HFRE/01

HILLWOOD FARM, SOUTH PLATT HILL, RATHO, EDINBURGH A Desk-Based Assessment, Archaeological Evaluation and Monitored Topsoil Strip

Evaluation

commissioned by Mr Robert Fleming

10/01755/PPP

November 2012 (Updated May 2013)

HILLWOOD FARM, SOUTH PLATT HILL, RATHO, EDINBURGH A Desk-Based Assessment, Archaeological Evaluation and Monitored Topsoil Strip

Evaluation

commissioned by Mr Robert Fleming 10/01755/PPP

November 2012 (Updated May 2013)

HFRE/01	HA Job no:
NT 13124 71016	NGR:
Ratho	Parish:
City of Einburgh	Council:
headland1-137762	OASIS ref.:
none	SMR no.:
RCAHMS	ill be deposited with:

Edward Bailey	Project Manager:
Jürgen van Wessel, Donald Wilson	Author:
Jürgen van Wessel, Donald Wilson	Fieldwork:
Ross Murray, Jürgen van Wessel	Graphics:
Edward Bailey – Project Manager	Approved by:

Archive wi

CONTENTS

1	INTRO	DUCTION	
2 SITE LOCATION AND DESCRIPTION			
3	BACKG	GROUND	
4	AIMS A	AND OBJECTIVES	
5	METH	ODOLOGY	
	5.1	Trial Trenching	
	5.2	Monitored Topsoil Strip	
	5.3	Recording5	
	5.4	Reporting and Archives	
6	RESUL	TS5	
	6.1	Trial Trenching	
	6.2	Monitored Topsoil Strip6	
7	DISCU	SSION	
8	REFER	ENCES	
	8.1	Bibliographic sources	
	8.2	Cartographic sources	
	8.3	Other sources	
9	APPEN	IDICES9	
	9.1	Appendix 1 – Site registers	
	9.2	Appendix 2 – Discovery and Excavation in Scotland entry	
	9.3	Appendix 3 – SUERC Radiocarbon Dating Report14	

LIST OF ILLUSTRATIONS

- 1 Location Plan showing the trench layout
- 2 General view of the evaluation area facing south-west
- 3 General view of the evaluation area facing north-east
- 4 Extract from Adair's map of 1735
- 5 Extract from Laurie's map of 1786
- 6 Extract from Kirkwood's map of 1817
- 7 View of Trench 6 facing east
- 8 View of Trench 2
- 9 Detail of the undulating bedrock in Trench 3
- 10 General view of monitored topsoil strip, facing south-west



Site location

A programme of archaeological work was carried out in order to satisfy a condition of the planning consent for the construction of a single dwelling at Hillwood Farm, South Platt Hill, Ratho. The work consisted of a deskbased assessment, archaeological trial trenching and a monitored topsoil strip.

The desk-based assessment identified a number of significant archaeological features in the surrounding area of the proposed development. These features appeared to range in date from the prehistoric through to industrial periods.

The evaluation covered an area close to the top of South Platt Hill. The trial trenching comprised 8 trenches measuring 145 linear m. These trenches revealed areas of stone rich geological subsoil and undulating bedrock, sealed beneath topsoil on average 0.35m deep. A left human femur was recovered from the topsoil. This was dated to the 7th to 8th century AD and may relate to an Anglian settlement recorded during archaeological works associated with the construction of the M8 extension No features or further artefacts of archaeological significance were revealed during this work.

The monitored topsoil strip covered the footprint of the dwelling, including a 3m buffer and the access track. No further remains of archaeological significance were identified.

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned to carry out a desk-based assessment, archaeological trial trenching and a monitored topsoil strip in advance of construction of a single dwelling at Hillwood Farm, South Platt Hill, Ratho, Edinburgh. The work was carried out in order to satisfy a condition of planning consent (ref: 10/01755/PPP) and adhered to a Written Scheme of Investigation prepared by Headland Archaeology and agreed with City of Edinburgh Council Archaeology Service (CECAS).

This report presents the results of the desk-based assessment, the trial trenching and monitored topsoil strip. The trial trenching was undertaken on 15th November 2012 and the topsoil strip on the 30th April 2013.

2 SITE LOCATION AND DESCRIPTION

The site is located on open ground close to the top of South Platt Hill, which lies 0.5 km north-west of Ratho (Illus 1). It is currently occupied by sloping open grassland bounded by woodland to the north and east and steep sloping ground to the south and west (Illus 2: Photo 14, Illus 3: photo 16).



Illus 2: View of site facing south-west

The proposed development also includes an access track leading west from the development site and turning to the north to join an existing track.

The site lies at around 109 m OD and is underlain by the Midland Valley silt complex of Quartz Microgabbro igneous bedrock, which are Carboniferous in origin (British Geological Survey website; <u>http://www.bgs.ac.uk</u>).



ILLUS 3 View of site facing north-east

3 BACKGROUND

As noted above a desk-based assessment relating to the site was undertaken in advance of the evaluation works, the results of which are presented below. These results suggested that the archaeological potential of the area was high. The site was thought to have particular potential to contain remains relating to the prehistoric period.

The proposed site occupies the western end of the summit of South Platt Hill located 0.5km north of Ratho, 10km from Edinburgh. Although no modern archaeological works have taken place on this site the New Statistical Account (NSA) of 1845 records that South Platt Hill was the site of an 'ancient encampment' the remains of which were disturbed and used c.1800 for building the walls on the adjacent Ratho Hall (Clason 1845). The NSA included a description of the site by a George Reid as; "occupying about one acre on the summit of the eminence, surrounded by a ditch and rampart made of large stones mixed with black earth. There were also two circular enclosures, one on the E, the other on the W side of the main camp, of from 30' -40' diameter, similarly surrounded by a substantial rampart of large blocks and black earth, and paved internally with flags of freestone, which must have been brought from a distance. On removing the rubbish, the bones of some persons of large size were found, all enclosed in freestone cists. A stone from one of the cists now forms a seat on top of the hill, at the corner of the wood. Some large blue and yellow beads were also found; none are known to have been preserved. There was also a tradition of a woman having been burned here for

witchcraft. On examining the spot specified, a quantity of burnt ashes was found quite entire."

Excavations by AOC Archaeology Group in 1993 (Smith 2005) on the nearby summit of North Platt Hill in advance of the construction of the M8 extension unearthed a complex site comprising both prehistoric remains (including a Bronze Age cremation cemetery, a palisade & ring ditch) and significantly an Anglian settlement of the 7th to 9th century AD (NMRS Ref No: NT17SW 95).

To the west of South Platt Hill a cist of prehistoric date was revealed during quarrying in 1897 that included two crouched inhumations and a cupmarked stone (NMRS Ref No. NT17SW 12). A prehistoric fort of probable Iron Age date is also recorded as cropmarks occupying the summit of the adjacent Hillwood Hill to the north (NMRS Ref No. NT17SW 92) and prehistoric sites (including cup and ring marked rocks) are known from the summit of Tormain Hill to the South. (NMRS Ref No. NT16NW 7 and 8).

It is clear from the historical and cartographic evidence that the area around Ratho was sparsely populated with little development until the turn of the 19th century. Adair's 1735 map (**Illus 4**) depicts both the North and South Platt Hills along with the town of Ratho, Ratho kirk and Ratho Byres indicating a increasing level of activity in this area at this time.



Extract of Adair's 1735 map

By the late 1700 the increasing development and improvement of farming allowed for the enclosure of much of the area. These improvements were overseen in the Ratho area by George Reid who owned much of this land. The cultivation of this land is clearly depicted on Laurie's map of 1786 (Illus 5) with all but the higher ground shown under cultivation.



ILLUS 5 Extract from Laurie's 1786 map

The early 1800s saw the construction of Ratho Hall to the E of South Platt Hill and by the 1820s the impressive Union Canal cut across the area. Kirkwood's map of 1817 (Illus 6) depicts both these features.

Interestingly this map also depicts a 'witches stone' further to the south on Tormain Hill. Given that the description of South Platt Hill mentioned in the NSA stated that the burning of witches took place there, it is possible to suggest that the two hills had been misidentified and it was Tormain Hill being described and not South Platt Hill. The later ordnance survey maps of the area depict the increasing size and quantity of quarries in the area with Ratho quarry and Craigpark quarry in particular becoming quite extensive. No significant changes to South Platt Hill are noted after this time until the construction of the motorway to the north in the 1990s.



ILLUS 6 Extract from Kirkwood's 1817 map

4 AIMS AND OBJECTIVES

In general, the purpose of the evaluation was to provide sufficient evidence for confident prediction of the archaeological significance and potential of the proposed development site.

More specific aims of the evaluation included:

- Establishing the location, extent, nature and date of archaeological features or deposits that may be present within the accessible areas targeted for trenching.
- Establishing the integrity and state of preservation of archaeological features or deposits that may be present within the accessible areas.

The results of the evaluation were used to inform the strategy for further archaeological mitigation. In the event, the discovery of human bone on the site prompted the specification by CECAS for an archaeologically monitored topsoil strip of the footprint of the house and the access track in advance of construction.

The resulting archive (finds and records) will be organised and deposited in the National Monuments Record of Scotland to facilitate access for future research and interpretation for public benefit.

5 METHODOLOGY

5.1 Trial Trenching

The evaluation phase incorporated 232 sq m of trial trenching (approx 5% sample). All trenches were opened with a mechanical excavator, suitably equipped with a toothless ditching bucket of adequate width (1.6 m). All trenches were excavated by machine under direct archaeological supervision to remove topsoil and deposits of modern make-up and were excavated in controlled spits. Machine excavation terminated at the top of the natural geology or the first significant archaeological whichever horizon. was encountered first. Spoil was stored beside the trench.

Excavation of archaeological deposits and features required to satisfy the objectives of the evaluation were continued by hand. On completion of machine excavation, all faces of the trench that require examination or recording were cleaned using appropriate hand tools where required. The stratigraphic sequence was recorded in full in each of the trenches, even where no archaeological deposits have been identified.

5.2 Monitored Topsoil Strip

The Archaeologically monitored topsoil strip covered the footprint of the house (with a 3m buffer) and the access track, a total of 1539 sq m. Topsoil was removed by mechanical excavator with a toothless ditching bucket under constant archaeological supervision. Excavation continued until either the natural sub-stratum or significant archaeological deposits were encountered. The resulting surface was then hand-cleaned where necessary and investigated for archaeological features.

All features and deposits were hand-excavated to a specification agreed in the WSI.

5.3 Recording

All recording followed IfA Standards and Guidance for conducting archaeological evaluations. All contexts and small finds have been given unique numbers. All recording was undertaken on *pro forma* record cards. 35mm colour transparencies were taken with a graduated metric scale clearly visible. Digital images were also taken for illustrative purposes. A full list of the photographic record can be found in Appendix 1.

A site plan including all identified features, areas of excavation and other pertinent information was recorded digitally. The site plan is accurately linked to the National Grid and heights to OD. Digital recording was undertaken using a differential GPS linked to a hand-held computer in order to allow data checking while in the field.

5.4 Reporting and Archives

On completion of the evaluation Headland will produce a site archive that will include a copy of this report. An online OASIS report (headland1-137762) will be completed and will be accompanied by a pdf report and boundary file. A summary report will be submitted for inclusion in *Discovery and Excavation Scotland* (a copy of which can be found in Appendix 2).

The project archive will be compiled in accordance with the guidelines published by the Institute for Archaeologists on behalf of the Archaeological Archives Forum (July 2007). The documentary and digital archive will be submitted to RCAHMS within six months of completion of all work on this project. All finds will be reported to the Scottish Archaeological Finds Allocation Panel, which will determine the ultimate destination of the material archive. Once this is determined, and within three months, arrangements will be made with the specified museum for transfer of material and title.

6 RESULTS

6.1 Trial Trenching

A total of 8 trenches were excavated (see **Illus 1**), comprising approximately 232 sq m, equating to a 5% sample of the available area. The initial 5 trenches (Tr. 1 - 5) were located across the higher ground that gradually sloped to the south and west. A single trench (Tr. 6) was positioned across a steep bank leading to an area of lower ground to the west (**Illus 7**).





View of Trench 6 facing east

Two final trenches (Tr. 7–8) were located along the line of the access track across the lower ground.

The stratigraphy of the majority of trenches was similar, with geological subsoil comprising stone rich orange sand and undulating bedrock sealed by plough soil with an average depth of 0.35m (**Illus 8**).



ILLUS 8 View of Trench 2 facing east

The only two trenches that failed to produce these results (Tr.7 & Tr.8) were located on the lower slope of the hill to the W. These two trenches revealed made ground below the topsoil. This comprised mottled orange stone rich clay that had been imported as part of the construction of the motorway to the N of the site. This was a very compact deposit and was not excavated as it was known to be several meters thick.

The bedrock recorded in Trenches 1 to 6 formed a series of uneven steps sloping to the S and W. Although these were recorded on the trench record sheets and a number of them were investigated they were considered to be a naturally occurring phenomenon (**Illus 9**).



ILLUS 9 Detail of the undulating bedrock in Trench 3

A left side human femur was recovered from the topsoil within Trench 2 although no negative features or archaeological contexts were recorded in this trench. Subsequent radiocarbon dating (Scottish Universities Environmental Research Centre: SUERC 44162) of the bone returned a date of 7th to 8th century AD for the bone indicating that the bone may have related to a ploughed out burial from the site. No further features or artefacts of archaeological significance were recorded during the evaluation. A full trench register is provided in Appendix 1.

6.2 Monitored Topsoil Strip

No further archaeological features or deposits were uncovered during the monitored topsoil strip. The excavations revealed friable, undulating bedrock with patches of stone-rich orange sand beneath 0.1 to 0.7m of ploughsoil across the whole area (Illus 10), except for the north-western 50m of the access track, where several layers of redeposited clays related to construction of the adjacent M8 motorway extension were encountered. These clays contained bottle glass, fencing wire and fragments of ceramic field rains.



ILLUS 10 General view of topsoil strip, facing south-west

7 DISCUSSION

Apart from the isolated human femur the fieldwork revealed no evidence of the prehistoric activity thought to have existed on this hill. The general topography of the hill included a rounded top partly covered in trees gradually leading down to a plateau with a sharp embankment to the SW. This was reminiscent of the type of topography generally associated with a small hillfort although in this instance this embankment did not continue to all sides of the hill and did not seem to form an archaeological feature. A single trench through this bank failed to reveal any visible signs of a bank or ditch indicative of hillfort sites.

The only evidence of human activity seemed to relate to the unstratified human femur recovered from Trench 2. Securely dated to the 7th to 8th centuries AD the presence of the femur would indicate that at least one early Christian burial was present on the hill that was subsequently ploughed out. This is consistent with the NSA account of human remains being found at the summit of the hill. It is probable that the femur recovered relates to a severely disturbed, ploughed out, burial. The remains of which were not recorded during the evaluation or monitored strip, although it cannot be discounted that further remains may not be present in areas not subjected to the investigation.

8 REFERENCES

8.1 Bibliographic sources

Archaeological Archives Forum Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (published by the IfA 2007).

If AStandards and Guidance for archaeological field evaluation (revised October 2008).

New Statistical Account (NSA) 1845, J Clason

Smith, A N 1995a The excavation of Neolithic, Bronze Age and early historic features near Ratho, Edinburgh, *Proc Soc Antiq Scot, vol.125* Page(s): 72-3

8.2 Cartographic sources

Adair, J 1735 A map of Mid-Lothian survey'd by Mr Adair

Laurie, J 1786 A plan of Edinburgh and the country adjacent

Kirkwood, R 1817 This Plan of the City of Edinburgh and its Environs.

Ordnance Survey 1852 six-inch Edinburghshire Sheet 5

Ordnance Survey 1895 six-inch Edinburghshire Sheet II.SW

8.3 Other sources

British Geological Survey website http://mapapps.bgs.ac.uk/geologyofbritain/home.h tml?location=edinburgh (Accessed 12/11/2012)

SPP: Scottish Planning Policy (February 2010; http://www.scotland.gov.uk/Publications/2010 /02/03132605/0)

9 APPENDICES

9.1 Appendix 1 – Site registers

Photographic register

001 - - General pre-excavation shot of the evaluation area 002 - - General pre-excavation shot of the evaluation area 003 - - General pre-excavation shot of the evaluation area 004 - - General pre-excavation shot of the evaluation area 005 1/37 Film 1 ID shot	
003-General pre-excavation shot of the evaluation area0040051/37Film 1 ID shot	
004-General pre-excavation shot of the evaluation area0051/37Film 1 ID shot	
005 1/37 Film 1 ID shot	
006 1/36 NE General view of Trench 1	
0071/35EGeneral view of Trench 2	
008 1/34 SW General view of Trench 3	
0091/33SEGeneral view of Trench 4	
010 1/32 E General view of Trench 5	
011 1/31 E General view of Trench 6	
012 1/30 NW General view of Trench 7	
013 1/29 N General view of Trench 8	
014 1/28 SW General site shots	
015 1/27 NW General site shots	
016 1/26 E General site shots	
017 1/25 NW General site shots	
018 – – View of the bedrock in Trench 2 (digital only)	
019 – – View of the bedrock in Trench 3 (digital only)	
020 – View of the bedrock in Trench 3 (digital only)	
021 – View of the bedrock in Trench 4 (digital only)	
022 – View of the bedrock in Trench 6 (digital only)	
023 – – View of the bedrock in Trench 3 (digital only)	
024 2/23 – ID Shot	
025 – SSW Panorama – Pre excavation (Shot 1)	
O26 - SW Panorama - Pre excavation (Shot 2)	
027 – WSW Panorama – Pre excavation (Shot 3)	
028 – W View of access track and M8	
029 – SSE Working shot	
0302/22SPanorama – Post excavation (Shot 1)	
0312/21SSWPanorama – Post excavation (Shot 2)	
0322/20SWPanorama – Post excavation (Shot 3)	
0332/19WSWPanorama – Post excavation (Shot 4)	

034	2/18	W	Panorama – Post excavation (Shot 5)
035	2/17	NE	General view of footprint after stripping
036	2/16	E	General view of access track after stripping
037	2/15	NW	General view of Access track after stripping, showing bands of redeposited clay

Trench register

TRENCH 1	
Orientation :	N-S
Length (m):	20m
Width (m):	1.6m
Max. depth:	0.4m
Avg depth:	0.35m

Context no. Description Depth (m)

This trench ran from the top of the bank (N) on a gradual slope to the S with several sharp drops in the bedrock recorded. Where the bedrock dropped this was in-filled with large angular stones. A stone rich loam topsoil 0.4 covered the bedrock.

TRENCH 2

Orientation :	E-W
Length (m):	20m
Width (m):	1.6m
Max. depth:	0.45m
Avg depth:	0.3m

Context no. Description Depth (m)

This trench sloped gradually from E to W across the bank of the hill. The loam topsoil 0.4

covered the bedrock that seemed to form in bands stepping down to the SW. A single human femur was recovered from the topsoil of this trench.

TRENCH 3

Orientation	N-S
Length (m):	20m
Width (m):	1.6m
Max. depth:	0.6m
Avg depth:	0.35m

Context no. Description Depth (m)

This trench sloped moderately from N to S with a number of stepped drops in the underlying bedrock. A stone rich loam topsoil up to 0.6 m thick overlay the natural geology.

TRENCH 4

Orientation: NW-SE

Length (m):	20m
Width (m):	1.6m
Max. depth:	0.65m
Avg depth:	0.35m

Context no. Description Depth (m)

This trench sloped down gradually from the NW with up to 0.65m of loam topsoil covering the bedrock and areas of stone rich orange sand.

TRENCH 5

Orientation :	E-W
Length (m):	20m
Width (m):	1.6m
Max. depth:	0.4m
Avg depth:	0.3m

Context no. Description Depth (m)

This trench was over level ground across the plateau of the hill with 0.4m of loam topsoil covering a orange brown stone rich sand.

TRENCH 6

Orientation :	E-W
Length (m):	20m
Width (m):	1.6m
Max. depth:	0.3m
Avg depth:	0.3m

Context no. Description Depth (m)

This trench was positioned over the sharp bank to the W of the site with the trench sloping from E to W. The loam topsoil 0.3m deep covered bedrock that stepped occasionally.

TRENCH 7

Orientation :	SE-NW
Length (m):	15m
Width (m):	1.6m
Max. depth:	0.5m
Avg depth:	0.30m

Context no. Description Depth (m)

This trench was located on the lower bank to the W of the hill across level ground with 0.3 m of topsoil over stone rich orange clay formed by re-deposited material associated with the construction of the motorway.

TRENCH 8

Orientation :	N-S
Length (m):	15m
Width (m):	1.6m
Max. depth:	0.25m
Avg depth:	0.2m

Context no. Description Depth (m)

This trench was located on the lower bank to the W of the hill across level ground with 0.3 m of topsoil over astone rich orange clay formed by re-deposited material associated with the construction of the motorway.

LOCAL AUTHORITY:	City of Edinburgh	
PROJECT TITLE/SITE NAME:	A Desk-Based Assessment, Archaeological Evaluation and Monitored Topsoil Strip at Hillwood Farm South Platt Hill, Ratho, Edinburgh	
PROJECT CODE:	HFRE/01	
PARISH:	Ratho	
NAME OF CONTRIBUTOR:	Donald Wilson	
NAME OF ORGANISATION:	Headland Archaeology Ltd	
TYPE(S) OF PROJECT:	Evaluation	
NMRS NO(S):	None	
SITE/MONUMENT TYPE(S):	None	
SIGNIFICANT FINDS:	None	
NGR (2 LETTERS, 8 OR 10 FIGURES)	NT 13124 71016	
START DATE (THIS SEASON)	15 th November 2012	
END DATE (THIS SEASON)	25 th April 2013	
PREVIOUS WORK (INCL. <i>DES</i> REF.)	None	
MAIN (NARRATIVE) DESCRIPTION: (MAY INCLUDE INFORMATION FROM OTHER FIELDS)	A desk-based assessment and programme of archaeological trial trenching was carried out in order to satisfy a condition of the planning consent for the construction of a single dwelling at Hillwood Farm, South Platt Hill, Ratho. The desk-based assessment identified a number of significant archaeological features in the surrounding area of the proposed development. These features appeared to range in date from the prehistoric through to industrial periods.	
	The evaluation covered an area close to the top of South Platt Hill. The trial trenching comprised 8 trenches measuring 145 linear m. These trenches revealed areas of stone rich geological subsoil and undulating bedrock, sealed beneath topsoil on average 0.35m deep. A left sided human femur was recovered from the topsoil. This dated to the 7 th to 8 th century AD. No features or further artefacts of archaeological significance were revealed during this work.	
	The monitored topsoil strip covered the footprint of the dwelling, including a 3m buffer and the access track. No further remains of archaeological significance were identified.	
PROPOSED FUTURE WORK:	unknown	
CAPTION(S) FOR ILLUSTRS:	Report to be lodged with City of Edinburgh SMR and NMRS.	
SPONSOR OR FUNDING BODY:	Mr Robert Fleming	
ADDRESS OF MAIN CONTRIBUTOR:	-	
EMAIL ADDRESS:	Headland Archaeology Ltd, 13 Jane St, Edinburgh. EH6 5HE	
ARCHIVE LOCATION (INTENDED/DEPOSITED)	don.wilson@headlandarchaeology.com	

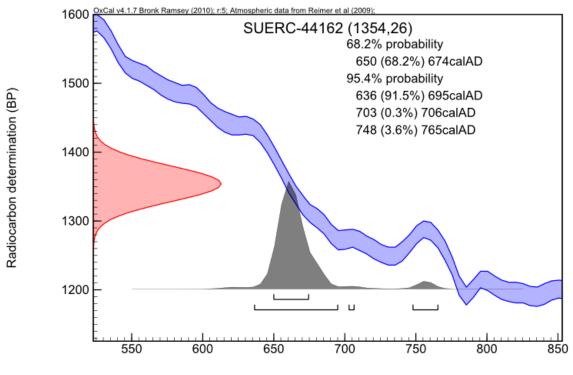
9.2 Appendix 2 – Discovery and Excavation in Scotland entry

9.3 Appendix 3 – SUERC Radiocarbon Dating Report RADIOCARBON DATING CERTIFICATE

12 February 2013

Laboratory Code	SUERC-44162 (GU29225R)
Submitter	Alan O'Brien
	Lothian and Borders Police
Site Reference	South Platt Hill
Context Reference	Trench 2
Sample Reference	361196
Material	Human Bone : femur
δ^{13} C relative to VPDB	-20.9 ‰
$\delta^{15}N$ relative to air	10.8 ‰
C/N ratio (Molar)	3.2
Radiocarbon Age BP	1354 ± 26

Calibration Plot



Calibrated date (calAD)