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Tullo Wind Farms Combined Infrastructure, Aberdeenshire

Archaeological Watching Brief

Report No. 3041

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	Andrew Brown MSc
Illustrator	Graeme Carruthers MA MifA
Editor	Melanie Johnson PhD MA PFSA Scot MifA
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Tullo Wind Farms Combined Infrastructure, Aberdeenshire

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1. INTRODUCTION

1.1 General

This report presents the results of an archaeological watching brief undertaken by CFA Archaeology Ltd (CFA) in May and June 2013 on the ground breaking works at three wind farm extensions in Aberdeenshire, at Tullo (Planning Ref. KM/APP/2011/3694), Easter Tulloch (Planning Ref. KM/APP/2011/2603) and Shiels (Planning Ref. KM/APP/2011/2389). The work was commissioned by Natural Power Consultants Ltd (NPC).

A Written Scheme of Investigation (WSI) dated 19th December 2012 was produced by CFA and agreed by Aberdeenshire Council Archaeology Service (ACAS).

1.2 Background

NPC has consent to erect 3 wind farms to be built in one construction phase hence only a single WSI to cover all 3 developments.

The three wind farms, Tullo II, Easter Tulloch and Shiels, will be built in one construction phase hence the submission of a single WSI to cover all three applications. A similar approach was agreed with the planning authority for the submission of other planning discharge information.

The watching brief was requested by ACAS to monitor the major infrastructure elements such as roads, turbine bases, construction compounds, borrow pits, substations and crane pads.

1.3 Objectives

The objectives of the programme of works were:

- The demarcation of Treehead hut circles and cairn (Site 7 in the Tullo Extension ES).
- To undertaken an Archaeological Watching Brief during the removal of topsoil or overburden from over the natural undisturbed subsoil.

2. WORKING METHODS

2.1 General

CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance for Archaeological Fieldwork. Recording of all elements followed established CFA methods.

2.2 Demarcation

Treehead hut circles and cairn (Site 7 in the Tullo Extension ES) was fenced off in order to signal its presence to construction workers working in the vicinity. This ensured the avoidance of any accidental damage to the site. The importance of the demarcated area was described to construction staff in a tool box talk provided by CFA.

2.3 Watching Brief

Topsoil and modern overburden was removed by a mechanical excavator equipped with a smooth-bladed bucket. All groundbreaking work was carried out under constant archaeological supervision.

All further excavation required to fulfil the objectives of the WSI was carried out by hand.

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

3. ARCHAEOLOGICAL RESULTS

The numbers in bold and parentheses refer to contexts, a list of which is contained in Appendix 1.

The areas monitored during ground works were all turbine bases and crane pads, the footprint for the substation and some of the access track.

Topsoil was up to 0.4m deep, onto natural substrate of orange-brown stony silt.

The formation depth of the access tracks was approx. 0.3m below existing ground surface. As a result only the topsoil was disturbed and natural was not exposed across most of the access tracks. Agreement was reached with ACAS that where topsoil was of sufficient depth that natural was not being exposed, then a watching brief was not required. Only in a few areas of track excavation, where the topsoil was much thinner, was the natural seen.

No archaeological features, deposits or artefacts of archaeological significance were found during the watching brief.

Site 7, the hut circles and cairn near Treehead, was demarcated as stipulated in the WSI and there were no adverse affects during construction.

4. CONCLUSION

A watching brief was carried out during the groundworks prior to the erection of a number of wind turbines at Tullo (Planning Re. KM/APP/2011/3694), Easter Tulloch (KM/APP/2011/2603) and Shiels (KM/APP/2011/2389).

No significant archaeological remains were discovered during the course of the works.

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of reports will be lodged with the Aberdeenshire Council Sites and Monuments Record.

A summary statement of the results of this programme of work will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 3) and submitted online via the OASIS protocol.

APPENDIX 1: Context Register

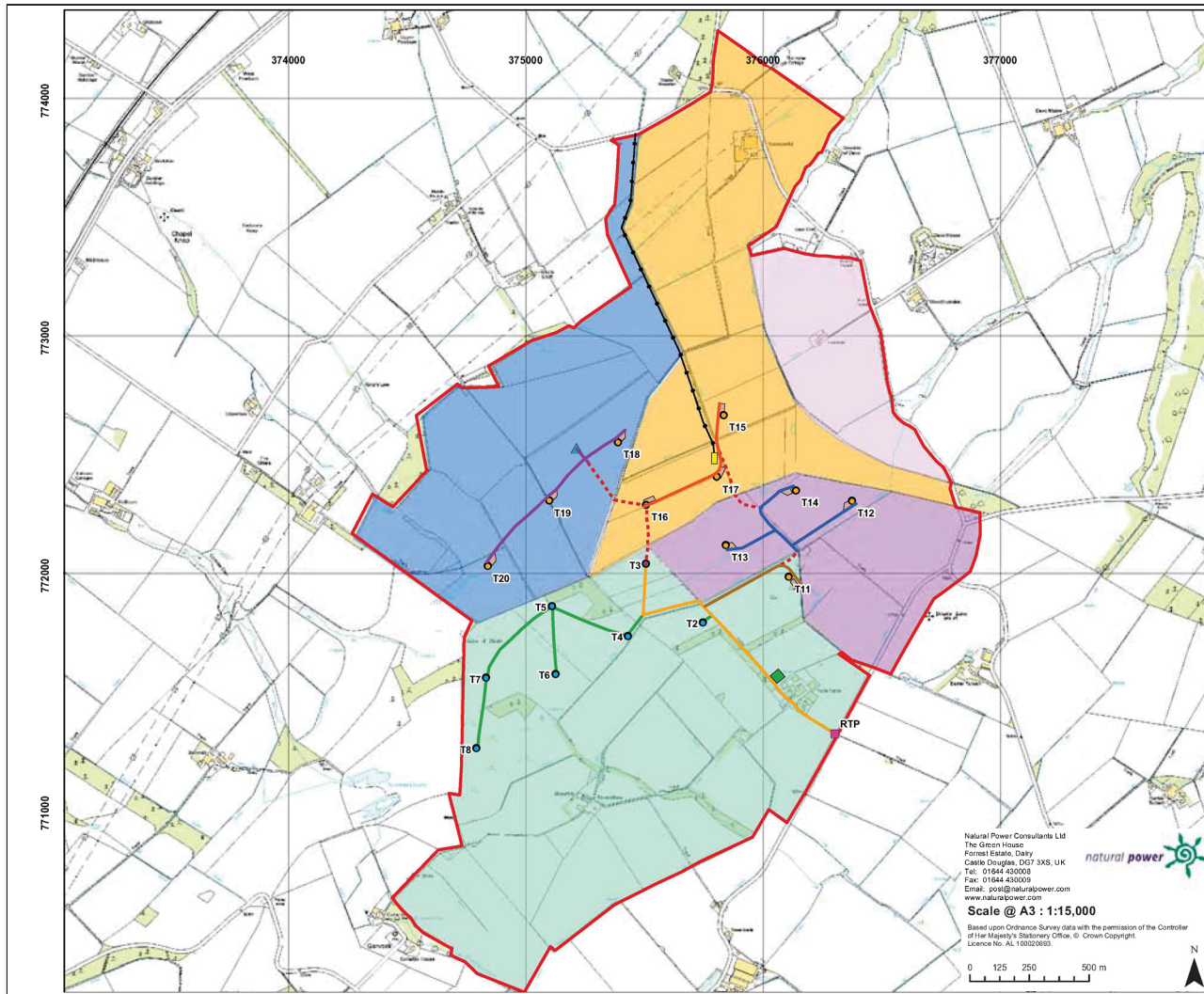
Context No.	Description
001	Topsoil
002	Subsoil

APPENDIX 2: Photographic Register

Shot No.	Description	Taken from	Conditions
1	Beginning of stripping at CH00	E	Clear
2	Photo showing topsoil and limited natural exposed	E	Clear
3	Topsoil with small patches of natural	S	Clear
4	CH200 showing only topsoil, no natural	E	Clear
5	Bellmouth by CH625 showing natural exposed for cut	SE	Clear
6	CH625 showing natural exposed on road to T13	E	Clear
7	CH800 to 900 prior to stripping to natural	S	Clear
8	CH825 showing plough scars	S	Clear
9	Section of CH850 showing deep ceramic drain	E	Clear
10	Stripped to natural area from CH900 looking to CH800 showing deep cut for drain in front of machine	N	Clear
11	Turbine view	N/A	Clear
12	Pressure testing working shots	N/A	Clear
13	Pressure testing working shots	N/A	Clear
14	Pressure testing working shots	N/A	Clear
15	T16 hardstanding topsoiled	SE	Overcast
16	T16 hardstanding topsoiled	SE	Overcast
17	T16 hardstanding topsoiled showing chisel plough scores	SW	Overcast
18	T16 hardstanding topsoiled showing chisel plough scores	SW	Overcast
19	T16 base topsoiled	S	Sunny
20	Access road approaching T18	SW	Sunny
21	Access road approaching T18	SW	Sunny
22	T17 following topsoil removal	SW	Bright
23	T17 following topsoil removal	W	Bright
24	Cairn of Shiels	E	Bright
25	Cairn of Shiels	SE	Bright
26	Working shot during topsoil removal at T14	SW	Overcast
27	T14 following topsoil removal	SW	Overcast
28	T12 during topsoil removal	SW	Overcast
29	T12 following topsoil removal	SW	Bright
30	T12 following topsoil removal	NE	Overcast
31	T15 Turbine base during topsoil strip	NW	Overcast
32	T15 Turbine base following topsoil strip	SE	Overcast
33	T15 crane pad during topsoil strip	E	Bright
34	T15 crane pad following topsoil strip	SE	Overcast
35	T19 Base east side of existing track	SW	Sunny
36	T20 Partially stripped hardstanding: 27m x 40m	SW	Overcast
37	T20 Turbine base stripped to natural: 30m x 30m	NE	Sunny
38	Substation 20m x 40m post-ex with cows	NE	Overcast
39	T13 post-ex	N	Overcast

APPENDIX 3: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	Aberdeenshire
PROJECT TITLE/SITE NAME:	Tullo Wind Farm Extension
PROJECT CODE:	THEX
PARISH:	Garvock
NAME OF CONTRIBUTOR:	Andrew Brown
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	N/A
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 10 figures)	NO 8390 9176
START DATE (this season)	May 2013
END DATE (this season)	June 2013
PREVIOUS WORK (incl. DES ref.)	N/A
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was carried out during groundworks for the construction of Tullo, Easter Tulloch and Shiels wind farm extensions. The areas monitored during ground works were all turbine bases and crane pads, the footprint for the substation and some of the access track. No significant archaeological remains were discovered during the course of the works.
PROPOSED FUTURE WORK:	N/A
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Natural Power Consultants Ltd
ADDRESS OF MAIN CONTRIBUTOR:	The Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ
EMAIL ADDRESS:	cfa@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Royal Commission on the Ancient and Historic Monuments of Scotland Aberdeenshire Council Sites and Monuments Record



REGISTERED ORGANISATION
IFA

key

- Tullio II turbine location
- Tullio I turbine location
- ▲ Shells anemometer location
- Easter Tullio Consented
- Shells Consented
- Tullio Extension Consented
- Tullio not built
- Existing Tullio I tracks
- Tullio 1 track to be used for Tullio extension
- Tullio 2 construction compound
- Potential scablation location
- Indicative crane pad location
- Keth landownership
- Garmna landownership
- Bardsley landownership
- Anderson landownership
- Combined development area

CFA ANCHAEOLGY LTD
The Old Engine House
Eden Park, Mussburgh
East Lothian, EC11 1PQ
T: 0131 273 4380
F: 0131 273 4381
www.cfa-archaeology.co.uk

Fig No:	1	Revision	A
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Title
Location map

Project
Tullio Wind Farm Extension, Aberdeen

Scale at A3
1:15,000

Client
Natural Power Consultants Ltd

Natural Power Consultants Ltd
The Green House
Castle Douglas, DG7 3XS, UK
Tel: 01844 430008
Fax: 01844 430009
Email: npc@naturalpower.com
www.naturalpower.com

Scale @ A3 : 1:15,000

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0 125 250 500 m

N





Fig. 2 - Example of formation depth for tracks, natural not exposed



Fig. 3 - Turbine 16



Fig. 4 - Turbine 17

Fig. No: 2-4		Revision: A	Project: Tullo Wind Farm Extension, Aberdeen		
Drawn by: TB	Checked: MJ	Report No: 3041	Client: Natural Power Consultants		
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CFA ARCHAEOLOGY LTD
 The Old Engine House
 Eskmills Park, Musselburgh
 East Lothian, Eh21 7PQ
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 F: 0131 273 4381
 e: info@cfa-archaeology.co.uk
 w: www.cfa-archaeology.co.uk



Fig. 5 - Turbine 14



Fig. 6 - Turbine 12



Fig. 7 - Turbine 15

Fig. No: 5-7		Revision: A	Project: Tullo Wind Farm Extension, Aberdeen		
Drawn by: TB	Checked: MJ	Report No: 3041	Client: Natural Power Consultants		

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