

Northamptonshire Archaeology

Maxey Quarry, Cambridgeshire Western Extension 2007-2008 Assessment Report



Ian Meadows

October 2009

Report 09/143

Northamptonshire Archaeology

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OASIS REPORT FORM

Project name Short description (250 words maximum) Excavation to the south and west of the Etton Causewayed Enclosure, in advance of gravel extraction by Tamac, had already revealed an extensive prehistoric landscape. The excavation of a further 9.12ha to the west did not find a continuation of this activity, as only seven early prehistoric pits could be identified. Instead, the landscape was dominated by an Iron Age farmstead on the locally highest ground. Iron Age roundhouses were denoted by an area of post-pits and two ring guilles. A co-axial Roman field system abutted the eastern side of the earlier farmstead. The entire study area was crossed by a series of palaeochannels, which may largely have operated as shallow winterbournes. Most of the palaeochannels were overlain by elements of the Roman field system although one channel course was flanked by the ditches, possibly showing that it was contemporary with the Iron Age and Roman landuse. Project type (eg DBA, evaluation etc) Site status (none, NT, SAM etc) Previous work (SMR numbers etc) Current Land use Quarry Future work (yes, no, unknown) Monument type/ period Significant finds Neolithic, Bronze Age, Iron Age, Roman NeolBA pottery, Iron Age and Roman pottery and other finds (arefact type and period) PROJECT LOCATION County Cambridgeshire Tamac Quarry, Maxey, PE6 9EE (including postcode) Study area (sq.m or ha) OS Easting & Northing (use grid sq. letters) Height OD PROJECT CREATORS Organisation Project Daier Significant finds Northamptonshire Archaeology Project Daier Start date 2007 End date 2008 ARCHIVES Location (Accession no.) Physical Paper Digital BIBLIOGRAPHY Title 809/143	OASIS REPORT FO	JKW					
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Scale 1:500

Scale 1:500

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MAXEY QUARRY, CAMBRIDGESHIRE WESTERN EXTENSION 2007-2008 ASSESSMENT REPORT

Abstract

Excavation to the south of Maxey Cut, in advance of gravel extraction by Tarmac, has already revealed an extensive prehistoric and Roman landscape. The excavation of a western extension to the old quarry enabled the examination of a further 9.12ha. This area saw a diminution in the occurrence of early prehistoric pits, perhaps reflecting the increasing distance from the ceremonial landscape to the north. At its western end an Iron Age farmstead lay within a series of enclosures on a piece of raised ground. The extensive Roman co-axial field system continued from the previous excavation and its ditches cut across most of the shallow palaeochannels, suggesting they may have become largely inactive by that period, although one channel course was flanked by the ditches, possibly showing that it was contemporary with the Iron Age and Roman landuse.

1 INTRODUCTION

1.1 Background

Northamptonshire Archaeology has carried out extensive excavation on behalf of Tarmac in their quarry at Maxey, Cambridgeshire (Fig 1, TF 137 071 approx centre) commencing with evaluation in 1998 and subsequent open area excavation since 2000 (Meadows 2006). This report deals with approximately half of the area known as Maxey Quarry western extension (Fig 2). It covers the area directly to the south of the Maxey Cut comprising about 9.12ha. This area adjoins the western end of the former Maxey Quarry, the archaeology of which was excavated and recorded by Northamptonshire Archaeology from 2000 to 2007. The assessment reports for that work have been lodged with the Peterborough HER and it is the intention that the work recording the western extension will all be published along with the earlier work to form a single synthetic report.

The quarry lies in an area of renowned archaeological significance, which was first recognised in the RCHM (1960) document 'A matter of time', and is reflected by the number of excavations and observations that have been carried out over the last 40 years in the area north of the Maxey Cut. This work culminated in the excavation of the Causewayed Enclosure by Francis Pryor in the early 1980s (Pryor 1998).

The landscape north of the Maxey Cut is densely occupied with large ceremonial and funerary monuments including two Cursus monuments, several Henges, and Barrow cemeteries, in addition to the Causewayed Enclosure. In the past the majority of archaeological excavations were confined to the monuments themselves and very little examination of their environs took place. To the south a further quarry application may lead to the examination of part of a similarly monumental landscape. The opportunity that the present quarry provides is a unique chance to explore the hinterland of a major monument complex using modern techniques. The provision by Tarmac of funding for the excavation through PPG 16 has allowed the recovery of an unrivalled assemblage of material of Neolithic and early-middle Bronze Age date.

It is unfortunate that the direct context of many of the monuments to the north of the present quarry is so ill understood owing to the lack of comparable excavation of the areas around the individual monuments. Pits were recorded inside the causewayed enclosure and these were always perceived as part of activity associated with the life and use of the monument (Pryor 1998 102-3). The same is true for similar monumental landscapes across the country where the surroundings of monuments are seldom examined with as much rigour as the monument itself, if at all. This project therefore has given archaeology a rare opportunity and a unique insight into the environs of ceremonial and funerary landscapes of this period.

1.2 Original objectives

The original objective of the archaeological recording action at Maxey Quarry was to preserve by record the archaeological hinterland of the monument complex to the north of Maxey Cut. The original project design had the following archaeological objectives:-

- Define the environmental history of this part of the Welland by environmental sampling
- Explore the interaction of people and monuments with the changing course(s) of the watercourses
- Examine the environs of the causewayed enclosure and provide a context for the monuments to the north
- Study the paleochannels for potential ritual usage of water features and to better understand their position in the broader landscape
- Examine the evidence for later prehistoric land management and the apparent discontinuity of land use
- Examine the Romano-British and medieval landscape to provide a context for the evolution into the historic period.

1.3 Methodology

It was originally anticipated that this phase of extraction would last six years, divided up into three extractive phases; although in the present economic climate it is likely to take longer. It has been agreed in discussion that the ultimate scale of the project, both in terms of the area covered and the volume of data, requires the assessment of the results to date. It was felt that these results might better inform the continuing work (in particular the southern extension proposal) by identifying strategies that might be productive. If the post-excavation were to be left entirely until the end of the project it would potentially result in an unacceptable delay, so a staged programme of post-excavation has been proposed. This phase will cover the northern half of the western extension which is bounded on its west side by Nunton Lane, on the north side by Maxey Cut and on the east side by the previous quarry an area of 47hectares. This area was excavated between 2007 and 2008 with no further excavation in 2009.

The strategy adopted throughout the project has been one of strip and record, at each stage an archaeologist has directly supervised all soil movement. This process ensured the generally clean machining down to good archaeological levels for planning and

excavation. The exposed surface was manually planned on permatrace at a scale generally of 1:100. This generated a total of 79 plans. The individual phase site grids were linked to fixed reference points and were tied in by either EDM survey or GPS to ensure the accurate integration of each phase of evidence. The plans were then digitised to generate an overall site plan with data split into several layers, pits, tree holes, ditches, springs and palaeochannels. This data was manually checked (by the author) to ensure the correct identification of each feature in each layer.

In addition to the levels taken in features, a 5m grid of spot heights has been taken across almost the entire scraped surface. This survey was originally carried out manually using a level but more recently using GPS technology. It was felt necessary to carry out this type of survey as the scraped surface revealed a range of slight topographic variations, low ridges and hollows in the gravel. The production of a grid of levels will allow the recognition of these slight variations in the surface of the natural which would probably have been reflected in the pre-alluvial ground surface. These slight features would, in the very flat landscape of the site, have offered choices in location, which might be borne out by the distribution of features, types of feature or dates of features across the site.

1.4 The site archive

The site archive of the western extension to date comprises the following:

1864 Individual context records
79 Plans
513 Sections
36 Environmental bulk samples of various sizes
Nearly 200 colour slides
Nearly 200 black and white photographs
8 standard boxes of animal bone
7 standard boxes of pottery
1 standard box of flint

2 SUMMARY OF THE RESULTS

2.1 Introduction

Unlike the work to the east, this area comprised three broad phases of activity, together with a palaeochannel system. A very sparse Neolithic-Early Bronze Age phase, an Iron Age phase and a Roman phase. The first was characterised by small scatters of pits and isolated finds of flint, the second by the remains of ring gullies and ditches and pits characteristic of a settlement and the latter by elements of the extensive field systems that covered this entire area (Figs 3-8).

2.2 Palaeochannels

The palaeochannels ranged from a few tens of millimetres to about 0.30m deep and in many instances it was possible to see where the uppermost channel had reoccupied an earlier high-energy late glacial channel within the gravel. The precise sequence of palaeochannel activity across the study area could not readily be disentangled owing to the homogeneity of their fills. Most channels contained no artefacts, although some were

cut through by pits and almost each length was cut into by the presumed Roman ditch system. This suggested that the flow may have decreased at that time, perhaps as a result of larger scale waterflow management schemes of which some of the channel flanking ditches previously observed at Maxey may be part.

That the majority of the channels were cut by ditches perpendicular to the line of flow would perhaps suggest that even in general flooding these channels were not recolonised. In the southern part of the site a pair of ditches [786, 1051] may have flanked the course of an intermittently active channel or reflected the active canalisation of whatever flow it produced. The only channel that was not bisected by a ditch was the channel adjacent to the northern limit of excavation, which had been active in historical times. This channel was flanked along its southern side by the largest ditch sequence on this part of the excavation, perhaps reflecting that it was active in the later Iron Age and Roman periods too.

2.3 Tree throws

Whilst large numbers of tree throws could be seen in the previous quarry there were far fewer in this area. This reduction in number is difficult to simply rationalise, however, it might reflect the greater degree of agricultural intrusion into the underlying archaeological levels, truncating or obliterating them. This degradation may be as a result of the generally shallower soil coverage over this part of the site, which rises to 10m aOD at the western end and had a much thinner alluvial cover, in places as little as a few centimetres, than the areas to the east.

However, several tree pits were encountered and a sample was excavated (see Appendix 1). In those excavated examples most had no stratigraphic relationships, but where they did occur they were seen as the earliest feature cut by either ditches or other pits. Two examples contained finds, [443] a flint flake and [545] a bone fragment. The occurrence of finds within the fills of these two tree pits shows that some of the tree pits were contemporary with occupation of the floodplain, whereas in the previous phases of work the tree pits were universally sterile.

2.4 Pits

The pits (see Appendix 1) in this phase divide into distinct groups. There were a few (seven in total) dateable from pottery as early prehistoric pits, in the eastern part of the study area, but none in the western half, suggesting that the early prehistoric activity that had so dominated the previous quarry area did not continue indefinitely westwards. This reduction coincides with the reduction in larger ceremonial early prehistoric monuments known to the north and indeed their greater distance from the line of what is now Maxey Cut. This shift in ceremonial emphasis would have a consequence for the intensity of settlement seen in this part of the site when compared to the previous areas. It shows that there was a distinct hinterland of contemporary occupation and activity associated with the monumental landscape.

The features were almost evenly distributed across the eastern part of the site, not in groups, although pairs occurred. It is possible that the shallow character of many of the small pits may have allowed others to have been lost through cultivation in the same way that the tree throws may have been obliterated in this part of the site. This cultivation may have been during the Iron Age and Roman periods, but as there were field systems of that date to the east, it is perhaps more likely that any loss was a

product of the medieval and post-medieval ploughing on ground lacking the cushion of alluvial clay to seal and protect earlier remains.

The remaining dateable pits belonged to the Iron Age and Roman periods and comprised either post-pits or small borrow pits for material presumably for local constructions. The majority of the pits occurred in a concentration around the centre of the present study area with the bulk of the site having only a thin scatter. This scatter of such features would perhaps suggest they are short-lived episodic events borrowing material in an unsystematic fashion. Unlike in the previous area, there was no evidence for possible wells/waterholes, perhaps reflecting a largely transient occupation. In the central cluster of pits, however, several were identified as post-pits suggestive of the presence of timber structures whose ground plan could not be ascertained. Two other structures were clearly indicated by the occurrence of ring gullies in the western part of the site (see below).

Statistically the majority of the pits (nearly 70%) were 0.3m deep or less, only 20% across the site were deeper than 0.4m reflecting small-scale extraction. Few of the pits could have reached the contemporary ground watertable so the reason for their original excavation is unlikely to be as wells. There did not appear a spatial or chronological character to the form or size of the pits, further reflecting the probably ad hoc nature of their original excavation.

2.5 Ditches

The extensive field system observed to the east continued into the present phase of study (See Appendix 2; owing to multiple numbering see also the table of equivalent numbers Appendix 3 and Figs 9-11). It was observed that the ditches in the eastern part of the present study area were similar to those in the former quarry, but at about the centre of the present study area the character of the ditches changed. To the east the co-axial system of generally slight ditches and gullies was the predominant system, whilst west of a sequence of north-south cuts a more irregular pattern emerged, perhaps associated with Iron Age occupation of the slightly higher ground.

The irregular ditches comprised a west - east sequence of cuts along the edge of a slight ridge of ground flanking the southern side of a major palaeochannel, which by the fact its fills were not overlain by any ditch cuts was possibly contemporary. This ditch sequence comprised several cuts and recuts whose purpose may have been less to enclose any settlement than to protect occupation from episodes of overbank flooding. At its western end the ditch line continued south-westwards with fewer recuts and at its east end the line continued southwards recut by ditches of Roman date. Fragments of a human adult skull were recovered from one of the ditch fills [2291] which lay at a point where there was a particularly irregular ditch pattern, perhaps indicative of episodes of entrance through the ditch line.

To the north of the ditch line there were no features present, which contrasted with the ground to its south that was divided into at least three recognisable enclosures. The largest was the eastern enclosure, approximately 70m north-south and 85m east-west. This enclosure contained several pits and shared the line of its eastern side with a later sequence of Roman ditches. Adjoining its western side was a smaller sub-square enclosure approximately 40m north-south and 45m west-east, which contained a deep-ditched enclosure in its north-east corner, which may have been to contain a small number of head of livestock. The western side of the enclosure was dominated by a scatter of pits and post-pits suggestive of the former presence of buildings, but no coherent ground plan could be determined.

To the west of the post-pit and pit scatter lay a further rectangular enclosure, 35m north-south and 30m west-east. Its eastern side was defined by a sequence of shallow gullies but the other two sides were formed by a single ditch, with occasional local scourings. This enclosure contained few features and cut ring ditch 1 [2575]. Because of this relationship it is possible that the enclosure is a later stage in the development of the occupation of this part of the site. A second ring ditch [2594] may be near the north-west corner of the main ditch sequence, it too was cut by ditches that were ceramically of Iron Age date.

In this part of the study area there appears to be a farmstead of Iron Age date with both early and middle Iron Age ceramics present. The nature of the occupation is probably a simple farmstead, possibly discontinuously occupied. Clearly the flood threat was a significant issue with the site and it is possible that the occupation had a seasonal character, such as has been suggested at Farmoor (Lambrick and Robinson 1979).

The corner of an enclosure [124] of probable Iron Age date extended a short distance out from the current southern limit of excavation and a single diagonal ditch [039] was present at the north-east corner of the present excavation, extending beyond the limit of study to the north and into the previous study area to its south.

The co-axial ditch system comprised a series of ditches which generally could not be seen to have been recut or scoured, the fills were generally very clayey, making such subtle observations difficult. These ditches divided the ground into a series of rectilinear land parcels of differing sizes, and where they could be dated they appeared to be Roman. Almost every ditch line cut the course of a palaeochannel, suggesting that by the time they were laid out the palaeochannels, even the shallow surface examples, had largely ceased to carry water, except perhaps in periods of spate when they may have been recolonised by the river course. One ditch [266], running approximately west-east, changed course to run slightly more south-eastwards entirely within the fill of one of these channels, and this may perhaps be an attempt to manage high water levels by channelling it along the ditch, effectively canalising the channel.

The channel that was possibly contemporary with the Iron Age ditches (see above) was not crossed by any elements of the co-axial system, perhaps suggesting it was also active in Roman times. Elements of this system do occur on what would have been the channels north bank [838].

The previous Iron Age boundaries appear to have been largely incorporated in the co-axial system, as across much of this area of Iron Age enclosures there does not appear to be any overlying system of ditches. It is possible that the earlier ditches had by this stage become established hedges and the ditch was not felt necessary to define the boundary. No obvious focus for the Roman field system could be determined and it was felt that it probably lay to the south of the present study area on slightly higher ground. A concentration of Roman pottery was identified about 500m to the south during fieldwalking as part of the evaluation for the proposed southern extension to the quarry (Holmes *et al* 2009).

Throughout the machining process metal detection was carried out by Steve Critchley. This was particularly important when the current plough soil was removed. The low level of recovered artefacts of any period, but in particular the Roman, must reflect the low intensity of use of many of these fields. Indeed it is possible that for much of the time the area may have been grazed and therefore domestic material such as pottery and other artefacts would not be imported to the area in manuring, this is suggested by recovery of only small amounts of pottery from the ditch fills.

2.6 Ring ditches

Two ring gullies [2575, 2594] were recorded within the present study area and, unlike the examples to the east, these did not appear to have served an early prehistoric ceremonial role, instead they appear to have been eaves-drip gullies for two Iron Age roundhouses (Appendix 4). Each of the gullies had a pennanular form with an entrance gap facing to the east and although isolated post-pits occurred within [2594] no coherent plan of a structure could be observed.

The larger of the ring gullies [2594] had a diameter of about 16m and the other [2575] 11m (internally). The ditches were generally between 0.2-0.3m deep. Pottery was recovered only from the southern side of [2594] whilst in the case of [2575] a more general distribution occurred, with finds also from the entrance.

Each of the gullies was dominated by a homogeneous fill with no evidence at the entrance for recutting or scouring. The use of ring ditches around houses is most frequently encountered in the middle and later Iron Age and although some earlier Iron Age pottery was recovered from the fill of the gully [2575] the bulk of the pottery was of the middle and later Iron Age. It is possible these gullies represent a second phase of Iron Age occupation insofar as the cluster of pits and post-pits in one of the enclosures could denote the former presence of post-built structure(s) whose ground plan could not now be determined.

3 THE FINDS

3.1 The worked flint by Yvonne Wolframm-Murray

Forty-four pieces of worked flints were recovered during these excavations (Appendix 5). With the exception of three contexts the material was residual. A possible Bronze age pit fill [421], a tree hole fill (444) and a small early prehistoric slot [605], fill (606), produced the only possible non-residual material. The artefacts comprised one core rejuvenation flake, 22 flakes, 14 blades, five scrapers and one polished flint axe fragment. Post-depositional edge damage was present on most artefacts consisting of nicks and crushing of the edges. Over two-thirds of the flints showed slight to heavy patination and there was a small amount of burnt material with only four pieces presenting such evidence. The majority of the raw material was a vitreous flint ranging from light greyish brown to dark grey in colour. There was also an opaque flint of light to mid grey and brown colours. The cortex present on the dorsal surfaces of the flints was a light to dark brown colour. The flint was procured from the local gravel beds.

No cores were recovered, though a core rejuvenation flake was found. The assemblage included 22 flakes, of which eight were broken, and in addition there were 14 blades, of which five were broken. Macroscopically visible utilisation was visible on two flakes and two blades. The retouched tool forms comprised six artefacts, which included five scrapers and one polished flint axe fragment. The scrapers consisted of a side scraper, a discoidal scraper, an end/side scraper and two thumbnail scrapers.

Technological characteristics of the assemblage indicate a date ranging from the Late Mesolithic to the Late Neolithic/Early Bronze Age. Mesolithic/Early Neolithic is suggested by a soft hammer struck proximal blade fragment. Late Neolithic/Early Bronze Age activity is indicated by the presence of a polished axe fragment and two thumbnail type scrapers. No further work is recommended other than a summary of worked flint from all phases.

3.2 The Neolithic and Bronze Age pottery by Alex Gibson

Some 970g of pottery was delivered to the writer for assessment. The contents of each bag were examined by context and sherd groups which had already been partly sorted by staff at Northamptonshire Archaeology. Each bag containing sherds (as opposed to crumbs) was opened and the contents examined macroscopically. Tentative identifications as to date and ceramic type, notes on fabrics, decoration and the identification of formal features such as rims, bases or carinated sherds were made during this preliminary survey and a database compiled (Appendix 6). These identifications are preliminary, however, until more detailed study can confirm or alter them. Similarly, many sherd groups where no identification was possible in the assessment (indicated by ?? in Appendix 6) will almost certainly be identifiable once more detailed study of forms and fabrics can be undertaken. It was clear in some sherd groups that more than one vessel was present, but an estimation of the total number of vessels must also await more detailed study.

Condition of the pottery

The condition of the pottery is extremely variable but generally poor. Many sherds are of very small size, some fabrics, particularly middle Neolithic fabrics, are extremely friable, and many new breaks were noted amongst the sherds. Beaker and some tentatively Bronze Age fabrics appear to be better-fired and more robust while Peterborough fabrics can be extremely soft and 'crumbly'. None of the material appears to have been marked and this will inevitably hinder future study. Sherd counts have not been attempted due to the fragility of much of the material and its continued degradation.

Spot dating of the ceramics

The initial (and in some cases tentative) identifications made are given in Appendix 6. It is strongly anticipated that these identifications will need refinement and/or alteration once a more detailed stratigraphic and contextual analysis is undertaken.

Earlier Neolithic pottery was identified or tentatively identified in one of the 13 potproducing contexts. Distinctive characteristics used in this identification were rim forms, shoulders and fabric similarities in other featureless sherds.

Peterborough Ware was identified or tentatively identified in two contexts and these identifications were based mainly on fabric, rim forms and decorative schemes.

Beaker was identified or tentatively identified in three contexts largely on the grounds of fabric and decoration.

Bronze Age urn ceramics were identified or tentatively identified in four contexts. The similarity of some of the coarser fabrics in these tentative identifications to the coarser Neolithic sherds necessarily means that particular attention will need to be given to the stratigraphical provenance of this material during the analysis stage.

It was not possible to make an identification of the ceramic tradition represented in four bags of material. This was because of the lack of diagnostic traits on small sherd evidence. It is anticipated that this figure will greatly reduce once context groups are examined and fabric comparisons made.

Earlier Neolithic

The earlier Neolithic ceramics appear to comprise globular bowls. There would also appear to be an element of smaller, cup-like vessels. The bowls appear to exhibit a range of fabrics from extremely fine, with well-crushed inclusions to coarse and thick and

are similar in appearance to the other material from the quarry (Gibson in Meadows 2008).

This assemblage, when combined with the material from elsewhere in the Quarry, provides a rich body of earlier Neolithic pottery. Careful study of this pottery with a back-up suite of absolute dates will provide a securely dated sequence for the earlier Neolithic ceramic record in this part of England and, indeed, will bolster Neolithic chronologies nationally.

Middle and Later Neolithic

The amounts of Peterborough Ware that have been tentatively identified suggest that this may form the bulk of the analysis.

Radiocarbon dates suggest that this material may date from *c*3500-2700 Cal BC and therefore this material forms an important large assemblage from the middle Neolithic period.

More material from this period may be identified during the analysis stage.

Beaker and Bronze Age

Both fine ware and coarse ware appears to be present in the assemblage suggesting at least an element of domestic material.

The Bronze Age element comprises Urn types. Problems of fabric similarity between some Urns and Neolithic Plain Bowls has already been mentioned.

Assessment of Importance

Neolithic and Bronze Age activity on the Fen Edge have been well documented since Abbott and Smith (1911). Surveys of Beaker material have also been undertaken (Bamford 1982: Gibson 1982) though much of this material was derived from largely unstratified contexts.

Pit deposition of material, particularly earlier Neolithic material, has been recently published from the Causewayed Enclosure at Etton (Pryor 1998) and the proximity of this site to the present pit complex clearly enhances the value of the present site.

This large assemblage has been well-excavated according to modern stratigraphic principles and has an excellent curation record since its excavation. This enhances the importance of the material for not only stratigraphic and spatial analysis but for modern biomolecular techniques of study such as residue analysis of both sherds and visible residues.

The chronological depth of the assemblage and the excellent excavation documentation will allow spatial analysis of deposition within a long chronological framework perhaps allowing us to understand changing depositional practices and/or locales.

The potential continental affinities of the 'Potbeker' sherds warrant further analysis of fabric as well as parallels from the Netherlands. This material may benefit from petrological analysis.

The density of material, the chronological depth of the assemblage, the rarity of such well-documented assemblages in the country generally and the close proximity of the quarry site to the Causewayed Enclosure at Etton makes this material of national importance.

Note by Ian Meadows: The pottery was all examined by Alex Gibson who retained what he considered to be the Neolithic and Bronze Age material. However, some material that remained was felt by Jane Timby to be possibly of Neolithic or Bronze Age date, so it is noted here.

Possible Neolithic/bronze Age pottery by Jane Timby

The earliest material present appears to be 21 small sherds from fill (788), feature [783], probably from a single vessel in a mainly fossil shell-tempered ware although other fossiliferous detritus is also present. The three rim sherds present have lightly impressed diagonal line decoration. Provisionally, the vessel appears to be a bowl characteristic of the middle? Neolithic period.

Fill (2005), feature [2006], produced five bodysherds from an early Bronze Age Beaker. The sherds, some joining, are decorated with a lightly comb impressed herring-bone design. The fabric is limestone-tempered. A further possible Beaker sherd, although plain, was noted in context (606), slot [605].

The prehistoric assemblage was sorted into broad fabric groups based on the type, size and frequency of the inclusions following the recommendations outlined in the PCRG (1997) guidelines. The similarity of this material in general terms to the later prehistoric wares means that further small unfeatured sherds could have been overlooked at this stage.

3.3 The Iron Age and Roman pottery by Jane Timby

The western extension at Maxey has produced approximately 1950 sherds of pottery weighing 9.3kg dating to the later prehistoric and Roman periods. Unless otherwise indicated the material was recovered from ditch contexts.

The pottery is in a very friable condition with multiple fresh joins. Where clear joins exist sherds have been treated as single pieces; this was not possible with the smaller pieces. The overall average sherd weight is just 4.8g reflecting the fragmented nature of the assemblage.

Traded or named Roman wares were coded using the National reference fabric codes (Tomber and Dore 1998). The sorted sherds were quantified by sherd count and weight for each recorded context.

Pottery was recovered from 176 individual contexts. At the assessment stage no site information was available to know if some of these belong to the same features. Only 30 contexts (17%) contain 20 or more sherds. The number of rim sherds was also relatively low, with these only accounting for 4% overall and many of these were not large enough to measure diameter.

The resulting quantified data is summarised in Appendix 7 along with a provisional spot date. Where there are typologically distinctive sherds an early or middle Iron Age is indicated although this cannot necessarily account for redeposited material, especially with such small groups. Most of the contexts are noted as Iron Age but it is likely that these are largely of middle Iron Age date.

In the following report the assemblage is discussed chronologically. No research into comparable assemblages from the region has been carried out at this stage.

Iron Age

Most of the assemblage, some 89%, comprises handmade wares, fired at low temperatures, dating to the Iron Age period. Most of the sherds have a calcareous temper, largely fossil shell with some limestone characteristic of the Jurassic series. Some attempt was made to divide these on the basis of the grade and frequency of inclusions but whilst the extremes are quite clear cut there is in effect a continuum between the two. In a large number of cases the inclusions have completely decayed leaving voids. It is unclear at present whether the differences in grade of temper has chronological implications, or is simply a reflection of vessel size or a mixture of the two.

In addition to the calcareous wares there are a few sandy or sand with sparse shell/limestone inclusions present but these are very much in the minority.

Amongst the typologically earlier material there are at least two carinated bowls with burnished, reddish self-coloured surfaces. These came from contexts (2248) and (2738), a type more characteristic of the earlier Iron Age. A further carinated sherd from a bowl or jar came from (2167). Also potentially early are at least two vessels with T-shaped rims (2679) and (2600), the former having in addition a finger-depressed bodysherd. Further internally or externally expanded rims came from (2538) ring ditch [2575], (2405) and (2166), also hinting at an earlier date.

A significant number of the sherds have scored decoration, a feature which is generally accepted to date from the mid third to second centuries BC. Some 22 contexts yielded sherds with this finish. Contemporary with this are vessels with finger-depressed or notched rims (eg (984), (979) and (2110). A single loop handle was recovered from (2685).

Apart from one sherd from (2547), ring ditch [2575], with linear decoration, possibly in the form of infilled triangles, the rest of the assemblage is plain. Some vessels have a smoothed or wiped finish and a few sherds have been burnished but the majority has no specific finish.

Very few sherds showed sign of use in the form of sooting or burning, several sherds from a jar from (2212) being an exception. At least four contexts produced sherds with internal burnt residue (236) pit [234], (634) pit 629], (882) and (1083).

Roman

The group contains 186 sherds of Roman pottery from 20 contexts. Of this 163 sherds belong to just three vessels from contexts (540), (601) and (668) leaving a thin scatter across the other features.

Most of the wares are local to the Lower Nene Valley with grey wares (LNV RE) current from the early 2nd century and colour-coated wares (LNV CC) which appear from the mid to later 2nd century. Other local wares include shell-tempered vessels, grey sandy wares and an oxidised ware with sparse shell.

Imports to the assemblage include single sherds from a plain Central Gaulish samian dish (755) and an Oxfordshire colour-coated mortarium (668).

Chronologically the group appears to include both 2nd century and later 3rd-4th century material. Context (668) with several sherds of a shelly ware storage jar along with the Oxfordshire mortarium dates to the later 3rd or 4th centuries. Contexts (9) and (747) with the LNV CC sherds could date from anytime after the later 2nd century, whereas the remaining contexts could date from the 2nd century. Context (601) contains 66 sherds

from a single jar in a local oxidised ware with sparse shell and context (540) similarly produced multiple sherds from a single grey ware jar.

Summary

The Maxey assemblage analysed here largely dates to the early-middle Iron Age with perhaps the greater emphasis towards the 3rd and 2nd centuries BC. A low level scatter of Roman pottery indicates some activity between the 2nd and 4th centuries.

3.4 Other finds by Ian Meadows

Of the 62 pieces assigned Small Find (SF) status the majority are items of flint (see above). Several of the others (4) are iron nails of undateable form, two of the ferrous items are artefacts, one a small knife blade (SF19/08) and the other is part of a nailed binding strip of indeterminate origin (SF 20/08).

Two pieces of saddle quern rubbing stones (SF1/08 & 11/08) were recovered. Both are fragmentary; one only preserves 45 x 30mm of the grinding surface (SF 11) and the other preserves 80 x 70mm (SF80). Both pieces are of glaucontitic geology and both have been burnt/scorched.

In addition to the quern rubbers, a spherical stone (SF 17/08) with two flat faces is identified as a hammer stone. Geologically this piece is probably a chert(?) pebble from the gravel, all around its circumference the original surface had been lost, presumably through usage. A single fragment of the narrow end of a Neolithic polished stone axe of a fine grained geology was recovered in (1022). The fragment may have been part of a 'ritually' broken axe but this is equivocal as it was recovered in a residual position within a later ditch sequence.

There are two lead artefacts; an undateable cylindrical weight (SF 18/08) 25mm long and 17mm diameter, and a lead seal (SF 32/07) bearing a classical style head on each side. Around one of the heads the legend CONSTANTINVSAVG could be read, although a legend had been present on the other face it was now indistinct. Unfortunately this piece was recovered from the interface of the plough soil and subsoil, but it can be paralleled by examples recovered from Ickham (Hassall and Tomlin 1979, 350-3) and Richborough.

The ancient copper alloy artefacts are either Bronze Age or Roman in date. One piece (SF 30/07) could not be closely identified but it is possibly a fragment of a Bronze Age sword blade, another (SF 2/08) was 65mm of the tip of a ribbed blade such as a spearhead. The final piece of prehistoric bronze was recovered from a palaeochannel fill and comprised the upper part of a riveted dagger blade (SF 36/07).

Roman copper alloy finds comprise two brooches, both Nauheim derivatives, recovered from the topsoil (SF1/08 and unnum/08). This style of brooch dates to the period immediately before the conquest, ceasing to be produced shortly after the conquest. Only two Roman coins were recovered; a Sestertius of Marcus Aurelius (SF 29/07),161-80AD, and an AE3 of Constantius II (SF 2/08) with what may be a FEL TEMP REPARATIO falling horseman reverse so dating to around 350AD.

The remaining pieces comprise a plain binding strip (sf22/07) and a tiny fragment (6mm) of repousse decorated sheet (sf8/08).

Recent material comprises two post-medieval coins, probably 19th-century half pennies, a few pieces of post-medieval glass (SF18/07), and a collection of cartridge shell casings (SF14/070).

Discussion

None of the small finds are likely to yield much additional information other than the pieces of Bronze Age metalwork and the polished stone axe fragment. The former pieces should be more closely paralleled and dated and the axe fragment should be identified petrologically.

3.5 Baked clay

Baked clay was recovered from several contexts varying from small fragments to larger concentrations such as might have been derived from surface ovens or similar structures.

- 2272 Small fragments of baked clay preserving no original surfaces. Pit [2271]
- 2344 Small fragments of coarse gritty possible baked clay or daub. Pit [2343].
- Several large fragments of soft fired clay with shell and flint inclusions. Some of the fragments reached 80 x 60mm and 40m thick. Many of the pieces preserved two surfaces indicating they came from both curved and flat sections. In a few pieces there were traces of the voids left by the incorporation of the wet clay around 15mm diameter withies. These pieces are most probably part of an oven superstructure. Pit [2472].
- Several large fragments and many more small pieces of soft fired clay in what would appear to be three fabrics, one shelly, one flinty and one fine. The apparent variations in fabric, whilst obvious, may not reflect that the pieces are from at least three separate items as they could be from different portions of a single structure which required differing types of inclusion at different parts. Several of the large fragments were of the order of 65 x 65mm and preserved both flat and curved surfaces. Within several of the pieces impressions of thin 15mm diameter withies were apparent, suggesting the clay had been daubed onto a frame. Pit [2476].
- 2532 A small fragment of fired clay. Ditch [2535].
- 2605 Several small fragments of fired clay. Ring ditch [2594].
- 2668 A single lump of fired clay. Ditch [2669].
- Several pieces of baked clay. Most had been reduced to a grey hue but one was oxidised. The pieces ranged in size from 5 x 25mm to 10x5mm. Ditch [2681].

Discussion

These pieces of baked clay are typical of the debris from an oven or ovens. The majority of the material was recovered from pits in the vicinity of occupation that would accord with the suggestion as to the materials origin or from ditches that cut through ring ditches. No further work is likely to be of use on this material as joins between pieces did not seem to be present.

4 MAMMAL BONES by Philip Armitage

4.1 Introduction

Over 1811 hand-collected bone elements/fragments from the 2007/08 excavations were submitted for identification and assessment (Appendix 8).

Out of the total 1811 bones, 332 (18.3%) are identified to species and anatomy (Table 1), and 1479 (81.7%) remain unidentified owing to their extremely fragmented state/absence of diagnostic features (Table 2). The disproportionately high percentage frequency of unidentified specimens (81.7%) reflects the leached/brittle nature of much of the buried bone throughout the site (as discussed in previous Maxey Quarry assessments – see Armitage in Meadows 2006 and 2008), which has resulted in high levels of breakage/fragmentation and also has produced large quantities of extremely "scrappy" fragments from certain contexts (see archive).

The identified species, all mammalian, are, in order of abundance, in 2007 domestic cattle, sheep, horse, domestic pig, goat, dog, and roe deer. No fish, amphibian or reptile bones were identified in the submitted faunal material, and the only bird bones present (four long bone shaft pieces) remain unidentified (but possible are from domestic fowl?).

In 2008 the order of abundance was domestic sheep/goat, domestic cattle, domestic pig, horse, and dog. No bird, fish, amphibian or reptile bones were identified in the submitted faunal material.

Table 1: Summary counts of the numbers of identified animal bone specimens (NISP) by species

	Species	2007	2008
Horse	Equus caballus (domestic)	11	4
Domestic cattle	Bos (domestic)	50	77
Sheep/Goat	Ovis/Capra (domestic)	48	93
Goat	Capra (domestic)	1	0
Domestic pig	Sus (domestic)	8	15
Dog	Canis (domestic)	21	3
Roe deer	Capreolus capreolus	1	0

4.2 Taphonomic modifications

Preservation

Overall, the preservation of the animal bone is generally assessed as poor to fair – although certain deposits did yield relatively well-preserved bones (see archival records). As in the previously examined samples (from the 2000 – 2007 excavations) the incidence of sub-aerial weathering before burial, appears to be relatively low suggesting rapid burial; however, many of the specimens examined exhibit the effects of leaching, and in certain cases, mineralization/iron staining - probably resulting from contact with groundwater during burial. The conditions following deposition of the bones appear to have resulted in a tendency, on drying, for many to become brittle and therefore greatly susceptible to fragmentation whilst *in situ* and/or during excavation/subsequent handling. Additional fragmentation may have been due to physical attrition/compaction in the ground.

Given the exceptionally high levels of fragmentation over the site, quantification proved difficult. For the purposes of establishing bone counts (NISP values) fragments of shafts and/or epiphyses recognized as deriving from the same bone element were counted as

a single "unit". Likewise, reconstructed jawbones (in some cases with associated loose teeth) were counted as single elements.

Table 2: Summary counts of the unidentified mammal bone fragments

Category	2007	2008
Cattle/horse sized	230	65
Sheep/goat/pig sized	29	55
Small indeterminate fragments	147	79
Very 'Scrappy' bone fragments	499	371
Bird (indet shaft)	4	0

It should also be noted that the NISP counts for dogs in Table 1 includes 16 elements from fill (476), pit [475] which represent a single animal— the value is "inflated" owing to the presence of loose/detached teeth.

Dog gnawing

Owing to the highly fragmented condition of much of the recovered bone, it is not possible to establish a precise percentage frequency for dog-gnawed bone elements. However, overall, the incidence of such bones appears to be low. Whilst some of the gnawed bones may represent the remains of food refuse scavenged by dogs, some of the specimens, notably the cattle humerus from (1073) ditch [1070], gnawed at both ends, could however indicate that kitchen/table food scraps had been purposely fed to household/working dogs and later buried along with the general household refuse.

Burning

Owing to the highly fragmented condition of much of the recovered bone, it is not possible to establish a precise percentage frequency for burnt-bone elements. However, overall the incidence of such bones appears to be low, with the notable exception of a "concentration" of 19 extremely "scrappy" calcined fragments in context (681) Neolithic pit [678].

Butchering

For domestic cattle, sheep/goat and pigs, all parts of the skeleton are represented indicating these animals were being slaughtered/butchered/consumed in the immediate vicinity. Owing to the fragmentation and generally poor preservation, butchery evidence (in the form of chop/cut marks on the bones) is scanty in the faunal assemblages examined.

Brief description of the animals

Cattle – Small/short horned cattle that are typical of the Iron Age/Romano-British period (see Armitage & Clutton-Brock 1976) are represented by two short/stumpy blunt-ended horn cores, both males, from contexts (91) and (199) ditch [196]. Medium horned cattle are represented by a single female horn core from (405) pit [401].

Sheep/goats – The fragmented state of many of the ovicaprid bones prevents precise determination of species. However, it is believed that the majority of the specimens classified as sheep/goat in Table 1 derive from sheep. Only a single humerus from (656) pit [651] is positively identified as goat (criteria of Boessneck *et al* 1964). The withers height in one of the adult sheep, represented by a complete metacarpal bone from (238) pit [237] is estimated to have been 65.2 cm (method of Teichert).

Horses – A lower third molar from (560) ditch [558] derives from a horse aged 17 to 18 years at time of death (criteria of Levine 1982). The withers height of the horse

represented by the complete metatarsal bone from (962) is estimated to have been 125.2 cm (method of Kiesewalter 1888) – indicating a small, pony-sized animal.

Pigs – A male domestic pig is represented by a lower canine tooth (tusk) from (456) (sexed using the criteria of Mayer & Brisbin 1988).

Roe deer – The shed antler from (199) ditch [196] derives from a mature (3 to 5 yr. old) buck (age criteria of de Nahlik 1974 and Tegner 1951).

5 POLLEN SAMPLES by Phil Allen

5.1 Introduction

Location and Scope of work

Archaeological Research Services Ltd was commissioned in January 2008 by Northamptonshire Archaeology to undertake a pollen and non-pollen palynomorph assessment on material collected from a range of excavated features and a palaeochannel at the Maxey Western Extension site, Cambridgeshire. In September 2007 eighteen locations were sub-sampled, producing a total of nineteen samples for pollen assessment. The pollen assessment was undertaken during February 2008.

Geology

The underlying geology consists of the Jurassic sedimentary sequences of Oxford clay and Kellaways beds overlain by extensive undifferentiated sand and gravel river terrace deposits deposited during the Holocene (British Geological Survey 2007). The material used for this assessment was sub-sampled from the Holocene sediments.

5.2 Methods

Pollen Preparation

Nineteen samples were selected for pollen assessment. The context number and depth of sample can be seen in Table 3. At each selected level c 2g of sediment was used per sample. One *Lycopodium* tablet (batch number 938934) were added to each sample prior to chemical preparation for the purposes of calculating pollen concentrations as described by Stockmarr (1971).

The chemical preparation of the samples followed the acid digestion based on the procedure as described by Barber (1976) with an added density separation stage to concentrate the pollen, which followed the J J Lowe and N Branch Royal Holloway and Bedford New College method (unpublished).

All counts were undertaken using a Leica DME compound microscope at a magnification of x400. A standard assessment count of the area of one 22 x 22 mm cover slip of pollen and non-pollen-palynomorphs was employed.

Identification of pollen grains and spores was aided by the use of published identification keys, including Faegri & Iversen (1989), Moore *et al.* (1991), van Geel *et al.* (1998) and Hans-Jürgen Beug (2004) and by comparison with pollen reference material (type slides) held by ARS Ltd.

Table 3: Levels selected for pollen assessment

Sample Number	Context	Depth (m)	Comment		
17	928	0.11-0.33	IA ditch [925]		
18	996	0.03-0.04	IA ditch [995]		
18	996	0.21-0.22	IA ditch [995]		
19	1007	0.15-0.25	IA ditch [1005]		
19	1007	0.41-0.51	IA ditch [1005]		
20	1078	0.15-0.22	IA ditch 1077		
20	1078	0.26-0.33	IA ditch 1077		
21	-	0.04-0.05	Palaeochannel		
21	-	0.48-0.49	Palaeochannel		
21	-	0.55-0.56	Palaeochannel		
21	-	0.95-0.96	Palaeochannel		
22	635	0.12-0.38	IA pit 629		
22	635	0.45-0.58	IA pit 629		
22	635	0.70-0.77	IA pit 629		
24	143	0.13-0.25	Pit nd		
24	143	0.43-0.60	Pit nd		
25	73	0.0-0.18	Pit nd		
26	314	0.0-0.20	Pit nd		
27	331	0.0-0.23	Pit nd		

5.3 Results

Pollen from Maxey Western Extension

The examination of the nineteen levels describes sediment with relatively high pollen and non-pollen palynomorphs concentrations. The results of the assessment are presented in Table 4.

Of the nineteen levels that were assessed, eighteen were deemed suitable for pollen counting. Sample 22 (0.95-0.96) contained exceptionally sparse levels of pollen and no usable data was produced from the assessment of one 22 x 22mm cover slip.

Although all the slides contained a large amount of inorganic material this did not impede identification of pollen and non-pollen palynomorphs. The range of arboreal pollen identified was relatively diverse and consisted of *Alnus glutinosa*, *Quercus*, *Pinus*, *Salix*, *Fraxinus*, *Betula*, *Fagus*, *Ulmus* and *Tilia*. The most frequently recorded arboreal types were *Alnus glutinosa*, *Salix and Quercus*. *Corylus avellana*-type represented the shrub communities.

The range of anthropogenic and disturbed ground indicators was comparatively diverse and included *Plantago lanceolata*, *Rumex acetosalacetosella*, *Chenopodiaceae*, *Avenatype*, *Hordeum sativum* and *Linum*-type (possibly *Linium catharticum*).

The number of other herbaceous types was quite assorted and included Poaceae, Caryophyllaceae, Apiaceae, Asteraceae, *Anthemis*-type, *Centaureae*-type, *Serratula*-type and *Taraxacum officinale*. Poaceae was the most frequently recorded pollen type throughout the assessment.

Indicators of wet/damp ground conditions were represented by Cyperaceae, *Sparganium erectum*, *Typha latifolia* and *Filipendula*. The non-pollen palynomorphs were represented by *Pteridium*, *Polypodium*, *Sphagnum*, *Filicales* and the presence of Types 207, 128, 88, 184 and 114. Microscopic charcoal was present and reasonably well represented in all the levels assessed.

Maxey Western Extension	Cample	donth (am)																
Maxey Western Extension	Sample 17	depth (cm) 18	18a	19	19a	20	20a	21	21b	21c 5-6	22	22a	220	24	24a	25	26	27
	0.11-0.33	0.03-0.04		0.15-0.25		0.15-0.22		0.04-0.05		0.65-0.56	0.12-0.38	0.45-0.58	0.70-0.77	0.13-0.25		0.9-0.18	0.6-0.20	0.0-0.23
Arboreal	1										0.7							
Alnus Betula		1	1	1		1		1	1	2	27	21 1	2	3	1	1	2	3
Fagus		l i	1				1			'								
Fraxinus		l '	1			2			3			1		2	1		1	
Pinus		١.		1			1		2	2	_	_		_		_	4	
Quercus	2	2	1		1	4	2			7	2	2		3	1	3	2	3
Ulmus Tika										1 3	1	2	1	1 1	2	1	1 1	3
Salin			9		2	1	1 1		1	Ť				2	2			1
Broken Pinus							1			1		2			_			
Shrubs dwarf shrubs																		
Corylus avellana-type	3	3	2			1	2			21	22	19			2	4	3	8
Disturbed ground human activity																		
Avena type	Ι.					_		1						l .				
Hardeum sativum	1 1		4	3	2	3 4	2		-		_	4	1	8	1	19		4
Plantago lanceolata Urtica	2		4	3		4	- 6 1		2 2		5 2	4	1 1		1	18	2	- 4
Chenopodiaceae	1			2	5	2	5		_	3	2	1		10	13	4	3	7
Rumex acetosa acetosella	3			_	1	-	_				4			1			-	·
Potentilla	2					1	1		3	1						1		1
Linum-type	2			2	1	6	3							3	6	2	1	
Ranunculaceae	5	l	2	2	1	5	3		2 7	7	1 1	2			4	3	1 1	2
Artemisa Grass and herbs	2				1	1			7		1			1		2	1	3
Grass and herbs Poaceae	23	- 4	29	40	17	22	60	8	26	27	13	19	8	24	9	21	A	15
Anthemis	23	1	Z9	13	1 17	22	62 3	8	∠5	Zf	13	19	"	24	9	∠1	4 2	150
Apiaceae	4			1	3	8	14		4	2	1 1			1 1	1	1	-	
Asteraceae	1	1			2	1		1 1		-	"			4	1	1	5	2
Caltha palustris			2			1												
Cirsium	3		3	1	1	2	l											
Centaureae type	2			_	2	_	١				_				_			,
Caryophyllaceae	6	1	4	1		2 5	4		10 2	2 4	1 1			6	2	2		1 1
Rosaceae Rumex obstusifolius	1		1	1		9	8		2	4	4	1	1	6		2		2
Senatula type	2																	
Papaver rhoeas	1																	
Galium	2		1							1								
Mentha									1							_		
Plantago coronopus			_		1		1				1 1			1 1		1		
Succisa Sinanis		1	2				4											
Scabiosa		l '							3				1					
Wet damp ground and aquatics	1						Ì											
Misophyllum verticillum	i	İ	ĺ				İ	İ			7	8			1			1
Сурегасеве	3		13	3	3	7	11	1	14	9	2	9	1	7	8	8	5	4
Sparganium erectum									6	2	1			1				
Filipendula	1		2		1	8	7		12	3				2		1	1	2
Typha latifolia			1		1		2	_	2	10								
Decay resistant	0.4	<u> </u>			20	20					_		_	44	24	40		
Lactuceae Taraxacum	24 17		1	2 15	36 63	22 22	14 32				2	8	1 1	14 31	21 37	18 27	6 17	1
Spores and NPP	1 18			13	Du	- 22	O.E.		l .		24	-		31	- 31	Z.I	117	
Filicales	İ				1	1	1	2				2	1		1		1	
Polypodium								1 1				3	1	1 1			1 1	
Sphagnum	1		1		1	2	1								1			
Pteridium		l					1			1					1	2		
T128		١.				_	_	6	2	4	1 1	1		1 1			l . I	
T207 T184	11 4	3				6	2		2	0	2	Ō		2	2	4	4	3
T114	8			2		2	3		5	10	5	8	7	3	2	1	6	6
T143	"					-	I ~		~			_	1	"	_			~
T112	1			5			l											
T88	2	1	4	1		1	1		1	4	1	1	3	5	1	1	3	2
Sordaria spore		1					l											
Caryospora callicarpa		<u> </u>												3				
Spike charcoal and preservation									400	70	40	6.4	- CVE	20	20	4.4		4.00
Lycopedium C G 50	30 8	19 7	21 3	9 10	16 7	14 10	24 7	115 8	18 13	72 7	16 12	54 2	65 3	33 15	28 15	11 5	53 3	12 16
C L 50	14	28	24	25	28	25	33	17	7	15	12 48	8	16	28	29	22	16	20
		1	~	1	5	2	1	1 7	3	1	3	1	1	0	1	1	1	1
UN organics	2	4	1	1	4	7	7	10	7	7	7	2	5	15	3	3	9	6
UN organics UNS	2 13	79		13	42	38	42		39	14	38	18		42	26	27	14	28
UNS WP	13 45	"	10				l		_	1		l .	I	1	1	ı		<u> </u>
UNS WP C1	13 45 5	7	2						5									
UNS WP C1	13 45 5 10		2 11	4	3	2	13	2		6	8	2		7	10	4	2	3
UNS WP C1 C2 C3	13 45 5	3	2	4	4	3	4	1	6	5	2	4		3	7	9	3	2
U N S WP C1 C2 G3 G4	13 45 5 10 6		2 11 3		4	3 1	4 3		6 0	5 0	2 5	4 18	,	3 1	7 2	9	3 1	2 1
U N S C1 C1 C2 C3 C4 C4 E5	13 45 5 10 6	3	2 11 3	4 6	4 1 11	3 1 7	4 3 13	1 1	6 0 9	5 0 8	2 5 4	4 18 7	4 7	3 1 3	7 2 6	9 0 4	3 1 2	2 1 6
U N S CT CT CT CT CT CT CT CT CT CT CT CT CT	13 45 5 10 6	3	2 11 3		4	3 1	4 3	1 1	6 0	5 0	2 5 4 7	4 18		3 1	7 2	9	3 1	2 1
U N S C1 C1 C2 C3 C4 D5 D6 D7 BR 8	13 45 5 10 6	3	2 11 3		4 1 11	3 1 7	4 3 13 9	1 1	6 0 9 1	5 0 8	2 5 4 2 5	4 10 7 6		3 1 3	7 2 6 10	9 0 4 10	3 1 2 13	2 1 6 2
UNS WP C1 C2 C3 C4 E5 D6 D7 BR 8 BR 9	13 45 5 10 6 1 2	3 1	2 11 3 3 4 15	6 2 1	4 1 11 1 6	3 1 7 4	4 3 13 9 1 17	1 1	6 0 9 1 1 7	5 0 8 4 12	2547252	4 18 7 6 6 12 1	7 3	3 1 3 1	7 2 6 10 5 5	9 0 4 10 2 4	3 1 2 13 1 7	2 1 6 2 1 1
U N S T WP C1 C2 C3 C4 E5 D6 D7 BR 8 BR 9 BR 9	13 45 5 10 6	3 1	2 11 3 3 4	6	4 1 11 1	3 1 7 4	4 3 13 9 1	1 1	6 0 9 1 1	5 0 8 4	2 5 4 2 5	4 18 7 6 6 12	7	3 1 3 1	7 2 6 10 5	9 0 4 10 2 4	3 1 2 13 1 7	2 1 6 2 1 1
U N S G WP C1 C2 C3 C4 D5 D6 D7 BR 8 BR 9 CR 10 CR 11	13 45 5 10 6 1 2 3	3 1 1 4	2 11 3 3 4 15	6 2 1 21	4 1 11 1 6	3 1 7 4 15	4 3 13 9 1 17 1 80	1 1 1	6 0 9 1 1 7	5 0 8 4 12 46	2 5 4 2 5 2 24	4 10 7 6 6 12 1 35	7 3 10	3 1 3 1 3 52	7 2 6 10 5 5 1 30	9 0 4 10 2 4 1 55	3 1 2 13 1 7 1	2 1 6 2 1 1 1 1
U N S C WP C1 C2 C3 C4 C5 C5 C6 C7 C7 C7 C7 C7 C7 C7 C7 C7 C7 C7 C7 C7	13 45 5 10 6 1 2 3 31	3 1 1 4 2	2 11 3 4 15 39	6 2 1 21 3	4 1 11 1 6 1 46	3 1 7 4 15 47	4 3 13 9 1 17 1 80	1 1 1 6	6 0 9 1 1 7 32	5 0 8 4 12 46 5	2 5 4 2 5 2 24 7	4 10 7 6 6 12 1 35	7 3 10 3	3 1 3 1 3 52 8	7 2 6 10 5 1 30 30	9 0 4 10 2 4 1 55	3 1 2 13 1 7 1 19	2 1 6 2 1 1 1 18
UNS WP G1 G2 G3 G4 D5 D6 D7 BR 8 BR 9 GR 10 GR 11	13 45 5 10 6 1 2 3	3 1 1 4	2 11 3 3 4 15	6 2 1 21	4 1 11 1 6	3 1 7 4 15 47 10	4 3 13 9 1 17 1 80 5	1 1 1	6 0 9 1 1 7	5 0 8 4 12 46 5	2 5 4 2 5 2 24	4 10 7 6 6 12 1 35	7 3 10	3 1 3 1 3 52	7 2 6 10 5 5 1 30	9 0 4 10 2 4 1 55	3 1 2 13 1 7 1 19 2	2 1 6 2 1 1 1 1

Table 4: Total pollen and NPP count data

5.4 Interpretation

Interpretation of the pollen

The combined pollen data has not been placed into a zoned pollen diagram because the assessment level counts (the area of a 22 x 22mm cover slip) are too low for statistical significance and, if plotted into a pollen diagram, the graphed curves would be misleading.

The range and frequency of identified and recorded arboreal types was reasonably diverse and consisted of *Alnus glutinosa* (alder) *Pinus* (pine), *Quercus* (oak) *Fraxinus* (ash), *Salix* (willow), *Betula* (birch), *Fagus* (beech), *Ulmus* (elm), *Tilia* (lime). Alder recorded the highest counts overall, but oak was the most frequently observed arboreal type and recorded in fourteen of the eighteen levels. The range of arboreal types suggests two contrasting ground conditions, wet/damp and dry present across the Maxey Western Extension site.

Arboreal types such as alder, oak, willow and ash are commonly characteristic of moist/wet ground conditions and the presence of these types most likely represents areas of wetter mixed woodland or woodland stands that occurred around the site. The dominant presence of alder throughout the assessment data suggests wet or damp ground environments were prevalent, as alder is native to stream-sides, marshy ground, wet thickets, hedges, wet oak woods and river banks. The evidence for damp ground is further suggested by increased frequencies in oak frequently concurrent with the presence of willow. The frequencies of damp-tolerant arboreal species recorded during the assessment may be indicating an ecological limit as alder, oak, willow and ash can tolerate damp conditions but not waterlogged ground.

The second group of arboreal types, such as pine, birch, beech, lime and possibly elm are characteristic of drier or faster draining ground conditions. Birch, beech and pine commonly inhabit sandy substrates, although the frequency of these types recorded during the assessment is relatively low and may suggest that drier areas or drier conditions were less widespread or extensive throughout the area, beech, lime, elm and particularly birch were not very common. The lack of these types can also be indicative of the damp ground conditions, as the ground may have periodically been too wet for these types to become established. The birch populations would be more likely to inhabit the dryer and more freely draining locations of the surrounding areas.

The arboreal pollen describes an area of mixed deciduous woodland, or localised woodland stands. *Filicales* and *Polypodium* palynomorphs provide additional evidence for areas of shaded woodland cover within the sample site. These ferns frequently form part of the understory component to the woodland. The overall frequency of identified arboreal pollen is relatively limited and this may reflect an area where the presence of trees was less dense, possibly due to well-established agricultural practices of grazing and arable activity. Alternatively the sample site may have been frequently inundated with water which proved to be too damp for trees to successfully establish a more extensive presence. However, increased wetness of an area can be achieved via other processes eg rise in watertable or by direct precipitation input.

The record of the shrub and woody climber types was limited to *Corylus avellana*-type (hazel). However, hazel was recorded in twelve of the eighteen levels assessed. Hazel is a versatile plant that can inhabit numerous environments and indicates a range of possible landscapes. The hazel may represent the understory component of open woodland around the site. However, the presence of hazel from levels with low representations of arboreal types most likely indicates open or cleared environments within and around Maxey Western Extension. Farming activity such as grazing and

arable agriculture may be a likely cause of the open areas and hazel is a frequent component of managed hedge communities, although natural openings cannot be entirely dismissed for promoting the hazel. The presence of hazel could also represent scrub communities on the river/stream terraces and overbank deposits as hazel is tolerant of damp ground conditions. The low frequency of the recorded shrub species may be a response to the local ground conditions as these types are common on all but very acidic, very dry or very waterlogged soils (Clapham *et al* 1957; Stace 1997).

The herbaceous pollen were the most widely represented types recorded during the assessment. Poaceae (grasses) were the dominant herb in frequency (ie recorded in all levels assessed) and quantity (ie recorded the highest counts). Other herbaceous pollen included Caryophyllaceae (pink or carnation family), Apiaceae (carrot family), Anthemistype (chamomile family), Rosaceae (rose family including many edible fruits) and Plantago lanceolata (ribwort plantain). The Apiaceae types could have been available as a gathered food source as cumin, parsley, carrot, dill and fennel are all members of this family. Additionally Rosaceae, including raspberry and blackberries could have been available as a gathered food source for human groups close by. However, the Rosaceae family is extensive (3000+ species) and includes many non-edible plant types; therefore it is not certain that the identified Rosaceae types are associated with human activity. Apiaceae (carrot family) was also present and again may be a further indication of an edible resource associated with human activity. However, as with Rosaceae, Apiaceae is a huge family and may represent non edible species that are naturally occurring in the vegetation composition of the site. Caryophyllaceae (pink family) are recorded frequently from almost all locations throughout the study site, adding further weight to the interpretation of open, damp and rough ground environments. The environment indicated by the herbs is principally open and is dominated by grassland with ample evidence to suggest damp to wet marshy conditions with limited evidence for some standing water. Furthermore the presence of Cyperaceae (sedges) is additional evidence for an open wet or damp environment.

The variety of aquatic types recorded indicates a range of wet environmental conditions have been present throughout the study site. *Myriophyllum verticillatum* (whorled watermilfoil), *Sparganium rectum* (bur-reed) and *Filipendula* (meadow sweet) are present intermittently and these types indicate slow moving streams, ditches or still open bodies of water such as pools, lakes or ponds. An additional indicator of standing water was the occurrence of *Typha latifolia* (reedmace – more commonly known as "bulrush") which is in indicative of fens and swampy environments. There was associated evidence for pastoral activity *Rumex acetosalacetosella* (sheep and common sorrel) (Behre 1981) near to these settings that could suggest that these areas were being utilised by livestock

Pollen types associated with human activity were relatively abundant in frequency and variety. The pollen types such as *Plantago lanceolata* (ribwort plantain) and Chenopodiaceae (goosefoot family) often indicate ground disturbance as a result of farming activities. These indicator types were recorded from fifteen of the eighteen levels during the assessment and suggest almost continuous human activity throughout the time period represented by the samples. The presence of these pollen types may suggest that the human impact was long term and extensive across the area, possibly indicating a fairly intensive use of the landscape. *Plantago lanceolata* (ribwort plantain) can indicate pastoral activity, as this plant is trample tolerant. Further evidence of pastoral activity is indicated by the presence of *Rumex acetosalacetosella* (sheep and common sorrel) (Behre 1981) and Ranunculaceae (buttercup family). Arable activity was represented by the presence of *Avena*-type (oats) and *Hordeum sativum* (barley). The presence of oats and barley suggests that the farming preference was most likely a mixture of animal grazing and cereal crop production. However, the range of cereal

pollen types recorded during the assessment was not extensive and *Tritium*-type (wheat) and *Secale cereale* (rye) were absent. This may reflect the wetness of the site as these latter cereals are not wet-tolerant. *Linum*-type probably *Linum catharticum* (fairy flax) was recorded and this can be viewed as additional evidence of human activity at the site as it was frequently used for dying fabrics. Fairy flax is known to grow on sandy substrates and may be a natural component of the local vegetation composition. Therefore this is a tentative interpretation.

Taraxacum officinale (dandelion) was recorded in thirteen levels and was the second most frequently recorded (actual grains) pollen type during the assessment. Dandelions are common components of pasture which could be related to human activity. However, Taraxacum officinale is decay-resistant and the high quantities recorded during the assessment may reflect the longevity of preferential preservation rather than human activity. The frequency and quantity of Taraxacum officinale recorded during this assessment suggests that some post-deposition erosion of the pollen has occurred

The non-pollen palynomorphs recorded throughout the assessment were comparatively well represented and support the interpretation produced from the pollen identifications. *Pteridium (*bracken) and *polypodium* (polypody) are common components of woodland environments and were recorded in low frequencies, and this possibly relates to the limited quantities of arboreal pollen recorded in the assessment. *Sphagnum* (mosses) and *Filicales* (ferns) were both recorded and can indicate open and damp environments. Additionally, bracken and polypody are often found in open environments and some of these may be a component of the open environment indicated by the herbaceous types. Polypodies are often found in damp/wet environments and this may further support the interpretation of open damp environments suggested by the pollen record.

Non-pollen palynomorphs types 207 (spore associated with arboreal communities) and *Sordaria* indicate a varied spore community living on and around the site. The identification of *Sordaria*, a microscopic fungus was important as it is commonly found on the faeces of herbivores and is further evidence for pastoral activities at the site. The presence of Type 114, a Scalariform perforation plate, occurring in vessels of *Alnus glutinosa* and *Corylus avellana*-type means that it is likely that some wetting phases occurred as Type 114 is produced by decomposing wood during fluvial transport prior to deposition in sediments (van Geel 1998).

The occurrence of Type 143 has been associated with soil samples dated to the Roman period (van Geel 2003), which adds further weight to a post Late Bronze Age date for many of the sediments from Maxey Western Extension site (Fig 12a).

Further evidence for decaying wood of various tree types was suggested by the presence of *Caryospora callicarpa* (van Geel 2006). Type 88 records a number of mandibles that attest to the presence of various invertebrates throughout the site as shown (Fig 12b). Microscopic charcoal (both <50 μ m and >50 μ m) was recorded at every level assessed and the frequency of concentrations was relatively high suggesting burning may have been a regular feature of the land-use regime at the site.

Although suggesting a chronological period from palynological analysis alone is hazardous, the sequence represented here is considered to post-date the Late Bronze Age c 3500 Cal BP. This is based on the relatively low presence of arboreal pollen and the overall character of the assemblage. Because the samples came from a range of geoarchaeological features they may not all come from the same period. Therefore this assessment summary could in fact be conflating data from several different time periods.

Pollen Taphonomy

The range of pollen and non-pollen palynomorph taphonomy was relatively diverse and suggests this is a complex site. The preservation condition of the pollen is listed as one of the key features for determining potential for full analysis of palaeobotanical remains as part of the assessment stage of MAP2 projects (English Heritage 1991). Examples of the different preservation conditions are shown in Fig 12c; however this figure does not display all of the categories.

The preservation condition of the pollen varied throughout the Maxey Western Extension site as shown in Table 5. The degree of preservation is an important indicator value (Jones 2007) that most likely reflects the differential deposition and post-deposition conditions across the site. The frequent wetting, drying and ground disturbance by farming on and around the site could promote bacterial activity that reduces the preservation potential of the pollen. It is worth considering that when the preservation condition is poor some pollen types may be completely absent from the preserved record and this could produce a biased vegetation reconstruction.

	Table 5:	Preservation	percentages	of poller
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Maxey Western Extension	Percentage
WP	26
C2	7
C3	4
C4	2
D5	6
D6	5
D7	1
BR 8	7
BR 9	1
CR 10	37
Unidentified	5

(classification based on Delcourt & Delcourt 1980)

Well preserved (WP) pollen was recorded in relatively high frequencies (26%) and this denotes that many grains had no observable deterioration and indicates good preservation potential. However, the most frequent preservation condition of the Maxey Western Extension pollen was partly crumpled (37%). This indicates that numerous pollen grains had suffered mechanical damage due to compaction of the pollen within the sediment, particularly resulting from the progressive extrusion of water (Delcourt and Delcourt 1980). Furthermore corrosion and degradation (category C and D) of the pollen was frequently recorded and indicates biochemical oxidation related to fungal/bacterial activity and/or chemical oxidation within aerial and sub-aerial environments which occur throughout Maxey Western Extension. Therefore the representative preservation condition of pollen describes deterioration of the pollen grains and is indicative of phases of wetting and drying where the combination of dehydration and chemical oxidation has eroded some of the pollen spectra.

Much of the pollen examined during the assessment did display damage commonly associated with bacterial and mechanical deterioration. This damage could relate to overbank flooding activity in terms of mechanical damage via fluvial transport to the site, but is most likely to be related to bacterial damage resulting from exposure to the air in a

predominantly sandy substrate. However, overall the pollen is well-preserved and the damage noted during the assessment did not impede identification.

Conclusions

The conclusions presented here are tentative, given that these are the results of an assessment only. The pollen evidence indicates that open herbaceous grassland environments were dominant, although some mixed woodlands/woodland stands were present but not extensive. There is ample evidence from the pollen that indicate damp and/or wet ground. This interpretation is supported by the non-pollen palynomorphs that suggests waterlogged ground and pooled or standing bodies of water. The pollen record appears to post-date the major periods of woodland clearances potentially dating to late prehistoric-early historic periods.

The open landscape appears to have been farmed via grazing and cereal production of oat and barley although cereal production appears to be quite limited throughout the site. The long term wet ground conditions most likely reflect local hydrological controls that to some extent determined the vegetation composition. Throughout the assessment relatively low arboreal frequencies were recorded, along with relatively high grasses, sedges and varied herbs, but with consistent human activity indicators and this vegetation composition describes a mosaic landscape consisting of open mixed woodland stands and areas utilised for pasture and arable activities. The evidence for pastoral activity was further supported by the presence of Sordaria, a microscopic fungus associated with herbivore faeces. The constant presence of microscopic charcoal indicates that burning was common throughout the site. However, due to the near continuous presence of anthropogenic indicators it is tentatively suggested that human land-use practices may have utilised fire, although attributing a definitive cause to the fire activity remains tentative.

The preservation condition of the pollen indicates that some post-deposition erosion of the pollen assemblage has occurred, which may explain the relatively restricted diversity of pollen types. However, due to the high frequency of well preserved pollen further work on these samples is recommended.

6 PROPOSALS FOR FURTHER ANALYSIS

6.1 The structural record

The first requirement is the integration of this analysis with the foregoing analysis for Phases 1-5 of the previous Maxey Quarry and, in due course, with the results of the remaining work in the Western Extension. The stratigraphic data thus cross related can be considered in terms of larger field systems which in individual phases are hard to identify owing to a paucity of dateable material.

The small number of demonstrably early prehistoric pits need to be joined with the overall site distribution to see if there is any chronological shift in the pattern of pit digging and see if it can be related to discrete monument hinterlands.

The undated pits need to be considered on spatial and morphological grounds to see if they are likely to have been early prehistoric in their excavation, or if they relate to the later activity that dominated this part of the site.

The character of the Iron Age settlement and its enclosures needs to be considered in terms of site evolution and evidence for possible seasonality needs to be considered along with the duration of the occupation. It is notable that the occupation is situated on slightly higher ground than had been present in the previously examined areas to the east and this factor should be considered in terms of the proposed extension to the south.

The presumably Roman co-axial field system, the limited dating evidence points to such a date, should be considered in association with the data from the east and in light of the activities now known to the south (Holmes *et al* 2009). It may be possible to consider both the process of expansion onto this marginal ground and perhaps, given the size of the study area, some consideration of trying to identify individual land holdings.

6.2 Neolithic and Bronze Age pottery

Introduction

The earlier prehistoric pottery from the Maxey Quarry (West) pit complex comprises a well-excavated and well-documented assemblage of national importance. The collection should be studied with a regard to investigating the Neolithic to Bronze Age ceramic sequence in the east Midlands against a clear stratigraphic and spatial distribution supported by radiocarbon dating.

The collection strategies employed ensure that the ceramics will be free of recent external contaminants and thus sherds from selected vessels and contexts should be subjected to absorbed residue analysis by a respected researcher. This will allow an economic assessment of the pottery as well as identifying possible differences in use and/or deposition through time and/or space. This work should follow on from the main block of ceramic analysis.

Little systematic work has been undertaken on provenancing studies with regard to earlier prehistoric pottery from the Fen edge. This assemblage offers the opportunity to test for locally made and imported ceramics and to assess the significance of these results against the stratigraphic information.

The assemblage warrants publication in a national outlet and consequently a fully illustrated report must be prepared. This must take account not just of the minimum number of individual vessels present and the affinities of the ceramics, but also of the stratigraphy of the pottery, the radiocarbon dating sequence and the results of the scientific analyses mentioned above.

Objectives of the analysis

To rationalise the assemblage by laying out the material by context and fabric.

To examine the sherds for joins to allow the complete or partial reconstruction of pots and to allow the estimation of minimum numbers of vessels.

To search for cross-context joins and/or sherd groups to shed understanding on the methods of deposition within the pits.

To commission a report on the thin section analysis of the ceramics.

To commission a report on the absorbed residue analysis of the ceramics.

To commission a full radiocarbon dating sequence on securely stratified material associated with the pottery.

To prepare a full report on the nature, importance, chronology, internal stratigraphy and context of the pottery to publication standard once the results of all the specialist reports and dates have been received.

Method

The pottery will be unpacked and laid out by context and by fabric within context groups. Joining sherds will be partially reconstructed using a good quality acetone-soluble adhesive. Similar fabric types from different contexts will be examined for joins and/or other evidence to suggest same vessel groups. Library research will be undertaken to establish parallels and regional comparanda for the material.

A report will be prepared to publication standard based on the above researches.

6.3 Non-early prehistoric pottery

The assemblage needs to be studied against the horizontal and vertical stratigraphy of the site to determine whether the provisional dating of the individual contexts can be refined and some form of fabric seriation determined.

Other possible earlier prehistoric pottery should be re-examined by Alex Gibson and incorporated in that archive.

6.4 Flint

No further work is recommended other than a summary of worked flint from all phases.

6.5 Small finds

None of the small finds are likely to yield much additional information other than the pieces of Bronze Age metalwork and the polished stone axe fragment. The former pieces should be more closely paralleled and dated and the axe fragment should be identified petrologically.

6.6 Mammal bone

Although the numbers of identified bone in the assemblage from 2008 may be modest, when analysed together with the bone samples from the 2000-2007 excavations (see Animal Bone Assessments produced by Armitage in Meadows 2006 and 2008) the material will provide useful additional insight into the dietary habits, food procurement strategies and livestock husbandry practices of the site inhabitants.

6.7 Pollen analysis

The preservation condition of the pollen indicates that some post-deposition erosion of the pollen assemblage has occurred, which may explain the relatively restricted diversity of pollen types. However, due to the high frequency of well-preserved pollen further work on these samples is recommended including extended counting of selected contexts.

7 DISCUSSION

This area of the Maxey Quarry recording action contrasted with the areas already excavated to the east, insofar as they were further from the early prehistoric monumental landscape. The area is also more elevated, reaching 10m aOD. The change in the revealed archaeological remains is readily apparent, as there are significantly fewer pits of early prehistoric date, leaving only an Iron Age farm and the probably Roman co-axial field system on the highest ground.

The Iron Age farm was unenclosed and it was unclear whether it was an extended period of occupation, as it was possible to suggest a developing enclosure pattern. The Roman system of ditches interestingly incorporates the eastern boundary of the Iron Age farm, suggesting perhaps that the boundaries defined by the farm were still evident, perhaps as hedges, and at the social level were still to be respected.

That the palaeochannel courses are with a single exception crossed by the Roman ditch system suggests that, apart from during episodes of extreme flooding, the channels are dry. There is, however, evidence to suggest that episodes of extreme flooding were not uncommon in that many of the ditch fills were predominantly clay, possibly alluvial derived material.

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APPENDIX 1: TABULATED DATA FOR PITS

Feature	Fills	Diameter (m)	Depth (m)	Pot	Bone	Ceramic date	Comment
34	35	0.6	0.27				
52	53	0.95x 0.7	0.1				
54	55, 56	1.2	0.54	*		E Neo	Cut by pit 57
57	58, 59						Cuts pit 54
60	61, 62	1.1	0.3				Tree hole
92	93	0.76x0.56	0.37				Posthole
94	95	0.74x0.58	0.3				Posthole
96	97	0.69x0.55	0.24				Posthole
98	99	1.6x0.6	0.2				Tree hole same as 100
100	101						Tree hole same as 98
102	103	0.6x0.4	0.2				Tree hole
106	107						Tree hole same as 108
108	109	0.8 x 0.6	0.17				Tree hole
118	119, 120	1.5 1.1	0.24		*		
128	129, 130	1.63 x 0.4	0.43				Tree hole
152	153	1.22 x 0.94	0.26	*	*	IA	
178	179,	1.8	0.9		*		Cuts ditch 174
	180,						
	181,						
	182,						
000	183, 184	0.50	0.04				Deathala
200	201, 202	0.53	0.24	*	*	DAG	Posthole
209	210, 211	1.1	0.27	^	^	BA?	Posthole
212	213, 214	0.8	0.29	*	*		Posthole
215	216	0.56	0.13				Posthole
217	218, 219, 220, 221	2.0	0.62				
222	223, 224, 225	0.72	0.48				Posthole?
231	232, 233	2.66	0.36	*	*	Beaker?	Cuts pits 234, 237
234	235, 236	1.05	0.42	*	*	IA	Cut by pit 231 and cuts pit 237
237	238, 239	1.8	0.5	*	*	IA	Cut by pits 231, 234
271	272	1 x 0.98	0.23				Possible tree hole
293	294, 295	0.75 x 0.8	0.38				
296	297, 298	1.94	0.53				
299	300, 301	0.82 x 80	0.14				Burnt stone present
302	303	0.61	0.04				Burnt stones present
304	305	1.0 x 0.9	0.13				Possible tree hole
311	312,	1.39	0.57				
	313, 314, 315						
327	328, 329	1.4	0.26				Tree bowl
330	331, 332, 333	2.8 x 1.9	0.52				Cut into palaeochannel fills
334	335	0.45	0.16				? Post-pit
336	337	0.38	0.2				Post-pit
342	343, 344	0.76	0.14	*		IA	Post-pit
361	362	0.66	0.12				·

Feature	Fills	Diameter (m)	Depth (m)	Pot	Bone	Ceramic date	Comment
363	364, 365	1.0	0.37				
366	367, 368, 369	0.81	0.48				
370	371, 372, 373	7m x 1.2	0.31				Banana-shaped slot
374	375	0.72	0.08				Burnt stones present
380	381	1.0 x 0.9	0.28				,
389	390, 391	0.9	0.3				
401	402, 403, 404, 405, 406	1.47	0.69		*		
407	408	0.8	0.18				
412	423	0.5	0.12				
420	421, 422, 423	3.1	0.55	*	*	BA?	Cut by ditch 418
424	425	0.52	0.43				
426	427, 428, 429, 430	1.45	0.6	*	*	BA?	Cut by pit 431
431	432, 433	0.95	0.5				Cuts pit 426
443	444	1.28	0.23		*		Tree hole with flint flake
445	446, 447, 448, 449, 450, 451	2.6					Cut by pit/tree hole 452
475	476	0.55	0.16		*		
502	503	1.22	0.25				
506	507	2.5 x 1.5	0.12				Tree hole cut by ditch 504
510	511, 512, 513	0.77	0.32				Pit or post-pit
516	517, 518	1.22	0.38				
519 521	520 522, 523, 524, 525	3 x 1 1.9x1.6	0.14		*		Possible natural feature
526	527	0.58	0.12				Tree hole
545	546	0.86	0.35		*		Tree hole
590	591, 592	3 x 2m	0.55		*		Pit cutting ditches 586, 588
603	604	0.55	0.23				Small pit or post-pit cutting slot 605
605	606	1.25	0.15	*	*	E PREH	Short slot cut by 603
623	624, 625, 626, 627, 628	4.2x3.6	0.7	*	*	IA	Large pit identified in the evaluation see also 629
629	630, 631, 632, 633, 634	4.2x3.6	0.7	*	*	IA	Same as pit 623
635	636, 637	0.76	0.54				

Feature	Fills	Diameter	Depth	-	ш	Ceramic	Comment
		(m)	(m)	Pot	Bone	date	
					ē		
644	645,	3.7	0.9	*	*	IA	
	646,	0	0.0			" `	
	647,						
	648, 649						
651	650,			*	*	IA	Same as 644
	652,						
	653,						
	654,						
	655, 656						
678	679,	0.6	0.28	*	*	Pboro	
	680,					ware	
	681, 682						
683	684,	0.8	0.35	*	*	Pboro	
	685, 686					ware	
725	726, 727	1.4	0.6				Pit cut and truncated by
							later features 721, 723,
							728,
743	744, 745	1.04	0.35				Tree hole
778	779	1.1	0.23				
780	781, 782	0.92	0.18				Infill included burnt
							material
783	784,	1.08	0.4	*	*	IA AND	
	785, 788					?NEO	
853	854	0.6	0.28				Tree hole
866	867, 868	0.37	0.23				Post-pit
869	879	0.38	0.2				Post-pit
885	886	0.42	0.2				Post-pit
887	888	0.52	0.19				Post-pit
901	902, 903	0.9	0.2				
921	922	0.45	0.1				
923	924	0.71	0.15				
929	930,	3.0	1.0		*		
	931,						
	932,						
	933,						
	934,						
	935,						
	936,						
	937,						
0.10	938, 939	0.40	0.40				
946	947, 950	0.43	0.19				
948	949, 951	1.16	0.24				
972	973, 974	1.4	0.4				Doot wit
1035	1036	0.8	0.22				Post-pit
1037	1038, 1039	1.35	0.4				
1040	1039	1.05	0.32				
1040	1041,	1.05	0.32				
	1072						
2004	2005,	0.7	0.21	*		Beaker	
2504	2005,	0.7	0.21			Dealer	
2007	2008	0.84	0.15		*		
2009	2010	0.74	0.15		*		
2015	2016,	1.07	0.3		*		
	,		<u> </u>			1	ı

Feature Fills Diameter Depth Ceramic Comment Pot (m) (m) date 2017 0.9x0.8 2030 2031 0.08 * 2033 2032 0.9x0.5 0.1 2034 2035 0.81 0.18 2036 2037 0.22 0.88 0.9x0.7 2039 2038 0.1 2041 2040 0.8x0.6 0.08 2043 2042 0.4 0.05 2044 2045 0.91 0.22 MIA 2052 2053 0.78 0.11 0.31 IΑ 2054 2055 0.63 2057 2056 0.69 0.09 2058 IΑ 2059, 1.0 0.16 2060 2067 2068, 0.5 1.2 Pit cut by 2077 2069, 2070, 2071, 2072, 2073, 2074, 2075. 2076 2077 2078, 8.0 1.2 IΑ Pit cuts 2067 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091 2092 2093 2.2 0.6 IΑ Same as 2067 2094 2095 2096 2134 2135 0.24 0.06 Post-pit No relationship with 2136 0.9×0.8 0.28 IΑ 2137, 2138 2134 recorded 2154 2153 0.67 0.15 Cut by ditch 2150 2155 1.5x1.4 0.4 IΑ 2156, 2157 2169 1.64 x 0.95 0.3 IΑ 2168 2175 0.55x0.25 0.07 Cut by slot 2177 2174 2177 2176 6.5 x 0.65 0.18 Irregular linear slot. Cuts 2175 2178 2179, 1.0x1.3 0.54 Cut by ditch 2181 2180 0.44x0.35 0.08 Post-pit 2192 2193 2194 2195 0.36x0.32 0.12 Post-pit

Feature Fills Diameter Depth Ceramic Comment Pot (m) (m) date 2196 1.38x0.7 2197 0.11 2199 2198 0.3 0.6 2216 2217 0.7x 0.62 0.15 2218 2219, 0.59x0.54 0.41 2222 2221 2220 1.5x0.4 0.17 2229 2228 0.7 0.34 2236 2235 0.8 0.37 2238 2237 1.1 0.21 2240 2239 2.64 0.25 ĪΑ Cuts 2242 2242 2241 1.67 0.29 E-MIA Cut by 2240 2255 2256 0.74 0.44 Cut by ditches 2251, 2253 2257 2258 3 x 2.14 0.18 Tree hole overlying gully 2259 2271 2272 1.2x1.1 0.26 IΑ No relationship recorded with spread 2275 2275 10 x 15m flints Spread, possibly waterlain 2279 0.62 0.37 IΑ 2278 2281 2280 0.67 0.24 2283 2282 0.92 0.36 2321 2320 0.2 Cuts ditch terminal 2319 0.4 (2316)2324 2325, 1.06x0.95 0.27 2326. 2327 2341 0.43 0.13 2342 0.56 0.16 IΑ 2343 2344 Cut by ditch 2361 and 2370 2364. 0.9 0.74 cuts ditch 2372 in the 2365. main W/E sequence 2366. 2367, 2368, 2369 2374 2373 1.3 0.32 2387 2386 0.38 x 0.24 0.14 Post-pit 2389 2388 0.38 0.14 Post-pit 2390 2391 0.17 0.59 IΑ Post-pit 2393 2392 0.29 0.08 IΑ Post-pit? 2394 0.72x0.22 2395 0.05 Post-pit? 2397 2396 0.49 0.06 Post-pit? 2427, 8.0 Burnt stones/pot boilers 2428 0.15 2433. 2434 2462 2461 0.31 0.08 Post-pit 2464 0.12 x 0.11 0.09 Stake hole 2463 0.24 2466 2465 0.07 Post-pit 2468 2467 0.26x0.15 0.09 2470 2469 0.09 Post-pit 0.32 0.65x0.56 2472 2471 0.12 Post-pit 2474 2473 0.38 0.06 Post-pit 2476 2475 0.53 x 0.43 0.18 2478 2477 0.58x0.49 0.09 Post-pit

MAXEY QUARRY WESTERN EXTENSION ASSESSMENT

Feature	Fills	Diameter (m)	Depth (m)	Pot	Bone	Ceramic date	Comment
2480	2479	0.5	0.07				Post-pit
2574	2573, 2583	0.7	0.35	*		RB	Probably modern
2577	2576	0.72x0.64	0.22				
2639	2638, 2637	1.2	0.33	*	*	IA	
2645	2644	0.6	0.23				Cuts ditch 2482
2647	2646	1.4	0.15				
2671	2670	1.0	0.2	*	*	IA	
2715	2714	1.55x0.34	0.27	*		IA	Cut by ditch 2211
2717	2716	2.7 x2.2	0.2				Tree hole cut by ditch 2208
2719	2718						Same as 2717
2741	2740	0.85	0.45	*	*	IA	Pit cut by ditch 2743 at SW corner of enclosure

APPENDIX 2: TABULATED DATA FOR THE DITCHES

Definitive ditch numbers in bold

LOE – Limit of Excavation

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
004	010, 015, 019	0.38	005, 006	Cut by 007				N/S ditch cutting palaeochannel fills
007	021, 049, 070	0.35	008, 009	Cuts 004	*	*	RB mid late C2	N/S ditch cuts a palaeochannel fill
010	004	0.45	011, 012, 071	Cut by 070				
013	26	0.09	014					E/W ditch cuts palaeochannel fill
015	004	0.5	016, 017, 018					
019	004	0.42	020					
021	007	0.27	022	Cut by 023				
023	36, 264	0.22- 0.42	024, 025	Cuts 021 Cuts 019				E/W gully cut into top of palaeochannel fills
026	013	0.17	027					
028	063, 110 441?	0.28	029, 030, 031	Cut by 67				NW/SE ditch at NE corner of site
036	023	0.12	037, 038					
039		0.88	040, 041, 042, 044,	Recuts 045	*	*	IA	NW/SE Ditch in NE corner of site ?beaker pottery
045			046, 047, 048	Cut by 039				
049	007	0.26	050, 051					
063	028		064, 065, 066					
067	039	0.32	068, 069					
070	007	0.45	071			*		
079	039	0.8	080, 081, 082, 083, 084			•		
085	045		086, 087					
110	028	0.3	111, 112, 113,					
121	159		122	Cut by either 154				
123		0.4	125, 126	Relationship with 124 not observed		*		
124	174	0.5	127, 131, 132	Relationship with 123 not observed		*		

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
133	185 unclear relations hip with 319	0.42	134, 135, 136	Recut by 137				Length of NW/SE ditch
137	188 unclear relations hip with 319	0.15	138	Recut of 133				Length of NW/SE ditch
145	039/045?	0.73	146, 147, 148, 149			*		
154	123/124		155, 156, 157, 158	Cuts 159		*		
159	121		160, 161, 162	Cut by 154				
163	154, 123/124		164, 165, 166, 167		*		IA	
168	163, 123/124		169, 170, 171		*	*	IA	Corner of ditch
172	205, 774	0.5	173	Relationship with 174 unclear				
174	124	0.3-0.4	175, 176, 177, 190		*		IA	
185	133	0.29	186, 187	Cut by 188		*		
188	137	0.26	189	Cuts 185				
193	123/124	0.6	194, 195	Cut by 196				
196	123/124	0.6	197, 198, 199	Cuts 193		*		
205	172	0.56	206, 207, 208					
226	269, 278 457, 306	0.14	227	Relationship with 330 not observed				Long N/S ditch
228	253, 256	0.43	229, 230					W/E ditch by S LOE
249	262	0.21	250	Cut into top of palaeochannel				
253	228	0.36	254, 255					
256	228		257			_		
258	013	0.2	259	Cuts 260				01 11 11 11
260	283	0.08	261	Cut by 258				Short length of shallow gully prob largely lost through recutting
262	249	0.2	263					
264	023	0.13	265					D
266	023 or 249?	0.23	267, 268					Part of long W/E ditch cut into top of paleochannel
269	226	0.23	270					

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
273	316	0.84	274, 275, 276, 277, 285, 286	Cut by N/S ditch 278 (226)				Continuing line of 133
278	226	0.46	279, 280, 287					
281	226	0.24	282	Cuts 283				
283	260	0.12	284	Cut by 281				
288	028	0.37	289	Cuts 290				
290	226	0.4	291, 292	Cut by 288				
306	226	0.28	307					
308	013	0.38	309, 310	Probably cuts 338				Part of long W/E ditch
316	273	0.44	317, 318		*	*		
319	133, 137?	0.51	320, 321, 322, 323, 324, 325, 326			*		
338	359, 459	0.18	339	Cut by 308				Shallow N/S gully
340	013	0.24	341					
345		0.14	346, 347					Shallow W/E gully shown as longer on sketch plan than px plan.
352	376, 495, 394	0.35	353, 354	Cuts 355 , cut by 023				N/S gully between N LOE and gully defining line of a palaeochannel
355		0.26	356	Cut by 355				Short stump ? pit or butt end
357	023 or 249?	0.21	258					
359	338	0.12	360					
376	352	0.13	377	Cuts 378				
378	013	0.22	379	Cut by 376				
386	484, 486, 488, 763, 761		387, 388					N/S ditch single cut for most of length but 2 cuts 763 , 761 in mid section
392	023	0.27	393	Cuts 394				Gully in top of palaeochannel
394	352	0.26	395	Cut by 392				N/S cut
409	414, 418	0.3	410, 411					Short length of E/W gully
414	409	0.15	415					
418	409	0.47	419	Cuts pit 420	*			B A pottery
434	023 or 249?							
441	028	0.21	442					
457	226							

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
459	338	0.1	460					
461	023 or 249?	0.33	462, 463					
469		0.1	470		*			Short gully parallel to N end of 386
478	480	0.12	479					Short gully in top of infilled palaeochannel
480	478							
482	483							Short gully in top of palaeochannel infill, possible originally joined 478
484	386	0.28	485			*		N/S ditch
486	386	0.09	487					
488	386		489					
490	499, 547, 568, 555, 584	0.3	491	Cuts 579				W/E gully by S LOE
495	352	0.16	496					
499	490	0.2	500, 501					
531	550	0.16	532	Shown on plan as cut by 490				
533	770		534					
539	553, 561, 687, 695	0.17	540		*		RB C2	Shallow L- shaped gully
541	570, 615, 665, 657, 746,809	0.34	542, 543, 544	Cuts 579				
547	490	0.14	548, 549					
550	531	0.09	551, 552					
553	539	0.15	554					
555	490		556, 557					
557	575 500	0.00	550 500	0.4- 707 740	-	*		
558	575, 588, 638, 662, 673, 739, 736, 725, 728,	0.36	559, 560	Cuts 707 710 565		î		
561	539		562					
565	642, 659, 701, 713, 715, 750, 757, 1053, 1055, 1067	0.17	566, 567	Cut by 558 Cuts 707 , 710				
568	490	0.26	569					
570	541	0.42	571, 572, 573, 574					
575	558	0.23	576	Cuts ditch 565	*		RB C2	Part of major

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
								ALCO III II
	227 242	0.50		0.11.400				N/S ditch line
579	607, 619,	0.52	580, 581,	Cut by 490 and				N/S ditch
	667, 690,		582, 583	541				shaped like a
584	800, 845 490			Cuts 811, 698				latch lifter
586	739	0.24	587	Cut by 588,				
				Pits 590, 592				
588	736	0.14	589	Cuts 586, cut by pits 590 & 592				
593	811	0.28	594					
607	579	0.63	608, 609, 610, 611			*		Part of E side of major ditch complex
612	671	0.26	613, 614	Cut by 615 Cuts 619				Short gully along W side of 541
615	541	0.63	616, 617, 618	Cuts 612 & 619				
619	579	0.3	620, 621, 622	Cut by 612 & 615				
638	558	0.3	639, 640, 641					
642	565	0.5	643					
657	541	0.2	658					
659	565	0.36	660, 661					
662	558	0.46	663, 664		*		RB	
665	541	0.24	666					
667	579	0.7	668		*		RB C3-4	
669								
671	612	0.28	672					
673	558	0.38	674					
675		0.27	676, 677	Cut by 565	*		RB	
687	539	0.36	689	Cut by 690/579				
690	579	8.0	691, 692, 693, 694	Cuts 687 & 695	*	*	RB	
695	539	0.34	696, 697	Cut by 690/579				
698		0.29	699, 700	Cut by 579				Short length of gully
701	565	0.63	702, 703, 704, 705, 706	Cuts 707		*		
703								
707	730	0.43	708, 709	Cut by 565 , 558 , cuts 710		*		
710	733	0.41	711, 712	Cut by 707 , 565 , 558		*		
713	565	0.3	714	Cut by 723				
715	565	0.3	716					
717			720					
721								
723	558			Cuts 713				
728				Cut by 723 cuts 722, pit 725				

Fills Ditch **Equiv** Depth Relationships Ceramic Comment Pot to (m) date 730 707 0.29 731, 732 733 710 734, 735 0.32 734 588 0.25 737, 738 736 739 558 0.32 740, 741, 742 746 541 0.35 745, 748 751, 752, 750 Cuts 754 757 565 0.3 753 754 757 0.48 758, 759, Cut by 754 760 761 386 0.22 762 **Cuts 763** 763 386 764 Cut by 761 0.17 774 172 0.59 775, 776, 777 786 827, 797, 0.12 787 RB C2+ 1045, 1047, 1049 795 0.08 796 Cuts 797 Shallow later cut but only locally identified 786 Although cut by 797 0.24 798 Cut by 795 795 its depth is comparable to 827 800 579 0.5 801, 802, Cuts **804** 803 804 814 805, 806 Cut by 800 and cuts **807** 807 818 or 0.23 808 Cut by **804** Unclear which 811 of 811 or 818 this was 810 809 541 0.22 811 593 0.3 812, 813 Cuts 814 Cut by **579** 814 804 0.44 815, 816, Cut by 811 817 Cuts **818** 818 0.26 N/S ditch butt 819, 820 Cut by 814 end earliest cut in the sequence 825 0.09 826 Shallow N/S gully running from S LOE 827 786 0.37 828, 829, Prob equiv to 830 795 838 855, 862 0.18 839 Cut by 858 Cuts palaeochannel 840 W/E ditch by N LOE 845 579 0.52 846, 847

Part of latch-

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
								lifter N/S ditch
855 858	838		856, 857 859, 860, 861	Cuts 838				N/S ditch terminal running from N LOE
862	838		864, 865					
879	895, 889	0.6	880, 881, 882	Cut by 883	*	*	MIA + IA	? equiv 707
883	899, 893	0.16	884	Cuts 879				?equiv 701
889	879	0.54	890, 891, 892	Cut by 893	*		IA	
893	883	0.16	894	Cuts 889				
895	879	0.46	896, 897, 898	Cut by 899		*		
899	883	0.14	900	Cuts 895				
904	1,2	0.27	905		*	*	IA	
906	1023	0.85	907, 908, 909, 910, 911, 912	Cuts 913, (pit) 915, 918. prob a continuation of 879/883 but unclear which				
913	968, 970, 1043	0.3	914	Cut by 906				
915	See pits							
918		0.37	919, 920	Cut by 906 no recorded relationship with 1070				Short isolated length of gully on w side of 1070
925	prob a continuati on of 879/883 but unclear which	0.65	926, 927, 928		*	*	IA	
952	955, 958, 993, 995, 1064	0.34	953, 954	Cut by 1058				Early L-shaped cut
955	952	0.3	956, 957	No relationship observed with 958				
958	952	0.2	959, 960	No relationship observed with 955				
968	913	0.35	969	Cut by 970				
970	913	0.35	971	Cuts 968				
976	980, 983		977, 978, 979, 980		*	*	MIA	
981	976		982	Cuts 985	<u> </u>			
983	976		984	0.11.001	*		MIA	
985			986, 987, 988, 989, 990	Cut by 981				

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
993	952		994	No relationship observed with 995				
995	952		996	No relationship observed with 993				
1003	Prob same as 976	1.86	1004	Cut by 1005				
1005	Prob same as 985	1.86	1006, 1007, 1009	Cuts 1003	*	*	IA	
1010	1058, 1070, ?1003/10 05		1011, 1012, 1013, 1014, 1015, 1016		*	*	MIA	
1018	925 prob a continuati on of 879/883 but unclear which	0.81	1019, 1020, 1021, 1022	Cuts 1023	*	*	IA	
1023	925, ? 906	0.51	1024, 1025	Cut by 1018				Length of ditch poss terminating at junction
1026	1070	0.87	1027, 1028, 1029, 1030	Cut by 1031				Truncated N/S ditch terminal
1031	1076 or 1077 879 or 883	0.8	1032, 1033, 1034	Cuts 1026		*		E/W ditch line
1043 1045	913 1047, 786		1044 1046	No relationship observed with				
1047	1045, 786		1048	1049				
1049	786?		1050	No relationship observed with 1045				
1051		0.2	1051	Cuts 1053				Palaeochannel flanking gully
1053	565	0.2	1054	Cut by 757 & 1051				
1055	565	0.6	1056, 1057					

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
1058	?1003/10 05	0.71	1059. 1060, 1061, 1062, 1063	Cuts 952, 1064	*	*		
1064	952		1065, 1066	Cut by 1058				
1067	565	0.45	1068, 1069					
1070	1026	1.12	1071, 1072, 1073		*	*	IA	
1076		0.7	1075	Cut by 1077				Early relict cut in a ditch sequence
1077	883	0.75	1078, 1079, 1080, 1081	Cuts 1076 & 1082	*	*	MIA + IA	
1082	879	0.5	1083, 1084, 1085, 1086	Cut by 1077	*	*	MIA	
2011	2022	0.22	2012					Shallow gullies NW corner of site
2013	2011	0.1	2014					Shallow gullies NW corner of site
2022	2011	0.12	2023	Cuts 2024				Shallow gullies NW corner of site
2024	2097, 2065, 2730	0.12	2025	Cut by 2022				Shallow gullies NW corner of site
2026	2047, 2028, 2099	0.08	2027	Cuts 2049				Shallow gullies NW corner of site
2028	2026	0.07	2029					Shallow gullies NW corner of site
2047	2026	0.1	2046	Cuts 2049				Shallow gullies NW corner of site
2049		0.09	2048	Cut by 2047, no relationship recorded with 2011				Shallow gullies NW corner of site
2061	2011	0.12	2062					Shallow gullies NW corner of site
2063	2101	0.12	2064	No relationship recorded with 2026 or 2011				Shallow gullies NW corner of site

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
				but plan shows cutting 2026				
2065	2024	0.1	2066					Shallow gullies NW corner of site
2097	2024	0.18	2098					Shallow gullies NW corner of site
2099	2026	0.14	2100	Cuts 2101				Shallow gullies NW corner of site
2101	2063	0.14	2102	Cut by 2099				Shallow gullies NW corner of site
2103	2109, 2152, 2404, 2408	0.4	2104	Cuts 2105			IA	Part of main E/W sequence
2105	2111	0.3	2106	Cut by 2103 & 2107		*		Part of main E/W sequence
2107	2115	0.12	2108	Cuts 2105				Shallow high level cut
2109	2103	0.3	2110	Cut by 2113 and cuts 2111			E-MIA	Part of main E/W sequence
2111	2105	0.28	2112	Cut by 2109 & 2115				Part of main E/W sequence
2113		0.13	2114	Cuts 2109				Shallow high level cut
2115	2107	0.08	2116	Cuts 2111				Part of main E/W sequence
2117	970, 913	9.28	2118					Length of E/W gully
2119	968	0.25	2120			*	IA	
2121	2185, 2259, 2299	0.37	2122	Cut by 2123		*	MIA	
2123	925, 2297	0.65	2124, 2125, 2126, 2127, 2128, 2129	Cuts 2121 Cut by 2132		*	MIA	Large E/W ditch cut
2132	2455	0.3	2133	Cuts 2123				
2140		0.25	2139	Cut by 2146				Short length of poss gully
2146	One of 2163, 2158	0.59	2141, 2142, 2143, 2144, 2145	Cuts 2140 & 2148		*	IA	Part of major W/E ditch line
2148			2147	Cut by 2146		*		?pit
2152	2103 , 2404	0.4	2149, 2150, 2151	Cut by 2146		*	IA	Gully terminal

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
2158	2415	0.59	2159, 2160, 2161, 2162	Cut by 2163			IA	
2163	2413	0.6	2164, 2165, 2166, 2167	Cuts 2158		*	IA + E- MIA	
2171	2208, 2232, 2243, 2707	0.24	2170			*		one of the 4 shallow N/S gully
2173	2211, 2234, 2709, 2759	0.15	2172					one of the 4 shallow N/S gully
2181	2117/211 9 , 2183	0.32	2182					
2183	2117/211 9 , 2181	0.22	2184	Cuts 2185		*	IA	Gully prob terminating
2185	2121, 2259, 2299	0.48	2167	Cut by 2183				Spread?
2186	2438	0.48	2187	Cut by 2188		*		Part of ? entrance blocking of T ditch
2188	2447, 2418	0.64	2189, 2190, 2191	Cuts 2186		*	IA	Part of ? entrance blocking of T ditch
2208	2171	0.39	2206, 2207			*	IA	
2211	2173	0.24	2209, 2210			*	IA	
2213	2268, 2711, 2761	0.1	2212			*	IA	one of the 4 shallow N/S gully
2215	2270, 2713, 2763	0.08	2214				IA	one of the 4 shallow N/S gully
2224	2262, 2739	0.36	2223			*	IA	W/E ditch of rectangular enclosure
2227	2224	0.21	2225, 2226			*	IA	
2232	2171	0.2	2230, 2231					
2234	2173	0.26	2233					
2243	2171	0.43	2244	Cuts 2245		*	IA	
2245	2247	0.08	2246	Cut by 2243				Palaeochannel flanking gully
2247	2245	0.24	2248	No observed		*	EIA	? same as 955/

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
				relationship with 2249				958
2249		0.14	2250	No observed relationship with 2247				
2251	958, ? equiv 2249	0.46	2252	Cuts 2253, 2255		*	IA	
2253	??2245	0.51	2254	Cut by 2251, cuts pit 2255				
2259	2121 , 2299	0.2	2260					
2262	2224	0.39	2261			*	MIA	W/E ditch of rectangular enclosure
2264	2304	0.1	2263	Poss continuation of 2285				
2266		0.2	2265			*		Cannot locate
2268	2213	0.12	2268					
2270	2215	0.09	2269				IA	
2274	2315, 2757, 2399	0.3	2273	Ditch perpendicular to 2289	*		IA	Part of enclosure ditch system
2276	2311, 2580, 2700, 2307	0.4	2277					
2285	2287	0.19	2284		*	*	IA	Short E/W gully ? related to 2264
2287	2285	0.1	2286					
2289	2733, 2735	0.17	2288					N/S enclosure ditch terminating short of palaeochannel
2297	2123	0.97	2290, 2291, 2292, 2293, 2294, 2295, 2296	Cuts 2299	*	*	IA	Large ditch part of W/E alignment
2299	2121	0.44	2298	Cut by 2297				
2300	2274	0.4	2301, 2302					
2304	2264	0.1	2303		*	*	IA	
2306			2305			*		Cannot locate
2307	2311, 2312, 2700, 2276	0.12	2308					Ditch forming acute-angled corner in W of site
2311	2307	0.25	2309,		*		IA	3.10

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
			2310					
2312	2307	0.24	2313					
2315	2274	0.3	2314					
2316	2319, 2351	0.28	2317					Length of W/E
2319	2316	0.25	2318	Cut by ph 2321				
2323		0.25	2322					Cannot locate
2329		0.22	2328	Cuts 2383	*		IA	Part of main W/E ditch sequence only locally identified possibly elsewhere removed by 2332
2332	??2163	0.54	2330, 2331	Cuts 2334 and 2383		*		Part of main W/E ditch sequence
2334	??2379	0.39	2333	Cut by 2332				Part of main W/E ditch sequence
2336	2338, 2340	0.01	2335					Short length of gully perhaps associated with 2316
2338	2336	0.02	2337					
2340	2336	0.03	2339					
2345	2355, 2737, 2772, 2775	0.32	2346, 2347, 2348					Approx N/S ditch joining the main W/E ditch line at its N end
2350	2307	0.3	2349	No relationship observed with 2351	*	*	IA	
2351	2316	0.26	2349	No relationship observed with 2350				
2355	2345	0.38	2352, 2353, 2354					
2361	2332	0.68	2358, 2359, 2360	Cuts 2363 and pit 2370	*	*	IA +MIA	
2363	2334	0.4	2362	Cut by 2361				
2372		0.25	2371	Cut by 2361 and pit 2370				Part of main W/E ditch sequence only locally identified
2377	2361, 2332	0.54	2375, 2376	Cuts 2379				
2379	??2334	0.39	2378	Cut by 2377	*		IA	

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
				and cuts 2381				
2381	2482, 2541, 2572, 2570	0.24	2380	Cut by 2379				N/S ditch cutting ring ditch
2383		0.38	2382	Cut by 2329 & 2332				Part of main W/E ditch sequence only locally identified possibly elsewhere removed by 2332
2385	2307	0.35	2384					
2399	2274	0.17	2398					
2401	2105	0.3	2400					
2404	2103 , 2152	0.36	2402, 2403					
2406	2105	0.43	2405	Cut by 2408	*	*	EIA	
2408	2103	0.43	2407	Cuts 2406			LIA	
2410	2422, 2451, 2460	0.1	2409	04.0 2 700				Complete short gully in angle of W/E ditch line
2413	2163	0.53	2411, 2412	Cuts 2415	*	*	IA	
2415	2158	0.21	2414	Cut by 2413	*		IA	
2418	2188	0.45	2416, 2417	Cuts 2420	*		IA	
2420		0.34	2419	Cuts 2422 cut by 2418				
2422	2410	0.36	2421	Cuts 2424 , cut by 2420	*		IA	
2424	2453, 2486	0.22	2423	Cut by 2422	*		IA	
2426	2443	0.17	2425					short gully in angle of W/E ditch line
2430	2794, 2379, 2334	0.26	2429					Part of main W/E ditch line
2432	2498, 2508, 2533, 2565, 2728, 2743	0.27	2431	Cut by W/E ditch 2496	*		IA	N/S ditch cutting ring ditch
2438	2186	0.32	2437	Cut by 2447				
2441	2491	0.3	2439, 2440	Cut by 2451, 2453				short gully in angle of W/E ditch line
2443	2426	0.4	2442	Cuts 2451				
2447	2188	0.72	2444,	Cuts 2438	*	*	IA	

Ditch	Equiv to	Depth (m)	Fills	Relationships	Pot	Bone	Ceramic date	Comment
			2445, 2446					
2451	2410	0.4	2448, 2449, 2450	Cut by 2443, cuts 2441	*	*	MIA	
2453	2424	0.2	2452	Cuts 2441				
2455	?2111	0.3	2454					
2460	2410	0.6	2458, 2459					
2482	2381	0.24	2481	Cut by pit 2645		*		
2486	2453, 2424		2485		*		IA	
2491	2441		2487, 2488					
2494	2496, 2430, 2334	0.28	2495		*		MIA	Part of main W/E ditch line
2496	2379, 2334	0.23	2497	Cuts 2432				
2498	2432	0.24	2499					
2502	2381	0.3	2500, 2501	Cuts ring ditch				
2508	2432		2507			*		
2513	2381	0.3	2511, 2512					
2533	2432	0.24	2532	Cuts ring ditch	*	*	IA	
2541	2381	0.27	2540					
2552	2381	0.33	2551		*	*		
2556	2381	0.44	2555	Cuto 2502	*	*	IA	W/E ditch
2561	2587, 2585, 2649, 2686		2559, 2560	Cuts 2563				cutting RD 2
2563		0.1	2562	Cut by 2561				N/S slot
2565	2432	0.27	2564	10.11.25=-	*	*	IA	
2568	2274	0.39	2566, 2567	Cut by 2570				
2570	2381	0.32	2569	Cuts 2568	*		1.0	
2572	2381	0.3	2571	Cuto 2502			IA	
2580	2276, 2307	0.45	2578, 2579	Cuts 2582				
2582	2381 , 2570	0.12	2581					
2585	2561	0.25	2584	1				100
2587	2561	0.37	2586	Cuts ring ditch 2594	*		MIA	W/E ditch line
2591		0.22	2589, 2600	Cuts ring ditch 2594	*	*	EIA	Short W/E gully
2596	2591	0.21	2595, 2599			*		
2612	2561	0.18	2611	Cuts ring ditch 2594	*		IA	
2649	2587	0.28	2648		*	*	IA	What is this

2669 2678 2681 2686	2591		1		Pot	Bone	date	
2681 2686	2504	0.25	2667, 2668		*	*	IA	
2686	2591	0.27	2676, 2677		*	*	IA	
	2591	0.32	2679, 2680		*	*	EIA	
2700	2591	0.27	2684, 2685		*	*	EIA	
2700	2307	0.4	2697, 2698, 2699		*	*		
2707	2171	0.3	2705, 2706					
2709	2173	0.1	2708	Cut by 2711				
2711	2213	0.15	2710	Cuts 2709				
2713	2215	0.04	2712					
2721	2725, 2728	0.12	2720					
2725	2721	0.2	2722, 2723, 2724					
2728	2721	0.15	2726, 2727					
2730	2024	0.18	2729					Shallow gullies NW corner of site
2733	2289	0.1	2731, 2732					
2735	2289	0.2	2734					
2737	2345	0.26	2736					
2739	2224	0.44	2738		*	*	EIA	W/E ditch of rectangular enclosure
2743	2224	0.42	2742	Cuts pit 2741	*	*	MIA	SW corner of rectangular enclosure
2748	2432	0.36	2745, 2746, 2747		*	*	IA	
2750	2345	0.3	2749					
2751	2381	0.19						
2755		0.1	2754	No relationship recorded with ditch 2766				
2757	2274	0.21	2756		*		RB	
2759	2173	0.1	2758		*	*	IA	
2761	2213	0.07	2760			*		
2763	2215	0.13	2762					
2766	2345	0.35	2764, 2765	Cuts 2769				
2769	2307	0.4	2767, 2768	Cut by 2766				
2772	2345	0.12	2770,	Possibly cuts	*		IA	Sag infill 2776

MAXEY QUARRY WESTERN EXTENSION ASSESSMENT

Depth (m) Equiv Relationships Ditch Fills Ceramic Comment Pot to date 2771 2775 2775 2345 0.29 2773, Sag infill 2776 2774

_APPENDIX 3: DEFINITIVE DITCH NUMBERS

VEV NO	EOLIVALENT NUMBERS	CERAMIC DATE
KEY NO	EQUIVALENT NUMBERS	CERAMIC DATE
004	010, 015, 019	DD mid C2
007	021, 049, 070	RB mid C2
013	026, 258, 308, 340, 378	
023	036, 264, ?266, ?357, 392, ?434, ?461	
028	063, 110, 288, 441	T 1
039	067, 079, 145	IA
045	085	
121	159	
123		~ .
124	174, 154, 163, 168, 193, 196	IA
133	185, ?319	
137	188, ?319	
172	205, 774	
226	269, 278, 281, 290, 306, 457	
228	253, 256	
249	262, ?266, ?357, ?434, ?461	
260	283	
273	316	
338	359, 459	
345		
352	376, 394, 495	
355		
386	484, 486, 488, 763, 761	
409	414, 418	BA POT
469		
478	480	
482	483	
490	499, 547, 555, 568, 584	
531	550	
533	770	
539	553, 561, 687, 695	RB C2
541	570, 615, 665, 657, 746, 809	
558	575, 588, 638, 662, 673, 723, 739, 736, 725, 728	RB C2
565	642, 659, 701, 713, 715, 750, 757, 1053, 1055, 1067	
579	607, 619, 667, 690, 800, 845	RB C3-4
586	739	
588	736	
593	811	
612	671	
675		RB
698		
703?		
707	730	
710	733	
721?		

KEY NO	EQUIVALENT NUMBERS	CERAMIC DATE
728?	EQUITED TO THE SECOND	
734?		
757		
786	797, 827, 1045, 1047, 1049	RB C2+
795	77, 900, 900, 900, 900, 900, 900, 900, 9	
804	814	
807	818	
825		
838	855, 862	
858	,	
879	895, 889, 895, ?925, ?1018, ?1031, 1082	MIA + IA
883	893, 899, ?925, ?1018, ?1031, 1077	MIA + IA
904		IA
906	1023	
913	968, 970, 1043	
918		
952	955, 958, 993, 995, 1064	
976	981, 983, 1003, ?1010, ?1058	MIA
985	1005, ?1010, ?1058	IA
1026	1070	IA
1051		
1076		
2011	2013, 2022, 2061	
2024	2065, 2097, 2730	
2026	2028, 2047, 2099	
2049		
2063	2101	
2103	2109, 2152, 2404, 2408	E-MIA + IA
2105	2111, 2401, 2406, ?2455	EIA
2107	2115	
2113		
2117	970=913, 2181, 2183	IA
2119	968 = 913, 2181, 2183	IA
2121	2185, 2259, 2299	MIA
2123	2297, 925	MIA + IA
2132	2455	
2140	2159/2162	TA
2146	2158/2163	IA
2148	2415	TA
2158	2415	IA + E MIA
2163	2413	IA + E-MIA IA
2171	2208, 2232, 2243, 2707	
2173 2186	2211, 2234, 2709, 2759 2438	IA
2188	2418, 2447	IA
	·	
2213	2268, 2711, 2761	IA

MAXEY QUARRY WESTERN EXTENSION ASSESSMENT

KEY NO **EQUIVALENT NUMBERS** CERAMIC DATE 2215 2270, 2713, 2763 IΑ 2224 2227, 2262, 2739, 2743 EIA + MIA + IA2245 2247, ?2253 **EIA** 2249 2251 ?=958 =952 IA 2264 2304 IΑ 2266 IA + RB2274 2300, 2315, 2399, 2568, 2757 2285 2287 IA 2289 2733, 2735 2306 2307 2276, 2311, 2312, 2350, 2385, 2580, 2700, 2769 IA 2316 2319, 2351 2323 2329 IA ??2163, 2361, 2377, 2498 IA + MIA2332 ?2379, 2363, ?2379, 2430, 2794, 2496 MIA + IA2334 2336 2338, 2340 2355, 2737, 2750, 2766, 2772, 2775 2345 IΑ 2372 2482, 2502, 2513, 2541, 2552, 2556, 2570, 2572, 2582, 2751 2381 IΑ 2383 2410 2422, 2451, 2460 MIA + IA2420 2424 2453, 2486 IA 2426 2443 2498, 2508, 2533, 2565, 2728, 2743, 2748 2432 IA 2441 2491 MIA + IA2561 2587, 2585, 2612, 2649, 2686 2563 2591 2596, 2669, 2678, 2691 (2681?), 2686 EIA + IA2721 2725, 2728 2755

APPENDIX 4: TABULATED DATA FOR THE RING DITCHES

Ring ditch 1: 2575

Feature	Fill	Depth	Pot	Bone	Comment
		(m)			
2484	2483	0.23		*	
2490	2489	0.19			
2504	2503	0.27			
2506	2505	0.25			
2510	2509	0.22	*		IA
2515	2514	0.22			
2519	2518	0.26			
2521	2520	0.23	*		MIA
2523	2522	0.22	*		
2525	2524,	0.21			
	2530				
2527	2526	0.26	*		
2529	2528,	0.4			
	2531				
2535	2534	0.13	*		MIA
2537	2536	0.24	*		IA
2539	2538	0.23	*	*	EIA
2543	2542	0.32	*		IA
2545	2544	0.26	*	*	IA
2548	2546,	0.3	*	*	MIA
	2547				
2550	2549	0.41	*	*	MIA
2554	2553	0.42	*	*	IA

Ring ditch 2: 2594

Feature	Fill	Depth	Pot	Bone	Comment
		(m)			
2590	2588	0.26			
2593	2592	0.07			
2598	2597	0.7			
2602	2601	0.27		*	
2604	2603	0.21	*		IA
2606	2605	0.15			
2614	2613	0.19			
2616	2615	0.15			
2618	2617	0.1			
2620	2619	0.28	*		IA
2622	2621	0.26	*	*	IA
2624	2623	0.04			
2628	2627	0.07			
2630	2629	0.29			
2632	2631	0.05			
2634	2633	0.23	*		IA
2636	2635	0.29	*		IA

Depth Fill Pot **Feature Bone** Comment (m) 2641 2640 0.35 2642, 0.3 2643 IΑ 2650 2653 2654 0.06 * 2658 2657 0.18 2664 2663 0.2 2675 2674, 0.14 IΑ 2672 2683 2682 0.08 2688 2687 0.25 * * ΙA 2694 2693 0.03 2702 2701 0.28 IΑ

Post- pit	Fill	Depth (m)	Diameter (m)	Pot	Bone	Comment
2608	2607	0.6	0.24			Post-pit, no relationship observed with ring gully fills.
2610	2609	0.14	0.2			Stake hole, no relationship clearly observed
2652	2651	0.2	0.35	IA		Within ring gully
2656	2655	0.14	0.41			Within ring gully, rel with ditch 2649 unclear
2626	2625	0.09	0.25			Post-pit cutting infill of ring gully [2627]
2660	2659	0.09	0.3	IA		Within ring gully no relationships
2662	2661	0.26	0.4			Possibly cuts ring gully fill [2658]
2666	2665	0.28	0.4			Post-pit cutting infill of ring gully [2664]
2696	2695	0.13	0.52			Post-pit cutting infill of ring gully [2695]
2704	2703	0.16	0.46			Post-pit cutting infill of ring gully [2701]

APPENDIX 5: FLINT CATALOGUE

Context	SF	Flake/Blade	Comments
82	2	Discoidal scraper	Possibly heat altered due to reddening
171	3	Blade	Soft hammer
263	6	End & side Scraper	Some post depositional damage
277	5	Blade	Overshot termination hard hammer
289	7	Thumbnail Scraper	Some localised reddening of flint due to heat
326 333 333	8 10 9	Thumbnail Scraper Blade	Small flake with removals around half the edges Rejuvenation blade from the platform of possibly a bladelet core
	9 11	Blade	Distal tip snapped off hard hammer
343	11	Flake	Utilised some fresh post depositional edge
364	13	Flake	damage, some older patinated damage Soft hammer
421		Flake	Some post-depositional edge damage, soft hammer
421		Flake	Some post-depositional edge damage, soft hammer
444	15	Flake	Some post-depositional edge damage, overshot termination, soft hammer
606	25	Scraper, side	Some crushing on the sides of the flake
606	23	Blade	Distal end snalled off
606	24	Flake	Some crushing on the sides of the flake
630		Flake	Post-depositional edge damage
650		Flake	Distal end of a blade, slight post-depositional damage
655		Flake	Slight post-depositional edge damage
704		Flake	Slight pos-depositional edge damage
711	31	Polished axe frag	Medial section of a large blade taken from a polished axe removal and damage roughly contemporary, some post depositional edge damage
785		Flake	Post Depositional edge damage
785		Blade	Soft Hammer
785		Blade	Overshot termination, soft hammer
928		Flake	Reddening possibly heat altered
928	35	Flake	
1009		Flake	
2122		Flake	Utilised, opaque mid grey brown
2162	3	Blade	Opaque light reddish brown
2166	4	Flake	Translucent light greyish brown
2166	5	Blade	Translucent light greyish brown
2167	6	Flake	Translucent mid greyish brown
2275	9	Flake	Translucent dark greyish brown

MAXEY QUARRY WESTERN EXTENSION ASSESSMENT

Context	SF	Flake/Blade	Comments
2275		Flake	Translucent mid greyish brown
2275		Flake	Translucent dark reddish brown
2368	10	Flake	Translucent dark greyish brown
2546	21	Spall	Opaque mid grey
2547	26	Blade	Translucent greyish brown
2547	12	Flake	Translucent mid greyish brown
2549	22	Blade-Mesolithic	Opaque light brown
2549	13	Blade	Opaque mid brown
2714	23	Blade	Translucent dark grey
2738	24	Flake	Translucent dark greyish brown
2744	25	Blade	Opaque mid reddish brown

APPENDIX 6: SPOT IDENTIFICATIONS OF THE EARLY PREHISTORIC POTTERY

Context Find No	POT ID	Weight (g)	Description
042	Beaker?	10	Undecorated wall sherds
056	Early Neolithic	20	Rim sherds
210	Bronze Age?	22	Undecorated sherds
232	Beaker?	10	Small sherd with impressions
318	??	1	Crumbs
418	Bronze Age?	32	Undecorated sherds
421	Bronze Age?	225	Undecorated sherds
427	Bronze Age?	460	Undecorated wall sherds
427	Beaker	460	Rusticated sherds
428	??	20	Undecorated sherds
470	??	7	Undecorated sherds
606	Early prehistoric	4	
681	Peterborough	21	Impressed rim
685	Peterborough	92	Impressed wall sherds
788	Neolithic?	22	
1060	??	51	Undecorated sherds
2005	Beaker		

APPENDIX 7: SPOT IDENTIFICATIONS OF THE IRON AGE AND ROMAN POTTERY

Context	IA	RB	Sherd count	Weight (g)	Date
					Roman
009	0	2	2	9	mid-late 2nd century+
044	2	0	2	59	Iron Age
153	28	0	28	57	IA
164	1	0	1	4	IA
171	1	0	1	20	IA
176	3	0	3	17	IA
236	2	0	2	19	IA
239	2	0	2	25	IA
343	8	0	8	4	IA
540	0	57	57	276	2nd century
576	0	1	1	34	2nd century
601	0	67	67	204	2nd century
624	2	0	2	2	IA
634	6	0	6	70	IA
649	6	0	6	16	IA
656	4	0	4	7	IA
663	1	0	1	5	Roman
668	0	42	42	917	late 3rd-4th centuries
677	0	3	3	12	Roman
692	0	1	1	21	Roman
747	1	1	2	145	late 2nd century+
755	0	1	1	2	2nd century
755	0	1	1	2	2nd century
785	13	0	13	25	IA
787	0	7	7	151	2nd century+
834	4	0	4	12	IA
881	29	0	29	553	Middle Iron Age
882	3	0	3	18	IA
892	9	0	9	32	IA
905	2	0	2	19	IA
928	3	3	6	66	IA
966	1	0	1	32	IA
979	13	0	13	128	MIA
984	21	0	21	161	MIA
1009	7	0	7	37	IA
1013	6	0	6	24	MIA
1013	1	0	1	1	IA
1072	12	0	12	34	IA
1078	3	0	3	44	MIA
1080	<u></u>	0	1	3	IA
1081	2	0	2	17	MIA
2273	1	0	1	2	IA
2278	2	0	2	1	IA
2284	11	0	11	8	IA
2290	6	0	6	12	IA
2293	3	0	3	16	IA
2293	J		ا ع	10	17

			Sherd		
Context	IA	RB	count	Weight (g)	Date
2303	9	0	9	46	IA
2309	1	0	1	3	IA
2328	8	0	8	4	IA
2344	2	0	2	11	IA
2349	5	0	5	3	IA
2358	11	0	11	22	IA
2359	2	0	2	27	IA
2360	4	0	4	44	MIA
2378	3	0	3	10	IA
2390	6	0	6	44	IA
2392	22	0	22	50	IA
2405	5	0	5	33	EIA
2411	4	0	4	6	IA
2414	4	0	4	12	IA
2416	1	0	1	14	IA
2421	7	0	7	13	IA
2423	2	0	2	5	IA
2431	4	0	4	19	IA
2435	3	0	3	10	IA
2444	22	0	22	270	IA
2448	11	0	11	68	MIA
2485	1	0	1	45	IA
2492	1	0	1	10	IA
2495	11	0	11	33	MIA
2509	1	0	1	8	IA
2520	25	0	25	141	MIA
2522	4	0	4	2	IA
2526	2	0	2	11	IA
2532	23	0	23	157	IA
2534	5	0	5	50	MIA
2536	2	0	2	4	IA
2538	7	0	7	52	EIA
2542	3	0	3	9	IA
2544	1	0	1	7	IA
2546	12	0	12	50	MIA
2547	10	0	10	48	MIA
2549	40	0	40	77	MIA
2553	7	0	7	13	IA
2555	2	0	2	6	IA
2564	1	0	<u></u> 1	2	IA
2571	1	0	1	13	IA
2573	0	1	1	7	Roman
2586	2	0	2	20	MIA
2600	68	0	68	137	Early Iron Age
2603	11	0	11	11	IA
2611	1	0	1	0.5	IA
2619	4	0	4	6	IA
2621	5	0	5	1	IA
2633	1	0	1	2	IA
2635	30	0	30	41	IA
2637	1	0	1	2	IA IA
2001	ı	U	ı		IA

Sherd Context IA **RB** Weight (g) count **Date** 46.5 IΑ IΑ IΑ IΑ IΑ IΑ IΑ IΑ EIA EIA IΑ IΑ IΑ IΑ EIA IΑ MIA IΑ IΑ Roman IΑ IΑ IΑ

APPENDIX 8: MAMMAL BONE CATALOGUE

Key: LAR large artiodactyls (cattle sized/horse sized bone fragments); SAR small artiodactyls (pig/sheep/goat sized bone fragments)

Context	Cattle	Sheep/g oat	Goat	Pig	Dog	Other species	LAR	SAR	Mammal frags	Scrappy Mammal frags	Notes
9							20				Prob pieces from a single long bone shaft
42							1	2	7		Single long bone share
43							-		9		
81	13				1		17	1	22		1 dog mandible
91	3	1			•			•	2		i deg manalele
116	2										
119		1					2		8		
125				2							1 mn & 1 incisor
127							17		4		
142	1	2					1	2			Teeth; 1 upper cattle 2 lower sheep
149	1										Cattle mn in frags
153				1							Pig metapodial
157							7				
171	3						4	2	15		
179					4						1 dog sk/mx (frag)& loose teeth
180	1										Cattle prox metacarpus
187	1										Cattle metacarpus in many pieces
199	8					1 roe deer antler	11		22		Antler naturally shed
210										4	
216										10	
232		2		2			6	1		23	
235	1										Cattle dist humerus
236	1	4									
238		1									
318							1	1		14	
324								2			
385							1				Long bone shaft in 18 pieces
403									5		
405	5										
421	1									25	Cattle;1 scapula in pieces
428	1										Cattle; 1 lower third molar
447								1	3		
449	1						3				Cattle; 1 upper pre molar
454	1										Cattle horn core

Context	Cattle	Sheep/g oat	Goat	Pig	Dog	Other species	LAR	SAR	Mammal frags	Scrappy Mammal frags	Notes
455	1			1			8			11	1 cattle prox Mtt; 1 pig lower canine male
476					16						Frag. Mn & mx plus loose teeth 1 adult dog
485							12			8	
522							21			122	Very scrappy much fragmented
523	1										1 cattle femur in many pieces
546							3				
560						1 horse					Horse; 1 lower third molar
591							2				
592	2					2 horse	3				Horse; 1 humerus & 1 femur
611								1			?Pig hu in many pieces
624	1										1 cattle horn core in frags
630							10			7	
634	1										1 cattle prox humerus (epi unfused)
647	1						7	1	2		1 cattle cervical in 3 pieces
649	1										carpal
653	1										1 cattle mandible in pieces
656			1								1 goat humerus right px U dist F
681	1									19	1 cattle first phalanx
681										8	
681		1		1			2			12	1 sheep lower third molar, 1 pig maxilla
681									1	1	
685	6	1					12	1		29	
693											Extremely scrappy fragments not counted
704	1							1			1 cattle lumbar vert
709							2				Incl frag ? horse molar
712							6				
755		1					-		4	00	1 sheepmetatarsus
785		2			-		7		4	38	
798							3		4 2	-	
803 846		1					3		8		1 sheep upper cheek tooth
847						1 horse					1 horse metacarpus
881		2				1.0.00	2	1			2 sheep tibia shafts
897							4		1		

Context	Cattle	Sheep/g oat	Goat	Pig	Dog	Other species	LAR	SAR	Mammal frags	Scrappy Mammal frags	Notes
905	8						11			142	
927	4					1 horse	1	1	2	142	1 horse metatarsus
928	3	1		1		110100	4				
930		-							1		
936	1								-	3	1 cattle thoracic vert large
962		4				1 horse					1 horse metatarsus
980	2	1					3	2		3	Cattle 1 hu& vert; sheep lower molar
1009	1	4					10				
1013	2	3				2 horse	1	1	1		Horse 1 olar & dist metapodial
1019	1	1				1 horse					1 horse innominate; cattle skull frag
1020	1	1							16		Cattle 1 rib; sheep 1 lower cheektooth
1021		3							1		
1032	4										
1061	2	2				1 horse & 4 bird	4	8	2		1 horse mtt; 4 bird long bone shaft frags
1062						1 horse					1 horse metatarsus
1062	1										1 cattle rib
1063		1									1 horn core sub adult ram
1072	1	2				1 horse			4		1 horse tibia
1073	1										1 cattle humerus
1078	2	1									
1080	3	3								9	
1083		2									Sheep 2 tibia shafts
2008	1						2				
2010	1						2			7	
2016	1						5		9		
2032	4								1	8	
2040	1			4					1	F0	
2045	5			1					3	50	
2078	1								3		
2082 2084	1	3		1							
2084	1	<u>ა</u>									
2106	ı							1		-	
2120	1						1	I		12	
2120	1						-			4	
Z 1 Z Z	2									4	

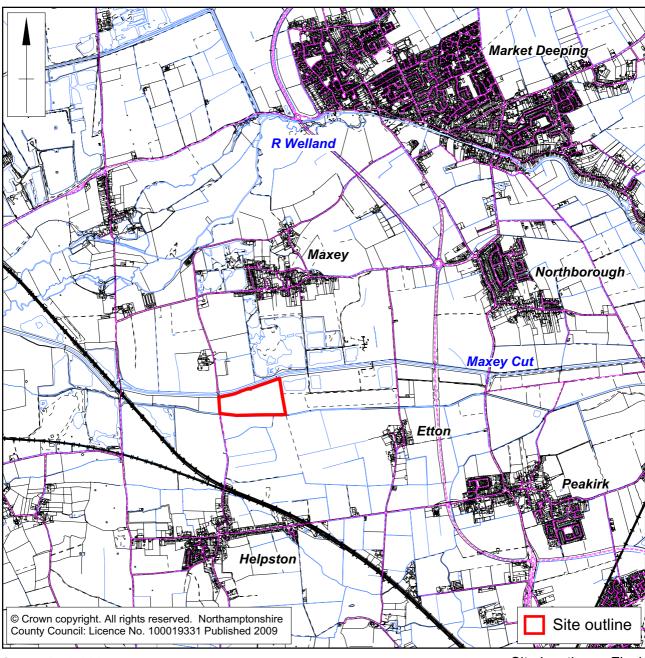
	င္မ	She	ရ	ם	0	spe	_	ွ	Mar	Scr. Mar	
Context	Cattle	Sheep/g oat	Goat	Pig	Dog	Other species	LAR	SAR	Mammal frags	Scrappy Mammal frags	Notes
2141	1							2			
2143							1		1		
2144									1		
2147					1						
2149	3					1	2	1		11	
						horse					
2151		1							1		
2157	2	1				2 horse	1		1		
2166	4	7		5	1			4	14		
2167	3	2						1	1	5	
2168		5					1	2		3	
2170				1			3				
2184	1										
2187	1	1									
2189	1	1					2	3		12	
2190	1										
2198		3									
2206	3						2	5	11		
2209	2	1		1			4		2		
2212	1										
2223		1					1	3			
2225	1						1		5	2	
2239	1	2						1			
2241	1						1	3		2	
2244	1	1									
2248	3	1		1			1			6	
2252	3	1						3		1	
2261							7	3		8	
2272	1							1		9	
2284		1		1						6	
2290									2		
2291	1										
2294							1				
2303	1									2	
2305										22	
2331							1	2		1	
2349	1										
2265						1 horse					
2358	3						1	2			
2360		1		1				3		3	
2392								1			
2405	1	2					1			5	
2411							2				
2435	1							1			
2444	3	1	_				_	_			
2448	3	1	1				4	2		21	

MAXEY QUARRY WESTERN EXTENSION ASSESSMENT

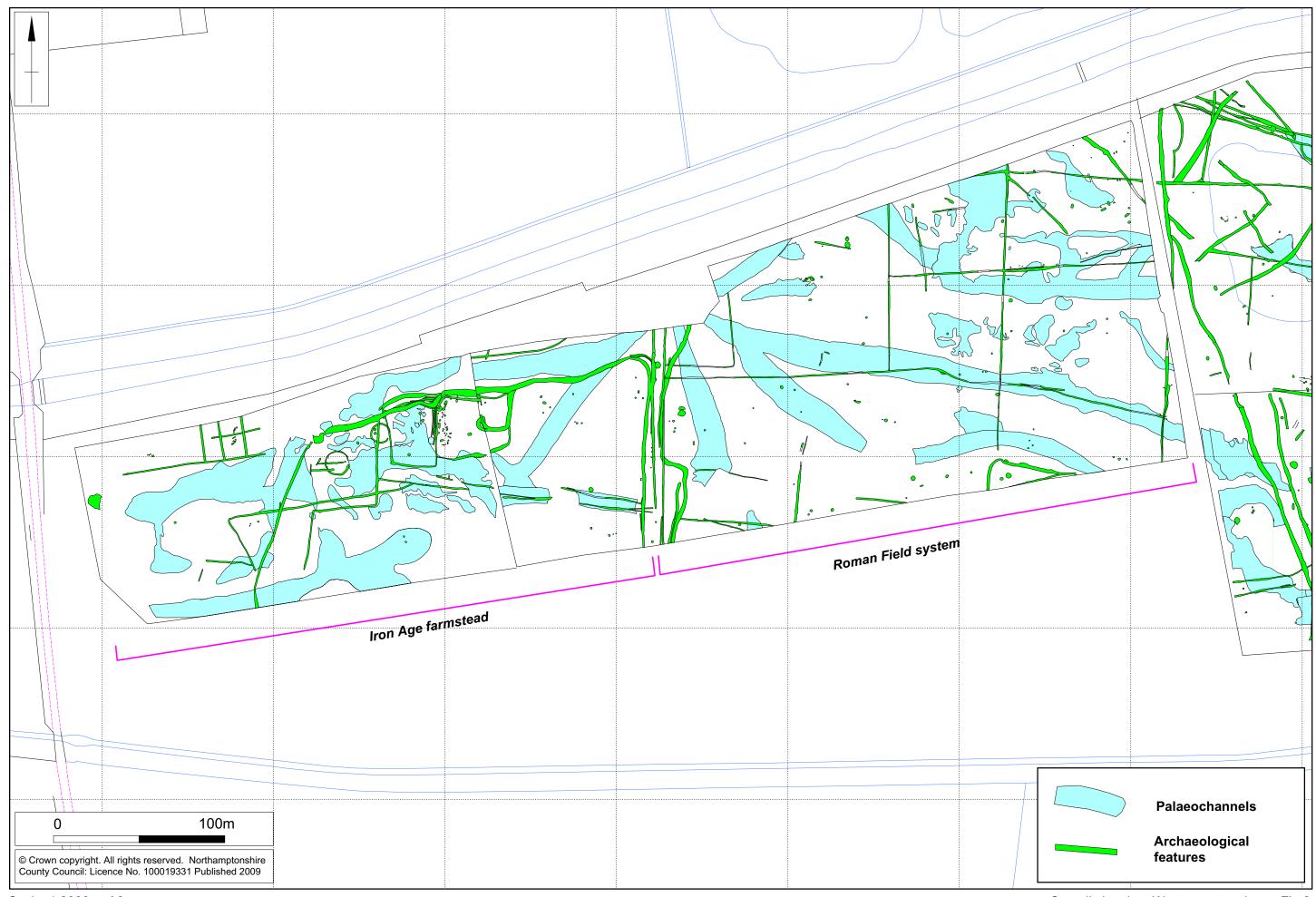
Context	Cattle	Sheep/g oat	Goat	Pig	Dog	Other species	LAR	SAR	Mammal frags	Scrappy Mammal frags	Notes
2481	1										
2483	1										
2507										25	
2532		2									
2538		1						1			
2544		1									
2546	1	1							2		
2547		2					2			7	
2549									4		
2553							1	1			
2555									1		
2564		2						3		14	
2595							3				
2600										8	
2601	1	1									
2621							1				
2625									1		
2637	1										
2642	2	2					1		1		
2648	1	2							5		
2668									2		
2670										7	
2677		3									
2679	1	34		1			2			100	
2685										9	
2697							1				
2738	3	3					1	1			
2740							2	2	5		
2742							3				
2746	2	1			1		1	3			
2758									3		
2760		2		1					2		

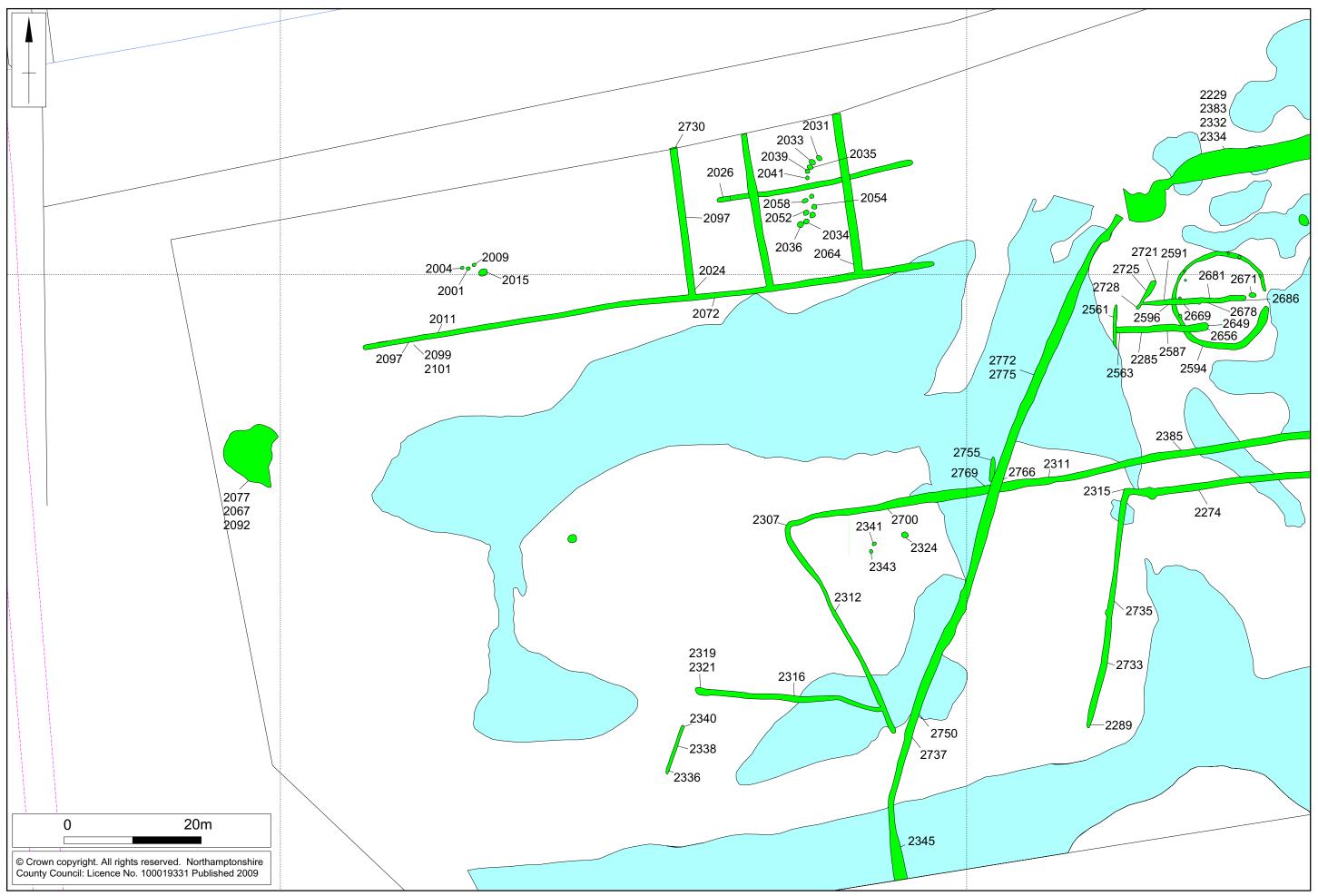


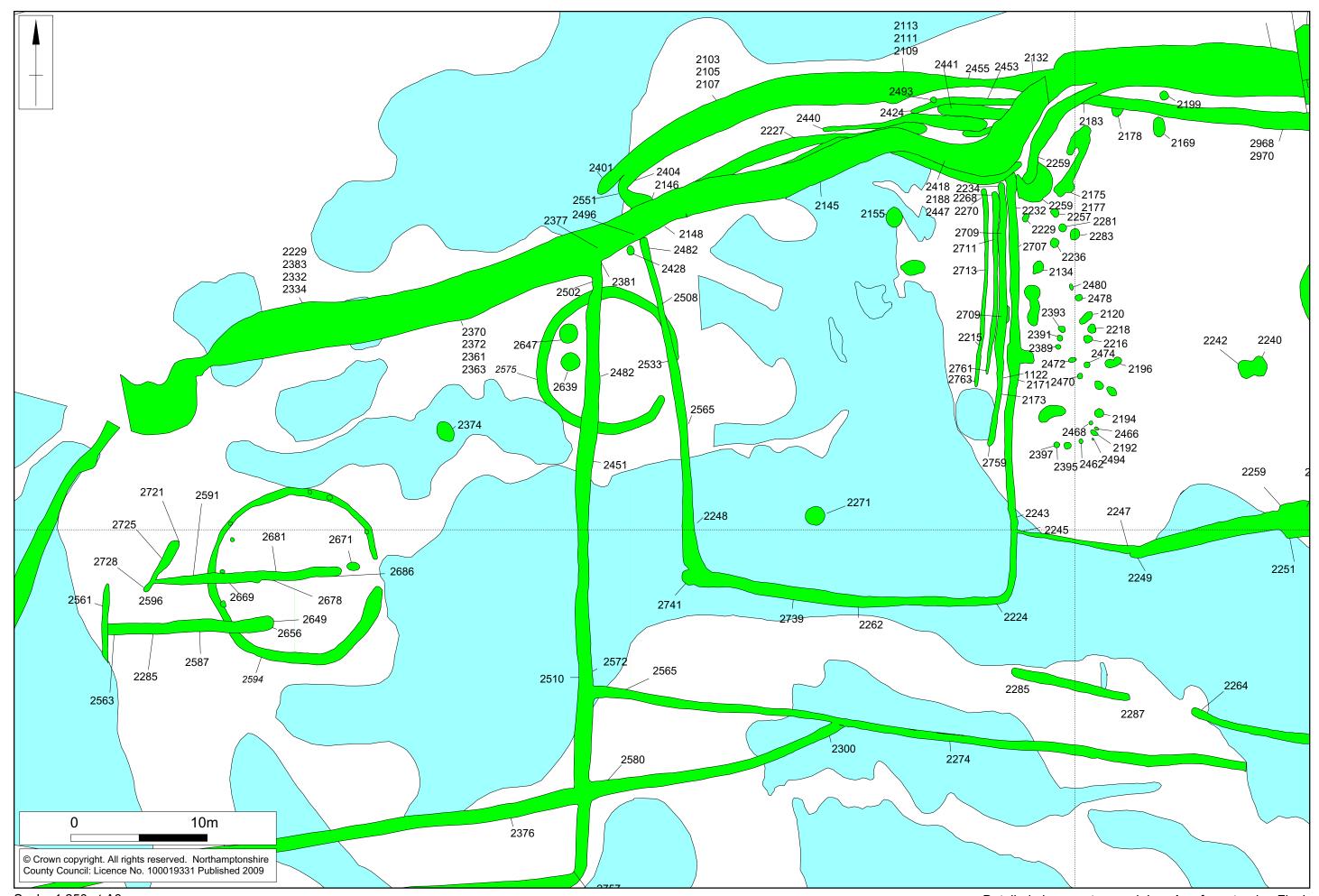


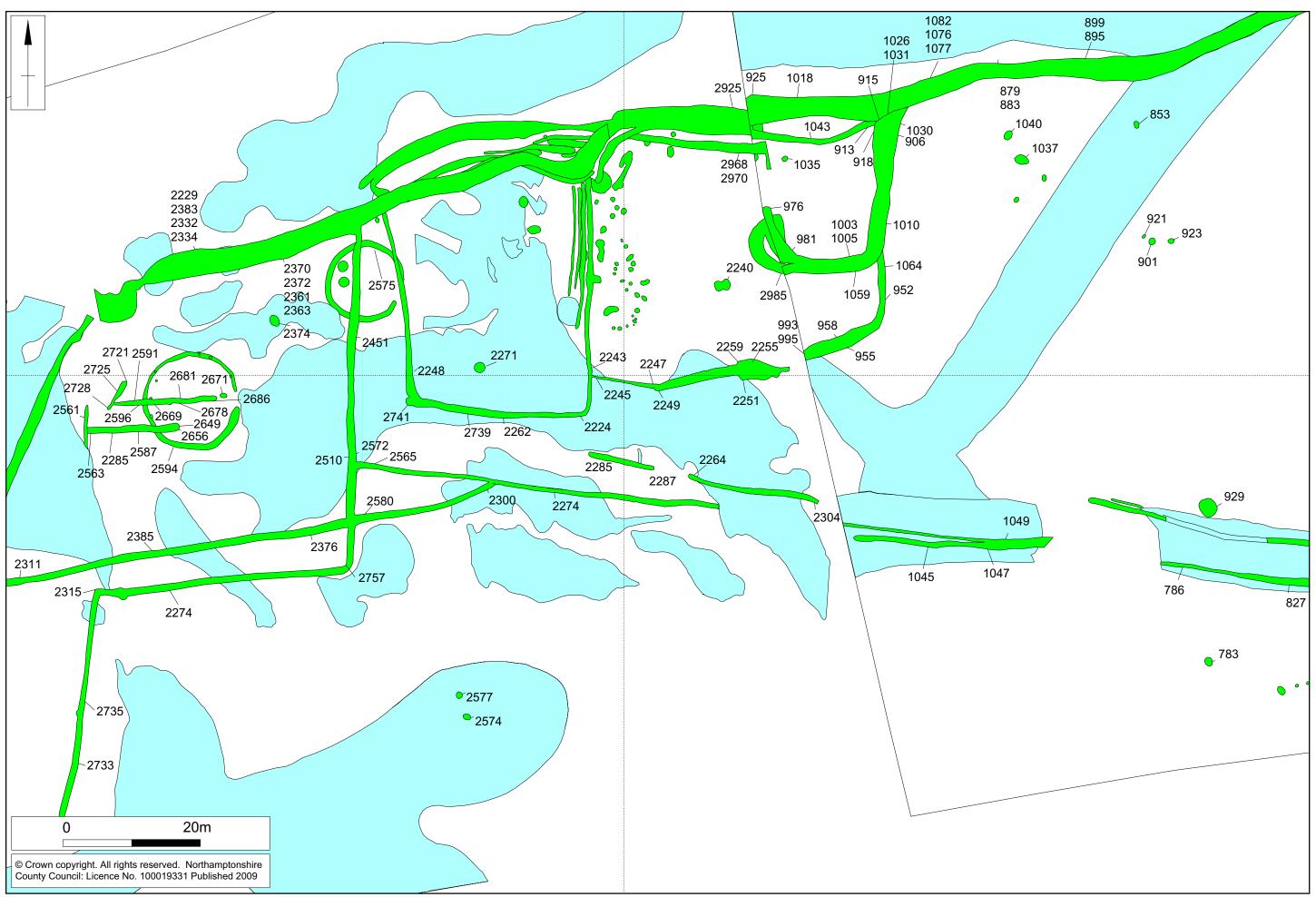


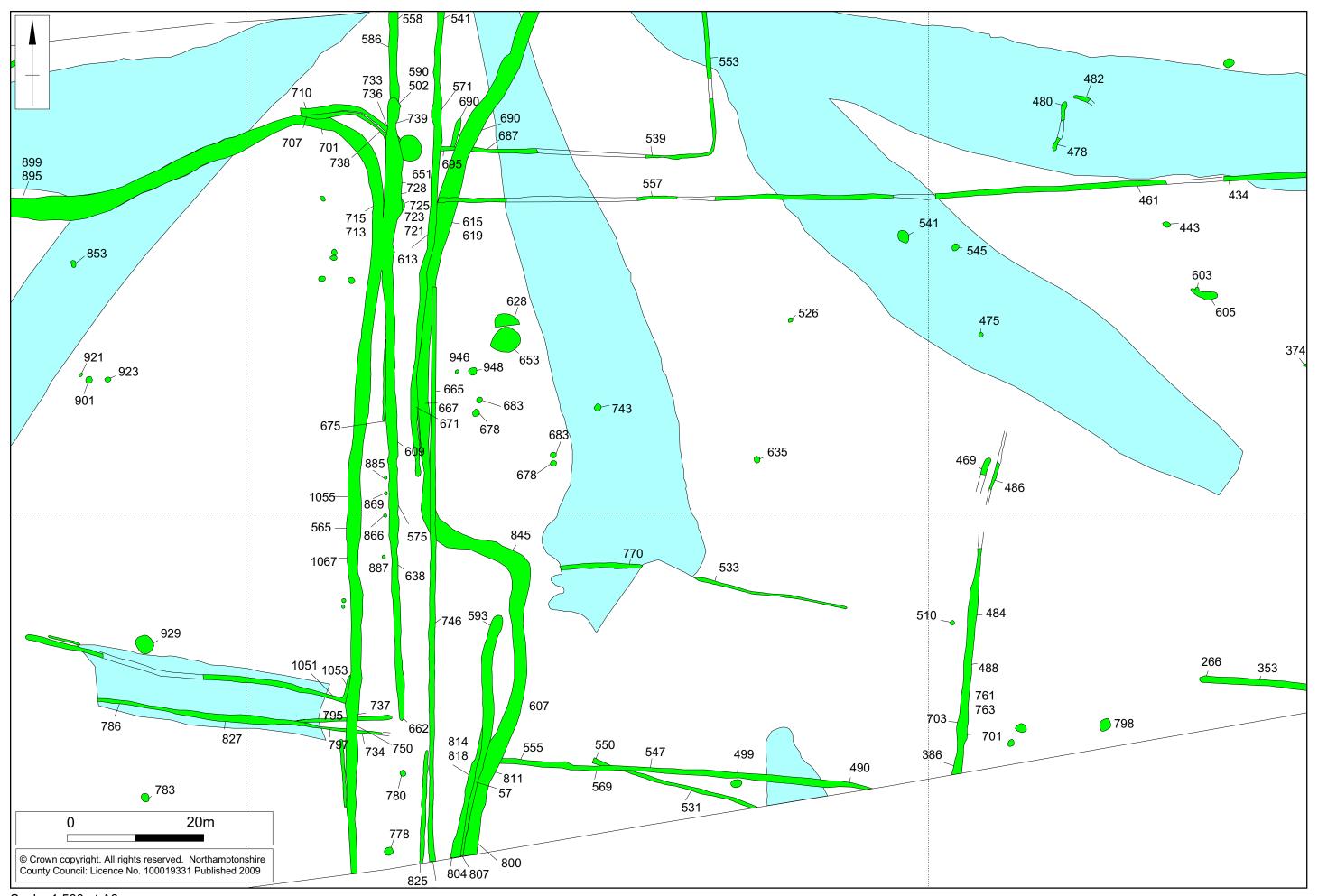
Scale: 1,40,000 Site location Fig 1

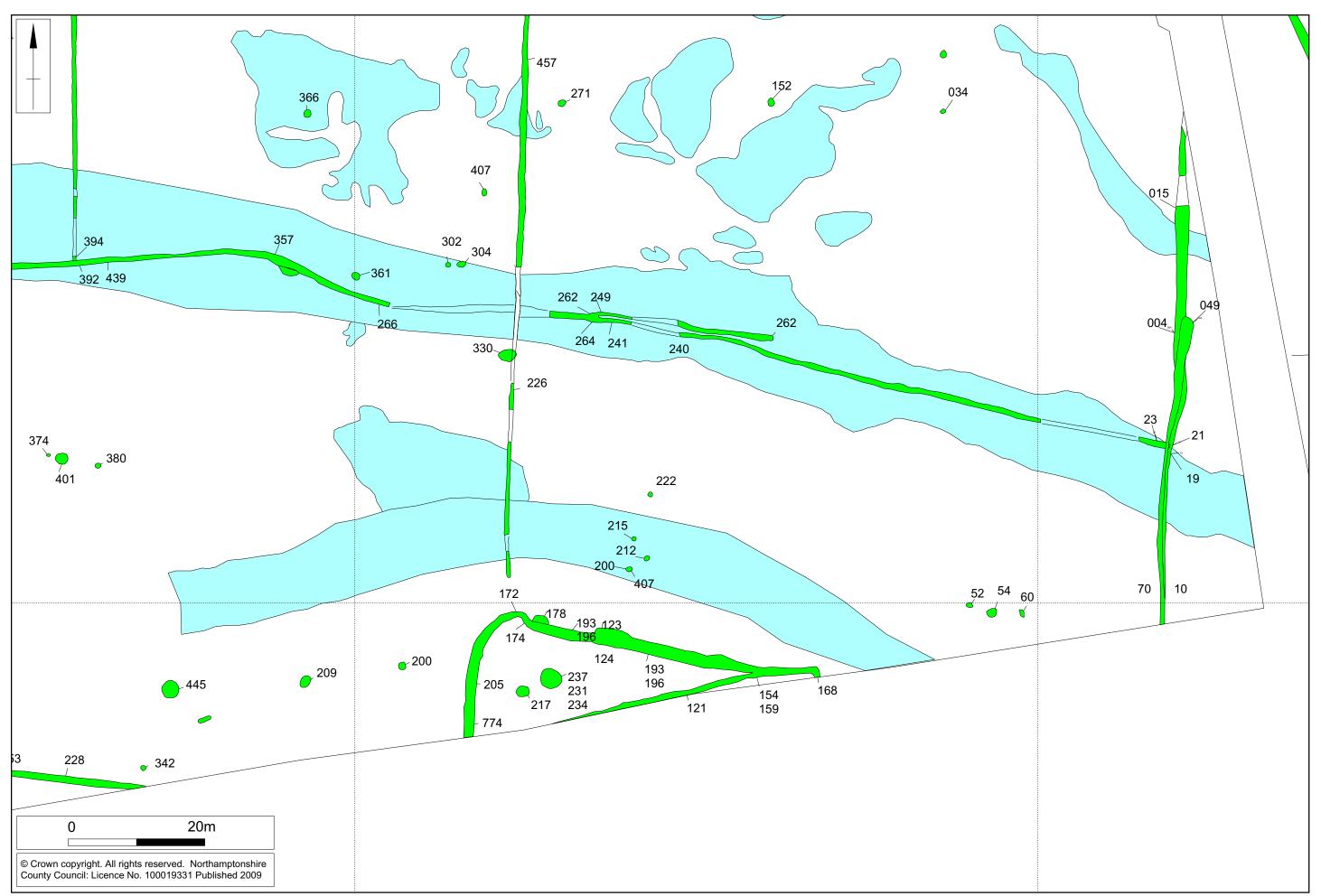


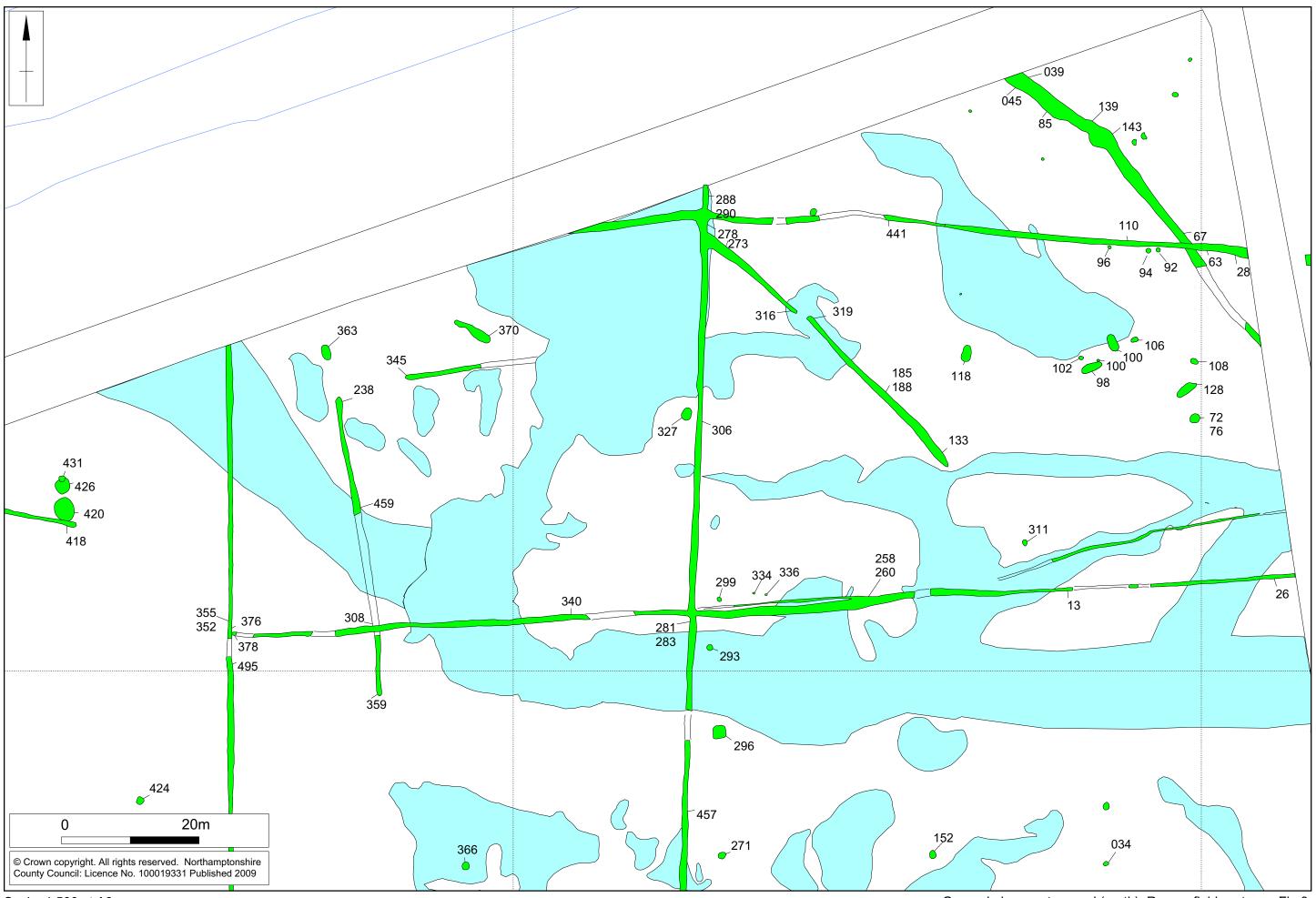


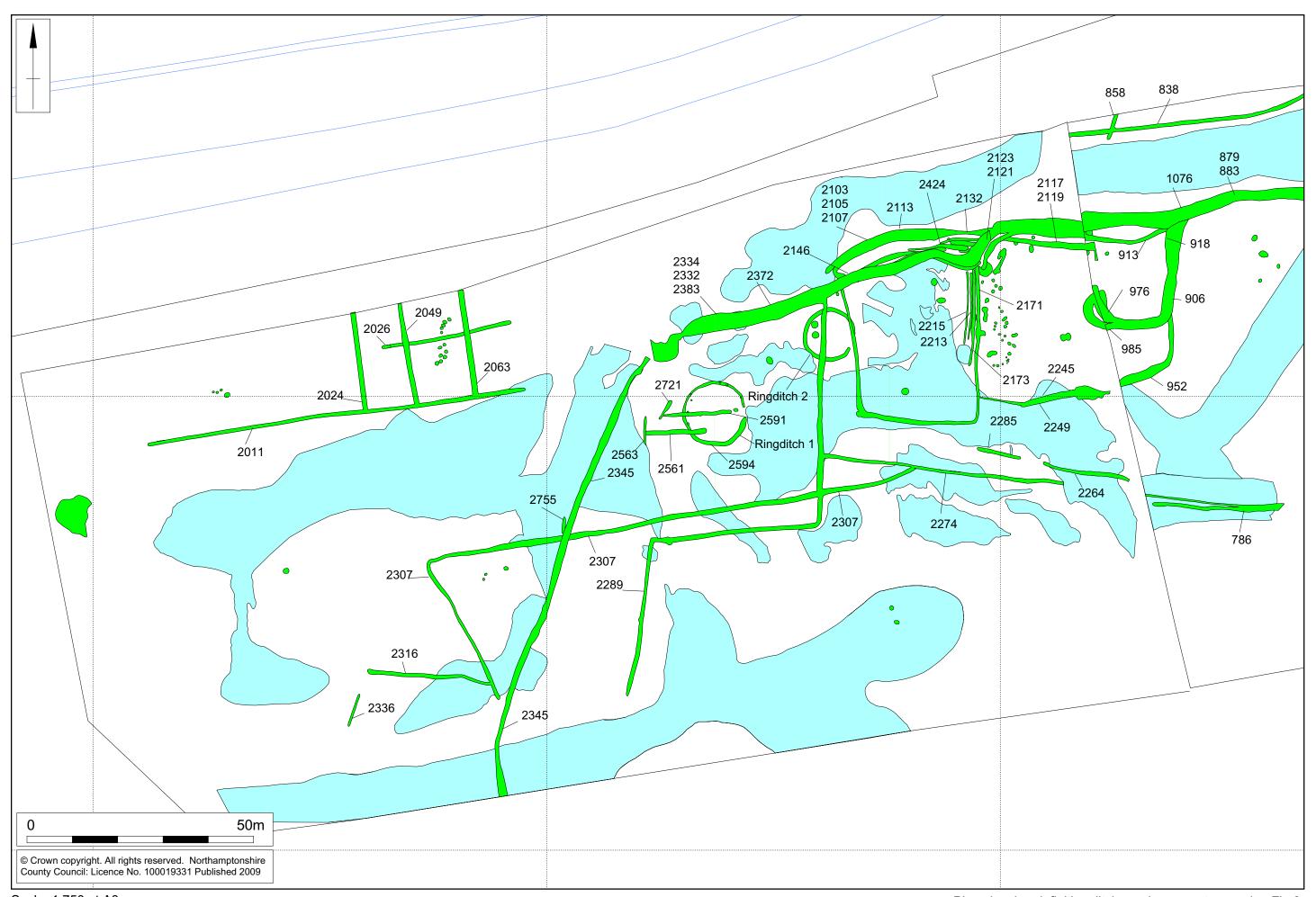


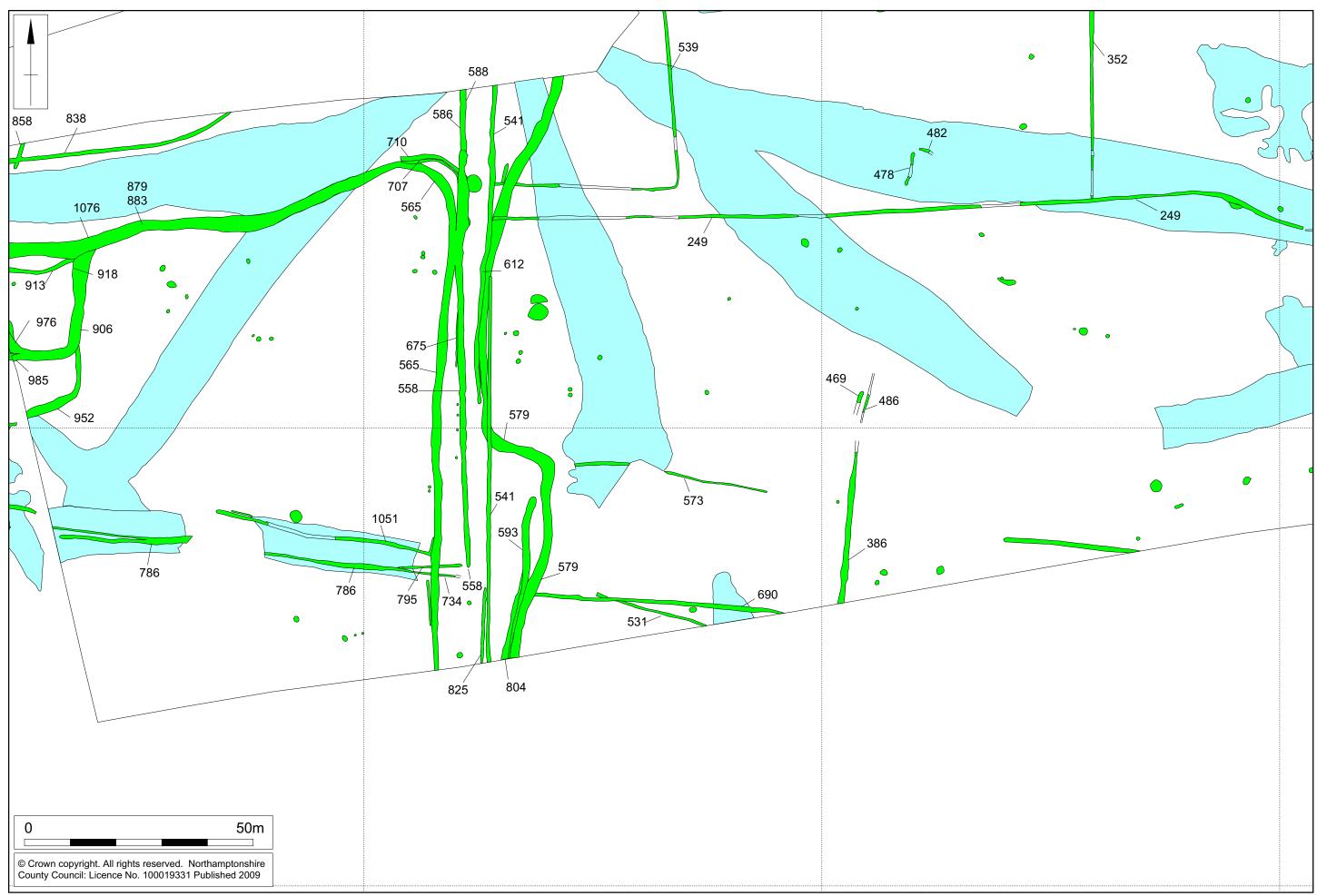


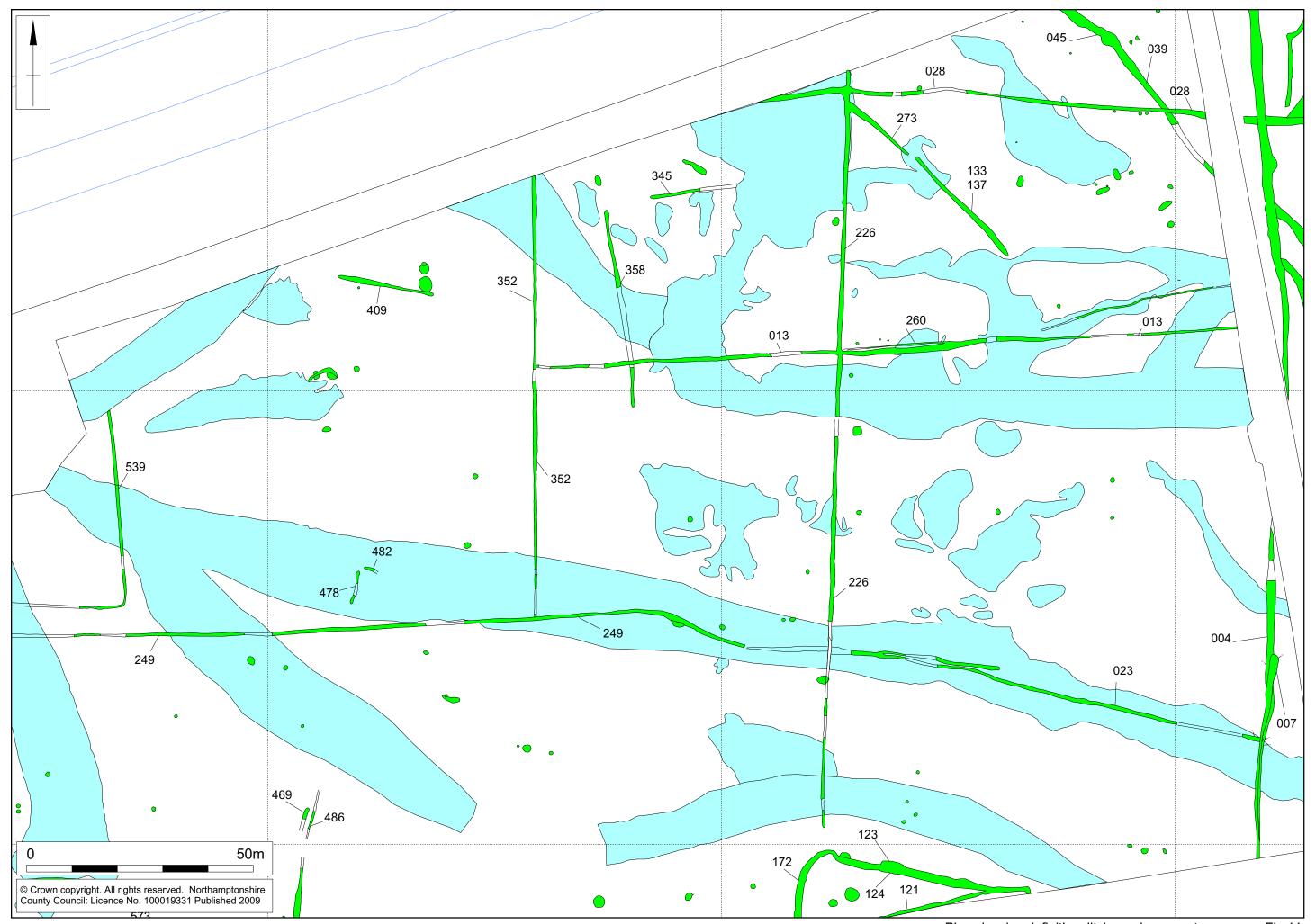














Non-pollen palynomorphs Type 143 from the samples

Fig 12a



Type 88 mandibles from the samples

Fig 12b



Examples of different pollen preservation conditions from the samples

Fig 12c



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