















# BARCAPLE FIELDS, NEWTON MEARNS, EAST RENFREWSHIRE

for Persimmon Homes West Scotland

2012/0625/TP

February 2013





## PROJECT SUMMARY SHEET (BNMR12)

Client Persimmon Homes West Scotland

Planning Reference 2012/0625/TP

National Grid Reference NS 5416 5761 (centre point)

OASIS No. headland1-144314

Address Barcaple, Newton Mearns, East

Renfrewshire

Parish Mearns

Council East Renfrewshire

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Schedule Fieldwork: 28th January – 1st February 2013

Report: February 2013

## Summary

A programme of trial trenching was undertaken at a proposed housing development site on the south side of Glasgow for Persimmon Homes West Scotland. The work was undertaken to provide information on the archaeological potential of the site to supplement the planning application.

The trial trenching revealed two fragmentary areas of rig and furrow cultivation remains within the site, likely to date to the medieval or post-medieval period. No other archaeological remains were identified and the potential for archaeological remains to be present within unevaluated areas is considered to be low.

#### Introduction

Headland Archaeology Ltd was commissioned to carry out a programme of archaeological evaluation by Persimmon Homes West Scotland at Barcaple Fields, Newton Mearns, East Renfrewshire. The work was undertaken to provide information to support a planning application (2012/0625/TP) for a residential development at the site, and was undertaken in accordance with a Written Scheme of Investigation agreed with West of Scotland Archaeology Service (WoSAS) on behalf of the local planning authority.

This report presents the results of the evaluation, which was undertaken from the 28<sup>th</sup> January to 1<sup>st</sup> February 2013.

#### Site Location

The site (NGR NS 5416 5761) lies on the northern fringes of Newton Mearns, a suburb of Glasgow (Illus 1). The total area proposed for development comprises 6.92 hectares. The site lies on the end of an east-west running ridge at c 90m OD and forms a flat plateau area at the south, sloping relatively steeply down to the northern limit. The slopes at the western end of the site are somewhat gentler. The underlying geology comprises Tuffaceous Mudstones; the superficial geology is a boulder clay.

Land use within the development boundary has been historically agricultural and currently the land is given over to grazing. The development area is currently divided into two fields and bounded on the south and east by shelter belts of mature trees and bushes. A small lane borders the site to the north with a railway line beyond, and the recently altered layout of Capelrig Road to the west.

## Archaeological Background (Illus 1)

The site contains no known sites of archaeological interest; however, it lies in an area with high archaeological potential. In the immediate vicinity are a number of sites of varying date. To the east-north-east of the site are two rock outcrops with cup-and-ring marked stones (Illus 1: Site 1. This marks the general location of the outcrops). A further two possible cup-and-ring marked stones are recorded in the land to the north of the development area, around Patterton Quarry. These were later reused in the wall of Barcaple Holm Farm to the southeast.

Further evidence of prehistoric activity in the area is provided by the discovery of a possible Bronze Age cremation burial to the north of the development area during a programme of archaeological works carried out in 2009 (Illus 1: Site 2. Evaluation took place across the hillside).

The site also occupies the western limit of an east-west running ridge, which was the location of the Capelrig Cross (Illus 1: Site 3). The cross itself was moved to a museum in the early 20<sup>th</sup> century; however its location is an indication of activity during the early Christian and medieval period. Often these stones marked boundaries between different areas of influence and could therefore be an indication of the importance of the ridge as a whole.

In general, the location of the development area on a north facing gentle slope make it a suitable spot for human activity to have taken place in the past. The archaeological potential

of the site as a whole was deemed as relatively high, with a particular potential for prehistoric remains.

#### Objectives

In general, the aim of the evaluation was to provide sufficient additional information to confidently predict the archaeological potential and significance of the development area.

Specifically, the objectives of the trial trenching were to:

- Establish the location, extent, nature and date of archaeological features and deposits within accessible areas available for trenching.
- Establish the integrity and state of preservation of archaeological features and deposits which were identified.
- Produce an archive of the works for deposition in the National Monument Records of Scotland

The evaluation was intended as the first part of a programme of works, with further phases of fieldwork to mitigate the impact of the proposed development on any archaeological remains identified in the site evaluation and a final phase comprising post-excavation analysis and publication.

## Methodology

The total area of the development site measures 6.8 ha; however, an overhead power line runs across the northern limit of the site. The northwest corner of the site has also been extensively disturbed by underground cables and temporary compounds for housing developments on the west side of Capelrig Road. Excluding buffer zones for cables and overhead lines, the area available for trenching comprised 6 ha. The total area evaluated by trial trenching was 4836 sq m, representing an 8% sample of the area. A proposed trench plan was agreed with WoSAS which sought to meet the objectives of the programme. Trenches were spread over the whole available area to achieve good spatial coverage; however the gradient of the slope at the north of the site meant that trenches in this location largely had to be on the same alignment to avoid trenching across the hill.

All trenches were individually numbered and laid out using a pole-mounted Trimble G6 differential GPS programmed with the relevant co-ordinates. Where trenches had to be relocated due to gradient or shortened because of standing water, their new location was recorded using the same.

Trenches were excavated using a tracked mechanical excavator equipped with a 2m wide toothless ditching bucket operating under constant archaeological monitoring. Topsoil was removed and machining continued in small spits until either clean geological sediments or archaeological deposits were encountered. The resulting surfaces were hand-cleaned where necessary and any potential archaeological features investigated. Where numerous features of similar type were identified, a suitable sample of them was investigated.

All trenches were hand drawn at a scale of 1:100 on pro-forma sheets. Any archaeological features or deposits were recorded and drawn using standard archaeological methods and

pro-forma record sheets. Photographs were taken using colour slide and print film, supplemented by digital shots.

#### Results

A total of 44 trenches were excavated, spread across the two fields (Illus 1). The presence of an overhead cable running east-west across the north of the site meant that a corridor 12m wide was unavailable for trenching. Another underground cable ran across the north-west of the site, also ruling out this area. From recent aerial photography, both these areas appear to have been recently disturbed during housing construction further to the west.

No features of substantial archaeological significance were identified, although sections of cultivation rig were identified in eight trenches. The stratigraphy across the site was fairly consistent, with natural subsoil generally a yellowy orange boulder clay, becoming sandier in places (Illus 2). Above this, a layer of silt (002) was present in the northern half of the site, particularly on the slopes and the base of slope at the very north of the site. In places, this was up to 0.3m in depth. Topsoil was generally between 0.2m and 0.4m in depth and contained frequent sherds of modern china and tile. This is thought to be evidence of frequent attempts to improve the relatively clayey soil.

#### **Cultivation Remains**

Sections of furrow were identified in Trenches 2 - 4, 17 and 38 - 41. Those in Trenches 2 - 4 and 17 were aligned SW-NE, while those in Trenches 39 - 41 were aligned SE-NW. In all cases the furrows were extremely shallow and often could only be seen as faint shadows on the subsoil. A slot excavated through one furrow [004] in Trench 4 was seen to be 0.04m in depth, 1.7m wide with extremely shallow sides. Where several sections could be seen within one trench, it was possible to estimate the distance between the midpoint of each furrow; in general this was between 7m and 8m. The two sets of furrows were at right angles to each other and may be evidence of sub-field divisions.

It is interesting to note that while furrows were present in a number of trenches, they were by no means universal, and were not merely confined to parts of the field with deeper topsoil. In most cases, the furrows were seen under c0.3m of topsoil. Their very shallow nature is likely to be the result of centuries of ploughing and land improvement, with the upper parts of the furrows and related rigs being truncated over the years.

## Modern features

A number of possible pits were identified on the north-facing slopes in both fields. These were investigated and found to contain topsoil with modern china and ceramics mixed in. A number of large erratic boulders were also identified during topsoil stripping in similar location. It became apparent that the possible pits were stone-holes, where such boulders had been dislodged during ploughing and the resulting hole filled up with topsoil. None were thought to have an archaeological origin.

No other features or deposits of archaeological interest were identified during the evaluation.

#### Conclusion

Other than some rig and furrow, the trial trenching did not reveal any archaeological features. The lines of furrows, which were concentrated in two discrete areas, is evidence of the agricultural history of the site and the wider area, however they are poorly preserved examples of this type of feature. The spacing of the furrows is patchy, however, enough to suggest that this could be broad rig (Dixon 1994, 37), and therefore date from the medieval or post-medieval period. There is no evidence to suggest there was any prehistoric activity within the site. The evaluation revealed that the underlying subsoil is extremely clayey in nature. Heavy rain during the evaluation resulted in extensive standing water across the field, both on the flat hilltop and down the slopes suggesting that area has always been unsuitable for settlement.

#### References

Dixon, P 1994 'Field systems, rig and other cultivation remains' in Foster & Smout (eds) The History of Soils and Field Systems.

Headland Archaeology Ltd 2013 Written Scheme of Investigation for Archaeological Evaluation. Barcaple, Newton Mearns, Renfrewshire Unpublished client document

### Appendices

Appendix 1.1 Trench Register Appendix 1.2 Context Register Appendix 1.3 Photo Register

Appendix 2 DES entry

Trench Number	Oriontation	Description
Number	Orientation	Description  Executed agrees flat ground in SE of field 1. Contained governly modern
		Excavated across flat ground in SE of field 1. Contained several modern field drains running EW across trench. No archaeological finds or features.
1 NW-SE		28m long, 0.4m deep.
-	IVV SL	Excavated across flat ground in SE of field 1. 6 lines of rig identified running
		SW-NE across trench. Rig spaced c8m apart from midpoint to midpoint.
2	N-S	51m long, 0.5m deep.
		Excavated down W-facing slope in field 1. 5 lines of rig identified running
		SW-NE across trench. Rig spaced c7m apart from midpoint to midpoint.
3	NE-SW	67m long, 0.5m deep.
		Excavated down W-facing slope in field 1. 8 lines of rig identified running
		SW-NE across trench. Rig spaced c7m apart from midpoint to midpoint.
4	NE-SW	102m long, 0.5m deep.
		Excavated across flat ground at top of hill in field 1. No archaeological finds
5	E-W	or features. 29m long, 0.3m deep.
		Excavated across flat ground at top of hill in field 1. No archaeological finds
6	NE-SW	or features. 50m long, 0.3m deep.
		Excavated down N-facing slope in field 1. Silt 002 present at northern end o
7	NW-SE	trench. No archaeological finds or features. 100m long, 0.4m deep.
		Excavated across flat ground at top of hill in field 1. No archaeological finds
8	N-S	or features. 41m long, 0.3m deep.
		Excavated across flat ground at top of hill in field 1. No archaeological finds
9	NW-SE	or features. 39m long, 0.5m deep.
		Excavated across flat ground at top of hill in field 1. No archaeological finds
10	NE-SW	or features. 50m long, 0.4m deep.
11	NIM CE	Excavated down N-facing slope in field 1. Silt 002 present at northern end o
11	NW-SE	trench. No archaeological finds or features. 100m long, 0.7m deep.
		Excavated across flat ground at top of hill in field 1. A possible pit identified
12	NW-SE	was investigated and shown to be a natural stone hole which had filled up
12	INVV-3E	with modern material. 50m long, 0.4m deep.  Excavated down W-facing slope in field 1. No archaeological finds or
13	NW-SE	features. 52m long, 0.3m deep.
15	1 <b>111</b> -5L	Excavated across flat ground at top of hill in field 1. No archaeological finds
14	NW-SE	or features. 55m long, 0.4m deep.
	11,1, 02	Excavated down N-facing gentle slope in field 1. No archaeological finds or
15	N-S	features. 49m long, 0.3m deep.
		Excavated down N-facing gentle slope in field 1. Sondage excavated
		through natural material at north end of trench. Silt 002 present at north end
16	N-S	of trench. No archaeological finds or features. 75m long, 0.4m deep.
		Excavated down N-facing slope in field 1. 2 lines of rig present at north end
		of trench running SW-NE. Rig spaced c10m apart from midpoint to
17	N-S	midpoint. 99m long, 0.5m deep.
		Excavated at base of steep slope in field 1. 0.5m of silt present at west end o
18	NE-SW	the trench. No archaeological finds or features. 60m long, 0.7m deep.
		Excavated down N-facing slope in field 1. Thin layer of silt 002 present
		a managarah ala tuan da Nia andra ada si ad fin da an fastuna E2m lang O Em

across whole trench. No archaeological finds or features. 53m long,  $0.5\mathrm{m}$ 

Excavated down N-facing slope in field 1. Thin layer of silt 002 present for

most of trench. No archaeological finds or features. 49m long, 0.5m deep.

19 N-S

20 N-S

		Excavated down N-facing slope in field 1. No archaeological finds or
21	N-S	features. 50m long, 0.4m deep.
		Excavated across flat ground in SW corner of field 2. No archaeological
22	E-W	finds or features. 25m long, 0.3m deep.
•		Excavated across flat ground in SW corner of field 2. No archaeological
23	NW-SE	finds or features. 50m long, 0.3m deep.
		Excavated down N-facing slope in field 2. No archaeological finds or
24	N-S	features. 102m long, 0.4m deep.
		Excavated across edge of flat ground in field 2. Silt 002 present in thin
		patches along base of trench. No archaeological finds or features. 62m long,
25	NE-SW	0.3m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
26	NW-SE	41m long, 0.4m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
27	N-S	51m long, 0.4m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
28	NE-SW	40m long, 0.4m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
29	E-W	30m long, 0.3m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
30	E-W	38m long, 0.3m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
31	E-W	100m long, 0.3m deep.
		Excavated across flat ground in field 2. Modern machine cut test pit present.
32	NE-SW	41m long, 0.3m deep.
		Excavated across flat ground in field 2. No archaeological finds or features.
33	NE-SW	30m long, 0.4m deep.
2.4	NIC	Excavated across flat ground in field 2. No archaeological finds or features.
34	N-S	77m long, 0.4m deep.
0.5	NIC	Excavated across flat ground in field 2. No archaeological finds or features.
35	N-S	48m long, 0.4m deep.
		Excavated down N-facing slope in field 2. Stopped at 49m due to machine
26	NUM CE	slipping down hill. No archaeological finds or features. 49m long, 0.3m
36	NW-SE	deep.
27	NI C	Excavated across gently sloping ground at west of field 1. No archaeological
37	N-S	finds or features. 20m long, 0.4m deep.
		Excavated down N-facing slope in field 2. Stopped at 61m due to machine
20	N-S	slipping down hill. Rig running SE-NW in flat part of trench on hilltop. Silt
38	N-3	002 present across northern part of trench. 61m long, 0.5m deep.
		Excavated down N-facing slope in field 2. Stopped at 32m due to machine
39	N-S	slipping down hill. Rig running SE-NW in flat part of trench on hilltop. Silt
39	N-3	002 present across northern part of trench. 32m long, 0.4m deep.
		Excavated down N-facing slope in field 2. Stopped at 65m due to machine
40	N-S	slipping down hill. Rig running SE-NW in flat part of trench on hilltop. Thin layer of silt 002 present across northern part of trench. 65m long, 0.5m deep.
40	11-3	Excavated down N-facing slope in field 2. Stopped at 54m due to machine
		slipping down hill. Rig running SE-NW in flat part of trench on hilltop. 54m
41	N-S	long, 0.4m deep.
11	1,0	Excavated down n-facing slope in field 2. Stopped at 50m due to machine
		slipping down hill. Silt 002 present across northern part of trench. 50m long,
42	N-S	0.4m deep.
	., .	weep.

		Excavated down N-facing slope in field 2. Silt 002 present across trench. No
43	N-S	archaeological finds or features. 52m long, 0.5m deep.
		Excavated down N-facing slope in field 2. Several large erratic boulders
		seen in natural subsoil. No archaeological finds or features. 51m long, 0.4m
44	N-S	deep.

# Appendix 1.2 Context Register

Context				
No	Description			
	Topsoil. Mid brownish compact grey clayey silt with occasional stones and frequent			
001	sherds of modern pottery, tile and china. 0.4m deep			
	Interface material. Moderately soft mid browny orange clayey silt with occasional			
	stones and flecks of coal. Present above natural subsoil in most of trenches running			
002	down slope. Up to 0.4m deep in places.			
003	Natural subsoil. Firm orangey yellow clay.			
	Cut of furrow. Linear in plan, U-shaped profile with extremely gently sloping sides			
004	and an uneven base. Cut not very clear. 1.8m wide, 0.04m deep.			
	Fill of 004. Compact light brown clayey silt with no obviously inclusions. Deposit			
005	very thin and patchy within feature. 0.04m deep.			

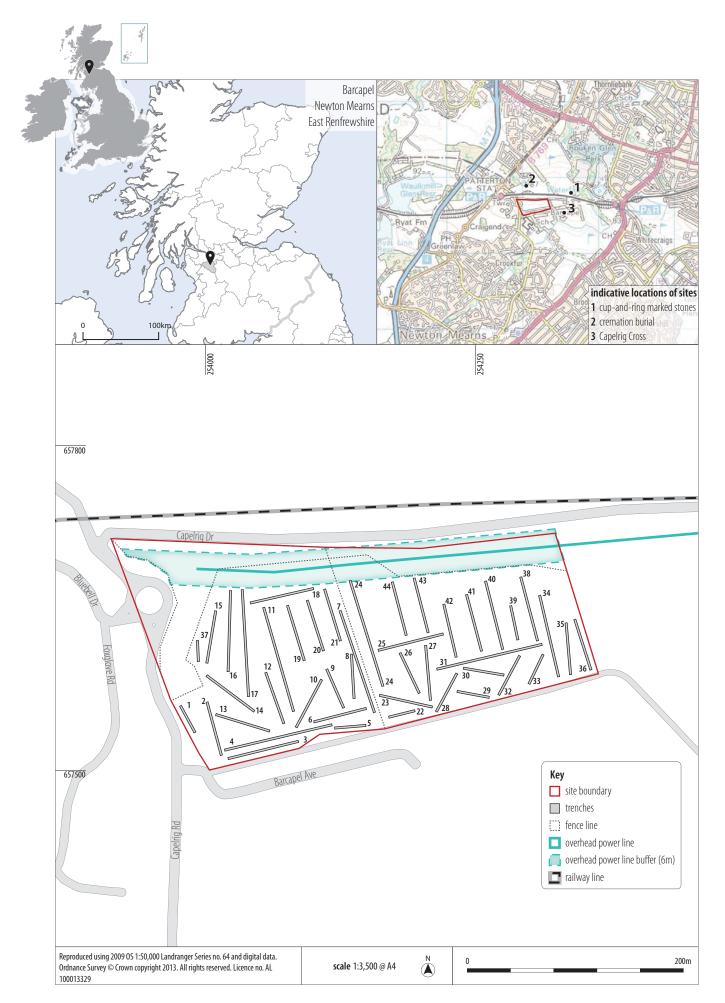
## Appendix 1.3 Photo Register

Photo			Colour	Colour	Direction	
Number		Digital	Slide	print	facing	Description
	1	Y	Y	Y		ID Shot
						NE-facing section through furrow
	2	Y	Y	Y	SW	[004]
	3	Y	Y	Y	N	Trench 36
	4	Y	Y	Y	N	Trench 35
	5	Y	Y	Y	N	Trench 34
	6	Y	Y	Y	NE	Trench 33
	7	Y	Y	Y	E	Trench 18
	8	Y	Y	Y	N	Trench 8
	9	Y	Y	Y	W	E-facing section of Trench 16
	10	N	Y	Y	S	Trench 16
	11	Y	Y	Y	N	Trench 15
	12	Y	Y	Y	N	Trench 37
	13	Y	Y	Y	NW	Trench 12
	14	N	Y	Y	SE	Trench 23
	15	N	Y	Y	NW	Trench 26
	16	N	Y	Y	N	Trench 27
	17	Y	Y	Y	NE	Trench 28
	18	Y	Y	Y	SE	Trench 29
	19	Y	Y	Y	SE	Trench 30
	20	Y	Y	Y	SW	Trench 32
	21	Y	Y	Y	W	Trench 31
	22	Y	Y	Y	N	Trench 38
	23	Y	Y	Y	N	Trench 39
	24	Y	Y	Y	N	Trench 40
	25	Y	Y	Y	N	Trench 41

26	Y	Y	Y	N	Trench 42
27	Y	Y	Y	W	Trench 25
28	Y	Y	Y	N	Trench 28
29	N	Y	Y	N	Trench 29
30	Y	Y	Y	NW	Trench 30
31	Y	Y	Y	W	Trench 5
32	Y	Y	Y	N	Trench 7
33	Y	Y	Y	SW	Trench 6
34	Y	Y	Y	N	Trench 8
35	Y	Y	Y	NW	Trench 9
36	Y	Y	Y	SW	Trench 4
37	Y	N	Y	NE	Trench 10
38	Y	N	Y	SW	Trench 3
39	Y	N	Y	N	Trench 2
40	Y	N	Y	NW	Trench 1
41	Y	N	Y	SE	Trench 13
42	Y	N	Y	SE	Trench 14
43	Y	N	Y	N	Trench 11
44	Y	N	Y	N	Trench 19
45	Y	N	Y	N	Trench 20
46	Y	N	Y	N	Trench 21

Appendix 2: DES entry

East Renfrewshire			
Barcaple Fields, Newton Mearns, East Renfrewshire			
BNMR12			
Mearns			
Kirsty Dingwall			
Headland Archaeology Ltd			
Evaluation			
-			
-			
-			
NS 5416 5761			
28/01/13			
01/02/13			
-			
A programme of evaluation through trial trenching was under taken at a 6.8 ha site to the south of Glasgow. The aim of the evaluation was to provide additional information regarding the archaeological potential of the site to support a planning application for a housing development. Trial trenching revealed some evidence of rig and furrow across parts of the site, although it was very poorly preserved and only partially survived. No evidence of other archaeological activity was seen.			
None			
-			
Persimmon Homes West Scotland			
Headland Archaeology Ltd, 13 Jane Street, Edinburgh, EH7 4BX			
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NMRS (intended)			



**Illus 1** Site location



Illus 2 Trenches running across flat top of field 2



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