

Project Code: BWFP09  
Planning Application Ref No: BB/APP/2008/2761 Boyndie T8  
Date of report: October 2009  
Client: Falck Renewables



## BOYNDIE WIND FARM, PORTSOY

### Archaeological Watching Brief

Donald Wilson  
*BA(Hons) AIfA*

## PROJECT SUMMARY SHEET

<i>Client</i>	FALCK RENEWABLES
<i>National Grid Reference</i>	NJ 63185 64030
<i>Address</i>	BOYNDIE WIND FARM
<i>Parish</i>	BOYNDIE
<i>Council</i>	ABERDEENSHIRE
<i>Planning Application Ref No</i>	BB/APP/2008/2761 BOYNDIE T8
<i>NMRS No</i>	NJ66SW0031
<i>Oasis No</i>	65333 (1)
<i>SMR No</i>	N/A
<i>HB/SAM No</i>	N/A
<i>Listing Category</i>	N/A
<i>Project Manager</i>	SIMON STRONACH
<i>Text</i>	DONALD WILSON
<i>Illustrations</i>	DONALD WILSON
<i>Typesetting</i>	CAROLINE NORRMAN
<i>Fieldwork</i>	DONALD WILSON
<i>Specialists</i>	N/A
<i>Schedule</i>	
<i>Fieldwork</i>	AUGUST 2009
<i>Report</i>	OCTOBER 2009

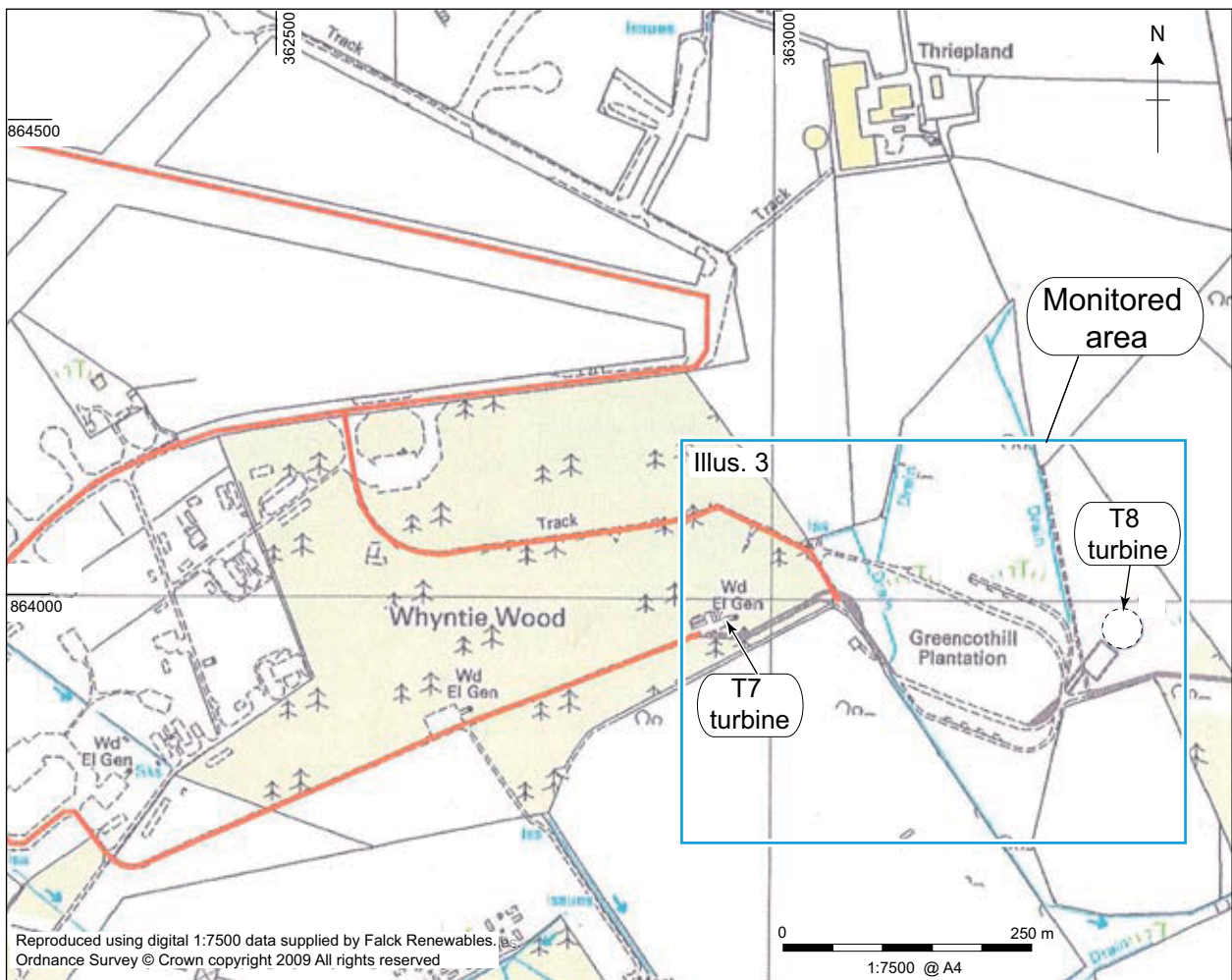
*Signed off by:* .....

*Simon Stronach BSc(Hons) MJA, Project Manager*

*Date:*.....

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**Illus 1**  
Site location plan



# BOYNDIE WIND FARM, PORTSOY

## Archaeological Watching Brief

by Donald Wilson

*Headland Archaeology Ltd was commissioned by Falck Renewables PLC to undertake archaeological monitoring on ground works associated with the erection of a single wind turbine (T8) on land to the west of the village of Boyndie, Aberdeenshire. The turbine site was within land previously used as a World War II airfield. The ground works revealed up to 0.5 m of topsoil over a geological deposit of stone rich clayey sand. No archaeological deposits, finds or features were identified and it seems that no archaeologically visible activity related to the airfield extended into the monitored area. No known features associated with the airfield or any archaeologically visible features were compromised during this phase of works.*

### INTRODUCTION

Planning permission (Ref No BB/APP/2008/2761 Boyndie T8) had been granted for the installation of a further wind turbine on land that was previously part of the Boyndie airfield, Aberdeenshire (NJ 363185 864030, Illus 1). Aberdeenshire Council attached a condition to planning consent that required archaeological monitoring to be undertaken during all ground breaking works associated with the construction of the turbine's concrete base, any road widening and excavation of any cable trenches to connect the new turbine (T8) to the substation located at one of the existing turbines (T7).

Due to the proposed turbine base being located in close proximity to features associated with the World War II airfield, the work was considered to be located on archaeologically sensitive land, a methodology was agreed with Moira Greig, the Aberdeenshire Archaeologist.

### ARCHAEOLOGICAL BACKGROUND

An Environmental Appraisal of the site had been undertaken (Headland 2008) which took into consideration the known archaeology of the area. The site was located approximately 500 m west of the village of Boyndie, Aberdeenshire on land that had previously been part of an area of managed woodland in the mid 1800's. This area was known as Whyntie Wood and Greencothill Plantation as identified on the 1st edition Ordnance Survey (Illus 2). Some of this woodland survived when the area was transformed into a small airfield in the early 1940's. Boyndie airfield is a Non Statutory Register site of national importance due to the role it played during World War II (NMRS: NJ66SW0031). This airfield was constructed in 1942-43 and was in use from May 1943 to June 1946. During this time the airfield was used initially for pilot training then from September 1944 by

Coastal Command which used the airfield as a base for five squadrons involved in attacking enemy shipping in the North Sea (Hughes 1999).

The area of the wind farm extension covers the eastern edge of Boyndie airfield (Illus 3) in an area that had been used for the main bomb stores. There were five individual features within the application area that had been identified during the Environmental Appraisal from an original plan of the airfield, although none of these features were to be affected by the ground works associated with the construction of the wind turbine or the associated road widening and subsequent cable trenches.

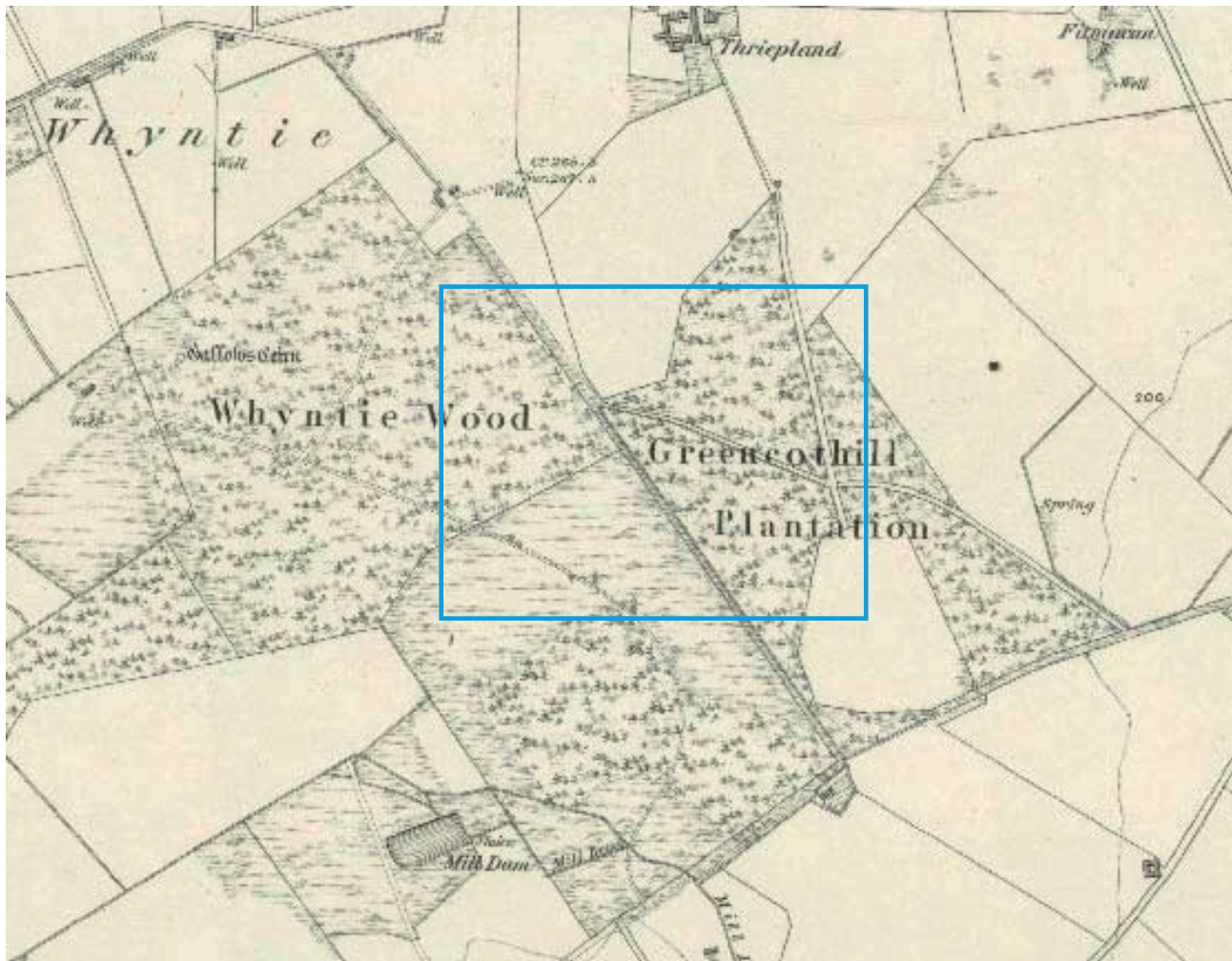
A Component Store (01) lay within the development area although this did not survive as an upstanding feature. Close to the location of the T8 wind turbine an incendiary bomb container store (02) only survived as a concrete floor with red brick surround. This feature had been incorporated into an east/west aligned modern gravel track that formed part of a public right of way.

Part of the airfield road network (03) also passes through the development area. This is a concrete track and survives, although in places it is very overgrown with gorse and other vegetation.

### OBJECTIVES

The objectives of archaeological monitoring all the ground works associated with the erection of the turbine were to:

- Determine whether or not any archaeological remains were present within the disturbed areas;
- Excavate and record any remains that would be directly affected by the construction of the turbine.
- Ensure that any upstanding remains relating to the WWII airfield are not damaged or adversely affected by the construction of the turbine base and associated cable trenches.



**Illus 2**

Extract from 1st ed. Ordnance Survey (1867) showing the Greencoath Plantation  
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## METHODS AND RESULTS

The T8 turbine base was located on the far eastern side of the airfield site, across what used to be Greencoath Plantation (see Illus 2). The topography of the site was fairly level, comprising rough gorse and overgrown scrub with occasional tree stumps and large outcropping boulders.

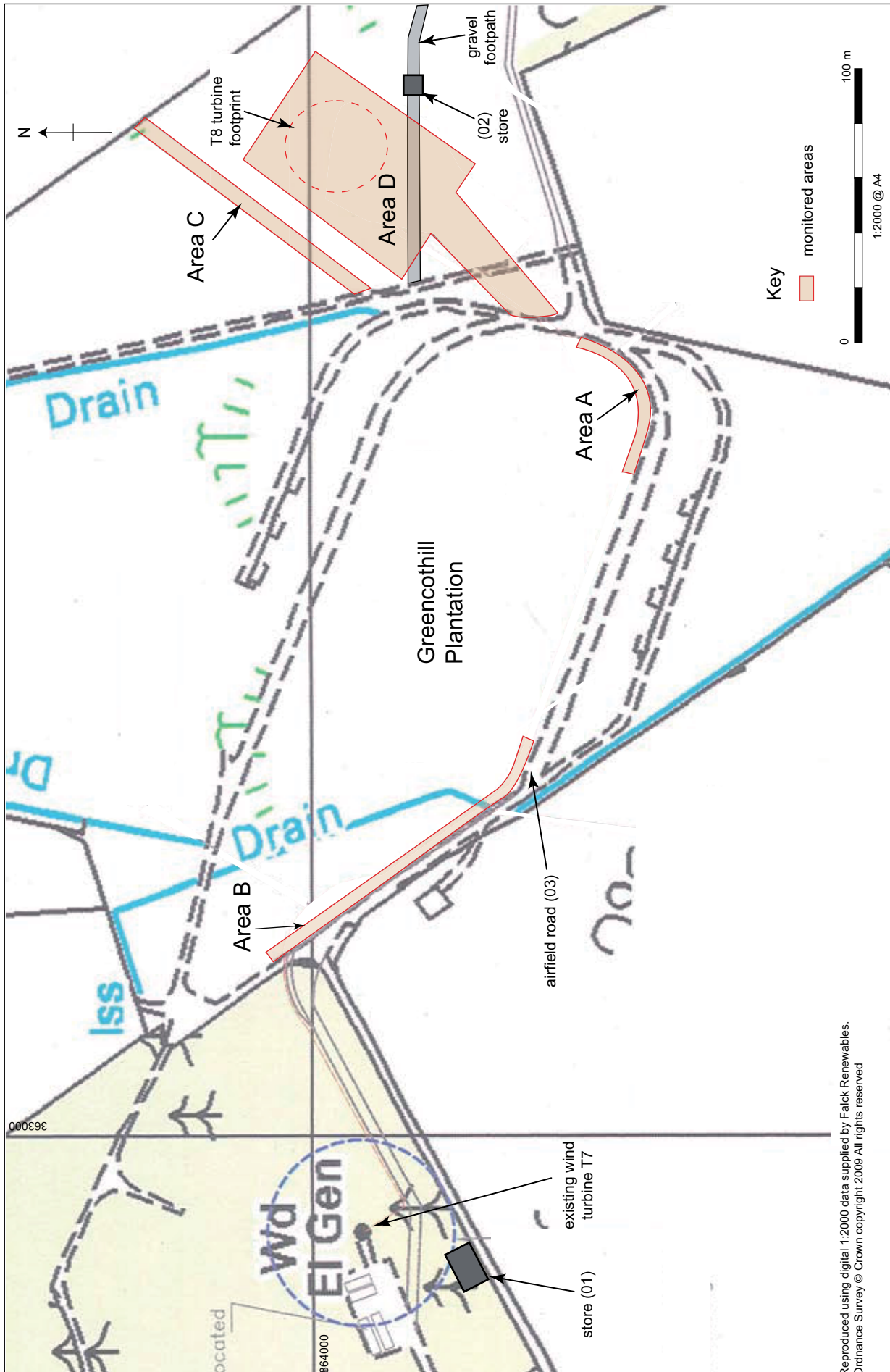
All ground breaking works were monitored by an experienced field archaeologist and a photographic record was taken using colour slide and print film plus digital images (Appendix 1).

Four separate areas were monitored as part of the ground works (Areas A – D, Illus 3). The first of these areas (Area A) comprised a trench aligned along the inner side of the south-eastern curve of the concrete airfield road (Illus 4). This measured approximately 70 m long and 1.5 m wide and was stripped of topsoil by a mechanical excavator equipped with a ditching blade under direct archaeological supervision. The area was excavated to a total depth of 0.5 m forming part of a programme of road widening. The topsoil comprised of reddish-brown peaty silt with frequent stone inclusions over a geological deposit of stone

rich grey clayey sand. This trench also revealed the make up of the airfield road which comprised 0.10 m of coarse pebble rich concrete over 0.35 m of poorly sorted angular stone. No archaeological features were encountered and no artefacts were identified within the topsoil. This trench was subsequently backfilled with rubble hardcore to form a road surface.

Similar results were recorded for Area B which again was excavated in order to widen the existing airfield road. The trench was located on the inside edge of the airfield road (Illus 5), this time further to the west. This trench was approximately 130 m long and 1.5 m wide and excavated to a depth of 0.5 m revealing a natural geological deposit.

It was necessary to excavate a drainage channel to the north-west of the footprint of the T8 turbine area in order to avoid flooding of this area, so a narrow trench (Area C) was machine excavated. This trench was aligned NE-SW measuring 90 m long and 0.5 m wide with a maximum depth of 0.5 m (Illus 6). The excavation revealed 0.35 m of dark brown peaty silt with frequent stone inclusions, including some very large boulders, over yellow stone rich clayey sand. Again no archaeological features were



**Illus 3**  
Location of the monitored areas

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Ordnance Survey © Crown copyright 2009 All rights reserved





**Illus 4**

View of Area A excavation taken from the west

encountered and no artefacts of archaeological interest were identified within the topsoil.

The final area (Area D) comprised the footprint for the T8 wind turbine plus an additional section of access track. The NE-SW aligned footprint for the turbine measured 70 m x 50 m (Illus 7) with a 15 m wide access track at the south-west end of the footprint running 50 m to the south-west where it joined the eastern end of the airfield road (Illus 8). This whole area was stripped by a tracked mechanical excavator using a ditching bucket. The topsoil in this area was between 0.30 and 0.40 m deep but was heavily disturbed by tree stumps and roots in addition to a



**Illus 5**

View of Area B excavation taken from the west

significant number of large stone boulders. A shallow east-west aligned modern gravel footpath ran across this area forming part of a public right of way. The removal of the topsoil and footpath revealed mixed yellow stone rich clayey sand. No archaeological features were encountered and no artefacts of archaeological significance were identified within the topsoil.

A cable trench was excavated between the substation at T7 turbine and the north-west end of Area B, which then continued along the line of the widened airfield road to turbine T8. This was excavated without archaeological monitoring.



**Illus 6**

View of the drainage ditch (Area C) from the south-west

## CONCLUSION

The archaeological monitoring for the ground works associated with the erection of the proposed turbine base at Boyndie airfield identified no additional archaeological features, deposits or artefacts. The work also did not adversely impact on any of the known upstanding remains of the WWII airfield. Given the stony nature of the deposits and the poorly draining subsoil recorded during this work early habitation of the area monitored may not have been attractive.



## REFERENCES

- Headland Archaeology 2008 *Boyndie Wind Farm Environmental Appraisal (BWFE08)*
- Hughes, J. 1999 *A steep turn to the stars: a history of aviation in the Moray Firth, Peterborough*. 137-44



**Illus 7**  
View of the T8 turbine footprint (Area D) from the north



**Illus 8**  
View of the access track to the turbine (Area D) from the south

## APPENDIX 1

### Photographic register

Colour print, colour slide and digital

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Frame	Direction	Description
1	–	Registration shot
2	E	View of area a trench
3	S	View of north facing section of airfield road
4	N	View of south facing section of trench showing peat
5	NW	View of Area B trench
6	SE	View of Area B trench
7	NE	View of drainage ditch Area C
8	E	Pre-excavation shot of T8 turbine location
9	SW	Working shot of T8 turbine footprint
10	S	Working shot of T8 turbine footprint
11	NE	View of T8 turbine footprint from SW corner
12	SW	Post-ex shot of T8 turbine footprint area
13	NE	View of trackway of Area D

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## APPENDIX 2

### DES-entry

LOCAL AUTHORITY:	Aberdeenshire Council
PROJECT TITLE/SITE NAME:	Boyndie Wind Farm
PROJECT CODE:	BWFP09
PARISH:	Boyndie
NAME OF CONTRIBUTOR(S):	Donald Wilson
NAME OF ORGANISATION:	Headland Archaeology Ltd
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	NJ66SW0031
SITE/MONUMENT TYPE(S):	World War II Airfield
SIGNIFICANT FINDS:	None
NGR (2 letters 8 or 10 numbers)	NJ 6318 6403
START DATE (this season)	18 <sup>th</sup> August 2009
END DATE (this season)	24 <sup>th</sup> August 2009
PREVIOUS WORK (incl. DES ref.)	Environmental Assessment
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Headland Archaeology Ltd was commissioned by Falck Renewables PLC to undertake archaeological monitoring on ground works associated with the erection of a single wind turbine (T8) on land to the west of the village of Boyndie, Aberdeenshire. The turbine site was within land previously used as a World War II airfield. A series of trenches were machine excavated in order to widen the existing airfield track and a 70 m x 50 m area was topsoil stripped for the footprint of the wind turbine. The ground works revealed up to 0.5 m of topsoil over a geological deposit of stone rich clayey sand. No archaeological deposits, finds or features were identified and it seems that any activity related to the airfield did not extend into the monitored area. No known features associated with the airfield or any archaeologically visible features were compromised during this phase of works.
PROPOSED FUTURE WORK:	None
ARCHIVE LOCATION: (intended/deposited)	Archive to be deposited in NMRS. Report lodged with Aberdeenshire SMR and NMRS.
SPONSOR OR FUNDING BODY:	Falck Renewables
CAPTION(S) FOR ILLUSTRS:	—
ADDRESS OF MAIN CONTRIBUTOR:	Headland Archaeology Ltd, 13 Jane St, Edinburgh. EH6 5HE
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