Excavation Report

Prehistoric landscape at the new agricultural reservoir Rosedene Farm Methwold

Strip, Map and Sample Excavation Report

June 2014

Client: Richard Jackson Engineering and GS Shropshire and Son Ltd

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Prehistoric landscape at the new agricultural reservoir, Rosedene Farm, Methwold

Strip, Map and Sample Excavation

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Table of Contents

List of Figures

List of Tables

List of Plates

Summary

Between the 27th June and 26th September 2013, Oxford Archaeology East carried out a Strip, Map and Sample excavation during the construction of an agricultural reservoir at Rosedene farm, Methwold. The works entailed the excavation in spits of between 0.6 and 2.4m of peat, across a 9.4 hectare site.

A total of five utilised tree throws, containing charcoal, animal bone and struck flint were found at the bottom of the archaeological sequence, underlying the peat. The struck flint assemblage included Mesolithic microliths

The project revealed that prior to the formation of the peat, the area was heavily forested. From the Late Neolithic onwards conditions gradually became wetter, turning first into Alder Carr fen woodland and eventually into a large body of water, potentially by the Late Bronze Age. The carbon dating could not elucidate this any further as a result of obligate water plants fixing ancient carbon from the chalk.

Within the upper part of the Alder Carr wood peat, evidence for beaver activity was identified with the recovery of beaver hewn wood, forming a lodge or food store. Fragments of stone axe cut wood were also recovered from this deposit.

A post-medieval willow drain was found at the top of the archaeological sequence cutting into the underlying peat.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 An archaeological Strip, Map and Record excavation was conducted at Rosedene Farm, Methwold. This programme of works was undertaken in accordance with a Brief issued by Dr Ken Hamilton of Norfolk County Council (NCC; Planning Application 07/00790/F), supplemented by a Specification prepared by OA East (Spoerry 2013).

1.1.2 The work was designed to assist in defining the character and extent of any archaeological remains within the development area during construction of an agricultural reservoir, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by NCC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.

1.1.3 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

1.2.1 The following is largely drawn from the relevant fenland survey volume (Silvester 1991). The development site lies on the fenland skirt land at the edge of the West Melbury Marly Chalk formation. In the area of Methwold, the fen edge includes chalky drift ridges and hollows. Directly to the north, a peninsular of mineral soils rises into the fen to a height of between 3 and 4m OD. This was named Catsholm peninsular by Silvester (1991; p58), after the farm at the west end.

1.2.2 The development site is relatively flat and has been levelled on a number of occasions, with the top of the upper peat deposits reworked. The peat has visibly shrunk from the level of the trackway built shortly after WWII along the north-west edge of the site (Hammond, M. *pers comm*).

1.2.3 To the south of the site is Sam's Cut, a major drainage channel on a north-west to south-east alignment, that was constructed by Vermuyden in 1631. The land use to the north of Sam's Cut has been different from that to the south. As a result, the peat deposits within the development site have undergone less degradation than those further south. Most of the Roddons and shallow islands within the region of the development have yet to be fully identified and mapped as they are still covered by peat.

1.2.4 Previous boreholes by Godwin (1940) in the area of Methwold fen and the Queens grounds, in conjunction with work by Boreham (2008) at Wissington, give an indication of the general aspects of peat formation at the site.

1.2.5 During during the Mesolithic period, the Methwold area was densely forested, both in the lowland fen basin and the uplands including the Catsholm Peninsular. Peat formation is believed to have started in the Neolithic (Godwins zone VIIb) with the formation of alder carr woodland. Godwin also identified a layer of grey silty peat full of *Phragmites*, which he identified as marginal fen clay (Godwin 1940, p.264). As the marine transgression retreated, woodland reformed until the crossover of zones VII and VIII. This coincided with a drying out in Methwold fen, which led to an increase in the amount of *Quercus* and the growth of *Pinus, Betula* and *Ulmus.*

1.2.6 A number of natural shell marl deposits formed within meres and streams at the end of the sequence. Several of these streams (slades) are located within the area of

Catsholm Peninsular (Silvester 1991). It is assumed that these deposits are associated with an Iron Age or Roman marine inundation (Boreham *pers comm*).

1.2.7 At present, the site, which lies at *c.*-1m OD, is heavily drained and used for agricultural purposes by G. S. Shropshire, who grow shallow rooted vegetables and salad crops.

1.3 Archaeological and historical background (Fig. 2)

1.3.1 A large quantity of archaeological material has been recovered from the area of Methwold fen, including finds scatters and human remains (Silvester 1991). This material is largely concentrated to the north of the development area, along the Catsholm Peninsular. A 1km search of the Historic Environment Record (HER) was carried out by Norfolk County Council's HER team and the following sections are largely drawn from the information gathered by this search.

Palaeolithic

1.3.2 There are no known finds from this period recorded within the 1km search area around the site, Palaeolithic material is known from a number of locations within the vicinity of Methwold Fen. Of note is a long blade assemblage, with a suggested date range of 9000-6000BC, recovered by a farmer during dyke cutting (Hall and Coles, 1998).

1.3.3 Further Palaeolithic material was recovered from Feltwell, at Shrub Hill Farm, in the 19th century. This included 200 Palaeolithic hand axes indicative of a rich Acheulian site (Silvester 1991, Darvill 2010). A mix of Palaeolithic and Mesolithic material was also recovered at Methwold as part of the fenland survey (SMR 4738 for example).

1.3.4 The evidence cited for this wider area of fenland would indicate general use of the Palaeolithic landscape.

Mesolithic

1.3.5 Catsholm Peninsular is the highest ground bordering and penetrating into Methwold Fen. Unsurprisingly this peninsular of mineral deposits has been a focus for occupation over an extended period of time.

1.3.6 There are three known scatters of Mesolithic material on the southern side of the Catsholm Peninsular, *c.*750m to the north of the development area (MNF 20991, Silvester 1991). These may represent elements of a much larger scatter, suggestive of Mesolithic occupation of Catsholm Peninsular. Additionally, 400m to the west, a further Mesolithic occupation site has been identified (Silvester 1991, MNF 2533 (ENF 1568, ENF 11422)).

1.3.7 Similar sites identified further afield include lithic material identified along the south edge of the Hythe Valley, Shippea Hill, Lakenheath and Decoy Farm, Hockwold (Hall and Coles 1998, Hall and Coles 1994).

Neolithic

1.3.8 The Catsholm Peninsular, and other high points within the fen such as Shrub Hill (Silvester 1991) to the south, appear to have continued to be the focus of occupation during this period. This is reflected in the large quantities of material recovered by field walking as part of the fenland survey (Silvester 1991).

1.3.9 Neolithic material has also been identified towards the western edge of Catsholm Peninsular. This includes a single stone axe, recovered pre 1972 (MNF15740), and a flaked axe, lithic implements and a polished axe (MNF 12578). A flaked Neolithic axehead, pot boilers, lithic implements and a polished axe head (MNF 12579) have been recovered from the adjacent fields and also directly north (MNF 23660 & MNF

20991). A scatter of undated lithics and pot boilers were identified to the west during the fenland survey (MNF 23133 & MNF 23218), whilst pot boilers and undated lithic implements were also recovered to the south (MNF 23658 & MNF 23659). It has been suggested that the pot boiler sites identified during the survey of the Methwold area most likely to date to the Late Neolithic or Early Bronze Age (Silvester 1991).

1.3.10 It would appear that some of the occupation the Catsholm Peninsular was multiphase, based upon the recovery of Neolithic and Bronze Age material from a number of sites (MNF 20345). Approximately 750m to the north- east of the development area, further Late Neolithic or Early Bronze Age remains are recorded (MNF 23237 & MNF 23236); in the latter case, the assemblage included a fragment of Beaker pottery (MNF 2528). Immediately adjacent to the south, Beaker pottery, antler tools including an awl and chisel, lithic implements, a quern stone and pot boilers of similar date have been recovered (MNF 2531). It seems likely that these sites represent an area of settlement focused around Broad Fen Farm.

1.3.11 Two further find spots have been identified south of Broad Fen Farm (MNF 20280 & 23662). One, which comprised pottery, lithic implements and pot boilers, has been attributed to the Neolithic period. The smaller find spot is of an undated flint blade and scraper. Finally, a Neolithic flint axe was recovered from Methwold Common, to the south-east; it is unclear whether this was associated with occupational material (MNF 14824).

Bronze Age

1.3.12 During the Bronze Age inundation, the earlier course of the Wissey is assumed to have become blocked by the formation of Fen Clay. The development area lies beyond the extent of the Fen Clay and Bronze Age occupation is not clearly defined within the area of Methwold fen (Silvester 1991). Although, as stated already, Early Bronze Age material has been identified in the area of Broad Fen Farm (MNF 23235).

1.3.13 Bronze Age metal objects and lithics have also been recovered from the area surrounding the fen margin at the western end of Catsholm Peninsular, near Catsholm farm. The earliest recorded find is a Bronze spearhead recovered in 1859 (MNF 2545). A further spearhead was recovered to the north during the fenland survey (MNF 2533).

1.3.14 Two Bronze Age axes (MNF 13459 & 13461) have been recovered from the south-western edge of Catsholm Peninsular, to the west of the development area. Lithics were also recovered from the east of Catsholm Farm (MNF 20991). Finally, a Bronze Age dagger and the butt of a rapier (MNF 23660 & 2530) were recovered from this locality in 1960. A wooden yew bow has also been recovered from Methwold Fen and is presumed to date to the Bronze Age (Healy 1996).

1.3.15 Human remains found at Hemplands Farm have been radiocarbon dated to the Bronze Age (see 1.3.34, below).

Iron Age and Roman

1.3.16 There are no Roman finds recorded within 1km of the development area. Sites identified as Late Bronze Age or Iron Age have been identified at the head of the Hythe Valley, these are a considerable distance from the development area; the same is true of Roman settlement (Silvester 1991).

Saxon and Medieval

1.3.17 Waterlogging of the area around the Catsholm Peninsular, and the subsequent formation of shallow peat, cut it off completely from Thornham and the upland during this time (Silvester 1991).

1.3.18 Documentary evidence suggests that a medieval house, dated between 1066 and 1900, was located to the west of the site of the reservoir. This is recorded in the HER as 'The house in Severalls Fen' (MNF 2552). The building is now gone and has been replaced by a modern barn.

Post-Medieval

1.3.19 Evidence for activity during the post-medieval period has been identified in the form of a small number of gun flints recovered from Broad Fen Farm (MNF 24108).

1.3.20 The line of the Wissington Railway has also been identified (MNF 13599 & 18619). The former (MNF 13599), dated to 1905, and was associated with the Ammonia factory now underneath Wissington Beet factory. The railway line was closed in 1917 due to severe flooding and reopened in 1924. These formed part of the Common Dyke branch, which was opened in 1925 by Southery farmers to supply a large farm.

Human Remains

1.3.21 Undated human remains have been found in the area (MNF 2548 & 2550). The former (MNF 2548) were recovered in 1949 during the clearing out of dykes located to the north-east of the development area. It is unclear what happened to the remains as the HER lists them as sent to London and lost there.

1.3.22 A single inhumation (MNF 2550) was found at Hemplands farm by Frank Curtis in 1967. It was recorded as buried on a platform made out of 'sticks (withies?)'. The skeleton, a mature/older female, underwent further analysis, including C14 dating and isotopic analysis as part of the Fenland Survey (Healy 1996). This demonstrated a reliance on terrestrial resources to the virtual exclusion of seafood and the C14 dated the remains to 3840 ± 80 BP. Both of these factors seem to confirm she was an Early Bronze Age individual.

1.4 Acknowledgements

1.4.1 Thanks to David Clarke and Peter Ansell of Richard Jackson for commissioning the work. Also to Ken Hamilton of NCC for monitoring the project. The project was managed by Paul Spoerry of Oxford Archaeology East.

1.4.2 Thanks also go to Saul Disbury of Pyors for his assistance during the works and finally thanks to the site staff, in particular Mike Green for all his hard work and perseverance, but also Michael Webster, Kathryn Nicholls, Robyn Webb, Graeme Clarke, Pat Moan, Gareth Rees and John Diffey.

1.4.3 The illustrations were produced by Gillian Greer and Frances Chaloner. Rachel Fosberry processed and reported on the environmental samples. Thanks also to Steve Boreham for his work on the pollen sequence and Michael Bamforth for his analysis of the worked and beaver gnawed wood.

1.4.4 Finally, thanks to Martin Hammond and G.S. Shropshire for their assistance and patience.

2 Aims and Methodology

2.1 Aims

2.1.1 The original aims of the project were set out in the Brief and Written Scheme of Investigation (Spoerry 2013 and Hamilton 2007).

2.1.2 The main aims of this excavation were:

- To mitigate the impact of the development on the potential archaeological remains. The development would have severely impacted upon these remains and as a result a strip map and sample was required.
- To preserve the archaeological evidence contained within the strip map and sample area by record and to attempt a reconstruction of the history and use of the site.

2.1.3 The aims and objectives of the excavation were developed with reference to national, regional and local frameworks, in particular Medlycott (2011) which draws on Glazebrook (1997) and Brown and Glazebrook (2000).

2.2 National Research Aims

2.2.1 *There has been a lack of progress in research into the Mesolithic period and the reasons for this need consideration. Should fieldwork methodologies be adapted or new methodologies adopted in order to better target this period? Work needs to be undertaken on developing a predictive model for identifying potentially important Mesolithic sites* (settlement, palaeoenvironmental resource, etc.).

2.2.2 The development offers an opportunity to assess techniques and research models for the identification and recovery of Mesolithic data in a large area of fenland landscape. Furthermore, to investigate the relationship between Mesolithic activity and former dry land surfaces sealed beneath the peat and 'sandhill' nodes within it.

2.3 Regional Research Aims

2.3.1 The Neolithic evidence from Norfolk appears to be distinctively different from that in other parts of the country. This distinction needs to be explored in more detail at a regional level in order to establish its validity, or whether it is a result of the date and/or dating of Neolithic material from Norfolk.

2.3.2 The transition from shifting, semi-permanent settlement to a more settled landscape of fields and farms remains an area of interest. Neolithic 'stability' is suspiciously late, as far as we know:

2.3.3 Dating of less conspicuous, non-monumental Late Mesolithic and Early Neolithic contexts, could help to refine understanding of the introduction of Neolithic practices and beliefs.

2.3.4 The substantial proportion of the archaeological record which is not readily identifiable from the aerial photographs—flint-working sites, agriculture, unenclosed settlement or pit groups — is under-represented. More work is needed to try to reduce or compensate for this bias, and to investigate further the relationship between the monuments and the less visible sites.

2.3.5 Study of previously unrecognised Neolithic remains on the fenland basin floor offers potential to elucidate any of these objectives, particularly where there is potential to see the transition from Mesolithic to Neolithic use of the landscape.

2.4 Site Specific Research Objectives

2.4.1 *It would be useful to understand why second millennium cal. BC field systems developed in some parts of the region, but not others. There remains a dearth of them north of the Stour and east of the Fens, with Brandon a rare exception. The regionalisation of settlement patterns also needs further study.*

2.4.2 The fact that extensive Bronze Age remains have been recovered locally, despite peat growth in the locality during this period, needs investigation. Specifically, is the model of landscape change incorrect or does it need alteration? Alternatively, was activity in the area characterised by wetland-based or wetland-edge procurement strategies? If the model needs adjustment, there should be consideration of the wider picture of variability in Bronze Age landscape use.

2.5 Additional Research Objectives

2.5.1 An initial assessment of the findings of the project showed that some of the original aims and objectives of the excavation stated above could be met through the analysis of the excavated materials. This process also identified a new objective, drawn from regional research assessments and agendas (Medlycott 2011). Namely, the pollen samples taken from deposits believed to have formed in the Neolithic allow us to look at the *Human impact on the natural landscape, including changing patterns of alluviation, woodland management and clearance* (Medlycott 2011; p 13).

2.6 Methodology

2.6.1 The methodology followed that outlined in the Brief (Hamilton 2007) and detailed in the Written Scheme of Investigation (Spoerry 2013). As the development progressed this was amended where necessary on account of the working conditions.

2.6.2 Machine excavation was carried out by a 360° mechanical excavator using a 1.8m wide flat bladed ditching bucket, under constant supervision by a suitably qualified and experienced archaeologist.

2.6.3 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.

2.6.4 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

2.6.5 Due to the difficulties of working on peat with a mechanical excavator the site was initially stripped to the underlying geology. Any areas containing archaeological material were carefully stripped and then excavated by hand.

2.6.6 Environmental sampling was carried out across the site with the aim of recovering a representative sample of the archaeological deposits. Monolith sampling for pollen was also carried out.

2.6.7 The site conditions were generally dry, with good light. However, a number of extremely wet days, high winds and the problems associated with the extraction of peat resulted in unfavourable ground conditions.

3 Results

3.1 Introduction

3.1.1 The works afforded the opportunity to look at three distinct groups of remains/periods of landscape change. Namely, the formation of the peat and the palaeoenvironment within the area of Rosedene Farm, the prehistoric archaeology sealed within and below the peat and the post-medieval alteration of the landscape.

3.2 Prehistoric (Fig. 4 & 5)

3.2.1 The removal of the peat across the site revealed five utilised tree throws cutting into the underlying natural chalk marl and gault clay. Tree throw (**39**) was 2.3m long, 1.9m wide and 0.42m deep with an irregular shape. It contained a single, mid brown silty peat (40) with frequent organic inclusions and occasional small flint pebbles. A small amount of charcoal was present within the tree throw, suggesting the tree was either burnt out or the tree throw was utilised (Fig. 5).

3.2.2 Tree throws **41** and **43** were similar in form, with irregular sides, bases and shapes in plan. Tree throw **41** was 3.1m long, 2.4m wide and 0.06m deep, whilst tree throw **43** was 2.5m in length, 2.06m in width and 0.12m deep. Both contained a single organic rich dark brown fill (42 & 44 respectively) with occasional small flint pebble inclusions. Struck flint was recovered from both deposits with an assemblage of material recovered from fill 42 and a single struck blade in fill 44 (App B.1).

3.2.3 A fourth tree throw (**45**) was 1.3m long, 1.21m wide and 0.08m deep. It contained fragments of animal bone and charcoal within its dark grey-brown silty clay fill (46) (Fig. 5 & App. C.2).

3.2.4 The last tree throw (**49**) was 4.1m long, 3.7m wide and 0.34m deep with two fills (48 & 50). The lower fill (48) was a light-brown peat with occasional small flint pebbles and charcoal flecks and struck flint, 0.18m deep. The upper fill (50) was a dark brown peat with occasional charcoal flecks 0.14m deep (Fig. 6).

3.3 Peat formation

3.3.1 During the strip map and sample process it was possible to record the peat development sequence at Rosedene Farm. This was deepest at the western end of the site, by the farm track. Here, the peat lay on top of sand and gravel deposits associated with Greensand beds between the Gault Clay and West Marlbury Chalk formation (Boreham *pers comm*). A stabilisation horizon was present at this point with a large number of tree throws and root balls visible, indicating the development area was heavily forested prior to the peat formation.

3.3.2 A thin, patchy layer of greyish brown silty clay sealed the clay and gravels. This in turn was sealed by the peat formation. The lower portion of the peat (2) was formed from wood peat, although patches of reeds were present within the material, suggesting it formed in damp Alder Carr woodland (Fosberry, App. C.3 & Boreham App. C.5). This formation appeared to form the majority of the surviving sequence, which throws into doubt whether or not the lower peat, whose presence is already questioned by Godwin, actually formed in this area (1940).

3.3.3 The site lies beyond the limit of the Bronze Age marine inundation and as a result no Fen Clay was present. However, at the top of the sequence and primarily confined to the northern edge of the site, a layer of buff coloured sandy-silt and silt was uncovered, the lower portion of which contained a high proportion of organics and freshwater molluscs including swan mussels (*Anodonta cygnea*).

3.3.4 In the areas not covered by this silt deposit the peat at the same horizon became less woody and contained fragments of *Phragmites* suggesting formation in considerably wetter conditions.

3.3.5 The entire site was then covered with a layer of heavily degraded, crumbly peat forming a topsoil (1) with little or no structure or traces of organic material.

3.4 Post-medieval (Fig. 7 and Plates 4 & 5)

3.4.1 A single post-medieval ditch/drain (**20**, **24**, **25**, **28**, **31**, **36**) was exposed that traversed the site on an east to west alignment parallel with the modern boundary ditches at the north and south of the site. The ditch was up to 1.2m wide and between 0.1m and 0.29m deep with a layer of wooden withies along its base. The upper fill (18, 22, 27, 30, 33, and 34) was a 0.2m thick dark, crumbly peat topsoil. A second layer of sandy peat (21 & 37) was identified in two of the sections. The ditch seems to have been intentionally filled to a depth of 0.1-0.2m with the withies forming a 'willow drain' (Bamforth App C.1).

3.4.2 A single piece of badly rolled roof tile was recovered from ditch fill 18. This has been identified as late medieval or early post medieval (Atkins *pers comm*), the state of preservation would suggest it is residual.

3.4.3 No further post-medieval archaeology was uncovered

3.5 Finds Summary

CBM

3.5.1 The single rolled fragment of late medieval or early post-medieval roof tile recovered from ditch fill 18 has not been retained.

Flint *(App B.1)*

3.5.2 A number of struck flints were recovered from two of the tree throws and also from the lower peat layer (2).

3.5.3 The three lithics recovered from layer 2 comprised an amorphous core, a blade and an obliquely blunted blade. These finds are likely to be of Late Mesolithic date.

3.5.4 A small assemblage of blades and flakes, including a crescent microlith, was recovered from tree throws **41** and **43**. The material was soft hammer struck and again likely to be of Late-Mesolithic or Early Neolithic date (Butler 2005).

3.5.5 Finally, a second assemblage of flints was recovered from tree throw **49**. This material is less patinated and potentially of slightly later, Early Neolithic date.

3.6 Environmental Summary

Wood *(App C.1)*

3.6.1 A number of pieces of modified wood were recovered from the site. Two of the pieces displayed markings that indicate their being worked by stone axe (samples 20 and 4; Figs. 9 & 10).

3.6.2 A platform of dead and beaver-gnawed wood was identified within Areas 1 and 2. The beaver (*Castor fiber)* was common in the British Isles from the Mesolithic into the Saxon periods (Yalden 1999). The last known record of beaver in the British Isles dates to 1789, from Bolton Percy, located to the south-west of York (Coles 2010). It is unclear whether these areas of beavered wood represent a lodge or winter food store (Figs. 4 & 8; Plates 1,2 & 3)

Bulk samples *(App C.3)*

3.6.3 The bulk environmental samples demonstrate a similar pattern to the pollen sequence with the site becoming increasingly wet until the formation of the marl deposit (38). Species such as alder, oak and yew have been identified within the deposits. Yew is rarely represented in peat samples and its presence at Methwold is a significant find.

Pollen *(App C.5)*

3.6.4 A series of pollen samples were taken from a representative sample. Unfortunately, due to de-watering of the site, the lowest samples taken from 3cm, 11cm and 24cm were barren. Variable preservation was recorded at 33 and 76cm, whilst the samples from 59cm and 68cm had good pollen survival.

3.6.5 The sequence recovered shows evidence for pre-clearance 'mixed oak woodland with lime and elm' (Boreham, App. C.5) on the adjacent higher ground. An abundance of hazel pollen (>35%) occurs in the higher samples at 68cm and 76cm, which is similar to the mid-Mesolithic hazel peak (c.9000 Cal years BP).

3.6.6 Two AMS radio-carbon dates were taken from the pollen core at the 11cm and 68cm points. The 11cm sample was dated as 3990 ± 30 BP and the 68cm as 4080 ± 30 BP. Both of these dates are firmly within the Late Neolithic. The apparent disparity in the dating, wherein the lower deposit (11cm) is more recent than the upper deposit (68cm), can be explained by the re-working of ancient carbon into the sample by freshwater organisms. A further bulk radio-carbon date taken at 43cm produced a date of 4094 +/- 35 BP. Again the disparity with the 11cm date is most likely due to re-worked ancient carbon. Boreham has suggested that the 11cm date is the best for dating the sequence, confirming Godwin's theory that peat formation within the Methwold region began in the Neolithic.

3.6.7 These dates mean that the hazel peak identified by Boreham as potentially mid-Mesolithic is actually Late Neolithic, suggesting the concentration of Hazel is due to woodland management by coppicing (Boreham. *pers comm*).

3.6.8 Within the immediate environs, the lithology of the sediments show progressive development from marshland, through eutrophic fen with deepening water, eventually forming a large pool or lake bordered with large mature trees, by the Late Neolithic or Early Bronze Age. The presence of white water lily and water milfoil pollen in more recent deposits suggest the site was eventually submerged in deep open water.

4 Discussion and Conclusions

4.1 Prehistoric

4.1.1 The site produced evidence for prehistoric sealed below and within the lower layers of the peat and the beaver lodge. This comprised five utilised tree throws containing a mix of unidentified bone fragments from a small to medium sized mammal, charcoal and two assemblages of worked flint. The material present would suggest a Late Mesolithic or Early Neolithic date, confirmed by the radio-carbon dates taken from the pollen core. Peat formation started on the site during the Neolithic. This is supported by the character of the two struck flints recovered from the basal layer of the peat.

4.2 Peat formation

4.2.1 Prior to the formation of the peat in the Late Neolithic period, the development area was heavily forested. As the area became increasingly wet, Alder Carr woodland formed and, as water levels continued to rise across the region, it became a large body of open water. This was colonised by beavers towards the end of the Neolithic or Early Bronze Age.

4.3 Post-medieval

4.3.1 The single post-medieval willow drain was not unexpected and of little archaeological interest.

4.4 Significance

4.4.1 The archaeological material uncovered demonstrates marginal use of a heavily forested landscape away from the main settlement areas. The cut wood recovered from the top of the peat may be indicative of Late Neolithic or Early Bronze Age activity in the area.

4.4.2 The most significant findings are the results of the pollen analysis, which have aided in characterising the Barroway Drove Beds; the skirtland at the very edge of the fen margin, outside the Bronze Age marine transgression. Until now, little pollen analysis has been carried out on the edges of the fen and the stratigraphy is poorly represented in the published literature along the northern fen edge.

4.5 National research aims

4.5.1 The archaeological remains from this site did not enable the methodologies for targeting Mesolithic activity to be scrutinised. As peat formation seems to have started around 3990 ± 30 BP, it should be assumed that oak dominated, ancient deciduous woodland was present during the Mesolithic. The Late Mesolithic or Early Neolithic activity on the site probably represents transient visitation by hunter-gathers of an area peripheral to previously identified settlement sites on the sand hills and dryer land of the Catsholm peninsular, to the north.

4.6 Regional research aims

4.6.1 The general paucity of Neolithic material renders it impossible to answer many of the proposed research aims. However, the utilised tree throws give a clear indication of some marginal land use that may be indicative of Early Neolithic activity outside of the known settlement area to the north, prior to the start of peat formation.

4.6.2 The site also enables some conclusions to be drawn regarding the human impact on fenland sites within the Neolithic. The well dated pollen sequence and palaeoenviromental evidence indicate that clearance of the site and the surrounding environs did not occur during this time, although the abnormal hazel pollen peak dated to 4080 ± 30BP is indicative of Neolithic woodland management and coppicing.

4.6.3 The dating from the pollen sequence suggests that this region of land was under a body of freshwater by the Late Neolithic and therefore not habitable.

4.7 Local research aims

4.7.1 The palaeo-environmental evidence recovered from the site gives an indication of the Bronze Age land use in the immediate vicinity of the Catsholm peninsular. There is clear evidence that the site became increasingly wet throughout the Neolithic and into the Bronze Age, eventually giving way to a body of open water bordered by a well established ancient woodland. This is likely to have formed as freshwater, backed up by rising sea levels at the start of the marine transgression.

4.7.2 During this time, people may have been drawn to the area as beavers, identified through the evidence of a lodge or food store, would have created a clearing within the environs of the development, increasing the local bio-diversity and making this an attractive area for hunting and gathering in the Neolithic and Bronze Age.

4.7.3 The large body of water may also explain why the occupation of the Catsholm peninsular died off at the end of the Bronze Age. As water levels continued to rise, the amount of usable land would have decreased, increasing pressure on food production and resulting in the abandonment of this area and migration into the dryer fenland margin around Feltwell and Methwold.

Appendix A. Context Inventory

Site			
General description	**Orientation**	-	
9.4 hectares stripped area for the building of an agricultural reservoir. Five utilised tree throws were found under the peat and beaver gnawed wood was found within the peat deposits. A single post-medieval willow drain was found at the top of the sequence.	**Avg. depth (m)**	0.6 – 2.4m	
	Width (m)	-	
	Length (m)	-	

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
1	layer	-	0.55	Topsoil	-	-
2	layer	-	0.7	peat	Struck Flint	Prehistoric?
3	layer	-	-	Natural gualt clay and chalk marl	-	-
4	timber	0.1	0.9	Beaver gnawed wood	-	Pre-Roman
5	timber	0.1	0.9	Beaver gnawed wood	-	Pre-Roman
6	timber	0.035	0.9	Beaver gnawed wood	-	Pre-Roman
7	timber	0.022	-	brushwood	-	Pre-Roman
8	timber	0.04	0.04	Beaver gnawed wood	-	Pre-Roman
9	timber	0.012	-	brushwood	-	Pre-Roman
10	timber	0.03	-	brushwood	-	Pre-Roman
11	timber	0.023	-	brushwood	-	Pre-Roman
12	timber	0.03	-	brushwood	-	Pre-Roman
13	timber	0.02	-	brushwood	-	Pre-Roman
14	timber	-	-	Human altered wood	-	Pre-Roman
15	timber	-	-	Beaver gnawed wood	-	Pre-Roman
16	timber	-	-	Beaver gnawed wood	-	Pre-Roman
17	timber	-	-	Beaver gnawed wood	-	Pre-Roman
18	fill	1	0.1	ditch	Roof tile	Post-medieval
19	timber	1.1	0.2	Cut brushwood	-	Pre-Roman
20	cut	1.1	0.24	ditch	-	Post-medieval
21	fill	0.72	0.07	ditch	-	Post-medieval
22	fill	1	0.1	ditch	-	Post-medieval
23	timber	1	0.1	brushwood	-	
24	cut	1	0.1	ditch	-	Post-medieval
25	cut	1.1	0.2	ditch	-	Post-medieval
26	timber	1.1	-	brushwood	-	
27	fill	1.1	0.2	ditch	-	Post-medieval
28	cut	1.04	0.2	ditch	-	Post-medieval
29	timber	1.04	0.2	brushwood	-	

30	fill	1.04	0.2	ditch	-	Post-medieval
31	cut	1.12	0.29	ditch	-	Post-medieval
32	timber	0.9	0.1	brushwood	-	
33	fill	1.12	0.15	ditch	-	Post-medieval
34	fill	1.2	0.2	ditch	-	Post-medieval
35	timber	1.1	0.2	brushwood	-	
36	cut	1.2	0.2	ditch	-	Post-medieval
37	fill	0.75	0.1	ditch	-	Post-medieval
38	layer	-	0.2	Shell marl at north-west of site	-	
39	cut	1.9	0.42	tree throw	-	Neolithic?
40	fill	1.9	0.42	tree throw	-	Neolithic?
41	cut	2.4	0.06	tree throw	-	Neolithic?
42	fill	2.4	0.06	tree throw	Flint	Neolithic?
43	cut	2.06	0.12	tree throw	-	Neolithic?
44	fill	2.06	0.12	tree throw	Flint	Neolithic?
45	cut	1.2	0.02	tree throw	-	Neolithic?
46	fill	1.26	0.08	tree throw	-	Neolithic?
47	timber	0.32	0.22	natural	-	Pre-Roman
48	fill	3.7	0.18	tree throw	-	Neolithic?
49	cut	3.7	0.34	tree throw	-	Neolithic?
50	fill	3.7	0.14	tree throw	-	Neolithic?

APPENDIX B. FINDS REPORTS

B.1 Flint

By Anthony Haskins

Introduction

B.1.1 A small assemblage of 34 flints was submitted for analysis. This report covers the initial rapid assessment and recommends no further study is needed.

Methodology

B.1.2 For the purposes of this report, individual artefacts were scanned and then assigned to a category within a simple lithic classification system (Table 1). Unmodified flakes were assigned to an arbitrary size scale in order to identify the range of debitage present within the assemblage. Edge retouched and utilised pieces were also characterised. Beyond this, no detailed metrical or technological recording was undertaken during the preliminary analysis. The results of this report are therefore based on a rapid assessment of the assemblage and could change if further work is undertaken.

Quantification

Context no.			2	42	44	48	**Totals**
Type	**Sub type**	**Classification**					
core technology	*core*	*Single Platform Flake*				1	**1**
		Amorphous	1				**1**
		core rejuvenation flake				1	**1**
flakes (>50mm)	*primary*					1	**1**
	secondary			5			**5**
	tertiary			1			**1**
flakes (>25mm <50mm)	*secondary*			1		1	**2**
	tertiary			4		1	**5**
	broken			1			**1**
flakes (>10mm <25mm)	*secondary*			1			**1**
	tertiary			4			**4**
blades (all sizes)	*secondary*		1				**1**
	tertiary			1	1		**2**
	broken		1	2			**3**
retouched tools		edge wear		2			**2**
		microlith	1	1			**2**
other		*Burnt flint*				1	**1**
Totals			**4**	**23**	**1**	**6**	**34**

Table 1: Flint quantification catalogue

Assessment

B.1.3 The entire assemblage is worked from a dark blackish blue opaque flint with occasional pieces showing mid greyish-blue to greyish-white patination/recortification. The cortex, where present, is generally thin and smooth, suggesting the material was collected from a secondary source such as a river, most likely the Wissey.

B.1.4 There are only a few pieces of core technology within the assemblage. A single amorphous core from within the basal layers of the peat (2) and a single platform flake core and rejuvenation flake from within tree throw fill 48. The working methodology visible on the flint work and cores is primarily focused on production of narrow flakes and blades, suggesting a Late Mesolithic or Early Neolithic date.

B.1.5 Debitage recovered from the site is dominated by narrow flakes and the occasional blade, again suggesting an Early Neolithic date, especially the assemblage recovered from tree throw fill 42.

B.1.6 Two microliths and two utilised flakes were recovered from the site. The utilised flakes came from tree throw fill 42 and seem to be part of a small assemblage of Early Neolithic material. A single crescent backed with abrupt retouch along the straight edge was also recovered from this feature, suggesting the assemblage is of transitional Late Mesolithic to Early Neolithic date.

B.1.7 The remaining identifiable tool form was a single obliquely backed blade, likely to be of Mesolithic date, recovered from the very base of peat layer 2.

B.1.8 Material from the lower wood peat layer (2) is largely unstratified within the peat formation and therefore it is difficult to understand its location within the sequence. This material includes a large thermally shattered amorphous core, an obliquely backed blade, a broken blade and a complete secondary blade. Of these flints, the obliquely backed blade and the broken blade have undergone heavy recortification, whilst the core and the remaining complete blade show no signs of recortification.

B.1.9 The largest concentration of flintwork from the site came from adjacent tree throw fills (42, 44). Twenty four lithics were recovered from these fills and consist largely of flake debitage and a small number of blades and narrow flakes. A single retouched crescent microlith would suggest a Late Mesolithic or very Early Neolithic date.

B.1.10 The remaining assemblage of flint comes from a separate tree throw fill (48). This material is again primarily made up of flakes and was found near to the amorphous core (2). The material displayed less evidence of recortification than that from 42 and 44, but was located in a similar position within the buried landscape, at the base of the peat formation, which suggests a similar date. The material within this feature is very similar to the pieces within 42 that are not recortified across the whole surface.

Statement of Potential and Recommendations for Further Work

B.1.11 This small assemblage is typical of a Late Mesolithic to Early Neolithic spread of flintwork along the fen edge. It may represent activity peripheral to the settlement sites further north on the Catsholm Peninsular (Silvester 1991). Due to its small size, no further work is recommended for the assemblage as it would not add to the understanding of the site.

Appendix C. Environmental Reports

C.1 Waterlogged Wood

By Michael Bamforth

Introduction

C.1.1 A total of 36 discrete items of waterlogged wood, recovered during a strip, map and sample exercise, were submitted for detailed recording. The material was recorded off-site by Michael Bamforth in 2013.

Provenance

C.1.2 The material was situated in waterlogged deposits which created the anaerobic conditions necessary for organic preservation. The material was recovered from several contexts assigned to two separate phases outlined below (Table 2).

- Pre-Roman peat: The 33 wood records assigned to this phase represent sub-samples of modified material recovered from within layers of fen-edge peat thought to have formed during the Late Neolithic or Early Bronze Age.
- Post-medieval brushwood land drain: The three wood records assigned to this phase represent sub-samples recovered from within a linear cut feature interpreted as a brushwood land-drain and dated to the post-medieval period.

Methodology

C.1.3 A sub-sample of the modified wood encountered was recovered and submitted for post-excavation recording and analysis.

C.1.4 This document has been produced in accordance with English Heritage guidelines for the treatment of waterlogged wood (Brunning 2010).

C.1.5 All items submitted for recording were given a unique identifier (e.g. Sample 1) and recorded individually using a Fenland Archaeological Trust pro forma 'wood recording sheet'. All records were then entered into a database.

C.1.6 Every effort was made to refit broken or fragmented items. However, due to the nature of the material, the possibility remains that some discreet yet broken items may have been processed as their constituent parts as opposed to as a whole. The metric data were collected with hand tools including rulers and tapes.

C.1.7 The system of categorisation and interrogation developed by Taylor (1998, 2001) has been adopted within this report.

C.1.8 Items identifiable to species by morphological traits, visible with a hand lens (oak *Quercus* sp.), were noted. Several items are tentatively identified as pine (*Pinus* sp.) based on gross morphology. Other items were sub-sampled to allow later identification to taxa via microscopic identification as necessary.

C.1.9 The condition scale developed by the Humber Wetlands Project (Van de Noort *et al*. 1995: Table 15.1) will be used throughout this report (Table 2). The condition scale is based primarily on the clarity of surface data. Material is allocated a score dependent on the types of analyses that can be carried out, given the state of preservation. The condition score reflects the possibility of a given type of analysis but does not take into account the suitability of the item for a given process. If preservation varies within a discreet item, the section that is best preserved is considered when assigning the item a condition score.

Results

Pre-Roman peat

C.1.10 The majority of the 33 items assigned to this phase are classed as roundwood or slightly larger unconverted timbers (Table 3). There is also a single item of half split, roundwood debris (Sample 14) and a single piece of bark (Sample 9b).

C.1.11 A total of 19 items were recovered as a sub-sample of two concentrations of wood *c.*10m apart (Area 1 and Area 2) from which generally smaller diameter beaver modified material and a single item trimmed with an edged tool (Sample 20, Area 2) were recovered.

C.1.12 The remaining 14 items were recovered from the same general vicinity as the two concentrations of wood and are generally somewhat larger beaver modified timbers and small trees. A single item trimmed with an edged tool (Sample 40) was also recovered.

C.1.13 The single small fragment of bark (Sample 9b, Area 2) and two pieces of small diameter roundwood (Samples 9a, Area 2 Sample and 22) display no evidence of modification.

C.1.14 The majority of the material (29 items) display evidence of beaver modification. Three of the beaver modified items have been identified as oak and twelve items have been provisionally identified as pine.

C.1.15 Beaver gnawing leaves a distinct pattern of parallel striations, often forming a number of 'keeled' facets (Coles 2006)(Figure 2). The majority of the beaver modified items have been gnawed through at either the proximal or distal end of the main shaft, or have had a side branch gnawed away. In the case of Sample 11, both ends and two side branches have been removed by beaver gnawing. However, there are also other kinds of beaver modification represented.

C.1.16 Sample 14, Area 2, is interesting in that it is half split roundwood that has been beavered at one end. Although the split could be an anthropogenic modification, it is equally likely to be the result of natural processes.

C.1.17 Samples 6, Area 2, and Sample 30 (Figure 3) have been lightly beaver gnawed along the main shaft, whilst Sample 43 has had a large notch gnawed away (measuring 82mm long x 20mm deep with a curved profile).

C.1.18 The beaver modified wood ranges in diameter from 21-115mm. There are two examples (Samples 39 and 42) of small fallen trees which have all or part of their root bowl present and have been subsequently gnawed by beaver at their distal ends, presumably after the trees have fallen over.

C.1.19 There is also a single small tree (Sample 31) that has been gnawed at its proximal end and seems to represent a beaver felled tree.

C.1.20 Two items (Samples 20, Area 2 and Sample 40) have tool faceting suggestive of working with an edged tool, possibly a stone axe. Both have been identified as possible pine

C.1.21 Sample 20, Area 2, has been trimmed at the proximal end from all directions. The facets are concave and small (maximum length 23mm and width 19mm)(Figure 4).

C.1.22 Sample 40 is a small tree that has been trimmed from two directions at the proximal end, with a small snapped hinge visible between the two worked surfaces. This probably represents a felled tree. A small incomplete stop mark is present and the facets are generally small and concave (maximum length 19mm and width 32mm) (Figure 5).

Discussion

C.1.23 Beavers were present in the UK throughout later prehistory, becoming extinct during the later half of the second millennium AD. The European beaver (*Castor fiber*) is a large rodent, with an adult measuring 1-1.25m long and weighing 20-25kg. They generally live near water sources such as streams, rivers and lakes. The water source provides an underground entrance for a burrow which is generally dug into the bank or shore to rise above the level of the water. Where there is not sufficient soil cover to excavate a burrow, beavers will build a lodge from a heap of wood and gnaw out a burrow within it (Coles 2006). The presence of beaver modified wood suggests open water was present in the vicinity.

C.1.24 Beavers are vegetarians with a broad diet including leaves, twigs and tree bark. To acquire the latter for food, or to obtain construction material for lodges or dams, beavers are capable of gnawing through low branches and of felling small saplings to substantial trees (Coles 2006). Although not preferred food sources, Beavers will consume both oak and pine. Oak will tolerate damp soils and will grow both in stands or mixed deciduous woodland (Gale and Cutler 2000). Pine generally prefers well drained soils (Gale and Cutler 2000). Although pine generally saw a decline during the Late Neolithic / Early Bronze Age, it may still have been present in the region during this time (Godwin 1975).

C.1.25 The types of beaver modification seen within this assemblage – gnawing along the shaft to consume bark for food, gnawing of distal ends for food and gnawing through proximal ends to acquire material or fell trees – are all within the range of normal beaver behaviour.

C.1.26 Although beavers do build dams in flowing water (Coles 2006), the most likely explanation for a large accumulation of beaver modified material on a fen edge, as seen in Areas 1 and 2, is that of a beaver lodge, although this would require open water in the immediate vicinity. A similar accumulation of beaver gnawed material encountered in Prehistoric fen-edge peats at Flag Fen, Peterborough, was also interpreted as a beaver lodge (Britchfield 2010, Pryor *et. al.* 2001).

C.1.27 The remaining, generally larger material scattered throughout the peat is likely to represent the debris left by beavers consuming, and in at least one case felling, trees for food or building material.

C.1.28 The tool facets recorded from Samples 20 and 40 displayed the concave cross section (Coles and Orme 1978) and the short, choppy facets (Sands 1997; Coles and Orme 1984: Fig. 11) generally produced by the less acutely angled cutting edge of a stone tool.

C.1.29 In terms of the presence of anthropogenically modified material within the potential beaver lodge, it is possible that the beavers collected material discarded by humans within the landscape and incorporated it into their structure. Coles (2010) provides some evidence to suggest that early farmers may have been drawn to beaver territories, either by the beavers themselves as prey, or by beaver modified environments consisting of tree-free areas, with organic rich soils.

Post-medieval brushwood land-drain

C.1.30 The three items assigned to this phase are all classed as roundwood:

Sample 25, context (019): Roundwood, no bark present, condition moderate, distal end trimmed from one direction. L: 525 x D: 20mm.

Sample 26, context (019): Roundwood, bark present, condition good. Curve and flare at proximal end suggests this may be a coppice heel (Rackham 1977). Proximal / heel end torn. Distal end trimmed from one direction with flat, clean facet. L:245 x D: 35mm.

Sample 27, context (019). Roundwood, bark present, condition moderate, Curve and flare at proximal end suggests this may be a coppice heel (Rackham 1977). Distal end is degraded. Proximal end trimmed from one direction with a single large, flat, clean facet present. L: 930 x D: 68mm

Discussion

C.1.31 The three pieces of small to medium diameter roundwood provide possible evidence of woodland management: Samples 26 and 27 both display morphological traits suggestive of coppicing in terms of a curve and flare at the proximal end, suggestive of a coppice 'heel' where the stem once joined a coppice stool (Rackham 1977). Sample 26 has been torn at the proximal end whilst Sample 27 was trimmed at the proximal end with an edged tool, such as an axe. The two trimmed items (Sample 26 and 27) both have broader, longer, flatter tool facets, indicative of the use of an iron tool (Coles and Orme 1978) (Figure 1).

C.1.32 The use of brushwood drains in England dates back to at least the first Millennium BC, with brushwood filled drains dating to the Iron Age excavated at Fengate, Peterborough (Pryor 1984). Indeed, prior to the middle of the 19th Century, the majority of field drains were constructed using either a stone or wood fill (Robinson 1986: 79).

C.1.33 Loudon (1826: 640) makes reference to several types of field drain utilising small diameter roundwood to form a covered channel. These include inserting a series of brushwood fagots (or bundles) end to end in a trench before covering with straw and backfilling, or alternatively tying lengths roundwood into a continuous cable before inserting into the trench. If the simplest form of simply placing brushwood/roundwood stems into the base of a trench before backfilling is used, Loudon (ibid) suggests aligning the proximal/distal ends of the stem with the slope of the trench to ensure efficient drainage.

Conclusion

C.1.34 The material recovered from the post-medieval brushwood drain is in keeping with this type of feature, which is likely to have been common within the landscape during this period.

C.1.35 The concentration of wood within Areas 1 and 2 of the Pre-Roman peats, which are thought to have formed during the Late Neolithic/Early Bronze Age, show a strong presence of beaver modified material and may well represent beaver lodges. A single piece of trimmed wood with tool facets that suggest the use of a stone tool, was recovered from the Area 2 concentration.

C.1.36 Somewhat larger material including a beaver felled tree (Sample 37) and a human felled tree (Sample 40) recovered from the surrounding peats where there is strong evidence for beavers consuming wood as food.

C.1.37 In terms of human/beaver relationships within a landscape, Coles (2006) suggests that early farmers may have been drawn to beaver territories by both the resources represented by the animal itself, and by the beaver modified environment consisting of tree-free areas, with organic rich soils.

C.1.38 The tool facets on the two pieces recovered from the Pre-Roman peats (Sample 20, Area 2 and Sample 40) suggest the use of a stone tool. Given the possible Late Neolithic to Early Bronze Age date for the formation of these peats (Section 4.2.1, above), the evidence provided by the woodworking technology would tend to support the earlier, Neolithic date.

Context	Unit	Suggested date	Frequency	% of assemblage
Unassigned	Peat	Pre-Roman	5	14
002	Peat	Pre-Roman	14	39
004	Peat	Pre-Roman	1	3
005	Peat	Pre-Roman	2	6
007	Peat	Pre-Roman	1	3
008	Peat	Pre-Roman	1	3
009	Peat	Pre-Roman	1	3
010	Peat	Pre-Roman	1	3
011	Peat	Pre-Roman	1	3
012	Peat	Pre-Roman	1	3
013	Peat	Pre-Roman	1	3
014	Peat	Pre-Roman	1	3
015	Peat	Pre-Roman	1	3
016	Peat	Pre-Roman	1	3
017	Peat	Pre-Roman	1	3
019	Brushwood land drain	Post-medieval	3	8
Total			**36**	**100%**

Table 2:- Wood records by context

Condition score	Museum conservation	Technology analysis	Woodland management	Dendro-chronology	Species identification
5 excellent	+	+	+	+	+
4 good	-	+	+	+	+
3 moderate	-	+/-	+	+	+
2 poor	-	+/-	+/-	+/-	+
1 very poor	-	-	-	-	+/-
0 non-viable	-	-	-	-	-

Table 3: Condition scale

Sample number	Area	Context	Species	Bark/ Sapwood/ heartwood	Condition score	Notes	Woodworking	Length (mm)	Diameter (mm)
5	1	(005)	Quercus sp.	Sh	4		One end beavered	480+	95
6	2	(004)	Quercus sp.	Sh	3	Limb – eccentric pith	One end and part of shaft beavered	415+	82×105
7	2	-		Sh	4		One end beavered	95	25
8	2	-		Bsh	4		One end beavered	150	33
9a	2	-		Sh	4			160++	25×32
9b	2			B	3	Bark		180	38×73
10	2	(005)	Quercus sp.	Sh	4	Broken crux	Distal end beavered	125+	90
11	2	-		Sh	4		Both ends and two side branches beavered	698	26
12	2	(007)		Sh	4		One end beavered	95	23
12	2	(008)		Sh	4		One end beavered	62	32
14	2	(009)		Sh	4	Radial half split	One end beavered	90	12×19
15	2	(010)		Sh	4		One end beavered	118	30
16	2	(011)		Sh	4		Proximal end beavered	105	25
18	2	(012)		Bsh	4		One end beavered	72	21
19	2	(013)		Sh	4		Both ends beavered	120	25
20	2	(014)	?Pinus Sp.	Sh	4	Distal end degraded	Proximal end trimmed from all directions	670+	53
21	2	(015)		Sh	4		Proximal end / beavered	340	50
22	2	(016)		Sh	4			218+	52
23	2	(017)		Sh	4		Proximal end beavered	425	45
29		(002)		Bsh	4		One end beavered	325	33
30		(002)	?Pinus Sp.	Sh	5	Top of small tree, proximal end degraded	Distal end and one side branch beavered and gnawing along shaft near beavered end	1475+	66
31		(002)	?Pinus Sp.	Sh	3		Proximal end beavered	855+	55
32		(002)	?Pinus Sp.	Sh	3	Degraded	Proximal end beavered	455	73
33		(002)	?Pinus Sp.	Sh	3	Surface degraded / exposed	One end beavered	325	46
34		(002)	?Pinus Sp.	Sh	3	Small tree, proximal end degraded	Distal end beavered	1485	39

Sample number	Area	Context	Species	Bark/ Sapwood/ heartwood	Condition score	Notes	Woodworking	Length (mm)	Diameter (mm)
35		(002)	?Pinus Sp.	Sh	4		Distal end beavered	810+	26
37		(002)	?Pinus Sp.	Sh	3	Small tree, distal end degraded	Proximal end beavered. Beaver felled tree	1035+	70
38		(002)	?Pinus Sp.	Sh	4		Proximal end beavered	560	28
39		(002)	?Pinus Sp.	Sh	3	Fallen tree with part of root bowl.	Distal end and one side branch beavered	1320	90
40		(002)	?Pinus Sp.	Bsh	4	Small tree, distal end in poorer condition	Proximal end trimmed from 2 directions with central hinge. Distal end probably trimmed from three directions. Felled tree	2785	90
42		(002)	?Pinus Sp.	Sh	4	Tree with root bowl	Both distal ends beavered	2610	115
43		(002)	?Pinus Sp.	Sh	3		Distal end beavered and one outer surface gnawed	785+	45
46		(002)	?Pinus Sp.	Sh	3		Proximal end beavered	1380+	25

Table 4: Wood assigned to Pre-Roman peat

C.2 Faunal Remains

By Anthony Haskins

C.2.1 139g of animal bone was recovered from the Rosedene Farm Agricultural Reservoir.

C.2.2 Of this material, a single unfused juvenile cattle radius and an unidentified shaft fragment from a medium mammal came from within the lower peat (2).

C.2.3 The remains recovered from tree throw fill 46 include two unidentified shaft fragments and a single femoral head from a small to medium sized mammal.

C.2.4 Finally, a single unidentified fragment of bone was recovered from tree throw fill 44.

C.2.5 Insufficient material was recovered from the site to make any conclusions.

C.3 Bulk Environmental samples

By Rachel Fosberry

Introduction and Methodology

C.3.1 Bulk samples were taken during archaeological investigations from a sequence of deposits at Rosedene Farm, Methwold, Suffolk in order to determine whether palaeoenvironmental remains are present, their mode of preservation and whether they are of interpretable value.

C.3.2 Information about past environments can be provided from contemporary waterlogged deposits which typically primarily consist of organic remains that have been preserved through anoxic conditions in which oxygen is absent and there is no or little bacterial decay. Preservation can be variable dependent on many factors including the plant species present and environmental conditions such as acidity. The types of remains preserved can include plants, molluscs and insects which can provide information on the local environment whereas pollen can be useful for wider paleo-environmental reconstruction. Additionally organisms such as diatoms, ostracods and foraminifera are useful for determining hydrological conditions in aquatic environments. Plants parts, in particular seeds, are often well preserved with the outer testa and cell-structure visible. The purpose of this initial assessment is to determine the presence or absence of the macroscopic environmental indicators (thus excluding pollen, diatoms and foraminifera) and to assess the level of preservation of plant remains and the diversity of plants present. In order to achieve this a sub-sample of two litres of each of the bulk samples was processed and dried. Samples preserved by waterlogging should really be examined whilst still wet as drying will cause shrinkage of organic components making identification more difficult. Assessment of a dried sample can be performed rapidly and it is easier ascertain the presence of the aforementioned items. It was considered to be the most practical method for this initial stage in order to ascertain whether further, more detailed analysis would be suitable.

C.3.3 Two litres of each bulk sample was processed by water flotation (using a modified Siraff three-tank system). The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was was collected in a 0.5mm mesh sieve. Both flot and residues were allowed to air dry prior to examination using a binocular microscope at magnifications up to x 60. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* and the authors' own reference collection. Nomenclature is according to Stace (1997).

Quantification

C.3.4 For the purpose of this initial assessment, items such as seeds (including achenes, drupes etc.) and other vegetative parts have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Results

Sample No.		1	2	3	4	28	44	45
Context No.		**2**	**2**	**2**	**2**	**38**	**50**	**48**
Description		**Peat**	**Peat**	**Peat**	**Peat**	**Clay marl layer**	**Fill of tree throw**	**Fill of tree throw**
Dry land herbs								
Conium maculatum L. seed	Hemlock			#				
Oxalis acetosella L. seed	wood sorrel		#		#			
Rumex sp. Achene	small-seeded Docks			#				
Solanum dulcamara L. Seed	Bittersweet nightshade			#				
Vicia cracca L. leaf	Tufted vetch	#	##	###	#			
Wetland/aquatic plants								
Carex spp. nut	Sedges			##				
Chara sp. Oogonia	Stoneworts		#		#	###	#	
Cladium mariscus (L.) Pohl nut	Great Fen-sedge						#	
Cladium mariscus (L.) Pohl fruit	Great Fen-sedge	#						
Cladium mariscus (L.) Pohl leaf	Great Fen-sedge	##						
Eupatorium cannabinum L. achene	Hemp-agrimony			#	#			
cf. *Phragmites* sp. culm node	Reeds stem-joint	##	#	##	##			
cf. *Phragmites* sp. Stem	Reeds	###	#	###	##			
Ranunculus subgenus *Batrachium* L. achene	Water-crowfoot	##	###	###	###			
Tree/shrub macrofossils								
Alnus glutinosa L. seed	Alder	##	##	##	#			
Cornus sanguinea L. seed	Dogwood			#				

Rubus subgen. Rubus seed	Brambles		#	#			#	#
Taxus baccata L. seed	Yew		#	##	#			
Viburnum opulus L. seed	Guelder rose				#		#	
Other plant macrofossils								
Bryophyte stem	moss			##	#			
Charcoal <2mm							##	#
Charcoal >2mm							#	#
Waterlogged root/stem		###	###	###	###	###	###	###
Indet seeds				#				
Other remains								
molluscs		#				###		
waterlogged arthropod remains		#		#				
Ostracods						#		

Table 5: Environmental samples from XNFRFM13

C.3.5 Plant remains are preserved by waterlogging and include seeds, roots, stems and leaves. Samples 1 to 4 were all taken from different areas within the peat in deposit 2 beneath an area of beaver-hewn wood and these samples all contain similar flora comprised of woody stems, reeds and roots. Stems and culm-nodes of common reed (*Phragmites* cf. *australis*) are common throughout as are seeds of alder (*Alnus glutinosa*) trees and the obligate aquatic plant water-crowfoot (*Ranunculus* subgenus batrachium). These three plant species indicate a wetland environment of fresh-water within alder carr. Additional plant species that represent drier areas within woodland include bramble (*Rubus* sp.), Guelder Rose (*Viburnham opulus*), yew (*Taxus bacata*), dogwood (*Cornus sanguinea*), docks (*Rumex* sp.) and wood sorrel (*Oxalis acetosella*). Both yew and bramble seeds showed evidence of nibbling, presumably by rodents such as water-voles. Numerous small, ovate leaflets, uniform in size, are abundant in Sample 3 and are also present in the other samples from deposit 2. Comparison with modern material found growing amongst brambles at the wetlands of Wicken Fen, National Nature Reserve, Cambridgeshire (October 2013) strongly suggests that these are the leaves of tufted vetch (*Vicia cracca*) although no seeds were recovered from the sample to confirm this identification. Semi-aquatic wetland plants include hemp-agrimony (*Eupatorium cannabinum*), sedges (*Carex* sp.) and Great Fen sedge (*Cladium mariscus*). The presence of a further obligate aquatic, stonewort (Characeae), indicates high water quality with a healthy ecosystem as many of these varied species only inhabit clear waters.

C.3.6 Sample 28, deposit 38 was primarily comprised of chalky marl which, after processing, resulted in a small residue of freshwater mollusc shells and a flot that is comprised of rootlets along with numerous C*hara* oogonia with both the outer calcified 'shell' and the organic inner structure intact. Ostracods, small bivalve crustaceans that inhabit the bottom of aquatic habitats, were also noted.

C.3.7 Samples 44 (deposit 50) and 45 (deposit 48) contain a high proportion of gravel comprised of rounded flint and quartz which possibly indicates a stream bed. Seeds and other plant remains are rare. Woody stem fragments and the seeds of bramble, Guelder rose and Great fen sedge represent species growing on/in the edges of a stream. Occasional charophytes also indicate clear water.

Discussion

C.3.1 The groups of samples taken at Rosedene Farm Methwold are spatially about 100m apart but represent a series of deposits that date from the Neolithic (48 and 50), the Late Neolithic and Early Bronze Age (2) through to the Roman period (38). The spatial variation could be misleading as there are possibly very local variations in the sequence of deposits. The plant macrofossils suggest a continued wet environment. The uniformity of the main characterising species, namely alder and reed, suggests a community of plants that grow either just below or above the water level with areas of slightly drier ground that can sustain trees and shrubs. The peat deposits lay beneath the area of felled pine (*Pinus sylvestis*) wood (Bamforth this report). There was no evidence of pine needles or cones in any of the four samples taken from peat 2. In other areas of East Anglia such as Wood Fen (near Ely, Cambridgeshire) and Woodwalton Fen (near Peterborough) there is evidence that fen woods of alder, oak and yew are replaced by pine woods during the Bronze Age (Godwin 1984, 105). Yew is a tree that has been recorded less frequently in previous studies of Flandrian environments in this area. This may be attributed to difficulty in pollen identification and/or differential preservation (Waller 1994,100) but macrofossils such as seeds are rarely found in fen peat deposits so are a significant find at Rosedene Farm.

C.3.2 The clay marl deposit 38 was thought to have been deposited as the result of a marine incursion in the Roman period. Marine silts were deposited to the north of the area which resulted in a rise in the levels of freshwater in the areas sampled at Methwold. The presence of freshwater molluscs and charophytes in deposit 38 substantiate this theory as they are likely to have been deposited in temporary raised water levels such as flood deposits..

C.3.3 Samples 44 (deposit 50) and 45 (deposit 48) are less informative and difficult to place within the palaeoenvironmental sequence at Rosedene Farm.

Further work

C.3.4 Dried samples have been examined for this initial assessment. Analysis of new preparations of wet-sieved material could potentially increase the list of plant species present within these samples but it is considered unlikely to significantly change the interpretation of these deposits.

C.4 Molluscs

By Rachel Fosberry

C.4.1 The molluscs in Sample 28, clay marl layer 38 where analysed. There are several rams horns (*Planorbis planorbis*) which had been identified on site. Most of these are juvenile. There is also a single specimen of the tiny pea clam (*Pisidium* sp.) and the most numerous species are common bithynia (*Bithynia tentaculata*). There are several opercula that are almost certainly from these snails. The other abundant species is the common bladder snail (*Physa* cf. *Fontinalis*).

C.4.2 All of the above are found in freshwater environments.

C.5 Pollen Analysis of Sediments

By Steve Boreham BSc. PhD.

Introduction

C.5.1 This report presents the results of assessment pollen analyses of eight sub-samples of sediment taken from a sequence of peat and marl (see **Photo 1**). At the site, a Late Mesolithic/Early Neolithic flint assemblage was recovered from a tree-throw cutting into the top of the underlying bedrock.

C.5.2 The sediment sequence investigated comprised a thin basal sandy silt unit (0-6cm) overlying bedrock, overlain by grey silt (6-21cm), grey organic silt (21-31cm), grey-black silty fine-grained organic (31-40cm), brown-black peat with shells (40-57cm), grey-black peat with marl (57-63cm), brown marly peat (63-67cm), brown-buff organic-rich marl (67-71cm), buff slightly organic marl (71-75cm), buff-white marl with shells (75-79cm) & white lake marl (79-90cm) (see **Photo 2**).

C.5.3 Two overlapping 50cm monolith samples <1> & <2> (F100) were taken through the sequence. A series of eight pollen sub-samples were taken at 3cm (basal sandy silt), 11cm (silt), 24cm (organic silt), 33cm (silty fine-grained organic), 43cm (peat with shells), 59cm (peat with marl), 68cm (organic-rich marl) & 76cm (marl with shells).

C.5.4 The eight sub-samples were prepared using the standard hydrofluoric acid technique, and counted for pollen using a high-power stereo microscope at x400 magnification. The percentage pollen data from these 8 samples is presented in Table Y.

Pollen Analyses

C.5.5 Unfortunately, three pollen sub-samples (3cm, 11cm & 24cm) had no surviving palynomorphs and were effectively barren. The five remaining pollen sub-samples had pollen concentrations that ranged between 56,637 and 102,249 grains per ml. Pollen preservation was rather variable in these samples, with some (33cm & 76cm) being sparse and others (59cm & 68cm) having abundant well-preserved palynomorphs. Finely divided organic material hampered pollen counting to some degree, particularly in the poorly preserved sparse samples. Assessment pollen counts were made from single slides for these sub-samples. The pollen sums for four of these sub-samples were above 50 grains, and two exceeded 100 grains. However, none exceeded the statistically desirable total of 300 pollen grains main sum. As a consequence caution must be employed during the interpretation of these results.

33cm – silty fine-grained organic

C.5.6 This pollen sub-sample was dominated by undifferentiated fern spores (together 31.6%) and members of the thistle and lettuce families (Asteraceae) (together 21.9%). The elevated Asteraceae pollen and fern spores in this spectrum indicates that post-depositional oxidation has affected this material so that these resistant types are somewhat over-represented. Very few other taxa were recorded, although both grass (Poaceae) and alder (*Alnus*) pollen reached 15.6%. The pollen of sedges (Cyperaceae) (6.3%) and hazel (*Corylus*) (6.3%) was also present, and the obligate aquatic bur-reed (*Sparganium*) (3.1%) was detected.

43cm – peat with shells

C.5.7 This pollen sub-sample was dominated by alder (*Alnus*) pollen (33.8%), and had other arboreal taxa including hazel (*Corylus*) (8.8%), lime (*Tilia*) (8.8%), oak (*Quercus*) (4.4%), birch (*Betula*) (4.4%) and pine (*Pinus*) (2.9%). A limited range of herbs were present including grass (Poaceae) (8.8%), dock (*Rumex*) (4.4%) and sedges (Cyperaceae) (2.9%). Lower plants were represented by horsetail (*Equisetum*) (1.5%), the polypody fern (*Polypodium*) (4.4%) and undifferentiated fern spores (together 8.9%). Obligate aquatics were represented by bur-reed (*Sparganium*) (2.9%), and reedmace (*Typha*) (1.5%).

59cm – peat with marl

C.5.8 This pollen sub-sample was dominated by undifferentiated fern spores (together 45.1%). The elevated fern spores suggest that post-depositional oxidation may have affected this material so that these resistant types are somewhat over-represented. However, since preservation of palynomorphs was generally good, this may simply represent a damp environment with abundant ferns, especially since the proportion of resistant pollen from the thistle and lettuce families (Asteraceae) was rather low. Arboreal taxa were represented by hazel (*Corylus*) (12.7%), alder (*Alnus*) (10.8%), oak (*Quercus*) (3.9%), lime (*Tilia*) (2%) and pine (*Pinus*), birch (*Betula*) and willow (*Salix*) (all 1%). A limited range of herbs were present including grass (Poaceae) (9.8%), sedges (Cyperaceae) (2.9%) and buttercup (*Ranunculus*) (2%). Spores of the polypody fern (*Polypodium*) were present (2%), and obligate aquatics were represented by bur-reed (*Sparganium*) (2%), white water-lily (*Nymphaea*) (2%) and reedmace (*Typha*) (1%).

68cm – organic-rich marl

C.5.9 This pollen sub-sample was dominated by hazel (*Corylus*) pollen (45.1%), and had other arboreal taxa including alder (*Alnus*) (16.6%), oak (*Quercus*) (7.4%), elm (*Ulmus*) (1.7%), lime (*Tilia*) (1.1%) and ash (*Fraxinus*), birch (*Betula*) and pine (*Pinus*) (all 0.6%). A limited range of herbs were present including grass (Poaceae) (6.3%), members of the thistle and lettuce families (Asteraceae) (together 1.7%), sedges (Cyperaceae) (1.1%) and dock (*Rumex*) (1.1%). Spores of the polypody fern (*Polypodium*) were present (1.1%), and undifferentiated fern spores together accounted for 12.5%. Obligate aquatics were represented by bur-reed (*Sparganium*) (1.7%), water milfoil (*Myriophyllum*) (1.7%) and reedmace (*Typha*) (1.1%).

76cm – marl with shells

C.5.10 This pollen sub-sample was dominated by hazel (*Corylus*) pollen (37.3%), and had other arboreal taxa including alder (*Alnus*) (13.7%), oak (*Quercus*) (5.9%), lime (*Tilia*) (2%) and pine (*Pinus*) (2%). A limited range of herbs were present including grass (Poaceae) (11.8%), sedges (Cyperaceae) (3.9%) and dock (*Rumex*) (3.9%). Undifferentiated fern spores together accounted for 11.8% and obligate aquatics were represented by bur-reed (*Sparganium*) (7.8%), water milfoil (*Myriophyllum*) (2%) and reedmace (*Typha*) (2%).

Discussion & Conclusions

C.5.11 The elevated Asteraceae pollen and fern spores in the sample from 33cm indicates that partial oxidative microbial degradation may have occurred leaving these resistant types over-represented. It is also clear that the material from the three barren basal samples (3, 11 & 24cm) had been completely oxidised. This suggests that the sediment sequence has been subjected to desiccation from the base, probably through land drainage and lowering of the water-table in the bedrock. It seems that the silt-rich basal sediments have been particularly affected by this de-watering process, but that the finer-grained organic material and marl has resisted the ingress of atmospheric oxygen.

C.5.12 Ignoring variations in the proportion of undifferentiated spores, the pollen assemblages of the upper five sub-samples is rather similar and seems to represent pre-clearance woodland rich in both alder and hazel. The lithology of the sediment sequence strongly suggests a progression from marshland into a eutrophic fen and, with deepening water, eventually a pool or lake. The pollen spectrum from the sub-sample at 43cm (peat with shells) strongly suggests nearby alder carr (wet woodland) and a fringe of emergent vegetation (sedges, bur-reed and reedmace). The presence of the polypody fern strongly suggests that large mature trees were growing close to the site. Further up the sequence (59, 68, 76cm) white water-lily and water milfoil pollen suggest deep, open water.

C.5.13 Taken together, this pollen sequence appears to represent a 'snapshot' of progressive inundation of a land surface in Mid-Late Mesolithic or possibly Early Neolithic times. It should be noted that not all of the available contexts were analysed for pollen during this assessment exercise, and that some larger contexts could be sampled again to provide better resolution. AMS radio-carbon dating of the 11cm and 68cm pollen samples has produced dates of 3990 ± 30 BP and 4080 ± 30 BP, respectively. Therefore refuting the original hypothesis and suggesting the pollen sequence reflects woodland management, for example coppicing, in a remote back-wood area away from the areas that are being clear-felled and cultivated. However, as seen by the results, dating of the marl layers has been problematic because aquatic plants, such as the marl-forming alga *Chara*, fix ancient carbon rather than atmospheric carbon which has resulted in an earlier date for the higher sample than the lower sample. A further bulk radio-carbon date taken at the 43cm samples returned a date of 4094 +/- 35 BP, further supporting the original dates and again showing obligate water plants are fixing the earlier carbon.

	3cm	11cm	24cm	33cm	43cm	59cm	68cm	76cm
Trees & Shrubs								
Betula				0.0	4.4	1.0	0.6	0.0
Pinus				0.0	2.9	1.0	0.6	2.0
Ulmus				0.0	0.0	0.0	1.7	0.0
Quercus				0.0	4.4	3.9	7.4	5.9
Tilia				0.0	8.8	2.0	1.1	2.0
Alnus				15.6	33.8	10.8	16.6	13.7
Fraxinus				0.0	0.0	0.0	0.6	0.0
Corylus				6.3	8.8	12.7	45.1	37.3
Salix				0.0	0.0	1.0	0.0	0.0
Herbs								
Poaceae				15.6	8.8	9.8	6.3	11.8
Cyperaceae				6.3	2.9	2.9	1.1	3.9
Asteraceae (Asteroidea/Cardueae) undif.				15.6	0.0	1.0	0.6	0.0
Asteraceae (Lactuceae) undif.				9.4	1.5	0.0	1.1	2.0
Cirsium type				0.0	1.5	1.0	0.0	0.0
Chenopodiaceae				0.0	0.0	0.0	0.6	0.0
Brassicaceae	barren	barren	barren	0.0	0.0	1.0	0.6	2.0
Filipendula				0.0	1.5	1.0	0.0	2.0
Lamiaceae				0.0	0.0	1.0	0.6	0.0
Ranunculus type				0.0	1.5	2.0	0.0	2.0
Rumex				0.0	4.4	1.0	1.1	3.9
Apiaceae				0.0	0.0	0.0	0.6	0.0
Lower plants								
Equisetum				0.0	1.5	0.0	0.0	0.0
Polypodium				0.0	4.4	2.0	1.1	0.0
Pteropsida (monolete) undif.				25.0	7.4	42.2	11.4	9.8
Pteropsida (trilete) undif.				6.3	1.5	2.9	1.1	2.0
Aquatics								
Myriophyllum spic.				0.0	0.0	0.0	1.7	2.0
Nymphaea				0.0	0.0	2.0	0.0	0.0
Sparganium type				3.1	2.9	2.0	1.7	7.8
Typha latifolia				0.0	1.5	1.0	1.1	2.0
Sum trees				**15.6**	**54.4**	**18.6**	**28.6**	**23.5**
Sum shrubs				**6.3**	**8.8**	**13.7**	**45.1**	**37.3**
Sum herbs				**46.9**	**22.1**	**20.6**	**12.6**	**27.5**
Sum spores				**31.3**	**14.7**	**47.1**	**13.7**	**11.8**
Main Sum				**32**	**68**	**102**	**175**	**51**
Concentration (grains per ml)	**<1052**	**<1052**	**<1052**	**56091**	**71516**	**82518**	**102249**	**53637**

Table 6: Percentage Pollen Data

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Tree Throw	Norfolk	Mesolithic -10k to -4k	Lithic implement	☐ Syste	Mesolithic -10k to -4k

Appendix E. OASIS Report Form

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-153870		
Project Name	Strip, Map and Sample at Rosedean Farm, Methwold		
Project Dates (fieldwork) Start	27-06-2013	Finish	26-09-2013
Previous Work (by OA East)	No	Future Work	No

Project Reference Codes

Site Code	ENF 131905	Planning App. No.	07/00790/F
HER No.	ENF 131905	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt: Direction from Local Planning Authority - PPS 5

Please select all techniques used:

- ☐ Field Observation (periodic visits)
- ☒ Part Excavation
- ☐ Salvage Record
- ☐ Full Excavation (100%)
- ☐ Full Survey
- ☐ Recorded Observation
- ☐ Systematic Metal Detector Survey
- ☐ Geophysical Survey
- ☐ Remote Operated Vehicle Survey
- ☐ Test Pit Survey
- ☐ Open-Area Excavation
- ☐ Salvage Excavation
- ☒ Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the NMR Monument Type Thesaurus and significant finds using the MDA Object type Thesaurus together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Ditch	Post Medieval 1540 to 1901		Select period...
	Select period...		Select period...

Project Location

County		Site Address (including postcode if possible)	
District	Kings Lynn and West Norfo	Rosedene Farm Severalls Road Methwold	
Parish	Methwold		
HER	Norfolk		
Study Area	9.4ha	National Grid Reference	TL 6883 9531

Paul Spoerry / Anthony Haskins	☒ Virtual Reality	☒ Survey

Project Originators

Organisation	OA EAST
Project Brief Originator	Ken Hamilton
Project Design Originator	Paul Spoerry
Project Manager	
Supervisor	

Project Archives

Physical Archive	Digital Archive	Paper Archive
Location ...	Location ...	Location ...
Accession ID ...	Accession ID ...	Accession ID ...

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	☒	☒	☐
Ceramics	☐	☐	☐
Environmental	☐	☐	☐
Glass	☐	☐	☐
Human Bones	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☐	☐	☐
Stratigraphic		☐	☐
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☒	☒	☐
None	☐	☐	☐
Other	☐	☐	☐

Digital Media	Paper Media
	☒ Photos ☒ Plans

Notes:

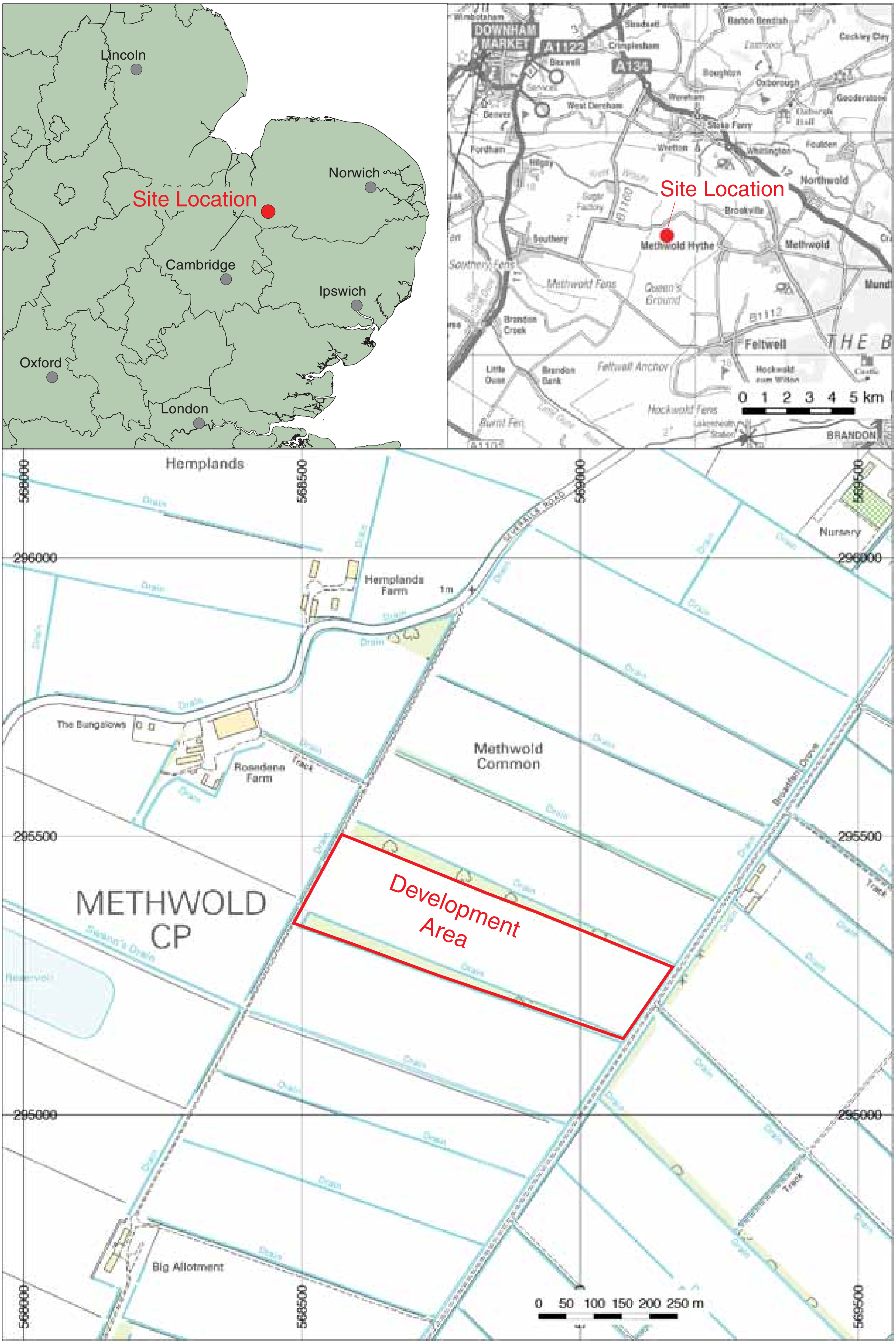

Figure 1: Site location showing development area (red)

NHER Data: Methwold

1km radius centred on TL 6883 9541

Compiled by H. Hamilton on 17 June 2013

Scale 1:18277

NORFOLK LANDSCAPE ARCHAEOLOGY

Union House, Gressenhall, East Dereham, Norfolk, NR20 4DR

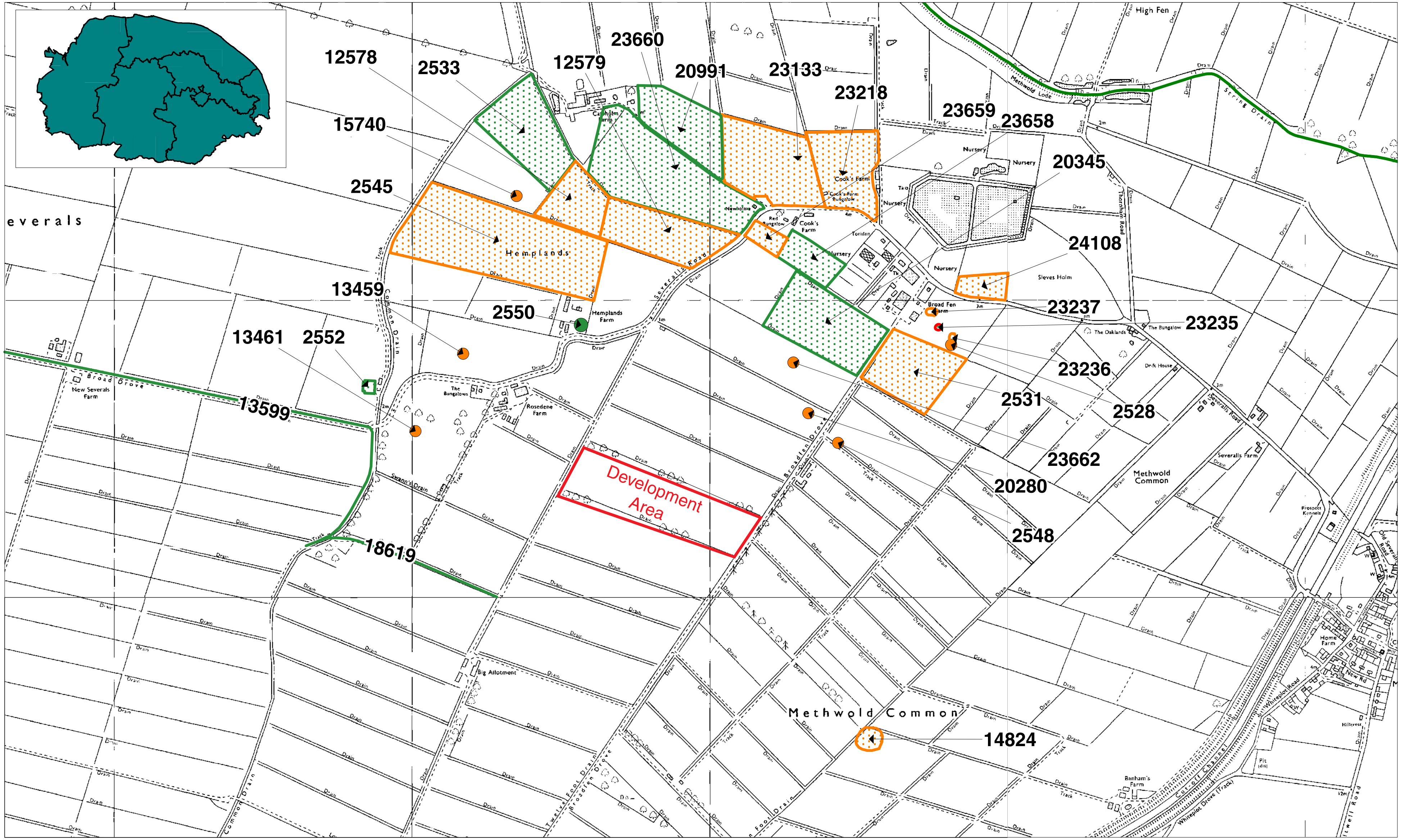

Figure 2: NHER map data with development area highlighted (red)

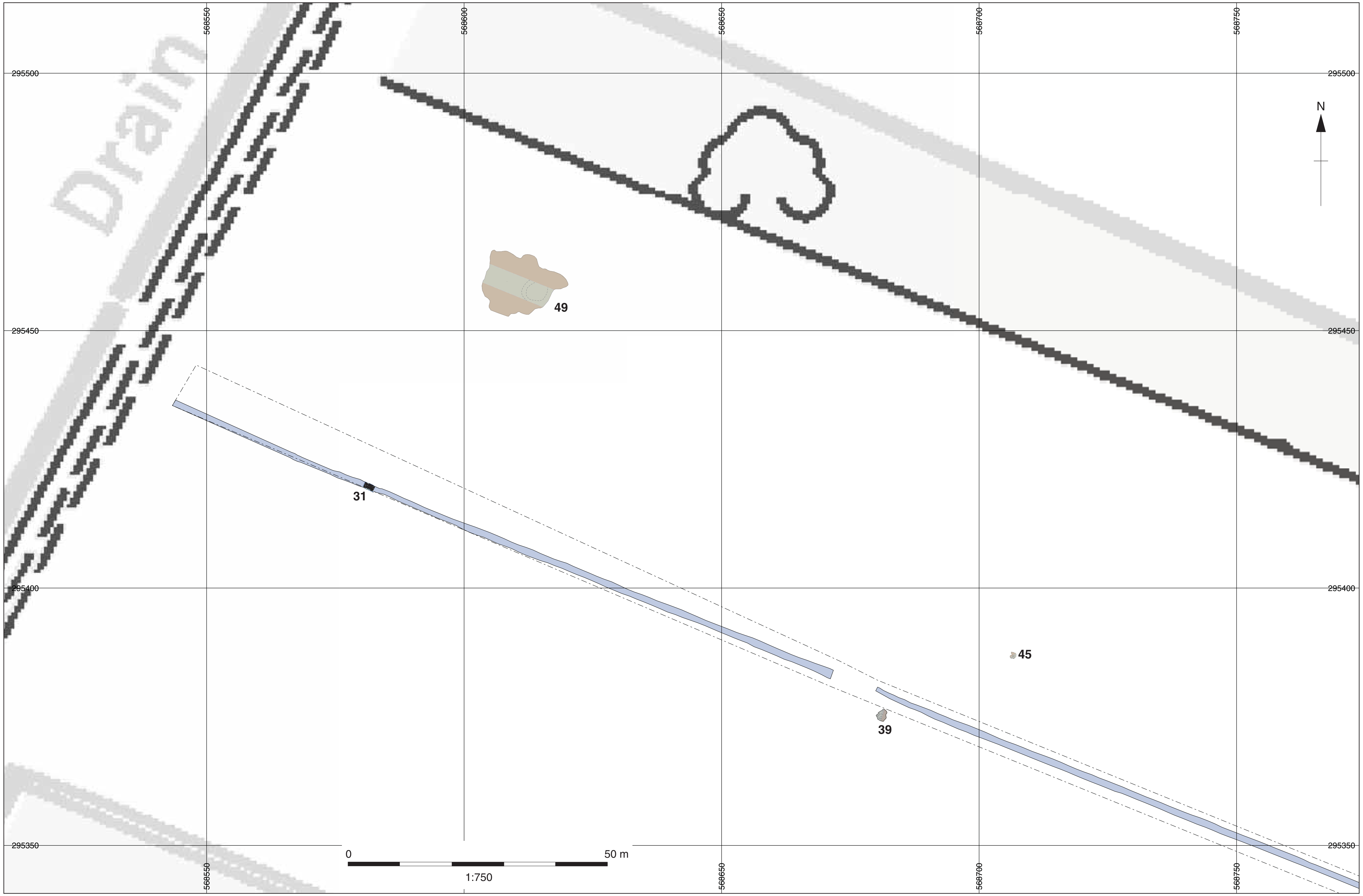

Figure 3: Plan of north-eastern corner showing archaeological features

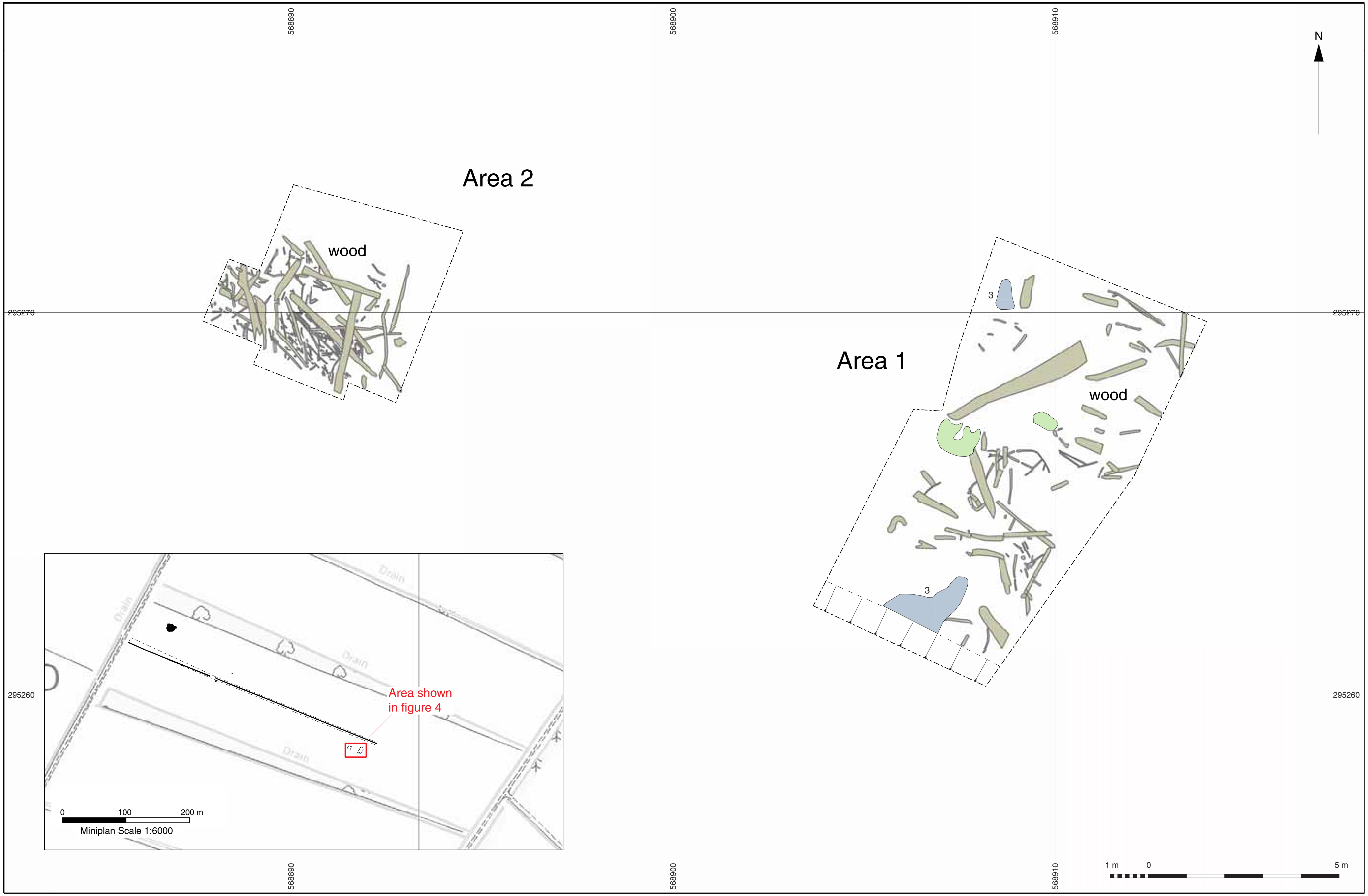

Figure 4: Plan of areas 1 and 2

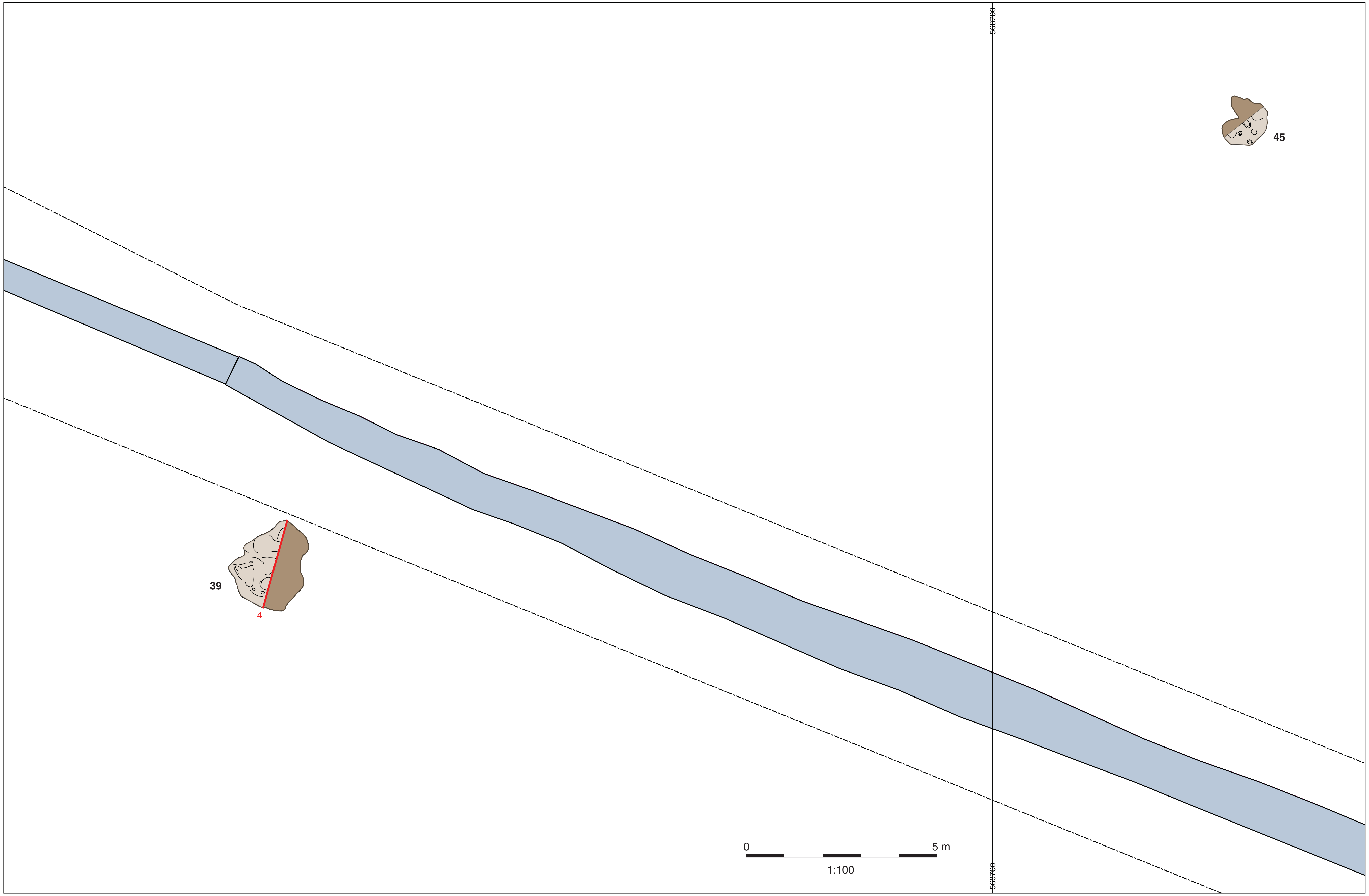

Figure 5: Plan of tree throws **39** and **45**

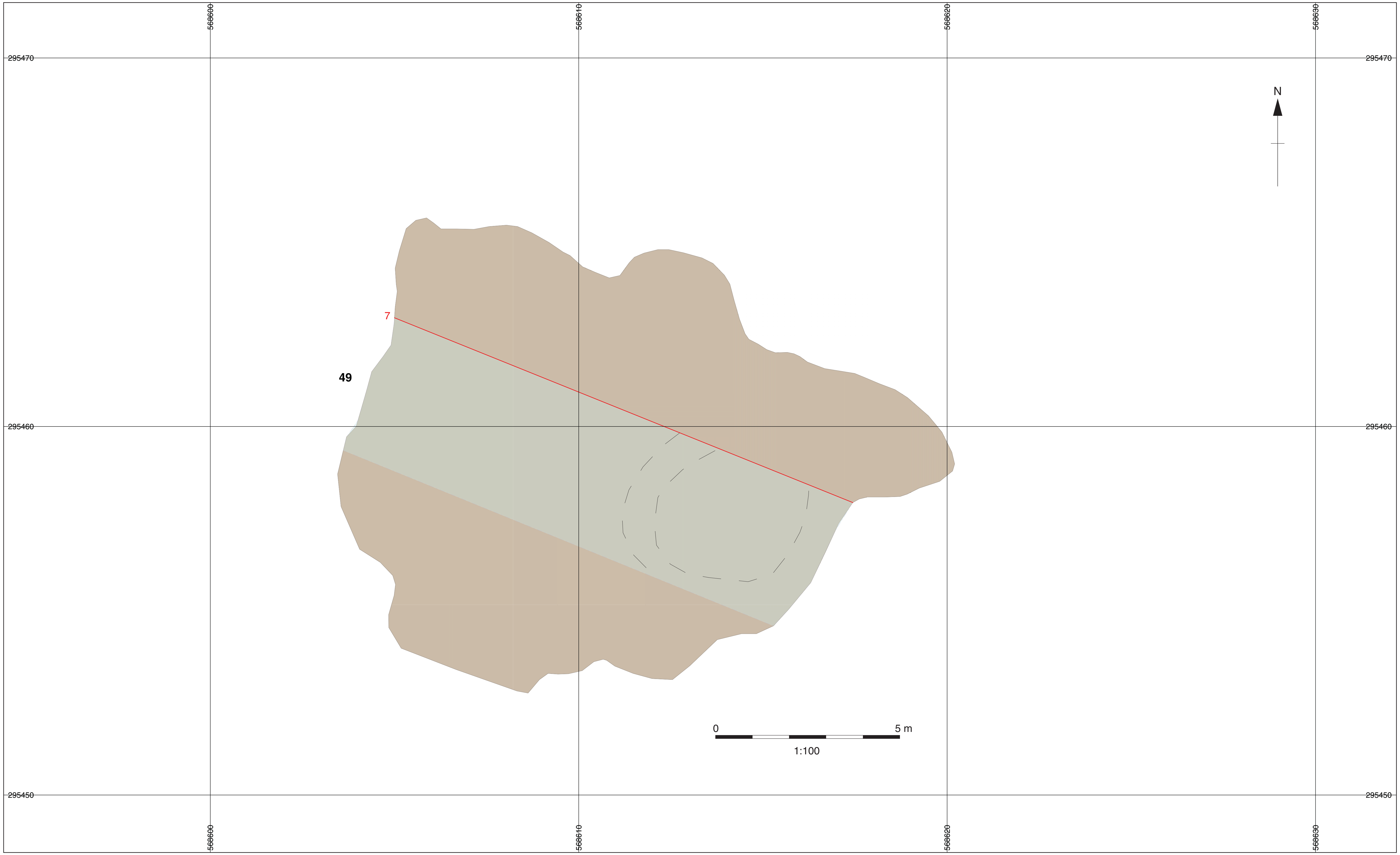

Figure 6: Plan of tree throw **49**

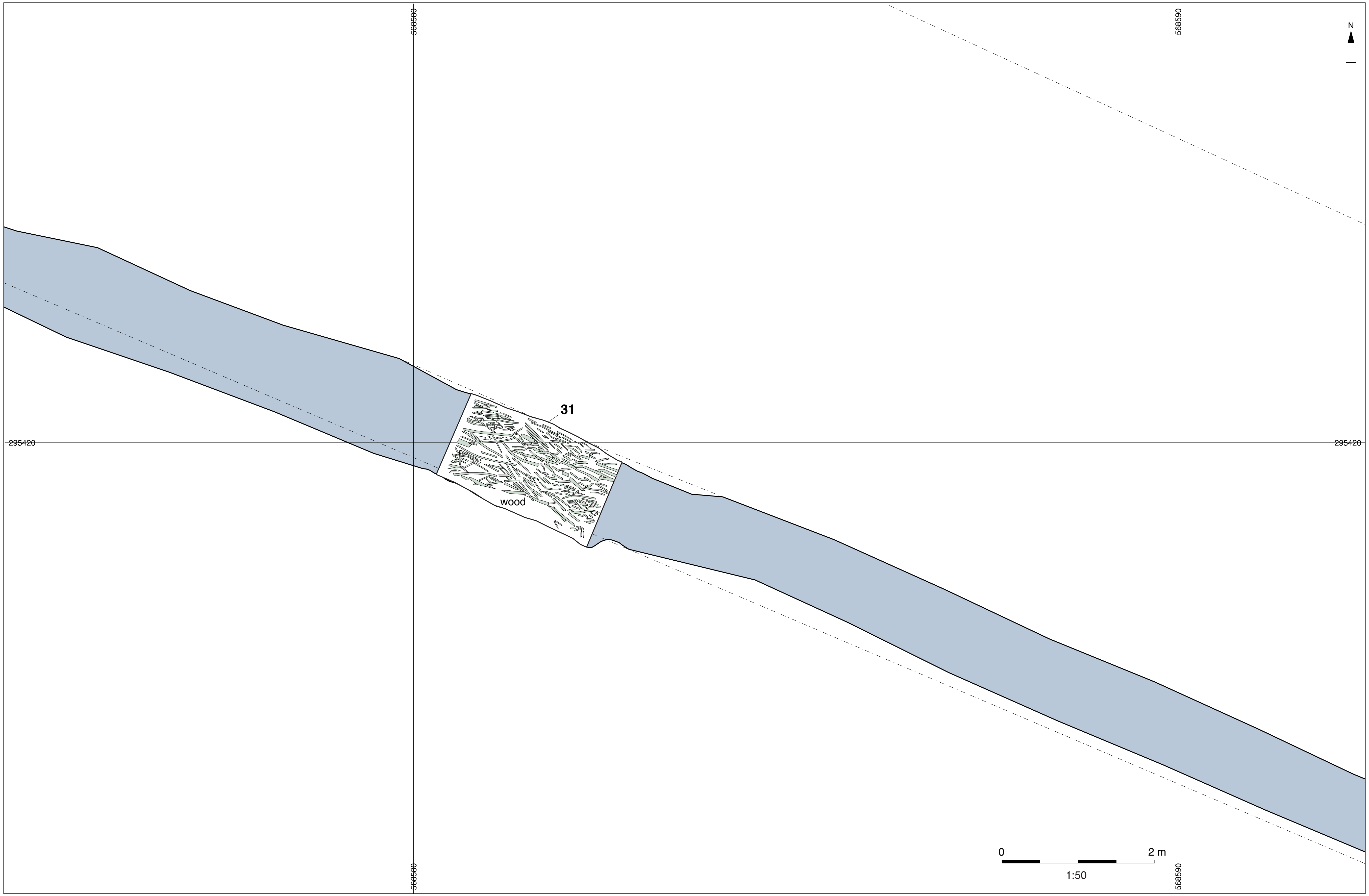

Figure 7: Detail plan of willow drain **31**

Figure 8: Worked wood (2) [30]. Scale 1:2

(2) [40]

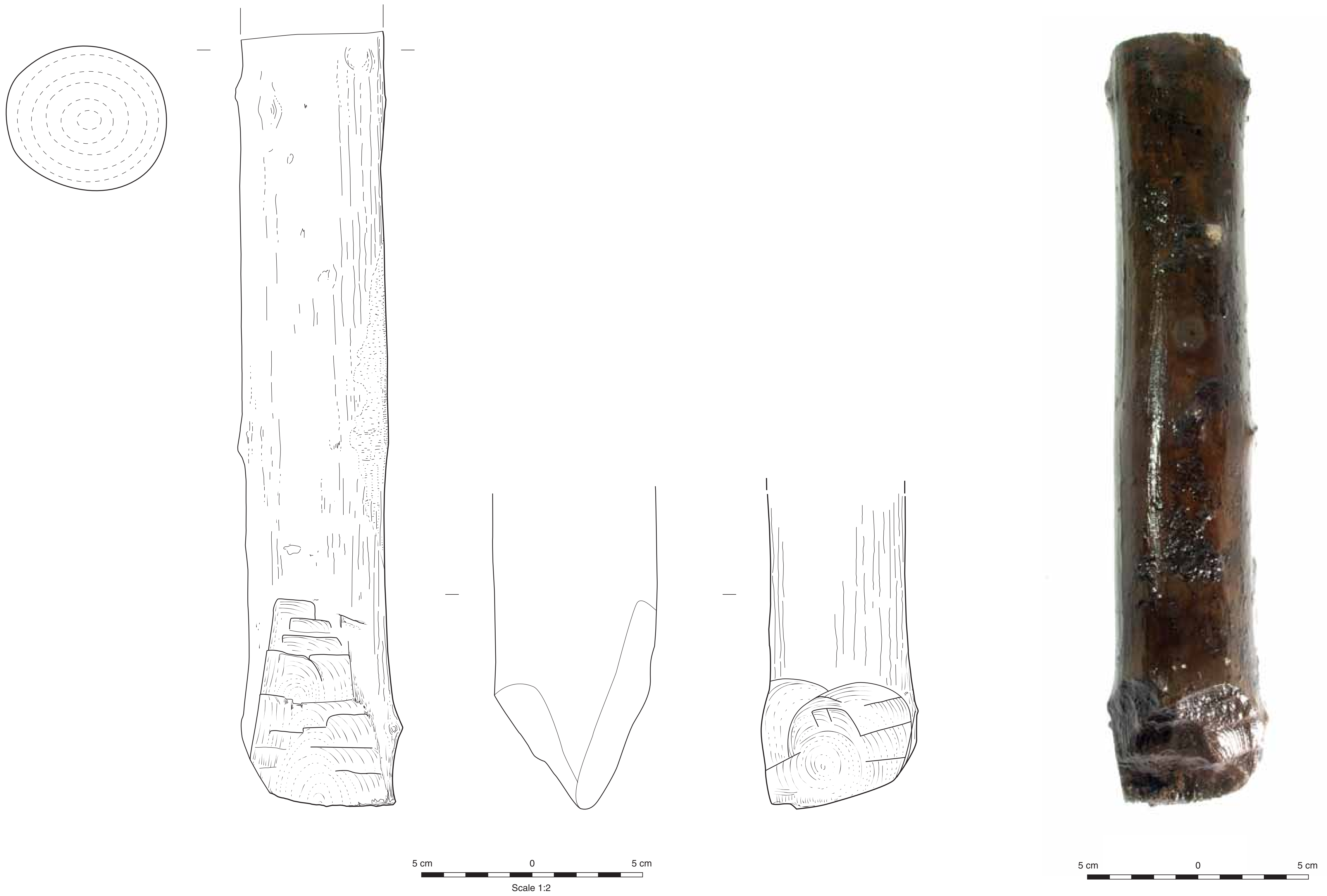

Figure 9: Worked wood (2) [40]. Scale 1:2

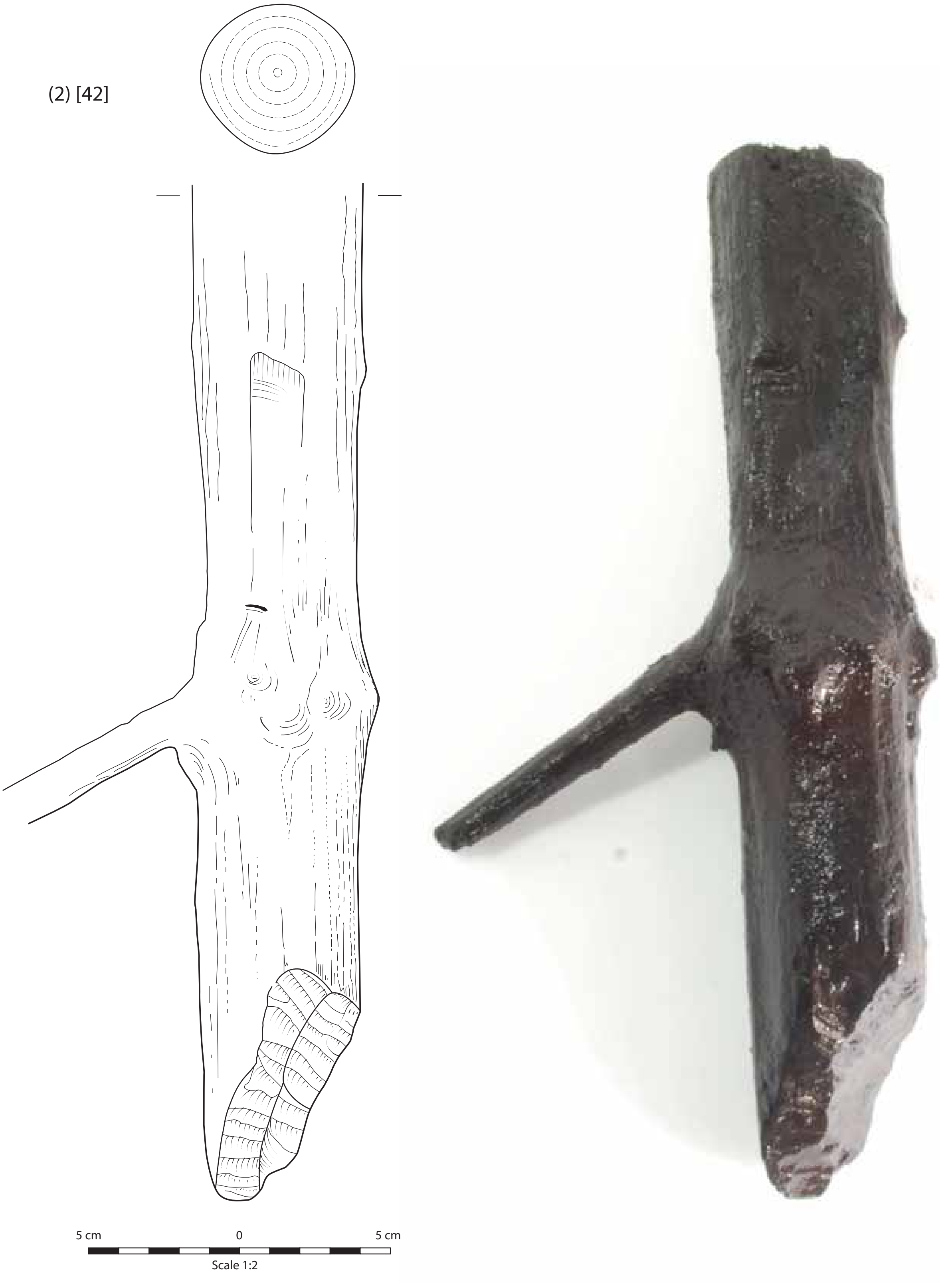

Figure 10: Worked wood (2) [42] . Scale 1:2

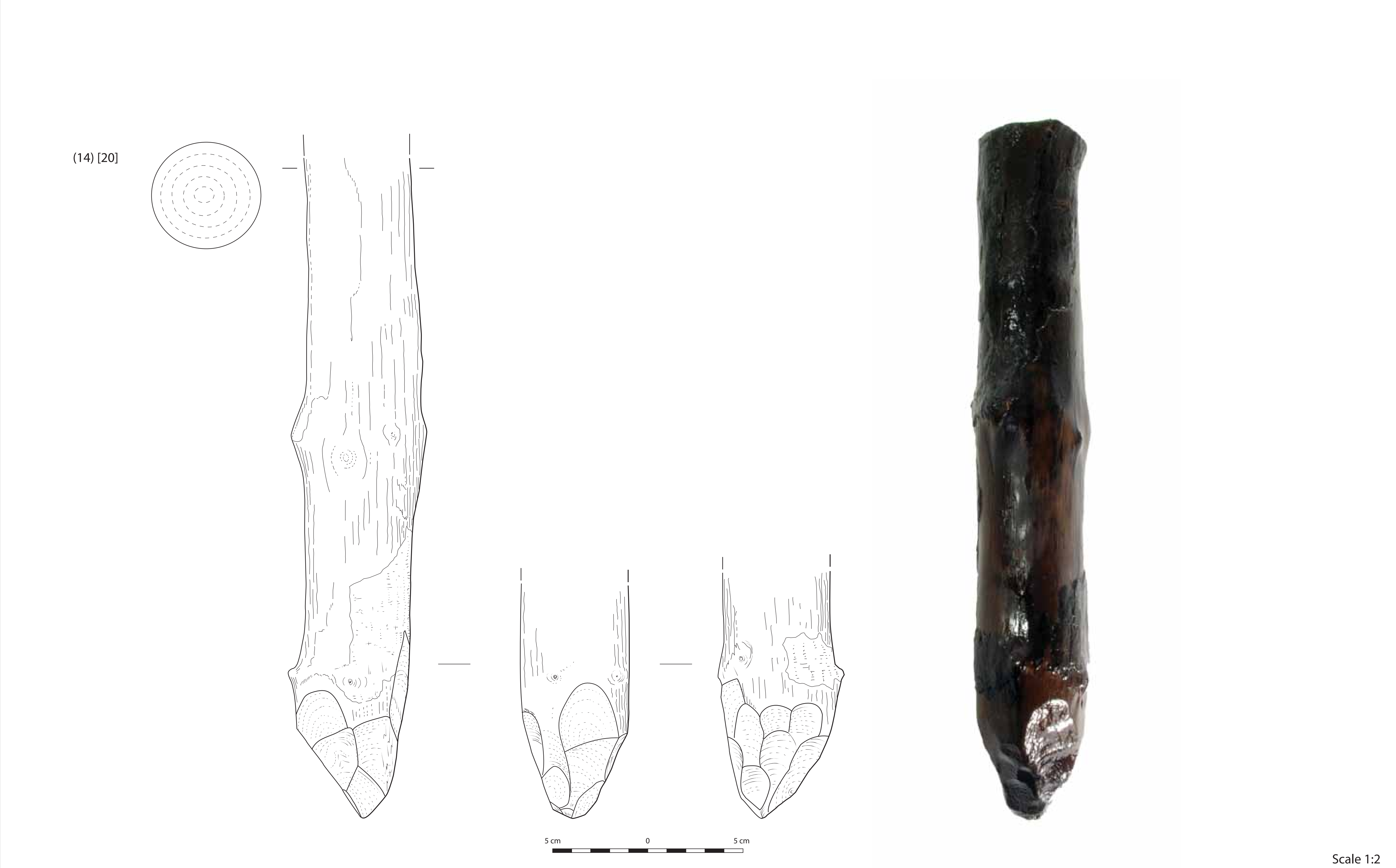

Figure 11: Worked wood (14) [20]. Scale 1:2

(19) [27]

Figure 12: Worked wood (19) [27]. Scale 1:2


Plate1: Area 1, Facing east


Plate 2: Detail of wood in area 1


Plate 3: Area 2, facing east


Plate 4: Section of 'willow' drain, facing east


Plate 5: east facing section of 'willow' drain

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