Archaeology in Lincolnshire and South Humberside, 1983
Compiled by A. B. Page

1983 seems to have been rather a lean year archaeologically, and this is reflected in the notes. One can only hope that 1984 will be better.

Andrew White, Keeper of Archaeology for eight years, left Lincoln to take up the post of Curator of Lancaster Museum. I am sure everyone would wish him success in his new post. His knowledge of Lincolnshire, particularly in the fields of ceramics and ecclesiastical monuments will be greatly missed, but his contributions to archaeology in the county will be a constant reminder of his tenure.

As before, ‘Archaeology in Lincolnshire and South Humberside’ is divided into three parts: a résumé of casual finds, excavation and fieldwork, and short notes, the last including a list of Lincolnshire sites and material published in national journals.

SITES AND FINDS
Two debased Iron Age silver staters were found at Fenton, both of South Ferriby normal types U-W.

A silver coin of Vales was found at Osbournby and may be part of the large hoard found previously in the same area. A scatter of Romano-British pottery was found at Bolingbroke, suggesting a previously unrecorded site, and a copper alloy bell at Skellingthorpe.

An Anglo-Saxon sceatta was found at Nettleham, an iron spearhead at Sutton on Sea, a bronze wrist clasp in Lincoln and a brooch of small long type at Thorpe on the Hill.

The medieval period was represented by a lead pilgrim ampulla from Great Gonerby.

Unassociated skeletons were found at Scopwick and Stow (Bransby).

Information from the following, indicated in the text by superscript numbers, is gratefully acknowledged: 1. Flight Lieutenant Trevaskus; 2. Mr Anyan; 3. Mr Anderson; 4. Mr Pownall; 5. Mrs Patterson; 6. Mr Fairclough; 7. Mr Welly; 8. Mr Sablus; 9. Mr Griffiths; and 10. the Revd M Spurrell.

Abbreviations used in text: 
CCM City and County Museum, Lincoln
LHA Lincolnshire History and Archaeology
VCH Victoria County History

EXCAVATIONS AND FIELDWORK

BAIN VALLEY SURVEY PROJECT
P. Chowne

The Bain Valley Survey Project was established in 1983 as a response to the continuous and expanding threat posed to the archaeology of the area by mineral extraction. Excavations carried out by the North Lincolnshire Archaeological Unit at Tattershall Thorpe in 1979 and 1981 have demonstrated that the survival of organic material suitable for environmental analysis is particularly good in this area. The study of such deposits is of the greatest importance in reconstructing the way in which man has evolved and his effect on the natural environment. ‘Wet’ or formerly wet sites are a finite resource fast disappearing in all parts of the world as a result of land drainage. The Department of the Environment has recognised this fact and is actively pursuing a policy of survey and excavations in the wetlands of East Anglia and the East Midlands. Lowering of the water table by quarrying has accelerated the drying out process in the Tattershall Thorpe area to such an extent that the present survey may be our last opportunity to establish an environmental background to the settlement of the Bain Valley area.

Survey of the entire valley is beyond the reach of the limited finances available to the Unit, so we have designed a sampling strategy for field-walking. This consists of a series of one kilometre wide transects running across the valley in an east-west direction. They are usually five or six kilometres in length with additional areas being walked where mineral extraction is taking place. The area between Ludford and Hemington has been completed; the remainder will be surveyed in 1984/5. It is not possible to present any detailed results at this early stage of the project although some general observations can be made on the distribution of sites in relation to soils and topography.

Mesolithic activity is confined to the valley bottoms usually close to springs. Early Neolithic sites have been discovered at the junction of the clay with flints and the loess soils. The clay with flints was being extensively exploited in the Neolithic and Bronze Age primarily as a source of raw material for the manufacture of tools and weapons. Evidence for later Bronze Age and early Iron Age activity has not been found. However, there is increasing evidence for major late Iron Age centres at Ludford and Horncastle both of which developed into Roman settlements of considerable importance. There is little sign of extensive Roman agriculture in the valley which contrasts markedly with the situation on the chalk to the east. These first impressions may well prove to be incorrect as the survey continues southwards.

THE FENLAND SURVEY (LINCOLNSHIRE) 1982-1983
T. Lane and P. Hayes

Over a period of several thousand years, variations in the climate and in the relative levels of sea and land have interacted to cause a complex series of flooding episodes in the Fenland Basin. Marine and brackish-water inundations have resulted in the deposition of the clays and silts which are characteristic of much of the Lincolnshire fenland, and which continue southwards in an arc around the Wash. In some areas, especially in the southern fenland, but also in parts of the Lincolnshire fens, the rising sea level and the deposition of silts and clays obstructed the natural drainage of water from the uplands. This led to the development of freshwater fens and the formation of peat, particularly on the landward side of the marine silts and clays.

In the past, certain parts of the Fens have been temporarily suitable for settlement, whether through naturally improved conditions or by deliberate flood protection and drainage. Burial of the abandoned settlements by subsequent flood deposits or peat, and the earlier burial of prehistoric remains predating the initial inundation of places close to the fen edge and fen islands, has led to the preservation of archaeo-
logical sites in a waterlogged state. These offer a unique potential, both archaeologically and for the recovery of related environmental evidence. However, the Fens are one of the richest and most intensively cultivated areas of arable land in the country. Deeper ploughing and lowering of the water table by drainage improvement schemes seriously threaten numerous hitherto undamaged sites and monuments. With these threats in mind the field survey was designed in order to assess the archaeological potential, to record settlement patterns and land use, and, by mapping the surface deposits, to produce landscape plans for different archaeological periods.\footnote{1}

The fieldwork is being carried out by the two officers of the South Lincolnshire Archaeological Unit and one each from the respective County organisations in Cambridgeshire and Norfolk. In addition, a palaeoenvironmentalist, based in Cambridge, is working on existing borehole information and recording new sections revealed by the cutting or widening of drainage ditches, in order to establish a stratigraphical framework across the whole of the Fens. A comprehensive programme of radiocarbon dating is being undertaken, using peat samples selected for their stratigraphical importance. While there has previously been considerable environmental work in the southern fens, little is known of the stratigraphical sequence in Lincolnshire and its dating.

In the first season fieldwork in Lincolnshire was undertaken in two areas. One was the parish of Crowland, in the south of the county, and the other was a block of parishes on the western fen edge: Billingborough, Ponton and Sempringham, Gosberton, and Quadring.\footnote{2}

Modern Crowland is sited at the end of a gravel promontory, surrounded on three sides by peaty soils. There is evidence of prehistoric use of the promontory,\footnote{3} though there are few signs of occupation in the Roman period. Settlement does not seem to have re-occurred until the 8th century A.D., with the arrival of Guthlac and the founding of Crowland Abbey. In the Roman period settlement in the parish was concentrated on the high silt land to the east. A number of sites were previously known,\footnote{4} and the Survey added some more, both settlements and salterns, though without altering the pattern which has been established.

The block of parishes on the western fen edge appears at first sight to have a similar landscape structure to Crowland. The fen edge gravel is bordered by silty clays containing a network of extinct creeks (roddons), and finally, on the east or seaward side, there are the higher silt lands. The settlement pattern is, however, strikingly different, particularly in the Roman period. In Crowland the Romano-British sites are confined to the silts and are associated with cropmarks and solnarks which are clearly visible from the air. In contrast, the silts of Gosberton and Quadring reveal from the air scarcely any signs of Romano-British settlement, though some sites were found by field survey. It may be that late or post Roman flooding has deposited silts which mask the cropmarks and partially bury the sites. A second difference between the areas is that the heavier clays, far from being empty as in Crowland, were found to contain very many Romano-British sites on the numerous silted-up creeks or roddons. In these parishes, therefore, there occurred a massive Romano-British expansion of settlement onto the fen. There is only one zone in which no settlement was located. It is immediately east of the fen-edge gravel, is no more than 1.5 km wide, and was peat covered until the 19th-century. Although uninhabited until the modern period, the zone contains a number of briquetage sites which are considered to be salterns of the late Iron Age or Roman period. Positive dating evidence was, however, absent from most of the sites. There is a concentration of late Iron Age and Roman sites along the gravel of the adjacent fen-edge.

The existence of Romano-British sites and the possibility of late Roman flooding were to some extent known from previous work, but the survey showed evidence of a hitherto unknown phase of Saxon occupation of parts of the silt lands of Gosberton and Quadring. Middle Saxon occupation of the highest land, near the existing villages, was known from earlier work,\footnote{5} but the sites recorded during the survey extend westwards away from the villages into the fen, in some cases beyond even the latest of the medieval fen banks.

These Saxon sites remain confined to silt soils, and are characterised by low, artificial mounds marked by dark soil containing numerous animal bones, occasional fragments of larva quern, and small quantities of pottery (mainly Middle Saxon, though a few sherds of possibly Early Saxon pottery were found). The sites appear to be small dispersed settlements, but their exact nature remains to be demonstrated by excavation, and their relationship to the villages on the silt lands is at present unknown.

Work during the 1983-84 field walking season has concentrated on two blocks of parishes on the northern fen edge. One block is centered on Stickford and Stickney, and includes the adjoining parishes in and around West Fen and East Fen. The second, smaller, block of parishes is at the southern end of the Witham valley, from Dogdyke to Pelham's lands.

Notes

2 The survey team wish to record their thanks to the many landowners and farmers who have cooperated with the project.
3 The Spalding Gentlemen’s Society book of cuttings, 153B Crowland, dated July 1813 records, ‘Last week we reported the turning up of a quantity of rude pottery and clipped flints. Since then an urn of light clay pottery has been found containing the ashes and calcined bones of a human being. The situation and arrangement of these materials gave no doubt of their Prehistoric nature’.

ROMANO-BRITISH POTTERY KILNS IN THE TRENT VALLEY

Naomi Field

Three Romano-British pottery kilns were excavated in the Trent valley, north of Lincoln in 1983, one at Green Lane, Lea and two at Newton on Trent. Kilns have already been discovered at Lea, Knaith and Torksey and all appear to have been in operation in the 2nd century. This area of Lincolnshire was ideally suited to pottery production with plentiful sources of clay with a good transportation network along the Trent and associated waterways.

1. Green Lane, Lea (Fig. 1)

The kiln was found after part of an old orchard was ploughed up and was well preserved in the wind-blown sands.\footnote{6} It was approximately 1.50 m. in diameter, 0.60 m. high and had a short flue leading to a large stokehole which was only partially excavated. The oven was lined with clay and still contained a load of greyware pottery some of which was under-fired and quite soft. A number of oblong, clay firebars were found but they were not in situ. A full report on the kiln products is being prepared by John Samuels.

Fieldwalking in the field where the kiln had been dis-
Archeomagnetic dating is based on the two basic facts, that (1) the Earth's magnetic field gradually changes in both direction and intensity, and (2) many archaeological materials, particularly those that have been fired, are able to retain a memory of the geomagnetic field from the time when they were fired (deposited or chemically altered). The measurement of the direction preserved in fired samples can usually be measured within 2-3°, and by collecting several samples, the final errors can be reduced to 1-2°. Observatorv records of the changes of the geomagnetic field in London extend back to 1600 A.D., and show average changes in direction of 0.25° per year so that dating within some five years is theoretically possible. In practice the errors are somewhat larger (reflecting anisotropy, inhomogeneity), but are still of the order of 10-25 years. However, such an accuracy also depends on knowing the direction of the geomagnetic field throughout archaeological times. Such records can only be constructed using archaeological materials of known age in order to construct a British archeomagnetic curve. This curve is now quite well established for some periods, but greater precision is still desirable even for the better known times. This also means that archeomagnetic dates should become increasingly reliable as the data base improves.

The actual process of study involves the sampling of archaeological materials in the field. For directional studies, these are ideally in situ fired materials, such as hearths and kilns—although unoriented materials, such as pottery, can be used for ancient geomagnetic intensity evaluations (but these are generally less precise than directional studies). The samples of fired materials can be very small, less than 1 cm. side cubes, as long as they can be accurately oriented. As all materials lying in the earth's magnetic field gradually acquire new magnetizations, it is necessary to remove these to isolate the magnetic direction acquired at the time that the material was originally fired. This is done by partially demagneti-

sing the samples by either heating them to 100-150 °C. or placing them in alternating magnetic fields of some 10-15 mT. (The actual demagnetization value is usually determined by detailed demagnetisation of a few selected pilot samples.) The mean direction, and associated statistical errors (usually 95% probability) are then calculated. As the earth's magnetic field gradually changes across Britain, the directions are converted to those at a central location, Meriden, and can then be compared with the standard British curve. (This correction could give a further age uncertainty of some 5 years.) It must be emphasised that the British curve is virtually undefined for pre-Roman times, and more precisely dated values are still needed to improve it between late Roman times and c. 1000 A.D. Within the Roman period, there is little change in the direction of the horizontal component (declination), and the vertical component (inclination) changes to become steep and then shallow. There are therefore frequently two age ranges within the Roman period that are consistent with the observed directions, meaning that other information must be used to determine the correct range.

Some deviation was observed between the directions of samples from different areas of the kiln. The wall samples were all well grouped, with a mean declination identical to those from the mouth, although their inclination values statistically differ by at least 4°. However, there is no indication whatsoever of systematic refraction effects in the wall samples or signs of kiln-wall fall-out or fall-in in either group of samples. The floor samples have somewhat more westerly declinations and their inclination is in between those of the walls and mouth. When all sample directions are combined, the direction is well defined (alpha-95 of 2.9°). If the more deviant directions are excluded, then the mean direction only changes slightly and the precision improves to alpha-95 of 2.1°.

The reason for the differences between the wall, mouth and floor locations is not clear. The floor samples appear to be of lowest reliability, with the most deviant directions being close to the walls. This would suggest that the floor samples may have cooled in both the geomagnetic field and that of the walls, although the looseness of the floor samples (mostly heated sands) could also mean that they have been physically disturbed when the kiln was originally partially cleared of pottery or by disturbance during subsequent excavation. However, it is relevant that the discrepancy appears to be predominantly in inclination, while any orientation errors would mean that both declination and inclination would be affected. Similarly, any effects due to the magnetic properties of the walls themselves affecting such orientation would be seen in systematic patterns of directions around the circumference of the kiln—and these are not present. The directions are, in fact, quite well defined and certainly appear to be adequate for dating purposes even though the scatter is somewhat larger than normally encountered in such structures.

Correction to Meriden only slightly changes the directions, reflecting the short distance between the two localities. However, none of the directions falls on the expected position on the archeomagnetic curve. The values from the walls and mouth all correspond to late 5th century directions, while those from the floor would indicate a pre-Roman age. Clearly such results are unsatisfactory. It is considered that the floor samples are the least reliable, as reflected by some highly aberrant directions. However, the late 5th century date is considered to be archeologically highly improbable. An arbitrary allowance of refraction effects, usually stated as 2.3°, has little effect, merely reducing the age to mid or early 5th century. If the kiln was not last fired at this time, then the reason for the observed deviation is not known and
urgent requires further study.3

It is to be hoped that the problem of dating is a purely scientific one since by analogy with excavated pottery the material from this klin should fall within the second half of the 2nd century. Clearly further samples from the other kilns at Green Lane should be taken when the opportunity arises.

2. Newton on Trent

Two Romano-British pottery kilns were discovered during construction of the Newton on Trent by-pass in 1983.4 No evidence of associated workshops or settlement was found along the line of the road.

Fig. 2 Newton on Trent, Kiln I (photo F. N. Field)

Klin I (Fig. 2) consisted of a D-shaped oven, with clay-lined walls 1.40 m. long, 0.85 m. wide and 0.70 m. deep. There was a short flue 0.40 m. long built of clay with a clay-lined floor (the oven floor was not lined) leading to the stokehole. This was not fully excavated due to lack of time. The oven was filled with a load of greyware pottery of a variety of forms and pieces of kiln furniture which were not in situ.

Klin II (Fig. 3) lay just north of Klin I and was probably in use just before it. It was also D-shaped, being 1.30 m. long, 1.10 m. wide and surviving to a height of 0.40 m. The flue was 0.85 m. long and the roof was still intact, which is quite unusual. (Many kilns are only discovered after they have been ploughed almost flat.) The flue led to a stokehole which was cut through by the stokehole of Klin I. The oven walls were again lined with clay and in the floor of the oven were 13 clay pedestals, some square in cross-section and others circular, upon which the pottery would have been stacked. Included with the pottery load in the oven was a large number of clay loom weights. Previously these have been considered to be Iron Age and there is a slight possibility that they were being used as kiln props, but given the large number present and their completeness it suggests that they were part of the load being fired.

The pottery retrieved from both kilns was similar in style to that of the kilns discovered at Lea, Knaith, and Torksey and dated to the second half of the 2nd century A.D. Full analysis is being undertaken by John Samuels.

Notes

1. I should like to thank Mr Kishby, the landowner for his cooperation and enthusiasm and Maggi Solly (CCM) for involving me in the excavation; thanks are also due to Maggi, Gerry Friel and John Samuels who helped to excavate the kilns.
3. Financial assistance was provided by the Ancient Monuments Laboratory.
4. I should like to thank Robin Minnett for his help and for reporting the discovery to me, and all the other people who, at very short notice, helped during the excavations, especially John Samuels and Roy Shanan and the two museum staff who must have washed a few hundredweight of pottery in record time. Full co-operation from the contractors was enjoyed throughout the excavations.

LINCOLN ARCHAEOLOGICAL TRUST REPORT

M. J. Jones

An interim report on the Trust’s excavations at the Castle and at Grantham Street is given in the Eleventh Annual Report, Archaeology in Lincoln 1982-3, together with other notes on work done. For Monks Abbey, see the account by David Stocker below.

Continued work at Grantham Street (see last year’s report, in LHA, 1982, 98) revealed only limited areas of Roman stone buildings on the site—the sheer depth of these made further investigation impossible. At the West Gate of Lincoln Castle, the only Roman material encountered was the voussoirs of the gate-arch which had been uncovered briefly in 1954. The main purpose of the work, however, was a survey of the gate structure, carried out using both photogrammetry and hand-drawing, with selective trenching. This revealed an early Norman foundation, predating the surviving structure which belongs largely to the 12th century. There were further modifications later in the medieval period. (Fig. 4).

In the autumn, a trial trench was excavated at the corner of Hungate and St Martin’s Lane prior to large-scale work
in 1984. Again, deep stratigraphy was encountered, the lowest level reached being a Roman surface at c. 4.5 m. below the modern level. There were also clear traces of Roman, Anglo-Scandinavian, medieval, and later structures. (Fig. 5).

A little further north, a large area of a late Roman house overlying earlier structures was revealed in advance of building work on Spring Hill. This contained at least one room with a mosaic and one heated room. Its eastern end had later been cut away by the western end of the church of St Mary Stanthorpe.

Apart from excavations much effort is being devoted to the preparation of reports, and in 1983 two fascicules on coins were published, as well as a number of shorter papers (see Annual Report for details).

RECENT WORK AT MONKS' ABBEY, LINCOLN (SK 989 713)

David Stocker

In February 1983 the Lincoln Archaeological Trust was asked by the DoE to undertake trial excavations to the south of the ruins known as 'Monks' Abbey' in eastern Lincoln, in advance of the construction of a new 'kick-about' area by the City Council.

History of the site and description of ruins

Little is known of the history of the Priory of St Mary Magdalene to which the surviving buildings known as Monks' Abbey originally belonged. The Priory was a Cell of the great Benedictine Abbey of St Mary in York, which had begun to acquire land in Lincoln soon after the Conquest. The Cell itself seems to have been founded c. 1110-18 and was situated in a large St Mary's estate to the east of the city, consisting of land between the River Witham and the top of the hill to the north. The Cell seems to have had a relatively uneventful career. It was always a minor house manned by two or three monks under a Prior, all of whom were sent from York. By the early 15th century however, it was said that no monks at all had resided there for ten years and that the property was let to laymen, but this was hotly denied by the mother house. There was a close association between the monks serving at the Cell and the neighbouring parish church of St Peter at Wells from the 12th century onwards, and it seems that the Cell itself, or members of it, may have exercised some parochial responsibility on behalf of St Peter's in the mid 15th century. There can be little doubt however, that the Cell was also used by the mother house as a pied à terre from whence it could direct its considerable financial interests in Lincoln city and its commerce. The Cell was dissolved along with St Mary's York in 1539 and passed rapidly into lay hands.

The surviving ruins are in three masses, comprising the remains of two structures. The easternmost consists of two rough rubble walls at approximate right angles to each other, which stand to a maximum of 1.5 m. high. They contain a number of reused architectural fragments including a keel-moulded voussoir section, a chevron-decorated element, a section from a major attached shaft, and a fragment from a window sill. These two walls are unlikely to be medieval in origin, not only because they reuse medieval architectural fragments in their walls, but also because they are sited within the ditch which originally ran along the eastern side of the site (Fig. 6). This ditch, which may have been the eastern boundary of the monastic enclosure, is now completely filled in, although its line can still be traced. The ditch still had water in it in the late 18th century, and was not drained until 1799 or 1800. It is possible that the two surviving walls are the remains of an ornamental cascade which is reported to have been here at that time. The northern part of this ditch was filled in during the last century, the southern part in recent years. If the architectural fragments came from Priory buildings on the site, as seems probable, they provide evidence for an elaborate building of the later 12th century.

The largest of the surviving buildings is the rectangular east-west building which is best explained as the choir of the Priory church. The east wall has an exterior string course which descends uncomfortably in two steps from a high level at the southern end to a much lower one at the northern. This oddity probably refers to a fenestration scheme earlier than that now visible. The present east window sits above this string; it was of three lights and has the remains of simple Perpendicular tracery in its head. The north and south walls also have Perpendicular windows of two lights (two
in the south wall which break the earlier line of the mid-wall string course, and one in the north wall which sits above it. The south wall also has a third opening at a level lower than the two tracery windows. This is now rectangular in shape but the head is of relatively modern date and may not reflect its original appearance—the upper part of the south wall has been rebuilt at this point. The western end of the north wall has been entirely rebuilt, but at the western end of the southern wall a respond and part of an arch survive, indicating a widening of the building at this point with an interior space to the south. This must belong either to a south transept or to the eastern end of a south aisle; for reasons given below, the former is perhaps more likely. The evidence for the eastern wall of such a building is visible as modern stitching in the south wall just to the east of the respond. The respond itself is of a single half-shaft with a broad frontal fillet. The base is buried, the capital (which was of a simple moulded type and may have carried a ‘dog-tooth’ motif) is now very badly weathered, and the arch itself is only represented by a few stones from its hoodmould which have lost any moulding they may have carried. These details are enough, however, to suggest a date in the early or mid 13th century for the arch.

To the west of the south wall of the choir, and at a slight angle to it, is another stretch of wall which has been greatly altered and is difficult to interpret without excavation. It has clearly been at least partially rebuilt during the post-dissolution period, but it does retain a blocked doorway with a segmental head which had been greatly altered prior to its blocking. To the east of this doorway is the western jamb of a large window of Perpendicular type which was said to be of five lights in 1906. At that date traces of a wall running north-south to the west of this standing fragment were also visible and may have marked the western limit of the church.

This block of masonry may represent the south wall of an aisleless nave. If it does, there can have been no formal cloister to the south (at least during the later period) as such a cloister would obscure the large Perpendicular window. Such an interpretation would imply that the building to the south-west of the chancel was a transept and not an aisle.

Bringing all this information together, it seems likely that the earliest known buildings on the site were of the late 12th century. It is probable that the eastern part of the conventual church was built (or more probably rebuilt) in the early or mid 13th century. This new building may have had a south transept and an aisleless nave. The church was renovated in the late 14th or 15th century and provided with new windows.

There is no evidence for a cloister to the south of the church, and indeed, this institution was so small in monastic terms that we should not automatically predict a conventional cloister layout. It was hoped that the recent archaeological activity to the south of the ruins would provide information on this point.

Method of investigation
Because the primary task of the excavation was to provide information to assist the siting of the new 'kick-about' area, and because the time available to do this was so short, a sequence of twelve metre-square holes was dug to a depth of between c. 0.5 m. and 1 m. at critical points to ascertain where the required construction trenches would cause least archaeological damage. This information was duly presented to the authorities and the 'kick-about' area was placed in the position marked on Fig. 7. The trenches required for its boundary walls were also observed as was the levelling process in the northern part of the designated area. Archaeological operations were hampered only by the very limited time available for work (totaling less than one week). The complete site archive may be consulted at the CCM.

Summary of excavated evidence
With reference to Fig. 7 holes nos. 1, 2, 5, 6, 7, 8, and 10 all encountered similar deposits consisting of quantities of broken brick, mortar, window glass, and other building debris suspended in a sandy matrix. These deposits contained occasional modern artefacts. Towards the south-west corner of the area investigated this material was overlain by deep dumps of clean topsoil (hole 3).

Holes 4, 9, 11, and 12 were the only ones to encounter archaeological deposits at these depths. Here, the tops of mortared limestone features were discovered, at a level close to the surface (indeed they were at the surface where the overlying turf had been worn thin by its position within the goalmouth of an informal football pitch). Associated with these features were deposits of tumbled limestone rubble containing mortar lumps and fragments of handmade tile. Due to pressure of time these features were only excavated to the depth of the intended foundations (max. 0.5 m.), and therefore no useful stratigraphic relationships or dating materials were recovered.
Interpretation of excavation results

Limited though they were, these excavations demonstrated that much of the central and western part of the plateau to the south of the ruins is of modern creation. It probably dates (at least in part) from the demolition of war-time buildings constructed in the vicinity between 1939 and 1945. Because of the limited depth of these excavations it was not possible to say whether or not these dumps overlie medieval deposits, but the relationship between them and the presumed medieval features on the eastern side of the plateau suggests that many medieval features in this central and western area have been dug away and replaced by modern dumps. This is regrettable as these modern disturbances may have destroyed the evidence which would suggest whether or not there was a formal cloister to the south of the church.

Archaeological deposits only survive above 1 m. depth on the eastern fringe of this plateau. The small area of archaeology investigated in holes 4, 11, and 12 and observed in area A provided the evidence for two walls or wall foundations; the larger of the two ran east-west, the smaller running north-south. Although proper analysis was not feasible it appeared that both structures were of the same build. These two features presumably represent a medieval building associated with the Priory, although no good dating evidence was recovered to confirm this supposition. Associated deposits of rubble etc. are best interpreted as demolition debris from this building.

Unfortunately these results do not assist greatly in our interpretation of the layout of the site. The building(s) indicated could belong either to an eastern extension of the east range of a conventional cloister or to an independent dwelling house which filled the same role. It is clear, however, that much larger-scale excavation is required to understand the fragments of this monastery; small-scale operations of this sort can only provide pointers for future work.

Notes
1 Sir Francis Hill, Medieval Lincoln, 1948, p. 338.
2 ibid.
4 Hill, op. cit., p. 359.
5 ibid., p. 134.
6 ibid., p. 287.
9 ibid.
10 ibid.

TOP BUILDINGS 'LONG BARROW', Normanby-le-Wold
Patricia Phillips

In September 1983 a four-year programme of survey and small-scale excavation was commenced on the Lincolnshire Wolds to the north of Market Rasen by the Department of Prehistory and Archaeology, Sheffield University. Part of the programme involves excavating small sections of the flanking ditches of scheduled long barrows to obtain environmental and dating information. These ditch silts and their contents will later be compared with those from the ditched oval features photographed from the air by Mr Paul Everson (LHA 15, 1980, 80). The first site to be sampled was Top Buildings long barrow, Normanby-le-Wold, situated on a plateau in the highest part of the Wolds, about 162 metres OD. The Top Buildings mound lies today in a sheep pasture.1

The mound is most clearly defined in the middle, where an enclosure (marked on the 1:2500 O.S. map but no longer in place) had presumably helped to preserve it; at either end, however, the ground is hummocky and uneven. The dimensions of the mound are approximately 65 m. long by 20 m. wide by 4 m. high. Department of the Environment permission was obtained for a three-metre long trench across one of the flanking ditches, and geophysical survey was undertaken under the direction of Mr A. Aspinall, University of Bradford, to pinpoint the edges of the ditch. The survey was not successful: the fluxgate gradiometer was rendered unusable by the proximity of a radio mast, and the resistivity survey, while indicating the mound as an area of low resistance, did not pick up any sign of a flanking ditch. Since the geophysical work followed a long hot summer, however, it was assumed that dry conditions were preventing the detection of the ditch. The ditch was presumed to be located between 11 and 20 metres from the axis of the mound, and a one-metre wide trench was accordingly excavated at right angles from the mound.

In the event the geophysical results were proved correct, as no ditch was found, despite extending the trench to 22 metres from the axis, and widening it to 3 metres in the centre. The base of the trench, at a depth varying from 40 to 65 cm. below ground level, was a mass of periglacial chalk festoons, which were identified by Dr Nic Ralph.

After removal of the turf, the approximately 17 cm. thick chalk pasture soil was excavated by spade, all of it being sieved through a 3 mm mesh. It contained numerous fragments of chalk and Wolds flint but no artifacts. The upper part of the underlying brown calcareous soil contained chalk chunks, and two relatively dense bands of these chunks were initially treated as features. However, they proved to be simply localized single level scatterings, possibly related to the enclosure mentioned above. The brown calcareous soil continued down into the chalk festoons.

Although sieving of the brown calcareous soil continued throughout the excavation, pressure of time and complete lack of finds led to a couple of buckets per metre square by the end of the excavation. Only seven pieces of apparently struck flint were encountered during excavation, all on matt Wolds flint (5 unretouched flakes, a possible burin, and a partially retouched large flake).

The absence of a ditch flanking the mound, as well as the scarcity of prehistoric material, makes it unlikely that the Top Buildings mound is a long barrow. This is surprising given its general appearance, and in view of the fact that excavations in 1970 at Otby Top, Walesby, two fields to the south, at a possibly ploughed out long barrow, produced Grimston ware, a flint industry, and human and animal bone (LHA 6, 1971, 6). The 1983 excavations at Top Buildings indicate that caution should be exercised about accepting unexcavated structures as prehistoric in date, and suggest that geophysical survey and small-scale excavation can provide useful tests of their status.

Note
1. The landowner, Mr J. Brant, kindly gave permission for the excavations to take place, as well as permitting systematic field survey on several of his fields.

STOW CHURCH
Naomi Field

Excavations took place on the north side of the nave at Stow church in advance of building work to extend the Victorian vestry to provide a meeting room and kitchen for the church.1 The area under investigation lay immediately west of a Saxon doorway in the west wall of the North transept which has been interpreted in the past as leading, at one time, to a porticus (enclosed aisle). It was hoped that further evidence of the Saxon fabric of the church might be revealed
to answer this and other problems.

Substantial remains of wall foundations were revealed just below the topsoil which were much disturbed by later burials including one marked with a late 13th-century cross slab (now in the church). The walls were of coursed limestone rubble with a rough facing; the lower courses were bonded throughout with sand and the upper levels with mortar (Fig. 8). Any associated floor levels had been completely destroyed by later burials. North, west and south walls were located, forming a rectangular structure with internal dimensions 2.20m wide and 9.20m long, probably representing a porticus attached to a pre-Conquest nave. The nave wall underlay the present, Norman, nave but was considerably shorter in length. No internal cross walls were found in the porticus. It was not possible to confirm the observation of the Revd. G. Atkinson who stated that in 1844 foundations of an early nave wall were found 'evidently coeval with the present transepts inasmuch as they bond into one another'. This is because of disturbance at the presumed juncture with Victorian bollard holes for a boiler house and the stair turret which was moved from inside the nave to its present position in 1863.

Fig. 8 Stow Church: foundation of porticus, looking west (photo F. N. Field)

The late Saxon foundations cut through 17 burials, evidently belonging to an earlier church. A substantial spread of burnt daub and charcoal were also found which may have come from a timber building beyond the limits of the excavation. Beneath the burnt levels and also cut by the porticus foundations was part of a limestone rubble path which contained many fragments of re-used Roman tile. A burial lay sealed beneath this path suggesting that even at this early date the site was ecclesiastical.

These small-scale excavations have brought to light a considerable amount of new evidence for the late Saxon stone church whose only standing remains are the two transepts and the lower part of the crossing. It now appears that there was a shorter nave underlaying the Norman nave which was contemporary with a porticus on its north side. It may be that the door in the north transept gave access to this porticus but there is no conclusive evidence as to whether the transepts are contemporary with or later than the newly discovered porticus because of disturbance by Victorian building activity. In future years it may be possible to investigate the area south of the nave to find out whether there was a south porticus.

A photogrammetric survey of the north wall of the nave and the two transepts was carried out by the Institute of Advanced Architectural Studies on behalf of the Royal Commission on Historical Monuments and the North Lincolnshire Archaeological Unit. These drawings will be annotated with geological and constitutional details. A Stow Research Group has been established in order to promote the study of the fabric and history of the church.

Notes
1 I should like to thank the Revd. M. Spurrell and members of the PCC who gave permission for the excavations to take place and who also gave much practical support to the diggers during the course of the work.
2 Atkinson G., Notes Historical and Architectural on Stow Church, (1846).

WINTERTON ROMAN VILLA, S. HUMBERSIDE
R. Goodburn

Four areas comprising a further 0.47 acre (0.19 ha) were excavated. These included a major area of 0.37 acre (0.15 ha) immediately N of that examined in 1982, c. 300-500 ft. (90-150 m) SW of the main courtyard. Nearest the house in this area, the plans of a number of the smaller fenced and ditched enclosures were completed. A fence running S to N across it from the 1982 site is probably part of the W side of a two-acre (0.5 ha) paddock whose E side was found close to the W side of corridor Building G (see below). There were a few pits and an oven in this area. To the W of the smaller enclosures was an area of very complex intersections of a succession of larger ditches. From the nodal area, some ditches ran to S (linking with those found in 1982), some to E (linking with those found in 1982 and 1974) and some to the N, an area known only from aerial photography; attempts to locate particular junctions of known ditch-lines in this zone, like the trial-trenches of 1982, succeeded only in exposing further ditch-complexes whose individual members were not identifiable. Although no metalled tracks were found, butt-ended ditches and post-pits (one with post-base preserved) enabled traffic routes to be identified. This area lies in a situation similar to that of the western part of the 1982 site and a similar sequence of events was identified: a series of enclosures and evidence for ploughing in the earlier Roman period; later on, damper conditions prevailed and eventually inundation of the lowest-lying parts ensued and silt was deposited. Then a drying-out took place and pastoral use of the land could take place. Some of the numerous ditches were apparently dug in an attempt to provide drainage, but seem largely to have been unsuccessful. This major area complemented and clarified work carried out in 1970, ' 1971, ' 1974, as well as that of 1982, and emphasised yet again the absolute necessity for excavation on a large scale in order to yield coherent results which may be reliably interpreted.

Due S of the main villa courtyard, two areas filled in gaps in the work of 1976 and 1981. The area lies at the junction of a fairly impenetrable spread of tufa below the escarpment with sand subsoil still further W. Some of the ditch system seems to have been draining water from one or more natural water-courses. A later feature was a roughly sub-rectangular palisade apparently of two phases (previously partially examined in 1973 and 1981) and now seem to measure c. 72 by 89 ft. (27 x 22 m); no clear trace of internal building was seen. Excavation of the rest of the small timber building post-dating the palisade was carried out. Posts of possible gates between fields to the S and Building B to the N were inserted in filled-in ditches (a large number of enclosure-ditches and slots were also present in the area). In the area S of aisled Building B there were ditched enclosures at an early date (pre-dating the building). But later on, walled yards were built. Parts of these were located in 1968, ' 1973 and 1981; this season it was discovered that at least two adjacent walled-yards existed S of Building B. The very badly preserved N-S wall dividing them lay over the line of a rubble-filled ditch. There were walled areas

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associated with these.

A small series of trenches immediately W of Building G showed that the E side of the c. 2-acre fenced enclosure (mentioned above) ran from airded Building P to the rear of Building G and terminated at airded Building M. It predated the metallated area or track along the W side of Building G. Traces of slots, both linear and curvilinear (the latter perhaps of I.A. huts), metal-working activities and wall debris here could only be briefly noted.

Notes
2 Britannia 13 (1982), 351; JHA, 1982, 75.
3 Britannia 6 (1975), 245-6, DoE, Arch. Excavs. 1974 (1975), 11.
5 ibid. 3 (1972), 315; AE 1971, 20-1.

SHORT NOTES

A SHERD OF ROMANO-BRITISH LEAD-GLAZED WARE FROM HOLBEACH ST JOHNS

David Gurney, Norfolk Archaeological Unit

This sherd of green lead-glazed ware (Fig. 9) comes from the Romano-British site at Shell or Laming's Bridge, Holbeach St Johns, centred on TF 342 162. It was found by Ernest Greenfield of the Ministry of Works in 1961, when he arrived on the site to continue excavations started in 1960 by the Boston Archaeological Group. The sherd was found under a spoil heap, and was kept with the finds from the Ministry excavations where it recently came to light. In the site notebook the sherd is listed as being of medieval date.

![Fig. 9 Sherd of Romano-British lead-glazed ware from Holbeach St Johns](image)

The excavations revealed an industrial area dating to the late 1st century AD, most probably associated with salt-production. An extensive ditch system in the area appears to be of 3rd-century date.

Description

The sherd is in a fairly fine hard fabric with sparse quartz and mica inclusions, grey in colour (10YR 6/1) with a partly-oxidised reddish-brown outer core. The overall glaze is medium-green in colour with some brownish patches. The form of the vessel is a rather squat imitation of samian form 30, and the whole of the vessel appears to have been glazed. On the external surface there is underglaze decoration of near-vertical white barbotine lines, and where the glaze covers these it appears yellow in colour.

Discussion

The lead-glazed wares of Roman Britain are comprehensively catalogued by Arthur, whose South-East English Group appears to have been produced in the vicinity of Staines, Surrey, where second and wasters have been recorded. This Group appears to date to the late 1st and early 2nd century AD, and includes at least seventeen vessels imitating samian form 30, and where similar decoration to that on the Holbeach sherd appears frequently on this and other forms.

The Holbeach sherd is almost certainly a product of the Staines area, and is one of the furthest outliers of the South-East English Group. The distribution of the Group is primarily along the lower Thames Valley, with three finds on the north-west along the line of Watling Street at Bradwell (Bucks), Whitchurch (Salop) and Chester.

The occurrence of this ware in Lincolnshire is hitherto unrecorded, but it is possible that lead-glazed sherds from the Staines area and other possible production areas have not been recognised.

Notes
2 Directed by Mr P. Mayes and Mr J. C. Mossop.
3 Bag 115, finds no. H30 330, grid square 1.
4 Unpublished interim report by Ernest Greenfield.
6 ibid., p. 298.
7 The sherd has been examined by Mr Kevin Crouch of the Staines Archaeological Unit who has confirmed this identification.
8 Arthur, op. cit. p. 298 and fig. 8.1.

A LATE-MEDIEVAL POTTERY GROUP FROM HUMBERSTON ABBEY, S. HUMBERSIDE

Colin Hayfield

Amongst the medieval pottery recovered from Humberston Abbey there was a number of complete and semi-complete vessels from the rere dorser drain which formed part of a single, late-medieval, group dating to the second quarter of the 16th century.

The Abbey of St Mary and St Peter at Humberston was a Tironian house subsumed by the Benedictine order and is thought to have been founded in the 12th century during the reign of Henry II (Knowles & Haddock, 1953, 68). In 1305 the monastic buildings were destroyed by fire and the monks had to beg alms in order to rebuild. Humberston Abbey was always a small church and could never boast more than fifteen monks; this number had dwindled to ten by the 15th century and to only four and a lay brother at the time of the dissolution. The last abbot, Robert Coningsbye, signed the Act of Supremacy in 1534 and the Abbey was dissolved in 1536 (VCH Lincs. II, 1906, 133-4).

Excavations were conducted on the Abbey site between 1965 and 1970 and a private publication was produced (Kirkby & Talby, 1974). All the known artifacts are currently stored at Humberston Library. The surviving pottery assemblage appears to be overwhelmingly biased towards rims, handles and other featured or decorated pieces suggesting that the plain body sherds have been discarded. In addition, most of the material is unprovenanced so there can be little detailed analysis of the site. One notable exception to this is a number of vessels that are attributed to the rere dorser drain and several of these pots feature in the original publication. The fill of the drain comprised a finely-grained soil which contained a wide range of other finds including ceramic ridge tiles, stained glass, moulded stonework, knives and a variety of bronze and lead objects
(Kirkby & Tailby, 1974, 4-5 and Figs. 23-4), it seems possible that this material represents an archaeologically discrete group. Only the pottery labelled as coming from the rere dorser drain is considered here. Whilst the material comprises only complete and near complete vessels it is hoped that it may be fairly representative of the original assemblage.

The rere dorser drain was likely to have remained open throughout the lifespan of the Abbey, but all the pottery examined was of late-medieval date, and had probably accumulated during the period immediately before the dissolution of the Abbey in 1536.

The Pottery (Figs. 10 and 11)
The group comprises two separate fabric types, Humberwares and Toynton-Bolingbroke fabrics.

The Humberwares are very hard, sand-tempered fabrics of rough texture whose oxidised surfaces range from orange to red, with slightly paler cores. Reduction was common both in vessel cores and on inner surfaces. Of the illustrated examples, all are fully oxidised except No. 2 which has a reduced core and inner surface. The suspension glazes on Nos. 1-3 are olive-green and on Nos. 4-5 a brownish-green. The handle of jug No. 3 is plugged at its upper attachment and indented at its lower, a constructional technique that characterises medium and large Humberware jugs (Hayfield, 1980, 33). Humberwares predominated in the East Riding of Yorkshire although they were also produced and marketed across North Lincolnshire.

Like the Humberware, the Lincolnshire based Toynton-Bolingbroke fabrics are also fired very hard, but slightly more heavily sand-tempered. Their pale orange and buff-brown surface and fabric colours are usually slightly paler than those of the Humberwares. Nos. 6-8 have reduced, blue-grey cores whilst Nos. 9-10 also have reduced inner surfaces. There was more variation in glaze colour than the Humberwares; that of No. 6 is an orange-brown, No. 7 a greenish-orange, No. 8 a purple to yellow-brown and Nos. 10-11 an olive-green. No. 9 is unglazed. All these glazes have a slightly pockmarked surface appearance which contrasts with the more even and consistent glazes of the Humberwares. The upper handle attachments of Nos. 7 and 11 are plugged.

Discussion
The group contains two urinals (Nos. 5 and 8) but, in addition, jugs 1, 3 and 9 have thick white salts on their inner surfaces suggesting that they were similarly used. A charred deposit on the outer surface of jug No. 1 extends over the broken off lower handle scar indicating that after being damaged it continued to be used, albeit as a urinal.

This is the largest group of substantially complete late-medieval vessels to be recovered from North Lincolnshire (Hayfield, 1983). The probability that they form part of a closely dated group adds to their importance, enabling their comparison with other “dissolution” groups from Lincolnshire, notably those from Thornholme Priory and Burnham (ibid. 229-232 and 237-238).

Acknowledgements
I would like to thank the staff of Humberston Library for allowing me access to the pottery from Humberston Abbey.

References
Hayfield 1980 C. Hayfield 'Techniques of Pottery Manufacture in East Yorkshire and North Lincolnshire' Medieval Ceramics, 4, 29-43
Fig. 11 Humberston Abbey. Toynon-Bolingbroke wares from the rear dorser drain. Scale ¼. (C. Hayfield).
TWO EARLY CLAY TOBACCO PIPES FROM SIBSEY

James Dear

In 1983 the Boston and District Archaeological Society began a long term survey project of Sibsey parish. The island on which the village of Sibsey is sited is composed of boulder clay surrounded by marine silts. Surface evidence for activity from the Neolithic has been found on the island whilst the higher silts in the southern part of the parish were extensively settled in Romano-British times and in the later Medieval period. This paper is concerned with clay tobacco pipes manufactured at the time of the massive fen drainage works of the mid 17th century.

Fig. 12 Clay pipes from Sibsey (actual size, imperial scale)

Stem and bowl fragments dating to the 19th and 20th century are commonly found on fields in the fen. 18th-century examples have been recorded from the area of modern settlement on the highest part of the island. Clay pipes of the 17th century are rare and are found in the fenland villages of south-east Lincolnshire. This is partly a reflection of the extent of drainage at that time; also the problems of transport; the absence of early local pipemakers; and the cost of tobacco. The discovery of two early 17th-century pipes together with numerous 17th- and 18th-century pottery sherds is of considerable importance.

The size and shape of the complete bowl (Fig. 12.1) indicates manufacture between 1620 and 1640. The style is typical of the early London pipemakers. The manufacture was confined to London until c. 1640 owing to tobacco taxes and monopolies. The two marks (Figs. 12.2 x 3) Tudor Rose and Wheel are normally only found on the earliest English clay pipes. After 1640 the manufacturing industry spreads throughout the country reaching Gainsborough by 1645, Hull (1644), York (1646), Lincoln (1662) and Boston by 1676. There seems little doubt that the two pipes from Sibsey were manufactured in London. Pipes of this early date bearing similar marks in relief on the base of the 'foots' have been recorded from Coventry, Hull, Stamford, York, Sussex and Wiltshire. A number of similar pipes have been recorded from a pottery kiln site at Boston (White, 1979, 179) probably as part of the regular sea trade with London.

Reference


LINCOLNSHIRE SITES AND MATERIAL PUBLISHED IN NATIONAL JOURNALS 1980-1982

Pauline Grisaffi

References to archaeological work in Lincolnshire from seven of the national journals are listed below for the years 1980-1982. Not all the volumes for 1983 were published when this list was compiled so will be included at a future date. For the years 1975-79 readers are referred to the article by T. M. Ambrose (LHA, 16, 1981, 83-4).

Antiquaries Journal

60 (1980) No references.

61 (1981)


Archaeological Journal

137 (1980) No references.

138 (1981)


139 (1982)


Journal of the British Archaeological Association


Proceedings of the Prehistoric Society

46 (1980)


48 (1982)


Britannia

11 (1980)


M Todd, review of Excavations at Winterton Roman Villa and other Roman Sites in North Lincolnshire, by I. M. Stead, p. 448.
12 (1981)
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M. G. Fulford, review of The Defences of the Upper Roman Enclosure. The Archaeology of Lincoln, VII/1, by M. J. Jones, pp. 436-7.

Medieval Archaeology
24 (1980)
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