# FORMER HOWE DELL SCHOOL PLAYING FIELD HATFIELD HERTFORDSHIRE

ASSESSMENT OF POTENTIAL AND UPDATED PROJECT DESIGN

Albion archaeology





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# ASSESSMENT OF POTENTIAL AND UPDATED PROJECT DESIGN

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Compiled by	Checked by	Approved by
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#### Preface

Every effort has been made in the preparation of this document to provide as complete an assessment as possible, within the terms of the brief and project design. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

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This assessment has been prepared by Wesley Keir (Project Officer) and Wiebke Starke (Archaeological Supervisor) and with contributions by Jackie Wells (artefacts) and Joan Lightning (CAD).

The excavation was supervised by Wiebke Starke with investigation and recording carried out by the following staff: Marcin Koziminski and Richard Gregson (Archaeological Supervisors), and Jo Ahmet and Gary Manning (Archaeological Technicians). Processing of the finds and ecofact samples were undertaken by Jackie Wells and Sławomir Utrata respectively. All Albion projects are under the overall management of Drew Shotliff.

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#### Key Terms

Throughout this document the following terms or abbreviations are used:

CPA County Planning Archaeologist

HER Hertfordshire Historic Environment Record

If A Institute for Archaeologists

MoLAS Museum of London Archaeology Service

WSI Written Scheme of Investigation



#### Non-Technical Summary

Hertfordshire County Council has granted planning permission (application 6/2628-11) for the erection of a special school and associated infrastructure at the former Howe Dell School playing field, Woods Avenue, Hatfield.

As the development site lies within an area of archaeological sensitivity, the Hertfordshire County Planning Archaeologist (CPA) recommended that a condition was attached to planning consent requiring the implementation of a programme of archaeological work. The first stage of the archaeological work (trial trench evaluation) was completed in April 2012. On the basis of the results and in accordance with the National Planning Policy Framework, the CPA advised that a strip, map, and record investigation was required within the footprint of the development area.

The investigation revealed thirteen parallel linear trenches which, due to their shape, size and regular spacing, are likely to represent cultivation trenches. In the absence of any environmental remains, the identity of the crop can only be guessed at, though the large spacing between the trenches suggests it is likely to have been a tall-growing crop. Vines for growing grapes are an obvious candidate, as has been suggested at many similar sites such as Wollaston (Northants.), Ampthill (Beds.) and Caldecote (Cambs.). A limited pottery assemblage suggests the cultivation area is likely to date to the later Iron Age – early Roman period. The eastern extent of the planting area was defined by the eastern boundary ditch of a seemingly earlier rectangular enclosure; its relationship with the later cultivation trenches suggests the possibility that this area was already under cultivation during the earlier Iron Age or even the late Bronze Age. A rubbish pit containing Roman pottery, brick and roof tile was located within the cultivation area.

Assessment of the data from the investigations has indicated that it has no potential for further analysis, beyond that presented in this report, principally due to the paucity and nature of the artefactual and ecofactual assemblages. The area of the cultivation trenches is also quite small in comparison to those recorded elsewhere and, at present, cannot be directly related to any known associated settlement site.

However, the results of the work do add to a growing body of evidence regarding the nature and distribution of specialist crop cultivation during the late Iron Age – Roman period. Accordingly, the results of the investigations will be uploaded onto the ADS Online Access to the Index of Archaeological Investigations (OASIS ref: albionar1-142456). In addition, a summary will be published in Britannia, the journal of the Roman Society.



#### 1. INTRODUCTION

#### 1.1 Project Background

Hertfordshire County Council has granted planning permission (application 6/2628-11) for the erection of a special school and associated infrastructure at the former Howe Dell School playing field, Woods Avenue, Hatfield.

As the development site lies within an area of archaeological sensitivity, the Hertfordshire County Planning Archaeologist (CPA) recommended that a condition was attached to planning consent requiring the implementation of a programme of archaeological work. This advice was in accordance with *Planning Policy Statement 5: Planning for the Historic Environment* (PPS5) (DCLG 2010) and its recent replacement, the *National Planning Policy Framework* (DCLG 2012).

The first stage of the archaeological work comprising trial trench evaluation was completed in April 2012. On the basis of the results of the trial trench evaluation and in accordance with the *National Planning Policy Framework*, the CPA advised that a strip, map, and record investigation was required within the footprint of the development area. This was undertaken between the 6th and 24th August 2012.

# 1.2 Status and Purpose of this Document

This report presents the results of all stages of the archaeological investigations. It assesses the analytical potential of the recovered data-sets and sets out the further stages required to complete the dissemination and archiving of the results of the fieldwork. The latter will fulfil the requirements stipulated in the Written Scheme of Investigation (Albion Archaeology 2012b) and allow the discharge of the archaeological planning condition.

#### 1.3 Site Location and Description

The site lies to the south of Hatfield town centre within an area of housing and schools developed in the latter half of the 20th century. It consists of a grassed playing field, accessed from Old Rectory Drive, centred on (NGR) TL 22611 08254 (Figure 1). The archaeological works were confined to the western c. 0.65ha of the site, which will principally comprise buildings, access road, car parking and hard play areas.

The playing field is bordered by Woods Avenue to the south-west; a hedge and footpath to the north-east; flats and a playing field to the north-west; and housing and the grounds of the Old Rectory to the south-east.

Evaluation of the site (Albion Archaeology 2012a) revealed that the geology consists of stiff gravely clay overlain by up to 0.7m of topsoil and subsoil. The site lies at c. 85m OD, rising gradually towards the south-west.

#### 1.4 Archaeological Background

The site lies within an area of late 20th-century development outside the medieval settlement of Hatfield, but in close proximity to the grounds of a medieval rectory that, up until recently, had been used by Howe Dell School.



A heritage asset statement (Albion Archaeology 2011) submitted with the planning application noted the presence of several heritage assets within a 500m-radius of the site, most of which date to the post-medieval period. The closest known heritage asset is the Old Rectory (Listed Building No. 158454), the grounds of which lay adjacent to the site. The HER was re-visited (recorded under previous Enquiry no. 104/11) immediately prior to the archaeological fieldwork.

The trial trench evaluation (Albion Archaeology 2012a) demonstrated that significant archaeological remains were present within parts of the site. Trenches 3, 4, 5, 6 and 7 contained six ditches and a posthole. The artefactual material presented moderate evidence to support an early Iron Age date. The ditches appeared to form part of a NE-SW/NW-SE aligned enclosure or field system, of which an associated entrance defined by two opposing ditches was apparent in Trench 3. The small number of artefacts recovered and the abraded condition of the pottery suggested that these features lay some way from any settlement focus.

The results of the trial trenching suggested the site might have parallels with late Bronze Age settlement activity recorded during excavations at Hatfield Aerodrome *c*. 1.6km to the west. There, five parallel ditches along with numerous postholes, pits and gullies were identified, including a large posthole structure some 60m in length (MoLAS 2002). Finds included large assemblages of domestic pottery and several ceramic loomweights.

At Howe Dell, a number of post-medieval features were also revealed during the trial trenching in Trenches 1, 5 and 6; they are likely to be associated with the agricultural use of the land. Historical records suggest that the site was cultivated from at least the medieval period until the playing field was created in the 20th century (Albion Archaeology 2011).



# 2. SUMMARY OF RESULTS

#### 2.1 Introduction

The contextual data was assessed in order to establish whether it could provide a coherent spatial and chronological framework. A total of 128 contexts were assigned to groups, *e.g.* a rectilinear enclosure, cultivation trenches, discrete features. The decision as to which Assessment Groups contexts were assigned to, was made on the basis of the following criteria:

- Do the contexts form a coherent spatial unit e.g. enclosure, pit group etc?
- Do the contexts represent key positions within the stratigraphic sequence?
- Do the contexts contain suitable dating material?

Assessment Groups were split into smaller Sub-groups (SG) where necessary to reflect distinct elements of an Assessment Group, *e.g.* each individual cultivation trench. The Assessment Groups were then assigned to a number of episodes (Phases) of human activity corresponding to broad, chronological divisions (Periods), *e.g.* Iron Age or modern, based on their artefactual assemblage.

The following text is structured by chronological period and discussed by Phase. Relevant elements within these Phases are generally referred to by their Assessment Groups (G) or Sub-groups (SG). Context numbers [\*\*\*] are referred to on occasion where it is useful to differentiate between different excavated segments. All the archaeological features revealed are illustrated in Figures 2–4. A full list of the contextual data is tabulated in Appendix 1.

# 2.2 Phase 1: Late Bronze Age – Iron Age (c. 1000-100BC)

The earliest phase of activity on site is represented by a rectilinear enclosure G1. Its two visible sides were defined by a ditch measuring at least 54m long on its north-west side and at least 50m long on its north-east side (Figure 3). A c. 4m wide break in the ditch defines an entrance way on the north-west side of the enclosure.

The profile of the enclosure ditch was largely V-shaped, though it varied somewhat along its length; it was up to 1.3m wide and 0.55m deep (see Figures 5 and 6). A stepped profile in one of the excavated segments [1074/6] (see Figure 5) suggests the boundary had been re-cut in this location.

The main fill of the ditch comprised mid grey-brown clay silt containing moderate amounts of small-medium sized stones derived from natural silting. A thinner, primary fill was visible within some of the excavated segments consisting of a lighter mid orange brown clayey silt, likely to be derived from weathering of the sides of the ditch.

A small number of pottery sherds spanning the late Bronze Age – early Iron Age period were recovered from the enclosure ditch. However, they were highly abraded and may not provide reliable dating of the enclosure itself — they may derive from an earlier phase of activity in the vicinity. The dating of this enclosure therefore must remain slightly ambiguous.



#### 2.3 Phase 2: Later Iron Age - Early Roman (c. 100BC to AD150)

This phase is characterised by thirteen rows of evenly spaced, parallel linear features G2, aligned NE-SW (Figures 4 and 7). Their layout and generally shallow, U-shaped profiles suggest they are likely to be associated with the cultivation of crops, either as drainage ditches associated with raised planting beds or for the actual crops themselves.

The trenches covered an area of c.  $2500\text{m}^2$ ; they were superimposed upon, and extended beyond, the northern boundary of enclosure G1. However, their eastern limit lay 12–20m inside the eastern boundary of enclosure G1, perhaps suggesting this side of the enclosure still survived in the landscape in some form or other.

The trenches were 0.4–0.9m wide and generally c.~0.2m deep. Their profiles varied across the site; some had steep, near vertical sides and relatively flat bases, whilst others were more concave in profile (see Figures 8–10). The trenches were fairly evenly spaced, generally being 4–5m apart.

The fills of all the trenches generally comprised a single mixed deposit of mid brown-grey to mid red-brown clay silt; all showed moderate to strong signs of bioturbation with some exhibiting a slightly humic nature. The east end of trench SG10 had clearly been re-cut (see Figure 9).

Two features were likely to be associated with the cultivation trenches. A shallow pit SG16 (Figure 11) was located at the east end of trench SG11 and a rather irregular, shallow spread of mid brown-grey clay silt SG20 was present at the end of, and partially overlying, trench SG5.

Pottery sherds dating from the late Bronze Age/early Iron Age through to the early Roman period were recovered from the cultivation trenches. As with the pottery from enclosure G1, its much abraded nature suggests that its provenance is questionable.

Also assigned to this phase is an oval-shaped pit G3, measuring  $2m \times 1.4m$  and c. 0.5m deep, located between trenches SG4 and SG5 (Figure 11). It produced several sherds of early Roman pottery as well as four pieces of Roman roof tile, a brick fragment and fragments of a rotary quern.

#### 2.4 Phase 3: Modern

A number of modern features G4 were observed scattered across the site. They included a number of postholes characterised by darker fills, frequently containing brick fragments, concrete and remnants of timber posts. Two lines of postholes possibly associated with a fence line were located near the southern boundary of the site truncating one of the cultivation trenches.

A series of deposits likely to have been for levelling the ground for the Howe Dell School playing field were visible along the south-eastern limits of the site. These deposits overlay the enclosure ditch G1 and contained frequent fragments of modern building material, glass and coal.



Another area of modern disturbance was located along the western edge of the site in the form of a semi-circular hollow, filled with soil interspersed with modern building material, iron fragments and coal.

#### 2.5 Phase 4: Undated

A somewhat isolated posthole G5 was located between the cultivation area and enclosure ditch G1. It produced no finds, although its fill differed to that of the modern postholes in G4.



#### 3. ARTEFACTS

#### 3.1 Pottery

#### 3.1.1 Methodology

For each context, pottery was recorded by fabric type and quantified by minimum sherd count and weight. Where possible, pottery was dated by individual fabric and / or form type, and was used to assist in determining site chronology.

### 3.1.2 Quantification

Forty-five pottery sherds, representing 25 vessels (167g) were recovered from features assigned to Phases 1 and 2 (Table 1).

Phase	Sherd No.	% Sherd	Wt (g)	% Wt
1	22	48.9	59	35.3
2	23	51.1	108	64.7
Total	45	100	167	100

**Table 1**: Pottery quantification by Phase

#### 3.1.3 Pottery Type Series

Fabrics are summarised below (Table 2), using type codes and common names in accordance with the Bedfordshire Ceramic Type Series, currently maintained by Albion Archaeology, and from whom detailed fabric descriptions are available.

Fabric Type	Common name	Sherd No.	Wt (g)
Pre-Roman			
F01A	Coarse flint	1	5
F01B	Fine flint	3	8
F01C	Flint and quartz	15	36
F03	Grog and sand	1	8
F28	Fine sand	1	1
F29	Coarse sand	10	28
F39	Grog and mica	3	16
		34	102
Roman			_
R06B	Coarse grey ware	1	5
R06C	Fine grey ware	3	51
R06D	Micaceous grey ware	4	4
R13	Shell	2	4
		10	64
UNID	Unidentified / undatable	1	1
		1	1

**Table 2:** Pottery Type Series

#### 3.1.4 Provenance, phasing and date range

Pottery was collected from 15 features within the site. All sherds are highly abraded and survive in poor condition, as evidenced by a low average sherd weight of only 4g.



#### 3.1.5 Phase 1

Eleven vessels, represented by 22 abraded flint-tempered and quartz-rich body sherds (59g) derived from enclosure G1. Dating is problematic, due to an absence of diagnostic vessel forms, although the sherds are likely to span the late Bronze Age – early Iron Age period.

#### 3.1.6 Phase 2

Cultivation trenches G2 yielded twelve abraded pre-Roman sherds (43g). Nine are flint-tempered and quartz-rich body sherds, similar to those of the preceding phase. A partial base angle is the sole feature sherd. Three sherds are grog-tempered, deriving from a wheel thrown, late Iron Age cordoned vessel. One additional sherd is too fragmentary for identification, although may be of early Iron Age origin.

Ten early Roman pottery sherds recovered from cultivation trenches G2 (9g) and pit G3 (55g) comprise locally manufactured reduced sand-tempered coarse wares, and two shelly sherds. All are highly abraded. Feature sherds are a jar or beaker base, and an everted rim.

# 3.2 Ceramic Building Material

#### 3.2.1 Methodology

For each context, ceramic building material (brick and tile) was recorded by fabric type and form, and quantified by minimum fragment count and weight. Where possible, the ceramic building material was also dated.

# 3.2.2 Quantification, variety, provenance and date

#### Phase 1

Rectilinear enclosure G1

Enclosure G1 yielded two abraded pieces of post-medieval flat roof tile (131g), and two brick fragments (257g). The latter are rather amorphous; they may be of either Roman or later date.

#### Phase 2

Cultivation trenches G2

Four sand-tempered flat roof tile fragments (87g) of post-medieval or later date occurred as intrusive finds in G2.

#### Roman pit G3

Roman building material recovered from pit G3 comprises four pieces of flanged roof tile (tegula) and a brick fragment (total weight 1.6kg). Although abraded, fragments are sizeable, with an average weight of 327g. Tegulae are of standard form and are 17–28mm thick. The brick measures 30mm in thickness.

#### Phase 3

Modern postholes G4

Five abraded pieces of sand-tempered post-medieval brick (147g) were recovered from G4.



#### 3.3 Non-Ceramic Artefacts

#### 3.3.1 Methodology

Each object was assigned a preliminary identification and quantified by number and/or weight. No further analysis is required.

#### 3.3.2 Quantification, variety, provenance and date

#### Phase 1

Rectilinear enclosure G1

Two worked flints comprise a hard hammer struck tertiary flake, and a combination tool. The latter is an end scraper, with notches on the lateral edges, one to either side of the scraper end. Both have sustained post-depositional damage.

#### Phase 2

Cultivation trenches G2

Worked flints comprise a hard hammer struck primary flake, a tertiary flake, a large cortical flake / core fragment with a few narrow flake scars on its dorsal surface, and a possible late Neolithic to late Bronze Age core fragment. The latter has two squat flake removals, no platform preparation, and has suffered post depositional damage.

An undatable, broken copper alloy rod (Registered Artefact 3 – see below) was also recovered.

RA3. Copper alloy. Rod. Solid cast rounded object, broken both ends. One end flares slightly, opposing end damaged with irregular channel c.10mm diameter. L. 48.4mm; max. w.7mm; max th. 5.8mm

#### Pit G3

The feature contained an end scraper (Registered Artefact 1 – see below), and a secondary flint flake, the latter of probable late Neolithic to late Bronze Age date. Fragments of a lava rotary quern (Registered Artefact 2 – see below), broadly datable to the Roman period were also recovered.

RA1. Scraper. Opaque dark brown with grey imperfections. End scraper, cortex remaining on part of one lateral edge and proximal end. Struck through cortex. L. 42mm

RA2. Quern. Lava. Three joining pieces of flat rotary quern, worn and eroded grinding surface, upper surface flat possibly pecked, no edges survive. Th. 30.5mm; 661g. Roman

#### 3.4 Animal Bone

No animal bone was recovered during the investigations.

#### 3.5 Plant Remains, Insect Remains and Molluscs

Six bulk soil samples, each 30 litres, were taken during the excavation to test for the presence of charred plant remains. The potential for specific pollen analysis of the cultivation trench fills was also considered during the fieldwork. However, the highly minerogenic and dry nature of the soil indicated there was little potential for the survival of pollen (Dr. Gill Cruise *pers. comm.*). The mix of gravelly sand and clay soils also indicated that there was high potential for contamination and general mixing, which would have undermined the usefulness of any results (*ibid.*).



Of the bulk samples, 20 litres from cultivation trenches G2, 10 litres from enclosure ditch G1 and 10 litres from pit G3 were processed for assessment purposes. The results are summarised below.

Samples <1> and <3> Vol. 20l. Cultivation trench fills (1042; SG9) and (1059; SG7).

Small and rooty flots with small assemblage of charred grain fragments and sparse amount of charcoal. The flots, as well as the residue of sample <1>, also contained naturally formed iron concretions. Very limited analytical potential.

Sample <4> Vol. 10l. Enclosure ditch fill (1079; G1)

Cereal grain and charcoal present in low concentrations. Sample also contains natural concretions similar to those found in the cultivation trench samples. Very limited analytical potential.

Sample <8> Vol. 10l. Pit fill (1081; G3).

Larger flot than above mentioned samples but very rooty. Contains a small amount of charcoal, of which the two larger pieces are abraded, and occasional charred seeds. Very limited analytical potential.



#### 4. ANALYTICAL POTENTIAL OF THE DATA

#### 4.1 Research Objectives

Following assessment of the results of the fieldwork and the analytical potential of the recovered data, it is apparent that the original objectives of the project, as set out in the WSI (Albion Archaeology 2012b), are still to a certain extent valid and achievable.

The strip, map and record investigation revealed that the activity within the site is likely to be later than that originally indicated during the evaluation. However, the original objectives focus on characterising activities associated with field systems and enclosures are still applicable and would contribute to research themes regarding the agrarian economy and land-use of the later prehistoric and Roman periods (Bryant 2000, 16-17; Going and Plouviez 2000, 21; Medlycott 2011, 29-31, 46-47).

Following the strip, map and record investigation, specific questions about the site include:

- What is the nature of the revealed cultivation area?
- What is the date of the cultivation area and how does it relate to the earlier enclosure?
- What was grown in the cultivation area?
- How does the cultivation area relate to the wider contemporary landscape?

#### 4.2 Contextual Data

The later prehistoric to Roman features within the site have undoubtedly suffered some degree of truncation due to the later, post-medieval and modern ploughing that is known to have occurred on the site. However, the depth of the revealed archaeological deposits indicates that there is still enough scope for the contextual data to potentially contribute to the research objectives of the project.

The type and character of the features do enable some analysis of the site as a discreet entity, though more light can be shed on its nature through comparisons with other similar sites investigated elsewhere. The later prehistoric to early Roman remains revealed within the site are discussed chronologically below, with reference to comparable sites elsewhere and its relationship to the surrounding landscape.

#### 4.2.1 Late Bronze Age – Iron Age enclosure (c. 1000-100 BC)

The enclosure G1 is likely to represent part of a field system located away from any settlement focus — no contemporary structural evidence was revealed within the site. Its relationship with the later cultivation trenches (see below) may suggest that the area had already been taken into cultivation by this time.

Though the recovered pottery sherds date to the late Bronze Age – early Iron Age, their highly abraded nature means that they may not provide an accurate date for the enclosure but may rather derive from an earlier phase of activity in



the wider vicinity. The spatial relationship of the enclosure with the later cultivation trenches tends to corroborate this theory, implying that the enclosure could be closer in date to these, possibly early Roman, features than the later prehistoric pottery suggests.

Similar enclosures and boundary ditches defining areas associated with later cultivation are known from sites in Hertfordshire and Cambridgeshire (Oxford Archaeology East 2009, 9; Cambridge Archaeological Unit 2007, 38) (see below).

#### 4.2.2 Later Iron Age - early Roman cultivation trenches (c. 100 BC to AD 150)

The layout and nature of the parallel trenches within the site indicate they are undoubtedly associated with crop cultivation, though whether they represent drainage ditches associated with raised cultivation beds or trenches which held the crops themselves is more difficult to ascertain. Both theories have been suggested for trenches of a similar nature investigated at several sites within Hertfordshire and nearby counties.

Similar areas of trenches, also seemingly associated with earlier enclosures or boundaries, have been investigated near Barkway in Hertfordshire (Oxford Archaeology East 2009) and in Trumpington (Cambridge Archaeology Unit 2007) and Caldecote (Kenny 2007) in Cambridgeshire. Larger cultivation areas have been investigated at Wollaston in Northamptonshire (Brown *et al* 2001) and, more recently, at Ampthill in Bedfordshire (Northamptonshire Archaeology 2010)

The sites investigated at Wollaston and Ampthill produced strong evidence for the growing of crops within the trenches themselves. At Wollaston, the sides of the trenches featured postholes, which were interpreted as evidence for crop supports. At both sites, root bowls were evident within the bases of the trenches. No such features were apparent within the Howe Dell trenches, nor those investigated at Trumpington or Barkway.

Interpretation of the trenches at Barkway tended towards the theory that they represented drainage ditches cut either side of raised cultivation beds. Like those at Howe Dell, the trenches were spaced c. 4–5m apart and ran down-hill presumably to aid drainage. However, several features of the trenches at Howe Dell suggest this theory is unlikely. The relatively deep termini of the trenches and a general lack of evidence for the necessary re-cutting that would have been needed to maintain the ditches suggests they would not have functioned well for drainage. The fills within the trenches at Howe Dell also appeared rather mixed from bioturbation and slightly humic in places as was also noted at Trumpington; both characteristics are more indicative of a rich cultivation soil. In addition, the volume of soil excavated from the trenches would seem insufficient for the ridging of beds of this width.

If plants were indeed grown within the trenches at Howe Dell, then the nature of that crop is somewhat uncertain. The trenches at Trumpington were interpreted as being for the growing of a root crop, namely asparagus. This conclusion appears to be largely based on a lack of evidence for the supports needed for growing taller crops, such as grape vines, and the fact that asparagus was a favoured Roman vegetable. However, if we assume the 4–5m



spacing between the trenches at Howe Dell is designed both for access and to allow enough light to the crop, this would seem excessive for a root crop that does not grow particularly high.

It therefore seems on balance that the trenches at Howe Dell were designed for a tall-growing crop; the relatively large spacing between the rows and their alignment would be favourable for maximising the light available to such a crop. In the absence of any environmental remains, the identity of this crop can only be guessed at, though vines for growing grapes are an obvious candidate, as has been suggested at many similar sites such as Wollaston, Ampthill and Caldecote. Although no post- or stakeholes for vine supports were evident at Howe Dell, such structures did not necessarily need to be substantial or even permanent (White 1970). It is also quite possible that these potentially shallow features have been truncated by more recent agricultural activity on the site, particularly by ploughing during the post-medieval and modern periods.

As with the sites mentioned above, the latest sherds of pottery recovered from the Howe Dell trenches indicate the cultivation area was in use during the later Iron Age – early Roman period, though their highly abraded condition suggests any dating should be treated with caution. The inclusion of several earlier pottery types corroborates the theory that the pottery is likely to have been brought in from occupation sites in the wider vicinity, probably incorporated into manure for the crops. There are few known late prehistoric or Roman occupation sites in the vicinity; late Bronze Age/early Iron Age settlement activity was identified at Hatfield Aerodrome c. 1.6km to the west (MoLAS 2002) and large numbers of prehistoric worked flints (HER1847) have been found in a stream bank in a wood c. 400m to the south-east of the site. However, the Hatfield area is likely to have been home to several late Iron Age and Roman farmsteads, lying as it does between the established Roman settlements of St Albans and Welwyn; fragments of Roman roof tile and quern stone recovered from a, presumably rubbish, pit G3 within the cultivation area hint at the presence of such activity nearby.

#### 4.3 Artefactual and Ecofactual Data

The recovery of a small pottery assemblage adds to current knowledge of the occurrence and distribution of ceramics within the locality. However, its fragmentary condition, and the absence of diagnostic vessel forms, or other defining elements reduce the material's value as a chronological indicator. The fragmented and abraded nature of the pottery suggests it may not be representative of the date of the features from which it derived, and may merely be indicative of an earlier phase of activity in the wider vicinity. Flint and quartz-rich wares are known to occur broadly from the late Bronze Age into the Iron Age period. The only pre-Roman pottery which can be dated with any certainty is the late Iron Age grog-tempered cordoned vessel (*c*. 100 BC–AD 50).

The small Roman assemblage comprises generic early Roman coarse wares, of probable local manufacture, which, like the earlier material is highly abraded and survives in poor condition.



The non-ceramic assemblage, comprising mainly residual worked flints, and an undatable metal object, is similarly unhelpful. The only object which may be contemporary with the feature in which it occurred is the Roman rotary quern.

Consequently, the artefactual assemblage has no potential for further analysis.

Similarly, the paucity of seed, grain and charcoal remains within the environmental samples, coupled with the fact that the few present within the cultivation trenches are likely to have been brought in with soil from elsewhere, indicates that further analysis is unlikely to yield useful information about the site.



#### 5. UPDATED PROJECT DESIGN

#### 5.1 Introduction

Assessment of the data from the investigations has indicated that it has no potential for further analysis, beyond that presented in this report, principally due to the paucity and nature of the artefactual and ecofactual assemblages. The area of the cultivation trenches is also quite small in comparison to those recorded elsewhere and, at present, cannot be directly related to any known associated settlement site.

However, the results of the work do add to a growing body of evidence regarding the nature and distribution of specialist crop cultivation during the late Iron Age – Roman period. Accordingly, the results of the investigations will be disseminated further as set out below.

#### 5.2 Publication

This report will be uploaded onto the ADS Online Access to the Index of Archaeological Investigations (OASIS ref: albionar1-142456). In addition, a summary will be published in *Britannia*, the journal of the Roman Society. The summary will be cross-referenced to the online OASIS entry, which will allow interested readers to access the more detailed information in this document.

## 5.3 Archiving

Following the approval of this document by the Hertfordshire County Planning Archaeologist the archive of materials (subject to the landowner's permission) and all accompanying records will be deposited with Mill Green Museum (accession no. WEWHM:2012.37).



#### 6. BIBLIOGRAPHY

- Albion Archaeology, 2011, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Heritage Asset Statement. Document 2011/87
- Albion Archaeology, 2012a, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Archaeological Trial Trench Evaluation. Document 2012/62
- Albion Archaeology, 2012b, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Written Scheme of Investigation for Archaeological Strip, Map and Record Investigation. Document 2012/91
- Bryant, S, 2000, 'The Iron Age' in Brown, N and Glazebrook, J, Research and Archaeology: Framework for the Eastern Counties, 2. Research Agenda and Strategy. East Anglian Archaeology Occasional Paper No.8, 14-18.
- Brown, N and Glazebrook, J, 2000, *Research and Archaeology: Framework for the Eastern Counties*, 2. *Research Agenda and Strategy*. East Anglian Archaeology Occasional Paper No.8.
- Brown, A.G, Meadows, I, Turner, S.D. and Mattingly, D.J, 2001, 'Roman vineyards in Britain: stratigraphic and palynological data from Wollaston in the Nene Valley, England', *Antiquity* 75, Number: 290, 745–757.
- Cambridge Archaeological Unit, 2007, The Addenbrooke's Access road, Clay Farm, Trumpington, Cambridge. The 2007 investigation: site 3. Report no. 803
- DCLG, 2010, PPS5: Planning for the Historic Environment
- DCLG, 2012, National Planning Policy Framework
- English Heritage, 2009, Management of Research Projects in the Historic Environment (MoRPHE).
- Going, C. and Plouviez, J., 2000, 'Roman' in Brown, N and Glazebrook, J, Research and Archaeology: Framework for the Eastern Counties, 2. Research Agenda and Strategy. East Anglian Archaeology Occasional Paper No.8, 19-22
- Kenny, S. 2007, 'A banjo enclosure and Roman farmstead: excavations at Caldecote Highfields, Cambridgeshire' In: Mills, J. and Palmer, R. (eds), *Populating Clay Landscapes*, 120-131.
- MoLAS, 2002, Residential Development, Hatfield Aerodrome, Hatfield, Hertfordshire: An interim report on the archaeological investigation. Site Code: HE-RES 00



- Medlycott, M. (Ed), 2011, Research and Archaeology Revisited: A Revised Framework for the East of England. East Anglian Archaeology Occasional Paper 24.
- Northamptonshire Archaeology, 2010, A possible Roman vineyard on land off Tavistock Avenue, Ampthill, Bedfordshire. Report 10/132.
- Oxford Archaeology East, 2009, Late Iron-Age/Early Roman "Vineyard" at the Cokenach Estate, Barkway, Hertfordshire. Report no. 1055.

White, K, 1970, Roman Farming. Thames & Hudson



# 7. APPENDIX 1: CONTEXTUAL DATA

Phase	Group	Subgroup no.	Sub-group description	Context	
1.00	1.00		Cuts of enclosure boundary ditch	<b>no.</b> 306	<b>no.</b> 306
1.00	1.00	1.00	Cuts of eliciosure boulidary ditch	:	
}				1072 1078	
				1078	
				1010	
}				i	
				1074 1045	
				:	
}				1083	
				1064 1046	
				504	
}				:	
				1082	
				404	
				310	
1.00	1.00	2.00	C. 1 1 C11 C 1	1076	
1.00	1.00	2.00	Sole and upper fills of enclosure boundary ditch	1075	
				1077	
				1047	
				1079	
				307	
				1073	
				1084	
				311	:
				1018	:
				405 505	
2.00	2.00	2.00	Mart nouth assets also sultimation to and	1065	
2.00	2.00	3.00	Most north-westerly cultivation trench	1005	:
				1088 1004	
				1004	
				1007	
i i				1006	
				1007	
				1007	:
2.00	2.00	4 00	Cultivation trench truncating entrance of enclosure	309	
2.00	2.00	7.00	Caravation denon duncating endance of enclosure	308	
				1110	
				1109	
				1034	
				1035	
				1036	
				313	
				1033	
				315	
				314	
				312	
2.00	2.00	5.00	Cultivation trench	1010	
<u> </u>				1089	:



Phase	Group	Subgroup no.	Sub-group description	Context no.	Feature no.
		110.		1014	1
				1013	
				1015	
				1011	
				1090	
				1012	
2.00	2.00	6.00	Cultivation trench	1092	
				1091	1091
2.00	2.00	7.00	Cultivation trench	1058	:
				1093	
				1059	:
				1094	<u> </u>
2.00	2.00	8.00	Cultivation trench	1049	
				1048	
2.00	2.00	9.00	Cultivation trench	1041	1041
				1031	:
				1032	
				1044	
ļ				1096	
				1095	:
ļ				1043	:
2.00	2.00	10.00		1042	<u>  </u>
2.00	2.00	10.00	Cultivation trench	1066	:
				1067	:
Ì				1069	:
				1097	
				1098	
2.00	2.00	11.00	Cultivation trench	1068 1053	!
2.00	2.00	11.00	Cultivation trench	1053	:
 				1099	:
				1100	:
				1055	
				1050	: :
				1052	:
				1051	1050
2.00	2.00	12.00	Cultivation trench	1062	
				1102	: :
				1101	i :
<u> </u>				1063	: :
j i				1061	: :
				1060	iii
2.00	2.00	13.00	Cultivation trench	1103	
				1104	i :
2.00	2.00	14.00	Cultivation trench	609	608
				1021	:
ļ ļ				1022	:
				1023	:
ļ ,				608	:
				1105	:
				613	:
				1106	
				612	612



DI	C	Subgroup	Cl l	Context	Feature
Pnase	Group	no.	Sub-group description	no.	no.
				607	606
				606	606
				605	604
				604	604
				1020	1020
2.00	2.00	15.00	Cultivation trench	1040	1039
				1108	1107
				1107	1107
	ļ			1037	1037
				1038	1037
				1039	1039
2.00	2.00	16.00	Pit at NE end of cultivation trench SG11	1056	1056
				1057	1056
2.00	3.00	17.00	Oval-shaped pit located between trenches SG4 and SG5	1081	1080
				1080	1080
3.00	4.00	18.00	Modern postholes, truncating cultivation trench SG14	1028	1026
	ļ			1024	1024
	ļ			1025	
ļ				1027	1026
	<u> </u>			1112	1111
	ļ			1029	1029
				1030	1029
[				1111	1111
				1026	1026
4.00	5.00	19.00	Isolated post hole	1085	1085
				1086	1085



## 8. APPENDIX 2: HER SUMMARY SHEET

Site name and address:					
Former Howe Dell School Playing Field					
County: Hertfordshire		District: Welwyn Hatfield			
Village/Town: Hatfield		Parish: Hatfield			
Planning application re	ference: 6/2628-11				
HER Enquiry reference: 1	04/11				
Client name, address, and	tel. no.:				
Hertfordshire County Cou	ıncil, Hertfordshire Prop	erty			
Room 308, County Hall, l	Pegs Lane				
Hertford					
Nature of application:					
Erection of a special scho		ructure			
Present land use: disused	playing field				
Size of application area: a	. 1.2ha	Size of area inve	stigated: 0.65ha		
NGR (to 8 figures): TL 22	261 0825				
Site code (if applicable): l	HDS1823				
Site director/Organization	: Robert Wardill / Albio	n Archaeology			
Type of work:					
Strip, Map and Record In	vestigation				
Date of work:	Start: 06.08.12		Finish: 24.08.12		
Location of finds & site a	rchive/Curating museun	n:			
Mill Green Museum					
Related HER Nos:		Periods represented:			
		Late Bronze Age			
		Iron Age			
		Roman			
Relevant previous summa	ries/reports				

Relevant previous summaries/reports

Albion Archaeology, 2011, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Heritage Asset Statement Document 2011/87.

Albion Archaeology, 2012, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Archaeological Trial Trench Evaluation. Document 2012/62.

Albion Archaeology, 2012, Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Written Scheme of Investigation for Archaeological Strip, Map and Record Investigation. Document 2012/91.

Summary of fieldwork results:

Strip, Map and Record investigation revealed thirteen parallel linear trenches which, due to their shape, size and regular spacing are likely to represent cultivation trenches. In the absence of any environmental remains, the identity of the crop can only be guessed at, although the large spacing between the trenches suggests it is likely to have been a tall-growing crop. Vines for growing grapes are an obvious candidate, as has been suggested at many similar sites such as Wollaston (Northants.), Ampthill (Beds.) and Caldecote (Cambs.). A limited pottery assemblage suggests the cultivation area is likely to date to the later Iron Age – early Roman period.

The eastern extent of the planting area was defined by the eastern boundary ditch of a seemingly earlier rectangular enclosure; its relationship with the later cultivation trenches suggests the possibility that this area was already under cultivation during the earlier Iron Age or even the late Bronze Age.

A single rubbish pit containing Roman pottery, brick and roof tile was located within the cultivation area.

Author of summary: W. Keir Date of summary: 01.02.2013



#### 9. APPENDIX 3: OASIS DATA COLLECTION FORM

OASIS ID	albionar1-142456
PROJECT DETAILS	
Project name	Former Howe Dell School Playing Field, Hatfield
Short description of the project:-	

Hertfordshire County Council has granted planning permission (application 6/2628-11) for the erection of a special school and associated infrastructure at the former Howe Dell School playing field, Woods Avenue, Hatfield. As the development site lies within an area of archaeological sensitivity, the Hertfordshire County Planning Archaeologist (CPA) recommended that a condition was attached to planning consent requiring the implementation of a programme of archaeological work. The first stage of the archaeological work (trial trench evaluation) was completed in April 2012. On the basis of the results and in accordance with the National Planning Policy Framework, the CPA advised that a strip, map, and record investigation was required within the footprint of the development area. The investigation revealed thirteen parallel linear trenches which, due to their shape, size and regular spacing, are likely to represent cultivation trenches. In the absence of any environmental remains, the identity of the crop can only be guessed at, though the large spacing between the trenches suggests it is likely to have been a tall-growing crop. Vines for growing grapes are an obvious candidate, as has been suggested at many similar sites such as Wollaston (Northants.), Ampthill (Beds.) and Caldecote (Cambs.). A limited pottery assemblage suggests the cultivation area is likely to date to the later Iron Age – early Roman period. The eastern extent of the planting area was defined by the eastern boundary ditch of a seemingly earlier rectangular enclosure; its relationship with the later cultivation trenches suggests the possibility that this area was already under cultivation during the earlier Iron Age or even the late Bronze Age. A rubbish pit containing Roman pottery, brick and roof tile was located within the cultivation area.

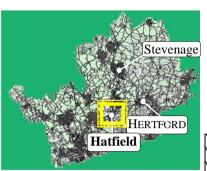
within the cultivation area.	
Project dates	Start: 06-08-2012 End: 24-08-2012
Previous/future work	Yes / No
Any associated project reference codes	HDS1823 - Contracting Unit No. WEWHM: 2012.37 - Museum accession ID albionar1-152122 - OASIS form ID
Type of project	Recording project
Site Status	None
Current Land use	Other 14 - Recreational usage
Monument type	CULTIVATION TRENCH Roman PIT Roman DITCH Late Iron Age
Significant Finds	POTTERY Late Bronze Age POTTERY Early Iron Age POTTERY Late Iron Age POTTERY Roman TILE Roman
Investigation type	""Open-area excavation""
Prompt	Planning condition
PROJECT LOCATION	
Country	England
Site location	HERTFORDSHIRE WELWYN HATFIELD HATFIELD Former Howe Dell School Playing Field
Study area	0.65 Hectares

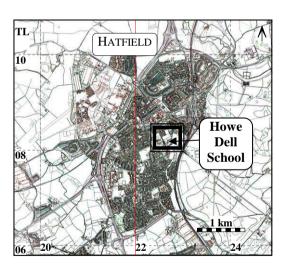


Site coordinates	TL 22611 08254
PROJECT CREATORS	
Name of Organisation	Albion Archaeology
Project brief originator	No Brief
Project design originator	Albion Archaeology
Project director/manager	Robert Wardill
Project supervisor	Wiebke Starke
PROJECT ARCHIVES	
Physical Archive Exists	Yes
Physical Archive recipient	Mill Green Museum
Physical Archive ID	WEWHM:2012.37
Physical Archive Contents	"Ceramics", "Worked stone/lithics"
Digital Archive recipient	Albion Archaeology
Digital Media available	"Database","GIS","Images raster / digital photography","Text"
Paper Archive recipient	Mill Green Museum
Paper Archive ID	WEWHM:2012.37
Paper Media available	"Context sheet", "Correspondence", "Miscellaneous Material", "Photograph", "Plan", "Report", "Section"
Paper Archive notes	To be stored at Albion Archaeology until deposition
PROJECT BIBLIOGRAPHY 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Assessment of Potential and Updated Project Design
Author(s)/Editor(s)	Keir, W. and Starke, W
Other bibliographic details	2013/22
Date	2013
Issuer or publisher	Albion Archaeology
Place of issue or publication	Bedford
Description	Comb bound report









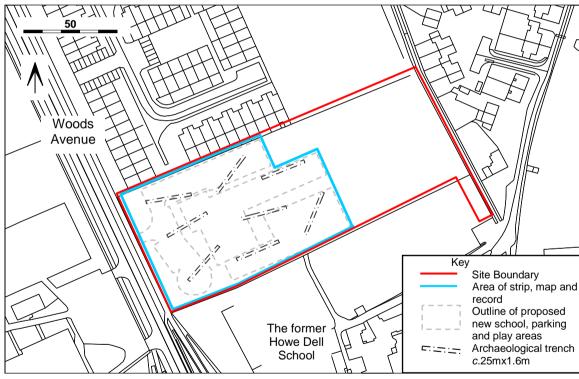
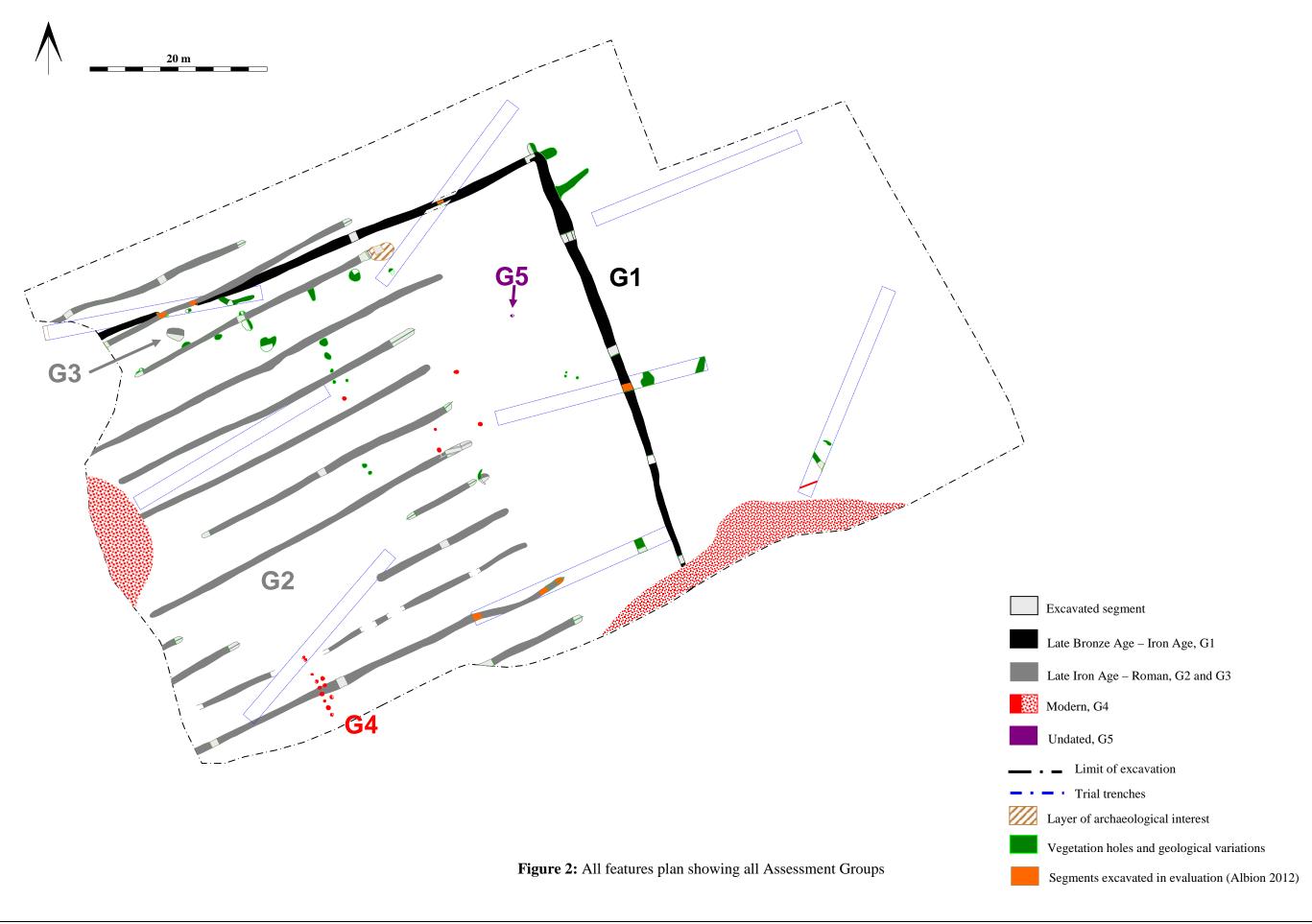


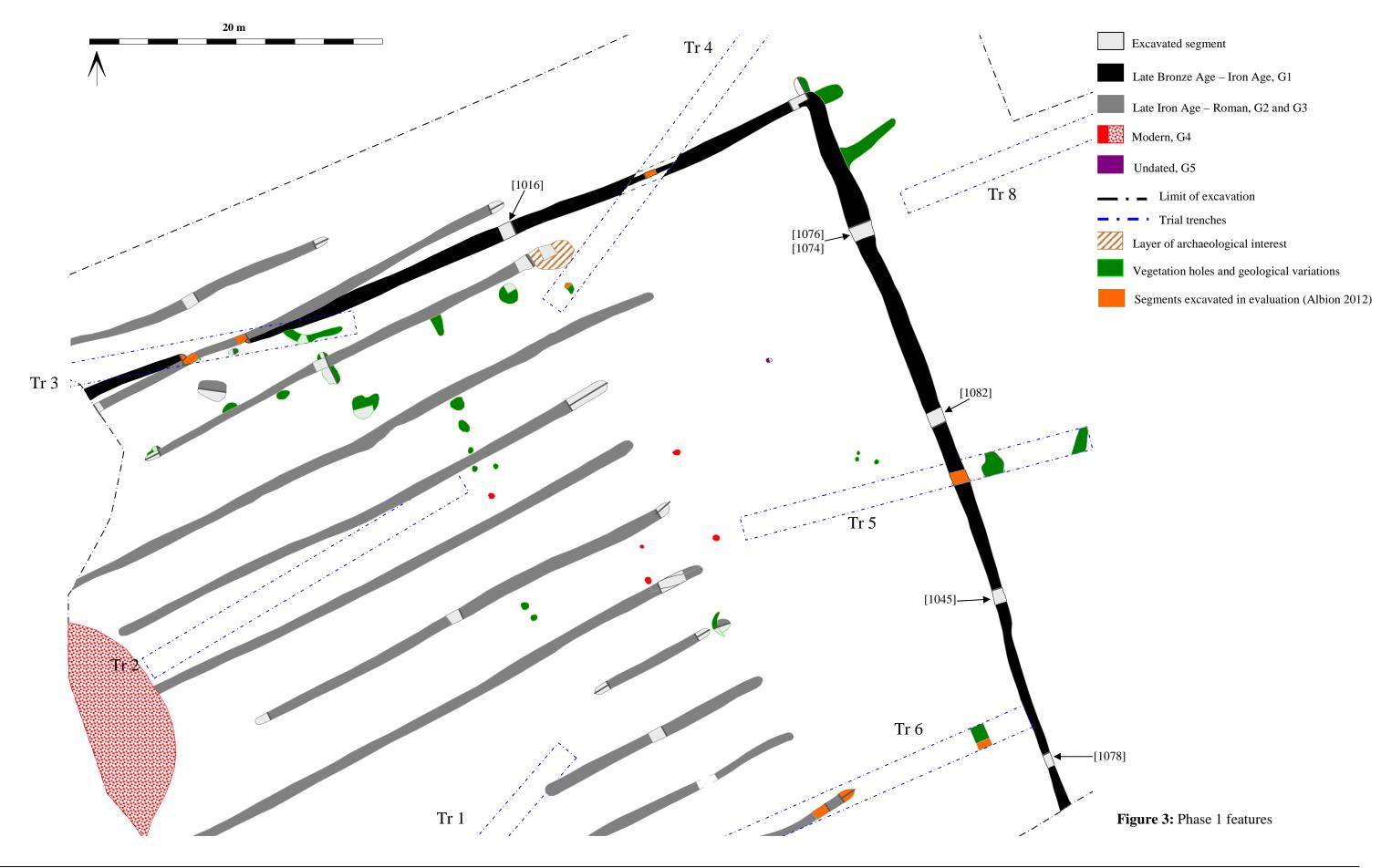
Figure 1: Location of site and area of excavation

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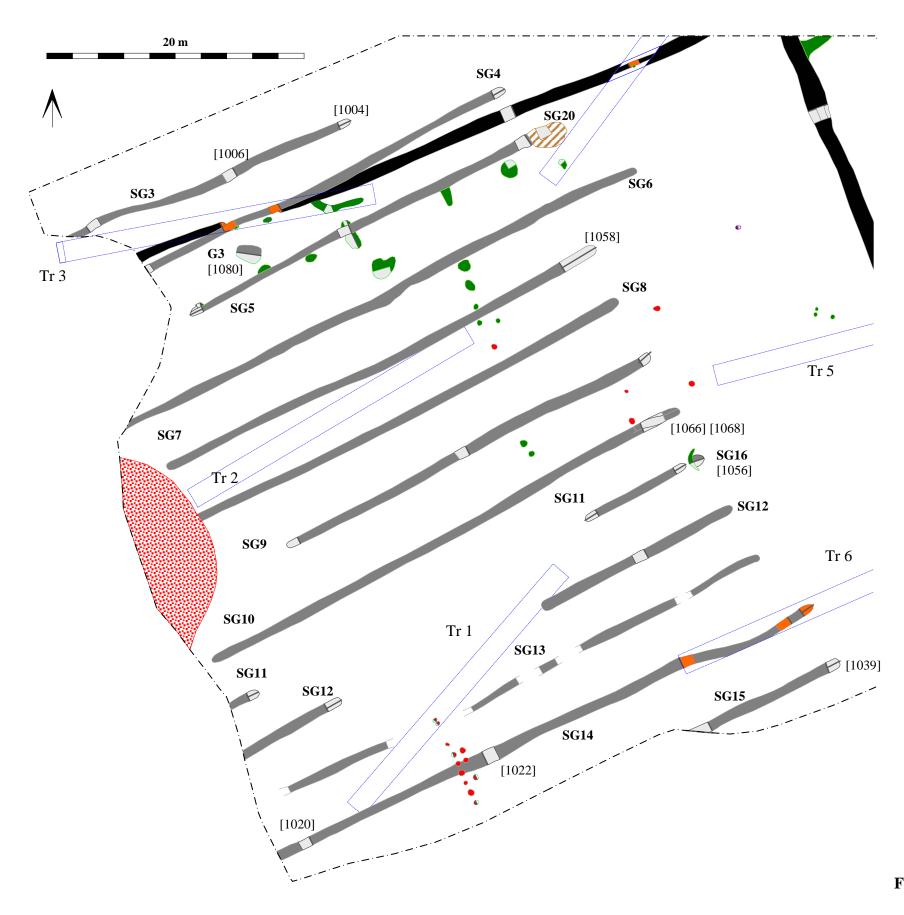












Excavated segment

Late Bronze Age – Iron Age, G1

Late Iron Age – Roman, G2 and G3

Modern, G4

Vegetation holes and geological variations

Limit of excavation

Trial trenches

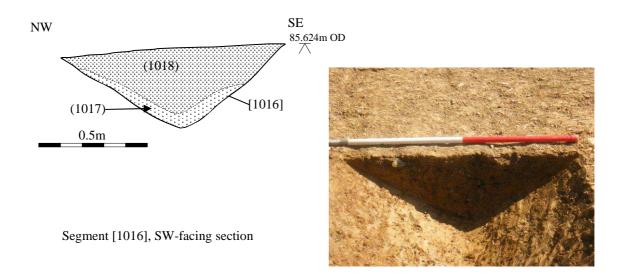
Layer of archaeological interest

Undated, G5

Segments excavated in evaluation (Albion 2012)

**Figure 4:** Phase 2 features





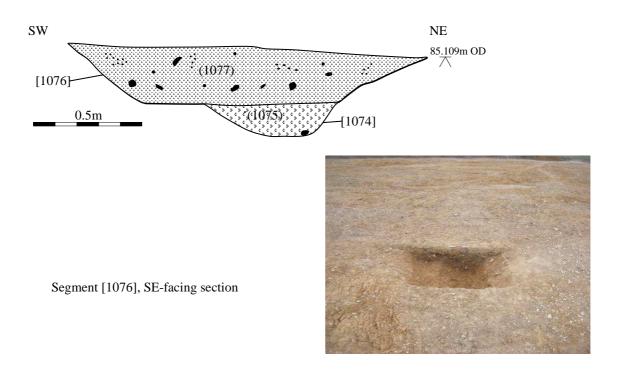
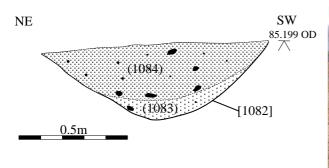


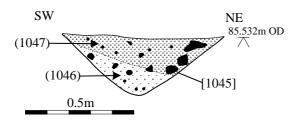
Figure 5: Enclosure ditch G1, sections and photographs





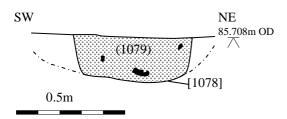


Segment [1082], SE-facing section





Segment [1045], SE-facing section



Segment [1078], SE-facing section

Figure 6: Enclosure ditch G1, sections and photographs

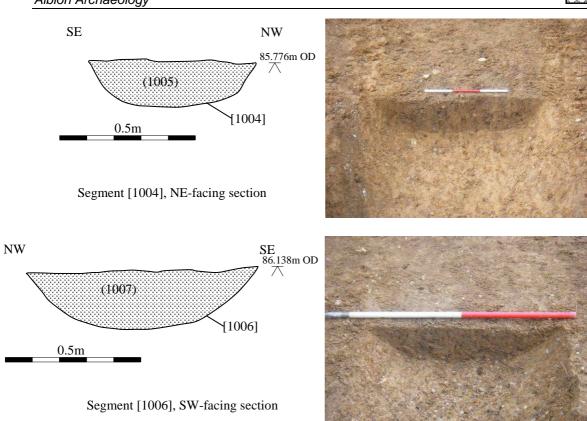






**Figure 7:** Photographs of excavation area and layout of cultivation trenches (Top: looking north. Bottom: looking north-east)





Cultivation trench SG3.

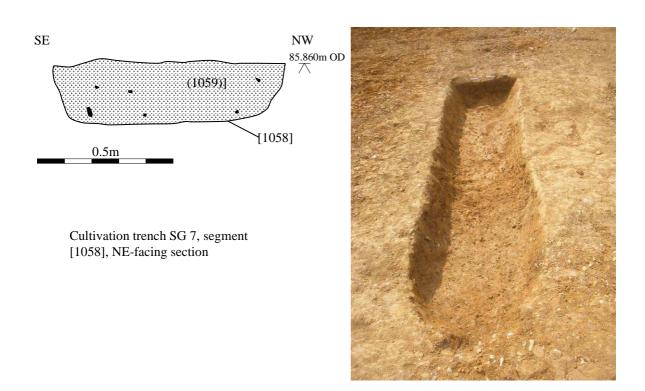
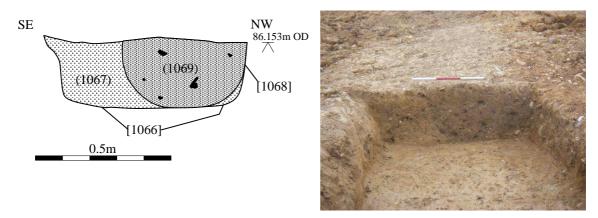


Figure 8: Cultivation trenches SG3 and SG7, sections and photographs





Cultivation trench SG10, segment [1068], NE-facing section

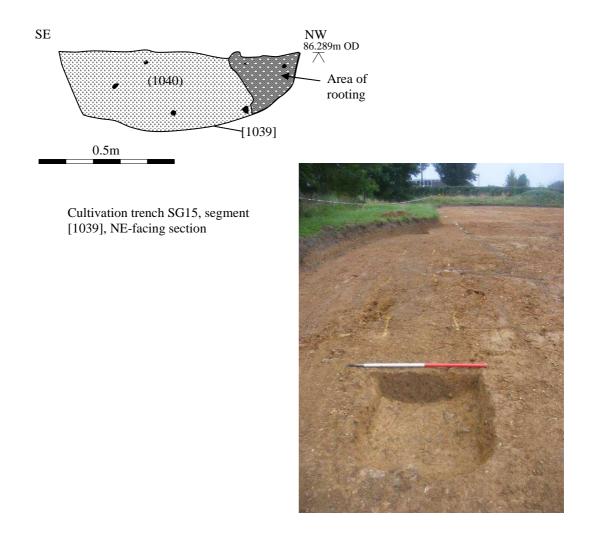
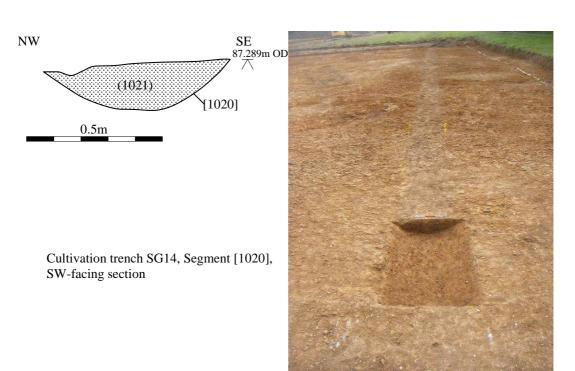


Figure 9: Cultivation trenches SG10 and SG15, sections and photographs





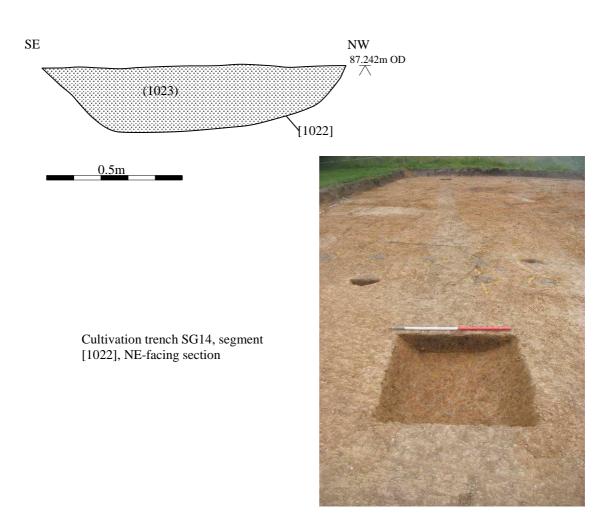
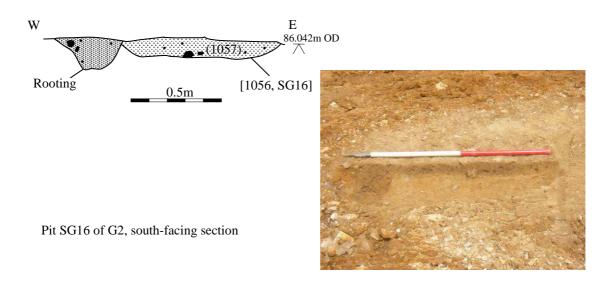


Figure 10: Cultivation trench SG14, sections and photographs





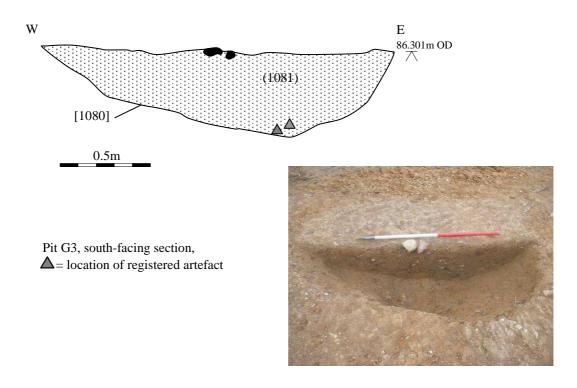


Figure 11: Pit SG16 (G2) and Pit G3, sections and photographs



Albion archaeology



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