

HERITAGE NETWORK



GAMLINGAY COMMUNITY TURBINE, Gamlingay, Cambridgeshire

HN956

ARCHAEOLOGICAL EVALUATION REPORT

THE HERITAGE NETWORK LTD

Registered with the Institute of Field Archaeologists as an Archaeological Organisation

Archaeological Director: David Hillelson, BA MIFA

GAMLINGAY COMMUNITY TURBINE, Gamlingay, Cambridgeshire

Project ref.: HN956

Event no.: ECB3694

Archaeological Evaluation

Prepared on behalf of Gamlingay Community Turbine Ltd

by

James Snee BSC (HONS) AIFA

Report no. 691

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Contents

	Summary.....	Page i
Section 1	Introduction.....	Page 1
Section 2	Fieldwork	Page 2
Section 3	Discussion	Page 5
Section 4	Bibliography.....	Page 6
Section 5	Illustrations	following Page 7
Appendix	OASIS summary sheet.....	Page 8

The front cover shows the site looking south

Acknowledgements

The fieldwork for this project was carried out by Caoimhin Ó Coileáin and James Snee. The report text and illustrations were prepared by James Snee and edited by David Hillelson.

The Heritage Network would like to express its thanks to: Chris Smith of Gamlingay Community Turbine Ltd; Daniel McConnell & Sally Thompson, Historic Environment Team (HET) of Cambridgeshire County Council, for their co-operation and assistance in the execution of this project.

Summary

Site name and address:	Gamlingay Community Turbine, Castle Farm, Hatley Road, Gamlingay, Cambridgeshire, SG19 3HH		
County:	Cambridgeshire	District:	South Cambridgeshire
Village/town:	Gamlingay	Parish:	Gamlingay
Planning reference:	n/a	NGR:	TL 24920 51040
Client name and address:	Gamlingay Community Turbine Ltd, 70 Church Street, Gamlingay, Sandy, Bedfordshire, SG19 3JJ		
Nature of work:	Wind Turbine	Current land use:	Agricultural
Site Status:	n/a	Reason for investigation:	Direction of LPA (PPS5)
Position in planning process:	Pre-determination	Project brief originator:	Local Authority
Size of affected area:	425m ²	Size of area investigated:	20m ²
Site code:	HN956	Event no:	ECB3694
Organisation:	Heritage Network	Site Director:	David Hillelson
Project type, methods etc...	Field evaluation	Archive recipient:	Cambridgeshire County Archaeological Store
Start of work:	21/11/2011	Finish of work:	21/11/2011
Related HER nos:	n/a	Periods represented:	Post medieval
OASIS UID:	heritage1-113105	Significant finds:	Pottery & Tile
Monument types:	None		
Physical archive:	Pottery, Tile		
Previous summaries/reports:			

Synopsis:

In order to characterise the archaeological potential of the site of a proposed Community Wind Turbine on land south of Castle Farm, Gamlingay, Cambridgeshire, the Heritage Network was commissioned by Gamlingay Community Turbine Ltd to undertake an archaeological field evaluation.

Two trenches were excavated in the footprint of the proposed turbine and its associated hard standing. A single natural deposit was revealed in Trench 2. A small quantity of post-medieval pottery and tile was recovered from the topsoil.

On the basis of these results, the risk that the development might disturb further archaeological remains of may be considered to be *Low* for all periods.

1 Introduction

1.1 This report has been prepared at the request of Gamlingay Community Turbine Ltd as part of the archaeological evaluation of the proposed wind turbine on land south of Castle Farm, Gamlingay, Cambridgeshire.

1.2 On the advice of the Historic Environment Team (HET) of Cambridgeshire County Council, and in line with Department of Communities and Local Government's *Planning Policy Statement 5* (PPS5), further information regarding the impact of the proposals on the historic environment has been requested. The HET has indicated that the investigation should take the form of an evaluation by trial trenching within the proposed development area.

1.3 The development area (totalling approximately 425m²) is located in open fields to the south of Castle Farm, located to the southeast of Gamlingay village and is centred on NGR: TL 24920 51040 (Figures 1 & 2).

1.4 The proposed development is located in a medieval agricultural landscape comprising ridge and furrow (HER: 11400), ditches and enclosures (HER: 05373 & HER: MCB18947). However, investigations close to Station Road, to the northwest of the proposed development (HER 11980) have identified significant remains of prehistoric and Anglo-Saxon date.

1.5 The proposed development entails the construction a rectangular hard standing and a circular base for the erection of a wind turbine.

1.6 The aim of the evaluation has been to consider the location, extent, date, character, condition, significance and quality of any remains that are liable to be threatened by the development, and to provide a local and regional, archaeological and historical context for them, in accordance with the current published regional research agenda (Brown and Glazebrook 2000, Medlycott 2011), should they be discovered. It was considered that the investigation had the potential to contribute to a number of regional research topics, including the character, management and development of the medieval rural landscape and the pattern and development of dispersed rural settlement in the medieval period.

1.7 The present report is intended to provide the planning authority with sufficient data to allow it to consider the archaeological implications of the proposed development, and to determine what further mitigation measures, if any, may be required to allow the development to proceed.

2 Fieldwork

TOPOGRAPHY AND GEOLOGY

2.1 The study area lies to the south of Castle Farm, located on Hatley Road, to the southeast of Gamlingay village. The land slopes down to the northwest and the site lies at a height of approximately 60m AOD (Figure 1).

2.2 The underlying solid geology consists of Gault Formation Mudstone (www.bgs.ac.uk/opengeoscience). This is overlain by mid Pleistocene till (ibid).

2.3 Local soils belong to the Evesham 3 Association (411c) and are described as “*Slowly Permeable calcareous clayey, and fine loamy over clayey soils. Some slowly permeable seasonally waterlogged non-calcareous clayey soils*” (SSEW 1983).

METHODOLOGY

2.4 All fieldwork was carried out in accordance with the approved Project Design, current health and safety legislation, and the appropriate IfA and ALGAO guidance documents.

2.5 The trenches were located by triangulation from survey points provided by the client using fibreglass tape measures. It is noted that the hard standing will be levelled on the slope by cut and fill so only the southern half will be affected by intrusive groundworks, so trench 1 was located in the area of greatest impact. The trenches were opened using a wheeled machine fitted with a 1.6m wide toothless ditching bucket. Spoil from the machining was inspected for archaeological artefacts and a metal detector was used to scan the spoil heaps for ferrous finds. The trenches were machined to the first significant archaeological horizon, and a sondage was machined in the southeast corner of Trench 1 to investigate the alluvial stratigraphy of the site. In addition, a sample of the topsoil at each end of each trench was sieved for finds and the area was visually scanned for further finds.

2.6 The trenches were cleaned by hand, and all potential archaeological features and deposits were sampled to ascertain their nature, depth, date, and quality of preservation.

2.7 All identified contexts were photographed and recorded using the appropriate pro-forma. Scaled plans and sections were drawn on drafting film at scales of 1:10 and 1:50.

RESULTS

2.8 Two evaluation trenches were excavated across the footprint of the proposed development (Figure 2, Plate 2). Each trench measured approximately 5.0m long by 2.0m wide, providing a total coverage of 20m², representing a sample of approximately 5% of the 425m² development area.

Trench 1:

Length (m):	4.82	Width (m):	2.52		Maximum Depth (m):	0.79	Orientation	NW-SE	
Level at NW End of Trench (mOD)			Top	60.63	Level at SE End of Trench (mOD)			Top	60.83
			Base	59.90				Base	60.04
Context	Type	Description	Dimensions (m)						
			Length	Width	Depth				
Topsoil	Deposit	7.5YR 4/2 Brown silty clay.	4.82			2.52		0.48	
Subsoil	Deposit	10YR 8/6 Brownish yellow firm clay.	4.82			2.52		0.14	
Natural	Deposit	Gley 1 8/1 Light greenish grey clay with occasional chalk inclusions.	4.82			2.52		> 0.17	

2.9 The excavation of Trench 1 revealed natural clay till, overlain by a thin band of subsoil and plough soil. A modern land drain was observed traversing the trench, but no archaeological features or deposits were revealed and no finds were recovered from the topsoil.

Trench 2:

Length (m):	5.28	Width (m):	2.32		Maximum Depth (m):	0.83	Orientation	E-S	
Level at NW End of Trench (mOD)			Top	60.63	Level at SE End of Trench (mOD)			Top	60.83
			Base	59.90				Base	60.04
Context	Type	Description	Dimensions (m)			Length	Width	Depth	
Topsoil	Deposit	7.5YR 4/2 Brown silty clay.				5.28	2.32	0.30	
Subsoil	Deposit	10YR 8/6 Brownish yellow firm clay.				5.28	2.32	0.15	
Natural	Deposit	Gley 1 8/1 Light greenish grey clay with occasional chalk flecks.				5.28	2.32	> 0.38	
100	Deposit	2.5 Y 7/3 Pale yellow firm clay with common chalk inclusions.				1.37	0.92	0.17	

2.10 The excavation of Trench 2 revealed natural clay till, overlain by a thin band of subsoil and plough soil. A single irregular deposit (100) was revealed in the southwest corner of the trench, but no finds were recovered from it and it is believed to be of natural origin. Sieving samples of the topsoil produced a small quantity of pottery and tile dated to the post-medieval period. This probably represents a manuring scatter.

FINDS ASSESSMENT**Finds Concordance**

Context	Pottery		Tile		Date
	No	Wt	No	Wt	
Tr 2 topsoil	1	15	4	35	Post-med

Pottery

2.11 A single abraded rim sherd, weighing 15g was recovered from the topsoil around Trench 2. It was of brown-glazed red ware, and dated to the 18th/19th centuries, placing it in the later post-medieval period.

Recommendations

2.12 No further significant data is likely to be obtained from this material. On this basis, no further work is proposed on this small assemblage.

Tile

2.13 Four broken tile pieces, weighing 35g, were recovered from topsoil around Trench 2. All were badly abraded and identified as fragments of peg tile dating to the post-medieval period.

Recommendations

2.14 No further work is proposed on this small assemblage.

3 Discussion

Archaeological Background

3.1 Gamlingay is located in a historic landscape of considerable diversity, with recorded remains dating from the Mesolithic, and Anglo-Saxon periods (HER 11980). However, the site of the present development is approximately 1km outside the village and approximately 800m southeast of the main concentrations of prehistoric and later remains

3.2 The area around the location of the proposed wind turbine is dominated by medieval agricultural features including ridge and furrow (HER 11400), ditches and enclosures (HER 05373 & HER MCB18947). These features have largely been identified from aerial photographs.

Research Design

3.3 The aim of the evaluation has been to consider the location, extent, date, character, condition, significance and quality of any remains that are liable to be threatened by the development, and to provide a local and regional, archaeological and historical context for them, in accordance with the current published regional research agenda (Glazebrook 1997; Brown and Glazebrook 2000; Medleycott 2011), should they be discovered. It is considered that this investigation has the potential to contribute to an understanding of:

- The character, management and development of the medieval rural landscape (Medleycott 2011, p 70);
- the pattern and development of dispersed rural settlement in the medieval period (Medleycott 2011, p 70);

Discussion

3.4 The evaluation of the site has revealed a single deposit of probably natural origin and a small quantity of post-medieval pottery and tile that probably derives from a manuring scatter.

Conclusions

3.5 The proposed Gamlingay Community Turbine lies in a known historic landscape and it was considered that an investigation of the site could contribute to an understanding of the character, management and development of the medieval rural landscape and the pattern and development of dispersed rural settlement in the medieval period.

3.6 The evaluation revealed no dated archaeological features or deposits. A small quantity of post-medieval pottery and tile was recovered from the topsoil around Trench 2.

3.7 On the basis of these results, the risk that the development might disturb further archaeological remains of is considered to be *Low* for all periods.

Confidence Rating

3.8 The archaeological trial trenching revealed the sequence of natural till, subsoil and plough soil. In addition the weather was mild and the light good. On this basis, the confidence rating for the work may be considered to be *High*.

4 Bibliography

British Geological Survey 1981 Sheet 188 “Cambridge” Solid and Drift edition (1:50,000)

Brown, N. & Glazebrook, J. 2000 *Research and Archaeology: a framework for the eastern counties, 2. Research agenda and strategy*. East Anglian Archaeology

Dept. of Communities and Local Government 2010 *Planning Policy Statement 5: Planning for the Historic Environment*. (TSO)

Dobney *et al.* 1995 *Environmental Archaeology and Archaeological Evaluations: recommendations concerning the environmental component of archaeological evaluations in England*. Working Papers of the Association for Environmental Archaeology, Number 2

English Heritage 2002 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. (HBMC)

English Heritage 2006 *Management of Field Projects in the Historic Environment: The MoRPHE Project Managers' Guide*. (HBMC)

English Heritage 2010 *Historic Environment Planning Practice Guide*. (HBMC)

Gurney, D. *et al.* 2003 *Standards for Field Archaeology in the East of England*. ALGAO (EER)

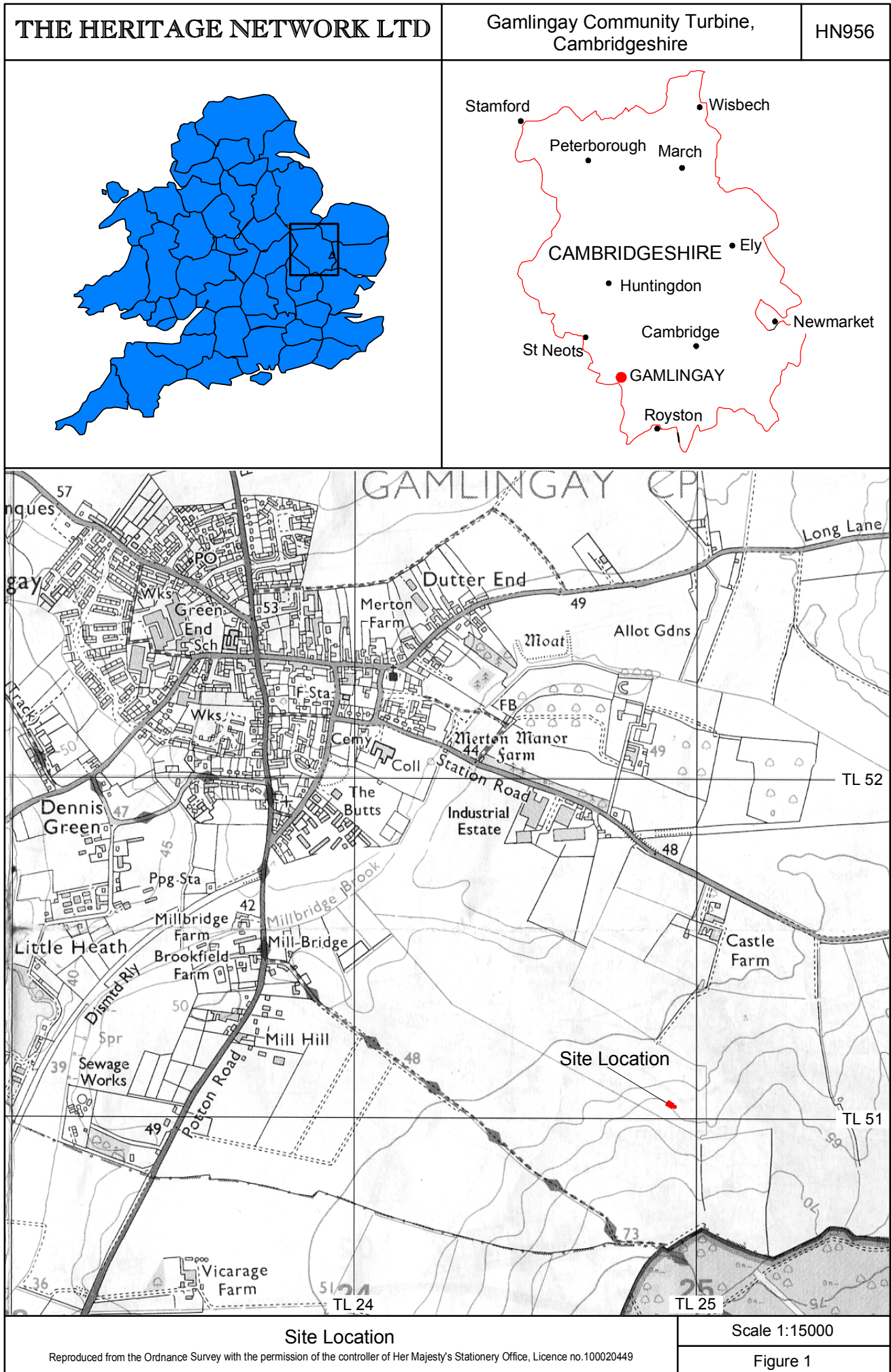
Institute for Archaeologists 2008 *Standards and Guidance for Field Evaluation*.

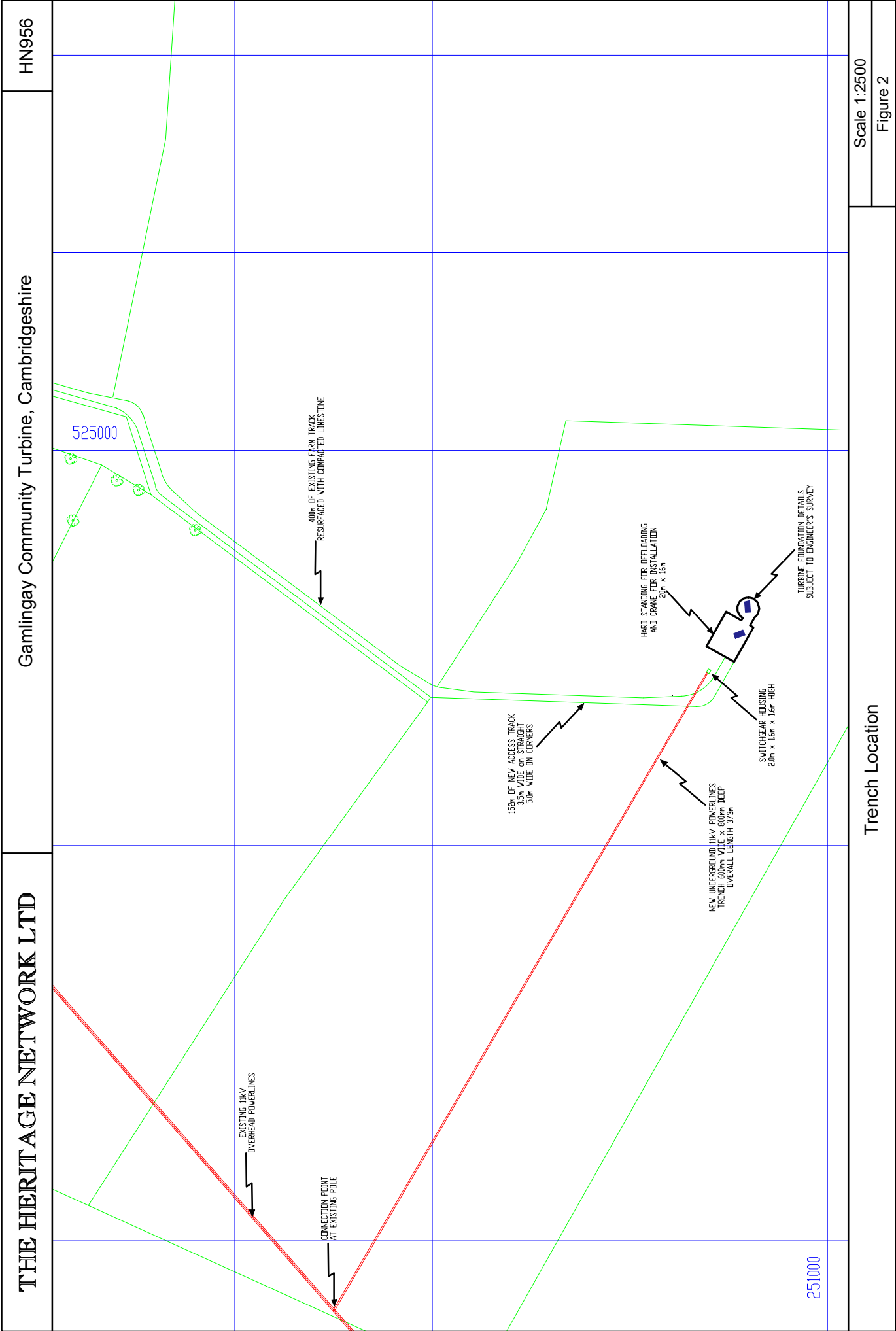
Medlycott, M. 2011 *Research and Archaeology Revisited: a revised framework for the East of England*. EAA OP24.

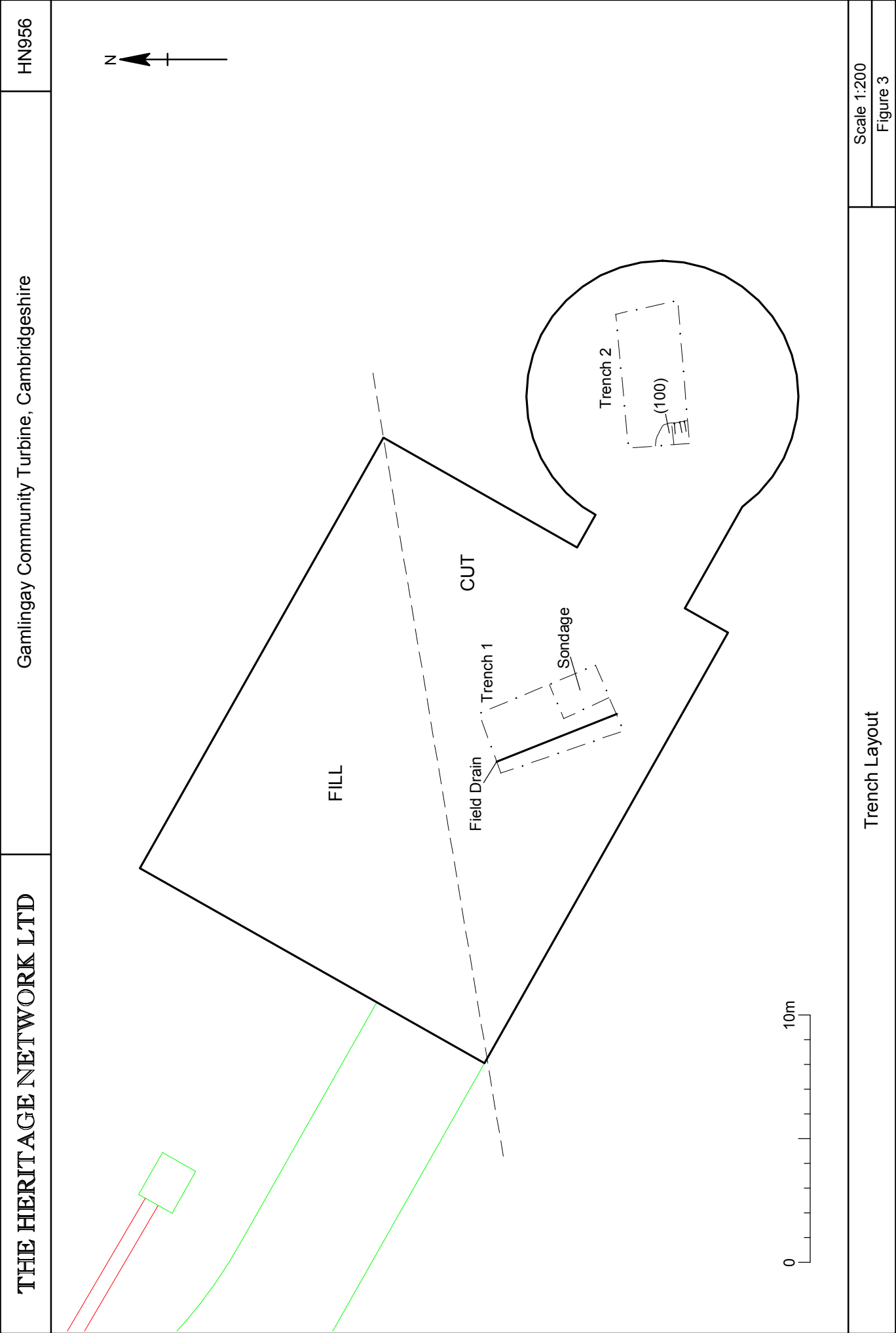
Soil Survey of England and Wales (SSEW) 1983:1:250,000 *Soil Map of England & Wales, Sheet 4, Eastern England*. SSEW

5 Illustrations

Figure 1	Site location
Figure 2	Trench location
Figure 3	Trench Layout
Plate 1	Trench 1, looking southeast
Plate 2	Trench 2, looking east
Plate 3	Sondage in Trench 1
Plate 4	Trench 2, natural deposit (100)







Trench Layout	
Scale 1:200	Figure 3



Plate 1: Trench 1, looking southeast.



Plate 2: Trench 2, looking east.



Plate 3: Sondage in Trench 1.



Plate 4: Trench 2, natural deposit (100).

Appendix

Oasis Summary Sheet

OASIS ID: heritage1-113105	
Project details	
Project name	Gamlingay Community Turbine Ltd, Castle Farm
Short description of the project	<p>In order to characterise the archaeological potential of the site of a proposed Community Wind Turbine on land south of Castle Farm, Gamlingay, Cambridgeshire, the Heritage Network was commissioned by Gamlingay Community Turbine Ltd to undertake an archaeological field evaluation.</p> <p>Two trenches were excavated in the footprint of the proposed turbine and its associated hard standing. A single natural deposit was revealed in Trench 2. A small quantity of post-medieval pottery and tile was recovered from the topsoil.</p> <p>On the basis of these results, the risk that the development might disturb further archaeological remains of may be considered to be <i>Low</i> for all periods.</p>
Project dates	Start: 21-11-2011 End: 21-11-2011
Previous/future work	No / Not known
Any associated project reference codes	ECB3694 - HER event no.
Any associated project reference codes	HN956 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	NONE None
Significant Finds	NONE None
Methods	'Sample Trenches'
Development type	Wind farm developments
Prompt	Direction from Local Planning Authority - PPS
Position in the planning process	Pre-application
Project location	
Country	England
Site location	CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE GAMLINGAY Gamlingay Community Turbine, Castle Farm
Postcode	SG19 3HH
Study area	425.00 Square metres
Site coordinates	TL 24920 51040 52.1430849133 -0.174271127817 52 08 35 N 000 10 27 W Point
Height OD / Depth	Min: 60.00m Max: 60.00m
Project creators	
Organisation	Heritage Network
Project brief author	N/A
Project design author	Heritage Network

Project director	David Hillelson
Project supervisor	James Snee
Funding body	Development Corporation
Project archives	
Physical Archive?	None
Digital Archive recipient	Cambridgeshire County Archaeological Store
Digital Media ?	'Images raster / digital photography','Text'
Paper Archive recipient	Cambridgeshire County Archaeological Store
Paper Media?	'Context sheet','Diary','Photograph','Report','Survey '
Project bibliography	
Publication type	Grey literature (unpublished document/manuscript)
Title	GAMLINGAY COMMUNITY TURBINE, Cambridgeshire
Author(s)/Editor(s)	Snee, J.
Other bibliographic details	Heritage Network Report no. 691
Date	2011
Issuer or publisher	The Heritage Network Ltd
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