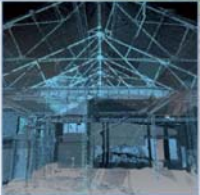


Droophill Windfarm, Glenbervie, nr Stonehaven: Archaeological Watching Brief Data Structure Report

OASIS ID: aocarcha1-161226
Planning Ref: APP/2009/1484
AOC Project: 22153c



Droop Hill Windfarm, Glenbervie, nr Stonehaven

Archaeological Watching Brief Data Structure Report

On Behalf of:	The Greenspan Agency 151 West George Street Glasgow G2 2JJ
National Grid Reference (NGR):	Point of access road to NE: NO 75945 82025 West extent of site: NO 75462 81770 South extent of site: NO 75667 81365
AOC Project No:	22153c
OASIS No:	aocarcha1-161226
Prepared by:	Jamie Humble
Illustration by:	Diana Sproat
Date of Fieldwork:	11 th October – 8 th November 2013
Date of Report:	November 2013

This document has been prepared in accordance with AOC standard operating procedures.

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Date: November 2013

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Summary

AOC Archaeology Groups was commissioned by the Greenspan Agency to undertake an archaeological watching brief on the topsoil strip for two wind turbines, control building and their associated access tracks at Droop Hill to the north-west of the village of Glenbervie near Stonehaven, Aberdeenshire.

A series of features relating to the post-medieval farming landscape of the area were identified during the watching brief. These comprised two boundary dykes each of which had two associated ditches one to either side of the dyke. The boundary dykes were identifiable as upstanding monuments and for the most part were unaffected by the wind farm development.

1 INTRODUCTION

1.1 Background

1.1.1 AOC Archaeology Group was commissioned by the Greenspan Agency to undertake an archaeological watching brief on the topsoil strip for two wind turbines, control room and their associated access tracks at Droop Hill to the north-west of the village of Glenbervie near Stonehaven, Aberdeenshire. The works were undertaken in order to satisfy a condition set by the Aberdeenshire Council as advised on archaeological matters by the Aberdeenshire Council Archaeology Service (ACAS). The works were conducted according to the terms of an *Written Scheme of Investigation* approved by ACAS and in accordance with the principles set out in *Scottish Planning Policy* (Scottish Government 2010) and *PAN 2/2011 Planning & Archaeology* (Scottish Government 2011).

1.2 Site Location

1.2.1 The area subject to watching brief was located to the south of Backfield Farm to the north-west of the village of Glenbervie in an open field and upland moorland and is centred between NGR: NO 75945 82025, NO 75462 81770 and NO 75957 81365 (Figure 1).

1.3 Archaeological background

1.3.1 There are no known archaeological sites within the development boundaries. However, whilst no known archaeological sites are under direct threat from the development there are a number of sites that lie within a few hundred metres of the trackway, turbines and control building. Most important of these is a series of clearance cairns, (NMRS No. NO78SE 21) a Scheduled Ancient Monument (SAM No. 1413) which is described as a grouping of at least thirty well defined upstanding clearance cairns, measuring 1.5m to 6.5m across and up to 0.4m high, focused across an area c. 350m north-west to south-east by 200m north-east to south-west. The SAM lies immediately to the south and west of the two turbines.

1.3.2 Also within a few hundred metres of the turbines are further four NMRS listed sites. To the north-west lies Greenheads farmstead (NMRS No. NO78SW 34) whilst to the west of the SAM there are two further clearance cairns (NMRS No. NO78SE 21). The last two sites are both areas of rig and furrow agriculture that have been identified by aerial photography. To the south lies NMRS No. NO78SW 37 whilst to south-east lies site NMRS NO. NO78SW 38.

2 OBJECTIVES

2.1 The objectives of the watching brief were:

- i) to monitor the topsoil strip of the proposed turbine areas, sub-stations and access roads to prevent the destruction of significant archaeological features prior to their recording;
- ii) given the discovery of significant archaeological material in quantity that will suffer an adverse impact from the development (ie, where preservation *in situ* is impractical), the recording of all archaeological features by means of a mitigation strategy to be formulated with ACAS.

3 METHODOLOGY

3.1 Topsoil stripping was conducted by a 360° excavator with a bladed ditching bucket. All excavation was monitored by an experienced field archaeologist and all recording was carried out according to AOC Archaeology Group's standard practices.

4 RESULTS

- 4.1 The area watched as part of this programme of works can be found in Figure 1. The monitored topsoil strip comprised of c. 2km of haul road c. 4 m in width and two turbine bases c. 60 m by 30 m. The topsoil (010) was fairly thin, between 0.15 m to 0.35 m in depth. This overlay a natural grey orange sandy clay glacial till subsoil (011) with patches of sand and clay throughout the watched area.
- 4.2 A series of features relating to the post-medieval farming landscape of the area were identified during the watching brief. These comprised two boundary dykes [007] & [012] each of which had two associated ditches [005] & [008] and [001] & [003] respectively (Figure 2). Boundary dykes [007] & [012] were identifiable as upstanding monuments and for the most part were unaffected by the wind farm development with only a 4m length of [007] being impacted upon.
- 4.3 Boundary dyke [012] was oriented on a varying north-west to south-east axis and extended for over 350m along the north-eastern edge of north-west to south-east ridge of high ground. Boundary dyke [012] measured between 2m to 3m in width and survived up to 1m high and was not excavated as part of the wind farm development. On the same alignment as dyke [012] in the area of the northern turbine were two parallel ditches [001] & [003]. Ditch [001] extended for 59m across the stripped area was 1.92m wide and 0.22m deep with a shallow u-shaped profile. Ditch [001] was filled by a dark brown humic clayey sand (002) similar in character to the topsoil (010) in this area. Ditch [003] lay 1.8m to the north-east of [001], extending for 59m across the stripped area was 0.95m wide and 0.12m deep with a shallow u-shaped profile. Ditch [003] was filled by a dark brown humic clayey sand (004) again similar in character to the topsoil (010) in this area. Ditches [001] & [003] were on the same alignment as dyke [012] and are a continuation of the same boundary where the upstanding dyke [012] has not survived.



Plate 1: Boundary ditches [001] and [002], from north-west.

- 4.4 Boundary dyke [007] was oriented on a varying east-west axis and extended for over 160m running from dyke [012] down the gentle east facing slope of the development area. Dyke [007] was 3.2m wide and 0.38m high and composed of mid orange brown clayey sand with abundant large water rounded stone and gravel of that was the up cast from the excavation of ditches [005] & [008]. To the north and parallel to dyke [007] lay ditch [005], 0.36m wide and 0.08m deep with a shallow u-shaped profile. Ditch [005] was filled by a mid grey

silty clay (006) similar in character to the topsoil (010) in this area. To the south and parallel to dyke [007] lay ditch [008], 1.02m wide and 0.30m deep with a shallow u-shaped profile. Ditch [008] was filled by a dark brown humic silty clay (009) similar in character of the topsoil (010) in this area.



Plate 2: Boundary dyke [007] and associated ditches [005] and [008], from south-east.

5 CONCLUSIONS

- 5.1 A series of boundary dykes and associated ditches relating to the post-medieval farming landscape were identified during the monitored topsoil strip. Boundary dyke [012] is probably a head-dyke, a boundary feature of townships before general enclosure was the norm and served to separate the rough grazing from the agricultural land. Head-dykes often coincide with a natural boundary, as seen at Droop Hill where dyke [012] follows the edge of the ridge line.
- 5.2 No further archaeological works are considered necessary within the development area. This recommendation will require confirmation by the Aberdeenshire Council.

6 REFERENCES

Scottish Government 2010 *Scottish Planning Policy*.

Scottish Government 2011 *PAN 2/2011 Planning & Archaeology*.

APPENDIX 1: COLOUR DIGITAL PHOTOGRAPHIC REGISTER

Ref No	Description	From	Date
1	Registration	-	11/10/13
2	General view of NE field pre-excavation	E	11/10/13
3	General view of NE field pre-excavation	E	11/10/13
4	Stripped haul road in NE field	E	11/10/13
5	Stripped haul road in NE field	E	11/10/13
6	Stripped haul road in NE field	W	11/10/13
7	Stripped haul road in NE field	W	11/10/13
8	Registration	-	4/11/13
9	General view of site pre-excavation	E	4/11/13
10	Stripped haul road	W	4/11/13
11	Stripped haul road	E	4/11/13
12	Ditches [001] & [003]	NW	4/11/13
13	Ditches [001] & [003]	NW	4/11/13
14	Ditch [001] NW-facing section	NW	4/11/13
15	Ditch [001] NW-facing section	NW	4/11/13
16	Ditch [003] NW-facing section	NW	4/11/13
17	Ditch [003] NW-facing section	NW	4/11/13
18	Registration	-	7/11/13
19	Ditch [001] NW-facing section	NW	7/11/13
20	Ditch [003] NW-facing section	NW	7/11/13
21	Ditch [001] NW-facing section	NW	7/11/13
22	Ditch [003] NW-facing section	NW	7/11/13
23	Ditch [001] NW-facing section	NW	7/11/13
24	Ditch [003] NW-facing section	NW	7/11/13
25	Ditches [001] & [003]	NW	7/11/13
26	Ditches [001] & [003]	NW	7/11/13
27	Boundary dyke [007] and associated ditches [005] & [008]	NE	8/11/13
28	Boundary dyke [007] and associated ditches [005] & [008]	NE	8/11/13
29	Bank [007]	W	8/11/13
30	Stripped southern turbine base area	S	8/11/13

APPENDIX 2: DRAWING REGISTER

Drawing No.	Description	Scale
01	Area of monitored topsoil strip on 11/10/13	1:1000
02	Area of monitored topsoil strip on 4/11/13	1:1000
03	E-facing section of ditches [001] & [003]	1:20
04	Plan of ditches [001] & [003]	1:100
05	Area of monitored topsoil strip on 7-8/11/13	1:1000
06	NE-facing section through dyke [007] and associated ditches [005] & [008]	1:20

APPENDIX 3: CONTEXT REGISTER

Context No.	Feature	Description
[001]	Cut - Ditch	Linear cut oriented NW-SE extending for 59m across the northern turbine area, 1.92m wide by 0.22m deep. Runs parallel to ditch [003] which lies 1.8m to the NE. Gentle break of slope at the top leads to shallow sloping sides that break gently to a concave base. Ditch associated with boundary dyke [012].
(002)	Deposit – Fill of [001]	Dark brown humic clayey sand with frequent roots and occasional water rounded stone. Solitary fill of ditch [001].
[003]	Cut - Ditch	Linear cut oriented NW-SE extending for 59m across the northern turbine area, 0.95m wide and 0.12m deep. Runs parallel to ditch [001] which lies 1.8m to the SW. Gentle break of slope at top leads to gently sloping sides which break gently to a concave base. Ditch associated with boundary dyke [012].
(004)	Deposit – Fill of [003]	Dark brown humic clayey sand with frequent roots and water rounded stone. Solitary fill of ditch [003].
[005]	Cut - Ditch	Linear cut oriented NE-SW running for 5m across trench, but which probably extends for length of bank [007], over 100m. 0.36m wide and 0.08m deep. Gentle break of slope at top leads to gently sloping sides which break gently to a concave base. Ditch associated with boundary dyke [007].
(006)	Deposit – Fill of [005]	Mid grey silty clay with frequent roots, stone and gravel. Solitary fill of ditch [005].
[007]	Structure – Boundary Dyke	Bank oriented NE-SW running across trench for 5m but extending for over 100m, 3.20m wide and 0.38m high. Composed of mid orange brown clayey sand with abundant large water rounded stone and gravel of re-deposited natural in origin. Boundary dyke forming part of a field system with [012]
[008]	Cut - Ditch	Linear cut oriented NE-SW running for 5m across trench for 5m but extending for length of dyke [007], over 100m. 1.02m wide and 0.30m deep. Sharp break of slope at top leads to gently sloping sides which break gently to a concave base. Ditch associated with boundary dyke [007].
(009)	Deposit – Fill of [008]	Dark brown humic silty clay with abundant stone and gravel. Solitary fill of [008].
(010)	Deposit - Topsoil	Dark brown humic silty clay with frequent rounded stone and gravel. Throughout site between 0.1m and 0.3m thick. Topsoil.
(011)	Deposit - Natural	Varied deposit of Orange clay, Orange brown boulder clay or mid orangy brown clayey sand. Throughout site. Natural glacial till.
[012]	Structure – Boundary Dyke	Linear to curvilinear bank oriented NW-SE extending for around 350m across the site. Between 2-3m in width and up to 1m high. Bank not excavated during the wind farm works. Boundary dyke forming part of a field system with [007].

APPENDIX 4: DISCOVERY AND EXCAVATION IN SCOTLAND (DES) REPORT

LOCAL AUTHORITY:	Aberdeenshire Council
PROJECT TITLE/SITE NAME	Droop Hill Windfarm
PROJECT CODE:	AOC 22153c
PARISH:	Glenbervie
NAME OF CONTRIBUTOR:	Jamie Humble
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Monitored Topsoil Strip
NMRS NO(S)	N/A
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NO 75462 81770
START DATE (this season)	11 th October 2013
END DATE (this season)	8 th November 2013
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>AOC Archaeology Groups was commissioned by the Greenspan Agency to undertake an archaeological watching brief on the topsoil strip for two wind turbines, control building and their associated access tracks at Droop Hill to the north-west of the village of Glenbervie near Stonehaven, Aberdeenshire.</p> <p>A series of features relating to the post-medieval farming landscape of the area were identified during the watching brief. These comprised two boundary dykes each of which had two associated ditches one to either side of the dyke. The boundary dykes were identifiable as upstanding monuments and for the most part were unaffected by the wind farm development.</p>
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	The Greenspan Agency
ADDRESS OF MAIN CONTRIBUTOR:	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS

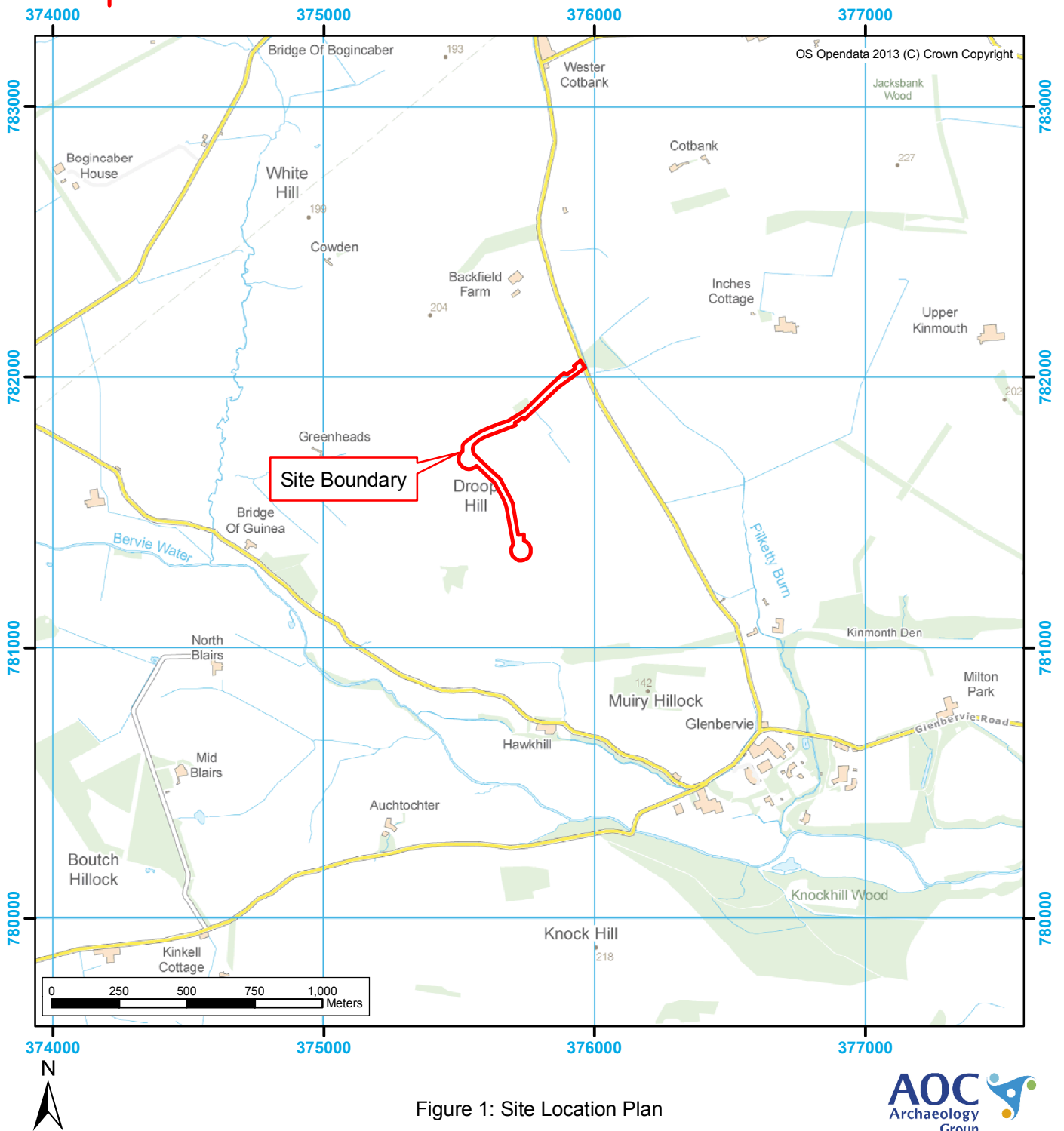
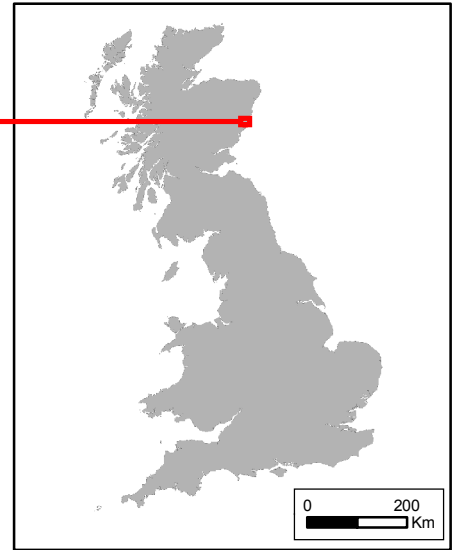
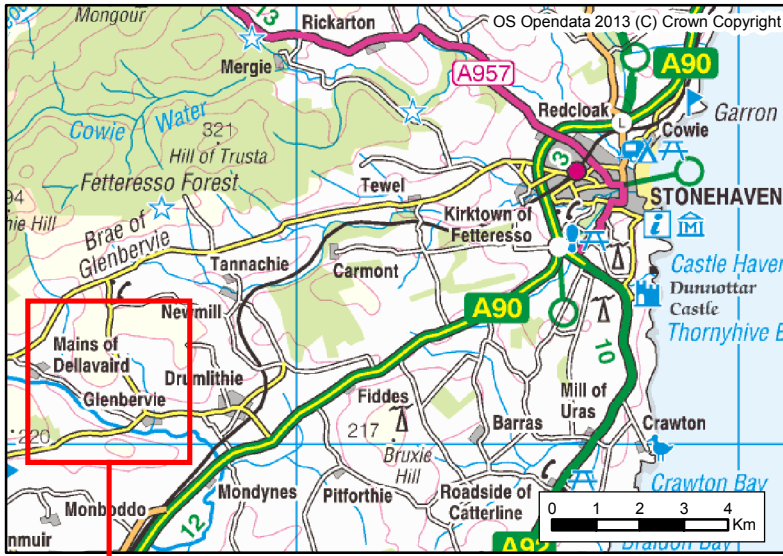


Figure 1: Site Location Plan



Figure 2: Turbine and Control Room Areas Location Plan

- Turbine
- ▨ Access Track
- ▭ Site Boundary
- ▭ Scheduled Area

0 50 100 150 200 Meters

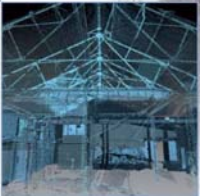


Cartographic data derived from Client's original illustration

Project No.:	22153
Date:	26.7.2013
Scale at A4:	1:7,000



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