



Beacon Park, Lichfield Staffordshire

Archaeological Watching Brief



Accession Number: 2017.LH.22
Ref: 116260.01
June 2017



**Beacon Park, Lichfield
Staffordshire**

Archaeological Watching Brief Report

Prepared for:

Amey OW Limited
1st Floor, The Sherard Building
Edmund Halley Road
Oxford
OX4 4DQ

Prepared by:

Wessex Archaeology
Unit R6
Riverside Block
Sheaf Bank Business Park
Prospect Road
Sheffield
S2 3EN

www.wessexarch.co.uk

June 2017

116260.01



Quality Assurance

Project Code	116260	Accession Code	2017.LH.22	Client Ref.	
Planning Application Ref.		Ordnance Survey (OS) national grid reference (NGR)	411390, 309589		

Version	Status*	Prepared by	Checked and Approved By	Approver's Signature	Date
v01	I	MT	RJO		20/03/2017
File:	S:\PROJECTS\116260_Reports\v01\				
V02	I	MT/RJO	RJO		16/05/2017
File:	S:\PROJECTS\116260_Reports\v02\				
V03	E	AWT	RJO	<i>Richard O'Shea</i>	20/06/2017
File:	S:\PROJECTS\116260_Reports\v03\				
File:					
File:					

* I = Internal Draft; E = External Draft; F = Final

DISCLAIMER

THE MATERIAL CONTAINED IN THIS REPORT WAS DESIGNED AS AN INTEGRAL PART OF A REPORT TO AN INDIVIDUAL CLIENT AND WAS PREPARED SOLELY FOR THE BENEFIT OF THAT CLIENT. THE MATERIAL CONTAINED IN THIS REPORT DOES NOT NECESSARILY STAND ON ITS OWN AND IS NOT INTENDED TO NOR SHOULD IT BE RELIED UPON BY ANY THIRD PARTY. TO THE FULLEST EXTENT PERMITTED BY LAW WESSEX ARCHAEOLOGY WILL NOT BE LIABLE BY REASON OF BREACH OF CONTRACT NEGLIGENCE OR OTHERWISE FOR ANY LOSS OR DAMAGE (WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OCCASIONED TO ANY PERSON ACTING OR OMITTING TO ACT OR REFRAINING FROM ACTING IN RELIANCE UPON THE MATERIAL CONTAINED IN THIS REPORT ARISING FROM OR CONNECTED WITH ANY ERROR OR OMISSION IN THE MATERIAL CONTAINED IN THE REPORT. LOSS OR DAMAGE AS REFERRED TO ABOVE SHALL BE DEEMED TO INCLUDE, BUT IS NOT LIMITED TO, ANY LOSS OF PROFITS OR ANTICIPATED PROFITS DAMAGE TO REPUTATION OR GOODWILL LOSS OF BUSINESS OR ANTICIPATED BUSINESS DAMAGES COSTS EXPENSES INCURRED OR PAYABLE TO ANY THIRD PARTY (IN ALL CASES WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OR ANY OTHER DIRECT INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE.



Beacon Park, Lichfield Staffordshire

Archaeological Watching Brief Report

Contents

Summary	iii
Acknowledgements.....	iv
1 INTRODUCTION.....	1
1.1 Project background	1
1.2 Site location, topography and geology.....	1
2 ARCHAEOLOGICAL BACKGROUND	1
2.1 Summary.....	1
2.2 Prehistoric and Roman.....	1
2.3 Early medieval and medieval.....	1
2.4 Post-medieval	2
3 METHODOLOGY.....	2
3.1 Aims and objectives	2
3.2 Fieldwork methodology	3
3.3 Machine excavation.....	3
3.4 Recording.....	3
3.5 Finds	3
3.6 Environmental	4
4 ARCHAEOLOGICAL RESULTS.....	4
4.1 Introduction	4
4.2 General stratigraphy.....	4
4.3 Other deposits.....	5
4.4 Structures.....	5
5 FINDS	6
5.1 Summary.....	6
5.2 Pottery.....	6
5.3 Ceramic building material (CBM).....	7
5.4 Clay tobacco pipe.....	7
5.5 Glass.....	7
5.6 Worked bone.....	8
5.7 Animal bone	8
5.8 Marine shell.....	8



5.9	Other finds	8
6	ENVIRONMENTAL EVIDENCE	8
6.1	Introduction	8
6.2	Aims and methods.....	8
6.3	Results	9
6.4	Discussion and further potential	9
7	DISCUSSION.....	9
7.1	Conclusions.....	9
8	STORAGE AND CURATION	10
8.1	Museum	10
8.2	Preparation of archive	10
8.3	Selection policy	10
8.4	Security copy.....	10
9	REFERENCES.....	11
9.1	Bibliography	11
APPENDICES		13
Appendix 1:	Context descriptions.....	13
Appendix 2:	Finds data	17
Appendix 3:	Environmental data	20
Appendix 4:	OASIS form.....	21

Figures

Figure 1: Site location, plan of Frames and section from Frame 3

Plates

Cover: Site with Erasmus Darwin statue
Plate 1: Working shot showing basal silt 3008
Plate 2: Wall 3006
Plate 3: Pavement 3004
Plate 4: Garden wall 3009
Plate 5: Garden wall 6002
Plate 6: Inspection chambers 14003 (far, brick) and 14004 (near, concrete)



Beacon Park, Lichfield Staffordshire

Archaeological Watching Brief Report

Summary

Wessex Archaeology was commissioned by Amey OW Ltd. to undertake an archaeological watching brief during emergency sewer repair work in Beacon Park, off Bird Street, Lichfield, Staffordshire. The evaluation was centred on National Grid Reference (NGR) 411390 309589.

The repair work comprised excavation of a manhole and a long trench in a series of sections (frames) to the south-west of the former public library and museum, latterly in use as Council offices. The undisturbed natural geology was not reached in any location, despite excavations extending to 2.2 m below ground level. This is consistent with the site being located with the Upper Pool, one of three former medieval pools in the area south of the Cathedral. No medieval or early medieval remains were encountered, except for a few residual sherds of medieval pottery.

Made ground deposits made up the majority of the observed stratigraphy. An early layer of silt seen across nearly all of the site may represent silting in the Upper Pool or material recorded historically as being dredged from the Minster Pool and used to backfill the former Upper Pool. The bulk of pottery recovered from the basal silt need not be later than early 18th century in date, somewhat earlier than the recorded dredging date of the 1850s. A fragment of late 18th/ early 19th century glass and one, possibly intrusive, very small later pottery sherd, were also recovered from the deposit. The remaining made ground deposits date from the 19th/20th century when the site was in use as a garden.

Several small 19th/20th century structures were identified, likely representing garden structures associated with the Museum Gardens which presently occupy the site. In one north-east section of the trench, a complex sequence of structures and made ground indicated successive garden layouts changing as the ground level was built up.

The site archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code 116260. It is recommended that the project archive resulting from the excavation be deposited with The Potteries Museum and Art Gallery, Stoke-on-Trent under the accession number 2017.LH.22. An OASIS form, wessexar1-286139, has been completed for this work and will be finalised at the time of deposition.



Beacon Park, Lichfield Staffordshire

Archaeological Watching Brief Report

Acknowledgements

The fieldwork was commissioned by Amey OW Ltd. on behalf of Severn Trent Water and Wessex Archaeology is grateful to Melanie Knight, Nichola Rafferty and Matthew Hitches in this regard.

The project was managed for Wessex Archaeology by Richard O'Neill. Fieldwork was carried out by Martina Tenzer between 9th March and 5th April 2017. This report was written by Ashley Tuck and Martina Tenzer. Finds were assessed by Lorraine Mephram and Lorraine Higbee (animal bone). Environmental samples were processed by Liz Chambers and Gwen Naylor and assessed by Inés López-Dóriga. Figures and plates were prepared by Will Foster.



Beacon Park, Lichfield Staffordshire

Archaeological Watching Brief Report

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by Amey OW Ltd. (hereafter 'the Client') to undertake an archaeological watching brief during emergency sewer repair work in Beacon Park, off Bird Street, Lichfield, Staffordshire, hereafter 'the Site' (Figure 1). The watching brief was centred on National Grid Reference (NGR) 411390, 309589.
- 1.1.2 Due to the archaeological sensitivity of the area, and following the discovery of artefacts during initial unmonitored groundworks, archaeological monitoring was requested by Stephen Dean, the Principal Archaeologist of Staffordshire County Council (SCC).
- 1.1.3 A Written Scheme of Investigation for the monitoring was prepared by Wessex Archaeology (2017), in accordance with industry best practice and guidance (ClfA 2014a-c), and approved by SCC in advance of fieldwork commencing.

1.2 Site location, topography and geology

- 1.2.1 The Site is located in the east of Beacon Park, off Bird Street in Lichfield, Staffordshire. The Site is located in a flat lawn area of Beacon Park behind the Council offices at approximately 85 m Above Ordinance Datum (aOD).
- 1.2.2 The bedrock geology comprises sandstone, siltstone and mudstone of the Bromsgrove Sandstone Formation formed during the Triassic Period in an environment dominated by rivers. No superficial deposits are recorded for this area (BGS 2017).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Summary

- 2.1.1 The following information is a summary of information found in the WSI (Wessex 2017), which is based in part on the Staffordshire Extensive Urban Survey (EUS) for Lichfield (Staffordshire County Council 2011).

2.2 Prehistoric and Roman

- 2.2.1 There is evidence of human activity in the vicinity of the Site from the prehistoric period onwards. The earliest evidence comprises Mesolithic flint tools found in St Michael's Churchyard. A possible Neolithic settlement was located to the south of the Cathedral. Later prehistoric and Roman period activity in the area is represented by stray finds.

2.3 Early medieval and medieval

- 2.3.1 The Site is located within an area of historic environment potential and lies within Historic Urban Character Area (HUCA) 14: Bird Street. There is potential for archaeological



remains from the early medieval period onwards. The HUCA lies within the Lichfield City Conservation Area and there are two grade II* listed and five grade II listed buildings nearby. The Site lies within the medieval town boundary although the plots here are characterised as irregular rather than typical burgage plots.

- 2.3.2 During the early medieval and medieval period Lichfield was a significant settlement and ecclesiastical centre associated with St Chad. Chad was created Bishop of Mercia in AD669 and established a cathedral at Lichfield during his short tenure as Bishop (669-672). Several important early medieval discoveries have been made within the extant Cathedral including graves, structures and the probable 8th century 'Lichfield Angel'. There is also evidence for activity during the early medieval period beyond the area of Cathedral Close. Both St Chad's Church at Stowe and St Michael's Church at Greenhill have been suggested as early church sites. The site of the former is historically associated with the bishop, St. Chad, and a well there is believed to have 7th century origins. Throughout the medieval period St Chad's shrine was an important focus for pilgrimage.
- 2.3.3 The Cathedral and historic core of the town was established in the 12th century. The Cathedral Close was enclosed by a stone wall and a moat; parts of both survive and are both scheduled and listed. Substantial rebuilding (including the central spire of the Cathedral) was required during the later 17th century following the English Civil War. A further scheduled monument, Prince Rupert's Mound, lies approximately 100 m north-west of the Cathedral is thought to represent a defensive outwork. Important historic buildings survive in the Cathedral Close; including the medieval timber-framed Vicars Close and Darwin's House.
- 2.3.4 Three large pools had been created to the south of the Cathedral by at least the medieval period. One of these, Upper Pool, likely utilised as a fish pond, lay in the area of the current Museum Gardens and may have extended onto the Site.

2.4 Post-medieval

- 2.4.1 Upper Pool had ceased to exist by the late 18th century and the Museum Gardens were thought to have been formed from landscaped material dredged from the nearby Minster Pool in the 1850s (Staffordshire County Council 2011).
- 2.4.2 Available online mapping (1884 1:500 Ordnance Survey Town Plan to the present) suggests the Site has remained relatively unchanged as a garden associated with the grade II listed former public library and museum fronting Bird Street since the late 19th century. The former public library and museum was built between 1857 and 1859. To the north of this was a purpose built probate court, constructed between 1856 and 1859. The two buildings were later extended to form one building latterly in use as County Council offices.

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The general aims of the archaeological watching brief were:

- *to determine the extent, condition, character, importance and date of any archaeological deposits encountered;*
- *to provide information that will enable the archaeological remains to be placed within their local, regional and national contexts;*
- *to produce a Site archive for deposition with a local museum;*



- *to provide information to the local HER to ensure the long-term survival of the data; and*
- *to prepare a report on the results of the watching brief.*

3.1.2 The specific aims of the archaeological watching brief were:

- *to identify the presence and nature of any evidence of early medieval/ medieval settlement or water management activity within the Site.*

3.2 Fieldwork methodology

3.2.1 Detailed methodology for the work can be found in the Written Scheme of Investigation (Wessex 2017). Wessex Archaeology procedures conform to industry best practice, as outlined in the Standards and Guidance documentation issued by the Chartered Institute for Archaeologists (CIfA 2014a-c).

3.2.2 The watching brief involved the monitoring of groundworks associated with emergency sewer repair, specifically excavation of a manhole and open cut trenching approximately 35 m in length. The trench was excavated in a sequence of sections referred to as 'frames'. Each frame was about 3 m in length and excavated to an initial depth of 0.90 m below ground level (bgl). The frames were then secured with sheet piles and the base and piles then lowered to around 2.20 m bgl. Once the pipes or manholes were inserted, the frames were backfilled and work proceeded to the next frame.

3.3 Machine excavation

3.3.1 All excavated areas were scanned by the Client using a cable avoidance tool to check for uncharted services. Topsoil was removed using a mechanical excavator with a suitable bladed bucket, working under the continuous direct supervision of an archaeologist.

3.4 Recording

3.4.1 All archaeological structures and deposits encountered were recorded using Wessex Archaeology *pro forma* recording sheets and a continuous unique numbering system. A stratigraphic matrix was compiled to record the relationships between structures and deposits. Plans were prepared at appropriate scales showing the areas investigated and their relation to more permanent topographical features. The plans show the location of structures observed and recorded in the course of the investigation. Other plans, sections and elevations of archaeological structures, features and deposits were drawn as necessary at 1:10, 1:20 and 1:50 as appropriate. All drawings were made in pencil on permanent drafting film.

3.4.2 Photographs were taken to produce a photographic record consisting of 35 mm monochrome prints and digital images with a resolution of at least 10 megapixels. The photographic record includes contextual and detail shots. All detail shots were accompanied by an appropriately sized scale and a north arrow.

3.5 Finds

3.5.1 All artefacts from excavated contexts were retained, except those from features or deposits of obviously modern date. Finds were collected and treated in line with current national guidelines (English Heritage 2005; CIfA 2014c). A suitable metal detector was used to enhance artefact recovery.

3.5.2 All retained artefacts were, as a minimum, washed, weighed, counted and identified. Artefacts were suitably bagged and boxed in accordance with the guidance given by the

relevant museum and generally in accordance with national industry guidelines (English Heritage 2005; ClfA 2014c).

3.6 Environmental

- 3.6.1 Sampling followed the Historic England guidelines (English Heritage 2011) and the Wessex Archaeology Guidelines for Environmental Sampling.
- 3.6.2 Samples were taken from well-sealed and dated or datable archaeological features for plant macrofossils (charred and/or waterlogged and wood charcoal), small animal bones and small artefacts.
- 3.6.3 Bulk environmental soil samples were processed by flotation and scanned to assess the environmental potential of deposits. The residues and sieved fractions were recorded and retained with the project archive.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

- 4.1.1 The following section provides a summary of the information held in the Site archive, with a full list of context numbers and context descriptions contained in Appendix 1.
- 4.1.2 The groundworks (Figure 1) started in the south-west behind the council offices with the initial excavation of a 3 m long and 1.5 m wide trench (Frame 1) to locate the damaged sewer pipe. This area was initially excavated without an archaeologist present and was later re-excavated. As a result of this disturbance, all artefacts from this section were recorded as unstratified.

4.2 General stratigraphy

Natural

- 4.2.1 The undisturbed natural geology was not reached in any location, despite excavations extending to 2.2 m bgl. This is consistent with the Upper Pool formerly extending across the Site.

Basal silt deposits

- 4.2.2 The lowest layer identified was a silt layer, which was seen in almost all frames below 0.9 m to 1.6 m bgl (2004, 3008, 4004, 5005, 6005, 7003, 8005, 9003, 10004, 11005, 12004, 13003 and 14005, Plate 1). The basal silt layer was not identified in Frame 1 due to the previous disturbance. The silt layer was dark brown, grey brown or yellow brown in colour. Seven environmental samples were taken from the basal silt deposits from different frames. These silt deposits likely represent redeposited material recorded historically as having been dredged from the Minster Pool and used to backfill the former Upper Pool in the 1850s. This interpretation is consistent with the environmental results presented below. The finds report concludes that the assemblage recovered from the basal silts need not be later than the 18th century in date, somewhat earlier than the recorded dredging date of 1850.

Other made ground deposits

- 4.2.3 Imported made ground deposits made up most of the stratigraphic sequence across the Site. Excluding the basal silty made ground already described, made ground deposits contained 19th/20th century finds with some older material. (17th/18th century material and a few sherds of medieval pottery). Full details of made ground deposits are given in Appendix 1. Some examples of these deposits include 1004, reddish yellow silty sand with



abundant brick, mortar and tile, likely imported demolition material; 3007, brown silty sand with patches of clay and small stones; and 7002, dark brown sandy silt with big pieces of sandstone, brick, pottery, animal bone and clay pipe pieces. Upper layers of made ground were thought to represent levelling layers for the modern park surface.

Topsoil

- 4.2.4 Topsoil was present across all frames and consisted of dark brown sand silt 0.2 m deep (eg 1001), either planted as lawn or as an ornamental shrub border.

4.3 Other deposits

- 4.3.1 A band of peat (1003) 0.1 m deep was recorded in Frame 1. As this band of peat lay above a 19th/20th century made ground deposit (1004), it likely represents redeposited material laid down as made ground.
- 4.3.2 Much of Frame 1 consisted of backfill (1005) of a sewer pipe cut.

4.4 Structures

Frame 3

- 4.4.1 Frame 3 contained a complex series of structures on multiple levels (Figure 1). The basal silt deposit (3008) in Frame 3 was overlain by an 'L'-shaped fragment of sandstone wall (3006, Plate 2), 1 m by 0.6 m by 0.2 m deep, which was in turn overlaid by a layer of made ground (3005). A partially surviving pavement (3004, Plate 3) overlay made ground 3005 and consisted of handmade red brick, of 18th or early 19th century date, bonded with pinkish white sandy lime mortar. This pavement extended across Frame 3, but was not seen in either Frame 2 or Frame 4. Pavement 3004 was built on sandstone wall 3006, and was generally one course deep, except where sandstone wall 3006 was absent, where pavement 3004 was three courses deep.
- 4.4.2 It seems likely that sandstone structure 3006 represents an earlier, separate phase of activity and was opportunistically utilised by the builders of pavement 3004. Made ground layer 3007 overlay pavement 3004. Rough cast concrete raft 3003 sat on top of made ground 3007, and acted as a foundation for garden wall 3009 (Plate 4). Garden wall 3009 was aligned east to west and comprised three courses of a single skin of handmade red bricks with pinkish lime mortar. Garden wall 3009 was overlain by made ground levelling layer 3002 and by topsoil 3001.
- 4.4.3 The structures of Frame 3 appear to represent a progression of short-term garden-related structures as the level of the ground was built up. Due to their position in the stratigraphic sequence, the later structures can be said to be of 19th/20th century date, whereas the sandstone wall and pavement may be slightly earlier in date.

Frame 6

- 4.4.4 Frame 6 contained a rough cast concrete raft (6003) forming the foundation of a garden wall (6002, Plate 5) of two skins of handmade red brick, of 18th or early 19th century date, bonded with pinkish white sandy lime mortar. Structures 6002 and 6003 sat above the upper layer of made ground (6004), which contained 19th/20th century pottery, and below the topsoil (6001). Structures 6002 and 6003 were similar in form and stratigraphic placement to structures 3003 and 3009 from Frame 3, indicating a 19th/20th century date for the structures.

Frame 14

- 4.4.5 Two former inspection chambers (“manholes”) were encountered in Frame 14, where a further inspection chamber was installed as part of these works. The eldest inspection chamber was built of handmade red brick and was 1 m square (14003, Plate 6). The later inspection chamber (14004, Plate 6) was constructed in concrete.

5 FINDS

5.1 Summary

- 5.1.1 The evaluation yielded a relatively small assemblage of finds, mostly of post-medieval date, with a small medieval component. Finds came from layers throughout the stratigraphic sequence, from the basal layer of silt through to made ground.
- 5.1.2 All finds have been quantified by material type within each context, and the results are presented in Appendix 2, Table 1.

5.2 Pottery

- 5.2.1 The pottery assemblage amounts to 106 sherds, weighing 3,597 grammes. There is a small proportion of medieval material, but the majority is of post-medieval/modern date. Condition ranges from fair to good; the assemblage is fragmentary, but levels of surface and edge abrasion are relatively low. The assemblage has been quantified (sherd count and weight) by ware type within each context, with the presence of diagnostic forms noted. This information is presented in Appendix 2, Table 2.

Medieval

- 5.2.2 Three sherds of whiteware were identified (made ground 4004 and 13002, silty layer 7003). Whitewares could have come either from Chilvers Coton in north Warwickshire (Mayes and Scott 1984, fabric A), or from an as yet unknown site on the south Staffordshire-Warwickshire border (Rátkai 2008, 493-5). The sherd from 7003 carries red painted decoration, a decorative technique known amongst the Chilvers Coton wares. Chilvers Coton A was dated by the excavators to c. 1250-1300 with some possible production into the early years of the 14th century. However, the picture in southern Staffordshire appears consistent with continued use of whitewares throughout the 14th century.
- 5.2.3 In addition, one sherd in a coarse, gritty fabric came from made ground 4004. Similar fabrics have been identified on other sites in Lichfield (e.g. Rátkai forthcoming, fabric GRITIP).
- 5.2.4 All four medieval sherds were residual finds in post-medieval/modern contexts.
- 5.2.5 Two sherds of Midland Purple ware (from silty layers 9003, 11005) are undiagnostic, and could date anywhere between the 14th and 16th centuries.

Post-medieval/modern

- 5.2.6 The remaining 100 sherds belong to this chronological group. There is a small coarseware component, comprising sherds of coarsewares, mostly black-glazed, some over an iron-rich slip (late 17th to 18th century). Diagnostic forms include flared bowls and a convex jar. There is one sherd of trailed slipware. Four sherds of red earthenware from made ground 2002 are unglazed, and represent 19th/20th century flowerpots; one is stamped NOTTM....WELL (the mark of Sankeys of Bulwell, Nottingham, founded in 1855), but otherwise these wares are dated broadly as 17th/18th century or later. Alongside are a

few early post-medieval finewares, limited to six sherds of late 17th/18th century Staffordshire-type wares (nine mottled wares and one feathered slipware). There are also two sherds of tinglazed earthenware, and one of porcelain, both of similar date.

- 5.2.7 The majority of the post-medieval/modern assemblage, however, consists of refined wares of mid-late 18th century date or later: creamware, pearlware, whiteware and yellow ware. The latter was used for kitchenware bowls, while the other wares supplied tea- and tablewares (plates, cups, etc.). Other kitchenwares were provided by stoneware containers (jars, flagon).

Chronological sequence

- 5.2.8 Quantities of pottery by context are not large (the highest number of sherds per context is 28, and only two contexts yielded more than 20 sherds), but the pottery spot-dating suggests that while pottery from the made ground includes a mixture of 19th/20th material with some earlier sherds (17th or 18th century), the silty layer at the base of the sequence was limited to wares which need not be later than the early 18th century: glazed coarsewares, Staffordshire-type mottled and slipwares – one very small sherd of refined whiteware from layer 11005 could be intrusive. The dating evidence from the bottle glass is slightly at odds with this (see below), but still need not push the dating of the silty layer later than the 18th century.

5.3 Ceramic building material (CBM)

- 5.3.1 This category comprises brick and roof tile. Three complete or almost complete bricks were taken as samples (pavement 3004, wall 6002 and unstratified). All are unfrogged forms, handmade in coarse fabrics, and have dimensions of 235 x 100–110 x 60–5 mm, consistent with an 18th or early 19th century date.
- 5.3.2 The remaining 28 fragments belong to flat roof tiles. All are in relatively hard-fired, orange-red sandy fabrics. Only one retains any evidence of means of attachment to the roof – in this instance, a nibbed end (layer 10004).

5.4 Clay tobacco pipe

- 5.4.1 Of the 23 fragments of clay pipe recovered, 20 are plain stem fragments. Two of these (both from made ground 13002) retain parts of the bowl heels (one heart-shaped), and are thus of 17th century date.
- 5.4.2 Two complete bowls were also found, one from made ground 6004 and one from silty layer 9003, with another undiagnostic fragment from the same context. Both bowls are Broseley types. The bowl from 6004 is the earlier, with a narrow, elongated bowl, dated c. 1660–80 (Oswald 1975, fig. 7, 2b). The bowl from 9003 is a Broseley type has a wide, splayed base, and is dated c. 1680–1730 (*ibid.*, fig. 7, 5a), with a square heel stamp IOHN / [illegible], maker unknown.

5.5 Glass

- 5.5.1 The glass assemblage of 27 fragments (2,363 g) includes both vessel and window glass.
- 5.5.2 The vessel glass consists primarily of fragments of free-blown green wine bottle. The earliest could be a bottle neck, found unstratified, with a low string rim, possibly from a shaft-and-globe form, dated c. 1630–40 (Dumbrell 1983, 45). A second neck, probably from an 'onion' form of c. 1680–1730 (*ibid.*, 56–7, 62–3), came from made ground 4002, while three bases probably also from 'onion' bottles were found unstratified. A fourth base, from silty layer 7003, could be either from an 'onion' or 'mallet' form (the latter dating c.

1780–1830), while a body fragment from just above the base, from silty layer 10004, almost certainly falls within the ‘mallet’ range.

5.5.3 Later bottles are represented by a green beer bottle from the Lichfield Brewery (found unstratified), and a square bottle from made ground 2002, once containing coffee and chicory essence, with the mark S.C.W.S. Shieldhall (the Scottish Co-operative Wholesale Society’s factory in Shieldhall, Glasgow, established 1868).

5.5.4 Three vessel bases in clear glass, with prominent pontil marks, found unstratified, could be from larger vessels such as carboys.

5.5.5 Window glass fragments were recovered from made ground 7002 (greenish glass) and made ground 2002 (modern clear glass), with five fragments (greenish and clear) found unstratified.

5.6 Worked bone

5.6.1 One bone object was found unstratified. This is the handle from a toothbrush. The head is largely missing, although one or two of the drilled holes which held bristles survive. Brushes such as this are known from the 17th century and later (MacGregor 1985, 183, fig. 99f), although the majority of examples from excavations seem to date from the late 18th century or later. A comparable brush, for example, is known from Dorchester, Dorset, from a pit dating to the 1830s (Draper 1993, fig. 109, 31).

5.7 Animal bone

5.7.1 The animal bone consists largely of cattle (long bones, ribs, vertebra, scapula) and sheep (long bones, rib), with one pig (mandible), one goose, and two deer (one possibly from a fallow deer). The condition varies; there are a few small, heavily abraded and unidentifiable fragments (one is burnt), and some of the larger fragments are badly laminating.

5.8 Marine shell

5.8.1 Marine shell consists entirely of oyster. Both right and left valves are represented (both preparation and consumption waste) although right valves are predominant.

5.9 Other finds

5.9.1 Other finds comprise a very corroded iron object (possibly a nail), a small piece of ironworking slag, and a synthetic knife handle with part of the steel blade surviving.

6 ENVIRONMENTAL EVIDENCE

6.1 Introduction

6.1.1 Seven bulk samples were taken from the basal area of the trench across a range of frames and were processed for the recovery and assessment of environmental evidence, primarily charred plant remains and charcoal.

6.2 Aims and methods

Charred plant remains

6.2.1 Samples were processed by standard flotation methods; the flot retained on a 0.25 mm mesh, residues fractionated into 4 mm and 1 mm fractions and kept wet. The coarse fractions (>4 mm) were sorted, weighed and discarded. The flots were scanned using a stereo incident light microscopy at magnifications of up to x40 using a Leica MS5

microscope for the identification of environmental remains. The preservation and nature of the plant remains, as well as the presence/absence of other environmental remains such as molluscs, animal bone and insects, is recorded in Appendix 3, Table 3.

- 6.2.2 Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000, Tables 3, page 28 and 5, page 65), for cereals. Abundance of remains is qualitatively quantified (A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals and not the number of remains per taxa.

6.3 Results

- 6.3.1 The flots were of large size but were dominated by a high numbers of roots and other vegetative plant remains.

Waterlogged plant macroremains

- 6.3.2 Assemblages of seeds from plants from wet environments and nutrient rich soils, as typical from water verges and waste grounds, have been recorded in some of the flots. The taxa include water-plantain (*Alisma* sp.), goosefoot (*Chenopodium* sp.), buttercups (*Ranunculus* sp.), sedges (*Carex* spp.), plantain (*Plantago* sp.), dead-nettle (*Lamium* sp.) or gipsywort (*Lycopus europaeus*). A single seed from a taxon of standing water, white lily (*Nymphaea alba*) has been tentatively identified. Also, seeds from fruits from elder (*Sambucus* sp), raspberry/blackberry (*Rubus* sp.) and hazel (*Corylus avellana*), which might have been growing in the immediate environment or have been dispersed by animals are relatively abundant. In addition, plants of economic interest, such as a single barley (*Hordeum vulgare*) grain, and herb garden plants, such as *Brassica/Sinapis* and *Apiaceae*, have been sparsely recovered.

Charred plant remains

- 6.3.3 No charred plant remains other than a wheat (*Triticum* sp.) grain were observed in the flots from the subsamples, but wood charcoal from both mature wood and roundwood was noted.

6.4 Discussion and further potential

- 6.4.1 The analysis of the environmental assemblages has little further potential. The local vegetation represented by the basal deposit observed can be broadly described as being typical of both standing water as well as wetland vegetation, including herbaceous plants, shrubs and trees, from the verges and banks. A vegetable and herb garden might have existed nearby, accounting for the sporadic presence of plants of economic interest.

7 DISCUSSION

7.1 Conclusions

- 7.1.1 The undisturbed natural geology was not reached in any location, despite excavations extending to 2.2 m below ground level (BGL). This is consistent with the site being located with the Upper Pool, one of three former medieval pools in the area south of the Cathedral. No medieval or early medieval remains were encountered, except for a few residual sherds of medieval pottery.
- 7.1.2 Made ground deposits made up the majority of the observed stratigraphy. An early layer of silt seen across nearly all of the Site may represent silting in the Upper Pool or material recorded historically as being dredged from the Minster Pool and used to backfill the



former Upper Pool. The bulk of pottery recovered from the basal silt need not be later than early 18th century in date, somewhat earlier than the recorded dredging date of the 1850s. A fragment of late 18th/ early 19th century glass and one, possibly intrusive, very small later pottery sherd, were also recovered from the deposit. The remaining made ground deposits date from the 19th/20th century when the site was in use as a garden.

- 7.1.3 Several small 19th/20th century structures were identified likely representing garden structures associated with the Museum Gardens which presently occupy the Site. In one north-east section of the trench, a complex sequence of structures and made ground indicated successive garden layouts changing as the ground level was built up.

8 STORAGE AND CURATION

8.1 Museum

- 8.1.1 The Site archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code 116260. It is recommended that the project archive resulting from the excavation be deposited with The Potteries Museum and Art Gallery, Stoke-on-Trent under the accession number 2017.LH.22. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

8.2 Preparation of archive

- 8.2.1 The complete Site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by the Potteries Museum and Art Gallery, and in general following nationally recommended guidelines (SMA 1995; ClfA 2014d; Brown 2011; ADS 2013).
- 8.2.2 All archive elements will be marked with the accession code, and a full index will be prepared

8.3 Selection policy

- 8.3.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, some categories could be targeted for selective retention on the basis of their small quantities, nature and date range (commonly occurring and well documented types of relatively recent origin), such as clay pipe stems, ceramic building material, metalwork, modern glass, and oyster shell. Any discard of artefacts will be fully documented in the project archive.
- 8.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

8.4 Security copy

- 8.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.



9 REFERENCES

9.1 Bibliography

- ADS 2013 *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service & Digital Antiquity Guides to Good Practice
- Brown, D H 2011 *Archaeological archives; a guide to best practice in creation, compilation, transfer and curation*. Archaeological Archives Forum (revised edition)
- BGS 2017, *British Geological Survey Geology of Britain Viewer*. Available: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, accessed 24/5/2017
- Chartered Institute for Archaeologists (CIfA), 2014a. Standard and Guidance for an Archaeological Watching Brief.
- Chartered Institute for Archaeologists (CIfA), 2014b. Codes of Conduct.
- Chartered Institute for Archaeologists (CIfA), 2014c. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
- Chartered Institute for Archaeologists (CIfA), 2014d. Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation
- Draper, J, 1993 Objects from five post-medieval pits, in P J Woodward, S M Davies and A H Graham, *Excavations at Greyhound Yard, Dorchester 1981–4*, Dorset Natur Hist Archaeol Soc Monogr 12, 194–9
- Dumbrell, R, 1983 *Understanding Antique Wine Bottles*, Woodbridge: Antique Collectors' Club
- English Heritage, 2005. A Strategy for the Care and Investigation of Finds.
- English Heritage, 2006. Guidelines on the X-radiography of Archaeological Metalwork.
- English Heritage, 2011, Environmental Archaeology. A Guide to the Theory and Practice of Methods from Sampling and Recovery to Post-excavation.
- MacGregor, A, 1985 *Bone, Antler, Ivory and Horn: the technology of skeletal materials since the Roman period*, London: Croom Helm
- Mayes, P and Scott, K, 1984 *Pottery kilns at Chilvers Coton, Nuneaton*, SMA Monogr 10
- Oswald, A, 1975 *Clay Pipes for the Archaeologist*, Oxford: Brit Archaeol Rep 14
- Rátkai, S, 2008 *The medieval pottery* in A B Powell, P Booth, A P Fitzpatrick and A D Crockett, *The Archaeology of the M6 Toll 2000-2003*, Oxford Wessex Archaeology Monogr 2, 491–501
- Rátkai, S, forthcoming, Pottery, in A Tuck, Medieval boundary of the former Franciscan Friary, Lichfield, Staffordshire, *Trans Staffordshire Archaeol Hist Soc*



- SMA 1993 *Selection, Retention and Dispersal of Archaeological Collections*. Society of Museum Archaeologists
- SMA 1995 *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists
- Stace, C, 1997, *New flora of the British Isles* (2nd edition), Cambridge: Cambridge University Press.
- Staffordshire County Council 2011, *Staffordshire Extensive Urban Survey: Lichfield Historic Character Assessment*
- Wessex 2017, Beacon Park, Lichfield, *Written Scheme of Investigation for Archaeological Watching Brief*
- Zohary, D, and Hopf, M, 2000, *Domestication of plants in the Old World: the origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*, 3rd edition, Clarendon Press, Oxford.



APPENDICES

Appendix 1: Context descriptions

Frame No.1		Length: 3.0 m Width: 1.6 m Max. Depth: 2.2 m
Context	Description	Depth (m)
1001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
1002	Made ground: Levelling layer for park surface, dark brown silty sand, fragments of brick, mortar and tile, finds	0.20 – 0.50
1003	Band of peat, only visible for 0.5 m in north-facing section	0.50 – 0.60
1004	Made ground: Demolition layer, reddish yellow silty sand, abundant brick, mortar and tile fragments.	0.60 – 0.80
1005	Mid greyish brown silty sand, backfill of construction cut for 2 400 mm sewer pipe in trench, cuts wider than trench so not visible.	0.80 +
1006	Small band of concrete, visible in north-facing section.	0.20 – 0.30

Frame No.2		Length: 3.0 m Width: 1.0 m Max. Depth: 2.2 m
Context	Description	Depth (m)
2001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
2002	Made ground: Level layer for park surface, dark brown silty sand, patches of ashes, fragments of brick, mortar and tile, very rooty, pottery, glass	0.20 – 0.90
2003	Made ground: Demolition layer, reddish yellow silty sand, abundant brick, mortar and tile fragments.	0.90 – 1.40
2004	Deliberate backfill of duck pond, dark brown silty sand, very rooty, patches of dark peat, wet, sparse fragments of brick and tile, pottery and oyster shell	1.40

Frame No.3		Length: 4.0 m Width: 1.0 m Max. Depth: 2.2 m
Context	Description	Depth (m)
3001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
3002	Made ground: Level layer for park surface, dark brown silty sand, patches of ashes, fragments of brick, mortar and tile, very rooty, pottery	0.20 – 0.5
3003	Structure: Concrete, foundation garden wall 3009, rough cast concrete, 0.05 m thick	0.50 – 0.55
3004	Structure: Pavement, red unfrogged brick, brick sample 1, set in pinkish white sandy lime mortar, 1 course thick, up to 3 courses thick in south	0.80 – 1.10
3005	Made ground: Demolition layer, reddish yellow silty sand, abundant brick, mortar and tile fragments.	1.10 – 1.20
3006	Structure: Grey sandstone, wall or foundation, visible for 0.90 m in trench.	1.20 – 1.40
3007	Made ground: Level layer for former garden surface, brown silty sand, sparse brick, tile fragments	0.55 – 0.80
3008	Dark brown silty sand, clay patches, occasional small stones	1.40 +
3009	Structure: Garden wall, red unfrogged brick, pinkish white lime mortar	0.30 – 0.50



Frame No.4		Length: 3.0 m Width: 1.6 m Max. Depth: 2.2 m
Context	Description	Depth (m)
4001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
4002	Made ground: Level layer for park surface, dark brown silty sand, fragments of brick, mortar and tile, very rooty, pottery, clay pipe, glass bottle, oyster shell	0.20 – 1.20
4003	Made ground: Demolition layer, reddish yellow silty sand, abundant brick, mortar and tile fragments	1.20 – 1.40
4004	Dark brown silty sand, occasional small stones, CBM, pottery and animal bones	1.40 +

Frame No.5		Length: 3.0 m Width: 1.0 m Max. Depth: 1.7 m
Context	Description	Depth (m)
5001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.10
5002	Made ground: Greyish brown silty sand, CBM, bone, pottery	0.10 – 0.50
5003	Made ground: Reddish yellow silty sand, abundant CBM fragments	0.50 – 0.60
5004	Made ground: Dark brown sandy silt, dark flecks of coal/charcoal	0.60 – 1.60
5005	Silt layer, light yellowish brown sandy silt, dark spots of charcoal (burnt bone inclusions)?	1.60 +

Frame No.6		Length: 3.0 m Width: 1.0 m Max. Depth: 1.7 m
Context	Description	Depth (m)
6001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.10
6002	Structure: Red brick, garden wall, red unfrogged brick in pinkish white sandy mortar, L-shaped, one course visible	0.10 – 0.15
6003	Structure: Concrete foundation, rough cast concrete	0.15 – 0.20
6004	Made ground: Dark brown sandy silt, CBM fragments, pottery, animal bone and clay pipe pieces	0.20 – 1.50
6005	Silt layer, light yellowish brown sandy silt, dark spots of charcoal	1.50 +

Frame No.7		Length: 3.0 m Width: 1.0 m Max. Depth: 1.7 m
Context	Description	Depth (m)
7001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
7002	Made ground: Dark brown sandy silt, big sand stone, CBM fragments, pottery, animal bone and clay pipe pieces	0 – 1.50
7003	Silt layer, light yellowish brown sandy silt, occasional brick fragments, dark spots of coal	1.50 +

Frame No.8		Length: 3.0 m Width: 1.0 m Max. Depth: 1.8 m
Context	Description	Depth (m)
8001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
8002	Made ground: Dark brown sandy silt, abundant brick, tile and mortar fragments	0.20 – 1.40
8005	Silt layer, light yellowish brown sandy silt, sparse tile, brick	1.40 +



Frame No.8		Length: 3.0 m Width: 1.0 m Max. Depth: 1.8 m
Context	Description	Depth (m)
	fragments, oyster shell and pottery	

Frame No.9		Length: 3.0 m Width: 1.0 m Max. Depth: 1.8m
Context	Description	Depth (m)
9001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
9002	Made ground: Dark brown sandy silt, abundant brick, tile and mortar fragments	0.20 – 1.30
9003	Silt layer, light yellowish brown sandy silt, tile, brick fragments, clay pipe, animal bone and pottery	1.30 +

Frame No.10		Length: 3.0 m Width: 1.0 m Max. Depth: 1.6 m
Context	Description	Depth (m)
10001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
10002	Made ground: Red sand abundant tile, brick fragments	0.20 – 0.40
10003	Made ground: Greyish brown silty sand, pottery	0.40 – 1.30
10004	Silt layer, light yellowish brown sandy silt, occasional tile, brick fragments, slag, animal bone and pottery	1.3 +

Frame No.11		Length: 3.0 m Width: 1.0 m Max. Depth: 1.6 m
Context	Description	Depth (m)
11001	Topsoil: Dark brown sandy silt, shrub border	0 – 0.20
11002	Made ground: Red sand, brick and tile fragments	0.20 – 0.40
11003	Made ground: only visible in S-facing section: Greyish brown silty sand, occasional brick fragments	0.40 – 1.20
11004	Made ground: only visible in N-facing section, dark black ashes	0.40 – 1.20
11005	Silt layer, light yellowish brown sandy silt, occasional brick fragments, dark spots of coal, pottery, clay pipe	1.20 +

Frame No.12		Length: 3.0 m Width: 1.6 m Max. Depth: 1.5 m
Context	Description	Depth (m)
12001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
12002	Made ground: Red sand, brick and tile fragments, pottery	0.20 – 0.40
12003	Made ground: Greyish brown silty sand	0.40 – 1.10
12004	Silt layer, light yellowish brown sandy silt	1.10 +

Frame No.13		Length: 10.0 m Width: 0.60 m Max. Depth: 1.5 m
Context	Description	Depth (m)
13001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
13002	Made ground: Dark brown sandy silt, pottery, bone, clay pipe	0.20 – 1.00
13003	Yellowish brown silty sand, coal/charcoal flecks, CBM fragments, pottery	1.00 +



Frame No.14		Length: 3.0 m Width: 1.6 m Max. Depth: 2.2 m
Context	Description	Depth (m)
14001	Topsoil: Dark brown sandy silt, lawn of park	0 – 0.20
14002	Made ground: Dark brown sandy silt, animal bone, oyster shell	0.20 – 1.20
14003	Structure: Earliest manhole in frame, unfrogged red brick square 1.0 x 1.0 m, filled and blocked with modern brick and rubbish	0.20 – 1.00
14004	Structure: Modern manhole, concrete	0.20 – 1.00
14005	Greyish brown silty sand, oyster shell, animal bone	1.20 +



Appendix 2: Finds data

Table 1: All finds by context (number / weight in grammes)

Context	Animal Bone	CBM	Clay Pipe	Glass	Pottery	Shell	Other finds
1002		1/102			4/936		
2002				2/235	6/108		
2004		5/827			1/12	1/23	
3002					1/99		
3004		1/3034					
4002	3/334	2/66	4/13	1/173	4/325	3/57	
4004	4/201	3/505			3/55	1/17	
5002	4/9				6/43	1/3	1 iron
5005	4/4						
6002		1/1866					
6004			1/11		28/565	1/3	1 synthetic
7002			1/1	1/8	21/685		
7003	1/1		1/3	2/20	3/54		
8003		1/6			2/17	3/32	
9003	4/102	5/238	5/26		2/40		
10002					3/129		
10004	2/163	5/728		1/5	1/45		1 slag
11003			2/5		2/77		
11005	2/28	2/195	1/1		6/161	1/12	
12002					4/83		
13002	4/126	1/16	8/24		9/163	1/11	
13003	1/13	2/89					
14004	3/40	1/39				6/29	
Unstrat		1/3243		20/1922			1 worked bone
Total	32/1021	31/10954	23/84	27/2363	106/3597	18/187	



Table 2: Pottery by context

Context	Ware	No. Sherds	Wt (g)	Comments	Date
10002	Pearlware	2	63	transfer-printed plate	C19
10002	Black-glazed coarseware	1	66	convex jar	C17+
10004	Black-glazed coarseware	1	45		C17+
1002	English stoneware	2	590	container - base of ?jar	C19/C20
1002	Black-glazed coarseware	2	346	1 flat-rimmed flared bowl; 1 flared bowl with squared rim	C17+
2002	Pearlware	1	2	cup	C19
2002	Black-glazed coarseware	1	20		C17+
2002	Redware	4	86	unglazed flowerpot, stamped NOTTM ...WELL (Sankeys of Bulwell, Nottingham)	C19/C20
2004	Black-glazed coarseware	1	12		C17+
3002	Refined whiteware	1	99	moulded decoration - lower half of small vessel, possibly jug	C19/C20
4002	Porcelain	1	1	probably Chinese	C18+
4002	Coarseware (redware)	1	20		post-med
4002	Staffs-type mottled ware	2	304	2 bases (1 jar)	LC17/C18
4004	Medieval coarseware	1	9	gritty fabric	
4004	Medieval whiteware	1	22	rim, probably dish/bowl	
4004	Black-glazed coarseware	1	24		C17+
5002	Creamware	1	11	plate	C18
5002	Black-glazed coarseware	3	15		C17+
5002	Staffs-type mottled ware	1	14		LC17/C18
5002	White salt glaze	1	3		EC18
6004	English stoneware	2	165	jar	C19/C20
6004	Pearlware	4	74	incl transfer printed (1 flow blue)	C19
6004	Black-glazed coarseware	2	57		C17+
6004	Refined whiteware	15	187	incl transfer-printed, sponged & mocha dec	C19/C20
6004	Yellow ware	5	82	flared bowl	C19/C20
7002	English stoneware	3	213	flagon	C19/C20
7002	Pearlware	2	17		C19
7002	Black-glazed coarseware	2	37	flared bowl rim	C17+
7002	Refined whiteware	4	47	incl transfer-printed, slip-banded & mocha dec	C19/C20
7002	Yellow ware	10	371	flared bowl rim	C19/C20



Context	Ware	No. Sherds	Wt (g)	Comments	Date
7003	Medieval whiteware	1	28	red-painted dec	
7003	Staffs-type mottled ware	1	6		LC17/C18
7003	Staffs-type slipware	1	20	feathered slipware platter	LC17/C18
8003	Coarseware (redware)	2	17	1 glazed	post-med
9003	Midlands Purple ware	1	13		C14-C16
9003	Black-glazed coarseware	1	27		C17+
11003	Pearlware	1	65	flared faceted cup, transfer-printed	C19
11003	Refined whiteware	1	12	transfer-printed	C19/C20
11005	Midlands Purple ware	1	24		C14-C16
11005	Black-glazed coarseware	2	131		C17+
11005	Refined whiteware	1	3		C19/C20
11005	Staffs-type mottled ware	1	1	annular reeding (probably cylindrical mug)	LC17/C18
11005	Tinglazed earthenware	1	2		C17/C18
12002	Pearlware	2	44	1 transfer-printed; 1 squat cylindrical mug with annular reeding picked out in blue	C19
12002	Refined whiteware	1	11	teapot	C19/C20
12002	Yellow ware	1	28	flared bowl	C19/C20
13002	Medieval whiteware	1	3		
13002	Refined whiteware	2	13	hand-painted cup	C19/C20
13002	Staffs-type mottled ware	4	128		LC17/C18
13002	Tinglazed earthenware	1	1		C17/C18
13002	Slipware	1	18	trailed slipware	C17/C18



Appendix 3: Environmental data

Table 3: Assessment of the charred plant remains and charcoal

Context	Sample	Flot (ml)	Charred plant remains	Charcoal > 4/2mm	Other	Uncharred vegetative plant parts	Uncharred other	Insects	Molluscs
2004	1	35	-	5 ml	-	A***	Indet seed	-	-
3008	2	50		1 ml	-	A***	Hordeum vulgare (sprouted grain), Chenopodium sp., Sambucus sp., Plantago sp.	x	-
4004	3	50	-	5 ml	-	A***	Carex spp., Ranunculus tp. acris, Lamium sp., Lycopus europaeus, Apiaceae, Sambucus sp., cf. Nymphaea alba, monocot stem fragment, Pinaceae scaled leaf	x	-
5005	4	60	-	5 ml	Sab	A***	Carex spp., Chenopodium sp., Corylus avellana, Rubus sp., Apiaceae, Sambucus sp., Brassica/Sinapis, Lamiaceae, Ranunculus sp.	-	-
8003	5	50	-	5 ml	-	A***	Alisma sp., Carex spp., Chenopodium sp., Sambucus sp.	x	-
10004	6	35	-	1 ml	-	A***	-	-	-
13003	7	30	Triticum sp.	1 ml	-	A***	-	-	-

Key: A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia, E = earthworm eggs, I = insects; Sab/f = small animal/fish bones/charred faecal pellets, Moll-t = terrestrial molluscs, Moll-f = aquatic molluscs; Analysis: C = charcoal, P = plant, M = molluscs, C14 = radiocarbon



Appendix 4: OASIS form

OASIS ID: wessexar1-286139

Project details

Project name	Beacon Park, Lichfield, Staffordshire
Short description of the project	Wessex Archaeology was commissioned by Amey OW Ltd. (hereafter 'the Client') to undertake an archaeological watching brief during an emergency sewer repair works in Beacon Park off Bird Street, Lichfield, Staffordshire. The evaluation was centred on National Grid Reference (NGR) 411390 309589. The stated aims of the project have been met. No medieval or early medieval remains were encountered, except for a few residual sherds of pottery. The depth of the natural geological substrate, which was not seen during excavation to a depth of 2.2 m below ground level, is consistent with the picture of the area as a pond during the medieval period. Made ground deposits made up the majority of the stratigraphy on Site. An early layer of silt seen across nearly all of the Site may represent material recorded historically as being dredged from the Minster Pool and used to backfill the former Upper Pool. The finds assemblage recovered from the basal silts need not be later than early 18th century in date, somewhat earlier than the recorded dredging date of the 1850s. The remaining made ground deposits date from the 19th/20th century when the site was in use as a garden. Several small 19th/20th century structures were identified likely representing garden structures associated with the Museum Gardens which presently occupy the Site. In frame 3, a deep stratigraphy of structures and made ground suggests a succession of garden layouts changing as the ground level was built up.
Project dates	Start: 09-03-2017 End: 05-04-2017
Previous/future work	No / No
Any associated project reference codes	116260 - Contracting Unit No.
Any associated project reference codes	2017.LH.22 - Museum accession ID
Type of project	Recording project
Site status	Conservation Area
Site status (other)	Historic Urban Character Area
Current Land use	Other 14 - Recreational usage
Monument type	NONE None
Significant Finds	NONE None
Investigation type	""Watching Brief""
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	STAFFORDSHIRE LICHFIELD LICHFIELD Beacon Park
Postcode	WS13 6TU
Study area	0 Hectares
Site coordinates	SK 11390 09589 52.68352995414 -1.831492711508 52 41 00 N 001 49 53 W



Point

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Wessex Archaeology
Project design originator	Wessex Archaeology
Project director/manager	Richard O'Neill
Project supervisor	Martina Tenzer
Type of sponsor/funding body	Water Authority/Company
Name of sponsor/funding body	Amey OW Ltd

Project archives

Physical Archive recipient	Potteries Museum and Art Gallery
Physical Archive ID	2017.LH.22
Physical Contents	"Animal Bones","Ceramics","Glass","Metal","Worked bone"
Digital Archive recipient	Potteries Museum and Art Gallery
Digital Archive ID	2017.LH.22
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Potteries Museum and Art Gallery
Paper Archive ID	2017.LH.22
Paper Contents	"none"
Paper Media available	"Context sheet","Diary","Drawing","Photograph","Plan","Report","Section"

Project bibliography 1

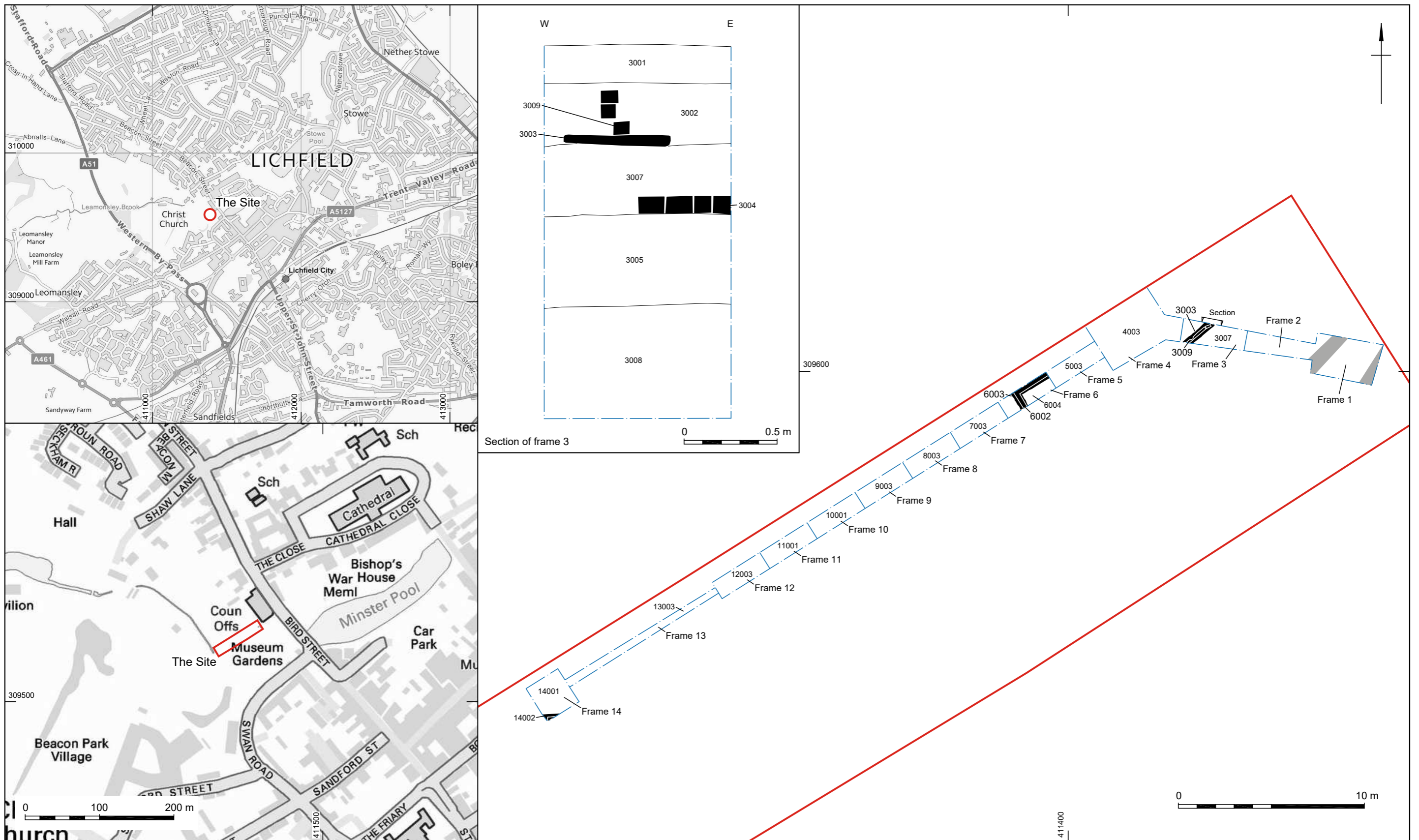
Publication type	Grey literature (unpublished document/manuscript)
Title	Beacon Park, Lichfield, Staffordshire: Archaeological Watching Brief Report
Author(s)/Editor(s)	Tuck, A.
Author(s)/Editor(s)	Tenzer, M.
Other bibliographic	116260.01



details

Date	2017
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	A4 laser printed report

Entered by	Ashley Tuck (a.tuck@wessexarch.co.uk)
Entered on	30 May 2017



Coordinate system:
OSGB36 (OSTN15/OSGM15)



- Site outline
- Excavation area
- Archaeology
- Modern disturbance

Contains Ordnance Survey data © Crown Copyright and database right 2017.
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	13/06/2017	Revision Number:	0
Scale:	1:200, 1:5000 & Section 1:20@A3	Illustrator:	WAF
Path:	Y:\PROJECTS\116260_Sheffield Project\Graphics_Office\Rep figs\WB\2017_06_07		

Site location, plan of Frames and section from Frame 3

Figure 1



Plate 1: Working shot showing basal silt 3008



Plate 2: Wall 3006


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	07/06/17	Revision Number:	0
	Scale:	Not to scale	Illustrator:	WAF
	Path:	Y:\PROJECTS\116260_Sheffield Project\GO\Rep figs\WB\2017_06_07\116260_WB_Plates.ai		



Plate 3: Pavement 3004



Plate 4: Garden wall 3009



	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	07/06/17	Revision Number:	0
	Scale:	Not to scale	Illustrator:	WAF
	Path:	Y:\PROJECTS\116260_Sheffield Project\GO\Rep figs\WB\2017_06_07\116260_WB_Plates.ai		



Plate 5: Garden wall 6002



Plate 6: Inspection chambers 14003 (far, brick) and 14004 (near, concrete)

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	07/06/17	Revision Number:	0
	Scale:	Not to scale	Illustrator:	WAF
	Path:	Y:\PROJECTS\116260_Sheffield Project\GO\Rep figs\WB\2017_06_07\116260_WB_Plates.ai		



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

