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ARCHAEOLOGICAL WATCHING BRIEF AT SPENCER FARM, HIGH LANE, CROFT, LINCOLNSHIRE

(CRSF 07)

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ARCHAEOLOGICAL
PROJECT
SERVICES

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ARCHAEOLOGICAL WATCHING BRIEF AT SPENCER FARM, HIGH LANE, CROFT, LINCOLNSHIRE

(CRSF 07)

Work Undertaken For
CgMs Consulting

Novemberr 2007

Report Compiled by
Rachael Hall BA(Hons) MIFA

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ARCHAEOLOGICAL PROJECT SERVICES

APS Report No. **136/07**

Quality Control

Watching Brief at
Spencer Farm
High Lane
Croft
Lincolnshire
(CRSF07)

Project Coordinator	Gary Taylor
Supervisor	Rachael Hall
Illustration	Rachael Hall
Photographic Reproduction	Sue Unsworth
Post-excavation Analyst	Rachael Hall

Checked by Project Manager	Approved by Senior Archaeologist
Gary Taylor	Tom Lane
Date: 30/11/07	Date: 30/11/07

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1. SUMMARY

A watching brief was undertaken during groundworks at Spencer Farm, High Lane, Croft, Lincolnshire. The watching brief monitored the excavation of service and foundation trenches for two new wind turbines

A sequence of naturally derived alluvial clays and silty clays were apparent throughout the excavated cable trenches, sub-station and Turbine Pads. Three undated ditches and a pond were identified during the machine excavation of the Turbine Pads. The pond may be medieval, though contained a piece of modern tile, thought to be intrusive. Two of the ditches appear to be related, forming part of a rectangular enclosed area, and were earlier than the pond.

A small mixed assemblage of finds dating between the 12th-20th centuries was retrieved during the archaeological monitoring.

2. INTRODUCTION

2.1 Definition of a Watching Brief

An archaeological watching brief is defined as *"a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed."* (IFA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by CgMs Consulting to undertake an archaeological watching brief during groundworks associated with a new wind turbine development at Spencer Farm, High Lane, Croft, Lincolnshire. The watching brief was carried out between the 31st May and 1st November 2007 in accordance with a brief prepared by CgMs Consulting (Appendix 1).

2.3 Topography and Geology

Croft End lies roughly half way between Burgh le Marsh to the north and Croft village to the south, approximately 6km west of Skegness and 52km east of Lincoln, in the administrative district of East Lindsey, Lincolnshire (Fig. 1). The development site is located 300m west of Spencer Farm, off High Lane, centred on National Grid Reference TF 495 631 at *c*.3m OD.

Local soils are of the Wallasea 2 Association, pelo-alluvial gleys overlying reclaimed marine alluvium (Hodge *et al.* 1984, 338).

Surface geology comprises glacially derived till with younger marine alluvium across the western part of the site, which in turn seals a solid geology of Cretaceous Claxby Ironstone, Tealby and Roach Formations (BGS 1996).

2.4 Archaeological Setting

Croft is located in an area of known archaeological remains dating from the prehistoric period to the present day. A flint scraper and an undated inhumation were found immediately west of the site in 1954.

Remains of Iron Age and Roman salt production have been found in the general area. Previous archaeological investigations at the site revealed no archaeological remains other than a recent pit (Hambly 2000)

Croft is first mentioned in the Domesday Survey of *c*. 1086. Referred to as *Croft* the name is derived from the Old English and means 'a small enclosed field' (Cameron 1998, 35). At the time of Domesday the

land was held by Gilbert de Gand and contained a salt-pan and 120 acres of meadow (Foster and Longley 1976). In the subsequent Lindsey Survey of *c.* 1115, the land was held by Gilbert's heir, Roger (*ibid.*).

The only extant remains of the medieval period is the parish church of All Saints which dates from the 14th and 15th centuries (Pevsner and Harris 1989, 237).

3. AIMS

The aim of the archaeological investigation was to ensure that any archaeological features exposed during the groundworks should be recorded and, if present, to determine their date, function and origin.

4. METHODS

All groundworks associated with the erection of two wind turbines were archaeologically monitored. This comprised the stripping of two 1000m² areas for turbine pads and associated cable trenching, the stripping of access roads and a compound. The monitoring of the road strip was terminated by the East Lindsey Historic Environment Officer at an early stage as the groundworks were limited. Each deposit encountered during the monitoring was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 2. A photographic record was compiled and sections were drawn at a scale of 1:10 and 1:20. Recording was undertaken according to standard Archaeological Project Services practice.

Following excavation finds were examined and a period date assigned where possible (Appendix 3). The records were also checked and a stratigraphic matrix produced. Phasing was assigned based on the nature of the deposits and recognisable relationships between them and supplemented by artefact dating.

5. RESULTS

The archaeological deposits and features are discussed by location below.

Archaeological contexts are listed below and described. The numbers in brackets are the context numbers assigned in the field.

Cable Junction Pit/Sub-station (Section1, Figure 5)
A natural sequence of alluvially-derived deposits comprising reddish brown and bluish grey silty clays (005), (004), (003) and (002) sealed by topsoil layer (001) was recorded in the cable junction pit located at the southernmost end of the cable trench.

Inspection Pit for Turbine 1 (Section 2-4,Figure 5)
Prior to the excavation of Turbine Pad 1, an inspection pit to test ground conditions was excavated within the footprint of the proposed pad.

The earliest deposit recorded within the Inspection Pit was the natural gravel layer (018) above which were alluvial layers (017) and (016). These were truncated by the northwest-southeast aligned modern ditch/pit [015], measuring 1.60m wide by 1.06m deep. Primary fill (014), greyish brown silty clay was present in the base of the cut. This was sealed by organic fill (013) which contained a sherd of modern tile, and silty sand (015). A 0.28m thick, mid-greyish brown silty clay subsoil overlay the feature that was in turn sealed by topsoil layer (010). (Further investigations in the vicinity, Turbine Pad 1, indicated that the former feature was a Pond).

Track
No archaeological deposits were exposed during the stripping of the track. Pottery dating from the 17th-18th century, along with modern tile and glass, slag, and daub were retrieved from the topsoil (007) during the excavation of the track (Appendix 3).

Turbine Pad 1 (Figures 3 and 6)
At the base of Turbine 1 at 1.25m beneath the current ground surface was natural sand (034).

Extending eastwards from the western baulk of Turbine 1 was [037]. This short (6.75m) segment of ditch, narrows and terminates within the turbine pad. Light greenish grey silty clay (036) fills the feature which was cut into natural.

Truncating [037] and cutting northeast-southwest across the northwestern corner of Turbine Pad 1 pond [033]=[015] (as recorded within the inspection pit). This feature was over 7.30m wide and in excess of 11m long. The base of the ditch was filled by grey clay (032) which was overlain by silt and peat (031) that contained cattle bone and a single sherd of late 12th to 14th century Ely-type ware. During previous monitoring (excavation of the Inspection Pit, see above) modern material was retrieved from the feature.

Extending northwestwards from the southern limits of the Turbine Pad was the 0.70m wide linear [039]. This ditch was filled by (038), reddish brown sand. The northern end of this was about 1m from the eastern terminus of ditch [037].

Extending across the trench and sealing the former features was a 0.58m thick layer of silty clay subsoil.

Turbine Pad 2 (Figures 4 and 7)
A natural sequence of deposits extended across Turbine Pad 2. The earliest of these deposits was (028) and (027), reddish brown silty clay and chalk interpreted as possible moraine material. The former was sealed by a sequence of alluvial deposits (029), (026), (025), (022) and (021). In part these deposits were sealed by 0.34m thick subsoil layer (020).

Truncating the subsoil (020), northwest to southeast in the eastern half of Turbine Pad 2 was [024], a 2.70m wide, steep-sided ditch with a rounded base. Backfilling the ditch was (023), mixed yellowish brown and light grey silty clay. Sealing the ditch was 0.20m thick topsoil layer (019). The ditch remains undated.

Cable Trench (Figure 8)
No archaeological deposits were encountered during the excavation of the cable trench from the Sub-Station to the Turbines.

Natural deposits of clay (042), (046) and (045) were recorded in the base of the cable trenches in sections 10 and 11. In section 11 this was sealed by 0.15m thick subsoil layer (044).

Natural sand (050) was recorded in the base of the cable trench leading to Turbine 2 (Section 12). This was overlain by alluvial deposits of clayey silt and clay (049) and (048) respectively.

A sequence of dumped deposits (041) and (040) associated with the construction of the lake and adjacent works were recorded in the northwest-southeast section of the cable trench.

Sealing all the deposits was topsoil layer (043) and (047).

6. DISCUSSION

Limited archaeological features and deposits were encountered during the groundworks undertaken at Croft during the construction of a two turbine wind farm.

A natural sequence of deposits, not unexpected of the region was identified within the excavated cable trenches, sub-station, and turbine pads. The earliest deposit appears to be glacially deposited moraine (clay and chalk), which is sealed by a sequence of alluvially-derived clays and clayey silts.

Truncating the natural sequence of alluvial deposits within Turbine Pad 2 were undated ditches [039] and [037]. It is possible that the two ditches may be contemporary and form part of a larger feature, such as a field system or enclosure, with the ditches forming a right-angled arrangement with a possible entrance in the northeastern corner where both features terminate.

Truncating the east-west ditch [037] was [033], a substantial cut across the northwestern corner of Turbine 1. Although, only partially exposed within Turbine Pad 1, the 7.30m+ wide by 11m long feature is likely to represent an earlier pond with its lower fills comprising organic material. The feature was sealed by a subsoil layer which was overlain by topsoil.

Pieces of modern tile and medieval pottery were recovered from the organic, peaty fills (013) and (031) of this feature.While the modern tile would generally be taken as providing the date for the infilling of the feature, there are grounds for considering this incorrect, and the artefacts to be intrusive. These reasons include the fact that the feature contained a peaty deposit, and peat is not quickly formed, as it develops from the growth of vegetation in waterlogged conditions. Thus, the peaty fill of the feature is unlikely to be a recent formation (too little time has lapsed for the development of the deposit). Moreover, the back-filled feature was overlain by the subsoil. This subsoil is likely to have been formed by arable agricultural activities at the site and suggests a period of ploughing. Consequently it seems likely that the medieval pottery fragment recovered from the feature is more likely to provide a reliable date than the modern tile.

This postulated medieval date has implications for ditch [037], cut by the pond-like feature, and probably related ditch [039]. These two ditches must therefore be medieval or earlier, and may form part of an earlier Field System.

A further undated ditch [024] was exposed cutting northwest to southeast through the eastern half of Turbine Pad 2. It is possible that the feature represents a previous field boundary.

A small assemblage of artefacts including a sherd of late 17th-18th century pottery, modern drain, glass and slag (Appendix 2) was recovered during the topsoil stripping of the access road. Such an assemblage is likely to represent manuring scatter, with refuse added to manure and spread as fertilizer suggesting agricultural use of the area.

7. CONCLUSION

An archaeological watching brief was undertaken at Spencer Farm, Croft, as the site lay in an area of known Romano-British remains.

A limited quantity of archaeological remains was exposed during the groundwork associated with the construction of two wind turbines.

A sequence of naturally derived alluvial clays and silty clays was apparent throughout the excavated cable trenches, sub-station and Turbine Pads. Three undated ditches and a pond were identified during the machine excavation of the Turbine Pads. The pond maybe medieval, and two of the ditches are likely to be earlier.

A small mixed assemblage of finds dating between the 12th-20th centuries was retrieved during the archaeological monitoring.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Mr M Dawson of CgMs Consulting for commissioning the fieldwork and post-excavation analysis. UCS Civils Limited allowed access to the site. The work was coordinated by Gary Taylor who edited this report along with Tom Lane. Dave Start kindly allowed access to the parish files and library maintained by Heritage Lincolnshire.

9. PERSONNEL

Project Coordinator: Gary Taylor
Site Supervisors: Tom Bradley-Lovekin, Robert Garlant, Vicky Mellor and Jim Robertson
Photographic reproduction: Sue Unsworth
Illustration: Rachael Hall
Post-excavation analysis: Rachael Hall

10. BIBLIOGRAPHY

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Pevsner, N. and Harris, J., 1989, *Lincolnshire*, The Buildings of England (2nd edition, revised Antram, N.)

11. ABBREVIATIONS

APS Archaeological Project Services

BGS British Geological Survey

IFA Institute of Field Archaeologists

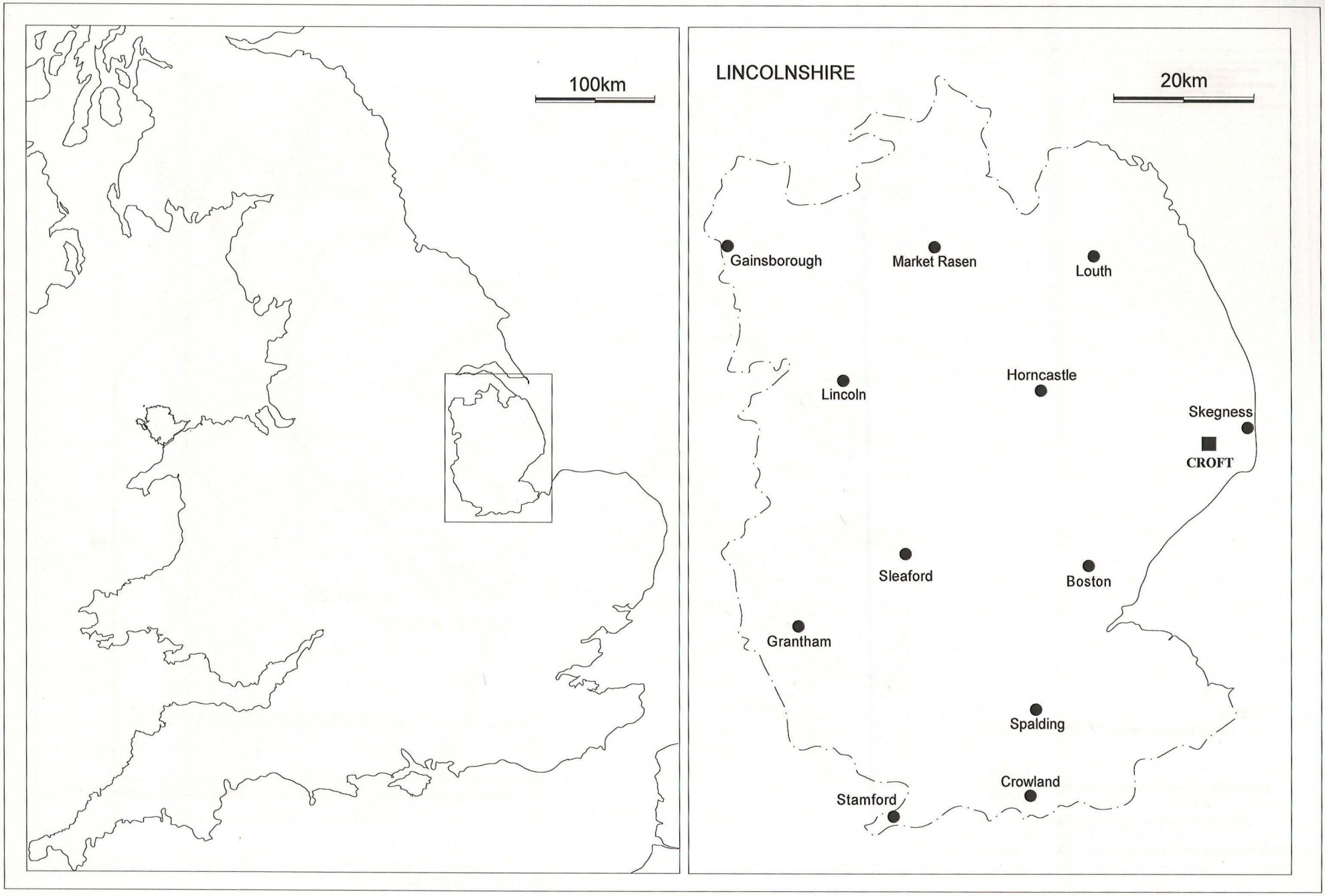


Figure 1 - General location plan

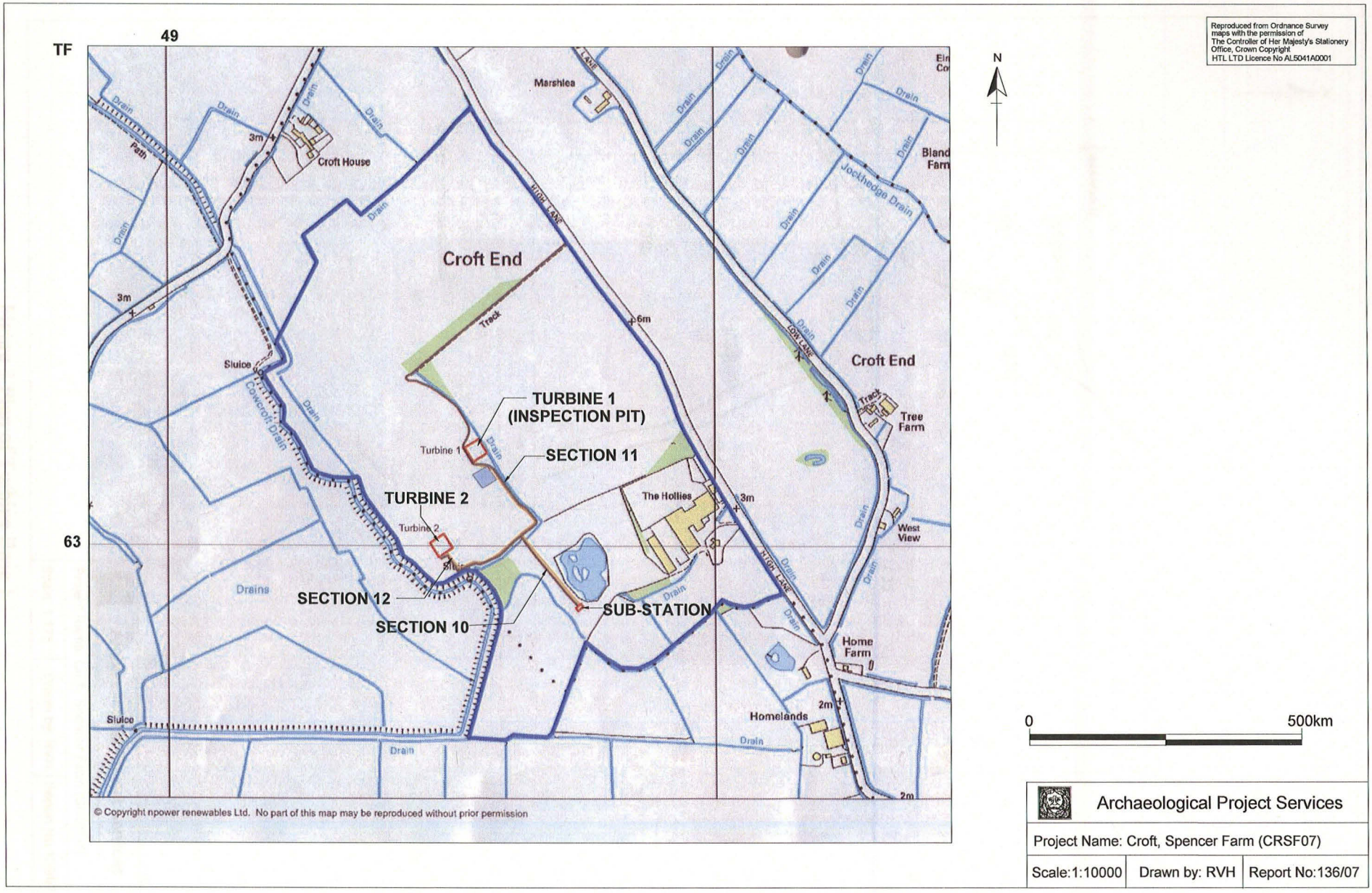
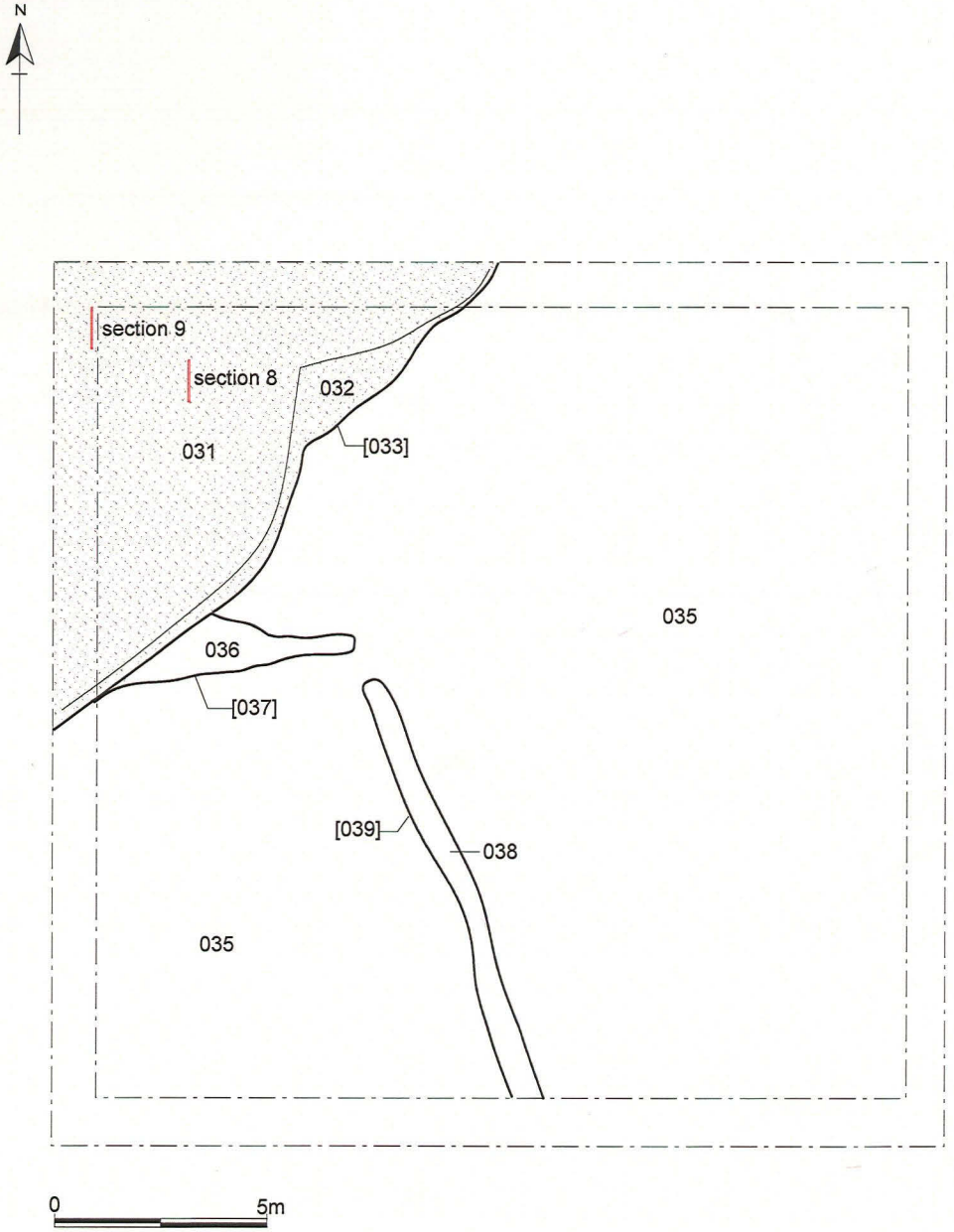


Figure 2 Site Location Plan



Archaeological Project Services		
Project Name: Croft, Spencer Farm (CRSF07)		
Scale: 1:175	Drawn by: RVH	Report No:136/07

Figure 3 Plan of Turbine Base 1

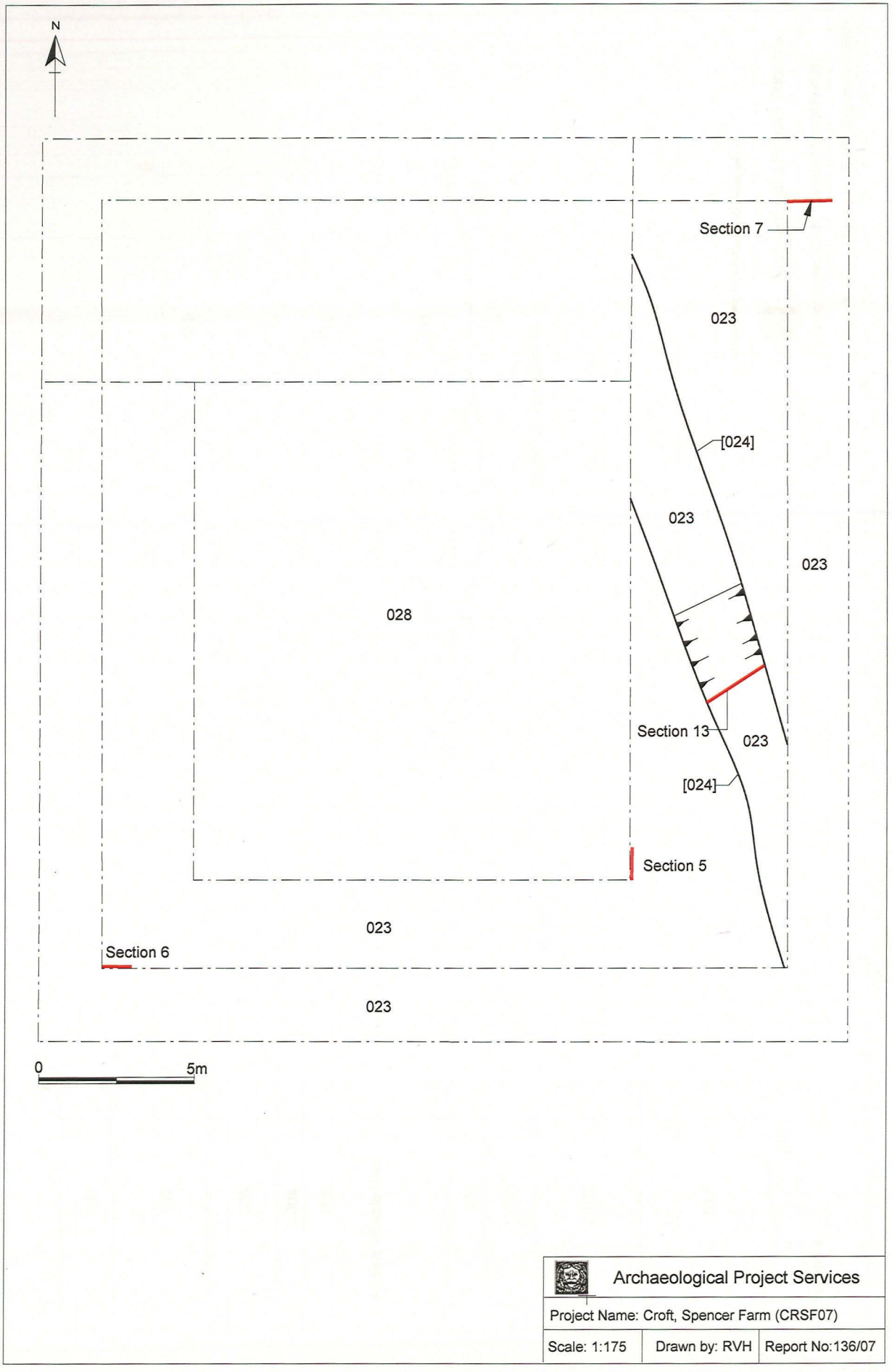


Figure 4 Plan of Turbine Base 2

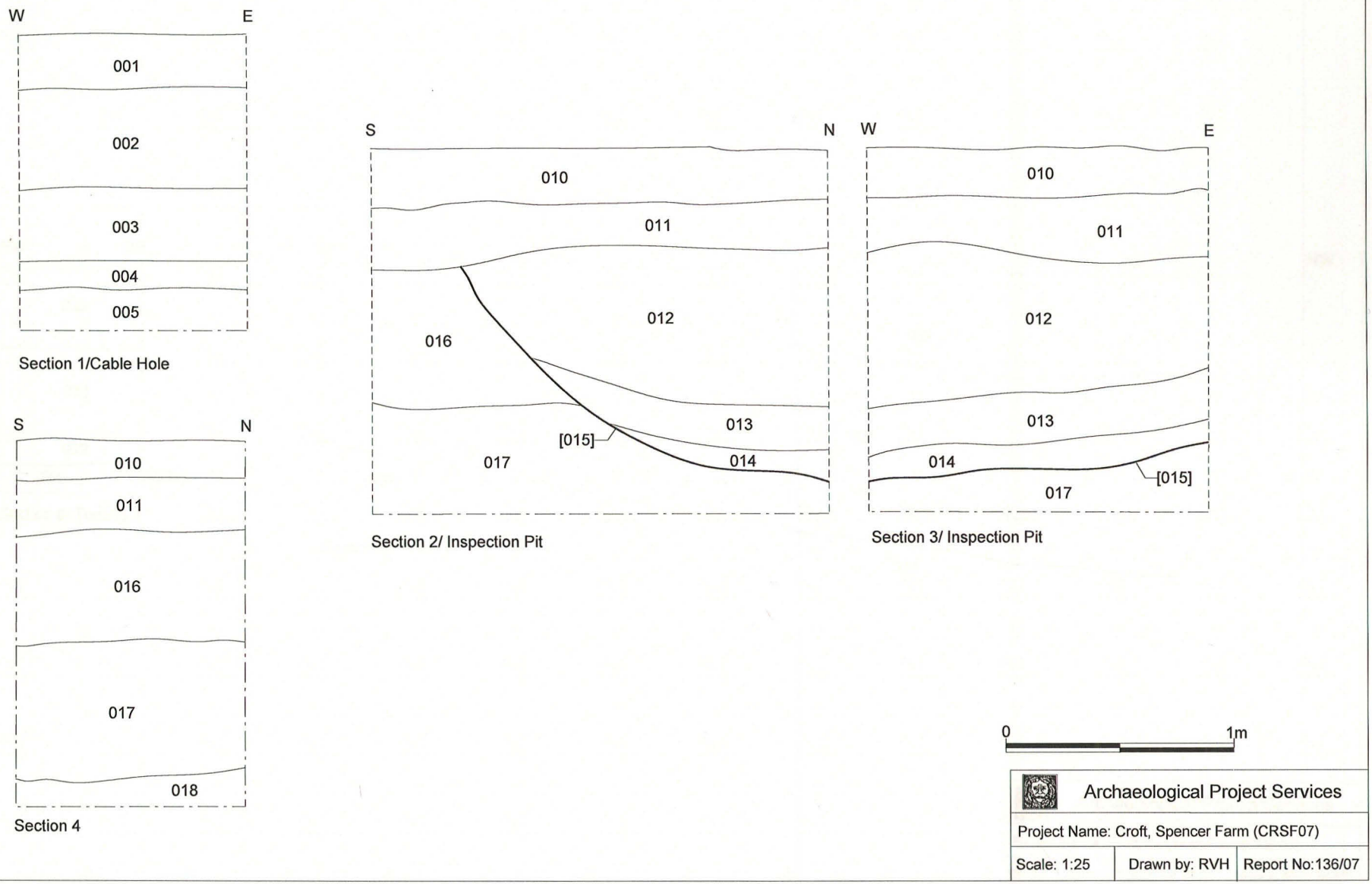
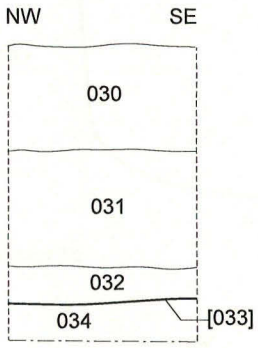
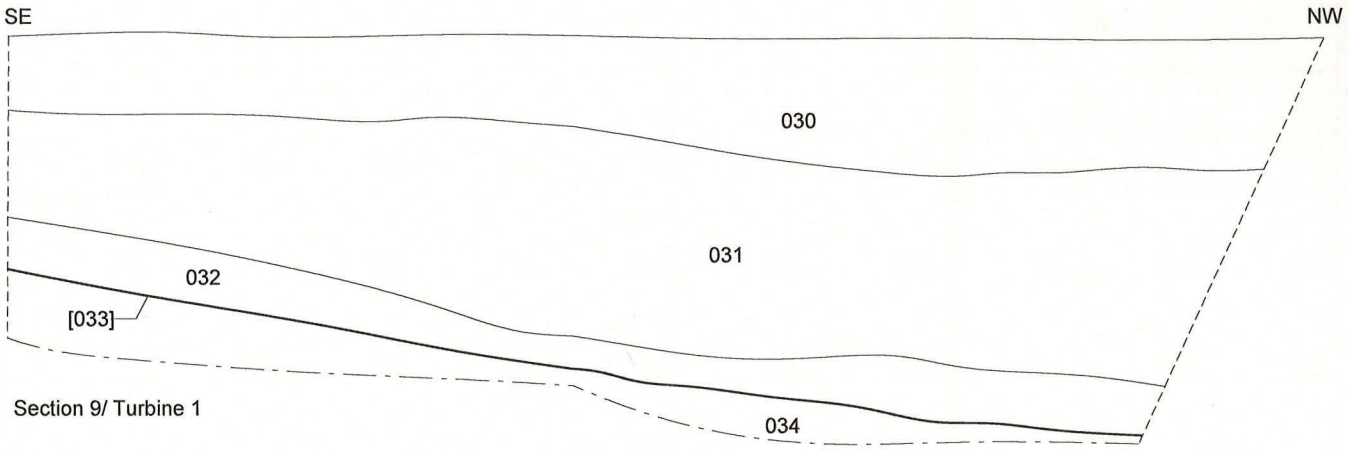


Figure 5 Sections 1-4 (Cable hole and Inspection Pit)



Section 8/ Turbine 1



Section 9/ Turbine 1

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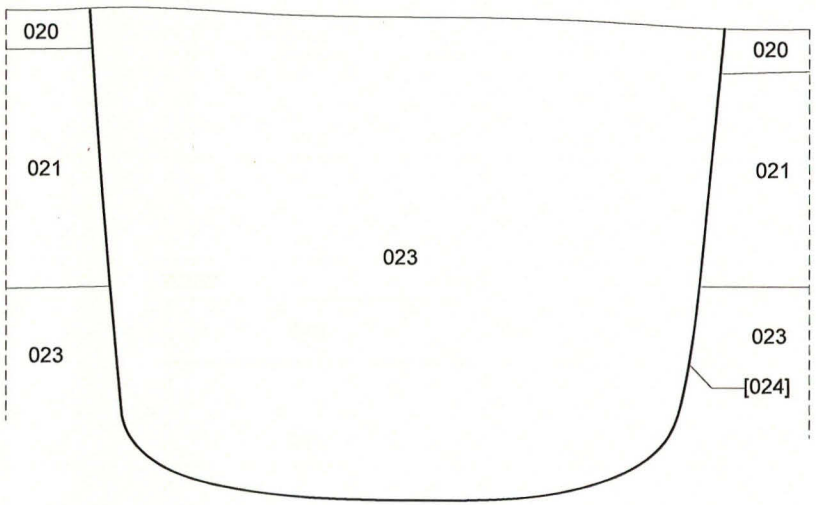
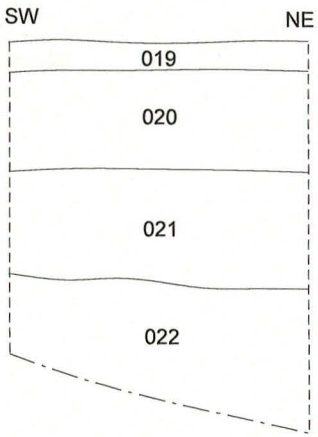
Figure 6 Sections 8-9 (Turbine 1)



Section 13



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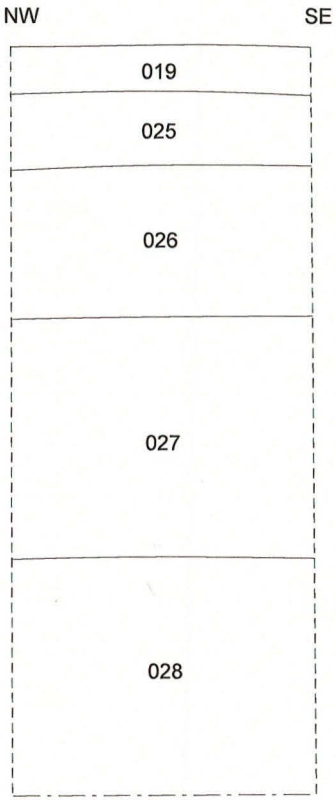

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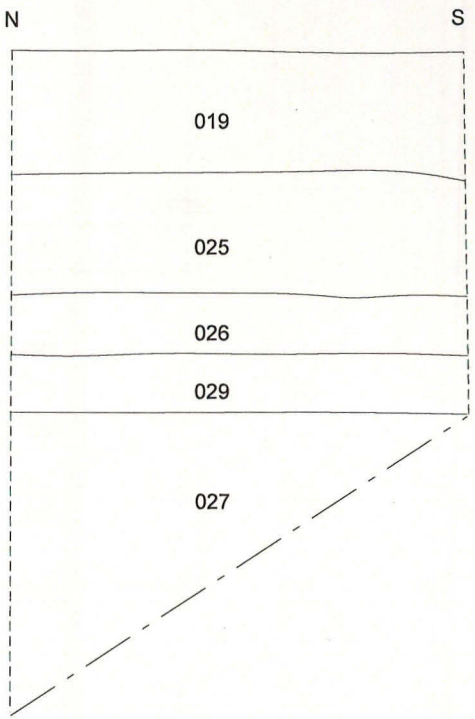

Section 7/ Turbine 2

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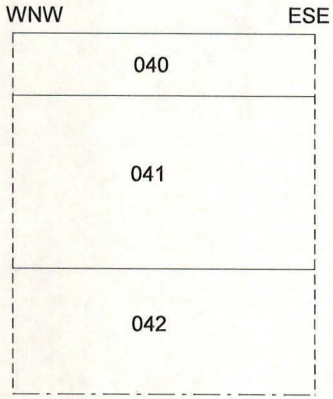
Figure 7 Sections 5-7 (Turbine 2)



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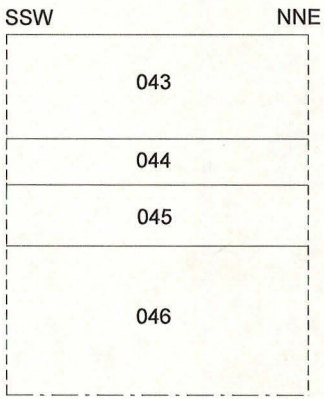
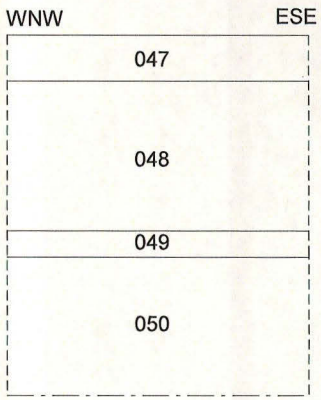


Section 11



Section 12

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Figure 8 Sections 10-12/Cable Trench

Plate 1 Topsoil stripping of track, looking southeast

Plate 2
Cable Hole, Representative Section 1, looking north

Plate 3 Inspection Pit 1, Ditch [015], looking northwest

Plate 4 Turbine 1, Pond [033], looking west

Plate 5 General view of Cable Trench, looking northwest

Plate 6 Cable Trench to Turbine 2, Representive Section 12, looking south-southwest

Appendix 1

Project Design for an Archaeological Watching Brief - land at Spencer Farm, Croft, Lincolnshire.

By Michael Dawson

1 INTRODUCTION

1.1 Consent to build a new wind farm cluster at The Hollies (Spencer Farm), Croft Skegness, Lincs was granted at appeal in June 2005 (App/D2510/A/04/1155199).

1.2 The consent requires a programme of archaeological works to be carried out in accordance with a written scheme of investigation, which has been submitted by the applicant and approved pursuant to this condition (Condition 17).

1.3 This Project Design provides the basis on which an archaeological contractor will carry out an initial watching brief followed by any subsequent recording under the management of Michael Dawson, of CgMs Consulting. This proposal for archaeological investigation is based on discussions with Ms Beryl Lott of Lincolnshire County Council and is based on similar watching brief specifications for sites investigated recently at Wygate Park in Spalding where extensive remains of Roman period salterns have been revealed.

1.4 This Project Design conforms to IFA *Standard and Guidance for an Archaeological Watching Brief (revised 1999) and for Archaeological Excavation (revised 1999).*

1.5 Any variations to the project will be agreed with the Archaeological Planning Officer before a revised programme of work is implemented.

2 BACKGROUND

2.1 The site is not known to contain any specific archaeological remains and although the potential for archaeology has been assessed (Thomas 2001) this has been considered to be low. The site is presently arable land under cultivation in an area of archaeological potential which includes both Roman and medieval activity. The watching brief is intended to ensure that should any archaeology be threatened by development it will be appropriately recorded. The greatest potential at the site is thought to be from the Roman and medieval periods although archaeology of all periods will be investigated.

2.3 The area of the development in Croft has not seen significant archaeological activity and whilst the area of the Lincolnshire Marsh is known for its Roman and prehistoric remains generally the land-surface probably reflects post Roman marine silting which has resulted

in a blanket cover of silts masking earlier deposits. The potential for survival of deeply buried deposits will be a significant consideration of the watching brief.

2.4 The development will entail the construction of 2 turbines, each requiring ground works of up to a maximum 1000m sq (likely to be significantly less but cannot confirm until foundation design completed). The turbine will have associated crane areas with two pads of 15m x15m and 12m x 10m area which will be constructed and new access routes over the site will require topsoil stripping, 5m in width to *c.* 0.3m in depth and the laying of a protective geotextile membrane. Cable trenching is also envisaged, as is the construction of a compound area of 30m sq.

2.5 The following development activities have the potential to impact on the archaeological resource of the site and will be covered by the watching-brief:

- Topsoil stripping for compound area
- Topsoil stripping along the route of the access road/routes 8m wide
- Excavation of areas for turbine bases
- Topsoil stripping for crane areas
- Excavation of trenches for cabling
- Groundworks required for the construction of a new substation

3 OBJECTIVES

3.1 The purpose of the archaeological investigation is to determine and understand the nature, function, character and date of any archaeological evidence at the site in its environmental and cultural setting.

3.2 This site has the potential to provide further information from the Prehistoric period onwards, but in particular the site has the potential to produce information on the Roman and medieval period.

3.3 The aim of the investigation will be:

i) Recording any archaeological remains threatened by destruction.
ii) Establishing the date range of any deposits that are encountered.
iii) Defining the character and nature of any deposits that are encountered.
iv) Establishing the relationship of any deposits to other archaeological evidence in the area.
v) Relating the site to other comparable sites at a regional level.
vi) Recovering palaeo-environmental remains to determine local environmental conditions.

3.4 The resulting archive (finds and records) will be organised and deposited in the County Museum when appropriate.

4 FIELD METHODS

4.1 The field project will comprise a watching brief to facilitate archaeological recording during periods of soil removal or disturbance.

4.2 Throughout the project CgMs or its appointees will adhere to the standards set out in the Institute of Field Archaeologists Code of Conduct, English Heritage's *Management of Archaeological Projects* (1991).

4.3 When appropriate, the archive will be assigned to a county store in the meantime the archive will be prepared in accordance with standards established in the county.

4.4 Topsoil removal by hand or machine and any other ground works involving ground disturbance will be undertaken under archaeological supervision.

4.5 When archaeological deposits are encountered they will be investigated and recorded.

4.6 The location of all deposits will be planned at 1:20.

4.7 All relationships between features or deposits will be investigated and recorded.

4.8 All deposits will be investigated to obtain material for dating and in order to determine function.

4.9 A sampling strategy for the retrieval of environmental, organic and artefactual material will be instituted during the excavation and will be appropriate to the deposits encountered. This will be carried out in consultation with an appropriate specialist. This will be determined at the implementation of the watching brief and will reflect the availability of specialists in areas particularly of ecofactual remains and ceramics and on the range and variety of deposits encountered. English heritage Science advisor will be informed of the start date of the project.

4.10 Provision will be made for delays caused by the need for archaeological recording and an allowance will be made for more detailed recording of significant finds if appropriate. The County Archaeology Officer will be consulted should any nationally significant deposits be discovered.

4.11 All finds will be retained and removed from the site for cataloguing and analysis. They will be washed, marked, sorted and packed as appropriate.

4.12 Adequate arrangements will be made within a suitable timescale for the conservation of artefacts. Where fragile or unstable finds are recovered appropriate steps will be taken to stabilise them. All conservation, including initial stabilisation will be undertaken by recognised named specialists.

4.13 On the unexpected discovery of human remains the appropriate Licence will be arranged prior to the removal, and if necessary the Coroners Officer informed. Any conditions in the Home Office Licence affecting the future deposition and curation of human remains will be discussed with the Archaeological Officer at the earliest opportunity.

5 POST-EXCAVATION

5.1 Following completion of the fieldwork the archive will be consolidated. The archive will conform to the standard laid out in Appendix 3 of *Management of Archaeological Projects.*

5.2 When the archive has been consolidated a proposal for further analysis and the appropriate level of publication will be prepared. It will then form the basis for a programme of work to bring the results of the investigation to publication.

5.3 Finds will be analysed, catalogued and quantified according to standards established in the county.

5.4 All finds will be cleaned, marked, sorted in accordance with the practices and standards established in the county.

5.5 Following the completion of fieldwork an agreed programme of post-excavation analysis will be undertaken following assessment.

5.7 The report produced will be published in an appropriate journal. Discussions will be held with the editor at the earliest possible stage to ensure that the report is acceptable to the journal and any matters of house style or other requirements are incorporated into the report.

5.8 An estimate of costs for publishing the report will be obtained from the editor and included in the costings for the programme of further analysis.

5.9 On publication of the report the archive will be deposited in an appropriate store.

6 GENERAL

6.1 The fieldwork will be undertaken by a team of recognised professional competence and experience in this type of project. No volunteer or unwaged personnel will be employed.

6.2 On-site health and safety procedures will conform to the *Health and Safety at Work Act*. A risk assessment will be undertaken before start of fieldwork.

6.3 The site archive will be organised so as to be compatible with other modern archaeological archives. Artefacts, environmental and organic material will be labelled, processed and analysed.

6.4 The responsibility for monitoring the progress of the project throughout its life, to ensure adherence to the Brief and Project Design and the maintenance of proper standards, lies with CgMs Consulting. So that arrangements for monitoring can be made MD the Archaeological Consultant to the owner can be contacted on 01536 790447.

6.5 The project timetable will begin in February 2006 although its full duration is not yet known.

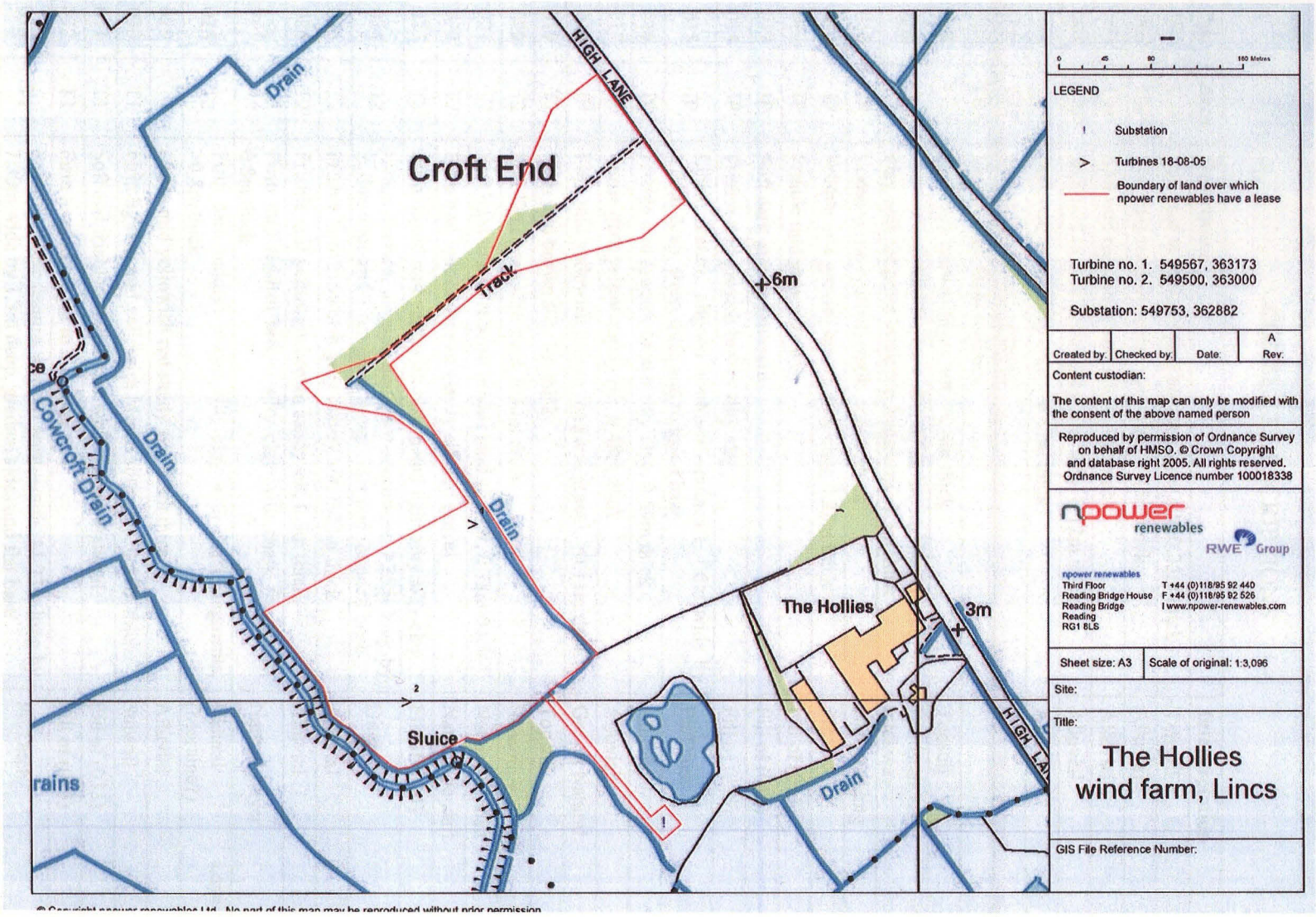

Fig 1 The Development Area

Appendix 2

CONTEXT DESCRIPTIONS

No.	Area	Description	Interpretation
001	CJP	Soft mid to dark greyish brown clayey silt, 0.25m thick	Topsoil
002	CJP	Soft mid reddish brown silty clay, 0.45m thick	Alluvial
003	CJP	Soft mid reddish brown silt, 0.32m thick	Alluvial
004	CJP	Soft mid to dark bluish grey silty clay, 0.12m thick	Alluvial
005	CJP	Soft mid brown silty clay, >0.17m thick	Alluvial
006	CJP	Unstratified finds retrieval	
007	TRA	Unstratified finds retrieval	
008	TRA	Soft dark brown clayey silt, >0.4m thick	Topsoil
009	TRA	Firm to soft mid brown and reddish brown mixed sand, silt, clay with frequent brick/tile fragments, 0.3m thick	Hardstanding of trackway
010	IP	Loose white crushed chalk, 0.26m thick	Hardstanding
011	IP	Friable mid greyish brown silty clay, 0.28m thick	Silt
012	IP	Friable mid grey silty clay	Fill of (015)
013	IP	Soft dark grey organic silt	Fill of (015)
014	IP	Friable mid greyish brown silty clay	Fill of (015)
015	IP	Linear feature, aligned northwest-southeast, 1.6m wide by 1.06m deep, steep sides and rounded base	Pit/Ditch
016	IP	Friable mid greyish brown silty clay, 0.59m thick	Alluvial
017	IP	Loose dark yellow sandy silt, 0.48m thick	Alluvial
018	IP	Firm mid yellowish brown sand and gravel, >0.11m thick	Gravel Natural
019	T2	Firm mid brown silt, 1m thick	Topsoil
020	T2	Soft light grey silty sand, 0.34m thick	Subsoil
021	T2	Soft light to mid reddish brown sand and silt, 0.38m thick	Natural deposit
022	T2	Firm mid reddish brown clayey silt and gravel	Natural deposit
023	T2	Firm mixed mid yellowish brown and light grey silty clay	Fill of (024)
024	T2	Linear feature, aligned northeast-southwest, >25m long by 2.70m wide and 1.6m deep, steep sides and rounded base	Ditch
025	T2	Friable light brownish grey clayey silt, 0.25m thick	Alluvial
026	T2	Friable mid yellowish brown sandy silt, 0.5m thick	Alluvial
027	T2	Firm mid reddish brown silty clay with chalk fragments, 0.8m thick	Natural Layer
028	T2	Firm dark reddish brown silty clay with chalk fragments, >0.8m thick	Natural Layer (Moraine?)
029	T2	Loose mid yellowish red sandy silt, 0.2m thick	Alluvial
030	T1	Firm light to mid yellowish brown silty clay, 0.58m thick	Subsoil
031	T1	Soft and friable silt and peat with organic material	Fill of (033)
032	T1	Firm to plastic light to mid grey clay	Fill of (033)
033	T1	Possible linear feature, aligned north-south, 11.23m long by 7.30m wide by 1.3m deep, gradual sides and flat base	Pit/Ditch
034	T1	Soft to firm light reddish brown sand, >0.3m thick	Natural Sand Layer
035	T1	Firm light yellowish brown clay, 0.6m thick	Natural Layer
036	T1	Firm light greenish grey silty clay	Fill of (037)
037	T1	Linear feature, aligned northeast-southwest, 6.75m long by 2m wide, not excavated	Ditch
038	T1	Firm light to mid reddish brown sand	Fill of (039)

No.	Area	Description	Interpretation
039	T1	Linear feature, aligned northwest-southeast, 10.76m long by 0.7m wide, not excavated	Ditch
040	CT	Loose, dark greyish brown silt, 0.20m thick	Redeposited Topsoil
041	CT	Loose, yellowish brown sand and gravel, 0.60m thick	Dumped, made-up ground
042	CT	Firm, dark grey clay, >0.40m	Natural Layer
043	CT	Loose, dark greyish brown silt, 0.35m thick	Topsoil
044	CT	Friable, dark greyish brown clayey silt, 0.15m thick	Subsoil
045	CT	Firm, reddish brown clay, 0.20m thick	Natural Layer
046	CT	Compacted, olivey brown clay and limestone	Natural Layer
047	CT	Firm, brownish grey sandy, clayey silt, 0.16m thick	Topsoil
048	CT	Firm, brown clay, 0.50m thick	Natural Layer
049	CT	Soft, mid-greyish brown sandy clayey silt, 0.08m thick	Natural Layer
050	CT	Soft, yellowish brown sand, 0.46m thick	Natural Layer

Abbreviations:

CJP Cable Junction Pit
TRA Track
IP Inspection Pit
T1 Turbine Base 1
T2 Turbine Base 2
CT Cable Trench

Appendix 3

THE FINDS

INTRODUCTION

A small, mixed assemblage of finds dating between the 12th-20th centuries was recovered. It seems likely that the assemblage represents manuring scatter, in which general refuse is added to manure and spread as fertilizer. This, in turn, would indicate the area was in agricultural usage from the medieval period to modern times.

POST ROMAN POTTERY

By Dr. Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* 2001 and to conform with Lincolnshire County Council's *Archaeology Handbook.* The pottery codenames (Cname) are in accordance with the Post Roman pottery type series for Lincolnshire, as published in Young *et al.* 2005. Three sherds from three vessels, weighing fifty-three grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. This data was then added to an Access database. An archive list of the pottery is included in table 1, which includes the Lincolnshire codenames and, where relevant, a date span.

Results

Table 1, Post Roman Pottery Archive

Context	Cname	Full Name	Fabric	Form	NoS	NoV	W (g)	Decoration	Part	Date
007	BL	Black-glazed wares	Staffordshire; Coarse	Bowl	1	1	15		BS	Late 17th to 18th
Internal glaze										

007	WHITE	Modern whiteware		hollow	1	1	1	blue painted design	BS	19th to 20th
031	ELY	Ely-type ware		Bowl	1	1	37		Rim	Late 12th to 14th
Everted rim; patchy soot										

Provenance

The presence of a sherd of Ely-type ware is unusual though not unprecedented in this location; this ware type has occurred in assemblages from Partney, Spalding, Bicker and the Boston area and would appear to be transported into Lincolnshire via coastal trade.

Condition

The pottery is in fairly fresh condition showing normal levels of abrasion

Summary

This small assemblage of pottery is of interest because of the presence of an Ely-type ware sherd. The pottery should be retained.

CERAMIC BUILDING MATERIAL

By Dr. Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in the ACBMG guidelines (2001) and to conform with Lincolnshire County Council's *Archaeology Handbook*. The pottery codenames (Cname) are in accordance with the Post Roman pottery type series for Lincolnshire, as published in Young *et al.* (2005). Four fragments of ceramic building material, weighing one hundred and eighty-seven grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. Fragments were counted and weighed by individual vessel within each context. This data was then added to an Access database. An archive

list of the ceramic building material is included in table 2, which includes the Lincolnshire codenames and, where relevant, a date span.

Results

Table 2, Ceramic Building Material Archive

Context	Cname	Full Name	Fabric	NoF	W (g)	Description
006	MODTIL	Modern tile	Hard oxidised	1	9	Suitable for discard
007	MODDRAIN	Modern land drain	Hard OX/R/OX	1	29	Suitable for discard
007	MODDRAIN	Modern land drain	Hard vitrified + calcareous	1	20	Suitable for discard
013	MODTIL	Modern tile	Hard oxidised	1	129	Suitable for discard

Summary

A small amount of modern ceramic building material was recovered from the site. All of this material is suitable for discard.

FIRED CLAY

By Dr. Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in the Lincolnshire County Council's *Archaeology Handbook.*

Methodology

The material was laid out and viewed in context order. Fragments of fired clay were counted and weighed within each context. This data was then added to an Access database. An archive list of the ceramic building material is included in table 3.

Results

Table 3, Fired Clay Archive

Context	Cname	Fabric	Sub type	NoF	W (g)	Description
006	FIRED CLAY	Red + calcareous material	DAUB	1	4	?ID; possible lath impression 8mm wide

Summary

A single fragment of fired clay was recovered from context (006); the fragment should be retained.

FAUNAL REMAINS

By Jennifer Wood

Introduction

A total of 5 (727g) fragments of animal bone were recovered from stratified contexts.

Provenance

The animal bone assemblage was recovered from a single context from a possible pond [033]. The bones were recovered from a single context (031), which was humic/peaty in nature and possibly waterborne in origin.

Condition

The overall condition of the remains was good to moderate, averaging at grades 2 on the Lyman Criteria (1996). One fragment of bone was of poorer condition, averaging at grade 4. All of the bone displayed dark brown tannin staining, consistent with a humic/organic depositional context. The variation in the bone condition may be due to weathering and travelling from being deposited in a waterborne context.

Results

Table 4, Fragments Identified to Taxa

Context	Taxon	Element	Side	Number	W (g)	Comments
031	Cattle	Mandible	L	1	79	Goneal angle
	Cattle	Mandible	R	1	338	PM4 erupting, M3 in wear- 18-30 months
	Cattle	Scapula	R	1	157	Glenoid and spinous process
	Cattle	Metatarsal	L	1	95	Cracking
	Cattle	Metacarpal	L	1	58	Abraided and pitted

Summary

The assemblage is represented solely by cattle remains. There was no evidence to suggest the remains were originally articulated. No evidence of gnawing, butchery or pathology was noted on

any of the remains. Little further information can be gained save the presence of the species on site.

GLASS

By Rachael Hall

Introduction

A single sherd of modern glass was recovered during the excavations.

Results

Table 5, Glass Archive

Context	Description	NoF	W (g)	Date
007	Colourless, small sherd of bottle	1	3	20th century

OTHER FINDS

By Gary Taylor

Introduction

Three other items, of which only one is certainly anthropogenic, were recovered.

Results

Table 6, Other Materials

Context	Material	Description	NoF	W (g)	Date
007	Slag	Iron slag, smithing?	1	43	Medieval?
	Stone	Vesicular stone, natural	1	105	
	Stone	Stone, burnt?	1	19	

Provenance

The other finds were recovered as unstratified material.

Range

Pieces of industrial residue and stone were recovered. The stone could be discarded.

Condition

All the material is in good condition and presents no long-term storage problems.

Potential

The stone is probably natural and, as such, as effectively no potential. As an isolated piece, the slag has negligible potential.

Summary

Industrial residues, such as iron slags, generally occur in abundance at their location of production. That only one piece of slag was recovered indicates that the iron smithing that gave rise to it is not located in the proximity.

SPOT DATING

The dating in table 7 is based on the evidence provided by the finds detailed above.

Table 7, Spot dates

Context	Date	Comments
006	19th to 20th	Date on single fragment of CBM
007	20th	
013	19th to 20th	
031	Late 12th to 14th	Date on a single sherd

ABBREVIATIONS

ACBMG	Archaeological Ceramic Building Materials Group
BS	Body sherd
CBM	Ceramic Building Material
CLAU	City of Lincoln Archaeology Unit
LHJ	Lower Handle Join
NoF	Number of Fragments
NoS	Number of sherds
NoV	Number of vessels
OX	Oxidised

NRFRC	National Roman Fabric Reference Collection
PCRG	Prehistoric Ceramic Research Group
R	Reduced
UHJ	Upper Handle Join
W (g)	Weight (grams)

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Appendix 4

GLOSSARY

Alluvium	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.
Anglo-Saxon	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, *e.g.* [004].
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, *etc.* Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Domesday Survey	A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) that become contained by the 'cut' are referred to as its fill(s).
Layer	A layer is an accumulation of soil or other material that is not contained within a cut
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

Appendix 5

THE ARCHIVE

The archive consists of:

50	Context records
2	Photographic record sheet
17	Daily Record Sheets
10	Sheets of scale drawings
1	Stratigraphic matrix
1	Bag of finds

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

Lincolnshire City and County Museum
The Collection
Danes Terrace
Lincoln
LN2 1LP

Archaeological Project Services Site Code:	CRSF07
Lincs County Council Accn.no	2007.116

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.