



Land at Richfield Road Bushey Hertfordshire

Archaeological Evaluation



for Orion Heritage

on behalf of Gade Property Developments Ltd

CA Project: MK0189 CA Report: MK0189_1

February 2020



Land at Richfield Road Bushey Hertfordshire

Archaeological Evaluation

CA Project: MK0189 CA Report: MK0189_1















	Document Control Grid									
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by				
А	26/02/20	RSB	MLC	Draft	For client comment	MPH				
В	27/02/20	RSB	MLC	Draft	Client Comment	MPH				
С	06/04/20	RSB	MLC	Final	HCCHEA Comment	MPH				

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

	IDIX E: HERTFORDSHIRE HISTORIC ENVIRONEMENT RECORD SUMM	
APPEN	IDIX D: OASIS REPORT FORM2	23
APPEN	IDIX C: THE PALAEOENVIRONMENTAL EVIDENCE2	22
APPEN	IDIX B: THE FINDS2	<u>!</u> 1
APPEN	IDIX A: CONTEXT DESCRIPTIONS1	8
10.	REFERENCES1	6
9.	CA PROJECT TEAM1	6
8.	DISCUSSION1	5
7.	THE PALAEOENVIRONMENTAL EVIDENCE	3
6.	THE FINDS1	1
5.	RESULTS (FIGS 2-9))
4.	METHODOLOGY	}
3.	AIMS AND OBJECTIVES7	,
2.	ARCHAEOLOGICAL BACKGROUND5	;
1.	INTRODUCTION4	ļ
SUMMA	ARY2	<u>'</u>

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan (1:25,000)
- Fig. 2 Trench location plan including archaeological features (1:1,000)
- Fig. 3 Site photographs
- Fig. 4 Trench 4: plan, section and photographs (1:200; 1:20)
- Fig. 5 Trench 10: plan, sections and photographs (1:200; 1:20)
- Fig. 6 Trenches 7 and 8 photographs
- Fig. 7 Trenches 1, 2 and 3 photographs
- Fig. 8 Trenches 4, 5, 6 and 7 photographs
- Fig. 9 Trenches 8, 9, 10 and 11 photographs

SUMMARY

Project Name: Land at Richfield Road Location: Bushey, Hertfordshire

NGR: 514576 194594

Type: Evaluation

Date: 27-30 January 2020

Planning Reference: 18/1026/FUL

Location of Archive: Bushey Museum and Art Gallery, Hertsmere

Accession Number: TBC

Site Code: LRRB20

An archaeological evaluation was undertaken by Cotswold Archaeology in January 2020 on Land at Richfield Road, Bushey, Hertfordshire. Eleven trenches were excavated. The evaluation comprised eleven trenches, within which two features producing Roman artefacts, one feature producing post-medieval period artefacts and one undated feature were recorded, along with evidence for probable quarrying.

A ditch containing Roman pottery was exposed in the west of the site in Trench 4 and Roman pottery was also recovered from a pit in the east in Trench 10. One other ditch was recorded, which contained post-medieval pottery and CBM along with one sherd of Late Iron Age/Roman pottery in Trench 10, and which correlates with a field ditch identified on the 1872-1883 Ordnance Survey mapping. An undated gully was recorded in Trench 8. Recent, though infilled, quarrying covered an extensive area around the centre of the site. These extraction pits were filled with material containing modern fragments of CBM. An area of modern disturbance was also observed in the west of the site which may also relate to quarrying.

In summary, the presence of a single ditch and pit producing Roman artefacts and a ditch producing Late Iron Age/Roman and post-medieval artefacts indicates some limited evidence for past activity of Roman and post-medieval date. However, that the Roman period finds assemblage comprised only five very abraded sherds; suggestive of its migration over some distance and exposure for some time prior to natural deposition. Accordingly, it is considered likely that the Roman pottery is residual and unlikely that it

represents evidence for Roman occupation within or adjoining the site. The ditches recorded in Trenches 4, 8 and 10 and the pit recorded in Trench 10, are considered likely to relate to former field boundaries and agricultural activity pre-dating the quarrying.

1. INTRODUCTION

1.1 In January 2020 Cotswold Archaeology (CA) carried out an archaeological evaluation for Orion Heritage on behalf of Gade Property Developments Ltd on land at Richfield Road, Bushey, Hertfordshire (centred at NGR: 514576 194594; Fig. 1). The evaluation was undertaken to fulfil Condition 14 of planning permission for a residential development granted by Hertsmere Borough Council (HBC) (18/1026/FUL). Condition 14 stated:

PRIOR TO THE COMMENCEMENT OF DEVLEOPMENT an Archaeological Written Scheme of Investigation shall be submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of archaeological significance and research questions; and:

- 1. The programme and methodology of site investigation and recording;
- 2. The programme and methodology of site investigation and recording as suggested by the archaeological evaluation;
- 3. The programme for post investigation assessment;
- Provision to be made for analysis of the site investigation and recording;
- 5. Provision to be made for publication and dissemination of the analysis and records of the site investigation;
- 6. Provision to be made for archive deposition of the analysis and records of the site investigation; and,
- Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

The development shall take be carried out in accordance with the programme of archaeological works set out in the Written Scheme of Investigation as approved and the development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved and the provision made for analysis and publication where appropriate.

Reason: To ensure adequate opportunity is provided for archaeological research on the site. To comply with Policy SADM29 of the Site Allocations and

Development Management Policies Plan 2016 and Policy CS14 of the Hertsmere Core Strategy 2013.

The scope of this evaluation was determined through discussions with Alison Tinniswood, Hertfordshire County Council's Historic Environment Advisor (HCCHEA), archaeological advisors to HBC. The archaeological works were carried out in accordance with a detailed *Written Scheme of Investigation* (WSI) produced by Orion Heritage (2019) and approved by HBC acting on the advice of the HCCHEA. The works also followed a subsequent Method Statement produced by CA (2020). The fieldwork followed the *Standard and guidance for archaeological field evaluation* (ClfA 2014), and was monitored by Alison Tinniswood, including a site visit on 30th January 2020.

The site

- 1.3 The proposed development area measures approximately 1.2ha and comprises scrub land surrounded by residential development (Fig. 3). It is accessed via a narrow passage off Richfield Road in the north-east. The site undulates along its length east to west with a general gradient descending from north to south. It lies at approximately 137m above Ordnance Datum (aOD).
- 1.4 The underlying bedrock geology of the area is mapped as London Clay Formation, clay, silt and sand of the Palaeogene Period. Superficial deposits are mapped as the Stanmore Gravel Formation, sand and gravel formed during the Quaternary period (BSG 2020). During this evaluation the natural geology encountered largely comprised sand and gravels with patches of silty clay.

2. ARCHAEOLOGICAL BACKGROUND

2.1 It is noted that no desk-based assessment has been carried out for the site. The Hertfordshire Historic Environment Record (HER) has, therefore, been obtained to inform the Orion Heritage WSI also informs this evaluation report.

Prehistoric period (pre-AD 43)

2.2 The development site lies on the valley slopes above the River Colne, in a favourable location for settlement from the earlier prehistoric period onwards. There

is some very limited evidence for this, comprising; a Palaeolithic flint implement found *c*.550m west of the present site on Merry Hill Road in the 1970s (MHT942), a Mesolithic flint tool (a 'graver') recorded to the rear of No. 38 Richfield Road (MHT944), just on the northern boundary of the site, and a Mesolithic flint axe head found at Chiltern Avenue approximately 350m to the north of the site (MHT938).

Roman period (AD 43 – AD 410)

- 2.3 Sherds of Roman pottery and pieces of glass have been recorded to the rear of No. 38 Richfield Road, just on the northern boundary of the site (along with the Mesolithic flint tool noted above). Parchmarks were also recorded, which may suggest the presence of walls beneath the ground surface (MHT911).
- 2.4 Following the construction of Chiltern Avenue in 1928, Roman tessera and tile were recovered to the rear of the properties (MHT773), and a Roman coin of Caligula was found in the 1950s, *c.*500m to the north-east of the site near Woodfield Rise (MHT943).
- 2.5 In addition to the few finds of Roman period origin the conjectured route of former Roman road (*Viatores'* route 169C) 'Nash Mill to Edgware', from Bushey Heath to Watling Street at Edgware is recorded passing north-west to south-east through the area (MHT4588, MHT4589), and within c.100m of the site where the A411 / A4140 is now.

Early medieval to modern periods (AD 410 – present)

- 2.6 There is little recorded archaeological evidence in the surrounding area for activity dating from the end of Roman period onwards. The site lies to the north-east of Sparrows Herne Hall, a post-medieval country house (probably built in the late 18th or early 19th century), which may stand on, or close to, the site of an earlier house. Cartographic evidence depicts the site as farmland, and largely surrounded by farmland, throughout the late 19th and the first half of the 20th centuries. The majority of the housing estate surrounding the site was developed during the 1950s.
- 2.7 Within the surrounding area the HER records a few former or extant remains of medieval to post-medieval origin. These comprise: traces of ridge and furrow cultivation at the south-east end of the King George V Playing Fields *c.*500m to the north-west of the site (MHT9192); a large ornamental fishpond in the grounds of Warren House, Warren Road *c.*350m to the south of the site, which is depicted on

the 1840 Bushey Tithe map (MHT12058); the site of a former windmill, c.700m to the south-east of the site, on Windmill Lane (MHT1538); the remains of the 'Spring Hole', a former brick-built public water source at Clay Hill (MHT4846); and the site of the former Coach and Horses pub (MHT18713), and the putative location for London Coal Duty marker (MHT5742), both about 1km from the site.

- 2.8 The remaining entries in the HER comprise a range of former and extant buildings predominantly of 18th to 20th century origin. Some examples, are however, of earlier origin, such as Oundle, 46 Little Bushey Lane, which is at least of 17th century date though may have originated as a late medieval hall (MHT13195). A historic building record and an archaeological evaluation were undertaken at the property in 2007-08, the latter comprising four trenches. No remains of significance were identified (EHT1244).
- Elsewhere, an archaeological watching brief was undertaken on groundworks at 191
 195 Sparrows Herne in 2010; no remains of archaeological significance were identified (EHT1608). There are also two records relating to programmes of historic building recording at Sparrows Herne Hall in 2003 (EHT5269) and at Nos 191 195 in 2009 (EHT6724)

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 the *Standard and guidance for archaeological field evaluation* (ClfA 2014). This information will enable the HBC 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* (MHCLG 2019).
- 3.2 The principal aims of the archaeological investigation were to:
 - Determine the presence or absence of archaeological remains;

- Determine the character, extent, date, complexity, integrity, state of preservation and quality of any archaeological remains present, therefore ensuring their preservation by record; and,
- To provide robust baseline information to inform the scoping of a mitigation strategy, should this be required.

3.3 The general objectives were to ensure:

- The protection and recording of archaeological assets discovered during the archaeological works;
- That any below-ground archaeological deposits exposed are promptly identified; and,
- The recording of archaeological remains, to place this record in its local context and to make this record available.

4. METHODOLOGY

- 4.1 The fieldwork comprised the excavation of eleven 1.8m wide trenches. These comprised three 20m long trenches, seven 30m long trenches and one 27m long trench, in the locations shown on the attached plan (Fig. 2). This was slightly at variance with the scope of work set out in the WSI, which stipulated a requirement for twelve trenches. This variation was due to the alignment of Trench 12 within the footprint of an existing, though mainly dry, pond (Fig.3). For this reason, proposed Trench 12 was not excavated and the length of Trench 11 increased to 27m, with the approval of the HCCHCA. Trench 1 was also moved 10m to the north-west in order to avoid a stand of trees. 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 and were sampled and processed. All artefacts recovered were processed in accordance with CA Technical Manual 3: Treatment of Finds Immediately after Excavation.
- 4.4 The archive and artefacts from the evaluation are currently held by CA at its office in Milton Keynes. Subject to the agreement of the legal landowner the artefacts will be deposited with Bushey Museum and Art Gallery, Hertsmere under accession number (TBC) 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 2-9)

- 5.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts, finds and environmental samples (palaeoenvironmental evidence) are to be found in Appendices A, B and C respectively.
- 5.2 The natural geological substrate was encountered at an average depth of 0.57m below present ground level (bpgl) and comprised loose mid brown yellow to light grey sand and gravels with patches of mid yellow orange silty clay. This was in general overlain by subsoil, comprising mid grey brown sandy silt with frequent rounded stone inclusions, measuring on average 0.31m thick. The exception to this was in Trenches 6 and 7 where modern quarrying had truncated this subsoil. A layer of topsoil, consisting of dark grey brown sandy loam, sealed the subsoil and measured on average 0.26m thick.
- 5.3 Six trenches comprising Trenches 1-3 (Fig.7), 5 (Fig.8), 9 (Fig.9) and 11 (Fig.9) contained no features of archaeological significance. Three trenches comprising Trenches 4, 6 and 7 (Fig. 8) contained evidence of modern quarrying. Three trenches comprising Trenches 4 (Fig. 8), 8 (Fig.9) and 10 (Fig.9) revealed features as further detailed below.

Trench 4 (Figs 2, 4 & 8)

- Ditch 403 ran through the southern end of Trench 4 on a north-west/south-east alignment. It had steep straight sides with a flat base and measured 0.5m wide by 0.2m deep (Fig. 4 Section AA). It contained a single fill (404), comprising light grey brown silty sand and gravel, from which three sherds of Roman pottery were recovered.
- Quarry pit 405 was exposed across the majority of Trench 4 and was machine excavated to a depth of 1.1m below the present ground level along its length. A hand dug intervention was excavated into the edge of this quarry as well as a machine excavated sondage in the northern end of the trench. These interventions showed it to have a steep straight edge and a depth of 2m. Two fills were recorded; a primary fill of natural silting (407), comprising mid grey blue silty clay and measuring 0.4m thick, overlain with a deliberate backfill (406) comprising mixed mid brown grey sand and gravel with mid brown orange clay patches. Modern fragments of brick and CBM were recorded from fill 406 but were not retained.

Trench 6 (Figs 2 & 8)

5.6 The entirety of Trench 6 was located within quarry pit 601. It was machine excavated to a depth of 1.14m and no natural geological substrate was exposed. Quarry pit 601 was infilled with a deliberate backfill (602), comprising mixed mid brown grey sand and gravel with mid brown orange clay patches, within which modern fragments of brick and CBM were observed; these were not retained.

Trench 7 (Figs 2,6 & 8)

5.7 Quarry pit 701 was exposed across the majority of Trench 7 and was machine excavated to a depth of 1.1m below the present ground level along its length. It was infilled with a deliberate backfill (702), comprising mixed mid brown grey sand and gravel with mid brown orange clay patches, within which modern fragments of brick and CBM were observed; these were not retained.

Trench 8 (Figs 2, 6 & 9)

A possible gully 803 ran through the south-western half of Trench 8 on a roughly east/west alignment. It was irregular in plan with moderate concave sides and base. It measured 0.45m wide by 0.1m deep and contained a single fill (804) comprising mid brown grey silty sand and gravel from which no finds were recovered.

5.9 An area of bioturbation (805) was also investigated in the centre of Trench 8. This feature had irregular undercutting sides with a flattish base and measured 1.95m long by more than 1m wide. No finds were recovered from its sandy silt fill.

Trench 10 (Figs 2, 5 & 9)

- 5.10 Ditch 1003 was exposed running through the western half of Trench 10 on a north-west/south-east alignment. It had moderately straight sides and a concave base and measured 1.1m wide by 0.28m deep (Fig. 5, Section BB). It contained a single fill (1004) comprising dark brown grey sandy silt from which an assemblage of post-medieval pottery and CBM fragments were recovered. It is likely to be the remains of an old field boundary.
- 5.11 Pit 1005 was partially exposed in centre of Trench 10. It appeared broadly circular with steep straight sides and a flat base. It measured 0.9m in diameter by 0.32m deep and contained a single fill (1006), comprising mid brown grey sandy silt (Fig. 5, Section CC), from which one sherd of Roman pottery was recovered.

Trench 11 (Figs 2 & 9)

5.12 A possible quarry pit 1103 was exposed in the north-eastern end of Trench 11. This was excavated by a machine to a depth of 0.8m below the present ground level. It contained a single fill (1104) comprising mixed mid brown grey sand and gravel with mid brown orange clay patches and hardcore, within which modern fragments of brick and CBM were observed. These were not retained.

6. THE FINDS

6.1 The artefactual material is recorded from three deposits; the fills of pits and ditches revealed in Trenches 4 and 10(Appendix B). The material was recovered by hand.

Pottery

6.2 The pottery recovered from the evaluation is recorded in Appendix B and discussed below. Recording of the finds assemblage was direct to an Excel spreadsheet; this now forms the basis of Appendix B (Table 1). The pottery was examined by context, using a x10 binocular microscope and quantified according to sherd count and weight

per fabric type. The pottery fabrics are defined in Appendix B (Table 2) in accordance with the Historic England guidelines (Barclay *et al.* 2016).

6.3 The assemblage comprises six sherds weighting 69g. The majority is in poor condition, with most sherd surfaces and fractures exhibiting signs of heavy abrasion. The mean sherd weight is moderately low for a Roman and post-medieval assemblage at 11.5g.

Late Iron Age/Roman periods

One sherd (33g) of sandy grog-tempered ware (UNS QGR), most likely dating to the Late Iron Age or Early Roman transitional period, is recorded from ditch fill 1004 in Trench 10. Four sherds (24g) of sandy grey ware (UNS GW) are recorded from ditch fill 404 (three sherds) in Trench 4 and pit fill 1006 (one sherd) in Trench 10. Ditch fill 404 produced an everted rim sherd in the same fabric (UNS GW). This material can be broadly dated to the Roman period. The origin of both fabrics is unknown, although they have both, most likely, been produced locally.

Post-medieval/modern periods

6.5 Ditch fill 1004 in Trench 10 produced the base of a flowerpot (42g) made in refined red earthenware (REFR). The base has a central perforation and the vessel dates from the 18th to 20th centuries.

Summary

6.6 The pottery provides limited evidence for activity during the Late Iron Age/Roman and post-medieval/modern periods. Due to the small size of the assemblage it is not possible to draw any further meaningful conclusions.

Ceramic Building Material

6.7 Nine fragments (771g) of ceramic building material made in fine (fs) or medium sandy fabrics (ms), some with ferrous inclusions (fe), are recorded from ditch fill 1004 in Trench 10. One fragment of peg tile, three fragments of roof tile and two fragments of brick are all noted from this deposit. Based on the fabric and thickness the fragments can be broadly dated to the post-medieval or modern period.

7. THE PALAEOENVIRONMENTAL EVIDENCE

- 7.1 Two environmental samples (19 litres) were processed from ditch 403 in Trench 4 and pit 1005 in Trench 10. This was done to evaluate the preservation of palaeoenvironmental remains and with the intention of recovering environmental evidence of industrial or domestic activity on the site, as well as possibly giving an indication of the local environment. It was also hoped that the samples might help to confirm the dating of these features. Sample 2 (pit 1005) was processed by standard flotation procedures (Ca Technical Manual No. 2) with sample 1 (ditch 403) being processed by wet sieving (250 micron mesh size) for the recovery of potentially waterlogged remains (CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites).
- 7.2 Preliminary identifications of plant macrofossils for the charred remains are noted in Appendix C; Table 3 and for the potentially waterlogged remains in Table 4, following nomenclature of Stace (1997).
- 7.3 The flots varied in size from small to large with low to high numbers of rooty material and uncharred seeds. The charred material exhibited poor levels of preservation. Due to the poor preservation it is hard to firmly identify any of the charred material to species.
- 7.4 The date of the features has been obtained through the dating of associated pottery (see Section 6).

Roman period

Trench 10

7.5 Fill 1006 (sample 2) of pit 1005 contained a single charred indeterminate seed and no other plant remains. Low quantities of charcoal fragments that are heavily iron impregnated were also recorded in sample 2 but further species identification was not possible due to the level of preservation.

Trench 4

7.6 Fill 404 (sample 1) of ditch 403 was thought to be potentially waterlogged in the field but contained no charred plant remains or waterlogged plant remains. Only a small number of charcoal fragments were noted in the assemblage. Moderate quantities of

uncharred leaf fragments were noted in the assemblage but are likely to be modern and do not represent a waterlogged assemblage.

Summary

7.7 The small assemblages from both samples 1 and 2 are likely to be indicative of wind-blown/dispersed material and do not provide any indication into the possible use or function of pit 1005 or ditch 403. They provide no evidence for any settlement activity in the immediate vicinity of these features nor do they assist with confirming their respective dates. There is no evidence for waterlogged deposits on the site from these samples.

8. DISCUSSION

- 8.1 The evaluation comprised eleven trenches within which two features producing Roman artefacts, one feature producing Late Iron Age/Roman and post-medieval artefacts and one of undated feature were recorded along with evidence for quarrying.
- 8.2 The two features producing Roman artefacts were not recognisably associated; comprising ditch 403 in the south-western half of the site and pit 1005 in the north-east separated by roughly 100m. The very low density of features producing Roman artefacts on site and the small amount of very abraded pottery collected from each of these features is strongly indicative of activity at the periphery of potential settlement. It is noteworthy that pit 1005 lies only c.15m from the rear of No. 38 Richfield Road, where sherds of Roman pottery and pieces of Roman glass were recorded, as well as parchmarks (HER 911). The HER records that these parchmarks could be associated with the presence of buried walls however this has to remain conjecture. A Roman building is thought likely to have existed further to the north, near to Chiltern Avenue where fragments of Roman tessera and tile were found (HER 773). However, there was no evidence to suggest any settlement activity within the site and it is considered likely that the remains recorded during the evaluation represent agricultural or similar activity.
- 8.3 A single sherd of post-medieval pottery and a few fragments of CBM were recovered from ditch 1003 in the north-east of the site. This is likely to be associated with an infilled former field boundary associated with the field systems depicted on the Ordnance Survey County Series (1:2,500) map of 1872 1883.
- This evaluation highlighted that much of the central part of the site has experienced significant localised quarrying in the recent past, affecting an area measuring at least 50m by 40m. These pits were backfilled with redeposited natural material, which contained modern CBM likely to have been associated with the construction of the houses along Richfield Road. Any earlier archaeological remains that may have been present in this central area will most likely have been completely removed by this activity.

- 8.5 An undated possible gully 803 in the north-eastern half of the site aligns with the northern boundary of the properties on Herne Close and may have once been a continuation of this property line which has now largely been removed.
- In summary, the presence of a single ditch and pit producing Roman artefacts and a ditch producing Late Iron Age/Roman and post-medieval artefacts indicates some limited evidence for past activity of Roman and post-medieval date. However, that the Roman period finds assemblage comprised only five very abraded sherds; suggestive of its migration over some distance and exposure for some time prior to natural deposition. Accordingly, it is considered likely that the Roman pottery is residual and unlikely that it represents evidence for Roman occupation within or adjoining the site. The ditches recorded in Trenches 4, 8 and 10 and the pit recorded in Trench 10, are considered likely to relate to former field boundaries and agricultural activity pre-dating the quarrying.

9. CA PROJECT TEAM

9.1 Fieldwork was undertaken by Ralph Brown, assisted by Abigail Breen and Tommaso Rossi. The report was written by Ralph Brown. The finds and palaeoenvironmental evidence reports were written by Pete Banks and Emma Aitkin respectively. The illustrations were prepared by Ryan Wilson. The archive has been compiled by Pete Banks and prepared for deposition by Hazel O'Neill. The project was managed for CA by Dr Mark Hewson.

10. REFERENCES

- BGS (British Geological Survey) 2020 Geology of Britain Viewer http://maps.bgs.ac.uk/geology-viewer-google/googleviewer.html Accessed 30 January 2020
- Booth P., Barclay A., Knight D., Evans J., Brown D.H. and Wood I., 2016 *A standard for pottery studies in Archaeology* Historic England.
- CA (Cotswold Archaeology) 2012 The taking and processing of environmental and other samples from archaeological sites: Technical Manual No. 2

- CA (Cotswold Archaeology) 2020 Land at Richfield Road, Bushey, Hertfordshire: Method Statement for Archaeological Evaluation
- MHCLG (Ministry for Housing, Communities and Local Government) 2019 *National Planning Policy Framework*
- Orion (Orion Heritage Ltd.) 2019 Land at Richfield Road, Bushey: Archaeological Written Scheme of Investigation
- Stace, C. 1997 New flora of the British Isles (2nd edition), Cambridge: Cambridge University Press.

Cartographic Sources

1872 - 1883 Ordnance Survey County Series (1:2,500)

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No	Context	Туре	Fill of	Context Interpretation	Context Description		W (m)	T (m)
1	100	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>20	>1.8	0.26
1	101	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>20	>1.8	0.22
1	102	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m	>20	>1.8	-
2	200	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>20	>1.8	0.28
2	201	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>20	>1.8	0.38
2	202	Layer		Natural	Natural Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m		>1.8	-
3	300	Layer		Topsoil Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m		>30	>1.8	0.28
3	301	Layer		Subsoil Friable mid grey brown sandy silt wi frequent rounded stone inclusions 0.01-0.08m		>30	>1.8	0.32
3	302	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m and patches of mid brown orange silty clay	>30	>1.8	-
4	400	Layer		Topsoil Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m		>30	>1.8	0.3
4	401	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>30	>1.8	0.38
4	402	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m and patches of mid brown orange silty clay	>30	>1.8	-
4	403	Cut		Ditch	NW-SE Linear with steep straight sides and a flat base	>1	0.5	0.2
4	404	Fill	403	Secondary silting	Loose light brown grey silty sand with frequent rounded stone inclusions 0.01-0.06m	>1	0.5	0.2
4	405	Cut		Quarry	Covers the whole of the eastern half of the trench, too big to see shape in plan. Steep straight sides and an undulating base.	>22	>1.8	2
4	406	Fill	405	Deliberate deposition	Soft mixed mid brown grey sand and gravel and mid brown orange clay patches		>1.8	1.6
4	407	Fill	405	Secondary silting			>1.8	0.4

5	501	Layer		Subsoil Natural	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>30	>1.8	0.44
		Layer		Motural	0.01-0.00111			
6	600			Matural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m and patches of mid brown orange silty clay	>30	>1.8	-
		Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>30	>1.8	0.16
6	601	Cut		Quarry	Cut not seen, covers the whole trench.	>30	>1.8	>0.98
6	602	Fill	601	Deliberate deposition	Soft mixed mid brown grey sand and gravel and mid brown orange clay patches	>30	>1.8	>0.98
7	700	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>30	>1.8	0.19
7	701	Cut		Quarry	Covers the whole of the southern half of the trench, too big to see shape in plan.	>30	>1.8	>0.91
7	702	Fill		Deliberate deposition	Soft mixed mid brown grey sand and gravel and mid brown orange clay patches	>30	>1.8	>0.91
7	703	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m and patches of mid brown orange silty clay	>30	>1.8	-
8	800	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>30	>1.8	0.27
8	801	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>30	>1.8	0.43
8	802	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m	>30	>1.8	-
8	803	Cut		Gully	E-W irregular linear with moderate concave sides and a concave base	>1.8	0.45	0.1
8	804	Fill	803	Secondary silting	Loose mid brown grey silty sand and gravel with frequent rounded stones 0.01-0.06m	>1.8	0.45	0.1
8	805	Cut		Bioturbation	Irregular sub circle as seen with irregular moderate undercutting sides and flattish base	>0.97	>1	0.27
8	806	Fill	806	Secondary silting	Friable dark grey brown with orange patches and rare sub rounded small stone inclusions	>0.97	>1	0.27
9	900	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>20	>1.8	0.22
9	901	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>20	>1.8	0.18
9	902	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m	>20	>1.8	-

10	1000	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>30	>1.8	0.3
10	1001	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>30	>1.8	0.25
10	1002	Layer		Natural	Loose light brown yellow sand and gravel with silty orange yellow patches	>30	>1.8	-
10	1003	Cut		Ditch	NW-SE Linear with straight moderate sides and a concave base	>1	1.1	0.28
10	1004	Fill	1003	Secondary silting	Soft dark brown grey sandy silt with occasional red mottling. Occasional rounded stone inclusions 0.01-0.06m	>1	1.1	0.28
10	1005	Cut		Pit	Circular in plan with steep straight sides and flat base	>0.9	0.9	0.32
10	1006	Fill	1005	Secondary silting	Soft mid brown grey sandy silt with occasional small rounded stone inclusions and rare flecks of charcoal	>0.9	0.9	0.32
11	1100	Layer		Topsoil	Friable dark grey brown sandy loam with occasional rounded stone inclusions 0.01-0.08m	>27	>1.8	0.4
11	1101	Layer		Subsoil	Friable mid grey brown sandy silt with frequent rounded stone inclusions 0.01-0.08m	>21	>1.8	0.2
11	1102	Layer		Natural	Loose mid brown yellow silty sand with frequent rounded stone inclusions 0.01-0.08m and patches of mid brown orange silty clay	>21	>1.8	-
11	1103	Cut		Modern disturbance	Straight edged, covers the north- eastern end of the trench, too large to see shape in plan	>6	>1.8	>0.64
11	1104	Fill	1103	Deliberate deposition	Tenacious mixed mid grey blue and mid brown orange clay with gravel patches and modern brick and CBM inclusions	>6	>1.8	>0.64

APPENDIX B: THE FINDS

Table 1: Finds Concordance

Context	Class	Description	Fabric Code	Count	Weight (g)	Spot-date
404	Roman Pottery	Sandy grey ware	UNS GW	3	22	RB
1004	LIA/Roman Pottery	Sandy grog-tempered fabric	UNS QGR	1	3	C18-C20
	Post-medieval/Modern Pottery	Refined red earthenware	REFR	1	42	
	CBM	RT x 3, PEG x 1, BR x 2	fs/fsfe/ms/msfe	9	771	
1006	Roman Pottery	Sandy grey ware	UNS GW	1	2	RB

Table 2: Fabric Descriptions

Period	Fabric Descriptions	Fabric Codes	Count	Weight (g)
LIA/Roman Pottery	oman Pottery Sandy grog-tempered fabric UNS QG			3
	Sandy grey ware	UNS GW	4	24
Post-medieval/modern pottery	Refined red earthenware	REFR	1	42
Grand Total		·	6	69

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

Table 3 Assessment of the palaeoenvironmental remains

Feature Pit	Context	Sample	Volume (L)	Flot size (ml)	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal > 4/2mm	Other
1005	1006	2	18	400	95	-	-	-	*	indet seed	**/**	-

Key: * = 1-4 items; ** = 4-20 items; *** = 21-49 items; **** = 50-99 items; ***** = >100 items

Table 4 Assessment of potential waterlogged remains

Area	Tr. 4
Feature Type	Ditch
Feature	403
Context	404
Sample	1
Processed vol (L)	1
Uncharred material	
Leaf frags	++
Charred material	
Charcoal 4/2mm	+/+

Key: + = 1-49 items; ++ = 50-100 items; +++ = >100 items

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS						
Project Name	Land at Richfield Road, Bushey, Hel	rtfordshire: Archaeological				
Short description Project dates	An archaeological evaluation was Archaeology in January 2020 on Land a Hertfordshire. Eleven trenches were e comprised eleven trenches, within which Roman artefacts, one feature product artefacts and one undated feature we evidence for probable quarrying. A ditch containing Roman pottery was site in Trench 4 and Roman pottery was in the east in Trench 10. One other contained post-medieval pottery and CB Late Iron Age/Roman pottery in Trench with a field ditch identified on the 187 mapping. An undated gully was record though infilled, quarrying covered an ecentre of the site. These extraction pith containing modern fragments of CB disturbance was also observed in the walso relate to quarrying. In summary, the presence of a single Roman artefacts and a ditch producing post-medieval artefacts indicates some activity of Roman and post-medieval Roman period finds assemblage comprisherds; suggestive of its migration exposure for some time prior to natural donsidered likely that the Roman potte that it represents evidence for Romadjoining the site. The ditches recorded and the pit recorded in Trench 10, are conformer field boundaries and agriculturing quarrying. 27/01/20 – 30/01/20	at Richfield Road, Bushey, excavated. The evaluation of two features producing sing post-medieval period ere recorded, along with exposed in the west of the salso recovered from a pit ditch was recorded, which M along with one sherd of 10, and which correlates 72-1883 Ordnance Survey ded in Trench 8. Recent, extensive area around the swere filled with material M. An area of modern west of the site which may be ditch and pit producing Late Iron Age/Roman and limited evidence for past date. However, that the sed only five very abraded over some distance and leposition. Accordingly, it is ry is residual and unlikely than occupation within or din Trenches 4, 8 and 10 onsidered likely to relate to				
Project type	Evaluation					
Previous work	none					
Future work	Unknown					
PROJECT LOCATION		/Doc 400				
Site Location	Richfield Road, Bushey, Hertfordshire, W	/D23 4RQ				
Study area (M²/ha) Site co-ordinates	514576 194594					
PROJECT CREATORS						
Name of organisation	Cotswold Archaeology					
Project Brief originator	-	-				
Project Design (WSI) originator	Orion Heritage Ltd.					
Project Manager	Mark Hewson					
Project Supervisor	Ralph Brown					
MONUMENT TYPE	none					
SIGNIFICANT FINDS	none					
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.)	Content (e.g. pottery, animal bone etc)				
Physical		ceramics				
Paper		Trench sheets Context				

	sheets, Sections, report
Digital	digital photos, report
BIBLIOGRAPHY	
CA (Cotswold Archaeology) 2020 Land	at Richfield Road, Bushey, Hertfordshire: Archaeological Evaluation, CA

CA (Cotswold Archaeology) 2020 Land at Richfield Road, Bushey, Hertfordshire: Archaeological Evaluation. CA typescript report MK0189_1

APPENDIX E: HERTFORDSHIRE HISTORIC ENVIRONEMENT RECORD SUMMARY SHEET

Site name and address:								
Richfield Road, Bushey, Hertl	fordshire							
County: Hertfordshire		District: Hertsmere						
Village/Town: Bushey		Parish: Bush	ey					
Planning application reference: 18/1026/FUL								
HER Enquiry reference: No								
Historic Environment Record	(HER obtained	to inform the O	rion Heritage Written Scheme					
of Investigation.								
Nature of application: Plann	ing permission	granted for the	residential development of					
the site.								
Present land use: Open land								
Size of application area: c.1	.2ha	Size of area i	nvestigated:c.1.2ha					
NGR (to 8 figures minimum): 514576 1945	94						
Site code (if applicable): LR	:RB20							
Contractor: Cotswold Archae	eology							
Type of work: Archaeologica	l Evaluation							
Date of work:	Start:27 th Janu	uary 2020	Finish: 30 th January 2020					
Location of finds & site ard	Location of finds & site archive/Curating museum: Bushey Museum and Art Gallery,							
Hertsmere								
Related HER Nos: None		Periods represented:						
		Late Iron Age/Roman, Roman and post-						
medieval.								
Polovant provious summarios/reports:								

Relevant previous summaries/reports:

Orion (Orion Heritage Ltd.) 2019 Land at Richfield Road, Bushey: Archaeological Written Scheme of Investigation (WSI)

(No Archaeological Desk-Based Assessment, Hertfordshire Historic Environment Record HER obtained to inform the Orion Heritage WSI).

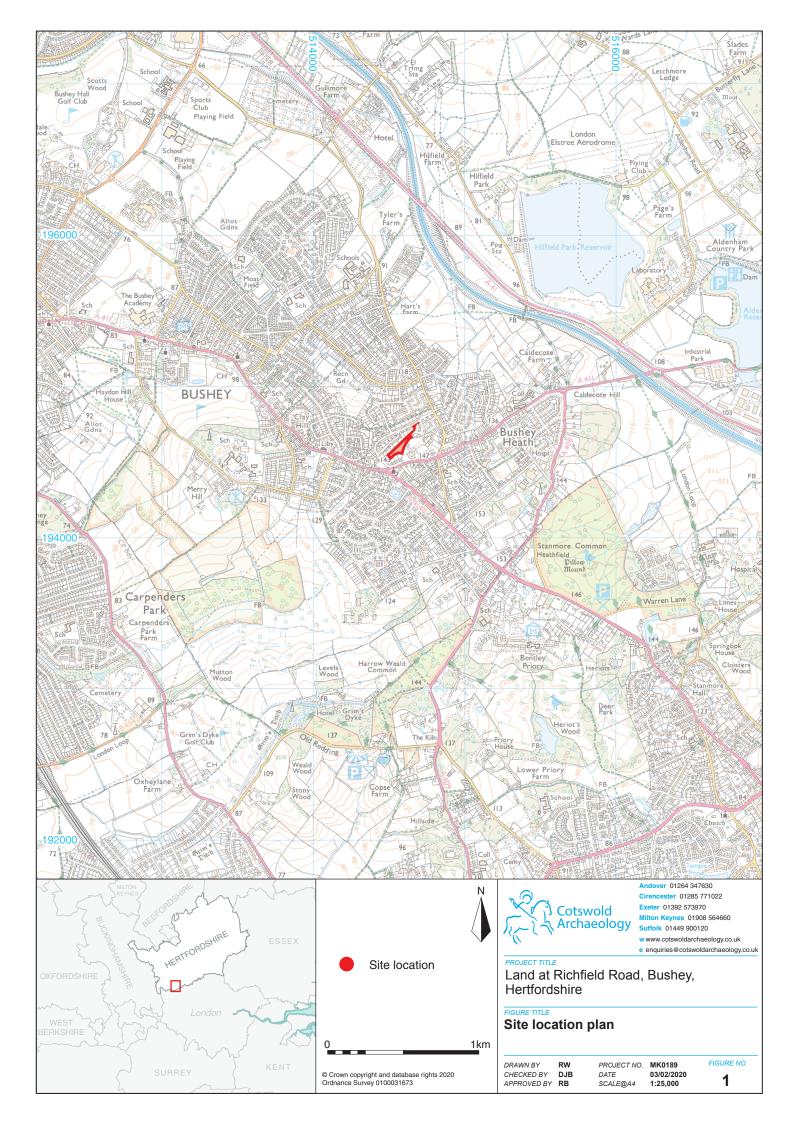
Summary of fieldwork results:

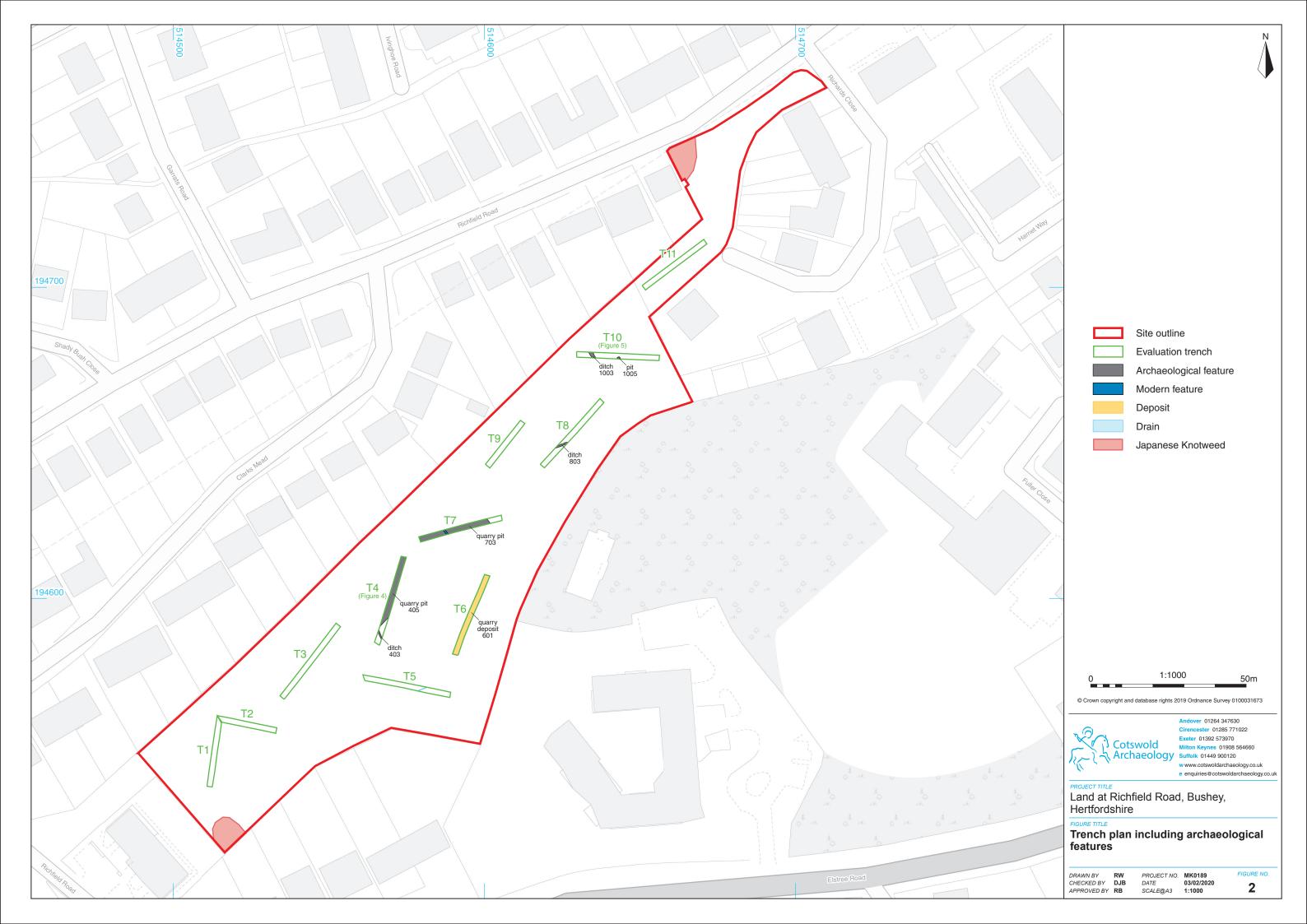
An archaeological evaluation was undertaken by Cotswold Archaeology in January 2020 on Land at Richfield Road, Bushey, Hertfordshire. Eleven trenches were excavated. The evaluation comprised eleven trenches, within which two features producing Roman artefacts, one feature producing post-medieval period artefacts and one undated feature were recorded, along with evidence for probable quarrying.

A ditch containing Roman pottery was exposed in the west of the site in Trench 4 and Roman pottery was also recovered from a pit in the east in Trench 10. One other ditch was recorded, which contained post-medieval pottery and CBM along with one sherd of Late Iron Age/Roman pottery in Trench 10, and which correlates with a field ditch identified on the 1872-1883 Ordnance Survey mapping. An undated gully was recorded in Trench 8. Recent, though infilled, quarrying covered an extensive area around the centre of the site. These extraction pits were filled with material containing modern fragments of CBM. An area of modern disturbance was also observed in the west of the site which may also relate to quarrying.

In summary, the presence of a single ditch and pit producing Roman artefacts and a ditch producing Late Iron Age/Roman and post-medieval artefacts indicates some limited evidence for past activity of Roman and post-medieval date. However, that the Roman period finds assemblage comprised only five very abraded sherds; suggestive of its migration over some distance and exposure for some time prior to natural deposition. Accordingly, it is considered likely that the Roman pottery is residual and unlikely that it represents evidence for Roman occupation within or adjoining the site. The ditches recorded in Trenches 4, 8 and 10 and the pit recorded in Trench 10, are considered likely to relate to former field boundaries and agricultural activity pre-dating the quarrying.

Author of summary:Ralph BrownDate of summary: 6th April 2020







Site pre-excavation, looking south-west



Entrance to the site with limited room for proposed Trench 12 (not excavated), looking south-west



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 564660 Suffolk 01449 900120 w www.cotswoldarchaeology.co.uk

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

Land at Richfield Road, Bushey, Hertfordshire

FIGURE TITLE

Site photographs

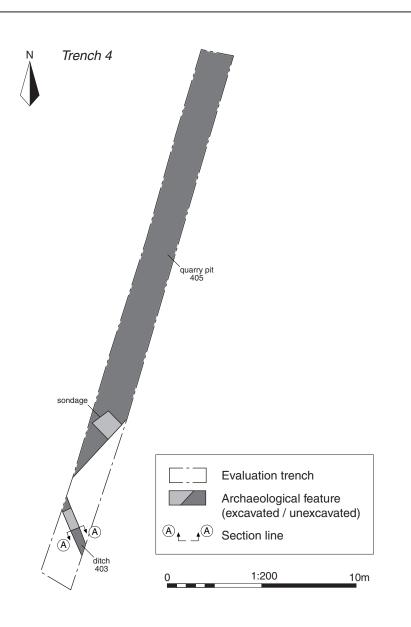
DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

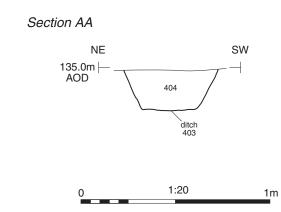
 PROJECT NO.
 MK0189

 DATE
 03/02/2020

 SCALE@A4
 NA

FIGURE NO.







Sondage through quarry pit 405, looking north-east (1m scale)



Ditch 403, looking north-west (0.4m scale)



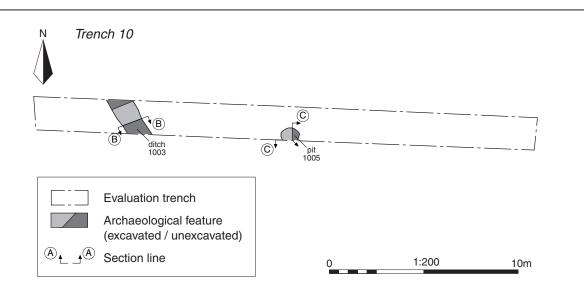
Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.

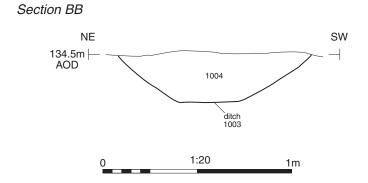
Land at Richfield Road, Bushey, Hertfordshire

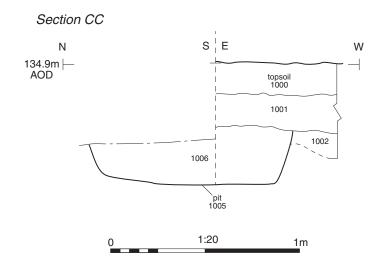
Trench 4: plan, section and photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

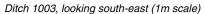
PROJECT NO. MK0189
DATE 03/02/2020
SCALE@A3 1:200, 1:20













Pit 1005, looking south-east (0.5m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.

Land at Richfield Road, Bushey, Hertfordshire

Trench 10: plan, sections and photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

 PROJECT NO.
 MK0189

 DATE
 03/02/2020

 SCALE@A3
 1:200, 1:20

5



Quarry pit 703, looking north-west (1m scale)



Gully 803, looking south-west (0.5m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 564660 Suffolk 01449 900120 w www.cotswoldarchaeology.co.uk

e enquiries@cotswoldarchaeology.co.uk

Land at Richfield Road, Bushey, Hertfordshire

FIGURE TITLE

Trenches 7 and 8: photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

 PROJECT NO.
 MK0189

 DATE
 03/02/2020

 SCALE@A4
 NA

FIGURE NO.

6



Trench 1, looking north-east (1m scales)



Trench 2, looking north-west (1m scales)



Trench 3, looking north-east (1m scales)



Andover 01264 347630
Cirencester 01285 771022
Exeter 01392 573970
Milton Keynes 01908 564660
Suffolk 01449 900120
w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

Land at Richfield Road, Bushey, Hertfordshire

Trenches 1, 2 and 3: photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

PROJECT NO. MK0189
DATE 14/02/2020
SCALE@A3 NA



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



Trench 6, looking south-west (1m scales)



Trench 5, looking north-west (1m scales)



Trench 7, looking north-east (1m scales)



Cotswold Milton Keynes 01908 564660

Archaeology Suffolk 01449 900120

www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

Land at Richfield Road, Bushey, Hertfordshire

Trenches 4, 5, 6, and 7: photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

PROJECT NO. MK0189
DATE 14/02/2020
SCALE@A3 NA



Trench 8, looking south-west (1m scales)



Trench 10, looking east (1m scales)



Trench 9, looking north-east (1m scales)



Trench 11, looking north-east (1m scales)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Cotswold Milton Keynes 01908 564660 Archaeology Suffolk 01449 900120

Land at Richfield Road, Bushey, Hertfordshire

Trenches 8, 9, 10, 11: photographs

DRAWN BY RW
CHECKED BY DJB
APPROVED BY RB

 PROJECT NO.
 MK0189

 DATE
 14/02/2020

 SCALE@A3
 NA



Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

t: 01392 573970

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ

t: 01449 900120

e: enquiries@cotswoldarchaeology.co.uk

