

# Archaeological Watching Brief on land west of Littlebourne in Kent

NGR 619450 158302  
Site Code: LIT/WB/14  
Planning Application: CA/13/1750/FUKL  
Date: 15/09/2014



Report for Vogt Solar Ltd

## **SWAT. ARCHAEOLOGY**

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Plate 1. Aerial view of site (Google Earth 2013)

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## **SUMMARY**

*Swale & Thames Survey Company (SWAT) carried out an archaeological watching brief of land west of Littlebourne in Kent. A planning application (CA/13/01750/FUL) for the construction of a solar array park (Plate 1) was granted with an archaeological condition (15 & 16) whereby Canterbury City Council (CCC) requested that archaeological works on site to include an Archaeological Watching Brief be undertaken in order to determine the possible impact of the construction work on any archaeological remains.*

*The work was carried out in accordance with an Archaeological Specification supplied by Wessex Archaeology and consultations with the Archaeological Heritage Officer, CCC.*

*The archaeological investigation consisted of monitoring of the excavation of topsoil for storage/compound areas (Plates 4, 5, 6), temporary access tracks (Plates 7, 8, 9), cable trenches (Plates 15, 16), site fence (Plate 17), sub-stations and transformers (Plates 12, 13), and the main solar array (Plate 16).*

*A scan of the excavated spoil from the ground-works with a metal detector was also carried out.*

*The programme of archaeological works carried out by SWAT Archaeology revealed no archaeological features.*

*The Archaeological Watching Brief has therefore been successful in fulfilling the primary aims and objectives written in an Archaeological Specification by Wessex Archaeology and dated 2<sup>nd</sup> November 2011.*

## **INTRODUCTION**

Swale and Thames Survey Company (SWAT Archaeology) was commissioned by Vogt Solar Ltd, St John's Innovation Centre, Cowley road, Cambridge Road, CB4 0WS to carry out an archaeological watching brief at the above site. The work was carried out in accordance with consultation with the Archaeological Heritage Officer, CCC, and the written Wessex Archaeology archaeological specification. The watching brief was carried out from July 7<sup>th</sup> to 2<sup>nd</sup> September 2014.

## **SITE DESCRIPTION AND TOPOGRAPHY**

The site is located on land west of Littlebourne and is bounded to the north by agricultural land and to the west and east by woodland and to the south by the A257 Canterbury Road. The site occupies the summit of a low hill, sloping gently from 45m aOD at the south-west corner to 35m aOD along the north-eastern boundary.

The site measures about 24.5ha. The underlying geology is mapped as Thanet Sand Formation. This is overlain in the south of the Site by Quaternary Clay and Silt (Head Deposits) and along the western edge of the site by River terrace Deposits comprising sand and gravel (British Geological Survey).

## PLANNING

The site has planning permission for the Solar Array from Canterbury City Council. The planning reference is CA/13/01750/FUL whereby the Canterbury City Council Archaeological Officer requested that archaeological measures including an archaeological Watching Brief be undertaken in order to monitor specific ground works associated with the solar array.

The following Condition was attached to the planning permission.

*3. No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written specification and timetable which has been submitted to and approved by the Local Planning Authority.*

## ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A desk-based assessment (DBA) by Wessex Archaeology (WA 2013a) sets out the known archaeological and historical background within a 1km study area of the Site. However, it is unfortunate that no investigation of aerial photography was included in that study as a glance of historical aerial photographs (Plates 2, 3 ) held by Google Earth show a wealth of prehistoric features, including enclosures, field systems and drove roads, and includes more archaeological information that revealed through the subsequent Wessex Geophysical Survey (WA 2013b).

Following on from the Wessex Geophysical Survey an archaeological evaluation was undertaken in Autumn 2013 (WA 2013) by Wessex Archaeology where 25 evaluation trenches were located on the proposed corridors for power cables, access roads and storage areas.

Two phases of activity were identified dating from the Early-Mid Iron Age through to the Early Roman period.

Of importance Wessex Archaeology in the Specification for the Archaeological Watching Brief advises that **“Modern ploughing has truncated the archaeological features with 300mm of topsoil and 100mm of subsoil overlying the archaeological remains (WA 2013: 7, 4.2.2).**

## AIMS AND OBJECTIVES

The Wessex Archaeology Specification has advised that the watching brief should be targeted at five aspects:

1. Provide further information concerning the presence/absence, date, nature and extent of any buried archaeological remains and to investigate and record all archaeological features revealed during excavation and groundwork.
2. Characterise and date any anomalies or finds recovered.
3. Investigate the function of any structural remains and the activities taking place within and close to the Site.
4. To inform and provide information for any future mitigation for the Site in compliance with the planning condition.

5. To ensure preservation by record by archaeological excavation where the development proposals will lead to permanent loss of the buried archaeology, or, where possible, preservation in situ of such remains (5.1.3).

## **METHODOLOGY**

The objectives of the archaeological watching brief were to mitigate through a number of measures the potential impact of the proposed development ground works on the buried archaeology.

The storage/compound areas were built on top of the existing de-turfed topsoil using a geotextile membrane and Type 2 stone. The archaeology was protected and preserved by this methodology (Plates 4, 5, 6).

Temporary access tracks were laid to allow access to the main array at several points. The method of construction was to use a wide bladed bucket removing topsoil to a maximum depth of 150-250mm-some 150mm above the known archaeology. The archaeology was protected and preserved by this methodology (Plates 7, 8, 9).

Cable trenches were excavated to a depth of 400mm which was the level of the known archaeology. However, Wessex Archaeology evaluation trenches on the route of the cable runs failed to expose significant archaeology and despite a close watch by a SWAT archaeologist no archaeology was revealed (Plates 15, 16).

Eleven solar stations/transformers and two substations were built up on concrete plinths. The stripping of the topsoil and subsoil was carried out under direct archaeological control but no archaeology was revealed (Plates 12, 13).

Main site fence was constructed of posts set about 700mm deep. East hole was watched during excavation but no archaeology was revealed (Plate 17).

The main solar array was constructed of galvanised steel posts driven into the ground (Plate 16).

The proposed bunds and Swales are not to be constructed.

All archaeological work was carried out in accordance with the Wessex Archaeological Specification (2013).

## **MONITORING**

One visit was carried out on July 21<sup>st</sup> by the Canterbury City Council Archaeological Advisor and two spurs of the access road viewed and discussed. The roads in question had been excavated down to 150-250mm which is 150mm above the known archaeology and no archaeology had been revealed at the time of excavation. However, after two days of torrential rain deeper features had filled with rain and could be seen on the surface. Unfortunately by the next day the features had dried out and were no longer visible. The two areas coincide with Wessex Archaeology evaluation trenches 13, 15, and the Wessex evaluation report states that

the archaeology in trench 13 is 330mm deep and in trench 15 is 440mm deep- both below the level of excavation of the access roads at 150-250mm (Plates 10, 11).

## RESULTS

The first activity on site was the construction of temporary access roads (Plates 7, 8, 9) followed by the piling of the solar array galvanised steel uprights by the ground contractors followed closely by the excavation of the cable runs (Plates 15, 16). Work started on all phases of development whilst SWAT Archaeology was present on site.

The Archaeological Watching Brief continued for the rest of the groundwork's but no archaeology was revealed. Geology revealed was constant across the site and comprised topsoil- a grey brown sandy gravelly clay loam of about 300mm thick overlaying dark brown sandy stiff clay (Brick earth). A metal detector survey was carried out but the ferrous and non-ferrous material recovered was modern and mostly fastenings discarded by the solar array contractors.

## FINDS

Unstratified pottery finds retrieved out of the topsoil/subsoil strip are:

(Area 2) 4 sherds EIA-MIA>MIA flint-tempered ware (c.600-350/200 BC emphasis; 1 rusticated)

Comment : Three small worn scraps and one fairly small thick-walled coarseware bodysherd with finger-fluted surface finish externally.

Likely date : Initially, c.600-350 BC (weight 23gms).

(Area 5) 6 sherds EIA>MIA flint-tempered ware (c.800/600-200 BC probable emphasis)

Comment : Mostly small coarseware bodysherds but also one moderate-sized, fairly heavily abraded, 2-3 with only unifacial damage.

Likely date : Uncertain – possibly broadly c.600-200 BC. (weight 19gms).

The find spots have been plotted and are preserved in the site archive.

## CONCLUSION

The archaeological Watching Brief has been successful in fulfilling the primary aims and objectives of the Wessex Specification. A common stratigraphic sequence was recognised across the site comprising topsoil **(01)** overlying subsoil **(02)**.

## **ACKNOWLEDGEMENTS**

SWAT would like to thank Vogt Solar Ltd for commissioning this project. Thanks are also extended to Richard Cross Archaeological Advisor, Canterbury City Council for his advice and assistance.

Paul Wilkinson supervised the fieldwork, assisted in the field by Matt Charlwood on metal detector, and Julie Martin on fieldwork.

A handwritten signature in black ink that reads "Paul Wilkinson". The script is cursive and fluid, with the first letters of each word being capitalized and prominent.

Dr Paul Wilkinson MIfA

September 2014

## **References**

Wessex Archaeology. *Land at Littlebourne, Nr Canterbury, Kent Written Scheme of Investigation: Method Statement for Archaeological Mitigation Works* 2013



## Plates



Plate 2. Google Earth view of the site on January 1<sup>st</sup> 1990. Eye altitude 449 metres



Plate 3. Google Earth view of the site on September 9<sup>th</sup> 2013. Eye altitude 277 metres



Plate 4. View of the storage compound (looking south-west)



Plate 5. View of the storage compound (looking south-west)





Plate 6. View of the storage compound depth of strip- 150mm (looking south-west)



Plate 7. View of the strip of the access tracks (looking south-east)



Plate 8. View of the strip of the access tracks (looking east)





Plate 9. View of the strip of the access tracks (looking north)



Plate 10. View of the access road after torrential rain- note depth of excavation (looking south)





Plate 11. View of the access track after torrential rain- note the ditch feature seeped into the plough soil (looking south-east)





Plate 12. View of excavation required for main sub-station (looking east)





Plate 13. View of the excavation for transformer station (looking east)



Plate 14. View of the transformer on raised concrete base (looking south)



Plate 15. View of the main cable runs with cables in situ (looking north-west)





Plate 16. View of the cable runs and solar arrays (looking west)



Plate 17. View of the fencing being erected (looking south)



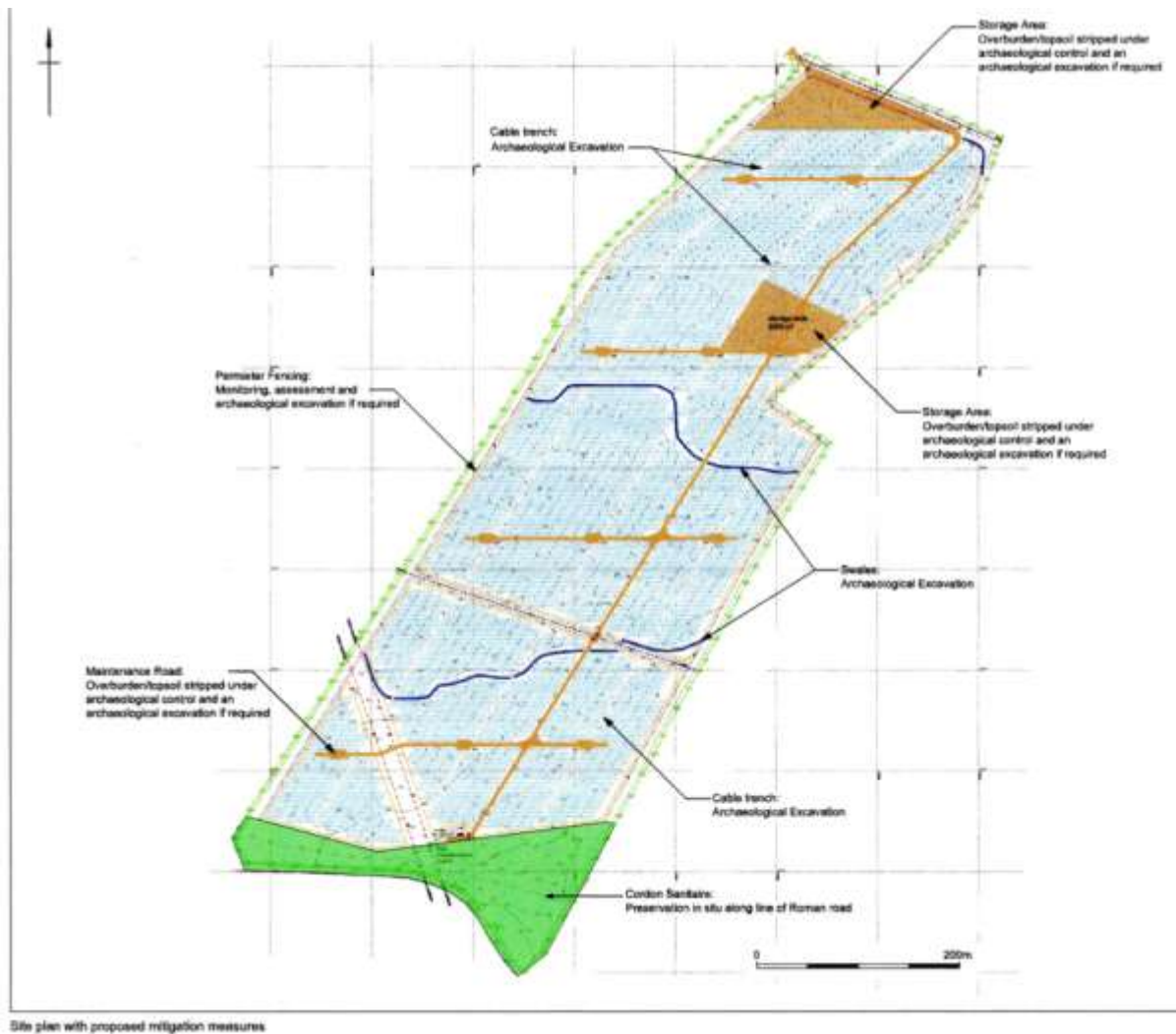


Figure 1. Site plan showing areas watched.

Brown areas: Compounds and storage

Brown linears: access road

White strips; cable runs

Green linears: fencing

# APPENDIX 1 – Canterbury City Council HER Summary Form

<b>Site Name:</b> <i>Littlebourne Solar Site</i>	
<b>SWAT Site Code:</b> <i>LIT/WB/14</i>	
<b>Site Address:</b> <i>Land at Littlebourne, Nr Canterbury, Kent</i>	
<b>Summary:</b> <i>Swale &amp; Thames Survey Company (SWAT) carried out an archaeological watching brief on land near Littlebourne in Kent. A planning application for the construction of a new solar array at the above site was submitted to Canterbury City Council (CCC) whereby Kent County Council Heritage and Conservation (KCCHC), on behalf of Canterbury City Council requested that an Archaeological Watching Brief be undertaken in order to determine the possible impact of the development on any archaeological remains. The work was carried out in accordance with the requirements set out within an Archaeological Specification (Wessex 2013) and in discussion with the Archaeological Officer Canterbury City Council.</i> <i>The Archaeological Watching Brief consisted of watching all phases of construction which encountered no archaeological features.</i>	
<b>District/Unitary:</b> <i>Canterbury</i>	<b>Parish:</b> <i>Littlebourne</i>
<b>Period(s):</b>	
<b>Tentative:</b>	
<b>NGR (centre of site : 8 figures):</b> <b>(NB if large or linear site give multiple NGRs):</b> <i>NGR 619450 158302</i>	
<b>Type of archaeological work (delete)</b> <i>Watching Brief</i>	
<b>Date of Recording:</b> <i>June to Sept 3014</i>	
<b>Unit undertaking recording:</b> <i>Swale &amp; Thames Survey Company (SWAT)</i>	
<b>Geology:</b> <i>Brick earth under topsoil</i>	
<b>Title and author of accompanying report:</b> <i>Wilkinson P. An Archaeological Watching Brief at Land at Littlebourne, Kent</i>	
<b>Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate)</b>  <i>As above</i>	
<b>(cont. on attached sheet)</b>	
<b>Location of archive/finds:</b> <i>SWAT</i>	
<b>Contact at Unit:</b> <i>Paul Wilkinson</i>	<b>Date:</b> <i>8<sup>th</sup> Sept 2014</i>