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Historic Building Recording

Site & Landscape Survey

Geophysical Survey

Proposed Construction Compound, Crystal Rig III Wind Farm, Bransly Hill, East Lothian

Archaeological Works

Report No. 3384

CFA ARCHAEOLOGY LTD

The Old Engine House
Eskmills Business Park
Musselburgh
East Lothian
EH21 7PQ

Tel: 0131 273 4380
Fax: 0131 273 4381
email: info@cfa-archaeology.co.uk
web: www.cfa-archaeology.co.uk

Author	Bruce Glendinning BSc PG Dip MCIfA
Illustrator	Graeme Carruthers MA MCIfA
Editor	Melanie Johnson MA PhD FSA Scot MCIfA
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This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

**Proposed Construction Compound,
Crystal Rig III Wind Farm,
Bransly Hill, East Lothian**

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1 INTRODUCTION

1.1 General

This report presents the results of a programme of archaeological works undertaken by CFA Archaeology Ltd (CFA) in September and November 2015 prior to the formation of a new construction compound at Crystal Rig III Wind Farm, East Lothian (NGR: NT 67053 70509) (Fig. 1). The work was commissioned by Natural Power Consultants Ltd.

A Written Scheme of Investigation (WSI) dated 10 November 2015 covering this programme of works was produced by CFA on behalf of Natural Power. The WSI was approved by the East Lothian Council Archaeology Service (ELCAS).

1.2 Background

The planning application (Ref. No.13/00722/S36) has been approved for a six turbine extension to the existing Crystal Rig Wind Farm.

The construction compound for the consented development was located in an area of rig-and-furrow cultivation identified during desk-based assessment and walkover survey for the Environmental Statement (Crystal Rig Wind Farm (Phase III); Chapter 11, Cultural Heritage). Site **27** comprised an area of rig-and-furrow cultivation remains, the remains of a turf-built bank (**27a**), and the remains of a building and enclosure (**27b**). The features were recorded by field survey, and the relict rig-and-furrow cultivation is visible on aerial photography.

1.3 Aims and Objectives

The aim of the evaluation was to determine the location, extent, date, character, condition, significance and quality of any archaeological remains identified within the compound area which are liable to be threatened by the proposed development.

2. WORKING METHODS

2.1 General

CFA Archaeology Ltd follows the Chartered Institute for Archaeologists' Code of Conduct, Standards and Guidance.

2.2 Rig-and-Furrow Survey

Modern aerial photographic images from Google Earth and Bing Maps and the historic collections of aerial photographs available through the National Collection of Aerial Photography (NCAP) were examined for evidence of rig-and-furrow cultivation.

A site visit was conducted prior to the evaluation, to record with DGPS equipment, the remains of rig-and-furrow cultivation visible on the ground within the proposed compound location.

2.3 Watching Brief

Five site investigation test-pits (C1-C5) (Fig 1) were excavated and these were monitored under a watching brief.

2.4 Evaluation

Four trenches were excavated which covered 359m² or c. 5.5% of the proposed construction compound (6300m²). Trenches were excavated to provide a representative spread across the area, whilst crossing the observed locations of the rig-and-furrow (Fig. 1). A wide, possible end rig or field boundary ditch (Fig. 1) was identified on the ground but was full of standing water so evaluation was not possible.

Topsoil and subsoil were removed by a 13 tonne tracked mechanical excavator equipped with a 1.9 m wide smooth-bladed ditching bucket. All groundbreaking work was carried out under constant archaeological supervision. Any further excavation required to fulfil the objectives of the evaluation was carried out by hand.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, by photography and by completing standard CFA record forms.

The stratification of all excavated areas was recorded whether or not significant archaeological deposits were identified.

Trench positions were surveyed using industry standard electronic surveying equipment and all trenches were backfilled.

3. ARCHAEOLOGICAL RESULTS

3.1 General

Numbers in bold refer to contexts, a full list of which is contained in Appendix 2.

3.2 Rig and Furrow Survey

Whilst rig-and-furrow was clearly observed on aerial photographs in the area around the compound location, no clear traces could be identified within the compound area, but suggestions of rig-and-furrow were thought to be visible running approximately east to west in the south-western corner of the compound area (Fig. 1).

During the walkover survey, it was observed that the compound area was uneven and various “lumps and bumps” were present across the area, but on close observation these features did not appear to be anything of interest. Only the remains of three or four slightly curving rigs with a five to six metre wavelength running approximately north to south were observed (Fig. 1-2). These were vestigial and only really visible in very low sunlight. A broad curving ditch feature was also identified running north-east to south-west (Fig. 1). This ditch separated a low area to the west of it from a slightly higher area to the east of it. The ditch may have been an end rig or field boundary ditch and was full of standing water.

The possible rig-and furrow-that was observed on the aerial photographs was not visible on the ground although there were patches of uneven ground which could have been mistaken for rig-and-furrow.

3.3 Watching Brief

Topsoil (**001**) measuring 0.2m deep and overlying natural undisturbed subsoil (**002**) was observed in all of the test-pits. No archaeological features were identified.

3.4 Trial Trenching

Trench 1 (55m long x 1.9m wide) (Figs. 1 & 3)

This trench was excavated across the proposed location of rig-and-furrow identified from aerial photographs, although this was not identified by the subsequent walkover survey. The rig-and-furrow was not present and the topsoil (**001**) measured c. 0.2m deep. No other archaeological features or deposits were found.

Trench 2 (51m long x 1.9m wide) (Figs. 1 & 4)

This trench was excavated across possible rig-and-furrow identified during the pre-evaluation survey. Whilst the rig-and-furrow could be seen on the surface in low sunlight there was nothing discernible in the section of the trench or cut into the natural subsoil (**002**). The topsoil (**001**) measured c. 0.2m deep. No other archaeological features or deposits were found.

Trench 3 (57m long x 1.9m wide) (Figs. 1 & 5)

This trench was excavated to cross the southernmost end of the possible rig-and-furrow identified during the survey and the easternmost extent of the possible rig-and-furrow identified from the aerial photographs. Whilst the rig-and-furrow identified from the walkover survey could be seen on the surface in low sunlight there was nothing discernible in the section of the trench or cut into the natural subsoil (**002**). The topsoil (**001**) measured c. 0.2m deep. No other archaeological features or deposits were found.

Trench 4 (25m long x 19m wide) (Figs. 1 & 6)

This trench was excavated across possible rig-and-furrow identified during the pre-evaluation survey. Whilst the rig-and-furrow could be seen on the surface in low sunlight there was nothing discernible in the section of the trench or cut into the natural subsoil (**002**). The topsoil (**001**) measured c. 0.2m deep. No other archaeological features or deposits were found.

4. CONCLUSIONS

The pre-evaluation survey of the compound area identified three or four curving broad rigs and a rig end or field boundary ditch.

The five test pits identified that the area had a very shallow topsoil of c. 0.2m deep.

Four trenches were excavated which covered 359m². These were arrayed to provide good coverage of the area whilst sectioning the visible rig-and-furrow. However, the rig-and-furrow was so vestigial that nothing could be picked up in the sections of the trenches nor were furrows observed as negative features cut into the natural.

No further work is recommended in relation to this development. However, it is recognised that the final decision on any mitigation required lies with ELCAS.

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the Historic Environment Scotland and copies of reports will be lodged with the ELCAS Sites and Monuments Record.

On completion of the programme of archaeological works a summary statement will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 3) and will also be reported on through *OASIS Scotland*.

APPENDIX 1: Photographic Register

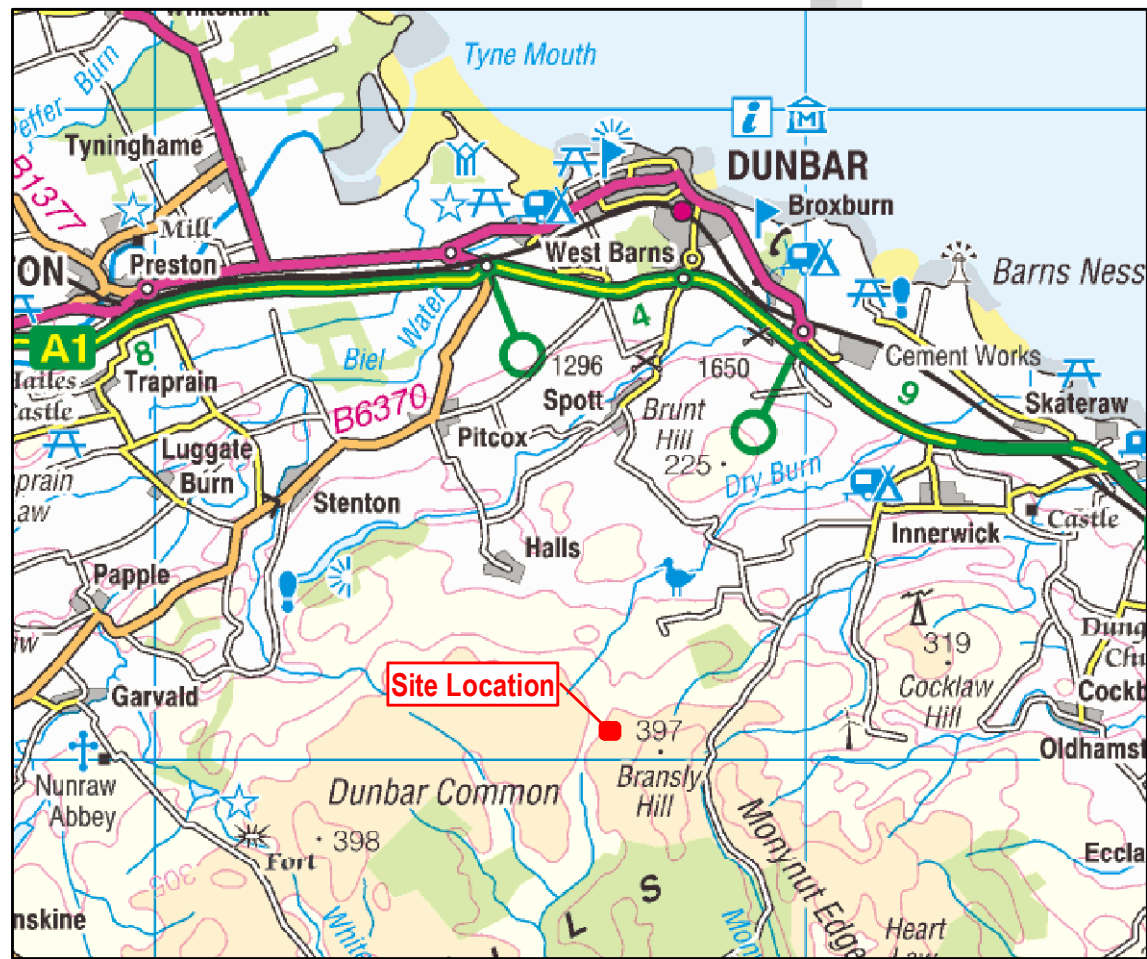
Photo Number	Description	Taken From
1	General post-excavation of Trench 1	N
2	General post-excavation of Trench 1	N
3	Possible rigs on north side of Trench 2	S
4	Possible rigs on north side of Trench 2	S
5	Possible rigs on south side of Trench 2	S
6	Possible rigs on south side of Trench 2	S
7	General post-excavation of Trench 2	E
8	Possible rigs on south side of Trench 2	E
9	General post-excavation of Trench 3	S
10	General post-excavation of Trench 3	S
11	General post-excavation of Trench 4	W
12	General post-excavation of Trench 4	W
13	Rig end or field boundary ditch	S
14	Rig end or field boundary ditch	S
15	Rig end or field boundary ditch	S
16	General post-excavation of TP C1	NE
17	General post-excavation of TP C2	E
18	General post-excavation of TP C3	E
19	General post-excavation of TP C4	NE
20	General post-excavation of TP C5	NE

APPENDIX 2: Context Register

Context No.	Description
001	Dark Brown Clayey silt - Topsoil
002	Pinkish Brown Sandy Clay and occasional gravel- Subsoil

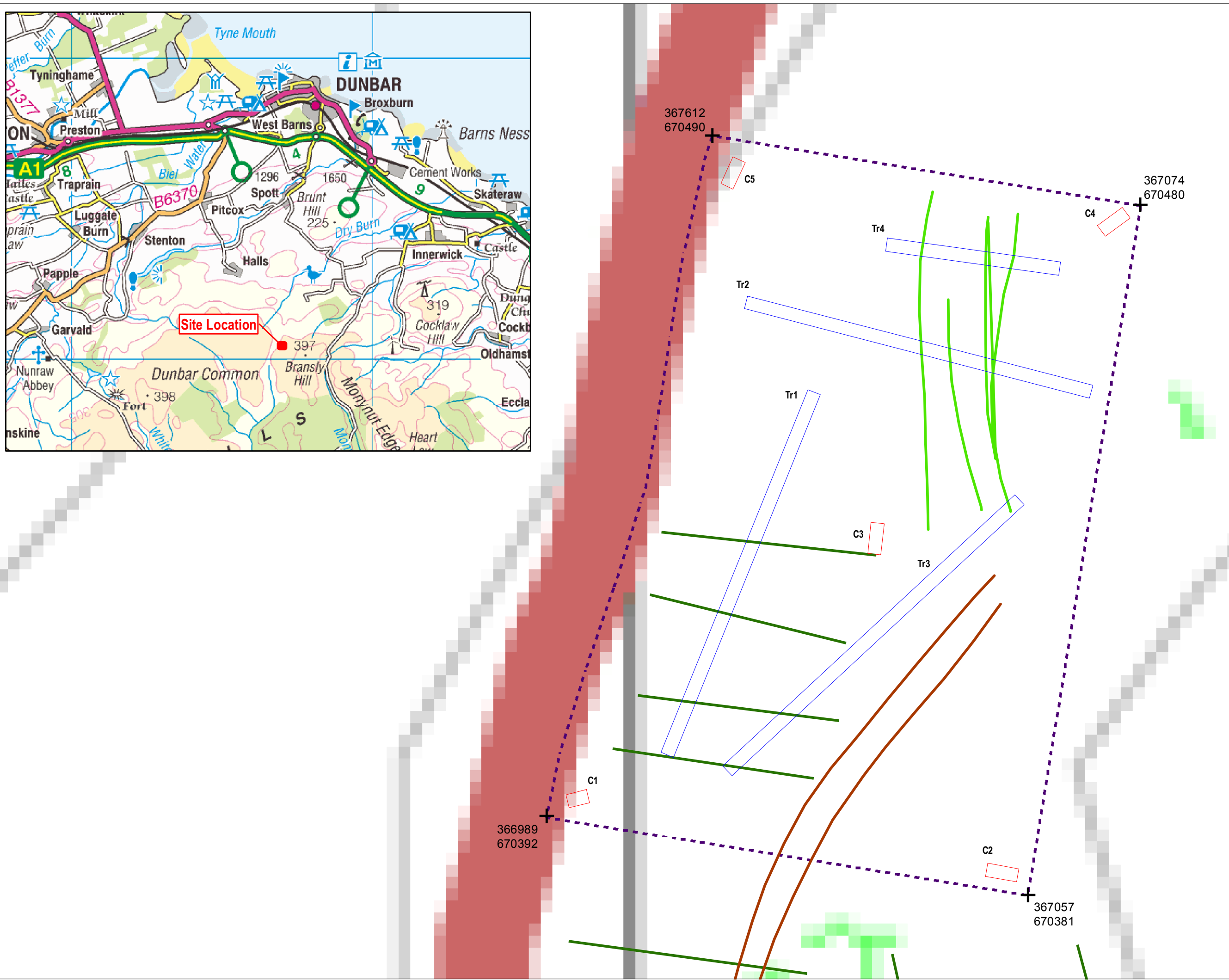
APPENDIX 3: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	East Lothian
PROJECT TITLE/SITE NAME:	Proposed Construction Compound, Crystal Rig III Wind Farm, Bransly Hill East Lothian
PROJECT CODE:	Spott (East Lothian)
PARISH:	CRYS2
NAME OF CONTRIBUTOR:	Bruce Glendinning
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Survey, Watching Brief and Evaluation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	N/A
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 6 figures)	NT 67053 70509
START DATE (this season)	September 2015
END DATE (this season)	November 2015
PREVIOUS WORK (incl. DES ref.)	N/A
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A programme of work was required on the temporary compound location for the proposed Crystal Rig Wind Farm extension. The work was required because the Environmental Statement had identified that the compound lay within an area of relict post-medieval farming remains. A preliminary survey identified short sections of three or four curving rigs with a wavelength of five to six meters. An end rig or field boundary ditch was also identified. A Subsequent watching brief on site investigation test pits and a programme of trial trench evaluation did not identify any features or deposits of archaeological interest.
PROPOSED FUTURE WORK:	unknown
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Natural Power Consultants Ltd
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ.
EMAIL ADDRESS:	cfa@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS, Reports lodged with SMR and HES.



Key:

- Construction Compound A
- Trench Location
- Test Pit Location
- Rig and Furrow identified from aerial photographs
- Possible field boundary ditch identified during survey
- Possible rig abd furrow identified during survey



CFA ARCHAEOLOGY LTD
 The Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 T: 0131 273 4380
 F: 0131 273 4381
 info@cfa-archaeology.co.uk
 www.cfa-archaeology.co.uk

Fig. No:	1	Report No:	3384
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Title:
Location map and trench layout

Project:
Crystal Rig III Wind Farm

Client:
Natural Power Consultants Ltd

Scale at A3:
1:500

Drawn by:	Checked:	Date:
SW	BG	08/01/2016

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Fig. 2 - General view of the proposed compound location showing rig-and-furrow remains on the south side of Trench 2



Fig. 3 - Trench 1



CFA ARCHAEOLOGY LTD
 Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 T: 0131 273 4380
 F: 0131 273 4381
 info@cfa-archaeology.co.uk
 www.cfa-archaeology.co.uk

Title:
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Fig. 4 - Trench 2



Fig. 5 - Trench 3



CFA ARCHAEOLOGY LTD
 Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 T: 0131 273 4380
 F: 0131 273 4381
 info@cfa-archaeology.co.uk
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Fig. 6 - Trench 4



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 Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 T: 0131 273 4380
 F: 0131 273 4381
 info@cfa-archaeology.co.uk
 www.cfa-archaeology.co.uk

Title:
Selected Photos

Fig. 6	Report: 3384	Drawn: SW	CKD: BG	Date: 17/12/15
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Project:
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