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**Middleton Wind Farm,
East Renfrewshire**

Archaeological Watching Brief

Report No. 2113

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standard operating procedures.

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CONTENTS

1.	Introduction	3
2.	Working Methods	4
3.	Archaeological Results	5
4.	Conclusions	7

Appendices

1.	Context Register	8
2.	Digital Photographic Register	8
3.	Drawing Register	9
4.	Discovery & Excavation in Scotland Entry	10

Illustrations (bound at rear)

Fig. 1 Site location and plan showing watching brief areas

Fig. 2 View of Scheduled Monument Bannerbank, from south, with buffer in place

Fig. 3 View of Turbine 6 base, from SW

Fig. 4 View of Turbine 3 base and junction, stripped, as seen from Turbine 1

Fig. 5 Stripped access track at Chainage 670 between Turbines 1 and 2

Fig. 6 Field bank (1002), NE-facing section

Fig. 7 View of upstanding field bank (1002). Looking SW from construction compound

1. INTRODUCTION

1.1 General

This report represents the results of an archaeological watching brief undertaken by CFA Archaeology Ltd between May and August 2012, to satisfy planning condition 21 for Middleton Wind Farm (Planning ref. 2008/0096/TP). The work was commissioned by ScottishPower Renewables.

A Written Scheme of Investigation (WSI) for the watching brief was produced by CFA Archaeology Ltd on behalf of RSK Environment Ltd.

1.2 Background

The area proposed for Middleton Wind Farm contained the Scheduled Monument known as Bannerbank hut circle (SM No. 12815, NMRS no. NS45SE 9). The monument is located on the south-east flank of Laggen Hill, and appears as a low ring of turf and stone 0.2m to 0.5m high to the west and with a possible entrance on the east.

Survey work has previously been undertaken on Middleton Farm (WoSAS ID Ev3575) by ACFA. Features recorded during this survey included three possibly prehistoric cairns, a Late Bronze Age homestead, two other hut circles, an 18th-century farmstead and a 19th-century sheepfold.

Bannerbank Quarry extension, on the opposite side of the B769 to Middleton Wind Farm, was also surveyed by ACFA in 2004, which recorded field clearance cairns and a possible homestead and enclosure (WoSAS ID Ev1437).

These surveys indicate that there are extensive upstanding remains in the general area of both later prehistoric and post-medieval date, including rural agricultural settlements as well as possible burial sites.

1.3 Objectives

The archaeological work consisted of two components:

- The protection of the Scheduled Monument of Bannerbank Hut Circle.
- A watching brief during ground-breaking associated with construction works.

The monitoring encompassed: all topsoil stripping associated with the establishment of the primary and secondary borrow pits, the construction of the wind turbine bases, sub-station and site compound; as well as all ground reduction associated with the construction of site access tracks (Fig. 1). Floating roads were not monitored.

2. WORKING METHODS

2.1 General

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

The marked out locations of turbine bases and other infrastructure and the routes of access tracks were walked over by the attending archaeologist prior to topsoil stripping taking place.

The removal of soil deposits was carried out using tracked excavators under constant archaeological supervision.

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.

3. ARCHAEOLOGICAL RESULTS

3.1 General

Numbers in bold in the following text refer to contexts, a full list of which is contained in Appendix 1. The remainder of the site records form Appendices 2-3. Appendix 4 provides the draft of an entry for submission to *Discovery and Excavation in Scotland 2013*.

3.2 Demarcation

A 10m buffer zone was set up around the Scheduled Monument of Bannerbank using wooden stakes placed at regular intervals around a perimeter and sprayed with orange paint (Fig. 2). The use of temporary fencing was not possible due to livestock activity in the area.

There was no impact on the site throughout the duration of the construction works.

3.3 Watching Brief

The groundbreaking works associated with the establishment of the primary and secondary borrow pits were monitored, as was the construction of the temporary site compound at the site entrance off the B769 and the permanent compound on the south flank of William's Hill. All groundbreaking works associated with the establishment of access tracks, turbine bases, new site entrance, turning heads and substation were monitored (Fig. 3-5).

At higher altitudes and on rockier parts of the site, topsoil was a sandy clay of 0.1-0.2m thick. Peat was present across much of the site at depths of 0.3m to more than 3m in some of the more waterlogged areas. The topsoil/peat generally overlay dark to mid-brown sandy clay natural which contained occasional glacial erratics, boulders, and stones, and on the hillsides there was often protruding bedrock close to the surface.

There were numerous drainage features cutting across the development area, attesting to attempts to drain and improve the moorland.

Field Bank 1002

One feature was identified within the area for the construction compound (Fig. 6-7). This was a discontinuous linear bank (**1002**), between NGR NS 48989 52744 and NS 49020 52764, at about 245m AOD. A 2m wide section was excavated by hand across this bank prior to topsoil stripping within the compound, and then its removal during topsoil stripping was monitored as part of the watching brief.

The feature measured 3.5m in width, and up to 1m at its maximum height measured from the natural, and a section measuring 16m long was removed during topsoil stripping operations, crossing the SE corner of the compound area (Fig. 1).

The bank was made up of a grey-brown sandy clay with orange mottling and stone inclusions (**1003**) covered in turf; the stones were less than 0.3m across and were sparsely distributed through the bank material (Fig. 7). It overlay natural and there was no peat seen in the section either beneath the bank or abutting it; topsoil here was 0.3m of sandy clay. This turf and stone feature was likely to have been a field boundary. No finds were recovered from or beneath this feature and there was no visible ground surface preserved beneath the bank.

The bank extended beyond the area of the compound, visible as an upstanding feature for c.80m towards White Loch from the compound, on a NE-SW alignment with some breaks (recorded as lying between NGR NS 49033 52773 and NS 48944 52713).

Bank **1003** was not associated with any cut features, such as ditches, and was not directly associated with the rig-and-furrow cultivation which lies at a higher altitude on William's Hill (WoSAS Site ID 53679).

Field banks were recorded by ACFA on the south-east flank of William's Hill, including WoSAS Site ID 53677 at NGR NS 4905, 5278: this is described as being 'The scant remains of a turf bank with little stone incorporated meanders with several short gaps from the lower south-east slopes of William's Hill for about 200m south towards the White Loch. No evidence remained to confirm whether it extended to the shores of the Loch and it seems to peter out in a boggy area about 150m short.' It seems highly likely that bank **1002** was part of this previously recorded feature. Other features recorded in the vicinity include banks, a possible enclosure and rig-and-furrow further to the north (WoSAS Site ID 53679), a probably post-medieval building platform (WoSAS Site ID 53678) further to the east, and two possible hut circles (WoSAS Site ID 22357 and 55792) further to the south.

The topsoil stripping operations did not impinge on any other previously recorded or newly identified upstanding archaeological features. No other features, finds or deposits of archaeological interest were recovered during the watching brief.

4. CONCLUSIONS

The watching brief monitored excavation works associated with the construction of Middleton Wind Farm. The Scheduled Monument of Bannerbank Hut Circle was demarcated and protected during all works.

A single earth and stone field bank, probably a land boundary and thus related to farming practices occurring on the moor, was identified **(1002)** and recorded during its partial removal. No finds or associated features were identified which may have hinted towards a potential date for this bank. However, the wider landscape features recorded during previous surveys indicate that land use was directed towards livestock grazing activities over a considerable length of time, and includes elements from both prehistoric and post-medieval rural settlement. In addition, a number of cairns outside of the development site may include prehistoric burial monuments. It is impossible to be certain of the bank's date but its surviving size may suggest a more recent, post-medieval date rather than a prehistoric one.

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 East Renfrewshire Council.

A summary statement of the results of this programme of work will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 4) and submitted online via the OASIS protocol.

APPENDIX 1: Context register

Context no	Type	Fill of	Description
1000	Deposit		Peat / topsoil- 0.20m-4.00m +
1001	Deposit		Mid-brown sandy clay, underlies (1000), overlies frost shatter. Depth varies.
1002	Deposit		Field bank. Grey-brown sandy clay with orange mottling.
1003	Deposit		Field bank. Stone inclusions, up to 0.3m across, angular and sub-angular.

APPENDIX 2: Digital Photographic Register

Number	Description	From	Conditions
1	Hut circle site, demarcated	NW	Rain
2	Hut circle site, demarcated	SW	Rain
3	Hut circle site, demarcated	N	Rain
4	Hut circle site, demarcated	SE	Rain
5	Hut circle site, demarcated	SE	Rain
6	Borrow pit	NE	Overcast
7	Borrow pit	NE	Overcast
8	Borrow pit	E	Overcast
9	Borrow pit	E	Overcast
10	Shot of possible field wall, orientated NE/SW as it intersects the access track at CH90, pre-stripping	NE	Sun
11	Post-ex shot of possible field wall (not a field wall)	NE	Sun
12	View of possible field wall in area of construction compound	NE	Sun
13	View of possible field wall in area of construction compound	N	Sun
14	Section, NE facing, possible field wall [1002]	NE	Sun
15	Section, NE facing, possible field wall [1002]	NE	Mon
16	Section, SW facing, as above	SW	Sun
17	Overall view of borrow pit	NE	Overcast
18	Access track from borrow pit to water crossing	S	Overcast
19	Turbine 3 platform stripping	SW	Overcast
20	Turbine 3 platform stripping	S	Overcast
21	Access track towards CH700	S	Overcast
22	Post-stripping/levelling turbine 3	SW	Overcast
23	Post-stripping/levelling turbine 4	NW	Overcast
24	Turbine 3 base and junction	W	Overcast
25	View of Bannerbank hut circle scheduled monument w/buffer in place	S	Overcast
26	View of stripped access track from CH575 south	N	Overcast
27	Working shot, CH600	NE	Overcast
28	CH670, stripped track	NE	Overcast
29	Turbine 2 stripping, peat depth, se facing section	SE	Rain
30	Turbine 2, stripped platform	SE	Overcast
31	Turbine 2	E	Overcast
32	Turbine 2	NE	Overcast
33	Turbine 2	SE	Overcast
34	Turbine 2	SW	Overcast
35	Turbine 2	SW	Overcast
36	Stripped area of new site entrance, NW facing section	N	Sun
37	Stripped access track entrance to turbine 4	NW	Overcast
38	Stripped access track entrance to turbine 4	NW	Overcast
39	Turbine 4 platform	SE	Sun
40	Turbine 4 platform	SE	Sun

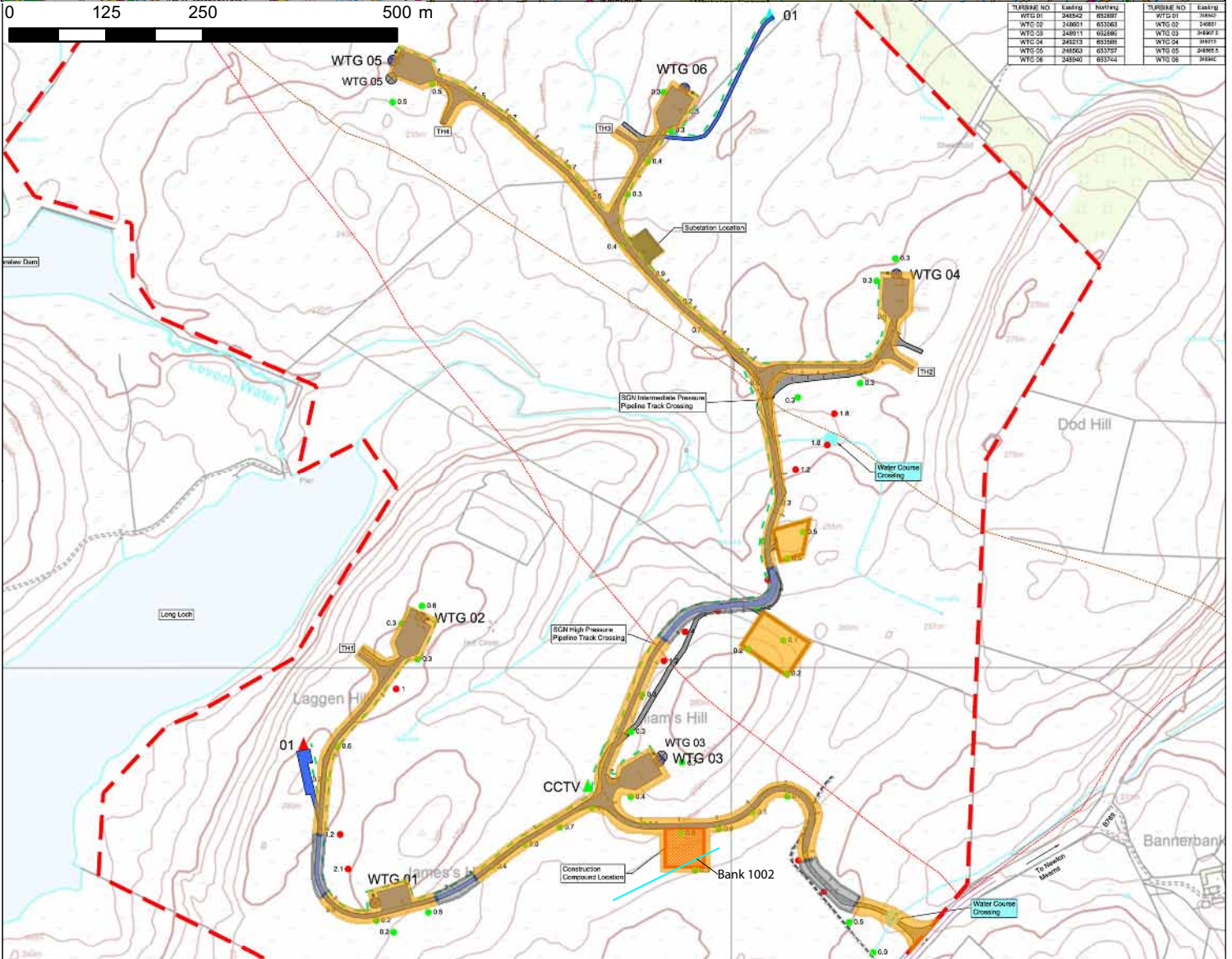
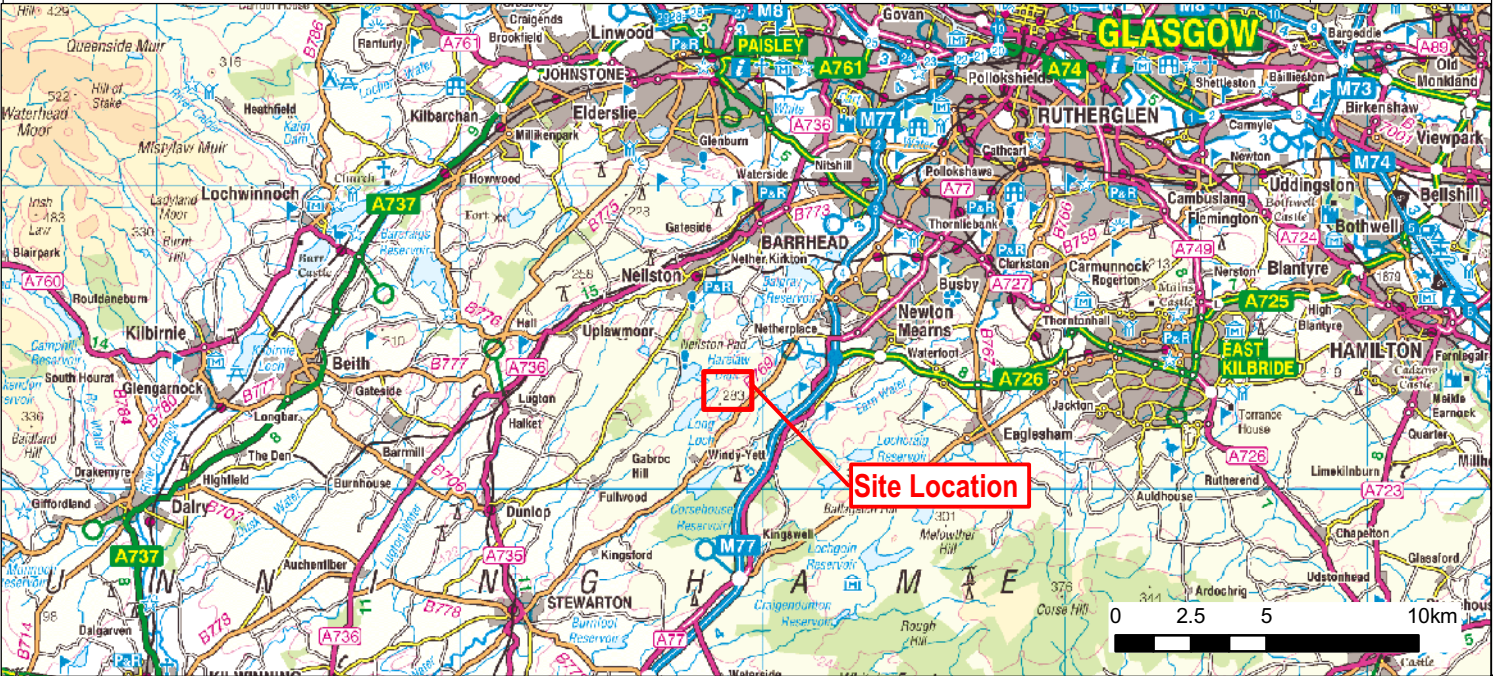
41	Turbine 4 platform	SE	Mon
42	Turbine 4 platform	SE	Sun
43	Turbine 4 platform	NE	Sun
44	Turbine 4 platform	NE	Mon
45	Turbine 4 platform	E	Sun
46	Turbine 4 platform	W	Sun
47	Turbine 4 platform	W	Sun
48	Turbine 4 platform	NW	Sun
49	Turbine 6 access track, SE facing section CH150	SE	Overcast
50	Turbine 6, NW facing section	NW	Overcast
51	Stripped access track from turbine 5 entrance	NW	Overcast
52	Turbine 6	W	Overcast
53	Turbine 6	SW	Overcast
54	Turbine 6	E	Overcast
55	Turbine 6	SE	Overcast
56	Turbine 1 towards Turbine 3	SW	Sun
57	View of Turbine 4, 5, 6	SW	Sun
58	Primary borrow pit	N	Sun
59	Turbine 6	SW	Sun
60	Turbine 6	SW	Mon

APPENDIX 3: Drawings Register

Dwg no.	Sheet no.	Scale	Plan / Section	Description / contexts
1	1	1:20	Section	Field bank-(1002)

APPENDIX 4: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	East Renfrewshire
PROJECT TITLE/SITE NAME:	Middleton Wind Farm
PROJECT CODE:	MIDD
PARISH:	Mearns
NAME OF CONTRIBUTOR:	Andrew Morrison
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	NS45SE 9
SITE/MONUMENT TYPE(S):	-
SIGNIFICANT FINDS:	-
NGR (2 letters, 8 or 10 figures)	NS 4869 5305
START DATE (this season)	May 2012
END DATE (this season)	August 2012
PREVIOUS WORK (incl. DES ref.)	-
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>A programme of archaeological works was carried out at Middleton Windfarm. The known site of a scheduled hut circle (NS45SE 9) was demarcated to prevent accidental damage during construction works.</p> <p>No archaeological features or deposits were recorded during the ground breaking works. A single linear earth and stone bank was recorded, likely a field bank, on the southern flank of William's Hill.</p>
PROPOSED FUTURE WORK:	-
CAPTION(S) FOR ILLUSTRS:	-
SPONSOR OR FUNDING BODY:	ScottishPower Renewables
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 NMRS.





Key: Site Boundary Watching Brief area Floated Road	Fig. No: 1	Revision:	Client: Scottish Power Renewables
	Title: Site location and plan showing watching brief areas		
Scale at A3: 1:8,000	Project: Middleton Wind Farm		
CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park, Musselburgh East Lothian, EH21 7PQ T: 0131 273 4380 F: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk			Drawn by: SW Checked: LW Report No: 2113



Fig. 4 - View of Turbine 3 base and junction stripped , as seen from Turbine 1



Fig. 5 - Stripped access track at chainage 670 between Turbines 1 and 2

Fig. No: 4-5		Revision: A	Project: Middleton Wind Farm			CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park, Musselburgh East Lothian, EH21 7PQ T: 0131 273 4380 F: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk
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Fig. 6 - Field bank (1002) NE-facing section



Fig. 7 - View of upstanding field bank (1002). Looking south-west from construction compound

Fig. No: 6-7		Revision: A	Project: Middleton Wind Farm			CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park, Musselburgh East Lothian, EH21 7PQ T: 0131 273 4380 F: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk
Drawn by: LW	Checked: LW	Report No: 2113	Client: Scottish Power Renewables			

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