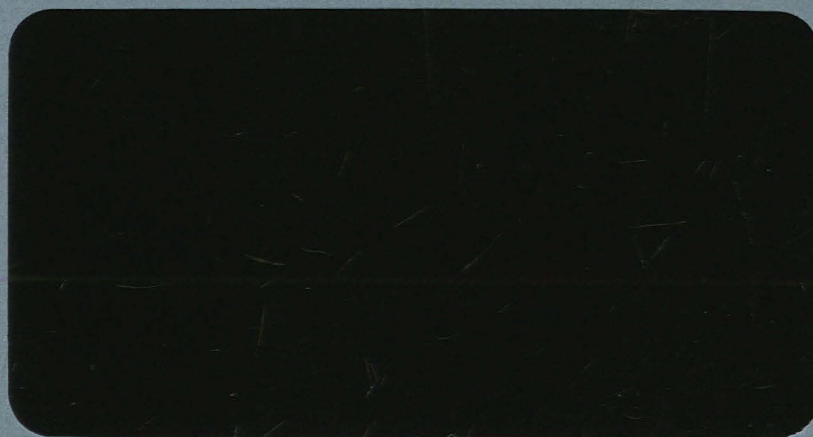


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**ARCHAEOLOGICAL WATCHING BRIEF REPORT
BOSTON GRAMMAR SCHOOL**

Site Code: BGS97
LCNCC Acc No. 102.96
NGR TF 33014374
Planning Ref. BO5/0243/96

Report prepared for Boston Grammar School by
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February 1998

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Summary

- * *On behalf of Boston Grammar School, Pre-Construct Archaeology (Lincoln) undertook an archaeological watching brief during the groundworks for a new music and arts block on the south-east side of an existing school range. These works followed an evaluation of site potential in 1996, which exposed an in-situ Romano-British industrial horizon, truncated by burials and other features associated with the Franciscan friary, which is known to extend over parts of the site.*
- * *The archaeological programme has resulted in the exposure of ten human skeletons, various earth-cut features, and a surface of medieval date. Late post-medieval building footings were also exposed, as were the remains of a Second World War Anderson shelter. An assessment of the human remains (documented in this report) constitutes the first detailed analysis of a section of the Franciscan friary cemetery population.*



Fig. 1 General site location at scale 1:10,000
(OS copyright reference AL 51521 A0001)

1.0 Introduction

In the spring and summer of 1997 an archaeological watching brief was undertaken during the construction of a new music and arts block within the grounds of Boston Grammar School. The site lies within the cemetery area of the Franciscan friary.

Pre Construct Archaeology (Lincoln) were commissioned by Meldrum Lee and Gillatt (on behalf of the Grammar School) to carry out a programme of archaeological observation and recording on all groundworks. These works followed an evaluation of the site in 1996 (Palmer-Brown 1996).

Copies of this report, which details the results of the watching brief, will be deposited with the clients, the County Sites and Monuments Record, the Community Archaeologist for Boston Borough Council, and the City and county Museum, Lincoln. A summary account will be submitted to the editor of the county journal *Lincolnshire History and Archaeology*.

An ordered archive of both paper and object elements is in preparation and will be deposited at the City and County Museum, Lincoln within six months of project completion: thereby satisfying all aspects of the project brief.

The watching brief was undertaken by the writer, C.P.H Palmer-Brown and M.Ridsdale.

2.0 Location and description

Boston is approximately 45km south-east of Lincoln in the fens of south Lincolnshire. The Grammar School is on the south side of the town and lies between the River Witham and the Maud Foster Drain on land approximately 4.0m O.D. Access is via Greyfriars Lane and Rowley Road.

The development site, a rectangular unit of approximately 400m², is situated on the south-east side of an existing building range. It was, until recently, covered with grass vegetation and the remains of footings for temporary classrooms. The ground is predominantly level although, approximately 9m east of the new building, there is a sudden fall-off of between 0.5 and 0.75m, down to the school playing field. The elevated area was, in the early part of the present century, a croquet lawn.

In this part of the Fens, drift deposits underlie marine alluvial clays. These deposits are common to the fen basin and have accumulated sporadically since the retreat of the last ice sheets, approximately 10,000 years ago (Lane 1993). There have been successive phases of marine transgression and regression following an initial rise in sea level after the last glaciation, but the timing of events and the extent to which these events were expressed is a matter of debate and continued investigation. There is, for example, a growing body of evidence which suggests that, following a relatively wet phase in the early post-Roman period, there was considerably less surface water present during Late Saxon times, as suggested by the appearance of permanent agricultural

settlements such as that recently excavated at Whitehouse Lane, Fishtoft (Palmer-Brown 1997).

3.0 Requirement and methodology

In 1990, the Department of the Environment issued *Planning Policy Guidance Note 16, Archaeology and Planning* which, for the first time, made the effects of development on archaeological resources a 'material consideration' within the planning process. This document lays emphasis on preservation *in situ* but where this is not possible requires archaeological deposits to be 'preserved by record'. This principle has been embraced within the Boston Local Development Plan (LDP Draft 1993).

The Community Archaeologist (acting on behalf of the Borough Council) issued a project brief requiring that an archaeological scheme of works should be undertaken during development. The level of recording deemed appropriate on this occasion was an archaeological watching brief. This has been defined as follows:

'a programme of observation and investigation conducted during the destruction of archaeological deposits, resulting in the preparation of a report and ordered archive' (Institute of Field Archaeologists, 1994 'Standard Guidance for Archaeological Watching Briefs').

Archaeological monitoring comprised the following elements:

- (i) Collection of unstratified artefacts
- (ii) Observation of topsoil stripping and the inspection of subsoil for archaeological features prior to levelling with limestone hardcore. (In reality, discrete topsoil stripping was not feasible due to the nature of the underlying silts)
- (iii) Observation during foundation and service trenching, followed by inspection of section and plan surfaces for archaeological features/deposits.
- (iv) Recording of archaeological features and limited excavation to determine, where possible, the date, nature and extent of deposits.

Recording was undertaken using Watching Brief Record Sheets, supplemented with scale drawings (usually at 1:20) where possible, and a comprehensive photographic archive. Observation points were plotted on 1:100 location plans and overlays which were provided by the clients.

Artefactual remains from the site were washed and processed, and were submitted for specialist identification and appraisal. An archive of the pottery was prepared by J Young, and a human bone report was prepared by N Dodwell.

Prior to the start of fieldwork, the County Sites and Monuments Record (SMR) was consulted.

3.1 Archaeology in Boston and the Local Development Plan (LDP)

Boston Borough Council acknowledges the significance of archaeological remains and has included within its LDP (Draft 1993) conditions regarding the protection or otherwise of buried deposits in association with the granting of planning permission (Sections C 11-13). The LDP states:

"One important factor to be taken into consideration in evaluating development proposals is the impact on archaeological deposits".

The Borough also recognises that, in cases where a site "contains archaeological deposits of particular importance, it will normally be expected that those deposits should remain undisturbed by development"....."However where the development proposal is clearly of greater value to the community than the preservation of archaeological remains, or where minor proposals will involve minimal damage, planning permission may be granted. When planning permission is granted it may be necessary to safeguard the archaeological interest".

The Boston LDP mirrors advice contained in the Department of the Environment document, *Planning Policy Guidance: Archaeology and Planning (PPG16)*. This identifies the need for early consultation in the planning process to determine the impact of construction schemes upon buried archaeological deposits.

4.0 Archaeological and historic background

Relatively few finds of prehistoric date have been recovered from the area of modern Boston, although Holocene deposits of alluvium and silt have, in many areas, masked archaeological horizons and settlements which developed during dry phases. For the Roman period, the archaeological record is similarly sparse, although occasionally artefactual remains are dragged to the surface during deep excavations and, in some areas (eg Fishtoft), settlement remains are found closer to the surface; where sub-surface islands or elevations lie beneath late glacial and subsequent deposits. In connection with the current investigation, Romano-British deposits were recorded during an evaluation in 1996 (Palmer-Brown 1996), and Roman coins were found close to Hussy Tower in 1936, approximately 110m south of the development. Excavations by D Meeds close to the tower also recovered sherds of greyware pottery.

Until recently, there was little direct evidence of human occupation in the Boston area between the end of the Roman period (c. AD500) and the commencement of

settlement in the Anglo-Scandinavian period (late ninth/early tenth century). However, in 1995, two eighth century sunken featured buildings (*Grubenhauser*) were discovered at St Nicholas School, approximately 700m east of the present site. These features were situated on the edge of a roddon (a filled in creek standing proud of the surrounding landscape) which may have offered protection in an environment which was otherwise hostile to agricultural communities (Palmer-Brown 1996).

In the medieval period, Boston developed as a commercial port, possibly with the siting of the Domesday port of Drayton to the south of Boston. The date of its foundation is uncertain but (as Owen notes) it must always have been an attractive natural access for exporters based at important economic centres such as Lincoln. Equally, the Witham outfall may have been just as attractive to foreign traders, eager to seek-out new markets (Owen 1984).

By the thirteenth century (to many, the 'golden age' of Boston), the port was second in importance only to London: in the decade 1279 - 89, for example, the town paid customs duties one third more than those of London (Pevsner and Harris 1988, 153).

Following the Norman Conquest, economic growth was stimulated by the introduction of organised trade fairs in the fees of Skirbeck and Wyberton under the direction of Alan Rufus, the Earl of Richmond - in France, these markets were well-established but, for Boston, this was a new phenomenon.

Boston Grammar School itself dates from 1567: the oldest surviving structure is of red brick, a symmetrical building with a middle-bay window. Additions to the north and south took place in 1850 and 1856 and there have been further, less inspiring, alterations in the present century (Pevsner and Harris 1988, 168). During the construction of school buildings, and during road works in Rowley Road, bodies and lead coffins were exposed but were not excavated under controlled conditions. These finds relate to the Franciscan friary, aspects of which may underlie parts of the present school complex.

Like all prosperous medieval towns, Boston attracted the settlement of friars: the proximity of the Greyfriars or Franciscans is indicated by Greyfriars Lane, which provides access to Boston Grammar School from South End. The date of the foundation of the friary is uncertain, though the house was built before 1268, when one Luke de Batenturt complained that the wine and other goods which he had deposited in the church had been removed (Victoria County History 2, 215). In 1300 there were approximately thirty friars; 35 in 1328 when Edward III gave a mere 11s 4d to them. In 1322 William and Robert de Masham gave the house a messuage and half an acre of land for the enlargement of their dwelling-place, and additional grants of land were received from John le Pytehede in 1348. The friary was in the custody of the monastery at York.

Following the Dissolution of the monasteries under Henry VIII, the friary site was purchased by the town in 1545: the purchase was subject to the keeping in repair 40 ft of the sea-Dyke, and 20 ft on 'le frontage' (*ibid.*). The house appears to have survived little more than one hundred years because in 1652 it was demolished (Boston Corporation Records). It is not surprising therefore to find that the friary is not

depicted on the earliest detailed map of Boston; that of 1741 by Robert Hall. Isolated buildings are shown to the north of the Grammar School which may have been the remains of (or outbuildings to) the friary: it is clear that, prior to 1741, the site of the monument was still known as lands belonging to it were sold to Richard Fydell in 1766 (Boston Corporation Records).

In 1972, three archaeological trial trenches were excavated by A. Musty (Musty 1972) on a site thought to have been formerly occupied by the friary (and is now bisected by the John Adams Way). The excavations were carried out to locate the friary and assess the impact of the new relief road on the archaeology. In the most easterly of the trenches, a north-south stone wall was exposed but, beyond cleaning and probing to test the extent of the foundations, the structure, which was almost certainly part of a medieval building was not investigated in detail. An east-west wall was exposed in a neighbouring trench, and the excavator suggested that the walls were probably components of the friary, which extended southwards; beyond Rowley Road and into the grounds of Boston Grammar School.

In July 1996, Pre-Construct Archaeology undertook a six day evaluation on the present site: involving the excavation of two trial trenches measuring approximately 6m x 3m. Trench 1 at the western end of the present development produced medieval deposits at a depth of 0.45m, with the deepest deposits sampled being at 2.27m below present ground surface. No burials were present in this area. Trench 2, in the centre of the eastern end of the new building, contained five inhumation burials located at a depth approximately 1m beneath modern ground surface. The burials were cut through in-situ Romano-British deposits.

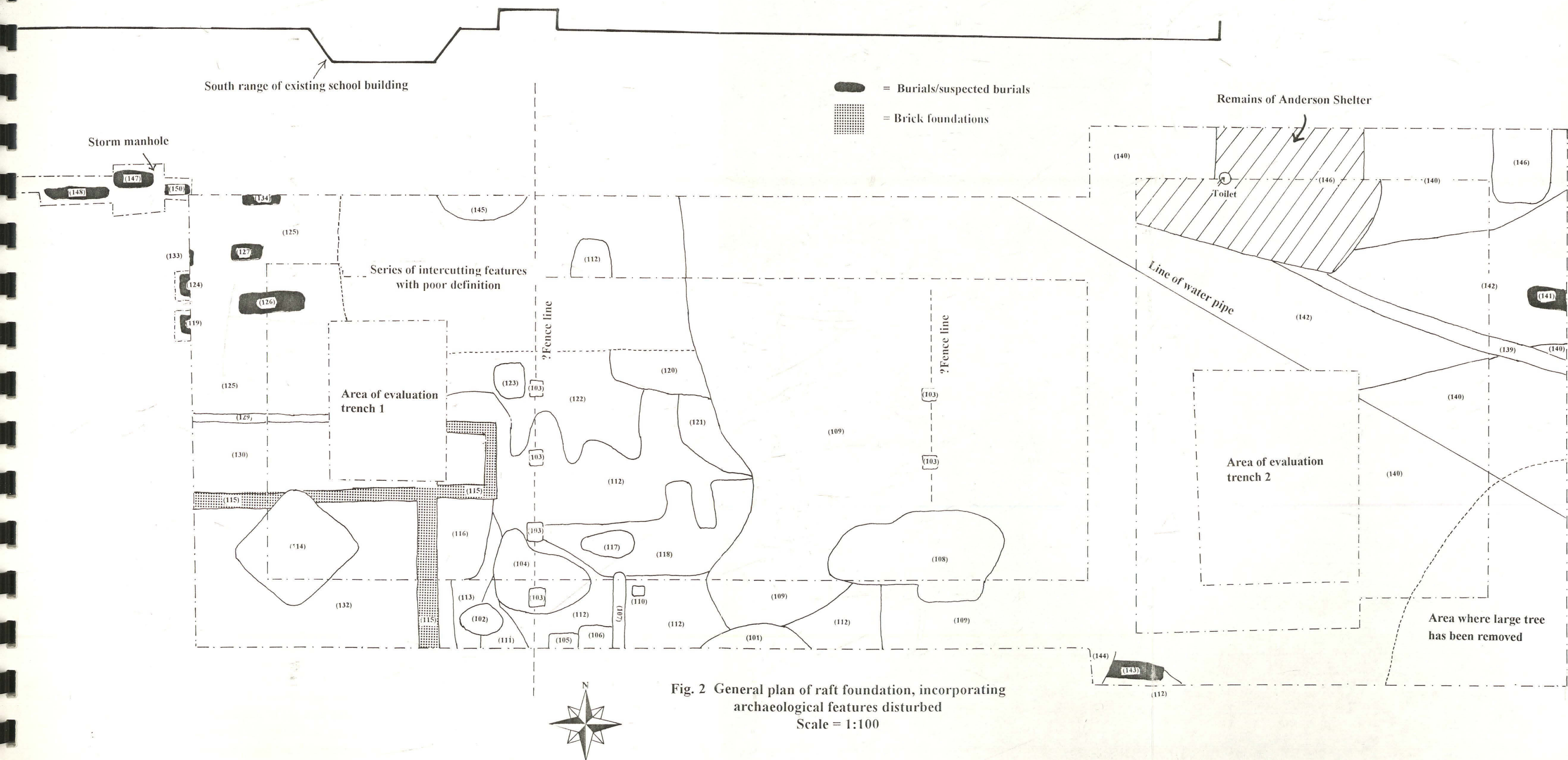
5.0 Results

Based on information derived during the site evaluation of 1996, a strategy of using a raft foundation over the main archaeological features on the site (ie to preserve archaeological deposits below c. 0.9m of the modern ground surface) was proposed and approved as a suitable mitigation strategy. This report presents the results of work carried out under this mitigation

5.1 Main building raft

Phase one of the fieldwork commenced March 13th, 1997 (see Fig.2). This involved machining of the main raft area in two operations - the west side followed by the east side. In both cases, the areas were excavated to full depth in one operation, as there were practical difficulties associated with working in graded spits. The raft consisted of a 0.625m deep ring beam with a central area being taken down by a further 0.55m.

During machining of the western half of the raft, the most recent features exposed comprised a series of post holes, (103), which belonged to fences extending north-south across the area and tied in with marks which survive on the 1924 block wall. Further late post-medieval walls and brick features were encountered (115) (116) (105) and (132); representing the disturbed remains of a building footing.



In the central part of the trench, several inter-cutting pit-like features were exposed which contained kitchen midden-type deposits. Relatively little time was available for the investigation of these features, although they all appeared to cut (112), a clean silt deposit mixed with some clay which appeared to be a levelling horizon. This, in turn, sealed (111); a 5mm thick dark organic layer which appeared to represent occupation debris and dipped to the east on top of a silt ?floor deposit (113). Unfortunately only a small area of this floor was exposed and no associated walls or finds were identified (see Fig.3).

To the east of the above, the base of the trench truncated a dark (buried) topsoil-type deposit (109) which was thought initially to be levelling for the croquet lawn; although it contained pottery dating between the 13th and 14th centuries..

The north west corner of the trench contained an area of graves (see Fig.8).

Four disturbed burials (119) (124) (126) and (127) were excavated after an application had been submitted to the Coroners Office for an exhumation licence. Two other possible graves (133) and (134) were noted in plan, but were left *in situ*, as the raft foundation did not disturb these significantly.

Burial (119) (Fig.8) was located on the extreme west side of the footprint, and was significantly disturbed during machining - only the skull and some of the upper bones were recovered. The remains were those of a mature male with no lower teeth, and apparently suffering with osteoarthritis of the spine at the time of death.

Burial (124) (Fig.8) lay adjacent to the above, and had also been disturbed as a result of machining. The grave contained the remains of an infant aged between three and five years.

Burial (126) (Fig.8) lay a short distance east of the above, and was more complete; only its skull had been clipped by the machine. It contained a mature adult female, still retained within the fragmentary remains of a wooden coffin. This individual was suffering from osteoarthritis and incipient arthritis (the latter in the knee joints) at the time of death. She may also have suffered with psoriasis. The foot bones of this individual were so well preserved and evenly spaced as to suggest to the excavator that the feet may have been contained in boots.

Burial (127) (Fig.8) was slightly north of (126). It contained a well-preserved neonate, aged no more than four months, and surrounded by timber coffin remains. It has not been possible to determine the gender of this child.

All of the above burials were orientated east-west, with each head facing (ie in keeping with Christian practice). The permanently high water table on the site meant that all of the graves contained fragments of wood - the remains of timber coffins.

Following completion of the works described above, the west half of the foundation raft was cast, and machining of the east section commenced. Very little soil differentiation was possible on the east side of the site; due largely to the effects of grave digging in antiquity and the destructive influence of air raid shelter excavation in

relatively modern times. The disturbed remains of an Anderson shelter (built of reinforced concrete) were exposed in the north-east part of the trench. Within this general area (which was extremely messy), a bucket toilet remained *in situ* in the south west corner of the structure (Fig. 2). Possible traces of an entrance to the shelter were noted in the north-west corner of the dog-leg on the north side of this area (a second entrance can still be seen at ground level in the foot path, approximately 9m north of the structure exposed).

Deposits surrounding the shelter, and most of the northern half of the area, appeared to of recent origin - possibly the backfill of the shelter construction trench. Similarly, the south-east corner was also devoid of clear stratigraphy; due to the removal of a large tree (which stood in this location prior to development).

Burial, (143) (Fig.9), was exposed in the south-west corner of this area. The skull was missing, as was all of the left arm and the top part of the left leg. Coffin remains were present, with sections of almost complete boards surviving in the base of the burial pit. The bones present were those of a young adult female. With the removal of the skeleton, this section of field work was brought to a conclusion.

5.2 Service trenches

The next phase of work involved the monitoring of drainage, sewage, gas and electricity trenches.

The electricity trench, which extended north of the site to an existing school building, was monitored retrospectively - after the cable had been inserted and the sides had weathered, partially filling the trench base (which was approximately 0.5m below the modern ground surface and 0.22m wide). No archaeological features were identified, although a small quantity of unstratified artefacts were recovered from the spoil heap. A soil profile was drawn and the trench was photographed.

The gas trench, which joined the gas main close to the sports hall, was of similar dimensions to the electricity trench. It extended along the base of the elevation which separates the main school from the playing field; to a point where it turned a right angle to link with the new block. The trench was too shallow to allow an assessment to be made on the nature of this strange earthwork, which must pre-date Hussy Tower (which is built on top of it).

The route of the proposed sewage trench was altered from that of an original design when it was realised that the planned off-flow manhole had been cast in the centre of a raft over the Bar Ditch (the traditional medieval town defence and later sewer). This was relocated to extend northwards from the building to join an existing foul pipe servicing the school changing rooms. This section of work was monitored by C Palmer-Brown, and the only feature of note was an area of reinforced concrete in the north east corner of the trench - thought to be associated with one of the 1940's Anderson-type air raid shelters.

During machining for the storm drains, a reduced fine silt deposit was seen in the spoil at the west end of the trench. This was thought to represent fill of the Bar Ditch, which passes beneath the school. Further investigation, however, was not possible due to the trench depth exceeding 1.2m and the inevitable acute water problems (which caused the trench to collapse).

Close to the new school building, surrounding a manhole at the north west corner, four skeletons were exposed (Fig. 2). These lay close to the graves exposed during the construction of the west side of the raft foundation. The graves were numbered as follows: (147), (148), (149), and (150).

Grave (147) (Fig. 10) was located in the base of the storm drain manhole. The body had been placed in a rectangular trench which, again, contained fragmentary coffin remains. The skeleton measured only 0.95m in length, and represented the remains of an infant aged three to five years. There is evidence to suggest that the child had suffered from a deficiency in vitamin D - rickets.

Burial (148) (Fig. 10) was approximately 0.2m west of the above in the edge of the drain run. Its skull had been clipped by the machine. The grave contained the remains of a young female, and also included a sub-adult femoral head (?residuality due to inter-truncation). The head of the main occupant was unusually elongated: this may have been a racial characteristic, or it may be indicative of premature and irregular closure of the cranial sutures.

Burial (149) was exposed during excavation of the north-south section of storm drain, close to the west wall of the main block. The only parts of the skeleton to be exposed were the lower legs and feet. The bones were those of a young adult, the gender of which has not been determined.

Heavy rain in mid-August caused many of the soil sections to collapse. It was one of these episodes that revealed **burial (150)** (Fig. 10) in the east section of the storm manhole. The burial was that of an infant; 6 - 12 months old. The burial was in the path of the storm run along the north side of the building, and so the remains were exhumed in advance of pipe laying. The remains were well preserved, with no indications of obvious pathology.

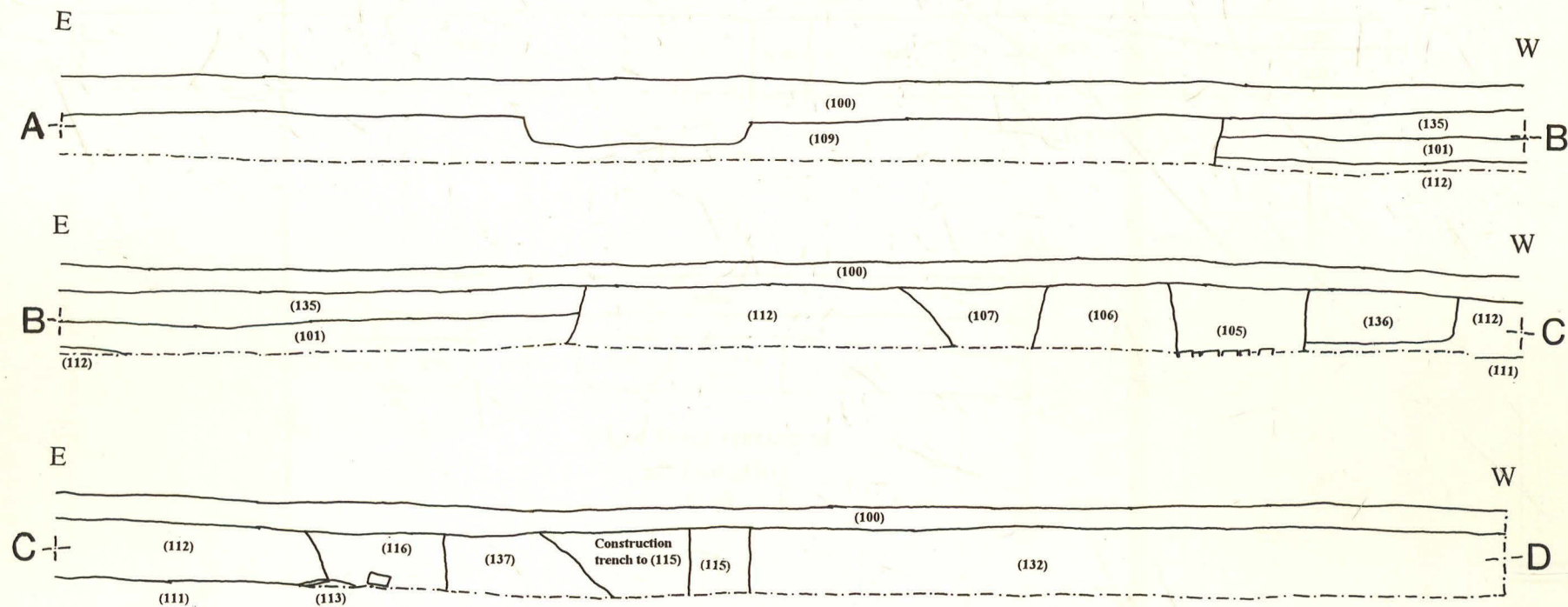


Fig.3 South section west
end of raft footprint
1:40

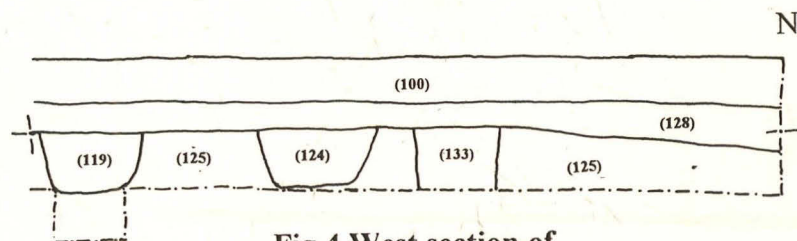
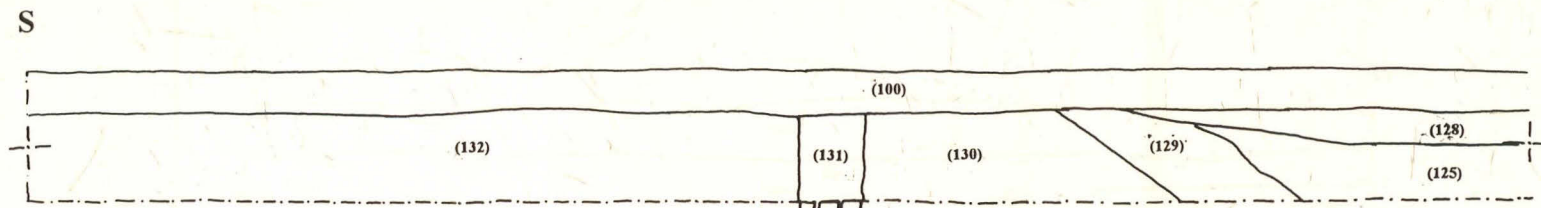


Fig.4 West section of
raft footprint
1:40

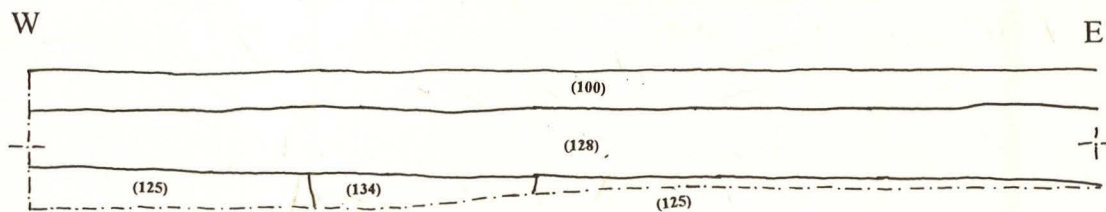


Fig.5 West end of north section showing
context (125) dipping to the east
1:40

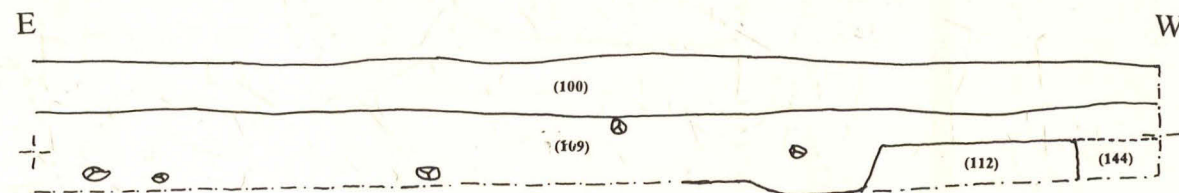


Fig.6 Section of south section
near burial (143)
1:40

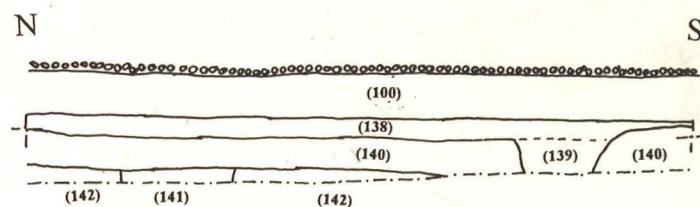


Fig.7 North part of east section
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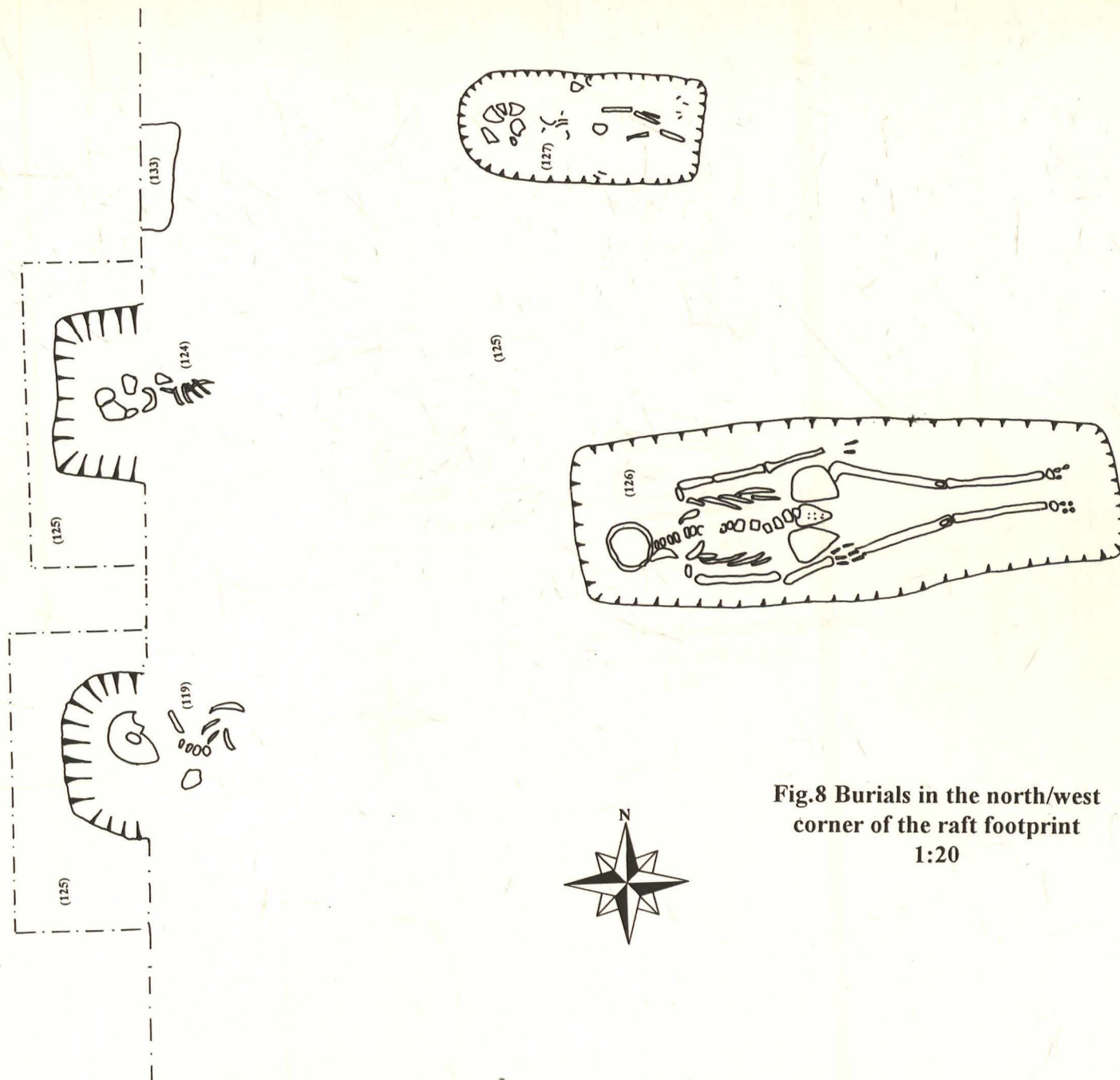


Fig.8 Burials in the north/west
corner of the raft footprint
1:20

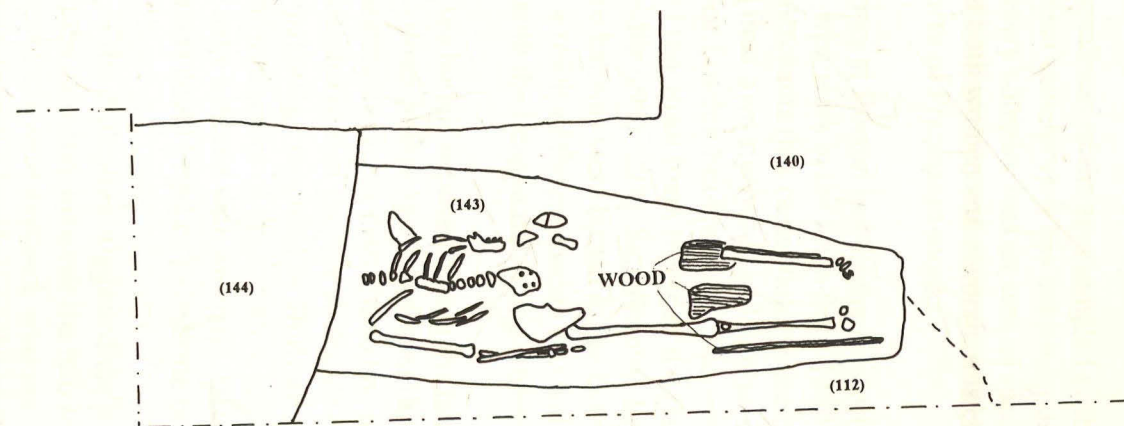


Fig. 9 Burial (143) (incorporating coffin
remains in base of grave)
1:20

6.0 Conclusions and discussion

Although Romano-British deposits were exposed in Trench 2 during the evaluation of 1996 (the first *in-situ* material of this date to have been positively examined in Boston itself), these layers were not truncated during the present investigation due to the large build up of post-Roman deposits on the site and the employment of a sympathetic foundation design.

The present investigation has resulted in the exposure and removal of ten human burials (a further five burials were exposed, but not exhumed, during the earlier field evaluation). These burials were within the confines of the cemetery associated with the Franciscan friary. Two other possible burials were not investigated.

Given the smallness of the area sampled (within what is known to have been a very large Christian cemetery), it has not been possible to determine whether or not this part of the cemetery complex was an area of specific designation. However, with the inclusion of both women and children, it is clear that the site was not used solely for the internment of Franciscan monks.

The Greyfriars at Boston had strong connections with the Hanseatic League of foreign merchants, who were in the town from 1260 onwards (Hansa was a league of German and other merchants that came to dominate the trade of Northern Europe). The Hansa established their own steelyard (guildhouse) in the town, as well as warehouses as a depot to their London headquarters. According to the 16th century antiquarian, John Leland, the Franciscan friars regarded the Hanseatic Merchants as the founders of their friary (Chandler 1993, 229). Significantly, Leland records that many Easterlings (as the Hansas were known) were buried in the friary cemetery. Were then the individuals exposed as a result of the evaluation and watching brief at the Grammar School associated with the League (including women and children)?

Five of the ten burials exposed during the latest phase of work were immature individuals - death before age five. Given that child mortality was, in the medieval period, considerably higher than it is today, this figure may not be significant, and it must be remembered that the five skeletons exposed during the site evaluation were all adults. The pathology recorded by Dodwell indicates that some of the mature skeletons showed traces of degenerative joint diseases, and one adult female (burial [126]) may have suffered with psoriasis. Dental pathology of the adult individuals (where present) could be taken to indicate poor diet.

The results of the evaluation suggested the possibility that there may have been a boundary to the cemetery between the two trenches excavated: in one area, no fewer than five individuals were exposed, whereas in the other there were none, suggesting that evaluation Trench 2 lay close to the west boundary of the cemetery. This has now been disproved by the cluster of burials found around the north-west corner of the new development.

Two groups of burials have now been exposed on the site: on the north-west and south-east sides of the development area. The south-west and central areas of the site

were devoid of burials, but contained deposits rich with domestic waste, and included fragments of a possible (undated) floor surface.

6.1 Effectiveness of methodology

It is variously concluded that the post-evaluation mitigation strategy has been only partially successful, in that it has not been possible to offer complete protection to the human remains described above. This was due partly to the requirement of a relatively deep ring beam foundation, and also to the fact that some of the burials occurred at levels higher than 0.9m beneath modern ground surface (the five sets of remains exposed during evaluation were all c. 1m beneath the grass surface). In defence of the strategy, it must be noted that all of the human remains exposed during the brief have been examined and reported on by a qualified human bone specialist - representing the first real assessment of cemetery remains which have, in the past, been haphazardly and unsympathetically brought to the surface over a number of years. Furthermore, given that the Grammar School, as an institution, has expressed a keen and sympathetic interest towards the archaeology, one assumes that the site remains in good hands.

7.0 Acknowledgements

Warm thanks are expressed to the staff and pupils of Boston Grammar School for their keen interest, co-operation and financial support: in particular, the school Bursar, Mr L Rich. Many thanks also to Harry Bowls, Site Manager for Hart Properties (Lincoln) Ltd., for keeping PCA informed of the site schedule. Finally, many thanks to Steven Membrey the Boston Community Archaeologist for his support and interest throughout.

8.0 References

- | | | |
|--------------------------|------|--|
| Boston Borough Council | 1993 | Local Development Plan (draft) |
| Chandler, J | 1993 | <i>John Leland's Itinerary: Travels in Tudor England</i> |
| Dept. of the Environment | 1990 | 'Archaeology and Planning' Planning Policy Guidance Note 16 (PPG 16) |
| Lane, TW | 1993 | <i>East Anglian Archaeology</i> No. 66 |
| Mills, A D | 1993 | <i>English Place-Names</i> |

- Morris J (general ed.) 1986 *'Lincolnshire' Domesday Book 31*
- Musty, AES 1972 *Excavations at Boston, Lincolnshire in 1972*
(unpublished)
- Owen, DM 1984 'The Beginnings of the Port of Boston', in
Field & White (eds) *A Prospect of Lincolnshire*
- Palmer-Brown, C P H 1996 'Two Middle Saxon Grubenhauser at St Nicholas
School, Church Road, Boston' *LHA* vol 31
- Palmer-Brown, C P H 1996 *Archaeological Evaluation Report: Boston
Grammar School* (unpublished)
- Palmer-Brown, CPH 1997 *Archaeological Excavation and Watching Brief
Report: Whitehouse Lane, Fishtoft*
(unpublished)
- Pevsner, N & Harris, J 1989 *The Buildings of England: Lincolnshire* (2nd
ed.)
- Thompson, P 1856 *History and Antiquities of Boston*
- Victoria County History* (Lincolnshire) Vol. 2, Ecclesiastical and Monastic Sections,
215 - 216

9.0 Appendices

9.1 Human bone report by Natasha Dodwell

9.2 Archive of post-Roman pottery by J Young

9.3 Colour photographs

HUMAN BONE REPORT

BGS 96

Natasha Dodwell

Introduction

Osteological analysis of ten Medieval skeletons found at Boston Grammar School, on land formerly owned by the Franciscan Friary or Greyfriars, is presented below. These individuals should be viewed as a sample of a larger cemetery population; five adult skeletons were uncovered in the evaluation (Palmer-Brown 1996) but were left in-situ and reburied without detailed osteological recording. Over the years other inhumations have been haphazardly exposed on Rowley Road and during the construction of some of the school buildings.

Methodology

General methods used in the osteological evaluation of these individuals are those of Bass (1992), Buikstra and Ubelaker (1994) and Steele and Bramblett (1988).

The adult dentition is recorded in the following way:-

Upper Jaw

Right								Left							
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

Lower Jaw

/	lost post mortem	X	lost ante mortem
U	Unerupted	E	Erupting
-	jaw missing	B	Broken
NP	not present		

Age

The age of younger individuals was assessed from the stage of tooth development (Ubelaker 1978) and epiphyseal bone fusion (McMinn and Hutchings 1985; Buikstra and Ubelaker 1994). The age of adults was assessed from the stage of epiphyseal fusion, dental attrition (Brothwell 1981) and changes in the pubic symphysis (Brooks and Suchey 1990). The age categories used in this assessment are:

foetus/neonate	<6 months
infant	0-4 years
juvenile	5-12 years
subadult	13-18 years
young adult	19-25 years
middle adult	26-45 years
mature adult	45 years +

Sex

Because of the inaccuracies inherent in sexing younger individuals sex determinations were made only for adult specimens. i.e., those over 18 years of age. The sex of adult individuals was ascertained from sexually dimorphic traits of the skeleton. Reliability of these determinations varies depending on the degree of preservation of each skeleton. If the remains were too fragmentary or the sex indicators were contradictory the sex is referred to as ?male or ?female.

Preservation and Completeness of the Sample

The preservation of the ten skeletons analysed was generally excellent although the completeness of individuals differed considerably; skeletons [119] and [149] were fragmentary whereas skeletons [126] and [148a] were almost complete. The epiphyses of many of the younger individuals were missing. This variation in the completeness of the skeletons analysed is important to note as it limits a genuine comparative analysis of the incidence of any disease in this sample, as well as inhibiting more accurate age and sex identifications.

[119]

Age: Mature adult

Sex: ? Male

Preservation: Only the skull, vertebrae of the neck and fragments of the shoulder girdle and ribs survived.

Other information: A right infant scapula was recovered from the fill.

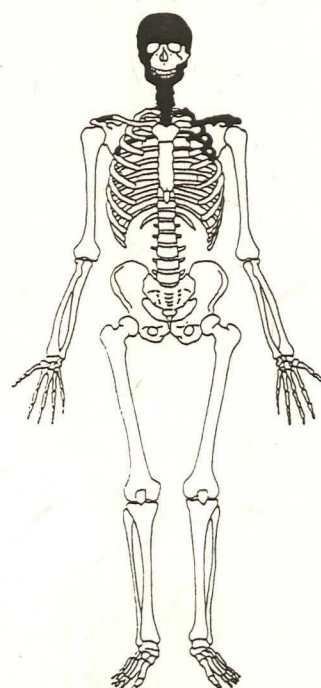


Diagram of bones present

Dentition:

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Dental Pathology:

An **edentulous mandible**; all the teeth in the lower jaw have been lost before death. The bone has resorbed to the extent that most of the tooth sockets are obliterated suggesting that these teeth were lost some time before death. The 1st premolars and the right 2nd premolar and 1st molar were lost nearer to death as their sockets, although healed are still

just visible. Ante-mortem tooth loss results from dental disease/poor oral hygiene and is a common finding in the elderly. Despite the absence of the maxilla it can be presumed that this individual would have experienced difficulty eating solid or rough foods and that this may have resulted in nutritional deficiencies in his diet.

Pathology:

The bodies of the 6 surviving cervical vertebrae exhibit severe porosity and marginal osteophytes. An area of porosity and eburnation was noted on the inferior process of one of the surviving upper thoracic vertebrae. These changes are consistent with **osteoarthritis** of the spine (see skeleton [126]). **Incipient arthritis** (in the form of increased porosity) was recorded on the acromioclavicular joints of the scapulae and on the lateral ends of both clavicles.

Although not truly pathological, ossified cartilage, a sign of ageing, was recorded on the costal facets of the surviving ribs.

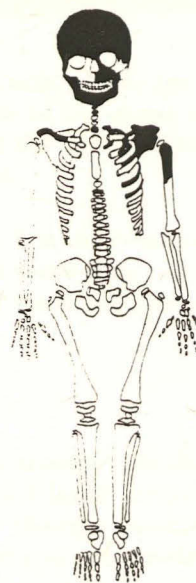
[124]

Age: Infant (stage of dental eruption indicates 4 years \pm 12 months).

Sex: -

Preservation: Surviving bones are in good condition. Only the skull, upper vertebrae and left shoulder survive.

Pathology: None observed.



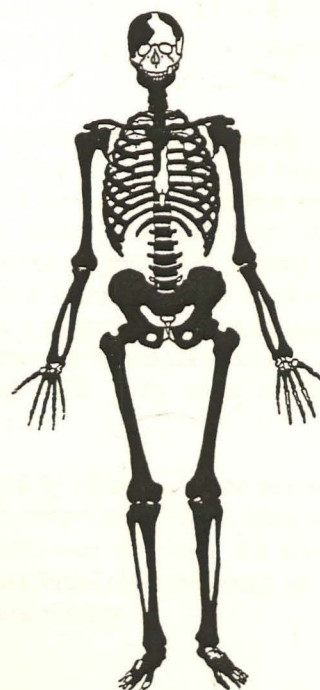
[126]

Age: Mature Adult.

Sex: Female.

Preservation: Excellent.

Other information: Some coffin remains present. The green staining recorded on some of the bones probably results from contact with coffin fittings.



Dentition:

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	X	6	5	4	3	2	1		1	2	3	4	5	6	X	X

Dental Pathology:

1. Large **carious lesions** were recorded on both the left and right 1st molars. The cavities are so large that the distal root of each tooth has been completely destroyed. The surviving proximal roots have also been affected and the individual was close to losing both these teeth when they died.
2. Extensive deposits of dense grey/brown mineralised plaque were observed on the buccal and lingual aspects of the mandibular incisors, canines and 1st premolars. This is known as supra gingival calculus or **calculus**. Deposits of hard grey/green mineralised plaque known as sub gingival calculus were noted on and below the necks of all the incisors and the left canine.
3. Cream, slightly pitted, lamellar bone was observed up to 11mm below the gingival margin of the mandible. Plaque can begin to irritate the soft tissue of the gums and if not regularly removed will lead to inflammation and resorption of the alveolar bone. This condition is known as **periodontal disease** and can lead to tooth loss.
4. Four teeth in the mandibular dentition were lost ante-mortem. The tooth sockets of the 3rd molars are barely visible suggesting that these teeth were lost some time before death. Resorption of the bone around the sockets of the 2nd molars and the distal root of the 1st molars is less advanced.

Pathology:

1 Osteoarthritis, a disease process characterised by changes on and around articulating joint surfaces was widespread throughout the vertebral column and to a lesser degree at both shoulders. Incipient arthritis was recorded at the knee joints. The changes associated with this disease process include an increased porosity of the joint surface and outgrowths of bone around the joint margin known as osteophytes. Such features are usually associated with abnormal stress being placed upon the joints, either through occupational factors, or simply by the normal wear and tear of the ageing process. Once protective cartilaginous material between joints is worn away, bone can rub directly on bone creating a polished or eburnated surface to a joint.

i. All of the surviving cervical vertebral bodies exhibit severe porosity and osteophytes (up to 4mm). Areas of eburnation (4mm) were recorded on the body of C5 and on the articular processes of T3 and T10. Vertebral bodies in the lower spine (T10-L5) also exhibit porosity and marginal osteophytes although these are less severe than those seen at the neck. Small, shallow pits (max. 5mm) and linear depressions were recorded in the superior and inferior bodies of several thoracic and lumbar vertebrae (T10-L3). The edges are smooth and the cortical bone continues into the depressions. These are known as **Schmorl's Nodes** and result from the degeneration of the inter-vertebral discs. They are a common finding in elderly individuals.

ii. Joint disease at the shoulders can also be diagnosed by changes to the scapulae and clavicles. At the acromioclavicular joints of the scapulae a raised plaque of bone (20x10mm) with porosity (holes as large as 4mm) was recorded. An area of eburnation was noted on the right joint. Both acromial/lateral ends of the clavicles have an altered joint morphology and severe pitting.

iii. The spines on the proximal joints of both tibiae are elongated and sharp to the touch. This spiking is an early indicator of osteoarthritis.

2. Distinguishing categories of joint disease is largely dependent on the pattern of the bony changes around the body. The bones of the 2nd finger of the right hand exhibit changes consistent with those of an erosive arthropathy of the seronegative or reactive type (Rogers and Waldron 1995, 69-77). A proliferation of new bone was noted on and around the distal joint of the 2nd metacarpal. The proximal phalanx also exhibited a proliferation of new bone around the margins of its proximal joint but there was also erosion at the centre of the joint. The most dramatic change to the digit is the complete fusion of the proximal and middle phalanges. A tentative diagnosis of **psoriatic arthropathy** can be made, a condition associated with the skin disease psoriasis.

[127]

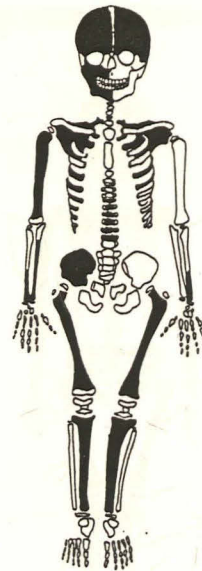
Age: Neonate (birth to 4 months).

Sex: -

Preservation: Excellent.

Other information: Remains of wooden coffin recorded.

Pathology: A pale grey/brown plaque of disorganised, woven bone was recorded on the medial aspects of both tibiae shafts and along the anterior surface of both femora. This new bone would have resulted from a **non-specific infection** which would have been active at death.



[143]

Age: Young adult.

Sex: Female.

Preservation: Parts of skull truncated by later pit. Machine damage to pelvis. Left femur and radius missing. Surfaces of some bones, particularly those on the right of the body are weathered (?localised adverse soil conditions).

Other information: Wooden coffin remains.

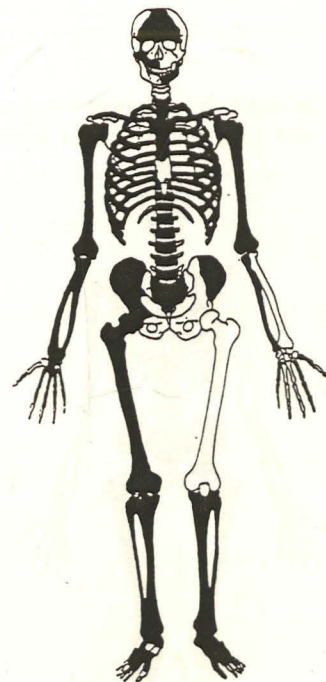


Diagram of bones present

Dentition:

/	7	6	/	/	/	2	/		-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-		/	/	B	B	X	6	7	B

Dental Pathology:

Two large carious lesions were noted in the dentition of the left mandible; one on the distal surface of the 1st molar and one on the mesial surface of the 2nd molar. Small flecks of calculus were recorded on all of the surviving teeth. There was no evidence, except for a gap in the dentition, of the mandibular 2nd premolar. This was either lost a considerable time before death or is congenitally absent. An X-ray would determine whether its eruption has been delayed.

Pathology: None observed.

[147]

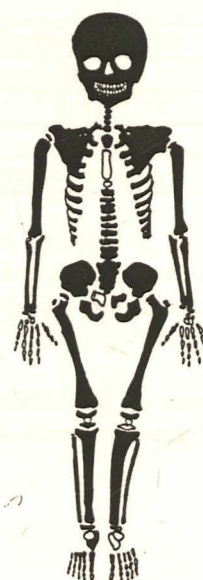
Age: Infant (4 years \pm 12 months).

Sex: -

Preservation: Excellent although the ends of some of the long bones have been damaged post-mortem.

Other information: Wooden coffin remains recorded.

Pathology: Both tibiae and fibulae bow laterally which is suggestive of rickets, a vitamin D deficiency which leads to a softening of the bones. If the deficiency is chronic and occurs whilst the bones are growing, the weight-bearing bones become bent and deformed when walking commences (Roberts and Manchester 1995, 173-175).



[148]

This context contained two burials; an adult and a neonate. The neonate was found close to the right elbow of the adult. In this analysis, the adult is referred to as [148a] and the neonate as [148b].

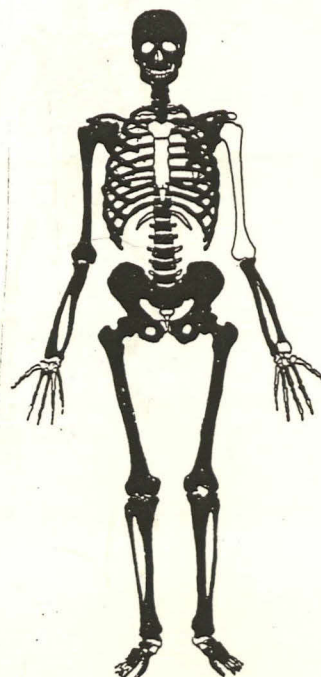
[148a]

Age: Young Adult

Sex: Female

Preservation: Excellent

Other information: A subadult femoral head was recovered from the grave fill. Green staining was recorded on many of the bones.



Dentition:

8	7	NP	5	X	3	2	1		1	2	3	4	5	6	7	8
NP	NP	6	5	4	3	2	1		1	2	3	4	5	6	7	NP

Dental Pathology:

1. Slight deposits of mineralised plaque or **calculus** were recorded on the lingual aspects of most of the teeth. Cream, slightly pitted new bone, indicative of **periodontal disease** was noted above the right maxillary molars and below the mandibular molars and premolars, particularly where the teeth are rotten.

2. Three of the surviving teeth are rotten; the right mandibular 2nd premolar and the left 1st and 2nd molars.

3. **Carious lesions** were recorded on four of the surviving twenty-seven teeth. Their position and severity are presented in tabular form;

Tooth Affected		Severity	Surface location
left mandible	2nd premolar	small	distal
left maxilla	2nd premolar	medium	distal
left maxilla	2nd molar	medium	distal
left maxilla	3rd molar	medium	mesial/occlusal

4. The right 1st maxillary premolar was lost not long before death as resorption of the alveolar bone is not advanced. No scarring of the alveolar bone was noted at the positions of the missing mandibular 3rd molars and the right 2nd molar. This suggests that they are congenitally absent or have yet to erupt.

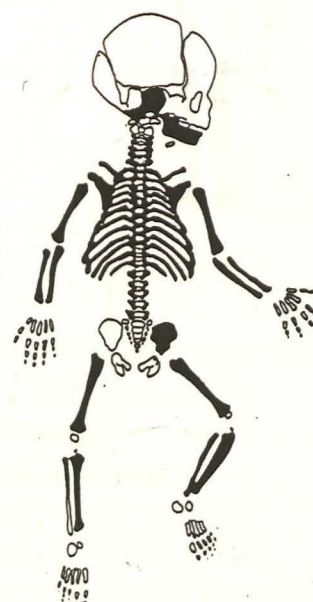
Pathology: None observed. However, the elongated shape of the skull should be noted. Whilst this could be a racial trait it is more probably indicative of premature and irregular closure of cranial sutures.

[148b]

Age: Neonate

Preservation: Excellent, although many of the epiphyses and hand/feet bones are missing.

Pathology: None observed.



[149]

Age: Young adult.

Sex: ?

Preservation: Poor. Only part of lower legs and feet survive.

Dentition: None surviving.

Pathology: None observed.

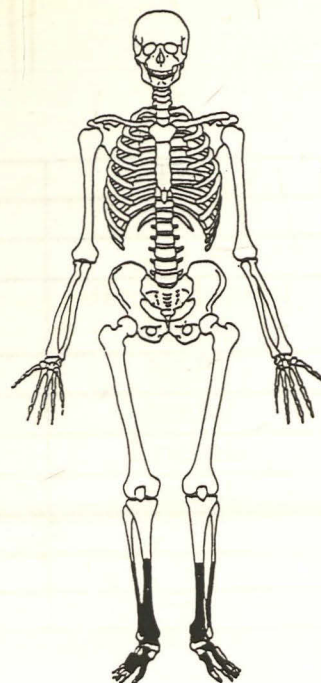


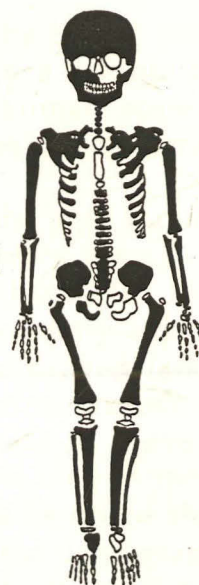
Diagram of bones present

[150]

Age: Infant (9 months \pm 3 months)

Preservation: Excellent

Pathology: None observed.



Other human bone analysed

[100] unstratified material

All bones are adult.

- Left pelvis (?female)
- Left femur, without head (biocondylar width=76mm)
- Right femur, distal end missing (diameter of head=46mm)
- Left proximal tibia
- Vertebrae; 1 thoracic and 1 cervical
- ribs; 1 left, 1 right and 1 shaft

[142]

- Left adult clavicle (distal end)

Summary Table

	Age	Sex	Pathology
[119]	mature adult	?male	dental
[124]	infant	-	-
[126]	mature adult	female	dental & joint disease
[127]	neonate	-	NSPI
[143]	young adult	female	dental
[147]	infant	-	? rickets
[148a]	young adult	female	dental
[148b]	neonate	-	-
[149]	young adult	?	-
[150]		-	-

Abbreviations: NSPI=non-specific infection

Discussion

It should be emphasised that the size and limits of the burial area are unknown and that the ten skeletons analysed are only a sample of the cemetery population. The recovery of disarticulated human bone from some of the grave fills suggests that intercutting of graves was occurring.

At first sight perhaps the most striking observation is the high number of immature individuals; five (50%) of the sample died before the age of c.5 years. Infant mortality in the past was far higher than it is in the western world today. After the initial dangers during and immediately after birth, common childhood diseases and infections could have proved fatal and these acute diseases would kill without leaving traces on the skeleton. The burial of a young adult female together with a neonate in grave [148] perhaps illustrates the dangers inherent in childbirth, not only to the child itself but also to women of child-bearing age. It should be noted that the high number of infants may not be a true reflection of the demography of the cemetery as a whole, particularly given the presence of the five adult burials left in-situ during the evaluation phase (Palmer-Brown 1996).

The incidence of disease, at least that recognisable on the skeleton is relatively low. Both the mature adults (skeletons [119] and [126]) exhibited alterations to the vertebral column indicative of degenerative joint disease of the spine. The erosive and prolific lesions on the right hand of the mature adult female, [126], have been tentatively diagnosed as psorotic arthropathy, a condition associated with the skin disease psoriasis. Not only would the affected joints have caused pain, but the fusion of the phalanges would have limited movement.

Dental pathologies were recorded on three of the four adults (the dentition of [149] was missing). The relatively high incidence of dental disease and ante-mortem tooth loss amongst the adults cannot solely be attributed to the maturity of the individuals. Skeleton [148a], a young adult, had rotten teeth, caries and periodontal disease, probably the result of poor oral hygiene and diet.

These burials are on land formerly owned by the Franciscan Friary and masonry structures thought to belong to the Friary buildings were uncovered below the present grammar school in the 1970's (Musty 1972). However, the location of the Friary church itself (and therefore its associated cemetery) is unknown. Although lay persons could be buried within a monastic cemetery in exchange for their property and wealth (B. Sloane pers. comm.), the presence of infants and women in this sample suggests that this was a lay cemetery or a burial area associated with an institution, possibly a hospital, owned and run by the religious order.

References

- Bass, W. M. 1992 *Human Osteology: A Laboratory and Field Manual.*, Columbia: Missouri Archaeological Society, Inc.
- Brooks, S. T. and Suchey, J. M. 1990 Skeletal Age Determination Based on the Os Pubis: A Comparison of the Acsádi-Nemeskéri and Suchey-Brooks Methods *Human Evolution* 5: 227-238
- Brothwell, D. 1981 *Digging up Bones* (third edition) British Museum [Natural History], London.
- Buikstra, J. E. and Ubelaker, D. H. 1994 *Standards for Data Collection from Human Skeletal Remains*, Arkansas Archaeological Survey Research Series No. 44.
- McMinn, R. M. H. and Hutchings, R. T. 1993 *A Colour Atlas of Human Anatomy*, London: Wolfe.
- Musty, A.E.S. 1972 *Excavations at Boston Lincolnshire in 1972* (unpublished).
- Palmer-Brown, C. 1996 *Boston Grammar School Archaeological Evaluation Report*. LCCM Accession No.: 102.96 Pre-Construct Archaeology (Lincoln).
- Roberts, C. and Manchester, K. 1995 *The Archaeology of Disease* (second edition), New York: Alan Sutton Publishing Ltd., Cornell University Press.
- Rogers, J. and Waldron, T. 1995 *A Field Guide to Joint Disease in Archaeology*, Chichester: John Wiley & Sons.

Appendix 9.2 Analysis of post-Roman pottery by J Young

Steele, D. G. and Bramblett, C. A. 1988 *The Anatomy and Biology of the Human Skeleton*, Texas: A&M University Press.

Appendix 9.2 Archive of post-Roman pottery by J Young

POST-ROMAN POTTERY ARCHIVE: BGS97 HORIZON DATING

Context	Earliest horizon	Latest horizon	Probable horizon	Date range
100	EMH	EMH	-	19-20th
101	MH4	MH8	-	13-14th
102	MH1	MH10	-	12-15th
104	MH5	MH6	-	13- mid 14th
108	MH7	MH10	MH7-MH8	14th
109	MH5	MH8	-	13-14th
119	MH7	MH10	MH7-MH8	14th
120	MH4	MH8	-	13-14th
125	MH5	MH8	-	13-14th
140	PMH7	PMH9	-	14-15th
142	MH4	MH7	-	13-14th
147	MH10	PMH3	-	15-16th
148	MH4	MH9	-	13-15th
149	MH7	PMH3	-	14-16th
150	MH5	MH8	-	13-14th

POST-ROMAN POTTERY ARCHIVE: BGS97 HORIZON DATING

Context	Earliest horizon	Latest horizon	Probable horizon	Date range
100	EMH	EMH	-	19-20th
101	MH4	MH8	-	13-14th
102	MH1	MH10	-	12-15th
104	MH5	MH6	-	13- mid 14th
108	MH7	MH10	MH7-MH8	14th
109	MH5	MH8	-	13-14th
119	MH7	MH10	MH7-MH8	14th
120	MH4	MH8	-	13-14th
125	MH5	MH8	-	13-14th
140	PMH7	PMH9	-	14-15th
142	MH4	MH7	-	13-14th
147	MH10	PMH3	-	15-16th
148	MH4	MH9	-	13-15th
149	MH7	PMH3	-	14-16th
150	MH5	MH8	-	13-14th

POST-ROMAN POTTERY ARCHIVE: BGS97 WARE TYPES BY CONTEXT

Context	Ware	Sherds	Form	Comments
100	FREC	1	JUG;LARGE	BS
100	LERTH	1	?	19/20TH
100	LMLOC	1	JAR	UNGLZE
100	MEDLOC	1	?	SHELL FABRIC
100	POTT	1	COOKPOT	NECK
100	TB	1	?	BASE;INT GLZE
100	TB	1	?	BS;NO GLZE
100	TB	1	?	BS;NO GLZE
100	TB	1	BOWL	BS
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	2	JAR/JUG	BASE
100	TOY	1	JUG	FE DEC
100	TOY	1	JUG	LHJ
100	TOYII	1	CISTERN	RIM;THU DEC
101	MEDLOC	1	JUG	POCKED GREEN/LIGHT ORANGE GLZE
101	MEDLOC	1	JUG;SMALL	THICK OLIVE GLZE;CORDON
102	MEDLOC	1	JUG	SPL GLZE;? DATE
104	NOTG	1	JUG	HANDLE;CREAM/LIGHT ORANGE FABRIC
108	DUTR	1	SKILLET?	BASE
108	MEDX	1	JUG;FACE	?? GRIMSTON;MALE FACE WITH SHORT BEARD ON INTURNED RIM
108	TOY	1	JUG	BS
109	MEDLOC	1	JUG	CU GLZE;? LSW
109	TOY	1	JUG	THU BASE
119	ARCH	1	BOWL	RIM;BLUE & TURQUOISE INTERNAL DEC; ? PAINTED
119	SIEG	1	JUG	BS
120	MEDLOC	1	JUG	NECK;CORDON
125	IMP	1	?	? ID AS FLEMISH GREYWARE
125	TOY	1	?	BS
125	TOY	1	BOWL	BS
125	TOY	1	JUG	? ID
140	LSW2/3	1	JUG	BS
140	STSL	1	FLAT	FEATHERED DEC
140	TB	1	JUG	? MED
140	THET	1	?	? ID;OR EMHM
142	MEDLOC	1	BOWL?	NO GLZE;RIM
142	SLST	1	?	BS
147	BOU	1	JUG/JAR	BS
147	SCAR	1	JUG	BS;CU GLZE;WHITE FABRIC;INCISED DEC; ? ID OR IMP
147	TB	1	JUG/JAR	BS;OR TOYII
148	MEDLOC	1	?	UNGLZE;LIGHT FABRIC

148	MEDX	1	JUG	BS
149	DUTR	1	COOKING VESS	BS
150	MEDLOC	1	JUG	? TOY

POST-ROMAN POTTERY ARCHIVE: BGS97 WARE TYPES BY CONTEXT

Context	Ware	Sherds	Form	Comments
100	FREC	1	JUG;LARGE	BS
100	LERTH	1	?	19/20TH
100	LMLOC	1	JAR	UNGLZE
100	MEDLOC	1	?	SHELL FABRIC
100	POTT	1	COOKPOT	NECK
100	TB	1	?	BASE;INT GLZE
100	TB	1	?	BS;NO GLZE
100	TB	1	?	BS;NO GLZE
100	TB	1	BOWL	BS
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	1	JAR/JUG	BS;GLZE
100	TB	2	JAR/JUG	BASE
100	TOY	1	JUG	FE DEC
100	TOY	1	JUG	LHJ
100	TOYII	1	CISTERN	RIM;THU DEC
101	MEDLOC	1	JUG	POCKED GREEN/LIGHT ORANGE GLZE
101	MEDLOC	1	JUG;SMALL	THICK OLIVE GLZE;CORDON
102	MEDLOC	1	JUG	SPL GLZE;? DATE
104	NOTG	1	JUG	HANDLE;CREAM/LIGHT ORANGE FABRIC
108	DUTR	1	SKILLET?	BASE
108	MEDX	1	JUG;FACE	?? GRIMSTON;MALE FACE WITH SHORT BEARD ON INTURNED RIM
108	TOY	1	JUG	BS
109	MEDLOC	1	JUG	CU GLZE;? LSW
109	TOY	1	JUG	THU BASE
119	ARCH	1	BOWL	RIM;BLUE & TURQUOISE INTERNAL DEC; ? PAINTED
119	SIEG	1	JUG	BS
120	MEDLOC	1	JUG	NECK;CORDON
125	IMP	1	?	? ID AS FLEMISH GREYWARE
125	TOY	1	?	BS
125	TOY	1	BOWL	BS
125	TOY	1	JUG	? ID
140	LSW2/3	1	JUG	BS
140	STSL	1	FLAT	FEATHERED DEC
140	TB	1	JUG	? MED
140	THET	1	?	? ID;OR EMHM
142	MEDLOC	1	BOWL?	NO GLZE;RIM
142	SLST	1	?	BS
147	BOU	1	JUG/JAR	BS
147	SCAR	1	JUG	BS;CU GLZE;WHITE FABRIC;INCISED DEC; ? ID OR IMP
147	TB	1	JUG/JAR	BS;OR TOYII
148	MEDLOC	1	?	UNGLZE;LIGHT FABRIC

148	MEDX	1	JUG	BS
149	DUTR	1	COOKING VESS	BS
150	MEDLOC	1	JUG	? TOY

Appendix 9.3 Colour photographs



P1. General view during earth-stripping,
south side of footprint, looking east



P2. General view looking north-west,
during construction of foundation raft



P3. Burial [126], looking west



P4. Burial [148], looking west



P5. Burial [147], looking west



P6. Burial [150], looking east



P7. Burial [127], looking west



P8. Burial [124], looking west



P. 9 Burial [119], looking west