MILTON KEYNES WIND FARM PETSOE

ARCHAEOLOGICAL FIELD EVALUATION

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On behalf of Your Energy Ltd.

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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 specification. 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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Albion Archaeology would like to acknowledge the assistance of the landowner, Bill Needham, who also supplied the plant.

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Structure of this report

After the introductory Section 1, the results of the trial excavation are presented in Section 2. A synthesis of the results and their significance is presented in Section 3. Section 4 contains the bibliography. More detailed information on the recovered artefacts and the contextual data recorded in the trenches is presented as appendices (Section 5).

Key Terms

Throughout this report the following terms or abbreviations are used:

Albion Archaeology

GPS Global Positioning System

MKC AO Milton Keynes Council Archaeological Officer

Client E4Environment Ltd. on behalf of Your Energy Ltd.

IFA Institute of Field Archaeologists

Procedures Manual Procedures Manual Volume 1 Fieldwork, 2nd Edition 2001.

Bedfordshire County Council



Non-Technical Summary

In February 2006 Albion Archaeology carried out an archaeological evaluation on eight defined locations within c.206 hectares of land at Petsoe Manor Farm, north of Milton Keynes, centred on grid reference SP 9150 4922. The work was carried out for E4Environment Ltd, working on behalf of Your Energy Ltd in advance of preparations for the submission of a planning application for a wind farm.

Seven cruciform trenches were positioned on the proposed sites of the seven wind turbines. A further linear trench was opened on the site of the proposed electricity substation.

Archaeological deposits were present in Trenches 1 and 6. Trench 1 revealed two ditches on a perpendicular alignment which may represent part of a late Iron Age/Roman field system or enclosure. Trench 6 revealed two undated ditches on a parallel alignment which may have formed part of a trackway.

The remaining trenches contained no archaeological features.



1. INTRODUCTION

1.1 Planning Background

Planning permission is being sought by E4Environment Ltd, on behalf of Your Energy Ltd, for the construction of a wind farm at Petsoe Manor Farm, Emberton. An archaeological desk-based assessment has been carried out as part of an Environmental Impact Assessment. This demonstrated that the major development works would be located in areas with no known archaeological remains.

However, the Archaeological Officer of Milton Keynes Council (MKCAO) advised that further information was required on the location, extent and nature of any previously undetected archaeological features in specific areas where the main groundworks would be undertaken. The MKCAO, therefore, issued a brief for a programme of further archaeological investigation (MKC 2006).

Albion Archaeology was commissioned to undertake the evaluation of the areas and to prepare a report on the results (this document).

1.2 Site Location and Description

The site is located within the holding of Petsoe Manor Farm at the eastern end of the parish of Emberton. It straddles the valley of a stream, to either side of which the land slopes gently up to higher ground. A low ridge runs east to west across the northern part of the site, whilst in the south the high ground forms a fairly level plateau. The site is centred on grid reference SP 9150 4922.

The geology of the area is Boulder Clay over morainic drift, but it is likely that there has been some accumulation of slope wash deposits in the valley floor. The site now comprises mainly large, 'prairie' fields, bounded by small, regularly cut hedges. The land at Petsoe Manor Farm lies at a height of 75mOD to 80mOD; it slopes gently upwards to around 100m OD in the south and west.

1.3 Archaeological Background

The archaeological and historical background of the area has been investigated in detail in the initial archaeological desk-based assessment that was undertaken as part of the Environmental Impact Assessment for the development. Also, the earliest historical and documentary sources for the site have been thoroughly examined in a published study by Chibnall (1979).

For the prehistoric to the Anglo-Saxon periods there is only one known record of any archaeological significance: an isolated find spot of sherds of Roman pottery located to the north of Petsoe Manor Farm and close to an old north-south road, first depicted on the Jefferys map of 1770. The significance of these finds is unknown, but it may perhaps indicate that the general line of the north-south route predates the medieval period.



Chibnall (1979) suggests that in the Anglo-Saxon period the landscape was extensively wooded and that early English settlers began to clear the land for settlement.

Records for the medieval period indicate that the eastern end of the parish of Emberton comprised two smaller 'extra parochial' areas, called Petsoe and Ekeney. The manor of Petsoe was listed in Domesday (1086) as held by Countess Judith of Huntingdon. The manor of Ekeney is not mentioned in Domesday, but it is mentioned in documents from the 13^{th} century. The old manor house at Petsoe probably fell into disuse c.1340. The Chapels of St James (Petsoe) and St Martin (Ekeney) were mentioned in a grant of 1246; the parishes seem to have been combined in 1459 and both chapels went out of use by 1561. Petsoe manor house still appears on a map dated 1643, but the farm house was largely demolished in 1947.

The medieval parishes seem not to have been very populous and their settlements did not survive into the 16th century. Their identification as 'deserted medieval village' (DMV) sites is probably overstating the likely size of the settlements. They may have been no more than large manorial farmsteads. Surviving earthworks on both sites suggest the extent of the settlement remains and evidence for medieval cultivation systems. The site of St Martin's church at Ekeney survives only as a roughly rectangular platform on one side of a ploughed field and is now a Scheduled Ancient Monument.

The site of the original Petsoe Manor is now ruinous and the remaining structures of the demolished farmhouse are probably 19th century or later. Petsoe Manor Farm, located *c*. 1km west of Petsoe Manor itself, dates from the post-medieval period and the current house was probably also built in the 19th century.



2. TRIAL EXCAVATION

2.1 Introduction

The evaluation was carried out in February 2006 in dry and bright conditions. Seven cruciform trenches, $10m \times 10m \times 1.60m$ wide, were positioned on the proposed sites of seven wind turbines (Figure 2). A further trench, $10m \log 1.60m$ wide, was opened on the site of the proposed electricity substation.

Three further trenches had been proposed on the site of the planned anemometer mast and constructors' compound. However, these trenches could not be excavated. A temporary anemometer mast was already in place on the proposed location and the compound trenches would have been located on concrete and hardstanding of the farmyard of Petsoe Manor Farm, which is currently in use. It was agreed with the MKC AO that the trenches did not need to be excavated prior to determination of the planning application.

The aim of the trial trenching was to assess the potential for surviving archaeological remains within the areas affected by the wind turbines and substation. The results have been included in the final draft of the Environmental Impact Assessment report prepared in support of the planning application.

Detailed technical information on all deposits and archaeological features discussed below can be found in Appendix 2.

2.2 Method Statement

Throughout the project the standards set in the IFA Standard and Guidance for Field Evaluation have been adhered to. Also those standards outlined in Albion Archaeology's Procedures Manual for Archaeological Fieldwork and the Analysis of Fieldwork Records (2001), the IFA Code of Conduct and English Heritage's Management of Archaeological Projects (1991) were adhered to.

The detailed trial excavation methodology was as follows:

- The position of the trenches was discussed with and agreed by the MKC AO in advance of fieldwork. They were then located on the ground by surveyors from Mouchel Consulting Ltd, using a Leica Global Positioning System (GPS).
- All machine excavation was supervised by an archaeologist and was undertaken using a JCB fitted with a toothless bucket.
- Topsoil and modern overburden was removed by machine down to the top of archaeological deposits, or clean natural deposits, whichever was encountered first.
- The trenches were then cleaned by hand in order to expose any archaeological features and deposits.
- Subsequently, each trench was recorded and photographed using digital format and black and white 35mm film. All deposits were recorded using



a unique number sequence commencing at 100 for Trench 1, 200 for Trench 2 etc.

- The spoil heaps and any archaeological features were scanned for artefacts by eye and with a metal detector.
- Recording took place on pro-forma sheets in accordance with the Albion Archaeology *Procedures Manual* (2001).
- The trenches were inspected by the MKC AO, prior to being backfilled.

All archaeological deposits and features (known as 'contexts') were assigned an individual number. Within this report, numbers in brackets refer to these context numbers. Cut features (*i.e.* pits, ditches *etc.*) are expressed [***], layers and deposits within cut features are expressed (***).

2.3 Results of the Trial Excavation

2.3.1 Soils and geological deposits

The overburden was fairly homogenous across the site. The ploughsoil was 0.26m-0.46m thick. The underlying subsoil was 0.25m thick in most areas, except in Trench 7, where no subsoil was encountered. Each trench was excavated to the top of the chalky Boulder Clay, which was reached at depths of 0.74m-0.36m below the ground surface, depending on the slope of the land.

Archaeological deposits were only present in Trenches 1 and 6. The remaining trenches were recorded, photographed and scanned for metal finds, before being backfilled.

2.3.2 Trench 1: late Iron Age / Roman ditches

Trench 1 was situated on a south-facing slope in the south of the proposed development area (Figure 1, Plates 2-3). Two ditches were uncovered, which ran beyond the limit of excavation. NW-SE orientated ditch [103] was 1.0m wide and 0.36m deep. A larger ditch [107] lay at right angles to ditch [103]. It was 1.25m wide and 0.53m deep. A total of 22 sherds of late Iron Age / early Roman pottery was recovered from the two ditches. The sherds were generally small and abraded.

These ditches are interpreted as part of a late Iron Age / Roman field system.

2.3.3 Trench 6: Trackway

Trench 6 was the most northerly trench within the proposed development area, situated on a gentle north-facing slope. It contained two undated ditches running parallel on a north-south alignment and positioned 9.20m apart (Figure 2, Plate 1). Both continued beyond the limit of excavation. Ditch [603] was recorded in the centre of the cruciform trench and was 0.40m wide and 0.21m deep. Ditch [605] lay to the east of [603] and was 0.50m wide and 0.20m deep. Both ditches contained naturally accumulated fills. Their profiles showed signs of root disturbance, suggesting that they may have been flanked by hedgerows.

The distance between the ditches suggests that they were probably part of a former trackway or droveway. They were not substantial enough to be



boundary or drainage ditches. No artefacts were recovered from either of the ditches, suggesting that they were not situated close to a settlement.



3. SYNTHESIS

3.1 Discussion

Archaeological trial trenching on land to the south and west of Petsoe Manor Farm has demonstrated the presence of archaeological remains in two defined areas. Six of the evaluated areas contained no evidence for archaeological remains. This tends to confirm the conclusions of the desk-based archaeological assessment that there are few sites of archaeological significance within the proposed development area.

3.1.1 Late Iron Age / Roman

Trench 1 contained the only dateable archaeological remains within the eight evaluated areas. Two late Iron Age / Roman ditches were aligned at right angles to each other. Although no relationship was visible in the trial trench, it is likely that they formed part of the same field system.

No early prehistoric activity has been recorded within the development area, or in the immediate vicinity, and only an isolated scatter of Roman artefacts has previously been located to the north of Petsoe Manor Farm. This may support the conclusion that there was dispersed late Iron Age / Roman activity in this area.

The remains in Trench 1 are considered to be of local significance to the understanding of the prehistoric and Roman periods in this part of Milton Keynes.

3.1.2 Undated

Two undated ditches were found in Trench 6, suggesting a trackway or droveway had run on a north-south alignment across this part of the development area. The 1885 1st Edition Ordnance Survey map shows that this part of the development area had been divided into several fields, with boundaries running on a similar north-south alignment. It is possible that the trackway was contemporary with these field systems. However, it is also conceivable that the trackway was part of an earlier landscape, perhaps linked to the late Iron Age / Roman remains in Trench 1.

In any event, the absence of artefacts is evidence that the features lay some distance from any centre of habitation and are, therefore, of low archaeological potential.

3.2 Summary of Significance

Trial trenching has demonstrated that only two of the proposed wind turbines will have an impact on sub-surface archaeological remains. It also suggests that most of the development area lies beyond the extent of the medieval settlement and land use recorded in this area



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5. APPENDICES

5.1 Appendix 1: Artefact Summary

A small pottery assemblage, datable to the late Iron Age / early Roman period (c. 1st century BC / AD) was recovered from ditches [103] and [109], Trench 1. Sherds are generally abraded and small, with an average weight of 6g, although two vessels are represented by more than single sherds. Three fabric types were identified in accordance with the Bedfordshire Ceramic type Series, held by Albion Archaeology. No finds were recovered from Trenches 2-7 and 11.

Feature	Type	Context	Find type
103	Ditch	104	Pottery: 15 sherds (89g), fabric types F07 (shell), F09 (grog/sand).
107	Ditch	109	Pottery: 7 sherds (61g), fabric types F06B (medium grog), F07 (shell).

Table 1: Artefact Summary



5.2 Appendix 2: Trench Summary



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: 0.45 m. Max: 0.48 m.

OS Co-ordinates: Ref. 1: SP9169948406 Ref. 2:

Context:	Type:	Description:	Excavated:	Finds Present:
100	Topsoil	Friable dark grey brown clay loam moderate small chalk 0.34m thick.	v	
101	Subsoil	Plastic mid grey brown silty clay occasional small chalk 0.17m thick.	V	
102	Natural	Plastic mid yellow brown chalky clay frequent small-medium chalk, moderate medium stones 0.51m below groung level.		
103	Ditch	Linear NW-SE profile: concave base: concave dimensions: min length 3.94m, max breadth 1.m, max depth 0.36m	✓	
104	Fill	Plastic mid grey brown silty clay occasional medium chalk, occasional medium stones Top fill, naturally accumulated, probably deposited through alluviual processes. 0.18m thick. Contained pottery.	✓	✓
105	Fill	Friable light grey brown silty clay frequent medium chalk naturally accumulated slumpage material, probably from weathered sides. 0.10m thick.	✓	
106	Fill	Plastic light yellow brown silty clay moderate medium chalk Naturally accumulate fill, probably a slump deposit from weathered sides. 0.16m thick.	d 🗸	
107	Ditch	Linear NW-SE profile: near vertical base: flat dimensions: min length 1.6m, m breadth 1.25m, max depth 0.53m	nax 🗸	
108	Fill	Friable mid yellow orange silty clay occasional medium chalk, occasional medium- large stones A deposit of slumped natural, probably derived from weathered edges. 0.05m thick.		
109	Fill	Friable mid brown orange silty clay occasional medium chalk, occasional small-medium charcoal, occasional medium-large stones Main fill of the ditch, 0.53m thick. Contained pottery.	✓	✓



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9157048736 Ref. 2:

Context:	Type:	Description:	Excavated:	Finds Present:
200	Topsoil	Friable mid orange brown clay loam occasional small stones 0.35m thick.	✓	
201	Subsoil	Plastic mid grey brown silty clay occasional small chalk, occasional small st 0.15m thick.	ones	
202	Natural	Plastic mid yellow brown chalky clay frequent small chalk, occasional large stones 0.50m below ground level.		



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9198448685 Ref. 2:

Context:	Type:	Description:	Excavated:	Finds Present:
300	Topsoil	Friable mid pinkish brown silty clay occasional small stones 0.26m thick.	V	
301	Subsoil	Plastic dark orange brown silty clay occasional small chalk Subsoil deposit through colluviual processes.	ed 🗸	
302	Natural	Plastic mid yellow brown chalky clay frequent medium chalk, occasional la chalk, occasional large stones 0.41m below ground level.	rge	



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9194849038 Ref. 2:

Context:	Type:	Description:	Excavated: Fi	nds Present:
400	Topsoil	Friable dark brown black silty clay 0.40m thick.	✓	
401	Subsoil	Plastic light yellow brown silty clay moderate flecks chalk, occasional flecks chalk $0.20m$ thick.	✓	
402	Natural	Plastic mid yellow brown chalky clay frequent medium chalk 0.60m below ground level.		



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9225148513 Ref. 2:

Context:	Type:	Description:	Excavated: Finds Present:
500	Topsoil	Friable mid yellow brown sandy clay moderate small-medium stones $0.30 \mathrm{m}$ thick.	V
501	Subsoil	Friable mid orange brown sandy clay frequent medium chalk, frequent smachalk, moderate medium chalk, moderate small chalk 0.20m thick.	II 🗸
502	Natural	Friable light yellow brown chalky clay frequent medium chalk, moderate so medium stones 0.50m below ground level.	nall-



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: 0.5 m. Max: 0.74 m.

OS Co-ordinates: Ref. 1: SP9159449136 Ref. 2:

Context:	Type:	Description:	Excavated:	Finds Present:
600	Topsoil	Friable mid grey brown silty clay 0.26m thick.	✓	
601	Subsoil	Plastic mid yellow brown silty clay frequent flecks chalk, occasional small sto 0.24m thick.	nes	
602	Natural	Plastic mid yellow brown chalky clay frequent flecks chalk, moderate small chalk 0.50m below ground level.		
603	Ditch	Linear N-S profile: concave base: concave dimensions: min length 9.m, max breadth 0.4m, max depth 0.21m Possible hedgerow ditch.	✓	
604	Fill	Plastic mid red brown silty clay moderate medium chalk, moderate medium stones	✓	
605	Ditch	Linear N-S profile: concave base: concave dimensions: min length 1.6m, max breadth 0.5m, max depth 0.2m Small ditch running almost parallel to ditch 6 Very root disturbed so possibly a ditch associated with a hedgerow.	03.	
606	Fill	Plastic mid orange brown silty clay occasional small chalk, occasional flecks chard Very similar to fill 604.	eoal 🗸	



Max Dimensions: Length: 32.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9233048947 Ref. 2:

Context:	Type:	Description:	Excavated:	Finds Present:
700	Topsoil	Friable mid pinkish brown silty clay occasional medium chalk, occasional schalk $0.46 \mathrm{m}$ thick.	mall 🗸	
701	Natural	Plastic mid yellow brown chalky clay frequent large chalk, frequent mediu chalk, frequent large stones 0.46m below ground level.	n 🗆	



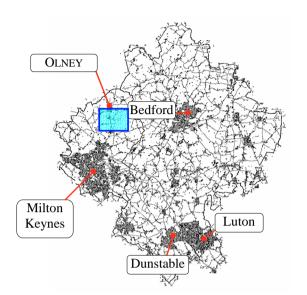
Max Dimensions: Length: 10.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

OS Co-ordinates: Ref. 1: SP9224449072 Ref. 2: SP9223449072

Reason: Evaluate substation location

Context:	Type:	pe: Description:		Excavated: Finds Present:		
1100	Topsoil	Friable mid brown grey clay silt occasional small-medium stones Frequent ro disturbance. 0.45m thick.	ot 🗸			
1101	Subsoil	Firm mid orange brown silty clay occasional medium stones A colluviual deposit, 0.25m thick.	✓			
1102	Natural	Friable mid pinkish brown silty sand frequent small-medium stones A layer o natural clay lying on top of boulder clay. This deposit appeared to have bands running across it of a more reddish clay consistency. After excavation these habeen interpreted as geological phenomena, appearing as stipes due the remova of the top of the deposit by machine. 0.70m below ground level.	s ave			





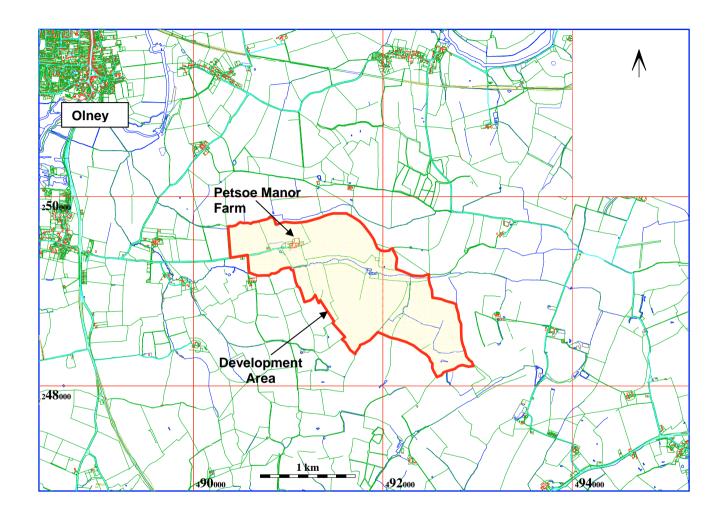


Figure 1: Site location map

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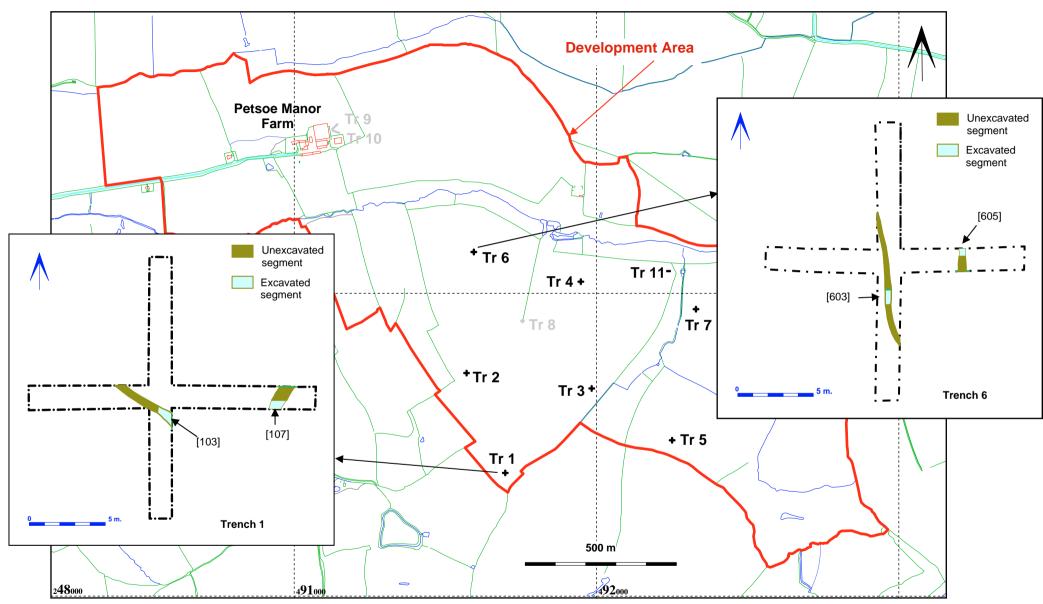


Figure 2: Trench location map and plans of all archaeological features (greyed-out trenches 8-10 were not excavated)

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Plate 1: Trench 6, ditch [605], looking south



Plate 2: Trench 1, ditch [107], looking west





Plate 3: Trench 1, ditch [103], looking north-west