

**An Archaeological Watching Brief at Streat Water
Treatment Works, Streat, East Sussex**

NGR: TQ 3515 1500

Planning Reference: LW/10/1321

**Project No: 4650
Site Code: STR10**

**ASE Report No: 2011087
OASIS id: archaeol6-100359**

**Andrew Margetts
With contributions by
Luke Barber**

May 2011

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Abstract

Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology, University College London, were commissioned by 4 Delivery Limited on behalf of Southern Water to undertake an archaeological watching brief during intrusive ground works associated with the enlargement of the existing water treatment works at Streat, East Sussex (NGR TQ 3515 1500).

No significant archaeological remains were encountered during the groundworks although three sherds of medieval pottery were recovered from the ploughsoil indicating activity of this date nearby. The work was undertaken from the 14th March to the 1st of April 2011.

CONTENTS

- 1.0 Introduction**
- 2.0 Archaeological Background**
- 3.0 Archaeological Methodology**
- 4.0 Results**
- 5.0 The Finds**
- 6.0 Discussion**
- 7.0 Conclusions**

Bibliography
Acknowledgements

SMR Summary Sheet
OASIS Form

FIGURES

- Figure 1: Site Location
- Figure 2: Site Plan showing monitored areas
- Figure 3: Photographs

TABLES

- Table 1: Summary of ESCC HER records with 1km of the site
- Table 2: Quantification of site archive
- Table 3: List of Recorded Contexts
- Table 4: Quantification of the finds

1.0 INTRODUCTION

1.1 Site Background

1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology, University College London, were commissioned by 4Delivery Limited (hereafter 4D) on behalf of Southern Water to undertake an archaeological watching brief during intrusive ground works associated with the enlargement of the existing water treatment works at Streat, East Sussex hereafter referred to as 'the site' (NGR TQ 3515 1500; Figures 1 - 2).

1.2 Geology and Topography

1.2.1 The British Geographical Survey Map (Sheet 318/333) shows the site is located at the intersection of the Gault Clay to the south and the Folkstone Beds of the Greensand to the north. There are local alluvial and head deposits associated with the tributaries of the River Ouse (Butler 2007).

1.2.1 A geotechnical investigation was undertaken in September 2010 on behalf of 4D by Costain Geotechnical Services (ASE 2010). The work comprised the drilling of a single borehole to a depth of 10m below ground level (43.55m OD). The borehole log refers to 'made ground' or 'possible made ground' to a depth of 2.00m below ground level. However, the 'made ground' descriptions are generally of clean sandy gravels with occasional pieces of flint and pottery. Excavations to the east undertaken by the Mid-Sussex Field Archaeological Team indicate that the 'natural' horizon was at a depth of c. 400mm below ground level, suggesting that only the first sequence in the borehole log is true ploughsoil or 'made ground'.

1.3 Planning Background

1.3.1 Planning permission was granted by East Sussex County Council for the extension and upgrading of the existing wastewater treatment facility (Planning Reference LW/649/CMS). Condition 8 of the planning permission stated the following:

No development shall take place until the applicant, or its agent or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation including a timetable for the investigation which has been submitted by the applicant and approved in writing by the Director of Transport and Environment. The works shall be undertaken in accordance with the approved details.

Reason: To secure the proper recording of any archaeological finds at the site, in accordance with Policy WLP35€ of the East Sussex and Brighton & Hove Waste Local plan 2006.

1.3.2 4D and ASE consulted the County Archaeology Officer, East Sussex County Council (ESCC) regarding the impact of the proposed works. An archaeological watching brief was recommended due to the archaeological potential of the site (see below).

1.3.3 The County Archaeology Officer (ESCC) stipulated that all ground work excavations associated with the scheme (including the creation of a temporary site compound) would be subject to the archaeological watching brief.

1.3.4 A *Written Scheme of Investigation* (WSI; ASE 2010) was produced for the proposed archaeological works and approved by the County Archaeology Officer ESCC. All excavations were monitored by an archaeologist and took place intermittently from the 14th March to the 1st of April 2011. Greg Chuter (Assistant County Archaeologist, East Sussex County Council) was kept informed of the work.

1.3.3 All work was carried out in accordance with the WSI (*ibid*) and with the relevant *Standards and Guidance* of the Institute for Archaeologists (IfA 2007), as well as with reference to East Sussex County Council's, *Standards For Archaeological Fieldwork, Recording And Post Excavation Work* (ESCC 2008).

1.4 Aims and Objectives

1.4.1 In general, the aim of the watching brief was to record, interpret and report on any archaeological and palaeoenvironmental remains exposed during the groundworks (including artefacts or ecofacts of archaeological interest) to appropriate archaeological standards.

1.4.2 The watching brief would also assess the past impacts on the site and pay particular attention to the character, height/depth below ground level, condition, date and significance of the deposits.

1.4.3 Specific aims included:

- Is there any evidence for Mesolithic activity?
- Is there any activity associated with the Roman road (including burials)?
- Is there any evidence for medieval activity associated with the medieval village of Streat?

1.5 Scope of Report

1.5.1 This report details the results of the archaeological watching brief undertaken during groundworks at the site. The work was undertaken from the 14th March to the 1st of April 2011 by Andrew Margetts (Senior Archaeologist) and Chris Killeen (Archaeologist). The fieldwork was managed by Andy Leonard (Project Manager) and the post-excavation analysis was managed by Jim Stevenson (Project Manager).

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 The following information is drawn from a 1 km radius search of the Historic Environment Record (HER) held at ESCC centred on NGR TQ 3515 1500. The results of the ESCC HER search are summarised below (Table 1) with selected locations plotted on Figure 1.

ESCC HER No.	OS Co-ordinates (TQ)	Description
EES14126	TQ 3504 1521	C17th brick drain
EES14141	TQ 3598 1472	Resistivity survey over Plumpton Villa
EES14359	TQ 3526 1458	Excavation of Mesolithic site including 3,000 flints
EES9623	TQ 35 15	Streat Fishing Lake
EES9624	TQ 360 147	Plumpton Villa
EES14499	TQ 3581 1534	Excavation of a Roman road at Cart House Field
EES14450	TQ 3584 1536	Resistivity survey of Roman road
EES 8976	TQ 3420 1540	Hayleigh Farm, Westmeston
EES8978	TQ 3490 1540	(West of) Streat Rectory, Section No. 18
MES1883	TQ 358 154	Roman building
MES2026	TQ 352 147	Mesolithic flintwork assemblage
MES2030	TQ 3504 1523	C17th house
MES2031	TQ 3508 1518	C12th church
MES2032	TQ 35 15	Mesolithic core findspot
MES2033	TQ 35 15	Mesolithic flintwork assemblage
MES2074	TQ 347 151	C14th deer park
MES4599	TQ 3838 2703	Post-medieval trackway
MES7155	TQ 3472 1525	C17th building
MES7393	TQ 3675 1499	Roman road
MES7402	TQ 3525 1459	Excavation of Mesolithic site including 3,000 flints
MES7416	TQ 3510 1520	Potential medieval village recorded on the OS map of 1805-1810
MES7424	TQ 3505 1542	Post-medieval buildings
MES7426	TQ 3577 1457	Post-medieval barn
MES7436	TQ 3514 1477	Post-medieval sand quarry
MES7437	TQ 3576 1462	Post-medieval quarry
MES7442	TQ 3510 1530	Medieval settlement
MES7443	TQ 3500 1530	Medieval settlement
MES7444	TQ 3500 1460	Late post-medieval settlement
MES7751	TQ 3520 1460	Mesolithic camp
MES7752	TQ 3520 1460	Neolithic flintwork assemblage
MES7755	TQ 3500 1520	Romano-British settlement
MES8219	TQ 3514 1521	Late post-medieval school
MES14435	TQ 3480 1535	Post-medieval coin findspot
MES15517	TQ 3582 1534	Medieval pit recorded during excavation
MES15534	TQ 3576 1539	Early Mesolithic to Late Bronze Age flint assemblage

Table 1: Summary of ESCC HER records with 1km of NGR TQ 3515 1500

2.2 SMR Number MES7402 refers to a Mesolithic site excavated in a field off Streat Lane, Streat, to the east of the site, in 1996/1997 by the Mid Sussex Field Archaeological Team. The site was excavated as a condition of planning permission and contained four pits containing large quantities of fire-fractured flint, together with a possible temporary shelter. The flintwork assemblage of over 3,000 pieces included microliths and a small number of expedient implements. Radiocarbon dates indicate that the site was being used during the later seventh millennium BC (SAC 145, 7-31).

3.0 ARCHAEOLOGICAL METHODOLOGY

- 3.1** The intrusive groundworks were anticipated to comprise the installation of two kiosks and other apparatus at and below ground level (including chambers, soakaway and associated service runs), concrete access road and general landscaping. A separate temporary compound was also created approximately 120m to the south and is likely to involve some ground reduction (topsoil strip; Figure 2).
- 3.2** Any intrusive ground works associated with the development were monitored by an archaeologist. Any machine used for removal of material above undisturbed natural subsoil was fitted with a toothless bucket of appropriate width whenever practicable.
- 3.3** Where new excavations revealed significant archaeological remains, an opportunity was made for careful hand excavation and the collection of samples by the archaeologist in attendance taking site health and safety into account. Adequate time was made available for appropriate archaeological excavation by hand to identify and record the remains as far as possible within the limits of the works in order to extract archaeological and environmental information, should this have proved necessary.
- 3.4** This approach enabled any archaeological deposits disturbed during the proposed works to be adequately recorded in line with the advice given in PPS: 5 which replaced PPG: 16.
- 3.5** The spoil from the excavations was inspected by the archaeologists to recover artefacts or ecofacts of archaeological interest and routinely scanned with a metal detector.
- 3.6** The County Archaeology Officer, ESCC was kept informed of progress so that he could monitor the archaeological work.
- 3.7** All archaeological features were recorded according to standard ASE practice. Where practicable, all features were planned at 1:20 and section drawings were at 1:10. Drawings were made on plastic draughting film. Features and deposits were described on standard pro-forma recording sheets used by ASE. All remains were levelled with respect to Ordnance Survey datum. A photographic record was made in both monochrome and colour transparency.

Number of Contexts	2
No. of files/paper record	1
Plan and sections sheets	0
Bulk Samples	0
Photographs	9 (digital)
Bulk finds	1 bag
Registered finds	0
Environmental flots/residue	0

Table 2: Quantification of site archive

4.0 RESULTS (Figures 2 and 3)

4.1 Introduction

4.1.1 The stripping of a temporary compound and the Water Treatment Works themselves were subject to archaeological monitoring

4.1.2 Table 3: List of Recorded Contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Thickness
1	Deposit	Ploughsoil	-	-	0.30m
2	Deposit	Head Deposit	-	-	-

4.2 Summary

Temporary Compound

4.2.1 The Temporary Compound area was stripped of c.0.25m of Ploughsoil [1]. This comprised firm mid grey brown clay silt that contained inclusions of frequent angular flint nodules as well as occasional modern brick fragments. The natural horizon was only encountered occasionally and where this was reached the horizon was noted to be disturbed by the plough. The natural geology comprised mid orange brown silt clay head deposit [2] that contained occasional inclusions of angular flint nodules. No features or finds of archaeological interest were encountered.

Water Treatment Works

4.2.2 The area of the Water Treatment Works was stripped of c.0.25m of Ploughsoil [1] the natural horizon was not reached during the majority of this work, however, it was decided to strip a smaller area in the location of the deeper groundworks (chambers, soakaway etc.) down to the natural horizon. No archaeological features were encountered but three sherds of medieval pottery were recovered from the ploughsoil.

5.0 THE FINDS

5.1 A small assemblage of finds was recovered from the ploughsoil [1] in the area of the water treatment works. A summary is given in Table 4. Finds were all washed and dried or air dried as appropriate. They were counted, weighed and bagged by context and by material. No further conservation is required.

5.1.1 Table 4: Quantification of the finds

Context	Pot	Wt (g)
1	3	26

5.2 The Pottery by Luke Barber

The archaeological work produced just three pieces of post-Roman pottery, all of which were recovered from [1]. The earliest sherd consists of an abraded but quite well fired reduced black bodysherd tempered with sparse/moderate multicoloured flint grits to 2mm. This piece is of Mid/Late Saxon date, probably fitting into a mid 8th- to 10th- century date bracket. The other two sherds conjoin and are from the neck and partial rim of a low-fired abraded jar tempered with coarse sand. The vessel is patchily fired, with grey core and inner surface with oxidised outer face. Although not particularly diagnostic a 10th- to 12th- century date range is probable.

6.0 DISCUSSION

- 6.1** No archaeological features were encountered during the course of the groundworks.
- 6.2** Three sherds of pottery dating from the 8th to 12th centuries were encountered within the ploughsoil indicating activity of this date within the area of the site. These residual pottery fragments are probably derived from the nearby medieval settlement of Streat.
- 6.3** Interestingly, no pieces of worked flint were recovered during the watching brief, surprising given the proximity of Mesolithic site MES7402 (see section 2.2 above). In addition no Roman remains associated with the nearby Roman Road were encountered.

7.0 CONCLUSIONS

- 7.1** No significant archaeological remains were encountered during the groundworks although sherds of medieval pottery were recovered from the ploughsoil probably derived from the nearby medieval settlement of Streat.

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ACKNOWLEDGEMENTS

ASE would like to thank 4D for commissioning the work as well as Greg Chuter (ESCC) for his help and guidance throughout the project.

SMR Summary Form

Site Code	STR 10					
Identification Name and Address	Streat Water Treatment Works, Streat, East Sussex					
County, District &/or Borough	East Sussex, Lewes					
OS Grid Refs.	TQ 3515 1500					
Geology	Head Deposits					
Arch. South-East Project Number	4650					
Type of Fieldwork	Eval.	Excav.	Watching Brief X	Standing Structure	Survey	Other
Type of Site	Green Field	Shallow Urban	Deep Urban	Other Water Treatment Wrks		
Dates of Fieldwork	Eval.	Excav.	WB. 14 th Mar – 1 st Apr 2011	Other		
Sponsor/Client	4Delivery					
Project Manager	Andy Leonard and Jim Stevenson					
Project Supervisor	Andy Margetts					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS X	MED X	PM	Other		
<p>100 Word Summary. <i>Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology, University College London, were commissioned by 4Delivery Limited (hereafter 4D) on behalf of Southern Water to undertake an archaeological watching brief during intrusive ground works associated with the enlargement of the existing water treatment works at Streat, East Sussex (NGR TQ 3515 1500). No significant archaeological remains were encountered during the groundworks although three sherds of medieval pottery were recovered from the ploughsoil indicating activity of this date nearby. The work was undertaken from the 14th March to the 1st of April 2011</i></p>						

OASIS Form

OASIS ID: archaeol6-100359

Project details

Project name	An Archaeological Watching Brief at Streat Water Treatment Works, Streat, East Sussex
Short description of the project	Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology, University College London, were commissioned by 4Delivery Limited (hereafter 4D) on behalf of Southern Water to undertake an archaeological watching brief during intrusive ground works associated with the enlargement of the existing water treatment works at Streat, East Sussex (NGR TQ 3515 1500). No significant archaeological remains were encountered during the groundworks although three sherds of medieval pottery were recovered from the ploughsoil indicating activity of this date nearby. The work was undertaken from the 14th March to the 1st of April 2011.
Project dates	Start: 14-03-2011 End: 01-04-2011
Previous/future work	Yes / Not known
Any associated project reference codes	STR10 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Transport and Utilities 3 - Utilities
Monument type	0 None
Significant Finds	POTTERY Early Medieval
Significant Finds	POTTERY Medieval
Investigation type	'Watching Brief'
Prompt	Planning condition

Project location

Country	England
Site location	EAST SUSSEX LEWES STREAT Streat Water Treatment Works
Postcode	BN6 8RX
Study area	100.00 Square metres

Site coordinates	TQ 3515 1500 50.9180474301 - 0.07707792231850 50 55 04 N 000 04 37 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 1.00m Max: 1.00m

Project creators

Name of Organisation	Archaeology South East
Project brief originator	East Sussex County Council
Project design originator	Archaeology South-East
Project director/manager	Andy Leonard
Project supervisor	Andrew Margetts
Type of sponsor/funding body	4D Ltd
Name of sponsor/funding body	4 Delivery Ltd

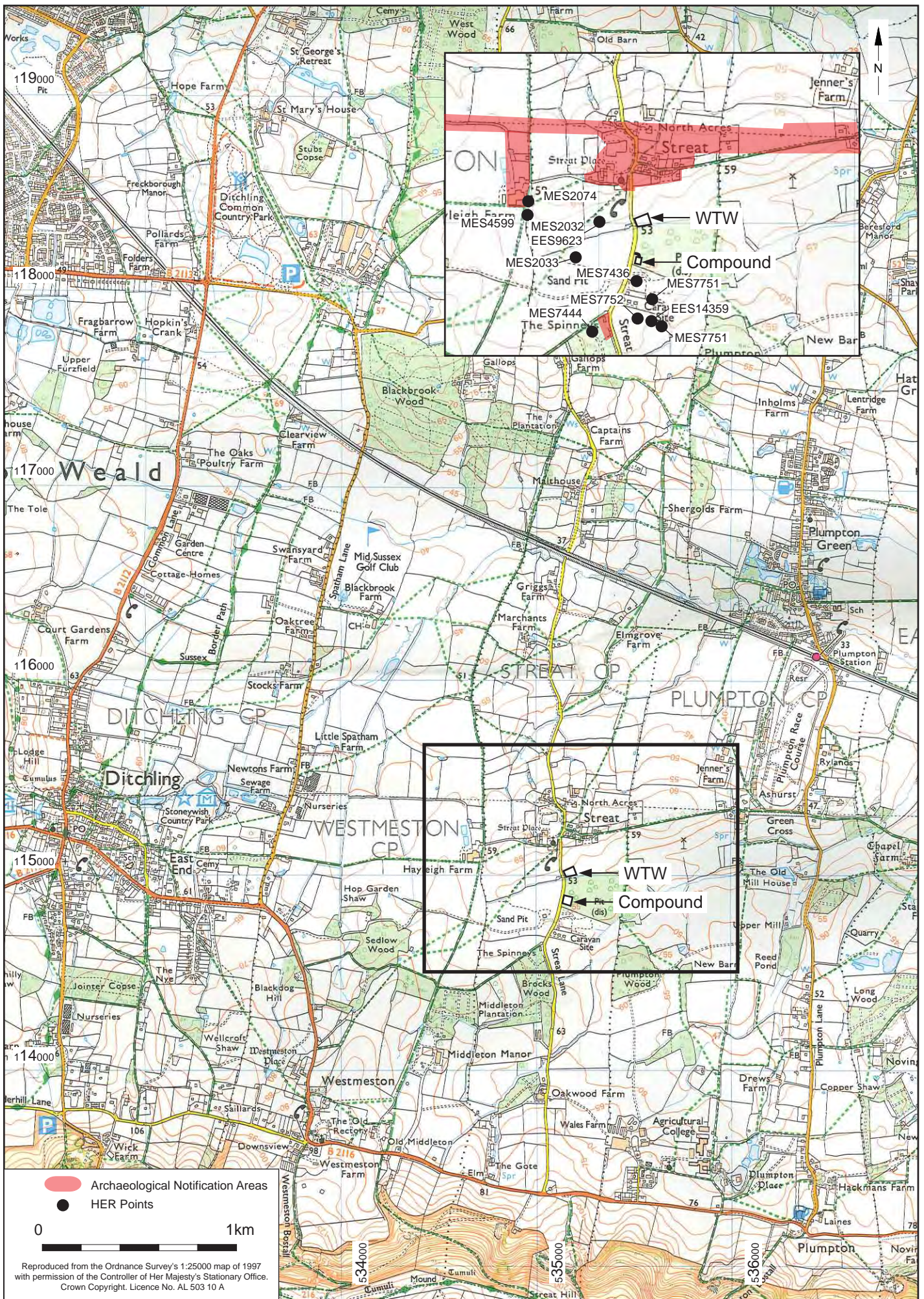
Project archives

Physical Archive Exists?	No
Digital Archive Exists?	No
Paper Archive Exists?	No

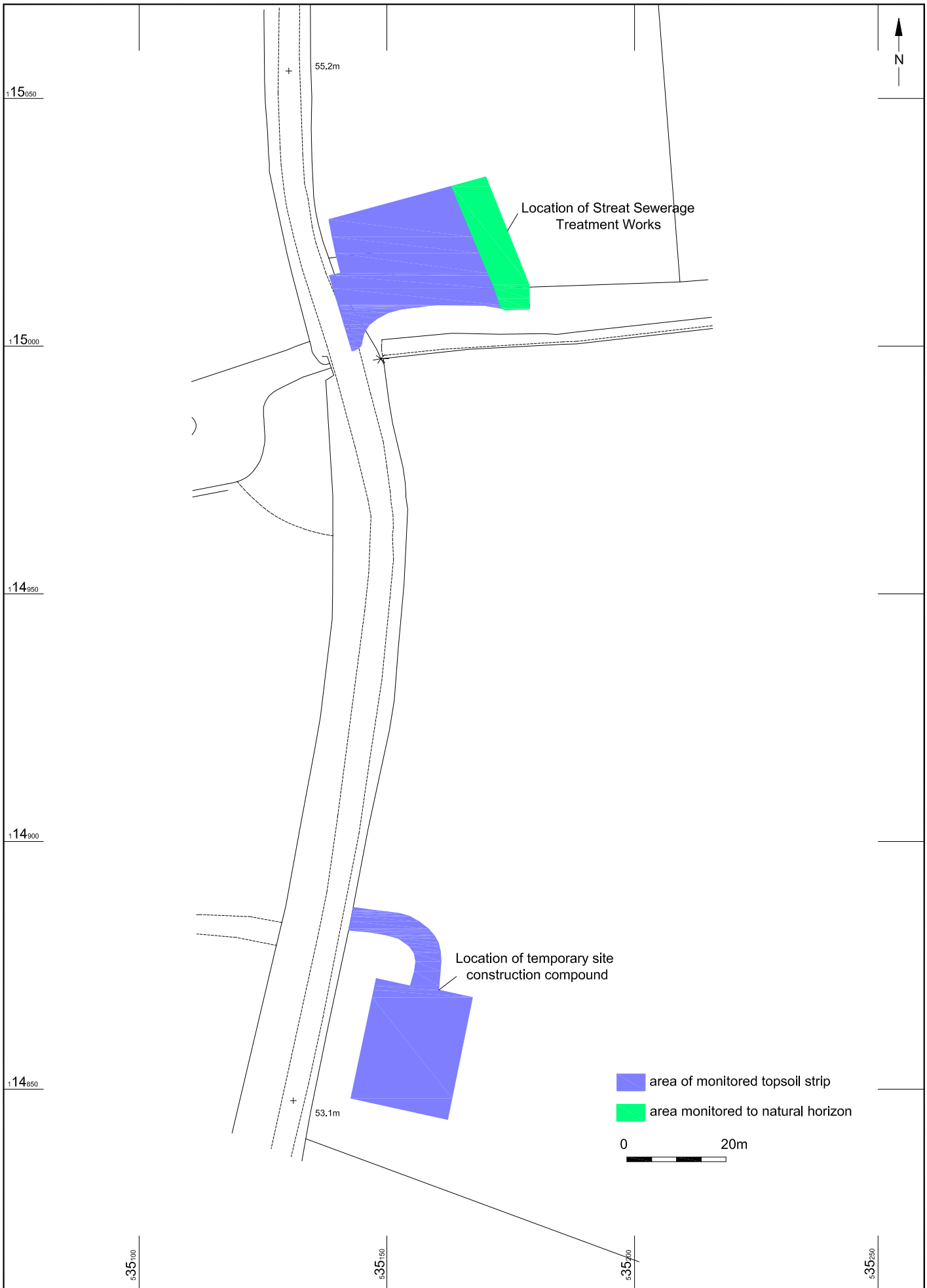
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Project Ref: 4650	April 2010	Site location	
Report Ref: 2011087	Drawn by: FEG	Fig. 1	



© Archaeology South-East		Streat Water Treatment Works, East Sussex	Fig. 2
Project Ref: 4650	April 2011	Site plan of monitored areas	
Report Ref: 2011087	Drawn by: LD		



Topsoil strip of Water Treatment Works



Strip of Water Treatment Works to natural horizon



Temporary Compound topsoil strip

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