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# Fairwind Solar Farm Bulphan, Essex

Archaeological Watching Brief Report



Planning Ref: 13/0543/FUL  
Ref: 88672.02  
August 2014



**Fairwind Solar Farm  
Bulphan, Essex**

**Archaeological Watching Brief Report**

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## Quality Assurance

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# Fairwind Solar Farm Bulphan, Essex

## Archaeological Watching Brief Report

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## **Fairwind Solar Farm Bulphan, Essex**

### **Archaeological Watching Brief Report**

#### **Summary**

Wessex Archaeology was commissioned by SunEdison Ltd (hereafter 'the Client') to undertake an archaeological watching brief on land at Fairwind Farm, Lower Dunton Road Bulphan, Essex. The area of development impact comprises approximately 30ha of land centred upon National Grid Reference (NGR) 565460, 187709. The watching brief was undertaken between 23<sup>rd</sup> June to 11<sup>th</sup> July, and 4<sup>th</sup> August 2014.

Planning permission has been granted for the proposed scheme, with this watching brief forming part of the archaeological mitigation associated with the consent prior to the construction of a solar farm development. The development works are to comprise the enabling of solar panels, service trenches, the construction of inverter units and ancillary components.

The watching brief was maintained throughout service trench and inverter units foundation excavations, until it was concluded in consultation with the Senior Historic Environment Officer for Essex County Council that the potential for archaeological remains to be exposed was exhausted. No features, deposits or finds of archaeological origin were identified during the watching brief.



# **Fairwind Solar Farm Bulphan, Essex**

## **Archaeological Watching Brief Report**

### **Acknowledgements**

Wessex Archaeology would like to thank Carlos Rodriguez and Christina Martin of SunEdison for commissioning the work. The help and assistance from the site staff of SunEdison was also greatly appreciated. We would also like to thank Richard Havis, Senior Historic Environment Officer for Essex County Council, for his assistance and advice.

The fieldwork was undertaken by Chris Hirst and Steve Thompson. This report was written by Piotr Orczewski and Steve Thompson. Illustrations were drawn by Karen Nichols. The project was managed on behalf of Wessex Archaeology by Gareth Chaffey.



# Fairwind Solar Farm Bulphan, Essex

## Archaeological Watching Brief Report

### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology (WA) was commissioned by MS Power Projects Ltd (hereafter 'the Client') to undertake an archaeological watching brief on land at Fairwind Farm, Lower Dunton Road Bulphan, Essex (**Figure 1**). The area of development impact comprises approximately 30ha of land centred upon National Grid Reference (NGR) 565460, 187709 (hereafter 'the Site').
- 1.1.2 Planning permission was granted (13/0543/FUL) for the proposed scheme and this watching brief formed part of the archaeological mitigation associated with the consent. The Senior Historic Environment Officer for Essex County Council (ECC) has advised that the watching brief should be maintained during groundworks at depth (i.e. service trenches).
- 1.1.3 The watching brief followed pre-determination programmes of desk-based assessment (WA 2013a) and geophysical survey (WA 2012b) which were implemented to identify any previously unknown areas of archaeological activity at the Site, assess the survival and density of below ground deposits, and/or confirm their absence.
- 1.1.4 A Written Scheme of Investigation (WSI) for the watching brief (WA 2013c) was prepared by Wessex Archaeology and submitted to, and approved by, the Senior Historic Environment Officer of ECC, prior to the start of the fieldwork. The watching brief was undertaken in accordance with the Institute for Archaeologist's *Guidance for Archaeological Watching Brief* (as amended in 2008).
- 1.1.5 The watching brief was undertaken between the 23<sup>rd</sup> June – 11<sup>th</sup> July and 4<sup>th</sup> August 2014.

#### 1.2 The Site

- 1.2.1 The Site is located in south Essex, c. 500m to the west of the town of Basildon and c. 7km to the east of Upminster. The settlement of Bulphan lies c. 2km to the south-west. The Site comprises an irregular parcel of agricultural land of c. 30ha, currently occupied by three fields under arable cultivation.
- 1.2.2 The Site is bounded to the south and west by arable farmland and to the east by the north to south aligned Lower Dunton Road. The northern boundary of the Site is defined by the London, Tilbury and Southend Railway embankment. Six transmission towers are situated within the Site, which connect to an electrical substation located at the north-eastern boundary. A north-east to south-west aligned paved track-way passes through the northern end of the Site, running parallel to a stream which forms part of a series of drainage systems feeding into the Mar Dyke some 2km to the south-west of the Study Area.





- 1.2.3 The majority of the Site occupies a relatively level area of land, at an elevation of approximately 15m above Ordnance Datum (aOD). The highest point of the Site lies at the northern end, rising from the south to an elevation of approximately 19m aOD.
- 1.2.4 The underlying geology of the Site is mapped as Palaeogene clay, silt and sand of the London Clay Formation, overlain by clay, silt, sand and gravel head deposits in the majority of the Site. A narrow band of alluvium runs north-east to south-west through the northern part of the Site.

## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **2.1 Introduction**

- 2.1.1 A detailed archaeological and historical background for the Site has been compiled and presented previously (WA 2013b), and as such will not be repeated here.
- 2.1.2 In summary, the 2013 desk-based assessment (WA 2013a) identified a low potential for the presence of buried archaeological remains related to Romano-British, medieval and post-medieval agricultural practices. It was considered that any remains would be likely to be of local or regional importance for medieval/post-medieval and prehistoric/Romano-British archaeology respectively.
- 2.1.3 The 2013 gradiometer survey (WA 2013b) demonstrated the presence of anomalies of probable and possible archaeological interest within the Site. The majority of the features identified related to relatively recent agricultural activity in the area with possible former field boundaries, pits and more ephemeral features such as weak trends, detected. Extensive magnetic disturbance associated with services and numerous small-scale ferrous responses were also seen throughout the dataset.
- 2.1.4 Only one feature identified in the desk-based assessment was found in the geophysical data, likely to be a former field boundary. The other ditches identified in the data could not be linked to any features identified in the desk-based assessment.
- 2.1.5 The results of the geophysical survey and desk-based assessment were collated in an Environmental Statement (Quod 2013).

### **2.2 Archaeological background**

- 2.2.1 No sites or find spots of prehistoric date are recorded within the immediate vicinity of the Site. The geology and topography of the Site suggests that, prior to the creation of the later drainage systems, the Site would have been located in poorly drained marshy land, susceptible to flooding. It is considered therefore, that the Site is not likely to have offered a favourable location for settlement during this period.
- 2.2.2 Romano-British settlements are known to have existed at Billericay, c. 6km to the north-east and Orsett, c. 5.6km to the south-west (Rodwell 1972), although evidence of this period within the Study Area is limited to the discovery of two fragments of tile recovered at Great Berry, c. 830m to the south-east of the Site.
- 2.2.3 It is postulated that the land within the Site came under cultivation during the Romano-British period. An intensification of agriculture in south-east Essex led to the formation of a planned landscape, elements of which remain in existence. The field pattern was characterised by co-axial enclosures with sinuous boundaries, which strongly resemble those currently present within the Site.

- 2.2.4 It is likely that the Site remained in the agricultural hinterland of small settlements such as Bulphan, c. 2km to the south-east, and Dunton, c. 460m to the north, both of which are recorded in the *Domesday Survey* of 1086, throughout the Saxon, medieval and post-medieval periods, and remained largely unchanged beyond minor reorganisation of field boundaries into modern times.
- 2.2.5 A moated site is recorded approximately 880m to the north of the Site and a possible Deserted Medieval Village has been identified to the south of this. Medieval settlement within the vicinity of the Site is likely to have evolved around the parish Church of St. Mary approximately 460m to the north, although the present church was rebuilt in the 19th century, it incorporates features of medieval date. A 13<sup>th</sup> century coffin recovered within the churchyard confirms that a church existed at this location since the medieval period.
- 2.2.6 Historic map regression illustrates the predominantly rural location of the Site and the study area, situated within broad expanse of agricultural land with a small, nucleated settlement at Dunton. At the time of the 1838 Dunton Tithe map the Site comprised five fields, with main field boundaries almost identical to those currently extant. Subsequent 19<sup>th</sup> and 20<sup>th</sup> century Ordnance Survey maps continue to illustrate the Site as undeveloped agricultural land, showing only some minor reorganisation of the internal field divisions.
- 2.2.7 Given the general lack of recorded archaeological remains within the Site, the desk-based assessment (WA 2013b) noted the inherent uncertainty in attempting to define the potential for archaeological features within the Site.

### 3 METHODOLOGY

#### 3.1 Aims and objectives

3.1.1 The aims and objectives of the watching brief were to:

- *clarify the presence/absence and extent of any buried archaeological remains within the Site that may be disturbed by development;*
- *identify, within the constraints of the investigation, the date, character, condition and depth of any surviving remains within the Site;*
- *assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits; and*
- *produce a report which will present the results of the fieldwork.*

#### 3.2 Fieldwork methodology

3.2.1 The full detailed methodology of the archaeological works was set out in the agreed WSI (WA 2013c) and comprised the monitoring of the excavation of cable trenches and foundations for inverter units. The excavations monitored (see **Appendix 1** for details), and their locations have been indicated in **Figure 1**.

3.2.2 Prior to machining, the cable trench locations were scanned by SunEdison using a cable tracing device. The trenches and foundations were excavated using a 360° mechanical excavator employing a toothless ditching bucket under constant archaeological supervision. Mechanical excavation continued in spits through topsoil and down to either the uppermost archaeological features or natural deposits, whichever was encountered



first. Topsoil was separated from subsoil and any other arisings. The spoil from the trenches was scanned for artefacts.

- 3.2.3 All potential features and deposits of possible archaeological origin were partially excavated to ascertain their nature and function and were fully recorded using WA's *pro forma* recording system with a unique numbering system for individual contexts. All deposits were assigned a unique number.
- 3.2.4 A representative section of each trench was recorded showing the depth of the overburden deposits. A full digital photographic record was maintained using high resolution camera. Digital photography adhered to the National Monument Records Digital Imaging Guidelines. A full graphic record was maintained. The site drawings were drawn at an appropriate scale, typically 1:10 for sections and 1:20 for plans.
- 3.2.5 All excavations observed during the watching brief were surveyed using GPS and tied in to the Ordnance Survey. Site survey was carried out using a Leica Viva series GNSS unit using the OS National GPS Network through an RTK network with a 3D accuracy of 30mm or below. All survey data was recorded using the OSGB36 British National Grid coordinate system.
- 3.2.6 A unique site code **88672** was allocated to the Site, and was used on all records.

## **4 ARCHAEOLOGICAL RESULTS**

### **4.1 Introduction**

- 4.1.1 The following section provides a summary description of the results of the archaeological watching brief. Details of individually excavated trenches are retained in the Site archive and a detailed tabulated version of these is provided in **Appendix 1** of this report. **Figure 1** shows the overall location of each trench within the Site.

### **4.2 Natural deposits and soil sequences**

- 4.2.1 The stratigraphy across the Site, as recorded in the machined trenches, was relatively consistent. A light to mid greyish brown silty clay topsoil (between 0.20 to 0.30m thick) with frequent sub rounded stone pebbles and rooting from recent crop overlay the natural geology, characterised by a light to mid brownish red (orange) silty clay with sparse sub rounded pebbles (**Plates 2 to 5**).

### **4.3 Results**

- 4.3.1 Foundations for seven inverter units (recorded as Trenches 1 – 7) were approximately 2.80m long, 4.80m to 5.20m wide and were excavated to a depth of 0.60m (**Plate 1**).
- 4.3.2 Cable trenches (Trenches 8 – 30) were generally between 0.40m to 0.60m wide and between 0.60m to 1.30m deep, while the gas main capping structure trench (Trench 31) was 5m long by 3.5m wide and a maximum of 2.40m deep (**Plate 6**).

## **5 ARTEFACTUAL EVIDENCE**

- 5.1.1 No artefacts were recovered during the course of the watching brief.

## **6 ENVIRONMENTAL EVIDENCE**

- 6.1.1 No material suitable for environmental analysis was present within the monitored areas.



## 7 CONCLUSIONS

- 7.1.1 The watching brief was maintained throughout service trench and inverter units foundation excavations, until it was concluded in consultation with the Senior Historic Environment Officer for Essex County Council that the potential for archaeological remains to be exposed was exhausted.
- 7.1.2 No archaeological remains were encountered during groundworks associated with the development. No areas of modern disturbance were noted, suggesting that the lack of material is a true representation of a dearth of archaeological potential on the Site.

## 8 STORAGE AND CURATION

### 8.1 Museum

- 8.1.1 It is recommended that the project archive resulting from the excavation be deposited with Essex Museums Service. The Museum has agreed in principle to accept the project archive on completion of the project. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

### 8.2 Preparation of archive

- 8.2.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Essex Museums Service, and in general following nationally recommended guidelines (SMA 1995; IfA 2009; Brown 2011; ADS 2013).
- 8.2.2 Details of the archaeological watching brief will also be entered into the online "OASIS" database maintained by the Archaeological Data Service (ADS). A copy of the OASIS entry has been included in this report (**Appendix 2**).
- 8.2.3 All archive elements will be marked with the site code **88672**, and a full index will be prepared. The physical archive comprises the following:

- *1 file/document case of paper records & A3/A4 graphics*

### 8.3 Discard policy

- 8.3.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.
- 8.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002).

### 8.4 Security copy

- 8.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.



## 9 REFERENCES

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## APPENDIX 1: TRENCH SUMMARY TABLES

Trench 1			Co ordinates	[565716.934,187786.423,0]
Dimensions: 12.80m by 4.80m		Max Depth: 0.60m	Ground Surface	18.6
Context	Description			Depth bgl
101	Topsoil	Light greyish brown silty clay with frequent stone pebbles and rooting from crop.		0-0.20m
102	Natural	Light reddish brown silty clay with sparse stone pebbles.		0.20m +

Trench 2			Co ordinates	[565733.996,187674.758,0]
Dimensions: 12.70m by 4.80m		Max Depth: 0.55m	Ground Surface	19.1
Context	Description			Depth bgl
201	Topsoil	Light greyish brown silty clay with frequent stone pebbles and rooting from crop.		0-0.25m
202	Natural	Light reddish brown silty clay with sparse stone pebbles.		0.25m +

Trench 3			Co ordinates	[565612.52,187545.089,0]
Dimensions: 13.70m by 5.20m		Max Depth: 0.55m	Ground Surface	16.2
Context	Description			Depth bgl
301	Topsoil	Light greyish brown silty clay with frequent stone pebbles and rooting from crop.		0-0.35m
302	Natural	Light reddish brown silty clay with sparse stone pebbles.		0.35m +

Trench 4			Co ordinates	[565447.374,187690.759,0]
Dimensions: 12.70m by 5.35m		Max Depth: 0.60m	Ground Surface	16.7
Context	Description			Depth bgl
401	Topsoil	Light greyish brown silty clay with frequent stone pebbles and rooting from crop.		0-0.24m
402	Natural	Mid reddish brown silty clay.		0.24m +

Trench 5			Co ordinates	[565457.86,187551.165,0]
Dimensions: 12.80m by 5.20m		Max Depth: 0.55m	Ground Surface	16.0
Context	Description			Depth bgl
501	Topsoil	Light greyish brown silty clay with frequent stone pebbles and sparse flint shards. Rooting from crop.		0-0.21m
502	Natural	Light yellowish brown silty clay with sparse small stone pebbles.		0.21m +



<b>Trench 6</b>		<b>Co ordinates</b>	[565189.168,187752.334,0]	
<b>Dimensions:</b> 12.90m by 5.20m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	13.7
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
601	Topsoil	Light greyish brown silty clay with sparse sub rounded stone pebbles and rooting from crop.	0-0.25m	
602	Natural	Light greyish yellow brown silty clay with sparse sub angular stone.	0.25m +	

<b>Trench 7</b>		<b>Co ordinates</b>	[565000.008,187792.322,0]	
<b>Dimensions:</b> 12.85m by 5.25m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	18.8
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
701	Topsoil	Light greyish brown silty clay with sparse sub rounded stone pebbles.	0-0.26m	
702	Natural	Mid brownish orange silty clay with sparse sub angular pebbles.	0.26m +	

<b>Trench 8</b>		<b>Co ordinates</b>		
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
801	Topsoil	Light greyish brown silty clay with frequent rounded stone pebbles and rooting from crop.	0-0.20m	
802	Natural	Mid brownish orange silty clay with sparse sub rounded pebbles.	0.20m +	

<b>Trench 9</b>		<b>Co ordinates</b>	[565215.665,187826.169,0]	
<b>Dimensions:</b> x by 0.90m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	14.9-20.8
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
901	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and occasional flint shards. Rooting from recent crop.	0-0.30m	
902	Natural	Brownish orange compact silty clay with frequent sub rounded stone pebbles.	0.30m +	

<b>Trench 13</b>		<b>Co ordinates</b>	[565257.158,187809.109,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	14.3-21.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1301	Topsoil	Mid greyish brown silty clay with frequent sub angular stone pebbles. Occasional flint shards.	0-0.28m	
1302	Natural	Mid brownish orange compact silty clay with sparse sub angular stone pebbles.	0.28m +	



<b>Trench 14</b>		<b>Co ordinates</b>	[565286.221,187822.077,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.75m	<b>Ground Surface</b>	14.2-17.0
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1401	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and rooting from recent crop.	0-0.25m	
1402	Natural	Mid brownish red silty clay with sparse sub rounded stone pebbles.	0.25m +	

<b>Trench 15</b>		<b>Co ordinates</b>	[565601.884,187679.675,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	16.5-17.7
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1501	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and sparse flint shards.	0-0.30m	
1502	Natural	Mid brownish red silty clay with sparse sub rounded stone pebbles. Modern field drain uncovered.	0.30m +	

<b>Trench 16</b>		<b>Co ordinates</b>	[565633.213,187780.952,0]	
<b>Dimensions:</b> x by 0.50m		<b>Max Depth:</b> 0.70m	<b>Ground Surface</b>	16.4-18.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1601	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and sparse flint shards. Crop rooting.	0-0.27m	
1602	Natural	Mid brownish red silty clay with sparse sub rounded pebbles. Modern filed drain uncovered.	0.27m +	

<b>Trench 17</b>		<b>Co ordinates</b>	[565724.098,187729.506,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	18.2-18.8
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1701	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and sparse flint shards. Rooting from recent crop.	0-0.26m	
1702	Natural	Mid brownish orange silty clay with sparse sub rounded stone pebbles.	0.26m +	

<b>Trench 18</b>		<b>Co ordinates</b>	[565766.843,187811.43,0]	
<b>Dimensions:</b> 9.50m by 0.40m		<b>Max Depth:</b> 0.35m	<b>Ground Surface</b>	19.3
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
1801	Topsoil	Mid greyish brown silty clay with small frequent sub rounded stone pebbles and small flint shards and rooting from recent crop.	0-0.23m	
1802	Natural	Brownish red silty clay with sparse sub rounded pebbles.	0.23m +	





<b>Trench 19</b>		<b>Co ordinates</b>	[565767.124,187813.62,0]
<b>Dimensions:</b> 9.50m by 4.00m		<b>Max Depth:</b> 0.40m	<b>Ground Surface</b> 19.2
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
1901	Topsoil	Mid greyish brown silty clay with small frequent sub rounded stone pebbles and small flint shards with rooting from recent crop.	0-0.25m
1902	Natural	Brownish orange clay with sparse sub rounded pebbles.	0.25m +

<b>Trench 20</b>		<b>Co ordinates</b>	[565723.376,187767.733,0]
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b> 18.1-18.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
2001	Topsoil	Mid greyish brown silty clay with sparse sub rounded stone pebbles and rooting from crop.	0-0.26m
2002	Natural	Mid brownish orange silty clay.	0.26m +

<b>Trench 21</b>		<b>Co ordinates</b>	[565714.428,187825.283,0]
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b> 16.0-18.0
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
2101	Topsoil	Mid greyish brown silty clay with frequent sub rounded small stone pebbles and rooting from recent crop.	0-0.25m
2102	Natural	Mid brownish orange silty clay with small sparse patches of yellow dryer clay.	0.25m +

<b>Trench 22</b>		<b>Co ordinates</b>	[565611.416,187821.198,0]
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.70m	<b>Ground Surface</b> 16.2-17.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
2201	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and sparse flint shards and rooting from crop.	0-0.23m
2202	Natural	Mid brownish red silty clay with sparse sub rounded pebbles. Modern field drain uncovered.	0.23m +

<b>Trench 23</b>		<b>Co ordinates</b>	[565561.694,187747.763,0]
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.90m	<b>Ground Surface</b> 15.2-16.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
2301	Topsoil	Mid greyish brown silty clay with frequent stone pebbles and rooting from recent crop.	0-0.25m
2302	Natural	Dark brownish orange silty clay with rare stone pebbles.	0.25m +



<b>Trench 24</b>		<b>Co ordinates</b>	[565512.093,187746.716,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	16.3
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2401	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and rooting from recent crop.	0-0.30m	
2402	Natural	Mid brownish red silty clay. Field drain uncovered.	0.30m +	

<b>Trench 25</b>		<b>Co ordinates</b>	[565453.55,187734.894,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	16.0
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2501	Topsoil	Mid greyish brown silty clay with frequent small subrounded stone pebbles and occasional flint shards. Also rooting from recent crop.	0-0.25m	
2502	Natural	Dark brownish orange silty clay.	0.25m +	

<b>Trench 26</b>		<b>Co ordinates</b>	[565410.55,187437.878,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 1.00m	<b>Ground Surface</b>	13.4-15.0
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2601	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and rare flint shards. Rooting from recent crop.	0-0.28m	
2602	Natural	Light yellowish brown silty clay.	0.28m +	

<b>Trench 27</b>		<b>Co ordinates</b>	[565365.399,187696.367,0]	
<b>Dimensions:</b> x by 0.40m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	15.2-16.4
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2701	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and rare flint shards.	0-0.25m	
2702	Natural	Mid yellowish brown silty clay.	0.25m +	

<b>Trench 28</b>		<b>Co ordinates</b>	[565873.561,187747.556,0]	
<b>Dimensions:</b>		<b>Max Depth:</b>	<b>Ground Surface</b>	20.2-22.3
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2801	Topsoil	Mid greyish brown silty clay with frequent sub rounded stone pebbles and rooting from recent crop.	0-0.28m	
2802	Natural	Mid brownish orange silty clay.	0.28m +	

<b>Trench 29</b>		<b>Co ordinates</b>	[565090.571,187683.314,0]	
<b>Dimensions:</b> x by 0.60m		<b>Max Depth:</b> 0.60m	<b>Ground Surface</b>	12.7-14.7
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>	
2901	Topsoil	Light greyish brown silty clay with frequent sub rounded stone pebbles and rooting from crop.	0-0.30m	
2902	Natural	Dark brownish orange silty clay.	0.30m +	



<b>Trench 30</b>		<b>Co ordinates</b>	[564852.528,187760.352,0]
<b>Dimensions:</b> x by 4.0m		<b>Max Depth:</b> 1.30m	<b>Ground Surface</b> 15.8-22.6
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
3001	Topsoil	Dark greyish brown silty clay with frequent small sub rounded stone pebbles and rare flint shards. Rooting from recent crop.	0-0.25m
3002	Natural	Mid brownish orange silty clay with occasional modern field drains running through.	0.25m +

<b>Trench 31</b>		<b>Co ordinates</b>	[565322.21, 187766.89)
<b>Dimensions:</b> 5m by 4.0m		<b>Max Depth:</b> 2.4m	<b>Ground Surface</b> 15.8-22.6
<b>Context</b>	<b>Description</b>		<b>Depth bgl</b>
3101	Topsoil	Dark greyish brown silty clay with frequent small sub rounded stone pebbles and rare flint. Rooting from recent crop.	0-0.30m
3102	Natural	Mid brownish orange silty clay. cut by north south aligned trench for modern gas main, recorded as c.2.50m wide and excavated to 2.40m to reveal the top of the pipe. No archaeology was revealed.	0.30m +



## APPENDIX 2: OASIS FORM

**OASIS ID: wessexar1-187919**

### Project details

Project name	Fairwind Solar Farm, Bulphan
Short description of the project	Wessex Archaeology (WA) was commissioned by SunEdison Ltd (hereafter 'the Client') to undertake an archaeological watching brief on land at Fairwind Farm, Lower Dunton Road Bulphan, Essex. The area of development impact comprises approximately 30ha of land centred upon National Grid Reference (NGR) 565460, 187709. The watching brief was undertaken between 23rd June to 11th July, and 4th August 2014. Planning permission has been granted for the proposed scheme, with this watching brief forming part of the archaeological mitigation associated with the consent prior to the construction of a solar farm development. The development works are to comprise the enabling of solar panels, service trenches, the construction of inverter units and ancillary components. The watching brief was maintained throughout service trench and inverter units foundation excavations, until it was concluded in consultation with the Senior Historic Environment Officer for Essex County Council that the potential for archaeological remains to be exposed was exhausted. No features, deposits or finds of archaeological origin were identified during the watching brief.
Project dates	Start: 23-06-2014 End: 04-08-2014
Previous/future work	Yes / No
Any associated project reference codes	13/0543/FUL - Planning Application No.
Any associated project reference codes	88672 - Sitecode
Type of project	Recording project
Site status	None
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Planning condition

### Project location

Country	England
Site location	ESSEX BASILDON BASILDON Fairwind Solar Farm, Bulphan, Essex
Postcode	RM14 3TD
Study area	28.80 Hectares



Site coordinates TQ 565453 187737 50.946539176 0.22872768473 50 56 47 N 000 13 43 E  
Point

Height OD / Depth Min: 14.00m Max: 20.00m

### Project creators

Name of Organisation Wessex Archaeology

Project brief originator SunEdison Ltd

Project design originator Wessex Archaeology

Project director/manager Gareth Chaffey

Project supervisor Chris Hirst

Project supervisor S Thompson

Type of sponsor/funding body Developer

Name of sponsor/funding body SunEdison

### Project archives

Physical Archive Exists? No

Digital Archive recipient Essex County Museum

Digital Archive ID 88672

Digital Contents "none"

Digital Media available "Images raster / digital photography", "Survey", "Text"

Paper Archive recipient Essex County Museum

Paper Archive ID 88672

Paper Contents "none"

Paper Media available "Context sheet", "Drawing", "Notebook - Excavation", "Research", "General Notes", "Plan", "Section", "Survey "

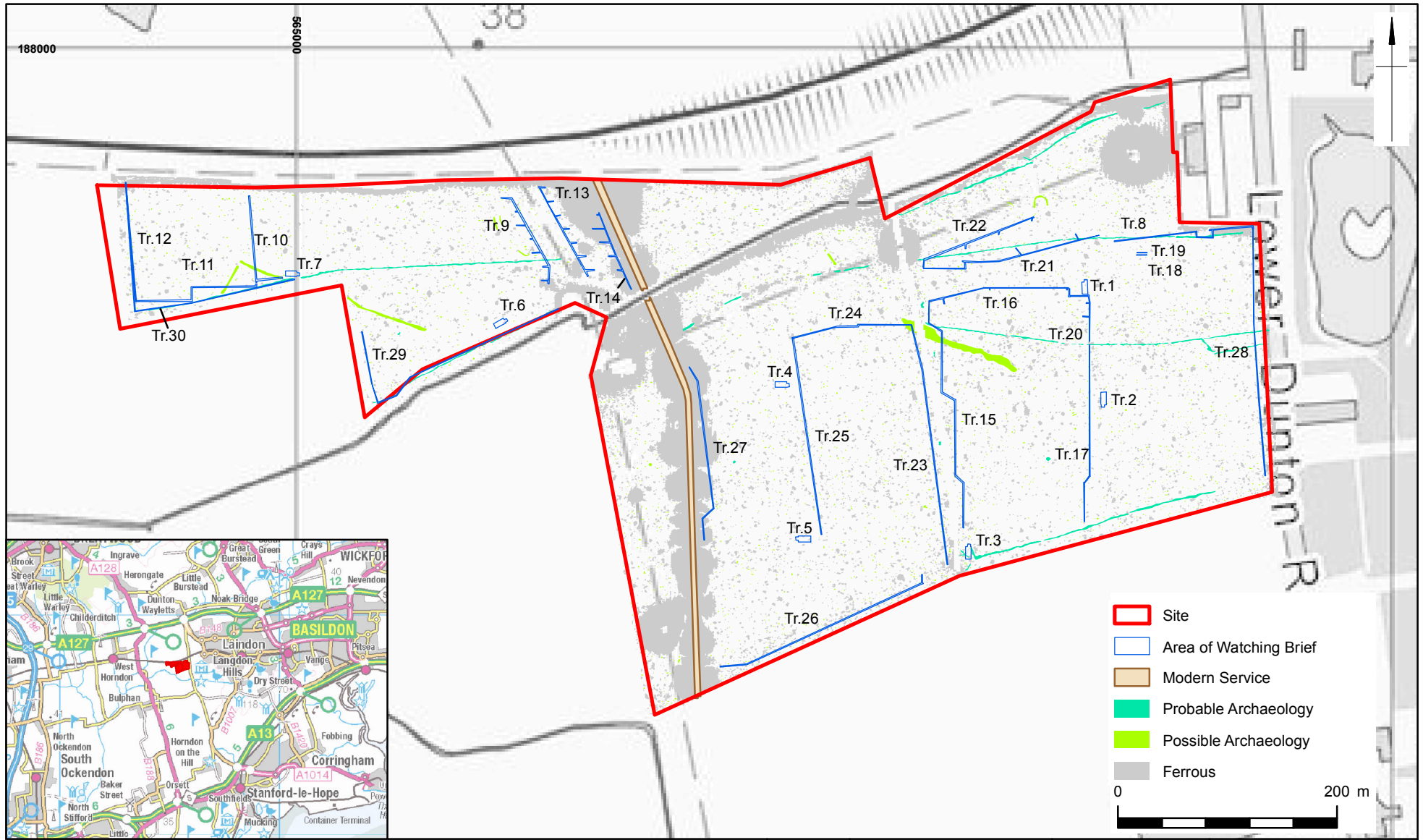
### Project bibliography 1



Publication type	Grey literature (unpublished document/manuscript)
Title	Fairwind Solar Farm, Bulphan, Essex
Author(s)/Editor(s)	Thompson, S
Other bibliographic details	88672.02
Date	2014
Issuer or publisher	Wessex Archaeology
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Site and watching brief areas

Figure 1



Plate 1: View of Foundation Trench 1



Plate 2: South facing section of Trench 1


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Plate 3: North facing section of Trench 22



Plate 4: View of Trench 17 from the east



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Plate 5: West facing section of Trench 30



Plate 6: Opening of Trench 31, view from the south-east

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