



# PRE-CONSTRUCT ARCHAEOLOGY

L I N C O L N

**REPORT ON A PROGRAMME OF  
ARCHAEOLOGICAL FIELDWORK  
UNDERTAKEN ON,  
BRANSTON ISLAND, BRANSTON,  
LINCOLNSHIRE.**

NGR: TF 0980 7080  
ACC. No. 2001.183  
Site Code: BILD 01





Conservation  
Services  
05 DEC 2002  
Highways & Planning  
Directorate

EVENTS LI 5365  
LI 5366  
LI 5367

SOURCES LI 9622  
LI 9623

PRN 63501 PREHISTORIC  
63502 PREHISTORIC  
63503 PREHISTORIC  
63504 PREHISTORIC  
63505 PREHISTORIC  
63506 MEDIEVAL  
63507 POST MEDIEVAL  
63508 EARLY MEDIEVAL/  
MEDIEVAL  
63509 ROMAN

**REPORT ON A PROGRAMME OF  
ARCHAEOLOGICAL FIELDWORK  
UNDERTAKEN ON,  
BRANSTON ISLAND, BRANSTON,  
LINCOLNSHIRE.**

NGR: TF 0980 7080  
ACC. No. 2001.183  
Site Code: BILD 01

Report Prepared for  
Bullen Consultants, on behalf of the Environment Agency,  
by Jim Rylatt

December 2002

Pre-Construct Archaeology (Lincoln)  
61 High Street  
Newton on Trent  
Lincoln  
LN1 2JP  
Tel & Fax. 01777 228155

© Pre-Construct Archaeology (Lincoln)

## Contents

List of figures	iv
List of plates	v
Summary	1
1.0 Introduction	2
2.0 Location and description	2
3.0 Planning background	3
4.0 Archaeological and historical background	4
5.0 Methodology	7
6.0 Results	9
6.1 <i>CH580 – CH610</i> : The vertical timber settings	9
6.1.1 The evaluation	9
6.1.2 The excavation	11
6.1.2.1 Trench 1	11
6.1.2.2 Trench 2	12
6.1.3 The watching brief	13
6.2 Other features and deposits	14
6.2.1 The evaluation	14
6.2.2 The watching brief	15
6.2.2.1 The north-western margin: <i>CH1750 – CH2550</i>	15
6.2.2.2 The eastern margin: <i>CH550 – CH1700</i>	17
7.0 Discussion	18
7.1 The medieval pottery industry at Potterhanworth	22
8.0 Conclusions	24
9.0 Effectiveness of methodology	25
10.0 Site archive	25
11.0 Acknowledgements	25
12.0 References	26
13.0 Appendices	
Appendix 13.1: Colour photographs	
Appendix 13.2: Report on prehistoric and Romano-British pottery - by M.J. Darling	
Appendix 13.3: Post-Roman pottery archive - by J. Young	

Appendix 13.4: Post-Roman tile archive - by J. Young

Appendix 13.5: animal bone archive – by J. Rackham

Appendix 13.6: Report on radiocarbon determination of peat – Beta Analytic & R. Gale

Appendix 13.7: Report on limestone net sinkers – A. Vince

Appendix 13.8: Report on worked lithics – J.D. Rylatt

Appendix 13.9: Report on waterlogged timbers from peat (074) – M. Taylor

Appendix 13.10: List of archaeological contexts

Appendix 13.11: Catalogue of sites and finds in the environs of Branston Island

## List of Figures

- Figure 1: Site location at a scale of 1: 25,000.
- Figure 2: Location of section of soke dyke that was subject to groundworks; plan at 1:10,000.
- Figure 3: The northern and eastern sides of Branston Island, at 1:10,000, showing relationships to the locations of archaeological features and materials recorded in the Lincolnshire Sites and Monuments Record.
- Figure 4: The southern post cluster, (A), *CH583 - CH587*, showing the different components exposed during the evaluation and subsequent excavation.
- Figure 5: The northern post cluster, (B), *CH601 - CH604*, showing the different components exposed during the evaluation and subsequent excavation.
- Figure 6: Composite plan showing the inter-relationships of the timbers exposed between *CH583 - CH610*. Depicted at 1:100.
- Figure 7: Relationship between post clusters (A) and (B), and the four timbers, (042), exposed within the channel of the Old River Witham.
- Figure 8: Sections across the eastern terminal of ditch [039].
- Figure 9: Plan of the area of burning, (004), exposed at *CH719*.
- Figure 10: Branston Island soil profiles - chainage 550 to 1100.
- Figure 11: Branston Island soil profiles - chainage 1150 to 1600.
- Figure 12: Branston Island soil profiles - chainage 1650 to 2200.
- Figure 13: Branston Island soil profiles - chainage 2250 to 2450.
- Figure 14: section through sandbank (051), situated at *CH2045*.
- Figure 15: section through ditch [079], situated at *CH632*.
- Figure 16: section through palaeo-channel [086], situated at *CH915*.
- Figure 17: section through pit [072], situated at *CH1079*.
- Figure 18: section through pit [082], situated at *CH725*.
- Figure 19: speculative reconstruction of the later prehistoric landscape along the northern and eastern margins of Branston Island.
- Figure 20: speculative reconstruction of the medieval landscape along the northern and eastern margins of Branston Island.

## List of Plates

Plate 1: General view of Branston Island, looking north. Trees and buildings at Short Ferry Marina are visible on the skyline, at the left hand side of the image.

Plate 2: The new soke dyke under construction, showing the depth of the peat deposits at the north-east corner of the island, looking east.

Plate 3: Trench 2, showing elements of post group (A). Elements of Structure 1 are visible at the bottom right hand corner of the picture. Structure 2 runs across the image to the north of the nearest scale, looking north.

Plate 4: Trench 1, showing elements of post group (B). Post group (107), a component of Structure 3, is situated at the bottom left corner of the picture, with Structure 4 lying immediately to the right of the large tree root at the centre of the image, looking west.

Plate 5: South-eastern corner of Trench 1, showing post group (107), which forms the south-western end of Structure 3, looking east

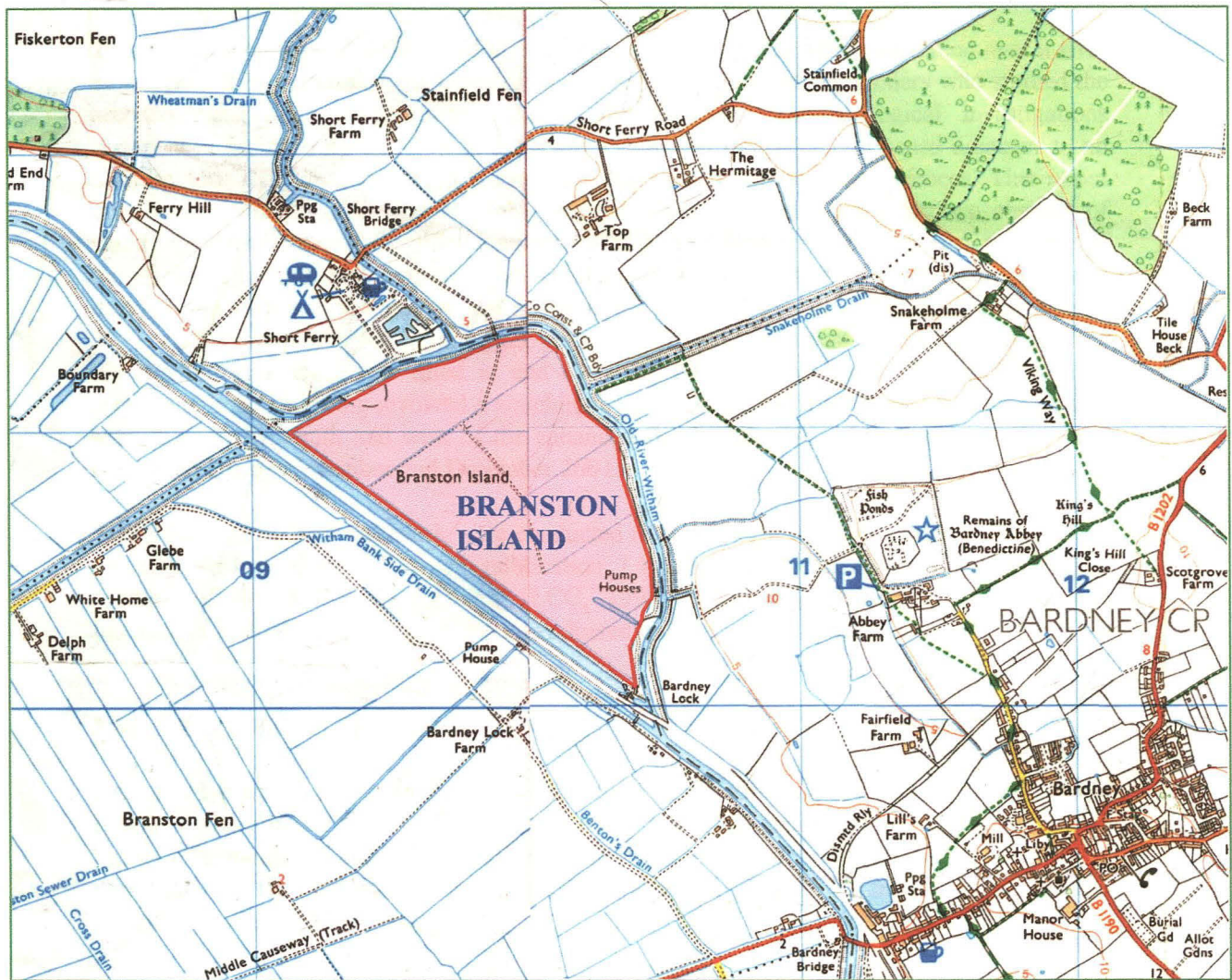
Plate 6: West facing section of palaeo-channel [086], exposed at the edge of the new soke dyke, looking north-east.

Plate 7: West facing section of pit [082], exposed at the edge of the new soke dyke, looking east.

### *Summary*

- *A programme of archaeological investigation has been undertaken along the northern and eastern edges of Branston Island, Branston, Lincolnshire. These works were carried out in advance of the reinforcement of the flood bank retaining the Old River Witham.*
- *A small quantity of prehistoric material was recovered from the eastern edge of the island. This included a few struck flints and fragments of Beaker pottery. A radiocarbon date for the basal peat indicates that it started to form in the Early Bronze Age, 1920-1410 Cal BC.*
- *Evidence of limited Romano-British and Late Saxon activity is provided by pottery recovered from deposits situated between CH520 and CH610.*
- *Two clusters of vertical timbers were exposed between CH580 and CH610. These posts appear to have formed elements of four different structures, all of which are likely to have been components of fish weirs. It is thought that these structures were constructed between the mid-10<sup>th</sup> and 14<sup>th</sup> centuries AD.*





**Figure 1: Site location at a scale of 1: 25,000.**  
(O.S. copyright license No. A1 515 21 A0001)

## 1.0 Introduction

Bullen Consultants, on behalf of the Environment Agency, commissioned Pre-Construct Archaeology (Lincoln) to undertake a programme of archaeological investigation in advance of the enhancement of flood banks retaining the Old River Witham along the northern and eastern edges of Branston Island, Branston, Lincolnshire. These works equate to the upgrading of 'Site 5', as part of Phase 2/3 of the Lower Witham Flood Defence Improvement Scheme.

This report documents the results of three phases of work, which were undertaken over a five-month period. It incorporates a series of assessments by specialist researchers who studied the archaeological materials recovered during the fieldwork. Archaeological investigations commenced in late July 2001, with a narrow evaluation trench being opened adjacent to an existing soke dyke that ran the full length of this element of the flood defences. This initial investigation identified significant archaeological deposits in only one area; two clusters of waterlogged timbers were identified between *CH550* and *CH600*, at the south-eastern corner of the island. The form and date of these features was not clear, and as a consequence it was decided that further investigation was necessary. Two small trenches were opened in August 2001, each examining a 5m x 5m square centred upon one of the post clusters. Following this the existing soke dyke was filled in and the flood bank was widened. The final phase of archaeological monitoring involved a watching brief undertaken during the excavation of a new soke dyke to the south and west of the enhanced flood bank. This phase of the project was conducted during November and December 2001.

The different stages of fieldwork were conducted in accordance with the procedures set out in the Lincolnshire County Council publication *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice* (LCC, 1998). National guidelines produced by the Institute of Field Archaeologists were also adhered to (IFA, 1999a, b & c).

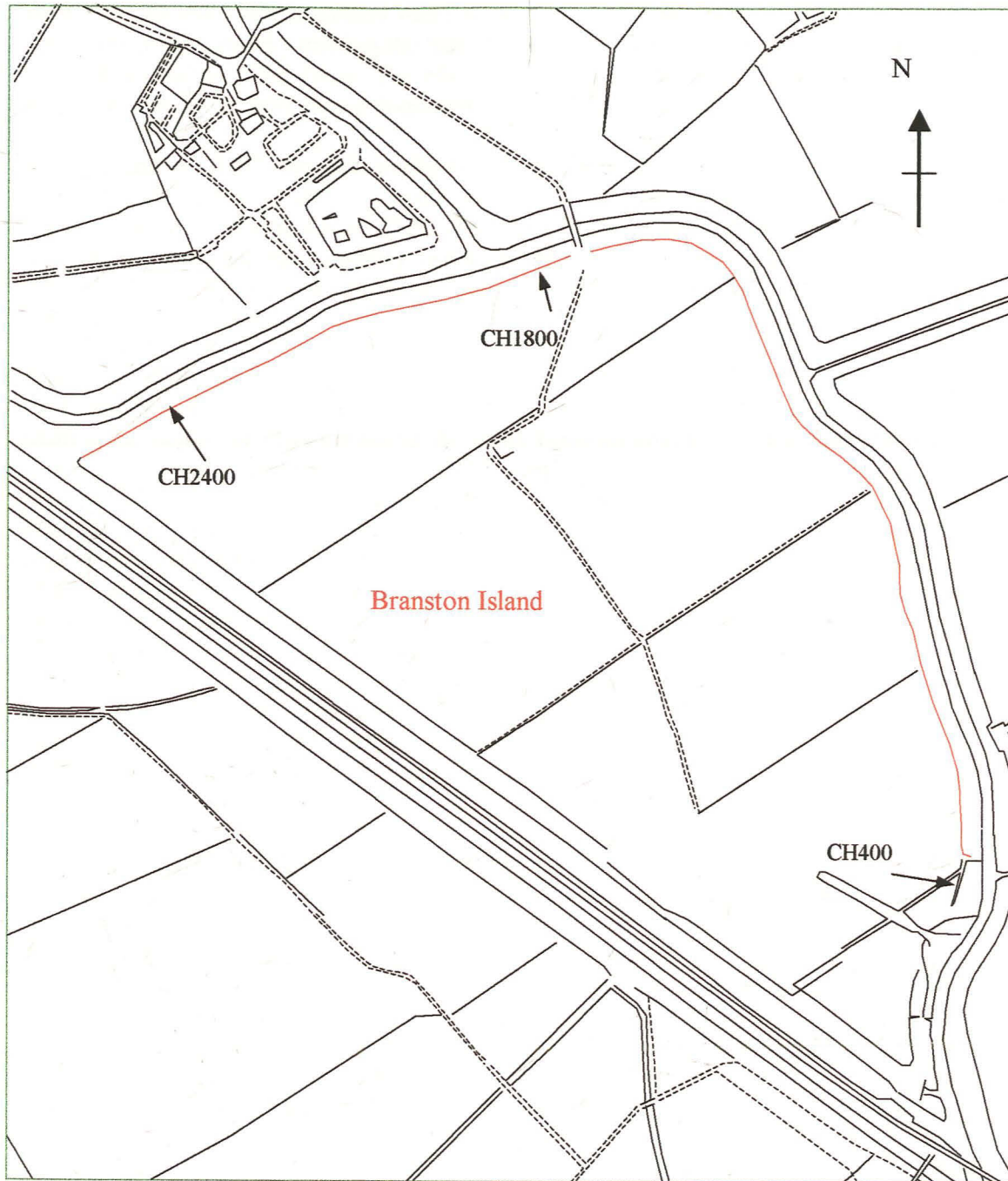
## 2.0 Location and description

Branston Island lies 9.5km to the east of Lincoln and constitutes a discrete component of the Lower Witham valley (fig. 1). The 'island' forms the north-eastern corner of Branston Civil Parish. The hamlet of Short Ferry, Fiskerton is the closest modern settlement, and is situated immediately to the north-west of Branston Island. Access is gained via a track running from the eastern end of Short Ferry Bridge.

As the name suggests, Branston Island is totally encircled by large watercourses. The northern and eastern edges are defined by a pronounced bend in the former, meandering course of the river, this channel now being known as the Old River Witham. A major tributary of the Witham, the Barlings Eau, flows into the northern section of the original channel, while two large drainage ditches, Snakeholme Drain and Bardney Beck, join the north-south aligned element. The south-western edge of Branston Island is formed by a 1.9km long section of straight, canalised channel that runs from Fiskerton Sluice to Horsley Deeps<sup>1</sup>, where the two branches of the river reunite at the south-eastern corner of the 'island'. This artificial section of the river was created in the second to third decades of the 19<sup>th</sup> century to straighten out the natural course of the Witham, and thus improve the navigation.

The area contained by the former and modern courses of the Witham is roughly triangular and extends to c. 93ha. A flood bank runs around the entire perimeter of the 'island', and a soke dyke follows the internal edge of this barrier (fig. 2). Isolated trees are situated at intervals

<sup>1</sup> Horsley Deeps is also referred to as Bardney Lock.



**Figure 2:** Location of section of soke dyke that was subject to groundworks, shown in red; plan at 1:10,000.

along the soke dyke, which collects water from a series of drains. The latter run from north-east to south-west, thereby dividing the 'island' into fields; sparse hedgerows still run along the edges of several of these dykes. The other major land division is a track that runs south-westward, then south, from the north-eastern corner of the island.

In the summer of 2001, the most northerly field to the west of the track contained a mature crop of barley, while the field to the east contained wheat. There was also a mature maize crop, which occupied the northern third of the field to the south of that containing barley. The rest the island, comprising approximately two-thirds of the entire area, was being used as 'set-aside' land, and was covered by waste-high, semi-aquatic weed species that are typical of seasonally flooded land.

Quaternary drift deposits are the uppermost geological strata encountered along the course of the Lower Witham. The modern river channel runs along the northern and eastern edges of the basin in the vicinity of Branston Island, the valley being approximately 5km wide at this point (I.G.S., 1973). Interleaving peat beds and alluvial deposits form the uppermost strata immediately below the modern topsoil; the peat is often desiccated or degraded due to modern drainage, while the alluvial layers are generally comprised of clayey and silty lenses. The pronounced bend in the river at Branston Island marks the junction between an older sequence of alluvial deposits to the east and, marine and estuarine deposits to the south. The former include relatively large sandbanks, while the latter are silty clays, with some peaty laminations.

A spur of Glacial Till extends south-eastward to the northern edge of the 'island'. Short Ferry is sited upon the southern end of this low rise. Similarly, a ridge of Older River Sand and Gravel, overlying Glacial Till, runs up to the south-eastern corner of the 'island', immediately to the south of Bardney Beck. The upper strata of the solid geology are comprised of the Jurassic Oxford Clay Formation.

Central National Grid Reference: TF 0980 7080.

### **3.0 Planning background**

The Environment Agency has implemented the Lower Witham Flood Defence Improvement Scheme to enhance the flood defences of the River Witham and its tributaries, the Barlings Eau, Stainfield Beck, Sandhill Beck, Billingham Skirth and River Sle/Kyme Eau, as well as a section of the old river channel encircling Branston Island. It is a five-year programme of works that will target 51 discrete sections of flood bank. The Built Environment Team, Highways and Planning Directorate, Lincolnshire County Council, advised the Environment Agency that the groundworks associated with this programme of works could expose significant archaeological deposits at certain points along the river. Consequently, it was agreed that an archaeological contractor would be appointed to monitor these works.

Work on the initial phases of the scheme commenced in 2000/2001, and targeted a section of the northern bank (LHB) of the Witham to the south of Fiskerton, the western bank (RHB) of the Barlings Eau, and the section of bank (RHB) surrounding Branston Island, which is considered in this report. Archaeological deposits were encountered during the groundworks associated with the works at Fiskerton and Branston Island. This resulted in the implementation of additional investigative fieldwork.

#### 4.0 Archaeological and historical background

A range of archaeological material provides evidence for prehistoric activity in the environs of Branston Island (fig. 3). A broken leaf-shaped flint 'point', possibly an arrowhead, was uncovered while digging a drain at Short Ferry Marina (52898). This artefact could provide indications of earlier Neolithic activity on the spur of Glacial Till that runs up to the confluence of the River Witham and the Barlings Eau.

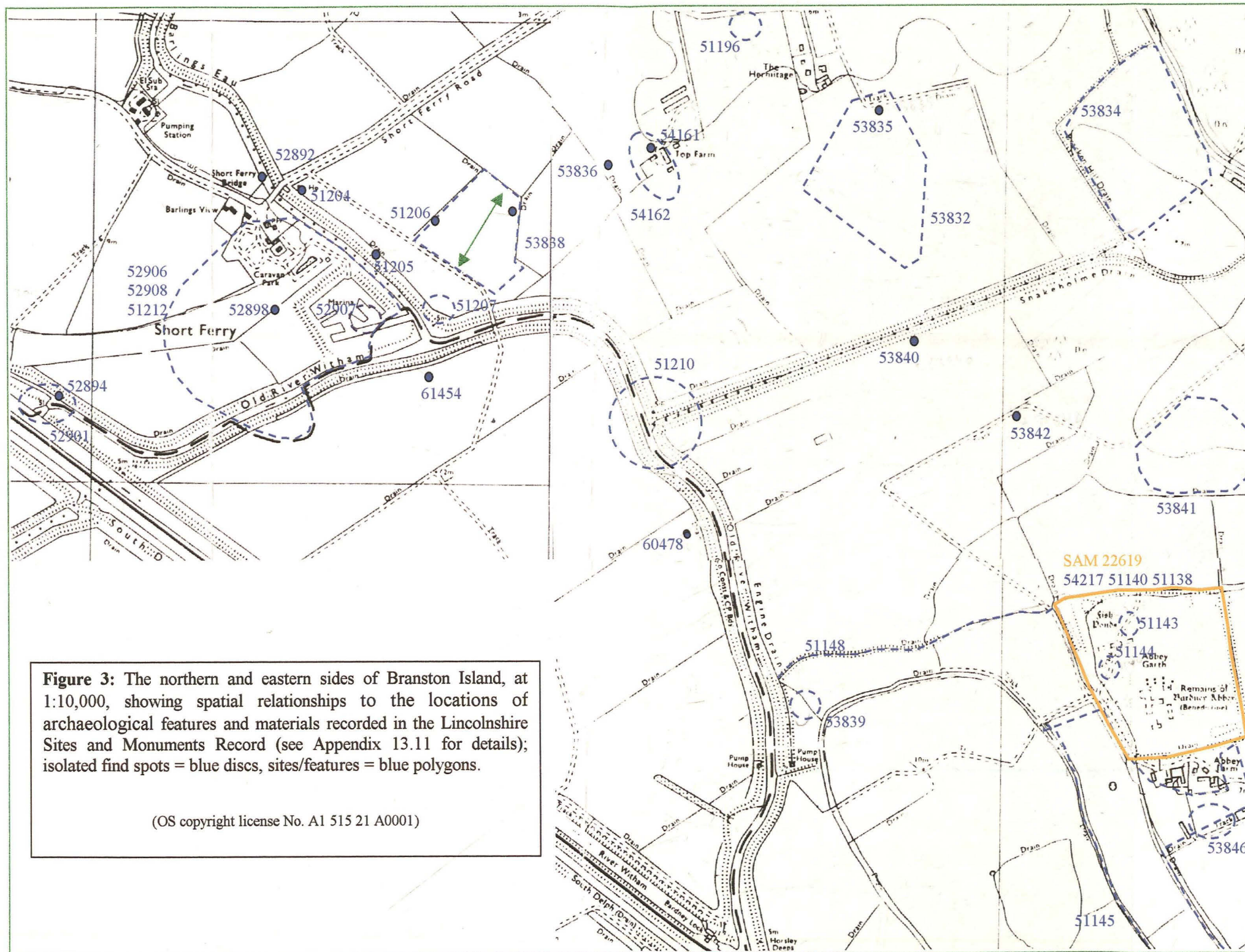
Slightly later material was identified during an archaeological investigation of the southern edge of another spur that is occupied by Top Farm, Stainfield. A number of features, including pits, gullies and ditches, were identified along the western edge of the farmyard (Palmer-Brown, 1997; 54162). One of the pits contained several sherds of Late Neolithic to Early Bronze Age pottery, while an adjacent curvilinear ditch may have encircled a ploughed out round barrow (54161). Aerial photographs indicate that there are at least two round barrows close to Top Farm. One has been identified only 100m to the west (53836), while the other is situated c. 450m to the east (53835). Two circular cropmarks that probably represent further barrows have been identified in the low-lying area to the east of Branston Island. One lies immediately to the south of Snakeholme Drain (53840), with the other closer to Bardney Abbey (53842).

Of similar antiquity to the barrows was an Early Bronze Age food vessel thought to have been found along the northern edge of Branston Island, in or shortly before 1869 (findspot is stated as TF 0973 7122); the pot was handmade, c. 0.125m high and 0.15m in diameter, and had four feet attached to the base (61454). It was recovered from a deeply stratified 'bed of sand' adjacent 'to the course of the ancient River Witham'. However, the original report indicates that the findspot was 'at Heighington', which conflicts with the accepted grid reference. Consequently, the exact provenance of this vessel is uncertain.

Several log boats have been discovered close to Short Ferry. One was found sealed beneath peat at Fiskerton Sluice, c. 300m to the north-west of Branston Island (52894). This vessel was 7.3m long by 0.6m wide, and following excavation it was deposited with Lincoln City and County Museum. The remains of another four dugout boats were found to the east of the mouth of the Barlings Eau. Two were found whilst recutting a drain running along the tail of the bank of the river (51205). A fragment of another was exposed in 1953, c. 300m from the confluence of the Barlings River and the Old Witham (51203). A small portion of the fourth example was found in 1976, c. 130m to the east of the Barlings Eau (51206). All three sites are situated within the field crossed by the track providing access to Branston Island. Part of the bottom and side of a sixth log boat was also found in 1976, during ploughing along the eastern edge of Branston Island (60478 - TF 103 709). Referred to as 'Bardney 3', it was an oak vessel, the exposed portion being 2.25m long, 0.6m wide and up to 0.12m thick. It is thought that the remainder of this vessel is still *in-situ*.

The remains of two more log boats have been found at Horsley Deeps, immediately to the south of the 'island'. The first was found in 1814 during the creation of a drain next to the river (this may have been the South Delph) (51162). This is possibly the same vessel that was referred to as 'Bardney 1', which was 9.15m long by 1.4m wide. The second log boat was found c. 100m upstream during the construction of Horsley Deeps Lock/Bardney Lock, in or slightly before 1829. Known as 'Bardney 2', it was an oak vessel 9.3m long by 0.9m wide, which was found 2.4m below the ground surface.

There is relatively little evidence for Romano-British activity around Branston Island. A small amount of Roman pottery was found in the Abbey Church at Bardney, during the early 20<sup>th</sup>



**Figure 3:** The northern and eastern sides of Branston Island, at 1:10,000, showing spatial relationships to the locations of archaeological features and materials recorded in the Lincolnshire Sites and Monuments Record (see Appendix 13.11 for details); isolated find spots = blue discs, sites/features = blue polygons.

(OS copyright license No. A1 515 21 A0001)

century excavation of a vestry within the north aisle of the choir (51138). It is possible that prehistoric pottery was found at the same time, but the fabric identification is equivocal, making it equally possible that these sherds could have been coarse wares of Romano-British, Anglo-Saxon or medieval date.

Romano-British pottery was also found during the initial construction of Short Ferry Marina, raising the possibility that there may have been a small farmstead situated at the end of this spur of till (52907). The fact that this raised ground was surrounded by wetland on three sides, abutted the junction between two navigable water courses and coincided with a major reorientation of the main channel of the River Witham, is likely to have made it a prime location for settlement. Further pottery of Roman date was recovered from the northern edge of the field to the east of Top Farm, Stainfield, adjacent to Short Ferry Road. It is possible that all of these sherds came from a single vessel (51196).

A few artefacts have been found in the immediate vicinity of Short Ferry Bridge, including a sword that was discovered in 1872 while cleaning and deepening the Barlings Eau (52892). Described as 'two-edged', this undated weapon was approximately 1.40m long. Another find was a penny of Edward the Confessor that was recovered from the riverbank at the north-eastern end of the bridge. Other less well provenance metalwork also seems to have come from the vicinity, such as an iron knife of 13<sup>th</sup> - 14<sup>th</sup> century date, which was found at the 'mouth of the Barlings Eau' in 1788 (Stocker & Everson, 2002).

The nature of these finds, combined with a comparison to other sites in the Witham Valley, raises the possibility that they were associated with a focus of ritual activity analogous to the Iron Age timber causeway at Fiskerton. Stocker & Everson (*ibid.*) suggest that Short Ferry Road is likely to have been superimposed upon this structure. This road runs along an embankment that crosses Stainfield Fen between the Barlings Eau at Short Ferry Bridge, and another spur of high ground near The Hermitage, c. 1km to the east.

The area to the south of the bridge became a focus of activity in the medieval period, with the construction of a monastic grange and fishery in the angle formed by the confluence of the River Witham and the Barlings Eau (52906). The presence of a grange at the western end of Short Ferry Road provides support for the argument that there was a pre-Christian ritual focus here, as there appears to have been a direct spatial relationship between the location of votive sites and later monastic establishments.

The grange is likely to have been the example known as 'Barling Mouth' or 'Barleymouth', which belonged to Stainfield Priory. Excavation revealed that its buildings were constructed upon an artificial mound, and were associated with a quay that ran along the edge of the river (White, 1977). This raised structure had been constructed by revetting a bank of sand and gravel with pitched limestone slabs. The related structures and deposits represented 11<sup>th</sup> - late 13<sup>th</sup> century activity, and included fishing and fish processing equipment such as pieces of a stamped curfew, fish smokers and limestone net sinkers. Subsequent deposits incorporated stone roof tiles and 16<sup>th</sup> - 18<sup>th</sup> century pottery, which suggested that there was an associated medieval to post-medieval dwelling in the immediate vicinity (White, 1984). Kiln props and a large quantity of medieval and post-medieval pottery were also recovered during the excavations (52908). Most of the sherds were produced in the East Midlands, but there were also fragments of French Polychrome and, German and Flemish stonewares.

Eleven limestone net sinkers were found on the eastern bank of the Barlings Eau in May 1960 (51207). These items were situated only 40m from the remains of the medieval grange, and are likely to be directly associated. Cropmarks have indicated the location of a block of ridge and

furrow situated c. 110m to the north-east of the confluence between the Witham and the Barlings River. It seems likely that these *selions* would have formed part of a field system belonging to the grange (53838).

Another monastic fishery is thought to have been located at the junction between the River Witham and the Snakeholme Drain, c. 550m to the south-east of 'Barleymouth' (51210). This establishment was possibly the example known as 'Maidengarth', which also belonged to Stainfield Priory.

An iron axe head of 10<sup>th</sup> – 11<sup>th</sup> century manufacture (51163) was found in the area of Horsley Deeps at around the same time that the log boat known as Bardney 1 was discovered. This axe is the most northerly recorded item from a large body of prehistoric to medieval metalwork that has been retrieved from the river between Horsley Deeps and Bardney village. This assemblage includes two further Anglo-Scandinavian axe heads that were found in the river 'at Bardney' in 1787-8. George Pearson recorded that these items were associated 'with other axes, chopping instruments, and carpenter's tools' (cited in Stocker & Everson, 2002). Comparable material appears to have continued entering the river during the medieval period, a felling axe, parade axe, an iron sword, 2 spearheads and 3 daggers are recording as being found 'at' or 'near' the village (Field & Parker-Pearson, in press).

Bardney Abbey was an early foundation, being the first monastic house in the Lower Witham Valley (54217). It is likely to have been established after AD 675, but was certainly in existence before AD697, and probably represented a physical expression of the Mercian Royal family's interest in the fenland edge (Stocker, 1993). Indeed, the Mercian King Aethelred was probably the founder, and abdicated a few years after his wife's murder to become the Abbot in AD704/5. The abbey is mentioned in early 8<sup>th</sup> century texts, particularly by Bede, the place-name being derived from Old English elements meaning 'B(e)arda's island of land' (Cameron, 1998). The house was principally famous for the shrine containing the relics of St Oswald, formerly a Northumbrian king and the main rival of Mercia for control of Lindsey. His remains had been brought to the abbey at the instigation of Aethelred's wife, Queen Osthryth, who was also Oswald's niece.

It has been suggested that the Anglo-Saxon Abbey effectively occupied the whole island of Bardney, with the principal focus being at the highest point, where the modern village now stands (Stocker, 1993). The Danish army destroyed this establishment in AD870, but Gilbert de Gant refounded a monastic house at Bardney in 1087; this new site lay at the northern edge of the dry land, c. 700m to the east of Branston Island. Initially, it was a Benedictine priory dependent upon the Abbey at Charroux, but it achieved independence and was raised to abbey status in 1116. The Abbey was Dissolved in 1538, and six of the monks were executed as a result of their involvement in the Lincolnshire Rising.

A strip of low ground approximately 120m wide runs along the western edge of the Abbey precinct. This linear depression, which probably represents a relict channel of the Witham, contains a group of fishponds and associated earthworks that are likely to have created and used during the lifetime of the Abbey (51145). The end of Bardney Beck runs across the northern end of this hollow, between the north-west corner of Bardney Abbey and the Old River Witham. It is relatively straight and wide, raising the possibility that this section was a medieval canal constructed to link the abbey to the Witham, thereby integrating the monastic house into the regional transport and communications system (51148).

Two undated cropmark complexes are situated a little to the east of Branston Island. The larger cluster, which includes an enclosure and associated linear features, is situated a little over



200m to the north of Bardney Abbey (53841). The other is a small sub-rectangular enclosure located in a small field. It lies less than 150m to the east of Branston Island (53839). This feature remains undated, but appears to be orientated along the existing boundary, suggesting that it is of medieval or later date.

## 5.0 Methodology

Each of the three phases of work undertaken on Branston Island utilised different methodologies. The form of each component was devised following consultation with the Senior Built Environment Officer, Lincolnshire County Council.

The objective of the works was to strengthen the flood bank retaining the Old River Witham along the northern and eastern edges of Branston Island (fig. 2). There was a relatively narrow berm, generally less than 5m wide, between the foot of the original flood bank and the existing soke dyke. Consequently, it was necessary to create more space in order to place the clay that would reinforce the bank. As a result the initial soke dyke was filled with further clay and a new, slightly larger drain, c. 6m wide and 1.5m deep, was created approximately 5m further to the south or west.

### *The evaluation*

It was determined that the primary impact upon sub-surface deposits would be the excavation of the new soke dyke, which would extend c. 2000m around two sides of the island. It was therefore necessary to establish the presence and form of any archaeological deposits situated within the footprint of the new dyke. Therefore a narrow trench was opened, which ran the full length of the new drain, between CH500 and CH2550. It was separated from the existing dyke by approximately 2m.

A large, tracked 360° excavator fitted with a 1.6m wide, toothless ditching blade was used to remove all deposits to a depth of 1.0m below modern ground level; this process frequently exposed the alluvial sands and silts situated below the base of the peat sequence. The machine removed material in spits that were no greater than 0.2m in depth. This process was monitored constantly to ensure the identification and investigation of any archaeological features that were exposed.

Where exposed, archaeological features and deposits were sample excavated, and information relevant to their interpretation was entered on standard context sheets. Scale drawings were made in both plan and section, and a photographic record (colour prints) of exposed features was maintained<sup>2</sup>.

One or two experienced archaeologists carried out the evaluation over a period of sixteen days – on 26<sup>th</sup>, 27<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup> July, and 1<sup>st</sup> - 3<sup>rd</sup>, 6<sup>th</sup> - 10<sup>th</sup>, 13<sup>th</sup>, 15<sup>th</sup> - 17<sup>th</sup> August 2001, inclusive.

### *The excavation*

The evaluation identified only one area where there were significant *in-situ* archaeological deposits. Two clusters of waterlogged vertical timbers were exposed between CH550 and CH600, toward the south-eastern corner of the island. It was determined that further

---

<sup>2</sup> Due to a camera malfunction these images were incorrectly exposed and could not be developed.

investigation was necessary in order to better establish the nature and date of these structures. Consequently, two 5m<sup>2</sup> trenches were opened, each abutting the western edge of the evaluation trench and being centred upon one of the post clusters. A tracked 360° excavator fitted with a 1.6m wide, toothless ditching blade was used to remove all deposits in spits no greater than 0.2m in depth. This process continued until the surface of the peat bed containing the preserved timbers was exposed. The machining was monitored constantly to ensure that any archaeological features exposed were identified and investigated.

The peat bed was excavated by hand, and was removed in 0.05m deep spits. This maximised the recovery of datable materials and ensured the identification of any surviving timbers. These investigations resulted in the production of written descriptions of all deposits and features on standard context record sheets. Complementary scale drawings were made in both plan and section. A photographic record (colour prints) of exposed features was also maintained. Selected prints have been reproduced in this report, with the remainder forming part of the project archive.

A team of 9 experienced field archaeologists carried out the excavation over a period of five days, from the 20<sup>th</sup> to the 24<sup>th</sup> August 2001, inclusive.

### *The watching brief*

Following the completion of the excavation, the existing soke dyke was filled in and the adjacent flood bank was enhanced. A watching brief was then undertaken during the excavation of the new soke dyke. It was also intended that this watching brief should include the monitoring of toe protection works along a 350m long section of the right hand bank of the Old River Witham. This involved the removal of silts situated along the edge of the river channel in order to create fish refuges. Observation of the initial element of the toe protection works established that the excavation of underwater deposits did not produce any meaningful results. As a consequence further monitoring of this part of the project was discontinued.

An experienced archaeologist undertook the watching brief between the 8<sup>th</sup> November, and 20<sup>th</sup> December 2001.

Artefacts recovered during this programme of works were cleaned and processed prior to their submission to researchers specialising in the examination of archaeological materials. The results of these investigations have been included as independent appendices to this report, and the general conclusions of these accounts have been integrated into the main text.

## 6.0 Results and interpretation

Each of the three phases of fieldwork exposed elements of the two clusters of vertical timbers situated between *CH580* and *CH610*. These results will be considered independently from the other the data relating to the remainder of the soke dyke, which was collected during the evaluation and watching brief. Where appropriate, integration of this material will occur in section 7.0.

### 6.1 *CH580 - CH610*: The vertical timber settings

#### 6.1.1 The evaluation

The stratigraphic sequence between *CH500* and *CH610* differed from that encountered elsewhere on the island. The ground surface along much of this section was comprised of a dark brownish to black slightly sandy loam, (008), which contained moderate quantities of sub-rounded gravel. This deposit was up to 0.4m deep and probably represented a dump of organic sediment cleaned from the adjacent soke dyke. In some places it was possible to see a clear interface between (008) and the buried topsoil, (001), beneath, but in other places the two deposits had been homogenised by ploughing. Topsoil (001) was a mid to dark-brown peaty material.

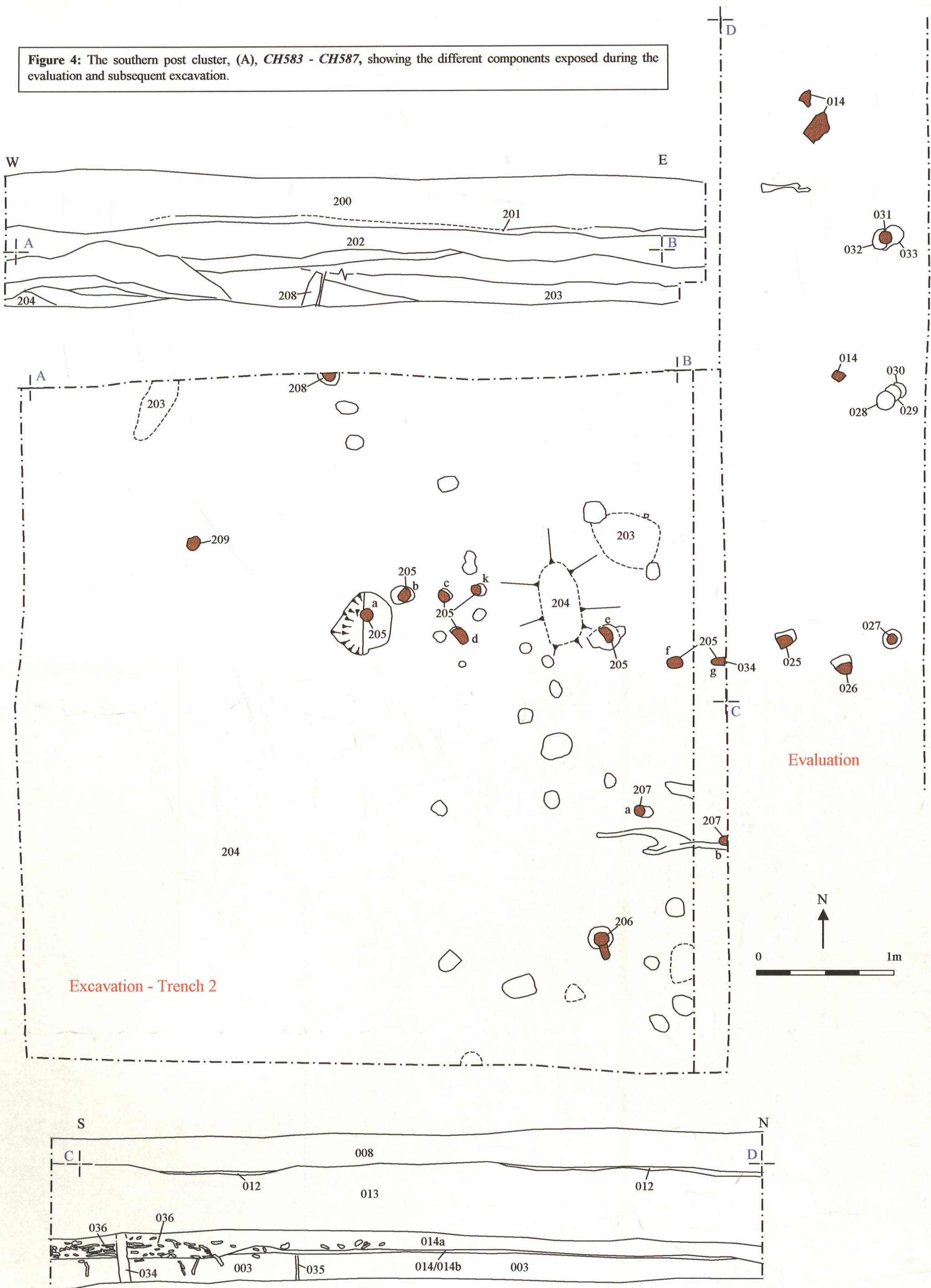
Removal of (008) and (001) exposed a thin, intermittent lens of mid yellowish-brown sand, (012). This material resembles deposits sealed beneath the peat, which raises the possibility that it represents spoil from cleaning, or creating, the base of the soke dyke. Alternatively, (012) may represent the remains of a relatively high-energy flood deposit, the upper elements of which have been incorporated into the ploughsoil.

Below (012) lay a thick alluvial deposit of mottled dark-grey to orangey-brown silty clay, (013), which was between 0.35 and 0.55m deep. A basal sherd from an 11<sup>th</sup> century Stamford Ware vessel and three fragments of glazed mid-12<sup>th</sup> to mid-13<sup>th</sup> tile were recovered from (013) (Appendix 13.4). It appears likely that (013) is a cumulative deposit representing silting along the margins of a river channel that was slowly migrating eastward (J. Rackham, *pers. comm.*).

Alluvium (013) sealed a relatively thin bed of peat, (014), which extended between *CH400* and *CH600*. This dark brown to black silty, fibrous material contained some twigs and wood fragments, the latter increasing in density toward the base of the deposit. Further investigation revealed that the stumps of a series of vertical posts had been preserved within the peat. These timbers formed two discrete clusters, (A) and (B).

Group (A) was exposed between *CH583* and *CH587*, and appeared to represent two intersecting rows, one running from north-east to south-west, *Structure 1*, with the other aligned east to west, *Structure 2* (fig. 4). Three timbers, (028), (031), and (089) were exposed from *Structure 1*, and each was separated from its neighbour by relatively large gaps of 1.0m and 2.5m. They were all pieces roundwood without any heartwood, possibly indicating that they were all fast grown coppice poles. Localised deposits of degraded peaty wood, (029) and (032), were situated at the bases of posts (028) and (031), respectively. Examination of this material indicated that it projected vertically into the underlying sediments, demonstrating that it represented the base of rotten posts; (029) had been 0.12m in diameter and (032) was larger at 0.15m. The fact that the bases of the rotten posts had been partially truncated by the insertion of (028) and (031) indicated that there were at least two phases to this structure. It

Figure 4: The southern post cluster, (A), CH583 - CH587, showing the different components exposed during the evaluation and subsequent excavation.



seems likely that the second phase represented a localised repair to a functional, but aging structure.

Small, semi-circular deposits of yellow sand, (030) and (033), abutted the rotten posts, and the bottoms of their replacements. This material filled small scour pits that had been formed by eddies created around the posts. Evidence of such erosion suggests that these elements of *Structure 1* stood some way into a large river channel where they were subjected to strong currents.

Four timbers were identified in *Structure 2*. Two, (027) and (034), were roundwood poles, but the other two, (026) and (027), were split timbers, with 'D'-shaped profiles. The dimensions of (026) and (027) were comparable, hinting that they had formed two halves of the same pole, 0.15m in diameter. The timbers of *Structure 2* were set at c. 0.30m intervals. Each post was slightly offset from its neighbours, which created an alignment with a 'serrated' plan. This arrangement suggests that wattle panels (of up to 0.05m thickness) were slotted between the staggered rows of posts. The post and panel structure would have projected out into a river channel, disturbing the flow. As a result it was necessary to set the posts close together in order to brace the structure against the full force of the current.

A small section of wattle panel, (036), was exposed in the east facing section, running behind and abutting post (034). It was c. 0.8m long and 0.2m deep, and was formed by five rows of thin horizontal branches running from north to south; each branch was 'corrugated' as though woven around small vertical struts. It is difficult to explain why the remains of panel (036) ran perpendicular to the posts of *Structure 2*. It is possible that the panel was not a component part of *Structure 2*. Alternatively, the current may have twisted (036) around after the structure was abandoned.

A lens of mottled pale yellow to white fine sand, (015), had developed immediately to the north of *Structure 2*. It formed a slight ridge, c. 0.05m deep, immediately upstream of the post alignment, but then thinned out and disappeared further to the north. It seems likely that (015) provides another indication of the degree to which the posts and panels of *Structure 2* impeded the flow of the current, causing heavier sediment and coarse detritus to be deposited against the face of the barrier.

The other group of timbers, (B; *Structure 3*), was identified between *CH601* and *CH604* (fig. 5). Five timbers were exposed and formed part of a double row running from north-east to south-west, (017), (020), (022), (024) and (041). Consequently, *Structure 3* ran parallel to *Structure 1*, which lay 17m to the south. An additional, outlying post, (016), was situated c. 2m to the south, at *CH599*.

Within the main alignment of *Structure 3* were two cylindrical peaty deposits, (019) and (023), which represented the remains of decayed posts. As with *Structure 1*, one of these rotten posts, (023), had been truncated by a later replacement, (022), again indicating that this structure was repaired and maintained during its working life. Additionally, there were sand filled eddy holes around posts (017) and (020), which again suggests that this part of the structure was situated away from the very edge of the river channel.

Artefactual material was not recovered from the stratified deposits surrounding the posts during the course of the evaluation. However, a number of unstratified items were recovered, either during machining, or from the spoil heaps adjacent to post clusters (A) and (B). These items included eight sherds of Romano-British pottery of the 2<sup>nd</sup> to 4<sup>th</sup> centuries AD (Appendix 13.2), three limestone net sinkers, which were probably medieval in date (Appendix 13.7), and

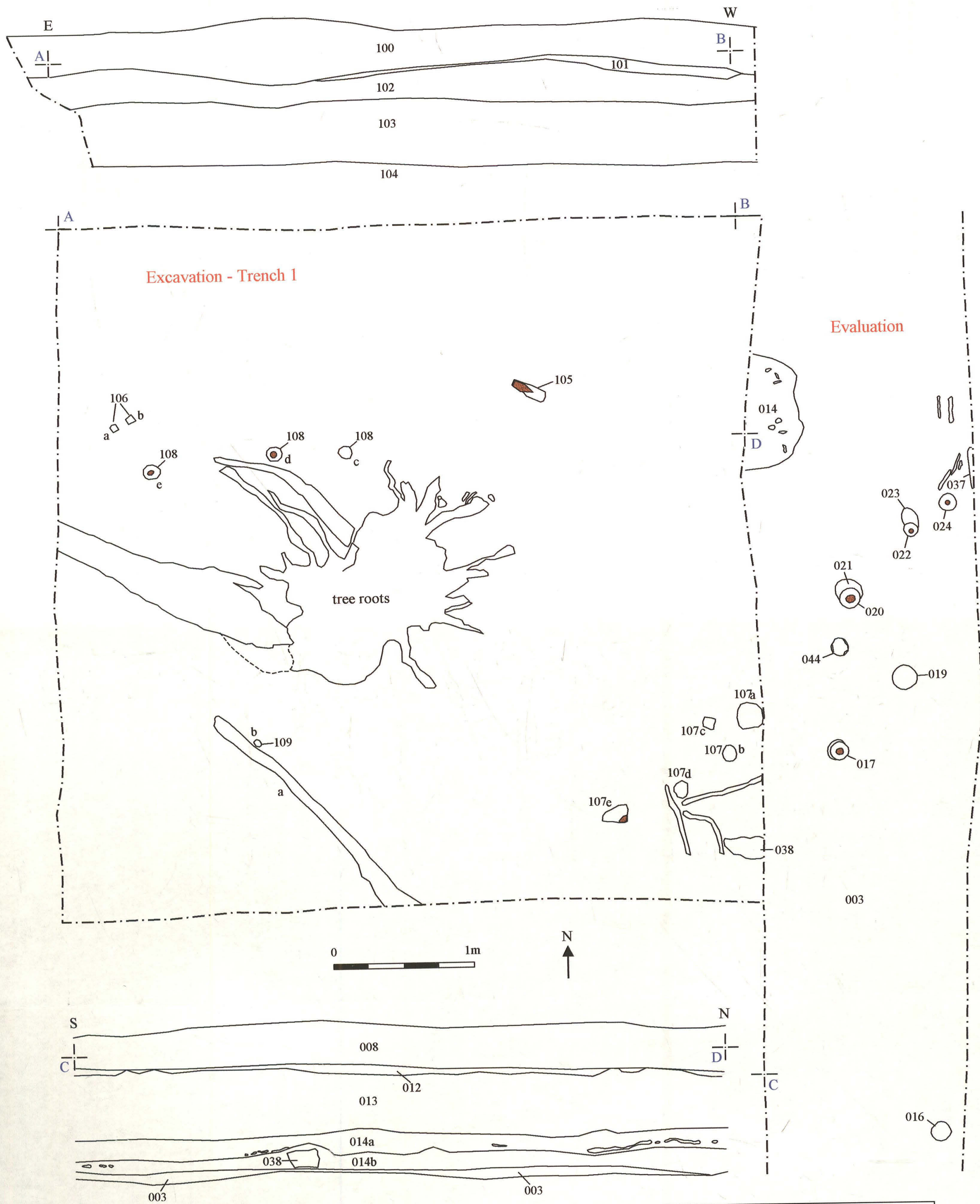


Figure 5: The northern post cluster, (B), CH601 - CH604, showing the different components exposed during the evaluation and subsequent excavation; oak timbers with areas of heartwood are depicted in brown.

several pieces of medieval pottery produced during the 12<sup>th</sup> to 14<sup>th</sup> centuries. Additionally, a number of small fragments of human cranium were also retrieved.

## 6.1.2 The excavation

### 6.1.2.1 Trench 1

Trench 1 was opened between *CH601* and *CH606*, immediately to the west of the posts of cluster (B) that were exposed during the evaluation. The uppermost deposit was the ploughsoil, (100), which incorporated large quantities of pebbles and gravel along the eastern half of the trench, close to the soke dyke (fig. 5). These coarse components are likely to be derived from spoil generated during the creation or cleaning of the dyke. Related to this was a thin layer of gingerly-brown slightly silty sand, (101), which was situated at the base of the ploughsoil. It covered the eastern edge of trench, extending c. 5.0m from the western edge of the soke dyke. This material represents the base of the spoil heap created during the construction of the soke dyke.

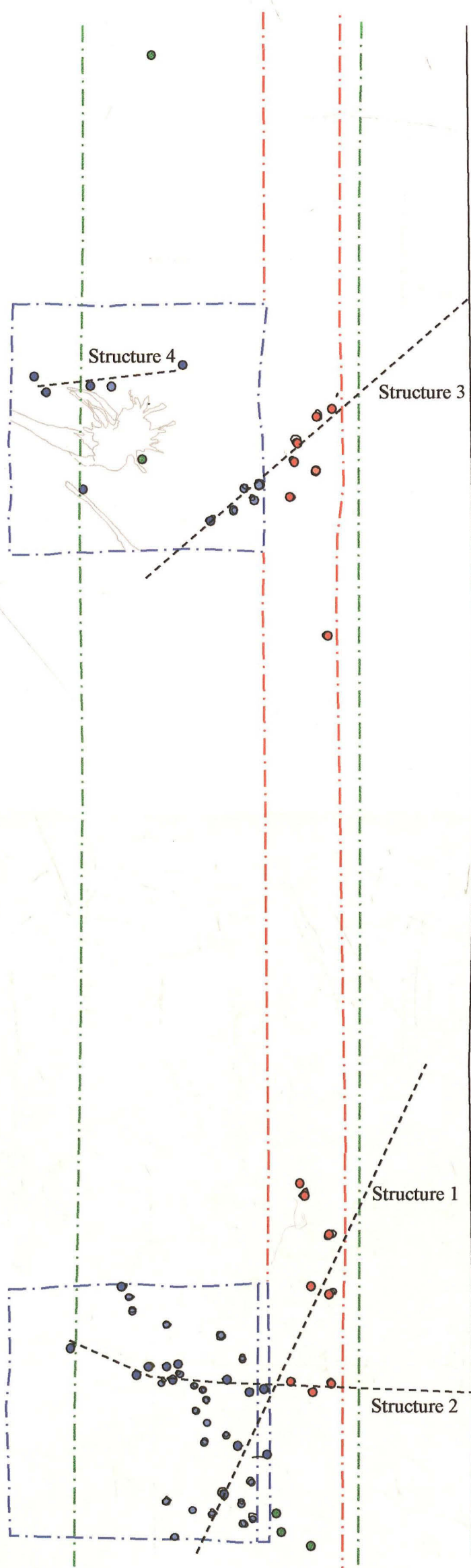
Beneath (101) lay a deposit of mid grey silty clay, with orangey-brown mottles, (102). This alluvial deposit was c. 0.3m deep at the eastern edge of the trench, but decreased in depth toward the west. This suggested that (102) had formed along, and filled, the western edge of a palaeo-channel.

Removal of (102) exposed a bed of orangey-brown to dark greyish-brown slightly silty peat, (103), c. 0.45m deep. This material incorporated lots of fragments of wood, which were up to 0.04m diameter. However, many of these fragments were distorted, probably having been compressed as a result of peat shrinkage. Peat (103) was excavated by hand revealing the remains of additional vertical timbers and a small quantity of cultural material. The latter was comprised of a single sherd of Romano-British greyware (Appendix 13.2), 80 sherds forming an early to mid 10<sup>th</sup> century Lincoln kiln-type shelly ware dish (Appendix 13.3), and several pieces of cattle and sheep bone (Appendix 13.5).

A group of five posts, (107), were exposed at the south-east corner of the trench, and represented a south-westerly continuation of *Structure 3*. Four of these posts were pieces of roundwood, while the fifth, (107)e, was a piece of radially split timber representing a quarter of a trunk c. 0.24m in diameter.

Another group of four posts and two stakes were identified toward the northern edge of Trench 1. Together they formed a short east-west aligned row of timbers, *Structure 4*, that was only 3m long. The most easterly element of this structure was post (105), a piece of oak roundwood 0.12m in diameter. This timber was not vertical, its top pointing towards the west, with its base toward the east. Although it appeared to have been inserted at this angle, it is also possible that the force of the current in the river had caused it to move. The next post, (108)c, lay 1.2m to the west; it formed part of a straight row, c. 1.2m long, with (108)d and (108)e. The two stakes, (106), lay 0.30m to the north-west of the most westerly post, (108)e. They were both pieces of squared timber, with sides 0.08m long, and had been placed 0.10m apart. This suggests that they had originally clamped a horizontal element of the structure in place.

A third stake, (109)b, was identified approximately 1.4m from the south-west corner of the trench. It was another squared timber, which had sides 0.06m long. The north-western end of a large, slightly bowed, horizontal timber, (109)a, abutted the southern edge of this stake. Timber (109)a was more than 2.9m long and up to 0.15m wide. It had no signs of working and most of



post group (B)

Figure 6: Composite plan showing the inter-relationships of the timbers exposed between CH583 - CH610. Evaluation trench shown in red, excavation trenches in blue, and new soke dyke (watching brief) in green. Depicted at 1:100.

post group (A)



its upper surface was still covered by bark. These attributes suggested that it was a piece of natural driftwood. However, a functional use for (109)a cannot be discounted given the direct relationship between it and stake (109)b.

Removal of the peat exposed the bole, root system and part of the collapsed trunk of a mature tree at the centre of the trench. It was not possible to establish a direct stratigraphic relationship with the post structures. However, it seems most likely that this tree would have grown after this part of the river channel had started to silt up, following its migration toward the east, in which case the tree would post-date the timber settings.

A sample of peat was taken from the base of (103) in order to establish when this deposit began to form. A radiocarbon date (AMS) of 1920-1410 Cal BC (2 sigma) was obtained, which indicates that inundation and peat development in this area was initiated during the Early Bronze Age (Appendix 13.6).

#### 6.1.2.2 Trench 2

Trench 2 was opened between *CH581* and *CH586*, adjacent to the timbers of *Structure 1* and *Structure 2* (fig. 4). Removal of the ploughsoil, (200), exposed the surviving component of the spoil heap resulting from the creation of the soke dyke, (201). Below this was a layer of mid grey alluvium, (202), which decreased in depth toward the western side of the trench. As with (102), this suggests that the alluvium fills the western edge of a relict river channel.

Sealed beneath the alluvium was a layer of orangey-brown to dark greyish-brown peat (203), which was up to 0.45m deep. This deposit was excavated by hand exposing further structural timbers. Artefactual material was also recovered, this including 15 sherds of mid 3<sup>rd</sup> to 4<sup>th</sup> century Romano-British pottery (Appendix 13.2), and two pieces of cattle bone (Appendix 13.5). Additionally, five pieces of limestone rubble were discovered at the north-west corner of the trench. This stone must have been imported onto the site, and could represent the remains of a demolished structure that was situated somewhere to the west of the trench.

Two further timbers from *Structure 1*, (207)a and (206), were exposed at the south-eastern corner of the trench. Both were pieces of roundwood, (206) being set vertically, with (207)a sloping from the west down toward its base at the east.

Additional remains of *Structure 2* were also uncovered. Posts (205)e and (205)f continued the staggered line of timbers exposed during the evaluation. A low, oval mound of sand was situated immediately to the west of (205)e, and appears to represent a transformation of the underlying natural, (204). It seems likely that this mound formed against the upstream edge of *Structure 2* as a result of some localised variation in the form of the construction at this point. This proposal is supported by a change in the arrangement of the vertical timbers to the west of the mound. Four equally spaced posts, (205)a, (205)b, (205)c and (205)k, formed a straight line c. 0.9m long. A fifth post, (205)d, was located 0.2m to the south of the eastern end of this row. The final element of *Structure 2* was post (209), which was situated 1.3m to the west of (205)a. Eddy holes containing peat or sand were present around the bases of some of the timbers, indicating that the western end of the structure was still subject relatively strong currents.

One other vertical timber was exposed in Trench 2. Post (208) was identified at the northern edge of trench, and was partially embedded in the section. It was situated 1.5m to the north of *Structure 2*, but could conceivably form an outlying component of this feature. Alternatively, it

may have formed the southern end of another timber setting located in the area between Trench 1 and Trench 2.

Numerous circular and oval patches of slightly organic, mid grey sand were also exposed across the eastern half of the trench. These localised variations in the natural could indicate the former locations of rotted, or extracted posts. Alternatively, they may have been voids created by the roots of trees that subsequently grew along the silted up edge of the river channel.

### 6.1.3 The watching brief

A number of timbers, (090), were exposed during the construction of the new soke dyke. Ten posts were identified among the southern cluster, (A). Many had been exposed during the two previous phases of fieldwork; (090)a equated to (208); (090)b to (027); (090)c to (026); (090)d to (025); (090)e to (205k); (090)f to (205b); and (090)g to (205)a. However, there were three new timbers, (090)h to j, situated at *CH581*. All three were roundwood poles, which are likely to have formed part of *Structure 1* (fig. 6).

Five timbers, (091), were identified in the northern post cluster, (B). Two of these were new, (091)d having previously been identified as (041), (091)e as (017), and (091)b as (105). Post (091)c was situated beneath the eastern edge of the tree bole exposed during the excavation. This relationship confirmed that the tree had grown after the timber structures had been abandoned. It is not clear which structure (091)c formed part of, as it lay roughly equidistant from *Structure 3* and *Structure 4*. The fifth post, (091)a, was also an outlier, being situated c.6.0m to the north of *Structure 4*.

Four more vertical timbers, (042), were identified within the present channel of the Old River Witham at *CH670*. They formed a north-south orientated row, located approximately 2.0m from the western edge of the channel (fig. 7). Each was visible as a length of oak heartwood c. 0.10 – 0.12m in diameter, which projected by 0.30 – 0.40m from the riverbed. It was not possible to establish whether these timbers had any relationship with *Structure 3*.

A piece of moulded sandstone was discovered in (060) at *CH562*. It was 0.30m deep, by 0.23m wide and 0.23m high, and had a rebate at one corner, which may have acted as a doorstop. Its proximity to the clusters of vertical timbers raises the possibility that it was associated with the wooden structures; it may have formed part of an associated building, or could have been reused as a weight. However, it is also possible that this stone fell from a boat following the post-Reformation demolition of one of the nearby monastic houses, or may simply have been a piece of ballast discarded from a passing vessel. If so, the ejection of this piece of sandstone may have been occasioned by a boat becoming ensnared in the surviving timbers of the more southerly cluster of posts, (A).

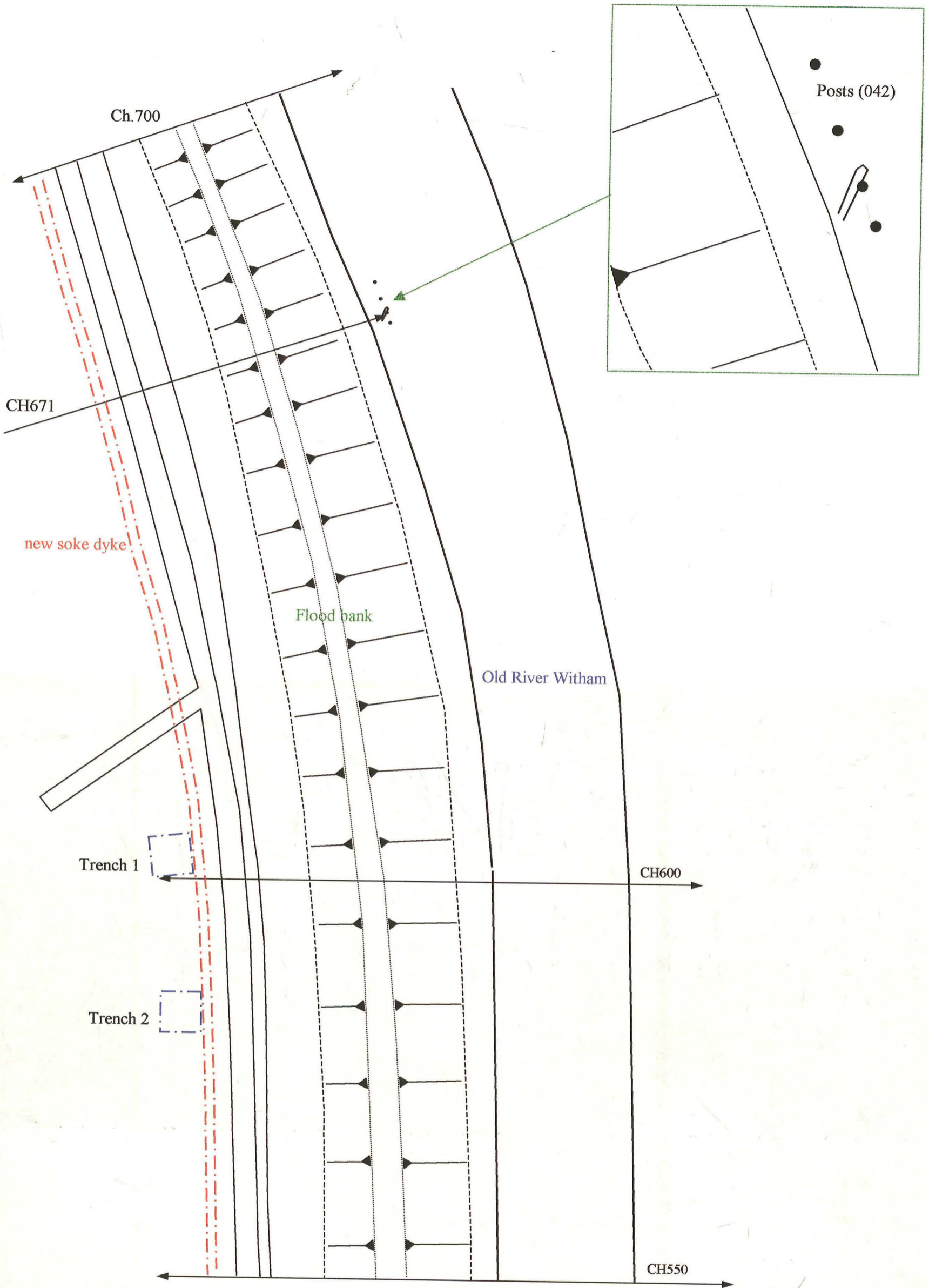


Figure 7: Relationship between post clusters (A) and (B), and the four timbers, (042), exposed within the channel of the Old River Witham.

## 6.2 Other features and deposits

### 6.2.1 The evaluation

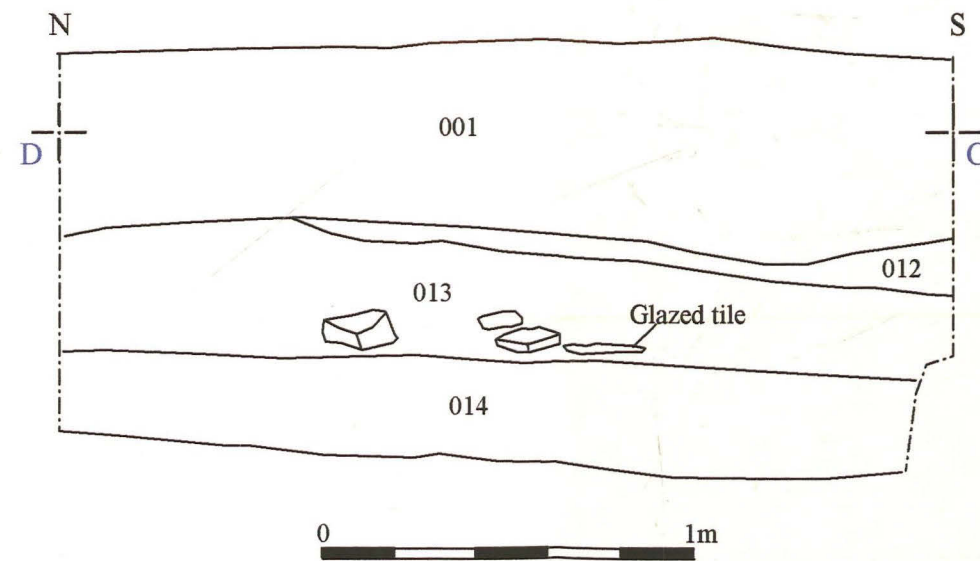
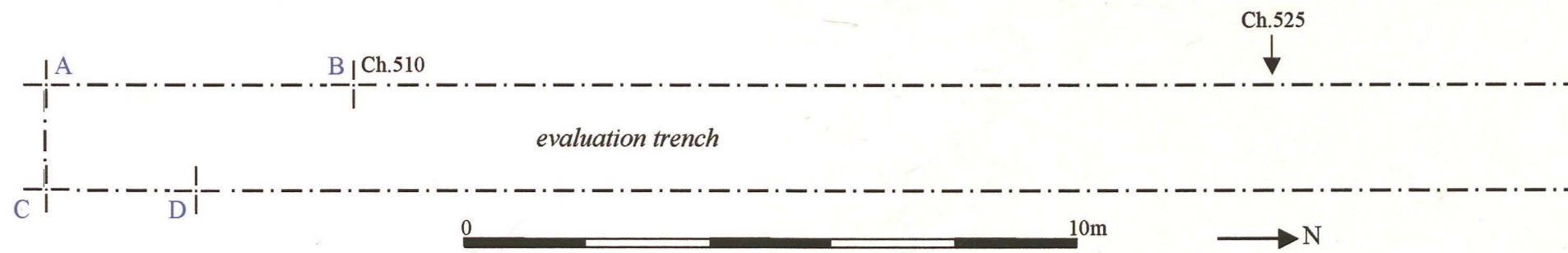
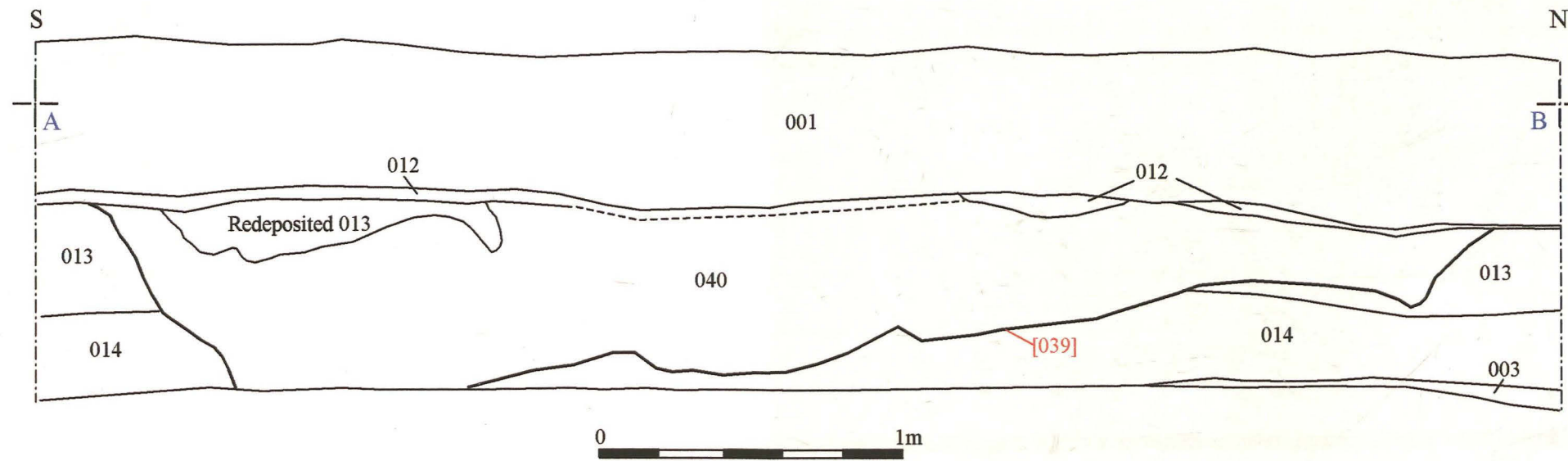
Archaeological features and deposits were not encountered along the majority of the course of the evaluation trench. However, this investigation exposed a range of naturally deposited sediments and organic strata. In most places the uppermost deposit was a mid to dark-brown peaty topsoil, (001), which was up to 0.5m deep. However, between *CH520 - CH600*, and *CH850 - CH900*, topsoil (001) was sealed beneath a dark brownish to black slightly sandy loam, (008). This deposit contained large amounts of peat, moderate quantities of sub-rounded gravel and frequent roots. It is likely to represent upcast from a relatively recent cleaning of the existing soke dyke.

At the southern end of the evaluation trench the topsoil was found to seal a thin lens of mid yellowish-brown sand, (012), which may have been upcast from a cleaning of the base of the soke dyke. Removal of (012) revealed the presence of a ditch, [039], at *CH510*. This linear feature ran from east-north-east to west-south-west, the oblique section exposed in the western side of the evaluation trench being c. 4.6m wide and more than 0.60m deep (fig. 8). There was virtually no evidence for [039] in the opposite section, indicating that the terminal of the ditch was situated within area occupied by the evaluation trench (i.e. it had stopped before it reached the soke dyke). The lower fill of [039] was a mixture of orange sand and sub-rounded flint gravel, (040). The composition of (040) suggested that it represented imported material that had been used to backfill this ditch. It seems likely that [039] represents part of the system of dykes that were created in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries to drain this part of the Witham Fen.

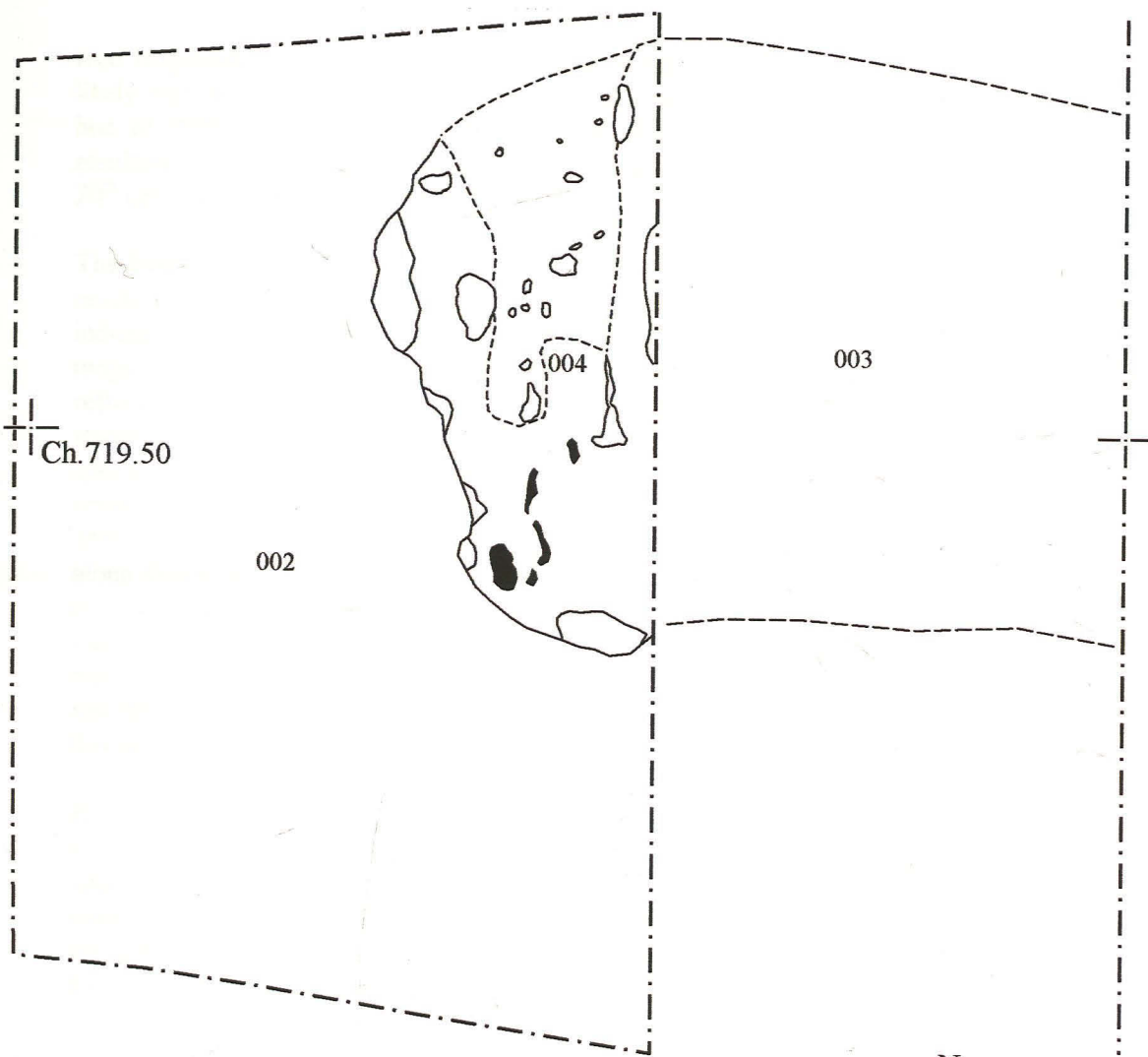
To the north of the post rows the removal of the topsoil, (001), exposed a mixed deposit of brownish-grey clayey sand and peat, (005), between *CH600* and *CH1000*. This layer was discontinuous and uneven, but was generally c. 0.2m deep. Its stratigraphic relationships and heterogeneous composition suggest that (005) is the surviving component of spoil heaps created during the construction of the original soke dyke. A mound of orangey-brown to yellowish sandy gravel, (006), approximately 8.0m long and 0.2 - 0.4m deep, was identified at *CH920*. Like (005), this deposit was situated between the topsoil, (001), and the upper peat bed, (002), suggesting that it was a product of the same episode of activity; this was confirmed during the watching brief when a gravel filled palaeo-channel, (086), was identified adjacent to *CH920* (see 6.2.2.2, below). The soke dyke is depicted on the Second Edition Ordnance survey map of 1906 (6": 1 mile), providing a *terminus ante quem* for the creation of (005) and (006).

A lens of hard, orangey-brown burnt peat and charcoal laminae, (004), was identified adjacent to *CH719* (fig. 9). This sub-circular area of oxidised material was c. 2.0m in diameter and up to 0.1m deep, and was sandwiched between the base of the topsoil, (001), and the spoil, (005). This localised area of burning probably results from the lighting of a bonfire on top of one of the spoil heaps. This may have occurred shortly after the creation of the soke dyke, in which case the fire may have consumed cleared scrub or bog oaks exposed by the construction works. Alternatively the fire may have been set some time later, but prior to this part of the island being utilised for arable production

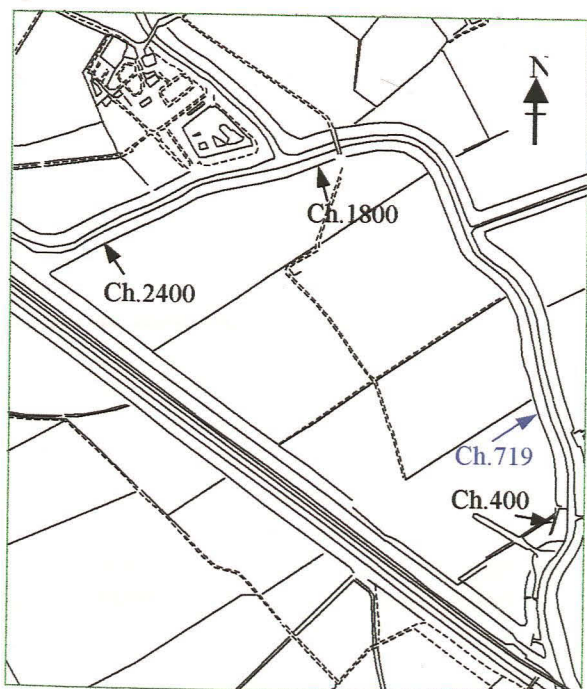
A sequence of peat deposits were sealed beneath (001) or (005). The uppermost of these was a very fibrous dark brown to black deposit, (002), which was up to 0.6m deep. A large proportion of (002) was composed of degraded reed fragments. There were two different organic deposits situated beneath (002). A layer of mid brown fibrous material, (010), was exposed between *CH650* and *CH1750*. As with (002), the majority of (010) was composed of



**Figure 8:** Sections across the eastern terminal of ditch [039], which was situated at the southern end of the evaluation trench.



0 1m



**Figure 9:** Plan of the area of burning, (004), exposed at *CH719*.

reed fragments, and the main difference between these two layers were their colours. It seems likely that (010) represents the anaerobic, basal component of the reed peat, while the blackish hue of (002) suggests that this material has become differentiated due to oxidation and resultant degradation. This is likely to reflect changes to the hydrology resulting from 19<sup>th</sup> and 20<sup>th</sup> century drainage schemes.

The basal peat between *CH1750* and *CH1900*, (011), was mid brown and was composed of much finer, fibrous organic material than the reed peats, (002) and (010). Examination indicated that while there were no reed fragments, this deposit incorporated large quantities of twigs and pieces of wood. The different compositions of (010) and (011) almost certainly reflect differing depositional environments. The reed peat will have formed in relatively shallow standing water away from the open waters of the river channel. The presence of significant quantities of twigs and small branches within (011) could indicate that this deposit developed within an area of alder carr, which would have grown along the interface between wetland and drier ground. Alternatively, the woody component of (011) could represent driftwood deposited along the margins of a body of open water. The latter scenario seemed more likely based on the evidence collected during the evaluation, as the area between *CH1750* and *CH1900* is located immediately opposite the confluence between the Old River Witham and the Barlings Eau. The merging of these two rivers, one flowing eastward and the other southward, is likely to have resulted in turbulence that would have scoured away the southern bank opposite their junction, thereby creating a relatively large open pool or mere at this point.

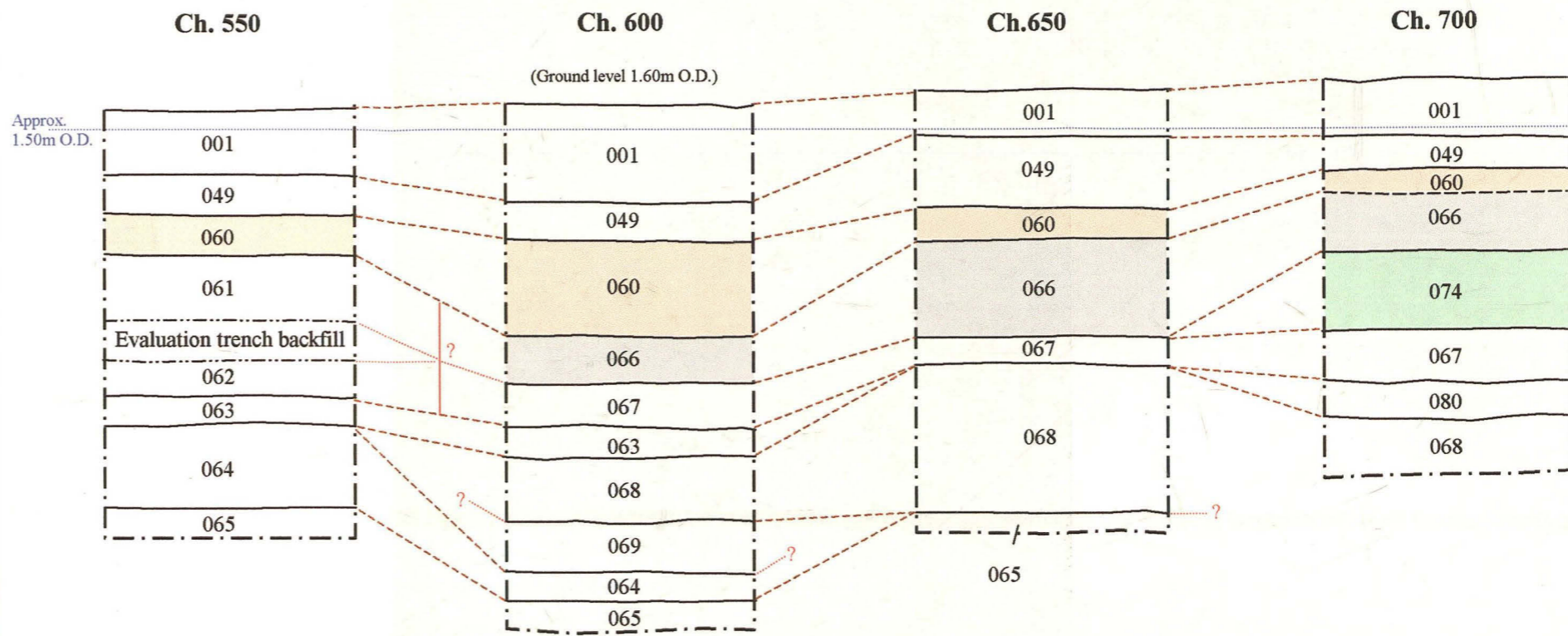
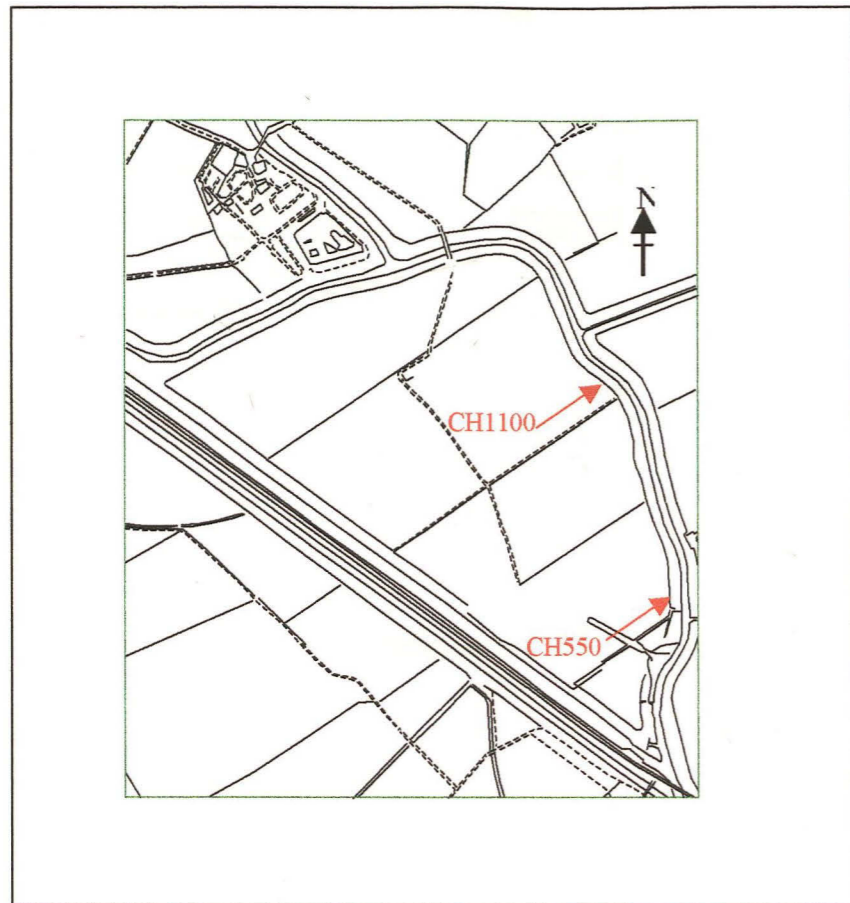
Removal of the basal peat, (010) and (011), exposed sands, (003), which contained occasional sub-rounded gravel and pebbles. Although always leached and pale, the colour of this deposit varied along the course of the evaluation trench, ranging from greyish-white, through yellow, to light brown. This deposit is not a buried soil, but does represent the uppermost surviving component of the land surface prior to the raising of water levels and the resultant onset of peat formation in the earlier Bronze Age.

### 6.2.2 The watching brief

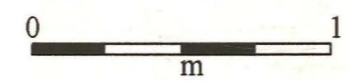
The new soke dyke was approximately 6m wide and 1.5m deep. Consequently, each section took longer to excavate than a comparable length of the evaluation trench. This allowed a more detailed examination of the stratigraphic sequence, and as a result sections were drawn and described at 50m intervals along the soke dyke (figs. 10 to 13). By comparing the differing compositions and distributions of the deposits encountered, it has been possible to formulate generalised observations regarding past environmental conditions along the northern and eastern sides of Branston Island.

#### 6.2.2.1 The north-western margin: *CH1750* – *CH2550*

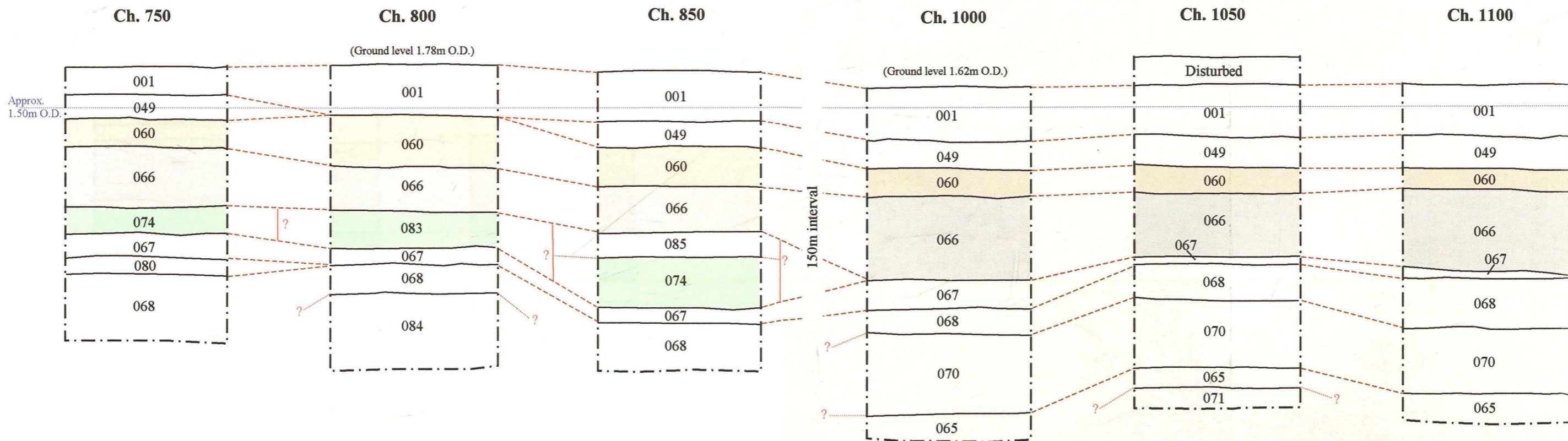
In most locations the uppermost deposit encountered was mid to dark-brown peaty topsoil, (001), but in places this had been removed, or was covered by imported material. Beneath the topsoil was a subsoil, (049), a mixed layer of mid greyish-brown slightly clayey silt and peat. The subsoil sat directly on top of the peat beds to the east and south-east of the bridge onto Branston Island (situated at *CH1733*). In contrast, it sealed a layer of mid to light brown silty clay, (043), to the west (figs. 12 & 13). The small particle size and structure of (043) indicated that it was probably an alluvial deposit, while its restricted distribution suggested that there were different depositional environments to the east and west of the bridge. It therefore seems likely that the north-western corner of Branston Island, between *CH1750* and *CH2500*, lay



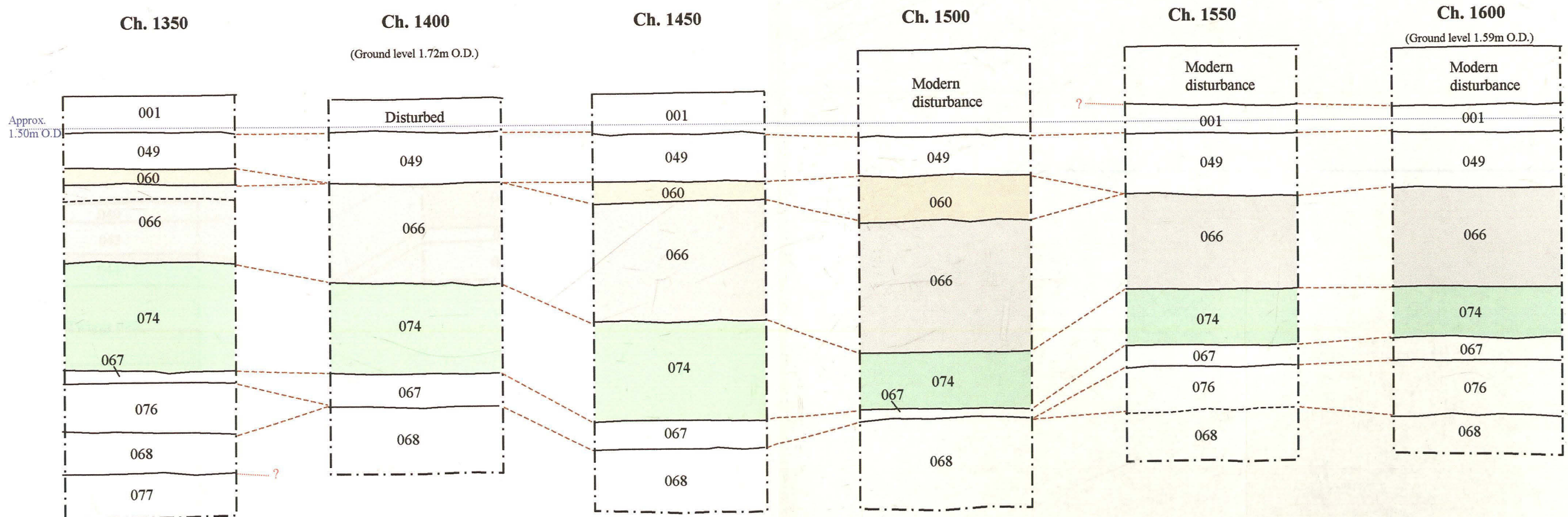
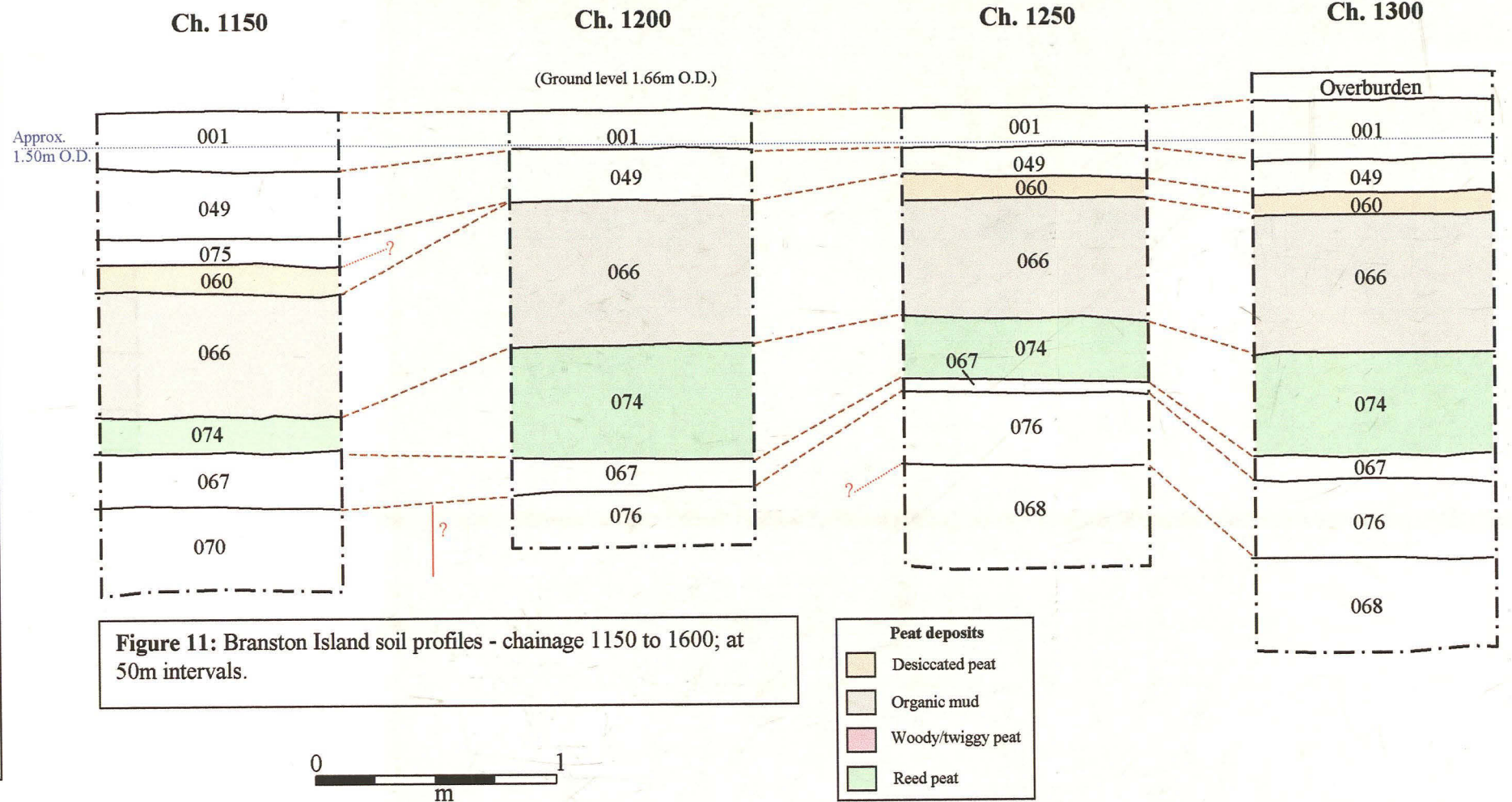
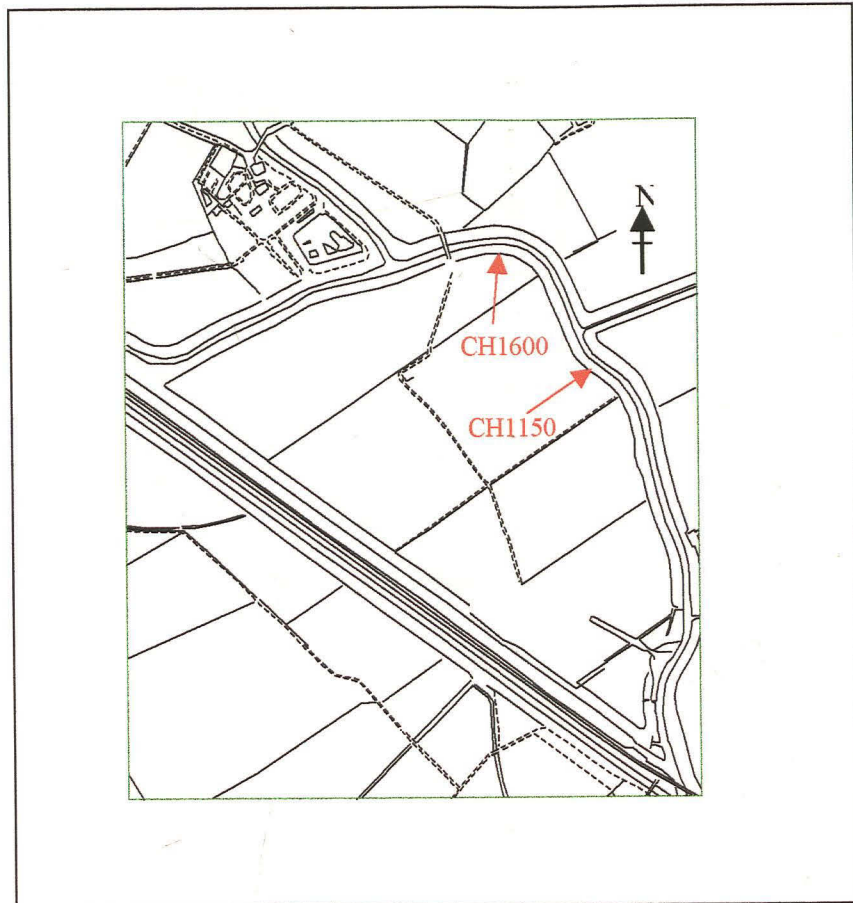
- Peat deposits**
- Desiccated peat
  - Organic mud
  - Woody/twiggly peat
  - Reed peat

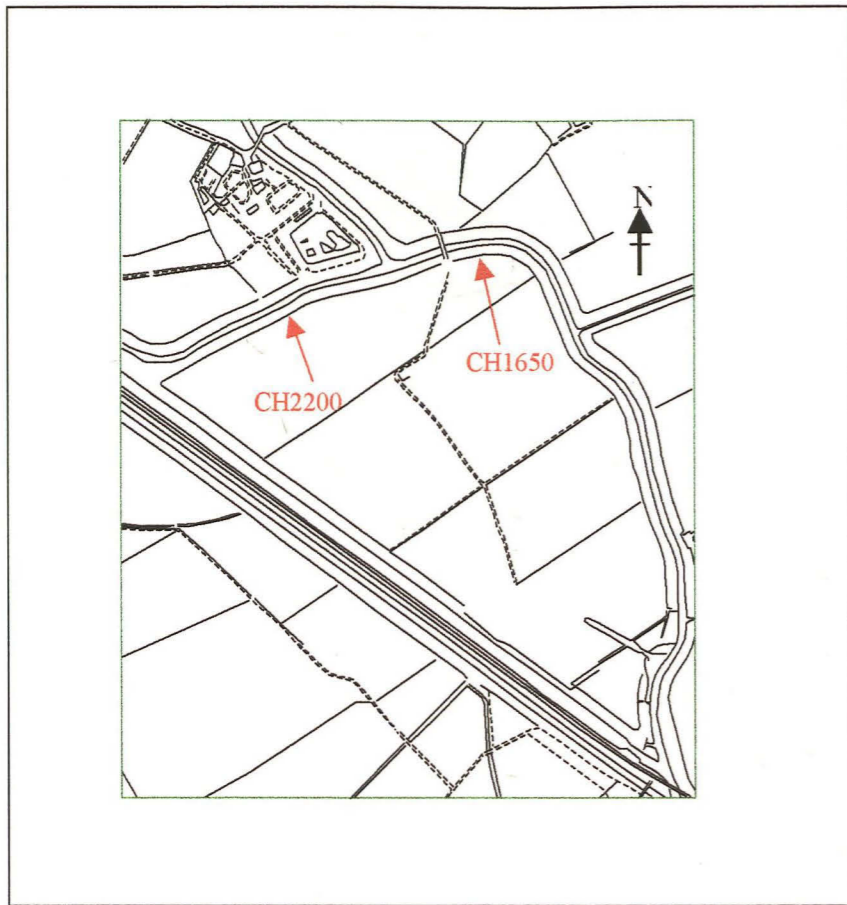


**Figure 10: Branston Island soil profiles - chainage 550 to 1100; at 50m intervals, unless otherwise stated.**

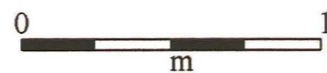
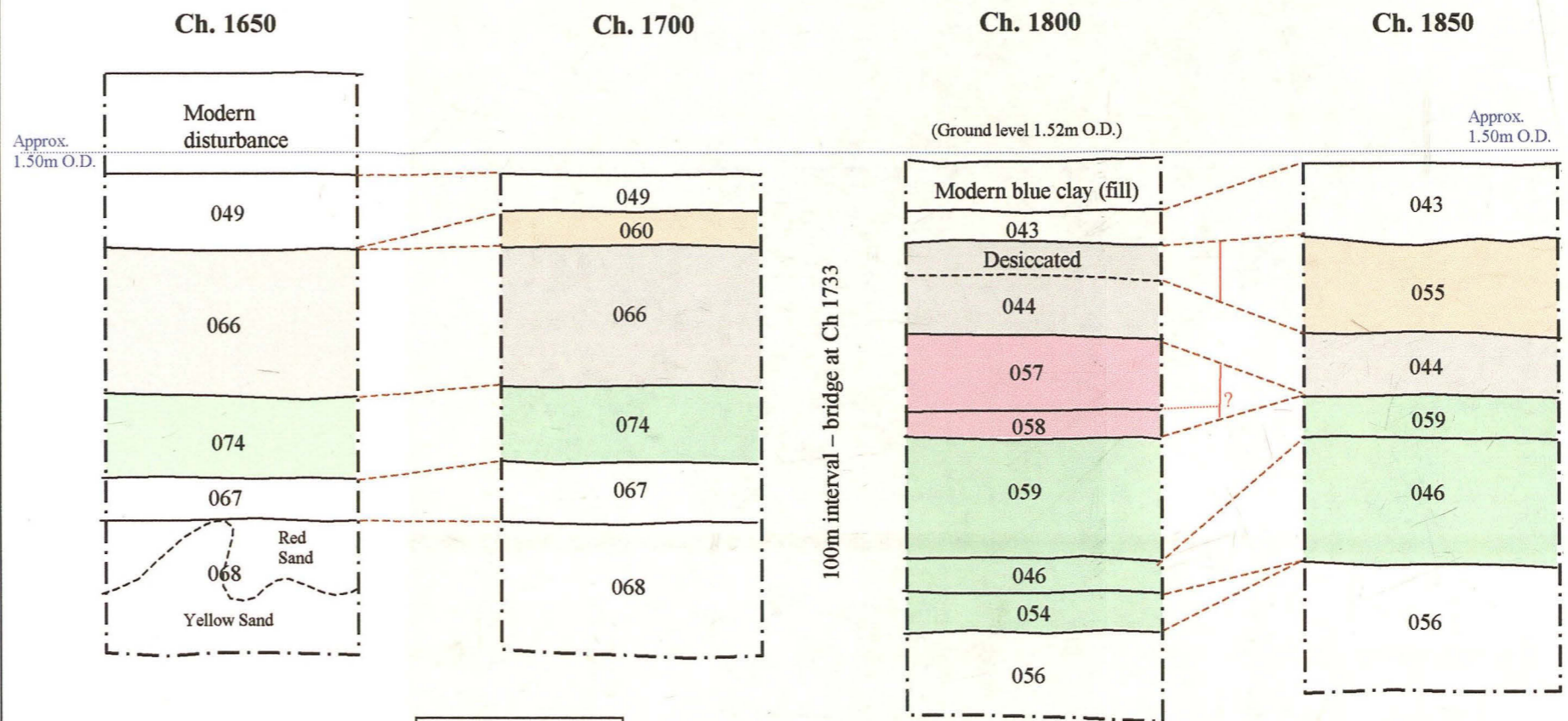




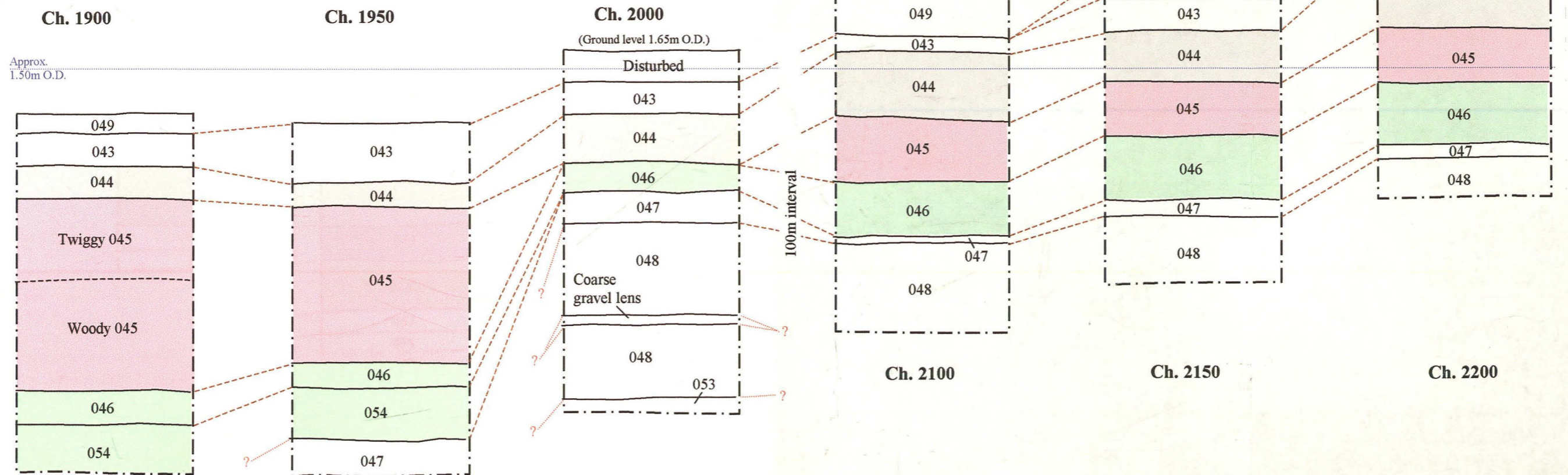


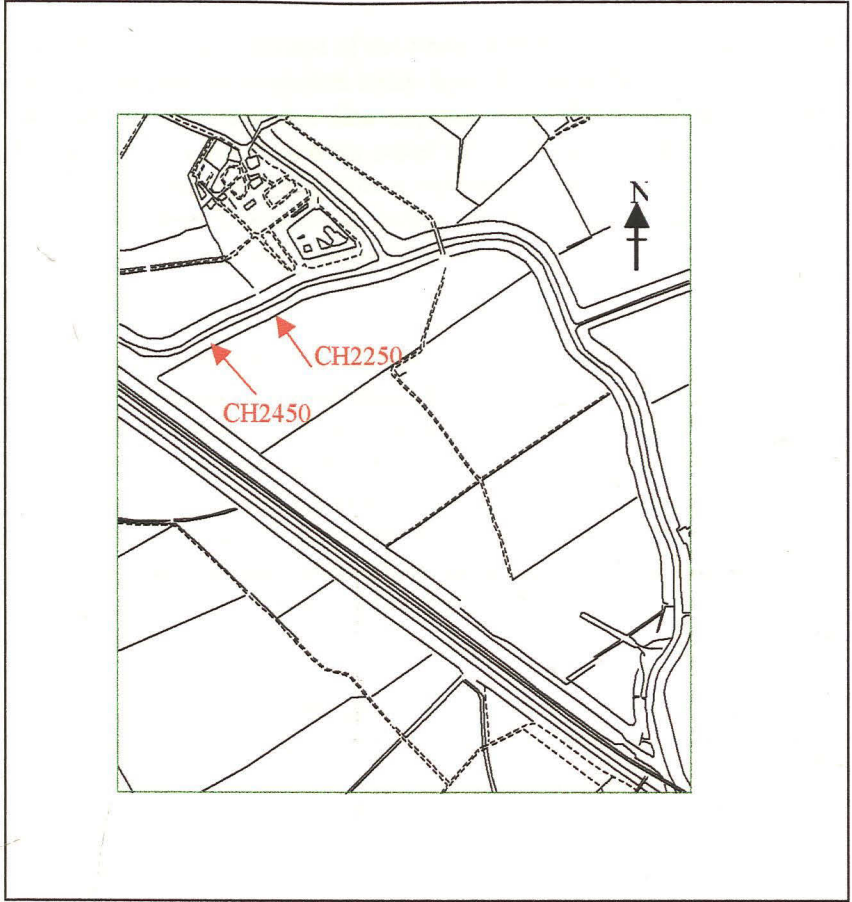


**Figure 12: Branston Island soil profiles - chainage 1650 to 2200; at 50m intervals, unless otherwise stated.**

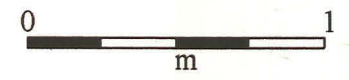
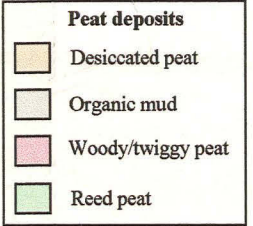


- Peat deposits**
- Desiccated peat
  - Organic mud
  - Woody/twigggy peat
  - Reed peat





**Figure 13: Branston Island soil profiles - chainage 2250 to 2450; at 50m intervals.**



Ch.2250

Ch. 2300

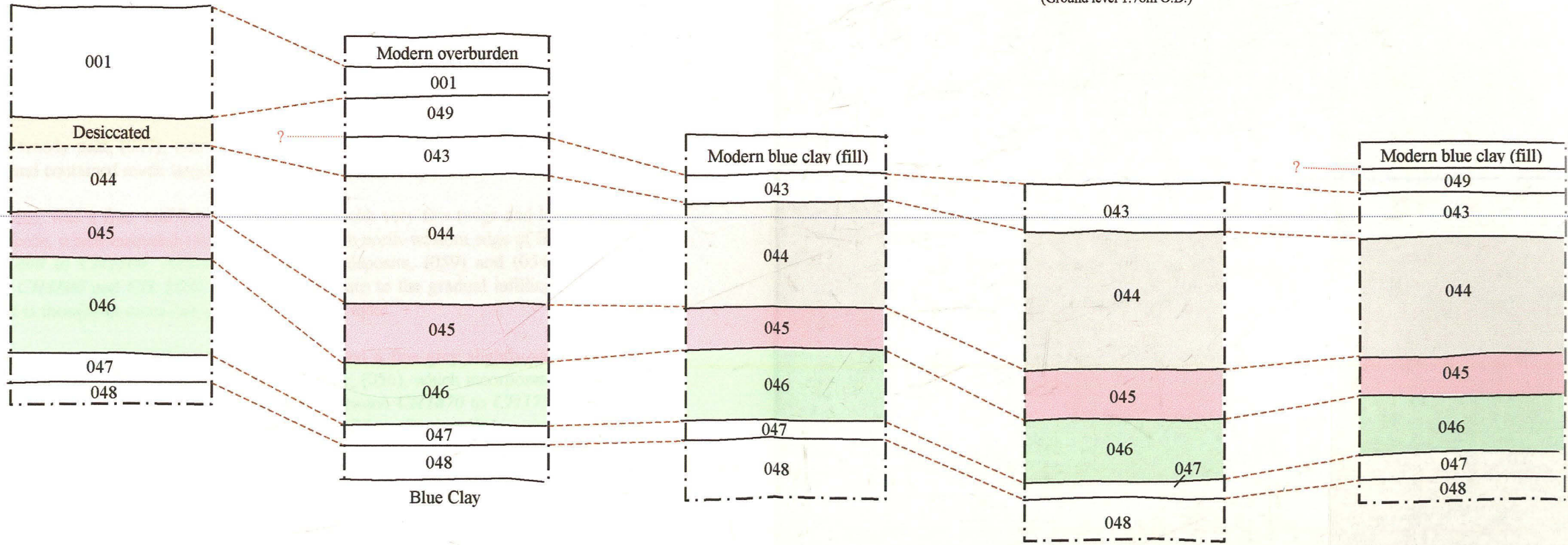
Ch.2350

Ch. 2400

Ch. 2450

(Ground level 1.76m O.D.)

Approx. 1.50m O.D.



close to, or was crossed by a major channel of the River Witham, while the area to the east was a relatively low energy wetland environment away from the main flow. It is possible that the merging of the Witham and the Barlings Eau opposite *CH1880* could have resulted in the deposition of (043), as the competing currents could have reduced the carrying capacity of the river. This alluvium, (043), was situated below a well-developed soil sequence and above the peat beds, which suggests that it developed during the medieval or post-medieval periods. However, artefactual material was not recovered from this deposit, so it is not possible to confirm this hypothesis.

To the west of the bridge, the removal of the alluvium, (043), exposed a sequence of peat beds. There was relatively little evidence of desiccation, and these peats seemed to be relatively well preserved in comparison to those along the eastern periphery of the island. Generally, the uppermost peat bed was a very dark brown to black fibrous organic deposit, (044), which contained occasional twigs and wood fragments and was up to 0.65m deep. The low quantities of coarse components could indicate that this deposit has become partially oxidised and degraded due to the lowering of the water table. However, these differences from earlier organic deposits could also reflect changes in the depositional environment, which resulted in the laying down of organic muds (gitcher).

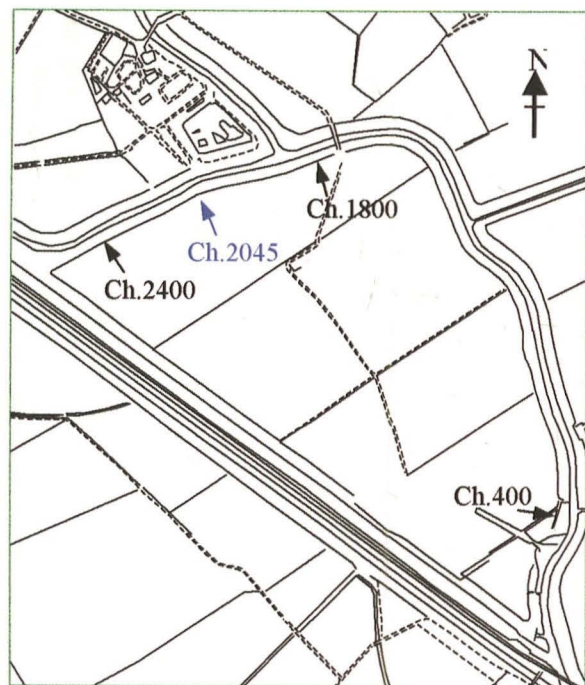
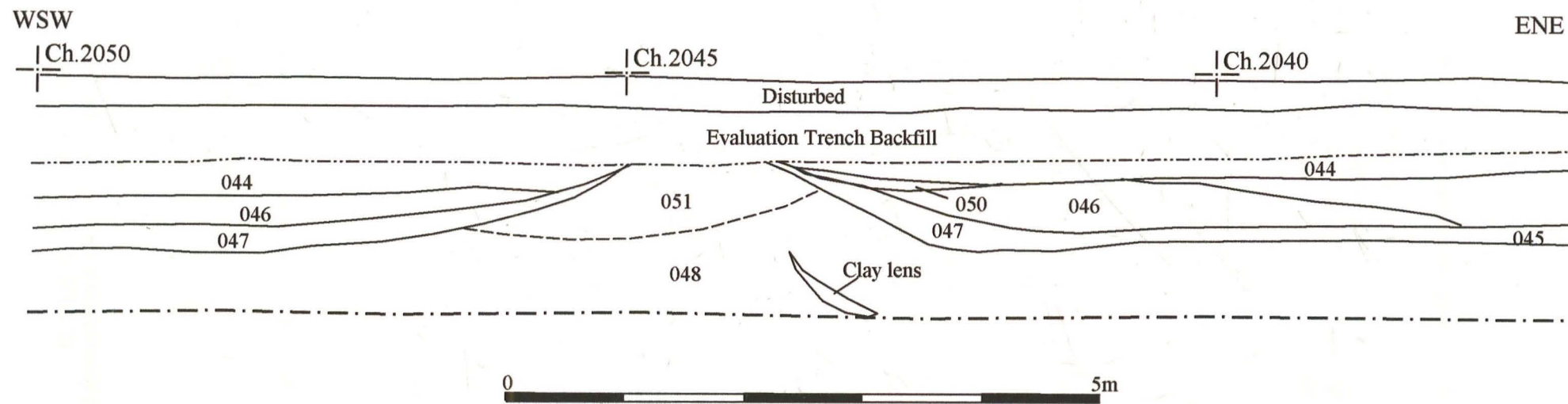
Below (044) lay peat beds containing large quantities of twigs and wood fragments, (045) and (057). The largest of these deposits was (045), a dark reddish-brown fibrous peat, containing large quantities of twigs, pieces of wood up to 0.05m in diameter, and localised pockets of reed fragments. It formed three discrete blocks that extended from beyond *CH2500* to *CH2070* (a), *CH2040* to *CH2010* (b), and *CH1975* to *CH1875* (c).

Deposits (a) and (b) were separated by a small sandbank, (051) (fig. 14). This mound of mid orange coarse sand was c. 4m wide and survived to a height of c. 0.65m high. However, it had been truncated, either during the canalisation of the river, or by later agricultural activity. As a result any overlying peat deposits had also been removed. The peat sequence between *CH1800* and *CH 1950* was particularly deep and suggested the presence of a north-south aligned relict channel in the vicinity of *CH1900*. There is a marked rise in the relative levels of deposits between *CH1950* and *CH2000*, which probably reflects the presence of the western side of this palaeo-channel.

The fourth area of woody peat, (057), was identified between *CH1750* and *CH1800*. It was a mid-brown colour and contained much larger pieces of wood than (045).

The basal peat, (046), was a fine, mid brown fibrous mud, with very few twigs and localised concentrations of reeds, which extended along the whole of the north-western edge of Branston Island, from *CH1800* to *CH2500*. Additional reedy peat deposits, (059) and (054), were identified between *CH1800* and *CH 1950*, and probably relate to the gradual infilling of the palaeo-channel that is thought to cross this section of the soke dyke.

Removal of the peat between *CH1950* and *CH 2500* exposed a fine grey slightly silty sand (047). At the eastern end of the section a mid bluish-grey clay, (056), which incorporated large quantities of well-preserved reed fragments, was exposed between *CH1870* to *CH1750*. This deposit was over 0.50m deep, and appeared to be composed of fine alluvium. It is possible that this material gradually filled the 'inside' of a bend in the palaeo-channel as it slowly migrated westward. The interface between clay (056) and peat (054), which occurs at *CH1870*, probably defines the eastern edge of the relict watercourse at the time that it became redundant and a new channel was established. The new channel probably ran further eastward and is likely to have been the forerunner of the present course of the Old River Witham.



**Figure 14:** section through sandbank (051), which was situated at CH2045, on the north-western margin of Branston Island

### 6.2.2.1 The eastern margin: CH550 – CH1700

Removal of the topsoil, (001), and subsoil, (049), exposed the top of the peat deposits. In most places the upper peat was a desiccated and degraded dark brown deposit, (060). Beneath (060) was a 0.45 – 0.60m deep layer of dark brown peaty mud, (066), which extended from c. CH600 to the bridge at CH1733 (figs. 10,11 & 12).

Two features cut through peat (066). The first was a ditch, [079], situated at CH632 (fig. 15). It was a steep-sided linear feature, with a 'U'-shaped profile, c. 2.10m wide and 0.51m deep, which was orientated from east-north-east to west-south-west. It had a similar alignment to existing boundaries on Branston Island, and an examination of the Second Edition Ordnance Survey map (6": 1mile) indicated that there was a drain in this location in 1906 (third boundary up from the south-east corner of the island). It is likely that this feature was created during the second or third decades of the nineteenth century, as part of the improvements to the drainage and navigation. However, it is possible that it was created as part of the first scheme of works during the 1780s. A mature tree adjacent to [079] is likely to represent the only remains of flanking hedge.

The second feature was a palaeo-channel, [086], which was crossed by the soke dyke between CH908 and CH920 (fig. 16). This relict watercourse was aligned from north-east to south-west, and had an asymmetric 'W'-shaped profile; the deeper element ran along the northern edge of the feature and was c. 5.5m wide and 0.89m deep, while the southern half was c. 5.70m wide and 0.65m deep.

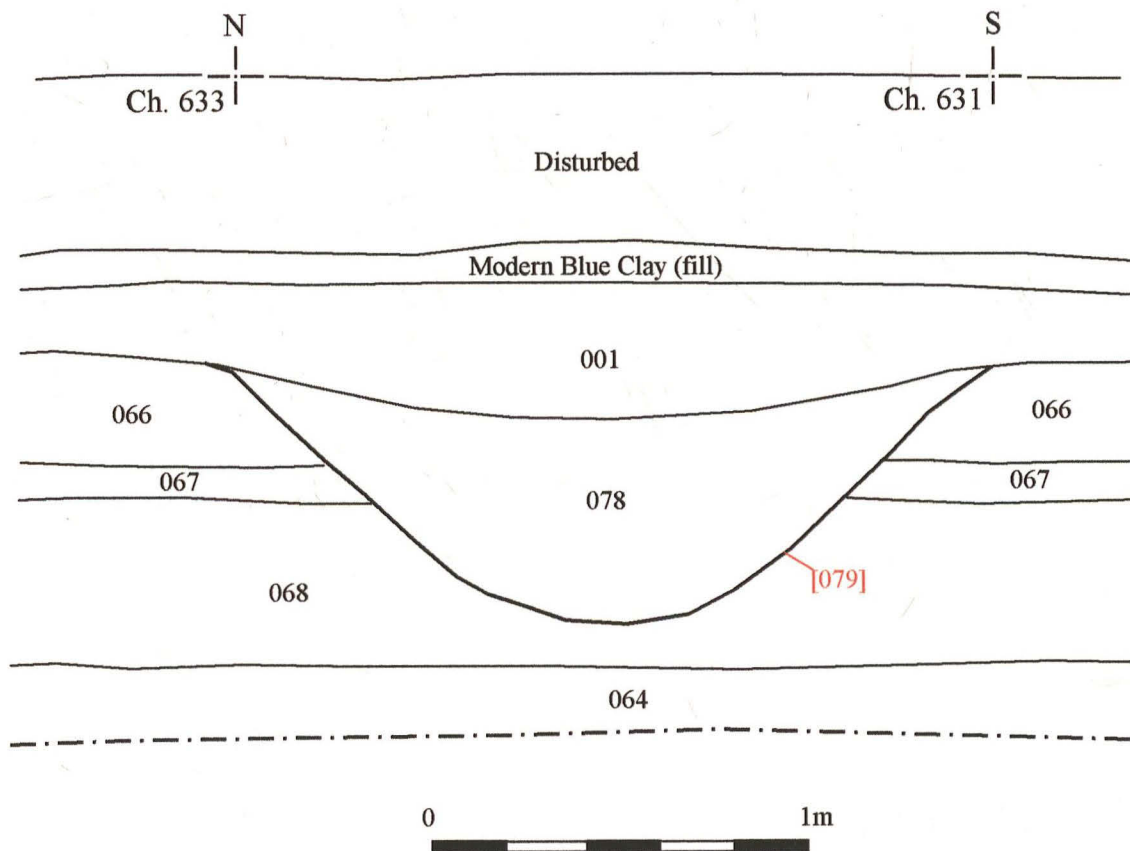
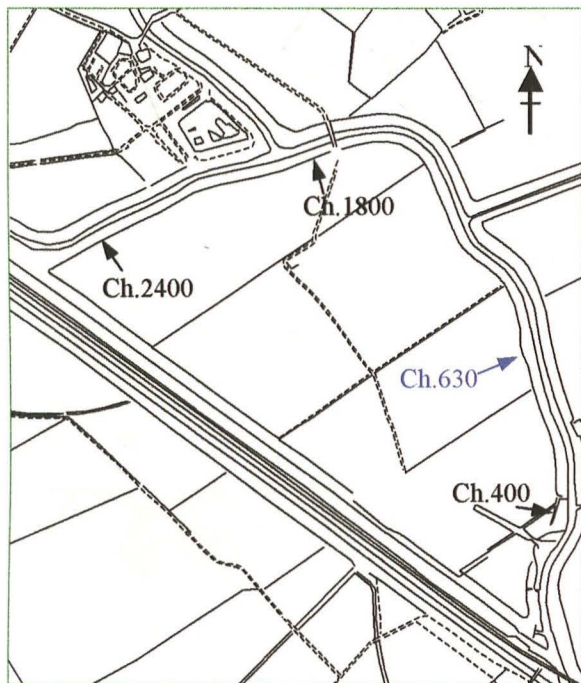
The primary fill of [086] was a lens of pale grey alluvial clay. Above this was a 0.5m deep deposit of mid greyish-orange clay, (087). Cleaning of the section exposed two squared timbers (cross-sections of 0.10 x 0.06m and 0.13 x 0.06m), along with a sherd of medieval pottery and a limestone net sinker. The pottery was a fragment of a Lincoln Glazed Ware pipkin produced during the 13<sup>th</sup> century (Appendix 13.3). The net weight is comparable to examples of known medieval date<sup>3</sup>, but is more than double the size of the three that were recovered from area of the two groups of vertical posts (see 6.1.1, above).

The recovery of artefacts from near the base of [086] suggests that this channel was an active component of the main river system during the medieval period. However, at only 11m wide it is not likely to have been the main channel. The latter is likely to have run further to the east, along a similar course to the present channel of the Old River Witham, with its western edge intercepting the soke dyke to the south of CH600. This means that the area examined during the excavation (6.1.2, above) formed the eastern edge of an island within the braided river system.

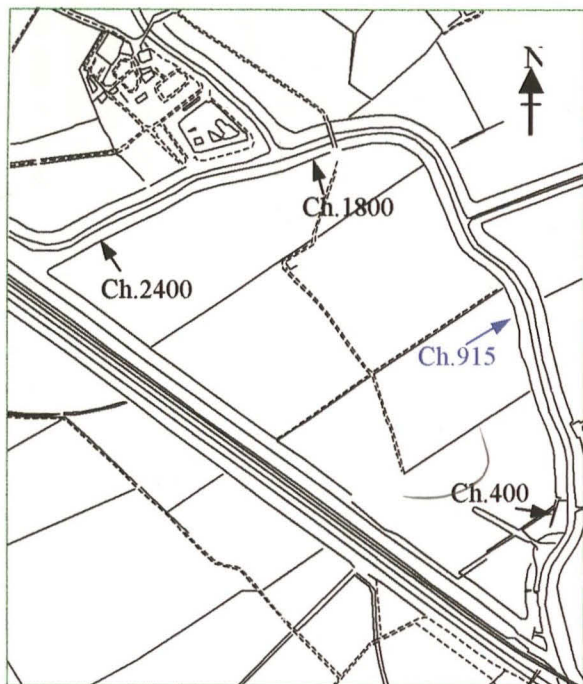
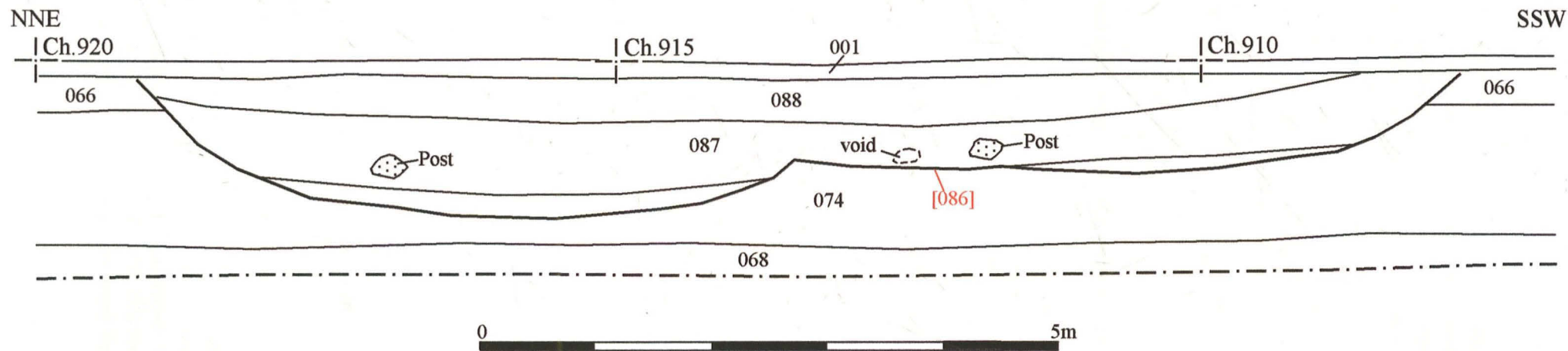
The upper fill of [086] was a loose, homogenous deposit of coarse gravel and orange sand, (088), c. 0.30m deep. This material was far coarser than any other deposits encountered at this level, which raises the possibility that it constitutes a deliberate backfill of this minor channel. It is likely that this event would have formed part of the scheme of works of 1787/8, which improved the navigation of the river. A fill as robust as (088) would have served to ensure that the river could not escape and reactivate its former course.

---

<sup>3</sup> Similar examples from excavations at Short Ferry were found in association with 13<sup>th</sup> century pottery (White, 1984: 31 & fig. 2).



**Figure 15:** section through ditch [079], which was situated at CH632, on the eastern margin of Branston Island



**Figure 16:** section through palaeo-channel [086], which was situated at CH915, on the eastern margin of Branston Island



Deposit (088) is the source of the material that formed the 8.0m long mound of gravel, (006), which was identified during the evaluation. This material would have been thrown up during the construction of the soke dyke. Most of the other spoil would have been composed of peat and would have decayed leaving a mound of gravel as the only indication of the original extent of the spoil.

Below organic mud (066) was an extensive bed of reed peat, (074), that ran from the bridge at *CH1730*, to beyond *CH1150*. Peat (074) was a fine, mid-brown fibrous deposit, with localised concentrations of reed debris, which was comparable to (046) on the western side of the bridge. Another bed of greyish-green, slightly clayey, reed peat, (074)/(083), was identified between *CH700* and *CH950*. The location of this discrete deposit suggests that it represents the remains of vegetation growing along the margins of the medieval palaeo-channel, [086]. Five large pieces of oak were recovered from peat (074). Two of the timbers appeared to have been worked, 002 and 003, but this activity may have been related to the felling of the tree rather than boat building or other carpentry (Appendix 13.9).

Removal of the peat exposed a layer of mid grey to bluish-grey medium grained sand, (067), which was identified along the whole of the eastern side of the island. One feature, [072], had been cut into (067) at *CH1078*. It appeared to be a pit, but was only observed in section. It was approximately 1.2m wide by 0.35m deep, and had an irregular profile; the north-west edge sloped at 45°, before stopping at a flat base c. 0.70m wide, with the opposite edge rising at c. 80°. A shallow, flat-bottomed depression, c. 0.55m wide by 0.07m deep, abutted its south-eastern edge (fig. 17).

The fill of [072] and its adjacent depression was a mid grey silty peat, (073), containing occasional bark fragments, round wood and flint pebbles. Artefacts were not recovered from this deposit, but its stratigraphic position suggests that it was created at around the time that peat formation was initiated. The radiocarbon date from the basal peat at *CH600* indicates that it began to develop during the Early Bronze Age.

Below sand layer (067) lay a deposit of mottled dirty yellow medium grained sand, (068). Another pit, [082], was detected at *CH725*. It had been cut into (068) and had a 'U'-shaped profile, 1.27m wide and 0.25m deep; it contained a dark brown silty peat, (081) (fig. 18). Given its stratigraphic relationships, it is likely that the creation of [082] will also have predated significant peat formation and must have occurred during, or possibly prior to the Early Bronze Age.

## 7.0 Discussion

The programme of archaeological investigation collected a range of data relating to past human activity along the northern and eastern margins of Branston Island. The earliest features and artefacts relate to activities either predating, or coinciding with the onset of peat formation (fig. 19). Amongst this material are the two pieces of worked flint recovered from *CH1200*. These flakes have bulbs indicative of hard hammer percussion, which is very broadly characteristic of Late Neolithic and Early Bronze Age technologies.

A pit, [072], was identified c.120m to the south of the point at which the flints were found. The fill of this feature was sealed by the peat, a sample of which (from *CH600*) was radiocarbon dated to 1920-1410 Cal BC (2 sigma). While there may be some disparity between the date of the peat at *CH600* and *CH1078*, this result implies that [072] should be an Earlier Bronze Age feature. However, it should be noted that there was a break in the beds of reed peat between

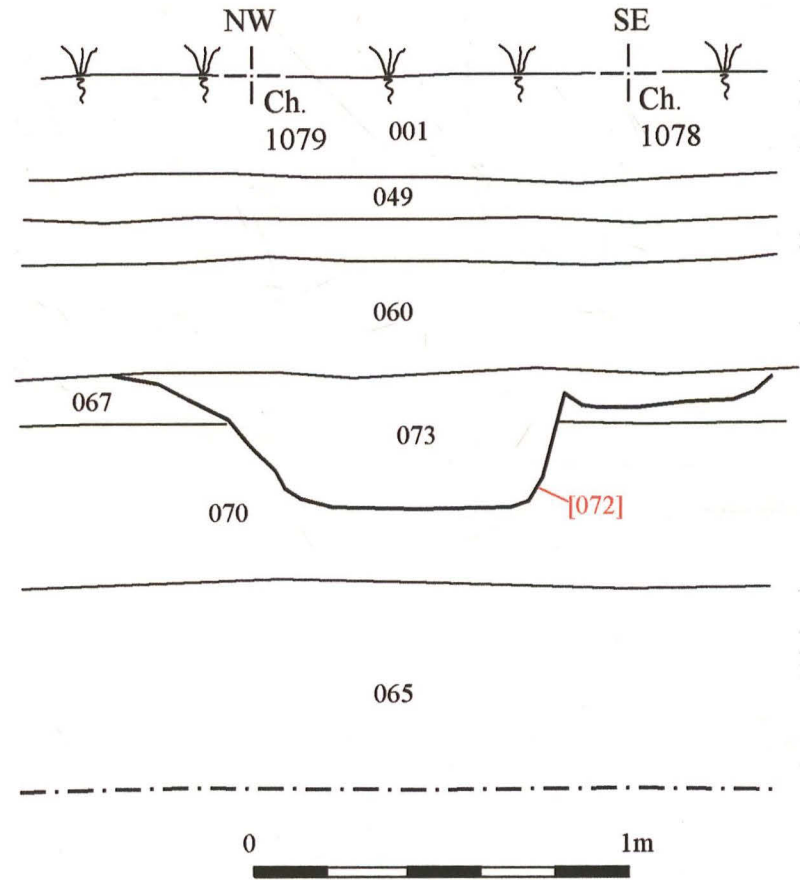
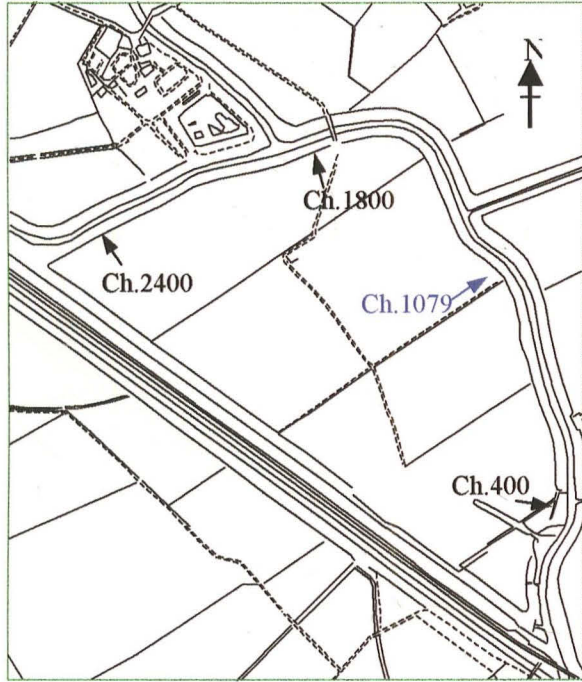


Figure 17: section through pit [072], which was situated at CH1079, on the eastern margin of Branston Island

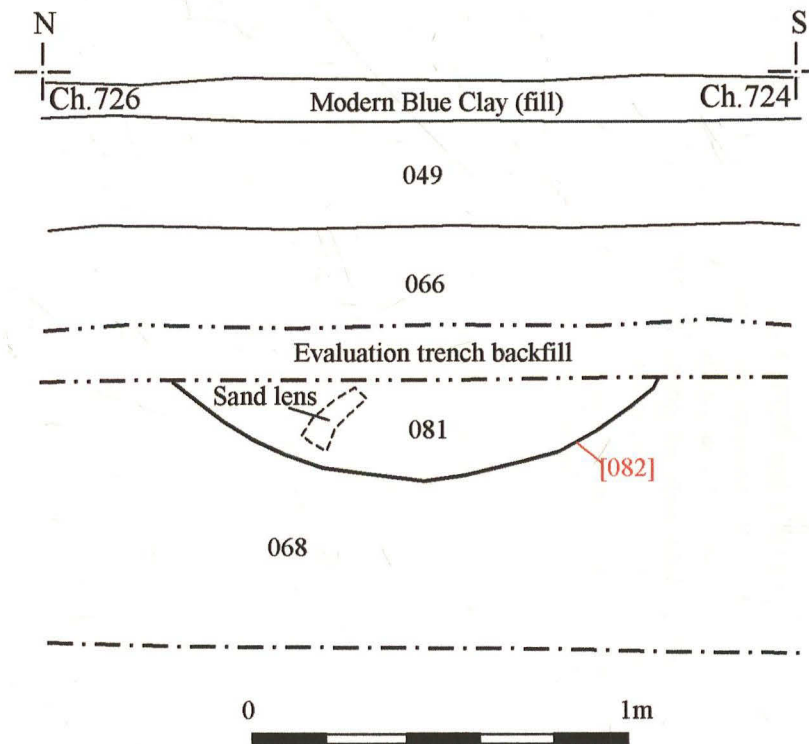
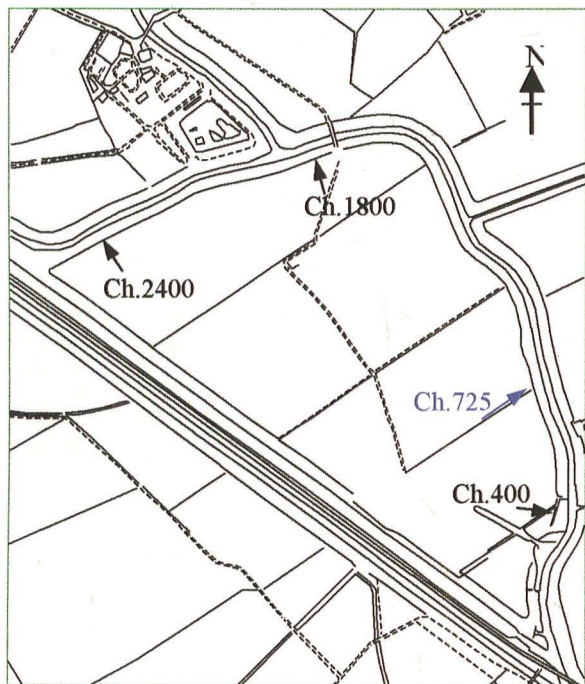


Figure 18: section through pit [082], which was situated at CH725, on the eastern margin of Branston Island

*CH950* and *CH1150*. This suggests that this area was slightly higher than its surroundings and may have formed a small island, or the western end of a promontory that stood proud of the reed beds during the initial stages of peat formation. Consequently, [072] may have been created later in the Bronze Age.

The proposal that the area between *CH950* and *CH1150* formed part of an area of higher ground receives some support from the recovery of sherds from a Late Neolithic to Early Bronze Age beaker from the ground surface at *CH1000* (Appendix 13.2); this pottery is likely to have reached the ground surface among the spoil cast up from the evaluation trench. The remains of a log boat have also been recovered a little to the west of *CH970* (White, 1977). This vessel must have been abandoned after the surrounding area became inundated by water. This raises the possibility that the boat was beached at the edge of this spit of dry land (see fig. 19).

Another pit, [082], was identified approximately 250m to the south of this putative island of raised ground. Its stratigraphic relationships indicate that this feature must have been created during or prior to the Early Bronze Age, before the onset of peat formation.

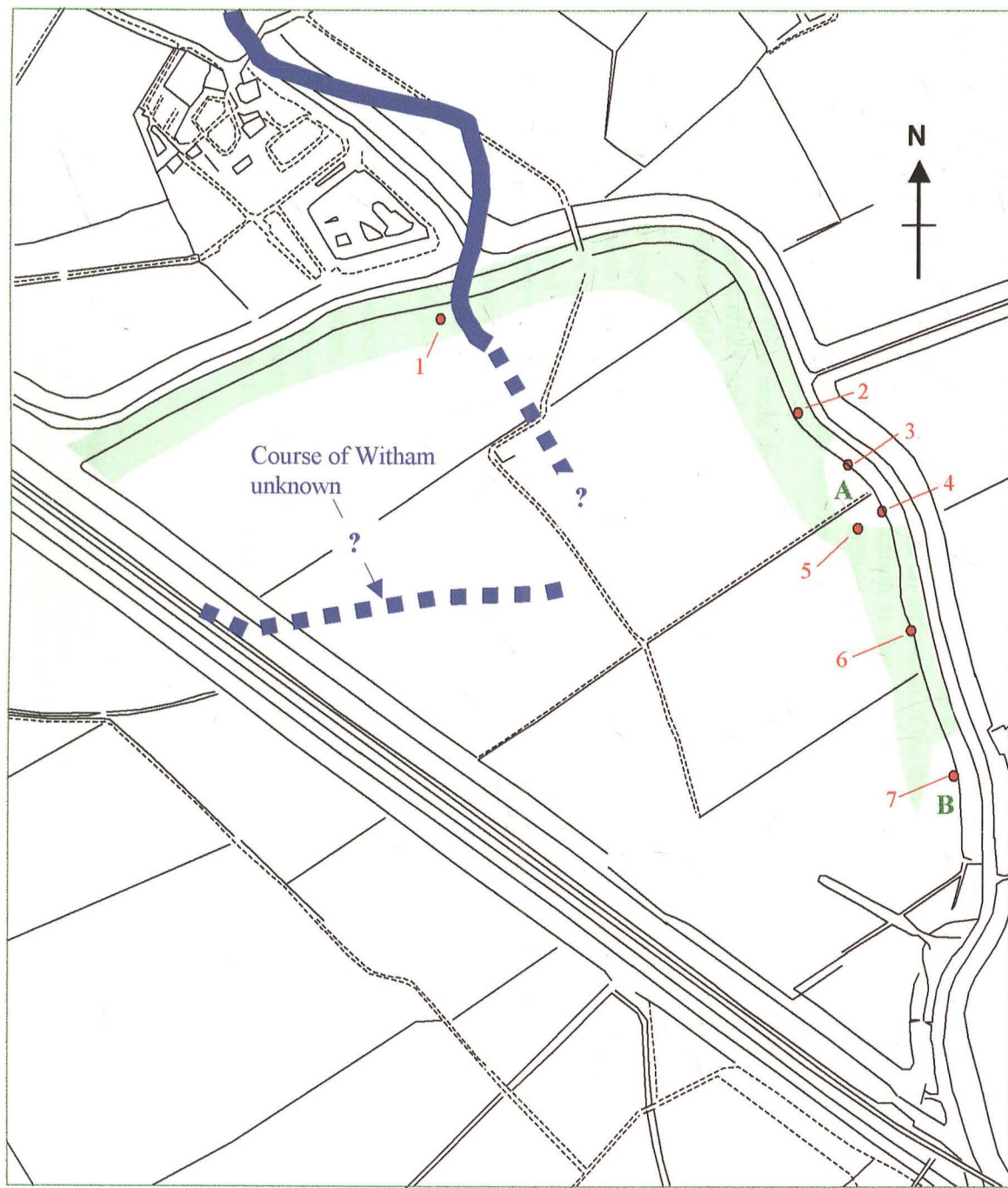
Fragments of a human skull were recovered from the surface of the ploughsoil, approximately 6.5m to the west of the original soke dyke, at *CH595*. There were a number of fragments of temporal and parietal bones from the cranial vault, but insufficient material was recovered to indicate the sex of the individual (M. Start, *pers. comm.*). Three maxillary teeth (upper jaw) were also recovered. These comprised the right 3<sup>rd</sup> molar, the left 1<sup>st</sup> molar and the right canine. There was no dental pathology, but the 1<sup>st</sup> molar had one unusual wear facet, while the canine had two. This localised erosion of the tooth surfaces could indicate that the individual systematically used its teeth for some specialised activity. The dental attrition on both molars indicated an age at death of between 30 and 40 years. This wear was particularly pronounced, indicating a coarse diet, and is most consistent with prehistoric populations.

Ploughing had shattered the skull, but it was evident that it could not have been in the ploughsoil for very long. Consequently, it appears likely that the skull was deposited among spoil recently cleaned from the sides and bottom of the soke dyke. The bone was quite dark raising the possibility that it had lain within, or close to the peat beds. While it may have been detached from a skeleton when the soke dyke was cleaned, it is also possible that the skull was deposited in isolation. Investigations by Bradley and Gordon (1988) have indicated that hundreds of skulls have been recovered from the River Thames, with further examples coming from the Walbrook in London<sup>4</sup>. These skulls are not generally associated with any other skeletal material, not even lower mandibles. They have been recovered from the same stretches of the Thames that contain concentrations of Late Bronze Age and Iron Age weapons and prestige metalwork. Selective radiocarbon determination has indicated that the majority of these skulls were deposited during the Late Bronze Age (14<sup>th</sup> to 9<sup>th</sup> centuries BC).

The River Witham is also associated with large quantities of late prehistoric metalwork. So it therefore seems likely that human heads, or skulls will also have formed part of these deposits; indeed, a fragment of skull, with a sword cut, was recovered from the Iron Age causeway at Fiskerton (field & Parker-Pearson, in press). It is therefore possible that this small collection of human remains also represents a late prehistoric votive deposit.

There was only very limited evidence of Roman-British activity, and this was centred upon the area of the post settings. Twenty-three sherds of mid 2<sup>nd</sup> to late 4<sup>th</sup> century pottery were

<sup>4</sup> Prehistoric skulls have now been recovered from a number of other British wetlands including Piling Moss and Poulton-le-Fylde, Lancashire (Wells & Hodgkinson, 2001)



### LATER PREHISTORIC LANDSCAPE

- course of river channel
- course unknown
- areas of reed peat
- A possible 'islands' of drier ground

#### Findspots

- 1 - Food vessel: found c. 1869 on northern edge of Branston Island adjacent to River Witham – exact provenance unknown; SMR no. 61454.
- 2 - 2 Flints at CH1200; see Appendix 13.8.
- 3 - Pit [072].
- 4 - Sherds of Beaker pottery at CH1000; see Appendix 13.2.
- 5 - Log boat: 'Bardney 3', an oak vessel found in 1976; SMR no. 60478.
- 6 - Pit [082].
- 7 - ?skull found adjacent to CH600.

**Figure 19:** speculative reconstruction of the later prehistoric landscape along the northern and eastern margins of Branston Island.

recovered from between *CH570* and *CH610*, the majority coming from around the southern group of posts, (A). Single outlying sherds were also recovered from *CH520* and *CH720*.

The quantity of Romano-British pottery surrounding post cluster (A) significantly exceeded the sherd count for medieval ceramics found in the same area. This could be taken as an indication that *Structure 1* and *Structure 2* were created during the Roman period. However, relatively little Romano-British pottery was found among the posts of the northern cluster, (B), despite the fact that the form of *Structure 3* is directly analogous to *Structure 1*. Furthermore, the most direct parallel for the form of these timber settings are medieval fish weirs constructed in the River Trent at Colwick (Losco-Bradley & Salisbury, 1979). Consequently, it is suspected that the juxtaposition of the Romano-British pottery and the timber settings may be somewhat fortuitous, and may merely reflect the fact that there was an area of relatively dry land to the west of *CH570* - *CH610*, which existed either episodically<sup>5</sup>, or for a sustained period. Accordingly, it is suspected that an archaeological examination of the area to the west of Trench 2 might expose the remains of a small mid 2<sup>nd</sup> to late 4<sup>th</sup> century settlement, or some form of waterside facility. If this is the case, it is likely that the sherds of pottery represent refuse discarded into an adjacent section of the river channel.

Evidence of Anglo-Saxon activity was also restricted to sherds of pottery recovered from among the clusters of posts at *CH600*. Almost all of an earlier 10<sup>th</sup> century Lincoln kiln-type shelly ware dish was found in the peat between *Structure 3* and *Structure 4*. Additionally, a single sherd of 11<sup>th</sup> century Stamford Ware was found in the layer of alluvium that sealed the peat. This material provides limited evidence that there was some Anglo-Scandinavian activity at this point along the river, and may provide an indication of the date at which the fishery was founded at this location. If so, the implication is that this would represent one of the five fisheries at Bardney that were owned by Gilbert de Gant at the time of the *Domesday Survey*. Gilbert subsequently donated these fisheries to the abbey he founded at Bardney.

The most significant finds made during the evaluation were the two clusters of vertical timbers situated between *CH583* and *CH610*. These posts appear to have formed elements of four different structures (table 1).

The southern group of timbers, (A), formed two structures. Eight roundwood timbers from *Structure 1* were exposed, two of which were replacements for earlier posts that had rotted away. Six posts appeared to form part of an irregular double row that made landfall at its south-western end (downstream - post (206)), and projected north-eastwards into the river channel (upstream - post (031)). The two rows were separated by c. 0.75m, and each pair of timbers lay approximately 1.0m from the neighbouring pair. The other two posts, (090)i and j, formed a perpendicular line that ran south-eastward from (206). These elements appear to have formed a contiguous part of *Structure 1*, possibly acting to brace at its south-western end.

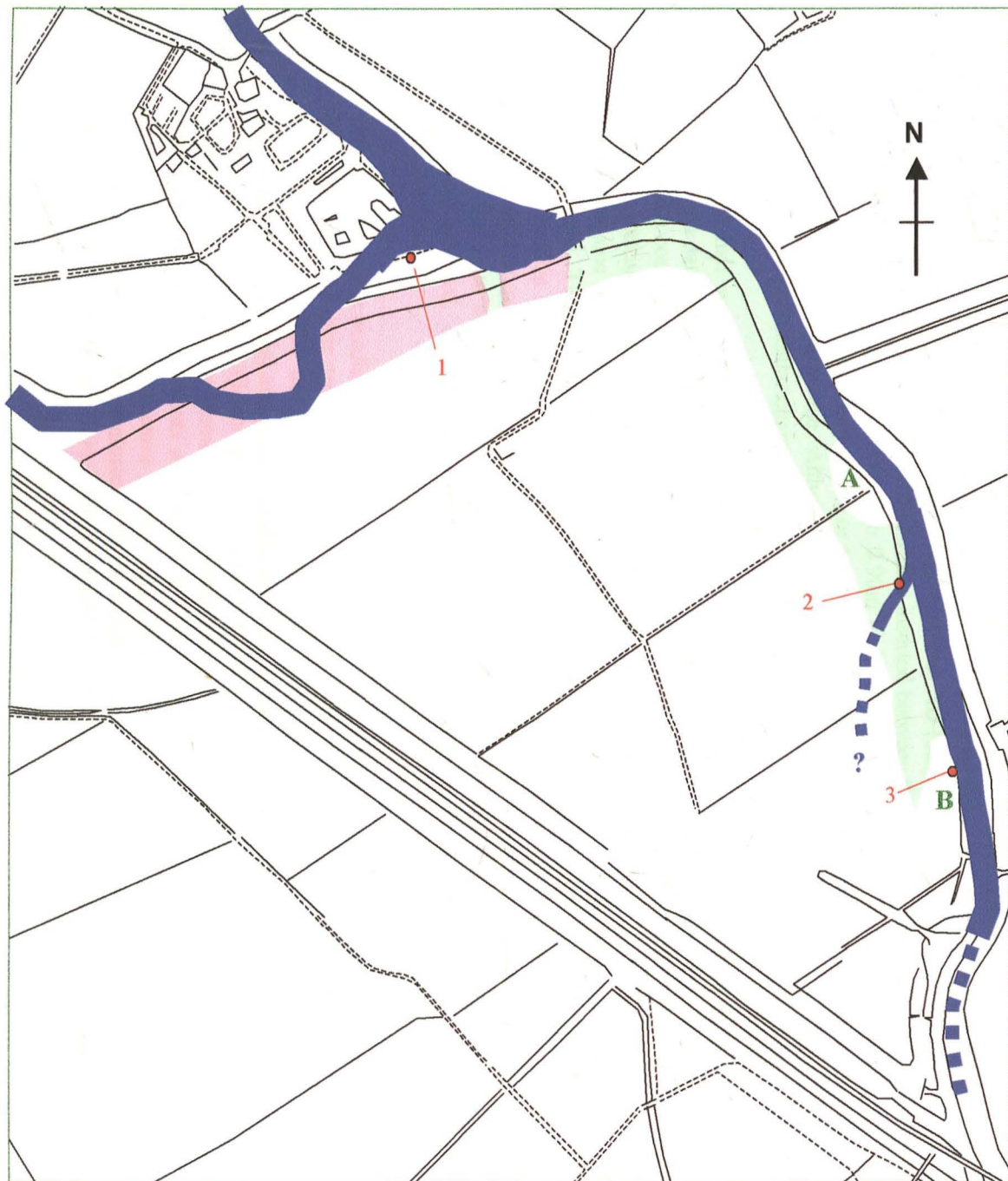
The timbers of *Structure 2* ran from east to west, perpendicular to the current. It was represented by 12 posts, four of which were split timbers and the rest roundwood. These elements formed two parallel, staggered rows that were only 0.05m apart. Each post lay c. 0.30m from its neighbours, both of which would be situated in the other row. The most westerly post, (209), lay c. 1.3m from its nearest neighbour.

---

<sup>5</sup> The punctuated nature of the archaeological assemblage recovered from this part of Branston Island raises the possibility that this 'island' of dry ground temporarily emerged from the surrounding fen on two occasions - from the mid 2<sup>nd</sup> to late 4<sup>th</sup> centuries AD, and the mid 10<sup>th</sup> to 14<sup>th</sup> centuries AD.

<b>Constituents of Structure 1 - cluster (A): running NE-SW between CH583 and CH587</b>		
<i>Phase 1</i>		
(029)	Roundwood: peaty wood fragments	0.12m diameter
(032)	Roundwood: peaty wood fragments	0.15m
<i>Phase 2</i>		
(028)	Roundwood: sapwood	0.13m
(031)	Roundwood: sapwood	0.10m
(089)/(207)b	Roundwood: sapwood	0.08m
(207)a	Roundwood: bark and sapwood	0.08m
(206)	Roundwood: bark and sapwood	0.09m
(090)h	Roundwood: sapwood	0.10m
(090)i	Roundwood: sapwood	0.10m
(090)j	Roundwood: sapwood	0.10m
<b>Constituents of Structure 2 – cluster (A): running E-W at CH584</b>		
(025)/(090)d	Split timber: sub-rectangular section (quartered timber), sapwood & heartwood - oak	0.18 x 0.10m
(026)/(090)c	Split timber: triangular section (quartered timber), sapwood & heartwood - oak	0.18 x 0.16m
(027)/(090)b	Roundwood: heartwood and sapwood: oak	0.14m diameter
(034)/(205)g	Roundwood: sapwood	0.10m
(205)a/(090)g	Roundwood: bark and sapwood	0.09m
(205)b/(090)f	Roundwood: sapwood	0.09m
(205)c	Roundwood: sapwood	0.10m
(205)d	Split timber: half section (D-shaped), bark and sapwood	0.16m
(205)e	Split timber: half section (D-shaped), bark and sapwood	0.15m
(205)f	Roundwood: bark and sapwood	0.12m
(205)k/(090)e	Roundwood: sapwood	0.07m
(209)	Roundwood: bark and sapwood	0.08m
<i>Outliers</i>		
(208)/(090)a	Roundwood: bark and sapwood	0.12m
<b>Constituents of Structure 3 - cluster (B): running NE-SW between CH600 and CH604</b>		
<i>Phase 1</i>		
(019)	Roundwood: peaty wood fragments	0.18m diameter
(023)	Roundwood: peaty wood fragments	0.18m
<i>Phase 2</i>		
(017)/(091)e	Roundwood: heartwood and sapwood: oak	0.13m
(020)	Roundwood: heartwood and sapwood: oak	0.13m
(022)	Roundwood: heartwood and sapwood: oak	0.10m
(024)	Roundwood: heartwood and sapwood: oak	0.12m
(041)/(091)d	Roundwood: sapwood	0.14m
(107)a	Roundwood: bark and sapwood	0.17m
(107)b	Roundwood: sapwood	0.12m
(107)c	Roundwood: sapwood	0.12m
(107)d	Roundwood: bark and sapwood	0.10m
(107)e	Split timber: quarter section, bark, sapwood and heartwood: oak	0.12m
<i>Outliers</i>		
(042)a	Roundwood: heartwood: oak	0.12m
(042)b	Roundwood: heartwood: oak	0.12m
(042)c	Roundwood: heartwood: oak	0.12m
(042)d	Roundwood: heartwood: oak	0.12m
(016)	Roundwood: sapwood	0.12m
<b>Constituents of Structure 4 - cluster (B): running E-W at CH603</b>		
(105)/(091)b	Roundwood: bark, sapwood and heartwood: oak	0.12m diameter
(108)c	Roundwood: sapwood	0.09m
(108)d	Roundwood: heartwood and sapwood: oak	0.14m
(108)e	Roundwood: bark, sapwood and heartwood: oak	0.14m
(106)a	Squared stake: sapwood	0.08m
(106)b	Squared stake: sapwood	0.08m
<i>Outliers</i>		
(109)b	Squared stake: sapwood	0.06m
(091)a	Roundwood: sapwood	0.10m
(091)c	Roundwood: sapwood	0.10m

**Table 1: Catalogue of the vertical timbers exposed between CH583 and CH610**



### MEDIEVAL LANDSCAPE

- course of river channel
- course unknown
- areas of reed peat
- areas of woody peat
- A possible 'islands' of drier ground

#### ● Findspots

- 1 - Medieval monastic fishery probably belonging to Stainfield Priory Constructed on a raised mound, with a stone building, fishing and fish processing equipment; SMR no. 52906.
- 2 - 13<sup>th</sup> century pottery and net sinker found in palaeo-channel; see Appendix 13.3 and 13.7.
- 3 - Fish weirs: two clusters of timber posts associated with net sinkers and mid 10<sup>th</sup> - 14<sup>th</sup> century pottery; see.

**Figure 20:** speculative reconstruction of the medieval landscape along the northern and eastern margins of Branston Island.



It was not possible to establish a direct stratigraphic relationship between *Structure 1* and *Structure 2*. *Structure 2* crossed *Structure 1* through a 3.0m wide gap that separated its north-eastern and south-western elements. This could mean that some of the posts formed a component of both structures (e.g. (205)f and (205)g), or that parts of *Structure 1* were removed in order to construct *Structure 2*. Consequently, it is not known whether one predated the other, or if they both represented complimentary elements of a composite structure.

The more northerly cluster of posts, (B), also formed two different structures. The exposed elements of *Structure 3* were comprised of ten pieces of roundwood and one split timber. As with *Structure 1*, there was evidence that a rotten timber had been replaced during the lifetime of this feature. Nine of the timbers were situated in a single, slightly irregular row, with gaps of 0.20m to 0.60m separating adjacent posts. The other two were situated 0.50m to the south-east of the main alignment, and may have formed some kind of buttress, or support.

*Structure 4* ran from east to west and was only 2.8m long. It was formed by a line of three posts, with a fourth, raking timber at its eastern end, and two closely-spaced, squared stakes at its north-western end. An outlying post, (091)c, and another stake, (109)b, were situated between *Structure 3* and *Structure 4*, and may have formed additional components of the latter.

Comparable structures have not previously been found along the course of the River Witham, but two excavated fish weirs situated in a former channel of the River Trent at Colwick, Nottinghamshire, have many analogous features. The earlier of these fish weirs was Anglo-Saxon, and was constructed during the 8<sup>th</sup> – 9<sup>th</sup> centuries AD (Salisbury, 1981). It had a double row of holly and oak posts, with wattle hurdles inserted between them; the hurdles were made from coppiced hazel, and were 0.60m to 0.90m high. This arrangement of posts and panels meant that the hurdles could be inserted or removed from boats, thereby opening up the channel when the weir was not in use. Although not identical, it would appear that *Structure 2* on Branston Island had similar characteristics.

The other fish weir at Colwick was a medieval structure, two of the posts providing radiocarbon dates of a.d. 1130±70 and a.d. 1090±60 (Losco-Bradley & Salisbury, 1979). The posts had a complex arrangement, being laid out in three alignments. The longest was a double row that extended approximately 100m from the western edge of the river. Two parallel alignments, one formed from three rows and the other a double row, ran for 31m from the opposite bank. There was a narrow gap between the opposing alignments, in which a platform of wattle hurdles had been constructed. All of the vertical timbers were made from oak. They were straight trunks from trees around 30 years old and 0.10m – 0.15m in diameter. The bottoms had been sharpened to a point, and they had been erected at 0.5m intervals, with the bark still attached. The timbers used for the alignments on Branston Island had the same characteristics.

Overlapping wattle hurdles had been placed on the upstream side of the posts, so that the force of the current held their upper portions in place (*ibid.*). Their bases were fixed in position with deposits of clay. Each hurdle was 3m long and 0.65m high, and was constructed from hawthorn sails (verticals) and alder rods (horizontal). In fresh water a wattle panel be effective for around five years, while the posts would last for around 30 years (Salisbury, 1981). This disparity would mean that elements of the weir would be repaired or replaced on a regular basis. The medieval alignments at Colwick are comparable to the arrangement of the posts forming *Structure 1* and *Structure 3*. This suggests that wattle panels were also placed along the upstream edges of these features, with the bases being pushed into the underlying peat to hold them in place. Both *Structure 1* and *Structure 3* also showed evidence of localised repairs.

The three alignments of the medieval fish weir formed a funnel, with the apex near the centre of the river channel (*ibid.*). This 'funnel' pointed downstream, so that the current velocity was increased and helped to direct fish into the opening at the end. A net, or a large wicker basket would be fitted across the opening to trap the fish<sup>6</sup>. While many of the features of the medieval fish weir at Colwick are replicated on Branston Island, there is one significant difference. *Structure 1* and *Structure 3* are constructed the opposite way round, so that the landward end lies downstream from the end at the centre of the channel. As a result the currents would guide fish toward the bank rather than into an opening at the centre of the river. It is therefore possible, that *Structure 2* and *Structure 4* represent contemporary and complimentary features, acting as sluices, or baffles for setting, or closing nets and traps. The fact that the fish were caught close to shore would certainly have made landing them much easier.

Several reasons may have contributed to the different format of the Branston Island weirs. The weirs would have projected into the river channel, which was also utilised by boats trading between Lincoln and Boston. There are numerous reports of fisheries creating 'obstacles or unofficial encroachments in the 'King's highway of the river'' (White, 1984: 29). Consequently, the weirs at Branston Island may have been constructed in this fashion to ensure that they only closed off one side of the river, leaving the eastern side, where all the monastic houses and villages were located, open to navigation. This arrangement would also ensure that part of the river was left open in compliance with laws created to ensure the maintenance of fish stocks (Salisbury, 1981). It is also possible that each area had its own traditions and vernacular techniques of construction, which explains the different form of the structures on the Trent and the Witham. However, this needs to be confirmed by further excavations along both river valleys.

In addition to using the weirs, it is evident that fisheries along the Witham also caught fish with nets (White, 1984). The recovery of three net sinkers from the area of the two post clusters provides evidence of this activity. These weights would have been attached to the bottom of seine nets, with inflated bladders acting as floats to buoy the top. In traditional small scale fisheries in Wales one end of the net is anchored on the shore while the rest is paid out from a boat describing a wide arc along the river. The boatman returns to the bank and the two ends of the net are hauled in. The use of boats and nets appears to have increased over time, and is well attested in 16<sup>th</sup> and 17<sup>th</sup> century probate inventories.

In addition to the fish weirs, the fishery will have had a fishgarth, a place to land fish and dry nets. It is also likely to have had one or more associated buildings where fish were prepared and smoked, and where nets and equipment could be repaired and stowed away. Any such facilities on Branston Island are likely to be situated in the area to the west of the timber structures.

Another limestone net sinker was recovered from the base of a palaeo-channel, [086], which was located between *CH908* and *CH920*. This former watercourse was 11m wide and must have been active at the time that the fishery was operating 300m to the south. The orientation of the channel suggests that it ran south-westward forming the other side of the island on which the fishery was sited (fig.20).

Another medieval fishery was situated near the northern edge of Branston Island. This was discovered during the construction of Short Ferry Marina, on the northern side of the Old River Witham. Excavation revealed that the fishery was sited on an artificial mound of gravel revetted by pitched limestone slabs, and there was evidence of a nearby dwelling (White,

<sup>6</sup> These weirs were most commonly used for catching eels and lampreys when they migrated in the spring and autumn, but were also effective for collecting coarse fish.

1984). Given its present position to the north of the river, and adjacent to its confluence with the Barlings Eau, it is unsurprising that this site has been equated with the grange and fishery known as 'Barleymouth'. This establishment was owned by Bardney Abbey, but from the 13<sup>th</sup> century it was rented out to the nuns of Stainfield Priory. Included in the deal was another fishery described as 'nearby but on the south (side of the river)' (White, 1984: 30). The watching brief and evaluation along the northern margin of Branston Island did not detect any evidence of this establishment. Consequently, it is worth considering whether the evidence needs reinterpreting. Examination of Ordnance Survey maps indicates that the parish boundary deviates away from the centre of the Old River Witham along the north-western edge of the island. It describes a pronounced 'S'-shaped arc, deviating to the south of the river, before cutting back northward across Short Ferry Marina. This sinuous arc almost certainly represents the course of the Witham prior to its straightening in 1787. This indicates that the confluence with the Barlings Eau was situated more than 100m further to the north, and that the fishery currently thought to be 'Barleymouth' would have lain on the south side of the Witham in the 18<sup>th</sup> century. If this were also true in the medieval period, then the actual site of 'Barleymouth' would have lain somewhere between the northern edge of the marina and the Tyrwhitt Arms. The excavated site would then represent the nearby fishery to the south.

Comparative analysis of the strata exposed during the watching brief also provided indications that a former river channel ran southward between *CH1870* and *CH1970*. Given that this position lies opposite the present confluence of the two rivers, these results appear to suggest that this palaeo-channel represented a southerly continuation of the Barlings Eau at a time when its junction with the Witham occurred somewhere further to the south. Dating material was not recovered from the palaeo-channel, or its environs. However, a transformation from beds of reed peat filling much of the channel, to woody peat above, has a close spatial correlation with the present course of the Old River Witham. The latter is associated with the medieval fishery suggesting that the palaeo-channel is somewhat earlier.

## 8.0 Conclusions

The programme of archaeological investigation conducted on Branston Island indicated that the landscape had been utilised by humans for several millennia, with the sequence of activity being as follows:

Two pits, fragments of Beaker and small quantities of worked flint provide indications of Late Neolithic and Early Bronze Age activity, which was centred upon a small island of drier ground situated at *CH950* to *CH1150*. The remains of a human skull could potentially relate to late prehistoric ritual activity around *CH600*.

Evidence of Romano-British and Late Saxon activity is provided by pottery recovered from deposits situated between *CH520* and *CH610*. The mid 10<sup>th</sup> century material could indicate the date at which a fishery was founded at the site.

The fishery is defined by a number of timber settings. Although the posts of *Structures 1, 2, 3* and *4* have not been dated, they form structures that have close associations with a medieval fish weir examined at Colwick, Nottinghamshire. This fishery is likely to be one of those belonging to Bardney Abbey, which are recorded as *Goshilgarthe*, *Maydengarthe*, and *Chaumbleingarthe* (White, 1984); Maidengarthe is thought to lie at the junction of the Old River Witham and the Snakeholme Drain, c. 650m to the north of this site, but the possibility that it actually lies further to the south cannot be discounted.

Many of the interpretations and theories presented in Section 7.0 are based on a restricted body of evidence and are therefore open to challenge. However, they have been consciously incorporated into this document in order to provoke discussion and counter-arguments. It is hoped that this process will further our knowledge of the changing nature of land-use in this area.

#### **9.0 Effectiveness of methodology**

The evaluation successfully identified the only concentration of archaeological features and deposits situated along the eastern margin of Branston Island. This enabled a small-scale excavation to be conducted to further elucidate the attributes, form and associations of the groups of vertical timbers.

The watching brief was a more prolonged programme of investigation, which enabled the relative distribution of different deposits to be plotted. This process identified two palaeo-channels and allowed a course-grained reconstruction of the pre-18<sup>th</sup> century wetland environment.

It is concluded that the programme of fieldwork satisfied its primary objectives by providing a permanent record of the archaeological deposits that would have been disturbed or destroyed by the construction of the new soke dyke.

#### **10.0 Site archive**

The site archive for this project is in preparation and will be deposited at the Lincoln City and County Museum (physical) and the Lincolnshire Archives Office (documentary) within six months. Access to the archive may be granted by quoting the global accession number 2001.183.

#### **11.0 Acknowledgements**

Pre-Construct Archaeology (Lincoln) would like to thank the Environment Agency and Bullen Consultants for commissioning this programme of archaeological works. In particular we would like to express gratitude to Andrew Osborne, Janette Hunter, Nigel Pilkington and Andy Yarde for the assistance they provided. Thanks are also extended to the site managers Peter Senior and Dan Bentham.

The author is grateful to Jim Bonnor, Steve Catney, James Rackham, Mouli Start and Maisie Taylor for the advice and information they have provided. Thanks are also extended to the members of the site teams who worked on Branston Island in 2001 - Pete Barnes, Dave Bower, Chris Clay, Rachel Gardiner, Phil Ings, Anne Irvine, Sean Jackson, Wayne Livesey, Irene McGrath and Simon Savage. Simon Savage produced most of the illustrations in this report from original drawings by members of the site team.

## 12.0 References

- Bradley, R. & Gordon, K. 1988 Human skulls from the River Thames, their dating and significance. *Antiquity*, **62**: 503-9.
- Cameron, K. 1998 *A Dictionary of Lincolnshire Place-Names*. Nottingham, English Place-Name Society, Popular Series, Vol 1.
- Field, N. & Parker-Pearson, M. In press *Fiskerton: An Iron Age timber causeway with Iron Age and Roman votive offerings*. Oxford, Oxbow.
- I.G.S. 1973 *Lincoln, Sheet 114*. Solid and drift edition. Southampton, Institute of Geological Sciences.
- IFA 1999a *Standard and Guidance for Archaeological Field Evaluation* (revised edition). Reading, Institute for Field Archaeologists.
- IFA 1999b *Standard and Guidance for Archaeological Excavation* (revised edition). Reading, Institute for Field Archaeologists.
- IFA 1999c *Standard and Guidance for an Archaeological Watching Brief* (revised edition). Reading, Institute for Field Archaeologists.
- LCC, 1998 *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice*. Lincoln, Built Environment Section, Lincolnshire County Council.
- Losco-Bradley, P.M. & Salisbury, C.R. 1979 A mediaeval fish weir at Colwick, Nottinghamshire. *Transactions of the Thorton Society of Nottinghamshire*, **LXXXIII**: 15-22.
- Palmer-Brown, C.P.H. 1997 *Archaeological Watching Brief Report: Top Farm, Stainfield, Lincolnshire*. Pre-Construct Archaeology (Lincoln) (Unpublished report).
- Salisbury, C.R. 1981 An Anglo-Saxon fish-weir at Colwick, Nottinghamshire. *Transactions of the Thorton Society of Nottinghamshire*, **LXXXV**: 26-36.
- Stocker, D. 1993 The early church in Lincolnshire. In Vince, A. (ed.) *Pre-Viking Lindsey*. Lincoln, City of Lincoln Archaeology Unit: 101-122.
- Stocker, D. & Everson, P. 2002 The straight and narrow way. Fenland causeways and the conversion of the landscape in the Witham Valley, Lincolnshire. In Carver, M. (ed.) *The Archaeology of Conversion in Northern Europe*. Brepols.
- Wells, C.E. & Hodgkinson, D. 2001 A Late Bronze Age human skull and associated worked wood from a Lancashire wetland. *Proceedings of the Prehistoric Society*, **67**: 163-174.
- White, A. 1977 Archaeology in Lincolnshire and South Humberside, 1976. *Lincolnshire History and Archaeology*, **12**: 73-4.
- White, A. 1984 Medieval fisheries in the Witham and its tributaries. *Lincolnshire History and Archaeology*, **19**: 29-35.

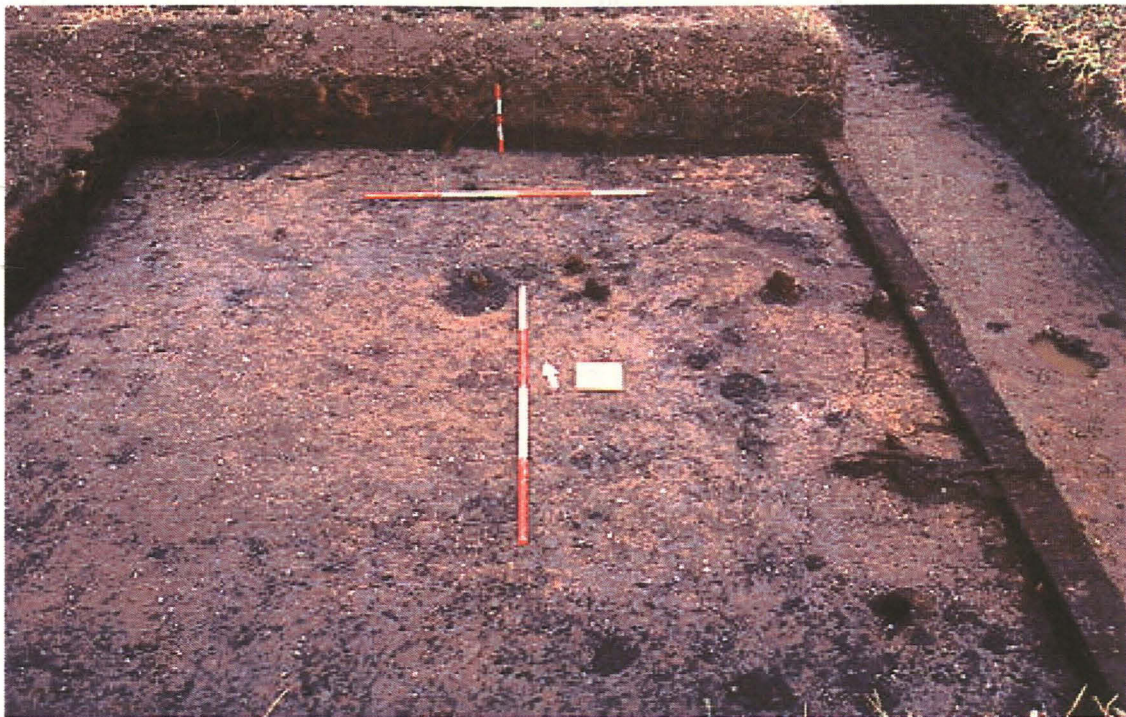
**Appendix 13.1: Colour photographs**



**Plate 1:** General view of Branston Island, looking north. Trees and buildings at Short Ferry Marina are visible on the skyline, at the left hand side of the image.



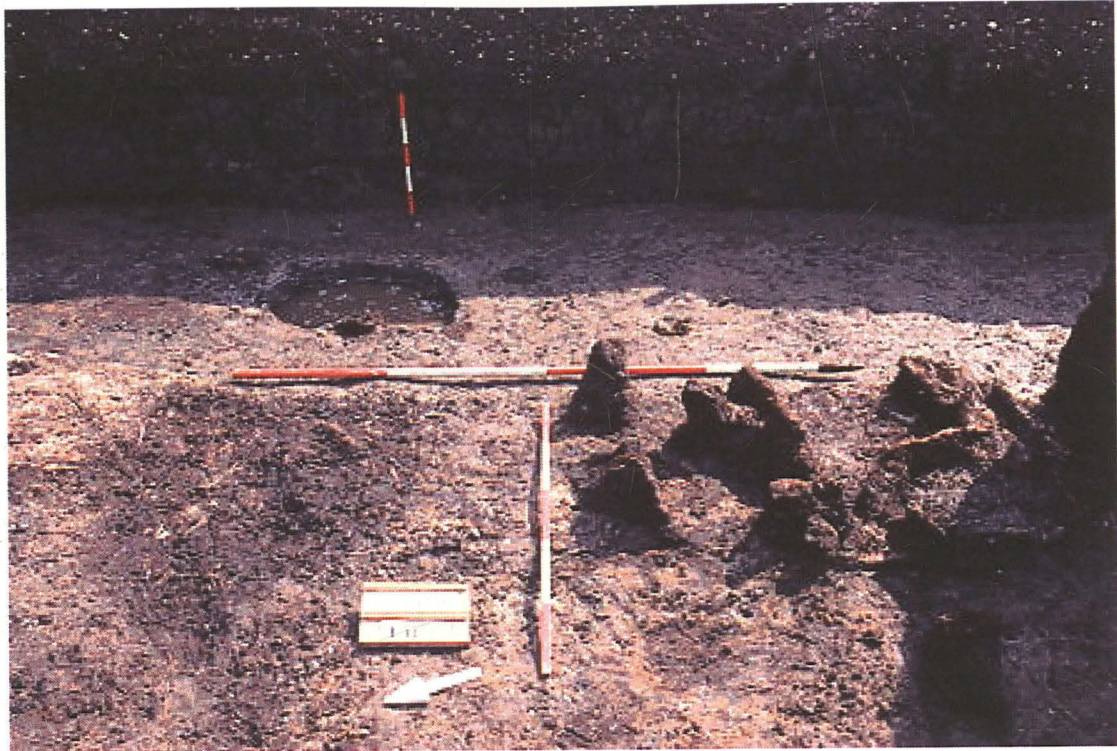
**Plate 2:** The new soke dyke under construction, showing the depth of the peat deposits at the north-east corner of the island, looking east.



**Plate 3:** Trench 2, showing elements of post group (A). Elements of Structure 1 are visible at the bottom right hand corner of the picture. Structure 2 runs across the image to the north of the nearest scale, looking north.



**Plate 4:** Trench 1, showing elements of post group (B). Post group (107), a component of Structure 3, is situated at the bottom left corner of the picture, with Structure 4 lying immediately to the right of the large tree root at the centre of the image, looking west.

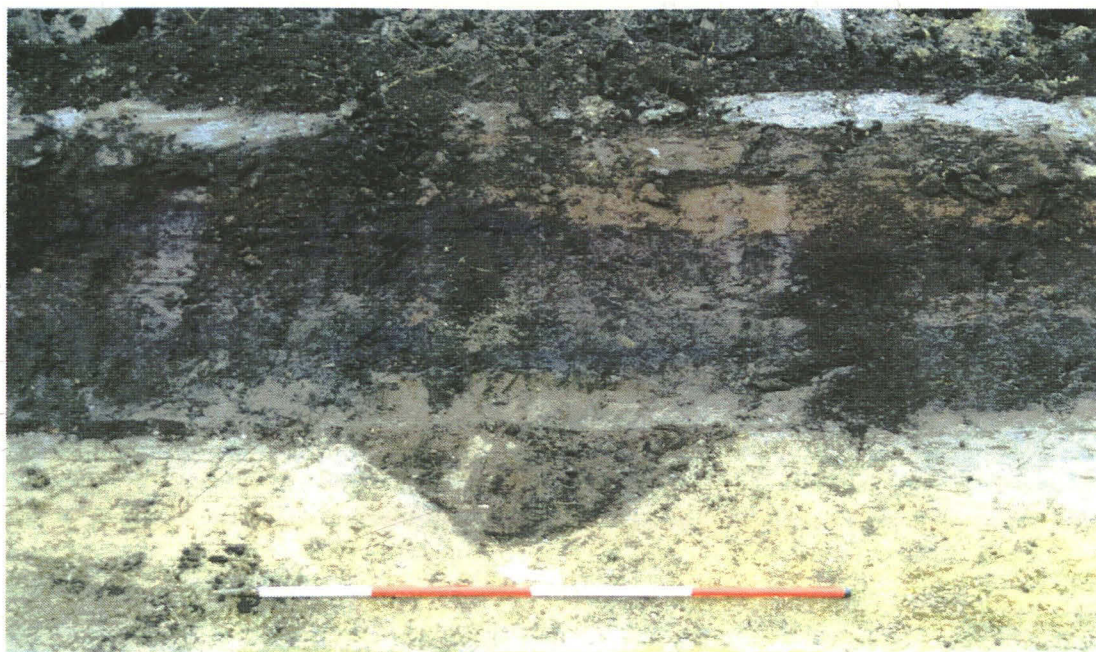


**Plate 5:** South-eastern corner of Trench 1, showing post group (107), which forms the south-western end of Structure 3, looking east



**Plate 6:** West facing section of palaeo-channel [086], exposed at the edge of the new soke dyke, looking north-east.





**Plate 7:** West facing section of pit [082], exposed at the edge of the new soke dyke, looking east.

## REPORT 116 ON POTTERY FROM BRANSTON ISLAND, RIVER WITHAM, BILD01

for PRE-CONSTRUCT ARCHAEOLOGY

by Margaret J. Darling, M.Phil., F.S.A., M.I.F.A.

24 November 2002

The pottery comprised 28 sherds, weighing 0.534kg from two contexts, and five unstratified locations. No problems are anticipated for long term storage. The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery*. A copy of the archive database is attached (and can be supplied on disk), and will be curated for future study.

A summary of the finds is shown on Table 1

Table 1 Quantities and dates by site context

Cxt	Sherds	Weight	Date	Comments
103	1	8	ROM	
203	15	272	M3+	
US CH.520	1	25	ML2	APPROX CH.520
US CH.570	1	39	2-3C	CHAINAGE 570
US CH.720	1	38	3C	US R. WITHAM
US CH.1000	3	10	LNEBA	SURFACE FIND ON EASEMENT
US SPOIL HEAP	6	142	L4 PROB	SPOILHEAP BY EVALUATION
Total	28	534		

### DISCUSSION

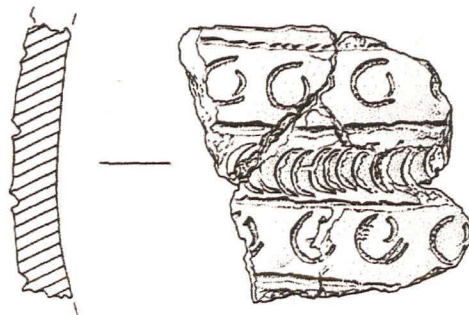
**Context 103** consists of a single grey body-sherd, and can only be dated as Roman. The 15 sherds from **context 203** include more datable pottery, particularly eight sherds from a shell-gritted dales ware jar, datable to the mid 3rd century and later. One of the body-sherds is from a cooking pot type with vertical burnished line decoration, also normally seen in the 3rd century. There are two large thick grey fabric body-sherds, likely to come from a large vessel, probably a type of storage jar; these cannot be closely dated but appear to be more common in the later Roman period. A date from the mid 3rd century onwards is applicable.

The various unstratified deposits produced sherds with a wider date-range. The earliest Roman sherd is a ring-necked flagon from **US Chain 520**, of mid to late 2nd century date. An everted rim jar from **US Chain 570** could be of similar date, extending into the 3rd century, while a folded jar or beaker from **Chain 720** is more probably 3rd century. The latest sherds came from the spoilheap by the evaluation trench, including an abraded lid-seated jar, the fabric being close to the

late coarse grey pebbly fabric seen in Lincoln city in the latest Roman deposits, datable to the late or very late 4th century. The Roman pottery has a range from the mid to late 2nd century, through to the latest 4th century.

The most interesting find consists of joining body-sherds from one vessel, hand-made, from US Chain 1000, (a surface find on easement) in a quartz-gritted fairly coarse grey fabric decorated with three rows of decoration, two rows of stamped open circles enclosing a central row with overlapped ring stamps, probably made by the same thin-walled tool, appearing as close-set crescents (illustration). The sherds come from a fairly thin-walled vessel, and are in fairly good condition. Such decoration is probably made using a bone or a quill from a feather or similar simple tool, and appears on beakers in the Late Neolithic/Early Bronze Age. This sherd therefore belongs to the Beaker tradition (pers. comm Carol Allen), and can be broadly dated to the late 3rd to early 2nd millenia. It is unfortunate that it is unstratified, giving no evidence of its context, but this implies very early activity in the area.

© M.J. Darling, 2002



5 cm

Unstratified Beaker sherd recovered from chainage 1000  
(drawn by D. Hopkins)

Cxt	Fabric	Form	Manuf+	Ves	D?	DNo	Details	Link	Sherds	Weight
103	GREY	CLSD	-	-	-	-	BS;F.SANDY THINNISH WALL	-	1	8
103	ZDATE	-	-	-	-	-	ROM	-	-	-
203	GREY	JBK	-	-	-	-	BS NECK/SHLDR	-	1	6
203	GREY	JBK	-	2	-	-	BASES PLAIN;F.THIN WALL	-	2	30
203	GREY	-	-	-	-	-	BS;F.THIN WALL	-	1	5
203	GREY	J	BVL	-	-	-	BS	-	1	8
203	DWSH	JDW	-	1	-	-	RIMS;BSS;V.VESIC;FRIABLE	-	8	54
203	GREY	JL?	-	-	-	-	BSS V THICK;VABR;STAINED	-	2	169
203	ZDATE	-	-	-	-	-	M3+	-	-	-
US CH.520	OXL	FR	-	-	-	-	RIM 100%;LTBN-CR;SPLAYED RING NECK	-	1	25
US CH.520	ZDATE	-	-	-	-	-	ML2	-	-	-
US CH.520	ZZZ	-	-	-	-	-	APPROX CH.520	-	-	-
US CH.570	GREY	JEV	-	-	-	-	RIM/PT WALL	-	1	39
US CH.570	ZDATE	-	-	-	-	-	2-3C	-	-	-
US CH.570	ZZZ	-	-	-	-	-	CHAINAGE 570	-	-	-
US R.WITHAM	GREY	JBKFO	-	-	-	-	BS BURNISH BASAL/PT WALL	-	1	38
US R.WITHAM	ZDATE	-	-	-	-	-	3C	-	-	-
US R.WITHAM	ZZZ	-	-	-	-	-	X R.WITHAM;CH.720	-	-	-
US CH.1000	PREH?	CLSD?	STRO;HM	1	D	-	BSS J;2 ZONE RINGS W ROW OVERSTAMPED RINGS;F.THIN WALL	-	3	10
US CH.1000	ZDATE	-	-	-	-	-	LNEBA	-	-	-
US CH.1000	ZZZ	-	-	-	-	-	SURF FIND ON EASEMENT	-	-	-
US S.HEAP	GREY	JEV	-	-	-	-	RIM/NECK;SL.LIDSEAT	-	1	40
US S.HEAP	GREY	-	-	-	-	-	BSS	-	4	41
US S.HEAP	LCOA?	JLS	-	-	-	-	RIM/SHLDR;ABR;VESIC;LOST RND QTZ?	-	1	61
US S.HEAP	ZDATE	-	-	-	-	-	L4 PROB	-	-	-
US S.HEAP	ZZZ	-	-	-	-	-	SPOILHEAP BY EVALUATION	-	-	-
									28	534

# Pottery Archive BILD01

Jane Young

Lindsey Archaeological Services

context	cname	sub fabric	full name	form type	sherds	vessels	weight	part	description	date
001	NOTG	light firing	Nottingham glazed ware	jug	1	1	10	rim	very abraded;collared rim	early to mid 13th
013	ST	A	Stamford Ware	?	1	1	41	base	soot;glaze part int & ext	11th
087	LSW2		13th to 14th century Lincoln Glazed Ware	pipkin	1	1	176	handle	central hollow;lower finger impression	13th
103	LKT		Lincoln kiln-type shelly ware	dish	80	1	876	profile	inturned rim;abraded;completely leached;near complete	early/mid 10th
u/s;chain	TOY		Toynton Medieval Ware	jug	1	1	122	rim	abraded;rod handle;UHJ with two thumbings	mid 13th to 14th
u/s;chain	EMHM		Early Medieval Handmade ware	jar	1	1	39	BS	soot	12th to early/mid 13th
u/s;spoil	MEDLOC	light OX/R/OX;fine-med sandy;med hard	Medieval local fabrics	jug	2	1	23	BS	streaks of white clay;comm fine subround quartz mod lager rounded;? Mareham	13th to 14th

# Tile Archive BILD01

*Jane Young Lindsey Archaeological Services*

context	cname	fabric	full name	frags	weight	description	date
013	GPNR	7	Glazed peg, nib or ridg	2	130	Lincoln;spots of glaze	mid 12th to early/mid 13th
013	GPNR	7	Glazed peg, nib or ridg	1	227	Lincoln;thick reduced glaze;corner;semi vitrified	mid 12th to early/mid 13th

03/10/02

The Environmental Archaeology Consultancy – EAC 46/02

1

## Archive catalogue of animal bone from Branston Island – BILD01

site	context	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path.	comment	pres vatic
BILD01	049	CAN	CEV	1	F	CFAF	12345						SOME DAMAGE	4
BILD01	049	SUS	FEM	1	R	DN	567						DISTAL EPIPHYSIS	4
BILD01	049	SUS	TIB	1	R	PN	123						PROXIMAL EPIPHYSIS-SAME LIMB AS ABOVE	4
BILD01	103	BOS	MAN	1	R								VENTRAL FRAGMENT HORI RAMUS-NOT ERODED	4
BILD01	103	BOS	TIB	1	F	DN	7						DISTAL SHAFT-HEAVILY ERODED	2
BILD01	103	CSZ	LBF	4	F								SHAFT FRAGMENT-HEAVILY ERODED	2
BILD01	103	CSZ	UNI	5	F								HEAVILY ERODED-LONG ENDS?	2
BILD01	103	CSZ	UNI	13	F								HEAVILY ERODED FRAGMENTS	2
BILD01	103	SSZ	CEV	1	F		4						CENTRUM-ERODED	2
BILD01	203	BOS	INN	1	R		239	KN					ILIAL SHAFT-FEMALE?-CUT MARK ON MEDIAL SHAFT	3
BILD01	203	BOS	TIB	1	L								ANT MIDSHAFT	3

Appendix 13.6: Report on radiocarbon determination of peat (103)

Mr. James Rackham

Report Date: 11/8/02

Environmental Archaeology Consultancy

Material Received: 10/24/02

Sample Data	Measured Radiocarbon Age	<sup>13</sup> C/ <sup>12</sup> C Ratio	Conventional Radiocarbon Age(+)
Beta - 171897 SAMPLE : BILD01-103 ANALYSIS : Radiometric-Advance delivery (with extended counting) MATERIAL/PRETREATMENT : (wood): acid/alkali/acid SIGMA CALIBRATION : Cal BC 1920 to 1410 (Cal BP 3870 to 3360)	3360 +/- 110 BP	-25.0* o/oo	3360 +/- 110* BP



# CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: est. C13/C12=-25;lab. mu't=1)

Laboratory number: Beta-171897

Conventional radiocarbon age<sup>1</sup>: 3360±110 BP

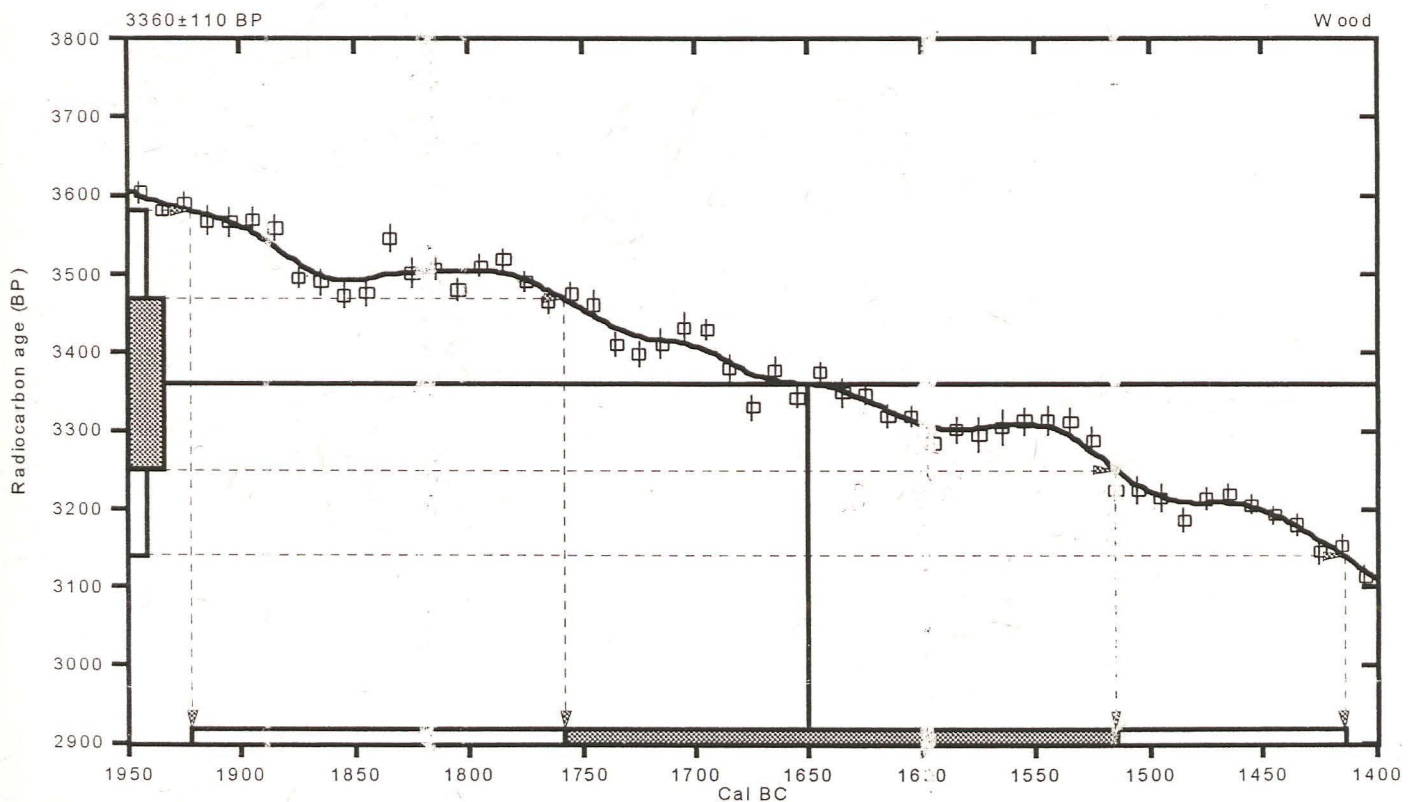
2 Sigma calibrated result: Cal BC 1920 to 1410 (Cal BP 3870 to 3360)  
(95% probability)

<sup>1</sup> C13/C12 ratio estimated.

## Intercept data

Intercept of radiocarbon age  
with calibration curve: Cal BC 1650 (Cal BP 3600)

1 Sigma calibrated result: Cal BC 1760 to 1520 (Cal BP 3710 to 3460)  
(68% probability)



## References:

*Database used*

INTCAL98

*Calibration Database*

*Editorial Comment*

Stuiver, M., van der Plicht, H., 1998, *Radiocarbon* 40(3), p xii-xjii

*INTCAL98 Radiocarbon Age Calibration*

Stuiver, M., et al., 1998, *Radiocarbon* 40(3), p 1041-1083

*Mathematics*

*A Simplified Approach to Calibrating C14 Dates*

Talma, A. S., Vogel, J. C., 1993, *Radiocarbon* 35(2), p 317-322

## Beta Analytic Radiocarbon Dating Laboratory

4985 S.W. 74th Court, Miami, Florida 33155 • Tel: (305)667-5167 • Fax: (305)663-0954 • E-Mail: beta@radiocarbon.com

## BRANSTON ISLAND, RIVER WITHAM, LINCOLNSHIRE, BILD01 RADIOCARBON SAMPLES: WOOD IDENTIFICATION

Rowena Gale, Folly Cottage, Chute Cadley, Andover, Hants SP11 9EB  
Honorary Research Associate, Royal Botanic Gardens, Kew

### Introduction

A single sample of waterlogged wood from basal peat was examined to identify suitable species for radiocarbon dating.

### Materials and methods

The wood was degraded and poorly preserved. The sample was prepared for examination using standard methods (Gale and Cutler 2000). Thin sections were mounted on glass slides and examined using a Nikon Labophot-2 microscope at magnifications of up to x400. The anatomical structures were matched to prepared reference slides. The wood was too degraded to count the number of growth rings. The taxa identified were bagged separately and weighed.

### Results

Wood from basal peat, <2> (103) – 2 x alder (*Alnus glutinosa*), roundwood, diameter 15mm, weight 11 gm;  
1 x ash (*Fraxinus excelsior*), roundwood, diameter 20mm, weight 10gm.

### Comments

The fragments described above are suitable for radiocarbon dating and provide sufficient weight.

### References

Gale, R. and Cutler, D. 2000 *Plants in Archaeology*, Westbury and Royal Botanic Gardens, Kew

## Assessment of Net Sinkers from Branston Island, Lincolnshire

*Alan Vince*

Four stone objects from Branston Island, Lincolnshire, were submitted for identification and assessment. They are most likely to be net sinkers and were constructed from two distinct stone facies, both limestones and both probably obtained from the Jurassic strata which form the Lincoln Edge.

### Description

#### Typology

Each of the objects is formed as a rough cylinder with rounded edges and a circular cross-sectioned hole. There is, however considerable variation in dimensions (Table 1).

The holes appear to have been made using a drill, although the tell-tale wear marks from the use of the drill do not survive on the heavily weathered surviving surfaces. Nevertheless, there is variation in the hole diameter and the orientation of the holes. In three cases the hole is perpendicular to the cylinder but in the fourth it is at an angle. In one case the hole is widened. This is likely to be due to the drill slipping during construction rather than wear since the widenings are not in the same direction on either side of the stone. In two cases the boring is roughly central and in the other two the holes are eccentric.

Each of the objects is heavily weathered, so that no original surfaces survive. There is, however, no obvious sign of wear or abrasion, such as might be expected if a rope was threaded through the hole. Despite this, the objects are probably net sinkers. The alternative identification would be as loom weights but the slanting bore hole in U/S/1 probably argues against this interpretation. Furthermore, the range of sizes and weights would not provide an even tension for the warp. A third option, that the stones, were thatch weights, can probably be discounted on the grounds of the weight of the smallest stone.

The use of a drill to make the holes in the stones probably implies the use of an iron bit, which would indicate a date in the Iron Age or later. No closer dating is possible from the objects themselves.

ID	Stone type	Weight (Gm)	Height	Diameter	Hole bore diameter	Angle of boring	Position of hole
087	Fossiliferous limestone	1013	53mm	109mm	16mm	Perpendicular	Eccentric
U/S/1	Fossiliferous limestone	372	35mm	85mm	7mm	Slanting	Eccentric

---

	limestone						
U/S/2	Oolitic limestone	514	45mm	75x85mm	7mm	Perpendicular	Central
U/S/3	Oolitic limestone	212	33mm	67mm	16mm	Perpendicular	Central

---

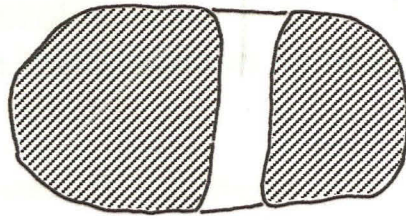
### Petrology

The objects were constructed from cream-coloured limestones of two lithologies. The first is an oolitic limestone consisting of tightly packed micrite ooliths with a mixture of micrite and sparry calcite cement. This rock contains a few bivalve shell fragments, of similar size to the ooliths.

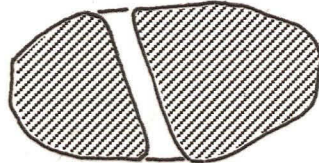
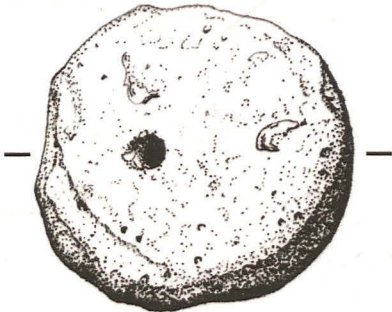
The second rock is a fossiliferous limestone. It consists of a micrite groundmass, probably containing quartz silt not visible at x20 magnification but giving a harsh feel to the hand specimen. The fossils consist of a range of microfossils and sparse bivalve shells replaced by coarsely-crystalline calcite of light brown colour. Both rock types occur within the Lincolnshire Limestone and it is possible that a petrologist familiar with the detailed outcrop of this series might be able to provenance the sources more closely.

### Assessment

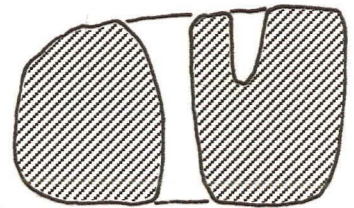
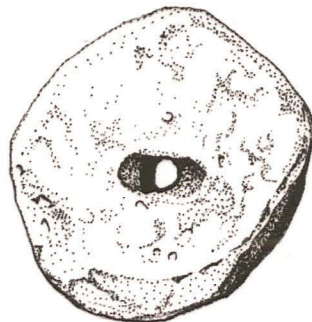
These objects have an intrinsic interest and would repay further study as part of a wider survey. This might provide closer dating and either confirm or refute their suggested function. They should all be illustrated since each one has unique features.



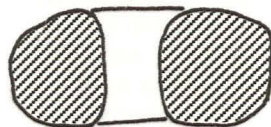
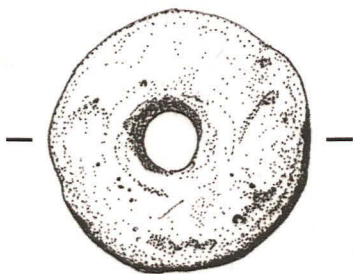
087



U/S 1



U/S 2



U/S 3

Limestone net sinkers found on Branston Island.

**Branston Island, Branston,  
Lincolnshire:  
Lower Witham Environment Scheme.  
BILD 01**

**Lithic Materials: Catalogue**

**Report by Jim Rylatt – September, 2002**

**1.0 Catalogue**

2 pieces of worked flint and 1 piece of modified stone were recovered during the archaeological investigations:

Worked flint:

<b>Chainage</b>	<b>Context No.</b>	<b>Description</b>
1200	U/S	Tertiary flake Sub-circular conchoidal flake, with flat platform, moderately pronounced bulb, with erailure flake removal, and hinged termination. Dorsal surface has scars indicating removal of similar flakes from two platforms. High quality, dark grey semi-translucent flint. 33 x 35mm.
1200	U/S	Secondary flake Blade-like flake, with flat, recorticated platform, pronounced bulb, and hinge termination. One lateral edge is cortical; <10% of dorsal surface. Dorsal surface has scars indicating removal of two similar parallel-sided flakes from one platform. High quality, dark grey semi-translucent flint. 29 x 24mm.

*NB:* Measurements are given only for complete flakes. The first figure relates to the maximum length, measured perpendicular to the striking platform; the second to maximum breadth, measured at a right angle to the length. Figures for the percentage of cortex relate to the total area of the dorsal surface and platform.

*NB:* both flakes are probably derived from the same core.

Modified lithic material:

<b>Chainage</b>	<b>Context</b>	<b>Weight (g)</b>	<b>Notes</b>
300-400	U/S	490	Probable potboiler - large fragment of fine-grained sandstone cobble, with triangular cross-section. One external surface rounded (across bedding plane), while other external surface has much less pronounced curvature (along bedding). Edges of fractured surface abraded due to post-depositional weathering. Approximately 80% of exterior is reddened, probably due to fire, which would have caused iron oxides in stone to migrate to surface.

## Site visit to Branston Island (BILD01) - 11th.December 2001

*Maisie Taylor*

The site visit took place on 11th.December 2001 and four large tree/timbers were examined. A bulk sample was removed for further examination, but proved to contain no woodworking debris.

### *The Timber*

001

A radially aligned piece from a large oak tree. Possibly an eroded tree trunk

002

A large tangentially split piece from the butt of a huge oak tree. The sapwood is patchy on the outer surface. One side is split along the medullary rays. The tree is not particularly slow grown (Rings 2-3mm apart). Very large trees like this are often very slow grown because they originate in very thick forest. The split side may have occurred during felling or when the tree fell or was pulled over.

L.3230mm    W.670mm    Th.80mm

003

A large tangential split timber which comes from the outer part of a big oak tree, but there is no sapwood. It is very similar to 002 except for the lack of sapwood. There is some potential shaping or bevelling along one edge, but this is difficult to interpret as machine damage is considerable.

L.1777mm    W.400mm    Th.90mm

004

A very slow-grown (Rings 1mm apart) tangentially aligned oak timber. The timber has been broken and split by the machine. It is possibly derived from the same tree as 005.

L.850mm    W.150mm    Th.110mm

005

As 004.

L.510mm    W.130mm    Th.110mm

The group of large tree trunks was most unusual. The main reason for examining the trees was to ascertain whether they may have been selected for boat construction, or had been worked in any way.

Timber 001 is almost certainly a tree trunk which had partially rotted and eroded before it became incorporated into the peat. Timber 002 is shaped but appeared to be derived from the base of the tree rather than from the trunk. The butt of a tree is rarely used because of the difficulty of working. It is possible that the split on this timber was caused by the weight of the tree causing a tear to run on when it was felled or went over. The growth rings suggest that the tree was not growing in forest or in stressed conditions. Timber 003 is also shaped in a gross fashion, perhaps when it was felled. Unfortunately subsequent machine damage makes interpretation difficult.

The main point of interest with these trees is their location. They are certainly of a size and quality which could have been selected for boat building, but if this was the boat builders wood pile, we are only left with the rejects and off-cuts.



## Appendix 13.10

## List of Archaeological Contexts

Evaluation

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
001	Layer	Topsoil – mid to dark-brown peaty loam, contains abundant roots, up to 0.5m deep. Seals (002), (004), (005) and (088).
002	Layer	Peat – dark brown to black fibrous organic deposit, with large quantity of degraded reed fragments, up to 0.6m deep. Seals (003 and (010).
003	Layer	Natural – pale grey sand, containing occasional sub-rounded flint gravel and pebbles.
004	Lens	Possible hearth base – orangey-brown sandy peat, containing charcoal laminae and occasional flecks of charcoal, c. 0.1m deep. Deposit has been hardened (baked) by fire. Seals (005); adjacent to <i>CH720</i> .
005	Layer	Mixed deposit of brownish-grey clayey sand and peat, c. 0.2m deep. Seals (002); intermittently present between <i>CH300</i> and <i>CH1000</i> .
006	Deposit	Gravel bank - mixed deposit of orangey-brown to yellow sandy gravel – frequent sub-rounded flint pebbles, c. 8.0m long and 0.2 – 0.4m deep. No dating, but close to group of trees; both bank and trees may represent deliberate bank stabilisation? Seals (002) – so probably relatively modern; adjacent to <i>CH920</i> .
007	Cut	Tree root void? – sub-circular feature, c. 2.5m long by >0.7m wide. Small area excavated had uneven and gently sloping sides. A few charcoal fragments were noted along the base of the feature.
008	Deposit	Modern topsoil – Dark brownish to black slightly sandy loam, containing moderate quantities of sub-rounded gravel and frequent roots, up to 0.4m deep. Probably upcast from cleaning adjacent soke dyke. Seals (001) and (012); present between <i>CH300 - CH500</i> , and <i>CH850 - CH900</i> .
009	Layer	Topsoil – mid grey peaty clay, contains occasional gravel, c. 0.25m deep. Seals (002); vicinity of <i>CH1735 - 1750</i> .
010	Layer	Peat – mid brown fibrous organic deposit, with large quantity of degraded reed fragments, > 0.2m deep. Sealed by (002); present between <i>CH650</i> and <i>CH1750</i> .
011	Layer	Peat – mid brown fibrous organic deposit, with frequent twigs and wood fragments. Similar colour and smell to (010), but no reed fragments, > 0.25m deep. Sealed by (002); present between <i>CH1750</i> and <i>CH1900</i> .
012	Lens	Mid yellowish-brown sand; possibly upcast from cleaning of soke dyke. Seals (013).
013	Layer	Alluvium – mottled dark-grey to orangey-brown silty clay, c. 0.5m deep; contained one sherd of pottery and glazed medieval tile. Compact deposit possibly resulting from silting within migrating river channel (moving eastward) – replaces peat between <i>CH400</i> and <i>CH600</i> . Seals

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
		(014).
014	Layer	Peat – very dark brown to black silty fibrous organic deposit, with occasional twigs and wood fragments in upper component (a), frequency increasing with depth (b), c. 0.20m deep. Seals (003); present between <i>CH400</i> and <i>CH600</i> .
015	Layer	Sand bar – mottled very pale yellow to white fine sand. Forms slight ridge immediately upstream of the southern post cluster, A, where it is c. 0.05m deep – probably built up where current impeded by structure formed by A. Thins toward north, being mixed with (014)b around the northern post cluster, B. Seals (003); present between <i>CH580</i> and <i>CH600</i> .
016	Structure	Post – light brown waterlogged vertical timber, with circular section 0.12m in diameter - entirely sapwood, possibly oak. Situated c. 3.0m to the south of northern post cluster, B. Cuts (003); at <i>CH600</i> .
017	Structure	Post – waterlogged vertical timber, with circular section 0.13m in diameter – sapwood and heartwood present: oak. Southerly element of northern post cluster, B. Cuts (003); at <i>CH600</i> .
018	Deposit	Fill of eddy hole – narrow crescent of fine yellow sand encircling the upstream side of post (017). Eddy had scoured away small area of (003).
019	Structure	Degraded post – black silty peat and occasional wood fragments representing remains of a vertical timber, c. 0.18m in diameter. Southerly element of northern post cluster, B. Cuts (003); at <i>CH600</i> .
020	Structure	Post – waterlogged vertical timber, with circular section 0.13m in diameter – sapwood and heartwood present: oak. Element of northern post cluster, B. Cuts (003); at <i>CH600</i> .
021	Deposit	Fill of eddy hole – crescent of mottled yellow to orange sand, with fine organic component. Encircled the upstream side of post (020). Eddy had scoured away small area of (003).
022	Structure	Post – waterlogged vertical timber, with circular section 0.10m in diameter - mostly sapwood, with small area of heartwood: oak. Element of northern post cluster, B, probably a repair as cuts (023); at <i>CH600</i> .
023	Structure	Degraded post – black silty peat and occasional wood fragments representing remains of a sub-oval vertical timber, c. 0.18m long by 0.11m wide. Element of northern post cluster, B, predates (022). Cuts (003); at <i>CH600</i> .
024	Structure	Post – waterlogged vertical timber, with circular section 0.12m in diameter - mostly sapwood, with small area of heartwood: oak. Element of northern post cluster, B; at <i>CH600</i> . Cuts (003).
025	Structure	Post – waterlogged vertical timber, with sub-rectangular section 0.18m long by 0.10m wide – sapwood and heartwood representing quartered oak timber with two sapwood edges squared off. Probably from same trunk as (026). Element of southerly element of southern post cluster, A; at <i>CH580</i> . Cuts (003).

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
026	Structure	Post – waterlogged vertical timber, with sub-oval section 0.18m long by 0.16m wide – sapwood and heartwood: quartered oak timber. Probably from same trunk as (025). Element of southerly element of southern post cluster, A; at <i>CH580</i> . Cuts (003).
027	Structure	Post – waterlogged vertical timber, with circular section 0.14m in diameter – sapwood, with large area of heartwood: oak. Southerly element of southern post cluster, A; at <i>CH580</i> . Cuts (003).
028	Structure	Post – waterlogged vertical timber, with circular section 0.13m in diameter – entirely sapwood: possibly oak. Element of southern post cluster, A, probably a repair as cuts (029); at <i>CH580</i> .
029	Structure	Degraded post – black silty peat and occasional wood fragments representing remains of a vertical timber, c. 0.12m in diameter. Element of southern post cluster, A, predates (028). Cuts (003); at <i>CH580</i> .
030	Deposit	Fill of eddy hole – crescent of yellow sand, with fine organic component. Had encircled the eastern side of degraded post (029). Eddy had scoured away small area of (003).
031	Structure	Post – waterlogged vertical timber, with circular section 0.10m in diameter – entirely sapwood: possibly oak. Element of southern post cluster, A, probably a repair as cuts (032); at <i>CH580</i> .
032	Structure	Degraded post – black silty peat and occasional wood fragments representing remains of a vertical timber, c. 0.15m in diameter. Element of southern post cluster, A, predates (031). Cuts (003); at <i>CH580</i> .
033	Deposit	Fill of eddy hole – large crescent of mottled yellow to orangey-grey sand, with fine organic component. Encircles the eastern side of post (031) and probably incorporates earlier eddy hole fill around (032). Eddy had scoured away small area of (003).
034	Structure	Post – waterlogged vertical timber, with circular section 0.10m in diameter and >0.35m long – entirely sapwood: possibly oak. Southerly element of southern post cluster, A; at <i>CH580</i> . Cuts (003), same as (205)g.
035	Structure?	Stake? – waterlogged vertical timber, c. 0.05m in diameter and >0.28m long – entirely sapwood. Possibly part of a structure associated with southern post cluster, A; at <i>CH580</i> . Cuts (003).
036	Structure	Wattle panel – series of small, fragmentary horizontal branches, surviving up to five deep, c. 0.8m long and 0.2m deep. Each branch is corrugated, as though woven around small vertical struts. Southerly element of southern post cluster, A, which appears to be associated with post (034); at <i>CH580</i> . Contained within (014).
037	Timber	Piece of oak visible in trench section. Had a sub-rectangular cross-section, c. 0.30m long by 0.10m high that suggesting it had been worked – may have been horizontal timber or collapsed post. Alternatively could be a natural piece of wooden debris that became caught in post structure. Situated adjacent to northern post cluster, B.
038	Timber	Piece of oak visible in trench section. Had a sub-rectangular cross-

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
		section, c. 0.20m long by 0.14m high that suggesting it had been worked. Subsequent excavation indicated that it was a natural piece of wooden debris. Situated adjacent to northern post cluster, B.
039	Cut	Ditch – eastern terminal of east-west aligned linear feature, c. 4.6m wide and >0.60m deep, with southern side sloping at c. 60° to the horizontal and undulating northern edge sloping at c. 20°. Cuts (013), contains (040). At <i>CH510</i> .
040	Fill	Lower fill of [039] – orange sand and sub-rounded flint gravel, incorporating localised patches of grey sand, orangey-brown clay and grey clay. Seems to be deliberate backfill. Sealed by small pocket of redeposited material derived from (013).
041	Structure	Post – waterlogged vertical timber, with circular section 0.14m in diameter - entirely sapwood: possibly oak. Element of northern post cluster, B; at <i>CH600</i> . Cuts (003).
089	Structure	Post – waterlogged vertical timber, with circular section 0.10m in diameter - entirely sapwood: possibly oak. Element of southern post cluster, A; at <i>CH573</i> . Same as (207)b Cuts (003).

### Excavation

#### Trench 1

100	Layer	Ploughsoil – mid to dark brownish-grey humic sandy silt, with common pebbles and gravel. Gravel component was largest where the trench was close to the soke dyke suggesting that this material was spoil that had been cleaned out of the base of the dyke. Also contained a shattered human skull. Seals (101), same as (008) and (200).
101	Deposit	Gingery-brown slightly silty sand situated across the eastern half of the trench (to c. 5.0m from the western edge of the soke dyke). Probably the remains of the spoil heap resulting from the creation of the soke dyke. Seals (102), same as (201).
102	Layer	Mid grey silty clay, with orangey-brown mottles. Probable alluvial deposit, which decreases in depth toward the western side of the trench suggesting that it fills the western edge of an old river channel. Seals (103), same as (202).
103	Layer	Peat – orangey-brown to dark greyish-brown slightly silty organic deposit, c. 0.45m deep, with frequent woody inclusions of c. 0.04m diameter – latter compressed due to peat shrinkage. Also contained two localised sand lenses and pottery. Seals (105), same as (203).
104	Layer	Natural – pale grey sand, with frequent orange mottles and large gravel component, >0.20m deep. Same as (003) and (204), cut by [105],[106], [107], [108] and [109].
105	Structure	Post – waterlogged timber, with circular section 0.12m in diameter – heartwood, sapwood and bark present: oak. Timber is angled, with top towards west and base toward east, c. 0.33m of timber visible above interface of (103)/(104). Northern element of northern post cluster, B

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
		(with (108)); at <i>CH600</i> . Cuts (104).
106	Structure	Stakes – two waterlogged timbers situated c. 0.10m apart: (a) squared timber, with sides of 0.08m, entirely sapwood; (b) squared timber, with sides of 0.08m, entirely sapwood. Cut (104).
107	Structure	Group of posts at south-east corner of trench – five waterlogged vertical timbers representing westerly extension of northern post cluster, B: (a) vertical timber with sub-circular section 0.17m in diameter, bark and sapwood, but no heartwood: possibly oak; (b) slightly angled timber (top to north, base to south) c. 0.12m diameter, with c. 0.1m projecting above top of (104); (c) vertical timber c. 0.12m diameter, entirely sapwood, with c. 0.1m projecting above top of (104); (d) vertical timber with oval section 0.11m long by 0.08m wide, bark and sapwood, but no heartwood: possibly oak; (e) Split timber c. 0.12m diameter, with heartwood, sapwood and bark. Cut (104).
108	Structure	Group of posts in western half of trench – line of three timbers running east to west. (c) vertical timber, entirely sapwood, c. 0.09m diameter and 0.18m projecting from (104); (d) slightly angled timber (top angled to west), heartwood and sapwood visible, c. 0.14m diameter and 0.18m projecting from (104); (e) vertical timber, heartwood, sapwood and bark: oak, c. 0.14m diameter, projecting c. 0.15m from (104). Cut (104)
109	Structure	Two associated waterlogged timbers – vertical and horizontal timber in south-west corner of trench. (a) horizontal timber, with slight bow, >2.9m long and up to 0.15m wide – no signs of working and bark survives over much of surface – may be entirely of natural origin. (b) vertical stake, squared timber with sides of c. 0.06m, c. 0.10m projecting above (104). The stake is situated on northern side of the north-western end of (a) and may have been intended to hold the latter in place. Cuts (104).

#### Trench 2

200	Layer	Ploughsoil – mid to dark brownish-grey humic sandy silt, with common pebbles and gravel, c. 0.30m deep. Gravel component was largest where the trench was close to the soke dyke suggesting that this material was spoil that had been cleaned out of the base of the dyke. Seals (201), same as (008) and (100).
201	Deposit	Gingery-brown slightly silty sand situated across the eastern half of the trench (to c. 5.0m from the western edge of the soke dyke). Probably the remains of the spoil heap resulting from the creation of the soke dyke. Seals (202), same as (101).
202	Layer	Mid grey silty clay, with orangey-brown mottles. Probable alluvial deposit, which decreases in depth toward the western side of the trench suggesting that it fills the western edge of an old river channel. Seals (203), same as (102).
203	Layer	Peat – orangey-brown to dark greyish-brown slightly silty organic deposit, c. 0.45m deep, with frequent woody inclusions of c. 0.04m diameter – latter compressed due to peat shrinkage. Also contained pottery and five pieces of limestone rubble that were situated near the north-west corner of the trench. Seals (204), same as (103).

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
204	Layer	Natural – pale grey sand, with frequent orange mottles and large gravel component, >0.20m deep. Same as (003) and (104), cut by [205], [206], [207], [208] and [209].
205	Structure	Group of posts running east-west across centre of trench – eight waterlogged vertical timbers representing westerly extension of southerly element of southern post cluster, A: (a) vertical timber with circular section 0.09m in diameter, bark and sapwood, but no heartwood: possibly oak; (b) degraded sub-circular timber c. 0.09m diameter, only sapwood visible (c) slightly angled timber (top to south-west, base to north-east) c. 0.10m diameter, entirely sapwood; (d) vertical split timber (half log) with 'D'-shaped section c. 0.16m diameter, bark and sapwood, but no heartwood: possibly oak; (e) vertical split timber (half log) with 'D'-shaped section c. 0.15m diameter, bark, sapwood and heartwood: oak; (f) Vertical timber with hexagonal section) 0.13m long by 0.11m wide, bark and sapwood visible: possibly oak; (g) same as (034); (k) vertical timber with circular section c. 0.07m diameter, entirely sapwood. Scour hollows containing peat are present around some of the timbers. Cut (204).
206	Structure	Post – vertical timber situated at south-east corner of trench. Roundwood, c. 0.09m diameter, with bark and sapwood, but no heartwood: oak. No obvious relationship to other posts, unless with (207) to the north. Cuts (204).
207	Structure	Posts – two timbers situated near eastern edge of trench. (a) angled timber, (top to west, base to east) roundwood, c. 0.08m diameter, with bark and sapwood, but no heartwood,: oak; (b) vertical timber, roundwood, c. 0.08m diameter, with sapwood, but no heartwood. Cuts (204).
208	Structure	Post – angled timber (top to north-east, base to south-west) situated at northern edge of trench. Roundwood, c. 0.12m diameter, with bark and sapwood, but no heartwood: oak. Probably related to main group forming southern post cluster, A. Cuts (204).
209	Structure	Post – vertical timber situated toward western edge of trench. Slightly oval timber, c. 0.09m by 0.07m, with bark and sapwood, but no heartwood: oak. Possibly a western continuation of (205). Cuts (204).

#### **Watching Brief**

042	Group no.	Post row – four vertical timbers situated within channel of the Old River Witham, c 2.0m from the western bank at <i>CH670</i> . Only heartwood of each post was visible, indicating that they were oak timbers. Each was c. 0.10 – 0.12m in diameter and protruded by c. 0.30 – 0.40m from the river bed. Possibly part of a medieval fish trap.
043	Layer	Medieval flood deposit? – mid to light brown silty clay. Seals (044) and (055).
044	Layer	Peat – very dark brown to black fibrous organic deposit, with occasional twigs and wood fragments, but partially oxidised and degraded, up to 0.65m deep. Seals (045), (050) and (057).

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
045	Layer	Peat – dark reddish-brown fibrous organic deposit, with frequent twigs and wood fragments, up to 0.05m in diameter, and localised areas of reeds, c. 0.25m deep. Seals (046).
046	Layer	Peat – fine mid brown fibrous organic deposit, with very few twigs and localised concentrations of reeds, c. 0.30m deep. Seals (047), (054) and (056), same as (074).
047	Layer	Fine grey slightly silty sand. Seals (048) and (051).
048	Layer	Natural – mid yellow sand, containing occasional coarse sand laminae. Seals (053).
049	Layer	Subsoil – mixed deposit of peat and mid greyish-brown slightly clayey silt, containing occasional gravel. Seals (043), (060) and (075).
050	Layer	Flood deposit – localised deposit of very fine white silt, situated between layers of peat. Has built up against north-eastern face of sandbank (051), which presumably impeded and slowed flood waters; at <i>CH 2040 – CH2050</i> . Sealed by (044), seals (052).
051	Deposit	Sandbank – mid orange coarse sand, c. 4m wide. Situated beneath the peat, it survives to c. 0.65m high, but the top has been truncated. Sealed by (047), seals (048); centre at <i>CH2044</i> .
052	Layer	Peat – black fibrous organic deposit containing large pieces of wood, up to 0.30m deep. Situated to east of sandbank (051), the latter probably causing ponding or other localised environmental variation. Sealed by (050), seals (045); present between <i>CH2042</i> and <i>CH2025</i> .
053	Layer	Natural – mid orange clay; localised deposit seen at base of soke dyke at <i>CH1990</i> to <i>CH2010</i> . Sealed by (048).
054	Layer	Peat – dark greenish-brown fibrous organic deposit, containing large quantities of well-preserved reed leaves and stems, with pronounced odour of decay, c. 0.30m deep. Generally at base of peat sequence, indistinct in places and sometimes associated with a clayey matrix. Sealed by (046) seals (047); present between <i>CH1970</i> and <i>CH1730</i> .
055	Layer	Peat – black slightly silty fibrous organic deposit, at top of peat sequence, partially oxidised and degraded, c. 0.40m deep. Sealed by (043), seals (044); present at <i>CH1850</i> .
056	Layer	Mid bluish-grey clay containing frequent well-preserved reed fragments, > 0.50m deep; similar to (054), but not peaty. Localised deposit seen at base of soke dyke at <i>CH1870</i> to <i>CH1750</i> . Sealed by (046).
057	Layer	Peat – mid-brown woody organic deposit, with medium and large pieces of wood, c. 0.30m deep. Sealed by (044), seals (058); present between <i>CH1800</i> and <i>CH1750</i> .
058	Layer	Peat – dark grey woody organic deposit, with wood fragments generally 0.02 – 0.03m in diameter, c. 0.10m deep. Sealed by (057), seals (059); present at <i>CH1800</i> .

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
059	Layer	Peat – mid brown fibrous organic deposit, with twigs and very frequent reed fragments, c. 0.45m deep. Sealed by (058), seals (046); present between <i>CH1800</i> and <i>CH1750</i> .
060	Layer	Peat – dark brown desiccated organic deposit, c. 0.15m deep. Sealed by (049) and (075), seals (061); present between <i>CH550</i> and <i>CH1100</i> .
061	Layer	Natural – mottled yellow to grey sand, c. 0.25m deep. Seals (062); present at <i>CH550</i> .
062	Layer	Natural – mid brown sand, with occasional flint pebbles, c. 0.15m deep. Seals (063); present at <i>CH550</i> .
063	Layer	Natural – mid yellow gravelly sand and gravel, c. 0.15m deep. Seals (064) and (068); present between <i>CH550</i> and <i>600</i> .
064	Layer	Natural – mottled pale grey to bluish-grey medium to coarse sand, c. 0.10 - 0.35m deep. Seals (065); present between <i>CH550</i> and <i>600</i> .
065	Layer	Natural – mottled mid grey to bluish-grey gravelly clay, c. 0.10 - 0.35m deep. Sealed by (064) and (070), seals (071); seen at base of soke dyke between <i>CH550</i> and <i>CH620</i> , and at <i>CH1000</i> .
066	Layer	Peat – dark brown fibrous organic deposit, c. 0.45 – 0.60m deep. Sealed by (049), seals (067), (074), (083) and (085), cut by [079] and [086]; present between <i>CH600</i> and <i>1700</i> .
067	Layer	Natural – mid grey to bluish-grey medium grained sand, with occasional flint pebbles, c. 0.10 - 0.35m deep. Sealed by (066) and (074), seals (068), (076), (080) and (081); present between <i>CH600</i> and <i>CH1300</i> .
068	Layer	Natural – mottled dirty yellow medium grained sand, with occasional flint pebbles, c. 0.25 - 0.60m deep. Sealed by (067) and (076), seals (065), (069), (070), (077) and (084), cut by [082]; present between <i>CH600</i> and <i>CH1100</i> , and <i>CH1250</i> – <i>CH1700</i> .
069	Layer	Natural – yellow sand, with grey mottles and occasional flint pebbles, c. 0.20m deep. Sealed by (068), seals (064); present at <i>CH600</i> .
070	Layer	Natural – very pale salmon-pink slightly silty clay, c. 0.45m deep. Sealed by (068), seals (065); present between <i>CH1000</i> and <i>CH1100</i> .
071	Layer	Natural – pale brown fine sand, seen at base of soke dyke, > 0.15m deep. Sealed by (065); present at <i>CH1050</i> .
072	Cut	Pit – feature seen in section, irregular profile, north-west edge sloping at 45° to flat base c. 0.70m wide, and south-east edge rising at c. 80° - feature is 1.2m wide by 0.35m deep. Also has a shallow depression running along its south-eastern edge, latter c. 0.55m wide by 0.07m deep, with flat base. Cuts (067), contains (073). Situated at <i>CH1078</i> .
073	Fill	Fill of [072] – mid grey silty peat containing occasional bark fragments, round wood and flint pebbles. Fills both pit and associated depression to south-east. Sealed by peat (066), suggesting relatively old.
074	Layer	Peat – fine mid brown fibrous organic deposit, with a few twigs and



<i>Context No.</i>	<i>Category</i>	<i>Description</i>
		localised concentrations of reed debris, c. 0.50m deep. Sealed by (066), seals (067), same as (046); present between <i>CH1150</i> and <i>CH1700</i> .
075	Layer	Peat – mid brown silty desiccated organic deposit, c. 0.15m deep. Sealed by (049), seals (060); present between <i>CH550</i> and <i>1100</i> .
076	Layer	Natural – white fine sand and gravel, >0.30m deep. Sealed by (067), possibly same as (080); present between <i>CH1200</i> and <i>CH1600</i> .
077	Layer	Natural – yellow sand, with occasional concreted areas, >0.25m deep. Sealed by (068) at base of soke dyke; present at <i>CH1350</i> .
078	Fill	Fill of [079] – very dark greyish-brown silt containing occasional gravel, c. 0.50m deep. Sealed by (060).
079	Cut	Ditch – east-north-east to west-south-west aligned linear feature, with steep-sided ‘U’-shaped profile, >9.0m long by 2.10m wide and 0.51m deep. Similar orientation to existing boundaries on Branston Island, so probably post-medieval (or possibly medieval); adjacent tree likely to relict of former flanking hedge. Cuts (066), contains (078). Situated at <i>CH632</i> .
080	Layer	Natural – pinkish-white sand, c. 0.13m deep. Sealed by (067), possibly same as (076); present between <i>CH690</i> and <i>CH730</i> .
081	Fill	Fill of [082] – dark brown silty peat, with occasional gravel and flint and large sand lens, c. 0.25m deep. Sealed by (067).
082	Cut	Pit – feature with ‘U’-shaped profile, 1.27m wide and 0.25m deep. Cuts (068), contains (081). Situated at <i>CH725</i> .
083	Layer	Peat – greyish-green slightly clayey fibrous organic deposit, with very frequent reed fragments, c. 0.20m deep. Sealed by (066), seals (067); present at <i>CH800</i> .
084	Layer	Natural – yellow slightly sandy gravel, with occasional concreted areas, >0.45m deep. Sealed by (068) at base of soke dyke; present at <i>CH800</i> .
085	Layer	Flood deposit – mid brown silty clay, sandwiched between peat beds, c. 0.14m deep. Sealed by (066), seals (074); present at <i>CH850</i> .
086	Cut	Palaeo-channel – north-east to south-west aligned linear feature with asymmetric, flattened ‘W’-shaped profile; Deepest element runs along northern edge and is c. 5.5m wide and 0.89m deep, shallower element along southern edge c. 5.70m wide and 0.65m deep. Cuts (066), contains (087) and (088). Situated at <i>CH908</i> to <i>CH920</i> .
087	Fill	Lower fill of [086] – mid greyish-orange clay containing occasional rounded pebbles, c. 0.49m deep ( <u>primary fill</u> is a layer of clean grey clay, c. 0.2m deep). Contained a limestone net sinker, medieval pottery, two post voids and two squared horizontal timbers; latter 0.10 x 0.06m and 0.13 x 0.06m in section. Sealed by (088).
088	Fill	Upper fill of [086] – loose orange coarse gravel, c. 0.30m deep; possibly a deliberate backfill. Sealed by (001).

<i>Context No.</i>	<i>Category</i>	<i>Description</i>
090	Structure	Posts – ten vertical timbers, (090)a to j, forming part of the southern cluster, (B), at <i>CH580</i> to <i>CH585</i> .
091	Structure	Posts – five vertical timbers, (091)a to e, forming part of the northern cluster, (A), at <i>CH600</i> to <i>CH610</i> .

**Appendix 13.11: Catalogue of sites and finds in the environs of Branston Island.**  
**(Data derived from the Lincolnshire County Sites and Monuments Record)**

<b>SMR Code</b>	<b>NGR</b>	<b>Description</b>
52898	TF 0940 7140	Broken leaf shaped 'point' (arrowhead?) found while digging a drain at Short Ferry Marina by Mr and Mrs Shooter. Probably Neolithic.
54162	TF 1020 7172	Late Neolithic to Early Bronze Age features, including pits, gullies, ditches and a possible round barrow ditch, found to west of Top Farm, Stainfield, during an evaluation by PCA.
54161	TF 1022 7173	Late Neolithic to Early Bronze Age Pottery found to west of Top Farm, Stainfield, during an evaluation by PCA.
53836	TF 1014 7167	Cropmark indicating presence of round barrow or other mounded feature to west of Top Farm, Stainfield.
53835	TF 1074 7181	Cropmark defining ring ditch of round barrow, situated to the south-east of The Hermitage, Stainfield.
53840	TF 1081 7128	Cropmark defining ring ditch of round barrow, situated just inside Bardney Parish, to the south of The Hermitage, Stainfield.
53842	TF 1103 7113	Cropmark defining ring ditch of round barrow, situated a little to the north of Bardney Abbey.
61454	TF 0973 7122	Food vessel found on northern edge of Branston Island - 'a curious urn with four feet' found around 1869, at a considerable depth in sand adjacent to the River Witham. Possibly the same item as a food vessel in the Trollope Collection (LM 88.50); 0.15m diameter and 0.13m high. (see Arch. Jour. XXVI: 288)
52894	TF 0896 7120	Log boat (Fox type IIB) found sealed beneath peat at Short Ferry, in March 1952. Excavated and deposited with Lincoln City and County Museum; 7.3m long by 0.6m wide.
51205	TF 0962 7150	Two log boats found whilst recutting a drain close to the present course of the Witham, south-east of Short Ferry. Broken up and reburied.
51206	TF 0974 7157	Fragment of a log boat found in 1976, south-east of Short Ferry Bridge.
51203	TF 0990 7158	Fragment of a log boat found in 1953 to the east of Short Ferry.
60478	TF 103 709	Part of bottom and side of a log boat found in 1976 during ploughing - remainder may still be in-situ. Known as 'Bardney 3', it was an oak vessel, the exposed portion being 2.25m long by 0.6m wide and up to 0.12m thick.
51162	TF10506990	Log boat found in 1814 when a drain was cut near Horsley Deep. Possibly the same as 'Bardney 1' found c. 1815, which was 9.15m long by 1.4m wide.
51142	TF 1037 7004	Remains of a log boat uncovered at Bardney Lock; possibly the same as 51162.

SMR Code	NGR	Description
52892	TF 0937 7166	Sword found in 1872 by William Buckle while cleaning and deepening the Barlings Eau at Short Ferry; 1.37 to 1.42m long.
51140	TF 1136 7061	Possible prehistoric pottery found during early 20 <sup>th</sup> century excavations at Bardney Abbey. Found in the area of the north aisle of the choir of the abbey church, may also be medieval.
51138	TF 1136 7061	Romano-British pottery found during excavations on a vestry running along the north aisle of the choir of the abbey church at Bardney Abbey.
52907	TF 0965 7134	Romano-British pottery found during the construction of Short Ferry Marina.
51196	TF 1044 7200	Romano-British pottery – number of sherds, possibly from a single pot, recovered after part of the field to the north-west of The Hermitage, Stainfield, had been bulldozed. Found by Mr Allerton, now in LCCM 134.56.
51204	TF 0944 7165	Penny of Edward the Confessor found on the bank of the Barlings Eau by Short Ferry Bridge. A trefoil quadrilateral (BM type 3), obv. '+EDP RD REX' rev. '+COIGRIM ON LONCOL'.
51163	-	Viking period axe head found near Horsley Deeps c. 1815. Now in the Society of Antiquaries collection.
52906	TF 0960 7130	Medieval monastic grange and fishery belonging to Stainfield Priory and known as 'Barling Mouth', in the angle of the confluence of the River Witham and the Barlings Eau, Short Ferry. Constructed on a raised mound, excavation revealed remains of a stone building, fishing and fish processing equipment. Artefacts included the remains of a stamped curfew, fish smokers and net sinkers. Pottery continued into the post-medieval period.
51207	TF 0975 7136	Eleven medieval limestone net sinkers found south-east of Short Ferry Bridge, in May 1960.
52908	TF 0965 7134	Medieval and post-medieval material recovered during the construction of Short Ferry Marina, among which was a considerable quantity of pottery. Latter included Nottingham, Toynton, Bourne, shelly, Tudor-Green, Cistercian, Midlands Yellow, French Polychrome, Lincoln wares and German and Flemish stonewares.
53838	TF 0984 7155	Ridge and furrow earthworks to the east of Short Ferry Marina, probably later medieval.
51210	TF 103 712	Medieval monastic fishery belonging to Stainfield Priory and known as 'Maidengarth', situated at the junction of the River Witham and the Snakeholme Drain, to the south-east of Short Ferry.
54217	TF1135 7061	Bardney Abbey – founded pre AD697, with Aethelred of Mercia becoming its abbot in AD705. It was destroyed by the Danish army in 870 and refounded by Gilbert de Gant in 1087. Latter foundation was a Benedictine Priory on the present site, which was dependent on Charroux, but was raised to abbey status in 1115. Dissolved in 1538, with six monks being executed after the Lincolnshire Rising. Excavated in 1909-14, 1933

SMR Code	NGR	Description
		and 1974. Protected as a Scheduled Ancient Monument (SAM 22619).
51148	TF10877069	Possible monastic canal – the lower part of the Bardney Beck to the west of Bardney Abbey is relatively straight and may have been widened to enable navigation to the Witham.
51144	TF 1122 7064	Foundations of a possible monastic barn situated within the outer courtyard of the Bardney Abbey precinct. It was excavated in 1910 and found to be 77.9m long by 7.2m wide, with walls 0.75m thick, and later sub-divisions. An 85m long stable block was also excavated to the north..
51145	TF 1124 7037	Group of fishponds and associated earthworks to the west and south-west of Bardney Abbey.
51143	TF 1126 7071	A circular foundation of a windmill or dovecote, of c. 6.5m diameter, situated within the precinct of Bardney Abbey.
53844	TF 1170 7058	Ridge and furrow earthworks to the east of Bardney Abbey; probably part of associated medieval field system.
53841	TF 1140 7108	Undated cropmarks, including an enclosure and associated linear features, situated to the north of Bardney Abbey.
53839	TF10587051	Undated cropmark enclosure to the west of Bardney Abbey and adjacent to the Old Witham.
53843	TF 1155 7064	Undated enclosure and rabbit warrens running along the eastern edge of the precinct of Bardney Abbey.
52901	TF 0890 7120	Fiskerton Sluice, Short Ferry. Situated one mile upstream of Bardney Lock, this sluice was constructed as part of the scheme to improve the navigation and drainage of the river; the river was raised and embanked between 1812 and 1830 under the supervision of John Rennie. The sluice allowed excess water to be diverted into the old river channel surrounding Branston Island.
53846	TF 1146 7030	Earthwork remains of Second World War searchlight battery situated to the south of Abbey Farm, Bardney.