Archaeological Investigation at No.1 Ditton Walk Cambridge

Archaeological Evaluation Report

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February 2014

Client: CgMs on behalf of Bidwells

OA East Report No: 1570
OASIS No:
NGR: TL 473 595

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Archaeological Investigation at No. 1 Ditton Walk, Cambridge

Archaeological Evaluation

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Report Date: February 2014

Report Number: 1570

Site Name: No. 1 Ditton Walk, Cambridge

HER Event No: ECB 4095

Date of Works: January 2014

Client Name: CgMs on behalf of Bidwells

Client Ref: 16212

Planning Ref: 10/0861/OUT

Grid Ref: TL 473 595

Site Code: CAMDTW13

Finance Code: CAMDTW13

Receiving Body: CCC Stores, Landbeach

Accession No:

Prepared by: Stuart Ladd
Position: Supervisor
Date: February 2014

Checked by: Stephen Macaulay
Position: Senior Project Manager
Date: February 2014
Signed: .....

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Summary

Three trenches were excavated to establish the survival of any archaeological deposits below modern foundations and car park/yard at 1 Ditton Walk, Cambridge, TL 473 595. No archaeological features were recorded due, almost certainly to a significant degree of 19th-century and modern truncation, and as a result of made ground due to terracing off Coldham's Brook and construction activity.

A fourth smaller test pit was initially broken through concrete but halted at a depth of 0.4m on a second concrete slab.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 An archaeological evaluation was conducted at 1 Ditton Walk, Cambridge.

1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Kasia Ganiec of Cambridgeshire County Council (CCC Planning Application 10/0861/OUT), supplemented by a Specification prepared by OA East (Macaulay 2013).

1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CCC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.

1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

1.2.1 The site lies on Gault Clays with West Melbury Marly Chalk Formation deposits known from the immediate vicinity (British Geological Survey; Muldowney 2007, 1). Most of the natural deposits encountered were of chalk marl, but gault clay was exposed at a greater depth below modern terracing.

1.3 Archaeological and historical background

1.3.1 A desk-based assessment of the archaeological potential of the site and its environs has been completed (Flitcroft, 2009) so detailed description of the archaeological background of the site will not be provided here.

1.3.2 In summary, evidence of Roman and Saxon occupation was found in trial excavations immediately southwest of the current site (Muldowney 2007) and there was also the possibility that the tail-race of the paper mill to the south of the site might still survive here but redevelopment and terracing in the 20th century were considered likely to have destroyed previously surviving archaeological remains (Flitcroft 2009, 17).

1.4 Acknowledgements

1.4.1 The work was commissioned by Myk Flitcroft of CgMs, on behalf of Bidwells. Machine excavation was undertaken by Newmarket Plant Hire under the supervision of Stuart Ladd, who also surveyed the site. The project was managed by Stephen Macaulay and monitored by Kasia Gdaneic of Cambridgeshire County Council.

2 Aims and Methodology

2.1 Aims

2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

2.1.2 As the site was terraced and redeveloped in the 20th century it was hoped to establish whether any of the 'historic' ground surface had survived anywhere on site.

2.2 Methodology

2.2.1 Machine excavation was carried out under constant archaeological supervision with a wheeled JCB-type excavator using a toothless ditching bucket and concrete breaker.

2.2.2 Areas for trenching were CAT scanned prior to excavation. A number of potential electrical services were detected, limiting the area available for excavation.

2.2.3 The site survey was carried out using a Leica GPS 1200 system with SmartNet technology and processed using QGIS.

2.2.4 Spoil, exposed surfaces and features were to be scanned with a metal detector. All deposits were obviously modern so no metal finds were collected.

2.2.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

2.2.6 No environmental samples were taken due to the all the deposits encountered being modern.

2.2.7 Weather was cold, but not freezing, with occasional light rain. Previous heavy rain and blocked drains had caused a large pool to form on the concrete car park surface but the trenches avoided this.

3 RESULTS

3.1 Introduction

3.1.1 All trenches encountered 20th century truncation and build up at varying depths. Results are discussed in trench order with the earliest deposits first. See Figure 3 for the trench locations.

3.2 Trench 1

3.2.1 Trench 1 was located north-west of the factory building, close to the western boundary, where a brick retaining wall and banks put the surface level some 1.5 to 2m above the level of the ground to the west, adjacent to Coldham's Brook.

3.2.2 A 3mx8m area was broken out through tarmac and concrete, excavated to a depth of 1m, then stepped in to make a sondage approximately 1.5m wide and 6m long to a depth of between 2.8 and 3m below ground level (between 4.16m and 4.06m OD).

3.2.3 At the southern end of the trench, natural blue Gault clay was exposed, evidently truncated. Further north this had been further truncated by a modern feature containing 19th century china in a fill of mixed white and grey clay or chalk marl. This was only recorded in plan.

3.2.4 Sealing this was a layer of made ground from 2.8m to 1.6m below the surface. This consisted of mid-light brownish grey silty clay with frequent chalk/marl flecks and occasional gravel. Brick, tile and fragments of cement panels dated this to the 20th century.

3.2.5 Above this was a series of tipped layers making up ground from 1.6m to 0.4m below surface (see Plate 1). In order of deposition, these consisted of redeposited chalk marl, followed by clinker, coarse sand, more clinker and hardcore.

3.2.6 Concrete extended across the northern half of the trench, the whole area in turn was covered by tarmac.

3.3 Trench 2

3.3.1 Trench 2 was located in the western half of the car park, avoiding possible services and a large puddle. It was aligned north-south and 6.6m long x 1.5m wide at the surface. A concrete wall footing blocked the machine bucket at 1.3m below ground level across the northern 5m of the trench, but the depth of this footing then dropped to 1.9m at the south of the trench allowing a sondage to test the natural deposits to 5.47m OD (see Fig. 4).

3.3.2 Natural deposits of chalk marl were recorded at a depth of 1.5m (5.95m OD) across the trench, but were also heavily truncated to depths in excess of 2m by wall foundations. These were tested by machine and found to be clean and very stiff compared with the redeposited material found at higher levels.

3.3.3 Across much of the north of the trench, the natural marl was covered by a thin soil (104; see Plates 2 and 4 and Fig. 4) extending into the eastern baulk, 0.15m thick. This contained only 19th-century material, primarily brick and tile fragments, but no indication of the nature of any associated activity. The lack of any interface layer with the natural marl below the soil shows it built up after an earlier terracing/truncation event i.e. that even here the natural chalk marl was truncated to a depth of 1.5m (5.95m OD) in the 19th century.

3.3.4 The soil was truncated by construction cuts (**103**, **105**) for wall foundations (102, 106, respectively). The walls within these cuts surrounded the north, west and south edges of the trench and consisted of white/yellow bricks with dimensions 230 x 110 x 70mm. Foundation **105** was cut deeper and appears to form a structure running east-west. On the western side of the trench this had been bricked up, on the eastern side it had been backfilled with a drain installed at a depth of 1.3m. As seen in Section 1 (Fig. 4), this opening was 0.75m wide and originally at least 1.5m in height, so was likely a corridor between cellars, later re-used as the route of a drain.

3.3.5 The foundations had been packed with redeposited marl (101) 0.6m thick containing occasional charcoal and small brick or tile fragments. This sealed the 19th-century soil (104), making ground up to 0.7m below the surface. This provided a base for a concrete slab, making up 0.7 to 0.4m below the surface. Hardcore and the modern concrete car park surface sealed the earlier slab and the walls.

3.4 Trench 3

3.4.1 Parallel with the southern boundary, Trench 3 ran southeast-northwest for 8m at 1.6m wide. The natural deposit of chalk marl was encountered at a depth of 0.8m (6.70m OD) and tested with a machine sondage at the eastern end to 1.5m (6.00m OD). It was very firm with no inclusions. This had evidently been truncated with no evidence of any soil surviving above it.

3.4.2 The natural marl was cut at this level by a brick culvert drain, running diagonally east-west across the trench. To the north of this on a close alignment was linear feature 0.2m deep (**107**) containing a soil (108) with loose bricks.

3.4.3 These modern features were sealed by a build-up of sand (0.12m thick), clinker (0.16m thick), hardcore (0.16m thick) and the surface concrete slab (0.25m thick).

3.5 Trench 4

3.5.1 A 2.3m by 3m area of the concrete between Trenches 1 and 2 was broken out but encountered the same earlier slab of concrete as Trench 2 at 0.4m below the surface (6.90m OD). This suggested a similar degree of truncation to the nearby Trench 2, so excavation was halted at this level.

3.6 Finds Summary

3.6.1 Only 19th century finds were collected so no specialist analysis was required.

3.7 Environmental Summary

3.7.1 No environmental samples were taken.

4 Discussion and Conclusions

4.1 Terracing and truncation

4.1.1 Natural deposits were encountered in Trenches 1, 2 and 3, however in all cases these were truncated at, respectively, 2.8m, 1.5m and 0.8m below the surface.

4.1.2 The original pre-terrace land surface was not identified in any trench. Trench 2 had a surviving deposit of 19th-century soil (104) approximately 0.3m thick over an area of 1.3m x 4.5m (Fig. 4) but this formed after terracing.

4.2 The Creamery

4.2.1 Trench 2 showed the severity of truncation by modern construction, probably relating to the Creamery shown on the 1927 Ordnance Survey map (Fig. 2). Foundations reach a depth in excess of 1.9m below the modern surface (5.47m OD) and the deepest (**105**) appears to form a corridor running east-west, suggesting that cellars were dug to a similar depth to the east and west of this trench.

4.2.2 Redeposited natural chalk marl (101) 0.6m thick shows the level of build-up that occurred in constructing the creamery. It is most likely the material came from terracing on site to the west as the material is very similar to the natural marl but with occasional sand, gravel or brick inclusions. The same material was used to build up the ground level at Trench 1.

4.3 Modern redevelopment

4.3.1 The demolition of the Creamery occurred some time between 1970 and 1977 (Flitcroft 2009, 13), resulting in the truncation of the deeper foundations (e.g. wall 106 survives to a height around 1.5m above its foundation, despite originally forming a corridor between cellars). This provided a level surface for the laying of the current concrete car park surface. The standing depot building was built to the north, with the footprint of the Creamery building being given over to the current car park.

4.4 Significance

4.4.1 All trenches show heavy truncation of natural deposits and an absence of surviving archaeological remains.

4.5 Recommendations

4.5.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office.

Appendix A. Trench Descriptions and Context Inventory

Trench 1		
General description	**Orientation**	N-S
Truncated natural gault clay at 2.8m below surface. Deposits of made ground up to modern surface of concrete and tarmac hard standing.	**Avg. depth (m)**	2.8m
	Width (m)	3
	Length (m)	9.5

Trench 2						
General description					**Orientation**	N-S
Truncated natural chalk marl at 1.5m below surface. 19th century soil survives over part of the trench. All truncated by modern foundations, including possible cellars from the creamery building and associated lower concrete surface. Capped with current concrete surface of car park.					**Avg. depth (m)**	1.9
					Width (m)	1.6
					Length (m)	8.5
Contexts						
context no	**type**	**Width (m)**	**Thickness (m)**	**comment**	**finds**	**date**
101	layer		0.5	Redeposited marl; made ground. Abuts 102, 106.		20th century
102	wall			Creamery foundations		20th century
103	cut			Construction cut for 102. Cuts 104		20th century
104	layer		0.3	Soil layer. Overlies truncated natural.	china & brick	19th century
105	cut	>1.2		Construction cut for cellar corridor 106. Cuts 104.		20th century
106	wall	0.23m (bricks either side of cut)		Wall of cellar/corridor		20th century

Trench 3						
General description					**Orientation**	NW-SE
Truncated natural chalk marl at 0.8m below surface. This is cut by a brick culvert and modern features aligned east-west. Made ground of sand, clinker and hardcore seals these. Capped with concrete of car park					**Avg. depth (m)**	0.8
					Width (m)	1.6
					Length (m)	8
context no	**type**	**Width (m)**	**Thickness (m)**	**comment**	**finds**	**date**
107	cut	>1m		Modern, cuts truncated natural.		20th century
108	Fill		>0.2	Creamery foundations	Modern brick	20th century

Trench 4		
General description	**Orientation**	E-W
Earlier creamery concrete surface encountered at 0.4m below modern concrete surface of car park.	**Avg. depth (m)**	0.4
	Width (m)	2
	Length (m)	

APPENDIX B. BIBLIOGRAPHY

British Geological Survey	2013	*Geology of Britain Viewer*, http://mapapps.bgs.ac.uk/geologyofbritain/home.html. Accessed 10th January 2014.
Flitcroft, M.	2009	*Archaeological Desk-based Assessment, 1 Ditton Walk Cambridge*, CgMs Report MF/10822
Macaulay, S.	2013	*Specification for Archaeological Evaluation 1 Ditton Walk, Cambridge*
Muldowney, L.	2007	*Roman and Saxon Remains at The Old Paper Mill, Ditton Walk, Cambridge, Cambridgeshire*, CAM ARC Report 917

Appendix C. OASIS Report Form

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-168682		
Project Name	Archaeological Investigation at No. 1 Ditton Walk Cambridge		
Project Dates (fieldwork) Start	08-01-2014	Finish	09-01-2014
Previous Work (by OA East)	No	Future Work	Unknown

Project Reference Codes

Site Code	CAMDTW13	Planning App. No.	10/0861/OUT
HER No.	ECB 4095	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt	Planning agreement (Section 106 or 52)
Development Type	Housing Estate

Please select all techniques used:

☐ Aerial Photography - interpretation	☐ Grab-Sampling	☐ Remote Operated Vehicle Survey
☐ Aerial Photography - new	☐ Gravity-Core	☒ Sample Trenches
☐ Annotated Sketch	☐ Laser Scanning	☐ Survey/Recording Of Fabric/Structure
☐ Augering	☒ Measured Survey	☐ Targeted Trenches
☐ Dendrochronological Survey	☐ Metal Detectors	☐ Test Pits
☒ Documentary Search	☐ Phosphate Survey	☐ Topographic Survey
☐ Environmental Sampling	☐ Photogrammetric Survey	☐ Vibro-core
☐ Fieldwalking	☐ Photographic Survey	☐ Visual Inspection (Initial Site Visit)
☐ Geophysical Survey	☐ Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the NMR Monument Type Thesaurus and significant finds using the MDA Object type Thesaurus together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
	Select period...		Select period...
	Select period...		Select period...
	Select period...		Select period...

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	Camgridge City	1 Ditton Walk Cambridge CB5 8QD	
Parish	Camgridge City		
HER	Cambridgeshire		
Study Area	56sq.m	National Grid Reference	TL 473 595

Project Originators

Organisation	OA EAST
Project Brief Originator	Kasia Gdaniec
Project Design Originator	Stephen Macaulay
Project Manager	Stephen Macaulay
Supervisor	Stuart Ladd

Project Archives

Physical Archive	Digital Archive	Paper Archive
None	OA East	CCC Stores, Landbeach
None	CAMDTW13	CAMDTW13

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	☐	☐	☐
Ceramics	☐	☐	☐
Environmental	☐	☐	☐
Glass	☐	☐	☐
Human Bones	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☐	☐	☐
Stratigraphic		☐	☒
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☐	☐	☐
None	☐	☐	☐
Other	☐	☐	☐

Digital Media	Paper Media
☐ Database	☐ Aerial Photos
☒ GIS	☐ Context Sheet
☐ Geophysics	☐ Correspondence
☒ Images	☐ Diary
☒ Illustrations	☐ Drawing
☐ Moving Image	☐ Manuscript
☐ Spreadsheets	☐ Map
☒ Survey	☐ Matrices
☒ Text	☐ Microfilm
☐ Virtual Reality	☐ Misc.
	☐ Research/Notes
	☐ Photos
	☐ Plans
	☐ Report
	☐ Sections
	☐ Survey

Notes:

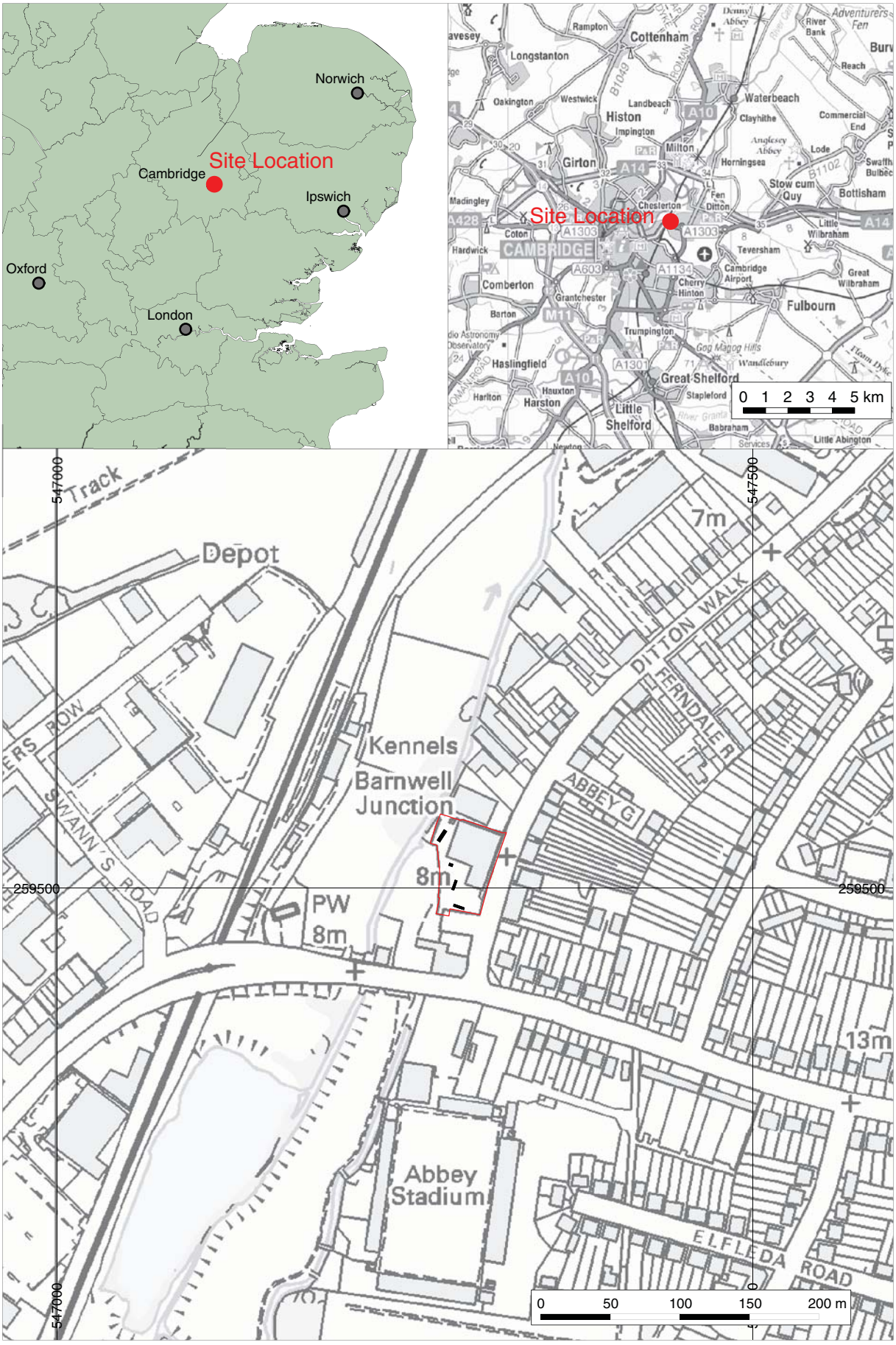

Figure 1: Site location showing archaeological trenches (black) in development area (red)

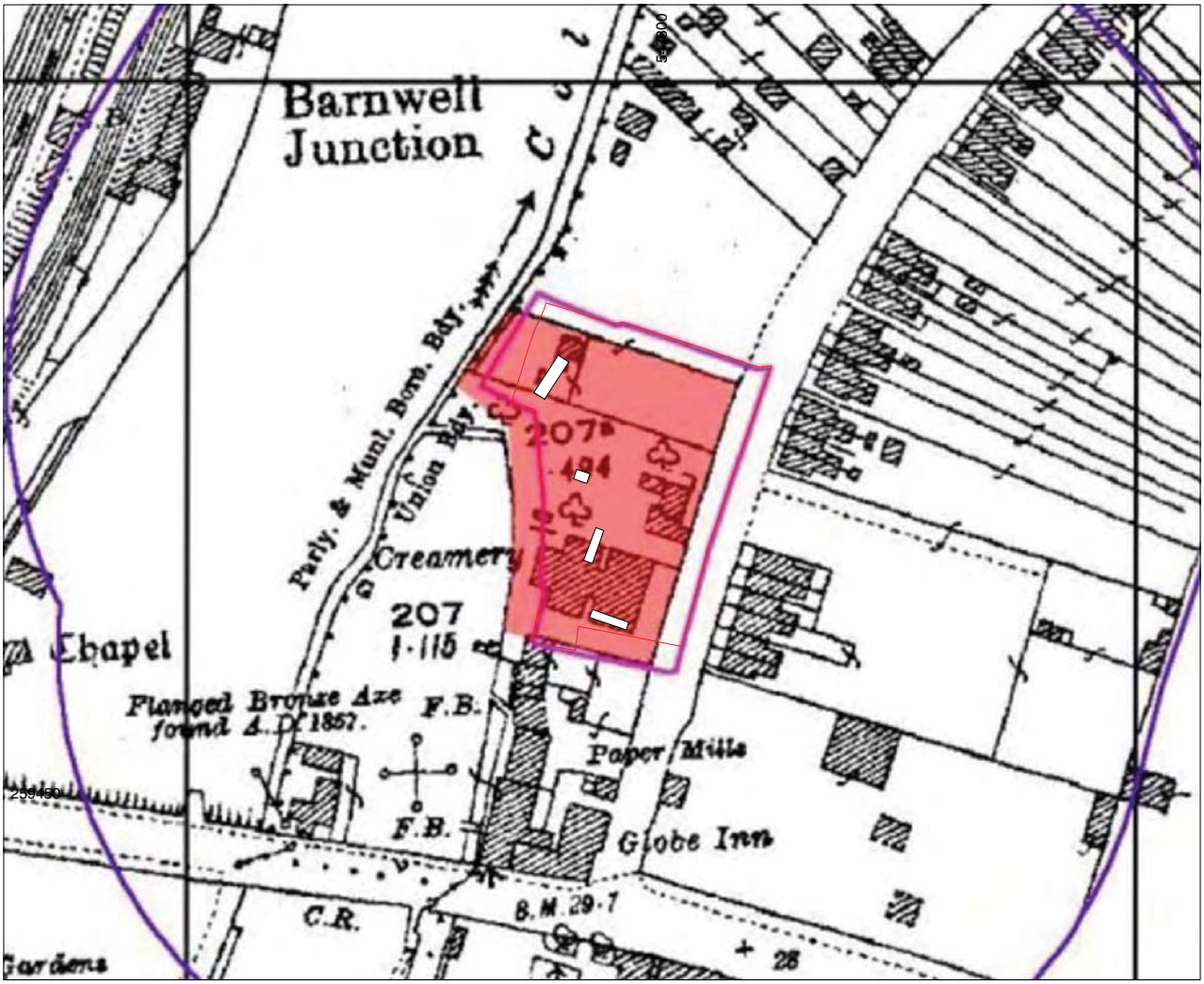

Figure 2: Extract of 1927 Ordnance Survey Map, showing the Creamery building, evaluation trenches and proposed development area (after Flitcroft 2009)

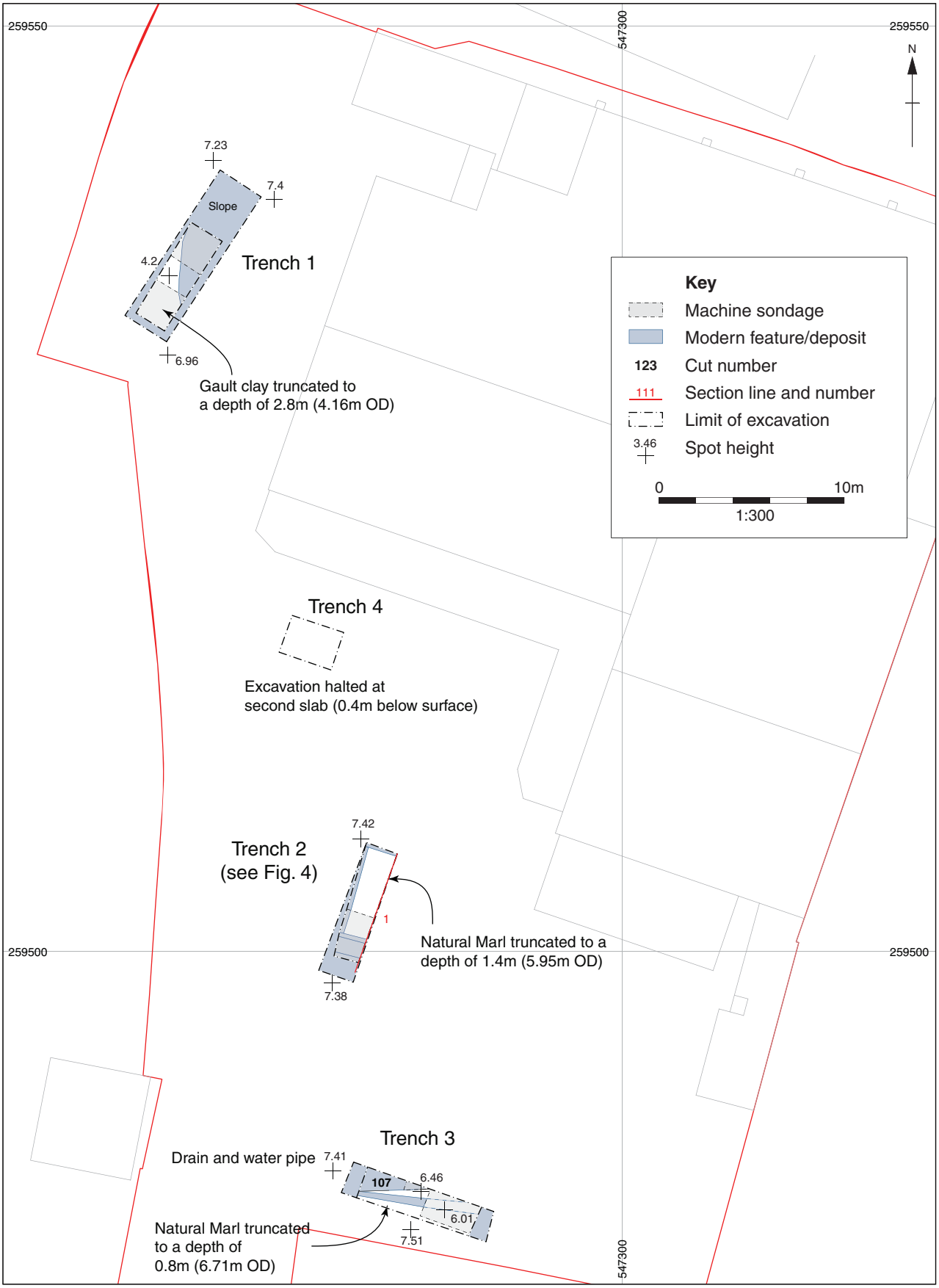

Figure 3: Trench layout

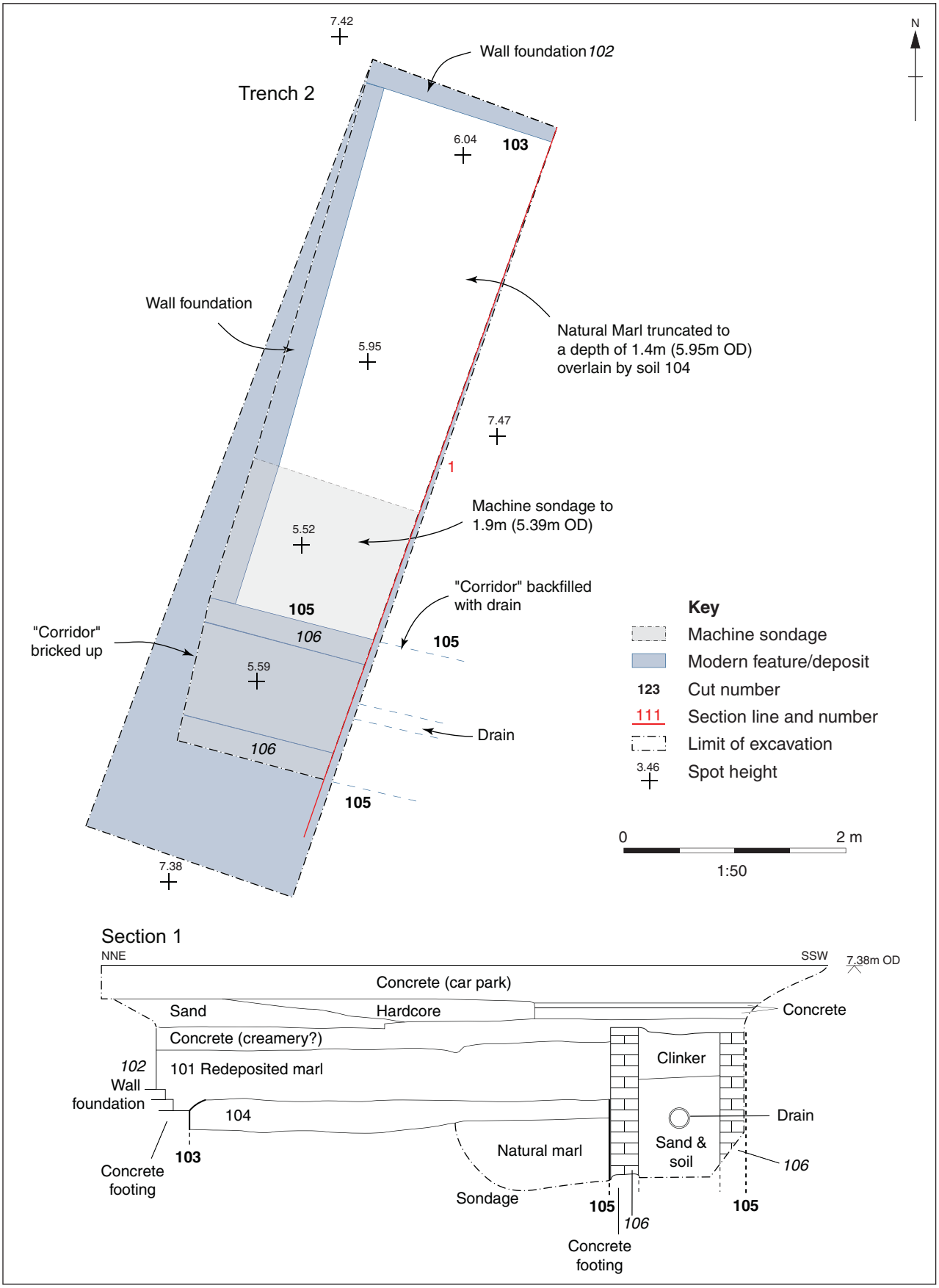

Figure 4: Trench 2

Plate 1: Section of Trench 1, looking west (1m scale)

Plate 2: Section of Trench 2, showing 19th-century and later build-up, looking east (1m scale)

Plate 3: Trench 1, looking south (1m scale)

Plate 4: Trench 2, showing soil layer 104 prior to excavation, looking north (1m scale)

Plate 5: Trench 3, looking west (1m scale)

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