



## Footpath NU14, Gravesham, Kent

### Archaeological Watching Brief Report





**Footpath NU14, Gravesham, Kent**

**Archaeological Watching Brief Report**

Prepared for:  
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## **Footpath NU14, Gravesham, Kent**

### **Archaeological Watching Brief Report**

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## Footpath NU14, Gravesham, Kent

### Archaeological Watching Brief Report

#### Summary

Wessex Archaeology was commissioned by Kent County Council to carry out an Archaeological Watching Brief during footpath improvement to Footpath NU14 and the erection of a fence line at Gravesham, Kent located at National Grid Reference 561700, 173535.

The footpath area lies within an area of considerable archaeological significance. Part of the works took place within Scheduled Monument No: KE268a; a known Mesolithic/Neolithic Site. Originally excavated in 1938, the site comprised 2 distinct horizons, or “floors”, yielding flint scatters attributed typologically to the Mesolithic (Burchell 1938). The horizons were sealed below roughly 2m of colluvium. Following additional excavation in the 1960s by Gail Sieveking of the British Museum (Sieveking 1960), the Site was scheduled.

Prior to any work taking place within Scheduled Monument No: KE268a, Scheduled Monument Consent was granted by the Department of Culture, Media and Sport.

The archaeological watching brief of the groundworks for the footpath comprised the monitoring of the removal of an old fenceline and its re-erection to the east. The excavation of 30 postholes up to 450m deep for the new fenceline and the monitoring for the laying and renewal of the footpath. The renewal of the footpath involved no ground disturbance within the Scheduled Monument area beyond vegetation clearance at ground level. No digging or stripping was undertaken, with the new footpath created through the laying down of a geo-textile membrane and the building up of the footpath.

No archaeological deposits or features were revealed within the postholes or anywhere within the watching brief area. Subsoil and probable colluvial layers yielded a number of finds comprising worked and burnt flint. Whilst the worked flint was mainly waste flakes, a single core and 2 flake tools were recovered. These are indicative of prehistoric activity in the vicinity, but as they do not derive from *in situ* deposits they could not be directly related to the Scheduled Monument.

All ground-works undertaken in association with the footpath improvements were carried out with minimum possible ground disturbance in compliance with the conditions of Scheduled Monument Consent granted for the works. Although Scheduled Monument KE268a was impacted upon by the groundworks by limiting the depth no damage or impact was made to the significant archaeological deposits.

The watching brief was undertaken between the 1<sup>st</sup> and 10<sup>th</sup> December 2008.

## **Footpath NU14, Gravesham, Kent**

### **Archaeological Watching Brief Report**

#### **Acknowledgements**

The work was commissioned by Lawrence Tricker of Kent County Council and Wessex Archaeology would like to thank him for his help and assistance. The help and advice of Judith Roebuck of English Heritage and Lis Dyson at Kent County Council is also gratefully acknowledged.

The fieldwork was carried out by Chloe Hunnisett, who also compiled this report. The project was managed by Damian De Rosa on behalf of Wessex Archaeology. The illustrations were prepared by Will Foster

## Footpath NU14, Gravesham, Kent

### Archaeological Watching Brief Report

#### 1 INTRODUCTION

##### 1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Kent County Council (hereafter “the Client”) to carry out an Archaeological Watching Brief during footpath improvement to Footpath NU14 and the erection of a fence line at Gravesham, Kent (hereafter ‘The Site’) located at National Grid Reference 561700, 173535.

1.1.2 The Site encompasses a Scheduled Monument – Mesolithic/Neolithic Site, Ebbsfleet (No KE268a). Scheduled Monument Consent - Ref HSD 9/2/10702 (**Appendix 1**) was granted prior to the work being undertaken.

1.1.3 A Written Scheme of Investigation (WA 2008a) detailing the methods for undertaking the watching brief was prepared by Wessex Archaeology and submitted to and approved by the Client and English Heritage prior to any work being undertaken

##### 1.2 Site Location.

1.2.1 The Site is located west of Gravesend between the A226 (Thames Way) and the Channel Tunnel Rail Link (**Figure 1**).

1.2.2 Part of the Site lay within land occupied by a sewage farm, which lay to the east of the Site. The work comprised the improvement of an existing footpath and fenceline, which runs along the western edge of the existing sewage works (**Figure 1**).

1.2.3 Ground level was generally flat across the Site, with a very gentle slope from north to south falling from 3.60m to 3.20m above Ordnance Datum (aOD)

1.2.4 The solid geology of the this area comprises Upper Chalk, which locally is capped by Thanet Sands (Institute of Geological Sciences 1979). The chalk outcrops only in localised areas on the slopes down into the valleys. On the lower valley slopes, Pleistocene Head deposits occur which mask the underlying Chalk.

1.2.5 However, Plateau Gravels have been located on the higher ground and significant depths of colluvium (up to 1.7m in depth) have been recorded on the lower valley sides and the valley floor of the Ebbsfleet. The colluvium is a chalk-flecked brown/yellow clay/silt containing some small to medium sub-rounded flint gravel inclusions. The deposit becomes lighter in colour and more calcareous towards the upper profile. The colluvium seals features of prehistoric and Roman date.

### 1.3 Archaeological and Historical Background

- 1.3.1 The development area lies within an area of considerable archaeological significance. Part of the works took place within a Scheduled Monument (No: KE268a); a known Mesolithic/Neolithic Site. Originally excavated in 1938, the site comprised 2 distinct horizons, or “floors”, yielding flint scatters attributed typologically to the Mesolithic (Burchell 1938). The horizons were sealed below roughly 2m of colluvium. Following additional excavation in the 1960s by Gail Sieveking of the British Museum (Sieveking 1960), the Site was scheduled.
- 1.3.2 To the south of the Site lies the Roman Settlement of *Vagniacae*. Immediately to the east of the Site recent archaeological excavations undertaken by Wessex Archaeology in advance of housing development have revealed extensive archaeological remains dating from the middle Palaeolithic to the medieval period (WA2008b).

## 2 AIMS

### 2.1 Watching Brief

- 2.1.1 The objectives of the watching brief were to contribute to heritage knowledge of the area through the recording of any archaeological remains exposed as a result of excavations in connection with the groundworks.
- 2.1.2 The main objective of the watching brief was to ensure that through archaeological monitoring the development complied fully with Scheduled Monument Consent HSD 9/2/10702 (**Appendix 1**)

## 3 METHOD

### 3.1 Monitoring of Development

- 3.1.1 All work was carried out in accordance and compliance with Scheduled Monument Consent HSD 9/2/10702 (**Appendix 1**) granted for the Site and with the standards and guidance given in the Institute of Field Archaeologist's *Standard and Guidance for an Archaeological Watching Brief* (revised 2001).
- 3.1.2 Prior to commencement of ground-works, a site visit was undertaken in order to assess and photographically record the current condition of the monument area. The boundaries of the scheduled monument were located using a GPS, and were clearly marked out on the ground.
- 3.1.3 An archaeological watching brief was maintained on all ground-works within the Scheduled Monument area. This included attendance on Site by a suitably qualified archaeologist, and close monitoring of any activities that may have impacted upon archaeological features and deposits, including removal of old fencing, scrub clearance, digging of new fence post-holes, erection of new fencing and installation of the new pathway.

- 3.1.4 Close communication was maintained with the contractors to ensure that agreed methodologies were adhered to within the Scheduled Monument area. In particular this ensured that agreed depths of 450mm below ground level were adhered to when digging the new post holes within the Scheduled Monument area. It also ensured that ground-works for the footpath did not involve ground reduction but comprised the laying down of a geotextile membrane and the building up of the ground surface.
- 3.1.5 All recording was undertaken using Wessex Archaeology's *pro forma* recording system. A full manual and digital photographic record was created, including photographs of the Scheduled Monument area's general condition before, during and after completion of ground-works.
- 3.1.6 Areas under archaeological observation, including locations of new post holes, were surveyed using a Total Station or GPS and tied in to the Ordnance Survey. All post holes within the Scheduled Monument area were surveyed at the base to ensure that the maximum depth was not exceeded.

## **4 RESULTS**

### **4.1 Scheduled Monument Impact**

- 4.1.1 During the watching brief 17 new post holes and 13 shallower support strut holes between 200mm and 400mm in diameter were dug within the Scheduled Monument area under constant archaeological supervision, to a maximum depth of 450mm below ground level. In addition a further 17 post holes were dug under archaeological supervision outside the watching brief area, with 4 postholes immediately outside the Scheduled Monument area dug under the conditions specified for within the monument area.
- 4.1.2 No ground-works within the Scheduled Monument area exceeded the maximum depth of 450mm below ground level.
- 4.1.3 Old fencing was removed with little or no ground disturbance, generally involving truncation of fence posts at ground level.
- 4.1.4 Installation of the new footpath involved no ground disturbance within the Scheduled Monument area beyond vegetation clearance at ground level. No digging or stripping was undertaken, with the new footpath created through the laying down of a geo-textile membrane and the building up of the footpath.

### **4.2 Stratigraphy**

- 4.2.1 Within the postholes the stratigraphic sequence exposed was as follows
- 4.2.2 A thin c.0.10m layer of modern humic topsoil **(1)** overlay a c.0.30m thick layer of subsoil/made ground **(2)**. The subsoil **(2)** was comprised of a compact, mixed silty clay loam with modern and later post medieval debris including glass and ceramic building material in addition to rare chalk and flint inclusions.



- 4.2.3 In post holes to the south of the Scheduled Monument area, an additional silty sand made ground, deposit **(4)**, containing modern debris, including plastic, overlay subsoil **(2)**.
- 4.2.4 Deposit **(3)**, a mid orange brown clay loam was revealed at 0.4m - 0.44m below ground level. This deposit was uniform, fairly compact, with very rare struck flint and rare sub-rounded pebbles. This deposit was only revealed at the very base of the postholes making a full assessment difficult, but it is likely to be a colluvial deposit.

### **4.3 Archaeology**

- 4.3.1 No archaeological deposits or features were revealed within the post holes or anywhere within the watching brief area.
- 4.3.2 Subsoil **(2)** and probable colluvium **(3)** yielded a number of flint flakes. The flakes from the subsoil **(2)** are not chronologically diagnostic, but are most likely to be later prehistoric. None of the flakes from probable colluvium **(3)** are dateable and although they appear to have been worked the apparent 'retouch' is probably naturally-occurring damage. The flakes are however indicative of prehistoric activity in the vicinity, although they cannot be directly related to the Scheduled Monument.

## **5 FINDS**

- 5.1.1 None of the flint recovered from the topsoil **(1)** is worked.
- 5.1.2 A total of five flakes were recovered from the subsoil **(2)** one of which had a crude retouch. None of the pieces are chronologically diagnostic, but are most likely to be later prehistoric.
- 5.1.3 Within the probable colluvium **(3)** three worked flakes were recovered. In each case the apparent 'retouch' is probably naturally-occurring damage. None are dateable.
- 5.1.4 This material is insignificant and does not warrant further work.

## **6 PALAEO-ENVIRONMENTAL**

- 6.1.1 No deposits suitable for palaeo-environmental analysis were encountered during the watching brief.

## **7 DISCUSSION**

- 7.1.1 During the watching brief, no archaeological features or deposits were revealed. The very small assemblage of re-deposited worked and burnt flint were not chronologically diagnostic, but would appear to indicate a background of prehistoric activity in the area. However, it must also be expected that a small assemblage such as this would generally be present as residual material within topsoil and subsoil.

- 7.1.2 The small assemblage recovered during the watching brief is not comparable to the Mesolithic assemblage recovered during the previous excavations, during which burins, blades, blade cores and shouldered points were recovered from 2 distinct horizons (Burchell 1938)
- 7.1.3 No remains were encountered during the ground works which were indicative of the Scheduled Monument. This is consistent with the known depth of the Scheduled Monument at c.2m below ground level, and the shallow depth of excavation of the post holes, as specified in the Scheduled Monument Consent.
- 7.1.4 All ground-works undertaken in association with the footpath improvements were carried out with the minimum possible ground disturbance in compliance with the conditions set out in the Scheduled Monument Consent. As a result there was minimal impact on site conditions within the Scheduled Monument area. By limiting the depth of the groundworks no damage or impact was made to the significant archaeological deposits.

## **8 ARCHIVE**

### **8.1 Preparation and Deposition**

- 8.1.1 The archive from the project, including the finds and subject to the wishes of the landowner will be deposited with the appropriate local registered museum.

## **9 REFERENCES**

- Burchell, J.P.T. 1938. Two Mesolithic Floors in the Ebbsfleet Valley of Kent. *The Antiquaries Journal* 18: 396-401
- Sieveking, G. 1960. Ebbsfleet. *Archaeologia Cantiana* 74: 193
- Wessex Archaeology 2008a: *Footpath NU14, Gravesham, Kent, Written Scheme of Investigation for an Archaeological Watching Brief*. WA Ref 70620.01
- Wessex Archaeology 2008b: *Springhead Quarter: Phase 2 and 3 Trial Trench Evaluation, Ebbsfleet, Kent* Ref: 58848.02

## **Appendix 1: Scheduled Monument Consent**

## **Appendix 1: Scheduled Monument Consent**





Mr. Laurence Tricker  
Kent Thameside  
The Old Rectory  
Springhead Road  
Northfleet  
DA11 8HN

Your Ref  
Our Ref HSD 9/2/10702

14 November 2008

Dear Mr. Tricker,

**ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 (AS AMENDED) – SECTION 2**  
**PROPOSED WORKS AT: NEOLITHIC SITES NEAR EBBSFLEET, SWANSCOMBE AND GREENHITHE, KENT**  
**COUNTY MONUMENT NO.: KE268**  
**APPLICATION BY: MR. LAURENCE TRICKER, KENT THAMESIDE, THE OLD RECTORY, SPRINGHEAD ROAD, NORTHFLEET, DA11 8HN**

1. I am directed by the Secretary of State for Culture, Media & Sport to refer to your application, on behalf of Kent County Council, for scheduled monument consent dated 10 September 2008, and to:

- an email dated 16 October 2008 from yourself to Judith Roebuck (English Heritage);
- a letter dated 17 October 2008 from Mr Damina De Rosa (Wessex Archaeology) to yourself regarding an archaeological watching brief;
- cost proposals dated 20 October 2008, including terms and conditions of contract, from Wessex Archaeology; and
- works details dated 14 July 2008 (including No. 14 sketch/details/location photos/cross section);

submitted therewith in respect of proposed works at the above scheduled ancient monument for the improvement of the footpath across the monument and the replacement of the fence to a different design.

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford to the applicant, and to any person to whom it appears to the Secretary of State expedient to afford it, an opportunity of appearing before and being heard by a person appointed for that purpose. This opportunity has been declined in your telephone conversation with Mrs. U. Patel of the Department on 13 November 2008.

3. The Secretary of State is also required by the Act to consult with the Historic Buildings and Monuments Commission for England (English Heritage) before deciding whether or not to grant scheduled monument consent. Having received the advice of English Heritage, the Secretary of State considers that the proposed works potentially detrimental to the monument, but that reasonable safeguards are specified in the application for an appropriate level of archaeological supervision and recording. The effects of the works on the setting of the monument have also been assessed and are not considered to be an overriding factor in this instance. The Secretary of State is agreeable for the works to proceed providing the conditions recommended by English Heritage, and set out below, are adhered to, and accordingly hereby grants scheduled monument consent under section 2 of the 1979 Act for the proposed works as referred to in paragraph 1 above, subject to the following conditions:

(i) The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by English Heritage. At least 2 week's notice, (or such shorter period as may be mutually agreed) in writing of the commencement of the works shall be given to: Judith Roebuck, Inspector of Ancient Monuments, English Heritage, South East Region, Eastgate Court, 195-205 High Street, Guildford GU1 3EH, in order that an English Heritage representative can have the opportunity to inspect and advise on the works and their effect in compliance with this consent.

(ii) Before works specified on the attached schedule are carried out, the applicant will ensure that Damian De Rosa Wessex Archaeology, Portway House Old Sarum Park Salisbury Wiltshire SP4 6EB or his nominated representative has made arrangements to enter the site at any reasonable time before and during the execution of the specified works and in accordance with a written scheme of investigation agreed in advance with the Secretary of State advised by English Heritage made provision for recording and removing for study of any matters of archaeological or historic importance observed in the course of the inspection.

(iii) Photographs shall be prepared of the monument before the start and after completion of the works and a set of the prints shall be sent to English Heritage at: Eastgate Court, 195-205 High Street, Guildford, GU1 3EH.

(iv) All those involved in the works must be informed of the scheduled status of the monument, its extent, and the legal obligations which apply.



(v) Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or ground disturbance other than that which is expressly authorised in this consent.

(vi) The level of the footpath shall be built up from the existing ground surface with new material being placed on a geotextile membrane.

(vii) The width of the path should be restricted in the scheduled area to avoid the need to excavate soil levels at the sides.

(viii) The scheduled monument should be accurately located on the ground to enable the spacing of the fence posts to be designed so that there are the minimum possible within the scheduled area.

(ix) Depth of excavation for the fence posts shall be limited to 450mm.

(x) All existing trees, shrubs, and woody growths shall be cut off at ground level and the roots poisoned, the stumps being left in situ and not grubbed out.

(xi) A report on the archaeological recording shall be sent to the County Sites and Monuments Record and to Judith Roebuck, Inspector of Ancient Monuments, English Heritage, South East Region, Eastgate Court, 195-205 High Street, Guildford, GU1 3EH within 3 months of the completion of the works (or such other period as may be mutually agreed).

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within five years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked before then).

5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

6. Attention is drawn to the provisions of section 55 of the 1979 Act under which any person (hereinafter referred to as the 'applicant') who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded his powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interest have been substantially prejudice by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.

7. A copy of this letter is being sent to:

Ms. Liz Pollard  
Casework Officer  
English Heritage  
SE Region  
Eastgate Court  
195-205 High Street  
Guildford  
Gu1 3EH;

Mr. Damian De Rosa  
Wessex Archaeology  
Portway House  
Old Sarum Park  
Salisbury  
Wiltshire  
SP4 6EB;

Mrs. Vivienne Coad  
Baileys Reed  
Bodiam Road  
Salehurst  
Nr. Robertsbridge  
East Sussex  
TN32 5SP;

and to

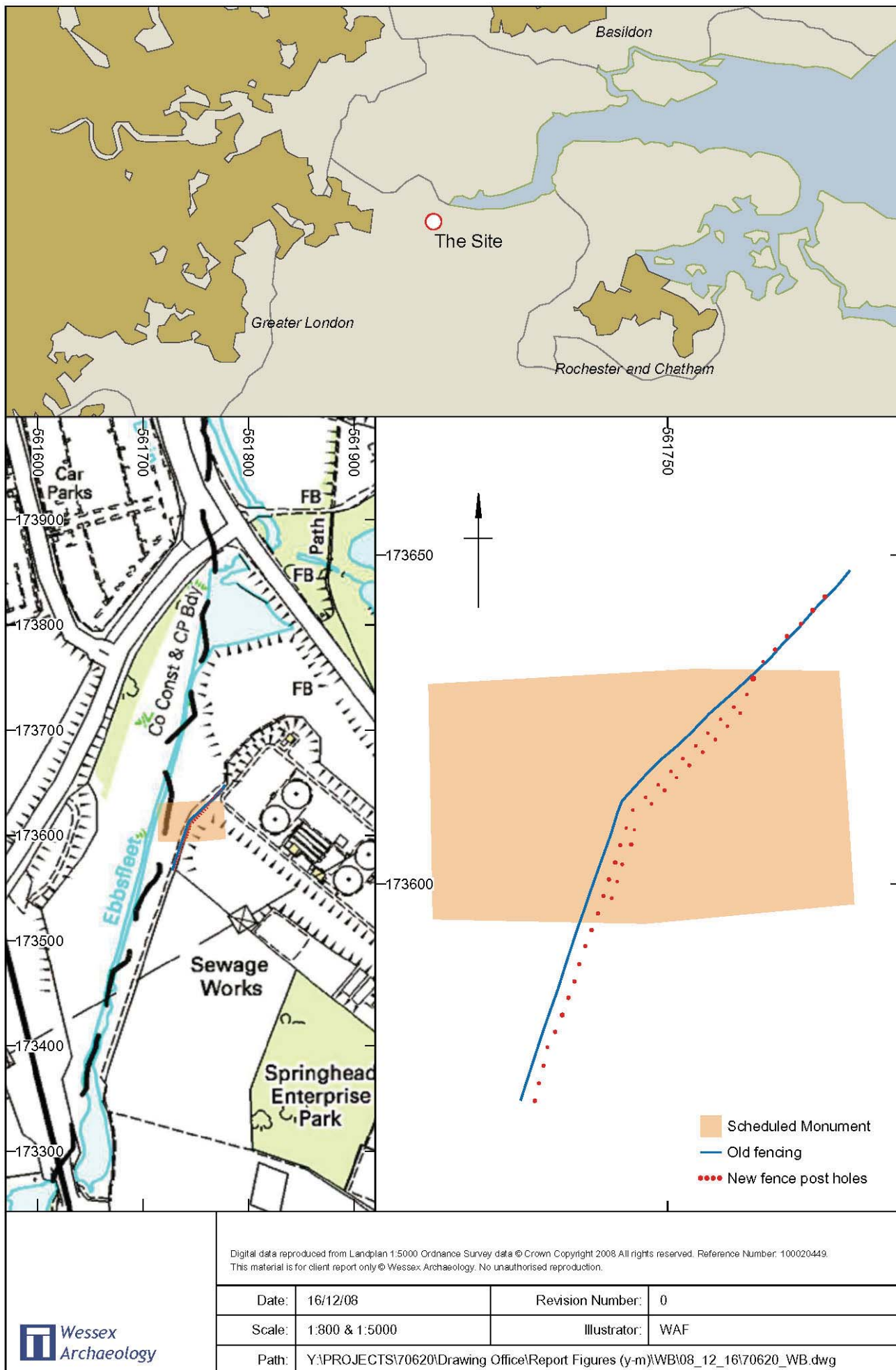
Mr. Paul Cuming  
Strategic Planning Directorate  
Kent County Council  
2<sup>nd</sup> Floor, Invicta House  
County Hall  
Maidstone  
Kent  
ME14 1XX.

Yours Sincerely



**JOHN TALLANTYRE**  
Authorised by the Secretary of State  
to sign in that behalf.





Site location map showing watching brief area and locations of post holes

Figure 1





Plate 1: Shot of Scheduled Monument area prior to commencement of ground works: View from the north-east



Plate 2: Working shot during installation of new fencing, showing new post holes: View from the south


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Plate 3: Shot of completed fence line within Scheduled Monument area: View from the south-west



Plate 4: Working shot during installation of new footpath: View from the south-west

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