ARCHAEOLOGICAL WATCHING BRIEF AT WESTGATE PRIMARY SCHOOL LINCOLN (LWS04)

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Work Undertaken For



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ARCHAEOLOGICAL WATCHING BRIEF AT WESTGATE PRIMARY SCHOOL LINCOLN (LWS04)

Work Undertaken For **HBS** Limited

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1. SUMMARY

An archaeological watching brief was undertaken during construction work at Westgate Primary School, Westgate, Lincoln.

The area of the development is deemed archaeologically sensitive as it lies within the historic core of Lincoln, within an area of known Early Roman, Late Roman, and medieval defensive remains. Investigations within the present development during 1938-46 and again in 1973 revealed the remains of the ditch and rampart of the first century legionary fortress crossing north to south across the site. The outer defences of the medieval castle are located 70m to the south of the site. The development is located within a Scheduled Ancient Monument (No. 115, The Roman Colonia).

Early Roman deposits were exposed by groundworks within the existing school hall. Although a number of features related to the initial phase of the Legionary defences (c. AD55-67) were identified, finds dating indicates that many of the deposits and features relate to the renewal of these fortifications later in the first century. The eastern scarp of the fourth century Colonia ditch was also recorded.

Post-medieval deposits and features identified included later fills of the Colonia ditch and the remains of a stone built structure and a possible cellar. Recent contexts comprised topsoil, overburden and the foundations of the existing school building.

An east-west transect of auger piles drilled across the site were also monitored.

Finds recovered during the watching brief included Roman pottery, Amphora, painted wall plaster tile and other building materials, animal bone and marine mollusc shells.

2. INTRODUCTION

2.1 Definition of a Watching Brief

An archaeological watching brief is defined as: "a formal program of observation and investigation conducted during any operation carried out for nonarchaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits maybe disturbed or destroyed." (IFA 1999).

2.2 Planning Background

Archaeological Project Services (APS) was commissioned by HBS Business Services to undertake an archaeological watching brief, during construction work associated with the extension of the school hall and reception area at Westgate Primary School, Westgate, Lincoln. The watching brief was required by Lincolnshire County Council as a condition of planning permission (Ref. No. 2003/0589/CCC) The development site is protected as a Scheduled Ancient Monument (No.115) and the work was undertaken under the provisions of Scheduled Ancient Monument Consent (Consent No. HSD9/2/1976pt41). The watching brief was undertaken between the 24th of May and the 5th of July 2004.

2.3 Topography and Geology

Westgate Primary School is located within the historic core of Lincoln, on the north side of Westgate close to its junction with Burton Road at National Grid Reference SK 975 721 (Fig. 2, Plate 1). The site lies on the plateau overlying the Limestone escarpment at approximately 65m OD. The natural geology on the escarpment consists of Lincolnshire limestone overlying Northampton Sand ironstone that in turn seals Lias clay (Jones and Stocker 2003a, 17).

2.4 Archaeological Setting

Evidence for prehistoric activity within Lincoln is generally scarce and no remains are known within the vicinity of the development, although a possible late Iron Age pit was identified at the eastern end of Westgate at St Paul-in-the-Bail and other finds of possible late Iron Age date have been found to the southwest at The Lawn (Jones and Stocker 2003b, 28).

The site lies within the northwest quadrant of the legionary fortress, of mid-to-late first century AD, Neronian date. Excavations in 1938-46 traced the line of the legionary ditch and rampart of the early fort along the southern portion of the development (Fig.13). These cross the site on a north-south alignment, passing directly underneath the new extension to the school (Jones 2003, 42). The site was reinvestigated in 1973 (Jones, 1980), when the rampart was found to be timber fronted (Fig.13). Timber revetments of this type were comparatively rare in Roman Britain and its use in Lincoln could have been influenced by Rhineland forts, although it may also have been due to soil conditions. (Jones 2003, 43).

The fortress was converted into a Colonia for former legionaries towards the end of the first century AD. Remains from this period identified during previous excavations at Westgate School include possible foundations for the Colonia wall, post-holes for an interval tower and the eastern edge of the Colonia ditch, the latter extending westwards beneath Reservoir Street (Trimble, 2003) (Fig.13). The buried remains of the Colonia on the site are protected as a Scheduled Ancient Monument (No.115).

Occupation within the upper Roman city continued throughout the Saxon period. Although no Early Saxon (450-650AD) remains are known from previous work at Westgate School, small quantities of 5th and 6th century pottery was found 200m to the east at the eastern end of Westgate during excavations within the area of the Roman Forum at St. Paul-in-the-Bail. It is possible that the Middle Saxon (650-850) church excavated on this site had an earlier predecessor (Vince 2003a, 145). Fifth to sixth century pottery was also recovered during investigations approximately 200m to the southwest, beyond the defences, at The Lawn. Occupation appears to have become concentrated in this latter area during the Middle Saxon when settlement within the city walls seems to have declined (Vince 2003a, 147).

Archaeological evidence from across the city has shown that Lincoln grew rapidly and prospered from the late 9th century onwards, developing into a major urban centre by the time of the Domesday Survey (Vince 2003b, 161). One of the principal features of the medieval city was the royal castle, erected in the southwest corner of the walled upper city in 1068, as a response to a rising in the North. By 1150 the castle's defences had been extended northwards, beyond the Roman Westgate and within 70m of the present site (Vince 2003b, 170-173) (Fig.3). The medieval street of Westgate was clearly laid out along the northern side of the castle ditch. A medieval church, St-Clement-in-the-Bail stood to the north of Westgate. Although its site is now lost, it is believed to have stood northeast of, and in moderate proximity to Westgate School. (Vince 2003b 173).

The area of development and its surroundings are depicted as open ground on an illustration of c.1784, which shows that both the West Gate and the ramparts of the fortifications have been levelled by this time (Vince 2003b 271).

3. AIMS

The aim of the watching brief was to record and interpret any archaeological features exposed during the excavation of foundation beam trenches, stanchion pits and service trenches associated with extension work to Westgate primary school. The drilling of auger foundation piles was also monitored. This was to enable the form, function, sequence and spatial arrangement of those archaeological features encountered to be determined.

4. METHODS

After limited ground clearance, an array of 150mm auger and displacement piles was drilled within both the existing school hall and the area of the new extension (Plate 2). Foundation beam trenches and stanchion pits were then excavated around the piles and connecting services dug. Operating under the terms of the monument consent, all the groundworks were excavated by the client's contractors, but monitored and recorded by APS staff.

Each archaeological deposit or feature revealed within the trenches was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 2. A photographic record was compiled and sections were drawn at a scale of 1:20. Recording of the deposits encountered during the watching brief was undertaken according to standard Archaeological Project Service's practice.

A range of archaeological finds of Roman and post-medieval date, was recovered during the watching brief and these were submitted to specialists for professional analysis.

5. **RESULTS**

Following post excavation analysis six phases of archaeological activity were identified:

Phase 1: Natural deposits

- Phase 2.1: Early Roman rampart, ditch and associated features
- Phase 2.2: Early Roman remodelling of defences

Phase 2.3: The late Roman Colonia Ditch

Phase 3: Post-medieval features and deposits

Phase 4: Recent features and deposits

These archaeological phases are reported below. The numbers in brackets are context numbers assigned on site and are listed in Appendix 2.

5.1 Phase 1: Natural deposits

Seven natural deposits were either recorded within Trenches 2 and 4 or noted during piling operations (Figs.4 and 12). Those natural deposits identified during piling will be reported separately (See 5.7). A friable buff yellowish brown slightly clayey sand (035), at least 0.57m thick was recorded at 64.70m OD at the base of Trench 2 and within surrounding piles (Fig.6 Section 4). Further north within Trench 4, natural (051) comprised a mixture of buff yellowish brown sandy silt clay and limestone brash, representing 15-20% of the deposit. This material was at least 0.26m thick and lay at 64.66m OD (Fig.7 Section 5).

5.2 Phase 2.1: Early Roman rampart, ditch and associated features

Within the existing school hall, fifty-one deposits and features identified, immediately beneath the existing floor, during the excavation of beam trenches and stanchion pits, to maximum depths of 0.42m and 1.49m respectively, can be dated on stratigraphic grounds to the early Roman period (AD43-120) (Fig.4). Artefactual evidence for this phase is limited although these deposits most probably relate to the initial legionary defences, dated elsewhere in Lincoln to c.AD55-67 (see Discussion).

Thirty rampart deposits were present within beam trenches in the northeast corner of the existing school hall. At the north end of the hall a 0.30>m thick firm mid-reddish brown slightly silty sand (109=159) appeared to be cut by a west facing steep sided north-south cut [111] (Fig.5, Fig. 8 Section 9) which was at least 0.36m deep and 2.10m wide. This feature is on the projected alignment of the legionary ditch and it possible that the 'cut' actually marks the position of the recorded during earlier revetment investigations on the site (Fig.13). The feature was infilled with a Phase 2.2 deposit (112), related to the later renewal of the defences. A second vertical cut [151] through (109) is hard to interpret but but probably also relates to the Phase 2.2 mentioned above (see 5.3). Sealing (109) was a 0.08m thick deposit of wellcompacted buff yellowish brown sandy silt clay (110).

Further rampart deposits were identified to the south in a connecting beam trench (Fig. 9 Section 10, Plate 12). At the base of the trench a 0.13m thick layer of friable buff yellowish brown sandy silt clay (095) was overlain by a 0.05m thick lense of friable dark reddish brown sandy clay (096), that was in turn sealed by a 0.09m thick friable deposit of buff yellowish brown silty sand (097). This was overlain by a 0.11m deep layer of brown sand (098), sealed by a substantial, 0.28m thick deposit of friable buff yellowish brown silty sand (099) containing limestone fragments and laminations of brown sandy clay.

At the northern end of Section 10, a 90mm thick deposit of loose reddish brown slightly clayey sand (100) was also sealed by (099). A 0.14m thick, tipped deposit of loose light reddish brown slightly clayey sand (101) was banked against the northern slope of (099) and was in turn covered by a 0.07m thick deposit of friable buff yellowish brown silty sandy clay (102).

In the northeast corner of the groundworks (Fig. 9 Section 13), a friable, 0.28m> deep medium yellowish brown sandy clay rampart deposit (135) was cut by later (Phase 2.2) features [136=141] and ([142=144]). A 0.19m thick, loose buff yellowish brown silty clay deposit (145) was also cut by [142=144]. South of (145) and separated by a beam trench, a 0.23m thick, loose yellowish brown grey silty sandy clay (156), containing a single sherd of first century pot, was overlain by a 0.15m deep deposit of loose light yellowish brown sandy silt (155) (Fig. 4 and Fig. 11 Section 16).

At the base of an east-west beam trench lay a deposit of loose reddish medium brown sand (104) that was at least 0.24m thick (Fig. 10 Section 8). Banked up against this deposit was a buff yellowish brown sandy silt clay (103), at least 0.12m thick and sealed by a 0.28m deep deposit of friable mid-reddish brown sand (092), in turn covered by the southward continuation of (095) (Fig. 9 Section 10).

Seven rampart deposits were recorded to the south within a north-south beam trench (Fig 10 Section 11). At the base of the trench lay a 0.18m thick friable dark reddish brown sandy clay (087) and a friable 0.03m thick mixed deposit of medium reddish brown sand and sandy clay (091). The latter was covered by the continuation of (092), which was in turn sealed by a 0.15m thick deposit of friable medium greyish brown sandy clay (093). To the south (087) was sealed by a 0.17m thick deposit of friable dark reddish brown sandy clay (086).

A substantial near vertical post-hole [088] cut through both (086) and (093). Sub-

ARCHAEOLOGICAL WATCHING BRIEF AT WESTGATE PRIMARY SCHOOL, WESTGATE, LINCOLN

rectangular in shape, measuring $0.57m \times 0.39m$ and at least 0.28m deep, the cut was filled with irregular oolitic limestone packing stones (089), which ranged from $0.09 \times 0.05m$ to $0.25 \times 0.19m$ in size. These stones were infilled with a secondary deposit of loose medium reddish brown slightly clayey sand (090).

Southeast of Section 11, within Section 14 (Fig. 9, Plate 11), a friable medium reddish brown slightly clayey sand rampart deposit (146), at least 0.17m thick was partially sealed by a 0.05m thick lense of loose buff yellowish brown sandy silt clay (147).

Fourteen rampart deposits were recorded within a stanchion pit (Trench 4) (Fig. 7, Section 5), excavated 0.15 m south of Section 14 (Fig. 4). At the base of the trench, two features cut though natural (051). The first ([052]), a probable linear measuring at least 0.47m in width and at least 0.28m deep was steep sided and filled with loose pale yellowish brown clayey sand (053). Immediately to the west, the second cut ([054]) was steep sided, 0.41m wide, at least 0.24m deep and filled by (055), a loose, mottled buff reddish yellow, medium reddish brown, sandy silt clay.

Sealing (055), a 0.07m thick deposit of friable medium reddish brown sandy clay (056) was in turn overlain by a 0.23m deep layer of friable dark reddish brown sandy clay (057) which also sealed (053) (Fig. 7 Section 5). This was in turn covered by a 0.04m thick lense of friable medium reddish brown sandy clay (058), which was in turn overlain by a 0.15m thick deposit of friable medium greyish brown slightly silty sandy clay (059). A deposit of loose slightly reddish greyish brown sand (060), 0.13m thick and banked up against (059), represented tipping within the defences.

Overlying (060) was a 0.13m thick deposit of loose medium reddish brown sand (061), overlain in turn by a 0.11m thick layer of friable buff reddish brown sandy silt clay (062) representing re-deposited natural material. A 0.18m thick deposit of loose medium reddish brown sandy clay (063), sealing (062), was in turn partially overlain by a 0.04m thick lens of redeposited buff reddish brown natural sandy silt clay (172). This was sealed by a 0.17m thick deposit of loose medium reddish brown sand (064).

Seven deposits, sealed natural (032) within a second stanchion pit (Trench 2) (Fig. 4 and Fig. 6 Section 3). Natural (032) was sealed by a 0.18m thick deposit of soft mid-brown sandy silt (031), overlain by a 0.29m thick deposit of mid-yellow to midbrown sandy silt (030).

A steep sided concave based feature ([040]), of unknown function cut through (030) (Plate 5). Measuring 0.48m in diameter and 0.37m deep, [040] was filled by a friable medium yellowish brown clayey sand (041). The fill was sealed by a compacted deposit of dark brown sandy silt containing flecks of yellow limestone (029), which was in turn overlain by a post-medieval (Phase 3) deposit (028).

In the southeast corner of Trench 2 (Section 4) a near vertical feature [170] cut natural (035). With a minimum width of 0.14m and at least 0.34m deep [170] was filled with a loose reddish medium brown sand (036).

5.3 Phase 2.2: Early Roman remodelling of the defences

Twenty-eight early Roman features and deposits recorded within foundation beam trenches in the northeast corner of the existing school hall (Figures 3 and 4 Plate 13) relate to the renewal of the legionary defences in the latter part of the first century AD.

At the northern end of the groundworks (Fig. 8 Section 9) [111], the probable cut of the legionary ditch, was filled with a

buff yellowish brown sandy silt clay (112) containing occasional shell, fragments of limestone and a single sherd of first to early second century pottery. This fill was cut by a substantial north south aligned vertical sided post-hole ([119]) that was at least 0.37m deep and 0.58m wide. The cut contained four fills; an oolitic limestone rubble packing deposit (116), sealed by a 0.14m thick deposit of loose light greyish brown slightly silty sand (115), overlain by a 0.06m deep deposit of loose light brown reddish yellow sand (114). The upper fill (113), sealing (114) comprised a 0.21m thick deposit of friable buff yellowish brown buff sandy silt clay and contained a single fragment of first century pot, of probable legionary origin.

The southern side of [119] cut through a deposit of friable medium yellowish grey brown clayey sand (131), overlying (112) (Fig. 4). Unexcavated as it lay beyond the limits of the beam trench, the deposit measured 0.6×0.45 m and may represent the fill of an earlier feature.

Located at the western end of Section 9, but separated from [119] by a beam trench, was a friable light yellowish greyish brown sandy silt clay (171) which was at least 0.28m deep and was similar to (112) (Fig.8 Section 9).

Two features ([136=141] and [142=144]) cut through Phase 2.1 deposit (135) (Fig. 4 and Fig. 9 Section 13, Plate 10). A steep sided pit, measuring 0.72m in diameter and at least 0.28m deep, ([136=141]) contained four fills; a friable pale brownish grey sandy clay primary fill (137), at least 0.09m deep and containing three sherds of first to early second century pottery, sealed by a 0.15m thick mixed deposit of loose buff yellowish brown sandy silt clay, mixed with yellow pale yellowish brown sandy silt (138). Overlying this, the upper fill (139) comprised a 0.21m thick deposit of friable pale yellowish brown sandy silt clay (139). The second feature [142=144] was

gradually sided, 0.85m wide and at least 0.29m deep. It was filled with a friable medium greyish brown sandy silt clay (143).

A north south aligned flat-based probable pit ([140=151]), cut though (139). Gradually sided, at least 2.30m long and 0.30m deep, [140=151] was filled with a single deposit of loose medium greyish brown sandy clay silt (134) (Fig. 9 Section 13) and a very firm mid-reddish brown slightly silty sand (152) (Fig. 8 Section 9). Two sherds of first century pottery were recovered from (134).

A further sequence of early Roman legionary deposits was revealed to the south (Fig.4 and Fig.11 Section 16), where Phase 2.1 deposit (155) was sealed by a 0.11m deep mixed deposit of friable buff vellowish brown sandy clay silt and pale greyish brown sandy silt (154), containing fragments of painted plaster, mortar and burnt stone. To the south a hollow within. (154) was filled with a 0.06m thick deposit of friable light yellowish brown sandy clay (157). Both (154) and (157) were sealed by a 0.15m deep deposit of slightly cessy friable light to medium greyish brown clayey sand (085) containing animal bone, painted wall plaster and twelve sherds of pottery and amphorae dated to AD70-100.

Early Roman deposits (155), (154) and (085) continued westwards and were also recorded within Section 8 (Fig. 10). Here (155) and (104) were sealed by a 0.21m deep deposit of friable mid-brown sandy clay (158), containing scarce fragments of limestone, which was in turn overlain by (154).

In the southeast corner of the existing school hall (Fig. 4 and Fig. 9 Sections 14 and 16), Phase 2.1 deposit (147), was sealed by a layer of friable dark reddish brown sandy clay (148), which was at least 0.32m deep. Ten sherds of 1st century amphorae were recovered from (148), including fragments very similar to sherds recovered from (085) and (113) which were probably from the same vessel (Precious, Appendix 3). A 0.07m thick layer of loose reddish brown sand mixed with re-deposited natural buff yellowish brown sandy silt clay (149), overlay (148) and was in turn sealed by a 0.08m thick deposit of plastic dark greyish brown sandy clay (150).

5.4 Phase 2.3: The late Roman Colonia Ditch

The cut ([117]) for the *Colonia* ditch, a substantial late Roman defensive work excavated around the upper city during the fourth century and maintained until the post-medieval period was identified within beam trenches excavated in the northeast corner of the existing school hall (Fig. 4 and Fig. 8 Section 9). The fills of this ditch have been assigned to Phase 3, as post-medieval pottery recovered from them indicated that the ditch was not finally infilled until the late 19th or early 20th century.

5.5 Phase 3: Post-medieval features and deposits

Forty features and deposits identified during the watching brief were of post-medieval origin.

Eight of these deposits, were fills within the 'Colonia' ditch. In the northeast corner of the school hall a loose dark brownish grey sandy silt (118) butted up against the cut ([117]) (Fig. 8 Section 9), whilst a further seven fills were recorded within a stanchion pit (Trench 3) excavated against the western wall of the school hall (Fig. 3 and Fig. 7 Section 6, Plate 6). At the base of the stanchion pit, a 0.17m deep deposit of friable dark greyish brown clayey sand (072), overlain by a 0.09m thick deposit of loose dark greyish brown very slightly clayey sand (073), which was in turn sealed by a 0.32m deep deposit of loose dark brownish grey slightly clayey sand (074), from which a single sherd of redeposited first century pottery was recovered.

This was sealed by a 0.27m thick deposit of loose dark brownish grey slightly clayey sand (075), that was in turn sealed by a 0.14m thick dump of loose dark brownish grey sandy clay (076), from which a single sherd of re-deposited Roman pottery was recovered. Sealing (076), a 0.19m thick deposit of loose medium reddish brown silty clayey sand (050), was in turn covered by a 0.20m thick deposit of loose yellowish brownish grey sandy silt clay (049). Late ninteeneth to early twentieth century stoneware as well as re-deposited Roman pottery was recovered from (050) and (049). The final deposit a 0.40m thick dump of loose dark greyish brown sandy silt clay (078) contained late nineteenth century material.

Seven deposits consisting of loose dark greyish brown sandy silt clay (121), buff yellowish brown mortary silt clay (122), mid to dark brown sandy silt (129), mottled mid-brown and yellow silty sand (130), loose medium greyish brown slightly clayey sand (161) and a medium reddish yellow brown slightly silty sand (167), all of which probably infilled the *Colonia* ditch, were recorded within groundworks excavated in the southeast corner of the site (Fig.4 and Fig 14 Sections 12, 17-18).

Four courses of a limestone and brick wall ([160]) (Fig. 4 and Fig. 11 Section 17) lay within foundation trench [166] cut through (161). The wall was partially covered by a loose medium reddish brown sand (162), sealed by a friable mottled medium yellowish brown clayey sand (163). A steep sided feature [124], measuring 0.65m in diameter and at least 0.35m deep, cut through (123) (Fig. 9 Section 12) and was filled with a mottled dark greyish brown / dark yellowish brown clayey sand (125). This was sealed by a friable dark yellowish brown sandy clay (126), overlain by a

friable dark greyish brown sandy silt clay (127).

A vertical sided north south aligned cut ([071]) cut through (078) (Fig. 7 Section 6), with a minimum width of 0.41m, at least 1.08m deep, it probably represents a foundation cut for a demolished building. The cut was filled with a 0.30m> deep deposit of loose medium greyish brown sandy silt clay (079), sealed by a 0.81m thick deposit of loose mottled medium reddish brown, medium greyish brown sandy clay (080).

The remains of a brick and limestone structure, walls [106] and [108], robbed by [065=132], were recorded within the central portion of the existing school hall (Fig 4, Fig. 7 Section 5, Plate 7 and Fig. 10 Section 8). Possibly a back filled cellar, as the area between [108] and [132] was infilled with a single deposit of loose medium reddish grey brown slightly silty sand (133=094), it is likely that a second east west aligned limestone wall ([120]) located east-northeast of [108] formed part of the same structure. Within Trench 4 (Fig. 7 Section 5) robber trench [065=132] was found to contain 3 fills; a mixed deposit of loose medium reddish brown sandy silt clay and limestone rubble (066), sealed by a loose reddish grey brown sandy silt clay (067) which also contained limestone. The upper fill (068) comprised loose reddish grey brown sandy silt clay, limestone rubble and ash lime mortar.

Four deposits were recorded within stanchion pits (Trenches 1 and 2) excavated within the school hall (Fig. 4 and Fig. 6 Sections 1 and 4). At the base of Trench 1, a friable medium yellowish grey brown sandy clay (025), was sealed by a medium yellowish brown sandy clay (024) (Plate 3). Within Trench 2 (Fig. 6 Section 4) undated deposit (036) was sealed by a loose dark greyish brown clayey sand (034), whilst in the northern section (Fig. 6 Section 3, Plate 4) Phase 2.1 deposit (029) was sealed by a very dark greyish brown sandy silt (028).

5.6 Phase 4: Recent features and deposits

Sixteen recent features and deposits were recorded during the watching brief. These included overburden (010, 020, 023, 033 and 165), topsoil (128), concrete hard core (022), the contractor's stone mat (011) and foundation trenches and structures related to the current school building ([081], 082. [027], 026 and [021]). One of the engineering test pits (Test Pit 1) ([037]) excavated in 2003 (Bradley-Lovekin, 2004), was re-exposed in Trench 2 and found to be filled with (038) and (039).

5.7 Deposits identified during piling operations

Although both auger and displacement piling was undertaken only the auger piles were monitored as the displacement method produces no spoil. It was originally intended to limit displacement operations to the foundations for the new floor slab within the existing school hall and auger all the piles for the footprint of the new extension to the south of it. However, auger piling was abandoned within the western portion of these groundworks, after pile 60 had been drilled to a depth of 9.75mm (55.25m OD), and natural bedrock not detected. Thereafter piles in this area (piles 61, 60A and 62) were augered to a depth of approximately 5m and then displaced. A representative sample of those piles monitored, forming an east west transect across the site have been analysed and a deposit profile prepared (Fig.12).

Natural deposits

Limestone bedrock (168) was identified across the eastern portion of the site (Fig.12 piles 38, 35, 43, 44B, 48 and 50), underlying the former position of the defences (Fig.13). The level of the surface of bedrock fell from 63.87m OD within pile 35 to 63.18m OD within pile 48, presumably reflecting the position of the legionary defences. The eastern slope of the *Colonia* ditch was indicted by the presence of limestone bedrock, within pile 50, at 61.72m OD. Bedrock was not detected in the western area of the footprint, overlying the *Colonia* ditch, where piles were augered to a depth of 55.25m OD.

Sealing (168) a 0.38m deep deposit of buff yellowish brown limestone brash (002), probably represents *in situ* natural, although a proportion of it may have been redeposited within the rampart. The surface of (002) ranged from 64.29m OD to 63.71m OD between piles 38 and 48.

A compact dark grey silty clay (014) of 'shingle like appearance was recorded at the base of pile 60, a single burnt flint pebble was recovered whilst piling through this deposit was probably intrusive (Cope-Faulkner and Taylor Appendix 4). Although natural, it was markedly different from the limestone deposits recorded elsewhere on the site indicating that the Colonia ditch cut through the bedrock. This was sealed by a 0.15m thick deposit of friable light reddish yellow brown sandy clay (013), which was in turn covered by a 1.0m deep deposit of compact dark grey silty clay (012), similar in appearance to (014). The surface of (012) lay at 56.88m OD.

Undated deposits

A 1.43m deep deposit of loose light to medium reddish yellow brown sandy clay (004) identified within piles 43, 48, 44, 44A, 44B, 49, and 49A was similar to the early Roman deposits identified elsewhere on the site and may be associated with them.

A 2.7m thick deposit of friable light reddish yellow brown clayey sand (009) containing moderate quantities of limestone and small fragments of ceramic building material overlay (012). This was in turn sealed by a 0.30m thick deposit of friable light greyish brown sandy clay (008), overlain by a 0.7m thick deposit of clay (007). A 2.10m thick deposit of friable medium brownish grey clayey sand (006), containing a small quantity of late post-medieval iron smithing slag and tile (Cope-Faulkner and Taylor Appendix 4), sealed (007). This was overlain by a 1.2m deep deposit of friable dark greyish brown clayey sand (005), containing frequent quantities of limestone and charcoal and a scarce amount of ceramic building material, marine mollusc and slag.

Further west a deposit of friable brownish yellow clayey sand (045), recorded at the base of pile 60A, was sealed by a 1.2m thick deposit of buff yellowish brown, limestone brash (169). similar in appearance to (002), but possibly redeposited within the fills of the Colonia ditch. Within Pile 60A this was sealed by a 0.40m deep deposit of friable medium grevish brown sandy clay (048), whilst within pile 62 it was covered by a 0.40m thick layer of light yellowish brown friable sandy clay (046). Sealing (048) was a 0.70m deep deposit of friable medium greyish brown sandy clay (047), whilst (046) was overlain by a 0.30m thick deposit of friable medium yellowish brown sandy clay (043), that was in turn sealed by a 1.10m deep deposit of friable dark greyish brown sandy clay (042).

The eastern edge of the *Colonia* ditch was encountered within pile 50 (Fig.12). Here (002) was sealed by a 0.90m deep deposit of loose medium brownish grey sandy clay (016), containing a scarce quantity of ceramic building material, which was in turn covered by a 0.50m thick deposit of loose medium brown clayey sand, from which a single undated brick or tile was recovered (Cope-Faulkner and Taylor Appendix 4).

Recent Deposits

Recent deposits identified during piling included loose dark yellowish brown sandy clay topsoil (003), loose medium yellowish brown sandy clay overburden (001=010) and the stone mat laid by the contractors prior to piling (011).

6. **DISCUSSION**

Seven natural deposits lay at 64.70m OD on the eastern side of the site, 0.60m to 0.71m below the pre-development ground surface. The shallow depth of stratigraphy overlying natural reflects the fact that deposits in this area were protected beneath Roman and later ramparts which were not levelled until the post-medieval period, limiting disturbance to the early Roman remains beneath them.

Within pile 50 natural limestone brash (002), dropped sharply to 62.23m OD, reflecting the slope of the *Colonia* ditch. Bedrock was not detected west of pile 50, despite pile 60 being augered to a depth of 9.75m (55.25m OD). Instead natural comprised sandy and silty clays (012, 013 and 014) indicating that the ditch cut through bedrock into the underlying deposits. Lias clay is known to underlie bedrock elsewhere on Westgate (Jones and Stocker 2003a, 17).

Previous investigations of the legionary defences surrounding the upper city, including work on the present site in 1938-46 and 1973, revealed evidence of five phases of modification and renewal;

- Ia Legionary defences (c.AD55-67)
- Ib Modified Legionary defences (c.AD71-78)
- II First *Colonia* wall (early 2nd century)
- III Stone towers added (mid-late 2nd century)

- IV Wall and rampart heightened (early 3rd century)
- W Wall thickened and heightened (4th century)

(Jones 1980, 50)

Although some caution should be exercised, it is likely that Phase 2.1 relates to the initial phase of defences of c. AD55-67 (Ia) and that the Phase 2.2 features date from either the initial modifications of c.AD71-78 (Ib), the construction of the *Colonia* defences in the early second century (II) or possibly a combination of both. Although the *Colonia* ditch was first established in the late first century, the cut identified here (Phase 2.3), most probably relates to its substantial enlargement during the 4th century (V) (Jones 1980, 50).

Fifty deposits and features identified during the excavation of groundwork trenches within the existing school hall (Fig.4 and 5) most probably relate to the initial legionary defences (Phase 2.1). The majority of these contexts are dumped deposits, within the defensive ramparts and derived from natural material excavated from the ditches. Absence of dating evidence from within these deposits is therefore to be expected.

Three Phase 2.1 features [040], [052] and [054] lay on the approximate alignment of the legionary palisade, recorded immediately south of [040] in 1973 (Figs 3 and 13). This palisade has been shown to have formed a revetment for the first phase of the legionary rampart (*c*. AD 55-67) and the fact that all three features cut through natural deposits at the base of the sequence supports their possible interpretation as part of this structure.

The substantial post-hole [088] (Fig. 4, Fig.13 and Fig.10 Section 11, Plate 8), was cut through earlier deposits, indicating that it did not form part of the initial rampart structure. Smaller than the post-holes for the interval tower excavated to the south by Webster (Fig.13), this post-hole, on the approximate alignment of both the palisade trench and the stone feature recorded in 1973, may represent an alteration to the rampart.

A near vertical cut [111] (Fig. 8 Section 9), related to Phase 2.1, lies on the projected alignment of the legionary ditch (Fig. 13). Although only the upper portion of the cut was disturbed by the development, the single sherd of first to early second century pottery recovered from its fill (112), is of interest as it suggests a Flavian date (AD69-96) for backfilling of the feature (Precious Appendix 3, Drawing 2). Previous work has indicated that the legionary ditch was infilled when the defences were modified during the later first century (Ib) (Jones 1980, 50). Two fragments of tile were also recovered from (112) (Cope-Faulkner and Taylor Appendix 4), the first was clearly Roman, the second was distorted by burning and may be either Roman or an intrusive medieval fragment.

Twenty-eight contexts identified in the northeast corner of the school hall relate to late first or early second century modifications to the defences (Phase 2.2). Three deposits (154, 148 and 085), within the area of the rampart (Figs. 4 and 13) contained occupation debris including pottery, amphorae and fragments of white painted plaster. Burnt pottery possibly dating to AD70-100, recovered from (085), appears to be indicative of destruction rather than burning through use (Precious, Appendix 3). It is therefore clear that (154, 148 and 085) relate to the renewal of the legionary defences, not their initial construction.

Post-hole [119], related to a later phase of the defences (Phase 2.2 or later) as it was cut through (112), the fill of [111], although the only dating evidence recovered from the post-hole was a single sherd of first century pot, of probable legionary origin recovered from its upper fill (113) (Precious Appendix 3)

Two intercut features, probably pits, [136-141] and [140-151] (Fig.4, Fig. 9 Section 13 and Fig.11 Section 16), are dated by a single sherd of first to early second century pot recovered from (137), the lowest fill of [141-136] and a sherd of first century, possibly pre-Flavian (AD50-70) pottery from (134), the fill of [140-151] which cut through the fills of the earlier feature (Precious Appendix 3). An adjacent feature [142-144] is hard to interpret although it lay within the projected alignment of the early Roman rampart (Fig. 9 Section 13 and Fig. 13).

The comparatively small assemblage of high quality Roman pottery and amphorae recovered from the site is of interest as it dates almost exclusively to the first century AD and contains a high proportion of probable legionary wares, which is to be expected given the location of the site (Precious Appendix 3). Fragments of very similar pot, probably from the same vessel were recovered from three Phase 2.2 deposits (085), (113) and (148). Precious suggests that the assemblage may be derived from a high status dining room or taverna. The presence of Flavian pottery (AD69-96) is significant as suggests that the Phase 2.2 deposits relate to the renewal of the defences during the later first century (Ib). This is supported by the presence of occupation material such as painted wall plaster within several of the deposits, which suggests that a general rebuilding was being undertaken at this time. Although the wall plaster recovered from (085) and (154) is undated (Cope Faulkner and Taylor Appendix 3), white painted plaster, associated with legionary structures of this period, is known from Lincoln (Jones Pers Comm).

The presence of imported wares is significant as these are associated with relatively high status occupation. Some of the imported amphorae vessel types within

ARCHAEOLOGICAL WATCHING BRIEF AT WESTGATE PRIMARY SCHOOL, WESTGATE, LINCOLN

the assemblage are rare, at least three types of wine amphorae were recovered, originating from Rhodes, the Eastern Mediterranean and possibly Southern Gaul. A fragment of probable South Spanish Amphorae is of a type associated with olives in a sweet liquor (Precious Appendix 3).

The only mid-Roman (AD125-AD275) wares recovered were residual, redeposited within (049) and (050), post-medieval fills of the *Colonia* ditch (Phase 3).

Deposits within the *Colonia* ditch were recorded across the western side of the site. Although it was hoped to record the profile of the ditch by monitoring a transect of auger piles across the site (Fig. 12), this was not possible as the ditch was cut into the lias clay beneath the bedrock, making it impossible to detect the base of the cut. The east side of the ditch was recorded within piles 48 and 50.

Post medieval deposits (Phase 3) identified included numerous fills of the *Colonia* ditch, dump deposits and the infilled remains of a possible stone built cellar [106], [108] and [065-132] (Fig. 4). The finds recovered from these deposits date from the late 19th to early 20th centuries, this late date is to be expected given the nature of the deposits.

Recent deposits comprised topsoil and overburden whilst disturbance was limited to the foundations of the existing school buildings.

7. CONCLUSION

A watching brief was undertaken during groundworks and auger piling at Westgate Primary School, Westgate, Lincoln.

The monitoring was required as a condition of both planning permission and monument consent as the school lies within the historic urban core, on the line

of defences of the mid to late first century legionary fortress, the late first century *Colonia* defences and the medieval city walls. The survival of well preserved Roman defensive remains on the site has been demonstrated by earlier excavations and these are now a Scheduled Ancient Monument.

Early Roman deposits were exposed by groundworks in the northeast corner of the existing school hall and within a stanchion pit excavated to the south. Although contexts related to the initial phase of the Legionary defences (c. AD55-67) were identified, finds evidence indicates that many of the datable deposits and features relate to the renewal of these fortifications later in the first century.

A transect of auger piles were monitored with the intention of recording the profile of the *Colonia* ditch, which runs north south beneath the western end of the school buildings. However, it was not possible to detect the base of the ditch as it was found to be cut into the lias clay underlying the bedrock.

Post-medieval deposits and features identified included fills of the *Colonia* ditch and the remains of a stone built structure and possible cellar. Recent contexts comprised; topsoil, overburden and the foundations of the existing school building.

8. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Helen Brooks of HBS Ltd. who commissioned both the watching brief and this report. The Lincoln City Archaeologist, Michael Jones and the Lincoln City Heritage Officer, John Herridge provided valuable help and advice as well as access to the Lincoln Urban Archaeological Database. The

ARCHAEOLOGICAL WATCHING BRIEF AT WESTGATE PRIMARY SCHOOL, WESTGATE, LINCOLN

project was coordinated by Dale Trimble and Tom Lane edited this report.

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IFA, 1999 Standard and Guidance for Archaeological Watching Briefs.

10. ABBREVIATIONS

APS Archaeological Project Services

IFA Institute of Field Archaeologists

OD Ordnance Datum (Mean Sea Level, Newlyn, Cornwall)



Figure 1: General Location Plan



Figure 2 Site location plan and archaeological setting



Fig. 3 Location of watching brief showing archaeological setting



Fig. 4 Location of groundworks monitored



Fig.5 plan of features recorded in the northeast corner of the groundworks





Fig. 6 Sections 1 to 4



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		Archaeological Project Services
0	1m	Project Name: Lincoln Westgate School LWS04
		Scale 1:20 Drawn by:TBL Report No: 153/0





Fig. 9 Sections 7, 10, 12, 13 and 14

and the states



Fig. 10 Sections 8, 11 and 15



Fig. 11 Sections 16, 17 and 18



Fig. 12 Profile of deposits identified during piling operations



Plate 1 North facing view of site prior to piling

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Plate 2 South facing view showing piling rig cutting through bedrock

Plate 3 Trench 1: south facing section (Section 2)

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Plate 4 Trench 2: southeast facing section (Section 3)

Plate 5 Trench 2: southeast facing section (Section 3), showing [040] in detail

Plate 6 Trench 3: south facing section (Section 6)

Plate 7 Trench 4: south facing section (Section 5)

Plate 8 West facing view Section 11 showing post-hole [088]

Plate 9 East facing view of post-hole [119]

Plate 10 Southwest facing view Section 13

Plate 11 South facing view Section 14

Plate 12 West facing view Section 10

Plate 13 North facing view showing deposits in northeast corner of school hall

Appendix 1

LAND AT WESTGATE JUNIOR SCHOOL, LINCOLN

SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF

BY

ARCHAEOLOGICAL PROJECT SERVICES Institute of Field Archaeologists' Registered Organisation No. 21

MAY 2004

1 SUMMARY

- 1.1 A watching brief is required during construction of an extension at Westgate Primary School, Lincoln.
- 1.2 The site lies in the historic core of the city, northeast of the castle and close to the junction of Westgate and Reservoir Street. The line of the defences of the early Roman military fort have been traced across the site during previous archaeological investigations on the site.
- 1.3 The archaeological work will consist of a watching brief during development works on the site.
- 1.4 On completion of the fieldwork a report will be prepared detailing the results of the watching brief. The report will consist of a narrative supported by illustrations and photographs.

2 INTRODUCTION

- 2.1 This document comprises a specification for archaeological watching brief during development on land at Westgate Primary School, Westgate, Lincoln The site is located at National Grid Reference SK 975 721.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 List of specialists.
 - 2.2.4 Programme of work and staffing structure of the project

3 SITE LOCATION

3.1 Westgate Primary School is located within the historic core of Lincoln, on the north side of Westgate close to its junction with Reservoir Street at National Grid Reference SK 975 721.

4 PLANNING BACKGROUND

- 4.1 The development site is protected as an Ancient Scheduled Monument. Scheduled Monument Consent (HSD9/2/1976pt 41) has been granted subject to an archaeological watching brief during groundworks associated with the development. Planning permission for the development has been granted by Lincolnshire County Council (Application No 2003/0589/CCC) on condition that the requirements of the Scheduled Monument Consent are adhered to and submission of a Written Scheme of Investigation for an archaeological investigation prior to construction.
- 4.2 The development comprises an approximately 20m x 10m extension of the school hall onto the south side of the existing building. The extension will rest on pile and beam foundations designed to minimise impact on buried archaeological remains. Other groundworks will include removal of tarmac from the existing playground and lifting of existing paving up to the former entrance to the building.

5 SOILS AND TOPOGRAPHY

5.1 The site lies at around 64m OD and natural geology consists of bands of Lincolnshire limestone and Northampton Sand ironstone.

6 ARCHAEOLOGICAL OVERVIEW

- 6.1 The site lies within the historic core of the city, close to the northeast corner of the medieval castle. The site is protected as a Scheduled Ancient Monument, due to the discovery of remains of the defences of the early Roman military fort, thought to have been built no earlier than the Neronian period (Jones 2003)
- 6.2 Excavations in 1945-46 were able to trace the line of the legionary ditch of the early fort on the west side of the area of development. These cross the site on a north-south alignment, and probably pass directly underneath the proposed extension to the school hall. Immediately west of the legionary ditch the line of the defences of the later Colonia have been traced and probably extend underneath Reservoir Street. Post holes, probably from an interval tower along the defences of the Colonia overly the legionary ditch. These remains are

deeply buried and unlikely to be impacted on by this phase of the development.

6.3 A recent archaeological watching brief undertaken during exploratory works for the current development revealed no significant archaeological remains (Bradley-Lovekin 2004).

7 AIMS AND OBJECTIVES of features be recorded in plan these will be increase a

- 7.1 The aims of the watching brief will be: which has been also be
 - 7.1.1 To record and interpret the archaeological features exposed during the excavation of the foundation trenches and other areas of ground disturbance.
 - 7.2 The objectives of the watching brief will be to:
 - 7.2.1 Determine the form and function of the archaeological features encountered;
 - 7.2.2 Determine the spatial arrangement of the archaeological features encountered;
 - 7.2.3 As far as practicable, recover dating evidence from the archaeological features, and
 - 7.2.4 Establish the sequence of the archaeological remains present on the site.

8 SITE OPERATIONS

- 8.1 General considerations
 - 8.1.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the watching brief.
 - 8.1.2 The work will be undertaken according to the relevant codes of practise issued by the Institute of Field Archaeologists (IFA), under the management of a Member of the institute (MIFA). Archaeological Project Services is IFA registered organisation no. 21.
 - 8.1.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.
- 8.2 Methodology

- 8.2.1 The watching brief will be undertaken during the ground works phase of development, and includes the archaeological monitoring of all phases of soil movement.
- 8.1.2 Groundworks will be observed regularly to identify and record archaeological features that are exposed and to record changes in the geological conditions. Section drawings will be recorded at a scale of 1:10. Should features be recorded in plan these will be drawn at a scale of 1:20. Written descriptions detailing the nature of the deposits, features and fills encountered will be compiled on Archaeological Project Services pro-forma record sheets.
- 8.2.3 Any finds recovered will be bagged and labelled for later analysis.
 - Throughout the watching brief a photographic record will be compiled. The photographic record will consist of:
 - the site during work to show specific stages, and the layout of the archaeology within the trench.
 - groups of features where their relationship is important
- 8.1.3 Should human remains be located the appropriate Home Office licence will be obtained before their removal. In addition, the Local Environmental Health Department and the police will be informed.

9 POST-EXCAVATION

9.1 Stage 1

- 9.1.2 On completion of site operations, the records and schedules produced during the watching brief will be checked and ordered to ensure that they form a uniform sequence forming a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued and labelled, the labelling referring to schedules identifying the subject/s photographed.
- 9.1.3 All finds recovered during the field work will be washed, marked and packaged according to the deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

9.2 Stage 2

9.2.2 Detailed examination of the stratigraphic matrix to enable the

determination of the various phases of activity on the site.

9.2.3 Finds will be sent to specialists for identification and dating.

9.3 Stage 3

- 9.3.2 On completion of stage 2, a report detailing the findings of the watching brief will be prepared.
- 9.3.3 This will consist of:
 - A non-technical summary of the results of the investigation.
 - A description of the archaeological setting of the watching brief.
 - Description of the topography of the site.

• Description of the methodologies used during the watching brief.

- A text describing the findings of the watching brief.
- A consideration of the local, regional and national context of the watching brief findings.
- Plans of the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- Sections of the archaeological features.
- Interpretation of the archaeological features exposed, and their chronology and setting within the surrounding landscape.
- Specialist reports on the finds from the site.
- Appropriate photographs of the site and specific archaeological features.

10 REPORT DEPOSITION

10.1 Copies of the report will be sent to the Client; HBS; the LCC Archaeology Section and to the County Council Archaeological Sites and Monuments Record.

11 ARCHIVE

11.1 The documentation and records generated during the watching brief will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This will be undertaken following the requirements of the document titled Conditions for the Acceptance of Project Archives for long term storage and curation. An archive number will be obtained from the City and County Museum for deposition of the archive and all site records will be referenced with APS site code LWS 04.

12 PUBLICATION

12.1 A report of the findings of the watching brief will be presented as a condensed article to the editor of the journal *Lincolnshire History and Archaeology*. If appropriate, notes on the findings will be submitted to the appropriate national journals: *Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

13 CURATORIAL RESPONSIBILITY

13.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the Senior Built Environment Officer of the LCC Archaeology Section. They will be given seven days notice in writing before the commencement of the project.

14 VARIATIONS AND CONTINGENCIES

- 14.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.
- 14.2 In the event of the discovery of any unexpected remains of archaeological importance, or of any changed circumstances, it is the responsibility of the archaeological contractor to inform the archaeological curator (*Lincolnshire Archaeological Handbook* 1998, Sections 5.7 and 18).
- 14.3 Where important archaeological remains are discovered and deemed to merit further investigation additional resources may be required to provide an appropriate level of investigation, recording and analysis.
- 14.4 Any contingency requirement for additional fieldwork or post-excavation analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the archaeological curator and the client.

15 PROGRAMME OF WORKS AND STAFFING LEVELS

- 15.1 The watching brief will be integrated with the programme of construction and is dependent on the developers' work programme. It is therefore not possible to specify the person-hours for the archaeological site work.
- 15.2 An archaeological supervisor with experience of watching briefs will undertake the work.
- 15.3 Post-excavation analysis and report production will be undertaken by the archaeological supervisor, or a post-excavation analyst as appropriate, with assistance from a finds supervisor, illustrator and external specialists. It is expected that each fieldwork day (equal to one person-day) will require a post- excavation day (equal to one-and-a-half person-days) for completion of the analysis and report. If the fieldwork lasts longer than about four days then there will be an economy of scale with the post-excavation analysis.

16 SPECIALISTS TO BE USED DURING THE PROJECT

16.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Task

Conservation

Pottery Analysis

undertaking the work

Serve Dress and a serverse

Conservation Laboratory, City and County Museum, Lincoln

Archaeological Trust

Roman - B Precious, Independent Specialist

Anglo-Saxon - J Young, Independent Specialist

Medieval and later - G Taylor, APS in consultation with H Healey, Independent Archaeologist

arching J Cowgill, Independent Specialist

Body

be

Non-pottery Artefacts

Animal Bones

Environmental Archaeology Consultancy

Environmental Analysis

J Rackham, Independent Specialist

Human Remains Analysis

R Gowland, Independent Specialist

17 INSURANCES

17.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

18 COPYRIGHT

- 18.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 18.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 18.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the Copyright, Designs and Patents Act 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the Copyright, Designs and Patents Act 1988 and may result in legal action.
- 18.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

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20 ABBREVIATIONS

- BGS British Geological Surve
- LCC Lincolnshire County Council
- IFA Institute of Field Archaeologists
- APS Archaeological Project Services

Specification: Version 1, November 18th, 2003

Appendix 2

Appendix 2 CONTEXT DESCRIPTIONS

No.	Trench	Description	Depth	Interpretation	
001	Piles 38- 37	Loose med yellowish brown sandy clay	>1m	Deposit	
002	Piles 38- 37	Buff yellowish brown limestone bedrock	1.5m	Natural Limestone	
003	Pile 37	Loose dark yellowish brown sandy clay	0.7m	Topsoil	
004	Pile 43a	Loose light reddish yellow brown sandy clay	>1.3m	Deposit	
005	Pile 60	Friable dark greyish brown clayey sand	1.2m	Deposit	
006	Pile 60	Friable medium brownish grey clayey sand	2.10m	Deposit	
007	Pile 60	Probable clay deposit impacted by piling	0.70m	Deposit	
008	Pile 60	Friable light greyish brown sandy clay	0.30m	Deposit	
009	Pile 60	Friable rich light reddish yellow brown clayey sand	2.7m	Deposit	
010	Pile 60	Loose buff yellowish brown sand and gravel	0.90m	Overburden	
011	Pile 60	Contractors stone mat, limestone scalpings	c.0.50m	Stone mat	
012	Pile 60	Compact dark grey, shingle like, silty clay	1.0m	Deposit	
013	Pile 60	Friable light reddish yellow brown sandy clay.	0.15	Sandy clay	
014	Pile 60	Compact dark grey, shingle like, silty clay	0.47m>	Deposit	
015	Pile 50	Loose medium brownish grey clayey sand	0.50m	Deposit	
016	Pile 50	Soft/ loose medium brownish grey sandy clay.	0.90m	Deposit	
017	Pile 51	Friable medium greyish brown sandy clay	0.60m	Deposit	
018	Pile 51	Soft slightly spongey medium greyish brown sandy clay.	0.80m	Deposit	
019	Pile 51	Probable clay deposit impacted by piling	1.4m	Deposit	
020	Piles 29- 31	Friable dark greyish brown sandy clay	0.54m	Overburden	
021	Trench 1	Modern brick wall, 0.30m wide, associated with existing school building.	0.56m>	Foundation Wall	
022	Trench 1	Concrete hardcore associated with existing school building	0.40m	Construction deposit	
023	Trench 1	Loose dark greyish brown clayey sand	0.40m	Deposit	
024	Trench 1	Compact medium yellowish brown sandy clay.	0.20m	Deposit	
025	Trench 1	Friable medium yellowish grey brown sandy clay.	0.27m	Deposit	
026	Trench 1	Modern brick rubble deposit	0.90>m	Fill of [027]	
027	Trench 1	North south aligned, 0.36>m wide, foundation cut for school hall wall	0.90>m	Foundation cut	
028	Trench 2	Very dark greyish brown sandy silt.	0.45m	Deposit	
029	Trench 2	Compact dark brown sandy silt.	0.77m	Deposit	
030	Trench 2	Moderate mid yellow to mid brown sandy silt	0.29	Deposit	
031	Trench 2	Soft mid-brown sandy silt.	0.18m	Deposit	
032	Trench 2	Compact creamy buff yellow limestone	0.36m	Natural?	

No.	Trench	Description	Depth	Interpretation
046	Trench 4	brash	0.35m>	Par ar [OPS]
033	Trench 2	Friable dark greyish brown slightly clayey sand	0.30m	Overburden
034	Trench 2	Loose dark greyish brown slightly clayey sand.	0.20m	Deposit
035	Trench 2	Friable buff yellowish brown slightly 0.58m>		Natural
036	Trench 2	Loose reddish medium brown sand	0.34m	Deposit
037	Trench 2	N/S aligned, 0.65m> wide cut, possibly test pit (LWS03 TP.1) excavated prior to development.	1.12m>	Recent cut
038	Trench 2	Loose dark greyish brown humic sandy clay	0.58m>	Fill of [037]
039	Trench 2	Loose buff yellowish brown sandy clay	0.52m>	Fill of [037]
040	Trench 2	0.48m diameter concave based cut.	0.37m	Pit or gully cut
041	Trench 2	Friable medium yellowish brown clayey sand	0.37m	Fill of [040]
042	Piles 62- 62a	Friable dark greyish brown sandy clay	1.10m	Deposit
043	Piles 62- 62a	Friable medium yellowish brown sandy clay	0.30m	Deposit
044	Pile 62a	Friable medium yellowish brown sandy clay	0.25m	Deposit
045	Pile 62a	Friable brownish yellow clayey sand	0.65m>	Natural
046	Pile 62	Friable light yellowish brown sandy clay	0.33m	Deposit
047	Pile 60a	Friable medium greyish brown sandy clay	0.70m	Deposit
048	Pile 60a	Friable medium greyish brown sandy clay	0.40m	Deposit
049	Trench 3	Loose yellowish brownish grey sandy silt clay.	0.20m>	Deposit
050	Trench 3	Loose medium reddish brown silty clayey sand	0.19m>	Deposit
051	Trench 4	Friable buff yellowish brown sandy silt clay	0.26m>	Natural
052	Trench 4	North/ south aligned, 0.47m wide, linear cut through natural.	0.28m>	Linear cut
053	Trench 4	Loose pale yellowish brown clayey sand.	0.28m>	Fill of [052]
054	Trench 4	0.41m wide cut, shape and form unclear	0.24m>	Cut feature
055	Trench 4	Loose buff reddish yellow brown / mottled medium reddish brown sandy silt clay	0.24m>	Fill of [054]
056	Trench 4	Friable medium reddish brown sandy clay	0.07m	Deposit
057	Trench 3	Friable dark reddish brown sandy clay	0.23m	Deposit
058	Trench 3	Friable medium reddish brown sandy clay	0.04m	Deposit/ lense
059	Trench 3	Friable medium greyish brown slightly silty sandy clay.	0.15m	Deposit
060	Trench 3	Loose medium slightly reddish, greyish brown sand.	0.13m	Deposit
061	Trench 3	Loose medium reddish brown sand.	0.13m	Deposit
062	Trench 3	Friable buff reddish brown sandy silt clay	0.11m	Deposit
063	Trench 3	Loose medium reddish brown sandy clay	0.18m	Deposit
064	Trench 3	Loose medium reddish brown sand	0.17m	Deposit
065	Trench 4	Vertical robber trench cut, post-medieval.	0.90m>	Robber trench
066	Trench 4	Medium reddish brown sandy silt clay	0.32m>	Fill of [065]
067	Trench 4	Loose reddish grey brown sandy silt clay	0.29m>	Fill of [065]

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No.	Trench	Description	Depth	Interpretation
068	Trench 4	Loose reddish grey brown sandy silt clay	0.35m>	Fill of [066]
069	Trench 4	Vertical service trench cut.	0.80m>	Service trench
070	Trench 4	Loose dark brownish grey silty sand	0.80m>	Fill of [069]
071	Trench 3	N/S aligned cut through post medieval deposits, 0.41m wide.	1.08m>	Cut feature
072	Trench 3	Friable dark greyish brown clayey sand.	0.17m	Deposit
073	Trench 3	Loose dark greyish brown very slightly clayey sand.	0.09m	Deposit
074	Trench 3	Loose dark brownish grey slightly clayey sand	0.32m	Deposit
075	Trench 3	Loose dark brownish grey slightly clayey sand.	0.27m	Deposit
076	Trench 3	Loose dark brownish grey sandy clay	0.14m	Deposit
077	Trench 3	Loose medium greyish brown sandy silt	0.18m	Deposit
078	Trench 3	Loose dark greyish brown sandy silt clay	0.40m	Deposit
079	Trench 3	Loose medium greyish brown sandy silt clay	0.30m>	Fill of [071]
080	Trench 3	Loose mottled medium reddish brown/ medium greyish brown sandy clay.	0.81m	Fill of [071]
081	Trench 3	N/S aligned foundation trench for existing school hall.	9.94m>	Foundation cut
082	Trench 3	Loose, mixed deposit of mid greyish brown sandy silt clay and reddish brown sandy clay	0.94m>	Fill of [081]
083	Trench 3	Unstratified material recovered during machining of Trench 3.	-	Unstratified
084	Beam trenches	Unstratified material recovered during machining of beam trenches within northern portion of existing school hall.	Tipone -	Unstratified
085	Beam trenches	Friable light/ medium reddish brown clayey sand, slightly cessy.	0.15m	Deposit
086	Beam trenches	Friable buff yellowish brown sandy silt clay	0.17m	Deposit
087	Beam trenches	Friable dark reddish brown sandy clay	0.18m	Deposit
088	Beam trenches	Sub-rectangular 0.57 x 0.39m diameter post-hole cut, near vertical sided.	0.29m>	Post-hole cut
089	Beam trenches	Oolitic limestone packing stones. Range 0.09 x 0.05 – 0.25 x 0.19m.	100000	Fill of [088]
090	Beam trenches	Loose medium reddish brown slightly clayey sand. Infilling packing stones [089]	0.28m>	Fill of [088]
091	Beam trenches	Friable mixed medium reddish brown sand with sandy silt clay.	0.03m	Deposit
092	Beam trenches	Friable mid-reddish brown sand	0.17m>	Deposit
093	Beam trenches	Friable medium greyish brown sandy clay	0.15m	Deposit
094	Beam trenches	Friable medium reddish brown sandy clay, post-medieval disturbance.	0.06m	Deposit
095	Beam trenches	Loose/ friable buff yellowish brown sandy silt clay	0.13m	Deposit
096	Beam trenches	Friable dark reddish brown sandy clay	0.05m	Deposit
097	Beam trenches	Friable buff yellowish brown silty sand	0.09m	Deposit

No.	Trench	Description	Depth	Interpretation
098	Beam Brown sand trenches		0.11m	Deposit
099	Beam	Friable buff yellowish brown silty sand	0.28m	Deposit
100	Beam	Loose light reddish brown slightly clayey	0.09m	Deposit
101	Beam	Loose light reddish brown slightly clayey	0.14m	Deposit
102	Beam	Friable buff yellowish brown silty sandy	0.07m	Deposit
103	Beam	Loose buff yellowish brown sandy silt clay	0.12m>	Deposit
104	Beam	Loose reddish medium brown sand	0.24m	Deposit louideour
105	Beam	E/W aligned foundation trench for post	0.38m	Foundation trench
106	Beam trenches	Post-medieval limestone wall; roughly hewn limestone blocks, average size 12 x 6cm	0.40m>	Limestone wall
107	Beam trenches	Cut for brick wall [107]	0.15m	Foundation trench
108	Beam trenches	Brick wall, component of / alteration to [106]	0.15m	Brick wall
109	Beam trenches	Very firm mid-reddish brown slightly silty sand.	0.13m	Deposit
110	Beam	Well compacted buff yellowish brown sandy silt clay	0.08m>	Deposit
111	Beam	North/ south aligned near vertical cut,	0.36m>	Cut feature
112	Beam	Buff mid-yellowish brown sandy silt clay	0.36m>	Fill of [111]
113	Beam	Friable buff yellowish brown sandy silt clay	0.20m	Fill of [119]
114	Beam	Loose light brown / reddish yellow sand	0.06m	Fill of [119]
115	Beam	Loose light greyish brown slightly silty	0.14m	Fill of [119]
116	Beam	Limestone rubble, possible fill of post-hole	Unexcav.	Fill of [119]
117	Beam	Cut for Colonia ditch, probably a later	Unexcav.	Ditch cut
118	Beam trenches	Upper fill of [117]	Unexcav.	Fill of [117]
119	Beam	North/ south aligned vertical sided post- hole cut. 0.58m wide.	0.37m>	Post hole cut
120	Beam trenches	Roughly hewn limestone wall, aligned east west. Average size of blocks 0.32 x 0.17m, post-medieval	Unexcav.	Limestone wall
121	Service	Loose dark greyish brown sandy silt clay.	0.11m>	Deposit
122	Service	Friable buff yellowish brown mortary silt	0.20m	Deposit
123	Service	Friable medium brown sandy clay	0.22m	Deposit
124	Service	Steep sided 0.65m diameter cut.	0.35m	Cut feature
125	Service	Loose mottled dark greyish brown/ dark yellowish brown clayey sand.	0.35m	Fill of [124]

No.	Trench	Description	Depth	Interpretation
126	Service	Friable dark yellowish brown sandy clay.	0.13m	Deposit
	trench	during inscherize of loarn trenches within		Sector Contraction
127	Service trench	Friable dark greyish brown sandy silt clay.	0.15m	Deposit
128	Service Loose medium greyish brown fine sandy trench silt.		-	Topsoil
129	Service Mid to dark brown sandy silt 0.4		0.43m>	Deposit
130	Service	Mottled mid brown/ yellow silty sand	0.20m	Deposit
131	Beam	Friable medium yellowish grey brown	Unexcav.	Deposit
132	Beam trenches	Cut for recent disturbance, possibly in-filled cellar, associated with walls [120] and [106].	Unexcav.	Possible foundation cut
133	Beam trenches	Loose medium reddish grey brown slightly silty sand.	Unexcav.	Fill of [132]
134	Beam	Loose medium greyish brown sandy clay silt.	0.30m	Deposit
135	Beam	Friable medium yellowish brown sandy	0.28m>	Deposit
136	Beam	Cut for small pit within legionary deposits, Steep sided 0.72m in diameter	0.28m>	Pit cut
137	Beam	Friable pale brownish grey sandy clay.	0.09m	Fill of [136]
138	Beam trenches	Loose deposit of buff yellowish brown sandy silt clay, mixed with pale yellowish	0.15m	Fill of [136]
139	Beam	Friable pale yellowish brown sandy silt	0.21m	Upper fill of [136]
140	Beam	North south aligned, flat based cut within legionary deposits	0.30m	Cut feature.
141	Beam	Same as [136]	6.4415	Same as [136]
142	Beam	Feature within legionary deposits, gradually sided, measured 0.85m> diameter.	0.29m	Cut feature
143	Beam	Friable medium greyish brown sandy silt	0.29m	Deposit
144	Beam	Same as [142]	-	Same as [142]
145	Beam	Loose buff yellowish brown silty clay	0.19m	Deposit
146	Béam	Friable medium reddish brown slightly	0.17m	Deposit
147	Beam	Loose buff yellowish brown sandy silt clay	0.05m	Deposit
148	Beam	Friable dark reddish brown sandy clay	0.32m	Deposit
149	Beam trenches	Loose light reddish brown sand, mixed with buff yellowish brown redeposited natural sandy silt clay.	0.07m	Deposit
150	Beam	Plastic dark greyish brown sandy clay	0.08m	Deposit
151	Beam	Vertical sided cut within legionary deposits, measured at least 2m in diameter.	0.30m>	Cut feature
152	Beam trenches	Very firm mid-reddish brown slightly silty sand.	0.30m>	Fill of [151]

No.	Trench	Description	Depth	Interpretation
153	Beam trenches	Recent unstratified material recovered during machining of beam trenches within disturbed areas of existing school hall	-	Unstratified
154	Beam trenchesFriable buff yellowish brown sandy clay silt, mixed with loose pale greyish brown sandy silt. Contained fragments of painted plaster and other occupation debris.		0.11m	Deposit
155	Beam trenches	Loose pale yellowish brown sandy silt	0.15m	Deposit
156	Beam trenches	Loose mid yellowish brownish grey silty sandy clay. Contained occupation debris	0.23m	Deposit
157	Beam trenches	Friable light yellowish brown sandy clay.	0.06m	Deposit
158	Beam trenches	Friable mid-brown sandy clay.	0.21m>	Deposit
159	Beam trenches	Firm mid-reddish brown slightly silty sand.	0.30	Deposit
160	Beam trenches	East/ west orientated roughly hewn limestone and brick wall, average size of limestone blocks 0.27 x 0.10m.	0.38m>?	Limestone wall
161	Beam trenches	Loose medium greyish brown slightly clavey sand.	0.11m>	Deposit
162	Beam trenches	Loose medium reddish yellow brown sand.	0.18m>	Deposit
163	Beam trenches	Friable mottled medium yellowish brown clavev sand.	0.28m	Deposit
164	Beam trenches	Tip line separating two dump deposits (163) and (162).	0.20m>	Tip line
165	Beam trenches	Loose dark greyish brown slightly clayey sand.	0.37m	Overburden
166	Beam trenches	Vertical sided foundation cut for wall [160], at least 0.85m wide.	0.10m>	Foundation cut
167	Beam trenches	Friable medium reddish yellow brown slightly silty sand. Contained post medieval C.B.M fragments.	0.40m	Deposit
168	Piles	Limestone bedrock below (002) identified during piling.	Unexcav.	Natural
169	Piles 62 and 60A	 Buff yellowish brown limestone brash, observed during piling, possibly natural, but possibly re-deposited within <i>Colonia</i> ditch 		Deposit
170	Trench 2	Near vertical feature, cutting (035), filled with (036), 0.14m> diameter	0.33m>	Cut feature
171	Beam trenches	Friable light yellowish greyish brown sandy silt clay deposit cut by [117]	0.28m>	Deposit
172	Trench 4	Friable buff reddish brown sandy silt clay. Within legionary deposits.	0.04m	Deposit

U.P.C.

Appendix 3

The Roman pottery from Lincoln, Westgate School (LWS04) for APS

B J Precious: Late Iron Age and Roman Pottery Consultant

21/10/04

The pottery has been recorded according to the Study Group for Roman Pottery (SGRP) guidelines, using codes currently in use at the City of Lincoln Archaeological Unit, and sherd count and weight as a measure. The site archive has been collated using Microsoft, excel (lws04.xls).

Introduction and dating (See Table 1, below)

The site produced a small, but discretely datable, and high quality assemblage from the Uphill area of Roman Lincoln consisting of 36 sherds weighing 1455 grams from 13 contexts. Almost all of the pottery dates to the 1st century AD with a high proportion being almost certainly of legionary manufacture; Early red-slipped, Cream, Pink, and Legionary grey wares, for example. This evidence fits well with the site's location within the area of the early fortress.

There is no pre-Roman pottery from the site, the earliest being a sherd of South Gaulish samian from context 134, cup form Dr 24/25, with a band of rouletting around the rim. This form is found in Britain in pre-Flavian contexts, although it continues to be made on the Continent into the Flavian period. The presence of a ring-necked flagon (Drawing 2) from context 84, and a wheel-made, native-tradition bowl (Drawing 1) from context 112 indicates a Flavian, rather than Neronian, date for these groups. Legionary wares continue to occur in early 2nd century groups within the City, but rarely after c AD120, as production probably ceased with the departure of the legions.

Two contexts, 49 and 50, produced pottery of distinctly, later date, suggesting an hiatus in the occupation of the area. This later group consists of two fragments of colour-coated beakers from the Nene Valley kilns of late 2nd to early 3rd and mid to late 3rd century date, respectively, and a grey ware jar of similar date.

Table 1: The date range of the Roman pottery from LWS04 by sherd count and weight

Con	text Date range	sherds w	eight s	h/wt
	15RO?	1	1	1
	49L2-E3	2	9	4.5
	50ML3C	1	13	13
	74IC	1	7	7
	76RO	1	1	7
1	841C	1	148	148
	851C	11	807	73.4
	1121-E2	1	38	38
	1131C	1	124	124
	1341C	2	37	18.5

1371-E2	3	43	14.3
1481C	10	220	22
1561C	1	7	7
TOTAL	36	1455	41.45

Condition

There is little evidence of abrasion, indeed most of the sherds are quite fresh and the base of a flagon from context 134 appears to have been unused. The average sherd/weight ratio of over 41 grams is high, indicating a relatively undisturbed assemblage. However, the group also includes a number of large, and relatively heavy amphorae sherds.

Several sherds show evidence of burning on forms not usually associated with cooking. One vessel from context **85** is burnt over the broken edge, indicating destruction rather than use.

Most of the contexts produced less three sherds with only two, **85** and **148**, consisting of 10 and 11 sherds, respectively. There are no definite sherd links, but very similar sherds, probably from the same vessels occur between contexts **85**, **113** and **148**.

Potential – Fabrics and forms (see Tables 2 and 3, below)

Imported wares are generally indicative of relatively, high status occupation, and this site produced a range of rarer, imported amphorae. This is a particularly distinctive group given the small size of the overall assemblage. All are types that cease to be imported by the end of the 1st century. These consist of at least three examples of wine amphorae from a range of sources: an examples from Rhodes (RHOD); the Eastern Mediterranean (EMED2-4); and two unsourced amphorae, but one is similar to the Gauloise 4 type from Southern Gaul. A more exotic content has been found in the last type, London 555, from a probable South Spanish source – olives in sweet liquor. A samian cup, Dr 24, of Neronian date from South Gaul completes this group of imported pottery.

However, the bulk of the pottery consists of wares likely to have been produced by legionary potters: Cream ware (6 sherds), Fine Legionary grey ware (5 sherds), Pink ware (10 sherds), and Red-slipped ware (1 sherd). There is only one example of an early Roman grey ware, a wheel made bowl of native tradition in a grey, gritty fabric with a scatter of shell tempering.

Table 2: The Roman fabrics from LWS04 by sherd count and weight

Fabric	Code	sherds %	6	grams 9	6
Unsourced amphorae	AMPH	2	5.56%	82	5.64%
Cream ware	CR	6	16.67%	260	17.87%
Eastern Mediterranean Dr 2-4 amphorae	EMED2-4?	1	2.78%	65	4.47%
Grey ware	GREY	2	5.56%	5	0.34%
Grey with minimum shell	GYMS	1	2.78%	38	2.61%
London 555 amphorae	L555	2	5.56%	210	14.43%
Legionary grey ware	LEG	5	13.89%	40	2.75%
Nene Valley colour-coated ware	NVCC	2	5.56%	18	1.24%
Unsourced oxidised ware	OX	2	5.56%	19	1.31%
Pink ware	PINK	10	27.78%	312	21.44%
Early Roman red-slipped ware	RDSL	1	2.78%	74	5.09%
Rhodian amphorae	RHOD	1	2.78%	330	22.68%
South Gaulish samian	SAMSG	1	2.78%	2	0.14%

TOTAL 36 100.00% 1455 100.00%

The small group of mid to late Roman pottery is also mainly composed of fine ware, two colour-coated beakers imported from the Nene Valley kilns at Peterborough. The accompanying sherd of grey ware is gritty with a light grey core and may be a product of the kilns in the upper Nene Valley.

Form	Code	sherds	%	grams	%
Undiagnostic		2	5.56%	5 2	0.14%
Samian cup Dr 24	24	1	2.78%	5 2	0.14%
Amphorae	Α	6	16.67%	687	47.22%
Flagon	F	12	33.33%	255	17.53%
Flagon?	F?	1	2.78%	5 18	1.24%
Large flagon	FL	2	5.56%	5 144	9.90%
Large flagon?	FL?	1	2.78%	25	1.72%
Ring-necked flagon	FR	1	2.78%	148	10.17%
Curved-rim beaker	BKCR	1	2.78%	5	0.34%
Everted-rim beaker	BKEV	1	2.78%	5 7	0.48%
Folded, scale decorated beaker	BKFOSC	1	2.78%	13	0.89%
Jar or beaker	JBK	5	13.89%	37	2.54%
Native tradition bowl	BNAT	1	2.78%	38	2.61%
Large bowl	BL	1	2.78%	74	5.09%
	TOTAL	36	100.00%	1455	100.00%

Table 3: The Roman forms from LWS04 by sherd count and weight

The forms, in particular, provide good evidence for the type of occupation on this site with several amphorae providing wine from different sources and exotic, olives in sweet liquor. There are at least eight flagons into which the wine may well have been decanted. Beakers, a fine, samian cup together with several small jars or beakers were used for drinking. A large, red-slipped bowl would have been used for serving goods at the table, but there is only one vessel that would have been used for cooking – the native tradition, coarse ware bowl.

Taken together this suggests that, apart from the military connection, this group could be the remains of a high-class dining room or taverna.

Recommendations and further work

This small but distinctive group provides evidence for relatively, high status Roman occupation within the area of the early fortress and of compatible date. The homogenous date range allows for good comparisons with other early Roman assemblages from the Upper City.

- The fabrics of the early Roman amphorae require further analysis. Thin sections of these excellent examples would provide good comparisons with those that form part of the Lincoln Fabric Collection.
- Two vessels have been selected for drawing for both dating and intrinsic importance. Drawing 1 is a native-tradition bowl in an unusual fabric with a rim not hitherto noted within the Corpus of Roman pottery from Lincoln. Drawing 2, a Cream ware, ring-necked flagon, also has a unique rim, and the potting technology used in applying the handle is unusual. These two vessels should be illustrated and included in the final report.

Storage and Curation

The pottery is in stable condition and should be retained for further work.

CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHS	1	NT
15	OX				1000	VABR	SCRAP POOR MIX CLAY; GREY IN OX EXT SURF LOST			1	1
15	ZDATE		R80		1.		RO?	0.00			36
15	ZZZ	a,	1.1.1.1			A State of the	SCRAP ONLY; PROB RO				
49	GREY	JBK			1.1	ABR	BS CF NVGWC		1	1	4
49	NVCC	BKCR					RIM POSS BKNV35-36			1	5
49	ZDATE			9			L2-E3				
50	NVCC	BKFOSC				0.1240.4	BS			1	13
50	ZDATE						ML3C	-	-		
50	ZZZ						PROB M3C				
74	CR	F					BS; PALE FAB DARKER EXT WASH			1	7
74	ZDATE						IC				
74	ZZZ						PINK ONLY; LEGIONARY		2.12		A Description
76	GREY					VABR	SCRAP GRSA?			1	1
76	ZDATE						RO				
76	ZZZ						SCRAP ONLY				
84	CR	FR			2		RIM NECK HANDLE SCAR; UNUS MANUFACTURE		-	1	148
84	ZDATE						10				
84	ZZZ						CR ONLY POSS FLTR		1		-
85	AMPH	A					BS MICACEOUS SOME ROCKS CF DR20 ELSE GAU4			1	64
85	CR	F		1?		1	HANDLE 2R; BS			2	45
85	CR	FL?	-		0.	я	BS THICK PALE FAB DK CR EXT WASH		1 2	1	25
85	EMED2-47	A					BS V MICACEOUS		1	1	65
85	L555	A	RSC				BS: SAME IN	148		1	176
85	LEG	JBK	ROUZ			STAIN	BS BLK STAIN INT NOT SOOT			1	6
85	LEG	JBK				BURNT	BS			1	2
85	PINK	FL					BS THICK AS IN	113		1	20
85	RDSL	BL				BURNTE	BS BASAL LGE VESS THICK: LEG			1	74
85	RHOD	A					BS HANDLE		1	1	330
85	ZDATE						10				
85	777						POSS 70-100: DESTRUCTION? BURNT EDGE RDSI				
85	777						GOOD RARE AMPHORAE: THIN SECTION				-
112	GYMS	BNAT	WM		1	1	RIM: NR IAGR MIN SHELL SOME GRITS			1	38
112	ZDATE	Divit									00
112	777						GYMS ONLY: UNUS RIM : FABRIC				
112	PINK	FI			-		BS: LEGIONARY FABRIC: AS IN	85	5	1	124
113	ZDATE							00			124
113	777										
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The Roman pottery archive from Lincoln, Westgate School (LWS04) for Dale Trimble, APS

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148	PINK	F		1		BSS NECK PALE PINK; LEG		8	168
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156	ZDATE					1C		2	2
156	ZZZ					LEG ONLY			T.C.

Appendix 4

THE POST-MEDIEVAL POTTERY AND OTHER FINDS by Paul Cope-Faulkner and Gary Taylor

Recording of the pottery was undertaken with reference to guidelines prepared by the Medieval Pottery Research Group (Slowikowski *et al.* 2001) and the pottery was quantified using the chronology and coding system of the Lincolnshire ceramic type series. A total of 9 fragments of pottery weighing 562g and representing 4 individual vessels was recovered from 4 separate contexts. In addition to the pottery, a quantity of other artefacts, mostly building materials, comprising 23 items weighing a total of 979g, was retrieved.

The excavated animal bone assemblage comprises 26 stratified fragments weighing 537g. The animal bone was identified by reference to published catalogues. No attempt is made to sex or age animals represented within the assemblage, although where this is readily apparent is noted in the comments column.

Provenance

The material was recovered from a range of deposits including layers, ditch fills, post-hole fills and pit fills.

All of the pottery was probably made in Staffordshire. Much of the tile was probably manufactured fairly locally in the Lincoln area.

Range

The range of material is detailed in the tables.

Tal	ble	1:	Po	otterv

Context	Fabric Code	Description	No.	Wt (g)	Context Date
049	LSTON	Late stoneware flagon	1	72	Late 19 th -early 20 th century
050	LSTON	Late stoneware, handle	1	22	Late 19 th -early 20 th century
078	TPW	Blue and white transfer printed tableware, lid	1	9	19 th century
153	LSTON	Late stoneware preserve jar	6 (link)	459	Late 19 th -early 20 th century

Table 2: Other Artefacts

Context	Material	Description	No.	Wt (g)	Context Date
006	Slag	Iron smithing slag, late post- medieval	1	4	Late post- medieval
	CBM	Tile	2	3	Sec. 15 Bernard and
006, pile 62	СВМ	Tile, oxidized throughout	1	4	Post-medieval
009	CBM	Tile	1	2	such - Round this
014	Stone	Burnt flint pebble	1	1	in the states in the factor
016	CBM	Brick/tile	1	4	and deprivation of
028	CBM	Pantile	1	126	Post-medieval
049	CBM	Tile, reduced core, 17mm thick	1	456	Medieval
085	Plaster	Plaster, white/white painted	4	3	wine pastule a
094	CBM	Handmade brick	1	27	Post-medieval
112	CBM	Tile, Roman	2	165	Medieval?
	CBM	Tile, medieval?	1	92] .
113	CBM	Tile, Roman, abraded	1	29	Roman
143	Stone	Burnt stone	1	51	
154	Mortar	Mortar	2	7	
	Plaster	Plaster, white/white painted	2	5	1

A few pieces of Roman tile were recovered. Deposit (112) contained two such pieces, plus a third tile that is probably medieval but could be overfired Roman.

Context	Species	Bone	No.	Wt (g)	Comments
001	bird	unidentified	1	1	prob. chicken
005	oyster	shell	1	5	fragment
041	cattle sized	ulna	1 1 1	8	ober ity the accheveragist and a decore
050	cattle sized	unidentified	1	18	ton of the contract (the numbers should us of
074	pig	canine	1	4	enamel only
084	pig unidentified	mandible unidentified	1	35 1	inc. 3 molars, a canine and 2 incisors
085	cattle sized cattle sized cattle sized cattle sized sheep sized	skull rib scapula unidentified scapula	1 2 1 1 1	10 32 24 2 7	deep butchery marks
112	cattle sized	radius	1	33	we account of the
134	cattle cattle sheep sized	radius ulna mandible	1 1 2	163 38 41	two animals, one ?juvenile
143	cattle	2 nd phalange	1	14	
148	cattle sized cattle sized	skull scapula	1 4	10 84	all from same bone
156	sheep sized sheep sized	ulna unidentified	1 1	3 4	

Table 3: The Faunal Remains

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Condition

All the material is in good condition and presents no long-term storage problems. Archive storage of the collection is by material class.

Documentation

There have been previous archaeological investigations at Westgate Primary School and in Lincoln in general and there has been reported study of the archaeological and historical evidence for the city. Details of archaeological sites and discoveries in the area are maintained in the Lincoln Urban Archaeological Database and the Lincolnshire County Council Sites and Monuments Record.

Potential

In general, the assemblage has limited local potential but reflects use of the area at the end of the 19th-beginning of the 20th century.

Other than the Roman tile (and pottery, reported separately), there is a dearth of material between the Roman period and the late post-medieval. This may imply that deposits of Saxon to early post-medieval date are absent from the area, or were not disturbed by the development, or were of a nature that did not involve artefact deposition.

References

Slowikowski, A., Nenk, B. and Pearce, J., 2001 Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics, Medieval Pottery Research Group Occasional Paper 2

Appendix 5

GLOSSARY

Anglo-Saxon	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> [004].
Colonia	Settlement established by Roman Imperial authorities for the benefit of retired legionaries. In Britain they were commonly established within the boundaries of former legionary fortresses.
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc</i> . Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Domesday Survey	A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) that become contained by the 'cut' are referred to as its fill(s).
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
Layer	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
Neronian	Period of rule by Emperor Nero during mid to late 1 st century AD.
Old English	The language used by the Saxon $(q.v.)$ occupants of Britain.
Posthole	The hole cut to take a timber post, usually in an upright position. The hole may have been dug larger than the post and contain soil or stones to support the post. Alternatively, the posthole may have been formed through the process of driving the post into the ground.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.
Rampart	Defensive embankment for fortifications.

Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saxo-Norman	This term is used to define the transition from the Anglo-Saxon to the Medieval period which occurred between approximately AD 850-1150. The Domesday Survey was compiled towards the end of this period in AD 1086.
Transformed	Soil deposits that have been changed. The agencies of such changes include natural processes, such as fluctuating water tables, worm or root action, and human activities such as gardening or agriculture. This transformation process serves to homogenise soil, erasing evidence of layering or features.

Appendix 4

THE ARCHIVE

The archive consists of:

172	Context records

27 Scale drawing sheets

3 Photographic record sheets

1 Box of finds

All primary records and finds are currently kept at:

Archaeological Project Services The Old School Cameron Street Heckington Sleaford Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

Lincolnshire City and County Museum 12 Friars Lane Lincoln LN2 1HQ

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The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number: Archaeological Project Services Site Code: LCNCC: 2003:371 LWS04

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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