

**ARCHAEOLOGICAL EVALUATION REPORT:  
TEST PITTING ON LAND AT THE OLD PALACE, MINSTER YARD  
LINCOLN, LN2 1PU**

Scheduled Monument Consent Application: S00005495

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On behalf of the Diocese of Lincoln

By  
Allen Archaeology Limited  
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The  
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## Document Control

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## Summary

Allen Archaeology Limited was commissioned by Focus Consultants (UK) Limited on behalf of the Diocese of Lincoln to undertake an archaeological evaluation of land at The Old Palace, Minster Yard in Lincoln, Lincolnshire.

Two test pits were excavated on a grassed area within the car park for The Old Palace, revealing a complex of archaeological deposits of mainly Roman, Late Saxon and Saxo-Norman date.

Roman activity comprised the construction of a substantial stone wall with associated yard surfaces, and a later build up of soil over the surfaces. A large quantity of Roman tile is suggestive of a collapsed or demolished roof in the vicinity, perhaps associated with the stone wall. Pottery from the overlying deposits suggests that this activity occurred from the 2<sup>nd</sup> century to the very late 4<sup>th</sup> century AD, and that glass production may have also occurred nearby. Amongst the Roman finds were a possible piece of scale armour, a carved bone phallus and a face pot of possible ritual significance.

In the 9<sup>th</sup> – 11<sup>th</sup> centuries there appears to have been a period of robbing of the Roman buildings, perhaps to repair the defensive walls of Lincoln, as there is no evidence for monumental building in the city at this time.

Pottery from the test pits shows limited activity through the medieval period, and the sudden change to modern deposits on the site suggests that there was probably some terracing of the area. This terracing may be associated with the refurbishment works in the 19<sup>th</sup> century or the construction of the existing car park.

## 1.0 Introduction

- 1.1 Allen Archaeology Limited (hereafter AAL) was commissioned by Focus Consultants (UK) Limited on behalf of the Diocese of Lincoln to carry out an archaeological evaluation by test pitting on land at The Old Palace, Minster Yard in Lincoln, Lincolnshire.
- 1.2 The excavating, recording and reporting conforms to current national guidelines, as set out in the Institute for Archaeologists '*Standard and guidance for archaeological field evaluations*' (IfA 1994, revised 2001 and 2008), procedures that are set out in the Lincolnshire County Council publication *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice* (LCC 1998), and the English Heritage documents '*Management of Research Projects in the Historic Environment*' (English Heritage 2006) and '*Management of Archaeological Projects*' (English Heritage 1991). All English Heritage guidelines on archaeological practice were also followed ([www.helm.org/server/show/nav.7740](http://www.helm.org/server/show/nav.7740)), along with a specification prepared by this company (AAL 2010).
- 1.3 The archive will be submitted to The Collection, Lincoln, within six months of the completion of the report, where it will be stored under the global accession number LCNCC:2010.158.

## 2.0 Site Location and Description

- 2.1 Lincoln is the regional centre of Lincolnshire, and is located approximately 58km to the west of the east coast of England. Minster Yard lies within the historic core of the settlement, with the area of investigation lying within the car park for The Old Palace.
- 2.2 The area of works is centred on NGR SK 97756 71711, lies at a height of approximately 60m above Ordnance Datum, and is situated adjacent to a fault line, with the solid geology of Lincolnshire Limestone noted (British Geological Survey 1973). No superficial geology is identified in the proposed development area.

## 3.0 Planning Background

- 3.1 An application for Scheduled Monument Consent has been submitted to English Heritage for the construction of a proposed attenuation tank with associated drainage within the car park of The Old Palace, as the site lies within the Scheduled Area for Lincoln Bishops Palace (Scheduled Monument Number LI 97). A decision on this consent was postponed until an archaeological evaluation by test pitting was undertaken within the area of the proposed groundworks, to provide an understanding of the below ground archaeological deposits (English Heritage Reference S00005495).
- 3.2 In addition, as part of proposed works at The Old Palace, ventilation and drainage systems are to be added to the basement of the building. Listed building consent was granted for this work (Planning Reference 2010/0130/LBC), with conditions, including a programme of archaeological excavation of a sump, and monitoring of any below ground excavations. This work will be discussed in a forthcoming report by this company once the work is completed.

## 4.0 Archaeological and Historical Background

- 4.1 Prior to the foundation of the city in the Roman period, the Lincoln Archaeological Research Assessment describes the area as being limestone uplands, with likely hill top activity during the prehistoric period. Also, the prehistoric 'Jurassic Way' is thought to have run along the scarp of the Lincoln Edge to the west of the site, before turning south-eastwards, down slope, crossing the River Witham at a causeway site at Stamp End.
- 4.2 Romano-British activity in the region began with the possible imposition of a fort in the area of South Common, pre-dating the legionary fortress adjacent to the site. The possibility of an early fort has been postulated due to the presence of a number of legionary tombstones that stylistically date to around AD 50 that were found in the south part of the city, largely around Monson Street during the 19<sup>th</sup> century (Jones 2002). This site appears to have been abandoned in favour of an uphill site to the north of the river in the 60's AD, where a larger legionary fortress was established immediately to the north of the site (*ibid.*).
- 4.3 Following the abandonment of the legionary fortress in Lincoln in the latter part of the first century AD, the site was developed as a *colonia*, a settlement of retired legionary soldiers and their dependents, and an administrative centre. The city expanded rapidly beyond the confines of the former legionary fortress at this time, extending downhill towards the river.
- 4.4 By the mid 5<sup>th</sup> century AD, the Roman city appears to have declined considerably, with only scattered ephemeral evidence of activity over the following four centuries having been discovered around Lincoln (Jones 2002).
- 4.5 Lincoln re-emerged as a town in the late 9<sup>th</sup> century, prospering greatly over the following two centuries as a thriving urban centre (Vince 2003), and by the time of the Norman Conquest of 1066 there may have been as many as 12,000 people living in the city (Sawyer 1998). The Domesday Survey of 1086 shows that there were seven Anglo-Scandinavian Estate owners prior to the Conquest, and that they were all replaced by Normans soon after, including Bishop Remigius, who established the cathedral in Lincoln (Vince 2003). The construction of Lincoln Cathedral began at some point between 1072 and 1075, and was consecrated in 1092 (Pevsner and Harris 1989).
- 4.6 Bishop Chesney began the Bishop's Palace complex, which lies immediately to the east of the site, around 1163, with later modifications by subsequent Bishops over the next three hundred years (*ibid.*). The site was much damaged in 1648 when besieged during the Civil War, before falling into decay and ruin in the late 17<sup>th</sup> and 18<sup>th</sup> centuries. Restoration of the palace began in 1838 and continued throughout the century.
- 4.7 Recent archaeological works during the installation of a lift shaft in the adjacent old Palace building exposed approximately 0.2m of disturbed soil directly below the existing floor surface. Below this were deposits of Late-Saxon date, sealing a possible Roman floor surface (K. Trott *pers. comm.*).

## 5.0 Methodology

- 5.1 The fieldwork was carried out by a team of six experienced field archaeologists in October 2010. The evaluation entailed the excavation of two test pits within the car park outside The Old Palace. Test Pit 1 measured 2m x 2m and 1.85m deep and Test Pit 2 measured 2m x 2m and 2.8m deep (Figure 2).
- 5.2 All excavation was carried out by hand, initially comprising de-turfing of each test pit. Deposits were then removed by hand down to the required depth of the test pit, or to the natural geology, whichever was encountered first.
- 5.3 A full written record of the archaeological deposits was made on standard AAL context recording sheets. Archaeological deposits were drawn to scale, in plan and section (at scale 1:20 or 1:50), with Ordnance Datum heights being displayed on each class of drawing. Photography formed an integral part of the recording strategy. All photographs incorporated scales, an identification board and directional arrow, and a selection of these images has been included in Appendix 1.
- 5.4 Each deposit, layer or cut was allocated a unique identifier (context number), and accorded a written description, a summary of these are included in Appendix 8. Three digit numbers within square brackets reflect cut features (e.g. pit [206]).

## 6.0 Results

### 6.1 Test Pit 1 (Figure 3)

- 6.1.1 Removal of the turf revealed a fairly loose grey brown silty sand with frequent sub-angular limestone fragments, 100, containing four sherds of mid to late 3<sup>rd</sup> century pottery, a single fragment of late 9<sup>th</sup> to mid 11<sup>th</sup> century pottery and ceramic building material (for example tile and brick, hereafter CBM) of Roman and modern date. This 0.18m thick modern topsoil overlay 101, a brownish grey slightly silty sand. Beneath this deposit was a gravel-rich grey silty sand, 102, that contained a mix of pottery of 2<sup>nd</sup> century and 12<sup>th</sup> to 18<sup>th</sup> century date and Roman tile, and appeared to seal a modern metal pipe. The later ceramics included a decorated Cistercian cup of late 15<sup>th</sup> to 16<sup>th</sup> century date.
- 6.1.2 The cut for the modern pipe partially truncated a discrete dump of loose sand and small fragments of limestone, 103, that was devoid of finds. Deposit 103 sealed layer 104, a 0.6m thick brown sandy gravel with limestone fragments and thirty five fragments of residual Roman CBM. Pottery from the layer suggests it was formed between the late 10<sup>th</sup> and early/mid 11<sup>th</sup> centuries.
- 6.1.3 Below 104 was a discrete dump of mid brown grey slightly silty sand, 106, containing limestone rubble, moderate charcoal flecking and a large number of fragments of Roman CBM. Within this dump was a group of 4<sup>th</sup> century pottery, including a fragment of beaker that had been used as a glass making crucible. A piece of square glass bottle of 2<sup>nd</sup> to 3<sup>rd</sup> century date was also recovered from this deposit. This sealed 105, a greenish grey silty sand containing a large amount of pottery of mainly late 4<sup>th</sup> century date, with some pieces of late 9<sup>th</sup> to 10 century pottery also present. Layer 105 also contained a large number of Roman CBM fragments, including box flue pieces suggestive of a heating system for a structure nearby.

6.1.4 105 overlay 107, a brown grey silty sand with occasional flecks of charcoal, pieces of limestone and Roman CBM. Three sherds of probably intrusive post-Roman pottery were recovered from this layer, along with one hundred and four fragments of 4<sup>th</sup> century pottery. The lowermost deposit encountered within the test pit was 108. This comprised a loose light brown sandy silt with moderate charcoal and frequent limestone fragments, Roman CBM and pottery of very late 4<sup>th</sup> century date. A fragment of a glass cup of 2<sup>nd</sup> to 3<sup>rd</sup> century date and a piece of an unidentifiable glass vessel was also found in this layer.

## 6.2 Test Pit 2 (Figure 4)

6.2.1 Removal of the turf revealed a loose silty sand topsoil 200 that contained a small group of greyware pottery of 3<sup>rd</sup> century onwards date. This sealed a number of modern drainage features that cut 201, a grey silty sand with occasional limestone fragments.

6.2.2 In the east and south facing sections of the test pit it was noted that 201 overlay 202, a yellowish brown silty sand with small rounded pebbles, angular limestone and Roman CBM fragments. Pottery within this deposit was mixed, comprising both late 10<sup>th</sup> to mid 11<sup>th</sup> century and late 4<sup>th</sup> century pieces. Also beneath 201 was 213, a modern dump of loose grey sand and small gravel.

6.2.3 Cutting 202 was a 1m deep north-west to south-east aligned linear, [206]. This steep sided cut with a flat base contained a metal pipe and was backfilled with dark brownish grey silty sand, 205. This modern pipe trench contained residual late 4<sup>th</sup> century pottery, including pieces of an unusual double lid-seated jar, and two fragments of Roman CBM.

6.2.4 Modern gravel lens 213 sealed [214], a pit with steep sides and a pointed base that was noted in section but was not visible in plan during the excavations. This 1.2m deep pit was backfilled with a greyish brown silty sand with some charcoal and ash, and fragments of limestone, 215.

6.2.5 Both linear [206] and pit [214] were cutting 203, a dump of charcoal lenses and grey/brown silty sand with angular limestone and nineteen pieces of Roman CBM. Within this deposit were sixty one sherds of pottery of mid to late 3<sup>rd</sup> century date, including fragments of a Dales ware jar and a 'Castor Box' lid, along with six pieces of post-Roman pottery. The later material comprised mainly late 10<sup>th</sup> to 11<sup>th</sup> century material, with a single fragment of a late 13<sup>th</sup> to mid 15<sup>th</sup> century Lincoln Glazed ware jug. The deposit also contained a fragment of Roman window glass of 2<sup>nd</sup> to 3<sup>rd</sup> century date.

6.2.6 Layer 203 sealed a large pit, [211] that was encountered in the south-west quarter of the test pit. The robber pit had steep, irregular sides and a flat base, and was filled with 212, a backfill of dark grey silty sand with occasional limestone fragments, charcoal flecks and Roman CBM. Pottery within the backfill was a mix of 3<sup>rd</sup> century and late 9<sup>th</sup> to 10<sup>th</sup> century pieces, and included a face pot fragment, which is suggestive of ritual activity. The pit was cutting an earlier pit, [207] that contained pottery of similar date to [211]. The earlier pit had a vertical north and eastern edge and a flat base, and had been backfilled with 208, a loose dark brown silty sand with frequent limestone rubble and Roman CBM. Pottery from this backfill was not closely dateable, being broadly from the late 9<sup>th</sup> to early 11<sup>th</sup> centuries.

6.2.7 Pit [207] appeared to cut 204, a build up of light brownish grey slightly silty sand with angular limestone fragments and mortar. Pottery from this deposit was mainly of 3<sup>rd</sup> century date, with some intrusive late 10<sup>th</sup> to 11<sup>th</sup> century pieces. It seems likely that this layer represents a build up



of refuse in the 3<sup>rd</sup> century onwards. Six fragments of Roman CBM were also recovered from this layer.

- 6.2.8 Pit [211] also cut a robber trench, [210] that ran west to east along the southern half of the test pit, along the line of an earlier wall foundation (see Section 6.2.9 below). The robber trench was backfilled with loose dark brown silty sand with occasional charcoal flecks and frequent limestone rubble, 209. The backfill contained Roman CBM, a quantity of very late 4<sup>th</sup> century and early/mid 10<sup>th</sup> century pottery, along with oyster shells and a fragment of Roman vessel glass. One Roman pot sherd from this backfill was found to contain a clear glass residue, indicating it was associated with glass production, possibly window glass. It is not clear if this industrial activity was of Roman date or if the pottery was reused later.
- 6.2.9 The robber trench, [210], followed the line of a substantial wall, [221], running east to west. This foundation trench was over 0.5m wide and 1.3m deep and filled with tightly packed medium and large pieces of limestone, 216, that were pitched at a 45<sup>o</sup> angle. This extensive foundation was clearly for a substantial structure that is almost certainly of Roman date.
- 6.2.10 Abutting the wall foundation cut [221] was a series of stone surfaces. The uppermost, which was sealed by layer 204 (see Section 6.2.7 above) comprised medium and large pieces of sub-rounded limestone, 218, that was approximately 0.1m deep. This overlay 219, a 0.25m thick layer of worn small and medium sized limestone pieces. Beneath these was a 0.3m deep bedding layer for the surface, comprising firm orange brown sand with occasional fragments of limestone and mortar.
- 6.2.11 Natural light brown sand 217 was encountered at 57.95m aOD, approximately 2.6m below the modern ground surface.

## 7.0 Discussion and Conclusion

- 7.1 The evaluation test pitting within the car park has shown that there is a significant archaeological resource within the location of the proposed attenuation tank.
- 7.2 The artefact assemblage from the two test pits was considerable in volume and is of some importance to the understanding of Roman, Late Saxon and Saxo-Norman Lincoln. Six hundred and eighty nine sherds of Roman pottery of mainly 3<sup>rd</sup> and 4<sup>th</sup> century date were recovered, and included imports from Germany, Oxford and the Nene Valley. Two of the fragments provided evidence for glass production, although it is not certain that this relates to a Roman glass-making industry or the Saxo-Norman reuse of Roman vessels. A fragment of a face pot was also within the assemblage; these are believed to have a ritual significance or be associated with a cult.
- 7.3 A total of fifty three fragments of post-Roman pottery were found, of which forty three were of late Saxon date (late 9<sup>th</sup> to mid 11<sup>th</sup> century) and eight were of Saxo-Norman date (late 10<sup>th</sup> to 12<sup>th</sup> century). The material was of mainly local origin, with a small number of Late Saxon sherds being from Torksey kilns.
- 7.4 The test pits also contained three hundred and sixty seven fragments of ceramic building material and two tesserae. The majority of the material comprised Roman tegula and imbrex fragments, suggestive of a collapsed or demolished roof, although a number of fragments appear to have been reused, probably in foundations or rubble core. A number of Roman brick

fragments are likely to be evidence for a hypocaust system of heating, including box flue tiles, and two further pieces were found to have fuel ash slag adhering to them, suggesting they had been used edge-on in an industrial hearth.

- 7.5 The bone assemblage comprised four hundred and twenty five fragments of animal bone and one piece of human bone. Unfortunately as the majority of the material was from probable Late Saxon and Saxo-Norman re-working of Roman deposits it is not possible to draw many conclusions regarding the assemblage. Only a small number of the pieces show evidence of gnawing, indicating the majority of the bone was buried soon after disposal, so reducing access to scavengers. Also within the assemblage was a worked antler tine that may have been used as a handle or toggle. The single human bone fragment, a tibia, suggests the presence of a disturbed inhumation in the general vicinity.
- 7.6 A small number of 'special' finds, which deserve further mention, were recovered from the site. A small copper alloy plate which may be a fragment of scale armour of either 2<sup>nd</sup> or 3<sup>rd</sup> century date, a copper alloy stud and a Roman phallus of carved bone were all found in Test Pit 1. All three have military connotations, which is perhaps not surprising as the site lies immediately to the south of the Roman defences. A worked bone decorated inlay of broadly Roman date was also found.
- 7.7 Five pieces of Roman glass were also found. Three of these were dateable to the 2<sup>nd</sup> to 3<sup>rd</sup> century, and included fragments from a square bottle and a cup, and a piece of window glass. It is not clear if the glass is related to the glass making crucible or fragment of pottery with a glass residue, although the coincidence should not be ignored.
- 7.8 The earliest remains encountered were within Test Pit 2, where a stone foundation for a substantial Roman building and associated stone surfaces were investigated. The wall was over 0.5m wide, and its foundation, at over 1.3m deep, indicated it was part of a very substantial structure. Immediately to the north of this wall was a well made surface, possibly part of a yard area. This comprised a 0.3m thick levelling layer of compact sand sealed by a 0.25m thick layer of limestone. A further spread of limestone indicated that the surface may have been rebuilt or repaired. No dating was forthcoming from the wall or the surfaces; however a build up of soil (layer 204) over surface 218, suggests this material began to form in the 3<sup>rd</sup> century. Other pottery from throughout the stratigraphic sequence suggests that Roman activity probably began in the 2<sup>nd</sup> century and continued in the vicinity into the very late 4<sup>th</sup> century.
- 7.9 The Roman remains equate well with current thinking that there was extensive development outside the defensive walls from the 2<sup>nd</sup> century onwards, mainly comprising commercial structures, with burial grounds beyond (Jones 2002). It is therefore interesting not only that there is some evidence for glass production on the site, but also that a human bone was recovered from Test Pit 1.
- 7.10 There then appears to be a hiatus of activity on the site until around the 9<sup>th</sup> to 10<sup>th</sup> century, when a series of robber pits and trenches were excavated. Initially, this comprised robber trench [210], and possibly [207], when a former Roman wall or building was probably robbed down to its foundation level, 216. A larger pit was then dug, perhaps to then remove some of the wall foundation material.
- 7.11 This confined period of stone robbing did not occur during the construction of the castle and cathedral, which began following the Norman Conquest of 1066. Instead, the robbing seems to date to the Late Saxon period, specifically the 9<sup>th</sup> to early 11<sup>th</sup> century. This phase of activity

again fits well with the known evidence, with the re-emergence of the town at the end of the 9<sup>th</sup> century, following centuries of little activity, possibly associated with the arrival of the Viking Army in 873/4 AD (Vince 2003). What is curious however, is the nature of the activity exposed within the test pits. The robbing of the Roman walls at this time would suggest that the material was being collected to be used elsewhere; however, dwellings in the town at this time were mainly of wood with sunken floors. There is also no evidence for monumental building in the 9<sup>th</sup> to 11<sup>th</sup> centuries in Lincoln, so it seems most likely the stone was either being broken up to surface roads, or was being used to repair the nearby Roman wall defences.

- 7.12 Dumps of material, and possibly the build up of soil may have continued into the 12<sup>th</sup> century, although a lack of features suggest activity was limited until modern services and drains were added. The lack of medieval activity on the site suggests that there may have been some terracing of the ground surface, possibly during the Victorian period, and later, when the car park was created.

## **8.0 Effectiveness of Methodology**

- 8.1 The archaeological evaluation methodology was appropriate to the scale of the proposed development. The investigations have shown that the proposed attenuation tank will impact upon archaeological deposits of both Roman and Late Saxon to Saxo-Norman date.

## **9.0 Acknowledgements**

- 9.1 Allen Archaeology Limited would like to thank Focus Consultants (UK) Limited for this commission, and to their client, the Diocese of Lincoln. Thanks also go to the staff at The Old Palace for their help during the works.

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## 11.0 Site Archive

11.1 The documentary and physical archive is currently in the possession of Allen Archaeology Limited. It will be submitted to The Collection, Lincoln within twelve months of the completion of the project, where it will be stored under the global accession number LCNCC: 2010.158.

## Appendix 1: Colour Plates



**Plate 1:** Excavation of Test Pit 1, looking east



**Plate 2:** East facing section of Test Pit 1 following excavation, looking west



**Plate 3:** Test Pit 2 during excavation, looking west. Robber trench [210] and robber pit [211] are visible



**Plate 4:** Test Pit 2 following excavation, looking east. Stone surfaces 218 and 219 are visible, along with wall foundation cut [221]



**Plate 5:** Close up of wall foundation cut [221] in Test Pit 2, looking east

## Appendix 2: Romano-British Pottery Assessment

By Ian Rowlandson

### Introduction

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery* (Darling 2004) using the codes developed by the City of Lincoln Archaeological Unit- CLAU (see Darling and Precious *forthcoming*). Rim equivalents (RE) have been recorded and an attempt at a ‘maximum’ vessel estimate has been made following Orton (1975, 31). The pottery has been bagged by fabric and vessels selected as suitable for illustration have been bagged separately for ease of future reference. The archive record (Appendix 1) is an integral part of this report and will be curated in an Access database, available from the author in a digital format. The report was produced on the basis of site information provided by AAL.

### Condition

The ceramics presented for assessment totalled 689 manually retrieved Roman sherds, weighing 12.466kg total RE 10.04, from 16 contexts from a scheme of archaeological evaluation. The majority of the Roman sherds are relatively fresh, the average sherd weight of 18.09g/sherd is high as would be expected for a site in the Upper City of Lincoln. Thirty-three sherds showed signs of external sooting from use on the fire or internal calcareous deposits typical of boiling water or urine. These deposits appeared most commonly on the jars in the Dalesware type fabric, on the other late Roman coarse ware fabrics LROL, LCOAV and SMSH, and a small number of sherds in the BBT, GREY and GROG fabrics. A number of vessels showed signs of industrial deposits and these are discussed in more detail (below). A single jar sherd from context 104 showed signs of a post-firing piercing.

The pottery presented for study is an interesting group including a fragment of a face pot and a number of sherds with industrial residues. Although much of the pottery was retrieved from deposits containing post Roman pottery, four contexts appear to be from *in situ* dumps of Roman pottery. It is likely that much of the residual material is derived by the early medieval reworking of similar dumps.

This group highlights the presence of important areas of surviving Roman archaeology and the potential that further evidence of glassmaking and other craft industries might be recognised from any further work on the site. A preliminary investigation of the literature suggests that clear glass production - possibly for window glass - is unknown in Lincoln and these finds may represent an important discovery. The presence of a face pot also adds another example to the growing corpus of such significant vessels in the region.

### Dating

The detailed archive is presented as Appendix 1. Table 1 provides a quantified summary of spot dates by context. Dates of the post Roman pottery by Young (this volume) have been included into this table to highlight the potentially residual groups of Roman pottery.

| Table 1- Dating Summary |             |   |       |            |            |
|-------------------------|-------------|---|-------|------------|------------|
| Context                 | Spot date   | Comments  | Sherd | Weight (g) | Total RE % |
| 100                     | L9-M11/ ML3 | A small group including a fragment of a large Dalesware jar and a single post Roman sherd | 4     | 117        | 30         |
| 102                     | M15-16/ 2C  | A single residual samian sherd  | 1     | 4          | 0          |
| 104                     | L10-12/ L4  | A large group including a single intrusive sherd  | 126   | 1833       | 132        |
| 105                     | L10-12/ L4  | A medium sized group of Roman pottery including a fragment of a bead and flanged bowl     | 92    | 1592       | 148        |

| Table 1- Dating Summary |             |   |       |            |            |
|-------------------------|-------------|---|-------|------------|------------|
| Context                 | Spot date   | Comments  | Sherd | Weight (g) | Total RE % |
| 106                     | 4C          | A medium sized group of Roman pottery including a fragment of a beaker used as a crucible   | 70    | 1542       | 106        |
| 107                     | 4C          | A large group including fragments of a pentice moulded beaker and a painted colour coated jar   | 104   | 1730       | 188        |
| 108                     | VL4         | A large group including earlier material  | 68    | 1691       | 189        |
| 200                     | 3C+         | A small group of greyware sherds  | 10    | 114        | 12         |
| 202                     | L10-12/ L4  | A small group of Roman pottery including a fragment of a bead & flanged bowl  | 12    | 296        | 24         |
| 203                     | PROM/ ML3   | A medium sized group of Roman pottery including fragments of a Dalesware jar and a 'Castor Box' lid.  | 61    | 932        | 43         |
| 204                     | L10-M11/ 3C | A small group of Roman pottery including a fragment from a tile pot and a sherd with possible traces of pigment. A 'Castor Box' fragment from this context is from the same vessel present in context 203 | 28    | 465        | 30         |
| 205                     | L4          | A small group including a fragment of an unusual double lid-seated jar  | 9     | 183        | 18         |
| 208                     | L9-10/ 3C+  | A medium sized group of Roman pottery including an amphora base   | 39    | 885        | 32         |
| 209                     | EM-L10/ VL4 | A medium sized group of Roman pottery including a fragment of samian imbedded in <i>opus signinum</i> and a sherd with glass making residue   | 59    | 931        | 42         |
| 212                     | L9-10/ 3C   | A small group of Roman pottery including a fragment of a  | 5     | 145        | 10         |
| 302                     | 2C+         | A single burnt sherd in a cream fabric  | 1     | 6          | 0          |

There is a relatively small quantity of early Roman pottery within the group. With the exception of some of the samian, amphorae and IAGR fabrics the majority of the pottery is typical of 3<sup>rd</sup> to 4<sup>th</sup> century groups with a relatively low amount of residual 1<sup>st</sup> and 2<sup>nd</sup> century material. Most of the contexts contain fragments of the typical late Roman greyware types, Dalesware and Nene Valley colour coated fineware fabrics. This is in contrast to the groups found at nearby The Old Palace site where important groups of early Roman pottery were found (Rowlandson with Precious 2008). This may merely be as a result of this evaluation being located on a different Roman terrace or not being deep enough to reach earlier, legionary deposits. Much of the Roman pottery from the LIBI10 site is probably residual. A number of the contexts contain post Roman pottery and it appears likely that the Roman pottery in these groups is a result of later reworking of Roman deposits. Four contexts which are likely to represent *in situ* Roman remains have been highlighted with the assistance of the excavator.

Context 106 contained Roman pottery that dates to the 4<sup>th</sup> century including a Nene Valley beaker, which was reused as a crucible. Also present is a fragment of a mortarium from the Nene Valley. The majority of the sherds in this group are in the reduced GREY and shell gritted DWSH fabrics.

Context 107 produced a larger group of Roman pottery. It contained a similarly high proportion of the GREY fabric and is dated to the 4<sup>th</sup> century on the basis of the presence of a colour coated beaker with a pentice moulding.

Context 108 produced a more mixed group of Roman pottery including a range of samian and amphora but also contained a shell gritted jar from the south Midlands (D3), another late Roman jar probably from southern Lincolnshire (D4) and fragment of a colour coated vessel probably from the Oxford industry. These all typically occur in 'final Roman' deposits in the city.



From Trench 2 a single layer, 204, overlying a yard surface appears to be of 3<sup>rd</sup> century date and produced a range of interesting material such as a fragment of a jar with an internal pitch deposit (see below), an unusual vessel in a tile fabric (D5) and a number of fragments of a Castor Box lid in a local oxidised fabric (D6). This group is the earliest uncontaminated group of Roman pottery retrieved during this evaluation.

The residual contexts produced a range of 1<sup>st</sup> to late 4<sup>th</sup> century Roman pottery, of which the majority can be classified as late Roman. This is of interest as there is usually a much earlier dating bias to assemblages from the Upper City of Lincoln.

### Overview of Fabrics & Forms

The summaries of fabric and form are presented in Tables 2 & 3.

| Table 2- Fabric summary |              |  |       |         |            |          |            |
|-------------------------|--------------|--|-------|---------|------------|----------|------------|
| Fabric                  | Fabric group | Fabric details                                 | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
| SAM                     | Samian       | Undifferentiated                               | 14    | 2.03%   | 103        | 0.83%    | 17         |
| SAMCG                   | Samian       | Central Gaulish                                | 13    | 1.89%   | 91         | 0.73%    | 22         |
| SAMCG?                  | Samian       | Central Gaulish                                | 1     | 0.15%   | 4          | 0.03%    | 0          |
| SAMEG                   | Samian       | East Gaulish                                   | 4     | 0.58%   | 51         | 0.41%    | 0          |
| SAMEG?                  | Samian       | East Gaulish samian                            | 1     | 0.15%   | 10         | 0.08%    | 0          |
| SAMLM                   | Samian       | Les Martres de Veyre                           | 2     | 0.29%   | 15         | 0.12%    | 0          |
| SAMSG                   | Samian       | South Gaulish                                  | 3     | 0.44%   | 35         | 0.28%    | 14         |
| AMPH                    | Amph         | Miscellaneous amphorae                         | 1     | 0.15%   | 23         | 0.18%    | 0          |
| DR20                    | Amph         | Dr 20 amphorae                                 | 3     | 0.44%   | 297        | 2.38%    | 0          |
| GAU4                    | Amph         | Gauloise 4                                     | 5     | 0.73%   | 573        | 4.60%    | 0          |
| MOMH                    | Mort         | Mancetter-Hartshill mortaria                   | 1     | 0.15%   | 71         | 0.57%    | 5          |
| MONV                    | Mort         | Nene Valley mortaria                           | 3     | 0.44%   | 148        | 1.19%    | 9          |
| MORT                    | Mort         | Mortaria; undifferentiated                     | 1     | 0.15%   | 10         | 0.08%    | 0          |
| MOSL                    | Import       | Rhenish; from Trier                            | 3     | 0.44%   | 12         | 0.10%    | 0          |
| MOSL?                   | Import       | Rhenish; from Trier                            | 1     | 0.15%   | 8          | 0.06%    | 0          |
| CC                      | Fine         | Other colour-coated wares                      | 3     | 0.44%   | 58         | 0.47%    | 10         |
| HADOX                   | Fine         | Misc. red-surfaced Oxfordshire/Hadham variants | 1     | 0.15%   | 2          | 0.02%    | 0          |
| NVCC                    | Fine         | Nene Valley colour-coated ware                 | 30    | 4.35%   | 225        | 1.80%    | 25         |
| NVCC?                   | Fine         | Nene Valley colour-coated ware                 | 1     | 0.15%   | 20         | 0.16%    | 0          |
| NVCC1                   | Fine         | Nene Valley Colour-coat- light firing fabric   | 13    | 1.89%   | 145        | 1.16%    | 0          |
| NVCC2                   | Fine         | Nene Valley Colour-coat- late red fabric       | 16    | 2.32%   | 59         | 0.47%    | 50         |
| NVCC2?                  | Fine         | Nene Valley Colour-coat- late red fabric       | 1     | 0.15%   | 3          | 0.02%    | 0          |
| OXRC?                   | Fine         | Oxfordshire red colour-coated                  | 1     | 0.15%   | 15         | 0.12%    | 0          |
| CR                      | Oxid         | Roman cream wares (various)                    | 11    | 1.60%   | 233        | 1.87%    | 15         |
| OX                      | Oxid         | Misc. oxidized wares                           | 15    | 2.18%   | 157        | 1.26%    | 17         |
| OXWS                    | Oxid         | Oxidized with white slip                       | 1     | 0.15%   | 104        | 0.83%    | 0          |
| SPOX                    | Oxid         | Swanpool oxidized wares                        | 1     | 0.15%   | 8          | 0.06%    | 10         |
| TILE                    | Oxid         | Tile fabric vessels                            | 1     | 0.15%   | 39         | 0.31%    | 0          |

| Table 2- Fabric summary |              |   |       |         |            |          |            |
|-------------------------|--------------|---|-------|---------|------------|----------|------------|
| Fabric                  | Fabric group | Fabric details                                    | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
| BB1                     | Reduced      | Black burnished 1, unspecified                    | 6     | 0.87%   | 145        | 1.16%    | 44         |
| BBT                     | Reduced      | Black Burnished type copies                       | 14    | 2.03%   | 216        | 1.73%    | 58         |
| DSSA                    | Reduced      | Early- mid Roman sandy ware                       | 1     | 0.15%   | 7          | 0.06%    | 3          |
| DSSA?                   | Reduced      | Early- mid Roman sandy ware                       | 1     | 0.15%   | 13         | 0.10%    | 0          |
| GFIN                    | Reduced      | Miscellaneous fine grey wares                     | 14    | 2.03%   | 100        | 0.80%    | 35         |
| GFIN?                   | Reduced      | Miscellaneous fine grey wares                     | 1     | 0.15%   | 5          | 0.04%    | 0          |
| GREY                    | Reduced      | Miscellaneous grey wares                          | 379   | 55.01%  | 6275       | 50.34%   | 452        |
| GREY?                   | Reduced      | Miscellaneous grey wares                          | 4     | 0.58%   | 125        | 1.00%    | 15         |
| GREYC                   | Reduced      | Coarse Greyware                                   | 2     | 0.29%   | 137        | 1.10%    | 0          |
| GROG                    | Reduced      | Grog-tempered wares                               | 3     | 0.44%   | 293        | 2.35%    | 0          |
| IAGR                    | Reduced      | Native tradition/transitional grit-tempered wares | 20    | 2.90%   | 433        | 3.47%    | 4          |
| IAGR?                   | Reduced      | Native tradition/transitional grit-tempered wares | 1     | 0.15%   | 4          | 0.03%    | 0          |
| LCOAV                   | Reduced      | Late coarse pebbly fabric variant                 | 1     | 0.15%   | 8          | 0.06%    | 0          |
| LOND                    | Reduced      | London wares                                      | 1     | 0.15%   | 5          | 0.04%    | 0          |
| DWSHT                   | Calcareous   | Dalesware shell gritted- local?                   | 70    | 10.16%  | 1292       | 10.36%   | 149        |
| IASH                    | Calcareous   | Native tradition shell-tempered                   | 1     | 0.15%   | 34         | 0.27%    | 0          |
| LROL                    | Calcareous   | Late Roman oolitic gritted fabric                 | 1     | 0.15%   | 20         | 0.16%    | 0          |
| SHEL                    | Calcareous   | Miscellaneous undifferentiated shell-tempered     | 14    | 2.03%   | 571        | 4.58%    | 15         |
| SHELP                   | Calcareous   | Shell gritted including Punctate Brachiopods      | 3     | 0.44%   | 90         | 0.72%    | 0          |
| SMSH                    | Calcareous   | South Midlands shell-tempered wares               | 1     | 0.15%   | 174        | 1.40%    | 35         |

| Table 3- Form summary |           |  |       |         |            |          |            |
|-----------------------|-----------|--|-------|---------|------------|----------|------------|
| Form                  | Form Type | Form Description                           | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
| A                     | Amph      | Unclassified form                          | 8     | 1.16%   | 870        | 6.98%    | 0          |
| BK                    | Beaker    | Unclassified form                          | 43    | 6.24%   | 323        | 2.59%    | 56         |
| BKBR                  | Beaker    | Bead rim                                   | 1     | 0.15%   | 8          | 0.06%    | 10         |
| BKCOR                 | Beaker    | Cornice rim                                | 1     | 0.15%   | 8          | 0.06%    | 10         |
| BKEV                  | Beaker    | Everted rim                                | 1     | 0.15%   | 11         | 0.09%    | 20         |
| BKFO                  | Beaker    | Folded; indeterminate type                 | 8     | 1.16%   | 31         | 0.25%    | 0          |
| BKFOS                 | Beaker    | Folded scaled beaker                       | 1     | 0.15%   | 3          | 0.02%    | 0          |
| BKPH                  | Beaker    | Poppy head beaker                          | 2     | 0.29%   | 14         | 0.11%    | 35         |
| BKPM                  | Beaker    | Pentice moulded beaker                     | 3     | 0.44%   | 16         | 0.13%    | 17         |
| BKSF                  | Beaker    | Silt-Folded                                | 3     | 0.44%   | 10         | 0.08%    | 0          |
| 36                    | Bowl      | Samian form- see Webster 1996              | 1     | 0.15%   | 3          | 0.02%    | 4          |
| 37                    | Bowl      | Samian form- see Webster 1996              | 3     | 0.44%   | 30         | 0.24%    | 13         |
| 38?                   | Bowl      | Samian form- see Webster 1996              | 1     | 0.15%   | 10         | 0.08%    | 0          |
| B                     | Bowl      | Unclassified form                          | 3     | 0.44%   | 19         | 0.15%    | 12         |
| B?                    | Bowl      | Unclassified form                          | 1     | 0.15%   | 14         | 0.11%    | 5          |
| B37                   | Bowl      | Hemispherical possibly imitating samian 37 | 1     | 0.15%   | 5          | 0.04%    | 0          |

| Table 3- Form summary |             |  |       |         |            |          |            |
|-----------------------|-------------|--|-------|---------|------------|----------|------------|
| Form                  | Form Type   | Form Description                           | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
| B38                   | Bowl        | Imitation samian 38                        | 2     | 0.29%   | 23         | 0.18%    | 0          |
| BFB                   | Bowl        | Bead and flange bowl                       | 10    | 1.45%   | 291        | 2.33%    | 50         |
| BFBH                  | Bowl        | Bead and flange high bead                  | 6     | 0.87%   | 165        | 1.32%    | 26         |
| BFL                   | Bowl        | Flange rimmed                              | 7     | 1.02%   | 270        | 2.17%    | 48         |
| BG225                 | Bowl        | Rounded as Gillam 1970 No 225              | 3     | 0.44%   | 102        | 0.82%    | 34         |
| BIBF                  | Bowl        | Inturned bead and flange - Swanpool D13-23 | 2     | 0.29%   | 59         | 0.47%    | 5          |
| BFLL                  | Bowl- large | Flange rimmed                              | 1     | 0.15%   | 28         | 0.22%    | 9          |
| BL                    | Bowl- large | Large                                      | 9     | 1.31%   | 327        | 2.62%    | 8          |
| BWM                   | Bowl- large | Wide-mouthed; D&P No 1225-30               | 1     | 0.15%   | 30         | 0.24%    | 4          |
| BWM1                  | Bowl- large | Wide-mouthed; D&P No.1225-7                | 1     | 0.15%   | 75         | 0.60%    | 13         |
| BWM2                  | Bowl- large | Wide-mouthed; D&P No. 1228                 | 1     | 0.15%   | 38         | 0.30%    | 4          |
| 18/31-31              | Bowl/dish   | Samian form- see Webster 1996              | 4     | 0.58%   | 29         | 0.23%    | 0          |
| BD                    | Bowl/dish   | -  | 25    | 3.63%   | 347        | 2.78%    | 0          |
| BD?                   | Bowl/dish   | -  | 1     | 0.15%   | 13         | 0.10%    | 0          |
| BDFL                  | Bowl/dish   | Flanged                                    | 1     | 0.15%   | 10         | 0.08%    | 5          |
| CLSD                  | Closed      | Form                                       | 84    | 12.19%  | 1514       | 12.15%   | 0          |
| 33                    | Cup         | Samian form- see Webster 1996              | 3     | 0.44%   | 20         | 0.16%    | 14         |
| 18/31                 | Dish        | Samian form- see Webster 1996              | 2     | 0.29%   | 16         | 0.13%    | 0          |
| 79                    | Dish        | Samian form- see Webster 1996              | 1     | 0.15%   | 21         | 0.17%    | 3          |
| D                     | Dish        | Unclassified form                          | 1     | 0.15%   | 6          | 0.05%    | 0          |
| D?                    | Dish        | Unclassified form                          | 1     | 0.15%   | 4          | 0.03%    | 0          |
| DFL                   | Dish        | Flange rimmed                              | 1     | 0.15%   | 13         | 0.10%    | 7          |
| DGR                   | Dish        | Grooved rim                                | 2     | 0.29%   | 20         | 0.16%    | 13         |
| DPR                   | Dish        | Plain rim                                  | 10    | 1.45%   | 245        | 1.97%    | 71         |
| DTR                   | Dish        | Triangular rim                             | 1     | 0.15%   | 17         | 0.14%    | 6          |
| FTR                   | Flagon      | Ringed dominant top ring                   | 1     | 0.15%   | 30         | 0.24%    | 8          |
| FJ                    | Flagon/jar  | Unclassified form                          | 3     | 0.44%   | 59         | 0.47%    | 0          |
| FS                    | Flask       | Or exceptionally small flagon              | 1     | 0.15%   | 4          | 0.03%    | 7          |
| J                     | Jar         | Unclassified form                          | 25    | 3.63%   | 480        | 3.85%    | 21         |
| J?                    | Jar         | Unclassified form                          | 2     | 0.29%   | 30         | 0.24%    | 0          |
| JBR                   | Jar         | Bead rimmed                                | 1     | 0.15%   | 20         | 0.16%    | 12         |
| JCUR                  | Jar         | Curved                                     | 1     | 0.15%   | 174        | 1.40%    | 35         |
| JDLS                  | Jar         | Double lid-seated                          | 3     | 0.44%   | 123        | 0.99%    | 15         |
| JDW                   | Jar         | Dales ware                                 | 23    | 3.34%   | 533        | 4.28%    | 187        |
| JEV                   | Jar         | Everted rim                                | 10    | 1.45%   | 149        | 1.20%    | 61         |
| JL                    | Jar         | Large                                      | 4     | 0.58%   | 261        | 2.09%    | 6          |
| JLH?                  | Jar         | Lug-handled                                | 1     | 0.15%   | 28         | 0.22%    | 0          |
| JLS                   | Jar         | Lid-seated                                 | 1     | 0.15%   | 14         | 0.11%    | 7          |
| JNN                   | Jar         | Narrow-necked                              | 2     | 0.29%   | 30         | 0.24%    | 11         |
| JRUST                 | Jar         | Rusticated                                 | 1     | 0.15%   | 11         | 0.09%    | 0          |
| JS                    | Jar         | Storage                                    | 8     | 1.16%   | 650        | 5.21%    | 0          |
| JS?                   | Jar         | Storage                                    | 1     | 0.15%   | 39         | 0.31%    | 0          |
| JBK                   | Jar/Beaker  | Small jar or beaker                        | 4     | 0.58%   | 54         | 0.43%    | 0          |
| JBKEV                 | Jar/Beaker  | Everted rim                                | 3     | 0.44%   | 90         | 0.72%    | 0          |
| JBKFO                 | Jar/Beaker  | Folded                                     | 1     | 0.15%   | 20         | 0.16%    | 0          |
| JB                    | Jar/Bowl    | Unclassified form                          | 9     | 1.31%   | 124        | 0.99%    | 52         |

| Table 3- Form summary |           |                               |       |         |            |          |            |
|-----------------------|-----------|-------------------------------|-------|---------|------------|----------|------------|
| Form                  | Form Type | Form Description              | Sherd | Sherd % | Weight (g) | Weight % | Total RE % |
| JBL                   | Jar/Bowl  | Large                         | 4     | 0.58%   | 89         | 0.71%    | 10         |
| JBNK                  | Jar/Bowl  | Necked                        | 2     | 0.29%   | 31         | 0.25%    | 25         |
| L                     | Lid       | Unclassified form             | 1     | 0.15%   | 7          | 0.06%    | 3          |
| L?                    | Lid       | Unclassified form             | 1     | 0.15%   | 23         | 0.18%    | 4          |
| CRUC                  | Misc      | Crucible                      | 1     | 0.15%   | 20         | 0.16%    | 0          |
| FACE                  | Misc      | Face pot                      | 1     | 0.15%   | 104        | 0.83%    | 0          |
| LBX                   | Misc      | Castor box lid                | 13    | 1.89%   | 116        | 0.93%    | 17         |
| M                     | Mortaria  | Unclassified Form             | 3     | 0.44%   | 88         | 0.71%    | 0          |
| MHH                   | Mortaria  | Hammerheads as Gillam 279-84  | 1     | 0.15%   | 71         | 0.57%    | 5          |
| MRR                   | Mortaria  | Reeded rim                    | 2     | 0.29%   | 88         | 0.71%    | 9          |
| OPEN                  | Open      | Form                          | 16    | 2.32%   | 214        | 1.72%    | 0          |
| 15/17                 | Plate     | Samian form- see Webster 1996 | 1     | 0.15%   | 9          | 0.07%    | 0          |
| 18                    | Plate     | Samian form- see Webster 1996 | 1     | 0.15%   | 8          | 0.06%    | 7          |
| P?                    | Plate     | Form                          | 1     | 0.15%   | 8          | 0.06%    | 0          |
| -                     | Unknown   | Form uncertain                | 275   | 39.91%  | 3609       | 28.95%   | 0          |

The samian present mostly dates from the later 2<sup>nd</sup> to perhaps early 3<sup>rd</sup> century. Of note is the presence of two fragments from jars or beakers, one with rouletted decoration. These vessels are usually only present in late groups of samian and are not common in assemblages from the city. The whole group, especially the two form 37 mould decorated bowl fragments and a name stamp, would benefit from identification by a samian specialist.

This group contains a range of Nene Valley type colour coated pottery typical of late Roman groups from the city. Also present are sherds of imported beakers from Germany (MOSL) and sherds from the late Roman Oxford industry (OXRC). These imports are commonly found in small quantities in groups from the city because the *colonia*, as a centre for trade, had access to a broad range of ceramic imports.

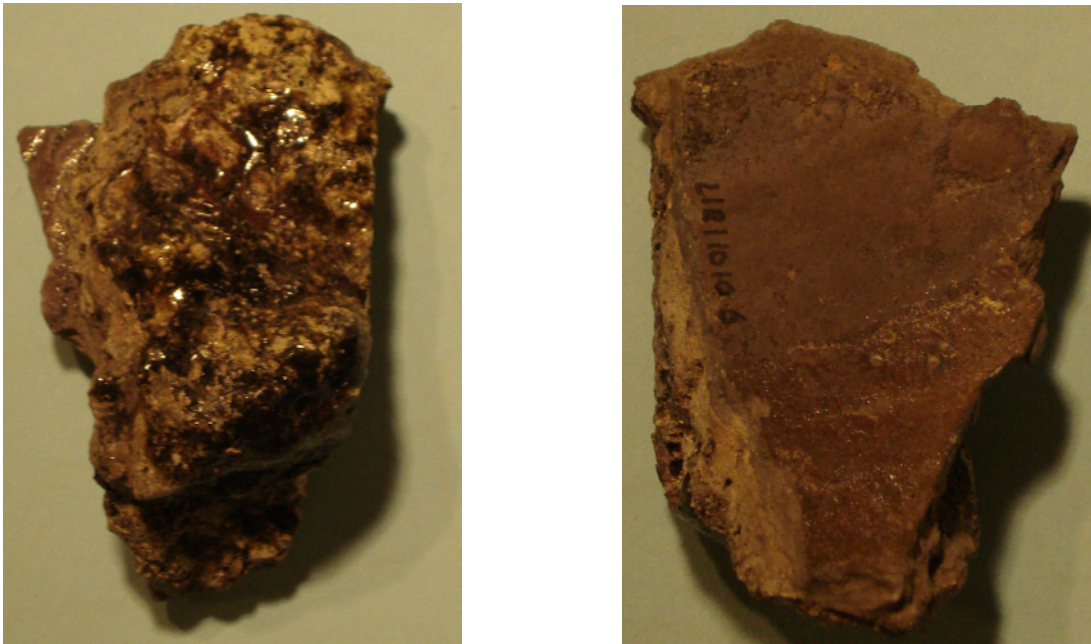
A small proportion of residual CR sherds are present in the group including a flagon rim. A white slipped face pot was probably also manufactured in the early Roman period (D2, discussed below). Sherds from the local OX and SPOX fabrics are all typical of late Roman products including a finely rouletted Castor Box lid (D6). Of note is a fragment from a large vessel in a TILE fabric (D5), possibly from a large jar, which has an applied handle or decorative lug with slashed decoration. A number of these vessels have previously been found in the Wigford area.

The local reduced greyware GREY was the most common fabric in this group with the range of forms present including the typical late Roman wide-mouthed bowls, suggesting that the majority of this fabric group is of 3<sup>rd</sup> to 4<sup>th</sup> century date. A small proportion of the IAGR fabric and rusticated jar sherds are residual in the group and represent rubbish from earlier phases of Roman occupation of the site.

The majority of the shell gritted sherds are in the Dalesware tradition and are probably from a local source. Only two vessels in this group were probably brought from further afield: a shell gritted jar from a south Midlands source (D3) and another late Roman jar probably from a south Lincolnshire source (D4). An unusual example of a 4<sup>th</sup> century double lid-seated jar also worthy of illustration (D1) represents an example of the latest Roman shell gritted cooking pots made in the area.

### The industrial residues

A small number of vessels from this site have evidence of industrial/ none domestic usage these are discussed in greater depth in this section.



*Above- Roman beaker sherd reused as a crucible from context 106. Left External slag residues. Right internal view showing external clay lining. Maximum height of sherd 75mm.*

A sherd from a rouletted Nene Valley colour coated beaker from context 106 has been reused to make a crucible. This vessel form was probably selected for its small capacity. It was coated in a local light-firing clay to better insulate the vessel and protect it from thermal shock. Deposits of fuel ash slag are present on the outside of the vessel. No internal residues were visible to the author although further analysis may yet recognise the materials processed in the vessel.

Context 209 produced a greyware sherd with a thin residue of clear glass on the internal surface of the sherd. The glass appears to be clear or pale green. This is unusual and suggests that this sherd may be from processes associated with making window glass. Although evidence for Roman window glass manufacturing has been recognised at York (Cool *et. al.* 1999) none are known from Lincoln to date (J. Young *pers. com.*). It is also worthy of note that this vessel is from a post Roman context dating to the 10<sup>th</sup> century so may represent reuse of a Roman vessel or vessel fragment. Further evidence from this site may help to resolve this question.



*Above- The greyware sherd with glass residue from context 209. Maximum width 65mm.*

Also present in this group is a sherd in the IAGR fabric, from context 204, which appears to have an internal deposit of a black substance, probably pitch. Streaks of the same material on the external surface of the vessel suggest that the pitch, when heated, was poured from the vessel. Another sherd from context 106 appears to have traces of red pigment on the surface of the vessel although, as the vessel is burnt, it may be some other substance.

### The Face Pot

The face pot fragment from context 212 is of great importance as these vessels are believed to have 'cultic' or 'ritual' significance. This vessel is in an unusual oxidised fabric which has an external white slip and a small patch of mica-rich orange red paint near the hair line. This gives the impression that the vessel may have had a hairstyle depicted by a zone of mica dusting. Unfortunately the vessel has fragmented along the edge of this decoration. The nose and brow ridges appear to have been partially pushed out from the inside of the pot.

Extensive research has been undertaken into face pots in Lincolnshire and beyond, providing excellent opportunities to undertake further study of this sherd. In particular, a comparison of stylistic affinities with other examples from the United Kingdom might prove useful (Darling in prep., Darling and Precious forthcoming and Braithwaite 2007). A preliminary investigation of the literature suggests that the style of the vessel both in decoration and fabric appears to share greater similarities with an early Roman vessel from excavations at Cottesford Place, Lincoln (Darling and Precious forthcoming No. 473) than the late Roman examples (Darling and Precious forthcoming, No. 481 & 1399-1414). As such, it would be a rare example of an early Roman face pot from Lincoln.



*Above- The face pot from context 212, external and internal views. Maximum width 106mm.*

### Discussion

The pottery from the LIBI10 evaluation highlights the extent of potential information which further excavated groups from this site may reveal about ceramic usage in the upper city. Further evidence may tell us about how people lived and their craft specialisms in this part of Roman Lincoln.

This evaluation mostly encountered late Roman deposits or residual late Roman pottery in post Roman deposits. The presence of an unusual face pot and important evidence for Roman industrial processes in this group make it important. The presence of a face pot in this group, a form often associated with areas of craft production such as the Wigford, also suggests the possibility of a craft or workshop area in this part of the town. Our understanding of the upper city in the Roman period is limited as there have been few large scale excavations (Steane 2006; Darling 1981a, 397). This investigation, and any subsequent investigations on the site, has the potential to greatly improve our knowledge.

## Recommendations

All of the pottery should be retained and deposited in the relevant museum to enable future research. This group highlights the extremely high research potential, which future investigations in the City of Lincoln, and specifically on this site, have to further illuminate our understanding of the domestic, industrial and ritual use of ceramics in the *colonia*. The industrial vessels found during the evaluation highlight the potential that further work may produce a larger group of vessels with industrial residues. The recommendations are as follows

- 1- Illustration of the six vessels selected should be undertaken as they are a useful addition to the existing corpus of illustrations from Lincoln (Darling and Precious forthcoming). Priority should be given to the illustration of the face pot.
- 2- Further comparison of the face pot with other examples from the region. The publication of this vessel would be desirable either as part of an overall publication of the site excavation or as an archaeological note to inform other researchers
- 3- Clarification of the identification of the samian ware by a specialist and a report on the stamped and mould decorated sherds should be undertaken prior to a final report on the pottery from the project.
- 4- In the event of further work on the site, provision should be made for the appropriate analysis of industrial residues. Crucibles should not be washed prior to consultation with a specialist who may advise on the potential for analysis. Further glass working evidence would benefit from the input of a specialist especially as there has been little evidence of clear glass manufacture from Lincoln.
- 5- In the event of further investigations on this site, a scheme of analysis including the vessels from this evaluation should be undertaken. Publication of these finds should be considered to highlight the results to a wider audience.

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| Appendix 1- LIBI10 Roman pottery archive |        |      |            |         |                           |         |           |       |        |          |         |     |
|--|--------|------|------------|---------|---------------------------|---------|-----------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form | Decoration | Vessels | Alt                       | Drawing | Comments  | Sherd | Weight | Rim diam | Rim eve | Pub |
| 100                                      | DWSHT  | JDW  |            | 1       | ABR                       |         | RIM       | 1     | 19     | 10       | 13      |     |
| 100                                      | DWSHT  | JDW  |            | 1       |                           |         | RIM       | 1     | 68     | 34       | 3       |     |
| 100                                      | GREY   | -    |            | 1       |                           |         | BS        | 1     | 10     | 0        | 0       |     |
| 100                                      | GREY   | J    |            | 1       |                           |         | RIM       | 1     | 20     | 12       | 14      |     |
| 102                                      | SAMCG? | -    |            | 1       |                           |         | BASE?;FTR | 1     | 4      | 0        | 0       |     |
| 104                                      | BBT    | DPR  |            | 1       |                           |         | RIM       | 1     | 31     | 24       | 9       |     |
| 104                                      | DWSHT  | CLSD | HM         | 1       |                           |         | BASE      | 1     | 12     | 0        | 0       |     |
| 104                                      | DWSHT  | CLSD | HM         | 10      |                           |         | BS        | 10    | 163    | 0        | 0       |     |
| 104                                      | DWSHT  | CLSD | HM         | 1       | CALC INT DEP;<br>SOOT EXT |         | BS        | 2     | 59     | 0        | 0       |     |
| 104                                      | DWSHT  | JDW  | WF         | 1       |                           |         | RIM       | 1     | 34     | 22       | 7       |     |
| 104                                      | DWSHT  | JDW  | WF         | 1       |                           |         | RIM       | 1     | 15     | 20       | 5       |     |
| 104                                      | DWSHT  | JDW  | WF         | 1       | ABR                       |         | RIM       | 1     | 22     | 12       | 6       |     |
| 104                                      | DWSHT  | JDW  | WF         | 1       | ABR                       |         | RIM       | 1     | 9      | 12       | 4       |     |
| 104                                      | GFIN   | B38  |            | 1       |                           |         | BS FLANGE | 1     | 8      | 0        | 0       |     |
| 104                                      | GFIN   | CLSD |            | 4       |                           |         | BS        | 4     | 29     | 0        | 0       |     |
| 104                                      | GFIN   | OPEN |            | 3       |                           |         | BS        | 3     | 27     | 0        | 0       |     |
| 104                                      | GREY   | DPR  |            | 1       |                           |         | RIM       | 1     | 21     | 18       | 5       |     |
| 104                                      | GREY   | -    |            | 1       | VAB                       |         | BS        | 1     | 18     | 0        | 0       |     |
| 104                                      | GREY   | BL   |            | 1       |                           |         | RIM       | 1     | 28     | 27       | 8       |     |
| 104                                      | GREY   | -    |            | 1       | CALC DEP INT              |         | BS        | 1     | 9      | 0        | 0       |     |
| 104                                      | GREY   | CLSD |            | 1       |                           |         | BASE      | 1     | 48     | 0        | 0       |     |
| 104                                      | GREY   | JDW  | WM         | 1       |                           |         | RIM       | 2     | 44     | 17       | 15      |     |
| 104                                      | GREY   | JEV  |            | 1       |                           |         | RIM       | 1     | 17     | 12       | 14      |     |
| 104                                      | GREY   | CLSD |            | 1       | PIERCED?                  |         | BS        | 1     | 22     | 0        | 0       |     |
| 104                                      | GREY   | BFB  |            | 1       | ABR                       |         | RIM       | 1     | 40     | 15       | 4       |     |
| 104                                      | GREY   | BL   |            | 1       |                           |         | BASE      | 1     | 47     | 0        | 0       |     |
| 104                                      | GREY   | CLSD | STRING     | 2       |                           |         | BASE      | 2     | 22     | 0        | 0       |     |
| 104                                      | GREY   | DPR  |            | 1       |                           |         | RIM       | 1     | 17     | 22       | 2       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |       |                    |         |     |         |                          |       |        |          |         |     |
|--|--------|-------|--------------------|---------|-----|---------|--------------------------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration         | Vessels | Alt | Drawing | Comments                 | Sherd | Weight | Rim diam | Rim eve | Pub |
| 104                                      | GREY   | DPR   |                    | 1       |     |         | RIM                      | 1     | 13     | 20       | 6       |     |
| 104                                      | GREY   | BFBH  |                    | 1       |     |         | RIM                      | 1     | 54     | 24       | 7       |     |
| 104                                      | GREY   | BD    |                    | 3       | ABR |         | BASE                     | 3     | 39     | 0        | 0       |     |
| 104                                      | GREY   | BL    |                    | 3       |     |         | BS                       | 3     | 142    | 0        | 0       |     |
| 104                                      | GREY   | -     |                    | 43      |     |         | BS                       | 43    | 474    | 0        | 0       |     |
| 104                                      | GREY   | JEV   |                    | 1       |     |         | RIM SHLDR                | 1     | 19     | 14       | 2       |     |
| 104                                      | GREY   | BFL   |                    | 1       |     |         | RIM                      | 1     | 42     | 24       | 3       |     |
| 104                                      | GREYC  | JS    | CORDON<br>BDL; HM? | 1       |     |         | BS; CORDONED STORAGE JAR | 2     | 137    | 0        | 0       |     |
| 104                                      | HADOX  | CLSD  |                    | 1       |     |         | BS                       | 1     | 2      | 0        | 0       |     |
| 104                                      | MOSL   | BK    |                    | 1       |     |         | BS                       | 1     | 2      | 0        | 0       |     |
| 104                                      | NVCC   | BK    |                    | 11      | ABR |         | BS                       | 11    | 47     | 0        | 0       |     |
| 104                                      | NVCC   | BK    |                    | 1       |     |         | RIM                      | 1     | 3      | 8        | 15      |     |
| 104                                      | NVCC   | BK    |                    | 2       |     |         | BASE                     | 2     | 18     | 0        | 0       |     |
| 104                                      | NVCC   | BK    |                    | 1       |     |         | BS                       | 1     | 11     | 0        | 0       |     |
| 104                                      | NVCC   | FJ    |                    | 1       |     |         | BS                       | 1     | 14     | 0        | 0       |     |
| 104                                      | NVCC1  | BD    |                    | 1       |     |         | BASE; FTR                | 1     | 11     | 0        | 0       |     |
| 104                                      | NVCC2  | BK    |                    | 1       |     |         | BS                       | 1     | 2      | 0        | 0       |     |
| 104                                      | NVCC2  | BK    | PA                 | 1       |     |         | BS                       | 1     | 1      | 0        | 0       |     |
| 104                                      | NVCC2  | BK    | ROU                | 1       |     |         | BS                       | 1     | 1      | 0        | 0       |     |
| 104                                      | NVCC2  | BKFOS |                    | 1       |     |         | BS                       | 1     | 3      | 0        | 0       |     |
| 104                                      | SAM    | BD    |                    | 1       |     |         | BS                       | 1     | 1      | 0        | 0       |     |
| 104                                      | SAM    | 33    |                    | 1       |     |         | BS                       | 1     | 9      | 0        | 0       |     |
| 104                                      | SAMCG  | 37    |                    | 1       |     |         | RIM                      | 1     | 6      | 20       | 6       |     |
| 104                                      | SAMCG  | 36    |                    | 1       |     |         | RIM                      | 1     | 3      | 24       | 4       |     |
| 104                                      | SAMCG  | BD    |                    | 1       |     |         | BS                       | 1     | 6      | 0        | 0       |     |
| 104                                      | SAMEG  | JBK   |                    | 1       |     |         | BS                       | 1     | 6      | 0        | 0       |     |
| 104                                      | SHEL   | -     |                    | 2       | VAB |         | BS                       | 1     | 17     | 0        | 0       |     |
| 104                                      | SPOX   | DGR   |                    | 1       |     |         | RIM                      | 1     | 8      | 14       | 10      |     |

| Appendix 1- LIBI10 Roman pottery archive |        |       |            |         |              |         |               |       |        |          |         |     |
|--|--------|-------|------------|---------|--------------|---------|---------------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration | Vessels | Alt          | Drawing | Comments      | Sherd | Weight | Rim diam | Rim eve | Pub |
| 105                                      | DWSHT  | JDW   |            | 1       |              |         | RIM           | 1     | 18     | 19       | 7       |     |
| 105                                      | DWSHT  | JDW   |            | 1       |              |         | RIM           | 1     | 13     | 10       | 8       |     |
| 105                                      | DWSHT  | CLSD  |            | 2       | CALC DEP INT |         | BS            | 2     | 37     | 0        | 0       |     |
| 105                                      | DWSHT  | JDW   |            | 1       |              |         | RIM           | 1     | 26     | 15       | 15      |     |
| 105                                      | DWSHT  | -     |            | 5       | ABR          |         | BS            | 5     | 82     | 0        | 0       |     |
| 105                                      | DWSHT  | JDW   |            | 1       |              |         | RIM           | 1     | 15     | 15       | 12      |     |
| 105                                      | GREY   | BFB   |            | 1       |              |         | RIM SCRAP     | 1     | 12     | 0        | 0       |     |
| 105                                      | GREY   | DPR   |            | 1       |              |         | RIM           | 1     | 15     | 20       | 10      |     |
| 105                                      | GREY   | BK    |            | 1       |              |         | RIM           | 1     | 6      | 8        | 8       |     |
| 105                                      | GREY   | DPR   |            | 1       |              |         | RIM           | 1     | 40     | 14       | 7       |     |
| 105                                      | GREY   | BFBH  |            | 1       |              |         | RIM           | 1     | 43     | 18       | 4       |     |
| 105                                      | GREY   | J     |            | 1       |              |         | RIM           | 1     | 14     | 16       | 7       |     |
| 105                                      | GREY   | -     |            | 17      |              |         | BS            | 17    | 213    | 0        | 0       |     |
| 105                                      | GREY   | BFB   |            | 1       | VAB          |         | RIM SCRAP     | 1     | 12     | 0        | 0       |     |
| 105                                      | GREY   | BFL   |            | 1       |              |         | RIM           | 1     | 14     | 20       | 7       |     |
| 105                                      | GREY   | JDW   |            | 1       | ABR          |         | RIM           | 1     | 11     | 14       | 10      |     |
| 105                                      | GREY   | BL    | BSC        | 1       |              |         | BS            | 1     | 15     | 0        | 0       |     |
| 105                                      | GREY   | BFB   |            | 1       |              |         | RIM           | 1     | 27     | 20       | 10      |     |
| 105                                      | GREY   | JBKFO |            | 1       |              |         | BS            | 1     | 20     | 0        | 0       |     |
| 105                                      | GREY   | CLSD  |            | 2       |              |         | BASE          | 2     | 79     | 0        | 0       |     |
| 105                                      | GREY   | -     |            | 2       | CALC DEP INT |         | BS            | 2     | 31     | 0        | 0       |     |
| 105                                      | GREY   | OPEN  |            | 5       |              |         | BASE          | 5     | 126    | 0        | 0       |     |
| 105                                      | GREY   | -     |            | 27      |              |         | BS            | 27    | 401    | 0        | 0       |     |
| 105                                      | GREY   | BFB   |            | 1       | ABR          |         | RIM           | 1     | 58     | 29       | 5       |     |
| 105                                      | GREY   | JNN   |            | 1       |              |         | RIM           | 1     | 14     | 14       | 11      |     |
| 105                                      | GREY?  | CLSD  |            | 1       | BURNT        |         | BS            | 1     | 44     | 0        | 0       |     |
| 105                                      | IASH   | CLSD  | HM         | 1       |              |         | BS            | 1     | 34     | 0        | 0       |     |
| 105                                      | MOMH   | MHH   | PA         | 1       |              |         | RIM RED PAINT | 1     | 71     | 38       | 5       |     |
| 105                                      | MONV   | MRR   |            | 1       |              |         | RIM           | 1     | 30     | 30       | 4       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |      |                              |         |                        |         |                               |       |        |          |         |     |
|--|--------|------|------------------------------|---------|------------------------|---------|-------------------------------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form | Decoration                   | Vessels | Alt                    | Drawing | Comments                      | Sherd | Weight | Rim diam | Rim eve | Pub |
| 105                                      | NVCC   | BK   |                              | 1       |                        |         | BS                            | 1     | 1      | 0        | 0       |     |
| 105                                      | NVCC1  | FJ   |                              | 1       |                        |         | BS                            | 1     | 17     | 0        | 0       |     |
| 105                                      | NVCC2  | BK   |                              | 1       |                        |         | RIM                           | 1     | 4      | 8        | 13      |     |
| 105                                      | NVCC2  | BKPM | PA                           | 1       |                        |         | BS DOTS                       | 1     | 6      | 0        | 0       |     |
| 105                                      | NVCC2  | BK   | PA                           | 1       |                        |         | BS DIAGONAL WHITE PAINT       | 1     | 5      | 0        | 0       |     |
| 105                                      | SAM    | 33   |                              | 1       |                        |         | RIM                           | 1     | 5      | 10       | 5       |     |
| 105                                      | SAM    | M    |                              | 1       |                        |         | BS                            | 1     | 18     | 0        | 0       |     |
| 105                                      | SAM    | 37   | MOULD                        | 1       |                        |         | BS                            | 1     | 6      | 0        | 0       |     |
| 105                                      | SAMCG  | OPEN |                              | 1       |                        |         | BS                            | 1     | 2      | 0        | 0       |     |
| 105                                      | SAMLM  | OPEN |                              | 1       |                        |         | BS                            | 1     | 7      | 0        | 0       |     |
| 106                                      | BBT    | J    |                              | 1       |                        |         | BS; SHLDR                     | 1     | 24     | 0        | 0       |     |
| 106                                      | BBT    | JB   |                              | 1       | SOOT EXT               | D?      | RIM; UNUSUAL SMALL BFB OR JNN | 1     | 14     | 10       | 12      |     |
| 106                                      | DR20   | A    |                              | 1       |                        |         | BS; SALT SURFACE              | 1     | 95     | 0        | 0       |     |
| 106                                      | DWSHT  | J    |                              | 1       |                        |         | BS                            | 1     | 9      | 0        | 0       |     |
| 106                                      | DWSHT  | J    |                              | 1       |                        |         | BS                            | 1     | 27     | 0        | 0       |     |
| 106                                      | DWSHT  | CLSD |                              | 1       | CALC INT;<br>SOOT EXT  |         | BASE;                         | 1     | 33     | 0        | 0       |     |
| 106                                      | DWSHT  | JDW  | WF                           | 1       | ABR                    |         | RIM                           | 1     | 16     | 10       | 8       |     |
| 106                                      | DWSHT  | JDW  | WF                           | 1       | ABR; SOOT EXT<br>& INT |         | RIM                           | 1     | 18     | 17       | 10      |     |
| 106                                      | DWSHT  | JDW  | WF                           | 1       |                        |         | RIM                           | 2     | 109    | 15       | 12      |     |
| 106                                      | DWSHT  | -    |                              | 1       | VAB                    |         | BS                            | 1     | 5      | 0        | 0       |     |
| 106                                      | GREY   | BWM1 |                              | 1       | ABR                    |         | RIM                           | 1     | 75     | 30       | 13      |     |
| 106                                      | GREY   | BFL  |                              | 1       |                        |         | RIM                           | 1     | 20     | 26       | 7       |     |
| 106                                      | GREY   | -    |                              | 14      |                        |         | BS                            | 14    | 171    | 0        | 0       |     |
| 106                                      | GREY   | -    |                              | 3       | CALC INT               |         | BS                            | 3     | 43     | 0        | 0       |     |
| 106                                      | GREY   | JEV  | LA                           | 1       |                        |         | RIM SHLDR;                    | 2     | 34     | 14       | 4       |     |
| 106                                      | GREY   | J    | LA BS;<br>OBTUESE<br>LATTICE | 1       |                        |         | BS                            | 1     | 28     | 0        | 0       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |       |            |         |                                  |         |  |       |        |          |         |     |
|--|--------|-------|------------|---------|----------------------------------|---------|--|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration | Vessels | Alt                              | Drawing | Comments   | Sherd | Weight | Rim diam | Rim eve | Pub |
| 106                                      | GREY   | BFB   |            | 1       |                                  |         | RIM  | 1     | 12     | 0        | 0       |     |
| 106                                      | GREY   | CLSD  |            | 1       | PIGMENT? EXT                     | D?      | BS; BURNT- ?EXTERNAL PIGMENT   | 1     | 5      | 0        | 0       |     |
| 106                                      | GREY   | BG225 |            | 1       |                                  |         | RIM  | 1     | 30     | 17       | 12      |     |
| 106                                      | GREY   | -     |            | 2       |                                  |         | BS   | 2     | 8      | 0        | 0       |     |
| 106                                      | GREY   | BD    | LA;BSC     | 1       |                                  |         | BASE   | 1     | 18     | 0        | 0       |     |
| 106                                      | GREY   | J     | BDL        | 4       |                                  |         | BS   | 4     | 52     | 0        | 0       |     |
| 106                                      | GREY?  | BD?   |            | 1       | VAB                              |         | BS   | 1     | 13     | 0        | 0       |     |
| 106                                      | GROG   | JL    |            | 1       | VAB                              |         | BASE   | 1     | 115    | 0        | 0       |     |
| 106                                      | GROG   | JS    |            | 1       | SOOT EXT                         |         | BS   | 1     | 138    | 0        | 0       |     |
| 106                                      | GROG   | JS    |            | 1       |                                  |         | BASE   | 1     | 40     | 0        | 0       |     |
| 106                                      | IAGR   | J     | HM         | 1       | SOOT INT;<br>CALC INT            |         | BS   | 1     | 46     | 0        | 0       |     |
| 106                                      | IAGR   | CLSD  | HM         | 1       |                                  |         | BS; OX R   | 1     | 27     | 0        | 0       |     |
| 106                                      | IAGR   | -     |            | 1       | ABR                              |         | BS   | 1     | 14     | 0        | 0       |     |
| 106                                      | MONV   | MRR   |            | 1       | ABR                              |         | RIM  | 1     | 58     | 28       | 5       |     |
| 106                                      | NVCC?  | CRUC  | ROU        | 1       | CRUC; CLAY<br>LINING SLAG<br>EXT | D?      | BS; REUSED AS SMALL CRUCIBLE; LAGGED WITH LOCAL LIGHT FIRING CLAY C. 0.9MM THICK; THICK EXTERNAL ?FUEL ASH SLAG DEPOSIT EXTERNAL; NO VISABLE TRACES OF INTERNAL DEPOSITS | 1     | 20     | 0        | 0       |     |
| 106                                      | NVCC1  | JB    |            | 1       | BURNT                            |         | BS   | 1     | 5      | 0        | 0       |     |
| 106                                      | NVCC1  | JB    | SHG        | 1       |                                  |         | BS   | 1     | 19     | 0        | 0       |     |
| 106                                      | NVCC1  | BKSF  |            | 1       | ABR                              |         | BS   | 2     | 7      | 0        | 0       |     |
| 106                                      | NVCC1  | BK    |            | 1       |                                  |         | BASE   | 2     | 46     | 0        | 0       |     |
| 106                                      | NVCC1  | BK    |            | 3       |                                  |         | BS   | 4     | 33     | 0        | 0       |     |
| 106                                      | NVCC2  | BK    |            | 1       |                                  | *       | RIM; BEAD RIM  | 1     | 5      | 7        | 20      |     |
| 106                                      | NVCC2  | BK    | PA         | 1       |                                  |         | BS   | 1     | 10     | 0        | 0       |     |
| 106                                      | NVCC2  | BKSF  |            | 1       |                                  |         | BS   | 1     | 3      | 0        | 0       |     |
| 106                                      | NVCC2? | LBX   | ROU        | 1       | ABR                              |         | BS   | 1     | 3      | 0        | 0       |     |
| 106                                      | SAMCG  | 79    |            | 1       |                                  |         | RIM  | 1     | 21     | 26       | 3       |     |
| 106                                      | SAMCG  | -     |            | 1       | ABR                              |         | BS   | 1     | 4      | 0        | 0       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |      |            |         |     |         |                              |       |        |          |         |     |
|--|--------|------|------------|---------|-----|---------|------------------------------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form | Decoration | Vessels | Alt | Drawing | Comments                     | Sherd | Weight | Rim diam | Rim eve | Pub |
| 106                                      | SAMEG  | BD   |            | 1       |     |         | BS                           | 1     | 7      | 0        | 0       |     |
| 106                                      | SHEL   | JL   | HM         | 1       |     |         | BS;                          | 1     | 62     | 0        | 0       |     |
| 107                                      | BB1    | DPR  |            | 1       |     |         | RIM BASE                     | 1     | 24     | 16       | 3       |     |
| 107                                      | BB1    | DPR  | BIA        | 1       |     |         | RIM                          | 1     | 27     | 15       | 12      |     |
| 107                                      | DWSHT  | J    | HM         | 7       |     |         | BS                           | 7     | 117    | 0        | 0       |     |
| 107                                      | DWSHT  | JDW  |            | 1       |     |         | RIM                          | 1     | 15     | 14       | 12      |     |
| 107                                      | DWSHT  | JDW  | WF         | 1       |     |         | RIM                          | 1     | 21     | 19       | 9       |     |
| 107                                      | GAU4   | A    |            | 1       |     |         | BS; CLOTH MARKS WHITE FABRIC | 1     | 97     | 0        | 0       |     |
| 107                                      | GFIN   | CLSD |            | 1       |     |         | BS                           | 1     | 13     | 0        | 0       |     |
| 107                                      | GFIN   | CLSD |            | 1       |     |         | BASE                         | 1     | 5      | 0        | 0       |     |
| 107                                      | GFIN   | BKPH |            | 1       |     |         | BS                           | 2     | 14     | 5        | 35      |     |
| 107                                      | GREY   | DPR  |            | 1       |     |         | RIM                          | 1     | 30     | 20       | 10      |     |
| 107                                      | GREY   | J    |            | 1       |     |         | BS SHLDR                     | 1     | 38     | 0        | 0       |     |
| 107                                      | GREY   | BFL  |            | 1       |     |         | RIM BASE                     | 1     | 113    | 20       | 10      |     |
| 107                                      | GREY   | BL   | BSC        | 1       |     |         | BS                           | 1     | 20     | 0        | 0       |     |
| 107                                      | GREY   | BL   | SHG        | 1       |     |         | BS                           | 1     | 13     | 0        | 0       |     |
| 107                                      | GREY   | JB   |            | 1       |     |         | RIM                          | 1     | 10     | 18       | 5       |     |
| 107                                      | GREY   | -    |            | 1       |     |         | BS SCRAP                     | 1     | 3      | 0        | 0       |     |
| 107                                      | GREY   | BFL  | BZZ        | 1       |     |         | RIM                          | 1     | 22     | 20       | 7       |     |
| 107                                      | GREY   | JBNK |            | 1       |     |         | RIM                          | 1     | 11     | 13       | 13      |     |
| 107                                      | GREY   | BFB  |            | 1       |     |         | RIM                          | 1     | 44     | 22       | 12      |     |
| 107                                      | GREY   | BL   |            | 1       |     |         | BASE                         | 1     | 62     | 0        | 0       |     |
| 107                                      | GREY   | JLS  |            | 1       |     |         | RIM                          | 1     | 14     | 20       | 7       |     |
| 107                                      | GREY   | -    |            | 40      |     |         | BS                           | 40    | 574    | 0        | 0       |     |
| 107                                      | GREY   | B    |            | 1       |     |         | RIM                          | 1     | 8      | 20       | 5       |     |
| 107                                      | GREY   | JB   |            | 1       |     |         | RIM                          | 1     | 17     | 18       | 8       |     |
| 107                                      | GREY   | JEV  |            | 1       |     |         | RIM                          | 1     | 7      | 14       | 8       |     |
| 107                                      | GREY   | BFL  |            | 1       |     |         | RIM                          | 1     | 18     | 16       | 5       |     |
| 107                                      | GREY   | BD   |            | 5       |     |         | BASE                         | 5     | 98     | 0        | 0       |     |

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|--|--------|----------|------------|---------|--------------|---------|--|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form     | Decoration | Vessels | Alt          | Drawing | Comments   | Sherd | Weight | Rim diam | Rim eve | Pub |
| 107                                      | IAGR   | -        | HM         | 3       |              |         | BS   | 3     | 57     | 0        | 0       |     |
| 107                                      | IAGR   | JLH?     |            | 1       |              |         | BS; HANDLE OR FOOT ?FOOTED BOWL TWO GROOVES AS EXAMPLE FROM SLEAFORD SWIP06 SITE | 1     | 28     | 0        | 0       |     |
| 107                                      | IAGR   | CLSD     | HM         | 2       | CALC DEP INT |         | BS   | 2     | 14     | 0        | 0       |     |
| 107                                      | MOSL   | BKFO     |            | 1       |              |         | BS   | 1     | 6      | 0        | 0       |     |
| 107                                      | NVCC   | BKFO     |            | 1       |              |         | BS   | 1     | 3      | 0        | 0       |     |
| 107                                      | NVCC   | FJ       | PA         | 1       |              |         | BS   | 1     | 28     | 0        | 0       |     |
| 107                                      | NVCC   | BKFO     |            | 1       | BURNT        |         | BS   | 1     | 5      | 0        | 0       |     |
| 107                                      | NVCC   | BK       | ROU        | 3       |              |         | BS   | 3     | 7      | 0        | 0       |     |
| 107                                      | NVCC   | BKBR     |            | 1       |              |         | RIM  | 1     | 8      | 8        | 10      |     |
| 107                                      | NVCC   | BK       |            | 1       |              |         | BASE   | 1     | 39     | 0        | 0       |     |
| 107                                      | NVCC   | BK       |            | 1       |              |         | BS   | 2     | 18     | 0        | 0       |     |
| 107                                      | NVCC2  | BKFO     |            | 2       |              |         | BS   | 4     | 9      | 0        | 0       |     |
| 107                                      | NVCC2  | BKPM     | ROU        | 1       |              |         | BS   | 1     | 3      | 0        | 0       |     |
| 107                                      | NVCC2  | BKPM     |            | 1       |              |         | RIM  | 1     | 7      | 7        | 17      |     |
| 107                                      | OX     | CLSD     |            | 1       |              |         | BS   | 1     | 11     | 0        | 0       |     |
| 107                                      | SAMCG  | 18/31-31 |            | 1       | BURNT        |         | RIM SCRAP  | 1     | 11     | 0        | 0       |     |
| 107                                      | SAMEG  | JBK      |            | 1       |              |         | BS LOWER WALL  | 1     | 31     | 0        | 0       |     |
| 107                                      | SAMEG? | BD       |            | 1       |              |         | BS   | 1     | 10     | 0        | 0       |     |
| 108                                      | BB1    | DGR      | LA         | 1       |              |         | RIM  | 1     | 12     | 22       | 3       |     |
| 108                                      | BB1    | BFB      | BIA        | 1       |              |         | RIM  | 2     | 69     | 20       | 19      |     |
| 108                                      | BBT    | BD       | BSC        | 1       |              |         | BASE   | 1     | 18     | 0        | 0       |     |
| 108                                      | BBT    | CLSD     |            | 1       |              |         | BASE   | 1     | 12     | 0        | 0       |     |
| 108                                      | BBT    | DPR      |            | 1       |              |         | RIM  | 1     | 27     | 22       | 7       |     |
| 108                                      | BBT    | BD       |            | 1       |              |         | BASE   | 1     | 9      | 0        | 0       |     |
| 108                                      | BBT    | CLSD     |            | 1       |              |         | BS   | 1     | 9      | 0        | 0       |     |
| 108                                      | CC     | CLSD     |            | 1       |              |         | BS RED CC; PINK FAB  | 1     | 10     | 0        | 0       |     |
| 108                                      | CR     | FTR      |            | 1       |              |         | RIM NECK HANDLE SCAR   | 1     | 30     | 8        | 8       |     |

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|--|--------|----------|------------|---------|--------------|---------|---|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form     | Decoration | Vessels | Alt          | Drawing | Comments  | Sherd | Weight | Rim diam | Rim eve | Pub |
| 108                                      | DWSHT  | CLSD     |            | 5       | CALC INT DEP |         | BS  | 5     | 89     | 0        | 0       |     |
| 108                                      | DWSHT  | CLSD     | HM         | 3       | ABR          |         | BS  | 4     | 65     | 0        | 0       |     |
| 108                                      | GAU4   | A        |            | 1       |              |         | BS; BUFF FABRIC                                   | 1     | 51     | 0        | 0       |     |
| 108                                      | GAU4   | A        |            | 1       |              |         | BS; PALE FABRIC                                   | 1     | 159    | 0        | 0       |     |
| 108                                      | GFIN   | BK       |            | 1       |              |         | BS  | 1     | 2      | 0        | 0       |     |
| 108                                      | GREY   | CLSD     | LA         | 1       |              |         | BS  | 1     | 8      | 0        | 0       |     |
| 108                                      | GREY   | BWM      |            | 1       |              |         | RIM   | 1     | 30     | 44       | 4       |     |
| 108                                      | GREY   | BDFL     |            | 1       |              |         | RIM   | 1     | 10     | 24       | 5       |     |
| 108                                      | GREY   | BFL      |            | 1       |              |         | RIM; LARGE  | 1     | 28     | 26       | 9       |     |
| 108                                      | GREY   | CLSD     |            | 1       | BURNT        |         | BS  | 1     | 27     | 0        | 0       |     |
| 108                                      | GREY   | JBL      | SHG; BSC   | 1       |              |         | BS  | 1     | 14     | 0        | 0       |     |
| 108                                      | GREY   | -        |            | 14      |              |         | BS  | 14    | 196    | 0        | 0       |     |
| 108                                      | GREY   | JEV      |            | 1       |              |         | RIM SHLDR INTERNAL GROOVE- CPN TYPE BUT WHEELMADE | 1     | 35     | 16       | 10      |     |
| 108                                      | GREY   | CLSD     |            | 1       |              |         | BASE; FTM   | 1     | 71     | 0        | 0       |     |
| 108                                      | GREY   | CLSD     | STRING     | 1       |              |         | BASE  | 1     | 41     | 0        | 0       |     |
| 108                                      | GREY   | JBNK     |            | 1       | ABR          |         | RIM   | 1     | 20     | 12       | 12      |     |
| 108                                      | GREY   | BD       | STRING     | 1       |              |         | BASE  | 2     | 55     | 0        | 0       |     |
| 108                                      | GREY   | JB       | SHG        | 1       |              |         | RIM; SHLDR  | 1     | 21     | 13       | 27      |     |
| 108                                      | GREY?  | BG225    | LA         | 1       |              |         | RIM; HIGH BURNISH BB2 TYPE?                       | 1     | 48     | 24       | 15      |     |
| 108                                      | MOSL   | BK       |            | 1       |              |         | BS  | 1     | 4      | 0        | 0       |     |
| 108                                      | MOSL?  | BKFO     |            | 1       |              |         | BS; MOSL COPY??                                   | 1     | 8      | 0        | 0       |     |
| 108                                      | OX     | CLSD     |            | 1       |              |         | BS  | 1     | 13     | 0        | 0       |     |
| 108                                      | OXRC?  | B38      |            | 1       |              |         | BS FLANGE   | 1     | 15     | 0        | 0       |     |
| 108                                      | SAM    | B?       |            | 1       |              |         | RIM; ??ID FORM TYPE- LARGE DIAMETER               | 1     | 14     | 24       | 5       |     |
| 108                                      | SAM    | 18/31-31 |            | 1       |              |         | RIM   | 1     | 9      | 0        | 0       |     |
| 108                                      | SAM    | P?       | NAME       | 1       |              |         | BS; NAME STAMP ]IO ?                              | 1     | 8      | 0        | 0       |     |
| 108                                      | SAM    | B        |            | 1       | ABR          |         | RIM?  | 1     | 4      | 22       | 7       |     |
| 108                                      | SAMCG  | 33       |            | 1       |              |         | RIM   | 1     | 6      | 13       | 9       |     |



| Appendix 1- LIBI10 Roman pottery archive |        |       |            |         |              |         |  |       |        |          |         |     |
|--|--------|-------|------------|---------|--------------|---------|--|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration | Vessels | Alt          | Drawing | Comments   | Sherd | Weight | Rim diam | Rim eve | Pub |
| 108                                      | SAMSG  | 15/17 |            | 1       |              |         | BS   | 1     | 9      | 0        | 0       |     |
| 108                                      | SAMSG  | 37    | MOULD      | 1       |              |         | RIM OVOLO  | 1     | 18     | 18       | 7       |     |
| 108                                      | SAMSG  | 18    |            | 1       |              |         | RIM  | 1     | 8      | 18       | 7       |     |
| 108                                      | SHEL   | JS    | HM         | 1       |              |         | BS; LARGE OXID SHERDS- STORAGE   | 2     | 145    | 0        | 0       |     |
| 108                                      | SHELP  | JBKEV | RILL; WM   | 1       |              | D4      | RIM SHLDR; PALE OXID SURFACES DARK CORE; COMMON SHEL (FINE-MEDIUM); SPARSE PUNCTATE SHELLS- SIMILAR TO SOUTH MIDLANDS FORMS- PERHAPS A SOUTH LINCOLNSHIRE PRODUCT ON BASIS OF FABRIC?? | 3     | 90     | 0        | 0       |     |
| 108                                      | SMSH   | JCUR  | WM         | 1       | SOOT EXT     | D3      | RIM SHLDR; SOOT EXT SHLDR; COMMON PB SHELL- IMPORT   | 1     | 174    | 17       | 35      |     |
| 200                                      | BBT    | JEV   | BZZ        | 1       |              |         | RIM  | 1     | 6      | 16       | 5       |     |
| 200                                      | GREY   | JNN   | BSC        | 1       |              |         | BS   | 1     | 16     | 0        | 0       |     |
| 200                                      | GREY   | BG225 |            | 1       |              |         | RIM  | 1     | 24     | 26       | 7       |     |
| 200                                      | GREY   | -     |            | 3       |              |         | BS   | 3     | 22     | 0        | 0       |     |
| 200                                      | GREY   | JB    | BZZ        | 1       |              |         | BS   | 3     | 38     | 0        | 0       |     |
| 200                                      | SHEL   | -     |            | 1       | CALC INT     |         | BS   | 1     | 8      | 0        | 0       |     |
| 202                                      | DR20   | A     |            | 1       | SALT SURFACE |         | BS   | 1     | 106    | 0        | 0       |     |
| 202                                      | DSSA?  | -     |            | 1       |              |         | BS   | 1     | 13     | 0        | 0       |     |
| 202                                      | DWSHT  | -     |            | 1       |              |         | BS   | 1     | 14     | 0        | 0       |     |
| 202                                      | GREY   | -     |            | 1       |              |         | BS   | 1     | 3      | 0        | 0       |     |
| 202                                      | GREY   | -     |            | 2       |              |         | BS   | 2     | 31     | 0        | 0       |     |
| 202                                      | GREY   | BFBH  |            | 1       |              |         | RIM  | 1     | 33     | 18       | 12      |     |
| 202                                      | GREY   | BFL   |            | 1       |              |         | RIM; DROOPING FLANGE   | 1     | 41     | 20       | 9       |     |
| 202                                      | GREY   | JBL   |            | 1       | VAB          |         | RIM  | 1     | 30     | 38       | 3       |     |
| 202                                      | GREY   | CLSD  |            | 2       |              |         | BS   | 2     | 16     | 0        | 0       |     |
| 202                                      | SHEL   | -     |            | 1       |              |         | BS   | 1     | 9      | 0        | 0       |     |
| 203                                      | DWSHT  | -     |            | 4       |              |         | BS   | 4     | 35     | 0        | 0       |     |
| 203                                      | DWSHT  | J     |            | 1       | CALC DEP INT |         | BS   | 2     | 41     | 0        | 0       |     |
| 203                                      | DWSHT  | JDW   |            | 1       | SOOT INT     |         | RIM; SOOT UNDER LID SEAT   | 2     | 37     | 16       | 18      |     |
| 203                                      | GFIN?  | JBK   | ROU        | 1       |              |         | BS   | 1     | 5      | 0        | 0       |     |

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|--|--------|-------|------------|---------|-----------------------------|---------|--|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration | Vessels | Alt                         | Drawing | Comments   | Sherd | Weight | Rim diam | Rim eve | Pub |
| 203                                      | GREY   | BD    |            | 1       |                             |         | BS   | 1     | 15     | 0        | 0       |     |
| 203                                      | GREY   | JRUST | RNOD       | 1       |                             |         | BS SHLDR   | 1     | 11     | 0        | 0       |     |
| 203                                      | GREY   | -     |            | 2       |                             |         | BS   | 4     | 97     | 0        | 0       |     |
| 203                                      | GREY   | BKEV  | LA         | 1       |                             |         | RIM SHLDR  | 1     | 11     | 7        | 20      |     |
| 203                                      | GREY   | J     |            | 1       |                             |         | SHLDR  | 1     | 23     | 0        | 0       |     |
| 203                                      | GREY   | -     | CLSD       | 1       |                             |         | BS; BASE; FTM  | 7     | 167    | 0        | 0       |     |
| 203                                      | GREY   | CLSD  |            | 1       |                             |         | BASE   | 1     | 12     | 0        | 0       |     |
| 203                                      | GREY   | BIBF  |            | 1       |                             |         | RIM  | 1     | 34     | 25       | 5       |     |
| 203                                      | GREY   | -     |            | 7       |                             |         | BS   | 27    | 387    | 0        | 0       |     |
| 203                                      | GREY   | -     |            | 2       |                             |         | BS   | 2     | 14     | 0        | 0       |     |
| 203                                      | IAGR   | -     |            | 1       | VAB                         |         | BS   | 2     | 10     | 0        | 0       |     |
| 203                                      | IAGR?  | -     |            | 1       |                             |         | BS   | 1     | 4      | 0        | 0       |     |
| 203                                      | OX     | LBX   | ROUZ       | 1       |                             | D6      | BS; JOINS 204  | 3     | 29     | 0        | 0       |     |
| 204                                      | CR     | CLSD  |            | 2       |                             |         | BS   | 2     | 49     | 0        | 0       |     |
| 204                                      | CR     | CLSD  |            | 1       |                             |         | BS EARLY MICA VARIENT  | 1     | 6      | 0        | 0       |     |
| 204                                      | DR20   | A     |            | 1       | ABR                         |         | BS; GRITTY FABRIC  | 1     | 96     | 0        | 0       |     |
| 204                                      | GREY   | JL    |            | 1       |                             |         | RIM SHLDR  | 1     | 19     | 16       | 6       |     |
| 204                                      | GREY   | CLSD  |            | 6       |                             |         | BS   | 6     | 39     | 0        | 0       |     |
| 204                                      | GREY   | JEV   |            | 1       |                             |         | RIM SHLDR  | 1     | 18     | 14       | 7       |     |
| 204                                      | GREY   | OPEN  |            | 2       |                             |         | BS   | 2     | 31     | 0        | 0       |     |
| 204                                      | GREY?  | CLSD  |            | 1       |                             |         | BASE- UNUSUAL BASE ??; HIGH FIRED  | 1     | 20     | 0        | 0       |     |
| 204                                      | IAGR   | J     |            | 1       |                             |         | BS SHLDR   | 1     | 14     | 0        | 0       |     |
| 204                                      | IAGR   | -     | HM         | 1       | DEP INT & EXT<br>?TAR/PITCH |         | BS; DARK DEPOSIT INTERNAL SURFACE NEAR BASE ON SHERD<br>BLACK ?PITCH OR TAR; EXTERNAL DRIPED STREAKS DOWN<br>EXTERNAL SURFACE OF JAR | 1     | 44     | 0        | 0       |     |
| 204                                      | OX     | LBX   | ROU        | 1       |                             | D6      | RIM; HIGHFIRED OXIDISED SELF SLIPPED FABRIC; JOINS 203   | 9     | 84     | 19       | 17      |     |
| 204                                      | SAM    | D     |            | 1       | BURNT                       |         | BS; HEAVILY BURNT AND DISCOLOURED  | 1     | 6      | 0        | 0       |     |
| 204                                      | TILE   | JS?   |            | 1       |                             | D5      | BS;OXID; MOD QU 0.5-1.5 + RARE SHALE 8MM; FRAGMENT OF<br>LARGE JAR OR ? LAMP CHIMNEY; APPLIED SLASHED ?LARGE<br>FRILL?               | 1     | 39     | 0        | 0       |     |

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|--|--------|----------|------------|---------|-------------------------------------|---------|------------------------------------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form     | Decoration | Vessels | Alt                                 | Drawing | Comments                           | Sherd | Weight | Rim diam | Rim eve | Pub |
| 205                                      | GREY   | BFBH     |            | 1       |                                     |         | RIM                                | 3     | 35     | 25       | 3       |     |
| 205                                      | GREY   | CLSD     |            | 1       |                                     |         | BS                                 | 1     | 14     | 0        | 0       |     |
| 205                                      | NVCC   | BK       |            | 1       |                                     |         | BS                                 | 1     | 3      | 0        | 0       |     |
| 205                                      | SAMCG  | 18/31-31 |            | 1       |                                     |         | BS                                 | 1     | 8      | 0        | 0       |     |
| 205                                      | SHEL   | JDLS     |            | 1       | SOOT OVER BREAK; SOOT INT; CALC INT | D1      | RIM; BS                            | 3     | 123    | 22       | 15      |     |
| 208                                      | BB1    | DFL      | LA         | 1       |                                     |         | RIM                                | 1     | 13     | 16       | 7       |     |
| 208                                      | BBT    | DTR      | LA         | 1       | BURNT                               |         | RIM                                | 1     | 17     | 20       | 6       |     |
| 208                                      | CC     | BK       |            | 1       | BURNT                               |         | BASE; DISCOLOURED                  | 1     | 40     | 0        | 0       |     |
| 208                                      | CR     | CLSD     |            | 2       |                                     |         | BS                                 | 2     | 39     | 0        | 0       |     |
| 208                                      | DWSHT  | J        | HM         | 1       |                                     |         | BS SHLDR                           | 1     | 17     | 0        | 0       |     |
| 208                                      | DWSHT  | -        |            | 1       | ABR                                 |         | BS SCRAP                           | 1     | 4      | 0        | 0       |     |
| 208                                      | DWSHT  | CLSD     |            | 1       | CALC DEP INT                        |         | BS                                 | 1     | 5      | 0        | 0       |     |
| 208                                      | GAU4   | A        |            | 1       |                                     |         | BASE; NEARLY COMPLETE- BUFF FABRIC | 1     | 249    | 0        | 0       |     |
| 208                                      | GAU4   | A        |            | 1       |                                     |         | BS; MICA; EXT WIPE MARKS           | 1     | 17     | 0        | 0       |     |
| 208                                      | GREY   | CLSD     |            | 1       |                                     |         | BASE                               | 1     | 7      | 0        | 0       |     |
| 208                                      | GREY   | D?       |            | 1       |                                     |         | RIM SCRAP                          | 1     | 4      | 0        | 0       |     |
| 208                                      | GREY   | JEV      |            | 1       |                                     |         | RIM                                | 1     | 7      | 15       | 4       |     |
| 208                                      | GREY   | BWM2     |            | 1       |                                     |         | RIM                                | 1     | 38     | 40       | 4       |     |
| 208                                      | GREY   | -        |            | 9       |                                     |         | BS                                 | 9     | 117    | 0        | 0       |     |
| 208                                      | GREY   | JBL      |            | 1       |                                     |         | RIM                                | 1     | 13     | 26       | 7       |     |
| 208                                      | GREY   | CLSD     | COMB       | 1       |                                     |         | BS COMBED WAVEY LINES              | 1     | 5      | 0        | 0       |     |
| 208                                      | GREY   | J?       |            | 1       |                                     |         | BS SHLDR; SIMILAR TO NVGW?         | 1     | 10     | 0        | 0       |     |
| 208                                      | IAGR   | CLSD     |            | 5       |                                     |         | BS                                 | 5     | 94     | 0        | 0       |     |
| 208                                      | IAGR   | CLSD     | HM         | 1       | VAB                                 |         | BS                                 | 1     | 62     | 0        | 0       |     |
| 208                                      | IAGR   | L?       | HM; B EXT  | 1       |                                     |         | RIM; BEAD RIM- ANGLE UNCERTAIN     | 1     | 23     | 20       | 4       |     |
| 208                                      | MONV   | M        |            | 1       |                                     |         | BASE; SLAG TRITS                   | 1     | 60     | 0        | 0       |     |

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|--|--------|------|----------------|---------|------------------------|---------|---|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form | Decoration     | Vessels | Alt                    | Drawing | Comments                                      | Sherd | Weight | Rim diam | Rim eve | Pub |
| 208                                      | MORT   | M    |                | 1       |                        |         | BS; RED COLOUR COAT; COARSE FABRIC- ?SOURCE   | 1     | 10     | 0        | 0       |     |
| 208                                      | OX     | CLSD |                | 1       |                        |         | BS  | 1     | 20     | 0        | 0       |     |
| 208                                      | SAM    | OPEN |                | 1       |                        |         | BS  | 1     | 4      | 0        | 0       |     |
| 208                                      | SAMLM  | BD   |                | 1       | ABR                    |         | RIM FRAG                                      | 1     | 8      | 0        | 0       |     |
| 208                                      | SHEL   | -    |                | 1       | VAB                    |         | BS SCRAP                                      | 1     | 2      | 0        | 0       |     |
| 209                                      | BBT    | BD   |                | 1       | ABR                    |         | RIM   | 1     | 13     | 2        | 0       |     |
| 209                                      | BBT    | JEV  |                | 1       |                        |         | RIM   | 1     | 6      | 12       | 7       |     |
| 209                                      | BBT    | J    | LA             | 1       | BURNT; CALC<br>DEP INT |         | BS  | 1     | 10     | 0        | 0       |     |
| 209                                      | BBT    | JBR  | HM?            | 1       |                        | D?      | RIM SHLDR                                     | 1     | 20     | 14       | 12      |     |
| 209                                      | CR     | CLSD |                | 1       |                        |         | BASE; FTM; ?LARGE FLAGON                      | 1     | 83     | 0        | 0       |     |
| 209                                      | CR     | CLSD |                | 1       |                        |         | BS  | 1     | 10     | 0        | 0       |     |
| 209                                      | CR     | FS   |                | 1       |                        |         | RIM   | 1     | 4      | 5        | 7       |     |
| 209                                      | CR     | -    |                | 1       | ABR                    |         | BS  | 1     | 6      | 0        | 0       |     |
| 209                                      | DSSA   | L    |                | 1       |                        |         | RIM   | 1     | 7      | 14       | 3       |     |
| 209                                      | DWSHT  | -    | HM             | 1       |                        |         | BS  | 2     | 23     | 0        | 0       |     |
| 209                                      | GFIN   | CLSD |                | 1       |                        |         | BS; PALE SURFACES                             | 1     | 2      | 0        | 0       |     |
| 209                                      | GREY   | OPEN |                | 1       | GLASS<br>RESIDUE       | D?      | BS; INTURNAL CLEAR GLASS RESIDUE C. 1MM THICK | 1     | 8      | 0        | 0       |     |
| 209                                      | GREY   | BD   |                | 2       | ABR                    |         | BASE  | 2     | 17     | 0        | 0       |     |
| 209                                      | GREY   | -    |                | 20      |                        |         | BS  | 20    | 221    | 0        | 0       |     |
| 209                                      | GREY   | BD   |                | 1       |                        |         | BASE  | 1     | 15     | 0        | 0       |     |
| 209                                      | GREY   | CLSD |                | 1       | VAB                    |         | BS  | 1     | 19     | 0        | 0       |     |
| 209                                      | GREY   | JL   | STRING         | 1       | OVER FIRED             |         | BASE  | 1     | 65     | 0        | 0       |     |
| 209                                      | GREY   | JBL  |                | 1       | MORTAR?                |         | BS  | 1     | 32     | 0        | 0       |     |
| 209                                      | GREY   | BFB  |                | 1       | VAB                    |         | BS  | 1     | 17     | 0        | 0       |     |
| 209                                      | GREY   | JDW  |                | 1       |                        |         | RIM; COMMON ROUNDED QUARTZ 0.5-0.7MM          | 1     | 15     | 14       | 6       |     |
| 209                                      | GREY   | BIBF | FRILL<br>NOTCH | 1       | ABR                    |         | RIM   | 1     | 25     | 0        | 0       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |          |            |         |                           |         |   |       |        |          |         |     |
|--|--------|----------|------------|---------|---------------------------|---------|---|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form     | Decoration | Vessels | Alt                       | Drawing | Comments  | Sherd | Weight | Rim diam | Rim eve | Pub |
| 209                                      | GREY   | JDW      |            | 1       | ABR                       |         | RIM   | 1     | 8      | 16       | 7       |     |
| 209                                      | LCOAV  | CLSD     | WIPE; WM   | 1       | CALC INT DEP              |         | BS; HIGHFIRED COARSE WHEEL MADE   | 1     | 8      | 0        | 0       |     |
| 209                                      | LOND   | B37      | SCVL       | 1       |                           |         | BS  | 1     | 5      | 0        | 0       |     |
| 209                                      | LROL   | J?       | WIPE; WM   | 1       | SOOT EXT;<br>CALC DEP INT |         | BS  | 1     | 20     | 0        | 0       |     |
| 209                                      | NVCC   | JBK      | PA         | 1       |                           | *       | BS; WHITE PAINTED 'SUN' ROUNDALS  | 1     | 12     | 0        | 0       |     |
| 209                                      | NVCC   | BK       |            | 1       |                           |         | BASE  | 1     | 8      | 0        | 0       |     |
| 209                                      | NVCC1  | BK       |            | 1       | ABR                       |         | BS  | 1     | 7      | 0        | 0       |     |
| 209                                      | SAM    | BD       |            | 1       |                           |         | BASE; FTR   | 1     | 7      | 0        | 0       |     |
| 209                                      | SAM    | 38?      |            | 1       |                           |         | BS; FLANGE? BROKEN AWAY   | 1     | 10     | 0        | 0       |     |
| 209                                      | SAMCG  | B        |            | 1       |                           |         | BASE; FTR   | 1     | 7      | 0        | 0       |     |
| 209                                      | SAMCG  | 18/31-31 |            | 1       |                           |         | BS  | 1     | 1      | 0        | 0       |     |
| 209                                      | SAMCG  | 18/31    |            | 1       |                           |         | BS  | 1     | 8      | 0        | 0       |     |
| 209                                      | SAMEG  | OPEN     |            | 1       | MORTAR                    | *       | BS; BEDDED INTO MORTAR; WEIGHT ESTIMATED ON SHERD SIZE; WEIGHT WITH MORTAR 46G  | 1     | 7      | 0        | 0       |     |
| 209                                      | SHEL   | -        | HM         | 2       |                           |         | BS  | 2     | 15     | 0        | 0       |     |
| 209                                      | SHEL   | JS       | HM         | 1       |                           |         | BASE?   | 2     | 190    | 0        | 0       |     |
| 212                                      | AMPH   | -        |            | 1       |                           | *       | BS  | 1     | 23     | 0        | 0       |     |
| 212                                      | CC     | BKCOR    |            | 1       | BURNT                     |         | RIM; BURNT; REDUCED CORE; SOURCE?   | 1     | 8      | 10       | 10      |     |
| 212                                      | OXWS   | FACE     | PA         | 1       |                           | D2      | BS; EYE BROWS AND EYES PUSHED FROM INSIDE; IT ALMOST LOOKS LIKE THE REMAINING VESSEL SHOULDER WAS THROWN FOLLOWING THE MOULDING OF HE FACE?; PAINTED BAND OF MICA DUSTING NEAR 'HAIR LINE' ; FABRIC- QUARTZ POORLY SORTED COMMON 0.3-0.8MM RARE 0.8-1.5MM; FE ANGULARE SPARSE 0.2-0.4MM; GROG/ ?SHALE RARE UP TO 8MM; WHITE SLIP HAS COMMON FINE SILVER MICA; PAINT/ MICA DUSTING ORANGE RED- MICA RICH; MAXIMUM WITH 106MM- AN EARLY EXAMPLE MORE SIMILAR TO CORPUS NO 473 THAN LATER EXAMPLES | 1     | 104    | 0        | 0       |     |
| 212                                      | SAM    | OPEN     |            | 1       |                           |         | BS  | 1     | 2      | 0        | 0       |     |

| Appendix 1- LIBI10 Roman pottery archive |        |       |            |         |          |         |          |       |        |          |         |     |
|--|--------|-------|------------|---------|----------|---------|----------|-------|--------|----------|---------|-----|
| Context                                  | Fabric | Form  | Decoration | Vessels | Alt      | Drawing | Comments | Sherd | Weight | Rim diam | Rim eve | Pub |
| 212                                      | SAMCG  | 18/31 |            | 1       |          |         | BS       | 1     | 8      | 0        | 0       |     |
| 302                                      | CR     | -     |            | 1       | SOOT EXT |         | BS       | 1     | 6      | 0        | 0       |     |

## Appendix 3: Post-Roman Pottery Assessment

By Jane Young

### Introduction

An assemblage of fifty-six post-Roman sherds representing fifty-three vessels was recovered from the site. The pottery ranges in date from the late Saxon to the post-medieval periods and includes local and regionally imported fabrics. The pottery has been fully archived to the standards for acceptance to the Collection in Lincoln in accordance with Lincolnshire County Council's *Archaeological Handbook* (sections 13.4 and 13.5) and with the guidelines laid out in Slowikowski, *et al.* (2001). Visual fabric identification of the Saxon and non-local pottery was undertaken by x20 binocular microscope. The assemblage was quantified by three measures: number of sherds, weight and vessel count within each context. Every effort was made to identify cross-context joins, of which one was found. The pottery data was entered on an access database using fabric codenames (see Table 1) developed for the Lincoln Ceramic Type Series (Young, Vince and Nailor 2005).

### Condition

The pottery is mainly in a slightly abraded condition with sherd size mainly falling into the small to medium range (below 50grams). Only three vessels are represented by more than one sherd and one cross-context join was noted. A few of the late Saxon sherds appear to have been misfired or subjected to intense post-firing heat. Several of the vessels have external soot residues suggesting that they have been used over an open fire. One jar has an internal 'kettle fur' deposit and one has an internal carbonised or tarry deposit. The calcareous temper has been leached from the internal surface of one of the late Saxon jars, suggesting that it has contained an acidic liquid.

### The Pottery

In total fifty-three vessels in nine different identifiable ware types, were recovered from the site (Table 1). The pottery was recovered from two test pits (Table 2). A narrow range of vessel types is represented with examples of various types of jar forming the body of the assemblage. Other form types recovered include dishes, bowls, jugs and a cup.

**Table 1 Pottery types with total quantities by sherd and vessel count**

| Codename | Full name                                 | Earliest date | Latest date | Total sherds | Total vessels |
|----------|---|---------------|-------------|--------------|---------------|
| BERTH    | Brown glazed earthenware                  | 1550          | 1800        | 1            | 1             |
| CIST     | Cistercian-type ware                      | 1480          | 1650        | 2            | 1             |
| LFS      | Lincolnshire Fine-shelled ware            | 970           | 1200        | 8            | 8             |
| LKT      | Lincoln kiln-type shelly ware             | 850           | 1000        | 26           | 24            |
| LS/SNLS  | Late Saxon/Saxo-Norman Lincoln Sandy ware | 850           | 1050        | 6            | 6             |
| LSH      | Lincoln shelly ware                       | 850           | 1000        | 5            | 5             |
| LSW1     | 12th century Lincoln Glazed ware          | 1100          | 1200        | 1            | 1             |
| LSW3     | 14th to 15th century Lincoln Glazed Ware  | 1280          | 1450        | 1            | 1             |
| TORK     | Torksey ware                              | 850           | 1100        | 6            | 6             |

### Late Saxon Pottery

Forty-three sherds representing forty-two vessels are of late Saxon type and date between the late 9<sup>th</sup> and mid 11<sup>th</sup> centuries. Thirty of these vessels are in two shell-tempered ware types (LKT and LSH) that were produced in Lincoln between the mid/late 9<sup>th</sup> and late 10<sup>th</sup> centuries. The twenty-four

Lincoln Kiln-type vessels (LKT) are mainly jars but two dishes and an inturned-rim bowl were also found. Most of the jars cannot be closely dated but two of the rim sherds are of early type, probably pre-dating the early/mid 10<sup>th</sup> century. The two dish rims are also early, as this form appears to die out by the early/mid 10<sup>th</sup> century. The inturned-rim bowl is unlikely to pre-date the early/mid 10<sup>th</sup> century, as examples have not yet been found in deposits pre-dating Ceramic Horizon ASH9 (early/mid to mid 10<sup>th</sup> century). Several of the vessels are either overfired, or have been subjected to intense heat as the external surfaces have spalled and the fossil shell temper has begun to decompose. In one case the vessel has subsequently been used over an open fire as the spalled surface is covered with a thick soot residue. Three of the vessels have internal iron-rich slips suggesting that they were intended for liquid containment. The five Lincoln Shelly ware vessels (LSH) are probably all jars of small to medium-size. One of these jars has an internal 'kettle fur' deposit over an internal iron-rich slip. Another jar has a soot residue over the external spalled surface.

The six reduced Lincoln Sandy ware vessels are of indeterminate type (LS/SNLS) and could either be of mid/late 9<sup>th</sup> to early 10<sup>th</sup> century (LSLS) or of late 10<sup>th</sup> to mid 11<sup>th</sup> century (SNLS) type. All six undecorated body or basal sherds are from jars. Three of the six Torksey ware sherds (TORK) are identifiable as coming from small or medium-sized jars. The other three sherds could come from jars or bowls. Torksey ware is not common on sites in Lincoln before the late 10<sup>th</sup> century, but was produced from the mid/late 9<sup>th</sup> to mid/late 11<sup>th</sup> centuries.

### **Saxo-Norman Pottery**

Eight single sherd vessels are of Saxo-Norman-type and date between the late 10<sup>th</sup> and 12<sup>th</sup> centuries. All eight of these vessels are shell-tempered Lincolnshire Fine-shelled ware (LFS) jars or possibly bowls. Most of these sherds can only be individually dated to between the late 10<sup>th</sup> and late 12<sup>th</sup> centuries but the single jar rim present in the group is of late 10<sup>th</sup> to 11<sup>th</sup> century type and the association with other late 10<sup>th</sup> to mid/late 11<sup>th</sup> century ware types suggests that the sherds are of pre-12<sup>th</sup> century date.

### **Medieval Pottery**

Two single sherd vessels are of medieval type. One small jug sherd is in 12<sup>th</sup> to 13<sup>th</sup> century Lincoln Glazed ware (LSW1) whilst the other is of late 13<sup>th</sup> to mid 15<sup>th</sup> century date (LSW3).

### **Late Medieval to Early Post-Medieval Pottery**

Two vessels can be considered to be of late medieval to early post-medieval type. Two sherds from a single small Cistercian ware cup (CIST) are most likely to be of late 15<sup>th</sup> to 16<sup>th</sup> century date. The decoration on one of these small fragments appears to be unusual in that it consists of pressed pads in white clay with small iron-rich clay pellets added. A small sherd in a fine brown-glazed orange earthenware (BERTH) probably comes from a jar of mid 16<sup>th</sup> to 18<sup>th</sup> century date. The vessel has an internal glaze and has an internal soot residue.

### **Site Sequence**

The fifty-three post-Roman sherds were recovered from two of the three test pits dug for the evaluation with the highest number of vessels coming from Test Pit 2 (Table 2). In almost all cases the post-Roman sherds were associated with large groups of Roman pottery.



**Table 2 Pottery summarised by ceramic period with vessel count**

| Ceramic period  | Trench 1 | Trench 2 | Total vessels |
|---|----------|----------|---------------|
| Late Saxon (pre conquest)   | 14       | 27       | 41            |
| Saxo-Norman (late 10 <sup>th</sup> to 12 <sup>th</sup> )          | 3        | 5        | 8             |
| Medieval (12 <sup>th</sup> to mid 15 <sup>th</sup> )              | 1        | 1        | 2             |
| Late to post-medieval (mid 15 <sup>th</sup> to 18 <sup>th</sup> ) | 2        | 0        | 2             |
| Total vessels   | 20       | 33       | 53            |

**Test Pit 1**

Twenty vessels ranging in date from the Late Saxon to post-medieval periods were recovered from five different layers in this trench. Topsoil layer 100 produced a single Torksey ware base sherd from a jar or bowl. The vessel can be generally dated to between the late 9<sup>th</sup> and mid/late 11<sup>th</sup> centuries, however it was found associated with a 19<sup>th</sup> to 20<sup>th</sup> century pantile.

A small mixed group of eight vessels was recovered from dump layer 102. The latest sherd in the group is from a Brown-glazed Earthenware jar of mid 16<sup>th</sup> to 18<sup>th</sup> century date. A second late medieval to early post-medieval vessel was also recovered from this layer. The vessel is a decorated Cistercian ware cup of probable late 15<sup>th</sup> to 16<sup>th</sup> century date. If both these two later vessels are contemporary then a date in the second half of the 16<sup>th</sup> century is possible. A small sherd from a 12<sup>th</sup> to 13<sup>th</sup> century Lincoln Glazed ware jug also came from this deposit. The other five vessels are all of Late Saxon date.

Dump layer 104 produced a small group of six vessels. Two of the vessels are in late 9<sup>th</sup> to 10<sup>th</sup> century Lincoln Shelly ware. One jar or bowl sherd is in Torksey ware and two sherds from small jars are in a reduced greyware fabric that is either of Late Saxon or Saxo-Norman type. The sixth sherd is from a Lincolnshire Fine-shelled ware jar or bowl of late 10<sup>th</sup> to 11<sup>th</sup> century date. This small group is most likely to belong to the period between the late 10<sup>th</sup> and early/mid 11<sup>th</sup> centuries.

Only two sherds were recovered from layer 105. The latest sherd is of late 10<sup>th</sup> to 12<sup>th</sup> century date. Dump layer 107 produced only three post-Roman sherds, the latest of which is of late 10<sup>th</sup> to 12<sup>th</sup> century date, although a medieval nibbed tile was also recovered from this deposit.

**Test Pit 2**

Thirty-three vessels were recovered from this test pit. The five vessels found in dump layer 202 include three Lincolnshire Fine-shelled ware jars of late 10<sup>th</sup> to mid 11<sup>th</sup> century date. Also present are Torksey ware and Lincoln Kiln-type jars. Associated with this group was a fragment from a 19<sup>th</sup> to 20<sup>th</sup> century brick.

A small mixed group of six vessels was recovered from dump layer 203. The latest sherd is from a Lincoln Glazed ware jug of late 13<sup>th</sup> to mid 15<sup>th</sup> century date. The other five sherds include four Late Saxon and one Saxo-Norman vessels. If the medieval sherd is intrusive in the layer a deposition date between the late 10<sup>th</sup> and 11<sup>th</sup> centuries is likely. The latest of the four vessels recovered from dump layer 204 is of late 10<sup>th</sup> to 11<sup>th</sup> century date.

Pit 207 produced a small group of eleven vessels (fill 208). The group includes six Lincoln Kiln-type vessels including an early dish rim of pre-early/mid 10<sup>th</sup> century date. One LKT jar sherd from this group joins another sherd from pit 210 suggesting that the material had a common origin. A single Lincoln Shelly ware rim sherd comes from a jar. Two sherds are from Torksey ware jars of undetermined Late Saxon date and two other reduced sandy ware sherds are from jars of Lincoln Late Saxon (LSLS) or Saxo-Norman (SNLS) type. This group cannot be closely dated because of the problem of identifying the Lincoln sandy wares. There is no doubt that at least one late 9<sup>th</sup> to early/mid 10<sup>th</sup> century vessel is in the group but dating the other sherds is not possible. The group could therefore date to anywhere between the late 9<sup>th</sup> and early 11<sup>th</sup> centuries. The five vessels recovered from pit 210 are all Lincoln Kiln-type products. They include an early dish rim and an early jar rim of pre-early/mid

10<sup>th</sup> century date. Also present is the rim from an inturned-rim bowl that is unlikely to be of pre-early/mid 10<sup>th</sup> century date. This overlapping of dates could suggest an early/mid 10<sup>th</sup> century date for deposition but the group is far too small to be certain. One of the two jar body sherds joins to a sherd in pit 207. The jar has an internal iron-rich slip. Pit 211 produced three Lincoln Kiln-type sherds, one of which is an early rim type from a medium-sized jar of mid/late 9<sup>th</sup> to early 10<sup>th</sup> century date.

## Discussion

The post-Roman pottery recovered from this site suggests post-Roman activity in the area from the mid/late 9<sup>th</sup> to early 10<sup>th</sup> century, although the assemblage is too small and lacks the critical chronological indicators to provide precise dating for individual groups. Little pottery from the early part of the late Saxon ceramic sequence has been recovered from the upper city where intensity of occupation appears to have only increased in the late 10<sup>th</sup> century (Young 2006, 285). It is probable that the pottery comes from nearby occupation and arrived on the site during robbing episodes. Activity in the area appears to have continued at least until the late 10<sup>th</sup> to early 11<sup>th</sup> century. The pottery is mainly of a domestic nature, but does include a few late Saxon misfired or burnt vessels. The entire assemblage should be kept for future study.

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**Dating Archive**

| <b>trench</b> | <b>context</b> | <b>earliest</b> | <b>latest</b> | <b>date</b>                                | <b>comments</b>                                       |
|---------------|----------------|-----------------|---------------|--|---|
| Trench 1      | 100            | EMH             | EMH           | 19th to 20th                               | date on single CBM;also late Saxon                    |
| Trench 1      | 102            | PMH2            | PMH8          | mid 16th to 18th                           |   |
| Trench 1      | 104            | ASH11           | ASH12         | late 10th to early/mid 11th                |   |
| Trench 1      | 105            | ASH11           | MH3           | late 10th to 12th                          | date on 2 PR sherds                                   |
| Trench 1      | 106            | R               | R             | Roman                                      | date on CBM   |
| Trench 1      | 107            | MH5 or ASH11    | MH10 or MH3   | 13th to 15th or late 10th to 12th          | later date on single tile;earlier date on 3 PR sherds |
| Trench 1      | 108            | R               | R             | Roman                                      | date on CBM   |
| Trench 2      | 202            | EMH or ASH11    | EMH or ASH 13 | 19th to 20th or late 10th to mid 11th      | later date on single brick                            |
| Trench 2      | 203            | MH 6 or ASH 11  | MH9 or ASH14  | late 13th to mid 15th or late 10th to 11th | single late sherd                                     |
| Trench 2      | 204            | ASH11           | ASH14         | late 10th to 11th                          |   |
| Trench 2      | 205            | R               | R             | Roman                                      | date on CBM   |
| Trench 2      | 208            | ASH7            | ASH12         | late 9th to early 11th                     | probably late 10th to early 11th                      |
| Trench 2      | 209            | ASH9            | ASH11         | early/mid to late 10th                     |   |
| Trench 2      | 212            | ASH7            | ASH11         | late 9th to 10th                           | date on 3 PR sherds;early rim                         |

| trench   | context | cname | sub fabric           | form type   | sherds | vessels | weight | decoration                                    | part | ref no | description                         |
|----------|---------|-------|----------------------|-------------|--------|---------|--------|---|------|--------|-------------------------------------|
| Trench 1 | 100     | TORK  |                      | jar/bowl    | 1      | 1       | 6      |   | base |        |                                     |
| Trench 1 | 102     | BERTH | fine orange<br>sandy | jar ?       | 1      | 1       | 10     |   | BS   |        | int glaze;int soot;mid 16th to 18th |
| Trench 1 | 102     | CIST  |                      | small cup   | 2      | 1       | 7      | pressed reverse<br>pads with<br>brown pellets | BS   |        | unusual decoration                  |
| Trench 1 | 102     | LKT   |                      | small jar   | 1      | 1       | 3      | square roller<br>stamping on<br>rim edge      | rim  |        |                                     |
| Trench 1 | 102     | LKT   |                      | small jar ? | 1      | 1       | 3      |   | BS   |        | int ^ ext soot                      |
| Trench 1 | 102     | LKT   |                      | jar/bowl    | 1      | 1       | 7      |   | BS   |        |                                     |
| Trench 1 | 102     | LKT   |                      | small jar   | 1      | 1       | 8      |   | BS   |        | soot                                |
| Trench 1 | 102     | LSH   |                      | jar         | 1      | 1       | 7      |   | BS   |        | spalled with soot over spalling     |
| Trench 1 | 102     | LSW1  |                      | jug         | 1      | 1       | 9      |   | BS   |        |                                     |
| Trench 1 | 104     | LFS   |                      | jar/bowl    | 1      | 1       | 3      |   | BS   |        | leached int surface;soot            |

| trench   | context | cname   | sub fabricform type | sherds | vessels | weight | decoration | part | ref no | description                                      |
|----------|---------|---------|---------------------|--------|---------|--------|------------|------|--------|--|
| Trench 1 | 104     | LS/SNLS | small jar           | 1      | 1       | 4      |            | BS   |        | soot   |
| Trench 1 | 104     | LS/SNLS | small jar           | 1      | 1       | 7      |            | BS   |        | soot   |
| Trench 1 | 104     | LSH     | jar/bowl            | 1      | 1       | 3      |            | BS   |        |  |
| Trench 1 | 104     | LSH     | small jar           | 1      | 1       | 2      |            | BS   |        | soot   |
| Trench 1 | 104     | TORK    | jar/bowl            | 1      | 1       | 15     |            | BS   |        |  |
| Trench 1 | 105     | LFS     | jar                 | 1      | 1       | 25     |            | BS   |        | soot;int deposit                                 |
| Trench 1 | 105     | LKT     | jar                 | 1      | 1       | 7      |            | BS   |        | soot   |
| Trench 1 | 107     | LFS     | jar                 | 1      | 1       | 5      |            | BS   |        | soot   |
| Trench 1 | 107     | LKT     | jar                 | 1      | 1       | 8      |            | BS   |        | soot   |
| Trench 1 | 107     | LS/SNLS | jar                 | 1      | 1       | 17     |            | BS   |        |  |
| Trench 2 | 202     | LFS     | jar ?               | 1      | 1       | 6      |            | BS   |        |  |
| Trench 2 | 202     | LFS     | jar                 | 1      | 1       | 11     |            | BS   |        | soot   |
| Trench 2 | 202     | LFS     | jar                 | 1      | 1       | 26     |            | base |        | soot on ext wall & break & int from 25mm upwards |
| Trench 2 | 202     | LKT     | jar                 | 1      | 1       | 7      |            | rim  |        | EVERA3 rim;soot                                  |
| Trench 2 | 202     | TORK    | jar                 | 1      | 1       | 16     |            | BS   |        | soot   |
| Trench 2 | 203     | LFS     | jar ?               | 1      | 1       | 9      |            | BS   |        |  |
| Trench 2 | 203     | LKT     | jar                 | 1      | 1       | 7      |            | BS   |        | soot int & ext & over breaks                     |

| trench   | context | cname   | sub fabricform type | sherds | vessels | weight | decoration | part | ref no   | description                           |
|----------|---------|---------|---------------------|--------|---------|--------|------------|------|----------|---------------------------------------|
| Trench 2 | 203     | LKT     | jar                 | 1      | 1       | 8      |            | BS   |          | soot ext incl over spalling;burnt ext |
| Trench 2 | 203     | LSH     | small jar ?         | 1      | 1       | 8      |            | base |          |                                       |
| Trench 2 | 203     | LSW3    | jug                 | 1      | 1       | 7      |            | BS   |          | cu speckled glaze                     |
| Trench 2 | 203     | TORK    | jar/bowl            | 1      | 1       | 8      |            | base |          |                                       |
| Trench 2 | 204     | LFS     | jar                 | 1      | 1       | 19     |            | rim  |          | EVERC rim                             |
| Trench 2 | 204     | LKT     | jar/bowl            | 1      | 1       | 7      |            | BS   |          | soot                                  |
| Trench 2 | 204     | LKT     | jar                 | 1      | 1       | 18     |            | BS   |          | part soot                             |
| Trench 2 | 204     | LS/SNLS | small jar           | 1      | 1       | 7      |            | base |          |                                       |
| Trench 2 | 208     | LKT     | jar                 | 1      | 1       | 11     |            | BS   |          | thick int carbonised or tarry deposit |
| Trench 2 | 208     | LKT     | jar                 | 1      | 1       | 10     |            | base |          |                                       |
| Trench 2 | 208     | LKT     | jar                 | 1      | 1       | 7      |            | BS   | vessel 1 | int fe slip;soot                      |
| Trench 2 | 208     | LKT     | dish                | 1      | 1       | 10     |            | rim  |          | rounded upright rim                   |
| Trench 2 | 208     | LKT     | jar                 | 1      | 1       | 40     |            | BS   |          |                                       |
| Trench 2 | 208     | LKT     | jar                 | 1      | 1       | 5      |            | BS   |          | soot                                  |
| Trench 2 | 208     | LS/SNLS | small jar           | 1      | 1       | 6      |            | BS   |          | soot incl break                       |
| Trench 2 | 208     | LS/SNLS | jar                 | 1      | 1       | 17     |            | BS   |          |                                       |
| Trench 2 | 208     | LSH     | jar                 | 1      | 1       | 42     |            | rim  |          | EVERA1 rim;fe slip int under int dep  |

| trench   | context | cname | sub fabricform type | sherds | vessels | weight | decoration                         | part | ref no   | description  |
|----------|---------|-------|---------------------|--------|---------|--------|------------------------------------|------|----------|--|
| Trench 2 | 208     | TORK  | jar                 | 1      | 1       | 12     |                                    | BS   |          |  |
| Trench 2 | 208     | TORK  | small jar           | 1      | 1       | 18     |                                    | base |          |  |
| Trench 2 | 209     | LKT   | jar                 | 2      | 1       | 11     |                                    | BS   |          | soot   |
| Trench 2 | 209     | LKT   | dish                | 1      | 1       | 18     |                                    | rim  |          | rounded upright rim;soot                               |
| Trench 2 | 209     | LKT   | jar                 | 1      | 1       | 7      | square roller stamping on shoulder | BS   |          | soot   |
| Trench 2 | 209     | LKT   | jar                 | 1      | 1       | 11     |                                    | BS   | vessel 1 | soot;overfired;fe slipped int                          |
| Trench 2 | 209     | LKT   | inturned rim bowl   | 1      | 1       | 46     |                                    | rim  |          | int rim  |
| Trench 2 | 212     | LKT   | jar                 | 1      | 1       | 68     |                                    | rim  |          | EVERA1 overhang rim;soot on rim top & over broken edge |
| Trench 2 | 212     | LKT   | jar                 | 1      | 1       | 13     |                                    | BS   |          | spalling   |
| Trench 2 | 212     | LKT   | jar                 | 1      | 1       | 30     |                                    | BS   |          | soot;int fe slip                                       |

## Appendix 4: Ceramic Building Material Assessment

By Jane Young

### Introduction

A total of three hundred and sixty-seven fragments of ceramic building material and one stone Tessera weighing 58.136 kg in total and ranging in date from the Roman to the early modern period was presented for examination. The material was recovered from two trenches on the site and represents a random sample of the material deposited. The material was examined visually and then recorded using locally and nationally agreed codenames. The CLAU tile type series was consulted for comparative material. The resulting archive was then recorded on an Access database and complies with the guidelines laid out in Slowikowski, et al. (2001) and the Lincolnshire County Council's *Archaeological Handbook* (sections 13.4 and 13.5).

### Condition

The material is in variable condition with most fragments showing a small degree of abrasion. Fragments range from large-sized (1977 grams) to small (7 grams) and include some with mortar still adhering. A number of bricks and tiles have mortar over broken edges suggesting that they had been re-used in foundations or as rubble core. Two of the tiles have fuel ash slag deposits suggesting that they may have been utilised as part of some industrial process.

### Overview of the Ceramic Material

A range of ceramic roof tile, brick and a Tessera was found on the site together with one stone Tessera (Table 1). The tiles recovered from the site are mainly typical of other material recovered from the upper City but do include fabrics that have not previously been noted. The assemblage is biased towards larger and more diagnostic fragments and this may be due to an unconscious choice during retrieval. This has possibly resulted in the unusually high ratio of identified Imbrex to Tegula as when archiving small fragments it is usually easier to positively identify Tegula than Imbrex. It may also have affected the number of Tesserae identified.

*Table 1: Ceramic material codenames and total quantities by fragment count and weight*

|      | Full name      | Total fragments | Weight in grams |
|------|----------------|-----------------|-----------------|
| BOX  | Roman box tile | 4               | 414             |
| BRK  | Brick          | 1               | 21              |
| DAUB | Daub           | 3               | 73              |
| IMB  | Imbrex         | 123             | 13335           |
| NIB  | Nibbed tile    | 1               | 54              |
| PANT | Pantile        | 1               | 58              |
| RBRK | Roman brick    | 46              | 17111           |
| RTIL | Roman tile     | 60              | 3852            |
| TEG  | Tegula         | 127             | 23176           |
| TESS | Tesserae       | 2               | 42              |

### Roman

Three hundred and fifty-nine identifiable fragments of Roman building material and two Tesserae recovered from the site were presented for assessment. The collection includes examples of brick (RBRK), Tegula (TEG), box-flue tiles (BOX) and Imbrex (IMB). Most of the tile fragments are in fair condition but several have mortar over broken edges suggesting that they had been reused, probably as rubble infill. A wide range of fabrics is present suggesting that the material does not all come from a single source. Most of the Roman tiles are quartz-tempered and fall within a bright to dull oxidised



colour range, although a few light firing examples also occur. Some of the tiles have streaks or patches of cream-coloured clay within the fabric. For the purpose of this assessment only a minimal fabric description (by eye) has been given, as there is no Roman Fabric Type Series for the city.

The one hundred and twenty-seven Tegula fragments include fifty-three examples with flanges or cut-outs. Several different Tegula flange types are present with the most common including Betts' Types 31 (14 examples) and Type 1 (12 examples). The range of flange types is quite wide (eight different varieties) but in most cases only one, or two of each type is present. Eight identifiable lower cut-outs occur, three of which are Bett's Type E, two are Type B, two Type C and one Type A. Thirteen of the Tegula have signatures, most of which appear to be semi-circular.

Several of the Tegula have evidence for knife-trimming along the external basal angle or part of the underside. A large paw mark is impressed on one fragment (probably from a dog) suggesting that the tiles were laid out to dry in an unfenced open area. A few of the Tegula appear to have been subjected to intense post-firing heat and four fragments have thick soot residues.

One hundred and twenty-three fragments of Imbrex (IMB) were recovered from the site. A high proportion of the fragments are edge, or end pieces. Thickness varies from 11 to 22mm and manufacturing techniques appear to vary with a few tiles having possible cloth marks. A wide range of fabrics is represented with a rare occurrence of one fragment in a cream fabric. Few such tiles are known in the city and this example may be of Flavian or earlier date.

Forty-six Roman bricks (RBRK) in a wide range of fabrics were found on the site. No complete measurements were possible but tile thickness ranges from 28-58mm and one tile is in excess of 180mm in length. These measurements are typical of Bessales, Pedales or Sesquipedalis and suggest that some of them may have come from a hypocaust system. Four of the bricks had been subjected to intense post-firing heat and a further brick has a thick soot residue. Two of these bricks have fuel-ash slag on the edges of the tile perhaps suggesting that they have been used edge-on in an industrial hearth. Similar bricks (and some Tegulae) were recovered from Flaxengate.

Four fragments were identified as box flue tiles (BOX). All four pieces are in different fabrics. Three of the flue tiles have combing, one of which is cross-hatched. One fragment may have been used as a Tessera as it has mortar over all but one surface, however it is of irregular shape.

Sixty other tile fragments are certainly of Roman date (RTIL) but are too fragmentary to determine type. These include a large fragment, possibly originally from a Tegula that has been deliberately worn or smoothed and has a thick soot residue.

A total of two identifiable Tesserae were recovered from the site. One piece has been formed from an Imbrex in a fine oxidised fabric whilst the other appears to be made from magnesium or fissile limestone. The limestone Tessera is roughly square at 20mm whereas the tile piece is slightly rectangular at 24x25mm.

### **Post-Roman**

Three of the fragments recovered from the site are of post-Roman date. A single medieval flat roof tile has an applied rounded nib and is in Lincoln Fabric 1. This tile could date to anywhere between the

mid 13<sup>th</sup> and 15<sup>th</sup> centuries. One fragment comes from a pantile of 19<sup>th</sup> to 20<sup>th</sup> century type. The third fragment is from a modern extruded or moulded brick of 19<sup>th</sup> to 20<sup>th</sup> century date.

### **Daub**

Three fragments of daub in fine reduced fabrics were recovered from the site. Two of the fragments join and were possibly broken during excavation. They have a rod impression of about 10mm across one surface. The third fragment has flat lath impressions.

### **Summary and Recommendations**

The ceramic building material recovered from this site dates between the Roman and the early periods and is mainly typical of types found on sites elsewhere in the upper City, although there is a rare occurrence of a light firing Imbrex. It has not been possible for this assessment to compare individual groups with the Roman pottery but the overall impression is that the assemblage is mixed and comprises what may be fresh demolition material mixed with re-used fragments. It is not certain at what period some of the tile appears to have been associated with possible industrial processes but both of the Roman bricks with fuel-ash slag are from context 107 in Trench 1 which contained three post-Roman sherds. Most of the undiagnostic tile has been discarded in accordance with guidelines set down by the City and County Museum; all of the remaining material should be retained.

### **References**

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| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                                | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>  |
|---------------|----------------|--------------|--|-----------------|--------------|---------------|---------------|---|
| Trench 1      | 100            | PANT         | fine orange fabric                           |                 | 1            | 58            | discarded     | 19th to 20th  |
| Trench 1      | 100            | RBRK         | coarse OX/R/OX                               |                 | 1            | 194           |               | 35mm;part knife trimming on base                              |
| Trench 1      | 100            | RTIL         | coarse oxid                                  |                 | 1            | 63            |               | 19mm;combed 6 (+);mortar;BOX/TEG                              |
| Trench 1      | 100            | RTIL         | oxid med sandy                               |                 | 1            | 158           |               | BOX/TEG;17mm  |
| Trench 1      | 100            | TEG          | coarse marbled                               |                 | 1            | 58            |               | 17mm;part signature   |
| Trench 1      | 102            | RTIL         | oxid coarse sandy                            |                 | 1            | 7             | discarded     | flake   |
| Trench 1      | 102            | RTIL         | oxid med sandy                               |                 | 1            | 100           | discarded     | flake;mortar including over all breaks & edges;probably a TEG |
| Trench 1      | 102            | TEG          | light dull oxid/light R/dull oxid;med-coarse | Flange Type 14  | 1            | 75            |               | abraded   |
| Trench 1      | 104            | IMB          | coarse oxid                                  |                 | 1            | 166           |               | edge;moderate ca in bedding;25mm                              |
| Trench 1      | 104            | IMB          | coarse oxid                                  |                 | 1            | 93            |               | 18mm  |
| Trench 1      | 104            | IMB          | coarse oxid                                  |                 | 1            | 132           |               | part marbled fabric;17mm;edge                                 |
| Trench 1      | 104            | IMB          | dull oxid med sandy                          |                 | 1            | 175           |               | edge;corner;part burnt ?;18mm                                 |
| Trench 1      | 104            | IMB          | OX/R/OX coarse sandy                         |                 | 1            | 26            | discarded     | 20mm  |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>             | <b>sub type</b>  | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                                       |
|---------------|----------------|--------------|---------------------------|------------------|--------------|---------------|---------------|--|
| Trench 1      | 104            | IMB          | OX/R/OX fine              |                  | 1            | 37            |               | edge;cloth marks;mortar;12mm                             |
| Trench 1      | 104            | IMB          | OX/R/OX fine-med sandy    |                  | 1            | 115           |               | hard fired;internal ? Cloth marks;edge;18mm              |
| Trench 1      | 104            | IMB          | OX/R/OX med               |                  | 1            | 329           |               | edge to apex;mortar;16mm                                 |
| Trench 1      | 104            | IMB          | OX/R/OX part marbled fine |                  | 1            | 49            |               | 12mm;mortar  |
| Trench 1      | 104            | IMB          | oxid fine sandy           |                  | 1            | 88            |               | edge;15mm;part knife trimmed ext                         |
| Trench 1      | 104            | IMB          | oxid fine sandy           |                  | 1            | 27            |               | 11mm   |
| Trench 1      | 104            | IMB          | oxid fine sandy           |                  | 1            | 50            | discarded     | mortar incl over breaks;16mm                             |
| Trench 1      | 104            | IMB          | oxid fine sandy           |                  | 1            | 59            |               | 18mm;mortar  |
| Trench 1      | 104            | IMB          | oxid med sandy            |                  | 1            | 67            |               | edge;15mm;mortar   |
| Trench 1      | 104            | IMB          | oxid med sandy            |                  | 1            | 42            | discarded     | 15mm   |
| Trench 1      | 104            | IMB          | oxid med sandy            |                  | 1            | 55            |               | 18mm   |
| Trench 1      | 104            | IMB          | oxid med sandy            |                  | 1            | 29            | discarded     | part marbled   |
| Trench 1      | 104            | IMB          | oxid med sandy            |                  | 1            | 55            |               | 13mm;several fine piercings or voids on ext surface only |
| Trench 1      | 104            | RBRK         | coarse oxid               |                  | 1            | 44            | discarded     | flake;burnt  |
| Trench 1      | 104            | RBRK         | OX/R/OX fine-med sandy    |                  | 1            | 255           |               | cracked during firing;mortar including over breaks;34mm  |
| Trench 1      | 104            | RTIL         | coarse dull oxid          |                  | 1            | 159           | discarded     | flake;TEG/RBRK   |
| Trench 1      | 104            | RTIL         | marbled med sandy         |                  | 1            | 34            | discarded     | 16mm;TEG/BOX   |
| Trench 1      | 104            | RTIL         | OX/R/OX med               |                  | 1            | 11            | discarded     | flake;burnt  |
| Trench 1      | 104            | TEG          | coarse marbled            | Flange Type 6/26 | 1            | 98            |               | 20mm   |
| Trench 1      | 104            | TEG          | coarse OX/R/OX            | Flange Type 2    | 1            | 29            |               | mortar incl over breaks                                  |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                    | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|----------------------------------|-----------------|--------------|---------------|---------------|--|
| Trench 1      | 104            | TEG          | coarse oxid                      |                 | 1            | 503           |               | mostly spalled   |
| Trench 1      | 104            | TEG          | dull oxid med sandy              |                 | 1            | 145           |               | 17mm   |
| Trench 1      | 104            | TEG          | light OX/pale<br>R/light OX fine | Flange Type 2   | 1            | 252           |               | 23mm;light upper ? Slipped surface                               |
| Trench 1      | 104            | TEG          | OX/R/OX fine sandy               | Flange Type 16  | 1            | 115           |               | mortar   |
| Trench 1      | 104            | TEG          | OX/R/OX fine sandy               |                 | 1            | 86            |               | hard fired;24mm  |
| Trench 1      | 104            | TEG          | OX/R/OX fine sandy               |                 | 2            | 494           |               | hard fired;25mm;same tile  |
| Trench 1      | 104            | TEG          | OX/R/OX fine sandy               |                 | 1            | 153           |               | hard fired;19mm;curved signature 4(+)                            |
| Trench 1      | 104            | TEG          | OX/R/OX fine sandy               |                 | 1            | 338           |               | mortar including over breaks;20mm;curved signature 3(+)          |
| Trench 1      | 104            | TEG          | oxid fine sandy                  | Flange Type 16  | 1            | 228           |               | mortar;20mm  |
| Trench 1      | 105            | BOX          | coarse oxid                      |                 | 1            | 214           |               | corner;knife trimmed;combed;18-23mm                              |
| Trench 1      | 105            | BOX          | OX/R/OX fine sandy               |                 | 1            | 18            |               | shaped ?;? Used as TESS;30x23-25mm;mortar over all but 1 surface |
| Trench 1      | 105            | BOX          | oxid coarse sandy                |                 | 1            | 103           |               | corner;combed 7 or 8;18mm  |
| Trench 1      | 105            | BOX          | oxid fine sandy                  |                 | 1            | 79            |               | int soot;cross combed  |
| Trench 1      | 105            | IMB          | coarse OX/R/OX                   |                 | 1            | 77            |               | corner;mortar;19mm   |
| Trench 1      | 105            | IMB          | OX/R/OX fine sandy               |                 | 1            | 177           |               | end;20mm;mortar  |
| Trench 1      | 105            | IMB          | OX/R/OX med                      |                 | 1            | 192           |               | mortar incl breaks;abraded;thin at 18mm                          |
| Trench 1      | 105            | IMB          | OX/R/OX med                      |                 | 1            | 125           |               | hard fired;mortar;17mm   |
| Trench 1      | 105            | IMB          | OX/R/OX<br>med-coarse sandy      |                 | 1            | 365           |               |  |
| Trench 1      | 105            | IMB          | oxid fine sandy                  |                 | 1            | 157           |               | corner;edge;18mm   |
| Trench 1      | 105            | IMB          | oxid fine sandy                  |                 | 1            | 48            | discarded     | flake;16mm;mortar incl breaks                                    |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                    | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|----------------------------------|-----------------|--------------|---------------|---------------|--|
| Trench 1      | 105            | IMB          | oxid med sandy                   |                 | 1            | 154           |               | edge;20mm;longdit finger grooves                               |
| Trench 1      | 105            | IMB          | oxid med sandy                   |                 | 1            | 67            |               | edge;mortar incl breaks  |
| Trench 1      | 105            | IMB          | oxid med sandy                   |                 | 1            | 93            |               | edge;14mm  |
| Trench 1      | 105            | RBRK         | coarse light<br>OX/light R/light |                 | 1            | 619           |               | abraded;mortar;very shaley;40mm                                |
| Trench 1      | 105            | RBRK         | coarse oxid                      |                 | 1            | 265           |               | corner;mortar incl breaks;40mm                                 |
| Trench 1      | 105            | RBRK         | coarse oxid                      |                 | 1            | 245           |               | hard fired;mortar incl breaks;34mm                             |
| Trench 1      | 105            | RBRK         | coarse oxid                      |                 | 1            | 254           |               | worn upper surface;32mm;mortar incl breaks                     |
| Trench 1      | 105            | RBRK         | coarse reduced                   |                 | 1            | 98            |               | hard fired;mortar incl breaks;32mm                             |
| Trench 1      | 105            | RBRK         | OX/R/OX<br>med-coarse sandy      |                 | 1            | 1409          |               | corner;28mm;180+mm;mortar                                      |
| Trench 1      | 105            | RTIL         | coarse OX/R/OX                   |                 | 1            | 363           |               | shaley;mortar incl breaks;hard fired;23mm;prob a TEG           |
| Trench 1      | 105            | RTIL         | coarse oxid                      |                 | 1            | 30            |               | 16mm;BOX/TEG   |
| Trench 1      | 105            | RTIL         | OX/dark R/OX med<br>sandy        |                 | 1            | 26            | discarded     | 18mm;TEG ?   |
| Trench 1      | 105            | RTIL         | oxid fine sandy                  |                 | 1            | 98            |               | ext salt surfaced;mortar;cloth marks ?;very thick odd IMB;25mm |
| Trench 1      | 105            | RTIL         | oxid fine sandy                  |                 | 1            | 18            | discarded     | flake  |
| Trench 1      | 105            | RTIL         | oxid fine-med sandy              |                 | 1            | 49            | discarded     | corner;flake;mortar;RBRK ?                                     |
| Trench 1      | 105            | RTIL         | oxid med sandy                   |                 | 1            | 29            | discarded     | 17mm;TEG ?   |
| Trench 1      | 105            | RTIL         | oxid med sandy                   |                 | 1            | 19            | discarded     | flake  |
| Trench 1      | 105            | TEG          | coarse dull oxid                 |                 | 1            | 187           |               | flange scar;? ID odd as ? Cloth bedding;20mm                   |
| Trench 1      | 105            | TEG          | coarse oxid                      | Flange Type 2   | 1            | 461           |               | mortar;knife trimmed underside & sides;flange butted on;24mm   |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                 | <b>sub type</b>                 | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>  |
|---------------|----------------|--------------|-------------------------------|---------------------------------|--------------|---------------|---------------|---|
| Trench 1      | 105            | TEG          | dull oxid fine sandy          | Flange Type 1<br>;upper cut out | 1            | 285           |               |   |
| Trench 1      | 105            | TEG          | dull oxid med-coarse<br>sandy | Flange Type 1<br>;upper cut out | 1            | 316           |               | 24mm  |
| Trench 1      | 105            | TEG          | OX/R/OX fine                  |                                 | 1            | 50            | discarded     | 23mm  |
| Trench 1      | 105            | TEG          | OX/R/OX fine                  |                                 | 1            | 224           |               | 24mm;? Part loop signature                                  |
| Trench 1      | 105            | TEG          | OX/R/OX fine + ca             | Flange Type 31                  | 1            | 404           |               | 22mm;mortar;salt surfacing;knife trimmed sides              |
| Trench 1      | 105            | TEG          | OX/R/OX fine sandy            |                                 | 1            | 181           |               | 25mm  |
| Trench 1      | 105            | TEG          | OX/R/OX med                   | Flange Type thin 31             | 1            | 253           |               | 18mm  |
| Trench 1      | 105            | TEG          | oxid coarse sandy             |                                 | 1            | 175           |               | odd upper surface burnt/reduced;18mm;part curved signature  |
| Trench 1      | 105            | TEG          | oxid fine                     | Flange Type 2 ;cut<br>out B     | 1            | 48            |               | encased in mortar   |
| Trench 1      | 105            | TEG          | oxid fine sandy               |                                 | 1            | 187           |               | 23mm  |
| Trench 1      | 105            | TEG          | oxid med sandy                |                                 | 1            | 23            |               | circular nail hole;23mm                                     |
| Trench 1      | 106            | IMB          | dull oxid fine sandy          |                                 | 1            | 122           |               | edge;to apex;13mm;spalled ext;mortar int;cloth impression ? |
| Trench 1      | 106            | IMB          | dull oxid fine sandy          |                                 | 1            | 24            | discarded     | 16mm  |
| Trench 1      | 106            | IMB          | dull oxid fine sandy          |                                 | 1            | 75            |               | 20mm;soot ext   |
| Trench 1      | 106            | IMB          | oxid coarse sandy             |                                 | 1            | 342           |               | edge;to apex;16mm   |
| Trench 1      | 106            | IMB          | oxid coarse sandy             |                                 | 1            | 170           |               | corner;mortar;14mm  |
| Trench 1      | 106            | IMB          | oxid coarse sandy             |                                 | 1            | 84            |               | soot;15mm   |
| Trench 1      | 106            | IMB          | oxid coarse sandy             |                                 | 1            | 47            |               | mortar;edge;14mm  |
| Trench 1      | 106            | IMB          | oxid coarse sandy             |                                 | 1            | 24            | discarded     | 14mm  |
| Trench 1      | 106            | IMB          | oxid fine sandy               |                                 | 1            | 119           |               | buff ext surface/slip;18mm                                  |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>       | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>  |
|---------------|----------------|--------------|---------------------|-----------------|--------------|---------------|---------------|---|
| Trench 1      | 106            | IMB          | oxid fine sandy     |                 | 1            | 156           |               | thin at 11mm;mortar incl breaks;edge  |
| Trench 1      | 106            | IMB          | oxid fine sandy     |                 | 1            | 25            | discarded     | 14mm  |
| Trench 1      | 106            | IMB          | oxid fine sandy     |                 | 1            | 85            |               | cloth impression ?;14mm   |
| Trench 1      | 106            | IMB          | oxid fine sandy     |                 | 1            | 82            |               | mortar;15mm   |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 49            | discarded     | edge;17mm   |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 36            | discarded     | 16mm  |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 98            |               | edge;18mm   |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 37            | discarded     | 16mm  |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 422           |               | corner;to apex;15mm   |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 129           |               | edge;mortar incl breaks;14mm  |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 113           |               | edge;mortar;16mm  |
| Trench 1      | 106            | IMB          | oxid med sandy      |                 | 1            | 144           |               | edge;18mm   |
| Trench 1      | 106            | RBRK         | coarse OX/R/OX      |                 | 1            | 1977          |               | encased in mortar;corner;41mm   |
| Trench 1      | 106            | RBRK         | coarse OX/R/OX      |                 | 1            | 140           |               | 36mm;mortar   |
| Trench 1      | 106            | RBRK         | coarse oxid         |                 | 1            | 115           |               | burnt underside;30mm  |
| Trench 1      | 106            | RBRK         | OX/R/OX;fine        |                 | 1            | 270           |               | sooted upper;40mm   |
| Trench 1      | 106            | RBRK         | oxid med sandy      |                 | 2            | 824           |               | same tile;part curved signature;corner;33mm;upper surface & edge part burnt |
| Trench 1      | 106            | RTIL         | coarse oxid         |                 | 1            | 15            | discarded     | flake   |
| Trench 1      | 106            | RTIL         | dull oxid med sandy |                 | 1            | 64            |               | TEG ?;16mm  |
| Trench 1      | 106            | RTIL         | OX/R/OX fine        |                 | 1            | 12            | discarded     | 12mm  |



| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>              | <b>sub type</b>                 | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                                   |
|---------------|----------------|--------------|----------------------------|---------------------------------|--------------|---------------|---------------|--|
| Trench 1      | 106            | RTIL         | oxid coarse sandy          |                                 | 1            | 67            |               | TEG ?;18mm   |
| Trench 1      | 106            | RTIL         | oxid fine sandy            |                                 | 1            | 64            |               | TEG ?;17mm   |
| Trench 1      | 106            | RTIL         | oxid fine sandy            |                                 | 1            | 12            | discarded     | flake  |
| Trench 1      | 106            | RTIL         | oxid med sandy             |                                 | 1            | 20            | discarded     | flake  |
| Trench 1      | 106            | RTIL         | oxid med sandy             |                                 | 1            | 176           |               | ? Thick TEG or thin RBRK;trimmed underside;28mm;edge |
| Trench 1      | 106            | TEG          | coarse bright oxid         | cut out E/B                     | 1            | 167           |               | large ca inclusions;22mm;end                         |
| Trench 1      | 106            | TEG          | coarse OX/R/OX             | Flange Type thick<br>31;cut out | 1            | 192           |               | knife trimmed basal edge;mortar                      |
| Trench 1      | 106            | TEG          | coarse OX/R/OX             | Flange Type 15;cut<br>out E     | 1            | 119           |               | very shaley  |
| Trench 1      | 106            | TEG          | coarse oxid                |                                 | 1            | 32            |               | very thin flange;knife trimmed basal edge            |
| Trench 1      | 106            | TEG          | dull marbled fine          |                                 | 1            | 95            |               | 21mm   |
| Trench 1      | 106            | TEG          | dull oxid med sandy        | cut out E                       | 1            | 272           |               | very odd;cut front edge;29mm;thick                   |
| Trench 1      | 106            | TEG          | OX/R/OX med<br>sandy       | Flange Type 1                   | 1            | 98            |               | knife trimmed basal edge                             |
| Trench 1      | 106            | TEG          | OX/R/OX fine sandy         |                                 | 1            | 92            |               | 25mm;mortar incl breaks                              |
| Trench 1      | 106            | TEG          | OX/R/OX fine sandy         |                                 | 1            | 62            | discarded     | flake  |
| Trench 1      | 106            | TEG          | OX/R/OX fine sandy<br>+ ca |                                 | 1            | 25            |               | flange flake;mortar                                  |
| Trench 1      | 106            | TEG          | OX/R/OX med<br>sandy + ca  | Flange Type 2 ?                 | 1            | 19            |               |  |
| Trench 1      | 106            | TEG          | OX/R/OX med                | cut out E/B                     | 1            | 152           |               | edge;mortar incl breaks                              |
| Trench 1      | 106            | TEG          | OX/R/OX med                |                                 | 1            | 159           |               | hard fired;19mm;end;mortar                           |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>          | <b>sub type</b>          | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>  |
|---------------|----------------|--------------|------------------------|--------------------------|--------------|---------------|---------------|---|
| Trench 1      | 106            | TEG          | OX/R/OX near vitrified | Flange Type 1/33;cut out | 1            | 686           |               | end;badly spalled during firing;mortar;knife trimmed basal edge |
| Trench 1      | 106            | TEG          | oxid coarse sandy      |                          | 1            | 102           |               | 23mm  |
| Trench 1      | 106            | TEG          | oxid coarse sandy      |                          | 1            | 73            | discarded     | 24mm  |
| Trench 1      | 106            | TEG          | oxid fine sandy        | Flange Type 33           | 1            | 115           |               | knife trimmed basal edge;13mm                                   |
| Trench 1      | 106            | TEG          | oxid med sandy         |                          | 1            | 60            |               | 24mm;very coarse flint & ca bedding                             |
| Trench 1      | 106            | TEG          | oxid med sandy         | Flange Type 1            | 1            | 119           |               | part knife trimmed side   |
| Trench 1      | 106            | TEG          | oxid med sandy         | Flange Type thick        | 1            | 270           |               | knife trimmed edge  |
| Trench 1      | 106            | TEG          | oxid med sandy         | Flange Type 1            | 1            | 126           |               | part knife trimmed side   |
| Trench 1      | 107            | IMB          | coarse oxid            |                          | 1            | 105           | discarded     | shaley;flake;mortar   |
| Trench 1      | 107            | IMB          | coarse oxid            |                          | 1            | 112           |               | common shale;15mm   |
| Trench 1      | 107            | IMB          | coarse oxid            |                          | 1            | 106           |               | edge;13mm   |
| Trench 1      | 107            | IMB          | coarse oxid            |                          | 1            | 191           |               | part spalled;edge   |
| Trench 1      | 107            | IMB          | coarse oxid            |                          | 1            | 111           |               | 17mm;edge;high fired;large fe incl                              |
| Trench 1      | 107            | IMB          | dull oxid fine         |                          | 1            | 219           |               | 18mm;common fe;edge;soot ext                                    |
| Trench 1      | 107            | IMB          | dull oxid fine sandy   |                          | 1            | 111           |               | edge;soot int;thick at 21mm                                     |
| Trench 1      | 107            | IMB          | dull oxid fine sandy   |                          | 1            | 114           |               | edge;18mm   |
| Trench 1      | 107            | IMB          | light oxid fine        |                          | 1            | 80            |               | 16mm;mortar   |
| Trench 1      | 107            | IMB          | marbled fine sandy     |                          | 1            | 176           |               | edge;17mm   |
| Trench 1      | 107            | IMB          | OX/R/OX fine sandy     |                          | 1            | 60            |               | high fired;18mm   |
| Trench 1      | 107            | IMB          | OX/R/OX med sandy + ca |                          | 1            | 100           |               | tool mark on edge;corner  |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                  | <b>sub type</b>    | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                               |
|---------------|----------------|--------------|--------------------------------|--------------------|--------------|---------------|---------------|--|
| Trench 1      | 107            | IMB          | OX/R/OX/R/OX<br>near vitrified |                    | 1            | 72            |               | spalled;edge;thin at 11mmm                       |
| Trench 1      | 107            | IMB          | oxid fine sandy                |                    | 1            | 28            |               | flake;cut/slash marks on ext                     |
| Trench 1      | 107            | IMB          | oxid fine sandy                |                    | 1            | 55            |               | int soot;part spalled                            |
| Trench 1      | 107            | IMB          | oxid fine sandy                |                    | 1            | 154           |               | edge;17mm  |
| Trench 1      | 107            | IMB          | oxid fine sandy                |                    | 1            | 163           |               | edge;mortar;13mm                                 |
| Trench 1      | 107            | IMB          | oxid fine sandy                |                    | 1            | 78            |               | edge;mortar;15mm                                 |
| Trench 1      | 107            | IMB          | oxid med sandy                 |                    | 1            | 104           |               | edge;17mm  |
| Trench 1      | 107            | NIB          | Lincoln Fabric 1               | applied Type 3 nib | 1            | 54            |               | shaley;right corner;mid 13th to 15th             |
| Trench 1      | 107            | RBRK         | coarse OX/R/OX<br>med sandy    |                    | 1            | 347           |               | fuel ash on edge;heat affected edge & upper      |
| Trench 1      | 107            | RBRK         | coarse oxid                    |                    | 1            | 162           | discarded     | flake;fe & shale                                 |
| Trench 1      | 107            | RBRK         | OX/R/OX med                    |                    | 1            | 348           |               | fuel ash on edge;heat affected edge              |
| Trench 1      | 107            | RTIL         | coarse oxid                    |                    | 1            | 47            |               | mortar;combing ?;BOX/TEG                         |
| Trench 1      | 107            | RTIL         | OX/R/? Med sandy               |                    | 1            | 12            | discarded     | part curved signature;flake                      |
| Trench 1      | 107            | RTIL         | OX/R/OX fine sandy             |                    | 1            | 22            | discarded     | 15mm   |
| Trench 1      | 107            | TEG          | coarse dull oxid               |                    | 1            | 117           |               | large ca incl;mortar;combing ?;17mm              |
| Trench 1      | 107            | TEG          | coarse OX/R/OX                 |                    | 1            | 200           |               | 20mm;part curved signaure 3/4;mortar incl breaks |
| Trench 1      | 107            | TEG          | dull oxid fine sandy           |                    | 1            | 219           |               | 28mm;central finger groove                       |
| Trench 1      | 107            | TEG          | OX/R/OX fine                   | Flange Type 31     | 1            | 200           |               | mortar   |
| Trench 1      | 107            | TEG          | OX/R/OX fine                   |                    | 1            | 71            |               | part curved signature;18mm                       |
| Trench 1      | 107            | TEG          | OX/R/OX fine sandy             |                    | 1            | 136           |               | high fired;25mm                                  |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>            | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|--------------------------|-----------------|--------------|---------------|---------------|--|
| Trench 1      | 107            | TEG          | OX/R/OX fine sandy       | Flange Type 1   | 1            | 336           |               | knife trimmed basal angle;20mm;mortar  |
| Trench 1      | 107            | TEG          | OX/R/OX med              | Flange Type 1   | 1            | 227           |               |  |
| Trench 1      | 107            | TEG          | oxid coarse sandy        |                 | 1            | 100           |               | 18mm   |
| Trench 1      | 107            | TEG          | oxid fine sandy          |                 | 1            | 375           |               | 24mm   |
| Trench 1      | 107            | TEG          | oxid med sandy           |                 | 1            | 122           | discarded     | knife trimmed edge & part underside;part flake                                     |
| Trench 1      | 107            | TEG          | oxid med sandy           |                 | 1            | 36            |               | part knife trimmed   |
| Trench 1      | 108            | IMB          | coarse oxid              |                 | 1            | 118           |               | mortar;15mm  |
| Trench 1      | 108            | IMB          | coarse oxid              |                 | 1            | 77            |               | end;mortar;20mm  |
| Trench 1      | 108            | IMB          | coarse oxid              |                 | 1            | 148           |               | 18mm   |
| Trench 1      | 108            | IMB          | coarse oxid part marbled |                 | 1            | 72            |               | edge;15mm  |
| Trench 1      | 108            | IMB          | dull OX/R/OX med sandy   |                 | 1            | 91            |               | hard fired;18mm  |
| Trench 1      | 108            | IMB          | dull oxid fine sandy     |                 | 1            | 152           |               | corner end;to apex;15mm  |
| Trench 1      | 108            | IMB          | dull oxid fine sandy     |                 | 1            | 47            |               | edge;mortar incl breaks;16mm   |
| Trench 1      | 108            | IMB          | dull oxid fine sandy     |                 | 1            | 147           |               | 13mm;edge  |
| Trench 1      | 108            | IMB          | fine orange sandy        |                 | 1            | 30            | discarded     | abraded;15mm   |
| Trench 1      | 108            | RBRK         | marbled fine             |                 | 1            | 228           |               | 34mm   |
| Trench 1      | 108            | TEG          | coarse oxid              |                 | 1            | 149           |               | mortar;19mm  |
| Trench 1      | 108            | TEG          | coarse oxid              |                 | 1            | 226           |               | part curved signature;large shale incl;very rough edge;very coarse bedding;20-24mm |
| Trench 1      | 108            | TEG          | coarse reduced           |                 | 1            | 57            |               | end;knife trimmed basal angle;25mm   |
| Trench 1      | 108            | TEG          | coarse reduced           |                 | 1            | 142           |               | 26mm;mortar incl some breaks   |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>               | <b>sub type</b>          | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>  |
|---------------|----------------|--------------|-----------------------------|--------------------------|--------------|---------------|---------------|---|
| Trench 1      | 108            | TEG          | dull oxid fine sandy        |                          | 1            | 154           |               | end;20mm  |
| Trench 1      | 108            | TEG          | dull oxid fine sandy        |                          | 1            | 297           |               | 24mm;part curved signature 4 (+)                            |
| Trench 1      | 108            | TEG          | dull oxid fine sandy        | Flange Type 1;cut out A  | 1            | 597           |               | 25mm;knife trimmed underside                                |
| Trench 1      | 108            | TEG          | marbled med sandy           |                          | 1            | 225           |               | 24mm  |
| Trench 1      | 108            | TEG          | OX/R/OX fine                | cut out E/B              | 1            | 31            |               | knife trimmed basal angle                                   |
| Trench 1      | 108            | TEG          | OX/R/OX med                 |                          | 1            | 495           |               | part knife trimmed underside;part curved signature;19mm     |
| Trench 1      | 108            | TEG          | OX/R/OX/R/OX med sandy      |                          | 1            | 62            |               | near vitrified;24mm   |
| Trench 1      | 108            | TEG          | OX/R/OX/R/OX/R/OX med sandy | Flange Type 10;cut out C | 1            | 291           |               | near vitrified;part knife trimmed underside;corner end;20mm |
| Trench 1      | 108            | TEG          | oxid fine sandy             |                          | 1            | 399           |               | 20mm;mortar incl some breaks;part knife trimmed underside   |
| Trench 1      | 108            | TEG          | oxid fine sandy             |                          | 1            | 156           |               | 24mm;part curved signature                                  |
| Trench 2      | 202            | BRK          | coarse                      |                          | 1            | 21            | discarded     | modern;19th to 20th   |
| Trench 2      | 202            | IMB          | coarse oxid                 |                          | 1            | 81            |               | 18mm  |
| Trench 2      | 202            | IMB          | oxid fine sandy             |                          | 1            | 54            |               | mortar;16mm   |
| Trench 2      | 202            | IMB          | oxid med sandy              |                          | 1            | 37            |               | end;15mm  |
| Trench 2      | 202            | RBRK         | coarse OX/R/OX              |                          | 1            | 66            |               | plant impression ?;35mm                                     |
| Trench 2      | 202            | RBRK         | coarse oxid part marbled    |                          | 1            | 292           |               | reduced upper surface;knife trimmed edge;42+ mm             |
| Trench 2      | 202            | RBRK         | OX/R/OX med                 |                          | 1            | 135           | discarded     | abraded;32mm  |
| Trench 2      | 202            | RTIL         | OX/R/OX fine                |                          | 1            | 34            | discarded     | flake   |
| Trench 2      | 202            | RTIL         | oxid med sandy              |                          | 1            | 28            | discarded     | mortar over All surfaces                                    |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>            | <b>sub type</b>   | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|--------------------------|-------------------|--------------|---------------|---------------|--|
| Trench 2      | 202            | TEG          | coarse light oxid        |                   | 1            | 310           | discarded     |  |
| Trench 2      | 202            | TEG          | coarse reduced           | Flange Type 31    | 1            | 54            |               |  |
| Trench 2      | 202            | TEG          | dull oxid med sandy      | Flange Type 1     | 1            | 92            |               | abraded  |
| Trench 2      | 202            | TEG          | oxid med sandy           | Flange Type 31    | 1            | 128           |               | 20mm   |
| Trench 2      | 202            | TEG          | various                  |                   | 4            | 442           | discarded     |  |
| Trench 2      | 203            | IMB          | coarse OX/R/OX           |                   | 1            | 105           |               | edge;18mm  |
| Trench 2      | 203            | IMB          | dull OX/R/OX med sandy   |                   | 1            | 95            |               | 15mm   |
| Trench 2      | 203            | IMB          | OX/R/OX fine + ca        |                   | 1            | 120           |               | mortar;18mm;edge;BOU like fabric   |
| Trench 2      | 203            | IMB          | oxid fine                |                   | 1            | 159           |               | end;15mm   |
| Trench 2      | 203            | IMB          | oxid med sandy           |                   | 1            | 87            |               | corner;15mm  |
| Trench 2      | 203            | IMB          | oxid med sandy + ca      |                   | 1            | 137           |               | corner;17mm  |
| Trench 2      | 203            | RBRK         | coarse marbled           |                   | 1            | 240           |               | very shaley (almosst all shale!);corner;58mm                             |
| Trench 2      | 203            | RBRK         | coarse OX/R/OX           |                   | 1            | 847           |               | shaley;cracked during firing;corner;mortar incl breaks;45mm              |
| Trench 2      | 203            | RBRK         | oxid med sandy           |                   | 1            | 206           |               | 36mm;mortar;impressions in underside                                     |
| Trench 2      | 203            | RTIL         | coarse OX/R/OX           |                   | 1            | 201           |               | abraded;28+mm;TEG ?  |
| Trench 2      | 203            | RTIL         | dull oxid med sandy + ca |                   | 1            | 94            |               | TEG/BOX;16mm   |
| Trench 2      | 203            | RTIL         | oxid med sandy           |                   | 1            | 60            |               | TEG/BOX/IMB;14mm   |
| Trench 2      | 203            | TEG          | coarse OX/R/OC           | Fange Type wide 1 | 1            | 665           |               | overfired;knife trimmed basal angle                                      |
| Trench 2      | 203            | TEG          | coarse oxid              |                   | 1            | 124           |               | 25mm;knife trimmed underside;soot  |
| Trench 2      | 203            | TEG          | OX/R/OX fine sandy       |                   | 1            | 404           |               | high fired;knife trimmed end & part underside;22mm;part curved signature |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>                | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|------------------------------|-----------------|--------------|---------------|---------------|--|
| Trench 2      | 203            | TEG          | OX/R/OX fine sandy           |                 | 1            | 153           |               | 24mm   |
| Trench 2      | 203            | TEG          | OX/R/OX med                  |                 | 1            | 175           |               | 32mm;edge;mortar   |
| Trench 2      | 203            | TEG          | oxid fine sandy              | Fange Type 1    | 1            | 799           |               | worn upper flange;large paw print on upper of dog ?;25-28mm                                  |
| Trench 2      | 203            | TEG          | reduced med sandy +<br>ca    | Fange Type 31   | 1            | 110           |               | overfired  |
| Trench 2      | 204            | IMB          | coarse oxid                  |                 | 1            | 184           |               | edge;20mm  |
| Trench 2      | 204            | IMB          | oxid fine sandy              |                 | 1            | 155           |               | corner;16mm  |
| Trench 2      | 204            | RTIL         | coarse oxid                  |                 | 2            | 146           |               | corner;17mm;same tile;black upper surface;TEG ?  |
| Trench 2      | 204            | RTIL         | coarse oxid                  |                 | 1            | 8             |               | 18mm;TEG ?   |
| Trench 2      | 204            | TEG          | coarse oxid                  |                 | 1            | 104           |               | 18mm;knife trimmed end   |
| Trench 2      | 205            | IMB          | coarse oxid                  |                 | 1            | 37            |               | 13mm   |
| Trench 2      | 205            | RTIL         | dull oxid med sandy          |                 | 1            | 23            |               | very abraded;? IMB   |
| Trench 2      | 208            | DAUB         | reduced fine sandy           |                 | 2            | 55            |               | abundant fine quartz mod ca veg matter;joining frags;soot on flat face;rod impression c 10mm |
| Trench 2      | 208            | IMB          | coarse light oxid            |                 | 1            | 97            |               | int soot;17mm  |
| Trench 2      | 208            | IMB          | coarse oxid                  |                 | 1            | 69            |               | edge;mortar;18mm   |
| Trench 2      | 208            | IMB          | coarse oxid                  |                 | 2            | 173           |               | join;mortar;corner;11mm  |
| Trench 2      | 208            | IMB          | coarse oxid                  |                 | 1            | 238           |               | comm ca in bedding;corner;22mm;tool marks on edge  |
| Trench 2      | 208            | IMB          | coarse oxid + comm<br>fe     |                 | 1            | 56            |               | 14mm   |
| Trench 2      | 208            | IMB          | cream med sandy              |                 | 1            | 95            |               | very unusual;abundant round-subround quartz 0.3-0.8mm;18mm                                   |
| Trench 2      | 208            | IMB          | dull OX/R/OX<br>coarse sandy |                 | 1            | 111           |               | hard fired;edge;18mm   |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>              | <b>sub type</b>            | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                         |
|---------------|----------------|--------------|----------------------------|----------------------------|--------------|---------------|---------------|--|
| Trench 2      | 208            | IMB          | oxid fine                  |                            | 1            | 39            |               | end  |
| Trench 2      | 208            | IMB          | oxid med sandy             |                            | 3            | 521           |               | same tile;17mm                             |
| Trench 2      | 208            | IMB          | reduced fine sandy +<br>ca |                            | 1            | 87            |               | edge;16mm                                  |
| Trench 2      | 208            | RBRK         | coarse OX/R/OX             |                            | 1            | 115           |               | 40mm                                       |
| Trench 2      | 208            | RBRK         | coarse OX/R/OX             |                            | 1            | 132           |               | 38mm                                       |
| Trench 2      | 208            | RBRK         | coarse oxid                |                            | 1            | 591           | discarded     | very shaley;large flake embedded in mortar |
| Trench 2      | 208            | RBRK         | coarse oxid                |                            | 1            | 153           |               | 35+mm                                      |
| Trench 2      | 208            | RBRK         | coarse oxid                |                            | 1            | 115           |               | knife trimmed side                         |
| Trench 2      | 208            | RBRK         | marbled OX/R/OX<br>fine    |                            | 1            | 261           |               | highfired;41mm                             |
| Trench 2      | 208            | RTIL         | coarse oxid                |                            | 1            | 108           | discarded     | flake                                      |
| Trench 2      | 208            | RTIL         | coarse oxid                |                            | 1            | 96            |               | 28mm;TEG/RBRK                              |
| Trench 2      | 208            | RTIL         | dull oxid fine sandy       |                            | 1            | 55            |               | flake;TEG/RBRK                             |
| Trench 2      | 208            | RTIL         | dull oxid fine sandy       |                            | 1            | 45            |               | edge;IMB/TEG;16mm                          |
| Trench 2      | 208            | RTIL         | OX/R/? Med sandy<br>+ ca   |                            | 1            | 78            |               | flake;TEG/RBRK                             |
| Trench 2      | 208            | TEG          | coarse marbled             | Flange Type 31             | 1            | 127           |               | 17mm                                       |
| Trench 2      | 208            | TEG          | coarse marbled             | Flange Type 2              | 1            | 89            |               | shaley                                     |
| Trench 2      | 208            | TEG          | coarse OX/R/OX             | Flange Type 31             | 1            | 228           |               | 18mm;knife trimmed side                    |
| Trench 2      | 208            | TEG          | coarse OX/R/OX             | Flange Type 4;cut<br>out C | 1            | 231           |               | mortar                                     |
| Trench 2      | 208            | TEG          | coarse OX/R/OX             |                            | 1            | 168           |               | knife trimmed basal edge;23mm              |



| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>          | <b>sub type</b> | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>   |
|---------------|----------------|--------------|------------------------|-----------------|--------------|---------------|---------------|--|
| Trench 2      | 208            | TEG          | coarse oxid            |                 | 1            | 130           |               | shaley;knife trimmed edge;14mm                                 |
| Trench 2      | 208            | TEG          | dull OX/R/OX med sandy |                 | 1            | 222           |               | knife trimmed edge;circular non-tapering nailhole of 11mm diam |
| Trench 2      | 208            | TEG          | OX/R/OX fine sandy     |                 | 1            | 67            |               | 26mm   |
| Trench 2      | 208            | TEG          | OX/R/OX fine sandy     |                 | 1            | 95            |               | 16mm   |
| Trench 2      | 208            | TEG          | OX/R/OX fine sandy     |                 | 1            | 187           |               |  |
| Trench 2      | 208            | TEG          | OX/R/OX med            |                 | 1            | 288           |               | 22mm;edge;part semi circular signature                         |
| Trench 2      | 208            | TEG          | oxid fine              |                 | 1            | 55            |               | 22mm   |
| Trench 2      | 208            | TEG          | oxid med sandy         |                 | 1            | 111           |               | sunken;18mm  |
| Trench 2      | 208            | TESS         | limestone              |                 | 1            | 21            |               | 20mm square;mortar   |
| Trench 2      | 209            | IMB          | coarse OX/R/OX         |                 | 1            | 241           |               | 17mm;mortar;edge;hard fired                                    |
| Trench 2      | 209            | IMB          | coarse OX/R/OX         |                 | 1            | 50            |               | 13mm   |
| Trench 2      | 209            | IMB          | coarse oxid            |                 | 1            | 61            |               | mortar;14mm  |
| Trench 2      | 209            | IMB          | OX/R/OX coarse sandy   |                 | 1            | 97            |               | 13mm;large flint incl;mortar                                   |
| Trench 2      | 209            | IMB          | OX/R/OX med            |                 | 1            | 42            |               | 14mm   |
| Trench 2      | 209            | IMB          | oxid fine              |                 | 1            | 99            |               | tool marks;14mm  |
| Trench 2      | 209            | IMB          | oxid fine sandy        |                 | 1            | 315           |               | mortar;15-19mm;edge  |
| Trench 2      | 209            | RBRK         | coarse light oxid      |                 | 1            | 451           |               | flake;comm shale   |
| Trench 2      | 209            | RBRK         | coarse OX/R            |                 | 1            | 482           |               | 45mm;corner;hard fired;mortar;knife trimmed edge               |
| Trench 2      | 209            | RBRK         | coarse OX/R/OX         |                 | 1            | 612           |               | mortar;corner;50mm   |
| Trench 2      | 209            | RBRK         | coarse OX/R/OX         |                 | 1            | 334           |               | 36mm   |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>           | <b>sub type</b>        | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                                |
|---------------|----------------|--------------|-------------------------|------------------------|--------------|---------------|---------------|---|
| Trench 2      | 209            | RBRK         | coarse OX/R/OX          |                        | 1            | 253           |               | 35mm;edge;mortar;part knife trimmed underside     |
| Trench 2      | 209            | RBRK         | coarse OX/R/OX          |                        | 1            | 179           |               | 44mm;corner;hard fired                            |
| Trench 2      | 209            | RBRK         | coarse OX/R/OX          |                        | 1            | 128           |               | 42mm  |
| Trench 2      | 209            | RBRK         | coarse reduced          |                        | 1            | 280           |               | flake;overfired;edge                              |
| Trench 2      | 209            | RBRK         | OX/R/OX                 |                        | 1            | 455           |               | knife trimmed edge;corner;33mm                    |
| Trench 2      | 209            | RBRK         | OX/R/OX fine sandy      |                        | 1            | 955           |               | deep finger pressings;comm ca in bedding;45mm     |
| Trench 2      | 209            | RBRK         | OX/R/OX fine sandy      |                        | 1            | 482           |               | 35mm  |
| Trench 2      | 209            | RBRK         | oxid fine               |                        | 1            | 419           |               | large shale incl;48mm;corner;mortar               |
| Trench 2      | 209            | RTIL         | coarse reduced          |                        | 1            | 115           |               | near vitrified overfired/burnt;28mm               |
| Trench 2      | 209            | RTIL         | dull OX/R/OX med sandy  |                        | 1            | 485           |               | worn;corner;soot incl over edge;25mm              |
| Trench 2      | 209            | RTIL         | OX/R/OX fine sandy      |                        | 1            | 35            |               | 15mm;edge;IMB/TEG                                 |
| Trench 2      | 209            | RTIL         | various                 |                        | 8            | 145           | discarded     | flakes  |
| Trench 2      | 209            | TEG          | coarse OX/R/OX          | cut out A/B/E          | 1            | 55            |               | hard fired;20mm                                   |
| Trench 2      | 209            | TEG          | coarse oxid             |                        | 1            | 90            |               | 25mm;knife trimmed underside                      |
| Trench 2      | 209            | TEG          | coarse oxid             |                        | 1            | 56            |               | 19mm  |
| Trench 2      | 209            | TEG          | coarse oxid             | cut out                | 1            | 57            |               | knife trimmed side;20mm                           |
| Trench 2      | 209            | TEG          | dull OX/R/OX fine sandy |                        | 1            | 210           |               | 20mm  |
| Trench 2      | 209            | TEG          | dull OX/R/OX med sandy  | Flange Type 1          | 1            | 99            |               |   |
| Trench 2      | 209            | TEG          | dull oxid fine sandy    | Flange Type 31;cut out | 1            | 108           |               | mortar over breaks;knife trimmed underside & side |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>           | <b>sub type</b>         | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                               |
|---------------|----------------|--------------|-------------------------|-------------------------|--------------|---------------|---------------|--|
| Trench 2      | 209            | TEG          | dull oxid med sandy     |                         | 1            | 148           |               | very coarse bedding incl comm flint;edge or hole |
| Trench 2      | 209            | TEG          | dull oxid med sandy     |                         | 1            | 313           |               | thick soot on underside;23mm                     |
| Trench 2      | 209            | TEG          | OX/R/OX fine            | Flange Type 4;cut out E | 1            | 375           |               | mortar;24mm                                      |
| Trench 2      | 209            | TEG          | OX/R/OX fine sandy      |                         | 1            | 68            |               | sooted upper surface;21mm                        |
| Trench 2      | 209            | TEG          | OX/R/OX fine sandy      | Flange Type 2;cut out B | 1            | 189           |               | mortar incl breaks                               |
| Trench 2      | 209            | TEG          | OX/R/OX fine sandy      |                         | 1            | 88            |               | mortar over break;16mm                           |
| Trench 2      | 209            | TEG          | OX/R/OX fine sandy + ca |                         | 1            | 188           |               | edge;corner;20mm                                 |
| Trench 2      | 209            | TEG          | OX/R/OX med             | Flange Type 31;cut out  | 1            | 488           |               | 27mm;upper end                                   |
| Trench 2      | 209            | TEG          | OX/R/OX med             |                         | 1            | 105           |               | 23mm;edge;knife trimmed underside                |
| Trench 2      | 209            | TEG          | oxid fine sandy         | Flange Type 31          | 1            | 226           |               | light upper surface                              |
| Trench 2      | 212            | DAUB         | reduced fine            |                         | 1            | 18            |               | lath impressions                                 |
| Trench 2      | 212            | IMB          | coarse marbled OX/R/OX  |                         | 1            | 38            |               | edge;15mm  |
| Trench 2      | 212            | IMB          | OX/R/OX fine sandy      |                         | 1            | 21            |               | hard fired;edge;16mm                             |
| Trench 2      | 212            | IMB          | OX/R/OX med             |                         | 1            | 22            |               | mortar;15mm                                      |
| Trench 2      | 212            | IMB          | oxid fine               |                         | 1            | 125           |               | edge;light slipped ext surface;17mm              |
| Trench 2      | 212            | IMB          | oxid fine               |                         | 1            | 53            |               | flake  |
| Trench 2      | 212            | IMB          | oxid fine               |                         | 1            | 65            |               | light slipped surfaces;14mm                      |
| Trench 2      | 212            | IMB          | oxid fine               |                         | 1            | 71            |               | edge;14mm  |
| Trench 2      | 212            | IMB          | oxid fine sandy         |                         | 1            | 302           |               | corner;22mm                                      |

| <b>trench</b> | <b>context</b> | <b>cname</b> | <b>fabric</b>        | <b>sub type</b>  | <b>frags</b> | <b>weight</b> | <b>action</b> | <b>description</b>                                |
|---------------|----------------|--------------|----------------------|------------------|--------------|---------------|---------------|---|
| Trench 2      | 212            | IMB          | oxid fine sandy      |                  | 1            | 29            |               | 11mm  |
| Trench 2      | 212            | IMB          | oxid fine sandy      |                  | 1            | 37            |               | 11mm  |
| Trench 2      | 212            | IMB          | oxid fine sandy      |                  | 1            | 70            |               | corner;mortar;20mm                                |
| Trench 2      | 212            | IMB          | oxid med sandy       |                  | 1            | 34            |               | 15mm  |
| Trench 2      | 212            | IMB          | oxid med sandy       |                  | 1            | 151           |               | 20mm  |
| Trench 2      | 212            | IMB          | oxid med sandy       |                  | 1            | 222           |               | corner;18mm                                       |
| Trench 2      | 212            | RBRK         | coarse oxid          |                  | 1            | 236           |               | knife trimmed side;42mm                           |
| Trench 2      | 212            | RBRK         | coarse reduced       |                  | 1            | 657           |               | knife trimmed sides;mortar;55mm;corner;hard fired |
| Trench 2      | 212            | RBRK         | coarse reduced       |                  | 1            | 241           |               | 36+mm;mortar incl breaks                          |
| Trench 2      | 212            | RTIL         | coarse OX/R/OX       |                  | 1            | 23            |               | TEG/BOX/IMB;14mm                                  |
| Trench 2      | 212            | RTIL         | dull oxid fine sandy |                  | 1            | 60            |               | TEG ?;18mm  |
| Trench 2      | 212            | RTIL         | R/OX/R fine sandy    |                  | 1            | 53            |               | TEG ?;16mm  |
| Trench 2      | 212            | RTIL         | various              |                  | 6            | 285           | discarded     | flakes  |
| Trench 2      | 212            | TEG          | coarse OX/R/OX       | cut out E/B/A    | 1            | 94            |               | 25mm;part knife trimmed underside                 |
| Trench 2      | 212            | TEG          | coarse OX/R/OX       | Flange Type 4    | 1            | 125           |               |   |
| Trench 2      | 212            | TEG          | coarse oxid          | Flange Type 31/2 | 1            | 515           |               | mortar;soot on underside                          |
| Trench 2      | 212            | TEG          | oxid fine sandy      | cut out E/B      | 1            | 41            |               | flange  |
| Trench 2      | 212            | TEG          | oxid fine sandy      |                  | 1            | 35            |               | flange  |
| Trench 2      | 212            | TEG          | oxid fine sandy      | Flange Type 4    | 1            | 72            |               |   |
| Trench 2      | 212            | TEG          | reduced fine sandy   |                  | 1            | 50            |               | 24mm  |
| Trench 2      | 212            | TESS         | oxid fine            |                  | 1            | 21            |               | from IMB;25x24mm;mortar                           |

## **Appendix 5: Animal Bone Assessment**

By Jen Wood

### **Introduction**

A total of 425 (8487g) refitted fragments of animal bone were recovered by hand during a program of archaeological works undertaken by Allen Archaeology Ltd at The Old Palace, Lincoln.

The assemblage was recovered from two test pits, predominantly from topsoil, made ground layers, robber pits and service trench back fills. Due to the nature of the depositional contexts, the potential for mixing and re-deposition of artefacts is relatively high. The pottery assemblage (this volume) suggests that many of the contexts originated from the late Roman Period and then were later disturbed within the late Saxon-early medieval periods. Therefore very little of the animal bone within the assemblage can be considered securely representative of a specific period. Dump deposit context (204) has been tentatively identified as securely of Roman date.

### **Methodology**

For the purposes of this assessment, the entire assemblage has been fully recorded into a database archive. Identification of the bone was undertaken with access to a reference collection and published guides. All animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Also fusion data, butchery marks (Binford 1981), gnawing, burning and pathological changes were noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as micro (rodent size), small (rabbit size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was done using the criteria of Boessneck (1969) and Prummel and Frisch (1986) in addition to the use of the reference material. Where distinctions could not be made the bone was recorded as sheep/goat (S/G).

The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated for each taxon. Where fresh breaks were noted, fragments were refitted and counted as one.

Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982) and Levine (1982), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (\*) measurements indicating bones that were reconstructed or had slight abrasion of the surface.

### **Results**

#### **Condition**

The overall condition of the bone was good, averaging at grade 2 on the Lyman criteria (1996).

A total of 59 fragments of bone displayed evidence of butchery. The butchery marks were consistent with jointing of the carcass and portioning, often associated with food preparation.

A sheep skull recovered from dump deposit 203 and two horncores recovered from robber pit [211] displayed evidence of horn removal.

A single fragment of worked antler was recovered from robber pit [207]. The antler tine had been sawn through proximal and distal ends, the outer surface of the antler trimmed/removed with a possible iron fragment inserted into the centre of the tine fragment on one side. The purpose of the piece is not immediately apparent, possibly functioning as a handle or toggle.

A total of 6 fragments of burnt bone were recovered from deposits (202), (203) and robber pit [210]. None of the remains were completely calcined; some fragments displayed only partial charring which has occasionally been associated with cooking or roasting the meat joint.

Gnawed bone represents 6% of the overall assemblage (27 fragments), suggesting that the remains majority of the remains were rapidly buried after disposal reducing the access of scavengers. The gnawing marks were identified predominantly as carnivore; however a possible duck humerus recovered from dump deposit 107 displayed evidence of small carnivore tooth puncture marks which could easily be from a cat.

### Species Representation

Table 1 summarises the number of fragments of bone identified to species or taxon within the assemblage.

Table 1. Number of Represented Taxa, by Context

| Taxon                                  | Context |     |     |     |     |     |     |     |     |     |     |     |     |     |     | Total |
|--|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
|  | 100     | 102 | 104 | 105 | 106 | 107 | 108 | 200 | 202 | 203 | 204 | 205 | 208 | 209 | 212 |       |
| Human                                  |         |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     | 1     |
| <i>Equid</i><br>(Horse Family)         |         |     |     | 2   |     | 2   |     |     |     |     |     |     |     |     |     | 4     |
| Cattle                                 |         |     | 4   | 9   | 2   | 7   | 9   |     | 5   | 7   | 5   | 1   | 11  | 6   | 12  | 78    |
| Sheep/Goat                             | 1       | 1   | 2   | 7   | 7   | 7   | 5   |     | 6   | 5   | 2   | 2   | 8   | 7   | 10  | 70    |
| Pig                                    |         |     |     | 2   |     | 3   | 5   |     | 4   | 1   |     | 1   | 1   | 4   | 2   | 23    |
| Dog<br>( <i>Canis Sp.</i> )            |         |     |     |     | 1   |     |     |     |     |     |     |     | 3   |     | 1   | 5     |
| Cat ( <i>Felis Sp.</i> )               |         |     |     | 1   |     |     |     |     |     |     |     |     |     |     |     | 1     |
| Goose<br>( <i>Anser Sp.</i> )          |         |     |     |     |     |     |     |     | 1   |     |     |     |     |     |     | 1     |
| Domestic Fowl<br>( <i>Gallus Sp.</i> ) |         |     |     |     |     | 2   |     |     |     |     |     | 1   | 1   | 1   |     | 5     |
| Mallard ( <i>Anas platyrhynchos</i> )  |         |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     | 1     |
| Duck?<br>( <i>Anas Sp.</i> )           |         |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     | 1     |
| Bird                                   |         |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     | 1     |
| Deer                                   |         |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     | 1     |
| Large Mammal                           |         |     | 12  | 14  | 10  | 27  | 18  | 1   | 7   | 9   | 12  |     | 19  | 15  | 2   | 146   |
| Medium Mammal                          |         |     | 6   | 2   | 4   | 14  |     |     | 4   | 6   | 3   |     | 8   | 6   | 1   | 54    |
| Small Mammal                           |         |     |     |     | 1   |     |     |     |     |     |     |     |     |     |     | 1     |
| Unidentified                           |         |     |     |     | 2   | 9   |     |     |     | 9   |     |     | 7   |     | 5   | 32    |
| N=                                     | 1       | 1   | 24  | 37  | 27  | 74  | 37  | 1   | 27  | 37  | 22  | 5   | 60  | 39  | 33  | 425   |

Cattle remains were the most abundant species identified within the assemblage, closely followed by Sheep/Goat. Pig remains were the next most abundant species with small numbers of dog, domestic fowl and equid (horse family) also present. Isolated fragments of mallard, goose, cat, deer and human were also identified within the assemblage.

A small amount of aging data in the form of toothwear scores and epiphyseal fusion data is present within the assemblage. However, due to high residuality of artefacts caused by redeposition of deposits, the suggested underlying husbandry practice patterns would not be guaranteed to be truly representative of either the late Roman or Early Medieval period of activity for the site.

## Discussion

The animal bone assemblage recovered from the scheme of works undertaken at The Old Palace, Lincoln was of a moderate size for the relatively small target area. Due to the mixing of deposits, very little reliable information can be gained about the underlying economies supplying the site at this stage. However, the bone preservation is very good and in the event of further works revealing more securely dated deposits, the remains should be able to provide a general impression of the underlying patterns of animal husbandry practices for the periods of activity.

A couple of generalised comments can be made about The Old Palace assemblage. The remains appear to largely represent domestic waste, with a mixture of butchery and food refuse present. Hints at possible craft industry such as horn and antler working are also indicated within the assemblage.

A point of small interest is the presence of part of a skull of a four-horned breed of sheep, reminiscent of breeds such as the Jacob, was recovered from deposit (203). Although four horned sheep are not terribly rare, the identification of such remains is not common within archaeological assemblages.

In addition the presence of disarticulated human remains, a fragment of tibia shaft recovered from (107), suggests that burials may be present within the environs of the site. In the event of further works, there is therefore potential for further disarticulated remains or intact burials to be uncovered.

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*October 2010*

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## Animal Bone Archive

| Ctxt No | Taxon         | Element    | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor ked | Bu rnt | G na w | Fr es h Br ea k | As so c'd | M ea su re d | To ot h We ar | Su rfa ce | Co nd itio n | No | (g) | Notes                                 |
|---------|---------------|------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|---------|--------|--------|-----------------|-----------|--------------|---------------|-----------|--------------|----|-----|---------------------------------------|
| 100     | Sheep/Goat    | Femur      | R    | Y  | N  | N  | N  | N  | N  | N  | N  | F    | X    | N    | Y     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 1  | 13  | Chopped through the caupt             |
| 102     | Sheep/Goat    | Tooth      | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 1  | 3   | Upper M2                              |
| 104     | Medium Mammal | Scapula    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 2   | Blade fragment                        |
| 104     | Large Mammal  | Scapula    | L    | N  | N  | N  | N  | Y  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 1  | 20  |                                       |
| 104     | Medium Mammal | Long Bone  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 2   |                                       |
| 104     | Cattle        | Mandible   | R    | N  | N  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | Y             | X         | 3            | 1  | 48  |                                       |
| 104     | Cattle        | Astragalus | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | N    | N     | N       | N      | N      | N               | N         | Y            | N             | X         | 2            | 1  | 50  |                                       |
| 104     | Sheep/Goat    | Innominate | L    | N  | Y  | Y  | Y  | Y  | N  | Y  | Y  | X    | X    | N    | Y     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 19  | Chopped at the illium                 |
| 104     | Cattle        | Tooth      | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 43  | Upper molar, broken                   |
| 104     | Cattle        | Mandible   | L    | N  | N  | N  | N  | N  | N  | Y  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 19  |                                       |
| 104     | Large Mammal  | Thoracic   | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | F    | N    | N     | N       | N      | N      | Y               | N         | N            | N             | X         | 2            | 2  | 59  |                                       |
| 104     | Sheep/Goat    | Metatarsal | L    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 1  | 15  |                                       |
| 104     | Large Mammal  | Long Bone  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 4  | 27  |                                       |
| 104     | Large Mammal  | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 5  | 24  |                                       |
| 104     | Medium Mammal | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 1  | 2   |                                       |
| 104     | Medium Mammal | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 2  | 10  |                                       |
| 104     | Medium Mammal | Thoracic   | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 5   |                                       |
| 105     | Large Mammal  | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N       | N      | N      | N               | N         | N            | N             | X         | 3            | 2  | 31  | Chopped and snapped through the blade |
| 105     | Large Mammal  | Atlas      | L    | N  | N  | N  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N       | N      | N      | N               | N         | N            | N             | X         | 2            | 1  | 14  |                                       |

| Ctxt No | Taxon         | Element       | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No  | (g)   | Notes |
|---------|---------------|---------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|---|---|-------|
| 105     | Sheep/Goat    | Metatarsal    | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 5   |   |       |
| 105     | Sheep/Goat    | Metatarsal    | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | A                            | 3               | 1                     | 18  |   |       |
| 105     | Large Mammal  | Mandible      | X    | N  | N  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 10  |   |       |
| 105     | Pig           | Skull-maxilla | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 14  | M2 only in occlusion  |       |
| 105     | Equid         | Tooth         | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | Y                        | X                            | 3               | 1                     | 46  | Lower PM/M=65mm   |       |
| 105     | Large Mammal  | Scapula       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 34  | Blade fragment  |       |
| 105     | Cattle        | Phalanx (I)   | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N          | N         | Y            | N                              | Y               | N                        | X                            | 2               | 1                     | 15  | Single cut on the anterior distal shaft. Possible carnivore gnawing on the distal end |       |
| 105     | Cattle        | Metacarpal    | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | Y         | N            | N                              | N               | X                        | 3                            | 1               | 49                    | Possible carnivore gnawing on the lateral condyle |   |       |
| 105     | Medium Mammal | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 4   |   |       |
| 105     | Cattle        | Innominate    | L    | N  | N  | N  | Y  | N  | N  | Y  | N  | F    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 27  | Chopped at the base of the acetabulum on the ischium                                  |       |
| 105     | Large Mammal  | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 4                     | 31  |   |       |
| 105     | Medium Mammal | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 1   | Two knife cuts on the medial side of the blade  |       |
| 105     | Cat           | Femur         | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 1               | 1                     | 3   |   |       |
| 105     | Cattle        | Metatarsal    | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 54  |   |       |
| 105     | Cattle        | Metatarsal    | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 3               | 1                     | 56  |   |       |
| 105     | Cattle        | Mandible      | R    | N  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 17  | Three chop marks on the inferior surface  |       |
| 105     | Equid         | Tooth         | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 48  | Lower M3  |       |

| Ctxt No | Taxon         | Element       | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes   |
|---------|---------------|---------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|---|
| 105     | Large Mammal  | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 2  | 19  |   |
| 105     | Pig           | Radius        | L    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | V    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 4                     | 1  | 27  |   |
| 105     | Large Mammal  | Mandible      | L    | N  | N  | N  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 16  |   |
| 105     | Sheep/Goat    | Mandible      | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 4                     | 1  | 30  | Unerrupted M3 only  |
| 105     | Sheep/Goat    | Femur         | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | R               | 2                     | 1  | 11  |   |
| 105     | Sheep/Goat    | Radius        | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 10  |   |
| 105     | Sheep/Goat    | Femur         | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 10  | Possible carnivore gnawing on the distal end                    |
| 105     | Sheep/Goat    | Femur         | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 3                     | 1  | 26  |   |
| 105     | Cattle        | Phalanx (I)   | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 26  | Knife cuts on the proximal and distal end on the anterior shaft |
| 105     | Cattle        | Tooth         | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 18  | Lower M1/2 broken   |
| 105     | Cattle        | Radius        | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | V    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 67  |   |
| 105     | Large Mammal  | Long Bone     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 2  | 36  |   |
| 106     | Medium Mammal | Mandible      | R    | N  | N  | N  | N  | N  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 10  | Knife cuts on the goneal angle                                  |
| 106     | Medium Mammal | Long Bone     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 2  | 6   |   |
| 106     | Dog           | Tibia         | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 8   | Quite curved shaft. Probably breed variation                    |
| 106     | Large Mammal  | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 5  | 43  |   |
| 106     | Large Mammal  | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 2  | 23  | Chopped and snapped midblade                                    |
| 106     | Medium Mammal | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 3   |   |
| 106     | Cattle        | Phalanx (III) | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 19  | Broken  |

| Ctxt No | Taxon         | Element          | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>r<br>e<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g)  | Notes |
|---------|---------------|------------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|------------------------------|------------------------------|-----------------|-----------------------|----|--|-------|
| 106     | Sheep/Goat    | Phalanx (I)      | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                            | X                            | 2               | 1                     | 3  |  |       |
| 106     | Cattle        | Radius           | L    | Y  | N  | Y  | N  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                            | X                            | 3               | 1                     | 85 | Carnivore gnawing on the proximal end              |       |
| 106     | Sheep/Goat    | Scapula          | R    | N  | N  | N  | Y  | Y  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 7  |  |       |
| 106     | Sheep/Goat    | Humerus          | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 2  | Chopped on the posterior distal shaft              |       |
| 106     | Sheep/Goat    | Skull-premaxilla | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 1  |  |       |
| 106     | Sheep/Goat    | Metatarsal       | X    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 6  |  |       |
| 106     | Sheep/Goat    | Humerus          | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 3               | 1                     | 11 |  |       |
| 106     | Sheep/Goat    | Metacarpal       | L    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | Y               | N                            | R                            | 3               | 1                     | 12 |  |       |
| 106     | Large Mammal  | Long Bone        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 11 |  |       |
| 106     | Large Mammal  | Vertebra         | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 3               | 1                     | 20 |  |       |
| 106     | Large Mammal  | Cervical         | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | U    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 3               | 1                     | 76 |  |       |
| 106     | Unidentified  | Unidentified     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 2                     | 4  |  |       |
| 106     | Small Mammal  | Long Bone        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 1               | 1                     | 0  |  |       |
| 107     | Cattle        | Tooth            | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 7  | Upper PM   |       |
| 107     | Medium Mammal | Cervical         | B    | N  | N  | N  | N  | N  | N  | N  | N  | U    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 10 |  |       |
| 107     | Large Mammal  | Scapula          | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 3               | 1                     | 31 | Blade fragment                                     |       |
| 107     | Medium Mammal | Cervical         | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | U    | N    | Y     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 16 | Chopped diagonally through the caudal articulation |       |
| 107     | Cattle        | Metacarpal       | L    | Y  | Y  | Y  | Y  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | Y               | N                            | A                            | 3               | 1                     | 44 |  |       |
| 107     | Cattle        | Phalanx (III)    | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | Y               | N                            | X                            | 2               | 1                     | 17 |  |       |
| 107     | Cattle        | Astragalus       | L    | N  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 3               | 1                     | 53 |  |       |
| 107     | Cattle        | Metacarpal       | L    | Y  | N  | Y  | N  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                            | X                            | 2               | 1                     | 23 |  |       |

| Ctxt No | Taxon         | Element     | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes  |
|---------|---------------|-------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|--|
| 107     | Equid         | Tooth       | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | Y                            | X               | 2                     | 1  | 62  | Lower PM/M=69mm  |
| 107     | Equid         | Tooth       | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 11  | Lower insicor  |
| 107     | Sheep/Goat    | Metatarsal  | L    | Y  | Y  | Y  | Y  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 3                     | 1  | 10  |  |
| 107     | Medium Mammal | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 4  | 16  |  |
| 107     | Cattle        | Phalanx (I) | R    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | U    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 18  |  |
| 107     | Large Mammal  | Vertebra    | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 17  |  |
| 107     | Large Mammal  | Vertebra    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 21  | Neural arch  |
| 107     | Large Mammal  | Lumbar      | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 19  | Neural arch  |
| 107     | Large Mammal  | Thoracic    | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | F    | N    | N     | N          | N         | N            | Y                              | N               | N                        | N                            | X               | 2                     | 2  | 78  |  |
| 107     | Cattle        | Tibia       | L    | N  | N  | N  | Y  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 44  | Two diagonal chops on the posterior shaft                      |
| 107     | Large Mammal  | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 10  |  |
| 107     | Large Mammal  | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 8  | 119 |  |
| 107     | Large Mammal  | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 10  | Chopped at the neck  |
| 107     | Large Mammal  | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 3  | 47  | Cut and snapped through the blade                              |
| 107     | Large Mammal  | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 8  | 64  |  |
| 107     | Sheep/Goat    | Metacarpal  | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N          | N         | N            | N                              | N               | Y                        | N                            | A               | 2                     | 1  | 23  | Single knife cut on the posterior of the proximal articulation |
| 107     | Medium Mammal | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 5  | 18  |  |
| 107     | Sheep/Goat    | Ulna        | R    | N  | Y  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 3   | Porous, juv?   |
| 107     | Human         | Tibia       | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 50  |  |
| 107     | Medium Mammal | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 2  | 5   | knife cuts on the blade  |

| Ctxt No | Taxon         | Element          | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes   |
|---------|---------------|------------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|---|
| 107     | Unidentified  | Unidentified     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 8  | 43  |   |
| 107     | Sheep/Goat    | Metatarsal       | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 6   |   |
| 107     | Bird          | Long Bone        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 0   |   |
| 107     | Fowl          | Coracoid         | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 3                     | 1  | 1   |   |
| 107     | Duck?         | Humerus          | L    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 2   | Knife cuts on anterior and posterior proximal shaft. Small carnivore tooth puncture marks, cat? |
| 107     | Unidentified  | Unidentified     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 18  |   |
| 107     | Pig           | Ulna             | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 5   |   |
| 107     | Pig           | Tooth            | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 7   | Lower canine, male  |
| 107     | Pig           | Metacarpal (III) | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 9   |   |
| 107     | Sheep/Goat    | Mandible         | L    | N  | Y  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | Y                              | N               | N                        | Y                            | X               | 2                     | 1  | 32  |   |
| 107     | Medium Mammal | Innominate       | L    | Y  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 17  |   |
| 107     | Sheep/Goat    | Humerus          | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 7   | Carnivore gnawing on the distal shaft   |
| 107     | Sheep/Goat    | Tibia            | R    | N  | N  | Y  | N  | Y  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 8   |   |
| 107     | Fowl          | Coracoid         | L    | N  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 1   |   |
| 108     | Cattle        | Humerus          | L    | N  | N  | N  | Y  | N  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 54  | Possible chop marks on the lateral crest  |
| 108     | Large Mammal  | Innominate       | R    | N  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 36  | Carnivore gnawing on the ilium  |
| 108     | Large Mammal  | Hyoid            | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 3   |   |
| 108     | Pig           | Fibula           | X    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 2   | Possible carnivore gnawing on the proximal end  |

| Ctxt No | Taxon        | Element    | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes  |
|---------|--------------|------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|--|
| 108     | Large Mammal | Femur      | R    | N  | N  | Y  | N  | N  | N  | N  | N  | U    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 28  |  |
| 108     | Cattle       | Humerus    | R    | N  | N  | N  | N  | Y  | N  | Y  | N  | X    | F    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 57  | A single chop mark on the medial side of the shaft |
| 108     | Sheep/Goat   | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 2   | Cut and snapped through the blade                  |
| 108     | Sheep/Goat   | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 5   |  |
| 108     | Large Mammal | Rib        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 5  | 71  |  |
| 108     | Cattle       | Metacarpal | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 56  |  |
| 108     | Large Mammal | Thoracic   | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 52  |  |
| 108     | Large Mammal | Long Bone  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 27  | Three cut marks on the shaft                       |
| 108     | Large Mammal | Mandible   | L    | N  | N  | N  | N  | N  | N  | Y  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 7   |  |
| 108     | Large Mammal | Long Bone  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 5  | 140 |  |
| 108     | Large Mammal | Thoracic   | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 2  | 47  | Spinous processes                                  |
| 108     | Cattle       | Atlas      | L    | N  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 32  |  |
| 108     | Sheep/Goat   | Atlas      | L    | N  | N  | N  | N  | N  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 13  | Single chop mark on the wing                       |
| 108     | Pig          | Mandible   | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | Y                            | X               | 3                     | 1  | 56  |  |
| 108     | Cattle       | Radius     | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 52  |  |
| 108     | Pig          | Tibia      | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 16  |  |
| 108     | Sheep/Goat   | Scapula    | L    | N  | Y  | Y  | N  | N  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 12  |  |
| 108     | Sheep/Goat   | Radius     | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 6   | Possible carnivore gnawing on the shaft            |
| 108     | Pig          | Ulna       | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 15  | Chopped through the semi-luna notch                |
| 108     | Cattle       | Tooth      | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 11  | Upper PM   |

| Ctxt No | Taxon         | Element         | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g)   | Notes                               |
|---------|---------------|-----------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|---|-------------------------------------|
| 108     | Cattle        | Phalanx (I)     | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 18 |   |                                     |
| 108     | Cattle        | Calcaneus       | R    | N  | N  | N  | N  | N  | N  | Y  | N  | U    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | X                            | 2               | 1                     | 23 | Possible carnivore gnawing on the proximal end  |                                     |
| 108     | Cattle        | Skull-zygomatic | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 26 |   |                                     |
| 108     | Pig           | Mandible        | R    | Y  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 12 |   |                                     |
| 200     | Large Mammal  | Innominate      | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 10 | Acetabulum fragment   |                                     |
| 202     | Sheep/Goat    | Femur           | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 17 | Knife cuts on the medial side of the shaft  |                                     |
| 202     | Cattle        | Metatarsal      | L    | Y  | N  | Y  | N  | Y  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 51 |   |                                     |
| 202     | Cattle        | Tooth           | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 36 | Upper M2  |                                     |
| 202     | Cattle        | Metatarsal      | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 35 |   |                                     |
| 202     | Sheep/Goat    | Tibia           | L    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | Y         | Y            | N                              | N               | N                        | X                            | 3               | 1                     | 11 | Partially charred black on the distal shaft. Omnivore/carnivore gnawing on the proximal end |                                     |
| 202     | Sheep/Goat    | Femur           | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 8  |   |                                     |
| 202     | Sheep/Goat    | Metacarpal      | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | Y     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 18  | Knife cuts on the anterior midshaft |
| 202     | Sheep/Goat    | Tibia           | R    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 45  |                                     |
| 202     | Sheep/Goat    | Tibia           | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 18 |   |                                     |
| 202     | Medium Mammal | Long Bone       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 2  |   |                                     |
| 202     | Large Mammal  | Long Bone       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 7  |   |                                     |
| 202     | Large Mammal  | Cervical        | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 26 |   |                                     |
| 202     | Cattle        | Humerus         | R    | N  | N  | N  | N  | N  | N  | Y  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 39 |   |                                     |
| 202     | Pig           | Tibia           | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 3                     | 1  | 30  |                                     |



| Ctxt No | Taxon         | Element         | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes  |
|---------|---------------|-----------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|--|
| 202     | Pig           | Metacarpal (IV) | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 6   |  |
| 202     | Pig           | Tibia           | L    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 19  |  |
| 202     | Pig           | Mandible        | R    | N  | N  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | Y                            | X               | 2                     | 1  | 14  |  |
| 202     | Medium Mammal | Lumbar          | B    | N  | N  | N  | N  | N  | N  | N  | N  | U    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 4   |  |
| 202     | Medium Mammal | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 2  | 7   | Cut and snapped midblade                                     |
| 202     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 11  | Cut and snapped midblade                                     |
| 202     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 2  | 16  |  |
| 202     | Cattle        | Femur           | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 37  | Possible carnivore gnawing on the proximal end               |
| 202     | Large Mammal  | Vertebra        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 5   | Articular facet  |
| 202     | Large Mammal  | Long Bone       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | Y         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 12  | Burnt black/grey   |
| 202     | Goose         | Tibio-tarsus    | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 4   |  |
| 203     | Unidentified  | Unidentified    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 8  | 17  |  |
| 203     | Sheep/Goat    | Skull-occipital | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | Y                              | N               | N                        | N                            | X               | 2                     | 1  | 23  |  |
| 203     | Cattle        | Femur           | R    | Y  | N  | N  | N  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 25  |  |
| 203     | Cattle        | Radius          | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 57  |  |
| 203     | Cattle        | Metatarsal      | R    | N  | N  | Y  | N  | Y  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 56  |  |
| 203     | Cattle        | Phalanx (III)   | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 14  | Complete   |
| 203     | Cattle        | Mandible        | L    | N  | N  | N  | N  | N  | N  | N  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 24  |  |
| 203     | Cattle        | Atlas           | L    | N  | Y  | N  | N  | N  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 22  |  |
| 203     | Sheep/Goat    | Skull-frontal   | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 52  | Chopped at bases of horncore. Four horned breed- like jacob. |

| Ctxt No | Taxon         | Element         | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g)  | Notes |
|---------|---------------|-----------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|--|-------|
| 203     | Sheep/Goat    | Metatarsal      | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | Y         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 5  | Charred brown                                    |       |
| 203     | Cattle        | Radius          | L    | Y  | N  | N  | N  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 22 |  |       |
| 203     | Large Mammal  | Thoracic        | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 22 | Spinous process. Chopped through the cranial end |       |
| 203     | Sheep/Goat    | Tibia           | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 13 |  |       |
| 203     | Medium Mammal | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 1  |  |       |
| 203     | Medium Mammal | Long Bone       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 5                     | 22 |  |       |
| 203     | Pig           | Metacarpal (II) | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 4  |  |       |
| 203     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 4                     | 31 |  |       |
| 203     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 3                     | 34 | Chopped and snapped through the blade            |       |
| 203     | Large Mammal  | Vertebra        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 14 | Articular facet                                  |       |
| 203     | Unidentified  | Unidentified    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | Y         | N            | N                              | N               | N                        | X                            | 4               | 1                     | 14 | Burnt grey/white                                 |       |
| 203     | Sheep/Goat    | Tibia           | R    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 3               | 1                     | 23 |  |       |
| 204     | Sheep/Goat    | Metacarpal      | L    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | U    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 3               | 1                     | 18 |  |       |
| 204     | Cattle        | Tooth           | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 9  | Lower PM4  |       |
| 204     | Large Mammal  | Long Bone       | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 32 |  |       |
| 204     | Cattle        | Femur           | L    | N  | N  | N  | N  | N  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | Y                              | N               | N                        | X                            | 2               | 1                     | 47 | Chopped at the supra condylar fossa              |       |
| 204     | Cattle        | Radius          | L    | Y  | N  | Y  | N  | N  | N  | N  | N  | F    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 33 | Chop mark on the medial side at the articulation |       |
| 204     | Medium Mammal | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 2                     | 3  |  |       |
| 204     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 4                     | 56 |  |       |
| 204     | Large Mammal  | Rib             | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 1               | 1                     | 6  | Chopped and snapped through the blade            |       |

| Ctxt No | Taxon         | Element      | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes  |
|---------|---------------|--------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|--|
| 204     | Large Mammal  | Rib          | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 10  | Cut and snapped through both ends of the blade         |
| 204     | Large Mammal  | Scapula      | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 13  | Blade fragment   |
| 204     | Large Mammal  | Long Bone    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 2  | 19  |  |
| 204     | Cattle        | Tooth        | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 33  | Broken lower M3  |
| 204     | Sheep/Goat    | Mandible     | R    | N  | N  | N  | N  | Y  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 18  | M2 and M3 (Broken) in occlusion                        |
| 204     | Large Mammal  | Long Bone    | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 32  |  |
| 204     | Large Mammal  | Innominate   | L    | Y  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 42  | Possible carnivore gnawing on the ilium                |
| 204     | Cattle        | Tibia        | R    | N  | N  | N  | N  | N  | Y  | N  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 37  |  |
| 204     | Medium Mammal | Rib          | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 4   |  |
| 205     | Cattle        | Innominate   | R    | N  | N  | N  | N  | Y  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 49  |  |
| 205     | Fowl          | Tibio-tarsus | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | Y                              | N               | N                        | N                            | X               | 2                     | 1  | 2   |  |
| 205     | Sheep/Goat    | Tibia        | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 22  | Possible carnivore gnawing on the proximal end         |
| 205     | Sheep/Goat    | Metacarpal   | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 11  |  |
| 205     | Pig           | Metapodial   | X    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 9   |  |
| 208     | Sheep/Goat    | Scapula      | L    | N  | N  | N  | N  | N  | Y  | N  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 6   |  |
| 208     | Cattle        | Humerus      | R    | N  | N  | N  | N  | Y  | N  | Y  | N  | X    | F    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 61  | Chop marks on the medial side of the shaft and condyle |
| 208     | Cattle        | Phalanx (II) | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 3                     | 1  | 20  |  |
| 208     | Cattle        | Mandible     | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | Y                              | N               | N                        | N                            | X               | 2                     | 1  | 27  |  |
| 208     | Large Mammal  | Thoracic     | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 27  | Spinous process  |

| Ctxt No | Taxon         | Element                    | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes  |
|---------|---------------|----------------------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|-----|--|
| 208     | Medium Mammal | Cervical                   | B    | N  | N  | N  | N  | N  | N  | N  | N  | F    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 15  |  |
| 208     | Large Mammal  | Cervical                   | B    | N  | N  | N  | N  | N  | N  | N  | N  | U    | U    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 12  |  |
| 208     | Large Mammal  | Innominate Skull-occipital | L    | N  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | Y            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 42  | Possible carnivore gnawing on the illium                 |
| 208     | Cattle        |                            | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 27  |  |
| 208     | Large Mammal  | Long Bone                  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 7  | 111 |  |
| 208     | Cattle        | Phalanx (I)                | R    | Y  | N  | Y  | N  | Y  | N  | Y  | N  | F    | F    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 19  | diagonal chop/chip on the distal end of the medial shaft |
| 208     | Large Mammal  | Rib                        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 11  | two chop marks on the blade                              |
| 208     | Large Mammal  | Rib                        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 4  | 37  |  |
| 208     | Medium Mammal | Rib                        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 4  | 15  |  |
| 208     | Cattle        | Femur                      | L    | Y  | N  | N  | N  | N  | N  | N  | N  | U    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 17  |  |
| 208     | Cattle        | Femur                      | L    | Y  | N  | N  | N  | N  | N  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 125 |  |
| 208     | Cattle        | Tibia                      | R    | N  | N  | N  | N  | N  | N  | Y  | Y  | X    | F    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 44  | Chopped at the lateral side of the articulation          |
| 208     | Large Mammal  | Long Bone                  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 30  | Chopped diagonally of the shaft                          |
| 208     | Medium Mammal | Long Bone                  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 3   |  |
| 208     | Cattle        | Femur                      | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 79  |  |
| 208     | Sheep/Goat    | Tibia                      | L    | N  | N  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 2                     | 1  | 3   |  |
| 208     | Sheep/Goat    | Metatarsal                 | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | N     | N          | N         | N            | N                              | N               | Y                        | N                            | X               | 2                     | 1  | 19  |  |
| 208     | Cattle        | Atlas                      | L    | Y  | N  | Y  | N  | Y  | N  | Y  | N  | X    | X    | N    | N     | N          | N         | N            | Y                              | N               | N                        | N                            | X               | 3                     | 1  | 36  |  |
| 208     | Mallard       | Tibio-tarsus               | L    | N  | N  | N  | Y  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                            | X               | 3                     | 1  | 1   |  |
| 208     | Sheep/Goat    | Tooth                      | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | Y                            | X               | 2                     | 1  | 7   | Lower M3=d   |

| Ctxt No | Taxon         | Element       | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Associated | Measured | Totally Worn | Surface | Condition | No | (g) | Notes   |
|---------|---------------|---------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|------------|----------|--------------|---------|-----------|----|-----|---|
| 208     | Dog           | Ulna          | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | Y    | N           | N          | N        | N            | X       | 3         | 1  | 7   | Possible carnivore gnawing on the semi-luna notch   |
| 208     | Large Mammal  | Lumbar        | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | U    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 40  |   |
| 208     | Pig           | Humerus       | L    | N  | N  | Y  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 3         | 1  | 17  |   |
| 208     | Medium Mammal | Long Bone     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 4   |   |
| 208     | Medium Mammal | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 3         | 1  | 2   |   |
| 208     | Large Mammal  | Rib           | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | Y           | N          | N        | N            | X       | 2         | 1  | 16  |   |
| 208     | Sheep/Goat    | Humerus       | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 3         | 1  | 7   |   |
| 208     | Sheep/Goat    | Humerus       | R    | N  | N  | N  | N  | N  | N  | Y  | Y  | X    | F    | N    | N     | N      | N     | N    | N           | N          | Y        | N            | X       | 2         | 1  | 8   |   |
| 208     | Sheep/Goat    | Tibia         | R    | N  | N  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | Y    | N           | N          | N        | N            | X       | 2         | 1  | 19  | Possible carnivore gnawing on the proximal and distal end   |
| 208     | Large Mammal  | Long Bone     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 40  |   |
| 208     | Dog           | Ulna          | R    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 5   |   |
| 208     | Sheep/Goat    | Metatarsal    | L    | N  | Y  | Y  | Y  | N  | N  | N  | N  | F    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 11  |   |
| 208     | Fowl          | Radius        | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N      | N     | N    | N           | N          | Y        | N            | X       | 2         | 1  | 0   |   |
| 208     | Unidentified  | Unidentified  | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N            | X       | 2         | 7  | 29  |   |
| 208     | Deer          | Antler        | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | Y      | N     | N    | N           | N          | N        | N            | X       | 2         | 1  | 12  | Outer surface trimmed off, sawn through proximal and distal ends. Possible Iron fragment, inserted into the midline |
| 208     | Cattle        | Skull-maxilla | L    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | Y           | N          | N        | N            | X       | 2         | 1  | 72  |   |
| 208     | Dog           | Ulna          | L    | N  | Y  | Y  | Y  | Y  | N  | N  | N  | X    | X    | N    | N     | N      | N     | Y    | N           | N          | N        | N            | X       | 3         | 1  | 17  | Possible carnivore gnawing on the proximal end  |

| Ctxt No | Taxon         | Element     | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>t<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g)  | Notes |
|---------|---------------|-------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|------------------------------|-----------------|-----------------------|----|--|-------|
| 209     | Cattle        | Humerus     | L    | N  | N  | N  | N  | N  | N  | Y  | Y  | X    | F    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 80 |  |       |
| 209     | Large Mammal  | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 6                     | 72 |  |       |
| 209     | Cattle        | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 24 | Knife cuts on the distal end of the medial condyle   |       |
| 209     | Cattle        | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 18 |  |       |
| 209     | Cattle        | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 30 |  |       |
| 209     | Large Mammal  | Cervical    | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 12 | Neural arch  |       |
| 209     | Medium Mammal | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 2                     | 9  |  |       |
| 209     | Large Mammal  | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | X                            | 3               | 1                     | 29 | Single knife cut on the midshaft   |       |
| 209     | Medium Mammal | Rib         | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 4                     | 17 |  |       |
| 209     | Fowl          | Femur       | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 3               | 1                     | 3  |  |       |
| 209     | Large Mammal  | Femur       | R    | N  | Y  | N  | N  | N  | N  | N  | N  | V    | X    | N    | Y     | N          | N         | Y            | N                              | N               | N                        | X                            | 3               | 1                     | 42 | Carnivore gnawing on the greater trochanter. Chopped and snapped at the greater trochanter |       |
| 209     | Cattle        | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | Y    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 27 | extensions of the majority of the muscle articulations.                                    |       |
| 209     | Large Mammal  | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 3                     | 42 |  |       |
| 209     | Sheep/Goat    | Metatarsal  | L    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | Y     | N          | N         | Y            | N                              | N               | N                        | X                            | 3               | 1                     | 18 | Chopped and snapped through the midshaft   |       |
| 209     | Cattle        | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N          | N         | N            | N                              | Y               | N                        | X                            | 2               | 1                     | 30 |  |       |
| 209     | Sheep/Goat    | Mandible    | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | N    | N     | N          | N         | N            | Y                              | N               | N                        | Y                            | X               | 3                     | 1  | 52   |       |
| 209     | Large Mammal  | Innominate  | R    | N  | N  | N  | N  | N  | N  | N  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | X                            | 2               | 1                     | 19 |  |       |

| Ctxt No | Taxon        | Element     | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Associated | Measured | Total Wear | Surface | Condition | No | (g) | Notes  |
|---------|--------------|-------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|------------|----------|------------|---------|-----------|----|-----|--|
| 209     | Large Mammal | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | Y     | N    | N           | N          | N        | N          | X       | 3         | 1  | 7   | Slightly charred black/brown   |
| 209     | Large Mammal | Scapula     | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 10  | Blade fragment   |
| 209     | Sheep/Goat   | Femur       | L    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | R          | 3       | 1         | 3  | Juv |  |
| 209     | Sheep/Goat   | Phalanx (I) | R    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | U    | F    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 2   |  |
| 209     | Sheep/Goat   | Innominate  | L    | Y  | Y  | Y  | Y  | N  | N  | N  | N  | U    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 6   | Porous   |
| 209     | Sheep/Goat   | Atlas       | B    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 8   |  |
| 209     | Pig          | Calcaneus   | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | N  | U    | X    | N    | Y     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 7   | Single cut on the proximal end   |
| 209     | Pig          | Scapula     | R    | N  | N  | Y  | N  | Y  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 11  |  |
| 209     | Pig          | Ulna        | L    | N  | Y  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | Y    | N           | N          | N        | N          | X       | 2         | 1  | 10  | Possible carnivore gnawing on the proximal end   |
| 209     | Pig          | Mandible    | R    | N  | N  | Y  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | Y           | N          | N        | Y          | X       | 2         | 1  | 36  |  |
| 209     | Sheep/Goat   | Innominate  | R    | N  | N  | Y  | Y  | N  | N  | Y  | N  | F    | X    | N    | N     | N      | N     | N    | N           | N          | N        | N          | X       | 2         | 1  | 8   |  |
| 212     | Cattle       | Metatarsal  | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | Y    | N     | N      | N     | Y    | N           | N          | Y        | N          | X       | 3         | 1  | 147 | Slight extention and eburnation of the medial articular facet. Carnivore gnawing on the distal end |
| 212     | Cattle       | Metatarsal  | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | V    | N    | Y     | N      | N     | Y    | N           | N          | Y        | N          | X       | 2         | 1  | 108 | Carnivore gnawing on the distal condyles. Knife cuts on the distal posterior# shaft                |
| 212     | Cattle       | Metatarsal  | R    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | U    | N    | N     | N      | N     | Y    | N           | N          | Y        | N          | X       | 2         | 1  | 124 | Possible carnivore gnawing on the proximal end   |
| 212     | Dog          | Humerus     | R    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N      | N     | N    | N           | N          | Y        | N          | X       | 2         | 1  | 27  |  |

| Ctxt No | Taxon        | Element     | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Worked | Burnt | Gnaw | Fresh Break | Asso c'd | Measure d | Tooth Wear | Surface | Condition | No | (g) | Notes   |
|---------|--------------|-------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|--------|-------|------|-------------|----------|-----------|------------|---------|-----------|----|-----|---|
| 212     | Sheep/Goat   | Humerus     | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | Y     | N      | N     | N    | N           | N        | Y         | N          | X       | 2         | 1  | 16  | Knife cuts on the posterior shaft above the medial condyle                                      |
| 212     | Sheep/Goat   | Tibia       | L    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | Y    | N           | N        | N         | N          | X       | 2         | 1  | 24  | Possible carnivore gnawing on the proximal end  |
| 212     | Sheep/Goat   | Metatarsal  | L    | Y  | Y  | Y  | Y  | N  | N  | N  | N  | F    | X    | N    | Y     | N      | N     | N    | N           | N        | Y         | N          | X       | 2         | 1  | 12  | Chopped and snapped through the distal shaft  |
| 212     | Sheep/Goat   | Metatarsal  | L    | Y  | Y  | Y  | Y  | Y  | Y  | N  | N  | F    | X    | N    | N     | N      | N     | Y    | N           | N        | Y         | N          | X       | 2         | 1  | 20  | Possible carnivore gnawing on the proximal and distal end, possible rodent gnawing on the shaft |
| 212     | Sheep/Goat   | Radius      | R    | N  | N  | N  | Y  | N  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N        | N         | N          | X       | 2         | 1  | 7   |   |
| 212     | Sheep/Goat   | Metatarsal  | L    | N  | N  | N  | N  | Y  | Y  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N        | N         | N          | X       | 2         | 1  | 9   |   |
| 212     | Cattle       | Metacarpal  | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N      | N     | Y    | N           | N        | Y         | N          | X       | 3         | 1  | 201 | Chop mark on the anterior midshaft. Carnivore gnawing on the distal condyles                    |
| 212     | Pig          | Phalanx (I) | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | V    | F    | N    | N     | N      | N     | N    | N           | N        | Y         | N          | X       | 1         | 1  | 4   |   |
| 212     | Large Mammal | Long Bone   | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N        | N         | N          | X       | 3         | 1  | 3   |   |
| 212     | Sheep/Goat   | Radius      | R    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | V    | N    | N     | N      | N     | N    | N           | N        | Y         | N          | E       | 2         | 1  | 35  | Mineral fleck encrusted   |
| 212     | Cattle       | Metacarpal  | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | F    | N    | Y     | N      | N     | N    | N           | N        | Y         | N          | X       | 2         | 1  | 141 | Knife cuts across the posterior midshaft  |
| 212     | Cattle       | Metatarsal  | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | N     | N      | N     | N    | N           | N        | Y         | N          | X       | 3         | 1  | 91  | Possible snapped midshaft   |
| 212     | Cattle       | Metacarpal  | L    | N  | N  | N  | N  | Y  | Y  | Y  | Y  | X    | F    | N    | Y     | N      | N     | N    | N           | N        | Y         | N          | X       | 3         | 1  | 81  | Chopped and snapped midshaft  |
| 212     | Cattle       | Skull-      | R    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N      | N     | N    | N           | N        | N         | N          | X       | 2         | 1  | 114 |   |



| Ctxt No | Taxon         | Element      | Side | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Prox | Dist | Path | Butch | Wor<br>ked | Bu<br>rnt | G<br>na<br>w | Fr<br>es<br>h<br>Br<br>ea<br>k | As<br>so<br>c'd | M<br>ea<br>su<br>re<br>d | To<br>ot<br>h<br>W<br>ea<br>r | Su<br>rfa<br>ce | Co<br>nd<br>itio<br>n | No | (g) | Notes                                |
|---------|---------------|--------------|------|----|----|----|----|----|----|----|----|------|------|------|-------|------------|-----------|--------------|--------------------------------|-----------------|--------------------------|-------------------------------|-----------------|-----------------------|----|-----|--------------------------------------|
|         |               | maxilla      |      |    |    |    |    |    |    |    |    |      |      |      |       |            |           |              |                                |                 |                          |                               |                 |                       |    |     |                                      |
| 212     | Cattle        | Humerus      | L    | N  | N  | N  | N  | N  | N  | Y  | Y  | X    | F    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 3                     | 1  | 64  | Chopped that the medial condyle      |
| 212     | Cattle        | Astragalus   | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | A               | 3                     | 1  | 68  |                                      |
| 212     | Cattle        | Mandible     | L    | Y  | Y  | Y  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | Y                             | X               | 3                     | 1  | 136 |                                      |
| 212     | Sheep/Goat    | Horncore     | R    | N  | N  | Y  | Y  | Y  | Y  | Y  | Y  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 3                     | 1  | 71  | Chopped through the base             |
| 212     | Sheep/Goat    | Horncore     | R    | N  | N  | Y  | Y  | Y  | Y  | N  | N  | X    | X    | N    | Y     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 2                     | 1  | 76  | Chopped and snapped through the base |
| 212     | Large Mammal  | Thoracic     | B    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 4                     | 1  | 6   |                                      |
| 212     | Sheep/Goat    | Scapula      | L    | N  | N  | N  | Y  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 2                     | 1  | 6   |                                      |
| 212     | Medium Mammal | Rib          | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 3                     | 1  | 2   |                                      |
| 212     | Unidentified  | Unidentified | X    | N  | N  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 3                     | 5  | 10  |                                      |
| 212     | Pig           | Mandible     | B    | Y  | Y  | N  | N  | N  | N  | N  | N  | X    | X    | N    | N     | N          | N         | N            | N                              | N               | N                        | N                             | X               | 2                     | 1  | 42  | Male                                 |
| 212     | Cattle        | Radius       | L    | Y  | Y  | Y  | Y  | Y  | Y  | Y  | Y  | F    | V    | N    | N     | N          | N         | N            | Y                              | N               | Y                        | N                             | X               | 3                     | 1  | 257 |                                      |

## Appendix 6: Registered Finds Assessment

By Kevin Trott

### Introduction

A programme of evaluation test pitting adjacent to The Old Palace in Lincoln produced a small assemblage of registered finds (hereafter RF), their date range extending from the Roman period, medieval and post-medieval periods. The artefacts consisted of two copper alloy objects; fourteen iron items and two worked bone pieces.

### Copper Alloy Objects

A single fragment of rectangular copper alloy was recovered from deposit 107 (RF 7). This item weighs 1 gram and is 1mm thick, 19mm wide and although broken it retains a small part of dishing around a rivet hole. Microscopic analysis has identified that the two opposing sides have an iron corrosion residue adhering with one face possibly having some organic residue present sealed under the concretion. Although incomplete, the fragment width and thickness is similar to a broken copper alloy scale from scale armour or *Lorica squamata* of a style worn in the late Neronian or early Flavian period in Usk (Manning 1995, 15) and Castleford (Bishop 1998, 68 – 9, Figs 226/7), during the period between *c.* AD 125-40/50 at Carlisle (Bishop 2009, 687 – 692, Fig 339), or even in the late 3<sup>rd</sup> century at Caerleon (Brewer 1986, 185 – 6, Fig 155).



**Plate 1: Possible fragment of scale armour, Registered Find 7, with rivet hole at top centre of piece. Scale is in centimetres**

The second copper alloy object, weighing 1 gram, was recovered from rubble spread 106 (RF 4), and is a near complete plain circular stud with a raised concentric groove along its edge. The reverse has a broken central stub for a shaft that once probably penetrated soft leather. These types of studs are not uncommon and are often encountered on military sites such as Longthorpe in Claudio-Neronian deposits (Webster 1987, 90 – 1, Fig 38); Usk and Caerleon in Neronian and early Flavian deposits (Brewer 1986, 185 – 9, Fig 165) and Carlisle (Howard-Davis 2009, 738 – 740, Fig 400). A similar stud was also recovered from an early 2<sup>nd</sup> century context at Alcester (Lloyd-Morgan 1994, 182, Fig 147). The function of these studs has been attributed to decoration on leather straps or belts of Claudian to early Flavian date (Howard-Davis 2009, 740).

### Iron Objects

Fourteen iron objects were recovered from nine contexts excavated within three test pits outside and within The Old Palace in Lincoln. Ten iron items were recovered from five contexts in Test Pit 1; three items from three contexts in Test Pit 2 and a single iron object from a context in Test Pit 3.

A single square head nail was recovered from the topsoil layer 101. The length (150mm) and square shank with similarly cast square head (15mm x 15mm) is relatively recent in style and size.

The second iron assemblage consisted of three square shanked (92mm long) and square headed (10mm x 11mm) nails recovered from a coarse gravel dump layer, 102. The style and size of these nails, like the nail from Context 101 is relatively recent in date.

The third iron item from Test Pit 1 was recovered from deposit 106, and consists of a reaping hook 29mm wide with a crescent-shaped blade and rectangular shank 65mm long which has traces of a corroded rivet surviving adjacent to the stump of the shank. This is a common piece of agricultural equipment and is found on late Iron Age sites and Roman sites throughout Britain. The thickness of the blades and lengths vary considerably due to their functional use across Roman Britain (Jackson 1985, 139 – 45 and Rees 1979).

Layer 107 produced four iron objects. The first item was the complete socket or ferrule for a probable broken pruning hook. The square shank extended from the ferrule, and the distal part of the small blade was present (although broken). Small traces of mineral-preserved wood were noted within the internal ferrule corrosion properties and future analysis could identify the wood species. Socketed pruning hooks are known from a number of Roman sites in Roman Britain and are discussed by Rees (1979).

The remaining three iron items from this layer were square shank, square headed nails. Nail 1 was 42mm in length with an off-centre head of 15mm x 17mm square. The second nail was slightly bent with a recent broken shank, measuring 35mm in length with a corroded square head measuring 15mm x 15mm. The final nail was also square shanked (85mm in length) that was bent and twisted near the distal point. The head was positioned off-centre and was 15mm square.

The final iron object from Test Pit 1 was recovered from a demolition deposit 108. This item was an iron square shanked nail (broken in antiquity and 35mm in length) with off-centred square head (15mm x 17mm).

Test Pit 2 produced two iron nails from layers 203 and 204. The iron nail from 203 had a square shank (45mm in length) with a off-centred square head (17mm x 17mm); the shank had been broken in antiquity. The second nail from soil build up 204 was also similar to the nail from Context 203 with a square complete shank measuring 60mm in length and an off-centred head measuring 16mm x 21mm.

The final iron item recovered from Test Pit 2 was encountered within fill 212 of robber pit [211]. This trapezoidal profiled iron object survived to a length of 87mm, and was recently broken along the proximal shank. The surviving distal end was elongated and resembled a tanged ladle that lacked its bowl; these ladles are not particularly common, however examples are known from early Roman contexts in Britain, for example two have been found in pre-Flavian contexts at Usk (Manning and Webster 1995, 202 – 204).

A single small iron tack was recovered from the dump or wall core from Test Pit 3, 302. The square tapered shank was 21mm in length with an off-centred square head 10mm x 11mm in size.

### **Worked Bone Objects**

Two worked bone objects were recovered from layer 104 within Test Pit 1. The first bone object (RF 1) consists of a phallic pendant with rectangular suspension recess within the lower shaft. Similar bone and copper alloy phallic pendants are common finds from military sites throughout the Roman period (Dr Andrew Birley, pers. comm.), although a bias towards the second century AD is not unusual. These phallic pendants are usually associated with harnesses and served as symbols of good luck. Parallels of phallic perforated pendants are known from Exeter (Allason-Jones 1991, 62, Fig 112) and Wanborough (Hooley 2001, 118, Fig 37) for example.



**Plate 2: Phallic pendant, Registered Find 1. Scale is in centimetres**

The second bone item (RF 2) consists of three sawn sides from a broken potential square or strip veneer (38mm wide) with three concentric circular grooves of ring with central dot (18mm diameter). This inlay fragment is usually associated with caskets of mid 2<sup>nd</sup> and 3<sup>rd</sup> century date. Parallels for this example from Lincoln include pyre debris from Brougham in Cumbria (Cool 2004) and from 3<sup>rd</sup> – 4<sup>th</sup> century contexts at Richborough (Cunliffe 1968, Plates LXI and LXII).



**Plate 3: Inlay Fragment, Registered Find 2. Scale is in centimetres**

### **Recommendations for Further Work**

The possible fragment of scale armour should be submitted to a Roman military specialist for further analysis and reporting, to confirm its identification.

The copper alloy and worked bone objects should be drawn by a suitably competent archaeological illustrator, along with the probable pruning hook and reaping hook. Any illustrations should be included within any future report for the site.

Analysis of the mineral-replaced wood within the socket for the pruning hook may be useful to identify the wood used for the shaft.

The data obtained from this assessment and any subsequent analysis should be incorporated into any future associated report, including any publication text for the scheme.

Any additional investigations should include the use of a metal detector to maximise the recovery of metal objects from the site.

## Acknowledgements

I would like to thank Dr Andrew Birley, Director of Excavations for the Vindolanda Trust, for verifying the identification of a number of the objects, and for his helpful comments.

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## Appendix 7: Roman Glass Assessment

By Rachael Hall

### Introduction

During recent archaeological evaluation work at The Old Palace, Lincoln, a small assemblage of glass was recovered. The assemblage comprised five fragments dating to the 2<sup>nd</sup>-3<sup>rd</sup> century AD. The assemblage is detailed below in Table 1.

### Catalogue

Table 1

| Context | SF | Type   | Wt (g) | No | Date                                |
|---------|----|--|--------|----|-------------------------------------|
| 106     | 6  | Bluish-green, body sherd, square bottle            | 2      | 1  | 2 <sup>nd</sup> -3 <sup>rd</sup> AD |
| 108     | 10 | Colourless, vessel body, decorated with trail, cup | 1      | 1  | 2 <sup>nd</sup> -3 <sup>rd</sup> AD |
| 108     | 9  | Colourless, vessel body, form unknown              | >1     | 1  |                                     |
| 203     | 12 | Bluish-green, window glass, grozing of two edges   | 3      | 1  | 2 <sup>nd</sup> -3 <sup>rd</sup> AD |
| 209     | 13 | Colourless, neck?, form unknown                    | 1      | 1  |                                     |

### Discussion

The assemblage is relatively small for a Roman urban context; however some information can be obtained from the glass. It is likely to reflect domestic activity, probably dating to the 2<sup>nd</sup> – 3<sup>rd</sup> centuries AD. The glass includes a fragment of a square bottle storage container and a probable small fragment of window glass.

### Recommendations

Given the very small nature of the assemblage no further recommendations for study are made, although they should be analysed in conjunction with other pieces from the site if further work is undertaken.

The fragments should be retained as part of the site archive.

## Appendix 8: Marine Shell Assessment

By Kevin Trott

### Introduction

A brief assessment of marine shell was conducted by the author on 22<sup>nd</sup> October 2010.

The table below lists the shell species and the total number of left and right valves for the oysters. Studies by Winder (1980 & 1992) note that the ratio of left and right valves indicates both food waste (left valves) and preparation waste (right valves). It was noticed that some marine organisms were present that included barnacles that rarely survive on marine shells recovered from archaeological assemblages.

**Table 1: Marine shell species per context**

| Context      | Left Oyster valve | Right Oyster Valve | Mussel   | Whelk    |
|--------------|-------------------|--------------------|----------|----------|
| 100          | 1                 | 1                  |          |          |
| 102          |                   | 1                  |          |          |
| 104          | 13                | 11                 | 1        |          |
| 105          | 1                 | 4                  | 1        |          |
| 106          | 25                | 34                 |          |          |
| 107          | 20                | 9                  |          |          |
| 108          | 41                | 18                 | 1        | 3        |
| 109          | 4                 | 3                  |          |          |
|              |                   |                    |          |          |
| 202          | 1                 | 4                  |          |          |
| 203          | 5                 | 3                  |          |          |
| 204          | 4                 | 5                  |          |          |
| 205          | 1                 |                    |          |          |
| 208          | 4                 | 5                  |          |          |
|              |                   |                    |          |          |
| <b>TOTAL</b> | <b>120</b>        | <b>98</b>          | <b>3</b> | <b>3</b> |

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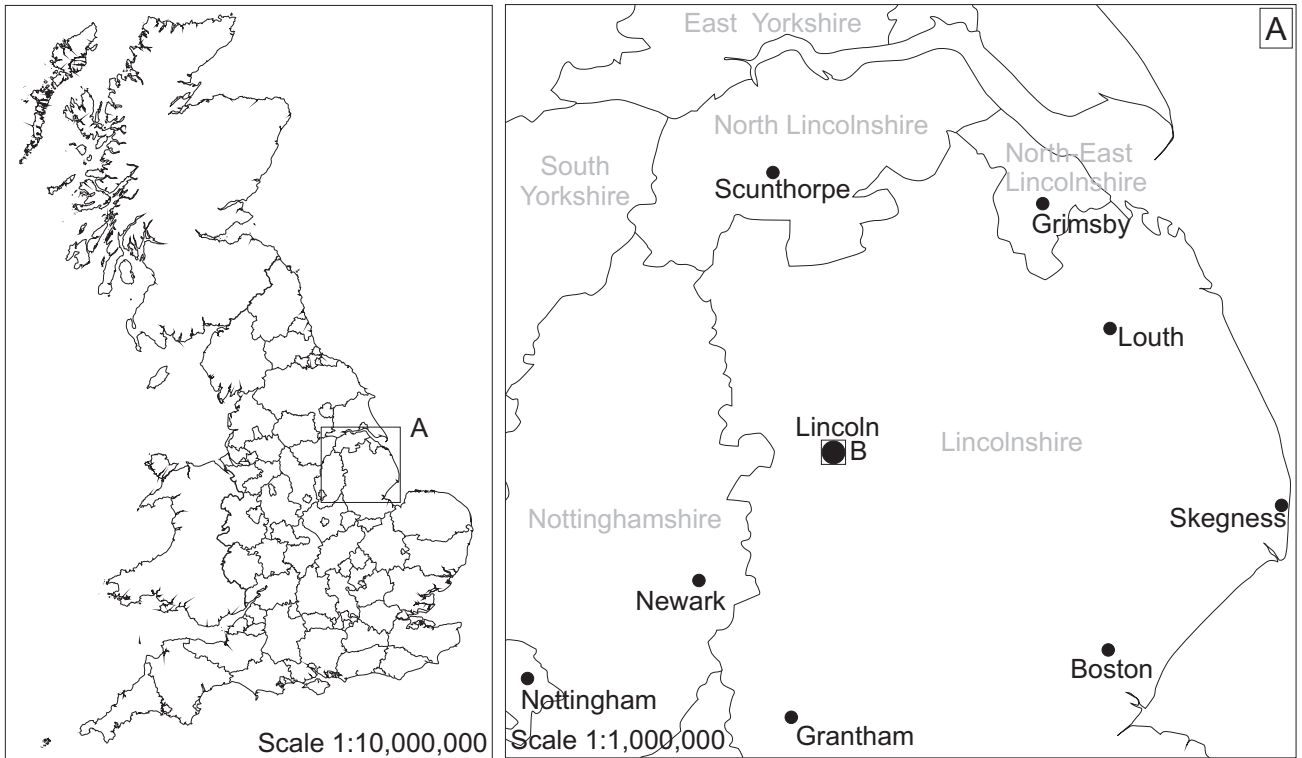
## Appendix 9: Context Summary List

### Test Pit 1

| Context No. | Type  | Description   | Interpretation     |
|-------------|-------|---|--------------------|
| 100         | Layer | Friable medium grey-brown silty sand with frequent limestone inclusions; occasional bone and gravel   | Topsoil            |
| 101         | Layer | Friable slightly silty medium brown-grey sand   | Buried topsoil     |
| 102         | Layer | Coarse gravel within friable slightly silty sand with limestone and chalk inclusions; occasional CBM and slate fragments present            | Dump               |
| 103         | Layer | Coarse sand and fine yellow limestone with occasional CBM, pottery and oyster shell   | Dump               |
| 104         | Layer | Loose coarse medium brown sandy gravel with limestone fragments and occasional CBM, pottery, oyster shell and opus signinum pieces          | Dump               |
| 105         | Layer | Loose greyish-green slightly silty sand with frequent oyster, mussel shells, CMB, pottery and animal bone                                   | Dump               |
| 106         | Layer | Loose coarse medium brown-grey slightly silty sand with limestone rubble, CBM, charcoal, pottery and animal bone                            | Rubble dump        |
| 107         | Layer | Loose slightly coarse medium brown-grey silty sand with occasional charcoal flecks, limestone, pottery, CBM and oyster shells               | Dump               |
| 108         | Layer | Loose light brown sandy silt with charcoal flecks and limestone fragments. Generous quantities of pottery, CBM and animal bone were present | Demolition deposit |

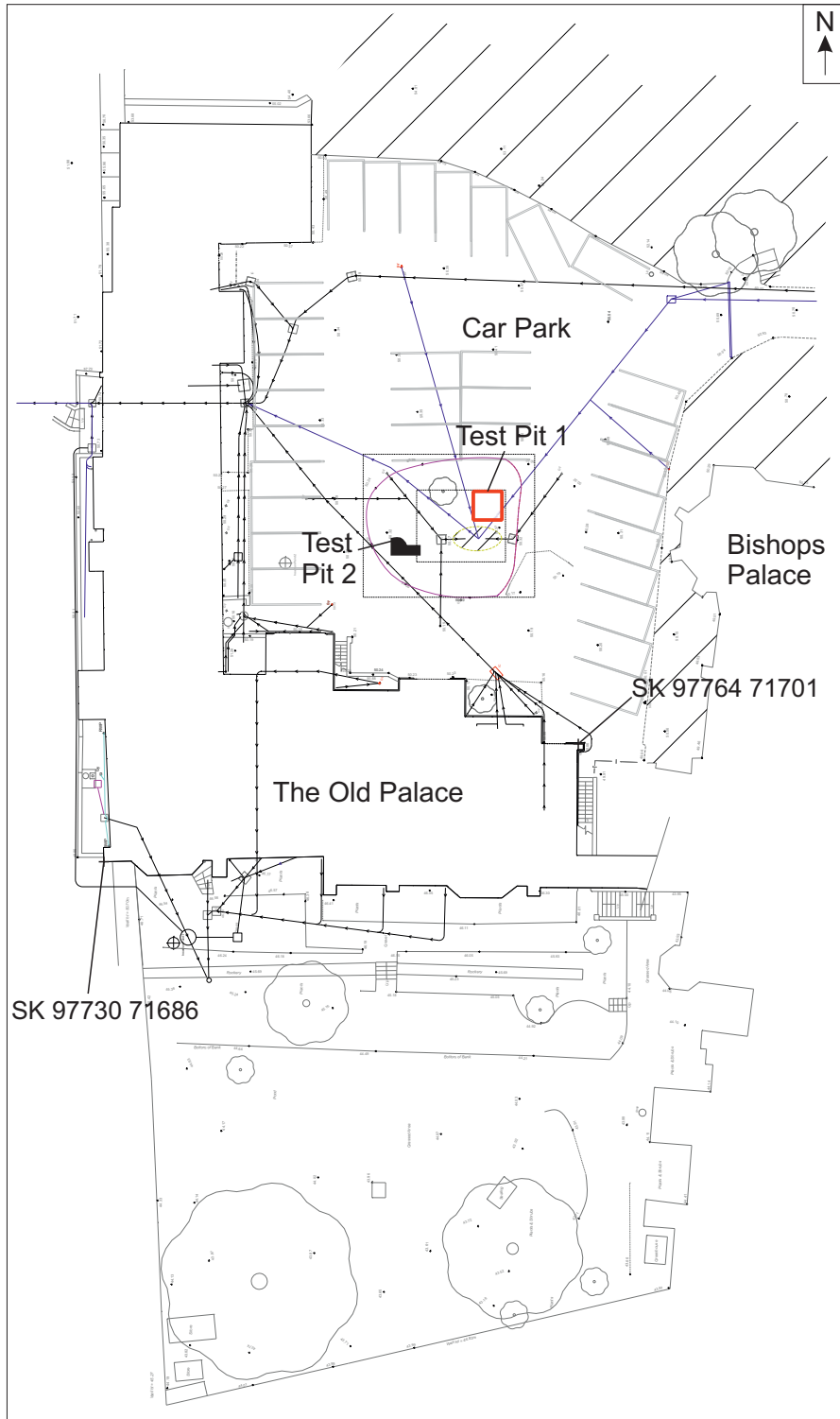
### Test Pit 2

| Context No. | Type      | Description  | Interpretation                   |
|-------------|-----------|--|----------------------------------|
| 200         | Layer     | Friable organic silty sand with frequent stone pebbles and limestone fragments   | Topsoil                          |
| 201         | Layer     | Loose-firm dark greyish-black silty sand with occasional limestone fragments   | Buried topsoil                   |
| 202         | Layer     | Very coarse medium yellowish-brown silty sand with small rounded stone pebbles and angular limestone, occasional charcoal flecks and oyster shells | Dump                             |
| 203         | Layer     | Loose-fairly coarse grey-brown silty sand with charcoal lenses and angular limestone rubble and pottery, CBM and animal bone                       | Dump                             |
| 204         | Layer     | Light brown-grey slightly silty sand with angular limestone fragments, mortar and charcoal flecks. Moderate amount of CBM, pottery and animal bone | Dump                             |
| 205         | Fill      | Loose dark brown-grey silty sand with limestone inclusions, pottery, animal bone and CBM   | Backfill of Service trench [206] |
| 206         | Cut       | North-west, south-east orientated service trench with perpendicular sides and curved base  | Service trench                   |
| 207         | Cut       | Potentially circular in-plan with steep sides  | Pit                              |
| 208         | Fill      | Loose dark brown silty sand with frequent limestone rubble, occasional charcoal flecks and quantities of pottery, CBM, animal bone and shell       | Backfill of Pit [207]            |
| 209         | Fill      | Loose-coarse dark brown silty sand with occasional charcoal flecks, frequent limestone rubble and occasional oyster shells                         | Fill of Pit [210]                |
| 210         | Cut       | Linear on an east-west alignment   | Robber trench                    |
| 211         | Cut       | Circular in plan pit steep sides and rounded base  | Robber pit                       |
| 212         | Fill      | Firm medium greyish black silty sand with occasional limestone fragments, charcoal flecks  | Fill of Pit [211]                |
| 213         | Layer     | Fairly loose grey sand and small gravel  | Modern gravel spread             |
| 214         | Cut       | Linear steep sided V-shaped profile  |                                  |
| 215         | Fill      | Very loose greyish-brown silty sand with charcoal lenses, occasional limestone fragments and plaster; mortar                                       | Fill of [214]                    |
| 216         | Structure | Pitched limestone, compacted   | Wall core                        |
| 217         | Layer     | Context sheet missing  |                                  |
| 218         | Layer     | Small, medium and large sized worn limestone fragments   | Possible yard surface            |
| 219         | Layer     | Small and medium sized limestone fragments   | Possible yard surface            |
| 220         | Layer     | Firm medium orange-brown sandy silt with mortar and occasional limestone   | Cobble surface make-up layer     |
| 221         | Cut       | Linear aligned east-west with near vertical sides and uneven base  | Construction cut for wall 216    |

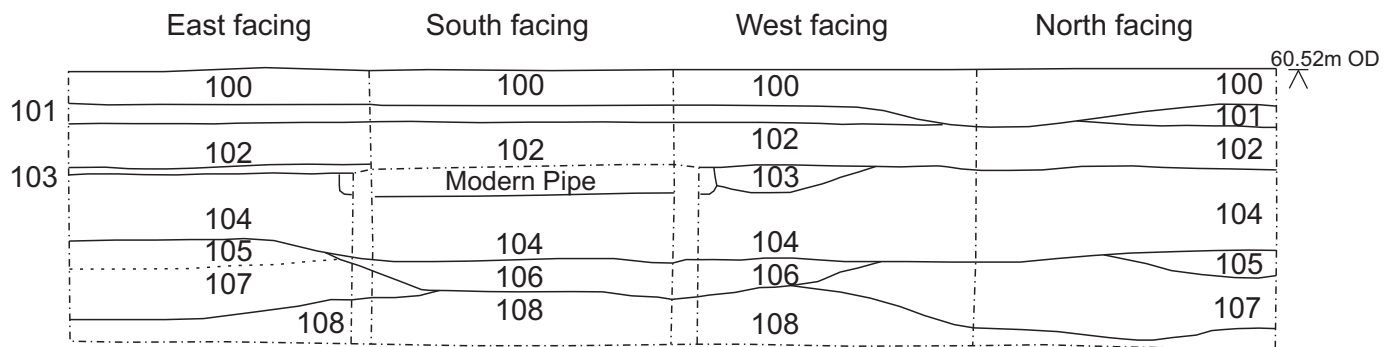


**Figure 1: Location of site outlined in red at scale 1:25,000**

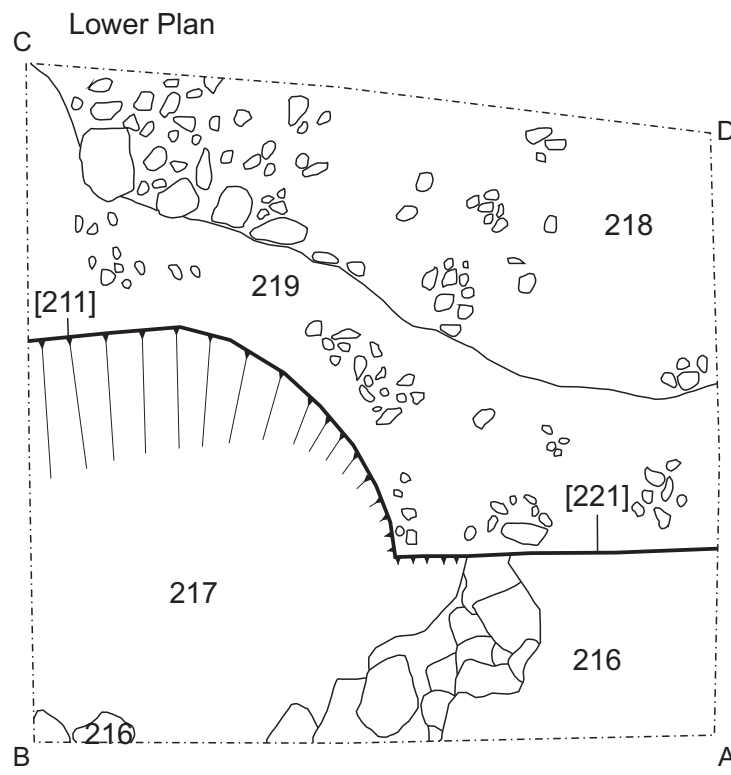
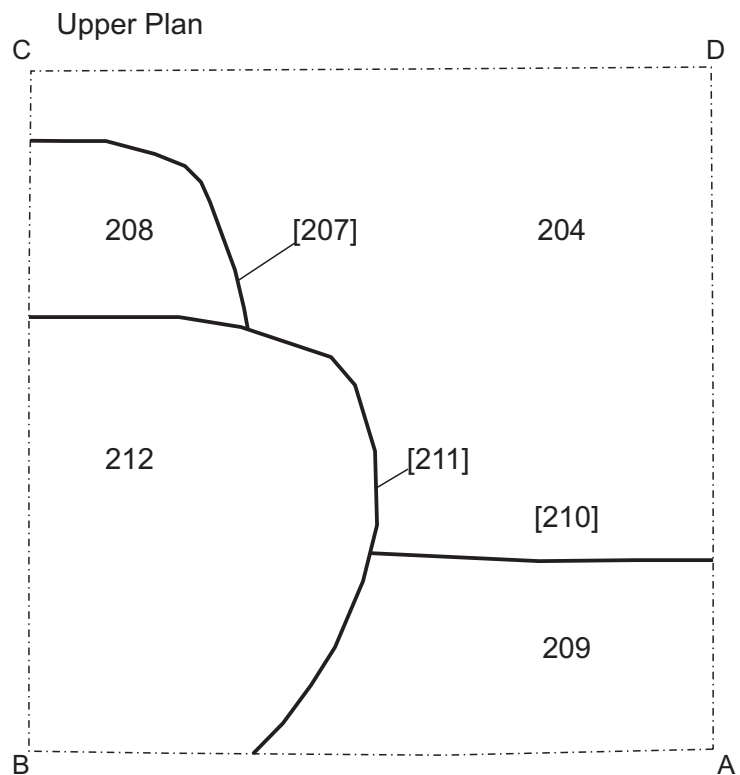
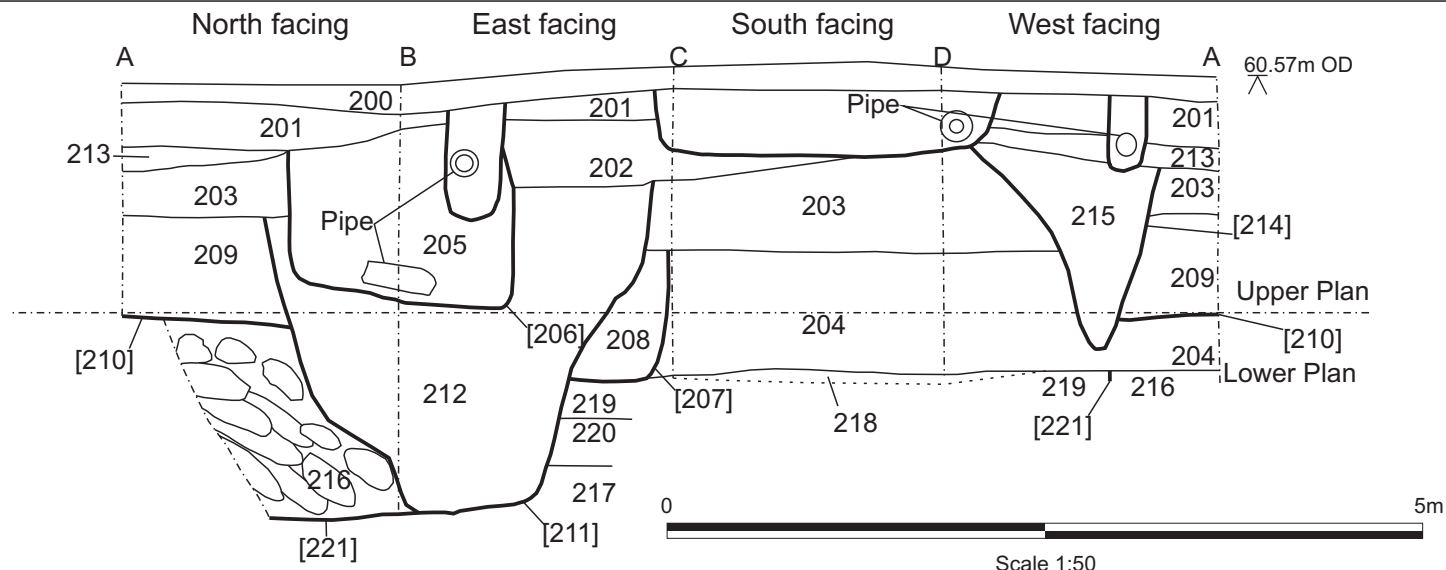
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**Figure 2:** Test pit location plan at scale 1:500 with test pits shown in red and main archaeological features in black. Superimposed over known services plan



**Figure 3:** Trench 1 section at scale 1:50



**Figure 4:** Trench 2 plans at scale 1:20 and section at scale 1:50



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