

Conservation Services

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ARCHAEOLOGICAL WATCHING BRIEF DURING PIPELINE TRENCHING AT BOURNE CASTLE, BOURNE, LINCOLNSHIRE (BCD 01)

Work Undertaken For Bourne United Charities

April 2002

Report Compiled by Paul Cope-Faulkner BA (Hons) AIFA

National Grid Reference: TF 0945 1997 City and County Museum Accession No: 2001.267

ARCHAEOLOGICAL PROJECT SERVICES



APS Report No. 85/02

Quality Control BCD 01 Bourne Castle

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1. SUMMARY

An archaeological watching brief was undertaken at Bourne Castle during the laying of a water refreshment pipe. The watching brief monitored the excavation of the pipe trench.

Bourne Castle-is believed to have been constructed in the mid 11th century at a time when a number of smaller manors were being amalgamated, although it is first mentioned in 1190. It was probably ruinous by the end of the medieval period, although local tradition has it that it was garrisoned during the English Civil War (1642-1646).

The investigation identified the west arm of the moat, four walls and a possible rampart all of the medieval period. A second, inner, moat was also identified but could also be interpreted as a pond. Postmedieval deposits indicate widespread demolition occurring at the castle between the 16th and 17th centuries.

Finds retrieved during the watching brief are dominated by medieval and postmedieval pottery produced in Bourne. Other medieval pottery from Yorkshire and elsewhere in Lincolnshire was also identified. Tile, glass, clay pipe, metalwork and animal bone was also retrieved.

2. INTRODUCTION

2.1 Definition of a Watching Brief

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

2.2 Planning Background

Archaeological Project Services was commissioned by Bourne United Charities to undertake an archaeological watching brief during groundworks associated with trenching for a water refreshment pipeline Bourne Castle, Bourne. across Lincolnshire. As Bourne Castle is a Scheduled Ancient Monument, consent for the scheme was sought from and granted by the Department of Culture, Media and Sport in a letter dated 10th September 2001 (Ref: HSD9/2/4339pt3). The watching brief was carried out between the 8th and 24th October 2001, in accordance with a specification prepared by Archaeological Project Services (Appendix 1) and approved by the Secretary of State as advised by English Heritage.

2.3 Topography and Geology

Bourne is located 24km southeast of Grantham and 15km northeast of Stamford in South Kesteven District, Lincolnshire (Fig. 1).

Bourne Castle is located 90m southwest of the town centre as defined by the Market Place at National Grid Reference TF 0945 1997 (Fig. 2). The castle occupies generally level ground at a height of c. 10m OD on land that slopes gently down to the east.

Local soils are of the Curdridge Association, typically argillic gley soils (Hodge *et al.* 1984, 153). These soils overlie a solid geology of Jurassic Oxford Clay (GSGB 1972).

2.4 Archaeological Setting

Bourne Castle lies in an area of known archaeological remains dating from the Romano-British period to the present day. During the Romano-British period Bourne is believed to have been a substantial settlement sitting astride the Roman thoroughfare King Street. A possible

Romano-British ditch was identified during evaluation on the site of the former hospital, immediately west of the castle (Hall 2001, 7).

Bourne is possibly first mentioned in the late 10th century. Referred to as Burnan the name is derived from the Old Norse brunnr meaning a spring or stream (Cameron 1998, 18). Doubts exist about the Burnan mentioned as being in Lincolnshire and it is now thought to refer to a lost place in Oxfordshire (Sawyer 1998, 232). At the time of the subsequent Domesday Survey, c. 1086, the land was held by Ivo Taillebois, Alfred of Lincoln, Oger the Breton, Robert of Stafford and Colegrim and contained a church with a priest, 4 watermills, 49 acres of meadow and extensive tracts of woodland (Foster and Longley 1976).

The castle is generally believed to date from the mid 11th century when the smaller Domesday holdings had been consolidated into a single manor (Cathcart-King 1983, 266). The construction of the castle may have been undertaken by Baldwin de Clare, successor to Oger the Breton, who founded nearby Bourne Abbey in or before 1138. This suggestion is on the basis that the construction of the abbey brought about a complete replanning of the town including the construction of the castle (Hayes and Lane 1992, 140).

The existence of a castle in Bourne is first documented in the Pipe Roll of 1190 (Roffe nd, 2). It is again mentioned in the 14th century although no specific description of the castle is given. However, by the mid 16th century, John Leland, the King's Antiquarian, described the castle as '*There appere grete diches, and the dungeon hil of an auncient castel*', implying it was in a ruinous state (Toulmin-Smith 1907, 25).

Bourne Castle is also mentioned in the 17th century at the time of the English Civil

War (1642-46) when the castle was apparently garrisoned by parliamentarian troops (Birkbeck 1970, 13). It is not known if this implies that elements of the castle were still standing at this time. Unconfirmed tradition has it that the Parliamentarian troops were ordered to slight the castle to punish Bourne for its loyalty to the King (Venables 1889, 7).

Well Head Cottage, located adjacent to the pipe trench, within the northwest bailey dates to the early 18th century or before (DoE 1972, 1).

Limited previous archaeological work has been undertaken at the castle. There are records of two antiquarian excavations in 1861 and 1889. In 1861, the gatehouse, flanked by two circular towers, and the drawbridge pit was revealed along with surviving timbers (Trollope 1861, x). The gatehouse was partly revealed again in 1889 (Venables 1889, 6). Electric cabling work undertaken across the castle in 1960 revealed medieval pottery of 13th century date and the remains of one stone building (Birkbeck 1970, 14). More recently, water pipe trenches identified an arm of the moat running north from St. Peter's Pool which had been subsequently used to water horses (Dymond 1996, 4). The remains of Bourne Castle have been afforded Monument Scheduled Ancient status (English Heritage 1996, 19).

3. AIMS

The requirements of the watching brief, as detailed in the specification (Appendix 1), were to locate and record archaeological deposits, if present, and to determine their date, function and origin.

4. METHODS

A single trench for the new pipe was excavated by machine to a depth of c. Im below the current ground level and for a

length of 174m, connecting St. Peter's Pool with a northerly arm of the Bourne Eau. Following excavation, the sides of the trench were cleaned and rendered vertical. Selected deposits were partially or fully excavated by hand to determine their nature and to retrieve artefactual material. The depth and thickness of each deposit was measured from the ground surface. Each archaeological deposit revealed was allocated a unique reference number (context number) with an individual written description. A list of all contexts and interpretations appears as Appendix 2. A photographic record was compiled and plans and vertical sections were drawn at a scale of 1:20. Recording of deposits encountered during the watching brief was according undertaken to standard Archaeological Project Services' practice.

Following excavation, all records were checked and ordered to ensure that they constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. Finds recovered from those deposits excavated were examined and a period date assigned where possible (Appendix 3). Phasing was assigned based on artefact dating and the nature of the deposits and recognisable relationships between them.

5. **RESULTS**

Following post-excavation analysis and the incorporation of specialist reports five phases were identified.

Phase 1	Natural deposits
Phase 2	Medieval deposits
Phase 3	Undated deposits
Phase 4	Post-medieval deposits
Phase 5	Modern deposits

Archaeological contexts are listed below and described. The numbers in brackets are the context numbers assigned during the watching brief.

Phase 1 Natural deposits

The earliest deposits encountered during the watching brief comprised light yellowish brown silty clay (003), gravel with sand (015), silt and gravel (060) and silt (068 and 096). These deposits were evident at several points along the pipe trench.

Within 10m of St. Peter's Pool were two deposits that may represent natural subsoil development at the site. The lower (059) comprised light yellowish brown clay that was overlain by yellowish brown clay with gravel (058). Further subsoil, also yellowish brown clay with gravel (035 and 072) was exposed 45m and 100m northeast of the pool.

Seemingly cut through subsoil (058) adjacent to St. Peter's Pool was a very gradual sided feature (066), sloping down to the southwest. Its proximity to the pool suggests it marks the former limits of the spring (Fig. 8). A primary fill of greyish brown silty clay (065) was contained within this feature.

Phase 2 Medieval deposits

Located 16m southwest of the junction of the pipe trench with the Bourne Eau was a series of deposits that may represent either the up-cast from canalising the river or a purpose-built rampart. The earliest of these layers comprised yellowish brown silt (094), possibly re-deposited natural that formed a mound some 0.6m high (Fig. 4). This was overlain by reddish brown silt (004 and 093) that contained $13^{th} - 14^{th}$ century pottery. Dumped against this bank to the northeast was a deposit of yellowish brown silt (095).

Approximately 12m further to the southwest was a limestone wall (070) comprising squared blocks (Plate 5). This was aligned east to west and was 0.5m wide by over 0.52m high (Figs. 4 and 9). Roughly parallel to wall (070) and situated

a further 6.5m southwest was a more substantial wall (006). Measuring 1m wide and 0.9m high this was constructed of ashlar blocks (Figs. 5 and 9; Plate 2).

A third wall (007), located 9m along the trench, comprised rough-hewn limestone blocks and was 0.6m high (Plate 3). This seemed to be associated with a further wall (008) to form a single structure (Plate 4). This wall was 2.5m wide and over 0.8m high (Figs. 5 and 9).

Located 14m northwest of St. Peter's Pool was a broad linear feature (067), identified as the western arm of a moat. Measuring 6.9m wide and over 0.6m deep this was aligned north to south (Fig. 8). The western side was cut through the subsoils (058 and 059), whereas the eastern side was marked by roughly hewn limestone blocks (053), possibly a collapsed structure or wall.

Overlying the limestone collapse (053) was a layer of greyish brown silt (047). Measuring 0.3m thick (Fig. 8), this deposit could represent a former topsoil that had formed within the castle area.

Parallel to the moat (067), and 10m to the northwest, was a second broad linear feature (044). This was 12m wide and over 0.4m deep with a shallow cut to the west, cutting the possible buried topsoil (047), and a marked, near vertical, cut to the east through subsoil (035). Contained within this feature were two fills, a lower of greyish brown silty clay with limestone (045) and an upper of yellowish brown silty clay (043). This feature may represent a second inner moat or a pond.

The original extent of St. Peter's Pool (066, Phase 1) was subsequently filled with light yellowish brown clay (064) and greyish brown silty clay (063). Relatively unworn pottery of $12^{th} - 13^{th}$ century date was retrieved from the upper fill.

Phase 3 Undated deposits

Overlying natural (015) in the central portion of the trench was a 0.54m thick layer of yellowish brown clay (014) interpreted as re-deposited natural. This was overlain by greyish brown clayey silt (013), measuring 0.4m thick.

Overlying context (013) was a 100mm thick layer of greyish brown ash and silt (031) below an inter-bedded yellowish brown clay and grey ash (030). These two deposits, with their high ash content, may be associated with occupation of the castle.

Approximately 45m northeast of St. Peter's Pool was a layer of yellowish brown clay with gravel lenses (032). Identified as redeposited natural, its purpose is unclear although when compared with natural (035), they could represent the same deposit.

Phase 4 Post-medieval deposits

Situated between walls (070) and (006) were deposits of yellowish brown clay (005) and silty clay (082) representing demolition of a structure associated with either of the two walls. Quantities of limestone fragments were recorded, as was a glazed medieval roof tile fragment. Further demolition deposits comprising yellowish brown clay (080 and 081) lay over wall (070) and sealed deposits (005 and 082).

Further demolition associated with wall (006) was identified to the southwest. Dumped against wall (006) was a layer of yellowish brown silty clay with frequent limestone fragments (083). This was overlain by yellowish brown clay (069) and reddish brown silty clay (078) that extended as far as wall (007). Above wall (007) was a discrete deposit of limestone rubble with clay (077), also representing demolition.

Between walls (007) and (008) were further demolition deposits comprising limestone fragments with clay (076) with yellowish brown silty clay (002) dumped against the southern side of wall (008). Locally made pottery of $16^{\text{th}} - 17^{\text{th}}$ century date was retrieved from this latter deposit. This demolition deposit was overlain by greyish brown silty clay (071) that may indicate natural soil development.

Overlying the undated deposit (013) was demolition material comprising greyish brown limestone rubble and silt (017 and 021). This was partly overlain by yellowish brown sand (020). Two features in turn cut this sand. To the southwest was an indeterminate feature (075) that was 0.5m wide and 0.3m deep containing a single limestone slab and backfilled with greyish brown limestone rubble and silt (074). To the north was a probable pit (019) that measured 0.96m wide and 0.5m deep with a single fill of greyish brown limestone rubble with silt (018).

The demolition deposit (021) was also cut by a pit (024) at its southwestern extent. This pit was 1m wide and 0.4m deep with a fill of greyish brown limestone rubble and silt (023). Overlying this pit and the undated occupation layers (030 and 031) was a number of demolition deposits comprising yellowish brown sand (022 and 073), yellowish brown limestone and mortar (027) and greyish brown silt with rubble (026).

Cut into the demolition deposit (027) was a small feature (029), possibly a pit. Measuring 0.4m wide and 0.3m deep it contained a single fill of yellowish brown silty clay (028). Cutting this pit and the undated re-deposited natural (032) was a larger feature (034), possibly also a pit. This was 2.5m wide by 0.7m deep with a single fill of brownish yellow silty clay with gravel (033).

Developed over the possible inner moat or pond (044) was a layer of yellowish brown clay (046) overlain by greyish brown silty clay with gravel (040), generally levelling the immediate area. Post-medieval Bourne pottery was retrieved from the latter deposit. Above these levelling deposits was a layer of loose mixed gravel (048) that may indicate a path.

The path (048) was in turn cut by a pit (050). This was 1.95m wide by 0.5m deep. This contained a single fill of greyish brown silty clay with limestone fragments (049).

Also cutting the re-deposited natural (032) and the levelling deposit (040) was a further pit (039). This was 1.8m wide and over 0.7m deep and contained three fills, a lower of brick and tile fragments (038), overlain by yellowish brown clay (037) and sealed by yellowish brown silty clay with burnt stone (036).

The limestone structure (053) adjacent to the moat (067) was demolished as indicated by a deposit of yellowish brown silt with limestone rubble (051). The moat (067) itself was backfilled during this period. Four fills were recorded, the lowest was dark yellowish brown silty clay (057) which was sealed by demolition backfill comprising yellowish brown clay with either rough-hewn limestone (055) or limestone fragments (054 and 056).

Phase 5 Modern deposits

Overlying the possible rampart (093 and 094) and extending from Bourne Eau 26m to the southwest was a dumped deposit of light yellowish brown silt with grey clay lenses (092). Modern brick and tile were retrieved from this deposit. This dumped layer was in turn overlain by further dumping episodes of yellowish brown silt (091) and light grey clay (090), the latter extending to the medieval wall (070).

Cut into the southwestern extent of the dumped deposits (090 and 091) were two linear features (087 and 089) with a third

located 1m to the southwest (085). All three trenches were associated with services, presumably to Well Head Cottage.

Adjacent to St. Peter's Pool were two deposits, one of light yellowish brown gravel (061) and a second of greyish brown silt with limestone rubble (062). Both were identified as the remnants of a former path around the pool. A possible path is indicated by a deposit of mixed gravel (041) 40m to the northeast of the pool.

Sealing all the archaeological deposits was a topsoil of dark yellowish brown sandy clay (001, 009, 010, 011, 012, 016, 025, 042 and 052). This varied between 0.25m and 0.6m thick. At the northwestern end of the pipe trench, the topsoil overlay a recent subsoil of mid greyish brown silty clay (079) that was 0.2m thick.

Cut through the topsoil at the northeastern end of the pipe trench was a broad shallow linear feature (099) that contained makeup (098) for a tarmac driveway. This drive also cut an indeterminate feature (097), possibly a pit that contained a mixed fill of yellow and grey silt and clay (100).

6. **DISCUSSION**

Natural deposits (Phase 1) comprise sands, silts, clays and gravel. These deposits are unlikely to be the underlying Jurassic Oxford Clay and may represent an inlier of estuarine and marine sands and gravels that form much of the fen-edge geology. Natural subsoil development had also occurred at the castle. The former extent of St. Peter's Pool which is fed by seven springs was also identified. A primary fill was recorded, although this could be interpreted as a puddled clay lining, which certainly exists within the pool proper (Birkbeck 1970, 1). Medieval deposits (Phase 2) comprise a rampart, a number of stone walls, a definite moat and a possible moat or pond. The mounded deposits at the northeastern end of the pipe trench, interpreted as a rampart, may also be upcast from excavating the western arm of the Bourne Eau. Four roughly parallel walls were recorded in the northeast corner of the bailey. It is not known if these represent structures or isolated lengths of wall.

At the southwest end of the trench, the moat was identified together with an inner moat or pond. This inner moat seems unusual and is not reflected in the earthworks present at the site. Apart from a rubble structure adjacent to the moat, no other buildings were recorded in this vicinity. Between the moat and the structures at the northeast end of the trench, the bailey appears to be largely devoid of archaeological features. Such an arrangement is characteristic of many castles where buildings would hug, or were built against, the curtain wall, leaving the bailey open. Undated deposits (Phase 3) identified in this stretch may represent levelling of the surrounding land, possibly to form a courtyard arrangement.

Although the scope of this investigation is limited by the width of the trench, it is possible to offer some interpretation of the castle. This is detailed in Figure 10 and incorporates evidence from earlier investigations at the castle.

Post-medieval deposits (Phase 4) consist primarily of demolition episodes. Pottery dates much of this demolition to the 16th or 17th century, which could accord well with the local tradition of Parliamentarian troops slighting the castle. However, Leland's account of the castle suggests it was already ruinous in the mid 16th century (Toulmin-Smith 1907, 25).

No evidence to support local tradition of a Roman fort and a Late Saxon hall at the castle site was found during this investigation.

Finds retrieved from this watching brief comprised a range of pottery dating from the $11^{th} - 12^{th}$ centuries to the present day. This earlier medieval pottery, from the Stamford area, was often residual in nature but confirms that the vicinity was settled at about the time the castle is believed to have been built. The Stamford pottery is gradually replaced by locally produced Bourne wares, although some imported pottery, from Scarborough or Beverley in Yorkshire and Potterhanworth near Lincoln was identified. Post-medieval pottery is predominantly Bourne produced although these are gradually taken over by mass produced earthenwares and products of the Staffordshire potteries.

Roofing tiles were very common and have characteristics that demonstrate they were made in Bourne. Some tiles, particularly ridge tiles, were glazed which is often associated with higher status buildings as would be expected at a castle or manorial centre. Glass, clay pipe and a quantity of animal bone was also retrieved.

7. CONCLUSION

Archaeological investigations were undertaken at Bourne Castle as the site is of medieval origin and also a Scheduled Ancient Monument.

Four medieval walls, a possible rampart, a moat and a possible second moat or pond were the earliest archaeological deposits encountered in this investigation. The walls are located at the northeast corner of the bailey suggesting that there was an open space, possibly a courtyard in the centre.

Above the medieval features were deposits indicating widespread demolition of the castle, although this cannot be dated any closer than the $16^{\text{th}} - 17^{\text{th}}$ century.

Finds retrieved from this investigation comprise locally made Bourne ware of medieval and post-medieval date. Other medieval pottery included examples from Yorkshire and elsewhere in Lincolnshire. Glass, tile, clay pipe and animal bone were also retrieved.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Mrs G.S. Clingo, Clerk to the Trustees, Bourne United Charities, for commissioning the fieldwork and post-excavation analysis. Denise Drury coordinated the work and Gary Taylor and Tom Lane edited this report. Gail Smith, the South Kesteven Community Archaeologist, kindly permitted examination of the relevant parish files held by Heritage Lincolnshire.

9. PERSONNEL

Project Coordinator: Denise Drury Site Supervisor: Barry Martin Surveying: Rachael Hall Finds processing: Denise Buckley Photographic reproduction: Sue Unsworth Illustration: Paul Cope-Faulkner, Mark Dymond Post-excavation analysis: Paul Cope-Faulkner

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11. ABBREVIATIONS

APS Archaeological Project Services

DoE Department of the Environment

GSGB Geological Survey of Great Britain

IFA Institute of Field Archaeologists

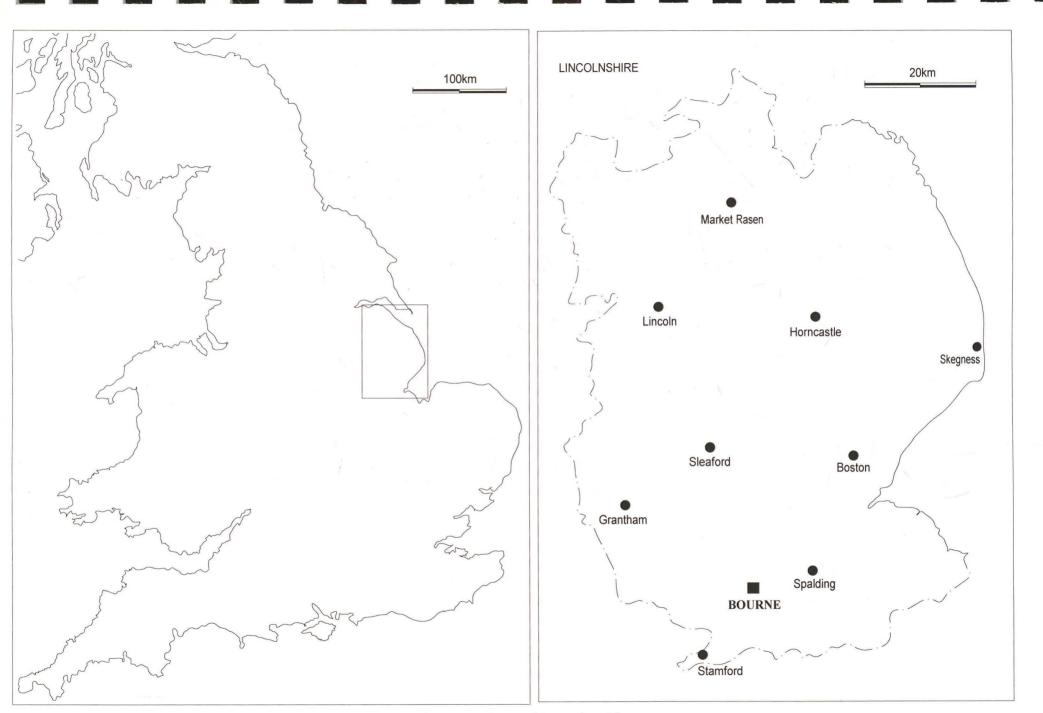


Figure 1 - General Location Plan.

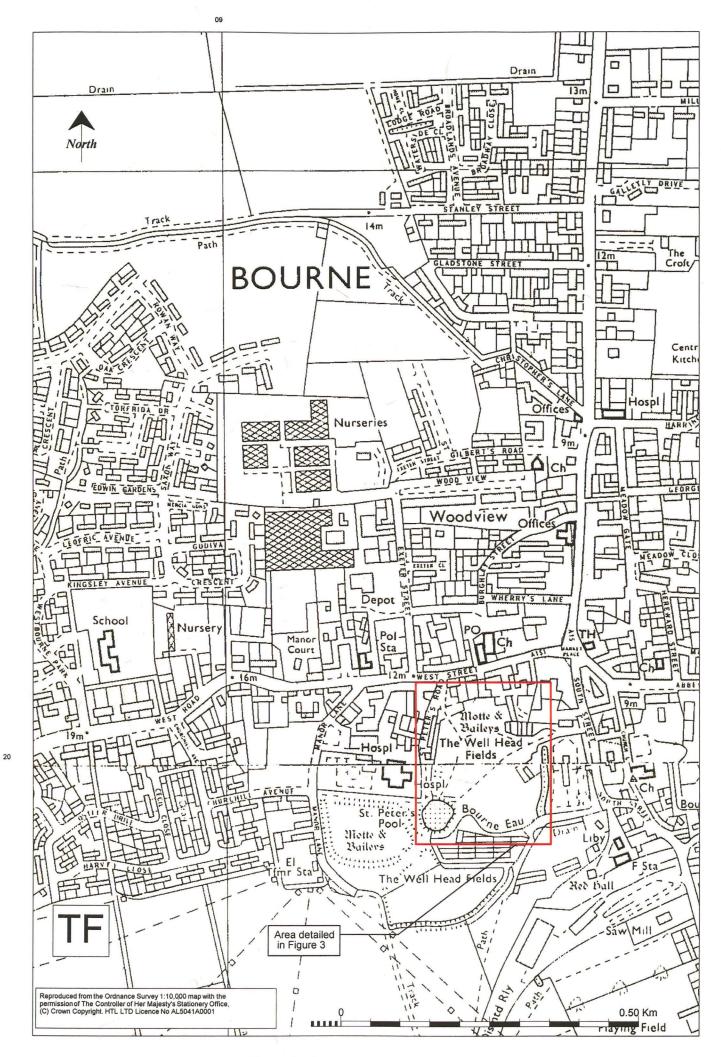
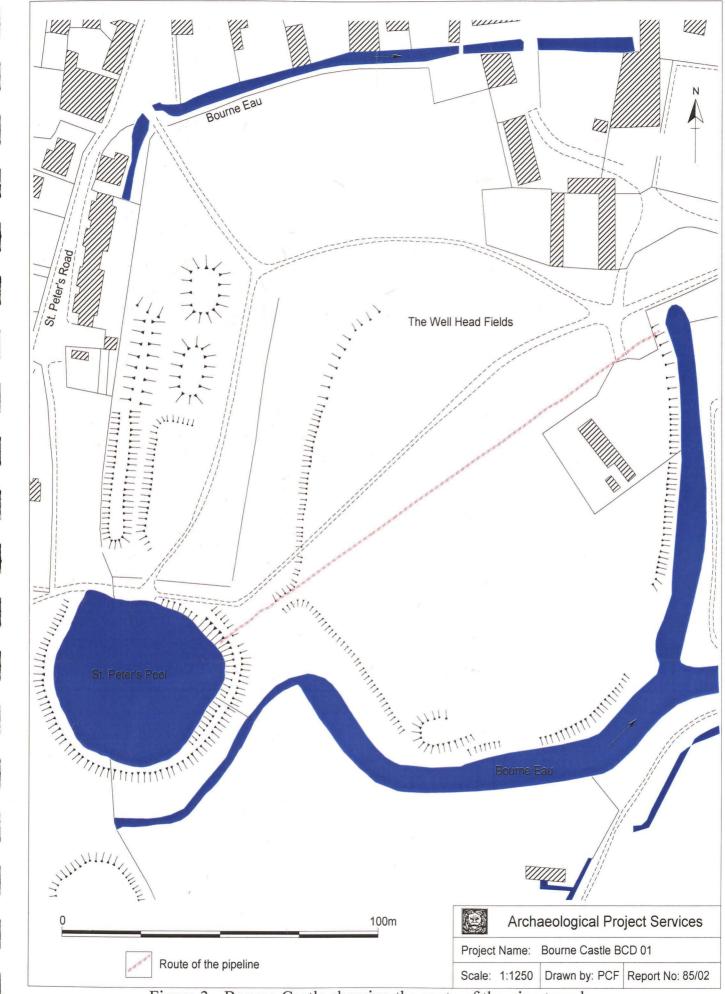
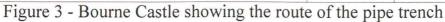


Figure 2 - Site location plan





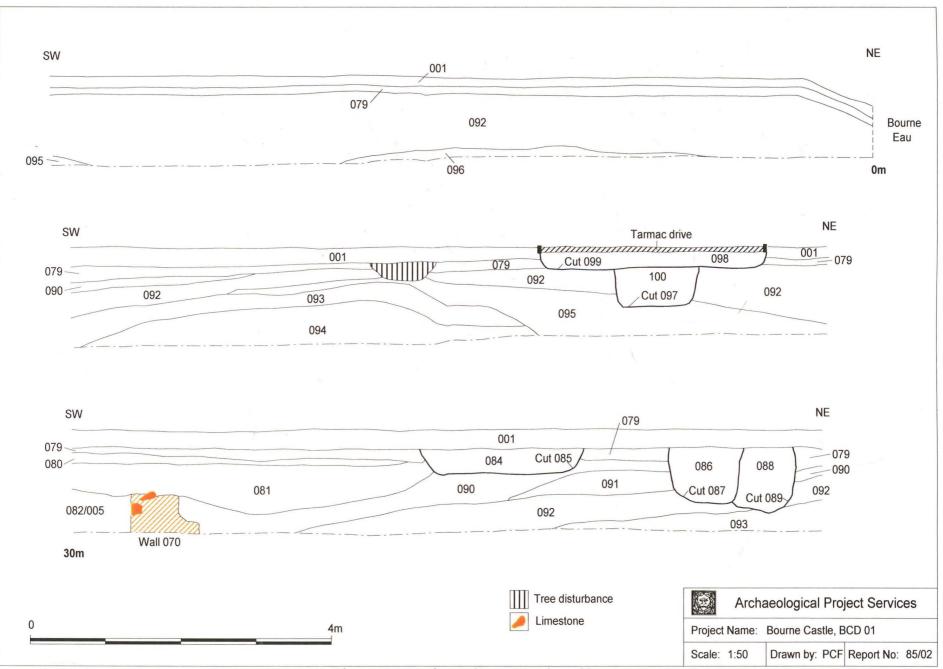


Figure 4 - Section 1 (0m - 30m length)

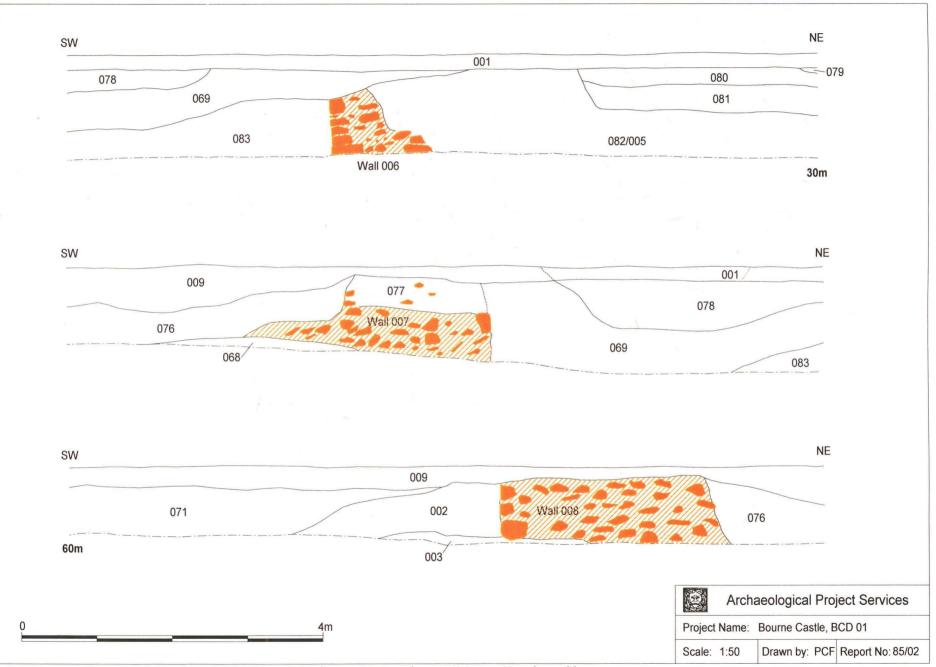


Figure 5 - Section 1 (30m - 60m length)

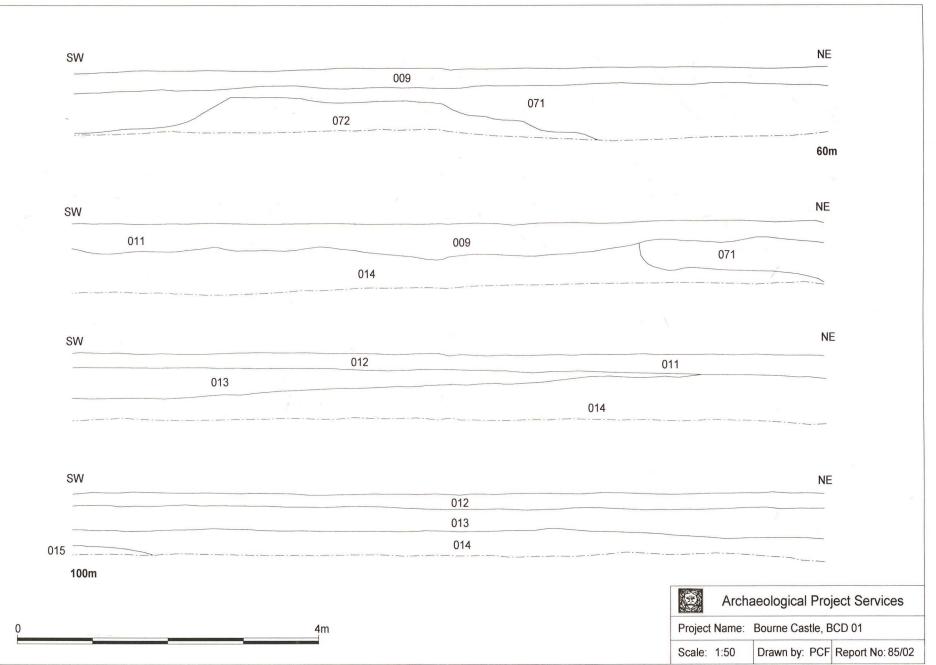


Figure 6 - Section 1 (60m - 100m length)

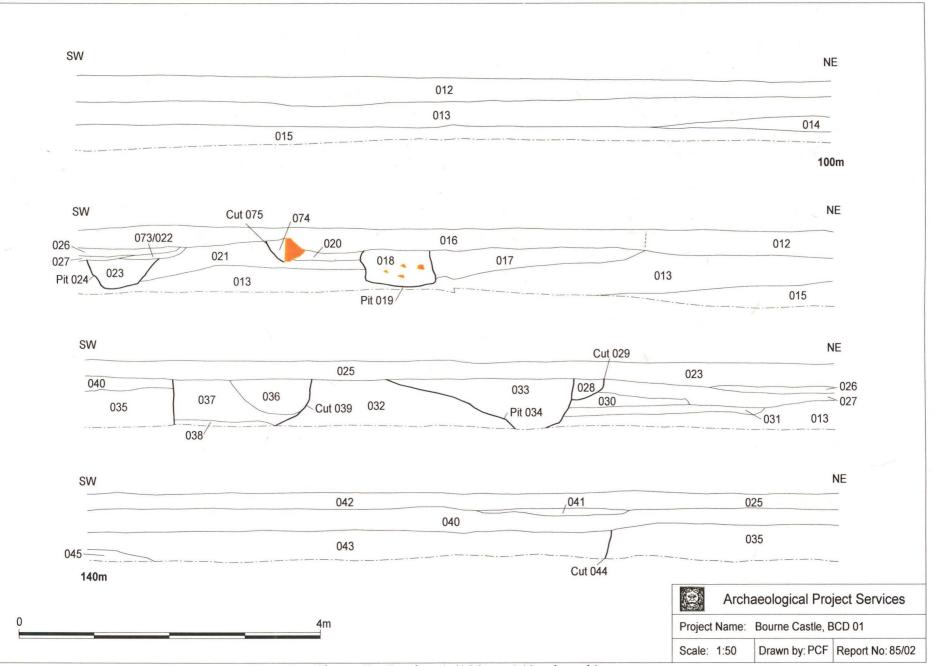


Figure 7 - Section 1 (100m - 140m length)

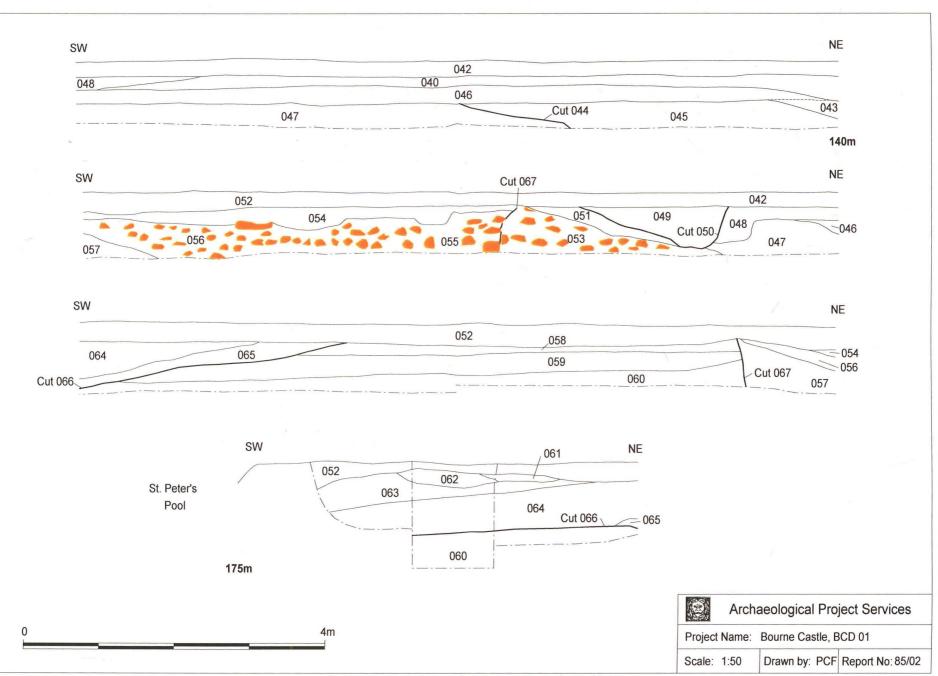


Figure 8 - Section 1 (140m - 175m length)

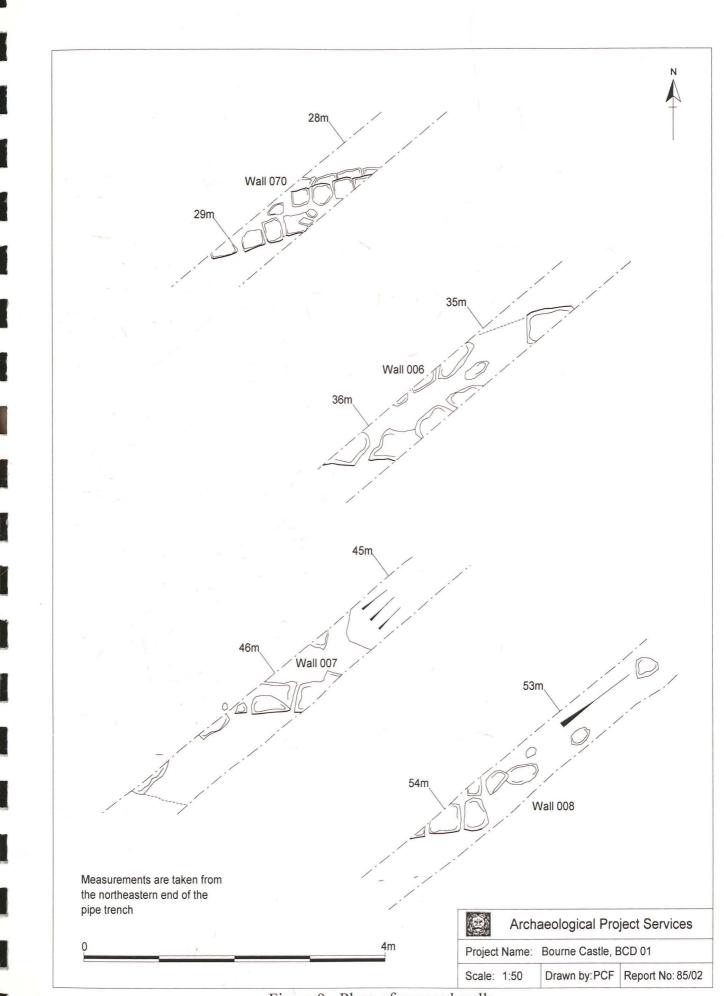


Figure 9 - Plans of exposed walls



Figure 10 - Bourne Castle: Interpretation



Plate 1 - General view across Bourne Castle showing the route of the pipe trench, looking northeast



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Plate 2 - Wall (006), looking northwest



Plate 3 - Wall (007), looking east



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Plate 4 - Wall (008), looking east

Plate 5 - Wall (070), looking west

Appendix 1

LAND AT BOURNE CASTLE, BOURNE, LINCOLNSHIRE - SPECIFICATION FOR ARCHAEOLOGICAL WATCHING BRIEF

1 SUMMARY

- 1.1 Watching brief is required during the laying of a water refreshment pipe at Bourne Castle, Bourne, Lincolnshire.
- 1.2 Bourne Castle is a Scheduled Ancient Monument (LI 95). Scheduled monument consent for the work has been granted subject to a condition requiring archaeological supervision and recording during works.
- 1.3 The watching brief will be undertaken during the groundworks associated with the pipe-laying scheme. Archaeological features exposed will be recorded in writing, graphically and photographically.
- 1.4 On completion of the fieldwork a report will be prepared detailing the results of the investigation. The report will consist of a narrative supported by illustrations and photographs.

2 INTRODUCTION

- 2.1 This document comprises a specification for an archaeological watching brief during the laying of a water refreshment pipe at Bourne Castle, Bourne, Lincolnshire, National Grid Reference TF 0945 1997.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 List of specialists.
 - 2.2.4 Programme of works and staffing structure of the project

3 SITE LOCATION

3.1 Bourne is located 24km southeast of Grantham and 15km northeast of Stamford in the South Kesteven district of Lincolnshire. The works are to take place on the site of Bourne Castle within the centre of the town at National Grid Reference TF 0945 1997. The route of the pipe is shown on the attached plan.

4 PLANNING BACKGROUND

4.1 Scheduled monument consent for the proposed works has been granted by the Department for Culture, Media and Sport. Consent is subject to a condition requiring archaeological supervision and recording during the groundworks associated with the pipelaying scheme..

5 SOILS AND TOPOGRAPHY

5.1 The site lies at c. 10m OD, adjacent to the Bourne Eau. Local soils are the Aswarby Association calcareous fine loamy soils over limestone (Hodge *et al.* 1984, 99).

6 ARCHAEOLOGICAL OVERVIEW

6.1 Although prehistoric activity has been recognised in the form of flint tools, no settlement of the period has so far been identified in the Bourne area. During the Romano-British period however, a settlement grew up on the King Street Roman road which runs north-south along the fen edge,

just west of the Car Dyke. Roman pottery kilns have been identified and further finds of pottery and *tessera* noted in the southern part of the town.

6.2 During the medieval period, Bourne grew into a substantial town centred predominantly around the church and castle. The church of SS Peter and Paul, once part of the Augustinian Abbey was founded in 1138. Bourne Castle, probably a late 11th century construction, is located west of the church. The castle comprised a single motte, possibly surmounted by a stone tower surrounded by two successive baileys. The baileys contained further buildings and incorporated a stone gatehouse. No buildings are extant, but there are extensive earthwork remains which are a Scheduled Ancient Monument (LI 95).

AIMS AND OBJECTIVES

7

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

8 SITE OPERATIONS

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

8.2 <u>Methodology</u>

- 8.2.1 The watching brief will be undertaken during excavations for the pipe trench and manhole and includes the archaeological monitoring of all phases of soil movement.
- 8.2.2 Trench sections will be monitored to identify and record archaeological features that are exposed and to record changes in the geological conditions. The section drawings of the trenches will be recorded at a scale of 1:10. Should features be recorded in plan these will be drawn at a scale of 1:20. Written descriptions detailing the nature of the deposits, features and fills encountered will be compiled on Archaeological Project Services pro-forma record sheets.
- 8.2.3 Any finds recovered will be bagged and labelled for later analysis.
- 8.2.4 Throughout the watching brief a photographic record will be compiled. The photographic record will consist of:
 - \$ the site during work to show specific stages, and the layout of the archaeology

within the trench.

\$ groups of features where their relationship is important

8.2.5 Should human remains be located they will be left *in situ* and only excavated if absolutely necessary. Should removal be required the appropriate Home Office licence will be obtained before the exhumation of the remains. In addition, the Local Environmental Health Department, coroner and the police will be informed, where appropriate.

POST-EXCAVATION

9

- 9.1 <u>Stage 1</u>
 - 9.1.1 On completion of site operations, the records and schedules produced during the watching brief will be checked and ordered to ensure that they form a uniform sequence forming a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued and labelled, the labelling referring to schedules identifying the subject/s photographed.
 - 9.1.2 All finds recovered during the field work will be washed, marked and packaged according to the deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

9.2 <u>Stage 2</u>

- 9.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 9.2.2 Finds will be sent to specialists for identification and dating.
- 9.3 Stage 3
 - 9.3.1 On completion of stage 2, a report detailing the findings of the watching brief will be prepared.
 - 9.3.2 This will consist of:
 - \$ A non-technical summary of the results of the investigation.
 - \$ A description of the archaeological setting of the watching brief.
 - \$ Description of the topography of the site.
 - \$ Description of the methodologies used during the watching brief.
 - \$ A text describing the findings of the watching brief.
 - \$ A consideration of the local, regional and national context of the watching brief findings.
 - \$ Plans of the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
 - \$ Sections of the trenches and archaeological features.
 - \$ Interpretation of the archaeological features exposed, and their chronology and setting within the surrounding landscape.

- \$ Specialist reports on the finds from the site.
- \$ Appropriate photographs of the site and specific archaeological features.

10 REPORT DEPOSITION

10.1 Copies of the report will be sent to the client; to English Heritage; and to the County Council Archaeological Sites and Monuments Record.

11 ARCHIVE

11.1 The documentation and records generated during the watching brief will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This will be undertaken following the requirements of the document titled *Conditions for the Acceptance of Project Archives* for long term storage and curation.

12 PUBLICATION

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

13 CURATORIAL RESPONSIBILITY

13.1 Curatorial responsibility for the archaeological work undertaken on the site lies with English Heritage. They will be given two weeks written notice of the commencement of the project.

14 PROGRAMME OF WORKS AND STAFFING LEVELS

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

15 SPECIALISTS TO BE USED DURING THE PROJECT

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

Task	Body to be undertaking the work
Conservation	Conservation Laboratory, City and County Museum, Lincoln
Pottery Analysis	Prehistoric - Trent & Peak Archaeological Trust
	Roman - B Precious, Independent Specialist

Anglo-Saxon - J Young, Independent Specialist

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

Non-pottery Artefacts	J Cowgill, Independent Specialist
Animal Bones	Environmental Archaeology Consultancy
Environmental Analysis	J Rackham, Independent Specialist
Human Remains Analysis	R Gowland, Independent Specialist

16 INSURANCES

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

17 COPYRIGHT

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

18 BIBLIOGRAPHY

Cathcart-King, D.J. 1983 Castellarium Anglicanum

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 Soils and their use in Eastern England, Soil Survey of England and Wales 13

Appendix 2

CONTEXT DESCRIPTIONS

No.	Description	Interpretation	Phase
001	Firm dark yellowish brown sandy clay, 0.3m thick	Topsoil	5
002	Firm light yellowish brown silty clay	Dumped deposit	4
003	Firm light yellowish brown silty clay	Natural deposit	1
004	Firm mid reddish brown silty clay, >0.44m thick	Rampart	2
005	Firm light yellowish brown clay, 0.60m thick	Demolition deposit	4
006	Limestone structure, ashlar blocks aligned east-west, >0.4m long by 1m wide and 0.9m high	Wall foundation	2
007	Limestone structure, rough hewn blocks aligned east-west,	Wall foundation	2
008	Limestone structure, rough hewn aligned east-west, 2.5m wide by $>0.8m$ high	Wall foundation	2
009	Firm dark yellowish brown sandy clay, 0.6m thick	Topsoil	5
010	Firm dark yellowish brown sandy clay, 0.3m thick	Topsoil	5
011	Firm dark yellowish brown sandy clay, 0.25m thick	Topsoil	5
012	Firm dark yellowish brown sandy clay, 0.35m thick	Topsoil	5
013	Firm mid greyish brown clayey silt, 0.4m thick	Levelling deposit	3
014	Firm light yellowish brown clay, 0.54m thick	Levelling deposit	3
015	Loose light yellowish brown gravel with sand	Natural deposit	1
016	Firm dark yellowish brown sandy clay, 0.35m thick	Topsoil	5
017	Firm mid greyish brown stone rubble with silt, 0.36m thick	Demolition deposit	4
018	Firm mid greyish brown stone rubble with silt	Fill of (019)	4
019	Feature, 0.96m wide by 0.5m deep, steep sides with uneven flattish base	Pit	4
020	Loose light yellowish brown sand, 0.12m thick	Make-up deposit	4
021	Firm mid greyish brown stone rubble with silt, 0.4m thick	Demolition deposit	4
022	Loose light yellowish brown sand, 100mm thick	Demolition deposit	4
023	Firm mid greyish brown stone rubble and silt	Fill of (024)	4
024	Feature, 1m wide by 0.4m deep, steep sides and rounded base	Pit	4
025	Firm dark yellowish brown sandy clay, #m thick	Topsoil	5
026	Firm mid greyish brown silt with rubble, 100mm thick	Demolition deposit	4

No.	Description	Interpretation	Phase
027	Compacted light yellowish brown limestone with mortar	Demolition deposit	4
028	Firm mid yellowish brown silty clay	Fill of (029)	4
029	Feature, 0.4m wide by 0.3m deep, steep sides and rounded base	Pit	4
030	Firm interbedded mid yellowish brown clay and dark grey ash, 0.2m thick	Occupation deposit	3
031	Firm dark greyish brown ash and silt, 100mm thick	Occupation deposit	. 3
032	Firm light yellowish brown clay with gravel lenses, 0.6m thick	Redeposited natural	3
033	Firm light brownish yellow silty clay with gravel	Fill of (034)	4
034	Feature, 2.5m wide by 0.7m deep, near vertical sides and rounded base	Pit	4
035	Firm light yellowish brown clay with gravel, 0.4m thick	?Natural deposit	1
036	Firm mid yellowish brown silty clay with burnt stone fragments	Fill of (039)	4
037	Firm light yellowish brown clay	Fill of (039)	4
038	Firm light greyish brown fragments of ceramic building material	Fill of (039)	4
039	Feature, 1.8m wide by >0.7m, steep sides, not fully excavated	Pit	4
040	Firm mid greyish brown silty clay with gravel, 0.4m thick	Levelling deposit	4
041	Loose mixed gravel, 100mm thick	Path	5
042	Firm dark yellowish brown sandy clay, #m thick	Topsoil	5
043	Firm mid yellowish brown silty clay	Fill of (044)	2
044	Feature, 12m wide by >0.4m deep, shallow side to west, steep on east side, not fully excavated	Moat	2
045	Soft/loose mid greyish brown silty clay with limestone fragments	Fill of (044)	2
046	Firm mid yellowish brown silty clay, 0.2m thick	Levelling deposit	4
047	Firm mid greyish brown silt	Buried topsoil	2
048	Loose mixed gravel, 0.48m thick	Path	4
049	Firm mid greyish brown silty clay with limestone fragments	Fill of (050)	4
050	Feature, 1.95m wide by 0.5m deep, steep sides and uneven base	Pit	4
051	Firm mid yellowish brown silt with limestone rubble, 0.2m thick	Demolition deposit	4
052	Firm dark yellowish brown sandy clay, #m thick	Topsoil	5
053	Firm mid yellowish brown rough hewn limestone blocks in silty clay	Moat side	2
054	Firm mid yellowish brown silty clay with limestone rubble	Fill of (067)	4

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No.	Description	Interpretation	Phase
055	Firm mid yellowish brown clay with rough hewn limestone blocks	Fill of (067)	4
056	Firm mid yellowish brown clay with limestone fragments	Fill of (067)	4
057	Firm dark yellowish brown silty clay	Fill of (067)	4
058	Firm light yellowish brown clay with gravel	Subsoil	1
059	Firm light yellowish brown clay	Subsoil	1
060	Firm light yellowish brown silt and gravel	Natural deposit	1
061	Loose light yellowish brown gravel, 100mm thick	?path	5
062	Firm mid greyish brown silt with limestone rubble, 0.2m thick	?path	5
063	Firm mid greyish brown silty clay	Fill of (066)	2
064	Firm light yellowish brown clay	Fill of (066)	2
065	Firm mid greyish brown silty clay	Fill of (066)	1
066	Feature, 6.5m wide by 0.6m deep, gradual sides and flattish base	Pool	1
067	Linear feature, aligned north-south, 6.9m wide by 0.6m deep, steep sides	Moat	2
068	Firm mid yellowish brown silt	Natural deposit	1
069	Firm mid yellowish brown clay	Demolition deposit	4
070	Limestone structure, squared blocks (200mm x 200mm x 150mm to 350mm x 250mm x 200mm), aligned east-west, >1:4m long by 0.5m wide by >0.52m high	Wall	2
071	Firm mid greyish brown silty clay, 0.6m thick	Former soil	4
072	Soft light yellowish brown clay with gravel	Subsoil	1
073	Loose light yellowish brown sand	Make-up deposit	4
074	Firm mid greyish brown limestone rubble and silt	Fill of (075)	4
075	Feature, 0.5m wide by 0.3m deep, steep sides	Indeterminate feature	4
076	Firm light to mid yellowish brown clay with limestone fragments	Demolition deposit	4
077	Firm mid yellowish brown clay with limestone fragments, 0.5m thick	Demolition deposit	4
078	Firm dark reddish brown silty clay	Demolition deposit	4
079	Firm mid greyish brown silty clay, 0.2m thick	Subsoil	5
080	Firm light yellowish brown clay, 0.2m thick	Demolition deposit	4
081	Firm mid yellowish brown clay	Demolition deposit	4
082	Firm light yellowish brown silty clay	Demolition deposit	4
083	Firm light yellowish brown silty clay with limestone rubble	Demolition deposit	4

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No.	Description	Interpretation	Phase
084		Fill of (085)	5
085	Linear feature, 2.15m wide by 0.35m deep, gradual sides and flat base	Water pipe trench	5
086	- /	Fill of (087)	5
087	Linear feature, 0.95m wide by 0.73m deep, near vertical sides and flat base	Water pipe trench	5
088	-	Fill of (089)	5
089	Linear feature, >0.75m wide by 0.8m deep, near vertical sides and flat base	Service trench	5
090	Firm light grey clay	Dumped deposit	5
091	Firm light yellowish brown silt	Dumped deposit	5
092	Firm light yellowish brown silt with grey clay lenses	Dumped deposit	5
093	Firm mid reddish brown silty clay	Rampart	2
094	Firm mid yellowish brown silt	Rampart	2
095	Soft light yellowish brown silt	Dumped deposit	2
096	Firm mid yellowish brown silt	Natural deposit	1
097	Feature, 1.1m wide by 0.52m deep, vertical sides and flat base	Pit	5
098	Tarmac surface and make-up	Surface	5
099	Linear feature, 3m wide x 0.3m deep, vertical sides and flat base	Cut for (098)	5
100	Firm mottled light yellow and grey silt and clay	Fill of (097)	5

Appendix 3

THE FINDS

by Paul Cope-Faulkner, Rachael Hall, Hilary Healey and Gary Taylor

Recording of the pottery was undertaken with reference to guidelines prepared by the Medieval Pottery Research Group (Slowikowski *et al.* 2001) and the pottery was quantified using the chronology and coding system of the Lincolnshire ceramic type series. A total of 106 fragments of pottery weighing 3074g and representing about 64 vessels was recovered from 12 separate contexts. In addition to the pottery, a moderately large quantity of other artefacts, predominantly building materials, comprising 46 items weighing a total of 3983g, was retrieved. Faunal remains were also recovered.

Provenance

The material was recovered from a variety of deposits including topsoil, subsoil and dumped deposits.

Most of the pottery and tile was made in Bourne, though there is material from elsewhere in Lincolnshire, particularly the southern part of the county. There are also regional imports from Staffordshire, Yorkshire and probably London.

Range

The range of material is detailed in the tables.

Pottery of probable 10th-12th century date is the earliest material recovered. Slightly later material, dating from the 12th to 14th century, is more abundant though the bulk of the pottery assemblage is of post-medieval, 16th-18th century, date.

Context	Fabric Code	Description	No.	Wt (g)	Context Date
001	BOU	Bourne D ware, including pancheon and enclosed vessel, 1 burnt, 16 th - 17 th century	6 (2 link)	176	19 th -20 th century
	BOUA	Bourne A/B ware, separate vessels, 1 abraded, 12 th -14 th century	2	85]
	GRE	Glazed red earthenware, 17 th century	1	26	
	MP	Midlands Purple-type ware, separate vessels, 17 th century	2	39]
	BL	Red painted earthenware, black glazed, separate vessels, 18 th century	2	79	1
	GRE	Red painted earthenware, brown glazed, 17 th -18 th century	1	36	1
	BS	Lead glazed stoneware flagon, late 19 th -early 20 th century	1	83]
	EMOD	Blue and white transfer printed tableware, separate vessels, 19 th century	3	6	
	VGF	Plant pot, 19 th -20 th century	1	48	
002	BOU	Bourne D ware pancheon	1	63	16 th - 17 th century
004	POTT	Potterhanworth ware cooking pot, sooted externally	1	48	13 th -14 th century
009	BOU	Bourne D ware, incl. pancheons and jugs, 2 slightly overfired, 16 th - 17 th century	10	711	19 th century

Table 1: Pottery

Context	Fabric Code	Description	No.	Wt (g)	Context Date
	MP	Midlands Purple-type ware, 17 th century	1	12	
	STMO	Staffordshire mottled ware, 18 th century	1	20	
	BS	Salt-glazed stoneware, ?London, 18 th -19 th century	1	9]
	GRE	Glazed red earthenware, 17 th century	1	15	
009 (cont)	BL	Red painted earthenware, black glazed, including pancheons and ?butterpot, 2 link, 18 th century	15	554	19 th century
	EMOD	Mocha ware, 19 th century	1	45	
010	BOU	Bourne D ware, separate vessels, 16 th -17 th century	2	86	18 th century
	BL	Red painted earthenware, black glazed, 18 th century	1	14	
017	POTT	Potterhanworth ware, sooted externally, 13 th -14 th century	1	18	13 th -14 th century
	SLST	South Lincs. Shelly ware, 12 th -14 th century	2(link)	15	
040	BOU	Bourne D ware jug, 16 th - 17 th century	1	29	$16^{\text{th}} - 17^{\text{th}}$ centur
		Scar/Bev?, chafing dish?, 12 th - 14 th century	1	51	
052	ST	Stamford ware, glazed, 11 th -12 th century	1	20	19 th century
	CRMWARE	Creamware, late, 19 th century	1	14]
063	ST	Stamford ware, numerous links, 1 vessel, pitcher, glazed, 11 th - 12 th century	39	593	12 th -13 th century
	POTT	Potterhanworth ware, incised wavy lines on inside of rim, 12 th -14 th century	1	18	
076	BOUA	Bourne A/B ware, no link but same vessel	2	48	12 th -14 th century
081	BOU	Bourne D ware, no link but same vessel	2	107	16 th -17 th century
093	POTT	Potterhanworth ware, abraded, sooted externally	1	6	13 th -14 th century

Stamford ware, of 11th-12th century date, is the earliest pottery recovered, but is restricted in extent, the 40 fragments recovered representing just two vessels and recovered from only two separate deposits. However, the pieces, particularly the substantial portion of the single vessel from (063), signify activity of probable Norman date at the site.

Locally-made Bourne wares succeeded and replaced the Stamford ceramics, probably in the 12th century. The quantity of medieval Bourne fabrics is not extensive, but these are supplemented by other, contemporary, wares from sources elsewhere in the Lincolnshire and beyond. These reflect continued activity at the site through the 12th-14th centuries.

The transition from Bourne A-C wares to D ware, both in terms of technological development and date of the change, is not yet clear. The dates for the various Bourne wares given in the table are those generally applied to the differing fabrics. However, there is some thought that Bourne D ware actually commences in the late medieval

period, and there is no chronological break between the different fabric types (J. Young, *pers comm.*; White 1989, 89). Bourne D, and other post-medieval wares, dominate the pottery assemblage, providing about 45% of the total collection by sherd count. In addition to the Bourne D fragments, there are pieces of Midlands Purple-type wares and glazed red earthenwares. Recent investigations in the general area of pottery production at Bourne, nearby on Eastgate, have suggested the possibility that both Midland Purple-types and glazed red earthenwares may also have been made in Bourne, following on from D ware (Cope-Faulkner *et al.* 2002). Very little early modern, 19th-20th century, pottery was recovered during the investigation.

Context	Material	Description	No.	Wt (g)	Context Date
001	СВМ	Tile, mortar adhering, 11mm thick, abraded, Bourne A/B fabric, medieval	1	147	18 th century
	СВМ	Glazed ridge tile, including crest, separate items, Bourne A/B fabric, 1 abraded, medieval	2	136	
	Clay pipe	Stem, bore 5/64", 18 th century	1	2	
	Stone	Roofing slate, post-medieval	1	5	
004	Stone	Burnt stone	1	166	
005	СВМ	Glazed ridge tile, crested	2 (link)	350	Medieval
009	СВМ	Tile, reduced cores, separate items, 14mm thick, medieval	2	407	Early post- medieval
	СВМ	Tile, splashed glaze, Bourne D ware fabric, ridge tile?, 10-15mm thick	4	426	
	СВМ	Brick/tile	1	15	
	Stone	Roof tile, 6mm thick	1	12	
038	Stone	Limestone pieces, roughly cubiç, 1 approx 35x35x40mm, other approx 40x40x30mm	2	158	
042	СВМ	Tile, Bourne D fabric, reduced core, 12mm thick	1	56	Early post- medieval
051	СВМ	Tile, ?Bourne D-type fabric, reduced core, 13mm thick	1	38	Late medieval- early post- medieval
052	СВМ	Pantile, 19 th -20 th century	1	193	20 th century
	СВМ	Machine-made brick 65mm wide, 19 th -20 th century	1	55	
	СВМ	Machine-made brick/tile, 45mm wide, 19 th -20 th century	1	36	
	СВМ	Drain, 19 th -20 th century	1	57	1
	СВМ	Floor tile, 20 th century	1	348	1
063	СВМ	Handmade brick, late post-medieval	2	280	?19 th century
	СВМ	Pantile, ?19 th century	1	126	
069	Stone	Burnt stone	1	75	
076	CBM /	Glazed ridge tile, separate items, Bourne A/B fabric, 9-13mm thick, 1 abraded	3	105	Medieval
079	Mortar	White mortar	2	25	

Table 2: Other Ceramic and Stone Finds

Context	Material	Description	No.	Wt (g)	Context Date
081	СВМ	Glazed ridge tile, Bourne A/B fabric, 9mm thick	1	41	Medieval
092	СВМ	Machine-made brick, 45mm thick, 19 th -20 th century	1	79	19 th -20 th century
	CBM	Pantile, 19 th -20 th century	1	98	
093	Stone	Burnt stone	2	137	
096	СВМ	Handmade brick	1	183	Late post- medieval

Note: CBM = Ceramic Building Material

Ceramic building material, predominantly tile, forms the largest component of the non-pottery assemblage. In contrast to the pottery, the majority of this material is medieval in date. The reasons for this are unclear though might be due to there being more tile-roofed buildings on the site in the medieval period, or that tile was taken off buildings for recycling at the end of the occupation of the castle in the post-medieval period.

Many of the tiles are in Bourne fabrics, similar to the pottery types. These are medieval Bourne A/B and postmedieval Bourne D wares, and the chronology of the pottery has been generally applied to the tiles. It is noteworthy, particularly in reference to the possible commencement of Bourne D ware pottery in the late medieval period (see above), that some of the tiles in this fabric have reduced cores, usually a characteristic of medieval tile production in Lincolnshire.

There are fragments of two decorative crests from medieval ridge tiles. These have a high (c. 30mm) crowning ridge with wide (c. 50-60mm) semi-circular serrations and stabbing on either side of the crest. This decorative style has been seen as kiln production material at Bourne previously. Such tiles are likely to have been on higher status buildings, as might be expected within the medieval castle.

Deposits (052) and (092) both contain early modern (19th-20th century) ceramic building material. It is unclear whether these reflect buildings of the period on the site, though the very mixed group from (052) is more likely to represent dumping of building debris.

Context	Туре	Comments	No.	Wt (g)	Date
009	dark green wine bottle	Iridescence, fragment	1	11	18 th century
042	colourless condiment bottle	applied rim, fragment	1	2	19 th century
052	light blue mould produced rectangular bottle	applied neck and rolled out rim	2	138	late 19 th century
	colourless bottle neck	applied rim, fragment	1	26	
	glass bottle stopper		1	50	

Table 4: Metalwork

Context	Material	Description			Date
Iron		Rectangular sheet, 46mm long, width tapers from 40mm to 37mm, 2mm thick, post-medieval	1	29	
001	Iron	Nail, rectangular section, bent, mineralised wood attached	1	8	18 th century
	Iron	Staple, 40mm long, 25mm wide, circular section to rod, limited corrosion, post-medieval	1	23	
	Iron and bone	Fork, two prongs (one broken), bone handle panels, riveted on, post-medieval	1	54	
-	Iron ?washer, diameter external 40mm, internal 20mm; 6mm thick, post-medieval		1	37	
010	Iron	Nail, circular domed head, rectangular shaft, broken; mineralised wood attached	1	24	Post- medieval
	Iron	?chain, rectangular links, post-medieval	1	87	
011	Iron	?machine part; circular sectioned rod, 10mm diameter, 156mm long, circular head 50mm diameter, 7mm thick		163	Post- medieval
052	Copper alloy	Coin, penny of Queen Victoria, 1900		9	20 th century

Forks are a late invention and were only introduced into Britain in the post-medieval period, which provides the date for the example from (001).

	Tabl	e 5:	The	Animal	Bone
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Context	Species	Bone	No.	Wt (g)	Comments
	sheep	metatarsus	1	44	,
001	cattle	metatarsus	1	102	Fractured
	cattle sized	rib	1	14	
004	sheep sized	radius	1 -	28	
	cattle	metacarpus	1	174	
000	cattle sized	?humerus	1	48	
009	sheep sized	femur	1	66	
	deer	antler	1	38	
052	unidentified	unknown	1	8	Rodent gnawing
	cattle sized	?skull	1	8	
063	sheep sized	tibia	1	16	
	sheep sized	vertebra	1	5	
	cattle sized	tibia	1	110	
076	cattle sized	?fragment of tibia	1	22	
	pig	radius	1	20	

The faunal assemblage is too small to invite further comment. The presence of deer antler would be suggestive of a higher status medieval building, as would be expected at Bourne Castle, although as the context dates to the 19th century this cannot be ascertained. Few of the bones exhibit butchery marks and most are complete.

Condition

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

Documentation

There have been numerous previous archaeological investigations at Bourne that are the subjects of report, but there has been little invasive study of the castle. Details of archaeological sites and discoveries in the area are maintained in the files of the South Kesteven Community Archaeologist and the Lincolnshire County Council Sites and

Monuments Record.

Potential

As a large collection of predominantly medieval and early post-medieval artefacts, the assemblage is of high local significance and potential. Occupation and use of the castle area in the 11th-12th centuries is indicated by the earliest pieces (Stamford ware). Continued use of the site through the medieval period is signified by the later artefacts, though the restricted quantity of pottery may indicate that there were specific waste dumping areas at the castle that were not encountered during the monitoring. Constructional materials of medieval date reflect the presence of buildings at the site, with some of them high status, as would be expected within a castle.

A relative abundance of post-medieval ceramics denotes continued use of the castle, probably in to the 17th century. In contrast to the earlier period, structural materials are not as abundant in the post-medieval phase, which might reflect buildings of a differing nature to those in the medieval period, or that construction materials were salvaged on abandonment of the castle.

The absence of any material earlier than the 11th century is informative and suggests that archaeological deposits dating from this period and before are absent from the area, or were not disturbed by the development. Similarly, the dearth of artefacts later than the 18th century would tend to suggest that the site has been unoccupied since this time.

References

Cope-Faulkner, P., Hall, R., Healey, H. and Taylor, G., 2002 'The Finds', in S. Thomson, Archaeological Evaluation on land at Eastgate, Bourne, Lincolnshire (BEGA01), unpublished Archaeological Project Services' report no. 34/02

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

White, A. J., 1989 Post Medieval Pottery in Lincolnshire 1450-1850, unpublished PhD thesis submitted to University of Nottingham

Appendix 4

GLOSSARY

Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Dumped deposits	These are deposits, often laid down intentionally, that raise a land surface. They may be the result of casual waste disposal or may be deliberate attempts to raise the ground surface.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut' are referred to as its fill(s).
Layer	A layer is a term to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany.

Appendix 5

THE ARCHIVE

The archive consists of:

- 100 Context records
- 6 Scale drawings (on 14 drawing sheets)
- 4 Photographic records
- 1 Stratigraphic matrix
- 1 Box of finds

All primary records and finds are currently kept at:

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

The ultimate destination of the project archive is:

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

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

Lincolnshire City and County Council Museum Accession Number: LCNCC : 2001.267

Archaeological Project Services Site Code:

BCD 01

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

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