

**SCAYNES HILL GROWTH SCHEME
HAYWARDS HEATH, WEST SUSSEX**

DRAFT

NGR 534638 124494

**A REPORT ON A GEOARCHAEOLOGICAL
WATCHING BRIEF**

**Site Code: SCA 09
Project no. 4100**

**ASE Report No. 2010066
OASIS id: archaeol6-75849**

May 2010

Prepared by Matthew Pope and Liane Peyre

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Abstract

Archaeology South-East have undertaken a geoarchaeological watching brief on behalf of 4-Delivery at the site of the Scaynes Hill Growth Scheme, Haywards Heath. This is a programme of sewer upgrading involving the construction of a Combined Sewer Overflow (CSO) chamber, new manholes and pipe trench excavation. The work involved the observation of deep excavations being carried out as part of this work. The investigation revealed that the site had been heavily disturbed through the formation of a mid-late 20th century landfill site. The landfill was recorded extending to depths varying between 1.8m and 3m across the site. In two locations disturbed alluvial sediments contaminated with landfill were encountered. No archaeological remains or intact palaeoenvironmental deposits were encountered.

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1.0 INTRODUCTION

- 1.1** Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology at the Institute of Archaeology, University College London, were commissioned by 4Delivery Limited to undertake a geoarchaeological watching brief on a flood alleviation scheme (Scaynes Hill AMP4 Growth Scheme) in Haywards Heath, West Sussex henceforth known as 'the site'. The northern extent of the scheme, where archaeological potential is greatest, was centred on National Grid Reference (NGR) 534638 124494 and its location is shown in Figure 1.
- 1.2** The permitted scheme was for a new rising main, a new Combined Sewage Overflow (CSO) and for new manholes within existing roads.
- 1.3** John Mills, the Archaeologist of West Sussex County Council (WSCC), after consultation with Gary Noble of 4Delivery Limited, recommended that a geoarchaeological watching brief be maintained for the northern end of the scheme as work close to a tributary of the Scrase Stream may have the potential to encounter archaeological deposits within the alluvial flood plain of the stream (Figure 2).
- 1.4** A watching brief was carried out between January and March 2010 with a series of site visits coinciding with the excavation of the manhole and chamber pits and during the cutting of the pipe trench.
- 1.5** This document represents a comprehensive report on the watching brief. It comprises project aims, contextual information and results.

2.0 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 The archaeological background to the site was outlined by John Mills of WSCC and further information has been provided by the WSCC Historic Environment Record (1km search radius centred on NGR 534638 124494) and is summarised below in Table 1.

Map Marker Number	WSCC HER No	NGR	Description	Period
1	4197 - MWS4573	TQ 33700 24500	Neolithic axe	Neolithic
2	6807 - MWS6836	TQ 34696 25392	36 & 38 High Street, Lindfield	Medieval
3	2824 - MWS124	TQ 34000 25000	Historic Garden - Oak Lee	Post medieval
4	4174 - MWS767	TQ 34720 25500	TOLL HOUSE	Post medieval
5	7411 - MWS7487	TQ 33712 24884	Richard Vennalls House and land	17 th century
6	7409 - MWS7485	TQ 33694 24701	Alexander Bridges House and Land	17 th century
7	4175 - MWS768	TQ 34640 25450	Lindfield Brewery	19 th century
8	6270 - MWS4928	TQ 33657 23871	Brickfields on S. side of New England Rd	19 th or 20 th century
9	8081 - MWS8204	TQ 3408 2386	War Memorial, Western Road Municipal Cemetery	WWI
10	7120 - MWS7173	TQ 352 249	Anti Aircraft - The Kentish Gun Belt - Criplands	WWII
11	7998 - MWS8116	TQ 34200 23800	Home Guard grave - Haywards Heath	WWII

Table 1: WSCC HER data

2.2 The site sits on bedrock of Upper Tunbridge Wells Sand (UTWS). This formation is part of the Wealden Group and dates to the Cretaceous and comprises beds of mudstones, silts and thin beds of sandstones. To the south of the outcrop these beds give way to the younger Cretaceous deposits of the Weald Clay.

2.3 Geotechnical investigation (Costain 2009) indicated that significant depth of made ground was encountered at BH1 and BH2 (4m and 2.5m respectively). Between these two locations there were varying depths of made ground resting on the solid cretaceous of the UTWS.

2.4 The site is situated within a minor tributary valley of the Scrase Stream within the Sussex Ouse River drainage system. The valley, aligned North-South follows a basal altitude of approximately 31m OD.

2.5 While similar headwater valleys of the central Weald were investigated by Scaife and Burrin in the 1980's (Burrin and Scaife 1984; Scaife and Burrin 1983; Scaife and Burrin 1992) the current on-going programme of works represents

the first systematic investigation of this particular area of drainage. Results could potentially feed into wider modelling of landscape change in the weald (Waller 1983; 1998b).

3.0 PROJECT AIMS AND OBJECTIVES

3.1 The general aim of the archaeological watching brief was to ensure that any features, artefacts or ecofacts of archaeological interest affected by the proposed groundworks were recorded and interpreted to appropriate standards.

3.2 Specific aims relating to the site were:

- To establish the geoarchaeological potential of the alluvial deposits associated with tributary of the Scrase Stream which runs to the rear of properties fronting William Allen Lane, and to obtain samples for palaeoenvironmental analysis where appropriate.

3.3 Research Aims

- To characterise the sedimentary sequence at the site in terms of Lithology, agents of deposition, preservational environment and age of deposition.
- To sample and characterise the preservational environment within bodies of sediment for the recovery of palaeoenvironmental remains.
- On the basis of assessment of palaeoenvironmental remains, if recovered, a first-order model for palaeoenvironmental development at the site.
- To develop from these models recommendations for further mitigation work, if necessary.

3.4 The site offers the scope for addressing the following specific Research Objectives.

- Determining the depth and character of alluviation in the central Weald.
- Examining the relationship between colluvial/alluvial processes and human clearance/modification of the watershed.
- Isolating the potential for survival of early Holocene channel profiles/land surfaces and associated artefacts/ecofacts.
- Assessing the degree to which models of river valley development developed by Scaife and Burrin are widely applicable in a central Wealden context.

4.0 METHODOLOGY

- 4.1** The northern part of the scheme between the manhole immediately north of America Lane (MHI) and the northernmost manhole (MHM) was monitored (the area shown in Figure 2).
- 4.2** Where ground works were undertaken by the contractors they were monitored at all times until it became clear beyond reasonable doubt that no archaeological remains were present (e.g. once excavation reached undisturbed natural subsoils, below which there would be no archaeological remains present - after the recording of any significant remains if present at higher levels).
- 4.3** The exposed sections were recorded according to procedures outlined in the Written Scheme of Investigation (Griffin and Swift 2009). These, in summary, were as follows.
- 4.4** Section were recorded in order to develop a series of detailed sediment logs. These comprised detailed sediment descriptions at 0.25m intervals or at the junction of major stratigraphic or lithological boundaries. They included descriptions of matrix lithology, coarse components, sediment cohesion as well as characterisation of superficial structures and likelihood of decalcification.
- 4.5** Given the depth of stratigraphy composite geological sections were drawn, where required, at 1:20. Samples were given a unique running number and marked on the section drawings. Sediment chromas and hues were recorded using a Munsell Soil Colour Chart. Section photography was undertaken wherever practical.
- 4.6** This WSI also contained contingencies to be enacted should archaeological remains or significant palaeoenvironmental deposits be encountered. These contingencies were not required.

5.0 OBSERVATIONS

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 4/4 dark yellowish brown	-	-	Modern CBM
0.2	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.7	Made Ground [3]	-	-	-	-	Landfill Material (Late 20th Century)
1.3	Disturbed Alluvium	Clay with sand	2.5Y4/5	-	-	Apparently redeposited.
2.3 – 2.4	Weathered Tunbridge Wells Sand [4]	Sand with Clay seams	-	-	-	Solid Geology

Table 2 Observation Location TP1 Pipe Trench (nr MHM)

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 5/4 dark yellowish brown	-	-	-
0.25	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.45	Made Ground [3]	-	-	-	-	Landfill Material (Late 20th Century)
2.3	Disturbed Alluvium	Clay with sand	2.5Y4/5	-	-	Apparently redeposited.
2.45 – 2.7	Weathered Tunbridge Wells Sand [4]	Sand with Clay seams	-	-	-	Solid Geology

Table 3 Observation Location TP2 (CSO Chamber)

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 5/4 dark yellowish brown	-	-	-
0.25	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.4	Made Ground [3]	-	-	-	.-	Landfill Material (Late 20th Century)
2.5 – 2.8	Weathered Tunbridge Wells Sand [4]	Sand with Clay seams	-	-	-	Solid Geology

Table 4 Observation Location TP3 (Pipetrench and Storm Carrier siphon/Manhole K)

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 5/4 dark yellowish brown	-	-	-
0.25	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.45	Made Ground [3]	-	-	-	.-	Landfill Material (Late 20th Century)
2.3	Disturbed Alluvium	Clay with sand	2.5Y4/5	-	-	Apparently redeposited.
2.45 – 2.9	Weathered Tunbridge Wells Sand [4]	Sand with Clay seams	-	-	-	Solid Geology

Table 5 Observation Location TP4 (Manhole J)

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 5/4 dark yellowish brown	-	-	-
0.3	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.45 - 2.1m	Made Ground [3]	-	-	-	.-	Landfill Material (Late 20th Century)

Table 6. Observation Location TP5 (Pipetrench south of Manhole J)

Depth (m)	Stratigraphy	Lithology	Colour	Coarse component	Sample	Notes
0	Top Soil [1]	Clay	10YR 5/4 dark yellowish brown	-	-	Possibly redeposited.
0.6	Made Ground [2]	Clay	10YR 4/6 dark yellowish brown	-	-	Landfill Cap
0.8	Made Ground [3]	-	-	-	.-	Landfill Material (Late 20th Century)
2.6	Disturbed Alluvium	Clay with sand	2.5Y4/5	-	-	Apparently redeposited.
3.0 – 3.2	Weathered Tunbridge Wells Sand [4]	Sand with Clay seams	-	-	-	Solid Geology

Table 7 Observation Location TP6 (Pipetrench North of Manhole I)

6.0 DISCUSSION OF RESULTS.

- 6.1** In all observed locations the same basic succession of sediments were observed. These comprised Topsoil [1], sometimes disturbed, overlying the clay capping of landfill [2] and underlying landfill material [3]. These were generally observable to a depth of 2.5m where they rested directly on the sandy clay of the Tunbridge Wells Sands [5].
- 6.2** In two locations the base of the landfill material rested on what appeared to be disturbed alluvium [4]. This was a structureless clay with sand, with mineralised organic deposits and plant rhizoliths fragments noted in places.
- 6.3** Samples were taken of the alluvial sediment, but given its disturbed and apparently redeposited nature it was not considered appropriate to subject them to further analysis.
- 6.4** The landfill contained packaging and newspaper material clearly datable to the latter half of the 20th century. This included print literature bearing dates from the early 1960's. No material older than this was apparent.
- 6.5** No further archaeological features or palaeo-ecologically significant deposits were encountered during the course of this work.

7.0 SIGNIFICANCE

- 7.1** No deposits or features of archaeological significance were encountered during the course of this investigation.
- 7.2** The observed sequences at all localities related directly to a late 20th century landfill resting on solid cretaceous geology.
- 7.3** Samples of disturbed and contaminated alluvium were retained but are not considered suitable for further processing.
- 7.4** No further work is recommended.

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OASIS ID: archaeol6-76742

Project details

Project name	Scaynes Hill Growth
Short description of the project	Archaeology South-East have undertaken a geoarchaeological watching brief on behalf of 4-Delivery at the site of Scaynes Hill Growth Scheme. This is a programme of sewer upgrading involving the construction of a CSO chamber, new manholes and pipe trench excavation. The work involved the observation of deep excavations being carried out as part of this work. The investigation revealed that the site had been heavily disturbed through the formation of a mid-late 20th century landfill site. The landfill was recorded extending to depth varying between 1.8m and 3m across the site. In two locations disturbed alluvial sediments contaminated with landfill were encountered. No archaeological remains or intact palaeoenvironmental deposits were encountered, No further work is recommended.
Project dates	Start: 01-01-2010 End: 01-04-2010
Previous/future work	No / No
Any associated project reference codes	4100 - Contracting Unit No.
Type of project	Recording project
Site status	None
Current Land use	Other 12 - Verge
Monument type	NONE None
Significant Finds	NONE None
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	WEST SUSSEX MID SUSSEX HAYWARDS HEATH Scayne Hill Growth
Postcode	RH16 3RJ
Study area	2.00 Hectares
Site coordinates	TQ 34638 24494 51.0035021244 -0.08084476683540 51 00 12 N 000 04 51 W Point

Height OD / Depth Min: 25.00m Max: 31.00m

Project creators

Name of Organisation Archaeology South East

Project brief originator 4 Development Ltd

Project design originator Archaeology South-East

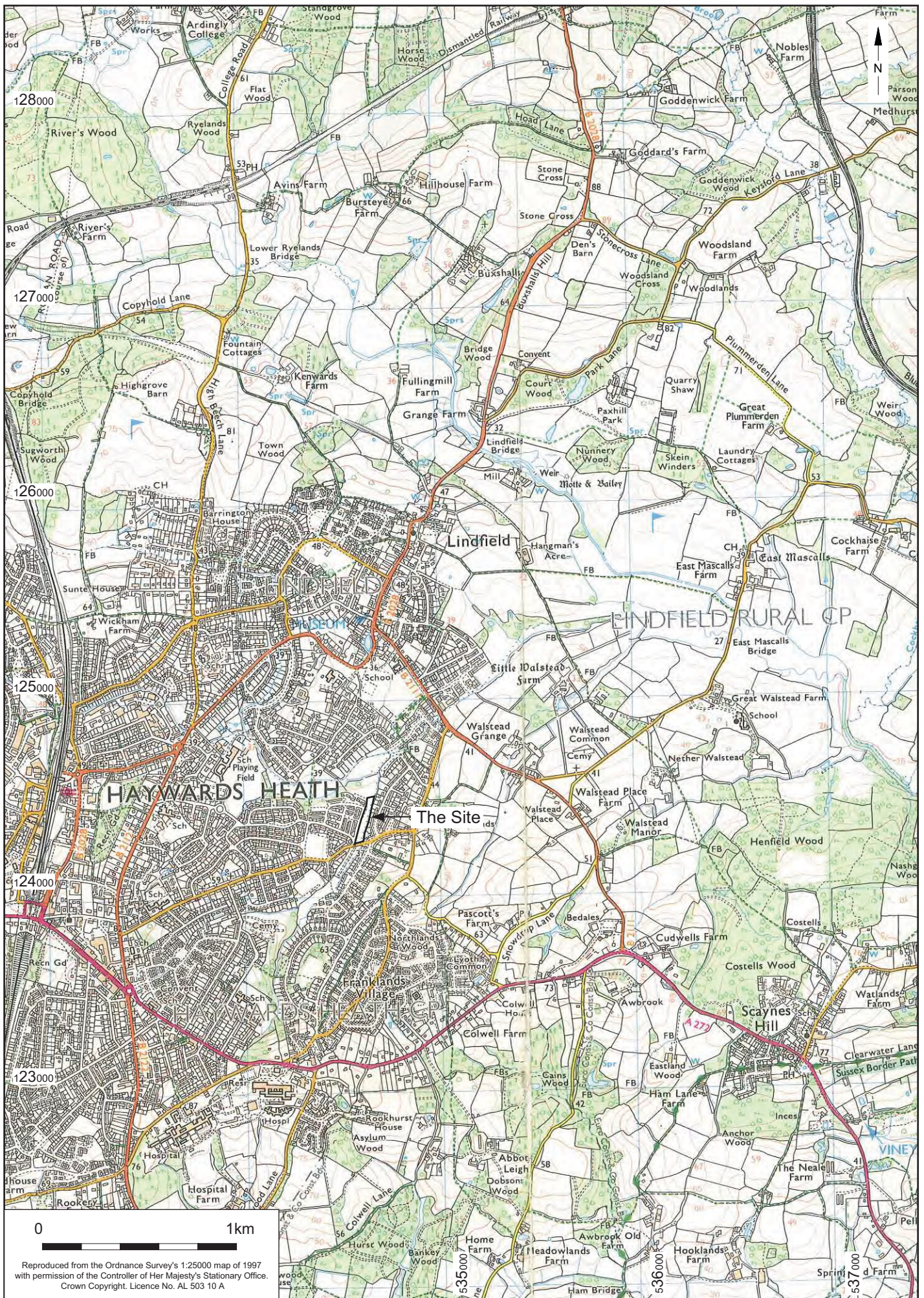
Project director/manager Neil Griffin

Project supervisor Matt Pope

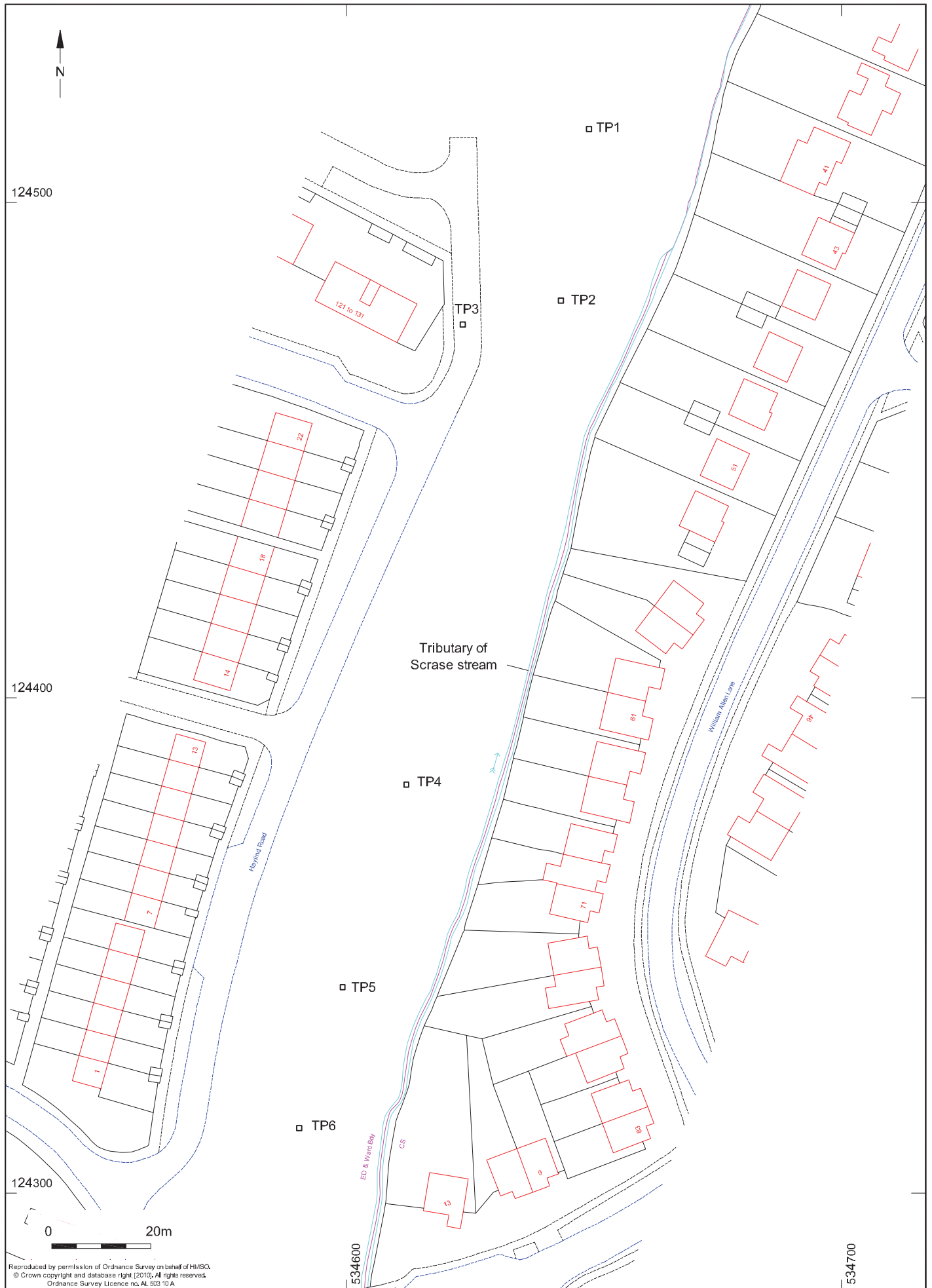
Type of sponsor/funding body 4D Ltd

Entered by Matthew Pope (m.pope@ucl.ac.uk)

Entered on 7 May 2010



© Archaeology South-East		Scaynes Hill Growth Scheme, Haywards Heath		Fig. 1
Project Ref: 4100	May 2010	Site location and HER Data		
Report Ref: 2010066	Drawn by: FEG			



© Archaeology South-East		Scaynes Hill, Haywards Heath	Fig. 2
Project Ref: 4100	May 2010	Location of monitored test pits	
Report Ref: 2010066	Drawn by: JLR		

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