Archaeological Services & Consultancy Ltd

ARCHAEOLOGICAL EVALUATION:
LAND AT RUSHMORE CLOSE
CADDINGTON
BEDFORDSHIRE

NGR: TL 0628 2006

Bob Harrington Design Ltd

on behalf of

Jephson Housing Association Group

A. Hancock BSc PgDip MIFA and M. Cuthbert BA (Hons) PIFA

March 2010

ASC: 1250/CRC/2

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Site Data

ASC project code:	CRC	*ASC project no:*	1250
OASIS ref:	Archaeol2-73111	*Event/Accession no:*	2010.22
County:	Bedfordshire		
Village/Town:	Caddington		
Civil Parish:	Caddington and Slip End		
NGR (to 8 figs):	TL 0628 2006		
Extent of site:	*c*.3500 sq m		
Present use:	Disused farmland		
Planning proposal:	Construction of 12 dwellings		
Planning application ref/date:	CB/09/06239/FULL		
Local Planning Authority:	Central Bedfordshire Council		
Date of fieldwork:	Geophysics: 28th - 29th Jan. Test Pits and Trenches: 15th - 23rd Feb.		
Client:	Bob Harrington Design Ltd 1st Floor 12 Church Square Leighton Buzzard Bedfordshire LU7 1AE		
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Internal Quality Check

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Revisions:		*Date:*	

Edited/Checked By:	J Hunn	*Date:*	12th March 2010

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Figure 1: General location *(scale 1:25,000)*

Summary

In January and February 2010 Archaeological Services and Consultancy Ltd carried out pre-determination evaluation of a small parcel of land located at the northern periphery of the village of Caddington, Bedfordshire. The clay with flint and brick earths of the Caddington area are known to contain in situ earlier Palaeolithic archaeological remains. However, test pits excavated to a depth of c.1.2m below the ground surface have shown that in situ Palaeolithic remains are not present within the near surface deposits. The archaeological potential of the deeper clay with flint deposits remains undefined. The evaluation trenching revealed ephemeral evidence of later prehistoric activity; an early-mid Iron Age post hole and a small number of other tentatively identified and undated features were present at the east of the site. A shallow ditch and possible pit at the west of the site are interpreted as dating to the post medieval period.

1. Introduction

1.1 In February 2010 *Archaeological Services and Consultancy Ltd* (ASC) carried out archaeological evaluation at Rushmore Close, Caddington, Bedfordshire. The project was commissioned by *Bob Harrington Design Ltd* on behalf of *Jephson Housing Association Group*, all work was carried out according to a brief (Oake 2009) prepared on behalf of the local planning authority (LPA), Central Bedfordshire Council, by their archaeological advisor (AA), Central Bedfordshire Council Archaeologists. The relevant planning application reference is CB/09/06239/FULL.

1.2 ***Planning Background***

The pre-determination archaeological evaluation was required under the terms of *Planning Policy Guidance Note 16* (PPG16), in order to inform proposals for the development of the site.

1.3 ***Archaeological Services & Consultancy Ltd***

Archaeological Services & Consultancy Ltd (ASC) is an independent archaeological practice providing a full range of archaeological services including consultancy, field evaluation, mitigation and post-excavation studies, historic building recording and analysis. ASC is recognised as a *Registered Organisation* by the Institute for Archaeologists, in recognition of its high standards and working practices.

1.4 ***The Site***

1.4.1 *Location & Description*

The proposed development site was located immediately north of Rushmore Close, at the northern periphery of the village of Caddington within the parish of Caddington and Slip End, Central Bedfordshire (NGR TL 0628 2006: Fig. 1).

The site was sub-rectangular: ground cover was rough grass with areas of overgrown shrubs and patches of brambles. Arable fields lay to the north and

east and the site was bounded by Chaul End Road to the west and by Rushmore Close to the south. Access to the site was from Rushmore Close. (Fig.2).

1.4.2 *Geology & Topography*

The soils of the area belong to the Batcombe Association, which are characterised as "*fine silty over clayey and fine loamy over clayey soils with slowly permeable subsoils and slight seasonal water logging. Some well drained clayey soils over chalk. Variably flinty."* (Soil Survey 1983, 582a). The underlying geology comprises plateau drift and Quaternary clay with flints (BGS, Sheet 220). The site exhibited a slight slope that descended *c.*1m north-south from *c.*175m – 174m AOD.

1.4.3 *Proposed Development*

The proposed development comprises the construction of 12 houses and associated infrastructure (Fig. 2).

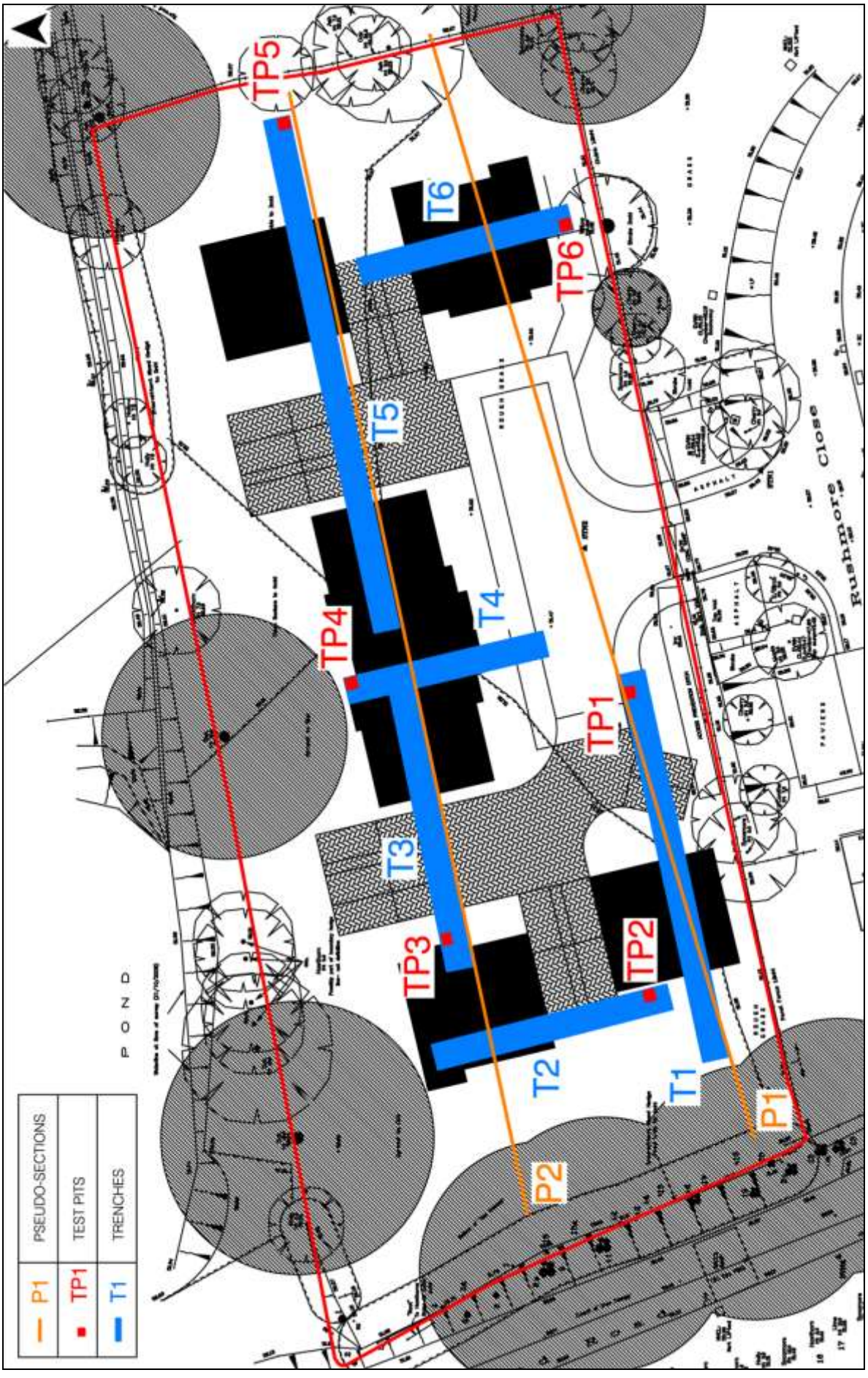

Figure 2: Site plan showing location of archaeological evaluations, tree protection orders (hatched) and proposed development (*scale 1:400*)

2. Aims & Methods

2.1 *Aims*

As required by the brief (Section 4), the aims of the evaluation were:

- To provide information on the archaeology of the proposed development site so that the planning application could be determined.
- To locate through geophysical survey sub-surface solution features and other geological features likely to contain deposits with a high potential to contain Palaeolithic remains.
- To examine geological deposits likely to contain *in situ* Palaeolithic remains.
- To examine the extent, nature and date of any archaeological features or deposits present.
- To determine the integrity and state of preservation of any archaeological features or deposits present.

2.2 *Methods: Geophysical Survey*

In line with the requirements of the brief (Section 5.6), the methods adopted for the geophysical survey were:

- Two *c.*90m long resistivity pseudo-sections were surveyed on transects aligned on the long axis of the application site.
- A Campus Tigre 128 resistivity meter linked to a computer running appropriate software was used to collect data.
- Survey was carried out with probes spaced at 1.5m. Data was examined while on site to ensure that the contact with the chalk had been defined.
- Data plots and summary analyses of the collected geophysical data were submitted to the AA to inform the location of test pits and trenches.

2.3 *Methods: Trenching and Test Pitting*

In line with the requirements of the brief (Section 5.6), the methods adopted for the trenching and test pitting were:

- Trial trenches with a minimum width of 2m were excavated within the proposed development site. The trenches examined 300sqm of the proposed development area.
- Trenches were excavated under archaeological supervision by excavating plant equipped with a toothless bucket
- Topsoil and subsoil was removed by machine down to the top of the first natural deposit or the surface of archaeological deposits.
- Six 1m x 1m test pits were excavated within the trial trenches to a maximum depth of 1.2m from the surface of the subsoil in order to test for the presence of Palaeolithic artefacts and undisturbed land surfaces. Test pits were hand

excavated in 10cm spits and the upcast was sieved for recovery of struck flint or other artefacts.

2.4 *Standards*

The work conformed to the requirements of the brief, to the relevant sections of the Institute of Archaeologists' *Standard & Guidance Notes* (IFA 2001) and *Code of Conduct* (IFA 2000a), to the Association of Local Government Archaeological Officers East of England Region *Standards for Field Archaeology in the East of England* (ALGAO 2003), to English Heritage guidelines (EH 1991, EH 2006, 2008), and to the relevant sections of ASC's own *Operations Manual.*

2.5 *Constraints*

The spread of trenches was constrained by tree preservation orders, which were most prevalent at the western and northern boundary hedgerows. The excavated trench locations conform to those agreed with the AA. However, site access and movement of plant necessitated a reduction in the proposed length of Trench 4. Selected trenches were lengthened to compensate and the required total of 300 sq m of was opened. The test pits locations also varied slightly from those agreed with the AA, largely as a consequence of areas of poor drainage. However, an appropriate spread of test pits was maintained.

3. Archaeological & Historical Background

3.1 The following section provides a summary of the readily available archaeological and historical background to the proposed development site and its environs. The site lies within an area of archaeological and historical interest, and has the potential to reveal evidence of a range of periods.

This section has been compiled with information from Bedfordshire Historic Environment Record (HER) and other readily available sources.

3.2 ***Prehistoric*** *(before 600BC)*

The Caddington area contains nationally significant archaeological remains of the Lower Palaeolithic period. Large numbers of Palaeolithic flint implements have been recovered from sites located within the village and in the surrounding area, (HER2037, HER2042, HER13559, HER655, and HER670). Excavation by W.G. Smith during the late 19th and early 20th centuries at brick-earth extraction pits located *c.*1km west of Rushmore Close, revealed the remains of a "Palaeolithic floor" with many flint artefacts present in primary contexts (HER605, HER2035). A vast artefactual assemblage was recovered, including handaxes, flakes, cores, punches and hammer stones, some of the flint flakes could be refitted to discarded tools and all artefacts were in excellent condition. Recent work has shown that stratified Palaeolithic artefacts may be present within the clay with flint at little more than 1m below the ground surface and has reinterpreted site formation processes (White 1997); and suggested that the "Palaeolithic floors" were the result of tool manufacture rather than other types of activity (Scott-Jackson 2000). Geotechnical boreholes and test pits carried out at the site by Listers Geotechnical Consultants (2009) showed that at least 5.5m of clay with flints overlay the chalk bedrock.

Extensive fieldwalking surveys, largely carried out by the Manshead Archaeological Society, have recovered evidence from later prehistoric periods in the fields surrounding Caddington. The surveys have recorded scatters of flint implements dating from the Mesolithic through to the Bronze Age (HER12455, HER15857, HER16058, HER16060, HER16061, HER16063, HER16065, HER16067, HER16071, HER16072, HER16969, and HER17783). A possible Bronze Age barrow reused as a medieval windmill mound (HER3190) is located *c.*1km to the southwest of the site.

3.3 ***Iron Age*** *(600BC-AD43)*

Compared to the wealth of finds dating to the prehistoric periods, comparatively little evidence of human habitation dating to this period has been found. Approximately 0.9km to the northeast of the site, large amounts of pottery and tile recovered through fieldwalking are thought to have identified two sites of Iron Age occupation (HER16073). The site of an Iron Age hillfort or 'camp' has been suggested *c.*1.2km to the south of the site. However, this monument is now thought to have been an enclosure and the only remaining evidence for its existence is the name of three roads that run close to the site: Dark Lane Camps, Upper Lane Camps and Lower Camps (HER13578).

3.4 ***Roman*** *(AD43-c.450)*

There are numerous documentary references to the discovery of finds dating to this period in and around Caddington during the 19th century, especially near the church (HER86). A watching brief carried out at Manor Farm, *c*.0.3km to the east of Rushmore Close recorded the presence of Roman pottery and tile (HER17751), and small pieces of Roman glass have been found within the village (HER10442). A large number of Roman pots or urns are said to have been found *c*1.2km to the southwest of the site although their exact date and current whereabouts are not known (HER87).

3.5 ***Saxon*** *(c.450-1066)*

There are no recorded archaeological finds dating to this period within the boundaries of the village. However, pottery of Saxon date has been found at the proposed site of a medieval windmill (HER3190), *c*.1km to the southwest of the development site.

3.6 ***Medieval*** *(1066-1500)*

Manor Farm, formerly known as Provender Farm or Provenderbury is located *c*.0.3km to the east of the development site (HER13589). Although extensively rebuilt in the 19th century, the manor house probably had its origins in the 14th century. The site of an earthwork mound known as Windmill Hill or Windmill Heap Barrow (HER3190) is located *c*.1km to the southwest of Rushmore Close. The earthwork may have been a prehistoric barrow subsequently reused as a windmill mound. A windmill is mentioned in surveys of the Manor of Caddington throughout the 13th century and several nearby fields had names associated with milling up to the 19th century. All Saints Church is located *c*.300m to the southeast of Rushmore Close; it is a Grade II listed building. It has its origins in the 12th century, although the current building was largely constructed in the 14th – 15th centuries and was restored in 1875 (HER1168).

3.7 ***Post-Medieval - Modern*** *(1500-present)*

Several brick-works and brick pits operated in the area surrounding Caddington, most closed during the early 20th century (HER6696, HER7202). The village itself remained relatively small until the mid 20th century. It has expanded in recent years, presumably as a result of better transport links following the construction of the M1, *c*.1km to the east of the village.

4. Results: Geophysical Survey

4.1 *Introduction*

Two *c.*90m long resistivity pseudo-sections (P1 and P2) were surveyed using a Campus Tigre resistivity meter (Fig.2). Section P1 was surveyed to a depth of *c.*14m and section P2 to a depth of *c.*10m, both with a Wenner array probe spacing of 1.5m. Section P2 was also surveyed using the dipole – dipole array at a probe spacing of 1.5m. However, a surface layer with highly variable resistivity resulted in poor dipole – dipole data quality and P1 was not surveyed with this array.

4.2 *Results and Discussion (Fig. 3)*

4.2.1 A *c.*1.9m deep layer of variable, although relatively high overall resistivity is apparent extending along the majority of the near surface of both sections. It is possible that this reflects the presence of relatively frequent flint and sand within the topsoil, subsoil and near surface clay.

4.2.2 High resistivity is evident *c.* 17m east and west of 48m on P1 and *c.*10m east of 49m on P2. The feature causing the high resistivity appears to have a relatively shallow concave profile and its presence in both pseudo-sections suggests that it may run NNE-SSW across the site. The anomaly may identify a relatively shallow drainage/runoff channel containing a deposit with greater sand and gravel content than the surrounding clay with flint.

4.2.3 An area of near surface high resistivity extends *c.*15m east of 72m on P1 and *c.*6m east of 78m on P2. The feature causing the anomaly appears to be *c.*3.5m deep with a concave profile and may run N-S across the site – possibly a drainage/runoff channel incorporating a greater amount of sand and gravel within its fill than is present in the surrounding clay. The anomaly could identify a backfilled extraction pit although results from a nearby geotechnical (Listers 2009) test pit (TP6) and borehole (WS3/SHDP3) suggest that this is unlikely.

4.2.4 Deep areas of higher resistivity are evident to the west of 30m on both profiles. It is best defined on deeper pseudo-section P1; a *c.*12m wide and *c.*7m deep anomaly with a concave profile is centred on 23m. The higher resistivity suggests that this anomaly identifies a deposit with a greater gravel and sand content than the surrounding clay with flint. The size of the anomaly and the results of nearby geotechnical test pits (*ibid.*) indicate that it is probably not caused by the presence of a backfilled extraction pit and suggest that it may have a geomorphological origin; perhaps a NNW-SSE aligned infilled drainage channel or natural depression.

4.2.5 Areas of high resistivity at the extreme west of P2 may identify relatively modern activity; the deep area of high resistivity located west of 8m may be caused by compaction of the ground along a footpath, roots of nearby trees reducing moisture content and by an edge effect resulting from the proximity

of a slope that descends to the level of Chaul End Road; a geotechnical gas monitoring borehole is clearly defined at 12m.

4.2.6 A deep band of low resistivity lies below the near surface; it extends the full width of pseudo-section P1 and from the eastern end to *c.*27m of pseudo-section P2. The low resistivity identifies a deep deposit of relatively homogeneous clay with flint. The contact of the clay with flint with the Cretaceous chalk bedrock is evident east of *c.*45m at a depth of *c.*6m-*c.*7m on both pseudo-sections. The surface of the chalk exhibits a pronounced dip to the west and may also dip to the east: the pseudo-sections have probably identified natural solution features located under the western half of the site and at its eastern periphery.

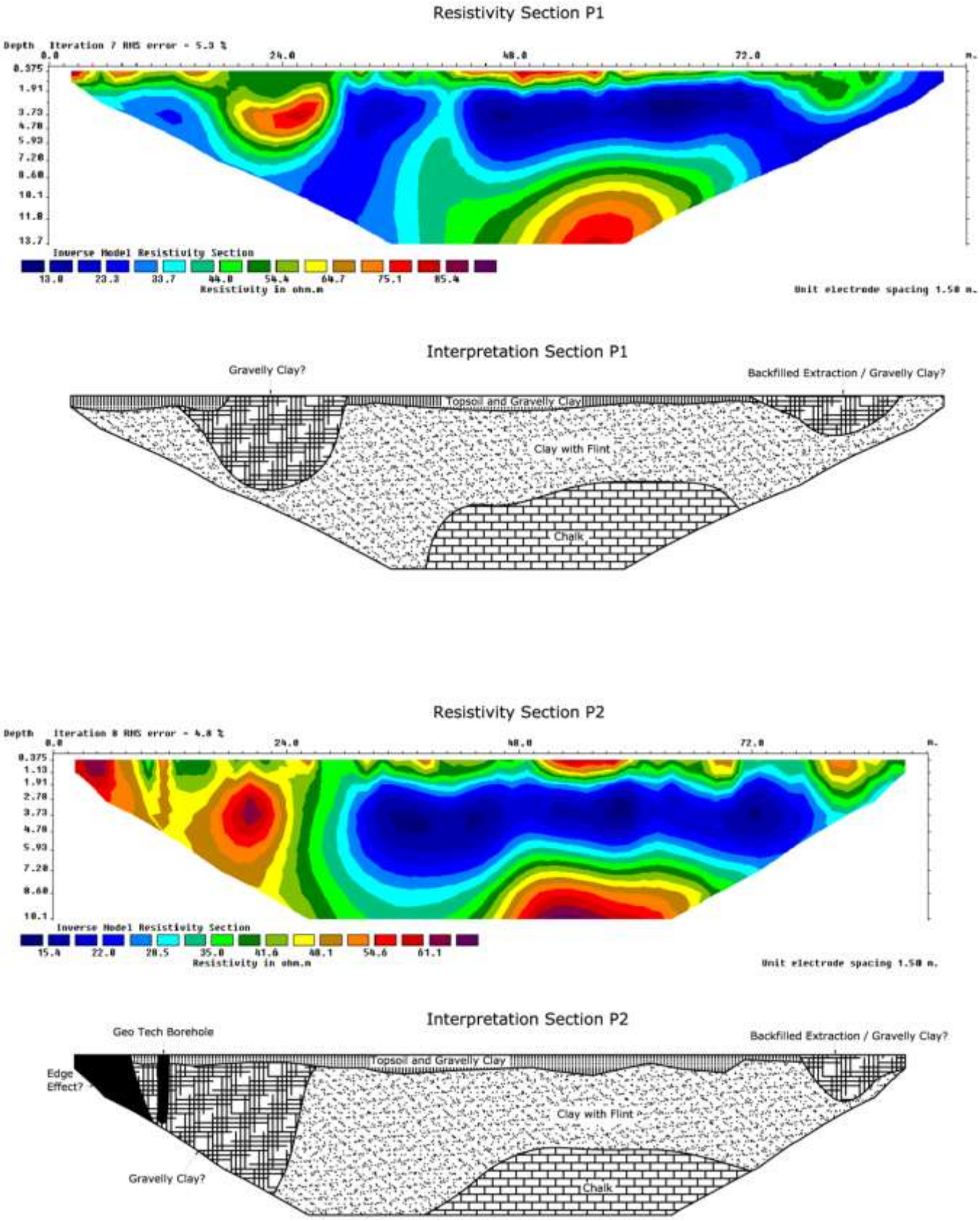

Figure 3: Resistivity pseudo-sections and interpretations *(not to scale).*

5. Results: Test Pits and Trenches

5.1 *Introduction*

This section provides a summary of the results of the test pitting and trenching. Full descriptions of the stratigraphy and archeological features revealed by the evaluation are respectively provided in Appendix 1 and Appendix 2.

5.2 *Test Pits: General*

The test pits showed that the topsoil and subsoil deepened slightly (*c.*0.1m) toward the south of the site and suggested that the surface of the *in situ* clay with flint may undulate slightly as it was not reached in Test Pits 3 and 4. However, a broadly similar stratigraphic profile was evident:

o Topsoil:	Mid greyish brown organic.	0 – 0.25m.
o Subsoil:	Mid greyish yellow/brown clayey silt.	0.25m – 0.5m.
o Natural *(Redeposited)*:	Grey mottled orange sandy/gravelly clay.	0.5m – 1.1m.
o Natural *(In situ)* :	Mid orange plastic clay with flint	1.1m and deeper

5.3 *Test Pits: Archaeological and Geomorphological Evidence*

One archeological artefact was identified during the test pitting; a later prehistoric flint blade was recovered from the subsoil within Test Pit 6 (Plate 5: Appendix 5). A layer of flint gravel including occasional small acorns was present at the base of the grey mottled orange sandy/gravelly clay contained within Test Pit 4 and manganese was observed at the base of the sandy/gravelly clay within Test Pits 2 and 6. The presence of the acorns and manganese illustrate that the sandy/gravelly clay is not an *in situ* geological deposit; it is a redeposited and weathered sediment derived from the clay with flint.

5.4 *Trenches: General*

Topsoil and subsoil was machine excavated under archaeological supervision to reveal the surface of the redeposited sandy/gravelly clay natural (Section 5.2). Features cutting the surface of the redeposited natural were not observed in Trenches 3 and 4. However, a small number of definite and tentatively identified archaeological features cut the surface of the redeposited natural in the remaining evaluation trenches; they are described in the following section.

5.5 *Trenches: Archaeological Features* ***(Fig. 4: Location and Fig. 5: Sections)***

5.5.1 *Post Medieval*

Trench 1 revealed a shallow NNW-SSE aligned ditch [102] (Plate 1). Trench 2 revealed a ditch [202] on the same alignment that terminated or had been truncated (Plate 2). The ditch was 0.9m wide at its southern end, narrowing to 0.3m at its northern end; it had a shallow concave profile that was a maximum of 0.30m deep. The ditch fills (101 and 201) were slightly stonier, but

otherwise indistinguishable from the subsoil. Both of the ditch segments were tentatively interpreted as having been cut through the subsoil. Trench 1 also revealed part of a possible small pit or ditch terminus with a shallow irregular profile; it was tentatively interpreted as having been cut through the subsoil. Dating evidence was not recovered from the fills of the ditch segments or the possible pit.

5.5.2 *Iron Age*

A small post hole [503] with a *c.*0.3m deep U shaped profile (Plate 4) was present in Trench 5; its charcoal flecked fill (504) included early-mid Iron Age pot sherds (Appendix 5) and a roughly worked flint core (Plate 4: Appendix 5). Post hole [503] was tentatively interpreted as having cut post hole [505]. Trench 5 contained further ephemeral evidence of Iron Age activity; sherds of early-mid Iron Age pottery (Appendix 5) were recovered from the top of the sandy clay fill of a shallow feature [507] partially revealed at the northern side of the trench (Plate 6) and crumbs of poorly fired and very degraded coarse-ware pottery were present in the fill of a severely truncated feature, perhaps a small post hole [511] (Plate 7).

5.5.3 *Undated*

In addition to the features described in Section 5.5.2, Trench 5 contained another severely truncated possible post hole [509]. Trench 6 revealed three possible archaeological features; a severely truncated possible small post hole [603] and a *c.*0.25m deep sub-circular possible post hole [607], which may have cut possible post hole [605] (Plate 8). No dating or other forms of archaeological evidence were recovered from the sandy clay fills of the features briefly described.

Plate 1: Ditch [102].

Plate 2: Ditch [202]

Plate 3: Pit? [105].

Plate 4: Post holes [503] and [505].

Plate 5: Flint blade (Test Pit 6: 601) and flint core from post hole [503].

Plate 6: Feature? [507].

Plate 7: Post hole? [511].

Plate 8: Post holes? [605] and [607].

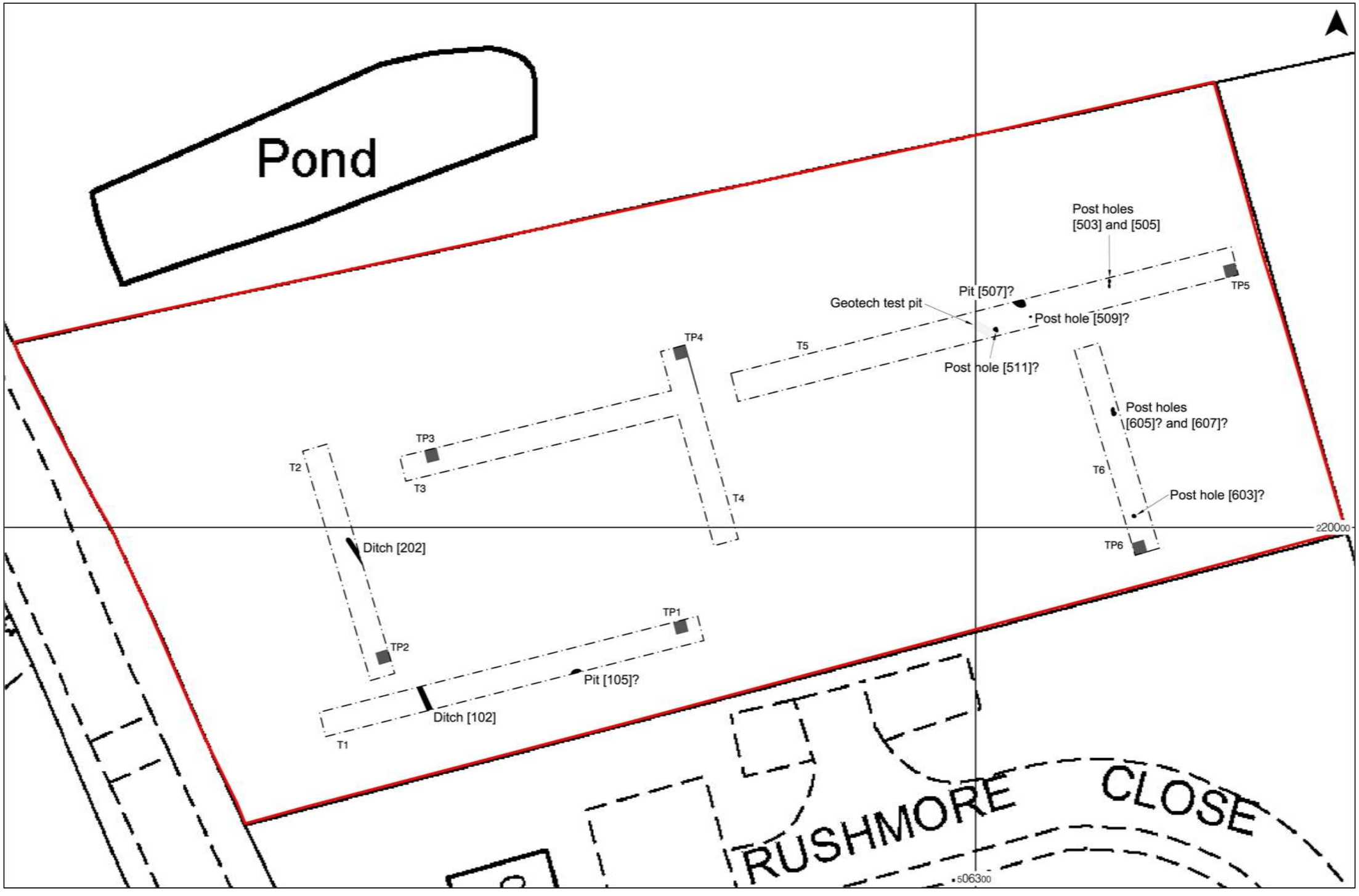

Figure 4: Location of archaeological features *(1:300)*

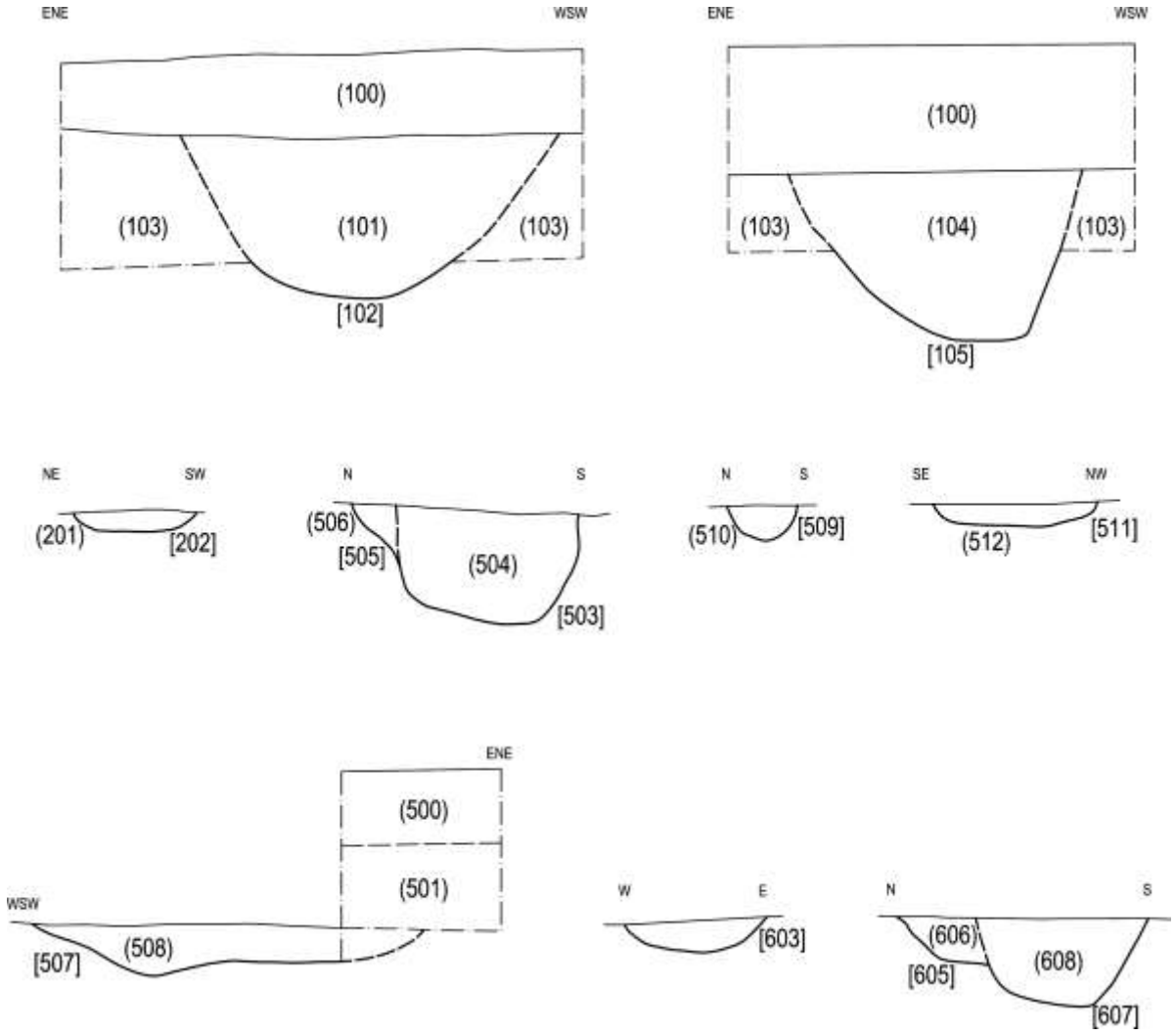

Figure 5: Sections through features *(1:20)*

5. Conclusions

5.1 The geophysical survey suggested that a near surface layer with a greater sand and gravel content overlay a deep deposit of relatively homogeneous clay with flint. The test pits confirmed that *c.*0.4m of relatively stony topsoil and subsoil plus at least 0.6m of redeposited sandy clay containing nodular flint overlay the *in situ* clay with flint.

5.2 A layer of flint gravel located at the base of the redeposited sandy clay (Test Pit 4) contained occasional small acorns. The acorns illustrate that the sandy clay must have been redeposited after post-glacial vegetation succession in the Caddington area was well advanced; it is probably a Holocene deposit laid down during the last 7000 years and i*n situ* Palaeolithic deposits or artefacts will not be present.

5.3 The geophysical survey indicated that an infilled drainage channel or depression was present toward the west of the site (Section 4.2.4). A diffuse area of sandier clay approximating the position of the geophysical anomaly was noted after the stripped surface of Trench 1 had weathered but the presence of an infilled geomorphological feature remains uncertain.

5.4 The postulated channel or depression overlies a probable solution feature developed in the surface of the underlying chalk. Slumping of overlying deposits downward as the solution feature expanded may be the origin of the infilled channel or depression.

5.5 The test pits showed that the surface of the *in situ* clay with flint lies at a depth of *c.*1.1m and indicated that the initial *c.*0.1m of this deposit is archaeologically sterile. The archaeological potential of the clay with flint at depths greater than *c.*1.2m remains undefined.

5.6 The subsoil excavated from Test pit 6 contained a residual Neolithic/Bronze Age flint blade. The nature and scale of Neolithic/Bronze Age activity is difficult to determine from recovery of a single residual lithic artefact.

5.7 A truncated post hole containing early-mid Iron Age pottery and an informal flint core cut the surface of the redeposited sandy clay within Trench 5. A small number of undated and tentatively identified archaeological features were also present in Trench 5 and in Trench 6. The eastern half of the site has a medium/high potential to contain further dispersed and poorly preserved early-mid Iron Age remains.

5.8 A shallow ditch and possible pit were present at the west of the site. The ditch and pit are tentatively interpreted as dating to the post medieval period; the ditch may have drained the extant pond located immediately north of the site.

5.9 The fieldwork was carried out in relatively good conditions and the different strata and fills of features were, on the whole, easily differentiated. The archaeological potential of the site has been adequately defined and results of the evaluation are attributed a high confidence rating.

6. Acknowledgements

The evaluation was commissioned by *Bob Harrington Design Ltd* on behalf of *Jephson Housing Association Group*. The project was monitored by Martin Oake, Central Bedfordshire Council, and archaeological advisor to the local planning authority. Thanks are also due to Nigel Herbert for the machine excavation and backfill of the trenches and *Allied Associates Geophysical Ltd* for supply of the geophysical equipment.

The project was managed for ASC by Alastair Hancock BSc PgDip MIFA. Fieldwork was carried out by the authors, Carina Summerfield-Hill BA MSc and Nigel Wilson HND AIFA. The pottery was examined by Anna Slowikowski BA MPhil PGCE MIFA. The report was prepared by Martin Cuthbert & Alastair Hancock and edited by Jonathan Hunn PhD MIFA.

7. Archive

7.1 The project archive will comprise:

1. Brief
2. Project Design
3. Evaluation Report
4. Clients site plans
5. Site records
6. Finds records
7. Finds
8. Site record drawings
9. List of photographs
10. B/W prints & negatives
11. Original specialist reports and supporting information
12. CDROM with copies of all digital files.

7.2 The archive will be deposited with Luton Museum.

8. References

Standards & Specifications

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Appendix 1: Test Pit Summary Tables

Test Pit 1

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test pit top	174.81m OD
Test pit base	173.62m OD

NGR Co-ordinates (centre of test pit)
506277 220042

Location	Eastern end of Trench 1
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width	Thickness	Depth
100	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.35m	0m
101	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.25m	0.35m
102	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.60m

Test Pit 2

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test pit top	174.68m OD
Test pit base	173.53m OD

NGR Co-ordinates (centre of test pit)
506253 220040

Location	Southern end of Trench 2
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width	Thickness	Depth
200	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
201	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present.	-	0.20m	0.25m
202	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	0.55m	0.45m
203	Layer	Orange-grey silty-clay. Rare flint and stone nodules. Distinct layer of manganese at base. Redeposited natural.	-	-	1.0m

Test Pit 3

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test pit top	175.17m OD
Test pit base	174.03m OD

NGR Co-ordinates (centre of test pit)

506257 220056

Location	Western end of Trench 3
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
300	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
301	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.15m	0.25m
302	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.40m

Test Pit 4

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test pit top	175.28m OD
Test pit base	174.04m OD

NGR Co-ordinates (centre of test pit)

506277 220064

Location	Northern end of Trench 4
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
400	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
401	Layer	Pale mid brown-yellow clayey silt, rare tile fragments- Subsoil/ploughsoil.	-	0.20m	0.25m
402	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	0.50m	0.45m
403	Layer	Orange-grey clay, red mottling. Frequent stone, flint and chalk nodules (max 150mm). Two acorns discovered within this layer. Redeposited natural.	-	-	0.90m

Test Pit 5

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test pit top	175.63m OD
Test pit base	174.51m OD

NGR Co-ordinates (centre of test pit)
506320 220070

Location	Eastern end of Trench 5
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
500	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.20m	0m
501	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present.	-	0.20m	0.20m
502	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	0.6m	0.40m
513	Layer	Orange-grey sandy-plasticised clay. Occasional flint nodules. Natural clay with flint.	-	-	1.0m

Test Pit 6

Max Dimensions (m)					
Length	1m	**Width**	1m	**Depth**	1.2m

Levels	
Test Pit Top	175.12m OD
Test Pit Base	173.89m OD

NGR Co-ordinates (centre of test pit)
506313 220048

Location	Southern end of Trench 6
Reason for Test pit	Evaluation

Context	Type	Description and Interpretation	Width	Thickness	Depth
600	Layer	Turf overlying mid brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.30m	0m
601	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata. Unretouched flint blade recovered.	-	0.30m	0.30m
602	Layer	Orange sandy/gravelly clay. Occasional manganese at base. Redeposited natural.	-	0.4	0.60m
609	Layer	Orange-grey sandy-plasticised clay. Occasional flint nodules. Natural clay with flint.	-	-	1.0m

Appendix 2: Trench Summary Tables

Trench 1

Max Dimensions (m)					
Length	31m	**Width**	2.3m	**Depth**	0.65m

Levels	
Trench top W	174.74m OD
Trench base W	174.05m OD
Trench top E	174.81m OD
Trench base E	174.30m OD
Gully [103] top	174.01m OD
Gully [103] base	173.88m OD
Pit [105] top	174.11m OD
Pit [105] base	173.86m OD

NGR Co-ordinates			
West	**502248 220034**	**East**	**506278 220042**
Orientation		West-East	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width	Thickness	Depth
100	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.35m	0m
101	Fill	As (103) although slightly more stone. No finds. Fill of [102].	0.9m	0.45m	0.35m
102	**Cut**	Ditch running N-S across trench, shallow concave profile. May cut the subsoil. Same as [202]?	0.9m E-W	-	0.8m
103	Layer	Pale greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.25m	0.35m
104	Fill	As (103). Occasional small natural flint inclusions. No finds. Fill of [105].	0.7m	0.4m	0.35m
105	**Cut**	Ovoid pit or bioturbation? Runs into southern trench edge, steep sides, uneven base	0.7m E-W	-	0.75m
106	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.60m

Trench 2

Max Dimensions (m)					
Length	19m	**Width**	2.1m	**Depth**	0.47m

Levels	
Trench top N	175.16m OD
Trench base N	174.74m OD
Trench top S	174.68m OD
Trench base S	174.24m OD
Gully [203] top	174.60m OD
Gully [203] base	174.55m OD

NGR Co-ordinates			
North	506248 220056	**South**	506253 220038
Orientation		North-South	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
200	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
201	Fill	As (203), occasional small natural flint inclusions. No finds. Fill of [202].	0.34m	0.05m	0.25m
202	**Cut**	Ditch running NNW-SSE into trench. Shallow concave profile. May cut the subsoil. Same as [102]?	0.34m E-W	-	0.30m
203	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.20m	0.25m
202 204	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.45m

Trench 3

Max Dimensions (m)					
Length	20m	**Width**	2.1m	**Depth**	0.45m

Levels	
Trench top W	175.17m OD
Trench base W	174.68m OD
Trench top E	175.15m OD
Trench base E	174.78m OD

NGR Co-ordinates			
West	506255 220055	**East**	506276 220060
Orientation		East-West	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
300	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
301	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.15m	0.25m
302	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.40m

Trench 4

Max Dimensions (m)					
Length	16m	**Width**	2.25m	**Depth**	0.45m

Levels	
Trench top N	175.28m OD
Trench base N	174.83m OD
Trench top S	174.89m OD
Trench base S	174.48m OD

NGR Co-ordinates			
North	506276 220064	**South**	506280 220049
Orientation		North-South	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
400	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.25m	0m
401	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.15m	0.25m
402	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.40m

Trench 5

Max Dimensions (m)					
Length	41m	**Width**	2.1m	**Depth**	0.45m

Levels	
Trench top E	175.63m OD
Trench base E	175.19m OD
Trench top W	175.18m OD
Trench base W	174.72m OD
Posthole [503] top	174.87m OD
Posthole [503] base	174.56m OD
Posthole [505] top	174.87m OD
Posthole [505] base	174.60m OD
Pit [507] top	174.83m OD
Pit [507] base	174.69m OD
Posthole [509] top	174.81m OD
Posthole [505] base	174.69m OD
Pit [511] top	174.76m OD
Posthole [511] base	174.66m OD

NGR Co-ordinates			
West	506281 220061	**East**	506321 220071
Orientation		East-West	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width	Thickness	Depth
500	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.20m	0m
501	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.20m	0.20m
504	Fill	Moderate-soft, Mid-brown orange silty clay frequent charcoal/disintegrated pottery. Pottery finds and possible flint core- Fill of posthole	0.38m	0.30m	0.40m
503	**Cut**	Circular posthole, '*U*' shaped in section with steep, almost vertical, sides and a flat base. Cutting posthole [505] – cut of posthole	0.38m	-	0.70m
506	Fill	Moderate-soft, Mid-brown orange silty clay - Fill of posthole	>0.23m	0.27m	0.40m
505	**Cut**	Circular posthole, cut by posthole [503] on its southern side. Dimensions and shape unclear.	>0.23m	-	0.67m
508	Fill	Moderate-soft, mid-light brown silty clay. Pottery fragments on surface.	>0.85m	0.08m	0.40m
507	**Cut**	Runs into northern trench edge, full dimensions unclear. Very gradual sloping sides, irregular base. Possible truncated pit? or bioturbation.	>0.85m	-	0.54m
510	Fill	Moderate-soft, Mid-brown orange silty clay. Occasional large flint inclusions (possible packing). Fill of posthole?	0.20m	0.11m	0.40m
509	**Cut**	Circular posthole, '*U*' shaped in section with steep, almost vertical, sides and a flat base. Cut of posthole?	0.20m	-	0.56m
512	Fill	Moderate-soft, Mid-brown orange silty clay - Fill of posthole?	0.44m	0.06m	0.40m
511	**Cut**	Circular posthole, '*U*' shaped in section with shallow gradual sides and a flat base. Cut of posthole?	0.44m	-	0.50m
502	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.40m

Trench 6

Max Dimensions (m)					
Length	16.5m	**Width**	0.6m	**Depth**	2.09m

Levels	
Trench top N	175.46m OD
Trench base N	174.84m OD
Trench top S	175.12m OD
Trench base S	174.58m OD
[603] top	174.48m OD
[603] base	174.39m OD
[605] top	174.61m OD
[605] base	174.44m OD
[607] top	174.61m OD
[607] base	174.35m OD

NGR Co-ordinates			
North	506309 220064	**South**	506314 220048
Orientation		North-South	
Reason for Trench		Evaluation	

Context	Type	Description and Interpretation	Width (max: mm)	Thickness (max: mm)	Depth (BGL: mm)
600	Layer	Turf overlying mid greyish brown organic topsoil. Occasional natural flint inclusions and modern debris.	-	0.30m	0m
601	Layer	Mid greyish yellow/brown clayey silt subsoil/ploughsoil. Occasional natural flint fragments present. Occasional well fired ceramic building material in upper part of strata.	-	0.30m	0.30m
604	Fill	Moderate-soft, Mid-brown orange silty clay - Fill of posthole?	0.40m	0.05m	0.60m
603	**Cut**	Circular posthole, '*U*' shaped in section with shallow gradual sides and a flat base – Cut of posthole?	0.40m	-	0.69m
606	Fill	Moderate-soft, Mid-brown orange silty clay, occasional manganese inclusions - Fill of posthole?	0.30m	0.18	0.60m
605	**Cut**	Circular posthole, cut by posthole [607] on its southern side. Dimensions and shape unclear - cut of posthole?	0.30m E-W	-	0.78m
608	Fill	Moderate-soft, Mid-brown orange silty clay, occasional manganese inclusions. Fill of posthole?	0.42m	0.28m	0.60m
607	**Cut**	Circular in plan, '*U*' shaped section with sharp sides, concave-sharp base. Possibly cutting [605]. Cut of posthole?	0.42m E-W	-	0.88m
602	Layer	Orange sandy/gravelly clay. Redeposited natural.	-	-	0.60m

Appendix 3: List of Photographs

SITE NAME: Land at Rushmore Close, Caddington, Bedfordshire				**SITE NO/CODE:** 1250/CRC
Shot	B&W	Digital	Colour	Subject
1		✓		Geophysics working shot
2		✓		Geophysics working shot
3		✓		Geophysics working shot
4		✓		Geophysics working shot
5	✓	✓	✓	Ditch [103]. North facing section, looking south, 1x1m scale
6	✓	✓		Pit? [105] in trench section, looking south, 1x1m scale
7	✓	✓	✓	Ditch [203] terminus, looking SSE, 1x1m scale
8	✓	✓	✓	Double posthole {503] & [505], looking west, 1x1m scale
9	✓	✓		Pit? [507], looking northeast, 1x1m scale
10	✓	✓		Post hole? [509], looking north, no scale
11	✓	✓		Post hole? [511], looking west, no scale
12	✓	✓		Post hole? [603], looking north, 1m scale
13	✓	✓		Post hole? [605] & [607], looking north, 1m scale
14		✓		General shot of sieving
15		✓		General shot of sieving
16		✓		Machine excavation in progress
17		✓		Machine excavation in progress
18	✓	✓		Test pit 1, looking north, 2x1m scale
19	✓	✓		Test pit 2, looking east, 2x1m scale
20				Test Pit 3, looking east, 2x1m scale
21	✓	✓		Test pit 4, looking north, 2x1m scale
22	✓	✓		Test pit 5, looking south, 2x1m scale
23	✓	✓		Test pit 6, looking west, 2x1m scale
24	✓	✓		Trench 1, looking west, 2x1m scale
25	✓	✓		Trench 2, looking south, 2x1m scale
26	✓	✓		Trench 3, looking west, 2x1m scale
27	✓	✓		Trench 4, looking north, 2x1m scale
28	✓	✓		Trench 5, looking west, 2x1m scale
29	✓	✓		Trench 6, looking south, 2x1m scale

Appendix 4: Finds Concordance

Context	Pottery		Flint (no)
	(no)	(g)	
Trench 5: (508)	4	58g	
Trench 5: (504)	8	35g	1 (core?)
Test Pit 6: (601)			1 (blade)

Appendix 5: The Finds

Pottery

The pottery was dated and its fabric briefly examined and classified by Anna Slowikowski BA MPhil MIFA. All sherds are early-middle Iron Age in date. Diagnostic sherds were not included in the small assemblage, but the sherds are probably from ovoid jars and the fabrics suggest that a middle Iron Age date could be more likely.

Context (504): Six sherds of fabric type code F04: Organic inclusions with some sand.
Two sherds of fabric type code F19: Sand and organic inclusions.

Context (508): Four sherds of fabric type code F28: Sandy fabric, more abraded than the sherds from context (504)

Extremely fragmentary coarse ware pottery was recovered from the fill of post hole [511]. It had been poorly fired and was so degraded that it could not be dated.

Lithics

Two worked flint artefacts were recovered during the evaluation (Plate 4).

Context (601): A blade; 44mm long and 12mm (max) wide in unpatinated mid brownish grey flint. The blade is complete and has a hinged distal termination partially obscured by an area of cortex. A small flat striking platform is present at the proximal end. Three previous blade removals are evident on the dorsal side. The ventral side has a small bulb of percussion lacking a bulbar scar. Possible areas of retouch along parts of one lateral margin, remnants of cortex are present on the other lateral margin, which also exhibits a flake scar with hinged termination.

Context (504): Informal multidirectional core in unpatinated dark brownish grey heat affected flint. Maximum dimensions 69mm x 56mm: Weight 136g. Three large flakes have been removed. One edge has small superimposed flake scars possibly resulting from percussive damage. Another face and nearby edges are roughened as though used to repeatedly strike another object. Thick cortex is present around a third of the circumference.

Appendix 6: ASC OASIS Form

PROJECT DETAILS			
Project Name:	Land at Rushmore Close, Caddington Beds	OASIS reference:	Archaeol2-73111
Short Description:	*In January and February 2010 Archaeological Services and Consultancy Ltd carried out pre-determination evaluation of a small parcel of land located at the northern periphery of the village of Caddington, Bedfordshire. The Caddington area is known to have high potential for recovery of earlier Palaeolithic archaeological remains, but the evaluation has shown that in situ Palaeolithic deposits or artefacts are not present to a depth of c.1.2m below the ground surface. The archaeological potential of the deeper clay with flint deposits remains undefined. Ephemeral evidence of later prehistoric activity was identified; an early-mid Iron Age post hole and a small number of tentatively identified, undated features were present at the east of the site. A shallow ditch and possible pit investigated at the west of the site are tentatively interpreted as dating to the post medieval period.*		
Project Type:	Geophysical survey, evaluation trenching and test pits		
Previous work: (eg. SMR refs)	N/a	Site status: (eg. none, SAM, listed)	None
Current land use:	Disused arable	Future work: (yes/no/unknown)	Unknown
Monument type:	None	Monument period:	none
Significant finds: (artefact type & period)	Twelve sherds of early-mid Iron Age pottery from two features		

PROJECT LOCATION			
County:	Bedfordshire	OS reference: (8 figs min)	TL 0628 2006
Site address: (+ postcode if known)	Land at Rushmore Close, Caddington, Beds		
Study area: (sq. m. / ha)	3500 sq m	Height OD: (metres)	175m OD

PROJECT CREATORS			
Organisation:	Archaeological Services & Consultancy Ltd		
Project brief originator:	Martin Oake	Project design originator:	A Hancock
Project Manager:	A Hancock	Director/Supervisor:	Martin Cuthbert
Sponsor / funding body:	Bob Harrington Design Ltd		

PROJECT DATE			
Start date:	28/02/2010	End date:	23/02/2010

PROJECT ARCHIVES		
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)
Physical:	Luton Museum Acc n.o: 2010.22	Pottery, flint core, flint blade, photographs and negatives
Paper:		Brief, Project Design, Eval Report, Trench sheets, context sheets, section and plan drawings, survey register
Digital:		All digital files

BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)			
Title:	Archaeological Evaluation: Land at Rushmore Close, Caddington Beds		
Serial title & volume:	ASC Ltd Report ref. 1250/CRC/2		
Author(s):	Alastair Hancock BSc PgDip MIFA and Martin Cuthbert BA (Hons) PIFA		
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