

Figure 1 : Site Location Plan



Figure 2: Watching Brief Location Plan



Figure 3: Location of Test Pits, Trial Trenches, Service Trenches and the 2009 Excavation area



Figure 4: Plan of features encountered at Western extent of the site during the Watching Brief



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Figure 7: Phasing of features encountered during phases of work at Grange Paddock's, including extrapolation of potential linear features



Figure 8: Phasing of features found during excavations at Grange Paddocks Leisure Centre.

Figure 8	FIGURE	report no: CP 941/09	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	Introduction of the pennines Archaeology Ltd 2010 Grange Paddocks Leisure Centre Bishop's Stortford CLENT: Wardell Armstrong LLP Everyone Active DRAWNBY: HN DRAWNBY: HN DRAWNBY: First century features Skeletal remains found Skeletal remains found Skeletal remains found Late second to fourth century spread Late fourth century spread Extent of late fourth century spread Extent of late fourth century spread Extent of late fourth century spread Extent of late fourth century spread Extent of late fourth century spread	PENNINES

Ζ Section #5 West Facing Section of Test Pit F11 Section #3 East Facing Section of Test Pit C10 (2012) NATURAL (2013) HARDCORE NATURAL (2015) [2014] (2005) [2006] Ζ (2009) (2012) NATURAL (2010)[2011] Section #4 South Facing Section of Romano-British ditch within Test Pit E4 (2019)(2017) (2019) (2007) HARDCORE ≻[2008] NATURAL VOID S 57.87

Figure 9: Sections 3 to 5, showing features within Test Pits C10, E4 and F11 respectively.

FIGURE: Figure 9	REPORT No: CP 941/09	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majestry's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	Brick Concrete Modern service pipe Animal bone Evel (m AOD)	DRAWN BY: MME DATE: May 2010 KEY:	scaue: 1:20 at A3	^{CLIENT:} Wardell Armstrong LLP Everyone Active	North Pennines Archaeology Ltd 2009 Grange Paddocks Bishop's Stortford	ARCHAEOLOGY

Figure 10: Sections 6 to 9, showing features and deposits within Test Pits C3, E4, D/E7 and E7 respectively.



Section #9 East Facing Section of deposits (2027) (2028), within Test Pit D/

E7

 $\frac{1}{38,35}$

FIGURE: Figure 10	REPORT No: CP 941/09	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	Pottery	58,35 Level (m AOD)	Modern service pipe	Concrete	KEY: Brick	DATE: May 2010	DRAWN BY: MME	scale: 1:20 at A3	cLIENT: Wardell Armstrong LLP Everyone Active	North Pennines Archaeology Ltd 2009 Grange Paddocks Bishop's Stortford	ARCHAEOLOGY









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FIGURE: Figure 11	report No: CP 941/09	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	KEY:	date: Drawn by: Initials date: May 2010	scale: 1:20 at A3	_{CLIENT:} Wardell Armstrong LLP Everyone Active	North Pennines Archaeology Ltd 2010 Grange Paddocks Bishop's Stortford	ARCHAEOLOGY

Figure 12: Sections 14 and 15, showing features and deposits within Service Trenches ST 3 and ST 1.

Section #15 South West Section of deposit (2036), feature [2037], within Service Trench ST 1



Section #14 North West Facing Section of deposit (2034), and feature [2035], within Service Trench, ST 3



FIGURE: Figure 12	report no: CP 941/10	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majestry's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	KEY: Concrete Modern service pipe <u>38.35</u> Level (m AOD)	drawn by: MME date: May 2010	scale: 1:20 at A3	CLIENT: Wardell Armstrong LLP Everyone Active	North Pennines Archaeology Ltd 2010 Grange Paddocks Bishop's Stortford	ARCHAEOLOGY



Section #18 North West Facing Section of deposits (2039) [2041] (2042), within Service Trench, ST 7

[2041]

FIGURE: Figure 13	REPORT No: CP 941/09	Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	KEY: Brick Concrete 38.35 Level (m AOD)	DATE: May 2010	SCALE: 1:20 at A3	^{CLIENT:} Wardell Armstrong LLP Everyone Active	North Pennines Archaeology Ltd 2010 Grange Paddocks Bishop's Stortford	ARCHAEOLOGY

Figure 14: Sections 20 and 23, showing deposits and features within Service Trench ST 7 and ST 19 respectively.





Section #23







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GRANGE PADDOCKS,

BISHOP'S STORTFORD

HERTFORDSHIRE



WATCHING BRIEF REPORT CP. NO: 941/09 14/05/2010

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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by North Pennines Archaeology Ltd on the preparation of reports.

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SUMMARY

North Pennines Archaeology Ltd were commissioned by Wardell Armstrong LLP, acting for their clients 'Everyone Active', to undertake an archaeological watching brief on groundworks relating to the proposed extension at Grange Paddocks Leisure Centre, Bishop's Stortford, Hertfordshire (NGR TL 4895 2207).

The site lies within an Area of Archaeological Significance as designated on the East Hertfordshire District Council's Local Plan (Number 113). The area to the east of the site encompasses the Cannon Close estate, which was excavated during the 1950's, and was found to overlie the remains of a substantial Romano-British urban settlement. Excavations in 1978, within the area of the current dressing rooms found evidence of Roman activity comprising pits and postholes, dating to the 1st and 3rd centuries AD.

An evaluation and rapid desk-based assessment in 2001 found further evidence of Roman pits, ditches and burials ranging in date from mid 1^{st} to 3^{rd} centuries AD, in an area to the north of the current proposed development. More Roman features and pottery dating to the $3^{rd} - 4^{th}$ centuries AD were found in four of eight test pits dug during an evaluation carried out by NPA Ltd, in June 2009.

Subsequently, NPA Ltd carried out an excavation which revealed three phases of activity at the site; Roman, post– medieval and modern. Roman pits and a shallow ditch dating to the 4th century AD were found during this initial phase, with the skeletal remains of an elderly female being found in the northern end of the site, beneath the south wall of the changing rooms.

As a direct result of the findings above, and due to the potential for archaeological features to be disturbed during these works, it was deemed necessary for an archaeological watching brief to be undertaken. This was undertaken to monitor the excavation of a series of foundation pits and service trenches, relating to the extension to the current leisure centre existing at the site, as well as the construction of two metal fire staircases at either end of the site.

The watching brief was undertaken as several phases of work over a period of five months, with the work commencing in August 2009, and finishing in January 2010. The watching brief monitored the excavation of thirty-four test pits, nineteen service trenches, five stair well trenches within the footprint of the proposed extension, and an area measuring 5m² used for topsoil storage, to the east of the development. The test pits were located where concrete pads are to be placed for the metal frame of the new structure, while the service trenches were in most cases existing trenches that were reexcavated to add to or alter services within. The stair-well trenches were excavated on the outside on the west and east sides of the building.

Archaeological remains were found in thirteen of the thirty-four test pits, and comprised pits and evidence for occupational layers, in varying degrees of

preservation, with most features demonstrating evidence of truncation from prior construction phases at the site. Five of the test-pits were excavated and backfilled with concrete prior to the commencement of the watching brief. The remaining sixteen were so heavily disturbed from previous construction work that no archaeological layers survived and were backfilled.

Six of the nineteen service trenches contained archaeological deposits of which, in three trenches, the features were visible in section only, as they had been truncated by existing trenches. Six service trenches were through heavily disturbed areas of the site and the remaining seven did not go deeper than the hardcore / rubble layer that was below the top layer of concrete. One of the five stair-well trenches contained archaeology. No archaeology was encountered during stripping of topsoil within a 5m² bund.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks in association with the proposed extension at Grange Paddocks Leisure Centre, no further work is deemed necessary. However, given the high archaeological potential of the area, it is recommended that any future work within the vicinity of the site be subject to a programme of archaeological investigation.

Furthermore, it is envisaged that this phase of works will be used, in conjunction with previous archaeological excavations conducted to the north of the site (BSG-B), as the basis for an article for a local archaeological journal, such as the Hertfordshire Archaeology and History Journal.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Helen Martin-Bacon of Wardell Armstrong Ltd, for commissioning the project, and for all assistance throughout the work.

North Pennines Archaeology Ltd would also like to extend their thanks to the plant operators and groundsmen from R.A Swann Ltd and Phoenix Construction Ltd.

The archaeological watching brief was undertaken by Nigel Cavanagh, David Jackson and Michael McElligott. The report was written by Michael McElligott and Helen Noakes. The drawings were produced by Michael McElligott and Helen Noakes. The environmental analysis was undertaken by Don O'Meara and Thomas Whitbread.

The project was managed by Frank Giecco, Technical Director for NPA Ltd. The report was edited by Matthew Town, Project Manager for NPA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In August 2009, North Pennines Archaeology were invited by Wardell Armstrong Ltd, to maintain an archaeological watching brief at Grange Paddocks, Bishop's Stortford, Hertfordshire (NGR TL 4895 2207; Figure 1 and Figure 2). This was conducted during groundworks associated with the excavation of test pits and service trenches relating to the extension of the current leisure centre complex.
- 1.1.2 The proposed works lie within the immediate vicinity of a Romano-British Settlement. Previous fieldwork carried out at the site (Garfi 1979, Crank et al 2001, Giecco 2009, and Cavanagh and Noakes 2009) confirmed the presence of significant Roman remains, comprising pits, ditches and occupational spreads as well as a possible cemetery dating from the 1st to the 4th centuries AD.
- 1.1.3 As a result, Alison Tinniswood, Historic Environment Officer of Hertfordshire County Council Historic Environment Unit (HEU), requested that all ground reduction be subject to a programme of archaeological observation and investigation. This is in line with government advice as set out in the DoE Planning Policy Guidance on Archaeology and Planning (PPG 16).
- 1.1.4 All groundworks associated with the development of Grange Paddocks were excavated under full archaeological supervision, and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2002), and were consistent with the specification provided by Martin-Bacon (2009) and generally accepted best practice.
- 1.1.5 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 **PROJECT DESIGN**

2.1.1 A Written Scheme of Investigation (WSI) was submitted by Helen Martin Bacon of Wardell Armstrong, for an archaeological watching brief of the study area. Following acceptance of the WSI by Alison Tinniswood, Historic Environment Officer with HEU, North Pennines Archaeology Ltd was commissioned by Wardell Armstrong to undertake the work. The WSI was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

- 2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2002).
- 2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
 - to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
 - to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately leveled;
 - to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
 - to produce a photographic record of all contexts using colour digital, 35mm colour slide and monochrome formats, each photograph including a graduated metric scale;
 - to recover artefactual material, especially that useful of dating purposes;
 - to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 An area of approximately 115.3m² comprising thirty-four test pits, nineteen service trenches and five stair well trenches were marked out. The test pits were sub-square and measured a maximum of 1.7m in length, 1.6m in width, and were up to 1.45m in depth. The service trenches were linear in shape and were excavated to a maximum of 6.4m in length, 1m in width and 1.21m in depth. The foundation test pits and service trenches were stripped of overlying deposits to the required levels.

2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited within the Bishop's Stortford Museum. The archive can be accessed under the unique project identifier NPA09, BSG-C, CP 941/09.
- 2.3.2 North Pennines Archaeology support the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project. The site has been given the unique identification number, northpen3-77196 as part of the OASIS project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Grange Paddocks Leisure Centre, situated at NGR: TL 4895 2207, is located on the northern edge of Bishop's Stortford in the valley of the River Stort (Figures 1 and 2). The site lies on the flood plain just to the east of the river Stort.
- 3.1.2 The underlying geology of the site comprises terrace gravels relating to the close proximity of the River Stort. Within the site the soils belong to the Melford association, described as being derived from deep, well drained loams overlying calcareous clayey subsoil (Soil Survey of England and Wales, 1983).
- 3.1.3 The area of the excavation lies within the shell of a previous building constructed at the site, and used as part of the leisure centre complex. The groundworks, consisting of thirty-four test pits, are to be excavated to form concrete pads for the frame of a new building structure. Nineteen service trenches were excavated to realign existing service pipes to newly created services within the buildings footprint. Five stair-well trenches were dug on the west and east sides of the structure (Figure 3).

3.2 HISTORICAL CONTEXT

- 3.2.1 The proposed development is located within an Area of Archaeological Significance which includes substantial evidence of a Roman urban settlement, centered within the Cannons Close estate. The Roman road known as Stane Street, which linked Bishop's Stortford with the Braughing to Colchester road network, is located to the northern side of Stane Street, and crosses the playing fields on an east-west alignment, less than 50m to the south of the swimming pool.
- 3.2.2 The location of Stane Street, which appears to have been used as a fording point during the Roman period, and the close proximity of the settlement centered within the Cannons Close Estate, suggest that settlement is likely to have been related to the military control of the area. It has also been postulated that this settlement served as an imperial posting station, created to protect the juncture of a vital trading route.
- 3.2.3 Excavations at Legions Way suggest that the date of construction of Stane Street is from the 1st century AD, with a dense occupation occurring during the 2nd century AD (Fell 2002). This evaluation also found evidence for a burial within a roadside ditch.

- 3.2.4 During the 1953-60 excavations of Cannon Close, foundations for a substantial building of a Roman date were observed, but not planned. Finds of gold rings and steelyards were also discovered during these salvage works, which were led by Wing Commander T.W.Ellcock. Further excavations at Cannons Close during 1956 found evidence for a burial located under the pavement outside numbers 174 and 175 Cannon Close, and which contained the body of a shrouded man (*stortfordhistory.co.uk*).
- 3.2.5 The Roman occupation of Bishop's Stortford appears to be well documented until the 5th century, when the Stane Street crossing of the River Stort appears to have fallen out of use, and a new fording point is constructed 2.5km to the south.

3.3 **PREVIOUS WORK**

- 3.3.1 A rescue excavation was undertaken in 1978 by the East Hertfordshire Excavation Group, and the Bishop's Stortford and District Local History Society. This excavation was conducted within the area immediately to the north of the site.
- 3.3.2 The excavation found evidence for two phases of activity, represented by the remains of a small concentration of pits and gullies cut into the underlying river gravels. The findings of this excavation suggested that the site had been subject to a partial abandonment during the 2nd century AD, characterised by the lack of any material culture dating to this period.
- 3.3.3 Further works were undertaken in 2001 by Hertfordshire Archaeological Trust (HAT), who conducted a six trench archaeological evaluation (Crank *et al* 2001). This evaluation found evidence for a small inhumation cemetery, located approximately 10m to the north of the current building. Furthermore, evidence for a continued occupation from the 1st through to the 3rd century was identified within all the trenches, represented by a series of ditches, gullies and small pits.
- 3.3.4 In June 2009, North Pennines Archaeology Ltd conducted a geotechnical survey at the site (Giecco 2009). Eight Test Pits were excavated and archaeological features, consisting of pits and soil spreads, dating to at least two separate phases were observed within four of these trenches. The findings of this investigation concurred with those of the 1978 excavations, suggesting that substantial archaeological features would survive in situ beneath the proposed excavation area, which could also potentially be directly be related to features found during the 1978 excavations, and would furthermore help to resolve whether the site had been continuously occupied from the 1st to the 3rd centuries AD.

3.3.5 In June 2009, an excavation was undertaken by NPA Ltd (Cavanagh and Noakes 2010). The excavation found evidence for three phases of activity occurring at the site representing Roman, post-medieval and modern activities, with the main focus of Roman activity seemingly occurring during the 4th century AD. Further excavation to the north of this area found the skeletal remains of an elderly female, and further supports the evidence for an inhumation cemetery at the site.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken between August 2009 and January 2010. This involved the monitoring of thirty-four foundation test pits, nineteen service trenches, and five stair-well trenches. The foundation test pits were for the frame of the new structure and were located within the remains of the current building (Figure 3). Most of the service trenches were dug into existing trenches to extend or modify current service pipes. All test pits and trenches comprised a layer of topsoil overlying a layer of hardcore / rubble / sand. The test pits and trenches were excavated with a Kubota mini-digger fitted with a toothed bucket.

4.2 TEST PITS B11, C8, C9, C/B10 & D11

- 4.2.1 Test Pits B11, C8, C9, C/B10 and D11 were dug and filled with concrete prior to the watching brief commencing. No archaeological remains were therefore encountered within these pits, although the proximity of the current building walls to the test pits suggested heavy truncation was likely to have occurred.
- 4.2.2 Test Pits B11, C8, C9 and C/B10 measured 1.25m² and were excavated to a depth of 1.4m. Test pit D11 was 1.5m in length, 0.87m in width and was excavated to a depth of 1.4m. All the test pits were located within the building in the northeast corner of the site (Figure 3).

4.3 **TEST PIT C3**

- 4.3.1 Test Pit C3 was located within the middle of the north end of the site (Figure 4). The test pit measured 1.1m in length, 0.85m in width and was excavated to a depth of 1m. Natural sands and gravels were revealed at the base of the test pit, 0.70m below ground level.
- 4.3.2 Overlying this, a layer comprising dark brown silty clay with frequent natural pieces of flint (2016), was observed to a depth of 0.35m (Figure 10, Section 6). Layer (2016) was visible in the east and south sides of the test pit and was truncated by concrete footings to the north and west.
- 4.3.3 Overlying all these deposits, hardcore was observed to a depth of 0.09m, with concrete sealing all the above deposits from a depth of 0.26m below the current ground level.

4.4 **TEST PIT C6**

- 4.4.1 Test Pit C6 measured 1.25m in length, 1.45m in width and was excavated to a depth of 1.0m. Natural sands and gravels were encountered at 0.36m below ground level, overlain by sands, hardcore and concrete.
- 4.4.2 The test pit was entirely truncated by a recent concrete footing. No archaeological deposits were found (Plate 1).



Plate 1: South facing photograph of Test pit C6.

4.5 **TEST PIT C7**

- 4.5.1 Test Pit C7 was located in the middle of the site, measured 0.8m in width, 1.0m in length, and was excavated to a depth of 1.4m. Natural sands and gravels, measuring more than 1.2m deep were seen at 0.30m below ground level, these in turn were overlain by hardcore and concrete.
- 4.5.2 No archaeological deposits were noted as the test pit was heavily truncated by recent concrete footings.

4.6 **TEST PIT C10**

- 4.6.1 Test Pit C10 was located to the east side of the site, measured1.15m in length, 1.25m in width and was excavated to a depth of 1.42m. A north south aligned concrete footing ran through the middle of this test pit. Natural sands and gravels were found 0.70m below ground level, cut by Pit [2006], which was sealed by hardcore and concrete.
- 4.6.2 Pit **[2006]** was located on west side of the test pit. It measured 0.95m in diameter and was 0.40m depth, with concave sides and a gradual base

(Figure 9, Section 3). The single fill **(2005)** comprised compacted dark brown/grey silty clay and contained frequent pieces of natural flint, occasional charcoal flecks, oyster shell and Romano–British pottery. Pit **[2006]** was partially truncated by the later hardcore deposits and continued outside of the test pit.

4.7 **TEST PIT D1**

- 4.7.1 Test Pit D1 was located in the west side of the site. It measured 1.2m in width, 1.5m in length and was excavated to a depth of 1.45m. Concrete and brick foundation footings were observed to be orientated east-west along the north edge of the test pit. The west side of the test pit was truncated by a service pipe. Natural sands and gravels were encountered 0.73m below ground level, cut by layer (2029), which was sealed by hardcore, rubble and concrete.
- 4.7.2 Layer **(2029)** was a possible large spread or pit, truncated to the north and west by later concrete footings and extending beyond the test pit to the south and east (Figure 11, Section 10). The full depth of the deposit was not determined as it continued beyond the 1.45m depth required for the test pit.
- 4.7.3 This deposit (2029) was more than 0.74m deep and comprised loose, dark brown sandy clay. It contained occasional animal bone, Romano–British pottery, charcoal flecks, one piece of CBM, and frequent amounts of natural flint and roots. The upper part of the fill was truncated by a hardcore layer.
- 4.7.4 Deposit (2029) may be a continuation of a Romano–British occupation layer, and is similar to deposits observed within nearby test pits, D2 (2032), D3 (2033) and possibly C3 (2016). However, it is possible that this represents a series of refuse pits; the above deposits appear to become shallower going east as it goes from 0.74m in depth in test pit D1 (2029), to 0.23m in depth in test pit D3 (2033), which could be attributed to these being separate features.

4.8 **TEST PIT D2**

- 4.8.1 Test Pit D2, which was located to the northwest of the site (Figure 2), measured 1.3m in length, 1.2m in width, and was excavated to a depth of 1.5m. An east–west aligned concrete footing ran along the north side of the test pit. Natural sands and gravels were found at 1.16m below ground level, overlain by a deposit (2032), which was truncated by hardcore, sands and concrete (Figure 11, Section 12 and Plate 2).
- 4.8.2 The deposit **(2032)** measured 0.64m in width, 1.2m in length and was excavated to a depth of 0.58m. This deposit was visible throughout the test pit, and comprised very compact, dark brown sandy clay with frequent

natural flint inclusions and occasional Romano–British pottery, animal bone and charcoal flecks.



Plate 2: East facing photograph of Test Pit D2, showing possible occupation layer (2032).

4.8.3 No cut was visible within section, and the limited dimensions of the test pit coupled with the truncation of the deposit at the northern extent, mean that the interpretation of this feature is subject to some uncertainty. There is a possibility that deposit (2032) is either part of a large pit, or that it is a continuation of a Romano- British occupation layer observed within Test Pits D1 (2029), D3 (2033) and possibly C3 (2016).

4.9 **TEST PIT D3**

- 4.9.1 Test Pit D3 was located in the northwest corner of the site. Measuring 0.9m in width, 1.53m in length and excavated to a depth 1.4m, this contained a concrete footing aligned east to west along the north side of the test pit. Natural sands and gravels were found 0.75m below ground level sealed by deposit (2033), which was truncated by hardcore, sands and concrete.
- 4.9.2 The deposit **(2033)** measured 0.71m in width, 1.53m in length and was excavated to a depth of 0.23m, with no visible profile due to the extents of the test pit. The deposit comprised compacted, dark brown sandy clay with frequent natural flint, occasional charcoal flecks and very occasional animal bone (Figure 11, Section 13).
- 4.9.3 Deposit (2033) is the shallow fill of what could be a very large pit, similar in nature to deposits (2029) in D1, (2032) in D2 and (2016) in C3. It may also be

part of a Romano–British occupation layer that was previously excavated during the 2009 excavation phase, and numbered **(1006)**.

4.10 **TEST PIT D6**

- 4.10.1 Test Pit D6 was located in the middle of the site and measured 1.7m in length, 1.5m in width and was excavated to a depth of 1.45m (Figure 2). An east-west aligned concrete and brick footing truncated the northern side of the test pit. Natural sands and gravels were found 0.75m below ground level, cut by a pit [2031], which was truncated by hardcore, sand and concrete.
- 4.10.2 This pit **[2031]** which was located at the south end of the test pit was observed to measure 1.5m in diameter and was excavated to a depth of 0.34m. This feature had moderately steep sides and a flat base in profile (Figure 11, Section 11). The full extent of pit **[2031]** could not be determined as it continued beyond the limit of excavation of this test pit. The single fill **(2030)** comprised moderately loose, dark brown sandy clay with frequent natural flint, occasional Romano–British pottery, animal bone, charcoal flecks and oyster shell.

4.11 **TEST PIT D8**

- 4.11.1 Test Pit D8, which was located to the south of the northern wall measured 1.35m in width, 1.6m in length and was excavated to a depth of 1.4m (Figure 2). Natural sands and gravels were encountered at 1.03m below ground level, and were overlain by 0.64m of rubble backfill and 0.39m of hardcore, sands and concrete.
- 4.11.2 No archaeological deposits survived in this test pit due to heavy truncation by two concrete footings. The first of which was orientated east-west along the north side of the test pit, the second was orientated north-south along the west side of the test pit.

4.12 **TEST PIT D10**

- 4.12.1 Test Pit D10, which was located in the northeast corner of the site, to the south of the north wall, measured 1.4m in length, 1.1m in width and was excavated to a depth of 1.45m (Figure 5).
- 4.12.2 Natural sands and gravels were found at 0.40m below ground level and were excavated to a depth of 1.20m. The sands and gravels were overlain by 0.20m of hardcore and sand, below 0.20m of concrete. No archaeological deposits were noted within this test pit.

4.13 **TEST PIT D/E1**

- 4.13.1 Test Pit D/E1, which was located in the northwest corner of the west side of the site, measured 1.9m in length, 1.9m in width and was excavated to a depth of 1.35m (Figure 4). Natural sands and gravels were found at 1.03m below ground level, and were overlain by 0.86m of rubble backfill, hardcore and sand, below 0.23m of concrete.
- 4.13.2 The area within the test pit was heavily disturbed and as a result, there are no surviving archaeological deposits.

4.14 **TEST PIT D/E7**

- 4.14.1 Test Pit D/E7 which was located in the middle of the building, measured 1.1m in length, 0.75m in width and was excavated to a depth of 1.2m (Figure 4). Natural sands and gravels were observed at a depth of 0.82m and were overlain by deposits (2028) and (2027), which were sealed by the hardcore and concrete layer.
- 4.14.2 A deposit (2027) was evident throughout the test pit to a depth of 0.30m and comprised compact, dark brown sandy clay with frequent inclusions of natural flint, moderate amounts of animal bone including some burnt bone, frequent charcoal flecks and oyster shells. Finds of Romano–British pottery, copper and iron objects and one piece of CBM were recovered from within this deposit (Figure 10, Section 9).
- 4.14.3 Overlying this deposit (2028) another deposit (2027), was observed to a depth of 0.15m, and was a possible secondary fill of a pit. It comprised moderately compact, mid brown sandy clay with frequent inclusions of natural flint, oyster shells, and charcoal flecks, with pieces of antler bone, Romano-British pottery, daub and one piece of tile being recovered from within this deposit.
- 4.14.4 Deposits (2027) and (2028) are possibly fills of a large pit which, due to the limited dimensions of the test pit, was not fully excavated. No visible cut was observed within the test pit, suggesting that either the test pit may be located within the centre of the feature, or that these deposits were occupational layers, similar in nature to those encountered in the 2009 excavation phase, and to deposits found in Test Pits C3 (2016), E2, E3, D1 (2029), D2 (2032), and D3 (2033).

4.15 **TEST PIT E1**

4.15.1 Test Pit E1, which was located in the southwest corner of the site, measured1.6m in width, 1.8m in length and was excavated to a depth of 1.5m (Figure4). The natural substrate was observed at 1.10m below ground level, and

this was overlain by a 0.50m thick layer of rubble and backfill, which was sealed by a 0.30m layer of bedding sand and concrete.

4.15.2 Test Pit E1 largely contained concrete footings and service pipes, which had heavily truncated the area, as a result no archaeological features were found.

4.16 **TEST PIT E2**

- 4.16.1 Test Pit E2, which was located in the west side of the site, measured 1.4m in length, 1.4m in with and was excavated to a depth of 1.45m (Figure 4). Natural sands and gravels were encountered at 0.90m below ground level, and were overlain by 0.30m of a possible occupation layer (2046) which was sealed by hardcore, sand and concrete.
- 4.16.2 Test Pit E2 was backfilled with concrete immediately following excavation. A deposit **(2046)** comprised moderately compacted blackish-brown silty sand which contained inclusions of flint and charcoal was observed but no finds recovery was attempted. This deposit was similar in composition to those noted in Pits E3, ST7 and ST8.

4.17 **TEST PIT E3**

- 4.17.1 Test Pit E3, which was located in the west side of the site, measured 1.4m in length, 1.4m in width and was excavated to a depth of 1.45m (Figure 4). Natural sands and gravels were encountered at 0.90m below ground level and were overlain by 0.30m of a possible occupation layer (2047), which was sealed by hardcore, sand and concrete.
- 4.17.2 Test Pit E3 was backfilled with concrete immediately following excavation. The layer noted was similar in composition to those noted in pits E2, ST7 and ST8.

4.18 **TEST PIT E4**

- 4.18.1 Test Pit E4 was located in the middle of the building and measured 1.6m in width, 1.7m in length and was excavated to a depth of 1.45m.
- 4.18.2 Natural sands and gravels were encountered at 0.77m below ground level and were cut by a pit **[2020]** and a ditch **[2008]**, which were sealed by a 0.20m thick concrete slab. The slab was overlain by 0.15m of hardcore and sands, overlain by 0.42 of rubble backfill and concrete.
- 4.18.3 Pit **[2020]** was sub-circular in plan, where visible, measured 0.93m in diameter and was observed to a depth of 0.55m. It was steep sided with a flat base in profile (Figure 10, Section 7). The single fill **(2019)** comprised compact mid brown- grey sandy clay with occasional pieces of natural flint,
oyster shells, charcoal flecks, and finds of Romano – British pottery, one piece of possibly worked flint, one Roman nail, one small piece of iron and occasional animal bone. Pit **[2020]** was truncated by Ditch **[2008]**.

4.18.4 Ditch **[2008]** was aligned north-south in the west half of the test pit. It measured 1.4m in length, 1.0m in width and was 1.1m in depth, continuing beyond the limit of excavation. The ditch **[2008]**, which was vertically sided, with a concave base (Figure 9, Section 4, Plate 3), was filled by a single deposit **(2007)**. This deposit **(2007)** comprised soft, dark brown-grey silty clay with frequent natural flint, pebbles and gravel. Finds of Romano-British pottery, animal bone and occasional oyster shells were recovered from within this deposit.

4.19 **TEST PIT E7**

- 4.19.1 Test Pit E7, which was located in the middle of the site, measured 1.62m in width, 1.7m in length and was excavated to a depth of 1.45m. The natural substrate, which comprised sand and gravel were encountered at 0.50m below ground level, and were cut by Pit [2022] and Pit [2024], which were sealed by a 0.09m layer of re-deposited natural (2025). These deposits were then overlaid by 0.50m of hardcore, sand and concrete (Figure 10, Section 8, Plate 6).
- 4.19.2 Pit **[2022]** was located in the northwest corner of the pit, continuing beyond the limit of excavation and measured 0.58m in diameter and was excavated to a depth of 0.85m. It was sub-circular in plan with very steep sides and a flat base. The single fill of this feature **(2021)** comprised compacted dark brown sandy clay with frequent natural flint and charcoal inclusions. Moderate amounts of Romano–British pottery, animal bone and antler, and oyster shells were recovered from within this deposit.
- 4.19.3 Pit [**2024**] was located in the south end of the test pit with only a small area visible. It measured 0.8m in diameter and was excavated to a depth of 0.38m. This feature, with steep sides and a flat base in profile, was filled by a single deposit, **(2023)**.
- 4.19.4 This deposit (2023) comprised compacted, dark brown sandy clay and contained frequent sherds of Romano-British pottery, including a whole mortaria (Plate 6). Occasional inclusions comprising animal bone, charcoal flecks, oyster shell and one piece of dolomite, which may have been the pestle for the mortaria, were recovered from within this deposit.



Plate 3: Section shot of linear [2008]/(2007), Test Pit E4, looking north



Plate 4: Section shot of linear [2008]/(2007) & Pit [2020]/(2019), Test Pit E4, looking south



Plate 5: Shot of pit [2024]/(2023) showing mortaria in situ, Test Pit E7, looking southeast.



Plate 6: Post Ex Shot of pit [2024]/(2023) & [2022]/(2021), Test Pit E7, looking southeast.

4.19.5 Layer (2025) was present throughout the trench and sealed all archaeological features. The fill comprised compact mid brown silty clay and contained frequent natural flint inclusions, patches of sand gravel and occasional pieces of modern brick and plastic.

4.20 **TEST PIT E8**

- 4.20.1 Test Pit E8, which was located on the east side of the site, measured 1.7m in length, 1.6m in width and was excavated to a depth of 1.4m (Figure 5). Natural sands and gravels were encountered at 0.53m below ground level overlain by hardcore, sand and concrete.
- 4.20.2 No archaeological deposits were encountered within this test pit, potentially due to heavy truncation from previous construction work.

4.21 **TEST PIT E10**

- 4.21.1 Test Pit E10, which was located in the southeast corner of the site, measured 1.7m in length, 1.1m in width and was excavated to a depth of 1.4m (Figure 5). Natural sands and gravels were encountered at 0.40m below ground level, and were overlaid by hardcore, sand and concrete.
- 4.21.2 No archaeological deposits survived within the test pit. A north-south aligned concrete foundation footing ran along the east side of the pit measuring 1.1m deep by 0.35m wide. An east-west aligned large service drain measuring 0.7m in depth was also noted.

4.22 **TEST PIT F1**

4.22.1 Test Pit F1, which was located in the southwest corner of the site, measured 3.2m in length, 1.06m in width and was excavated to a depth of 1.45m (Figure 4, Plate 7). The whole area within the test pit had been heavily disturbed by concrete footings and other foundation works. Deposits comprising layers of re-deposited natural, rubble, hardcore and concrete were the only deposits to be observed within this test pit.

4.23 **TEST PIT F2**

- 4.23.1 Test Pit F2, which was located in the southwest corner of the site, measured 1.44m in length, 1.45m in width and was excavated to a depth of 1.3m (Figure 4). Natural sands and gravels were encountered at 0.66m below ground level overlain by hardcore, sand and concrete.
- 4.23.2 No archaeological deposits survived due to heavy truncation by concrete footings and service trenches.



Plate 7: Shot of Test Pit F1, looking east

4.24 **TEST PIT F3**

- 4.24.1 Test Pit F3, which was located in the southwest corner of the site, measured 1.23m in length, 1.1m in width and was excavated to a depth of 1.45m (Figure 4). Natural sands and gravels were encountered at 0.78m below ground level overlain by 0.53m of hardcore, backfill and sand layers sealed by concrete.
- 4.24.2 Test Pit F3 was heavily truncated by recent construction work and no archaeological features were noted.

4.25 **TEST PIT F4**

- 4.25.1 Test Pit F4, which was located in the southwest corner of the site, measured 1.3m in length, 1.1m in width and was excavated to a depth of 1.3m (Figure 4). Natural sands and gravels were encountered at 0.72m below ground level, and were overlaid by a 0.09m thick layer of re-deposited sand and gravels. All of these deposits were sealed by 0.63m of hardcore, sand and concrete.
- 4.25.2 No archaeological deposits survived as the area within the test pit had been heavily disturbed by previous construction work.

4.26 **TEST PIT F6**

- 4.26.1 Test Pit F6, which was located in the middle of the site, measured 1.3m in length, 1.2m in width and was excavated to a depth of 1.3m (Figure 4). Natural sands and gravels were not encountered within the test pit. A 0.60m thick series of re-deposited gravels and rubble were overlain by concrete.
- 4.26.2 The depth of re-deposited layers meant that any surviving archaeological deposits were not found.

4.27 **TEST PIT F8**

- 4.27.1 Test Pit F8, which was located in the middle of the site, measured 1.4m in length, 1.2m in width and was excavated to a depth of 1.2 (Figure 5). Recent backfill was noted from the base of excavation to 0.40m below ground. These deposits were overlain by hardcore and concrete.
- 4.27.2 No archaeological deposits were encountered within this test pit.

4.28 **TEST PIT F9**

- 4.28.1 Test Pit F9, which was located in the southeast corner of the site, measured 0.9m in width, 1.17m in depth and was excavated to a depth of 1.49m (Figure 5). Natural sands and gravels were encountered at 0.93m below ground level, and were overlain by a 0.46m thick layer of hardcore and backfill. The test pit was sealed by 0.36m of bedding sand and concrete.
- 4.28.1 Test Pit F9 was truncated by a northeast southwest aligned service trench. No archaeological deposits were found.

4.29 **TEST PIT F10**

- 4.29.1 Test Pit F10, which was located in the southeast corner of the site, measured 1m in length, 1m in width and was excavated to a depth of 1.4m deep (Figure 5). Natural sands and gravels were encountered at 0.40m below ground level, and were overlaid by bedding sand and concrete.
- 4.29.2 A southeast to northwest aligned service drain and concrete foundation footings were found within the trench. No archaeological deposits were found.

4.30 TEST PIT F11

4.30.1 Test Pit F11, which was located in the southeast corner of the site, measured4.79m in length, 1.1m in width and was excavated to a depth of 1.27m (Figure 5). Natural sands and gravels were encountered at 0.27m, and were

truncated by pits **[2018]** and **[2011]**. These features were overlain by deposit **(2009)**, which was sealed by 0.20m of mid grey-brown sandy loam topsoil.

- 4.30.2 Pit [2018] was located in the southern half of the test pit and was only visible in section. It measured 1.5m in diameter and was excavated to a depth of 0.50m. This feature, which had steep sides and a flat base in profile (Figure 9, Section 5, Plate 8), was filled by a single deposit (2017).
- 4.30.3 This deposit (2017), comprised moderately compact orangey mid brown silty clay with frequent natural flint and charcoal inclusions. Pieces of Romano–British pottery and oyster shell were recovered from within this feature. Pit [2018] was truncated to east by another pit [2011].
- 4.30.4 Pit **[2011]**, which was visible in section, measured 0.50m in diameter and was excavated to a depth of 0.25m. This feature which had a steep sided and flat based profile, (Figure 9, Section 5, Plate 8), contained a single deposit **(2010)**.
- 4.30.5 This deposit (2010) comprised brown grey silty sand, which contained sherds of Romano–British pottery. The deposit was sealed by an occupation layer (2009).
- 4.30.6 This layer (2009), comprised firm, mid grey brown sandy silt, containing gravel, cobbles and pebbles, Romano–British pottery, animal bone including an animals skull and oyster shell. Layer (2009) was mostly located on the south end of the trench and did not appear to continue beyond the northern edge, where it was truncated by service trench [2014] (Figure 9, Section 5, Plate 8).
- 4.30.7 Service trench **[2014]** was observed to a width of 0.89m and a depth of 0.71m. It contained two deposits, **(2015)** and **(2013)**, the latter of which represented the lower stony gravel base.
- 4.30.8 This feature appears to have been a dump or leveling deposit occupying a dip or natural undulation in the underlying natural gravels, which is comparable to Romano–British occupation layers seen during previous work phases at the site.

4.31 TRIAL PIT 1

- 4.31.1 Trial Pit 1, which was located to the north of the site, and 5m to the west of the 2009 excavation area (BSG-B), measured 1.4m in length, 1.05m in width and was excavated to a depth of 1.09m.
- 4.31.2 Natural sands and gravels were encountered at a depth of 1.40m below the current ground level, and were cut by pit **[2049]**. This feature, which measured 2m in diameter, was excavated to a depth of 0.38m. The pit **[2049]**

had a shallow base, and was filled by a single deposit **(2050)**, which comprised compacted dark brown sandy clay.

- 4.31.3 This feature was overlain in the northern corner by re-deposited natural (2051), which was observed to a depth of 0.3m. Backfill (2052) was observed within the southern corner of the trial pit, and was observed to a depth of 0.32m.
- 4.31.4 Both the above deposits (2051) and (2052) were overlain by topsoil, which comprised moderately compacted dark brown silty sand.



Plate 8: Shot of pits [2011]/(2010) & [2018]/(2017), Test Pit F11, looking east



Plate 9: Shot of Trench ST1, showing [2037]/ (2036), looking northeast

4.32 SERVICE TRENCH ST1

- 4.32.1 Service Trench ST1, which was aligned south east- north west, was located to the east side of the site and measured 5m in length, 0.51m in width, and was excavated to a depth of 1.2m deep. Natural sands and gravels were encountered at 0.65m below ground level and were truncated by pit [2037]. A 0.65m layer of hardcore and rubble overlaid the pit which was sealed by concrete.
- 4.32.2 Pit **[2037]** was observed in the northwest end of the test pit and was only visible in section due to truncation by a service trench. Pit **[2037]** measured 1.06m in length and was 0.31m in depth, with gradual sloped sides and a flat base in profile (Figure 12, Section 15, Plate 9). The single fill **(2036)** comprised moderately compact dark brown silty clay with frequent natural flint inclusions, occasional Romano–British pottery, charcoal flecks and oyster shells.
- 4.32.3 Pit **[2037]** appears to be Romano–British in date, and has been heavily truncated by a service trench and by the backfill layer, which appears to extend to the east side of the room and along the north side of the southern wall.

4.33 SERVICE TRENCH ST2

- 4.33.1 Service Trench ST2, was located on the east side of the site and measured 2.45m long x 0.52m wide x 1.18m deep with a gradual slope from north east to south west (Figure 5, Plate 10). Natural sands and gravels were recorded at 0.63m below ground, overlain by 0.30m of rubble backfill and 0.13m of sand and hardcore. The trench was sealed by concrete.
- 4.33.2 No archaeological deposits were observed within this trench as the area had been heavily disturbed by previous construction work.

4.34 SERVICE TRENCH ST3

4.34.1 Service Trench ST3 was located to the north east of service trench 1 on the eastern side of the site. It was orientated north east-south west and measured 4.2m in length, 0.5m in width, and was excavated to a maximum depth of 0.78m (Figure 5, Plate 11).



Plate 10: Shot of Trench ST2, looking northeast



Plate 11: Shot Trench ST3, showing [2035]/ (2034), looking southeast

- 4.34.2 Service Trench 3 was an existing service trench, reopened and excavated down to expose a service pipe that ran through the middle in a north east-south west direction. Natural sand and gravels were found at 0.53m below the ground level, and were cut by a pit **[2035]**. This pit **[2035]** had been truncated by a 0.26m thick layer of backfilled rubble, which in turn was overlain by 0.27m of bedding sand and concrete.
- 4.34.3 Pit **[2035]** was located in the southern end of the trench and was only visible on the northwest facing section due to previous truncation by the earlier service trench and later deposits of hardcore and rubble. It measured 1.25m in length and was filled to a depth of 0.4m. This feature, with gradually sloped sides and a flat base in profile (Figure 12, Section 14), was filled by a single deposit **(2034)**.
- 4.34.4 This deposit (2034) comprised moderately compact dark brown silty clay with frequent flint and oyster shell inclusions. Romano–British pottery, charcoal flecks, animal bone and patches of gravelly sand were also observed within this deposit.
- 4.34.5 The pit **[2035]** was not visible in the south east facing section of the trench, as it appeared to be truncated by the backfill layer so it is not known how far the pit extended.

4.35 SERVICE TRENCH ST4

- 4.35.1 Service Trench ST4 was located 1.7m to the south west of the southern end of trench ST1, on the east side of the site. It was orientated northwest-southeast and was next to a manhole (Figure 5). It measured 1.2m in length, 0.51m in width and was excavated to a depth of 0.79m. Natural geology was not found within the service trench, with 0.35m deep of backfilled materials overlain by a 0.44m layer of hardcore and concrete.
- 4.35.2 No archaeological deposits were found within this small trench most likely due to the more recent truncation within this area.

4.36 SERVICE TRENCH ST5

- 4.36.1 Service Trench ST5 was located to the northeast of the southern end of trench ST1, on the east side of the site. It was orientated northeast-southwest and it measured 1m in length, 0.55m in width and was excavated to a depth of 0.56m. Natural geology was not found within the service trench, with 0.20m deep of backfilled materials overlain by a 0.36m layer of hardcore and concrete.
- 4.36.2 No archaeological deposits were found within this small trench. This trench directly overlay an existing service.

4.37. SERVICE TRENCH ST6

- 4.37.1 Service Trench ST6 was located on the southwest side of ST1, 0.6m from the northern end (Figure 5). It was orientated northwest-southeast and measured 1.75m in length, 0.55m in width and was excavated to a maximum depth of 1.19m. Natural sands and gravels were found at 0.91m below ground level, and were cut by a possible pit **[2053]** and overlain by a possible occupation spread **(2040)**. A layer of stone gravel measuring between 0.10m and 0.35m depth sealed both features. A 0.33m layer of hardcore and gravel overlay the gravels.
- 4.37.2 The pit **[2053]** was seen in the southwest facing section, measuring 0.65m in length and 0.35m in depth and was truncated by a service trench. This was filled by a single deposit, which comprised compacted dark brown silty clay with frequent natural flint and charcoal inclusions, with finds of oyster shell, animal bone and one small piece of iron **(2038)**(Figure 13, Section 17)
- 4.37.3 A possible occupation spread (2040), was noted in the northwest facing section, measuring 1m in length and 0.13m in depth. The layer comprised moderately compact dark brown silty clay, which contained frequent natural flint and occasional charcoal flecks.
- 4.37.4 It is possible that this deposit (2040) is the spread of materials from the truncation of a pit [2053], and due to the similarity in the composition of this deposit, it is likely to be a spread of deposit (2038) rather than being a separate feature.

4.38 SERVICE TRENCH ST7

- 4.38.1 Service trench ST7 was located to the north of test pit E4 and was orientated northeast-southwest (Figure 4). It measured 3.55m in length, 0.5m in width and was excavated to a depth of 0.94m. Natural sands and gravels were found at 1.46m below ground level, overlaid by a spread (2042) which was cut by a ditch [2041]. The archaeological features were overlain by 0.44m depth of hardcore, rubble and concrete.
- 4.38.2 A ditch **[2041]** was aligned north-south within ST7 with only the cut of the western extent visible. The east side was truncated by a deep concrete and brick foundation footing. It is a continuation of **[2008]** which was found within test pit E4. Ditch **[2041]** measured 1.07m in width, and between 0.40m in depth the northwest side of ST7 to 0.8m in depth on the southeast.
- 4.38.3 In profile ditch [2041] was steep sided and had a flat base (Figure 13, Section 18). The single fill within this feature (2039) comprised compact dark brown silty clay, which contained frequent natural flint inclusions, occasional

charcoal flecks, Romano–British pottery, animal bone and oyster shell, along with four pieces of daub.

4.38.4 Ditch **[2041]** appeared to cut spread **(2042)**, which measured 0.70m east – west and comprised moderately loose darkish / mid brown sandy clay with frequent natural flint and one piece of pottery.

4.39 SERVICE TRENCH ST8

- 4.39.1 Service Trench ST8 was located in the west side of the site, orientated northsouth between test pits E3 and E4. It measured 4.7m in length, 0.48m in width and was excavated to a depth of 0.94m. Natural sands and gravels were found at 0.88m below ground level and were overlain by a continuation of a spread of materials (2042), which were initially uncovered in Service Trench 7 (Figure 13, Section 19 and Figure 14, Section 20, Plate 12).
- 4.39.2 The continuation of a ditch **[2041]** which cut natural sands and gravels and spread **(2042)**, was also observed within this service trench. The features were sealed by a 0.38m layer of hardcore and concrete.



Plate 12: Photograph of service trench ST8, showing Ditch [2041] and Spread (2042), looking southwest.

4.40 SERVICE TRENCH ST9

4.40.1 Service Trench ST9 was located in the west side of the building, joined to the southern end of ST8 and was orientated northwest-southeast. This trench measured 6.4m in length, 0.53m in width and was excavated to a depth of 0.46m at the northwestern end, and to 0.94m at the southeastern (Figure 4).

- 4.40.2 A layer of recent backfill was found at a depth of 0.46m and 0.94m below ground level. The backfill deposits were overlaid by a 0.17m thick layer of stone gravel which was sealed by 0.46m depth of hardcore and concrete.
- 4.40.3 No archaeological deposits survive in this trench. It had been heavily disturbed by previous construction works in the area with two service trenches visible.

4.41 SERVICE TRENCH ST10

- 4.41.1 Service Trench ST10 was orientated east-west and was located to the west side of the site (Figure 4). It measured 1.34m in length, 0.47m in width and was excavated to a depth of 0.59m. The test pit was excavated to the top of a concrete slab which was overlaid by 0.19m thick of backfill. The trench was sealed by a 0.40m thick layer of hardcore and concrete (Plate 13).
- 4.41.2 No archaeological layers survived within the trench due to heavy truncation during previous construction work.



Plate 13: General view of Trench ST10, looking east

4.42 SERVICE TRENCH ST11

- 4.42.1 Service Trench ST11 was orientated northwest-southeast and was located on the west side of the site (Figure 4). It measured 2.8m in length, 0.48m in width and was excavated to a depth of 0.5m. No natural deposits were found within this test pit. A layer of modern backfill was found at 0.46m below ground level overlain by hardcore and concrete.
- 4.42.2 No archaeological deposits survive in the trench due to heavy truncation caused during previous construction work.

4.43 SERVICE TRENCH ST12

- 4.43.1 Service Trench ST12, which was located in the western side of the site to the east of test pits E1 and D/E1, was orientated north-west and measured 4.05m in length, 0.65m in width and 0.49m in depth (Figure 4). Natural geology was not found within the trench, although a layer of stone gravel was found at 0.43m below ground level, and was overlain by hardcore and concrete.
- 4.43.2 No archaeological deposits survived in the trench. Service Trench 12 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.44 SERVICE TRENCH ST13

- 4.44.1 Service Trench ST13 was located to the east of test pit D/E1, in the western side of the site. It was orientated north-south and measured 1.3m in length, 1m in width and 0.43m in depth (Figure 4). Natural geological deposits were not found as the test pit was only excavated within the hardcore and concrete layer, in order to locate an existing service.
- 4.44.2 No archaeological deposits were observed within the trench.

4.45 SERVICE TRENCH ST14

- 4.45.1 Service Trench ST14 was orientated east-west in the western half of the site, and measured 1.3m in length, 0.56m in width and was 0.4m in depth (Figure 4). Natural geological deposits were not found as the test pit was only excavated within the hardcore and concrete layer.
- 4.45.2 No archaeological deposits survived in the trench. ST14 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.46 SERVICE TRENCH ST15

- 4.46.1 Service Trench ST15, which was located on the eastern side of the site, and was orientated east-west, measured 0.47m in length, 0.63m in width and was excavated to a depth of 1m (Figure 5). Natural geological deposits were not found as the test pit was only excavated within a 0.57m thick layer of backfill overlain by hardcore and concrete.
- 4.46.2 No archaeological deposits survived in the trench. ST15 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.47 SERVICE TRENCH ST16

- 4.47.1 Service Trench ST16, which was orientated north-south, was located in the eastern half of the site (Figure 5). It measured 1.32m in length, 0.9m in width and 0.4m in depth. Natural geological deposits were not found as the test pit was only excavated within the hardcore and concrete layer.
- 4.47.2 No archaeological deposits survived in the trench. ST16 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.48 SERVICE TRENCH ST17

- 4.48.1 Service Trench ST17, which was orientated northeast-southwest, was located on the northeast corner of the site. It measured 2.06m in length, 0.53m in width and 0.3m in depth (Figure 5). Natural geological deposits were not found as the test pit was only excavated within the hardcore and concrete layer.
- 4.48.2 No archaeological deposits survived in the trench. ST17 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.49 SERVICE TRENCH ST18

- 4.49.1 Service Trench ST18 was orientated northwest-southeast and was located in the southeastern corner of the site. It measured 1.35m in length, 0.57m in width and was 0.4m in depth (Figure 5). Natural geological deposits were not found as the test pit was only excavated within the hardcore and concrete layer.
- 4.49.2 No archaeological deposits survived in the trench. ST18 was excavated to find the location of an existing service therefore did not disturb archaeological deposits.

4.50 SERVICE TRENCH ST 19

- 4.50.1 Service Trench ST 19 was orientated northeast-southwest and was located to the northeast of the 2009 excavation area (Figure 6). This trench measured 6.8m in length, 0.40m in width and was excavated to a depth of 1.07m. Natural sands and gravels were observed within the base of the trench from a depth of 1m below the ground level. This deposit was cut in the northwestern corner by a possible pit [2058] (Figure 14, Section 23).
- 4.50.2 This pit **[2058]**, which was unexcavated due to the ground being frozen, was observed to be a maximum diameter of 1.35m and was observed within section to be 0.38m in depth. This feature was filled by moderately compacted dark brown sandy clay deposit **(2057)**. Overlying this deposit, a modern layer was observed to a depth of 0.32m **(2052)**, which comprised moderately compacted orange-brown sandy clay with frequent inclusions of rubble and building debris.
- 4.50.3 The above deposits were overlain by a layer of topsoil, which comprised loosely compacted dark black-brown silty sand, which was observed to a depth of 0.30m.

4.51 STAIRWELL TRENCHES 1 TO 3

- 4.51.2 Stairwell Trench 1 was orientated east-west and was located on the western side of the site. This trench measured 1.86m in length, 0.60m in width and was excavated to a depth of 1.0m. Stairwell trenches 2 and 3 were excavated to the north of the previous stairwell trench, and both measured 3m in length, 0.60m in width and were excavated to a depth of 1.10m (Figure 4).
- 4.51.3 No archaeological features were observed within these trenches, which were observed to contain natural sand and gravels ranging from depths of 0.70m to 0.80m below the ground level.

4.52 STAIRWELL TRENCH 4

- 4.52.1 Stairwell Trench 4, which was located to the eastern extent of the site, measured 3m in length, 1.70m in width, and was excavated to a depth of 1.2m (Figure 5). This trench, which was initially intended to be two separate trenches, was excavated as a single entity due to the changed needs of the construction.
- 4.52.2 Natural gravels were observed from a depth of 1.10m below the ground level, and were overlaid cut in the southeastern corner of the trench by a small pit [2043].

- 4.52.3 This pit **[2043]**, which measured a maximum diameter of 0.55m, was filled to a depth of 0.5m by loosely compacted dark brown silty clay **(2044)**, which had frequent flint inclusions.
- 4.52.4 Overlying this deposit and observed within the rest of the trench, modern backfill, comprising moderately compacted dark brown silty clay (2045) was observed to a depth of 0.6m. A total of three service pipes were observed within this deposit, suggestive that this area has been previously truncated, and that the pit observed within the southeast of the trench, may have been more substantial than observed.

4.53 STAIRWELL TRENCH 5

- 4.53.1 Stairwell Trench 5, which was aligned east-west, measured 1.25m in length, 0.60m in width and was excavated to a depth of 0.6m (Figure 5).
- 4.53.2 Natural gravel was observed from a depth of 0.50m below the ground level, and was observed to have been truncated by the creation of a modern manhole and a foundation trench for the existing leisure centre complex.
- 4.53.3 Overlying the above, topsoil was observed to a depth of 0.49m and comprised moderately compacted dark brown silty sand.

4.54 TOPSOIL STORAGE AREA

- 4.54.1 An area measuring 5m² located to the south-east of the watching brief area, was excavated for use as a topsoil storage and bund area (Figure 3). This area was excavated to a maximum depth of 0.8m, at which point natural gravel was observed.
- 4.54.2 No archaeological features were observed during this strip, and the deposits encountered comprised moderately compacted dark brown silty clays, which were 0.75m in depth and comprised subsoil overlaid by loose topsoil.

5 FINDS

5.1 FINDS ASSESSMENT

- 5.1.1 A total of two-hundred and twenty-three sherds of Roman pottery were recovered during the course of the watching brief, and these are discussed below.
- 5.1.2 The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director).

5.2 ROMAN CERAMIC VESSELS, BY LOUISE HIRD

- 5.2.1 In total 217 sherds of Roman ceramic vessels, weighing 5900 grams were recovered (table 1); of these seventy-six sherds derived from coarse wares, fifteen sherds were of fine wares, twenty sherds of black burnished wares, three sherds were of Lower Nene Valley Colour Coat ware, forty-six sherds were from a source nearby or within Verulamium (St Albans) and fifty-seven sherds were of coarse southern grog-tempered wares.
- 5.2.2 The reduced and coarse wares were recovered from eleven separate contexts and were predominantly manufactured from the Oxfordshire pottery industries and included red-slipped ware (OXF RS), Oxford reduced ware (OXF R), Oxford fine reduced ware (OXF FR), Oxford white slipped ware (OXF WS) and Oxford white ware (OXF WH). Pottery from this source is generally observed to date from manufacture in the late 2nd to early 3rd centuries AD.
- 5.2.3 The Black Burnished Wares were recovered from five separate contexts; deposits (2009) and (2036) contained a total of 6 sherds of pottery, which were from an unknown source. Contexts (2004), (2005) and (2007) contained a total of fifteen sherds of Black Burnished Wares, identified as having been produced in nearby Colchester.
- 5.2.4 The dating range for this Type 2 assemblage is roughly the late 2nd century to early third century AD, based on the acute lattice decoration on the pottery. Black Burnished ware has become synonymously associated with a military presence, due to the vast quantities found to have been traded on the Antoine wall. This type of pottery was firmly utilitarian, being used predominantly within a domestic sphere.
- 5.2.5 The Nene Valley colour coated ware was recovered from two contexts, (2004) and (2039), with 3 sherds being recovered. These sherds, being 4th century in date, were produced in Water Newton (modern day Peterborough).

- 5.2.6 Of the 46 sherds of pottery identified as being from a source close to Verulamium (St Albans), 42 sherds, found within context (2023), represent the remains of an entire mortaria. This high prestige item was found intact in-situ, but had broken during excavation. A possible dolomite pestle was observed nearby within the same pit. The remains of a makers stamp, DOINUS can be clearly seen twice on this item, and the vessel dates from AD 70-110.
- 5.2.7 A total of fifty-seven sherds of southern grog-tempered wares were found during this phase of work, and further represent coarse wares, manufactured in south-eastern England from 275-375AD.
- 5.2.8 The pottery assemblage as a whole therefore roughly dates to the late 2nd, and early 3rd centuries AD, with the notable exception of a mortaria, which dates to the early 1st century AD. These findings correlate to similar date ranges given for assemblages obtained from the site during earlier phases of work (BSG-A, BSG-B).
- 5.2.9 The overall impression is that this assemblage represents local ware, which would have been easily traded within an area that may have been minimally garrisoned. The presence of fine wares such as those of the mortaria and sherds of pottery from a source close to Verulamium (St Albans), as well as typologies from the Nene Valley and Colchester, coupled with the lack of Gaulish or oversea typologies, suggests that this assemblage may better represent the refuse from a small community, reliant on passing trade routes, rather than a military garrison.
- 5.2.10 Previous works at the site have found that local pottery typologies appear to have been more prevalent during the later occupation of the area, with forms that are from further afield, such as Colchester and Verulamium (St Albans), being present either as indicators of earlier phases of occupation or as background activity.

5.3 MODERN CERAMICS AND GLASS

- 5.3.1 One sherd of modern transfer ware pottery was obtained from within an unstratified deposit within Test Pit F11.
- 5.3.2 A total of two shards of glass were recovered from and unstratified deposit, and were identified as being modern in origin due to the presence of modern adhesives upon them.
- 5.3.3 Neither the modern pottery nor the glass fragments were retained, due to the limited archaeological potential posed by their further study.

		No		
Context	Fabric	sherds	Date	Comments
2004	BB2	3	L C2/eC3	BB2
2004	CO RE	1		Frilled rim jar
2004	соох	2		
2004	LNV CC	1	C4	LNV flanged bowl. H P & M 79
2005	CO RE	3		•
	COL			
2005	BB2	1	C3?	Plain dish
2007	SOB GT	5		
2007	CO RE	18		
2007	OXF RS	1		
2007	COL BB2	11	L C2/eC3	G 223 with lattice decoration. Possible graffito. 2
2007	OXF		02/203	piani nin disnes.
2007	FR?	1		
2009	CO RE	11		Large roll rim storage jar
2009	BB2	5		
	COL	-	AD 180-	
2009	BB2	2	250	Two examples of G313
2009	SOB GT	5		
2009	WS	8		Oxford white slipped
2009	OXF RS	3		
	VER			
2009	WH	3	C1/2	Verulamium region white ware
2010	CO RE	1		
2017	CO RE	3		
2017	CO OX	1		
2017	OXF WS	1		Burnt/sooted
2023	SOB GT	43		
2023				Pilled decoration
2023		1		
2023	VER	- 1	AD 70-	Complete mortarium stamped twice almost certainly
2023	WH	42	110	by DOINUS
2022	OXF		240-	Dessible Verse M40
2030		1	300?	Possibly Young M18
2034		6		
2036	CORE	6		
	COL		C2/eC3	
2036	BB2	1	?	
2036	SOB GT	1		
2039	CO RE	17		
2039	OXF RS	2	270-400	Young C 16
	OXF	-		
2039	WS	1		

Context	Fabric	No sherds	Date	Comments
2039	SOB GT	3		
2039	LNV CC	2		One sherd extremely abraded.
	VER			
2039	WH	1		
2042	CO RE	1		

Table 1: Roman pottery recovered during the watching brief.

6. ENVIRONMENTAL ANALYSES

6.1 INTRODUCTION

- 6.1.1 During the course of an archaeological evaluation 10 soil samples were taken. Samples were taken to extract material which may be pertinent to understanding the development of these contexts. This could include evidence of human activity which may have left preserved archaeological material during the prehistoric or historic periods. In particular, due to the artefactual assemblage collected from this area, evidence of activity during the Romano- British period was possible in the soil samples processed.
- 6.1.2 The methodology employed in the processing of these samples required that the whole earth samples be broken down and split into their various different components. All samples were fully processed by being manually floated and sieved through a 'Siraf' style flotation tank. The residue from each sample was retained, described and scanned using a magnet for ferrous fragments. The flot was dried slowly and scanned at x40 magnification for charred and uncharred botanical remains. Identification of these was undertaken by comparison with modern reference material held in the Environmental Laboratory at North Pennines Archaeology. Plant taxonomic nomenclature follows Stace (1997).
- 6.1.3 The retent, like the residue from wet sieving, will contain any larger items of bone, heavy (eg waterlogged) ecofacts or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage was done to allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. The retent samples were also scanned with a hand magnet to retrieve forms of magnetic material, as well as any artefactual material, such as pottery or metal objects which may be present.
- 6.1.4 Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information, in respect of the depositional environment of the material, thus enabling assessment of anthropogenic activity, seasonality and climate and elements of the economy associated with the features from which the samples are removed. In this case the sandy, well drained, base rich nature of the soil would be suitable for the preservation of charred plant remains and bone (should mineral replacement occur to offset the leeching of calcium from deposited bones material)

6.1.5 Sample numbers appear in brackets thus <>, whilst context numbers appear in brackets thus () for all analysis and discussion below. Results will be presented by Plot number numerically. Reference to seeds in the text is made using the richness scale of 1 = present, 2 = frequent and 3 = abundant, as seen in the tabular results attached.

6.2 ASSESSMENT RESULTS

- 6.2.1 Sample (2017) <9> came from the fill of a large pit [2018] in trench F11, which was identified as dating to the Romano-British period. The heavy residue contained low amounts of charcoal, burnt bone and magnetic residue. The magnetic material was notable in that it contained a relatively high proportion of hammer scale and spheroidal hammer slag. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained moderate amounts of charcoal and modern roots. As well as this infrequent numbers of a *Chenopodium* species (goosefoot) were recovered. One grain of charced *Triticum* sp. (wheat) was also recovered.
- 6.2.2 Sample (2019) <10> came from the fill of Romano-British pit [2020] in test pit E4. The heavy residue contained low amounts of charcoal, burnt bone, small vertebrate bone and oyster shell. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. Three small snail shells were also encountered amongst the flot. Additionally infrequent numbers of unidentified seeds were encountered. A single charred Culm inter node, belonging to a *Poaceae* sp. (grasses), was identified. Lastly one charred wheat grain was identified within the sample.
- 6.2.3 Sample (2021) <11> came from the fill of pit cut [2022] in test pit E7. The heavy residue contained low amounts of charcoal and burnt bone residue. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. Additionally infrequent numbers of *Chenopodium* sp. (goosefoot) and unidentified seeds, as well three unidentified charred grains were identified in the sample.
- 6.2.4 Sample (2023) <12> came from the fill of pit cut [2024] in test pit E7. The heavy residue contained low amounts of charcoal, burnt bone, Magnetic residue (hammer spheres) and one shard of glass. The glass is a rough rectangle of around 2mm by 4mm with little signs of abrasion across its surface. The bulk of the heavy residue consisted of stones, mainly angular

fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. Low numbers of leaf fragments, were noted and probably represent modern inclusions. Additionally infrequent numbers of *Chenopodium* species (goosefoot) and unidentified seeds, as well as five unidentified charred grains were identified.

- 6.2.5 Sample (2028) <14> from test pit D/E7 came from the lower fill of a pit or possible Romano-British occupation layer. The heavy residue contained low amounts of charcoal and burnt bone. As well as two small fragments of pottery, both of which represent locally produced rough fourth century wear. The first fragment is 2.5cm by 2.5cm and contains a number larger of inclusions within its fabric. The second is 2.1cm by 2cm and is of a much finer fabric that the first, with a ribbed pattern running across it. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. As well as infrequent numbers of *Cerastium* species (Little mouse-ear) and unidentified seeds. Six unidentified charred grains were also identified amongst the deposit.
- 6.2.6 Sample (2030) <16> came from the fill of a shallow pit cut [2031] in test pit D6. The heavy residue contained low amounts of charcoal, burnt bone and one lump of unidentified iron concretion. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal, along with moderate amounts of modern roots present. As well as infrequent numbers of *Chenopodium* species (goosefoot) and *Urtica dioica* (sting nettle family), and one charred grain of Wheat and two unidentified charred grains were all identified.
- 6.2.7 Sample (2032) <17> from test pit D2 derives from the lower fill of a pit, or possible Romano-British occupation layer. The heavy residue contained low amounts of charcoal, burnt bone, small vertebrate bone, Magnetic residue (hammer spheres). As well as two small fragments of pottery, the first is a rough gray pot rim 4.5cm by 3.5cm while the second is a fine red ware fragment 2cm by 1.5 cm .The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. Low numbers of leaf fragments probably a modern inclusion were noted As well as infrequent numbers of *Chenopodium* species (goosefoot), *Urtica* species and an unidentified seed were recovered. Lastly two charred unidentified grains, one grain of charred wheat and one grain of charred *Hordeum vulgare* (barley) were also present.

- 6.2.8 Sample (2038) <21> came from the fill of fill of possible pit [2035] in trench ST6. The heavy residue contained low amounts of charcoal, burnt bone, small vertebrate bones and one lump of unidentified iron concretion. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of modern roots along with moderate amounts of charcoal present. Low numbers of seeds of a *Myosotis* (forget-me-not family) species and an unidentified seed were recovered from the flot.
- 6.2.9 Sample (2039) <23> came from the fill of a linear feature [2008] in trench ST7/8, which has been provisionally dated to the Romano-British period. The heavy residue contained moderate amounts of charcoal, burnt bone, as well as low numbers of small bones, including fish bone. The iron fragment appears to be the head of a small nail. The bulk of the heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of charcoal along with moderate amounts of modern roots present. Low numbers of leaf fragments, probably a modern inclusion were noted. As well as infrequent numbers of seeds of a *Chenopodium* species (goosefoot) and an *Urtica* species (nettle) were recovered.
- 6.2.10 Sample (2042) <24> from trench ST7/8 which is thought to be a possible occupation layer. The heavy residue consisted of stones, mainly angular fragments of flint/ chert. The flot matrix contained the presence of a high amount of modern roots present only. As well as this infrequent numbers of a *Chenopodium* species (goosefoot) and *Urtica* species.
- 6.2.11 Sample (2055) <25> contained low amounts of burnt bone and magnetic residue in the heavy residue. The bulk of the heavy residue consisted of small and medium flint stones. The flot matrix consisted mainly of root material, with low amounts of charcoal. Low numbers of seeds of Chenopodium (goosefoot) and low numbers of an Urtica species (nettle) were also recovered. These suggest an open arable environment.
- 6.2.12 Sample (2056) <26> contained low amounts of bone, magnetic residue and charcoal fragments. A hobnail and a glass shard were also recovered. The bulk of the heavy residue consisted of small and medium flint stones. The flot matrix consisted of charcoal, sandy grit with some snail shells and worm casts. Low numbers of seeds of *Urtica dioica* were recovered.
- 6.2.13 Sample (2050) <27> contained low amounts of burnt and unburnt bone, burnt clay, charcoal and magnetic residue. The flot matrix consisted of charcoal and gritty sand. Seeds of *Urtica dioica* (nettle), *Chenopodium album* (Fat-hen), *Silene* species (campion), *Sambucus nigra* (elder), *Rubus* species (bramble berry) and a member of the *Lamiaceae* family (the mint family). This

assemblage suggests open waste ground, or former cultivated ground with some light scrub cover.

6.3 VERTEBRATE BONE

- 6.3.1 Fragments of bone were recovered from nine of the ten contexts, though all was of a fragmentary nature, which does not allow anatomical or species identification.
- 6.3.2 During the course of the watching brief, fragments of a left cattle horn were retrieved from Trench D/E7 (2028). Though fragmentary this appeared to be from a short horned variety. It measured 18cm around the base and was sawn c.11cm from the base, removing the tip of the horn. A chop mark was evident on the cranial aspect, near the base.
- 6.3.3 A left cattle tibia was also recovered. The proximal head was missing and though excavation marks were noted around the head it is clear that some of the damage occurred before the bone was excavated, therefore either after butchery, or due to natural formation processes or animal gnawing. The bone displays a variety of butchery marks. At the proximal end of the bone some deep scrape marks and cut marks are evident on the medial side. At the distal end a light saw mark was observed on the cranial aspect of the bone to the lateral of the medial malleolus.
- 6.3.4 It is notable that this site produced animal bone in such small quantities, which directly contrasts with the quantities uncovered during the excavation of BSG-A and BSG-B. This might reflect different areas of human activity and waste disposal across the area as a whole.

6.4 DISCUSSION OF WATCHING BRIEF ENVIRONMENTAL SAMPLES

- 6.4.1 The archaeobotanical evidence from the samples, taken during the watching brief phase of works at Bishop's Stortford, is not sufficient for detailed conclusions to be made about the nature of this landscape during the Romano-British period. No one plant variety was present in dominant enough numbers to allow pan-site conclusions to be reached in order to compare and contrast the assemblages recorded from these contexts. However, from this limited sample, some salient points can be made.
- 6.4.2 In particular, seeds of *Chenopodium* were most common amongst the samples taken. This is somewhat to be expected as goosefoot grows well in fertilised arable fields. The seeds of nettle recovered may be modern intrusions, though these would also have been common in the nitrogen-rich soils around settlements.

- 6.4.3 Cereal grains were found in six of the ten contexts investigated during this phase of work. Wheat varieties were found in three contexts: (2017) <9>, (2019) <10> and (2032) <17>: barley varieties were found in one context: (2032) <17>. Indeterminate grains were found in four contexts: (2021) <11>, (2023) <12>, (2028) <14>, (2032) <17>. The limited amounts of cereal remains present in this assemblage cannot be used to inform on what agricultural practices were being undertaken within this area. No charred remains were found, suggesting that domestic activities were not being undertaken at the site, and futher suggesting an area of open pasture.
- 6.4.4 Metal objects recovered from samples (2038) <21> and (2030) <16> are both heavily corroded fragments of iron objects. It is suggested here that these might be small nails. In particular object (2038) <21> might be the head of a nail.
- 6.4.5 Though magnetic material was recovered across the ten contexts, generally they were mainly identified as naturally occurring magnetic minerals. The one notable sample was (2017) <9>. In this sample moderate amounts of hammer scale and hammer slag were recovered. As this material is easily windblown all that can be securely said is that is that metalworking in the vicinity of this context, though not directly associated with it.

6.5 **CONCLUSIONS**

- 6.5.1 Few inferences could be made from this assemblage recovered during the watching brief phase of works. However, what does appear to be consistent is the appearance of species, such as *Chenopodium*, which suggests an arable environment.
- 6.5.2 The presence of small amounts of cereals also correlates to findings from previous works, which suggested that cereal production, but not processing, may have occurred within the site, or close to its environs.

6.6 WIDER CONCLUSIONS

- 6.6.1 The initial environmental evidence from Bishop Stortford, Hertfordshire raises certain issues, both for the immediate site itself as a whole and for Roman Hertfordshire.
- 6.6.2 Over the course of the investigations at Bishop's Stortford, a total of thirty environmental soil samples were processed. Of these, two samples were taken during the geotechnical investigation phase, (BSG-A); eighteen samples were taken during the course of the 2009 excavations (BSG-B) and ten samples were taken during the watching brief phase (BSG-C).

- 6.6.3 Archaeobotanical evidence for the site greatly contrasts between the first two stages and the third stages, which produced little botanical evidence, for both wild and domestic species. However, samples coming from the BSG-B excavation phase provided enough information to suggest that the area existed largely as 'unchanged landscape, which remained generally open, and cultivated from the 2nd century through to the late 4th' (Cavanagh and Noakes 2009).
- 6.6.4 Furthermore, archaeobotanical evidence obtained from the excavation phase showed a variety of plant species survived at the site, including *chenopodium* and *rumex* species, which are both associated with cultivation. These samples however are associated with a concentration of predominantly 4th century features, and it is indicated that activity at the site dates from at least the first century AD, suggesting that this type of landscape may not have always existed at the site.
- 6.6.5 Although finds of cereal grains were made during all three phases of work at the site, no positive identification for the processing of these crops has been made. This led to the suggestion that cereals may have been imported onto the site, with crop processing not actively occurring within the immediate vicinity, but being undertaken within the settlement, and therefore this evidence would be best observed within the areas closer to the Cannons Close estate, and to the east of the areas currently being investigated.
- 6.6.6 The lack of cereal processing also appears to be at odds with the zooarchaeology findings, which from the excavation (BSG-B) phase of works, implied that butchery was occurring on or nearby to the site. This is of interest due to the noticeable discrepancy between the recovery of animal bones during the first and latest work phases at the site, with almost the entire zooarchaeological collection coming from the 2009 excavation phase.
- 6.6.7 Metallic residues found within samples taken from both the excavation and the watching brief phase of work suggests that there may have been industrial activity occurring nearby to the site, and may represent some connection to a building found during the 1950's excavation at the Cannon's Close estate, and interpreted as a possible kiln. Clinker found in environmental samples from the geotechnical investigations (BSG-A) to the north of the watching brief area, may also tie directly into this, and may represent an area of industrial activity.

6.7 **Recommendations.**

6.7.1 Initial environmental sampling of the site suggested that the site existed within an open landscape, with species synonymous with cultivation being

found within the samples. Furthermore, the environmental evidence from the excavation phase appeared to suggest that butchery and industrial processes were occurring nearby to the site, and that these activities appear to be mostly late 3rd to 4th century in date.

- 6.7.2 Whilst this picture has not been disproven by the BSG-A and BSG-C phases of works, these investigations are of such a small scale that the results are unlikely to answer any questions which were posed by the excavation works; indeed, questions regarding the distribution patterns of animal bone showing evidence of butchery marks has arisen due to the latter phase of works at the site.
- 6.7.3 However, it is also worth noting that areas to the north and south would have been affected by the construction of both the changing rooms and the leisure centre complex during the 1970's. It is probable therefore, that potential fourth century deposits may have existed under these areas, but have been severely truncated. Such activity within this area would undoubtedly affect the composition of archaeobotanical deposits, and comparison of these deposits with deposits which survive largely intact, must take these factors into account.
- 6.7.4 It is envisaged that further work would allow us to move from the general to the specific, allowing stronger statistical statements to be made regarding contrasts within the contexts on this site: a rapid assessment would prioritise key samples, such as those on fringe areas of the site, taken during the geotechnical phase works that are most likely to further elucidate information for the site as a whole.
- 6.7.5 On a regional level it is hoped that greater detail would be recovered regarding the specific varieties of cereal used on this site. Whereas the general genus have been identified (wheat, barley, oat) it is hoped that the specific varieties (6/2 row-barley, Roman/British wheats) could be identified, should material of sufficient quality be recovered.

7. ZOOARCHAEOLOGICAL FINDINGS

7.1 INTRODUCTION

- 7.1.1 During the course of an archaeological excavation animal bones were collected by the excavation team from 6 contexts (including the bones from unstratified contexts). All bones were hand collected during the excavation of their respective contexts.
- 7.1.2 Favourable preservation conditions can lead to the retrieval of animal bones that may produce a valuable suite of information. This can enable an assessment of anthropogenic activity, seasonality and climate and elements of the economy associated with the features from which the samples are removed. For the excavation in general animal bones may bear taphonomic markers which give some indication as to how the surrounding deposit formed, and the natural and cultural formation processes to which the deposit was exposed to until its time of excavation.
- 7.1.3 More generally it will allow an assessment of the types of animals present on this site during phases of prehistoric and historic activity, though in this case the artefactual data suggests these bones originated during the Romano-British period. In the case of Bishop Stortford, the sandy, well drained, base rich nature of the soil would be suitable for the preservation of bone (should mineral replacement occur to offset the leeching of calcium from deposited bones material).
- 7.1.4 However, various taphonomic factors will act on the death assemblage causing degradation and weathering of the original sample. Thus, the sample being discussed here is only a fragment of the original assemblage formed in the past, in this case the Romano-British period.
- 7.1.5 The purpose of this study is to:
 - Quantify the bones collected from the excavation by deducing their anatomical position and the Genus of the animal from which they originate (if possible). This is done by comparing the material with reference material held at the Environmental Laboratory at North Pennines Archaeology, Nenthead.
 - To assess the presence of butchery evidence on all bones.
 - To assess evidence which may allow comments to be made regarding the pathology of the original animal population and other factors such as age at death and sex of animals.
 - To assess the taphonomic history of the bone from the creation of the death assemblage to their examination for this report.

- 7.1.6 In this instance the MNI and the NISP counts have not been calculated. Due to the low number of bones recovered, such calculations would be without a sound statistical foundation. The problems of these methods are well discussed in zooarchaeology literature (O'Connor 2000), but they are an important exercise for the zooarchaeologist when assessing the assemblage. They are discussed in greater detail in the discussion section at the end of the report. A final, generalised, method is discussed below as an alternative means of assessing the bone assemblage from this site.
- 7.1.7 Vernacular ('common') names are used throughout the text, following the conventions set out by O'Connor (O'Connor 1989). The taxon 'sheep' includes bones where the separation of sheep and goat is not normally possible but which in this context appear to be derived from sheep. The taxon 'goat' is used where material can be confidently attributable to goat.

7.2 ASSESSMENT RESULTS

- 7.2.1 A total of six contexts produced animal bone. These are (2009), (2021), (2023), (2028), (2029), and (2032). A full list of the animal bone is present in Table 1.
- 7.2.2 Context (2009) produced 4 bones, all of which could be indentified to a species identification and an anatomical position. One bone was identified as that of cattle; this consisted of a left tibia with numerous cutmarks observed along the bone shaft.
- 7.2.3 Three bones of a Caprid (sheep/goat) were identified; these were a humerous, a frontal and a maxilla. In this case evidence of butchery is limited to the cattle bone.
- 7.2.4 Context (2021) produced 15 bones. Two bones were identified as those of cattle; this consisted of a tibia and a horn. The tibia consisted of a distal element with cut marks on the lateral side. The horn consisted of a fragment near the base, which was 14.5cm around the base. Though fragmentary it is clear that this was from a short horned variety of cattle.
- 7.2.5 A total of 10 fragments of mandible were recovered from this context, but could not be confidently attributed to a specific taxon. Three unidentified longbone fragments were also recovered, again unattributed to a specific taxon.
- 7.2.6 Context **(2023)** produced 6 bones, of which, one, a sheep bone was recovered, and this consisted of a midshaft tibia fragment. One rib and four unidentified fragments were also recovered.
- 7.2.7 Context (2028) produced one bone, a cattle horn. This had a clear saw cut near the tip. The horn was 18cm around the base. Like the horn from (2021) this was also from a short horned variety of cattle.

- 7.2.8 Context **(2029)** produced 7 bones. One bone of sheep was identified. This consisted of a radius midshaft fragment. One dog bone was identified. This was a innominate acetabulum fragment.
- 7.2.9 Five fragments were not identified to either a species level or an anatomical position.
- 7.2.10 Context (2032) produced a rib fragment.

7.3 DISCUSSION

- 7.3.1 In total five trenches produced bone, with a total of 34 bones. 10 (30%) of the bones were identified to the species level, 15 (44%) were given an anatomical identification where a species identification was not possible, and 9 (26%) could not be given either a species or anatomical identification.
- 7.3.2 Of these, cattle bones appearing in three contexts represented 40% of identified bone; sheep/goat appearing in three contexts represented 50% of identified bone and dog bone appearing in one context represented 10% of identified bone.
- 7.3.3 Unidentified bone comprised only a fraction of the assemblage, from this phase of works at the site. This is possibly as a result of the hand collection strategy which tends to be biased against the collection of fragmentary material. However, it should again be noted that the low numbers recovered here allow only the most general statistical statements to be made.
- 7.3.4 One of the biggest problems for identification was the heavy abrasion evident on many of the bones. The sandy, flinty soil in which they were deposited may have done much to cause these abrasions, which would have been most damaging to the preservation of butchery evidence. This abrasion may also have occurred in conjunction with onsite trampling during the Roman period as the material entered the archaeological context.
- 7.3.5 Evidence for scavenging was not noted on bones in this assemblage. Butchery evidence was seen on three bones, and included chop and saw marks on the cattle horn cores and scrape and cut marks on the cattle tibia.

7.4 CONCLUSIONS AND RECOMMENDATIONS

7.4.1 Though only a small assemblage was recovered, there is evidence that the cattle on this site were of the short horned variety of 'Celtic Cattle' noted on other Roman sites (O'Connor 1988). The short horns with little torsion and a distinctively oval basal outline, are indicative of the variety being used on this site. In particular this evidence is important as no cattle horn cores were noted from the bone assemblage recovered from the other phases of work on this site (BSG-A and BSG-B).

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

- 8.1.1 A watching brief, conducted at Grange Paddocks Leisure Centre, Bishop's Stortford, found continuing evidence for Roman activity at the site. Comprising possible pits and/or ditches, with evidence of possible refuse layers, these features represent an area which appears to have been the focus of activity ranging from the 1st to late 4th centuries AD.
- 8.1.2 The findings of this watching brief suggest that an area used for the disposal of refuse, may spread further to the south of the site, whereas an inhumation cemetery appears to be confined to the northern extents of the site. This appears to be connected to a possible 1st century enclosure system, potentially delimitating the burial area.
- 8.1.3 Within an excavation area, two separate layers of a late 3rd- 4th century Romano-British refuse were observed. Within the watching brief area, these appear to have been severely truncated by the construction of a leisure centre complex, with only pits containing late 2nd to 3rd century deposits being observed. These pits contained large quantities of pottery types indicative of a nearby urban area, and potentially link to the settlement believed to have lied under the current day Cannons Close Estate. Dating evidence from within the excavation area, comprising pottery and a possible dispersed hoard (Tinniswood *pers comm*.) suggested that occupation was at least from the 4th century AD.
- 8.1.4 The watching brief however, found evidence to suggest a slightly earlier phase of refuse pits, dating to the late 2nd to early 3rd centuries and showing differing practices occurring on site; no evidence to substantiate primary butchery or industrial activity occurring nearby to the site was found, possibly reflecting more depositional factors than period-specific differences.
- 8.1.5 However, the watching brief found evidence to suggest that the settlement may have reached its peak during the 2nd century AD, as assemblages from these deposits suggest that the urban centre (possibly the Cannon's Close Estate) was within the trading routes of the towns of Colchester and St Albans (Verulamium). The later settlement, as characterised by two debris layers found during the 2009 excavation area, may have suffered a slight decline, as indicated by the high quantities of local Hadham and Shelly-ware types, with prestige pottery typologies belonging to Nene Valley wares.
- 8.1.6 It is also possible that this trend may be more dependent upon depositional processes rather than actual trading patterns, but further investigations into

the pottery types and their relative locations from across these various investigations may help to clarify this issue further.

8.1.7 The remains of an mature female were identified during the 2009 excavations, and suggests that, to the north, the site remains as a mostly first to late 2nd century field enclosure system, potentially deliminating a cemetery, as characterized by the 2001 HAT evaluations (Crank *et al* 2001). Geotechnical test pits undertaken within this area by NPA Ltd found no evidence to suggest that there was a continuation of any archaeological feature further west of Trench 5 from the 2001 HAT evaluation. This phase of investigation also supported the idea that the main settlement lies within the environs of the leisure centre complex, and further to the east, towards the Cannons Close Estate.

8.2 RECOMMENDATIONS AND THE EAST ANGLIAN REGIONAL RESEARCH FRAMEWORK

- 8.2.1 A number of research issues exist within the East Midlands, which are set out within the East Anglian Regional Research Framework (Brown and Glazebrook 2000). These documents outline the current archaeological record within East Anglia, and assess, by each chronological period, the necessity to identify where key areas of future research should focus.
- 8.2.2 Specific areas of research relevant to the excavation at Bishop' Stortford include the need to further understand intermural agricultural activity existing between large towns such as Colchester and St Albans, (Verulamium) and smaller settlements which existed along the routes to these towns.
- 8.2.3 Specifically, a need to address the distribution patterns of goods such as Roman pottery within the later Roman periods may help to show shifting patterns of active settlement inside towns (Going and Plouviez 2000; 21). This is especially pertinent when regarding the subtle differences in the assemblages from the 2nd and 3rd century, which tend to be trade orientated, and the late 3rd to 4th century pottery typologies, which are apparently from mainly locally produced sources.
- 8.2.4 In order to fully understand the period specific discrepancies, a report synthesizing the various pottery assemblages from the Bishop's Stortford area, categorising the main typologies and looking at fabric types, should be attempted.
- 8.2.5 Furthermore, the analysis of a glass bead found within deposit (1025) during the BSG-B phase of work should be undertaken. Information these studies would provide would further inform on trading routes and patterns which are currently, within Bishop's Stortford, poorly understood. The East

Anglian Regional Research Framework also encourages the study of pottery distribution patterns, as they, '*may indicate shifting patterns of active settlement within towns' (ibid)*.

- 8.2.7 Further to the north, human remains may still survive, although the evidence from the combined results of the archaeological excavation and the evaluations conducted at the site, suggests that any cemetery complex that may have existed was concentrated towards the north, underneath the current playing fields, and does not extend further across the site.
- 8.2.8 Further investigations, potentially utilising some form of geophysical survey, could clarify this, in a manner which would characterize the nature of a site, and aid future planning considerations. Furthermore, the detailed documentation of these burials may offer further insight to beliefs within the regional framework which states that there are 'different practices in urban areas to the countryside, where formal burial cemetaries are the exception rather than the norm.' (Going and Plouviez, 2000).
- 8.2.9 The framework also calls for further use of environmental sampling, and the increased need to sieve soil samples to retrieve smaller bones, due to the lack of faunal information from military and rural sites. It is hoped that this would further inform on the use of the countryside during the Roman occupation of an area, and specifically aims to reduce the bias of information coming from larger towns such as Colchester, where large bone assemblages have been found, and are used indiscriminately to characterize the regions consumption patterns (*ibid*).
- 8.2.10 A review of the remaining samples from the various phases of work at Bishop's Stortford should be undertaken, and samples showing a high potential for archaeobotanical remains should be processed, with analysis of those showing cereal remains within the flot being worthy of further examination.
- 8.2.11 Dissemination of the results from the Grange Paddocks excavations was stated as one of the main aims of these phases of work at the site, and as such, the results of the excavation, the geotechnical test pits and the watching brief conducted at the site, will be synthesised into an article written for publication within the Hertfordshire Archaeology and History Journal. Details of what shall be included within this publication, as well as the works required for this, are within an Updated Project Design (see Section 8).
9. UPDATED PROJECT DESIGN, STAFFING AND RESOURCES

9.1 INTRODUCTION

9.1.1 This section presents an updated project design based on the results of the assessment. The work modules required for completion of the post-excavation programme are also set out in relation to a series of identified aims.

9.2 AIMS

- 9.2.1 The principal aims of the final post-excavation can be summarised as follows:
 - To produce, in combination with the watching brief findings, a small excavation (Cavanagh and Noakes, 2009), geotechnical investigations, and the earlier evaluations conducted to the north of the site (Crank *et al*, 2001), an integrated interpretive synthesis of data for publication within a local journal.
 - To undertake analysis of identified categories of data at appropriate levels of detail.
 - To create and deposit an ordered and indexed research archive at the Bishop's Stortford museum.

9.3 **OBJECTIVES**

- 9.3.1 Following on from the assessment it is possible to set out a number of objectives that will be addressed by the final post-excavation programme.
 - [1] To finalise the stratigraphic sequence of the site
 - [2] To determine spatial and temporal patterns within the Romano-British site
 - [3] To better define the nature of occupation on the site and how this changes over time.
 - [4] To use the environmental evidence to undertake detailed spatial analysis of deposits and determine evidence for changing social and economic activities.
 - [5] To examine possible continuity of occupation of the site during the Romano- British period.
 - [6] To illustrate and publish the important Romano-British finds (pottery, coins and glass fragments).

[7] To define the position and significance of the site, concurrently with the first phase northern investigations at the site (HAT 511, Crank *et al* 2001), and the latest excavations at the site (BSG-B, Cavanagh and Noakes 2009, and BSG-C, McElligott and Noakes 2010) within its local, regional and national context.

9.4 METHODS OF ANALYSIS

- 9.4.1 To achieve the post-excavations programmes specified aims and objectives the following methods will be used. Each dataset and the relevant objectives and work modules to which it relates are set out below.
- 9.4.2 *Stratigraphic data:* further stratigraphic analysis will involve the quantification and description of the archaeological sequence in the light of artefactual dating. The context data will be reappraised and feature groups revised where necessary. Comprehensive interpretive group text has already been produced, but where applicable the environmental evidence will be integrated into this group text. Period text will be written to provide a chronological overview of the development of the site in conjunction with all archaeological investigations having take place on site (Crank *et al* 2001) and later excavations at the site (BSG-B, Cavanagh and Noakes 2009). Illustrations will be produced for each period including digitisation of key section drawings. *Objectives:* **[1, 2, 3, 5, 7]**
- 9.4.3 *Pottery:* the Romano-British sherds will be studied, intact or unusual vessels illustrated, and published alongside the pottery from earlier investigations (BSG-A, BSG-B), which includes a ceramic spindle whorl. Unpublished material at Bishop's Stortford Museum will be examined to be clear whether any of the pottery is comparable. The tempering materials of the vessels should be analysed alongside the pottery sherds from the previous excavations. Dating for comparative material will be sought in order to better understand the assemblage from this site. *Objectives:* [6, 7].
- 9.4.4 *Roman Coins:* eighteen coins were found during the excavation phase, providing a sound chronology for later deposits found within areas of the site. These potentially represented a dispersed hoard, as most showed minimal wear patterns, and a few in particular had clear minting marks. Those with good levels of preservation should be illustrated. *Objectives:* [6]
- 9.4.5 *Glass Bead:* the glass bead will be analysed by an appropriate specialist considering possible places of manufacture. The artefact will be drawn. *Objectives:* [6].
- 9.4.6 *Macrofossils:* all remaining samples will be further analysed with a view to integrating the raw data stratigraphic narrative. This analysis will aid in the

reconstruction of the changing agricultural conditions, economy and habitats of the site. *Objectives:* **[4]**.

- 9.4.7 *Animal Bone*: the animal bone will be analysed by an appropriate specialist to hopefully give an insight into the nature of the occupation at this site. *Objectives:* [4].
- 9.4.8 *Report Synthesis, Preparation and Publication:* the conclusions drawn from the final elements of analysis will be summarised and included in a synthesised descriptive text. Final site, interpretative and artefactual illustrations will be produced, in conjunction with evaluations conducted to the north of the site (HAT 511, Crank *et al* 2001) and later excavations, geotechnical investigations and a watching brief (BSG-A, Giecco 2009, BSG-B, Cavanagh and Noakes 2009 and BSG-C, McElligott and Noakes 2009). The completed manuscript will be edited internally and submitted to an appropriate editor for inclusion in a local journal, for public dissemination. *Objectives*: [1-7].
- 9.4.9 *Outline Synopsis for journal publication:* it is envisaged that all the previous phases of archaeological investigation undertaken at Grange Paddocks Leisure centre, Bishop's Stortford, will be assessed together. (HAT 511, BSG-A AND BSG-C) and as such, a revised costing should be prepared that combines the stratigraphic analysis of all three sites as one. As such the report would comprise the following:
 - Summary
 - *Introduction:* background, circumstances of project, geology/topography, archaeological background.
 - *Site Description*: location and fieldwork methodology.
 - *Excavated Data:* introduction, overall site plan. Romano-British feature descriptions integrated with artefactual, osteological and environmental illustrations. Medieval and post medieval feature descriptions integrated with artefactual and environmental evidence.
 - *Artefactual Data:* pottery, spindle whorl, Roman Coins metalwork and glass finds
 - *Environmental data:* Macrofossils, animal bone and human bone analysis
 - *Synthesis:* Site interpretation and discussion, comparative evidence, local and regional significance.
 - *Archiving:* the site and research archives will be prepared and deposited at Bishop's Stortford Museum

9.5 STAFFING AND RESOURCES

9.5.1 It is envisaged the full analysis of this watching brief (BSG-C) will be undertaken in conjunction with the earlier phases (HAT 511, BSG-A, BSG B), and all four will be published as a coherent piece of work. It is proposed that a revised costing be produced for the full analysis and publication of all four phases of archaeological investigation at Bishop's Stortford, and that this will be produced as a separate document. North Pennines Archaeology Ltd can provide the costs for the analysis of this work, as required.

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APPENDIX 1: CONTEXT TABLE

Context	Context									
Number	Туре	Description								
(2000)	Deposit	Pit Fill A								
(2001)	Deposit	Pit Fill B								
(2002)	Deposit	Pit Fill C								
2003	Skeleton	Human Inhumation								
(2004)	Deposit	Occupation laver: Romano – British								
(2005)	Deposit	Fill of RB pit cut [2006]								
[2006]	Cut	Cut of pit filled by (2005)								
(2007)	Deposit	Fill of RB linear [2008]								
[2008]	Cut	Probable N-S ditch filled by (2007)								
(2009)	Denosit	RB Occupation laver								
(2010)	Deposit	BB nit fill								
[2010]	Cut	Pit filled by (2010)								
(2012)	Denosit									
(2012)	Deposit	Stone gravel in Service test [2014]								
[2013]	Cut	Cut of Service test								
(2015)	Doposit	Backfill of [2014]								
(2015)	Deposit	Poss PR Occupation Javor (TP, C3)								
(2010)	Deposit	Fill of DP nit out [2019]								
(2017)	Cut	Page nit out by [2011]								
(2010)	Denesit	FUSS. pit cut by [2011]								
(2019)	Deposit	Fill of pit cut [2020], below [2008] – (TP. E4)								
[2020]	Denesit	$\frac{1}{1}$								
(2021)	Deposit	Fill OI pit Cut [2022] = (TP, E7)								
[2022]	Cut	Cut of pit, filled by $(2021) - (1P, E7)$								
(2023)	Deposit	Fill of pit cut [2024] - (TP, E7)								
[2024]	Cut	Cut of pit, filled by $(2023) - (1P, E7)$								
(2025)	Deposit	Redeposit layer above $(2021) \& (2023) - (1P, E7)$								
(2026)	Deposit	Redeposit layer / Backfill – (TP. F3)								
(2027)	Deposit	Upper fill of poss. pit Or RB occupation layer – (TP. D/E/)								
(2028)	Deposit	Lower fill of poss. pit Or RB occupation layer – (TP. D/E/)								
(2029)	Deposit	Fill of poss. large pit / occupation layer – (TP. D1)								
(2030)	Deposit	Fill of shallow pit cut [2031] – (TP. D6)								
[2031]	Cut	Cut of shallow pit, filled by (2030) – (TP. D6)								
(2032)	Deposit	Fill of poss. large pit / occupation layer – (TP. D2)								
(2033)	Deposit	Fill of spread / poss. occupation layer – (TP. D3)								
(2034)	Deposit	Fill of pit cut [2035] – (Tr. ST3)								
[2035]	Cut	Cut of pit, filled by (2034) – (Tr. ST3)								
(2036)	Deposit	Fill of pit cut [2037] – (Tr. ST1)								
[2037]	Cut	Cut of pit, filled by (2036) – (Tr. ST1)								
(2038)	Deposit	Fill of poss. pit – (Tr. ST6)								
(2039)	Deposit	Fill of RB Linear = (2007) – (Tr. ST7/8)								
(2040)	Deposit	Fill of poss. pit – (Tr. ST6)								
[2041]	Cut	Cut of RB linear = [2008] – (Tr. ST7)								
(2042)	Deposit	Poss. occupation layer – (Tr. ST7/8)								
[2043]	Cut	Cut of pit, filled by (2044) (SW 4)								
(2044)	Deposit	Fill of pit [2043]								
(2045)	Deposit	Modern backfill, (SW 4)								
(2046)	Deposit	Occupation layer, (TP. E2)								
(2047)	Deposit	Occupation layer (TP. E3)								
(2048)	Deposit	Natural within Trial Pit 1								
[2049]	Cut	Cut of pit, filled by (2050) (ST 19)								

Context Number	Context Type	Description
(2050)	Deposit	Fill of pit [2049], (ST 19)
(2051)	Deposit	Re-deposited natural (ST 19)
(2052)	Deposit	Backfill (ST 19)
[2053]	Cut	Cut of pit, filled by (2038) (ST.6)
(2054)	Deposit	Topsoil (Trial Pit 1)
(2055)	Deposit	Backfill (Trial Pit 1)
(2056)	Deposit	Romano-British spread (Trial Pit 1)

Table 2: List of Contexts issued during Watching Brief

APPENDIX 2: ENVIRONMENTAL TABLES

Sample	<9>	<10>	<11>	<12>	<14>	<16>	<17>	<21>	<23>	<24>	<25>	<26>	<27>
Context	2017	2019	2021	2023	2028	2030	2032	2038	2039	2042	2055	2056	2050
Volume processed (litres)	10	10	10	10	10	10	10	10	10	10	10	10	10
Volume of retent (ml)	4000	3000	4000	5500	5000	3800	400	1000	2000	1500	800	1000	400
Volume of flot (g)	>20ml	>10ml	>10ml	>10ml									
<u>Residue contents (relative abundance)</u>													
Burnt Bone	1	1	1	1	1	1	1	1	2	-	1	1	1
Charcoal	1	1	1	-	-	-	-	-	-	-	1	1	1
Flint/Chert	3	3	3	3	3	3	3	3	3	3	3	3	3
Magnetic residue	2	-	-	1	-	-	1	-	-	-	1	1	1
Metal work	-	-	-	-	-	1	-	1	-	-	-	1	-
Oyster shells	-	1	-	-	-	-	-	-	-	-	-	-	-
Pottery	-	-	-	-	1	-	1	-	-	-	-	1	-
Shards of glass	-	-	-	1	-	-	-	-	-	-	-	1	-
Small vertebrate bone	1	1	-	1	-	-	1	-	1	-	-	-	-
Small snail shells	1	1	-	-	-	-	-	-	-	-	-	-	-
Flot Matrix (relative abundance)													
Charcoal	3	3	3	3	3	3	3	2	3	-	1	3	-
Leaf fragments	-	-	-	1	-	-	1	-	1	-	-	1	-
Modern roots	2	2	2	2	1	2	2	3	2	3	3	2	3
Cereals (absolute count)													
Charred grain (Unidentified)	-	-	3	5	6	-	2	-	-	-	-	-	-
Hordemum sp. (Barley)	-	-	-	-	-	-	1	-	-	-	-	-	-
Triticum sp. (Wheat)	1	1	-	-	-	-	1	-	-	-	-	-	-
Flot Plant Remains (relative abundance)													
(x) Cerastium sp. (mouse-ears)	-	-	-	-	1	-	-	-	-	-	-	-	-
(t) Sambucus nigra (elder)	-	-	-	-	-	-	-	-	-	-	-	-	1
(x) Myosotis sp. (forget-me-not)	-	-	-	-	-	-	-	1	-	-	-	-	-
(a) Chenopodium sp. (goosefoot)	-	-	2	1	-	1	?	-	1	-	-	1	1
(a) Galium sp. (bedstraw)	1	-	-	-	-	-	-	-	-	-	-	-	-
(a) Lamiaceae (mint)	-	-	-	-	-	-	-	-	-	-	-	-	1

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GRANGE PADDOCKS, BISHOP'S STORTFORD: WATCHING BRIEF REPORT

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Sample	<9>	<10>	<11>	<12>	<14>	<16>	<17>	<21>	<23>	<24>	<25>	<26>	<27>
Context	2017	2019	2021	2023	2028	2030	2032	2038	2039	2042	2055	2056	2050
(a) Silene species (campion)	-	-	-	-	-	-	-	-	-	-	-	-	1
(g/x) Poaceae (Grasses) Rachius base,	-	-	-	-	-	-	-	-	-	-	-	-	-
(x) Uritica dioica (Nettle family)	-	-	-	-	-	1	1	-	1	1	1	1	1
(x) Rubus species (bramble)	-	-	-	-	-	-	-	-	-	-	-	-	1
Unidentifyed seeds	-	1	1	-	1	1	1	1	1	-	1	1	-

 Table 3: Environmental Analysis of samples taken during the Watching Brief

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r	1	-	r	1	1	-	-	1	1		
						Fusion		Condition			
Trench	Context	Genus	Element	Side	/10 present	Proxal	Distal	Butchery	Burning	Gnawing	Notes
	2009	Bos	Tibia	L				Y			Proximal section missing, several butchery marks
	2009	Caprid	Humerous	L							Midshaft section
	2009	Caprid	Frontal	L	5						Horn missing, but no evidence of butchery
	2009	Caprid	Maxilla	L							
		•									
E7	2021	Bos	Tibia	R	3			Y			Distal tibia, cutmarks on lateral side
E7	2021	Bos	Horn	L	5						14.5cm around base
E7	2021										10 fragments of mandible
E7	2021										3 unidentified longbone fragments
E7	2023		Rib		1						Fragment
E7	2023	Caprid	Tibia		3						Suggested as dog tibia
E7	2023										4 fragments
D/E7	2028	Bos	Horn		6			Y			Saw mark
D1	2029	Caprid	Radius		2						Midshaft fragment
D1	2029	Dog	Innominate		2						Acetabulum fragment, suggested as dog
D1	2029										5 fragments

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						Fusion		Condition			
Trench	Context	Genus	Element	Side	/10 present	Proxal	Distal	Butchery	Burning	Gnawing	Notes
D2	2032		Rib		1						Fragment

 Table 4: Analysis of Zooarchaeological specimens taken during the Watching Brief

APPENDIX 3: FIGURES