

# Rookery Business Park Solar Farm Besthorpe, Norfolk

Archaeological Evaluation Report



HER no: ENF138816 WA ref.: 108651.02 September 2015





## Rookery Business Park Solar Farm, Besthorpe, Norfolk

## **Archaeological Evaluation Report**

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## Rookery Business Park Solar Farm, Besthorpe, Norfolk

### **Archaeological Evaluation Report**

#### **Summary**

Wessex Archaeology was commissioned by Solarcentury to carry out an archaeological evaluation at Rookery Business Park, Besthorpe, Norfolk (NGR 608090 297450). The fieldwork was carried out over five days (24–28 August 2015).

A total of 16 trial trenches were excavated, representing a 2% sample of the development area, these were located to investigate anomalies identified from a preceding geophysical survey (Wessex Archaeology 2015b), as well as apparently 'blank' areas of the Site.

Seven of the sixteen excavated trenches contained archaeological features, mainly comprising ditches which correspond well with the rectilinear system of former field boundaries identified by the geophysical survey. A very small quantity of post-medieval artefacts (ceramic building material and a piece of clay pipe stem) was recovered from one of these ditches and this post-medieval date is corroborated by evidence from historic maps examined for the Historic Environment Assessment (Wessex Archaeology 2015a). These indicate that this rectilinear field system had been established by the time of the Inclosure map of 1810, and the pattern of fields remained until the 1970s, by which time all of the previously depicted internal field boundaries within the Site appear to have been removed.

The only other archaeological features uncovered within the trenches comprise two postholes, located in Trench 8 and Trench 16, and two possible gullies in Trench 9. A prehistoric worked flint flake was recovered from the fill of one of the possible gullies and undated burnt flint was recovered from the fill of one of the postholes.

Overall, this evaluation discovered a low density of archaeological features, predominantly related to the enclosure of the landscape in the 18th or very early 19th centuries.



## Rookery Business Park Solar Farm, Besthorpe, Norfolk

## **Archaeological Evaluation Report**

#### **Acknowledgements**

The project was commissioned by Solarcentury and Wessex Archaeology is grateful in particular to Ed Perrin in this regard. Wessex Archaeology would also like to thank James Albone (Senior Historic Environment Officer, Norfolk County Council) for all his advice and assistance throughout the project.

The fieldwork was directed by Steve Thompson, assisted by Tom Blencowe and Rachel Williams, Phoebe Olsen, and Pete Capps. This report was compiled by Gail Wakeham. The finds were reported on by Lorraine Mepham. The report illustrations were prepared by Ken Lymer. The project was managed on behalf of Wessex Archaeology by Andy Crockett.



## Rookery Business Park Solar Farm, Besthorpe, Norfolk

### **Archaeological Evaluation Report**

#### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology (WA) was commissioned by Solarcentury to carry out an archaeological evaluation on land at Rookery Business Park, Besthorpe, Norfolk (centred on National Grid Reference (NGR) 608090 297450), hereafter referred to as 'the Site' (Figure 1).
- 1.1.2 This archaeological field evaluation has been undertaken in order to inform the planning application for the installation of a photovoltaic (PV) solar array within the Site. In consultation with Senior Historic Environment Officer for Norfolk County Council (NCC) it was agreed that a total of 16 trial trenches (each measuring 50 m by 1.8 m), a 2% sample of the Development Area, would be excavated to investigate features of possible archaeological potential identified from a preceding geophysical survey (WA 2015b) as well as to target apparently 'blank' areas.
- 1.1.3 A Written Scheme of Investigation (WSI) was produced and set out in detail the methodologies and standards to be employed during the archaeological evaluation (WA 2015c). This was submitted to and approved by the Senior Historic Environment Officer (NCC) prior to fieldwork commencing.
- 1.1.4 The trial trench evaluation was carried out over a five day period (24–28 August 2015). This report presents the results of the archaeological evaluation, in order to inform any further mitigation work that may or may not be required.

#### 1.2 Site location, topography and geology

- 1.2.1 The Site comprises a trapezoidal parcel of land of approximately nine hectares (ha) located approximately equidistant between the villages of Spooner Row to the east and Besthorpe to the west. Within this, an area of around 7 ha is anticipated to from the core of the development (the 'Development Area', **Figure 1**).
- 1.2.2 The Site is contained within part of a single large arable field, bounded to the south-east by mature hedgerows. The A11 lies immediately to the north of the Site within a cutting bordered by a dense hedgerow and fencing. Agricultural land surrounds the Site in all directions. A small rectangular parcel of land containing mature trees and scrub lies immediately to the east of the Site while the Rookery Business Park is located approximately 200 m to the west-south-west.
- 1.2.3 The Site is situated within a relatively flat area of land at an elevation of approximately 44–46 m above Ordnance Datum (aOD).
- 1.2.4 The underlying bedrock geology throughout the Site is mapped as Cretaceous Chalk of the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk



Formation and Culver Chalk Formation, overlain by Quaternary diamicton deposits of the Lowestoft Formation. Alluvial deposits of clay, silt, sand and gravel, laid down during the Quaternary Period, are also mapped in dendritic patterns across the local area (British Geological Survey on-line viewer).

#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

#### 2.1 Introduction

2.1.1 The archaeological and historical background was assessed in detail within the Historic Environment Assessment (WA 2015a) which considered the recorded historic environment resource within a 1 km Study Area around the Site in order to place the site within its historical and archaeological context. The results of this assessment and relevant Norfolk Historic Environmental Records (NHER) and entries from the National Heritage List for England (NHLE) are summarised below.

#### 2.2 Archaeological and historical background

Prehistoric (900,000 BC - AD 43)

- 2.2.1 The earliest evidence of activity within the Study Area comprises a single Palaeolithic flint handaxe (NHER no. MNF29416), found approximately 500 m to the north-west of the Site in 1993. Discoveries of a small number of artefacts, which may be attributable to the Mesolithic (or possibly the Neolithic) period, have also been reported within the Study Area (NHER no. MNF66265, MNF29417, MNF9113 and MNF14540) and an assemblage of worked flint of possible Mesolithic to Iron Age date (NHER no. MNF66265), is reported to have been found in 2013 by metal detectorists on land immediately south-east of the Site.
- 2.2.2 A number of Neolithic, Bronze Age and Iron Age artefacts have also been found in the Study Area, largely restricted to occasional findspots.
- 2.2.3 A possible prehistoric burnt mound was found close to Wymondham College in 1959 (NHER no. MNF9120), and a scatter of prehistoric 'pot boilers' [burnt flint] (NHER no. MNF12964) was also found during fieldwalking.

Romano-British (AD 43 – 410)

- 2.2.4 In 1958, two Roman pottery kilns dated to the 1st century AD (NHER no. MNF9116) were excavated during construction work at Wymondham College, at the northern edge of the Study Area. Further excavation in 1962 revealed a third kiln, in addition to quantities of Roman pottery and kiln waste.
- 2.2.5 The remaining evidence for Romano-British activity within the Study Area comprises findspots discovered during fieldwalking or metal detecting.

Saxon and medieval (AD 410 – 1500)

- 2.2.6 The most notable trace of Saxon activity within the Study Area pertains to the discovery of a coin hoard (NHER no. MNF9117) by workmen close to Wymondham College in 1958. The hoard was comprised of over 800 silver pennies dating to the late 9th and early 10th centuries. Metal detecting and fieldwalking have also produced a small number of Saxon and medieval objects, including coins, pottery and personal items.
- 2.2.7 Evidence for medieval activity within the Study Area includes a series of earthworks (NHER no. MNF63583) located to the north-west of the Site, which have been identified



- by assessment of aerial photographs. The earthworks appear to suggest the presence of ridge and furrow, although these could equally date to the early post-medieval period.
- 2.2.8 A probable medieval moated site (NHER no. MNF9130) lies immediately adjacent to the eastern edge of the Site. The moated site is labelled as 'Wick Hall' by the first edition 6 inch Ordnance Survey map, although little is currently known about its history. Although the proposed development area would not encroach on the known extent of the 'Wick Hall' moated site, buried archaeological remains associated with it may extend into the Site.
- 2.2.9 The former site of Dial Farm (NHER no. MNF12127) lies approximately 500m to the north of the Site. This was a late 16th century timber framed house, demolished in 1972; however, the structure probably incorporated elements of an earlier building, suggesting that the 16th century farm may have been built on the site of a medieval precursor.
- 2.2.10 A possible medieval deer-park (NHER no. MNF9135) is located to the north-west of the Site, the former boundary of which is suggested to correspond with the curving parish boundary between Besthorpe and Morley, as well as several field boundaries.
- 2.2.11 The boundary dividing the parishes of Besthorpe and Wymondham as depicted by the c1810 Wymondham Inclosure map coincided approximately with the western edge of the Site. It is possible that this parish boundary may have Saxon or medieval origins.
  - Post-medieval, 19th century and modern (AD 1500 present day)
- 2.2.12 Several sites of possible archaeological interest have been identified on the periphery of the Study Area on the basis of aerial photographic evidence. These linear cropmarks are undated, although they mostly seem to correspond with former field boundaries of probable post-medieval date. A possible exception is a series of linear cropmarks (NHER no. MNF63586) at the northern edge of the Study Area, some of which may represent the vestiges of garden features or drainage ditches associated with Morley Hall, a Grade I listed moated manor house built in the 16th century to just north of the Study Area.
- 2.2.13 Several buildings within the Study Area are of post-medieval date, including the Grade II Listed farmhouses at Hill Farm (NHLE no. 1050718), Little Dial Farm (NHLE no. 1293195), Mayfield Farm (NHLE no. 1169106) and Turnpike Farm (NHLE no. 1292053) and it is possible that these buildings may have been constructed on the sites of farmsteads occupied during the medieval period.
- 2.2.14 Other built heritage within the Study Area includes a Grade II Listed stone pillar on London Road (NHLE no. 1196727) set up to commemorate the generosity of *Sir Edwin Rich*, who funded the repair of the '*Wymondham to Attleborough road*' in AD 1675. The road, which also linked Norwich to Thetford, was turnpiked in 1766 and two of the 21 surviving 19th century milestones along the route are situated within the Study Area. The Norwich and Yarmouth Railway line, which traverses the southern edge of the Study Area, was opened in 1844, becoming the Norwich and Brandon Railway from 1845, and was later part of the Great Eastern Railway.
- 2.2.15 The Wymondham Inclosure map of *c*1810 depicts the location of the Site as a patchwork of rectangular fields at the edge of the parish. The current boundaries of the Site to the south and east partially correspond with land divisions depicted by the Inclosure map and as these boundaries also separate the Site from the probable medieval moated site of Wick Hall, they could be of considerably greater antiquity. A similar arrangement is shown on the *c*1839–1841 Wymondham Parish Tithe map and the accompanying tithe



- apportionment reveals that the fields within and surrounding the Site were under a mixture of pasture and arable cultivation.
- 2.2.16 The 1887 and later edition Ordnance Survey maps depict no significant changes within the Site or its immediate vicinity until the 1970s, by which time all of the previously depicted internal field boundaries within the Site appear to have been removed. The only other significant change to have occurred within the vicinity of the Site during the later twentieth century was the construction of the A11 Wymondham bypass in 1996.
- 2.2.17 Three sites associated with the Second World War lie within the Study Area; these comprise two demolished pillboxes (NHER no. MNF63582) once sited along London Road, and a USAAF hospital (NHER no. MNF14759) which was located at what is now Wymondham College.

#### 2.3 Geophysical survey

- 2.3.1 The Site was subject to a detailed gradiometer survey (WA 2015b). This demonstrated the presence of anomalies of likely and possible archaeological interest along with former field boundaries, areas of increased magnetic response and other trends (**Figure 1**).
- 2.3.2 The survey located several linear responses in the southern part of the Site which indicate an area of possible archaeological activity. Additionally several pit type responses were seen across the Site along with linear trends that correspond with former field boundaries seen on the 19th century tithe and Inclosure maps.

#### 3 AIMS

#### 3.1 Specific aims and objectives

- 3.1.1 The specific aims of the archaeological evaluation, as defined in the WSI (WA 2015c), are to:
  - Examine the archaeological resource within the Site, including clarifying the presence/absence and extent of any buried archaeological remains;
  - Identify, within the constraints of the works, the date, character and condition 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;
  - Analyse and interpret the results; and
  - Produce a report which will present the results of the works in sufficient detail, including the information to allow an informed decision to be made concerning further mitigation strategies.

#### 4 METHODOLOGY

#### 4.1 Introduction

4.1.1 All works were undertaken in accordance with the methodology set out within the WSI (WA 2015c) and in compliance with the standards outlined in the ClfA's *Standard and guidance for archaeological evaluation* (ClfA 2014a) excepting where they are superseded by statements made below.



#### 4.2 Health and safety

- 4.2.1 Health and safety considerations were of paramount importance in conducting all fieldwork. Safe working practices will override archaeological considerations at all times.
- 4.2.2 All work was carried out in accordance with the *Health and Safety at Work etc. Act 1974* and the *Management of Health and Safety Regulations 1992*, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time.
- 4.2.3 WA supplied a copy of their Health and Safety Policy and a Risk Assessment to the Client before the commencement of any fieldwork. The Risk Assessment was read and understood by all staff attending the Site before any groundwork commenced.
- 4.2.4 All evaluation trenches were scanned before and during excavation with a Cable Avoidance Tool (CAT) in order to verify the absence of any live underground services.

#### 4.3 Trial trenching methodology

- 4.3.1 The trench locations were laid out using GPS in general accordance with the pattern given in the WSI, as shown in **Figure 1**.
- 4.3.2 A total of 16 trial trenches, each measuring 50m in length and 1.8m wide were excavated using a 360° excavator equipped with a toothless bucket under the constant supervision of a suitably experienced Archaeologist.
- 4.3.3 Machine excavation continued in spits to the top of archaeological levels, or the top of natural deposits were exposed, whichever was the higher. All excavated spoil was visually scanned for archaeological artefacts and metal-detected as appropriate by trained archaeological personnel for the purposes of finds retrieval.
- 4.3.4 Where appropriate the base of the trenches/surface of archaeological deposits will be cleaned by hand. All trenches and any archaeological features they contained were surveyed by GPS/Total Station to produce a Site plan that is related to Ordnance Survey National Grid and Datum (Newlyn).
- 4.3.5 Appropriate sampling of any potential archaeological features and deposits identified in the evaluation trenches was undertaken by hand, in order to address the aims of the evaluation, and recorded to professionally accepted standards.
- 4.3.6 Once the archaeological investigation was completed to the satisfaction of the Senior Historic Environment Officer (NCC), trenches were backfilled by machine using the excavated material in the approximate stratigraphic sequence in which they were excavated. They were left level on completion and no other reinstatement or surface treatment was undertaken.

#### 4.4 Recording

- 4.4.1 All trenches and any exposed archaeological features/deposits within them were recorded using the WA's *pro forma* recording system.
- 4.4.2 A complete drawn record of any archaeological features and deposits was compiled. This includes both plans and sections, drawn to appropriate scales (1:20 for plans, 1:10 for sections), and with reference to the Ordnance Survey National Grid. The Ordnance Datum (OD) height of all principal features and levels will be calculated and plans/sections will be annotated with OD heights.



4.4.3 A photographic record was maintained during the evaluation using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images were subject to managed quality control and curation processes which embed appropriate metadata within the image and ensure long term accessibility of the image set.

#### 4.5 Finds and environmental sampling

**Finds** 

- 4.5.1 All artefacts from excavated contexts were retained, except those from features or deposits of obviously modern date. All retained artefacts were, as a minimum, washed, weighed, counted and identified.
- 4.5.2 Artefacts were suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the Chartered Institute for Archaeologist's Standards and guidance for archaeological field evaluation (CIfA 2014a) and the Museums and Galleries Commissions Standards in the Museum Care of Archaeological Collections (1992). On completion of the archaeological post-excavation programme and with the permission of the landowner it is anticipated that any artefacts will be deposited with the relevant museum.
- 4.5.3 Any artefacts requiring conservation or specific storage conditions were dealt with immediately in line with First Aid for Finds (Watkinson and Neal 1998). Any ironwork from stratified contexts has been X-rayed and stored in a stable environment along with other fragile and delicate material.

#### Environmental sampling

4.5.4 No environmental sampling was undertaken during the trial trench evaluation, as no appropriate well-sealed and dateable contexts were identified.

#### 5 RESULTS

#### 5.1 Introduction

- 5.1.1 Nine of the sixteen excavated trenches did not contain any archaeological features (Trenches 3–5, 7, 11 and 13-15, Figure 1). The other trenches contained a low level of archaeological features, mainly comprising ditches likely to be part of the same field system as indicated by the geophysical survey, illustrated in Figure 1 and detailed below.
- 5.1.2 Detailed trench descriptions are tabulated in **Appendix 1**.

#### 5.2 Natural deposits and soil sequence

5.2.1 The soil sequence was broadly similar across Site. The underlying natural was a light yellowish brown sandy clay with common sub-angular and sub-rounded flints <0.08 m and patches of gritty angular chalk. The overlying ploughsoil consisted of a mid greyish brown silty clay loam with occasional sub-angular and sub-rounded flints <0.05 m.

#### 5.3 Modern disturbance

5.3.1 Many of the trenches contained land drains that generally follow a north-east to south-west alignment, and also in the eastern part of the Site, an east-south-east to west-north-west alignment, showing a good correlation with the drainage predicted by the geophysical survey (**Figure 1**). In some trenches land drains were recorded to cut and truncate archaeological features such as in **Trench 12**.



5.3.2 A small shallow sub-circular feature (1304) in **Trench 13** was investigated and considered to be root disturbance or related to modern agricultural activity as it was filled with sediment identical to the ploughsoil, although it did not contain any artefacts. Root disturbance was also identified in **Trench 10**.

#### 5.4 Archaeological features in the trenches

- 5.4.1 In **Trench 1**, two features consisting of a tree throw hole (**103**) and a north-west to south-east aligned ditch (**105**) approximately 2.2–2.3 m wide were surveyed. **Trench 2** contained a north-east to south-west aligned ditch (**203**), measuring 1.5 m wide. A similarly aligned ditch (**603**), 1.8 m wide, was also surveyed in **Trench 6**. It was not considered necessary to hand excavate these features in order to achieve the objectives of the evaluation, as they correspond well with the former field boundaries shown in the geophysical survey (**Figure 1**), and this ditch system was investigated in other trial trenches (see below).
- Trenches 8–10 were located to investigate an irregular array of short curving linear geophysical anomalies that were considered to be 'possible archaeology' (Figure 1). In Trench 8, one of these geophysical anomalies was investigated by hand and found to be variable geology and therefore not recorded further. In Trench 9, two linear features (903 and 905), both rather irregular in plan, were excavated and were found to be shallow possible gullies, 0.25 m and 0.11 m deep respectively. One of these (903) was truncated by a land drain. A worked prehistoric flint flake was retrieved from the single fill (906) of possible gully 905, considered to have formed through natural silting, and occasional charcoal flecks were recorded in the upper part of the fill of gully 903 (Plate 1). No further similar gullies were recorded in Trench 10, however two small sub-circular features thought to be possible postholes were examined and discovered to be root disturbance, and so not recorded further.
- 5.4.3 **Trench 8** also contained a single posthole feature (**803**), 0.18 m in diameter and 0.13 m deep. Occasional charcoal and fired clay flecks were identified near the surface of the single secondary fill, although no artefacts were recovered.
- 5.4.4 **Trench 10** also contained a north-east to south-west aligned ditch (**1003**) was surveyed, which again corresponds well with the field boundary indicated by the geophysical survey (**Figure 1**).
- in **Trench 12**, a north-west to south-east aligned ditch (**1203**) which again corresponds with one of the field boundary identified in the geophysical survey was excavated by hand (**Figure 1**). The ditch was well defined in plan measuring 2.15 m wide and 0.69 m deep (**Plate 2**). It was filled with a single secondary fill (**1204**), derived from natural silting from which two fragments of post-medieval ceramic building material and a piece of post-medieval clay tobacco pipe stem were recovered. The ditch fill was cut by a modern land drain.
- 5.4.6 In **Trench 16**, a north-east to south-west aligned ditch (**1605**) was surveyed, 1.8 m wide, but not excavated; as with the other ditches it corresponds well with the field boundary identified in the geophysical survey, likely to a continuation of the ditch that was surveyed in **Trench 10**. A small circular feature (**1603**) measuring 0.28 m in diameter and 0.25 m deep was excavated in **Trench 16**, and is interpreted as a possible posthole. The sides were straight and near vertical, although the base was slightly irregular; **1603** was filled with a single fill (**1604**) derived from natural silting which contained occasional charcoal flecks and five pieces of unworked burnt flint were also recovered.



#### 6 ARTEFACTUAL EVIDENCE

6.1.1 A very small quantity of finds was recovered, deriving from four contexts, with some unstratified finds in addition; the quantification of finds by context and by material type is given in **Table 1**. The assemblage ranges in date from prehistoric to post-medieval.

Table 1: All finds by context (number / weight in grammes)

Context	СВМ	Worked Flint (No.)	Pottery	Other Finds
906		1		
1204	2/23			1 clay pipe
1601			1/5	
1604				5 burnt flint
Unstrat.		3	1/2	
Total	2/23	4	2/7	

#### 6.1 Pottery

6.1.1 Two sherds of pottery were recovered, one from ploughsoil in Trench 16, and the other unstratified. Both are Romano-British, one a greyware and one a buff sandy ware. Both are undiagnostic body sherds. It may be noted that three late 1st century AD pottery kilns were excavated at Wymondham College between 1958 and 1962, which were producing both greywares and buff wares (Swan 1984, mf 4.500–501), and it is possible (though unconfirmed) that these small sherds are products of these kilns.

#### 6.2 Ceramic Building Material

6.2.1 Two fragments of ceramic building material recovered from fill **1204** of ditch **1203** comprise one small brick fragment, and part of a flat roof tile, both post-medieval.

#### 6.3 Worked Flint

6.3.1 All four of the worked flints recovered are waste flakes. The flake from fill **906** of gully **905** is patinated and in relatively fresh condition; the three flakes found unstratified have suffered slight edge damage, consistent with their provenance. In the absence of any tools or utilised pieces, or any other chronologically distinctive traits, these four pieces can only be broadly dated as Neolithic/Bronze Age.

#### 6.4 Other Finds

6.4.1 Other finds comprise one small fragment of post-medieval plain clay tobacco pipe stem from context **1204**, and five pieces of burnt, unworked flint (undated) from fill **1604** of possible posthole **1603**.

#### 7 ENVIRONMENTAL EVIDENCE

7.1.1 No archaeological deposits suitable for environmental sampling were identified during the evaluation.

#### 8 DISCUSSION

8.1.1 The evaluation identified a low level of archaeological features, with seven of the sixteen excavated trenches containing archaeological features. These largely consisted of ditches that correspond well with the former field boundaries identified by the geophysical survey (**Figure 1**).



- 8.1.2 Small quantities of post-medieval artefacts were recovered from one of these ditches excavated during this evaluation, and this post-medieval date is corroborated by the evidence from historic maps examined for the Historic Environment Assessment (WA 2015a). These indicate that this former rectilinear field system was present from the time of the earliest available map, Wymondham Inclosure map of *c*.1810 and also present on the 1839-1841 Wymondham Parish Tithe map (**Figure 2**). Examination of later mapping showed that the same field pattern was maintained until the 1970s, by which time all of the previously depicted internal field boundaries within the Site appear to have been removed.
- 8.1.3 The only other features revealed during this evaluation were two postholes, apparently located in isolation in **Trench 8** and **Trench 16** respectively and two poorly defined possible gullies in **Trench 9**. Although no diagnostically dateable artefacts were retrieved from these features, a single prehistoric worked flint flake was recovered from the fill of one of the possible gullies and undated burnt flint was recovered from the fill of one of the postholes. The possible gullies in **Trench 9** do not directly correspond with anomalies identified by the geophysical survey, however some irregular curving linear anomalies were identified in this locality; a similar feature investigated in nearby **Trench 8** was revealed to be variation in the natural geology.
- 8.1.4 Overall, this evaluation has revealed a low density of archaeological features, most of which are related to the post-medieval enclosure of the landscape which was likely to have taken place in the 18th or very early 19th centuries.

#### 9 STORAGE AND CURATION

#### 9.1 Museum

9.1.1 It is recommended that the project archive resulting from the evaluation be deposited with Norfolk Museums Service, though it should be noted that this is currently a closed repository, not accepting archaeological archives. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

#### 9.2 Preparation of Archive

- 9.2.1 On completion of the report a cross-referenced and internally consistent archive will be produced, 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 Norfolk Museums Service, and in general following nationally recommended guidelines (SMA 1995; ClfA 2014b; Brown 2011; ADS 2013). All archive elements will be marked with the Norfolk HER site code (ENF138816), and a full index will be prepared.
- 9.2.2 An OASIS online record <a href="http://ads.ahds.ac.uk/projects/oasis/">http://ads.ahds.ac.uk/projects/oasis/</a> will be initiated and key fields completed on Details, Location and Creators Forms. All appropriate parts of the OASIS online form will be completed for submission to the Norfolk HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included with the archive).

#### 9.3 Discard Policy

9.3.1 WA follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists (SMA) 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this



- instance, the plain clay pipe stem and burnt (unworked) flint have been discarded on these grounds.
- 9.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

#### 9.4 Security Copy

9.4.1 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.

#### 9.5 Storage of materials and archives

- 9.5.1 No charge will be made for the temporary storage of finds or archives during the period when Wessex Archaeology are undertaking analysis or report preparation.
- 9.5.2 However, if, after completion and submission of the report, finds and archives cannot be deposited with the relevant museum due to circumstances beyond Wessex Archaeology's control, a charge will be made for storage.
- 9.5.3 A charge for storage may also be made where a delay is caused by a lack of confirmation of post-fieldwork analyses and report, if the delay exceeds three months.

#### 9.6 Copyright

9.6.1 The full copyright of the written/illustrative archive relating to the site will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act* 1988 with all rights reserved. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the *Copyright and Related Rights Regulations* 2003.

#### 10 REFERENCES

#### 10.1 Published

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- Wessex Archaeology, 2015a, Rookery Business Park Solar Farm, Besthorpe, Norfolk: Historic Environment Assessment, unpublished client report, ref. 108650.01
- Wessex Archaeology, 2015b, Rookery Business Park Solar Farm, Besthorpe, Norfolk: Detailed Gradiometer Survey Report, unpublished client report, ref. 108650.03
- Wessex Archaeology, 2015c, Rookery Business Park Solar Farm, Besthorpe, Norfolk: Written Scheme of Investigation for Archaeological Works, unpublished client report ref. 108651.01

#### 10.2 Online resources

British Geological Survey on-line viewer, http://www.bgs/ac/uk/ [accessed August 2015]



#### 11 APPENDICES

## 11.1 Appendix 1: Trench summary tables

TRENCH 1						
Dimensio	<b>ns:</b> 43.5x2.2m		Max. depth: 0.31m		Ground level: 46.2m a	OD
Coordina	tes (NGR)	X = 6080	33.79 Y = 297577.92 (centre	e)		
Context	Description					Depth (m)
101	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate sub- angular flint cobbles and gravels			0.00-0.31
102	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted			0.31+
103	Cut	Cut of tre	Cut of treethrow			Unexcavated
104	Fill	Upper fill	Upper fill of treethrow 104			Unexcavated
105	Cut		Cut of NW-SE ditch 2.2–2.3 m wide, possibly just on junction of two ditches joining		Unexcavated	
106	Fill	Upper fill	of ditch 105			Unexcavated

TRENCH 2						
Dimension	ns: 41.8x2.2m		Max. depth: 0.24m	Ground level: 46.3m aOD		
Coordinate	es (NGR)	X = 60804	48.81 Y = 297532.68 (centre)			
Context	Description	Description				
201	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate sub- angular flint cobbles and gravels			
202	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted			
203	Cut	Cut of NE	-SW aligned ditch		Unexcavated	
204	Fill	Upper fill	of ditch 203		Unexcavated	

TRENCH 3						
Dimensions: 40.1x1.8m			Max. depth: 0.26m	Ground level: 45.2m aOD		
Coordinates (NGR) X = 6079			53.80 Y = 297510.55 (centre)			
Context	Description	•			Depth (m)	
301	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate subangular flint cobbles and gravels			
302	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted			

TRENCH 4						
Dimensions: 41.3x12.2m			Max. depth: 0.29m	Ground level: 45.0m aOD		
Coordinates (NGR) X = 607975.66 Y = 297437.51 (centre)						
Context	Description		Depth (m)			
401	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate subangular flint cobbles and gravels			
402	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly		0.29m+	



TRENCH 5						
Dimensions: 40.3x2.2m		Max. depth: 0.27m	Ground level: 45.8 aOD			
Coordinates (NGR) X = 608027.16 Y = 297			27.16 <b>Y</b> = 297462.28 (centre)			
Context	Description				Depth (m)	
501	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate subangular flint cobbles and gravels			
502	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted		0.27+	

TRENCH 6						
Dimensions: 40.6x2.2m			Max. depth: 0.30m	Ground level: 47.4m aOD		
Coordinate	es (NGR)	<b>X</b> = 60814	48.43 <b>Y</b> = 297539.00 (centre)			
Context	Description	n Depth (m)				
601	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate sub- angular flint cobbles and gravels			
602	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted			
603	Cut	Cut of NE-SW aligned ditch. Unexcavated			-	
604	Fill	Fill of ditc	h 603. Unexcavated.		-	

TRENCH 7						
Dimensions: 40.5 x2.2m			Max. depth: 0.30m	Ground level: 46.8m aOD		
Coordinates (NGR) X = 608108.13 Y = 297481.35 (centre)						
Context	Description	Depth				
701	Ploughsoil		Mid greyish brown sandy clay loam with poorly sorted moderate sub- angular flint cobbles and gravels			
702	Natural	Light yello sorted	Light yellowish brown sandy clay with sparse sub-angular flints poorly sorted			

TRENCH 8						
Dimension	ns: 49.0x2.2m		Max. depth: 0.35m	Ground level: 45.9m aOD		
Coordinate	es (NGR)	X = 60805	53.08 <b>Y</b> = 297437.62 (centre)			
Context Description					Depth (m)	
801	Ploughsoil		Mid greyish brown sandy clay loam with common sub-angular flints and stones <0.05m			
802	Natural		Light reddish brown sandy clay loam with common sub-angular flints and stones <0.07m. Also patches of chalk fragments.			
803	Cut	Cut of posthole			0.13	
804	Fill	Fill of posthole 803. Mid greyish brown silty sandy clay with occasional sub-rounded pea grit <0.01m.			0.13	



TRENCH 9						
Dimension	ns: 49.6x2.2m		Max. depth: 0.37m	Ground level: 45.2m aOD		
Coordinat	es (NGR)	X = 60802	22.98 <b>Y</b> = 29743720 (centre)			
Context	Description	•			Depth (m)	
901	Ploughsoil		did greyish brown sandy clay loam with sparse sub-angular and sub- bunded flints and stones <0.04m			
902	Natural		Light yellowish brown sandy clay loam with common sub-angular flints and stones <0.08m. Also patches of common chalk fragments.			
903	Cut	Cut of gul	Cut of gully			
904	Fill	Secondary fill of gully 903. Mid blueish grey silty sandy clay with occasional sub-rounded stones <0.05m			0.25	
905	Cut	Cut of gul	Cut of gully		0.11	
906	Fill	Secondar	Secondary fill of gully 905. Light yellowish brown sandy clay			

TRENCH 10						
Dimension	ns: 47.5x2.2m		Max. depth: 0.37m	Ground level: 45.74m aOE	)	
Coordinate	es (NGR)	X = 60809	92.69 <b>Y</b> = 297327.76 (centre)			
Context	Description	•	De			
1001	Ploughsoil		Mid greyish brown sandy clay loam with sparse sub-angular and sub-rounded flints<0.04m		0-0.28	
1002	Natural		Light yellowish brown sandy clay with common sub-angular flints <0.08m. Also patches of gritty angular chalk.			
1003	Cut	Cut of NE-SW aligned ditch. Unexcavated		-		
1004	Fill	Fill of ditc	h 603. Unexcavated.		-	

TRENCH 11					
Dimension	Dimensions: 40.3x2.2m		Max. depth: 0.45m	Ground level: 46.14m aOD	
Coordinates (NGR) X = 608123.77 Y = 297331.08 (centre)					
Context	Description				Depth (m)
1101	Ploughsoil		Aid greyish brown sandy clay loam with common sub-angular and sub- ounded stones <0.05m		
1102	Natural	Light reddish brown sandy clay with moderate to common sub-angular and 0.40+ sub-rounded stones<0.08m. Patches of common chalk fragments			0.40+

TRENCH 12					
Dimensio	<b>ns:</b> 40.0x2.2m		Max. depth: 0.37m Ground level: 47.44m aOD		
Coordinat	tes (NGR)	<b>X</b> = 60819	91.87 <b>Y</b> = 297354.21(centre)		
Context	t Description De			Depth (m)	
1201	Ploughsoil		Light greyish brown sandy silt clay loam with sparse sub-angular flints<0.06m		0-0.32
1202	Natural	Light yello	Light yellowish brown sandy clay with common sub-angular flints <0.09m.		
1203	Cut	Cut of NV	Cut of NW-SE aligned ditch		
1204	Fill		Secondary fill of ditch 1203. Mid greyish brown silty clay with rare sub- ouned chalk pieces and sub-angular flint <0.06m		



TRENCH 13					
Dimension	ns: 41.4x2.2m		Max. depth: 0.34m	Ground level: 47.82m aOD	)
Coordinate	es (NGR)	<b>X</b> = 60820	06.57 <b>Y</b> = 297420.27(centre)		
Context	Description	Depth (			
1301	Ploughsoil		Light greyish brown sandy silt loam with sparse sub-angular and sub-rounded flints<0.05m		0-0.30
1302	Natural		Light yellowish brown sandy clay with common sub-angular and sub-rounded flints <0.09m.		
1303	Cut	Cut of mo	Cut of modern disturbance or root disturbance		0.04
1304	Fill	Fill of mod	Fill of modern disturbance, identical to ploughsoil		

TRENCH 14					
Dimensions: 40.5x2.2m		Max. depth: 0.31m	Ground level: 48.67m aOD		
Coordinates (NGR) X = 6082			60.20 <b>Y</b> = 297456.99(centre)		
Context	Description				Depth (m)
1401	Ploughsoil		Mid greyish brown sandy clay loam withsparse sub-angular and sub- rounded flint <0.05m		
1402	Natural		ght yellowish brown sandy clay with common sub-angular and sub- ounded stones<0.08m. Patches of gritty angular chalk fragments		

TRENCH 15					
Dimensions: 40.5x2.2m		Max. depth: 0.33m	Ground level: 48.67m aOD		
<b>Coordinates (NGR) X</b> = 608260.20			60.20 <b>Y</b> = 297456.99(centre)		
Context	Description	Depth			Depth (m)
1501	Ploughsoil		Mid greyish brown sandy clay loam withsparse sub-angular and sub- ounded flint <0.05m		
1502	Natural		yellowish brown sandy clay with common sub-angular and sub-ded stones<0.08m.		0.30+

TRENCH 16						
Dimension	Dimensions: 41.0x2.2m		Max. depth: 0.33m		Ground level: 47.64m aC	)D
Coordinat	es (NGR)	X = 60817	79.95 <b>Y =</b> 297451.05 <b>(centre</b>	e)		
Context	Description					Depth (m)
1601	Ploughsoil		Mid greyish brown sandy clay loam with common sub-angular flints and stones <0.05m			
1602	Natural		Light yellowish brown sandy clay with common sub-angular and sub-rounded flints <0.08m. Also patches of chalk fragments.			0.33+
1603	Cut	Cut of pos	Cut of possible posthole.			
1604	Fill		Fill of possible posthole 803. Mid greyish brown silty clay with rare subangular flints <0.06m.			0.25
1605	Cut	Cut of NE	Cut of NE-SW aligned ditch. Unexcavated.			-
1606	Fill	Fill of ditc	h 1605. Unexcavated.		_	-



#### 11.2 Appendix 2: OASIS form

#### OASIS ID: wessexar1-229258

**Project details** 

Project name Rookery Business Park Solar Farm, Besthorpe, Norfolk

Short description of

the project

Wessex Archaeology was commissioned by Solarcentury to carry out an archaeological evaluation at Rookery Business Park, Besthorpe, Norfolk (NGR 608090 297450). The fieldwork was carried out over five days (24-28 August 2015). Seven of the sixteen excavated trenches contained archaeological features, mainly comprising ditches which correspond well with the rectilinear system of former field boundaries identified by the geophysical survey. A very small quantity of post-medieval artefacts was recovered from one of these ditches and this post-medieval date is corroborated by evidence from historic maps examined for the Historic Environment Assessment (Wessex Archaeology 2015a). These indicate that this rectilinear field system had been established by the time of the Inclosure map of 1810, and the pattern of fields remained until the 1970s, by which time all of the previously depicted internal field boundaries within the Site appear to have been removed. The only other archaeological features uncovered within the trenches comprise two postholes, located in Trench 8 and Trench 16, and two possible gullies in Trench 9. A prehistoric worked flint flake was recovered from the fill of one of the possible gullies and undated burnt flint was recovered from the fill of one of the postholes. Overall, this evaluation discovered a low density of archaeological features,

predominantly related to the enclosure of the landscape in the 18th or very early

19th centuries.

Start: 24-08-2015 End: 28-08-2015 Project dates

Previous/future work Yes / Not known

Any associated project reference

codes

108651 - Contracting Unit No.

Any associated project reference codes

ENF138816 - HER event no.

Type of project Field evaluation

Site status None

Cultivated Land 4 - Character Undetermined Current Land use

POSTHOLE Uncertain Monument type

Monument type **DITCH Uncertain** 

**DITCH Post Medieval** Monument type

Significant Finds **POT Roman** 

Significant Finds **CERAMIC Post Medieval** 

Significant Finds LITHIC IMPLEMENT Late Prehistoric

Significant Finds CLAY PIPE (SMOKING) Post Medieval



Methods & techniques

"Sample Trenches"

Development type

Solar farm

**Prompt** 

National Planning Policy Framework - NPPF

Position in the planning process

Pre-application

**Project location** 

Country

England

Site location

NORFOLK SOUTH NORFOLK WYMONDHAM Rookery Business Park Solar

Farm, Besthorpe, Norfolk

Postcode

NR18 9SS

Study area

7 Hectares

Site coordinates

TM 08090 97450 52.534621322944 1.068514315454 52 32 04 N 001 04 06 E

**Point** 

**Project creators** 

Name of

Organisation

Wessex Archaeology

Project brief originator

with advice from County Archaeologist

Project design

originator

Wessex Archaeology

**Project** 

director/manager

A Crockett

Project supervisor

S Thompson

Type of

sponsor/funding

body

Developer

**Project archives** 

Physical Archive

recipient

Norfolk Museums and Archaeology Service

Physical Archive ID

ENF138816

**Physical Contents** 

"Ceramics","Worked stone/lithics","other"

Digital Archive

recipient

Norfolk Museums and Archaeology Service

Digital Archive ID

ENF138816

**Digital Contents** 

"other"



Digital Media available

"Database", "Images raster / digital photography", "Survey", "Text"

Paper Archive recipient

Norfolk Museums and Archaeology Service

Paper Archive ID ENF138816

**Paper Contents** "other"

Paper Media available

"Context sheet","Diary","Drawing"

**Project** bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title Rookery Business Park Solar Farm, Besthorpe, Norfolk: Archaeological

**Evaluation Report** 

Author(s)/Editor(s) Wakeham, G.

Other bibliographic details

report number 108651.02

Date 2015

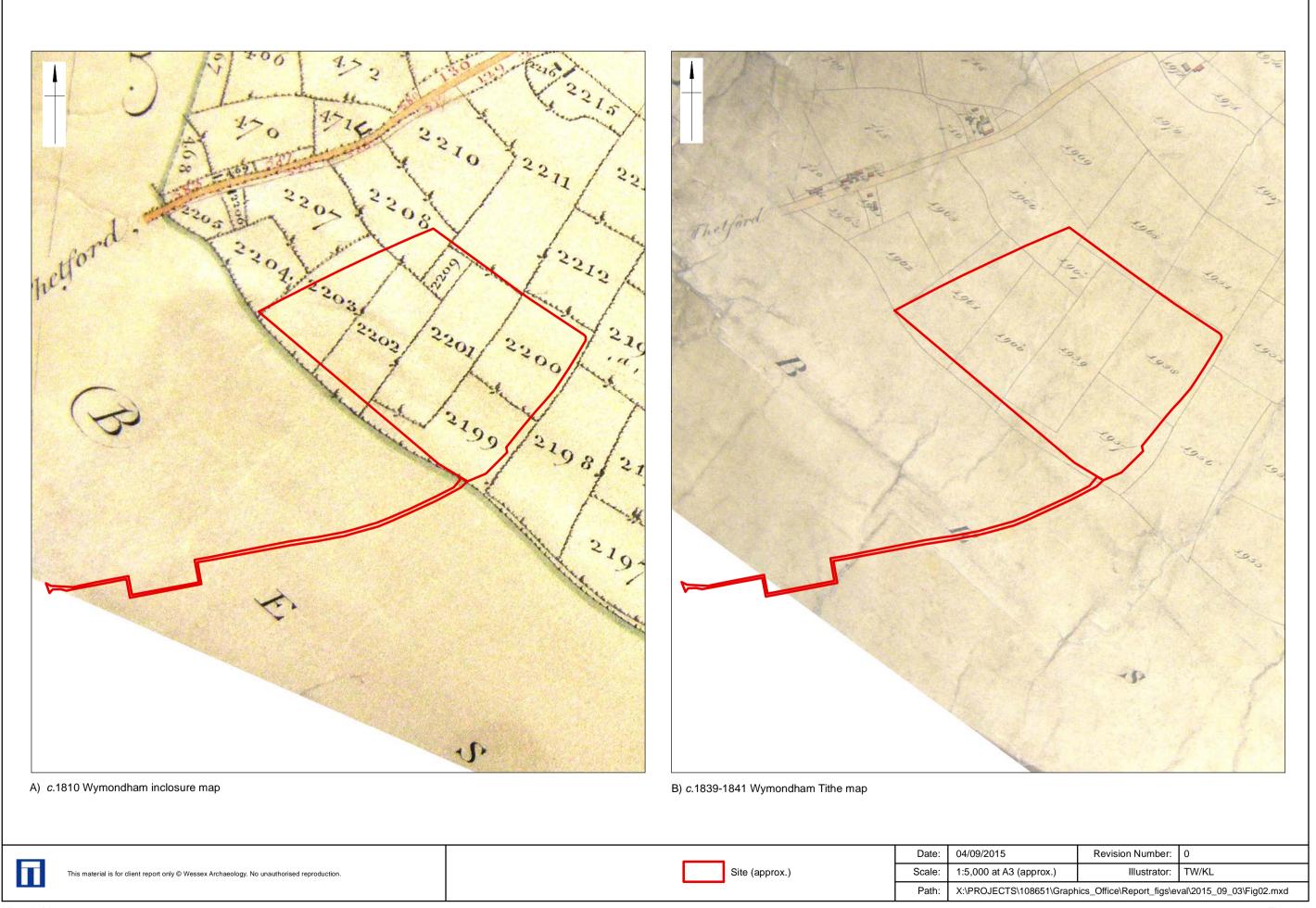
Issuer or publisher Wessex Archaeology

Place of issue or publication

Wessex Archaeology - Salisbury

Description A4 bound client report





Historic Maps



Plate 1: North-west facing section through possible gully 903



Plate 2: South-east facing section through post-medieval ditch 1203

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.				
	Date:	07/09/15	Revision Number:	0	
	Scale:	n/a	Layout:	KL	
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