discussion

9 7 The geophysical survey and evaluation trenching undertaken within Field 141 did not identify archaeological features other than ridge-and-furrow cultivation of medieval or early post-medieval date The latter was, however, well preserved below-ground in the area of the evaluation trench, despite the absence of surviving earthwork remains in the field

10.0 KILLERBY AREAS AS1-3 EXCAVATION RESULTS

10 1 Proposals to re-align Low Street and an existing pipeline in an area at the eastern side of the A1 near Killerby Hall as part of the A1 works prompted additional geophysical survey to be undertaken in the area (ASUD 2006), the survey areas being designated Additional Survey Areas 1-3 Following the results of this work, a series of four evaluation trenches were sited in this area (Figure 13)

10 2 The area is bounded to the west by Dere Street Roman road, in this area lying beneath the line of the modem A1 The 1857 First Edition Ordnance Survey map records that a skeleton and spearhead, presumably of Anglian date, had been found beside Dere Street in the area immediately to the north of Area AS3

10 3 In 1993 a small geophysical survey was undertaken at the westem edge of Area AS1 but no significant results were obtained (NYSMR ENY 1509) Fieldwalkmg along the western edge of the area produced two worked flints, a sherd of Roman pottery and seven medieval sherds (NYSMR ENY 1493) No previous archaeological interventions are recorded in Area AS3. These Areas were not included in the 2005 programmes of fieldwalking and geotechnical monitoring

Areas AS1 and AS2

10.4 Areas AS1 (to the south) and AS2 (to the north) comprised the two halves of a recently subdivided field located at the eastern side of the A1 opposite Field 151, bounded by Low Street to the south and by the driveway to West Lodge to the north, and centred at SE 255 954 Both areas were under stubble at the time of excavation

10 5 The major topographic feature within these areas is a large hollow crossing the centre of Area AS2 from north-west to south-east before curving to the south-west m Area AS1 (Plate 6) The northern end of the hollow withm Area AS2 contains a noticeably wet area with peaty soil, and part of the base of the hollow within Area AS1 is left unploughed and overgrown presumably for similar reasons This basin probably represents the site of a former pond or marshy area although it has not been recorded as such on historical mapping. From the basin the ground rises towards the A1 and more steeply towards a ridge of higher ground to the north-east

Trench B14 (Figure 14)

10 6 Trench B14 in Area AS1 was located across an indistinct linear anomaly on the geophysical survey It measured 20m by 3m and was orientated from north-west to south-east The modern ground surface in the area of the trench sloped down to the south-east into the depression formed by the southem end of the basin, from 45.55m AOD down to 44 28m AOD

10 7 The earliest deposit observed within the trench consisted of rounded and sub-angular cobbles m a matrix of grey clay [703]. This deposit was assumed to represent the undisturbed natural subsoil but was only observed within one small area Where investigated, it was overlain by a 0.1m thick layer of dark brown silty clay [702] containing flecks and small lumps of wood charcoal. This in tum was overlain by a layer of mid grey clay [692] mottled with dark brown peaty clayey silt. Where investigated this was 0.1m thick, and it was observed throughout the south-eastem 16m of the trench, continuing in all directions. At the north-westem (upslope) end of the trench, this deposit was overlain by a layer more than 0 05m thick of dark brown sandy silty clay [701] and 0 2m of mid brown clayey sand [700] containing frequent yellow sandstone fragments These deposits appeared to be of colluvial origin and did not produce any finds.

10.8 Withm the central part of the trench, layer [692] was cut by two shallow hollows Hollow [689] was irregularly shaped, measuring more than 2 0m from north to south (continuing beyond the trench to the north), up to 1 3m wide and up to 0 20m deep (Plate 7) It was filled with dark brown peaty clayey silt [688] containing moderate quantities of charcoal flecks and small lumps The feature produced a small quantity of animal bone including very large cattle vertebrae identified as being derived from, an 'auroch' (*Bos primigenius*), the prehistoric wild cattle Hollow [691] immediately to the south-east was sub-rectangular in shape with a fairly steep northern side and very genfly sloping western and southem sides. It measured more than 2 0m from north to south (again continuing beyond the trench to the north), up to 1 0m wide and up to 0 20m deep The fill [690] was similar to context [688] but contained *c.*10% large lumps of wood charcoal from an unidentified deciduous tree A sample of this material was submitted for assessment The fill also produced a small assemblage of animal bone including possible domesticated dog and red deer antler which had been cut usmg a flint tool

10 9 The hollows were sealed by an extensive layer of very dark brown peaty silty clay [687] containing infrequent small stones. This deposit was largely removed by machine, but although remaining areas were removed by hand no finds were recovered Extensive examination of the spoil resulting from machine-removal of this layer also failed to identify ammal bone comparable to that derived from the underlying hollows The layer was up to 0 15m thick and extended over the south-eastern (down-slope) 16m of the trench, thinning as it ran into the base of the south-east facing slope. At the foot of the slope it was overlain by a colluvial deposit [699] consisting of fairly stone-free mid brown clayey sand This extended for 4 5m from

north-west to south-east and was up to 0 3m thick Above these deposits the trench was covered by 0 2-0 4m of mid brown silty sandy clay modern ploughsoil [686]. This became noticeably darker and more peaty towards the down-slope end of the trench.

Trench B15 (not illustrated)

10 10 Trench B15 was located in Area AS2 towards the southern edge of the field, on a north-east facing slope running down into the basin. The trench measured 20m by 3m and was aligned from north-east to south-west in order to transect the line of an indistinct linear anomaly recorded by the geophysical survey The modern ground level in the area of the trench sloped from 46 47m down to 45.02m AOD However, the farmer indicated that some material may formerly have been removed from this slope to in-fill the adjacent lower-lying area to the north-east

10 11 The area of the trench was covered by some 0.26-0 33m of dark brown slightly silty sandy clay topsoil [716] This produced a small assemblage of nine medieval or early post-medieval pottery sherds. Removal of the topsoil revealed a sequence of natural subsoils At the south-western (upslope) end of the trench, the subsoil consisted of brownish yellow sandy clay [719] containing numerous rounded cobbles and yellow sandstone fragments This deposit was similar to deposit [684] recorded in Trench B16 some distance to the north-west (see below) To the north-east (downslope), deposit [719] was overlain by a layer of brown clayey sand [718] containing moderate rounded stones and yellow sandstone fragments This deposit was interpreted as material weathered down the slope from the underlying layer At the north-eastern end of the trench, this was in turn overlain by greyish brown slighdy silty, slightly sandy clay [717], probably a water-laid deposit relating to the former basin None of these deposits produced finds and no archaeological features were identified within the trench

Trench B16 (Figure 15, Plate 8)

10 12 Trench B16 was located in Area AS2 on the north-east facing slope running down towards the northern end of the basin It was orientated from north-east to south-west and measured 20m by 3m. The modern ground surface in the area of the trench sloped from 45 94m AOD down to 44 76m AOD to the north-east The trench was located to examine a group of discreet pit-like anomalies on the geophysical survey

10 13 The area of the trench was covered by between 0 20m and 0 30m (increasing down-slope) of dark brown silty sand topsoil [680]. Pottery recovered from the topsoil and during trench cleaning were recovered as contexts [680] and [685] respectively and included a sherd of possible Roman pottery and two unglazed medieval sherds Removal of the topsoil revealed a sequence of deposits which were investigated in two partial sections excavated against the north-western side of the trench At the south-western (upslope) end of the trench was a deposit of fragmented yellow sandstone in a matrix of yellow-brown sandy natural boulder clay [684] comparable

to deposit [719] in Trench B15 The earliest deposit observed at the north-eastern (downslope) end of the trench was mid greyish brown sandy clay [705] containing frequent fragments of yellow sandstone, moderate numbers of cobbles and occasional larger boulders An oxidised version of this deposit (context [683]) was observed further upslope These deposits probably represented material naturally weathered down the slope from parent material [684]. Context [683/705] was overlain by a probable buried primary soil horizon [682/704], which consisted of a layer up to 0 12m thick of dark brown silty clay Except at the south-western end of the trench these deposits were sealed by an extensive layer [681/693] consisting of up to 0.12m of mid orange brown silty clayey sand, either colluvium or a buried plough horizon

10.14 Two groups of three small pits were identified at either end of the trench At the northern end of the trench, the south-western half of irregularly-shaped pit or hollow [676] was investigated, the remainder extending beyond the excavated area This was approximately 1 3m wide, extended 0.6m into the trench and cut up to 0 18m into natural deposit [705] It was filled with very dark reddish brown peaty silty sand [677] Some Im to the south a second, smaller pit [678] cut layer [705] this was sub-circular in plan, up to 0 66m in diameter and up to 0 09m deep and contained a similar fill [679]. A third pit [694] lay a further 2 5m to the south-west This cut possible a buried soil layer [704] (which was not present m the area of the first two pits) Only the north-western half of this feature lay within the trench It was probably oval in plan, more than 0 70m long, 1 18m wide and 0 16m deep, with gently sloping sides and a concave base It had a 0 01m thick lens of black soot and charcoal [697] in the base This was overlain by up to 0 06m of dark brown silty clay [696] containing small lenses of possibly heat-affected yellowish, orange and reddish brown silty clay Above this was a second lens of soot and charcoal [695] up to 0 02m thick The uppermost surviving fill of the pit consisted of up to 0 08m of stone-free dark brown silty clay [698] containing rare flecks of charcoal None of these features produced any artefactual material.

10 15 The second group of pits was located at the south-western (upslope) end of the trench, each cutting directly into natural boulder clay [684]. The south-western and north-western edges of oval pit [670] lay beyond the excavated area It measured more than 1 7m long, more than 1 0m wide and up to 0 14m deep It was filled with very dark grey (almost black) organic clayey sand [671] containing numerous rounded and sub-angular cobbles but very few fragments of the yellow sandstone prevalent m the surrounding subsoil Pit [672] immediately to the north was sub-circular, up to 1 25m wide and up to 0.31m deep It had a similar fill [673]. Pit [674], located some Im to the south, was of a different character. It was probably circular, only some 0 60m in diameter and appeared more neatly cut and regular in shape It was packed throughout with angular sandstone fragments [675], although again the soft yellow sandstone predominant in the surrounding subsoil was almost entirely absent Spaces between the stones were filled with mid greyish or yellowish brown sand Again, none of these features produced artefactual material

Flint scatter

10 16 Durmg the work within these fields, a small group of worked flints (context [720]) was noted and recovered withm the south-eastern corner of Area AS1 near its entrance from Low Street

Discussion, Areas AS 1 and AS2

10 17 The geophysical anomalies targeted by Trenches B14 and B15 were almost certainly caused by linear out-cropping of one of the sequence of colluvial deposits observed crossing each trench Trench B16 confirmed the presence of a number of small pits identified by the geophysical survey. Several of these were clearly man-made, pit [694] containing successive lenses of burnt material, pit [674] being stone-packed, and pits [670] and [672] containing (unworked) stone assemblages differing from the surrounding subsoil and hence discounting them from being natural tree-throws. However, no evidence for dating or function of the features was recovered

10 18 The three trenches located within Areas AS1 and AS2 each ran down the side of an extensive basin possibly representing the former site of a large post-glacial pond The chemically reduced condition of the natural subsoils within the lower end of each trench indicated that this formerly held a significant depth of water, and the partial survival of peat deposits in Trench B14 near the southern end of the basm and as topsoil withm the northern end indicated that the site formerly had considerable potential for palaeoenvironmental study. Drainage works during the later 20th century are likely to have compromised this potential However, examination of aerial photographs taken in 2001 as part of the current development suggests that the base of the southem part of the basin remains wet even m dry weather At the time of excavation this area had been left unploughed and overgrown, again suggesting that it remains too wet for to be cultivable Without further investigation it is not possible to assess the potential of this resource During the earlier prehistoric period the natural resources of such a landscape feature would have proved highly attractive to a hunter-gatherer population, and might be expected to form a focus for archaeological remains of the period

10 19 The identification of two hollows containing charcoal and animal bones within Trench B14 is hence of some significance The combination of *auroch* bones, flint-worked red deer antler and the probable water-side location hints that the activity represented could date from the Mesolithic period Such an identification would be dependant upon a radiocarbon date Such a site would be of considerable significance regionally, particularly if contemporary palaeoenvironmental evidence survives within the bed of the adjacent former basm. Vyner (2004) has noted that "For the Mesolithic period there is little information from the [Swale-Ure] Washlands area as a whole"

10 20 The pits identified withm Trench B16, although undated, were, in view of their location and absence of material culture, also likely to date from the earlier

prehistoric period Similarly, the group of flints recovered from the higher ground at the eastern corner of Area AS1 overlooking the basin indicates earlier prehistoric activity focussed on this topographic feature

Area AS3

10.21 Area AS3 comprised a field located at the eastern side of the A1 opposite Field 152 and the southern half of Field 153, and centred at SE 252 957 It lay immediately to the north of Area AS2, bounded to the south by the driveway to West Lodge and to the north by the driveway to Killerby Farm It lies within Killerby civil parish in Hambleton District

10 22 The field sloped fairly steeply down to the south and east, from some 58m AOD at its north-western corner down to some 46m AOD at the middle of its southern edge The field had recently been ploughed.

10 23 Geophysical survey undertaken within a strip along the western edge of the field identified linear trends consistent with modern agriculture and also a number of indistinct anomalies of uncertain origin (Figure 13) A single linear anomaly crossed the modern agricultural trends at an angle from north-west to south-east, and Trench B17 was located near to the top of the hill-slope so as to investigate this feature

Trench B17 (Figure 16)

10 24 Trench B17 measured 20m by 3m and was orientated from north-east to south-west The ground surface in the area of the trench lay at a level of 52 27-53 00m AOD, sloping slightly down to the west and south The modern plough-soil consisted of dark brown silty sand [668] up to 0 30m thick The natural subsoil [669] across most of the area of the trench consisted of rounded and sub-angular stones measuring up to 200mm in a matrix of yellow sandy clay At the south-western end of the trench this was overlain by up to 0 35m of light orange brown silty sand [667] which included a lens of large stones

10.25 The natural deposits were cut by a small ditch [665] crossing the trench from north-west to south-east and corresponding to the targeted geophysical anomaly This had a surviving width of 2.0m, the south-western edge of the feature having been truncated It was up to 0 60m deep with a very shallow, irregular profile, and was filled with mid brown silty sand [666] containing frequent rounded and sub-angular stones measuring up to 0 3m The south-western edge of the ditch had been truncated by a parallel re-cut [663] This was 1 6m wide and 0 55m deep with an asymetric flat-based 'V'-shaped profile, more gently sloping on the south-western side It was filled with light brown silty sand [664] containing occasional stones Neither phase of the ditch produced any artefactual material

Discussion

10 26 The trench confirmed the presence of a linear ditch identified by the geophysical survey However, this remained undated. The orientation of the ditch, greatly at variance to that of the adjacent Dere Street Roman road (and presumably all post-Roman landscape layouts in the vicinity), suggests a prehistoric date for the feature Evidence for silting-up and subsequent re-cutting of the feature implies that it was a relatively long-lived boundary, and not a short-lived artefact such as a 20th century anti-glider ditch

11.0 DISCUSSION

11 1 The second phase of evaluation trenching has again generally suggested that the geophysical survey data has given a good indication of the presence or absence of archaeological features within the targeted areas However, several of the trenches did not identify significant archaeological features corresponding with the targeted geophysical anomalies These included Trench L9 in Field 58, Trench L12 in Field 141 and Trench B15 m Area AS2

11 2 Besides providing additional information to inform the detailed design of the motorway scheme, the trenches excavated in Field 174 at Catterick Bridge produced several significant results Trench ET2 identified the position of the inner edge of the town's defensive ditch, although the full width could not be established The presence of Anglian artefacts near to the base of the ditch fill indicated both the presence of Anglian activity m the vicinity and that the ditch had remained open to almost its full original depth into the early post-Roman period Trench ET3 demonstrated the presence of some Roman extra-mural activity in this area

11.3 The trenches excavated in Field 23 near Baldersby and Field 58 at Roxby House have confirmed that rectilinear enclosure systems identified by geophysical survey are likely to date from the Romano-British period Such field systems have been recorded by aerial photography across large parts of Yorkshire Despite the unsuitability of many of the soil types withm the road scheme area for producfion of cropmarks, it is becoming clear as a result of more widespread use of geophysical survey and large area excavations that that such field systems also became widespread across the Vale of York and the Vale of Mowbray from the Iron Age onwards The presence of assemblages of Roman artefacts m associated features at both Baldersby and Roxby House suggests nearby settlement at both locations

11 4 The identification of a possible round barrow withm Field 58 adds to the known distribution of such sites within the area Most upstanding barrows in the Vale of Mowbray attracted the attentions of 19th century antiquarians, and others are known mainly as cropmark ring-ditches identified from the air (Manby, King and Vyner 2003, 93) With the exception of Quem Howe (SE 338 804) and Scorton (NZ 233

000) (Waterman 1951; Greenhalf 1980) there has been little modern excavation of such monuments in this part of North Yorkshire.

11 5 The presence of *auroch* bones in Trench B14 at Killerby, found within a probably man-made hollow and in association with quantities of charcoal, worked red deer antler and possibly domesticated dog bones, means that this site is potentially the most significant discovery of this phase of the A1 evaluation Stallibrass (1995, 122) comments that "None of the finds of aurochsen are known to date from the Iron Age, and it is possible that aurochsen had died out (or been bred out) in the whole of Britain during the preceding Bronze Age" The presence of *auroch* bones places this site within the earlier prehistoric period, and its wetland-edge location perhaps suggests a Mesolithic date despite the absence of a supporting flint assemblage The potential for an associated waterlogged environmental assemblage within the adjacent basin (if this has survived 20th century drainage works) would make this a site of at least regional importance The identification of other groups of small pits, currently undated but likely to be prehistoric in date, within Trench B16 slightly further to the north along the edge of the same wetland area, suggests that the basin may have formed a local focus for prehistoric activity and hence is of considerable potential for future study

12.0 SPECIALIST FINDS ASSESSMENTS

12.1 Processing and quantification

Washing of the bulk finds was completed after fieldwork had ended All finds recovered have been recorded, marked where appropriate, packed in labelled bags or other packaging as appropriate and placed in labelled museum storage boxes Metal objects and other potentially unstable materials were packaged and transferred immediately to the Conservation Laboratory at the Archaeology Department, University of Durham A finds database was produced in order of context number This database tabulates the artefact type, quantity and a brief description. The artefact assemblage is summarised below

Table 2: Finds assemblage

Artefact type	*Quantity*
Flint	7
Pottery	391
Copper alloy	5
Lead	1
Iron	16
Jet	1
Glass	2
Ceramic building materials	53
Fired clay	2
Industrial waste	2
Human skeleton (fragment)	1
Worked bone	2
Anunal Bone	748
Antler	34
Environmental samples	5 (17 tubs)
Charcoal samples	4
Total	1274

12 2 The small and geographically dispersed nature of the assemblages of ceramic building materials, fired clay, glass and industrial wastes recovered during this phase of the evaluation derived primarily from secondary or residual contexts and are unlikely to contribute to the objectives of this stage of the overall project It is not therefore considered appropriate to submit them for specialist assessment at this stage Where considered appropriate they would be included within assessment of larger associated assemblages recovered during further works during construction phase of the motorway scheme

12.3 Flint (Appendix A)

12.3.1 Seven lithic items were submitted for assessment The entire assemblage has been catalogued using Microsoft Excel, the full catalogue being included within the site archive

12 3 2 Of the three flints were recovered from ditch fill 651 in Trench LI0, one was a natural pebble fragment. The remaining two items refitted to form a single incomplete piece of angular debitage The crudely knapped piece could fit with the more functional and less specialised assemblages of the later Bronze Age and Iron Age

12 3 3 Three flints were collected from surface of Area AS1 at Killerby as context 720 included an undiagnostic flake and two bulbar proximal ends from snapped blades, one of which was lightly fired These were well controlled, parallel sided examples with prepared striking platforms They are in keeping with a Mesolithic or early Neolithic date and are paralleled at the recently excavated nearby Marne Barracks site

12.3 4 The final flint, recovered during cleaning withm Trench B16 in Area AS2 at Killerby was a stmck flake with secondary working along one edge This was a fairly rudimentary piece and not chronologically diagnostic

Recommendations

12 3 5 The flints should be deposited with the site archive. Consideration could be given to illustrating the blade fragments from context 720

12.4 Romano-British pottery (Appendix B)

12.4.1 The submitted pottery assemblage consisted of *c* 300 sherds weighing 2 494 kg Of these, 67 sherds (190 3g) were Samian while the remainder (*c* 233 sherds, 2 011kg) were coarseware. All the sherds were examined

12 4 2 The samian fragments recovered were mostly small and only a limited number of forms could be identified Those that were dateable ranged from Hadrianic or early Antonine to late 2nd century or later in date

12 4.3 A range of nationally distributed fabric types were represented in the coarseware assemblage Forms present included jars, bowls, beakers, mortaria, possibly South Gaulish and Spanish amphorae

12 4.4 The datable material yielded *tpqs* for a number of contexts which are detailed within the full report in Appendix B

Recommendations

12 4 5 It is recommended that a more detailed record should be made of 16 vessels from significant contexts (i e all contexts except topsoil) For each vessel, this record should consist of a measured drawing and a fabric description, both of which should follow the accepted conventions for such drawings and fabric descriptions These records should be lodged with the permanent record in the relevant archive repository

12.5 Post-Roman pottery

12.5 1 A total of seven sherds of Anglian pottery and 30 sherds of medieval and post-medieval pottery were recovered during the Phase 2 evaluation trenching The medieval and post-medieval material derived entirely from topsoil contexts and has not been submitted for specialist assessment at this stage.

12 5 2 Only an initial assessment of the Anglian sherds has been undertaken at this stage The seven sherds had a total weight of 147g and derived from a minimum of three separate vessels, based on visible fabric disfinctions Two fabric types were represented by single small, un-diagnostic sherds The remaining five sherds (131g) probably derived from a single vessel Two large, joining sherds represented probably almost the full profile of what appears to have been a small globular beaker, however the base and rim were absent and too litfle of the circumference was present to determine the original diameter The vessel was hand-made, undecorated but probably burnished externally However, much of the external surface was obscured by areas of carbonised and mineralised deposits The interior of the vessel was heavily encrusted with a carbonised deposit

Recommendations

12 5 3 Prior to preparation of any final report on this material, further analysis of the fabrics represented within the Anglian assemblage should be undertaken, including comparison with similar material from the Catterick area (notably the large assemblage from Hollow Banks Quarry nearby). Petrological analysis may provide further information on fabric types, but should only be considered if a larger assemblage is recovered The small globular beaker should be illustrated

12.6 Conservation assessment (Appendix C)

12 6 1 Twenty nine objects were received for examination, conservation assessment and X-radiography, comprising 5 copper alloy, 1 lead, 1 possible jet, 2 worked bone and 20 iron objects The objects were briefly visually examined to assess their condition and stability, to determine the material from which they were made, and to look for surface and technological detail. The objects were sorted into groups of a similar density, which were X-rayed together

12 6.2 Most of the ironwork was found to be highly corroded and stable, with just a few pieces (eg 623AG) showing signs of cracking of the corrosion layer All the copper objects were stable when examined, and all but one were moderately corroded The ?jet, lead and worked bone objects were all stable Details of the artefacts examined, including an identification of the material and of the object where possible, the condition of the object when examined, its XR plate number, and any technological or other observations, were added to the site database

12 6.3 Most of the ironwork was shown to be nails or fragments of nails, including several hobnails, some complete. The copper alloy brooch (627AA) also used iron pins in its construction, and the iron has possibly preserved closely associated organic material The ring (635AB) is in very good condition, though appears worn The density and homogeneity of the material used would suggest that it is probably jet. The bone objects (627AB and AC) are both fragmentary, but in good condition

Recommendations

12.6 4 No further work is recommended for the ironwork The mineralised material on the brooch should be investigated for a possible identification, and the ?solder on the back of the wrist clasp (623AA) should be confirmed by EDXRF analysis Detail on one of the coins (605AA) is not clear following X-radiography, and further investigative conservation is required EDXRF analysis could also be used to confirm the ring as jet

12.7 Small finds (Appendix D)

12 7 1 A total of 26 finds were submitted for assessment These comprised two copper-alloy and one composite copper-alloy and ferrous items, nineteen ferrous objects, one jet and one lead-alloy artefact, and two worked bone fragments Objects were studied with reference to the X-ray plates to facilitate identification and to permit recommendations for further work to be formulated

12.7 2 The copper alloy items, all recovered from Trench ET2, included an Anglian cruciform brooch from context 627with rectangular head plate and spherical head knob, and a trefoil foot The two knobs from the arms were present, though detached A rectangular copper alloy plate was probably part of an Anglian wrist-clasp The third object was much of a sub-rectangular-sectioned oval loop, possibly Roman

12 7.3 Trench ET2 also produced a length of circular-section iron rod or wire, bent over on itself at one end to form a cmde loop, five nails and two Roman hobnails In addition three other iron fragments were recovered Contexts m Trench ET3 produced a further five nails and a hobnail. An undated tapering spatulate object, possibly a nail, was recovered during cleaning in Trench B16

12 7 4 A single lead alloy object, a tapering coiled strip, was recovered from Trench ET3

12 7 5 A Roman jet finger-ring with a semi-oval band and an oval panel was recovered from Trench L7 near Baldersby Two fragments from cylindrical bone unplement handle(s), one decorated with ring-and-dot decorafion together with an interlace design, the other with a cluster of rmg-and-dot motifs and two incised lines around what appears to be the terminal, were recovered from context 627 in Trench ET2 (which produced the Anglian brooch and pottery) The interlace design was suggestive of an Anglian or possibly Norse origin

Recommendations

12 7 6 As with most evaluations, the artefacts recovered provide a very limited perspective on the material culture of the areas examined. The majority of the finds (mainly the ferrous fragments) from this phase of work do not merit further study The cruciform brooch, incised plate, jet ring, and bone handle fragments do merit further research and at the very least the brooch and ring will require full publication A total of five items are recommended for illustration and deserve inclusion within a consolidated finds catalogue with more detailed citation of parallels than is appropriate in an assessment report, if any further excavation is undertaken on the site

12.8 Coins (Appendix E)

12.8 1 Two coins were submitted for assessment They were examined visually and on X-ray plates On both coins, both surfaces were partially or largely obscured by loosely-adhering material The X-ray plates presented images of both sides, superimposed one on the other, meaning that they were only partially legible

12 8.2 One coin, from Trench ET2 context 625, was provisionally identified as a *follis* of Constantme I, issued *c* AD 313-15 The second, from Trench ET3 context 605, was provisionally identified as an *antoninianus* of Gallienus or Claudius II, issued *c* AD 260-70

Recommendations

12 8 3 It is recommended that specific parts of these coins (described within the full assessment report) be cleaned by the conservator m order to facilitate a full identification Full catalogue entry should then be prepared for inclusion within the final coin report

12.9 Human bone (Appendix F)

12.9 1 A number of human bone fragments were recovered as context [602] from withm a small dnch [608] in Trench ET2 at Catterick Bridge All the bone fragments derived from a single skull They represented the facial part of the skull, including the frontal (forehead), eye orbits, zygomatics (check bones) and most of the upper jaw. The bone was m good condition, with no suiface erosion and moderate fragmentation The surviving parts of the skull suggested that they belonged to a male Ageing of the remains was based on the dental wear, which can be affected by diet and is therefore not a very reliable age indicator The teeth suggested that this individual was a young middle adult, aged between 26 and 35 years

12 9 2 Six of the usual 32 teeth survived The majority of maxillary teeth had been lost post-mortem and the mandible was not present. The individual had one large cavity affecting the right second molar and had slight plaque concretions on the right first molar Dental wear was moderate. No other pathological manifestations were noted

Recommendations

12.9.3 No further analysis of this material is recommended.

12.10 Biological remains (Appendix G)

12 10 1 Biological remains recovered from four sediment samples processed by NAA, one unprocessed sediment sample, an organic spot find and 697 fragments of hand-collected bone were submitted for an evaluation of their bioarchaeological potential

12 10 2 Ancient biological remains recovered from the processed subsamples were restricted to small quantities of charcoal, occasional charred cereal grains and weed, and a little animal bone. These remains were, on the whole, rather thinly distributed in the deposits and of little interpretative value The oak (Quercus) charcoal recovered from Context 636 (Trench L7) was often in the form of 'slivers' and probably derived from stmctural timber Charred cereal grains representing crop plants (barley and oat) and seeds of associated weeds indicate food waste and human activity at the sites, but no concentrations of such remains were encountered However, the grains would provide suitable material for radiocarbon dating (via AMS), if required

12 10 3 Hand-retrieved charcoal from context 690 Trench B14 proved to be very decayed The wood was from a deciduous tree but no further identification was possible

12 10 4 Some identifiable pollen grains/spores were recorded from Context 688, but most of the remains were rather eroded and many unidentifiable A more detailed investigation of these remains could, perhaps, provide a 'snapshot' of the local vegetafion at the time of the formation of this deposit, but this information would only be of value if the deposit could also be reasonably tightly dated

12 10 5 Vertebrate material was recovered from four of the trenches Assemblages recovered from those associated with the Roman town ditch at Catterick produced most of the remains, which appeared to represent both butchery waste and domestic refuse and was much fragmented The presence of cervid remains hinting at the exploitation of wild resources both for food and for raw materials for the manufacture of artefacts As a result of the high degree of fragmentation, few of the bones were measurable or of use for providing age-at-death data. Additionally, dating of the deposits was uncertain, or rather broad, limiting the potential of the material for further analysis

12 10 6 Remains recovered from two shallow hollows of unknown date from Trench B14 at Bainesse (Contexts 688 and 690) included bones of dog, a collection of antler fragments and two large bovid vertebrae which were identified as possible *aurochs*

12.10 7 Subsequent to completion of the assessment report contained within Appendix G, the animal bones from contexts 688 and 690 in Trench B14 were examined by Peter Rowley-Conwy of the Department of Archaeology, University of Durham, a specialist in Mesolithic and Neolithic faunal remains He confirmed that the bovid

remains derived from an *auroch*. In addition, it was his opinion that the cuts to the red deer antler were made using a flint tool It was his view that the dog remains were somewhat too large to be those of a modern fox, although further research into the size of ancient fox bones would be required to resolve this. However, if they were derived from a domesticated dog then, if of Mesolithic date, this would be an extremely early example of domestication

Recommendations

12 10 8 The quantities of plant macrofossil remains recovered from these deposits were too few to warrant further study, although some would provide material for submission for radiocarbon dating

12 10 9 The animal bone assemblages from Trenches ET2 and ET3 do not warrant further examination unless, perhaps, as part of a synthetic project reporting on this and other excavations in the area Data from these assemblages would only be of use if the dating of the deposits from which they were recovered could be refined beyond that currently available

12 10.10 Initially, it would certainly be of value to date (via radiocarbon assay, probably requiring AMS) the bones from Trench B14, and it is recommended that at least three dates be obtained using fragments of bone (both of dog and of ?aurochs) and charcoal (although there will be a fairly large unknown error inherent m using the unidentified charcoal from Context 690, it could nevertheless help to determine whether this deposit is of very early or relatively recent date) Further confirmation of the identification of aurochs could be established using DNA analysis, but this would not be necessary if the radiocarbon dating returned early (i e Mesolithic/Neolithic) and consistent dates for the remains In this event, some further investigation of the pollen remains within Context 688 would also be worthwhile as this may provide additional information regarding the surrounding environment of the time.

12 10 11 Future excavation in the vicinity of the basin at Killerby should consider the possibility of recovering evidence of early prehistoric settlement and environment, the dating of the extant remains from the deposits within Trench B14 should be considered a priority if further interventions are planned Should organic (though, in the present case, very well humified) deposits similar to Context 688 be encountered then it is recommended that these be sampled using column or kubiena tins (to obtain stratigrapically intact samples which may be subsampled for pollen analysis) as well as via bulk sediment collection

12 10 12 All of the recovered biological remains should be retained for the present.

12.11 Radiocarbon assessment

12 11 1 The majority of trenches excavated m this latest phase of work produced archaeological remains from periods (notably Roman) where dating on the basis of the recovered artefactual assemblages is likely to be more reliable than radiocarbon dating Other, prehistoric, features did not, in general, produce material suitable for dating. The exception was the pair of hollows withm Trench B14 located at the edge of the former basm within Area AS1 at Killerby In the absence of a dateable artefactual assemblage from these features, radiocarbon dating would provide the only means of confirming the potential date and significance of the faunal remains which were recovered Dated animal bone assemblages from such an early period are extremely rare m northern England and hence the value of the assemblage from Trench B14 would be considerably enhanced by such analysis

Recommendations

12.11 2 It has been recommended above (para. 12 10.10) that at least three samples from the hollow fills from Trench B14 be submitted for AMS radiocarbon assay, comprising *auroch* bone from context 688, dog bone from context 690 and wood charcoal from context 690 (m case the bone samples do not retain sufficient carbon content). However, pending confirmation as to whether the canid bones from context 690 represent either a large fox or an unportant very early example of domesticated dog, and given the destmctive nature of radiocarbon dating, it is proposed that part of the heavily fragmented red deer antler from the same context could be substituted as a dating sample

12 11 3 It is recommended that this radiocarbon dating programme be undertaken in advance of construction in order to confirm the significance of the excavated remains and to formulate an appropriate mitigation strategy to record further such deposits durmg the development.

13.0 CONCLUSION AND RECOMMENDATIONS

13 1 Excavation of this group of trenches has again indicated that the geophysical survey component of the evaluation along the route of the route of the proposed upgrade of the Dishforth to Barton section of the A1 to motorway has in general provided a good indication of the presence or absence of archaeological features along different parts of the route

13 2 In Field 174 at Catterick Bridge, Trench ET2 identified the posifion of the inner edge of the Roman town's defensive ditch A deposit of Anglian artefacts near to the base of the ditch fill indicated both the presence of Anglian activity m the vicinity and that the ditch had been maintained into the early post-Roman period. Trench ET3

immediately beyond the outer edge of the ditch demonstrated the presence of Roman extra-mural activity in this area.

13 3 Two trenches excavated m Field 23 near Baldersby identified linear ditches and a gully running on a similar alignment to enclosures recorded immediately to the east by geophysical survey One feature cut a pit containing Roman pottery and a Roman jet ring Combined with topsoil finds of Roman pottery this suggests that the wider enclosure complex was of Roman date

13 4 Of the three trenches excavated within Field 58 at Roxby House, one did not identify evidence for a possible circular feature recorded by the geophysical survey, which is likely to have had a geological origin A second trench confirmed the presence of a small ring-ditch containing worked flints and probably representing the site of a levelled prehistoric round-barrow The third trench confirmed the presence of a linear ditched boundary with an attached small rectilinear enclosure The latter feature contained an assemblage of Roman pottery

13 5 A trench excavated m Field 141 at Holtby demonstrated that a targeted geophysical anomaly was of natural origin. However, the trench also identified well-preserved remains of ridge and furrow cultivation surviving below-ground in this area

13 6 Two of the three trenches excavated within Areas AS1 and AS2 at Killerby identified man-made pits, some certainly of early prehistoric date, adjacent to the edge of a former basin No dateable artefacts were recovered from any of these features, although worked antler was found in one of the pits and *auroch* bones from an adjacent feature indicate a Bronze Age or earlier date for the activity There is potential for waterlogged environmental remains to be preserved within the base of the adjacent basm, despite extensive 20th century drainage A third trench did not identify archaeological deposits

13.7 A trench located within Area AS3 at Killerby confirmed the presence of a linear ditch identified by geophysical survey, but did not produce any dating evidence

13 8 A moderate finds assemblage was recovered from this phase of work, although a large component of this consisted of residual Roman finds from Trench ET2 at Catterick Bridge There were, however, several significant groups of finds These included the group of Anglian artefacts from Catterick, groups of Roman finds from Baldersby and Roxby House, and groups of animal bone carbonised plant remains and pollen from Killerby

Recommendations

13 9 No further analysis of the stratigraphic archive is required at this stage.

13 10 Several parts of the finds archive will require further analysis or recording for inclusion within the final consolidated archive and publication reports for the project Recommended further work on the finds assemblage includes

- illustration of two of the flints
- preparation of fabric descriptions and illustrations of sixteen Roman pottery vessels
- further analysis of the Anglian pottery assemblage and illustration of one vessel
- investigation of the mineralised material on the Anglian brooch
- investigation by EDXRF analysis of the possible solder on the back of the Anglian wrist clasp
- confirmation by EDXRF analysis that the Roman ring is jet
- further research and illustration of five small finds including the cruciform brooch, wrist clasp plate, jet ring, and bone handle fragments
- full identification (after cleaning) and preparation of full catalogue entries for the two Roman coins
- further analysis of the pollen remains recovered from Trench 14, should they prove to be of Mesolithic or Neolithic date
- determination of whether the dog bones from trench B14 derive from a fox or a domesticated dog

13 11 It is recommended that, should the larger development be undertaken, that this proposed further analysis not be undertaken at this stage but deferred and included with that for other assemblages of material recovered from the wider project

13 12 The identifications of *auroch* bones and other faunal remains withm shallow pits m Trench B14, combined with its probable waterside location, is of significance, as it raises the possibility that the site is of Mesolithic or early Neolithic date In addition, any surviving waterlogged deposits lying within the southern half of the former basin, are also likely to be of significance de to their potential for further palaeoenvironmental analysis Dating of the faunal remains would confirm the significance of the excavated remains and assist in formulating an appropriate mitigation strategy to record further such deposits during the development

13 13 Given the importance of the discovery both of new sites and individual artefacts, preparation of a final report to publication standard will be required, either as a free-

standing document or for incorporation into a final report after completion of fieldwork during construction of the new motorway

Northern Archaeological Associates
Report No NAA 06/155
Project No 696
Date: December 2006
Text Greg Speed
Illustrations Andrew Durkin and Damien Ronan
Edited by Richard Fraser

REFERENCES

Abramson, P (1995) 'Excavation of a Late Iron Age Settlement at Scotch Corner, North Yorkshire' *Durham Archaeological Journal* **11**, 7-**18**

Allason-Jones, L (2002) 'The Jet Industry and Allied Trades in Roman Britain', in P Wilson and J Price (eds) *Aspects of Industry in Roman Yorkshire and the North* Oxford, Oxbow Books, 125-**32**

ASUD (2005) *A1(T) Dishforth to Barton Improvement, North Yorkshire Geophysical Surveys* Archaeological Services, University of Durham Report **1121**, unpublished

ASUD (2006a) *A1 (T) Dishforth to Barton Improvement, North Yorkshire Phase* 2 *Geophysical Surveys* Archaeological Services, University of Durham Report **1368**, unpublished

ASUD (2006b) *Healam Bridge, A1 Dishforth to Barton, North Yorkshire Palaeoenvironmental Assessment* Archaeological Services, University of Durham Report **1484**, unpublished

BHWB (1995) *Early Mesolithic Artefacts from Little Holtby, north of Leeming Bar* Unpublished Barton, Howe, Warren, Blackledge Report **1584x95/4**

BHWB (1996) *A1 Dishforth to North of Leeming Improvements, North Yorkshire Cultural Heritage Stage 3 Assessment Report* Unpublished Barton, Howe, Warren, Blackledge Report **1584/11**

Casey, P J, Howard, P & Wright, J (1995) *The Scotch Corner (Violet Grange Farm) Geophysical Research Project* Unpublished report

Copp, A & Roe, A (1996) *Archaeological Investigations, Scorton Quarry, Scorton, Richmondshire· Assessment Report.* Field Archaeology Specialists report, unpublished

Copp, A & Roe, A (1997) *Archaeological Investigations, Scorton Quarry, Scorton, Richmondshire Post-Excavation Assessment Report.* Field Archaeology Specialists report, unpublished

English Heritage (1991) *The Management of Archaeological Projects 2*

English Heritage (1995) *A Strategy for the Care and Investigation of Finds* Ancient Monuments Laboratory

English Heritage (2002) *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from sampling and Recovery to Post-Excavation* Centre for Archaeology Guidelines **2002 01**

Greenhalf, D (1980) *Scorton* Unpublished excavation report NYCC SMR

Hylton Longstaff, W (1848) 'Archaeological Intelligence Anglo-Saxon Period' Archaeological Journal V, 220-1

Institute of Geological Sciences (1970a) *Richmond, Sheet 41 Solid Edition* London, Ordnance Survey

Institute of Geological Sciences (1970b) *Richmond, Sheet 41 Drift Edition* London, Ordnance Survey

Institute of Geological Sciences (1977) *Geological Survey Ten Mile Map, South Sheet, First Edition (Quaternary).* Southampton, Ordnance Survey

Institute of Geological Sciences (1979) *Geological Survey Ten Mile Map, South Sheet, First Edition (Solid)* Southampton, Ordnance Survey

Jarvis, R A, Bendelow, V C, Bradley, R I, Carroll, D M, Furness, R R, Kilgour, I N L and King, S J (1984) *Soils and Their Use in Northern England* Soil Survey of England and Wales Bulletin 10

LUAU (1995) *A1 Dishforth to North of Leeming (North Yorkshire) Final Evaluation Report* Lancaster University Archaeology Unit report, unpublished

Manby, T G, King, A and Vyner, B E (2003) 'The Neolithic and Bronze Ages a Time of Early Agriculture', in Manby, T G, Moorhouse. S and Ottaway, P (eds) (2003), 35-116

Manby, T G, Moorhouse, S & Ottaway, P (eds) (2003) *The Archaeology of Yorkshire An Assessment at the Beginning of the 21st Century.* Yorkshire Archaeological Society Occasional Paper 3

Moloney, C, Holbrey, R, Wheelhouse, P & Roberts, I (2003) *Catterick Racecourse, North Yorkshire The reuse and Adaptation of a Monument from Prehistoric to Anglian Times*, Wakefield, Archaeological Services (WYAS) Publications 4

NAA (2006a) *A1 Dishforth to Barton. Catterick Bridge, North Yorkshire Archaeological Evaluation Trenching and Recording Post-Excavation Assessment Report* Northern Archaeological Associates Report 06/01, unpublished

NAA (2006b) *A1 Dishforth to Barton. Bainesse Farm, Catterick, North Yorkshire Archaeological Evaluation Trenching Post-Excavation Assessment Report* Northern Archaeological Associates Report 06/02, unpublished

NAA (2006c) *A1 Dishforth to Barton Healam Bridge, Pickhill with Roxby, North Yorkshire Archaeological Evaluation Trenching Post-Excavation Assessment Report* Northern Archaeological Associates Report **06/03**, unpublished

NAA (2006d) *A1 Dishforth to Barton: Archaeological Monitoring of Geotechnical Investigations* Northern Archaeological Associates Report **06**/22, unpublished

NAA (2006e) *A1 Dishforth to Barton Archaeological Monitoring of Geotechnical Investigations.* Northem Archaeological Associates Report **06**/22, unpublished

Soil Survey of England and Wales (**1983**) *Soils of England and Wales 1.250 000 Map Sheet 1 Northern England* Southampton

Speed, G (forthcoming) *Excavations at Hollow Banks Quarry, Scorton, North Yorkshire*

Speed, G (in prep A) *A1 Motorway Walshford to Dishforth Excavation within a Neolithic and Early Bronze Age Landscape between Boroughbridge and Marton-le-Moor, North Yorkshire*

Speed, G (in prep b) Investigations within a Later Prehistoric and Romano-British Agricultural Landscape lying between Walshford and Flaxby, North Yorkshire

Stallibrass, S (1995) 'Review of the vertebrate remains', in Huntley, J P and Stallibrass, S, *Plant and vertebrate remains from archaeological sites in northern England data reviews and future directions* Architectural and Archaeological Society of Durham and Northumberland Research Report 4

Tees Valley Archaeology/Faber Maunsell (**2006**) *A1 Dishforth to Barton Improvement Report on Archaeological Fieldwalking.* Unpublished

Vyner, B E (2004) *The Swale-Ure Washlands Archaeological Background* MSS, unpublished

Vyner, B E (forthcoming) *Pottery from the excavations at Nosterfield* Report for Mike Griffiths Associates, unpublished

Waterman, D M (1951) 'Quemhowe, a Food Vessel barrow in Yorkshue' *Antiquaries Journal* **31**, 1-24

Watkinson, *D* and Neal, V (**1998**) *First Aid for Finds*

Wilson, P R (**2002**i and ii) *Cataractonium. Roman Catterick and its Hinterland Excavations and Research, 1958-1997* CBA Research Reports **128** and **129** York, Council for British Archaeology

Appendix A
FLINT ASSESSMENT

Peter Rowe

Introduction

This report summaries a small assemblage of seven lithic items recovered during archaeological trial trenching

The entire assemblage has been catalogued using Microsoft Excel The following variables have been catalogued -

- raw material type (e g flint, chert, agate)
- raw material colour
- percentage of cortex
- cortex type (e g reduced, chalky)
- percentage and patina colour
- type of artefact (e g flake, blade, core)
- interpretation (e g scraper, arrowhead)
- period
- maximum dimensions
- method of knapping (e g hard hammer percussion)
- whether burnt
- whether damaged

The full catalogue is available with the site archive A summary of the material is presented m Table 1 1 below -

Table 1: Quantities of flint by context and type

Context	Flint Type	Quantity
651	Debitage	2
651	Natural fragment	1
685	Utilised Flake	1
720	Proximal end blades	2
720	Flake	1
Total		7

Catalogue

Trench L10, Context 651 (ditch fill)

Three flints were recovered from this context One of these is a natural pebble fragment The remaining two items refit to form a single incomplete piece of angular debitage The smaller of the two pieces has broken away from the ventral side of the striking platform during knapping A third piece has also broken away but was not recovered

Area AS1, Killerby, Context 720 (surface finds)

Three flints were collected from the field surface at SE 2570 9535 They consist of an undiagnostic flake and two proximal ends from blades, one of which is lightly fired There is no evidence for edge use on any of these pieces Each of the flints has a dense white or grey patina

Area AS2, Trench B16, Context 685 (cleaning find)

A hard hammer struck flake with secondary working along one edge was recovered during initial cleaning This is a fairly rudimentary piece and is not chronologically diagnostic

Conclusion

Limited conclusions can be drawn from this small assemblage The flints from context 651 represent one crudely knapped piece of debitage with a crushed striking platform This could fit with the more functional and less specialised assemblages of the later Bronze Age and Iron Age (Young & Humphrey, 1999)

The three surface finds from Area AS1 (context 720) include two bulbar ends of snapped blades These are well controlled, parallel sided examples with prepared striking platforms They are in keeping with a Mesolithic or early Neolithic date and are paralleled at the recenfly excavated Marne Barracks Mesolithic site (Young, 2006)

It is very difficult to comment on the raw material given the small size of the assemblage and the degree of patination and lack of cortex on the surfaces This said the material is consistent with a collected rather than mined and is likely to have been curated locally from glacial deposits

Recommendations

The flints should be deposited with the site archive Consideration could be given to illustrating the blade fragments from context 720

Bibliography

ASUD (2006) *Marne Barracks, Catterick, North Yorkshire post-excavation analysis report* Archaeological Services, University of Durham Report **1387**

Young, R & Humphrey, J (1999) 'Flint use in England after the Bronze Age Time for a re-evaluation?' *Proc Prehist Soc* **65**, 231-242

Young, R (2006) 'The flint assemblage' In ASUD 2006

Appendix B

ROMAN POTTERY ASSESSMENT

John Dore

Summary

The pottery assemblage from A1 Dishforth to Barton Phase 2 Trial Trenching was examined on 28th December, 2006 It consisted of c 300 sherds of pottery weighing 2 494 kg Of these, 67 sherds (190 3g) were Samian while the remainder (c 233 sherds, 2 011kg) were coarseware All the sherds were examined

Results

Samian

The fragments recovered were mostly small and only a limited number of forms could be identified These were as follows

Table1

Context	Fabric	Form	Date Range
601	Samian CG & EG	F30	
605	Samian CG	F33	
608	Samian ?EG	F31R	AD 160+
622	Samian CG	F18/31R?	2C
627	Samian CG	F18/31R?	
646	Samian ?CG	F37	Had/E Ant?

Coarseware

The following nationally distributed fabric types were represented in the assemblage (See Tomber and Dore, 1998)

Table 2

Fabric	Forms
BB1	Jars & Bowls
BB2	Jars Bowls
BB2 related	Bowl
Calcite Gritted	Jars
CG CC (?)	Beaker
COL WH (?)	Mortarium
CRA RE	Bowls
DAL SH	Jar

Lincoln or S Carlton	Mortarium
LNV CC	Beakers and Bowl
Moselle CC (?)	Beaker
S Gaulish (?)	Amphora
Spanish	Amphora
SVW OX 2	Jar

Dates

The datable material yields the following termini post quos for the following contexts

Table 3

Context	Stratigraphic information	Fabric	Form	Date Range
601		LNV CC	BO bead and flange	2/2 3C
603		?COL WH	M	M2C
605	Robber trench fill	BB2 related	BO (Dish)	Prob 3C
608	? Ditch fill	Samian ?EG	F31R	AD 160+
622		CRA RE	BO	L3C+
623		? Lincoln or S Carlton	M	2C
625	Ditch fill	BB1	JA	3C+?
627	Anglian ware in this context	BB1	JA	3C?
635		Calcite Gritted	JA	L3C+
646	Ditch fill	Samian ?CG	F37	Had/E Ant?

Recommendations for further work

It is recommended that a more detailed record should be made of the drawable vessels from significant contexts (i e all contexts except topsoil) For each vessel, this record should consist of a measured drawing and a fabric description, both of which should follow the accepted conventions for such drawings and fabric descriptions These records should be lodged with the permanent record in the relevant archive repository

Drawable vessels have been identified in Table 4 by an asterisk in the notes field

Reference

Tomber, R and Dore, J (1998) *The National Roman Fabric Reference Collection A Handbook* London, Museum of London

Table 4

Context	Context type	Fabric	Number	Weight	Part	Form	Date Range	Notes
601	Layer	? Moselle CC	1	3 7	wsh	BK		
601	Layer	?S Gaulish	1	12 9	wsh	AM	2C-3C	
601	Layer	BB1	2	16		JA	3C+	
601	Layer	Gritty grey	2	29 8	rsh	BO		*
601	Layer	LNV CC	1	7 8	rsh	BO bead and flange	2/2 3C	*
601	Layer	Misc	66	268 7	wsh	misc		
601	Layer	S Spanish	5	197 8	wsh	AM		
601	Layer	Samian CG & EG	10	32 5	rsh & wsh	misc mcl F 30		
603	Layer	?CG CC	1	0 05	wsh	BK		
603	Layer	?CO1 WH	1	9 3	wsh	M	M2C	
603	Layer	Grey ware	2	31 9	rsh & wsh	BO	2C	*
603	Layer	LNV CC	2	3	wsh	BK		
603	Layer	Misc	11	28 4	wsh	misc		
603	Layer	orange ware, grey core	1	22	flange frag	M		
603	Layer	Samian CG	2	2 3	wsh			
605	Robber trench fill	BB1	1	38	rsn	JA	2C	*
605	Robber trench fill	BB2 related	1	27 3	rsh	BO (Dish)	Prob 3C	*
605	Robber trench fill	LNV CC	1	3 9	rsh	BK Plain rim bag shaped	L2C+	*
605	Robber trench fill	Misc	7	27 6	wsh	misc		
605	Robber trench fill	Samian CG	1	1 5	rsh	F33		
608	? Ditch fill	BB1	5	30 5	wsh			
608	? Ditch fill	Grey ware	22	72	wsh			
608	? Ditch fill	Samian ?EG	1	32 2	rsh	F31R	AD 160+	*
608	? Ditch fill	Samian CG	4	9 5	wsh			
608	? Ditch fill	Samian EG	1	1 7	wsh			
622	Layer	BB1	2	29 8	wsh			
622	Layer	CRA RE	1	10 2	rsh	BO	L3C+	*
622	Layer	LNV CC	5	16 2	wsh	BK		
622	Layer	Misc	10	62 8	wsh	misc		
622	Layer	orange ware, grey core	1	57 9	wsh			
622	Layer	Samian CG	10	12	rsh & wsh	incl F18/31R?	2C	
623	Ditch fill	? Lincoln or S Carlton	1	162 9	wsh	M	2C	

Context	Context type	Fabric	Number	Weight	Part	Form	Date Range	Notes
623	Ditch fill	misc	c 20	257 1	wsh	misc		including small abraded rsh 1C bowl
623	Ditch fill	Samian CG & EG	21	23 6	rsh & wsh	misc		Small frags
625	Ditch fill	BB1	2	30 1	rsh & wsh	JA	3C+?	
625	Ditch fill	Grey ware	4	12 8	wsh	misc		
625	Ditch fill	LNV CC	3	5 3	wsh	BK at least 1 indented	L2C+	
625	Ditch fill	orange ware	7	22	wsh	misc		
625	Ditch fill	Samian	3	2 9	wsh	misc very small frags		
627	Anglian ware in this context	BB1	1	15 9	rsh	JA	3C?	*
627	Anglian ware in this context	BB2	6	128 5	rsh & wsh	BO (Dish)	M2C	*
627	Anglian ware in this context	Calcite Gritted	2	24 9	wsh	JA		
627	Ditch fill	CC (LNV?)	2	0 9	wsh	BK	2/2 2C+	
627	Anglian ware in this context	Grey ware	1	5 4	rsh	BK		*
627	Anglian ware in this context	Grey ware	1	6 5	rsh	JA		
627	Anglian ware in this context	Misc	Lots	222 9	wsh	Misc		
627	Anglian ware in this context	Samian CG	10	63 5	wsh	incl F18/31R?		
627	Anglian ware in this context	SVW OX 2	1	20 3	rsh	JA (NMJ)	2C	*
631	Topsoil	orange ware	1	2 9	rsh	FL	?1C	
633	Topsoil	CRA RE	1	22 3	rsh	BO	L3C+	*
635	Pit fill	Calcite Gritted	4	136 6	rsh & wsh	JA	L3C+	*
635	Pit fill	DAL SH	2	12 8	rsh	JA	M3C+	*
646	Ditch fill	Samian ?CG	4	8 6	rsh & wsh	F37 with frag of medallion + figure	Had/E Ant?	*
646	Ditch fill	orange ware, very abraded	7	10	wsh	JA or FL?		
646	Ditch fill	Spanish	3	194 8	wsh	AM		
680	Topsoil	orange ware, very abraded	1	1	wsh			

 on behalf of A1 D2B JV

Appendix C

CONSERVATION ASSESSMENT

Jennifer Jones

Conservation Services, Department of Archaeology, Durham University

Quantification and condition

Twenty nine objects were received for examination, conservation assessment and X-radiography, comprising 5 copper alloy, 1 lead, 1 possible jet, 2 worked bone and 20 iron objects The objects were briefly visually examined to assess their condition and stability, to determine the material from which they were made, and to look for surface and technological detail

Most of the ironwork was found to be highly corroded and stable, with just a few pieces (eg 623AG) showing signs of cracking of the corrosion layer All the copper objects were stable when examined, and all but one were moderately corroded The ?jet, lead and worked bone objects were all stable

Moderately corroded metallic material is defined as having the surface detail, but not usually the general form of the object, obscured by corrosion products, and has some metal remaining below the corrosion Highly corroded metallic material is defined as either having both the form and the surface detail of the object obscured by corrosion, and/or having little or no metal remaining m its core

Details of the artefacts examined, including an identification of the material and of the object where possible, the condition of the object when examined, its XR plate number, and any technological or other observations, were added to the site database

X-Radiography

The objects were sorted into groups of a similar density, which were X-rayed together Four XR plates were used

When viewing the XR plates, they should be orientated with the bright spot (a lead marker) in the top left hand corner, to correspond to the annotated XR sleeve

Results

Most of the ironwork was shown to be nails or fragments of nails, including several hobnails, some complete The copper alloy brooch (627AA) also used iron pins in its construction, and the iron has possibly preserved closely associated organic material The ring (635AB) is in very good condition, though appears worn The density and homogeneity of the material used would suggest that it is probably jet The bone objects (627AB and AC) are both fragmentary, but in good condition

Recommendations

No further work is recommended for the ironwork The mineralised material on the brooch should be investigated for a possible identification, and the ?solder on the back of the wrist clasp (623AA) should be confirmed by EDXRF analysis Detail on one of the coins (605AA) is not clear following X-radiography, and further investigative conservation is required EDXRF analysis could also be used to confirm the ring as jet

Storage

The material was received well packed for medium to long term storage

The metalwork should continue to be stored in an airtight container at a stable temperature and below 20% **RH**, to inhibit further corrosion The RH should be controlled by active silica gel, which is regularly monitored and regenerated as necessary The jet and bone may be stored in conditions of ambient temperature and relative humidity, avoiding extremes of both

Appendix D

SMALL FINDS ASSESSMENT

M C Bishop

Introduction

This assessment of the recorded finds ('small finds') from the 2006 Phase 2 evaluation (A1DB) has been undertaken to accord with MAP2 Appendix 4 'Assessment Report Specification' (English Heritage 1991)

The total number of finds from the sites considered in this assessment report is 26 This comprised two copper-alloy and one composite copper-alloy and ferrous items, nineteen ferrous objects, one jet and one lead-alloy artefact, and two worked bone fragments All had been assessed for conservation and the metal items examined using X-radiography by the conservation laboratory at the University of Durham (Jones 2006)

Objects were studied with reference to the X-rays to facilitate identification and to permit recommendations for further work to be formulated All of the finds were appropriately packaged for short- to medium-term storage in accordance with museum and conservation guidelines

Catalogue

Copper alloy

1 Cruciform brooch with rectangular head plate and spherical head knob, and a trefoil foot The two knobs from the arms are present, though detached Catchplate and hinge loop are intact, but the pin and spring are missing Anglian, 6th century L 114mm, W 36mm, Depth 24mm 627 AA Recommended for illustration

2 Sub-rectangular-sectioned oval loop, about 75% surviving L 20mm, W 18mm, Th 3mm Roman? 622 AA

3 Rectangular plate with transverse incised lines in the centre and at one end (at which point it is broken) There appears to be one blocked rivet hole, slightly off-centre It is probably part of a wrist-clasp Probably Anglian, 6th century L 26mm, W 6mm, Th 1mm 623 AA Recommended for illustration

Ferrous

4 Length of circular-section rod or wire, bent over on itself at one end to form a crude loop L 48mm, Th 2mm 623 AB

Nails

No.	Manning type	Length	Finds Code
5	1a	86mm	605 AB
6	1a	41mm	627 AK
7	1a?	51mm	608 AB
8	1a	32mm	623 AF
9	1a	28mm	627 AE
10	1a	18mm	601 AA
11	?	22mm	623 AD
12	?	40mm	601 AB
13	?	39mm	625 AB
14	?	45mm	603 AB
15	hobnail	16mm	608 AC
16	hobnail	14mm	627 AJ
17	hobnail	10mm	627 AI

Fragments

18 Nail? L 28mm 623 AE

19 Rod L 28mm 627 AG

20 Tapering spatulate object Nail? L 26mm 685 AA

21 Uncertain L c 25mm 627 AA

Lead alloy

22 Tapering coiled strip 603 AA

Jet

23 Finger-ring with a semi-oval band and an oval panel Cf Allason-Jones 1996, 36–7 Roman W 26mm, H 24mm, Th 8mm 635 AA Recommended for illustration

Bone

24 Fragment of a cylindrical bone implement handle with ring-and-dot decoration, together with an interlace design suggestive of an Anglian or Norse origin L 55mm, W 12mm 627 AC Recommended for illustration

25 Fragment of a cylindrical bone implement handle with a cluster of ring-and-dot motifs and two incised lines around what appears to be the terminal L 25mm, W 12mm Roman, Anglian or Norse 627 AB Recommended for illustration

Statement of Potential

As with most evaluations, the artefacts recovered provide a very limited perspective on the material culture of the areas examined Most of the nails are probably indicative of structural activity and construction in general, whilst the hobnails clearly belonged to footwear The jet ring is clear evidence of Roman domestic occupation The cruciform brooch and wrist-clasp suggest an Anglian presence in the vicinity, as may be the case with at least one of the decorated bone handle fragments

Recommendations

The majority of the finds (mainly the ferrous fragments) from this phase of work do not merit further study The cruciform brooch, wrist-clasp plate, jet ring, and bone handle fragments do merit further research and at the very least the brooch and ring will require full publication in some form A total of five items are recommended for illustration and deserve inclusion within a consolidated finds catalogue with more detailed citation of parallels than is appropriate in an assessment report, if any further excavation is undertaken on the site

References

Allason-Jones, L (1996) *Roman Jet in the Yorkshire Museum* York

English Heritage (1991) Management of Archaeological Projects London

Jones, J (2006) *Conservation Assessment and X-Radiography of Material from A1DB06 for NAA*

Manning, W H (1985) *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum* London

 on behalf of A1 *D2B* JV

Appendix E

COIN ASSESSMENT

R J Brickstock

The following assessment is based on a visual examination (undertaken on 15/1/07) and on X-ray 5563 of the University of Durham's EH conservation laboratory

1) Context **625, Finds** code AA

Numismatic assessment:

A partially-legible bronze coin, both surfaces partially obscured by loosely-adhering material The x-ray presents images of both sides, superimposed one on the other – and is therefore only partially illegible The coin may be fully identifiable as it stands, but cleaning, particularly of the obverse, would allow a more precise attribution as well as a more useful assessment of circulation wear

Notes for Conservator: removal of material adhering to the surface is desirable, the most important area being the obverse legend

Provisional identification: a *follis* of Constantine 1, issued *c* AD 313-15, probably only slightly worn

2) Context **605, Finds** Code AA

Numismatic assessment:

A partially-legible bronze coin, both surfaces largely obscured by loosely-adhering material The x-ray presents again images of both sides – and is therefore of little practical assistance The coin is only partially-identifiable as it stands cleaning, particularly of the obverse, would allow identification of the ruler as well as a more useful assessment of circulation wear

Notes for Conservator: removal ot material adhering to the surface is desirable, the most important area being the obverse field and the reverse exergue (the latter for the mint-mark)

Provisional identification. an *antoninianus* of Gallienus or Claudius II, issued *c* AD 260-70, probably only slightly worn

Appendix F

HUMAN BONE ASSESSMENT

Malin Holst (York Osteoarchaeology)

A number of human bone fragments were recovered from Field 174, near Catterick by Northern Archaeological Associates as part of a scheme of archaeological evaluations carried out on behalf of A1 Dishforth to Barton Joint Venture The bone was recovered from a small ditch [608], thought to date to the Roman period

Context	Bone	Age	Sex	Other
602	Skull	Young Middle Adult (26 to 35)	Male	-

All the bone fragments derived from a single skull They represented the facial part of the skull, including the frontal (forehead), eye orbits, zygomatics (check bones) and most of the upper jaw The bone was in good condition, with no surface erosion and moderate fragmentation

The surviving parts of the skull suggested that they belonged to a male Ageing of the remains was based on the dental wear, which can be affected by diet and is therefore not a very reliable age indicator The teeth suggested that this individual was a young middle adult, aged between 26 and 35 years

Six of the usual 32 teeth survived The majority of maxillary teeth had been lost post-mortem and the mandible was not present The individual had one large cavity affecting the right second molar and had slight plaque concretions on the right first molar Dental wear was moderate

No other pathological manifestations were noted

Appendix G
BIOLOGICAL REMAINS ASSESSMENT

Deborah Jaques, John Carrott and Alexandra Schmidl

(Palaeoecology Research Services Report PRS 2007/01)

Introduction

Further evaluation excavation (trial trenching) was undertaken by Northern Archaeological Associates in several areas along the route of, and in ancillary areas adjacent to, the proposed upgrading of the A1 between Dishforth and Barton, North Yorkshire, during September and October 2006

Biological remains recovered from four sediment samples ('GBA'/'BS' *sensu* Dobney *et al* 1992) processed by NAA, one unprocessed sediment sample, an organic spot find and one and a half boxes of hand-collected bone, were submitted to Palaeoecology Research Services Limited (PRS), County Durham, for an evaluation of their bioarchaeological potential

Methods

Sediment samples

Four of the sediment samples were processed by NAA prior to delivery to PRS, and the unsorted 'flots' (hereafter termed washovers) and biological remains recovered from the residues submitted for evaluation The weights and volumes of the subsamples were recorded before being placed onto 500 micron nylon mesh in a sieving tank The light organic fraction was washed over into a 500 micron sieve to collect the washovers Both the washover and residue fractions of the processed subsamples were dried Only those components of the residues that were submitted to PRS are reported here (see the excavator's records for notes regarding any material, e g artefacts, removed prior to this)

One sample was submitted as unprocessed sediment and a subsample was processed by PRS Its lithology was recorded, using a standard *pro forma*, and one tub (or four collected) was processed, broadly following the techniques of Kenward *et al* (1980), for the recovery of plant and invertebrate macrofossils Before processing the subsample was disaggregated in water and its volume recorded in a waterlogged state Plant and invertebrate remains in the processed subsample fractions (residue and washover) were recorded briefly by 'scanning' usmg a low-power microscope, identifiable taxa and other biological and artefactual components being listed on paper The residue was largely mineral in nature and was dried and weighed prior to recording A subsample from this deposit was also examined for microfossils via the 'squash' technique of Dainton (1992) This method was originally developed to rapidly assess deposits for their content of eggs of intestinal parasitic nematodes but routinely reveals the presence of other microfossils, such as pollen and diatoms, which were the principal focus of this investigation The evaluation slide was scanned at 150x magnification with 600x used where necessary

All of the biological remains recovered were identified as closely as possible and their suitability for radiocarbon dating by standard radiometric technique or accelerator mass spectrometry (AMS) was also considered

Nomenclature for plant taxa follows Stace (1997)

Hand-collected bone

For the hand-collected vertebrate remains, data were entered directly into a series of tables using a purpose built input system and *Paradox* software Subjective records were made of the state of preservation, colour of the fragments and appearance of broken surfaces ('angularity') Additional information, such as fragment size, burning, butchery, dog gnawing and fresh breaks, was noted where applicable

Fragments were identified to species or species group using the PRS modern comparative reference collection Fragments that could not be identified to species were described as the 'unidentified' fraction Within this fraction, fragments were grouped into a number of broad categories large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and completely unidentifiable These categories are labelled 'Unidentified' in Table 1

Results

Sediment samples

The results are presented in context number order Archaeological information, provided by the excavator, is given in square brackets A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers

Context 608 [fill of ?Ditch 607 located in Trench ET3, Field 174, Catterick area, Roman]

Sample AA (40 kg/34 litres sieved to 500 microns by NAA with washover, no unprocessed sediment remains)

There was a relatively small washover (~100 ml) of modern rootlets, with a little fine sediment and approximately 15 fragments of unidentified charcoal (to 8 mm) There was also a single charred ?barley (***Hordeum***) grain, and a few other uncharred plant remains which were probably of modern origin (including two seeds of elder, *Sambucus nigra* L , and one of ?dock, cf *Rumex*)

Biological remains sorted from the residue comprised a small amount of modern rootlet and a little unidentified charcoal (~12 fragments to 17 mm, ~1 g), together with 37 fragments of bone (to 57 mm) Of the last, only a single caprovid tooth was identified Other fragments were mainly large mammal rib tragments and pieces of medium-sized mammal cranium Fresh breakage damage was prevalent

Context 627 [primary fill of Roman town Ditch 628 located in Trench ET2, Field 174, Catterick area, Anglian/Roman]

Sample AD (34 kg/28 litres sieved to 500 microns by NAA with washover, no unprocessed sediment remains)

The washover was, again, relatively small (~200 ml) and mostly of modern rootlets, with a little charred plant material including a small quantity of unidentified charcoal (to 12 mm), four charred grains (poorly preserved but one was probably of barley and two of the others oat, cf *Avena*) In addition, there were occasional fragments of ?cinder and a trace of coal

A small amount of modern rootlet and a little additional charcoal (to 11 mm, ~1 g) had been sorted from the residue The latter consisted of unidentified fragments and included two fragments of coal (to 5 mm, <1 g) Fifty-five fragments (to 75 mm) of bone were also recovered from the sample most of which could not be identified to species A cow first phalanx, a fragment of pig tooth and a ?dog vertebra were noted The unidentified fraction consisted of large and medium-sized mammal fragments

Context 635 [fill of Pit 636 located in Trench L7, Field 23, 'Other sites' area, Romano-British]

Sample AA (44 5 kg/34 htres sieved to 500 microns by NAA with washover, no unprocessed sediment remains)

The tiny washover (~20 ml) was mostly modern rootlets, with a few earthworm egg capsules (also modern) and a litde charcoal (to 20 mm) Some of the charcoal 'slivers' could be identified as oak (*Quercus*), and there were also small numbers of identifiable charred cereal grains and weed seeds There were several grains of oat (*Avena*), including one with a single floret base identifying it as the cultivated torm (*Avena sativa* L), and some poorly preserved grains of barley (*Hordeum distichon* L /*H. vulgare* L) In addition, there were some seeds from plant species typical of arable fields ('crop weeds') such as brome (*Bromus*), dock (*Rumex*), orache/goosefoot (*Atriplex/Chenopodium*) and ribwort plantain (Plantago lanceolata L) There were also many uncharred seeds of orache/goosefoot (*Atriplex/Chenopodium*), but here these can almost certainly be interpreted as modern contaminants

Six fragments ot burnt bone (to 12 mm) were recovered from the residue None could be identified

Context 688 [fill of Hollow 689 located in Trench B14, Area AS1, Bainesse area, undated]

Sample AA/T (8 kg/7 litres sieved to 300 microns by PRS with washover, and microfossil 'squash', approximately 30 litres of unprocessed sediment remain).

Moist, very dark grey-brown to very dark grey to black, crumbly (working soft), humic silt, with no obvious inclusions

The very small washover (~10 ml) consisted almost entirely of modern rootlets and unidentifiable plant fibres, with a litde fine charcoal Identifiable waterlogged plant material was restricted to a few

records of seeds of orache/goosefoot and elder indicating waste places and hedges in, or nearby, this feature

The tiny residue (dry weight 95 g) was mostly sand, with some stones (to 15 mm) and a little unidentified charcoal (to 15 mm)

The microfossil 'squash' sample was mostly organic detritus, with some inorganic content (approximately 25%) A small number of rather poorly preserved, most eroded and some broken, pollen grains/spores were present and included hazel (*Corylus*), ?fern (cf *Polypodium*) and grasses (Poaceae) No other identifiable microfossils were seen

Context 690 [fill of Hollow 691 located in Trench B14, Area AS1, Bainesse area, undated]

Sample AA/SPOT

Unwashed hand-collected material from this deposit was submitted as a spot find sample After an initial inspection, the sample was washed and dried by PRS and the small quantity of remains produced (323 g) proved to consist of very decayed charcoal The wood was from a deciduous tree but no further identification was possible

Context 695 [lens of burnt material within Pit 694 located in Trench B16, Area AS2, Bainesse area, undated]

Sample AA (1 kg/3 litres sieved to 500 microns by NAA with washover, no unprocessed sediment remains)

There was a tiny washover (~10 ml) of modern roodets, with a trace of very fine unidentified charcoal (to 1 mm)

Approximately 10 g of unidentified and somewhat 'silted' charcoal (to 26 mm) and an unidentified fragment of poorly preserved bone (to 53 mm) were recovered from the residue

Hand-collected bone

In total, 697 fragments of bone were recovered during this second phase of the excavations The remains were recovered from four of the trenches, two in the Catterick area (Trenches ET2 and ET3), one in the Bainesse area (Trench B14) and one in Field 58 near Pickhill (Trench L11, 'Other sites' area)

Trench ET2

Vertebrate material recovered from this trench came from three fills (Contexts 623, 625 and 627) of what was thought to be the north-eastern (inner) side of the Roman town [Catterick] ditch The

primary fill, Context 627, included Anglian artefactual material at the top of the deposit, with Roman pottery towards the base With this in mind, the excavator suggested that Roman material recovered from the other deposits (which were higher up in the sequence) was likely to be residual

The assemblage from this trench amounted to 479 fragments with a large proportion of these (355) being recovered from Context 627 Although of reasonable preservation, there was much fragmentation (of both ancient and recent origin) and most fragments had a rather battered appearance The assemblages from all three deposits were somewhat similar in nature, although bones from Context 623 were of variable colour and angularity (nature of the broken surfaces)

Cattle and caprovid remains were prevalent, with pig and horse bones present but far less numerous The latter were primarily teeth, although a small fragment of horse pelvis was recorded from Context 627 The extensive fragmentation resulted in many fragments that could not confidently be identified to species Remains of cervid were recovered from all three deposits, all probably representing red deer (*Cervus elaphus* L) A fragment of rather eroded antler was identified from Contexts 623, whilst a worked antler from Context 627 had been decorated with a pattern of rings and dots at either end Additionally, a red deer scapula and a second phalanx were noted from Contexts 623 and 625 (respectively)

Context 627 produced the only bird bone recovered, identified as chicken, whilst a possible human baby tibia shaft fragment was recovered from the same deposit

Trench ET3

Four deposits, two soil layers (Contexts 601 and 603), an associated ditch fill (Context 608) and the fill of a robber trench (Context 605), from this trench produced an assemblage of bone totalling 208 fragments Artefactual material recovered from these deposits was of Roman date The vertebrate remains, most of which came from Contexts 601 and 608, showed many similarities to the material from Trench ET2 Extensive fragmentation was common throughout and 20 to 50% of the bones from Contexts 601 and 608 were less than 50 mm in maximum dimension Again, this was partly the result of fresh breakage and partly caused by butchery techniques employed in the past The latter involved the systematic chopping of the bones into pieces possibly for the retrieval of the marrow A cattle metacarpal fragment with recent breaks from Context 601 was found to join to a fragment from Context 608

The main domestic species were represented, with remains of cattle and caprovid being the most numerous The few horse bones were mostly concentrated in Context 608 and included two proximal femur fragments (from two different animals) both of which had been heavily dog gnawed The single horse fragment from Context 601 was also part of a femur, although from the distal end of the bone Three fragments of eroded antler (probably from red deer) were recovered from Context 601 These joined and formed an incomplete band of unknown function As previously noted for Trench ET2, there was a sizeable unidentified fraction made up of both large and medium-sized mammal fragments, although the former were more numerous

Trench B14

The fills of two shallow hollows (Context 688 and 690) produced a small quantity of bone, amounting to 43 fragments No dateable finds were recovered from either deposit but the hollows were associated with what was described by the excavator as a 'post-glacial pond' and they were sealed by

a 'thin peaty horizon' The vertebrate remains were dark brown in colour and fairly robust, although the surfaces of the bones were slightly eroded Forty-three fragments of bone were recovered from these two deposits

The two bones from Context 688 were identified as large bovid thoracic vertebrae, one being complete and the other was halved longitudinally (this appeared to have occurred recently), and they clearly represented a very large individual The nature of the deposit from which these bones were recovered, and their large size, suggests that they might represent an aurochs (a type of cattle that became extinct in Britain sometime in the Bronze Age), although, given the uncertain date of the deposit, a modern origin for the bones cannot be entirely ruled out

The other hollow fill, Context 690, yielded several canid bones (dog-sized) representing part of the hind limb of the animal (tibia, metatarsals and two phalanges) and a collection antler fragments The latter were extensively damaged by fresh breakage and were probably all from the same animal The beam fragment had been chopped or cut to facilitate breaking the antler in two All of the bones showed similar preservation to those from Context 688, with slightly eroded surfaces and a darkish brown colour

Trench L11

A total of five poorly preserved and freshly broken fragments of bone were recovered from a single deposit within this trench (Context 646), all ot which joined to form part of a horse mandible

Discussion and statement of potential

Ancient biological remains recovered from the processed subsamples were restricted to small quantities of charcoal, occasional charred cereal grains and weeds, and a little animal bone These remains were, on the whole, rather thinly distributed in the deposits and of little interpretative value beyond the few observations presented below

The oak (*Quercus*) charcoal recovered from Context 636 was often in the form of 'slivers' and probably derived from structural timber Charred cereal grains representing crop plants (barley and oat) and seeds of associated weeds indicate food waste and human activity at the sites, but no concentrations of such remains were encountered However, the grains would provide suitable material for radiocarbon dating (via AMS), if required

Some identifiable pollen grains/spores were recorded from Context 688, but most of the remains were rather eroded and many unidentifiable A more detailed investigation of these remains could, perhaps, provide a 'snapshot' of the local vegetation at the time of the formation of this deposit, but this information would only be of value if the deposit could also be reasonably tightly dated

The organic spot find from Context 690 was of very decayed charcoal of wood from a deciduous tree species but could not be identified more closely.

The vertebrate assemblages from Trenches ET2 and ET3 were of somewhat battered appearance but ot reasonable preservation Material recovered from the deposits appeared to represent butchery waste and domestic refuse, with the presence ot cervid remains hinting at the exploitation of wild resources both for food and for raw materials for the manufacture of artefacts As a result of the high degree of

fragmentation, few of the bones were measurable or of use for providing age-at-death data Additionally, dating of the deposits was uncertain, or rather broad, limiting the potential of the material for further analysis

In contrast, and despite the small number of fragments recovered and the absence of dating for the deposits, the presence of possible aurochs remains renders the material from Trench B14 of some interest Confirmation of the identification of these remains would be useful but, unfortunately, vertebrae are not the ideal skeletal elements for biometrical or morphological analysis The use of additional comparative material may determine the identification more confidently but the highest priority would be to establish the integrity and date of the deposit from which these bones were recovered It seems possible that these represent remains from an early prehistoric site (?Neolithic), evidence for which is rather scarce in the region

Recommendations

The quantities of plant macrofossil remains recovered from these deposits were too few to warrant further study, although some would provide material for submission for radiocarbon dating (see below)

Material from Trenches ET2 and ET3 does not warrant further examination unless, perhaps, as part of a synthetic project reporting on this and other excavations in the area Data from these assemblages would only be of use if the dating of the deposits from which they were recovered could be refined beyond that currently available

Initially, it would certainly be of value to date (via radiocarbon assay, probably requiring AMS) the bones from Trench B14, and it is recommended that at least three dates be obtained using fragments of bone (both of dog and of ?aurochs) and charcoal (although there will be a fairly large unknown error inherent in using the unidentified charcoal from Context 690, it could nevertheless help to determine whether this deposit is of very early or relatively recent date) Confirmation of the identification of aurochs could be established using DNA analysis, but this would not be necessary if the radiocarbon dating returned early (i e Mesolithic/Neolithic) and consistent dates for the remains In this event, some further investigation of the pollen remains within Context 688 would also be worthwhile as this *may* provide additional information regarding the surrounding environment of the time

Although the putative Roman/Roman-British deposits reported here did not yield interpretatively valuable assemblages of biological remains, the possibility of significant concentrations being recovered by further excavations in the vicinity – particularly in areas close to Catterick, an important Roman town from which such evidence has been forthcoming in the past (see, for example, Stallibrass 2002) – should not be discounted

Future excavation in the vicinity of Trench B14 (Bainesse area) should consider the possibility of recovering evidence of early prehistoric settlement and environment. the dating of the extant remains from the current deposits should be considered a priority if further interventions are planned Should organic (though, in the present case, very well humified) deposits similar to Context 688 be encountered then it is recommended that these be sampled using column or kubiena tins (to obtain stratigrapically intact samples which may be subsampled for pollen analysis) as well as via bulk sediment collection

Retention and disposal

All of the recovered biological remains should be retained for the present

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here

Acknowledgements

The authors are grateful to Sarah Wilkinson and Greg Speed. of Northern Archaeological Associates, for providing the material and the archaeological information

References

Dainton, M (1992) 'A quick, semi-quantitative method for recording nematode gut parasite eggs from archaeological deposits' *Circaea, the Journal of the Association for Environmental Archaeology* 9, 58-63

Dobney, K, Hall, A R, Kenward, H K and Milles, A (1992) 'A working classification of sample types for environmental archaeology' *Circaea, the Journal of the Association for Environmental Archaeology* 9 (for 1991), 24-6

Kenward, H K, Hall, A R and Jones, A K G (1980) 'A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits' *Science and Archaeology* 22, 3-15

Stace, C (1997) *New flora of the British Isles 2nd edition* Cambridge Cambridge University Press

Stallibrass, S (2002) 'An overview of the animal bones what would we like to know, what do we know so far, and where do we go from here?', pp 392-415 in Wilson, P (ed) *Cataractonium Roman Catterick and its hinterland Excavations and research, 1958-1997 Part* 2 CBA Research Report 129 York Council tor British Archaeology

Table 1. Hand-collected vertebrate remains

Species		Trench ET2	Trench ET3	Trench B14	Trench L11	Total
Canis f domestic	dog	1	1	7	-	9
Equus f domestic	horse	5	5	-	1	11
Sus f domestic	pig	9	1	-	-	10
Cervidae	cervid	2	-	-	-	2
Cervus elaphus L	red deer	2	3	34	-	39
cf *Bos primigenius* Bojanus	?aurochs			2		

Bos f domestic	cow	31	20	-	-	53
Caprovid	sheep/goat	19	11	-	-	30
Gallus f domestic	chicken	2	-	-	-	2
?*Homo sapiens*	?human	1	-	-	-	1
Unidentified		407	167	-	-	574
Total		**479**	**208**	**43**	**1**	**731**

Appendix H

CONTEXTS AND FINDS CATALOGUE

Sarah Wilkinson

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
600	Catterick	Mod	Trackway surface	Sealed 601	ET3																
601	Catterick		Layer	Above 603 Below 600	ET3	90		7			2								85		
602	Catterick	RB	Human skull	Within 608	ET3										1						
603	Catterick		Layer	Sealed 605, 608 Below 601	ET3	50					1							1	19		
604	Catterick	RB	Robbing trench	Cut 606 Filled by 605	ET3																
605	Catterick	RB	Robbing trench fill	Fill of 604 Sealed by 603	ET3	24				1	1	1							12		
606	Catterick	Nat	Subsoil	Cut by 604, 607	ET3																
607	Catterick	RB	?Ditch cut	Cut 606 Filled by 608	ET3																
608	Catterick	RB	?Ditch fill	Fill of 607 Contained 602 Sealed by 603	ET3	75					1	1		2		1			33	4	
609 - 620	Catterick		Numbers not used																		

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
621	Catterick	Mod	Trackway surface	Above 622	ET2																
622	Catterick	Anglian +	Layer	Above 624 below 621	ET2					1									29		
623	Catterick	Anglian +	Layer	Above 625 Below 624	ET2																
623	Catterick	Anglian +	Layer	Above 625 Below 624	ET2	59		23		1	5					1			64		
624	Catterick	Anglian +	Rubble layer	Above 623 Below 622	ET2																
625	Catterick	Anglian +	Ditch fill	Fill of 628 Above 627 Below 623	ET2	93		10		1	1								19		
626	Catterick	Nat	Subsoil	Cut by 628	ET2																
627	Catterick	Anglian	Ditch fill	Primary fill of 628 Below 625	ET2	329		13		1	4								74	4	2
628	Other	RB	Ditch cut	Cut 626 Filled by 627 (primary), 625 +	ET2																
629	Other		Gully cut	Cut 632	L8																
630	Other		Gully fill	Fill of 629 Sealed by 631	L8																
631	Other	Mod	Topsoil	Sealed 630	L8														1		
632		Nat	Subsoil	Cut by 629	L8																
633	Other	Mod	Topsoil	Sealed 637, 639	L7														6		
634	Other	Nat	Subsoil	Cut by 636, 640	L7																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
635	Other	RB	Pit fill	Fill of 636 Cut by 638	L7				2								1		10	4	
636	Other	RB	Pit cut	Cut 634 Filled by 635	L7																
637	Other	RB+	Gully fill	Fill of 638 Sealed by 633	L7																
638	Other	RB+	Gully cut	Cut 635 Filled by 637	L7																
639	Other		Ditch fill	Fill of 640, above 642 Sealed by 633	L7																
640	Other		Ditch cut	Cut 634 Filled by 641 (primary), 642 and 639	L7																
641	Other		Ditch fill	Primary fill of 640 Below 642	L7																
642	Other		Ditch fill	Fill of 640, above 641 Below 639	L7																
643	Other		Gully segment	Cut 654 Same feature as seg 649 Filled by 644	L10																
644	Other		Gully segment fill	Fill of 643 Sealed by 653	L10																
645	Other	RB	Ditch cut	Cut 659 Filled by 646	L11																
646	Other	RB	Ditch fill	Fill of 645 Sealed by 647	L11	5													14		

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
647	Other	Mod	Topsoil	Sealed 646, 658	L11																
648	Other		Gully segment fill	Fill of 649 Sealed by 653	L10																
649	Other		Gully segment	Cut 654 Same feature as seg 643 Filled by 648	L10																
650	Other	?Prehist	Ditch fill	Fill of 652, above 651 Sealed by 654	L10																
651	Other	?Prehist	Ditch fill	Primary fill of 652 Below 650	L10								3								
652	Other	?Prehist	Ditch cut	Cut 655 Filled by 651 (primary) and 650	L10																
653	Other	Mod	Topsoil	Sealed 644, 648	L10														8		
654	Other		Layer	Sealed 650 Cut by 643/649	L10																
655	Other	Nat	Subsoil	Cut by 652	L10																
656	Other	?RB	Ditch cut	Cut 662 Filled by 657 (primary) and 658	L11																
657	Other	?RB	Ditch fill	Primary fill of 656 Below 658	L11																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
658	Other	?RB	Ditch fill	Fill of 656, above 657 Sealed by 647	L11																
659	Other	Nat	Subsoil	Below 662	L11																
660	Other	Mod	Topsoil	Above 661	L9																
661	Other	Nat	Subsoil	Below 660	L9																
662	Other	RB -	Layer	Buried soil Above 659 Cut by 656	L11																
663	Bainesse		Ditch recut	Cut 666, 667 Filled by 664	B17																
664	Bainesse		Ditch recut fill	Fill of 663 Sealed by 668	B17																
665	Bainesse		Ditch cut	Cut 669 Filled by 666	B17																
666	Bainesse		Ditch fill	Fill of 665 Cut by 663	B17																
667	Bainesse	Nat	Subsoil	Above 669 Cut by 663	B17																
668	Bainesse	Mod	Topsoil	Sealed 664	B17																
669	Bainesse	Nat	Subsoil	Below 667 Cut by 665	B17																
670	Bainesse		Cut	Pit or tree bowl Cut 684 Filled by 671	B16																
671	Bainesse		Fill	Fill of 670 Sealed by 680	B16																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
672	Bainesse		Cut	Pit or tree bowl Cut 684 Filled by 673	B16																
673	Bainesse		Fill	Fill of 672 Sealed by 680	B16																
674	Bainesse		Pit cut	Cut 684 Filled by 675	B16																
675	Bainesse		Pit fill	Fill of 674 Sealed by 680	B16																
676	Bainesse		Cut	Pit or tree bowl Cut 705 Filled by 677	B16																
677	Bainesse		Fill	Fill of 676 Sealed by 681	B16																
678	Bainesse		Cut	Pit or tree bowl Cut 705 Filled by 679	B16																
679	Bainesse		Fill	Fill of 678 Sealed by 680	B16																
680	Bainesse	Mod	Topsoil	Sealed 671, 673, 675, 679 Above 681	B16														1		
681	Bainesse		Layer	Sealed 677, above 682 Same as 693 Below 680	B16																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
682	Bainesse		Layer	?Buried soil Above 683/705 Same as 704 Below 681/693	B16																
683	Bainesse		Layer	Above 684 Same as 705 Below 682/704	B16																
684	Bainesse	Nat	Subsoil	Below 683/705 Cut by 670, 672, 674	B16																
685	Bainesse		Finds	Finds recovered during initial cleaning	B16						1		1						2		
686	Bainesse	Mod	Topsoil	Above 699	B14																
687	Bainesse		Layer	Sealed 688, 690 Below 699	B14																
688	Bainesse		Hollow fill	Fill of 689 Sealed by 687	B14	13														4	
689	Bainesse		Hollow cut	Cut 692 Filled by 688	B14																
690	Bainesse		Hollow fill	Fill of 691 Sealed by 687	B14	10	34		2												
691	Bainesse		Hollow cut	Cut 692 Filled by 690	B14																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
692	Bainesse		Layer	Above 702 Below 701 Cut by 689, 691	B14																
693	Bainesse		Layer	Sealed 698 Same as 681 Below 680	B16																
694	Bainesse		Pit cut	Cut 704 Filled by 697 (primary), 696, 695, 698	B16																
695	Bainesse		Pit fill	Fill of 694 Above 696 Below 698	B16															1	
696	Bainesse		Pit fill	Fill of 694 Above 697 Below 695	B16																
697	Bainesse		Pit fill	Primary fill of 694 Below 696	B16																
698	Bainesse		Pit fill	Fill of 694 Above 695 Sealed by 693	B16																
699	Bainesse		Layer	Above 687, 700 Below 686	B14																
700	Bainesse		Layer	Above 701 Below 699	B14																
701	Bainesse		Layer	Above 692 Below 700	B14																
702	Bainesse		Layer	Above 703 Below 692	B14																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
703	Barnesse	?Nat	Layer	Not excavated Below 702	B14																
704	Barnesse		Layer	Above 705 Same as 682 Cut by 694	B16																
705	Barnesse		Layer	?Above 684? Same as 683 Below 704 Cut by 676, 678	B16																
706	Other	Mod	Topsoil	Sealed 709, 711, 713	L12																
707	Other	Med/PM	R&F ridge make-up	Above 708 'Cut' by 710, 712, 714	L12																
708	Other	Nat	Subsoil	Below 707	L12																
709	Other	Med/PM	Furrow fill	Fill of 710 Sealed by 706	L12																
710	Other	Med/PM	Furrow cut	Cut 707 Filled by 709	L12																
711	Other	Med/PM	Furrow fill	Fill of 712 Sealed by 706	L12																
712	Other	Med/PM	Furrow cut	Cut 707 Filled by 711	L12																
713	Other	Med/PM	Furrow fill	Fill of 714 Sealed by 706	L12																
714	Other	Med/PM	Furrow cut	Cut 707 Filled by 713	L12																

Context	Site Name	Phase	Description	Relationships	Trench	Animal bone	Antler	CBM	Charcoal	Cu alloy	Fe	Fired clay	Flint	Glass	Human bone	Ind waste	Jet	Pb	Pottery	Sample	Worked bone
715	Other		Finds	Pottery recovered from field surface, vicinity of Trench L12	L12														5		
716	Bainesse	Mod	Topsoil	Above 717	B15														9		
717	Bainesse	Nat	Layer	Clay layer Above 718 Below 716	B15																
718	Bainesse	Nat	Layer	Above 719 Below 717	B15																
719	Bainesse	Nat	Layer	Below 718	B15																
720	Bainesse		Finds	Surface finds, near E corner Field AS1									3								

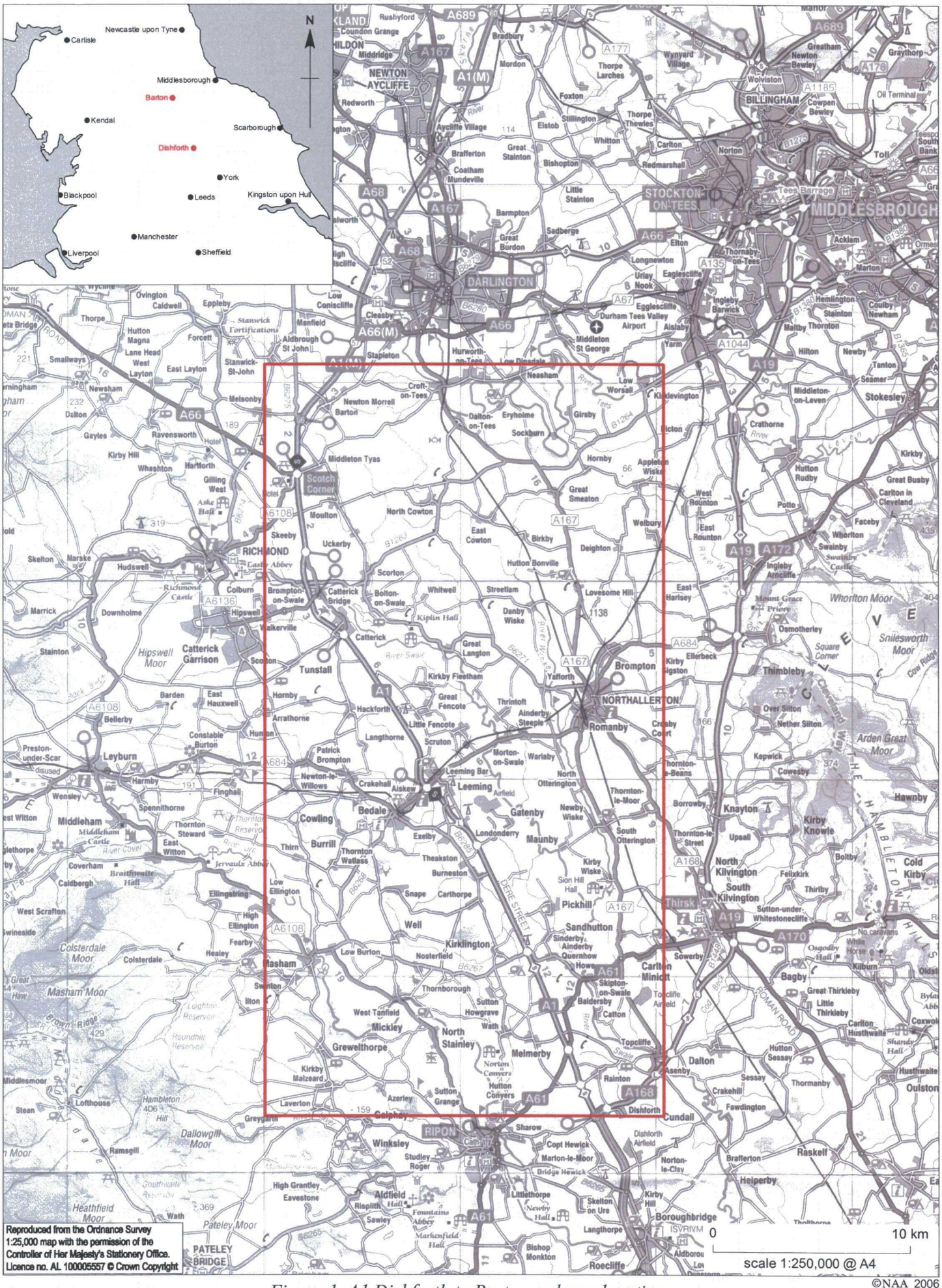


Figure 1 A1 Dishforth to Barton: scheme location

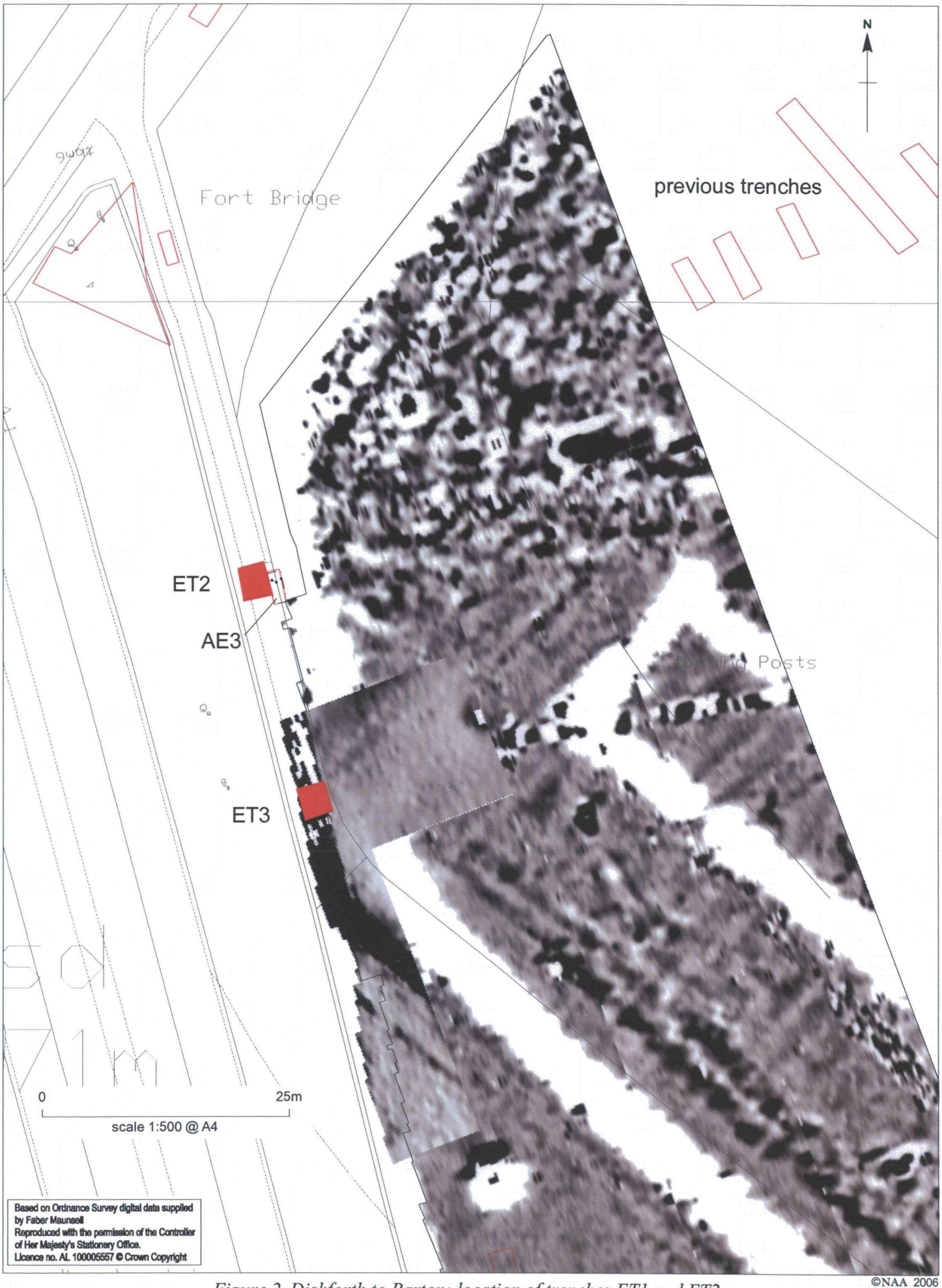


Figure 2 Dishforth to Barton: location of trenches ET1 and ET2

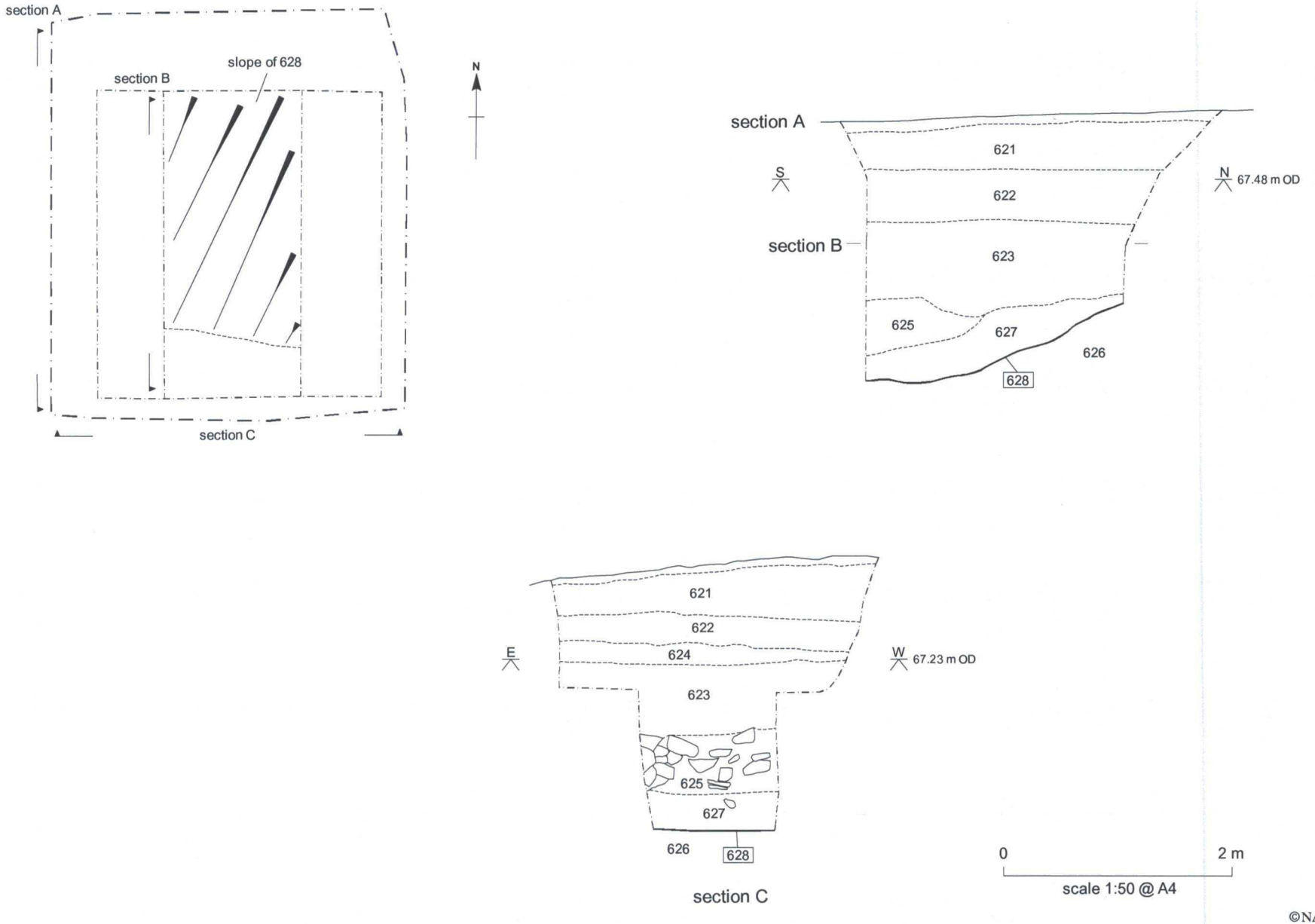


Figure 3 A1 Dishforth to Barton: Trench ET2, plan and sections

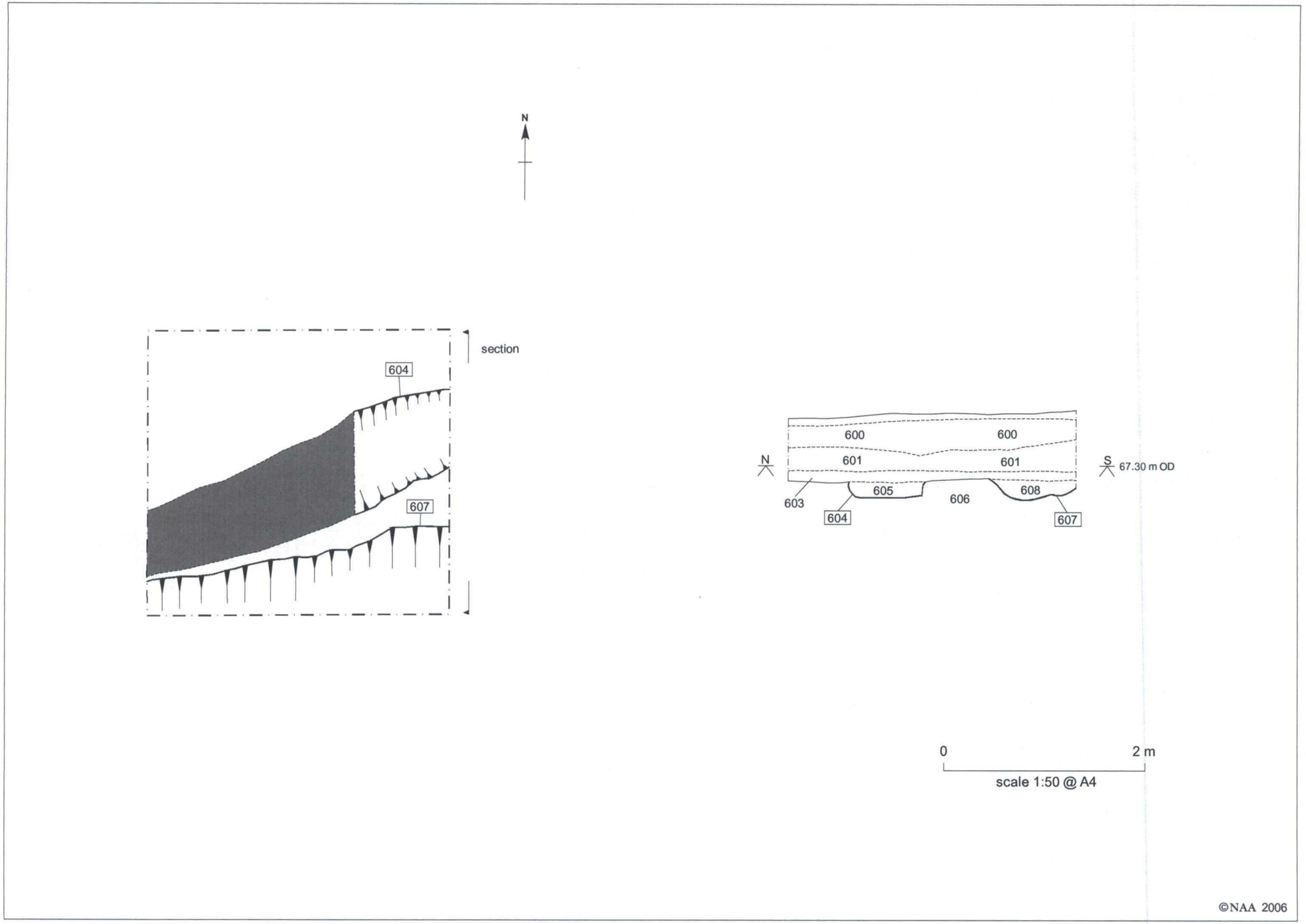


Figure 4 A1 Dishforth to Barton: Trench ET3, plan and section

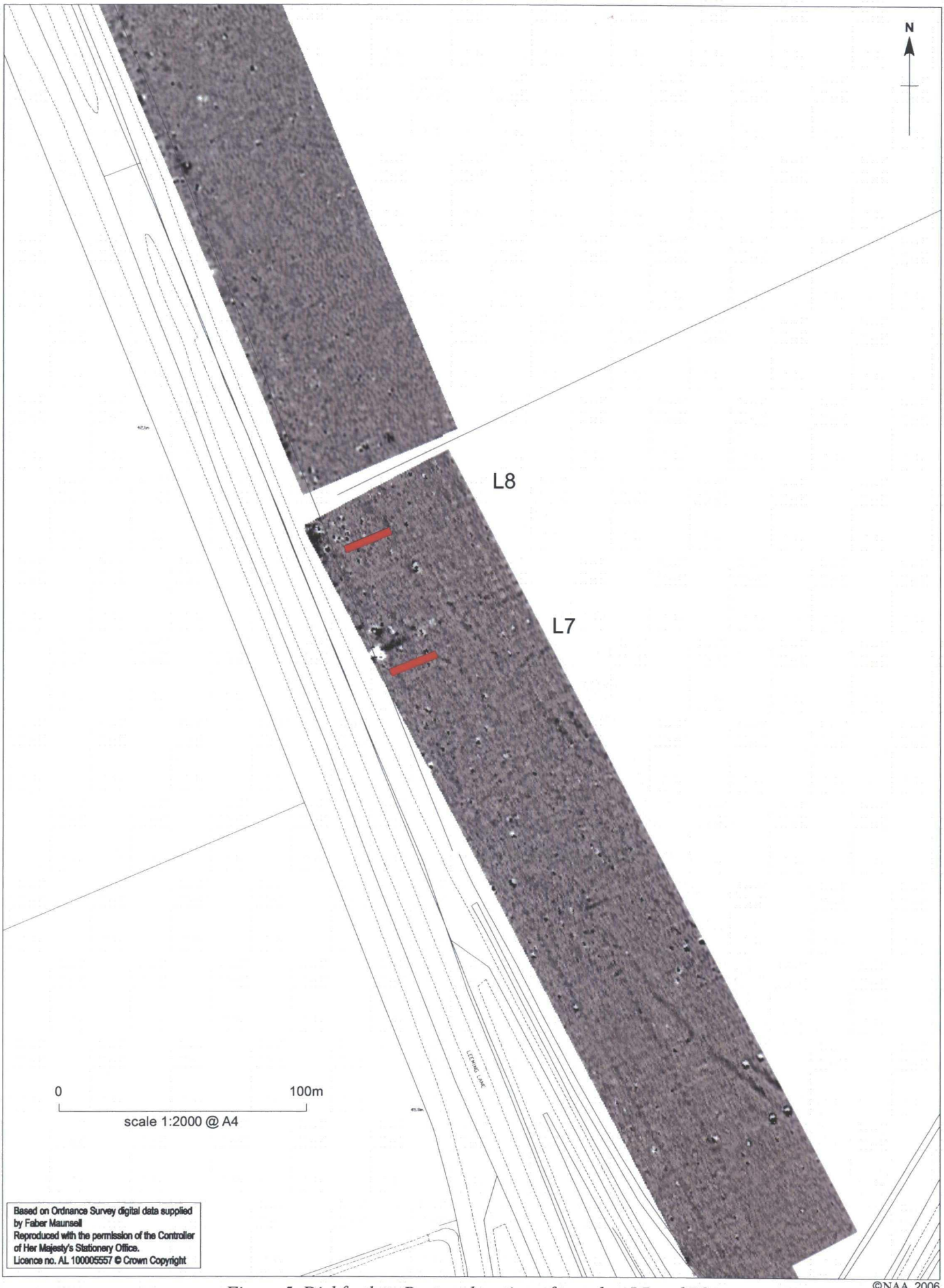


Figure 5 Dishforth to Barton: location of trenches L7 and L8

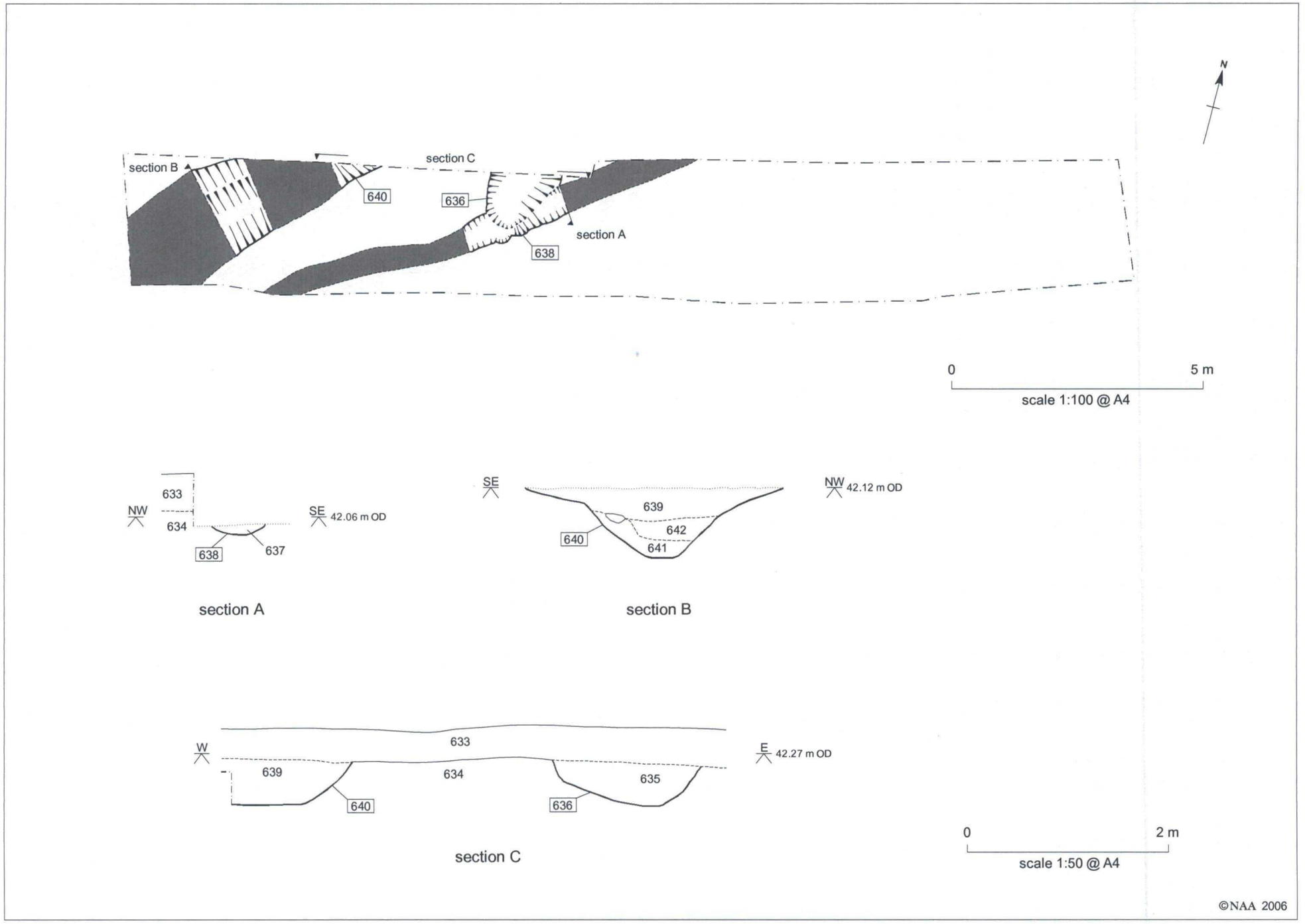


Figure 6 A1 Dishforth to Barton: Trench L7, plan and sections

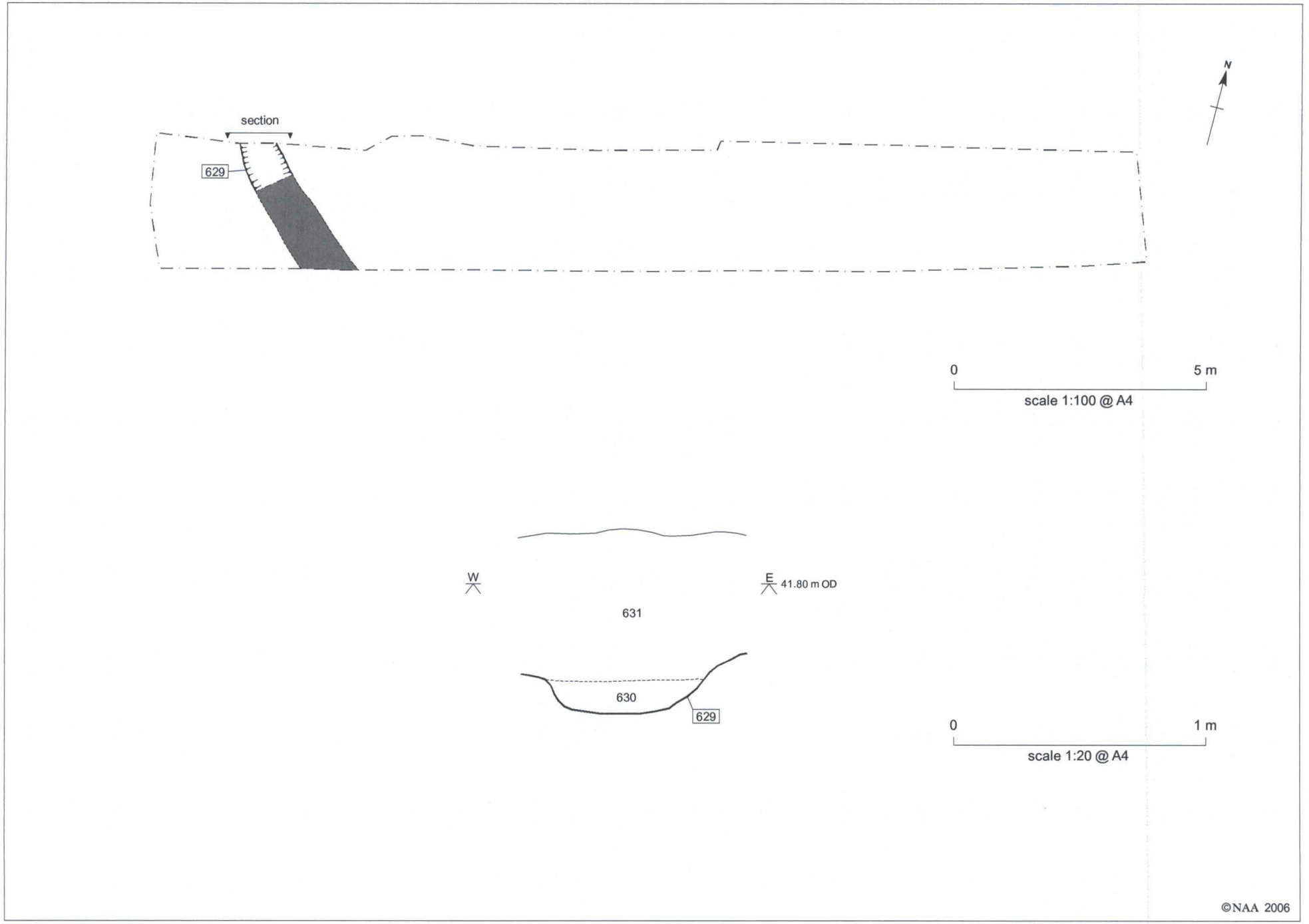


Figure 7 A1 Dishforth to Barton: Trench L8, plan and section

Figure 8 Dishforth to Barton: location of trenches L9, L10 and L11

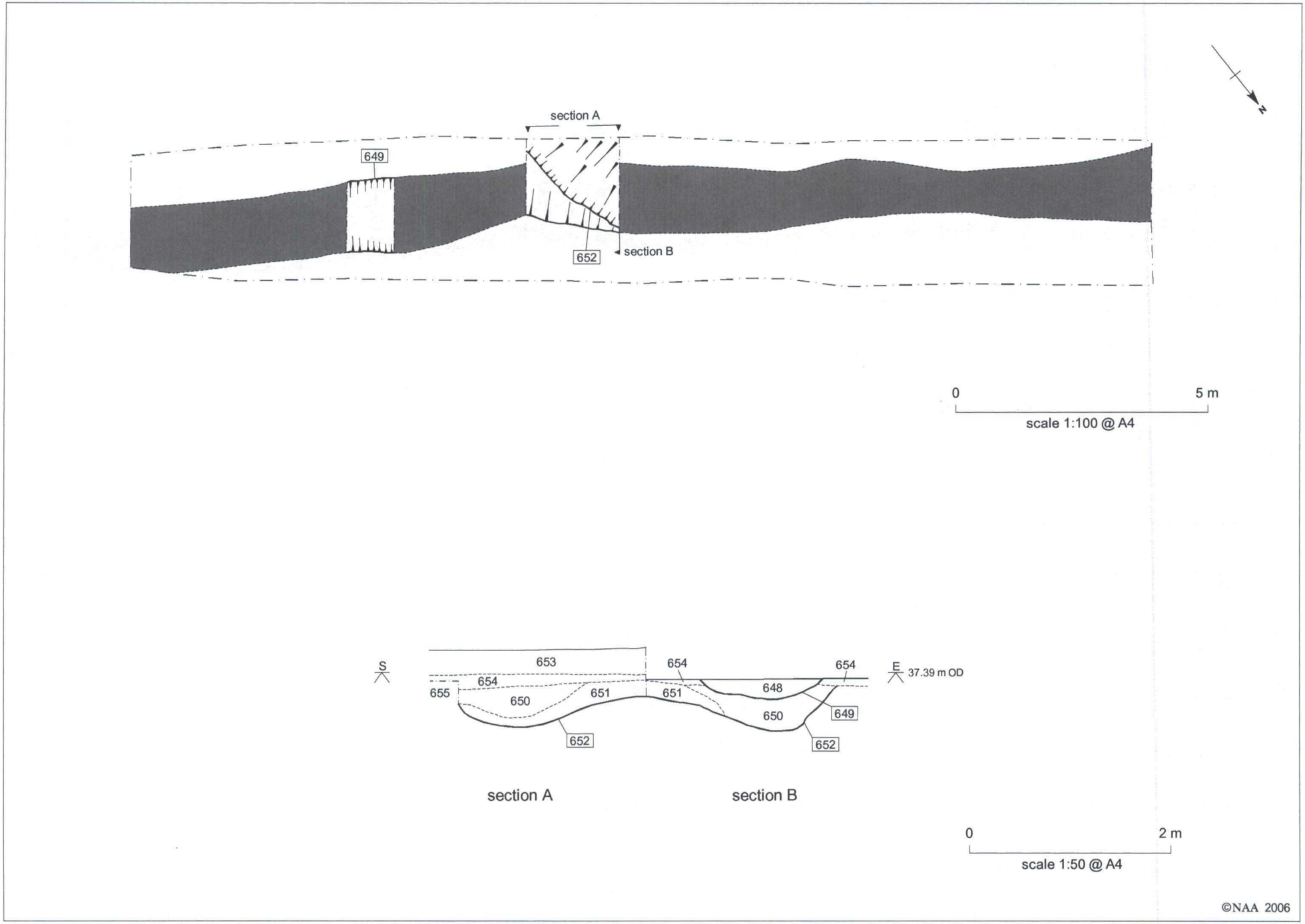


Figure 9 A1 Dishforth to Barton: Trench L10, plan and sections

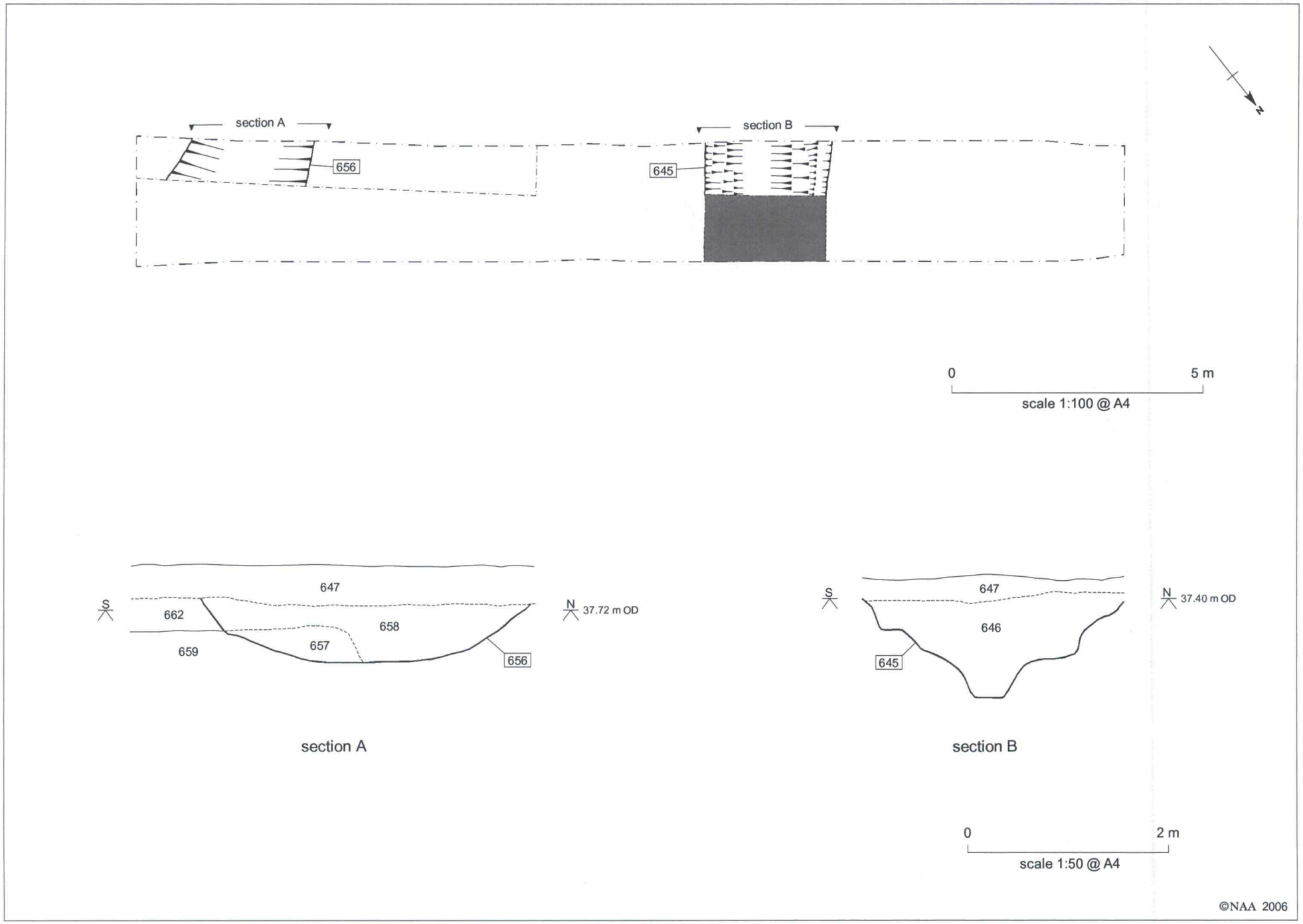


Figure 10 A1 Dishforth to Barton: Trench L11, plan and sections

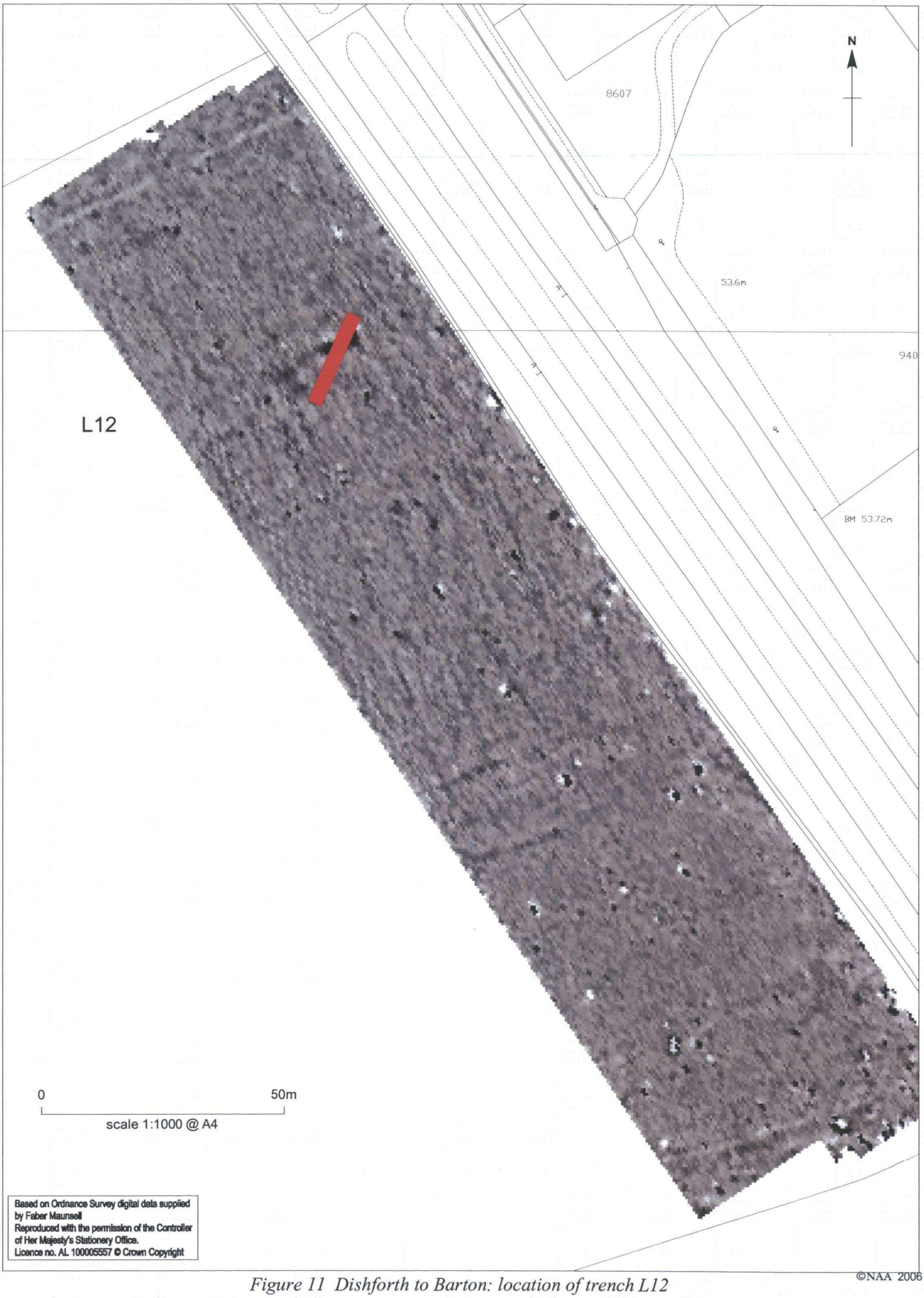


Figure 11 Dishforth to Barton: location of trench L12

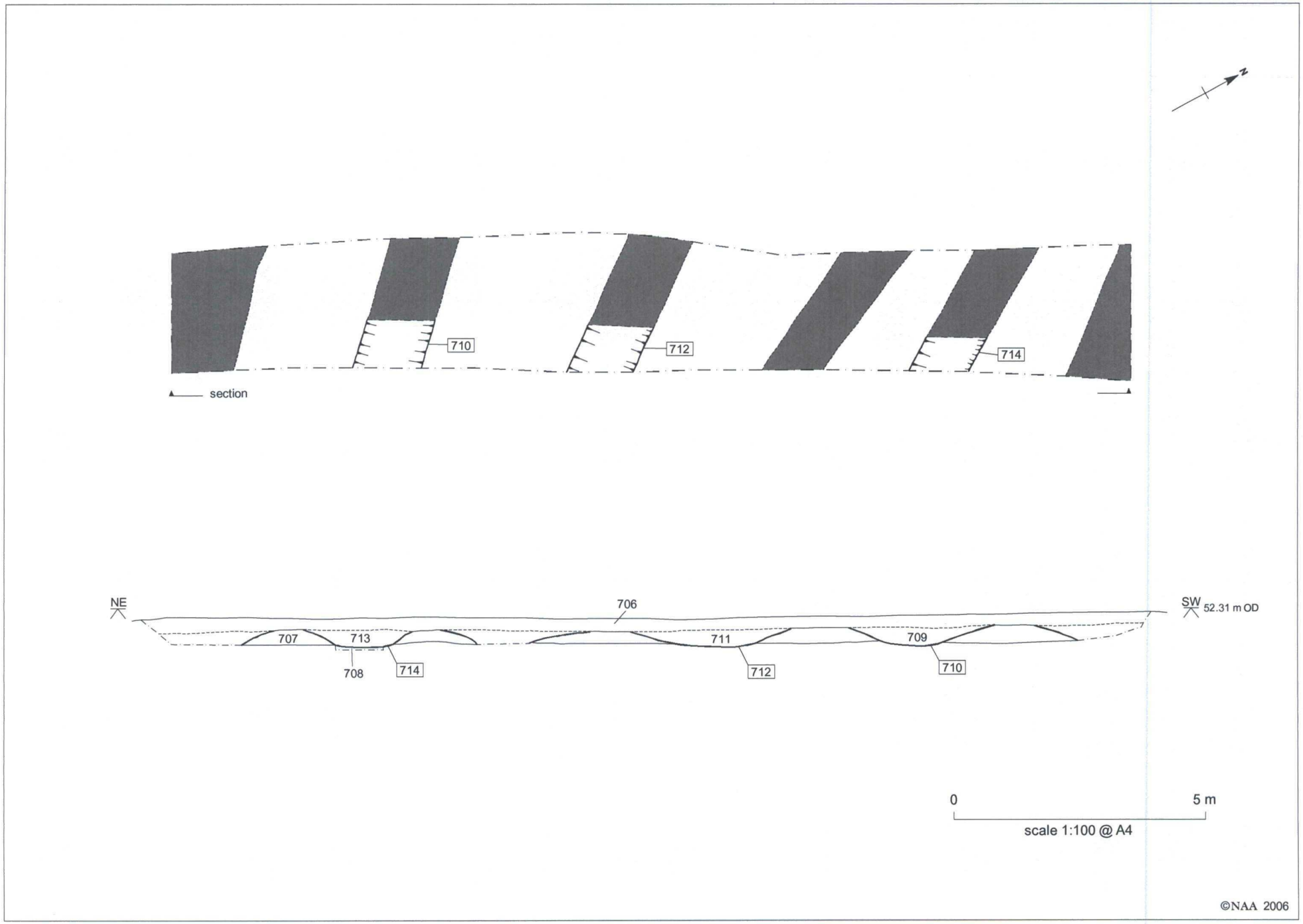


Figure 12 A1 Dishforth to Barton: Trench L12, plan and section

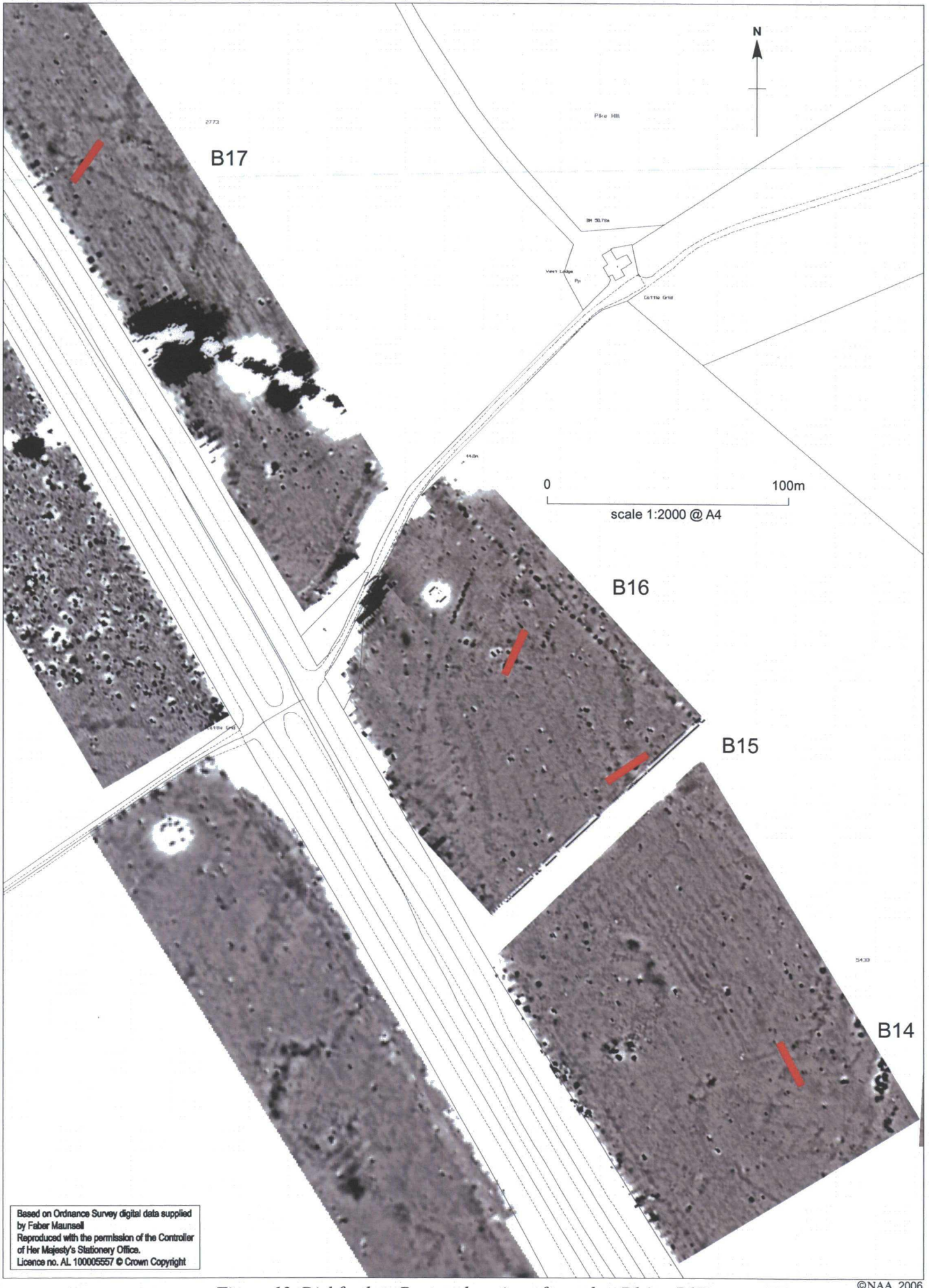


Figure 13 Dishforth to Barton: location of trenches B14 to B17

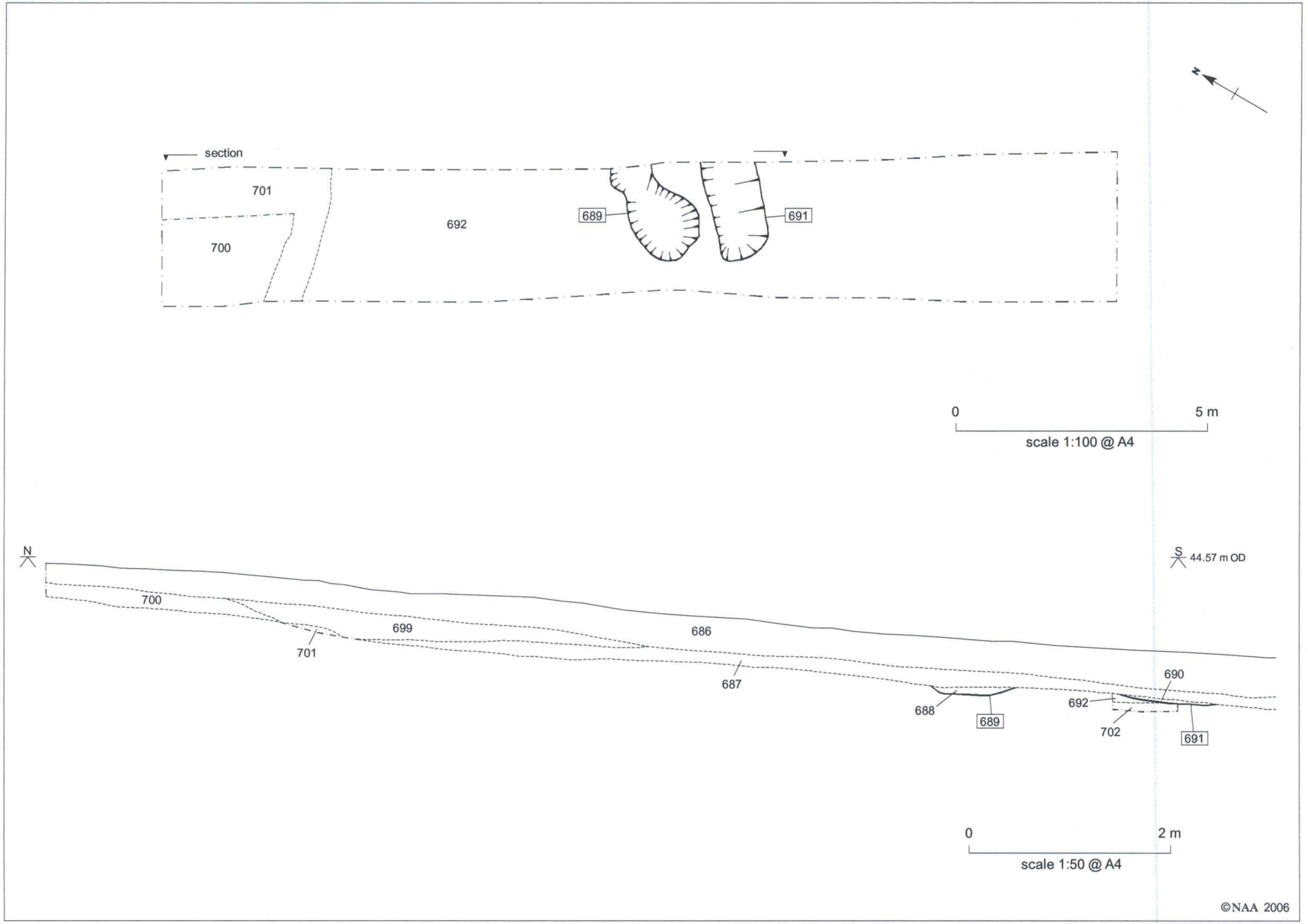


Figure 14 A1 Dishforth to Barton: Trench B14, plan and section

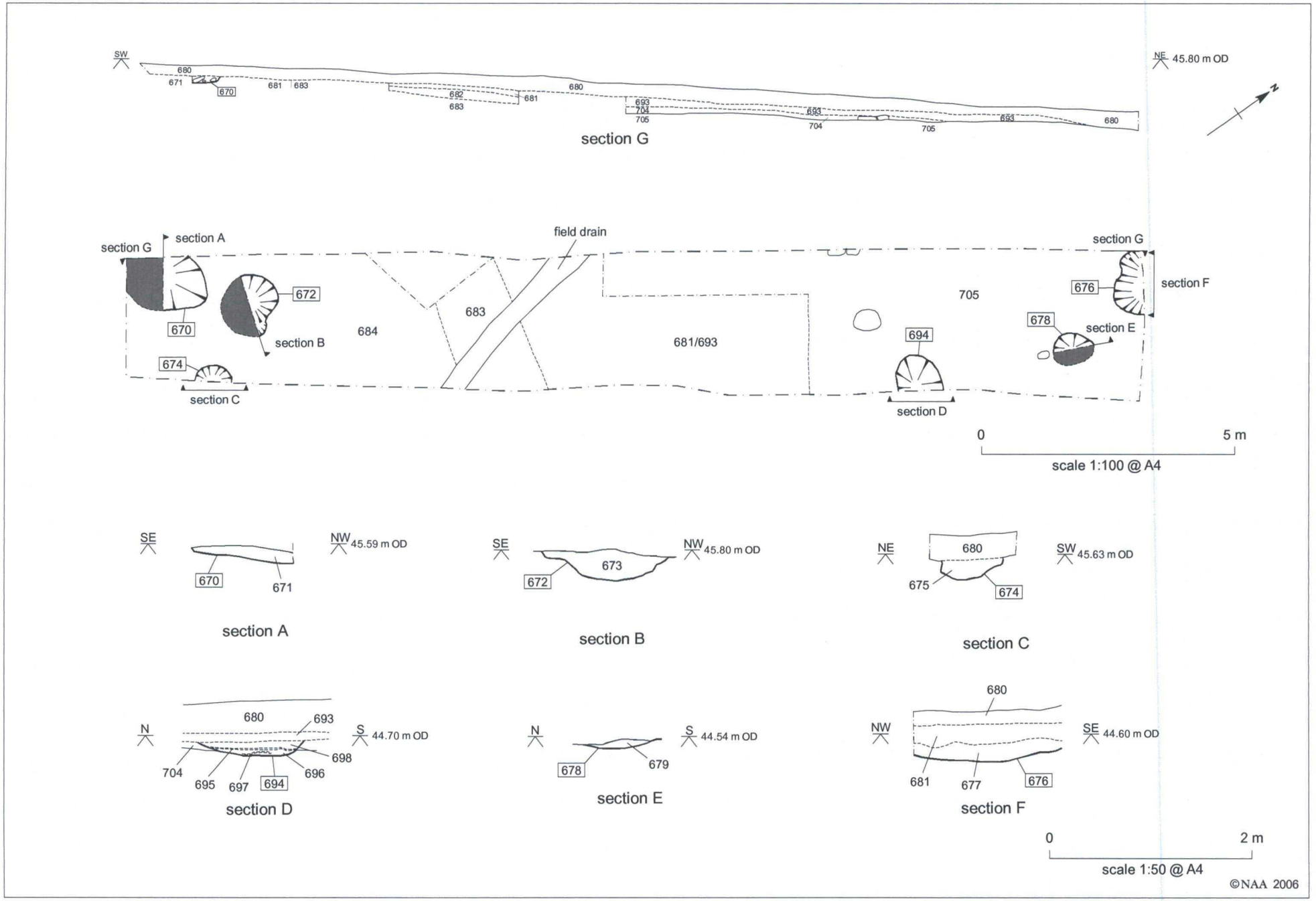


Figure 15 A1 Dishforth to Barton, Bainesse: Trench B16, plan and sections

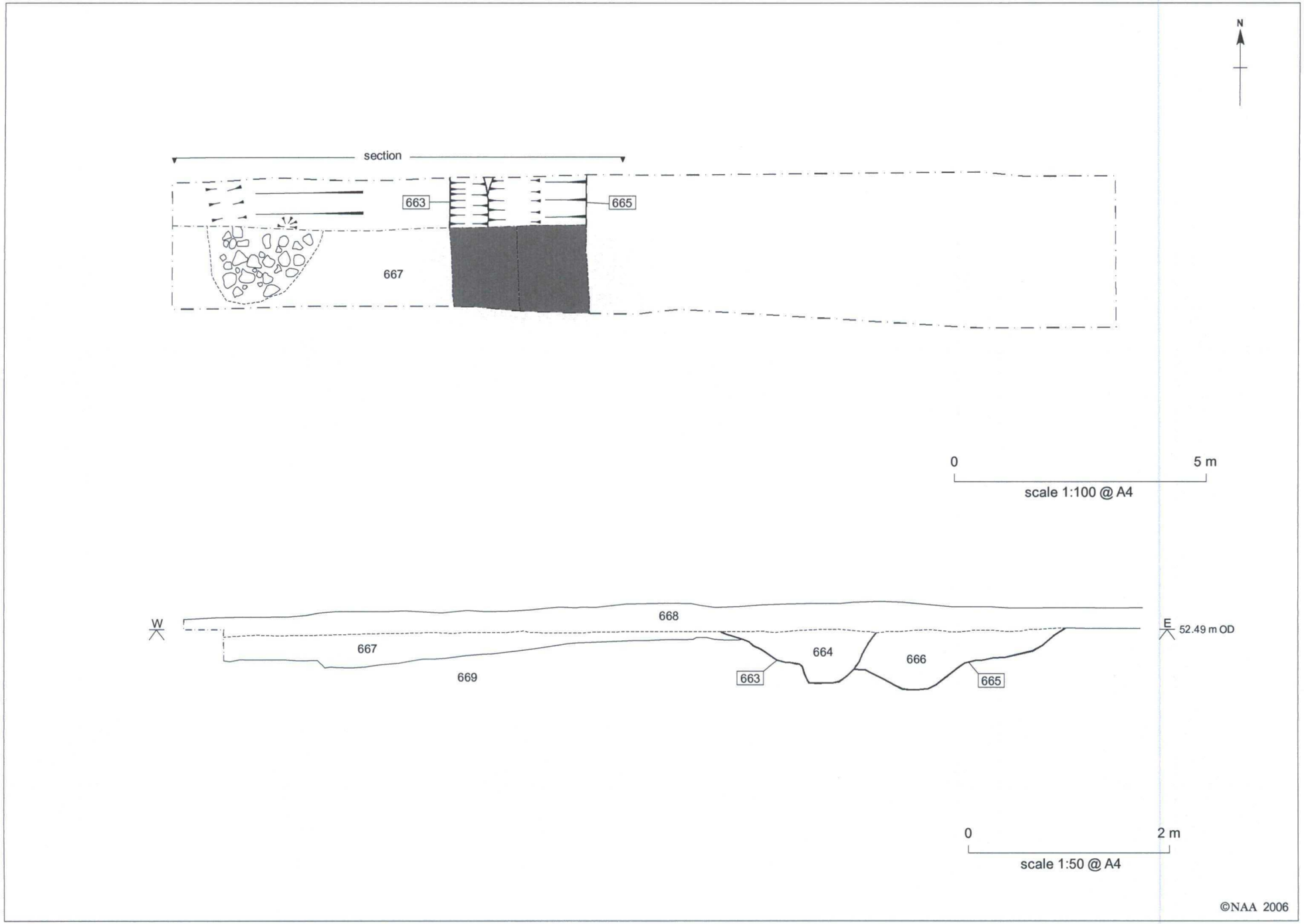


Figure 16 A1 Dishforth to Barton: Trench B17, plan and section

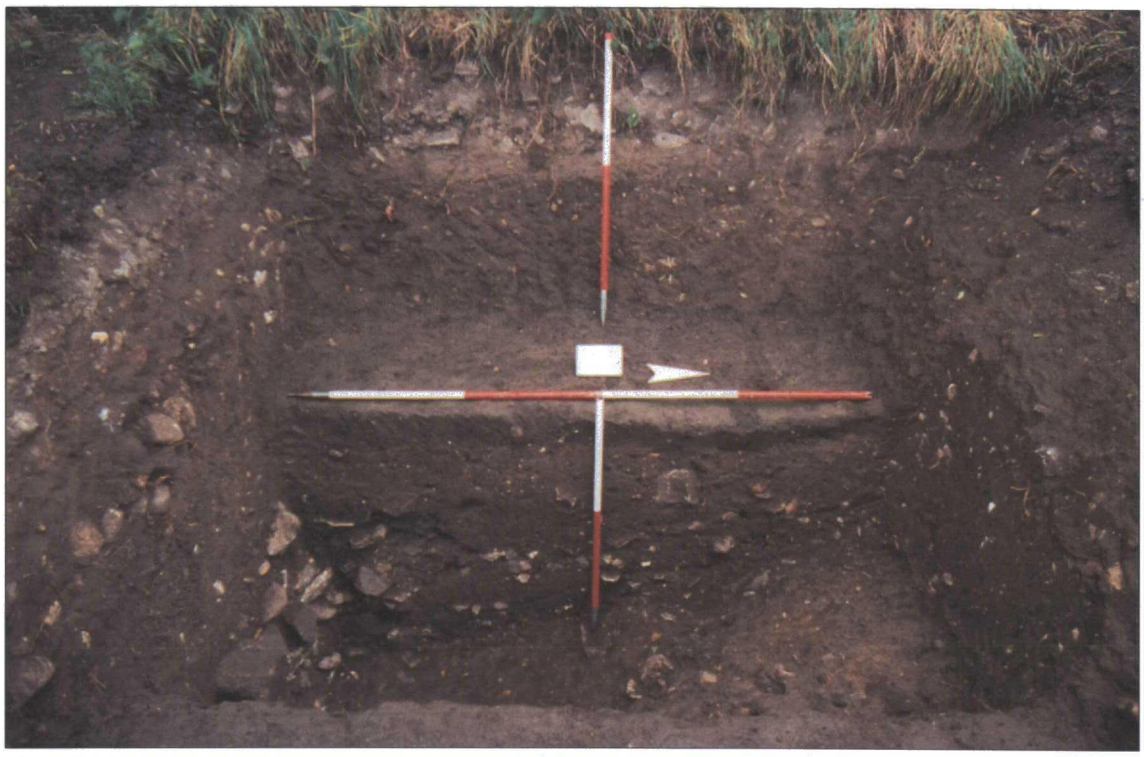


Plate 1 A1 Dishforth to Barton: Trench ET2, east facing section (scales 2m and 2x 1m)

Plate 2 A1 Dishforth to Barton: Trench ET3, facing east (scales 2m and 0.5m)

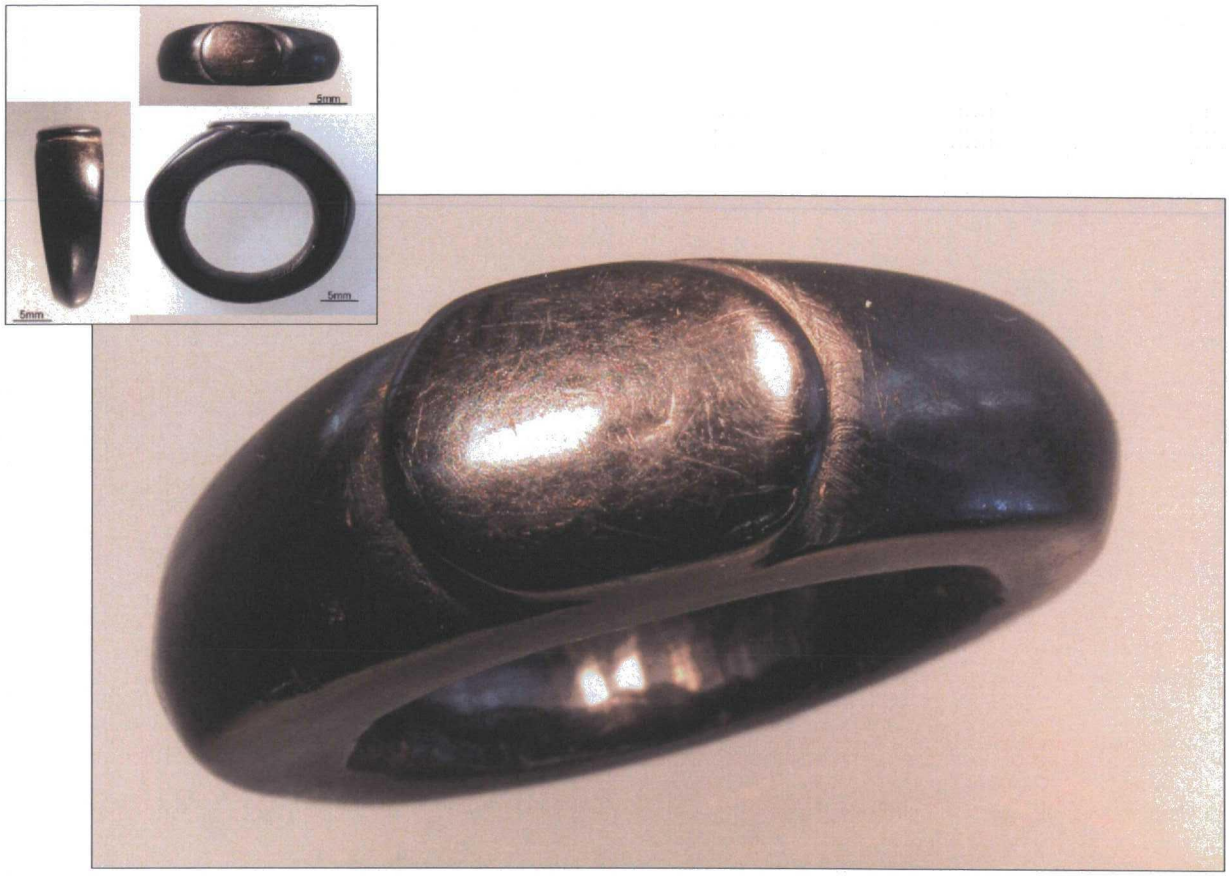


Plate 3 A1 Dishforth to Barton: jet finger ring from Trench L7

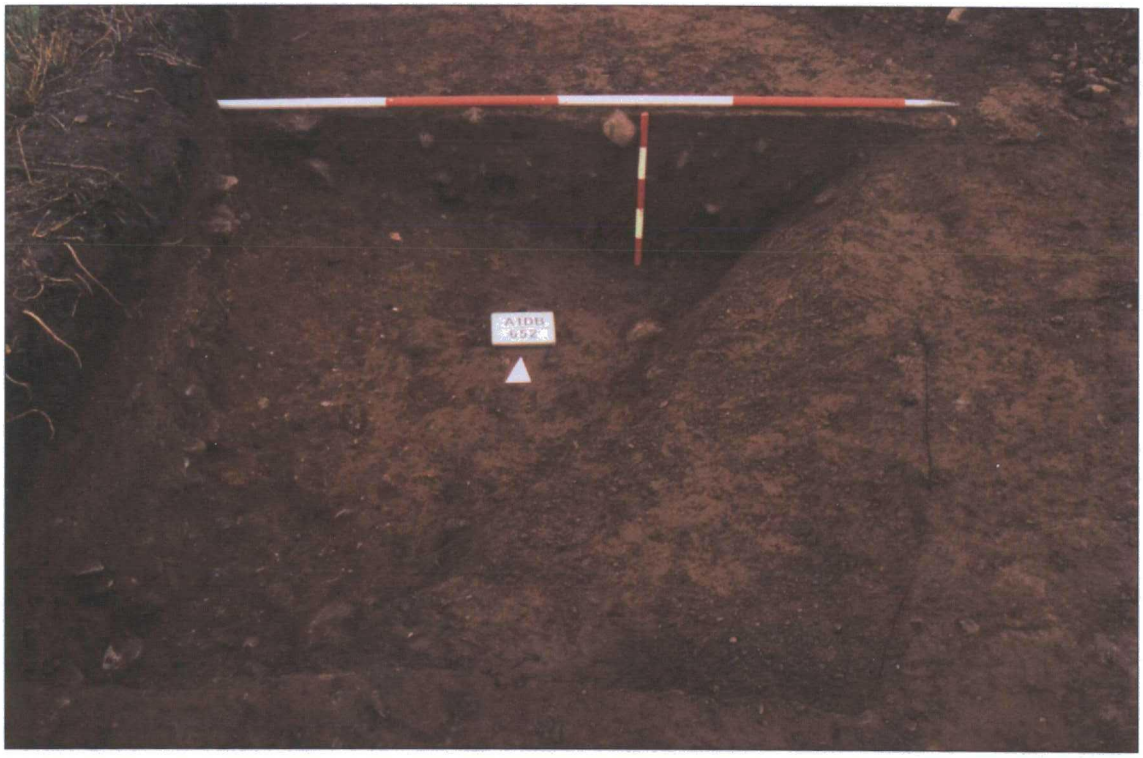


Plate 4 A1 Dishforth to Barton: Trench L10, ditch 652 facing north (scales 2m and 0.5m)

Plate 5 A1 Dishforth to Barton: Trench L11, ditch 645 east facing section (scales 2m and 1m)

Plate 6 A1 Dishforth to Barton: Area AS2, facing south-west

Plate 7 A1 Dishforth to Barton: Trench B14, hollow 689 facing north (scales 2m, 1m and 0.5m)

Plate 8 A1 Dishforth to Barton: Trench B16, facing south-west (scales 2 x 1m)

Scottish Universities Environmental Research Centre

Rankine Avenue
Scottish Enterprise Technology Park
East Kilbride Scotland UK G75 0QF

Director: *Professor A E Fallick*

Email: g.cook@suerc.gla.ac.uk
Telephone: 01355 223332
Direct Dial: 01355 270136
Fax: 01355 229898

RADIOCARBON DATING CERTIFICATE

10 May 2007

Laboratory Code	SUERC-13998 (GU-15321)
Submitter	Northern Archaeological Associates Marwood House Harmire Enterprise park Barnard Castle Co. Durham DL12 8BN
Site Reference	A1 Dishforth to Barton
Sample Reference	A1DB06 688 AA/T
Material	Charcoal : Species not identified – Assoc w aurochs ~~auroch~~ ~~deer antler~~
$\delta^{13}C$ relative to VPDB	-29.4 ‰
Radiocarbon Age BP	3660 ± 35

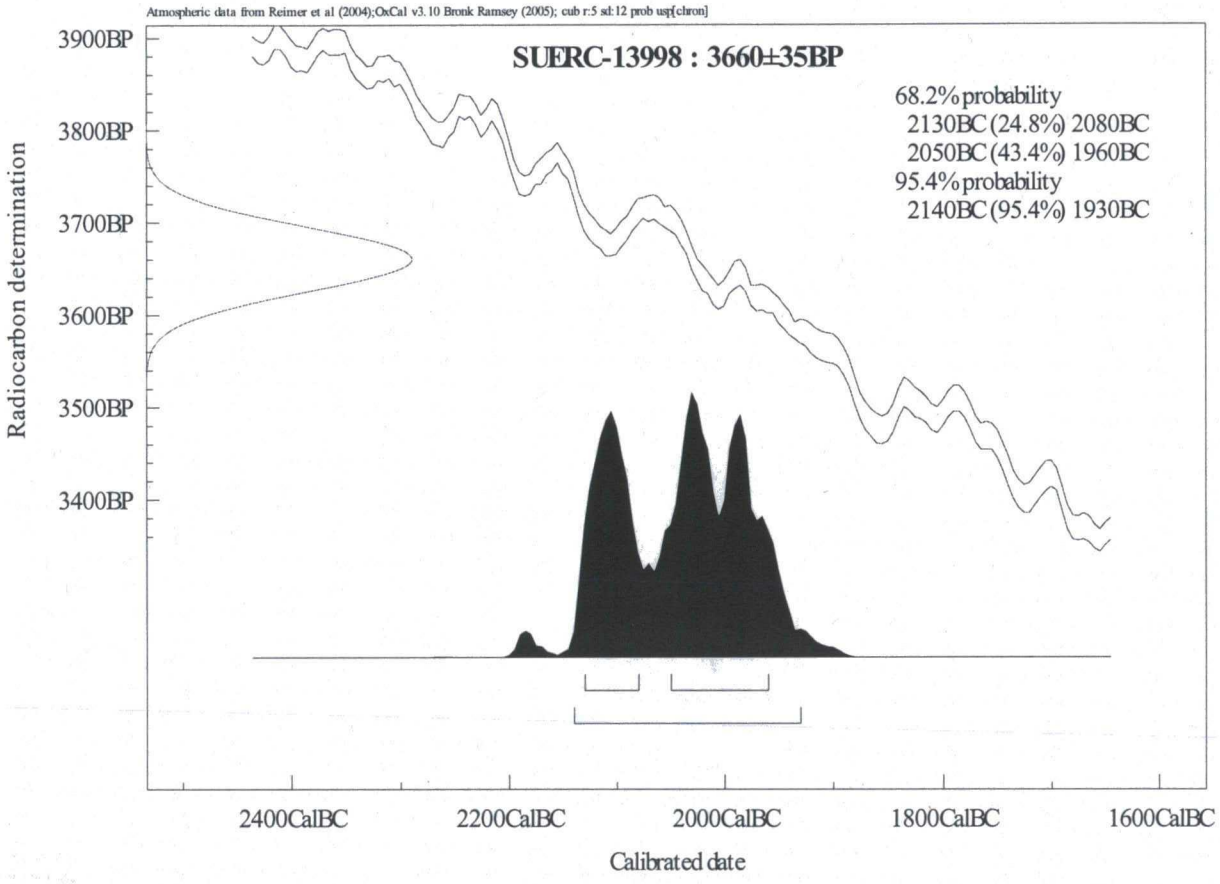
N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Rankine Avenue
Scottish Enterprise Technology Park
East Kilbride Scotland UK G75 0QF

Director: *Professor A E Fallick*

Email: g.cook@suerc.gla.ac.uk
Telephone: 01355 223332
Direct Dial: 01355 270136
Fax: 01355 229898

RADIOCARBON DATING CERTIFICATE

10 May 2007

Laboratory Code	SUERC-13999 (GU-15322)
Submitter	Northern Archaeological Associates Marwood House Harmire Enterprise park Barnard Castle Co. Durham DL12 8BN
Site Reference	A1 Dishforth to Barton
Sample Reference	A1DB06 690 AA
Material	Charcoal : Species not identified Assoc w red deer
$\delta^{13}C$ relative to VPDB	-25.3 ‰
Radiocarbon Age BP	6555 ± 35

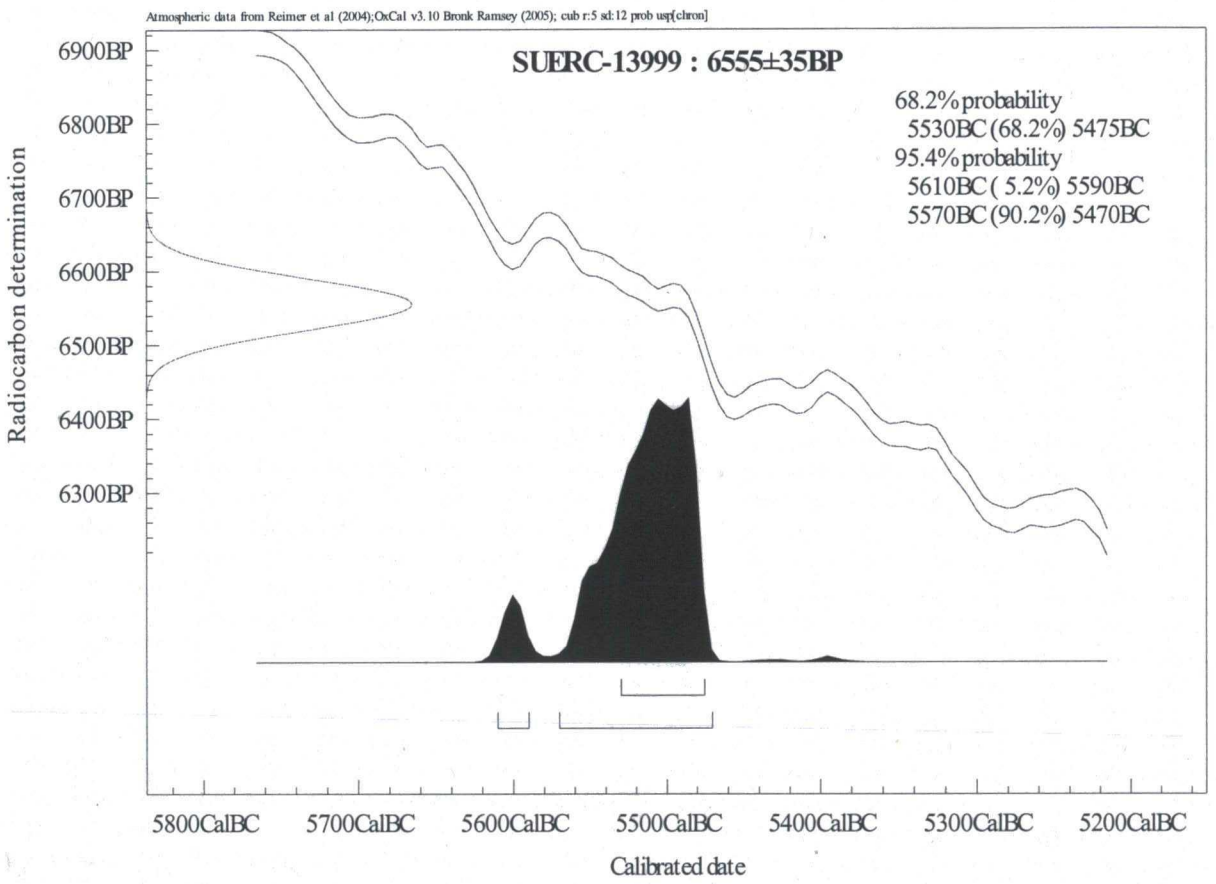
N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code.

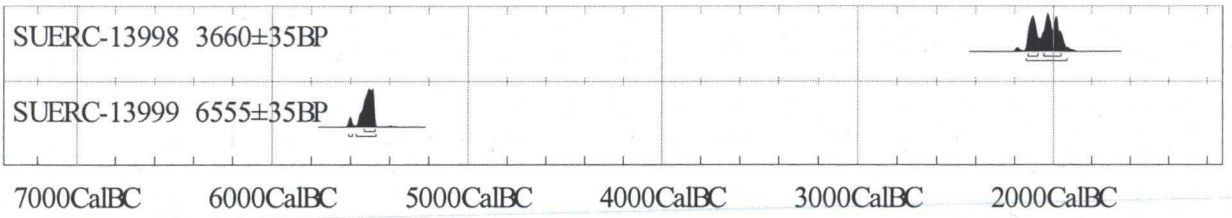
Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Atmospheric data from Reimer et al (2004);OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]



7000CalBC 6000CalBC 5000CalBC 4000CalBC 3000CalBC 2000CalBC

Calibrated date