Cotswold Archaeology

Blackfriars Street
Hereford
Herefordshire

Archaeological Evaluation

for
Herefordshire Housing Ltd

CA Project: 5814
CA Report: 16312

July 2016

Andover Cirencester Exeter Milton Keynes

Blackfriars Street
Hereford
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Archaeological Evaluation

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LIST OF ILLUSTRATIONS

SUMMARY

Project Name:	Blackfriars Street
Location:	Hereford, Herefordshire
NGR:	SO 5097 4046
Type:	Evaluation
Date:	31 May to 10 June 2016
Location of Archive:	To be deposited with Hereford Museum Resource & Learning Centre
Accession Number:	2016-32
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An archaeological evaluation was undertaken by Cotswold Archaeology in May and June 2016 at Blackfriars Street, Hereford, Herefordshire. Four trenches were excavated.

An undated pit, sealed by subsoil, was identified in Trench 3. Three undated pits/postholes, also seemingly cutting the subsoil, were identified in Trench 4. Although undated, these features are similar in nature to a number of pits previously identified in close proximity to the current site and tentatively interpreted as representing evidence of prehistoric activity.

A pit/ditch terminal, identified cutting the subsoil in Trench 4, contained a single sherd of medieval (12th to 14th-century) pottery. A number of undated pits/postholes were also identified cutting the subsoil within the trench and are likely to be broadly contemporary.

A curving ditch/gully containing quantities of blacksmithing slag and two, probably contemporary, postholes were identified cutting the subsoil in Trench 3. Although these features cannot be dated securely they are most likely medieval in date and may form part of a structure related to small-scale industrial activity.

A ditch identified in Trench 3 is likely to relate to post-medieval agricultural land management, drainage or division. A number of modern pits containing animal burials, presumably relating to the agricultural usage of the site, were identified in Trench 1. Modern post holes were identified in Trenches 1 and 2.

1. INTRODUCTION

1.1 In May and June 2016 Cotswold Archaeology (CA) carried out an archaeological evaluation for Herefordshire Housing Ltd at Blackfriars Street, Hereford, Herefordshire (centred on NGR: SO 5097 4046; Fig. 1). The evaluation was undertaken to provide further information on the archaeological potential of the site, at the request of Julian Cotton, Archaeological Advisor, Herefordshire Council (HC), prior to determination of a planning application which will be made to HC for residential development.

1.2 The evaluation was carried out in accordance with a detailed *Written Scheme of Investigation* (WSI) produced by CA (2016) and approved by Julian Cotton. The fieldwork also followed *Standard and guidance: Archaeological field evaluation* (CIfA 2014). It was monitored by Mr Cotton, including a site visit on 7 June 2016.

The site

1.3 The proposed development area is approximately 0.7ha in extent, and is currently occupied by commercial units and a public car park. The site is bounded by Blackfriars Street to the south, the Robert Owen Academy and an industrial unit to the east and further car parks to the north and west. The site lies at approximately 55.5m AOD at its south-western extent, with ground level sloping gently downwards to approximately 54m AOD at its north-eastern limit.

1.4 The underlying bedrock geology of the area is mapped as Raglan Mudstone Formation- Siltstone and Mudstone of the Silurian Period with superficial deposits of Devensian Till of the Quaternary Period (BGS 2016). The natural substrate identified during the evaluation comprised compact sand and gravel with occasional patches of silt clay.

2. ARCHAEOLOGICAL BACKGROUND

2.1 The area surrounding the proposed development site has been subject to an archaeological desk based assessment (CgMs 2013). The following is a summary taken from that document along with any publically available information pertinent to the site:

Prehistoric

2.2 Preceding archaeological evaluation undertaken immediately to the south of the proposed development area (close to the Blackfriars Street entrance of the former cattle market), revealed a Late Neolithic/Bronze Age pit. The pit contained pottery, carbonised wood and burnt stones and may be indicative of settlement activity (Boucher 2006). Two undated, but possibly prehistoric, stake-holes were also identified during a second phase of evaluation trenching on the site (Boucher 2007).

2.3 Two undated pits were revealed approximately 50m to the west of the proposed development area during an archaeological evaluation at the Hereford United football ground. Although the pits remained undated they were tentatively attributed to the prehistoric period due to their similarity with the pit identified in the former cattle market (Children 2009).

Roman

2.4 A chance find of Roman coins is recorded within the south-eastern corner of the current site, with further Roman coins being recorded approximately 50m to the south-west (CgMs 2013). No further Roman activity has been identified in the vicinity of the proposed development area.

Saxon/Early Medieval

2.5 Although Hereford is known to have Saxon origins, no heritage assets dating to the Saxon/Early medieval period are recorded within the immediate vicinity (*ibid.*).

2.6 The Diocese of Hereford is thought to have been founded in AD 676 with the Cathedral built by AD 803. Settlement during this time would have been focussed near to the Cathedral, approximately 700m to the south of the proposed development area (*ibid*.). However, the route of Widemarsh Street, approximately 100m east of the site, is thought to have been one of the main routes in to Hereford during the Early medieval period (Boucher 2007).

Medieval

2.7 Settlement appears to have remained focussed around the Cathedral during the medieval period, with Widemarsh Street continuing to act as the main route into the city from the north (CgMs 2013). While it is known that extra-mural settlement to the north of the medieval city wall was present (Barker 2007) it is not clear whether

elements of this, such as inns or workshops, would have extended as far north as the proposed development area.

2.8 The remains of a Dominican friary, Blackfriars, are recorded approximately 100m to the east of the proposed development area. The Dominicans reached Hereford in the mid-13th century and in the first instance settled on a site in Portfields, a little way outside St Owen's Gate, approximately 300m to the south of the current site, with activity at Blackfriars starting from the mid-14th century (Boucher 2009).

Post-medieval and Modern

2.9 Historic mapping shows that the proposed development area formed part of the agricultural hinterland of Hereford until the end of the 19th-century. A single, isolated, agricultural building is depicted by the 1841 All Saints Tithe map within the north-western corner of the site.

2.10 The 1888 Ordnance Survey (OS) First Edition map shows a group of buildings fronting Blackfriars Street within the south-western corner of the proposed development area with the remainder of the site forming allotment gardens or agricultural land. The 1937 OS map shows a garage and further buildings occupying the majority of the proposed development area.

3. AIMS AND OBJECTIVES

3.1 The objectives of the evaluation were to provide information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality. In accordance with *Standard and guidance: Archaeological field evaluation* (CIfA 2014), the evaluation has been designed to be minimally intrusive and minimally destructive to archaeological remains. The information gathered will enable HC to identify and assess the particular significance of any heritage asset, consider the impact of the proposed development upon it, and to avoid or minimise conflict between the heritage asset's conservation and any aspect of the development proposal, in line with the *National Planning Policy Framework* (DCLG 2012).

4. METHODOLOGY

4.1 The fieldwork comprised the excavation of 4 trenches, in the locations shown on the attached plan (Fig. 2). Trenches 1-3 measured 20m in length and 1.8m in width. Trench 4 measured 10m in length and 1.8m in width. Trench 3 was moved to avoid blocking the access to the car park and Trench 4 was moved, and reduced in length, to avoid the location of buried services. Both trenches were moved with the approval of the landowner and Mr Cotton. Trenches were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4: *Survey Manual*.

4.2 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.

4.3 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites.* No deposits were identified that required sampling. All artefacts recovered were processed in accordance with Technical Manual 3: *Treatment of Finds Immediately after Excavation*.

4.4 The archive and artefacts from the evaluation are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the artefacts will be deposited with Hereford Museum Resource & Learning Centre under accession number 2016-32, along with the site archive. A summary of information from this project, set out within Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGS 2-4)

5.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts and finds are to be found in Appendices A and B respectively

5.2 An analogous stratigraphic sequence was observed in the excavated trenches. The natural substrate, comprising compact sand and gravel with occasional patches of silt clay, was encountered between 1.1m and 1.2m below present ground level (bpgl). It was overlain by subsoil measuring between 0.15m and 0.35m in thickness. The subsoil was overlain by a buried plough soil measuring between 0.2m and 0.25m in thickness. The buried plough soil was overlain by buried topsoil measuring between 0.15m and 0.3m in thickness, which was in turn overlain by modern make-up/levelling deposits measuring approximately 0.4m in thickness. These deposits were sealed by the modern tarmac car park surface.

Trench 1 (Fig. 2)

5.3 Six sub-rectangular pits (1007, 1009, 1011, 1015, 1019, and 1023) were identified cutting the plough soil within the trench. Pits 1007 and 1015 were partially excavated and were found to contain articulated animal burials and quantities of modern artefactual material including glass, plastic and wood. Pits 1009, 1011, 1019 and 1023 were not excavated but are likely to represent further modern animal burials due their similarity in plan with the excavated pits within the trench.

5.4 Three circular postholes, 1013, 1017 and 1021, were identified in the northern half of the trench cutting the buried plough soil. All three were excavated and were found to contain modern concrete post pads and the remnants of modern wooden posts.

Trench 2 (Figs 2 & 3)

5.5 Shallow, irregular pit 2011/2013 (Fig. 3; section AA) was identified towards the south-western end of the trench. It cut the natural substrate and was sealed by subsoil. It contained single, undated fill 2012/2014.

5.6 Posthole 2007 was identified towards the centre of the trench. It cut buried plough soil 2010 and contained a single fill, 2006, from which a residual sherd of 18th to 19th-century pottery, a fragment of modern window glass and a number of modern concrete fragments were recovered.

Trench 3 (Figs 2 & 3)

5.7 Narrow, shallow ditch/gully 3006/3022/3024 (Fig. 4; section BB) was identified towards the centre of the trench. It cut the subsoil, was slightly curving in plan, had a shallow irregular profile and contained a single fill 3005/3022/3023, from which 10 fragments of blacksmithing slag were recovered (see *Appendix C*).

5.8 Small, sub-circular pits/postholes 3008 and 3010 were identified immediately to the south-west of curving ditch/gully 3006/3022/3024. Both cut the subsoil and contained similar undated fills, 3007 and 3009 respectively.

5.9 North-west/south-east aligned ditch 3011 was identified towards the south-western end of the trench. It cut the plough soil, had a 'U'-shaped profile and contained two undated fills, 3012 and 3015. The ditch appears to correspond to a field boundary depicted on the 1841 All Saints Tithe Map.

Trench 4 (Figs 2 & 4)

5.10 Three partially exposed irregular pits, 4008, 4016 and 4042, a pit/ditch terminal, 4014, and thirteen small pits/postholes (4010, 4012, 4018, 4020, 4022, 4024, 4026, 4028, 4030, 4032, 4034 and 4036) were identified within the trench. The majority of these features demonstrably cut the subsoil however, due to the similarity of their respective fills and the subsoil within the trench, it remains possible that pits/postholes 4012, 4022 and 4024 may have been sealed by subsoil.

5.11 Undated pits 4008 (Fig. 5; section EE), 4016 and 4042 (Fig. 5; section EE) were identified towards the south-eastern end of the trench. All had steeply sloping sides and flat bases. Pits 4008 and 4016 contained single sterile silt clay fills, 4007 and 4015 respectively. Pit 4042 contained two distinct, but undated, stony fills, 4041 and 4043.

5.12 Pits/postholes 4022 (Fig. 5; section FF) and 4026 (Fig. 5; section GG) had similar shallow, irregular profiles and contained single sterile silt clay fills, 4021 and 4023 respectively. The remaining pits/postholes all contained similar undated fills and remained unexcavated.

5.13 Pit/ditch terminal 4014 was identified cutting the subsoil in the south-eastern half of the trench. It was aligned north-east/south-west, had a flat base and contained a

single rubbly fill, 4013. A single sherd of medieval (12th-14th century) pottery was recovered from this fill. The fill of pit/ditch terminal 4014 was overlain by buried plough soil.

5.14 The buried plough soil was overlain by buried topsoil which was in turn sealed by modern make-up/levelling deposit 4001. This was cut by modern service trench 4006 and the construction cut for associated red brick manhole/inspection chamber 4039. Both were overlain by modern car park surface 4000.

6. THE FINDS

6.1 Artefactual material recovered from the evaluation is listed in Appendix B and discussed further below.

Pottery

6.2 A total of 11 sherds of pottery (53g) was recorded from five deposits (Appendix B). The majority of the material dates to the post-medieval period (5 sherds, 34g) with smaller quantities of medieval (3, 13g) and modern (4, 13g) pottery.

6.3 A body sherd in a micaceous quartz-tempered fabric from robber trench 4014 (fill 4013) is identified as of Herefordshire fabric type A2, and as such, is likely to date to the 12th to 13th centuries (see http://www.woolhopeclub.org.uk/potterymedievalHerefordpage.html). A further, very abraded sherd in this fabric was recovered from buried ploughsoil 2010. A body sherd in a micaceous fine oxidised fabric, also from ploughsoil 2010, is tentatively identified as of medieval Lugg Valley type

6.4 One sherd of Staffordshire/Midlands brown-glazed earthenware was recorded from posthole 2007 (fill 2006), dateable to the 18th and 19th centuries. A basesherd of glazed earthenware (Herefordshire Border Ware), was recorded from buried topsoil 2003 and a bowl rimsherd from plough soil 4040. Creamware, dating to the mid to late 18th century, was recorded from buried topsoil 3002. Transfer printed, refined white ware was recorded from two deposits; buried topsoil 4040 and buried topsoil 2003. Both sherds are dateable after *c.* 1770 with the green coloured design from deposit 2003 probably after 1800/1850 AD. Modern porcelain was recorded from buried topsoil 2003 and buried topsoil 4040.

Other finds

6.5 A total of six fragments (352g) of ceramic building material (CBM) were recorded from four deposits. A fragment of modern 'frogged' brick was recorded from posthole 1013 (fill 1012) and a fragment of glazed, white wall tile dating to the 20th century was recorded from posthole 1021 (fill 1020). The remainder comprise unfeatured fragments of flat tile of the type dateable across the late medieval and post-medieval periods.

6.6 Modern window glass was recorded from posthole 2007 (fill 2006) and a fragment of a glass vessel, possibly a modern vase or other 'tableware' form, was recorded from pit 1015 (fill 1014). Modern brown bottle glass was recorded from topsoil deposit 2003 and a fragment of a codd (carbonated beverage) bottle dating to the late 19th century was recorded from pit 1007 (fill 1006).

6.7 A total of four fragments (67g) of clay tobacco pipe (CTP), all unfeatured stem fragments, were recorded from three deposits. Only broad dating, between the late 16th and 19th centuries, can be suggested for this material.

6.8 An iron nail (18g) was recorded from posthole 1013 (fill 1012). It is hand-forged but cannot be closely dated.

Industrial residues

6.9 A total of 10 fragments of ironworking residues identified as blacksmithing slag was recorded from terminus 3006 (fill 3005). A full report on this material, which probably dates to the medieval period, is included in Appendix C.

8. DISCUSSION

8.1 A small number of archaeological features were identified during the evaluation, the majority of which were shown to cut the subsoil or buried plough soil within the excavated trenches. A comprehensive understanding of the features encountered during the evaluation cannot be achieved at present, primarily due to a lack of secure dating and their limited exposure within the excavated trenches. However a broad stratigraphic sequence can be suggested and is outlined below:

Prehistoric?

8.2 Undated pit 2011/2013 identified in Trench 2 was demonstrably sealed by subsoil and it remains possible that pits/postholes 4012, 4022 and 4024, identified in Trench 4, may also have been sealed by subsoil and could therefore be broadly contemporary. A number of similar, albeit isolated, features have been recorded during previous archaeological investigations in close proximity to the current site (see *archaeological background* above). These features have been interpreted as representing settlement activity of prehistoric date due to the recovery of Late Neolithic/Early Bronze Age pottery from a pit identified during an evaluation immediately to the south of the current site (Boucher 2006). Whilst it is tempting to interpret the pit identified in Trench 2 and the pits/postholes potentially sealed by subsoil in Trench 4 as representing a northward continuation of this possible prehistoric activity, the lack of dating from these features coupled with the limited view afforded by the evaluation trenching means that this interpretation remains tentative at best.

Medieval

8.3 Curving ditch/gully 3006/3022/3024 was identified in Trench 3 cutting the subsoil and it is possible that pits/postholes 3008 and 3010, located immediately to the south-west and also cutting the subsoil, are broadly contemporary. Quantities of blacksmithing slag were recovered from the fill of curving ditch/gully 3006/3022/3024 and although this material is only broadly dateable to the Iron Age to medieval periods; a medieval date would appear probable due to the fact that the ditch/gully cuts the subsoil within the trench. Evidence of more securely dated medieval industrial activity, including the remains of a possible tannery and evidence of small-scale iron working, has previously been identified during archaeological

investigations along Widemarsh Street, approximately 100m to the east of the proposed development area (Stone 1997) and it is possible that ditch/gully 3006/3022/3024 and postholes 3008 and 3010 represent a westward continuation of this activity.

8.4 Pit/ditch terminal 4014, identified cutting the subsoil in Trench 4, contained a single sherd of medieval (12th to 14th-century) pottery. A number of small pits/postholes were also identified in Trench 4 and although these features remained artefactually undated, it is likely that they are at least broadly contemporary with pit/ditch terminal 4014 (i.e. medieval) in date as they were also shown to cut the subsoil within the trench.

Post-medieval and Modern

8.5 Ditch 3011 identified cutting the buried plough soil in Trench 3 is likely to relate to agricultural land management, drainage or division and corresponds closely to a field boundary depicted on the 1841 All Saints Tithe Map. The boundary is no longer depicted on the 1888 First Editions OS map. A number of modern pits containing animal burials, presumably relating to the agricultural usage of the site, were identified in Trench 1. Modern post holes were identified in Trenches 1 and 2.

9. CA PROJECT TEAM

Fieldwork was undertaken by Greg Crees, assisted by Claudia Jorge and Anthony Beechey. The report was written by Greg Crees. The finds report was written by Katie Marsden. The illustrations were prepared by Sam O'Leary. The archive has been compiled by Greg Crees, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Steven Sheldon.

10. REFERENCES

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APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Type	Fill of	Context interpretation	Description	L (m)	W (m)	D (m)	Spot-date
1	1000	Layer		Tarmac	Carpark surface	>20	>2	0.28	
1	1001	Layer		Modern make-up/levelling	Mixed reddish to grey stone rubble	>20	>2	0.23	
1	1002	Layer		Buried topsoil	Mid grey brown clay silt	>20	>2	0.22	
1	1003	Layer		Buried plough soil	Dark grey brown, silty-clay, sub rounded stone inclusions	>20	>2	0.2	
1	1004	Layer		Subsoil	Mid grey brown, sand silt	>20	>2	0.15	
1	1005	Layer		Natural substrate	Mid to dark red brown sand and gravel with occasional patches of silt	>20	2	>1.07	
1	1006	Fill	1007	Fill of pit 1007	Dark grey brown sand silt	0.8	0.75	0.3	LC19
1	1007	Cut		Pit	Sub rectangular, vertical sided, flat base	0.8	0.75	0.3	
1	1008	Fill	1009	Fill of pit 1009	Dark grey brown sandy-silt, friable	1.25	0.7	N/A	
1	1009	Cut		Pit	Sub-rectangular, rounded corners, unexcavated	1.25	0.7	N/A	
1	1010	Fill	1011	Fill of pit 1011	Dark grey brown sandy-silt, friable	0.9	0.5	N/A	
1	1011	Cut		Pit	Sub-rectangular, rounded corners, unexcavated	0.9	0.5	N/A	
1	1012	Fill	1013	Fill of posthole 1013	Dark grey brown sand silt, friable	0.37	0.35	N/A	MC19+
1	1013	Cut		Posthole	Circular in plan, unexcavated	0.37	0.35	N/A	
1	1014	Fill	1015	Fill of pit 1015	Dark grey brown sand silt, friable	0.65	0.56	0.17	
1	1015	Cut		Pit	Sub-rectangular, vertical sided, flat base	0.65	0.56	0.17	
1	1016	Fill	1017	Fill of posthole 1017	Dark grey brown sand silt, friable	0.35	0.18	N/A	
1	1017	Cut		Posthole	Circular, partially exposed in plan, unexcavated	0.35	0.18	N/A	
1	1018	Fill	1019	Fill of pit 1019	Dark grey brown sand silt, friable	0.48	0.59	N/A	
1	1019	Cut		Pit	Sub-rectangular, rounded corners, unexcavated	0.48	0.59	N/A	
1	1020	Fill	1021	Fill of posthole 1021	Dark grey brown sand silt, friable	0.33	0.33	0.07	C20
1	1021	Cut		Posthole	Circular, steep sides, flat base	0.33	0.33	0.07	
1	1022	Fill	1023	Fill of pit 1023	Dark grey brown sand silt, friable	0.65	0.45	0.2	Pmed
1	1023	Cut		Pit	Sub-rectangular, rounded corners, vertical sided, flat base	0.65	0.45	0.2	
2	2000	Layer		Tarmac	Carpark surface	>20	>2	0.14	
2	2001	Layer		Modern make-up/levelling	Grey to red sand and gravel	>20	>2	0.15	
2	2002	Layer		Modern make-up/levelling	Mixed reddish brown to grey and rubble	>20	>2	0.4	
2	2003	Layer		Buried topsoil	Mid black grey, clay silt	>20	>2	0.16	C19
2	2004	Layer		Subsoil	Mid grey brown, sand silt	>20	>2	0.15	
2	2005	Layer		Natural substrate	Mid to dark red brown sand and gravel with occasional patches of silt	>20	>2	>1.2	
2	2006	Fill	2007	Fill of posthole	Dark grey brown sand silt, friable	0.4	0.33	0.2	C18-19
2	2007	Cut		Posthole	Square, vertical sides, flat base	0.4	0.33	0.2	
2	2008	Void		Void	Void	-	-	-	
2	2009	Void		Void	Void	-	-	-	
2	2010	Layer		Buried plough soil	Dark grey brown, silty-clay, sub rounded stone inclusions	>20	>2	0.3	C12-14
2	2011	Cut		Pit	Sub-circular, irregular sides, moderate to vertical slope, irregular base. Only partially exposed in plan	4.16	0.27	0.4	
2	2013	Cut		Pit	Sub-circular, irregular sides, moderate to vertical slope, irregular base. Only partially exposed in plan	4.16	0.27	0.2	

2	2014	Fill	2013	Fill of pit 2013	Mid green brown, silt clay, loose compaction	4.16	0.27	0.2	
2	2015	Fill	2016	Fill of modern service trench	Concrete	2	0.25	0.33	
2	2016	Cut		Modern service trench	Vertical sided, flat base	2	0.25	0.33	
3	3000	Layer		Tarmac	Carpark surface	20	2	0.2	
3	3001	Layer		Modern Make-up/levelling	Mixed red to grey brown stone rubble	20	2	0.27	
3	3002	Layer		Buried topsoil	Mid black grey, clay silt	20	2	0.15	M-L 18
3	3003	Layer		Subsoil	Mid grey brown, sand silt	20	2	0.22	
3	3004	Layer		Natural substrate	Light to mid red brown sand and gravel with occasional patches of silt	20	2	>0.96	
3	3005	Fill	3006	Fill of curving ditch/gully, terminus	Dark grey brown san silt, friable, occasional charcoal inclusions	0.85	0.44	0.16	
3	3006	Cut		Cut of curving ditch/gully, terminus	Moderate/straight sided, broad concave base.	0.85	0.44	0.16	?Med
3	3007	Fill	3008	Fill of pit/posthole	Dark grey brown, sand silt, friable	0.39	0.39	0.04	
3	3008	Cut		Cut of pit/posthole	Circular, gentle shallow sided, flat base	0.39	0.39	0.04	
3	3009	Fill	3010	Fill of pit/posthole	Dark grey brown, sandy-silt, friable	0.37	0.37	0.07	
3	3010	Cut		Cut of pit/posthole	Circular, gentle shallow sided, flat base	0.37	0.37	0.07	
3	3011	Cut		Cut of Ditch	NW-SE aligned, Linear, steep to vertical sided, flat base	0.8	0.66	0.38	
3	3012	Fill	3011	Lower fill of ditch	Mid greyish brown, silty-clay. Compact. Small rounded pebble inclusions	0.8	0.66	0.24	
3	3013	Cut		Cut of service trench	E-W aligned, vertical sided, flat base	>2	0.48	0.42	
3	3014	Fill	3013	Fill of service trench	Mixed rubble backfill	>2	0.48	0.42	
3	Void			Void	Void	-	-	-	
3	Void			Void	Void	-	-	-	
3	Void			Void	Void	-	-	-	
3	Void			Void	Void	-	-	-	
3	Void			Void	Void	-	-	-	
3	3020	Deposit		Buried plough soil	Dark grey brown, silty-clay, sub rounded stone inclusions	20	2	0.25	
3	3021	Fill	3022	Fill of curving ditch/gully, terminus	Dark grey brown sandy-silt, friable, charcoal inclusions	1	0.28	0.05	
3	3022	Cut		Cut of curving ditch/gully, terminus	moderate/straight sided, broad concave base.	1	0.28	0.05	
3	3023	Fill	3024	Fill of curving ditch/gully	Dark grey brown sandy-silt, friable, charcoal inclusions	0.6	0.22	0.04	
3	3024	Cut		Cut of curving ditch/gully	moderate/straight sided, broad concave base.	0.6	0.22	0.04	
4	4000	Deposit		Tarmac	Carpark surface & associated bedding material	9.5	2	0.22	
4	4001	Deposit		Bedding/levelling deposit	Mixed reddish to grey stone rubble	9.5	1.6	0.16	
4	4002	Deposit		Subsoil	Mid grey brown, sandy-silt	9.5	1.6	0.35	
4	4003	Deposit		Buried plough soil	Light grey brown, clay-silt, friable	9.5	1.6	0.3	
4	4004	Cut		Service trench	Linear, NW-SE, vertical sided, flat base	9.5	0.4		
4	4005	Fill	4004	Fill of service trench	Concrete	9.5	0.4	>0.8	
4	4006	Deposit		Natural substrate	Mid to dark red brown sand and gravel with occasional patches of silt	9.5	1.6	>1.3	
4	4007	Fill	4008	Fill of pit	Mid brown, clay-Silt, compact small pebble inclusions	1	0.63	0.43	

4	4008	Cut		Cut of pit	Oval, moderate slope, concave base, partially exposed in plan	1	0.63	0.43	
4	4009	Fill	4010	Fill of pit/posthole	Mid greyish brown, clay silt, compact	0.44	0.27	N/A	
4	4010	Cut		Cut of pit/posthole	Sub circular, unexcavated	0.44	0.27	N/A	
4	4011	Fill	4012	Fill of pit/posthole	Mid brown, clay-silt	0.7	0.56	N/A	
4	4012	Cut		Cut of pit/posthole	Sub circular, unexcavated	0.7	0.56	N/A	
4	4013	Fill	4014	Fill of pit/ditch terminal	Mid greyish brown, silty-clay, small gravel inclusions, loose compaction	0.81	0.4	0.4	C12-14
4	4014	Cut		Pit/ditch terminal	Linear, N-S aligned, shallow slope, irregular base.	0.81	0.4	0.4	
4	4015	Fill	4016	Fill of pit/posthole	Mid brown, clay-silt	0.77	0.28	N/A	
4	4016	Cut		Cut of pit/posthole	Sub circular, unexcavated, partially exposed in plan	0.77	0.28	N/A	
4	4017	Fill	4018	Fill of pit/posthole	Mid grey brown, clay-silt	0.21	0.24	N/A	
4	4018	Cut		Cut of pit/posthole	circular in plan, unexcavated	0.21	0.24	N/A	
4	4019	Fill	4020	Fill of pit/posthole	Mid grey brown, clay-silt	0.24	0.26	N/A	
4	4020	Cut		Cut of pit/posthole	circular in plan, unexcavated	0.24	0.26	N/A	
4	4021	Fill	4022	Fill of pit/posthole	Dark greyish brown, silty-clay, loose compaction, small gravel inclusions	0.35	0.34	0.05	
4	4022	Cut		Cut of posthole	Oval, moderate slope, flat base	0.37	0.34	0.05	
4	4023	Fill	4024	Fill of pit/posthole	Mid greyish brown, silty clay, frequent small gravel inclusions	0.57	0.52	0.1	
4	4024	Cut		Cut of pit/posthole	Oval, moderate slope, concave base, SW-NE aligned	0.52	0.52	0.1	
4	4025	Fill	4026	Fill of pit/posthole	Dark brown, clay silt	0.38	0.37	N/A	
4	4026	Cut		Cut of pit/posthole	Oval in plan, unexcavated	0.38	0.37	N/A	
4	4027	Fill	4028	Fill of pit/posthole	Mid grey brown, silt clay	0.42	0.41	N/A	
4	4028	Cut		Cut of pit/posthole	Sub circular, not fully exposed in plan, unexcavated	0.42	0.41	N/A	
4	4029	Fill	4030	Fill of pit/posthole	Dark brown, clay silt	0.47	0.47	N/A	
4	4030	Cut		Cut of pit/posthole	Oval in plan, unexcavated	0.47	0.47	N/A	
4	4031	Fill	4032	Fill of pit/posthole	Dark brown, clay silt	0.22	0.21	N/A	
4	4032	Cut		Cut of pit/posthole	Oval in plan, unexcavated	0.22	0.21	N/A	
4	4033	Fill	4034	Fill of pit/posthole	Dark brown, clay silt	0.28	0.28	N/A	
4	4034	Cut		Cut of pit/posthole	Oval in plan, unexcavated	0.28	0.28	N/A	
4	4035	Fill	4036	Fill of pit/posthole	Dark grey brown, silt clay, small sub angular gravel inclusions	0.25	0.27	N/A	
4	4036	Cut		Cut of pit/posthole	Oval in plan, unexcavated	0.25	0.27	N/A	
4	4037	Fill	4038	Backfill of construction cut	Mixed brown silty-clay & concrete rubble	>0.4	>0.1	>1	
4	4038	Cut		Construction cut for manhole	Vertical sided, flat base	>0.4	>0.1	>1	
4	4039	Deposit		Red Brick manhole	Modern red brick manhole/inspection chamber	1.3	0.6	>1	
4	4040	Layer		Buried topsoil	Mid grey brown, clay-silt, friable, some charcoal inclusions	9.5	1.6	0.25	
4	4041	Fill	4042	Lower fill of pit	Light grey brown, clay-silt, friable	0.65	0.55	0.25	
4	4042	Cut		Cut of pit	Circular, steep/vertical sided, flat base, partially exposed in plan	0.73	0.7	0.4	
4	4043	Fill	4042	Upper fill pf pit	Light grey brown, silty-clay, friable, some charcoal inclusions	0.73	0.7	0.2	

APPENDIX B: THE FINDS

Context	Class	Description	Ct.	Wt.(g)	Spot-date
1006	Glass	bottle	1	31	LC19
	CTP	stem	1	4	
1012	Iron	nail	1	18	MC19+
	CBM	brick	1	220	
1014	glass	?vase	1	18	
1020	CBM	tile	1	7	C20
1022	CBM	tile	3	68	pmed
2003	post-medieval pottery	Glazed earthenware	1	7	C19
	modern pottery	porcelain	2	8	
	modern pottery	green transfer print	1	1	
	Glass	bottle	1	16	
	CTP	stem	2	4	
	CBM	tile	1	57	
2006	post-medieval pottery	brown glaze	1	2	C18-C19
	Glass	window	1	2	
2010	medieval pottery	Micaceous qz-temp	1	4	C12-C14
	medieval pottery	Fine micaceous (oxid.)	1	2	
3002	post-medieval pottery	CW	1	5	M-L C18
	CTP	stem	1	3	
3005	Slag		10	1562	
4013	medieval pottery	micaceous qz-temp	1	7	C12-C14
4040	post-medieval pottery	transfer print	1	13	LC18-C19
	post-medieval pottery	Glazed earthenware	1	7	
	modern pottery	porcelain	1	4	

Appendix C: Metallurgical residues by Dr T.P. Young

Summary

The submitted material comprised 1.56kg (10 pieces) of smithing slag. Four of the pieces are complete, or substantially complete, smithing hearth cakes (SHCs), and these have weights ranging from 128-368g. All the observed evidence for fuel indicated the use of charcoal. One SHC had been broken off to include the adjacent wall with the lower part of a 22mm diameter blowhole. Several of the pieces suggested rather low-density SHCs dominated by sloughed wall material, whereas others were dense slag. Most of the pieces appeared to suggest formation in an attitude where they were formed inclined steeply down in front of a slightly overhanging hearth wall. The variety of SHC types suggests derivation from a forge undertaking a variety of work, rather than a repetitive 'industrial' task. Many of the pieces showed the presence of amounts of coarse sand, unlike the observed sand component of the wall ceramic, suggesting the use of a flux of crushed sand ranging up to about 2mm grain size. Such straightforward blacksmithing slags are hard to date with confidence, but the features of the present assemblage might favour an earlier medieval age (perhaps 11th to 13th centuries), although a very wide age range (Iron Age to Medieval) is possible.

Methods

All materials were examined visually with a low-powered binocular microscope where required. As an evaluation, the materials were not subjected to any high-magnification optical inspection, not to any form of instrumental analysis. The identifications of materials in this report are therefore necessarily limited and must be regarded as provisional.

Results

The assemblage comprises examples of smithing hearth cakes and fragments of similar material. The pieces are individually described in Table 1. The assemblage is very small, so the amount of interpretation possible is somewhat limited.

The pieces are indicative of SHCs with a wide range of sizes, textures and iron contents. This is probably indicative of a range of tasks and work-periods – suggestive of a general purpose forge, rather than a repetitive 'industrial' process. The denser slags are associated with evidence for a coarse quartz sand, distinct from the sand present in the observed hearth wall ceramic, which may suggest this quartz is unreacted (or only partially-reacted) welding flux.

The hearth ceramic contact is preserved in several pieces and the lower part of the blowhole in one. The blowhole was approximately 22mm in diameter – typical of examples from smithing hearths. This piece showed an angle of approximately 85° between the descending hearth wall and the axis of the blowhole bore, indicating the wall was probably slightly overhanging.

Those slag pieces with evidence for attitude, suggested formation in a fairly steeply inclined location down the wall. The top of the example including the blowhole showed an angle of approximately 50° between the top of the SHC and the bore of the blowhole. There was no evidence that the blowhole

Many of the fragments showed either the impression of charcoal fragments on the surface, or preserved charcoal pieces. None showed any evidence for the use of coal.

The four reasonably intact SHCs showed a range in weight from 128-368g.

Interpretation

These smithing slags are indicative of charcoal fuel and a hearth with a simple blowhole in the clay wall. The observed weight-range (albeit based on a very low number of specimens) would be typical of blacksmithing slags formed in such an environment – and as such they might theoretically have been produced at any period from the Iron Age. However, the use of simple blowholes in clay walls is unlikely after the later medieval period (15th century onwards; when iron tuyères, first of wrought iron and later of cast iron, progressively became the norm).

These slags include both dense iron slag and less dense wall-derived slags, but they do not the gravelly-textured material, that is so common in many residues believed to be from floor-level hearths. Such material is particularly characteristic of, but not restricted to, Roman assemblages. The 'cleaner' assemblages such as the present one, may derive from floor level hearths cut into a firm substrate, but are also characteristic of material from constructed hearths. Hearths may have been constructed rather than cut at almost any period, but become progressively more common over time, particularly with the Roman and later increasing use of waist-level hearths.

Post-medieval blacksmithing and much Roman blacksmithing commonly employed coal as fuel, although there are plenty of exceptions.

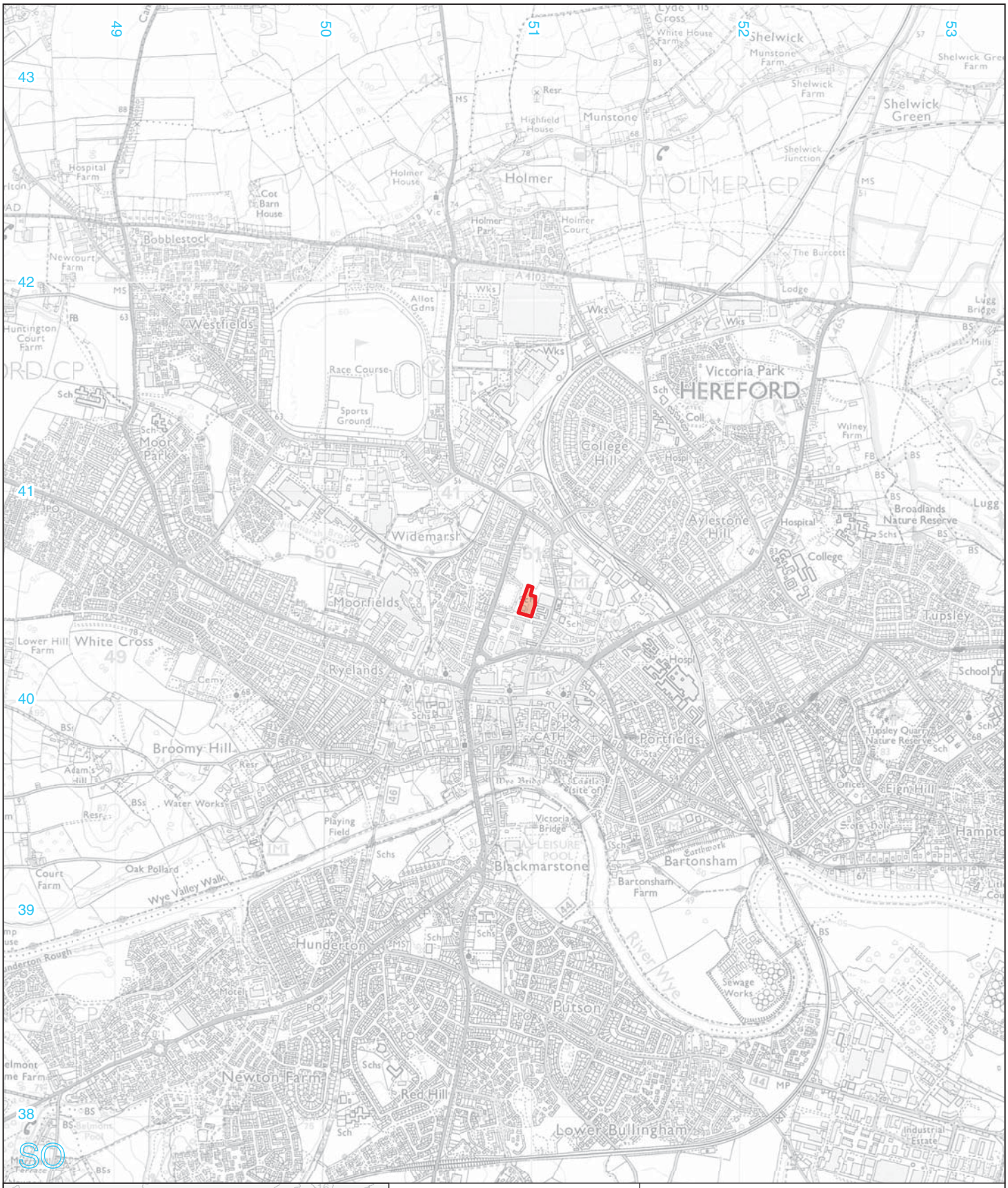
On balance, the present assemblage might be favourably compared with those from Willow Street and Mill Street, Worcester, of earlier medieval age (11th – 12th centuries; Young 2007, 2009). However, that is a very tentative comparison and a wide range of dates would be possible.

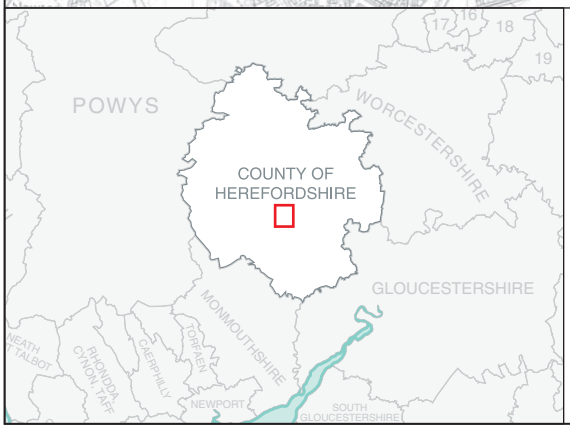
Conclusion

It is likely that the present limited material would not yield further useful information on detailed analysis, so no further analysis of the assemblage from the evaluation is recommended. The material does however indicate that any subsequent work should be take consideration of the likelihood of encountering more significant residue and structural evidence for ironworking

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	Blackfriars Street, Hereford, Herefordshire	
Short description	An archaeological evaluation was undertaken by Cotswold Archaeology in May and June 2016 at Blackfriars Street, Hereford, Herefordshire. Four trenches were excavated. An undated pit, sealed by subsoil, was identified in Trench 3. Three undated pits/postholes, also seemingly cutting the subsoil, were identified in Trench 4. Although undated, these features are similar in nature to a number of pits previously identified in close proximity to the current site and tentatively interpreted as representing evidence of prehistoric activity. A pit/ditch terminal, identified cutting the subsoil in Trench 4, contained a single sherd of medieval (12th to 14th-century) pottery. A number of undated pits/postholes were also identified cutting the subsoil within the trench and are likely to be broadly contemporary. A curving ditch/gully containing quantities of blacksmithing slag and two, probably contemporary, postholes were identified cutting the subsoil in Trench 3. Although these features cannot be dated securely they are most likely medieval in date and may form part of a structure related to small-scale industrial activity. A ditch identified in Trench 3 is likely to relate to post-medieval agricultural land management, drainage or division. A number of modern pits containing animal burials, presumably relating to the agricultural usage of the site, were identified in Trench 1. Modern post holes were identified in Trenches 1 and 2.	
Project dates	31 May to 10 June 2016	
Project type	Field evaluation	
Previous work	None	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Blackfriars Street, Hereford, Herefordshire	
Study area (M^2/ha)	0.69ha	
Site co-ordinates	SO 50977 40466	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Steven Sheldon	
Project Supervisor	Greg Crees	
MONUMENT TYPE	None	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.)	Content
Physical	Hereford Museum Resource & Learning Centre/2016-32	Pottery, slag
Paper	Hereford Museum Resource & Learning Centre/2016-32	Pro-forma recording sheets, permatrace drawings
Digital	Hereford Museum Resource & Learning Centre/2016-32	Digital photographs
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2016 *Blackfriars Street, Hereford, Herefordshire: Archaeological Evaluation.* CA typescript report **16312**		





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PROJECT TITLE

Blackfriars Street, Hereford, Herefordshire

FIGURE TITLE

Site location plan

DRAWN BY	**SO**	*PROJECT NO.*	**5814**	*FIGURE NO.*
CHECKED BY	**RP**	*DATE*	**14/06/2016**	**1**
APPROVED BY	**SS**	*SCALE@A4*	**1:25,000**	

5090
5095
5100
5105
4050
4045
4040
SO

T1
T2
T3
T4 (Fig. 4)

pit
2008/2011

curving ditch/gully
3006/3022/3024

pit/posthole
3008

pit/posthole
3010

ditch 3011

BLACKFRIARS STREET

N

site boundary
evaluation trench
archaeological feature
modern
section location

0
20m

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PROJECT TITLE
Blackfriars Street, Hereford, Herefordshire

FIGURE TITLE
Trench location plan showing identified archaeological features

DRAWN BY	SO	PROJECT NO.	5814	FIGURE NO.
CHECKED BY	RP	DATE	14/06/2016	2
APPROVED BY	SS	SCALE@A3	1:500	

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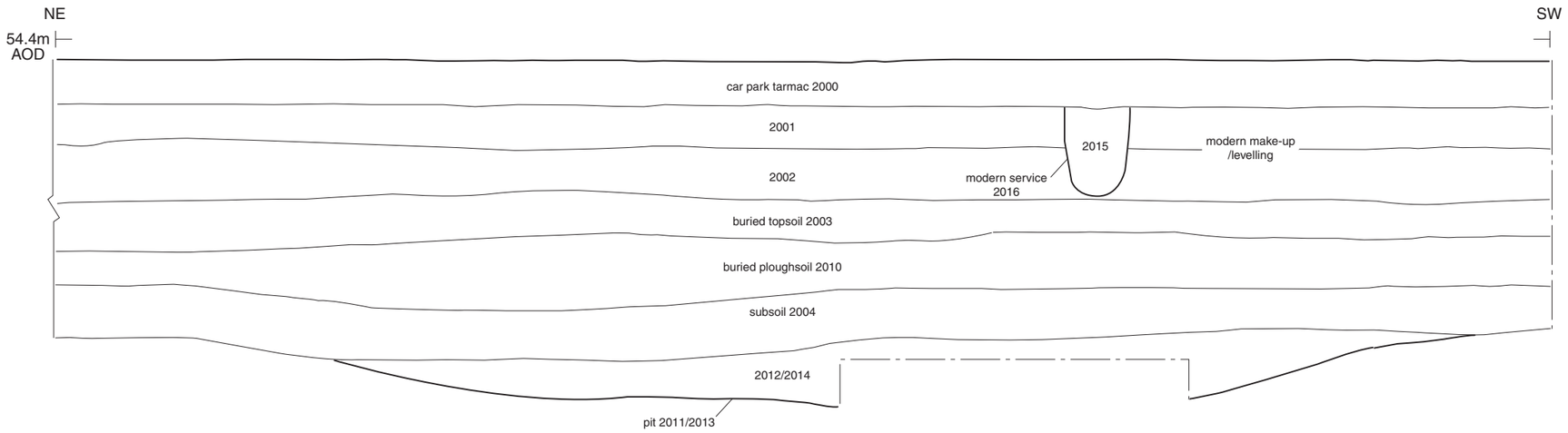
Section AA



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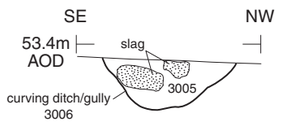

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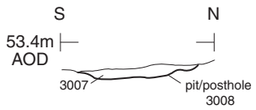

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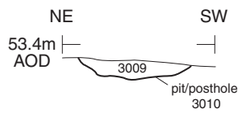

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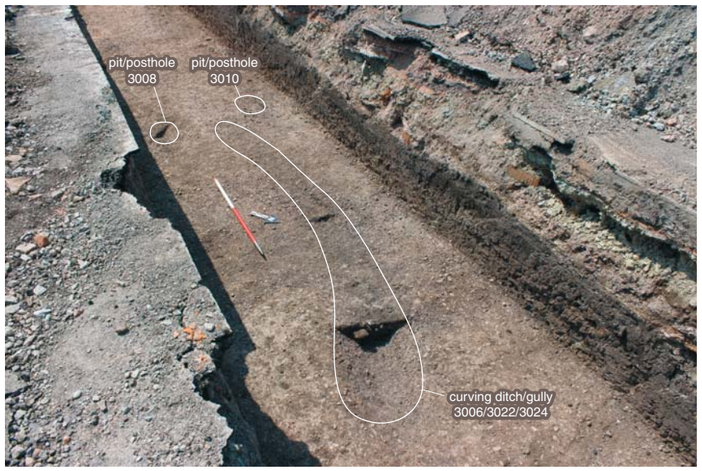
Pit 2011/2013, looking north-east (scales 1m)



Curving ditch/gully 3006/3022/3024, and pits/postholes 3008 & 3010, looking south-west (scale 1m)

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PROJECT TITLE

Blackfriars Street, Hereford, Herefordshire

FIGURE TITLE

Trenches 2 and 3: sections and photographs

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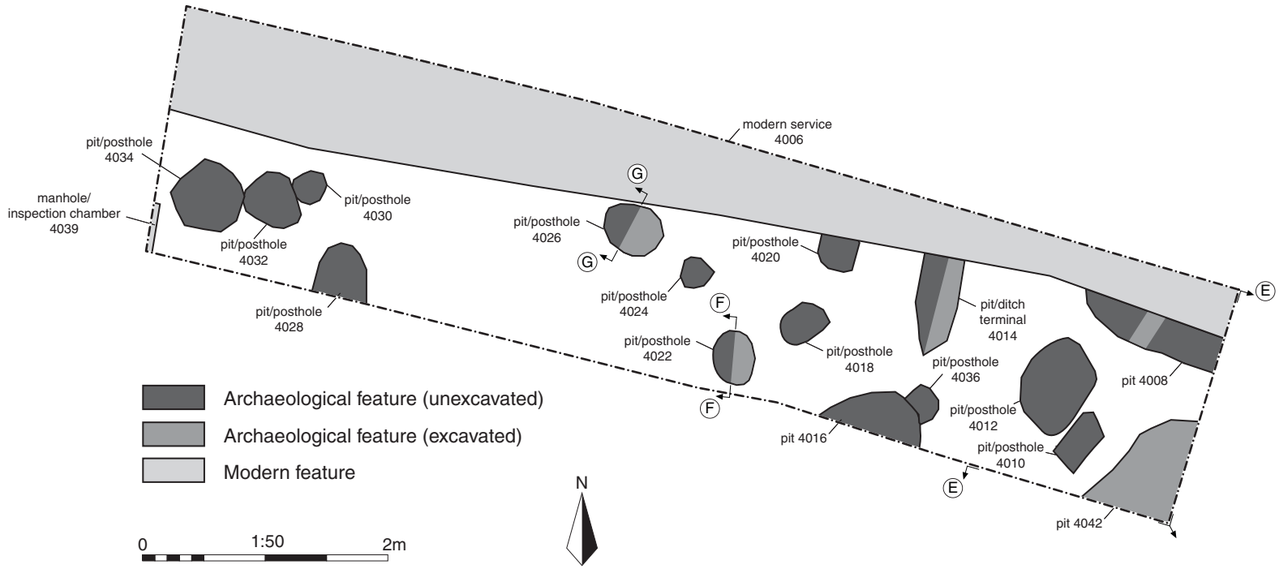
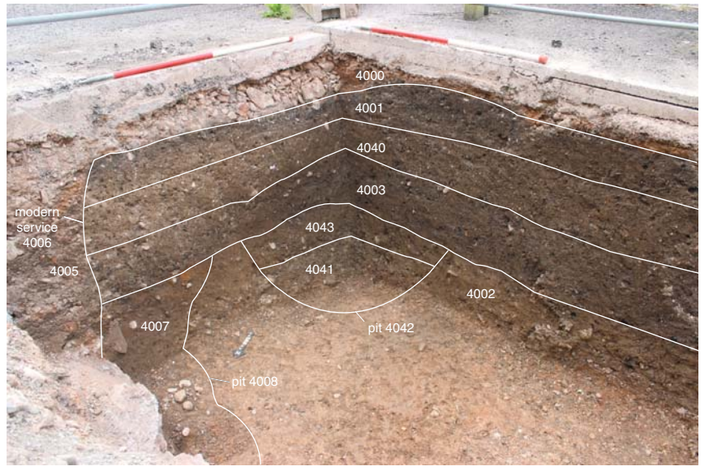
APPROVED BY	**SS**	*SCALE@A3*	**1:20**	

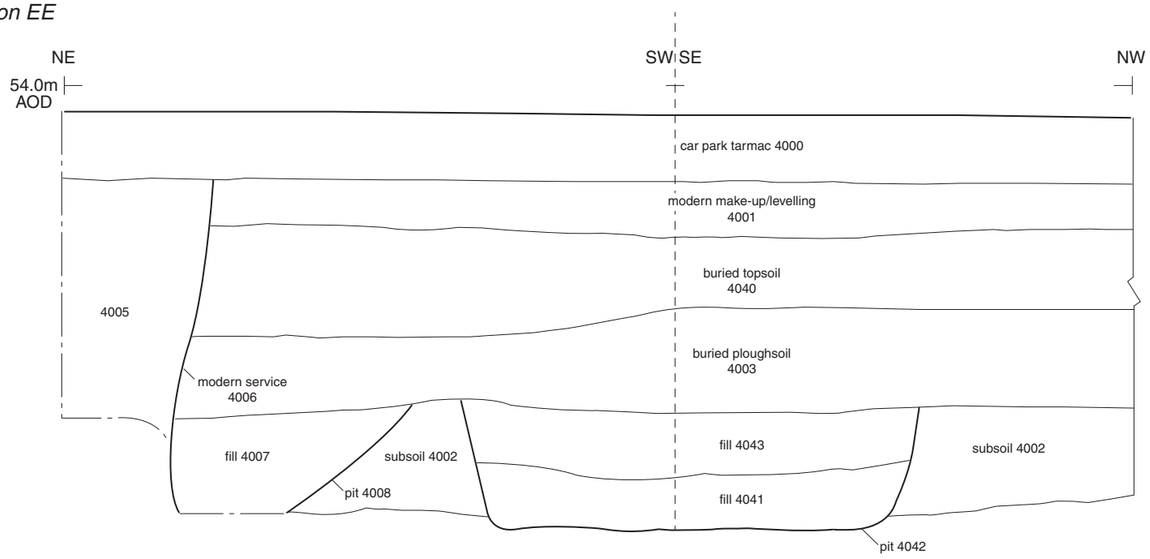


Trench 4, looking north-west (scales 1m)



East end of trench 4; north-west and north-east facing section showing pits 4008 and 4042, looking south-east (scales 1m)

Section EE



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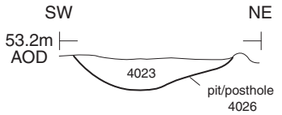
Section GG



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PROJECT TITLE

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FIGURE TITLE

Trench 4: plan, sections and photographs

DRAWN BY	SO	PROJECT NO.	5814	FIGURE NO.
CHECKED BY	LM	DATE	16/06/2016	4
APPROVED BY	SS	SCALE@A3	1:20 & 1:50	

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