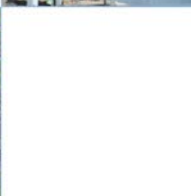
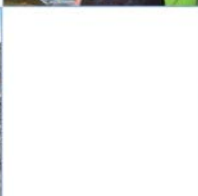
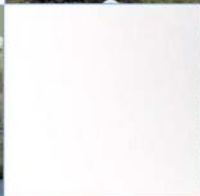


# Wind Turbine, Woo, Sanday, Orkney: Archaeological Evaluation Data Structure Report

AOC Project 23502

28<sup>th</sup> June 2016



# Wind Turbine, Woo, Sanday, Orkney: Archaeological Evaluation Data Structure Report

On Behalf of: Anna Halford and Gilles Favier  
Woo  
Sanday  
Orkney  
KW17 2AZ

National Grid Reference (NGR): HY 66784 45306

AOC Project No: 23503

OASIS Entry No: aocarcha1-256163

Prepared by: Thomas Bradley-Lovekin

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

Author: Thomas Bradley-Lovekin Date: 28<sup>th</sup> June 2016

Approved by: Lynne Roy Date: 29<sup>th</sup> June 2016

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**Enquiries to:** AOC Archaeology Group  
Edgefield Industrial Estate  
Edgefield Road  
Loanhead  
EH20 9SY

Tel. 0131 440 3593  
Fax. 0131 440 3422  
e-mail. [admin@aocarchaeology.com](mailto:admin@aocarchaeology.com)



[www.aocarchaeology.com](http://www.aocarchaeology.com)

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## **Abstract**

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An archaeological evaluation was conducted by AOC Archaeology Group within the intended footprint of a proposed 3kw wind turbine and its cable trench at Woo, Sanday, Orkney (Planning Application No: 16/112/TPP). The proposed wind turbine will have a maximum height of 11m.

There are no known archaeological remains located within the area proposed for the turbine base and associated cable trench. However, archaeological remains are known in the vicinity including numerous flints recovered from the field within which development is proposed and midden deposits, containing walls and paving, exposed to a depth of up to 1.2m along a c.100m long length of the adjoining shoreline.

No archaeological features, deposits or artefacts were identified during the evaluation.

# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 An archaeological evaluation was undertaken the 23<sup>rd</sup> of June 2016 by AOC Archaeology Group on behalf of Anna Halford and Gilles Favier in conjunction with a proposed wind turbine at Woo, Sanday, Orkney. The site lies within the administrative area of Orkney Islands Council, which is advised on archaeological matters by Julie Gibson, Orkney Islands Council Archaeologist. The archaeological works were conducted according to a *Written Scheme of Investigation* (AOC 2016), and in accordance with the principles set out in *Scottish Planning Policy* (2014) and *Planning and Archaeology 2/2011* (2011).

## 1.2 Location

- 1.2.1 The proposed turbine is located within an open pasture field north-west of Woo, Sanday at NGR: HY 66784 45306. The proposed footprint measures 2.5 x 2.5m and will require excavation to a depth of 1m (see **Figures 1 & 2**). The proposed route of the cable trench connecting the turbine to the principal building at Woo was also evaluated at the request of the Orkney Islands Council Archaeologist, Julie Gibson.

## 1.3 Archaeological Background

- 1.3.1 Woo is a small landholding located on the north facing coast of Sanday, between the settlements of Scar to the east and Nouster to the west. Three buildings are located on the property (**Plate 1**). The principal building comprises a single storey range, which was formerly a terrace of three cottages although they have now been conjoined into one. A former watermill and a separate small single storey single bay cottage are also located within the property boundary. All three buildings are recorded on the First Edition 25 inch to the mile Ordnance Survey map of published in 1882. The watermill is included in the National Record of Historic Environment (NRHE) (Sanday, Westove, Scar Watermill, NRHE HY64 NE 21)
- 1.3.2 There are no known archaeological remains located within the area proposed for the turbine base and associated cable trench. However, archaeological remains are known in the vicinity and an evaluation was required to investigate the possibility that hitherto unknown remains may be present, beneath the topsoil, within the area of the proposed development.
- 1.3.3 Exposed in the shore face north-east of the proposed development area is a long stretch of midden with small walls exposed (NRHE No: HY64NE 5). It contains limpets, fish bones, ash, pottery and flint. The exposed area is c. 100m in length. The bottom of the midden layer is 1.2m below ground level. One area contains walls and paving 6m in length which may be a building or enclosure. The midden runs the length of the shore banks from the cottage dyke to the edge of the upstanding building beyond. Additionally a thick scatter of flints was observed and collected by a previous resident in Woo in the field in which the proposed development is located (Gibson pers comm. 2016) and may be indicative of prehistoric settlement activity. Slightly to the north of the proposed development area at Runna Clett (NRHE No: HY64NE 3) a low mound may mark the site of a possible broch mound.

# 2 OBJECTIVES

- 2.1 The archaeological evaluation was undertaken in order to meet the following objectives:

- i) to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area through evaluation trenching;
- ii) to advise as to an appropriate form of mitigation should significant archaeological remains be encountered; preservation of any remains *in situ* will always be the preferred option. If preservation *in situ* proves infeasible to advise and implement an appropriate form of mitigation such as excavation, post-excavation analyses and publication, should significant archaeological remains be encountered;
- iii) to prepare a final Data Structure Report and project archive.

2.1 This Data Structure Report is in fulfilment of Objective *iii*.

### 3 METHODOLOGY

- 3.1 The evaluation was undertaken using a mini-digger equipped with a 0.85m wide bladed ditching bucket. Excavation was undertaken in shallow units/spits until the first significant archaeological horizon or natural subsoil was reached. All machine excavation was supervised by an experienced field archaeologist and according to AOC Archaeology Group's standard operating procedures, and as per the methodology within the *Written Scheme of Investigation* (WSI) (AOC 2016).

### 4 RESULTS

- 4.1 The entire 2.5m x 2.5m footprint of the proposed turbine base was excavated down to the surface of the sand and gravel, 0.40m below the ground surface (**Plate 2**). Further investigations established that this material was of natural geological origin and investigations were discontinued at that point, further investigations down to 1m deep base level for the proposed turbine footprint being considered unnecessary. The natural sand and gravel (**102**) was found to be overlain by a single deposit of loose to friable dark greyish brown sand topsoil (**101**).
- 4.2 The WSI envisaged evaluating individual sections of the proposed cable route, none of which were to be more than 10m apart. The WSI also allowed for the exemption of the course of the proposed cable route through the curtilage of the principal building as this had been disturbed previously. However in the event the proposed cable route was found to be 23.3m long, of 9.8m lay within the curtilage (gardens) and 13.5m to the west within the field where the turbine is proposed (**Plate 3**). Given this it was decided to excavate the entire western 13.5m stretch down to the level of the top of natural. Natural (**102**) was encountered at depths of between 0.40 and 0.60m and comprised sand and gravel interspersed with patches of bedrock. It was overlain by the same loose to friable dark greyish brown sand topsoil (**101**) that was encountered within the proposed turbine base.





**Plate 1 West facing view across the site showing the excavation of the turbine base**



**Plate 2 West facing view showing the excavated turbine base**





**Plate 3 West facing view showing the excavated cable trench**

## **5 CONCLUSIONS AND RECOMMENDATIONS**

- 5.1 The proposed 3kw wind turbine will require only limited ground works. Given this a 100% evaluation of both the 2.5 x 2.5m base footprint and the portion of the cable route which lies outwith the properties curtilage was considered appropriate.
- 5.2 No archaeological features remains or artefacts were encountered and consequently no further archaeological work is considered necessary.

## 6 BIBLIOGRAPHY

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# **Wind Turbine, Woo, Sanday, Orkney: Archaeological Evaluation Data Structure Report**

## **Section 2: Appendices**

## APPENDIX 1: Context Register

Context No.	Description and Interpretation
101	Loose to friable dark greyish brown sand <b>Topsoil</b>
102	Compacted/ hard yellowish brown sand and gravel, interspersed with bedrock <b>Natural</b>

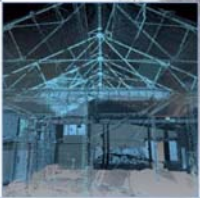
## APPENDIX 2: Photographic Register

Frame	Description	From	Date
1	West facing post-excavation view turbine base	E	23/6/16
2	North facing post-excavation view turbine base	S	23/6/16
3	East facing view showing turbine base under excavation	W	23/6/16
4	East facing overview showing Woo landholding	W	23/6/16
5	East facing view of the excavated cable route	W	23/6/16
6	West facing view of the excavated cable route	E	23/6/16



**APPENDIX 3: *Discovery and Excavation in Scotland* Report**

<b>LOCAL AUTHORITY:</b>	Orkney Islands Council
<b>PROJECT TITLE/SITE NAME</b>	Wind Turbine, Woo, Sanday, Orkney
<b>PROJECT CODE:</b>	23502
<b>PARISH:</b>	Sanday
<b>NAME OF CONTRIBUTOR:</b>	Thomas Bradley-Lovekin
<b>NAME OF ORGANISATION:</b>	AOC Archaeology Group
<b>TYPE(S) OF PROJECT:</b>	Archaeological Evaluation
<b>NMRS NO(S)</b>	None
<b>SITE/MONUMENT TYPE(S):</b>	None
<b>SIGNIFICANT FINDS:</b>	None
<b>NGR (2 letters, 6 figures)</b>	HY 66784 45306
<b>START DATE</b> (this season)	23 <sup>rd</sup> June 2016
<b>END DATE</b> (this season)	23 <sup>rd</sup> June 2016
<b>PREVIOUS WORK</b> (incl. DES ref.)	None
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	<p>An archaeological evaluation was conducted by AOC Archaeology Group within the intended footprint of a proposed 3kw wind turbine and its cable trench at Woo, Sanday, Orkney (Planning Application No: 16/112/TPP). The proposed turbine will have a maximum height of 11m.</p> <p>There are no known archaeological remains located within the area proposed for the turbine base and associated cable trench. However, archaeological remains are known in the vicinity including numerous flints recovered from the field within which development is proposed and midden deposits, containing walls and paving, exposed to a depth of up to 1.2m along a c.100m long length of the adjoining shoreline.</p> <p>No archaeological features, deposits or artefacts were identified during the evaluation.</p>
<b>PROPOSED FUTURE WORK:</b>	To be confirmed
<b>CAPTION(S) FOR ILLUSTRS:</b>	None
<b>SPONSOR OR FUNDING BODY:</b>	Anna Halford and Gilles Favier
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
<b>EMAIL ADDRESS:</b>	admin@aocarchaeology.com
<b>ARCHIVE LOCATION</b> (intended/deposited)	Archive to be deposited in NRHE



**AOC Archaeology Group**, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY  
 tel: 0131 440 3593 | fax: 0131 440 3422 | e-mail: [admin@aocarchaeology.com](mailto:admin@aocarchaeology.com)

[www.aocarchaeology.com](http://www.aocarchaeology.com)