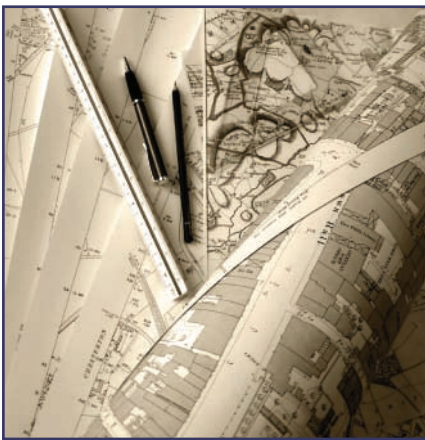


Proposed solar farm at Wick Farm (eastern plot) Wick Road, Burnham-on-Crouch



Desk-Based Assessment



July 2014

Client: AAH Planning

OA East Report No: 1635

OASIS No: n/a

NGR: TQ 9604 9567

Proposed solar farm at Wick Farm (eastern plot), Wick Road, Burnham-on-Crouch

Desk-Based Assessment

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Report Date: July 2014

Report Number: 1635
Site Name: Wick Road (eastern plot), Burnham-on-Crouch
HER Event No: -
Date of Works: July 2014
Client Name: AAH Planning
Client Ref: -
Planning Ref: pre planning
Grid Ref: TQ 9684 9575
Site Code:
Finance Code: XEXBUN14
Receiving Body: Colchester and Ipswich Museums service
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Date: 08/07/2014
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Date: July 2014
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Table of Contents

Summary	6
1 Introduction	8
1.1 Planning Background.....	8
1.2 Aims.....	8
1.3 Methodology.....	8
1.4 Location, Geology and Topography.....	8
1.5 Acknowledgements.....	9
2 Archaeological and Historical Sources	10
2.1 Historical Sources.....	10
2.2 The Historic Environment Record (HER).....	10
2.3 Cartographic Evidence.....	11
2.4 Portable Antiquities Scheme (PAS) Data.....	12
2.5 Aerial Photographs.....	12
2.6 Archaeological Excavations and Surveys.....	12
3 Deposit Mapping	13
3.1 Introduction.....	13
3.2 Mesolithic.....	13
3.3 Neolithic.....	13
3.4 Bronze Age and Iron Age.....	13
3.5 Roman.....	13
3.6 Anglo-Saxon and Medieval.....	13
3.7 Post-Medieval.....	13
4 Degree of Survival	14
4.1 Introduction.....	14
4.2 Site Visit.....	14
4.3 Conclusion.....	14
5 Impact of the Development	15
5.1 The Proposed Development.....	15
5.2 The Potential Impact to Below Ground Remains.....	15
6 Conclusions	16
Appendix A. Essex Historic Records	17
Appendix B. Aerial photographs consulted	18
Appendix C. Bibliography	19

Appendix D. OASIS Report Form.....20

List of Figures

- Fig. 1 Site location map showing development area (red). Scale 1:12500
Fig. 2 HER entries
Fig. 3 Ogilby and Morgan's Map of Essex (1678)
Fig. 4 Tithe award map of 1850
Fig. 5 First edition OS map 1874
Fig. 6 OS Map of 1974

List of Plates

- Plate 1 11339 North of Burnham Wick: Iron Age rectilinear enclosure
Plate 2 11315 East of Boreham Wick: Roman red hill deposits

List of Tables

- Table 1: Tithe award by field

Summary

In July 2014 Oxford Archaeology East undertook a desk based assessment to examine the available historical and archaeological resources relating to a 1 km search area around the proposed Solar Farm scheme at Wick Farm (eastern plot), Burnham-on-Crouch, Essex (TQ9684 9575).

The work was commissioned by AAH Planning as part of a pre-planning application for a proposed re-development of the site. The aim of this assessment is to determine the archaeological potential of the development site and the possible impact any future work could have on any archaeological remains. This has been achieved by combining existing information about the Search Area with new information gathered during the course of the study. It provides an assessment of the potential construction and operational impacts upon archaeological deposits and historic monuments.

The Site is currently one large arable field occupying reclaimed salt marsh between 2m and 4m OD, within the Dengie Peninsula. It is close to the medieval settlement of Burnham-on-Crouch and the Manor House of West Wick and East Wick. Evidence of archaeology from the Bronze Age has been identified to the north-west of the site on the higher ground. Roman remains, comprising 'red hills', which are synonymous with salt making, have been encountered in the northern part of the site.

This assessment demonstrates that there is the potential for surviving archaeological remains within the Site, in particular those dating to the Roman period. The majority of the Site has been subject to little modern disturbance. As a result, any archaeological deposits are likely to be in a good state of preservation, although they may have been affected by arable farming practises from the post-medieval period onwards.

The construction of the proposed new arrays, sub stations, cable trenches and access roads have the potential to have a direct and permanent effect upon any surviving archaeological deposits.

1 INTRODUCTION

1.1 Planning Background

1.1.1 A pre-planning application enquiry has been submitted for a proposed Solar Farm at Burnham Wick, Burnham-on-Crouch, Essex. An archaeological Desk-Based Assessment has been requested to assess the potential impact of the development on any surviving archaeological remains. The 19.68 hectare site is located 2km east of the village of Burnham-on-Crouch (TQ 9684 9575) and is within the Maldon District Council authority. The Site comprises one large field which is currently under arable cultivation.

1.2 Aims

1.2.1 The purpose of the archaeological Desk-Based Assessment is to define the character, extent and significance of known heritage assets within and close to the Site, taking into account any past impacts which may have affected the survival of any archaeology present on the Site itself. It identifies any heritage constraints on the proposed development and provides an outline assessment of any potential impacts which may result from the proposal.

1.3 Methodology

1.3.1 This Desk-Based Assessment has been carried out according to standards set by the Institute for Archaeologists in their guidance paper *Standards and Guidance for Archaeological Desk-Based Assessment* (2012). The assessment of setting has been carried with reference to English Heritage's Guidance Document *The Setting of Heritage Assets* (2010).

1.3.2 This report draws on secondary historical sources, cartographic evidence, the Essex Historic Environment Record (HER), The Portable Antiquities Scheme web site, aerial photographs, a site visit and previous archaeological work. A search of the Essex Historic Environment Record (HER) was conducted for all records within a 1km radius of the Site – hereafter referred to as 'the Search Area' (centred on TQ 9684 9567).

1.3.3 The HER is a computerised database of all listed and other historic buildings and all known archaeological sites, historic parks and gardens and other historic landscape features in the county, plotted onto linked digital mapping and often supplemented by photographs, drawings and substantial written accounts. All records falling within the requested search area of the site were provided in descriptive form with corresponding datasets supplied as shapefiles to provide the exact geographic location of each record (Fig. 2).

1.4 Location, Geology and Topography

1.4.1 The site is located on the north bank of the River Crouch, 1km from the river estuary. The ground is relatively level, at 4m OD, and is formed by reclaimed salt marshes. The site is currently used as arable farmland.

1.4.2 The drift geology of the Site mainly comprises river terrace deposits, but at its southern edge the drift geology is tidal flat deposits. These glacio-fluvial deposits overlay bedrock of London Clay (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

1.4.3 The site lies in the 'Dengie Marshes', a rural area, much of which is dominated by open, pasture land. Its main distinguishing features are long drainage channels, showing the old tidal creeks.

1.5 Acknowledgements

- 1.5.1 The author would like to thank AAH planning for commissioning this archaeological desk-based assessment, in particular Kevin Robinson. The report was sponsored by Countryside Renewables Capital LLP. James Drummond-Murray managed the project. Essex Record Office was visited to look at the cartographic evidence and to research the general historical background. Thanks are due to Martin Smith, the landowner, who provided valuable information on the previous archaeological work on the site.

2 ARCHAEOLOGICAL AND HISTORICAL SOURCES

2.1 Historical Sources

- 2.1.1 The Site lies to the east of the town of Burnham-on-Crouch. It is recorded in the Domesday book of 1086 as Burnham. Place name evidence suggests a Saxon origin for the settlement; Burn is derived from the Saxon word 'Bunn' or 'Bynn', meaning a torrent or fast flowing water, 'ham' is the Saxon word for a settlement.
- 2.1.2 Morant's book 'The history of antiquities of the County of Essex' is a useful source of historical information about Burnham parish. This describes the parish as originally having two Manors. The first, Burnham with Mangax, was held by Fitzwalter in capite of the king and formed the focus for the medieval town. In the high medieval period the town was a thriving settlement, with a market granted to a John Fitzwalter in 1348 and a monthly fair. The second manor was known as Eastwick and Westwick, whose manor house was the extant farmhouse of Wick Farm; the current residence of the landholders of the development site. At the time of the Domesday survey the land was held by the Priory of Dumnow. It was granted to Sir Richard Riche in 1543 after the Dissolution.
- 2.1.3 Burnham-on-Crouch lies within the wider Dengie peninsula, which comprised an area of low lying land between the Crouch and Blackwater estuaries. It is characterised by an open landscape punctuated by dispersed settlements and manors (ECC, 2008).

2.2 The Historic Environment Record (HER)

- 2.2.1 The Essex Historic Environment Record is the main repository of cultural heritage data for the borough. On the 7th June an HER search was undertaken of the proposed development area and a 1km radius around it. The HER is not a record of all surviving elements of the historic environment and does not preclude the subsequent discovery of further elements of the historic environment.
- 2.2.2 The 1km radius search area around the Site contains 15 HER records including finds, monuments and historic buildings. Each record has an HER number which is referred to in the text (in bold) and also on Figure 2. A complete list of all HER data can be found in Appendix A.

Bronze Age (2000-700BC) to Iron Age (700BC-AD43)

- 2.2.3 The earliest archaeological remains recorded in the HER within the search area are cropmarks of a rectilinear enclosure and associated linear features (**11339**). Subsequent excavations revealed that the rectilinear enclosure comprised a ditch and bank system of Iron Age date. A north to south aligned ditch was encountered which is thought to be Bronze Age in date (MAHG, 2006).
- 2.2.4 Immediately to the west of the enclosure, a pottery vessel containing Bronze Age spearheads and socketed axeheads was discovered by a local metal detectorist and handed to Colchester Museum (Smith, pers. Comm.).

Roman (AD 43 – 410)

- 2.2.5 Salt making was a long established industry in the Dengie peninsula, known to have begun in the Roman period. Evidence for this activity is characterised by large spreads of red burnt clay deposits, known as 'red hills', and these have been recorded to the east of the site by aerial photography (**11315**).

2.2.6 In 1976 an excavation carried out by Burnham Local History Society recorded burnt clay mounds and associated gullies along with a small assemblage of putative Roman briquetage and pottery (Smith, pers. comm.).

Anglo-Saxon (AD 410 – 1066) to Medieval (AD 1066- 1550)

2.2.7 No finds or features of Anglo-Saxon or medieval date have been recorded from the search area.

Post-medieval (AD 1550 – 1850)

2.2.8 The site itself lies on former salt marsh. Several monuments are recorded which are associated with both the draining of the land, such as the tractor driven drainage pump (45883) and the maintenance of the sea defences (45879, 45880, 45881 & 45882). Other features typical of a riverside locale, such as mooring posts (45878), have been encountered as surviving timber structures within the tidal deposits.

Modern (AD 1850 to present)

2.2.9 The location of the site on the south-east coast put it in a prominent position in the defence of Britain in both World Wars. During the First World War a flight station and landing ground (19347) was built 0.3km to the north of the site. During World War II a pill box was built into the sea wall (21275), as part of the hardened field defence systems meant to protect Britain from invasion.

2.2.10 Undated Features

2.2.11 Several cropmarks have been noted within the vicinity of the site that are currently undated. A set of parallel linear features were recorded to the north of the site (18831) that may be related to the rectilinear enclosure already attributed to the Iron Age (see above). To the east of this lies an old field boundary (16030).

2.2.12 Aerial photography has also recorded two perpendicular ditches on the southern side of the River Crouch (16028).

2.3 Cartographic Evidence

2.3.1 The earliest known map showing the study area, Ogilby and Morgan's Map of Essex, dates to 1678 (Fig. 3). This shows the site to be salt marsh with no associated settlement.

2.3.2 The next map to show the site is the Tithe awards of the mid 19th century (Fig. 4). By this time the salt marsh had been reclaimed the site was now part of the agricultural landscape. At this time the site was divided across five separate fields, shown in the table below.

Field No	Field name	Cultivation	Quantity (a.r.p)	Landowner	Occupier
255	Little flake	Arable	8.2.36	Lady Mildmay	Thos Clarke Pannel
257	further sluice marsh	Arable	11.2.23	Lady Mildmay	WH Bygrave
258	sluice marsh	Pasture	15.-.32	Lady Mildmay	WH Bygrave
259	lower pit marsh	Arable	11.3.24	Lady Mildmay	WH Bygrave
260	upper pit marsh	Arable	23.-.31	Lady Mildmay	WH Bygrave

Table 1: Tithe award by field

2.3.3 These field boundaries are also shown on the 1st edition OS map of 1874 (Fig. 5).

2.4 Portable Antiquities Scheme (PAS) Data

- 2.4.1 The Portable Antiquities Scheme is a DCMS funded project to encourage the voluntary recording of archaeological objects found by members of the public. Each county has a Finds Liaison Officer working for the scheme who will identify their finds and enter them onto a national database (www.finds.org). Data from PAS is transferred to the county HER for inclusion. All of the findspots recorded on the HER for the search area were originally reported through PAS and derive from metal detecting or fieldwalking surveys.
- 2.4.2 The PAS database was checked for finds within the search area that had not yet made their way onto the HER. Nothing was recorded within the search area.
- 2.4.3 The accuracy of the PAS data cannot be guaranteed by the HER.

2.5 Aerial Photographs

- 2.5.1 The National Monuments Record (NMR) in Swindon is English Heritage's public archive. They hold collections of aerial photographs ranging in date from the Second World War to the present day. A search area of 1km around the Site was searched on the 8th July 2014. Aerial photographs held by Essex HER were examined and these dated from 1946 to 1970. Lists of all aerial photographs consulted can be found in Appendix B. Two of these photographs have been represented as figures in this report (Plates 1 & 2). Aerial photographs on Google Earth were also examined.
- 2.5.2 Crops growing on the London clay have been demonstrated to be poor at indicating sub-surface features (ECC, 2008). As a result, they have limited value as an indicator of the presence of archaeology.
- 2.5.3 Plate 1 shows the Iron Age rectilinear enclosure, described previously to the north-west of the site, which led to subsequent excavation.
- 2.5.4 Plate 2, of the site itself, shows the red hill deposits visible as a concentration of linear and oval features.

2.6 Archaeological Excavations and Surveys

- 2.6.1 Two archaeological excavations have been carried out on the site and in the wider study area, these have been described in the relevant sections previously. Further survey work within the study area was undertaken to build up a chronological sequence for the river terrace and fluvial deposits of the South-East coast of England. This work, which was undertaken as part of the Medway Valley Palaeolithic project, involved the retrieval of two samples for optically stimulated luminescence dating (Schwenninger et al, 2007).

3 DEPOSIT MAPPING

3.1 Introduction

3.1.1 In this section, an attempt has been made to map all known monuments and events and, based on this mapping, to predict the existence of further remains within the Site. It should be borne in mind that there has been very little development and no archaeological investigations carried out within the site. As a result, there has been little opportunity for the discovery of archaeological remains within the site.

3.2 Mesolithic

3.2.1 Further to the west, along the banks of the River Crouch, flint microliths have been recovered near to the Bridgewater Creek and further along at North Fambridge. This indicates the use of the river estuary for seasonal hunting and fishing by itinerant groups of people.

3.2.2 No flint implements of early prehistoric date have been recorded within the search area and there is a low probability that similar finds would be encountered further towards the river estuary, within the bounds of the Site.

3.3 Neolithic

3.3.1 No finds or features of Neolithic date are recorded from the Site. Occupation of the river estuaries continued into the Neolithic period, as seen to the West in Burnham-on-Crouch, where an Early Neolithic settlement site was encountered.

3.3.2 There is a low probability that similar finds would be encountered closer to the river estuary, in the vicinity of the Site.

3.4 Bronze Age and Iron Age

3.4.1 Immediately to the north of the site is a known Iron Age rectilinear enclosure system (11339), that is thought to have originated in the Bronze Age.

3.4.2 It is thought that there is a low probability of encountering archaeology of this date as the land is situated on a lower lying portion of ground, likely to be more prone to coastal inundation.

3.5 Roman

3.5.1 Red hill deposits, associated with the salt making industry are recorded in the northern part of the site. There is a high probability that these deposits will be encountered within the Site. No further remains have been recorded to suggest further Roman remains.

3.6 Anglo-Saxon and Medieval

3.6.1 No finds or features of Saxon or Medieval date are recorded within the study area. There is a low probability that such remains will be present on site.

3.7 Post-Medieval

3.7.1 Commercial activity is situated along the river edge, both within the study area and further afield. These remains include pits dug to harvest oysters as well as several timber posts, thought to be mooring posts. There is a low probability that such commercial activity was occurring on the site and if so, it is likely to be concentrated along the southern edge of the site.

4 DEGREE OF SURVIVAL

4.1 Introduction

4.1.1 This assessment has revealed no firm evidence for any building works within the Site. However, there are a number of factors that may have affected the survival of any archaeological remains within the development area. These are detailed below.

Ploughing

4.1.2 The site has been under arable cultivation since 1778 at the earliest. Ploughing will have truncated the uppermost archaeological features, such as deep ditches or quarry pits, but are unlikely to have completely destroyed them. This type of survival is attested to by cropmarks of filled in post-medieval field boundary ditches showing on the aerial photos of the Site. Shallow features such as small pits and postholes, as well as upstanding features such as mounds, may well have been completely destroyed, depending on the depth of ploughing.

4.1.3 Ploughing will have disturbed artefacts within the tops of features and brought them to the surface. As a result, it is likely that below ground features, if present, will be detected by field walking the Site after harrowing.

4.1.4 The known red hill deposits to the north of the site have been left as set aside since the 1970s which will have limited damage to them.

WWI flight station

4.1.5 The site lies in close proximity to the flight station and evidence for the dumping of waste material has been noted in the surrounding fields (MAHG). There is a small possibility that similar remains will be encountered on the site.

4.2 Site Visit

4.2.1 No areas of modern disturbance, either from quarrying, building, dumping or agricultural activities were seen on the site visit.

4.3 Conclusion

4.3.1 Any archaeological features within the Site are considered to be relatively well preserved. The only real factor affecting the survival of below-ground remains will be the effect of ploughing from the post-medieval period and perhaps even earlier. It should also be noted that salt water flooding is likely to have had an adverse impact on the preservation of ecofacts.

5 IMPACT OF THE DEVELOPMENT

5.1 The Proposed Development

- 5.1.1 The proposal at Manor Farm is for a commercial solar farm generating electricity that will feed into the National Grid. The development would cover a maximum of approximately 19.6 hectares (48 acres) and will be undertaken and operated by Countryside Renewables.
- 5.1.2 If the maximum megawatts are installed, the site will contain some 22,000 solar panels (modules) arranged in a grid pattern. The panels measure 1.6m x 1.0m and would be arranged in arrays and set out in long rows running east-west across the Site. Where there is no evidence of significant archaeology, the arrays will be mounted on a simple metal piled framework. No concrete or foundations are required for these supports. The modules will be mounted at 20-30 degrees to the horizontal. The arrays will have a maximum height of 3m.
- 5.1.3 The site will be served by small inverters on a ratio of 1:1 MW. These buildings are 2.3 metres in height and measure 8.4m x 2.2m and are generally positioned at the end of one of the rows of panels. There is also a need for transformers for every one to two inverter housing which would measure 2.35 metres in height and are 4.4m high by 4.8m deep.
- 5.1.4 Small combiner boxes will be mounted to the frames below the panels. The arrays will be connected to the inverters and then via underground electrical cables to the substation.

5.2 The Potential Impact to Below Ground Remains

- 5.2.1 The proposed development has the potential to have a direct permanent impact upon any archaeological remains. Based on similar schemes, these impacts can be from the construction of the solar arrays (driving of piles or anchors) and associated control plant. The building of generator buildings and transformers will also have an adverse effect as well as the digging of trenches for of cabling.
- 5.2.2 The creation and use of any temporary works compound during the construction phase and permanent or temporary vehicle access routes into and around the site may involve considerable ground disturbance to a significant depth.
- 5.2.3 The archaeological excavation carried out in 1976 has proved that archaeological remains do survive in the northern part of the site and are sealed by topsoil and subsoil deposits up to 500mm thick. Most groundworks therefore will impact on these buried remains.

6 CONCLUSIONS

- 6.1.1 The 1km radius search area around the Site contains 15 HER records, all of which are monuments. Study of historic maps has clarified the historic land use of the Site and its wider area including locating filled in post-medieval field boundary ditches. Analysis of aerial photographs has located below ground features in the form of cropmarks within the site and the wider search area.
- 6.1.2 The land is low lying and would have been salt marsh up until drainage occurred in the late 18th or early 19th century, whereupon it was given over to agricultural activity. There is known occupation on what would have been the margins of the salt marsh. This would primarily have comprised salt making, although further exploitation of the coastal resources could have involved either fishing or shellfish collection.
- 6.1.3 This assessment demonstrates that there is high potential for archaeological remains to survive in the north of the proposed Site. This is likely to be typical of coastal exploitation. If such remains were encountered, there is little evidence for modern disturbance and as such archaeological deposits are likely to be in a good state of preservation.
- 6.1.4 The proposed Solar Farm development would take the Site out of arable cultivation for 25-30 years which would temporarily halt the damage being done by ploughing.
- 6.1.5 The mounting structures cited for the arrays would have an adverse effect on below-ground archaeological remains. Specifically, truncation arising from the works associated with concrete piles and foundations for the generator buildings and transformers. Also from the excavation of cable trenches. The use of any temporary works compound during the construction phase and permanent or temporary vehicle access ways into and within the site may involve considerable ground disturbance to a significant depth.
- 6.1.6 Given the known archaeological remains around the site it is likely that there will be a moderately adverse affect on any archaeological remains.

APPENDIX A. ESSEX HISTORIC RECORDS

HER ID	Name	Record Type	Summary	Period	Easting	Northing
11315	East of Boreham Wick	monument	medieval red hill deposits	Roman	5967	1959
16020	500m south of West Wick	monument	stretch of sea wall	post-medieval	5978	1963
45883	land at Grapnells Farm, Wallesea Island	monument	tractor driven drainage pump	Modern	5959	1948
45878	land at Grapnells Farm, Wallesea Island	monument	square mooring post	Modern	5965	1948
45880	land at Grapnells Farm, Wallesea Island	monument	two posts and associated pipes	Modern	5963	1949
45879	land at Grapnells Farm, Wallesea Island	monument	row of 'breakwater' posts	Modern	5964	1948
45882	land at Grapnells Farm, Wallesea Island	monument	early sea wall	Modern	5961	1948
45881	land at Grapnells Farm, Wallesea Island	monument	earthen banks, sea defences	Modern	5963	1948
19347	WWI landing ground	monument	landing ground and flight station 1915-1919	Modern	5962	1961
21275	pillbox, seawall	monument	WWII pillbox built into sea wall	Modern	5960	1953
11339	North of Burnham Wick	monument	cropmarks of rectilinear enclosure	unknown	5961	1960
18831	800m Se of Dammer Wick	monument	cropmarks of parallel linear features	unknown	5968	1962
16030	linear features, south of Pannel's brook	monument	cropmarks of field boundary and ice cracks	unknown	5969	1965
16028	linear features 500m east of Burnham-on-Crouch	monument	cropmarks of perpendicular linear features	unknown	5962	1955
469925	Burnham Wick Farm		OSL dating of two fluvial deposits		5960	1958

APPENDIX B. AERIAL PHOTOGRAPHS CONSULTED

Sortie number	Library number	Camera position	Run	Date	Scale 1:	Film details (in inches)
HSL/Essex/70/1062	388	v	0388	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	389	v	0389	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	390	v	0390	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	391	v	0391	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	392	v	0392	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	393	v	0393	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	2022	v	2022	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	2023	v	2023	10 AUG 1946	6000	Black and White 8.25×7.5
HSL/Essex/70/1062	2024	v	2024	10 AUG 1946	6000	Black and White 8.25×7.5

APPENDIX C. BIBLIOGRAPHY

- Essex County Council 2008 Maldon District Historic Environment Characterisation Project
- English Heritage 2010 *The setting of heritage assets: English Heritage guidance.*
- IFA 2012 Guidance paper: Standards and Guidance for Archaeological Desk-Based Assessment
- Miciak, L 2010 Quayside, The Quay, Burnham-on-Crouch, Essex. Essex County Council Field Unit HER summary
- Murant, P 1978 The history of antiquities of the County of Essex Vol II. EP Publishing; Wakefield
- Pocock, M Warners Hall, High Street, Burnham-on-Crouch, Essex Archaeological Monitoring and Recording. Essex County Council Field Unit Rep No 1632
- Schwenninger, JL, Wenban-Smith, F, Dbates, M & Briant, R 2007 Fluvial Sediments from the Medway Valley: Optically Stimulated Luminescence dating. English heritage

Cartographic Sources

- Enclosure Map of the Parish of Burnhame 1811
- Tithe Map of the Parish of Burnham 1850
- Ordnance Survey 1st Edition 25 inch Map. Essex. Sheet LIV.2 1874
- Ordnance Survey 6 inch. Sheet TQ 99 SW 1974
- Ordnance Survey 6 inch. Sheet TQ 99 SW 1980

Websites consulted

- <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> Viewed 07/07/14
- <http://www.finds.org> viewed on 08/07/14

APPENDIX D. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	<input type="text"/>		
Project Name	<input type="text" value="Wick Farm (eastern plot), Burnham-on-crouch"/>		
Project Dates (fieldwork) Start	<input type="text"/>	Finish	<input type="text"/>
Previous Work (by OA East)	<input type="text" value="No"/>	Future Work	<input type="text" value="Unknown"/>

Project Reference Codes

Site Code	<input type="text" value="XEXBUN14"/>	Planning App. No.	<input type="text"/>
HER No.	<input type="text"/>	Related HER/OASIS No.	<input type="text"/>

Type of Project/Techniques Used

Prompt	<input type="text" value="Direction from Local Planning Authority - PPG16"/>
Development Type	<input type="text" value="Service Infrastructure"/>

Please select all techniques used:

DBA

<input checked="" type="checkbox"/> Aerial Photography - interpretation	<input checked="" type="checkbox"/> Documentary Search
<input type="checkbox"/> Aerial Photography - new	<input checked="" type="checkbox"/> Visual Inspection (Site Visit)

Monument Types & Period

List feature types using the [NMR Monument Type Thesaurus](#) together with their respective periods. If no features were found, please state "none".

Monument	Period
<input type="text" value="red hills"/>	<input type="text" value="Roman (43 to 410)"/>
<input type="text" value="enclosure"/>	<input type="text" value="Bronze Age (-2,500 to -700)"/>
<input type="text"/>	<input type="text" value="Select period..."/>
<input type="text"/>	<input type="text" value="Select period..."/>

Project Location

County	<input type="text" value="essex"/>	Site Address (including postcode if possible)
District	<input type="text" value="Maldon"/>	<input type="text" value="Wick Farm
Wick Road
Burnham-on-Coruch
Essex CM0 8NF"/>
Parish	<input type="text" value="Burnham"/>	
HER	<input type="text"/>	
Study Area	<input type="text" value="19ha"/>	National Grid Reference <input type="text" value="tq 9684 9575"/>

Project Originators

Organisation	OA EAST
Project Brief Originator	
Project Design Originator	Kevin Robinson (AAH planning)
Project Manager	James Drummond-Murray (OA East)
Supervisor	Helen Stocks-Morgan (Oa EAst)

Project Archives

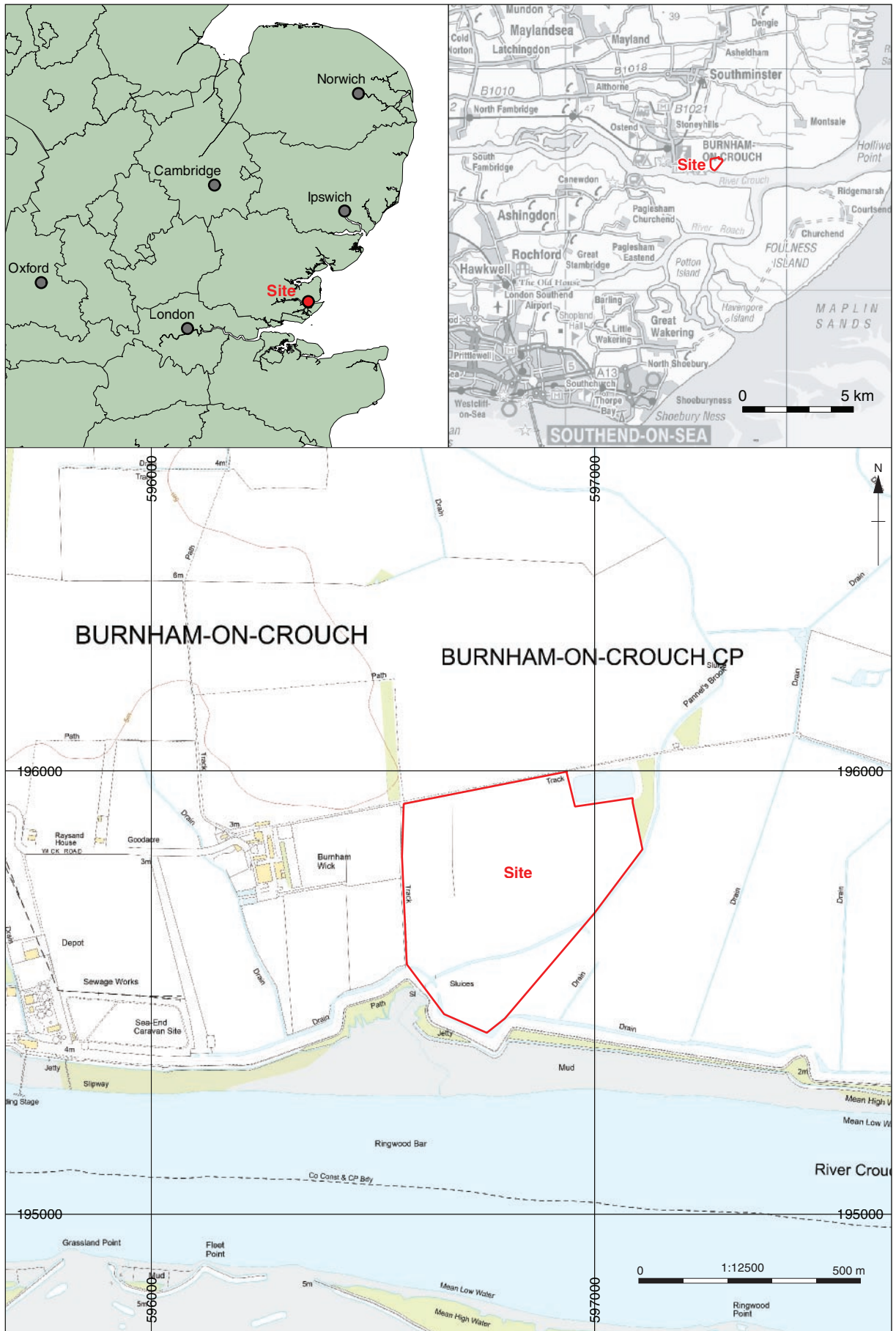
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	Location ...	OA east
	Accession ID ...	XEXBUN14

Archive Contents/Media

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	<input checked="" type="checkbox"/> Report
	<input type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:



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Figure 1: Site location showing development area (red). Scale 1:12500

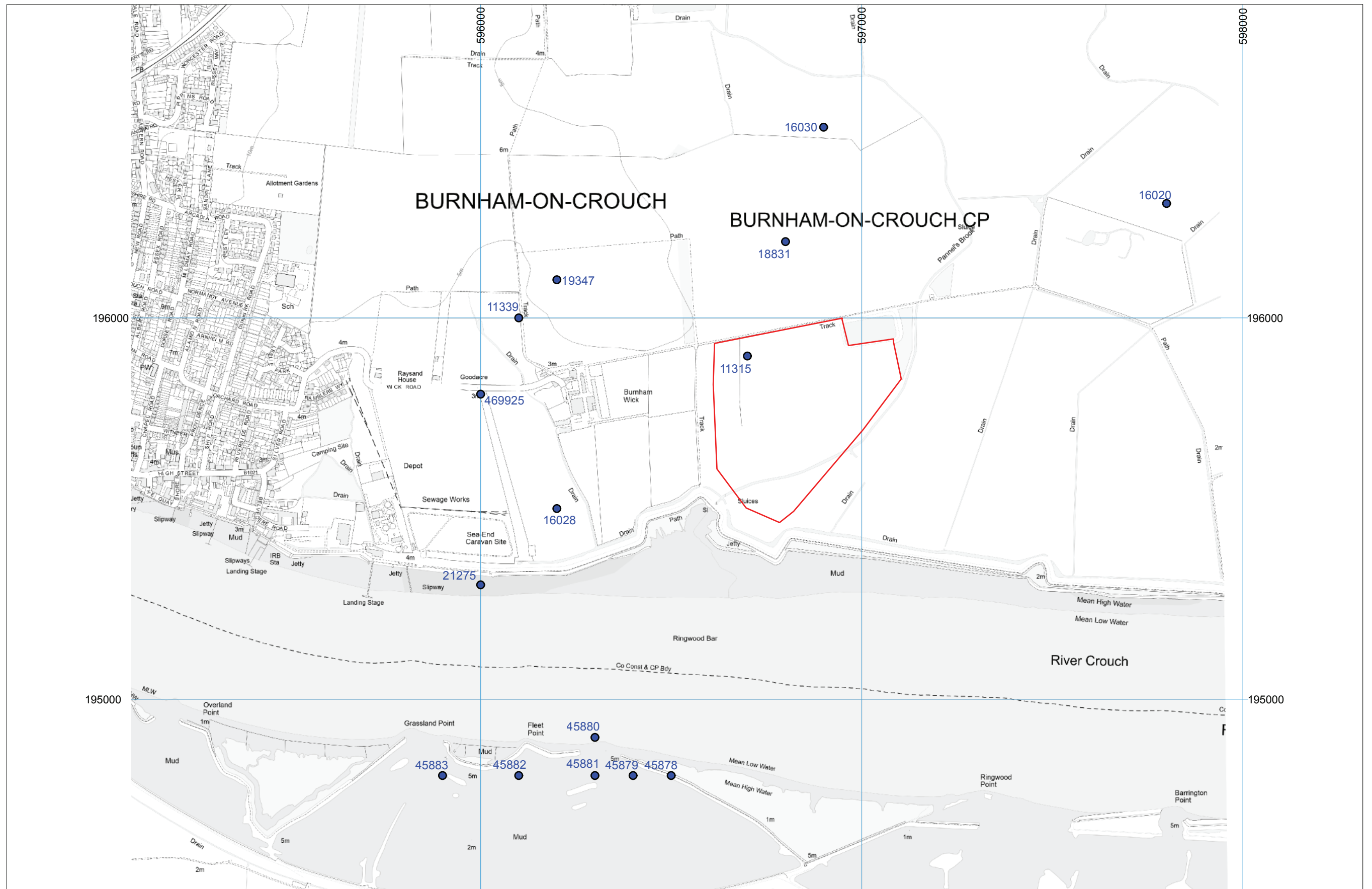


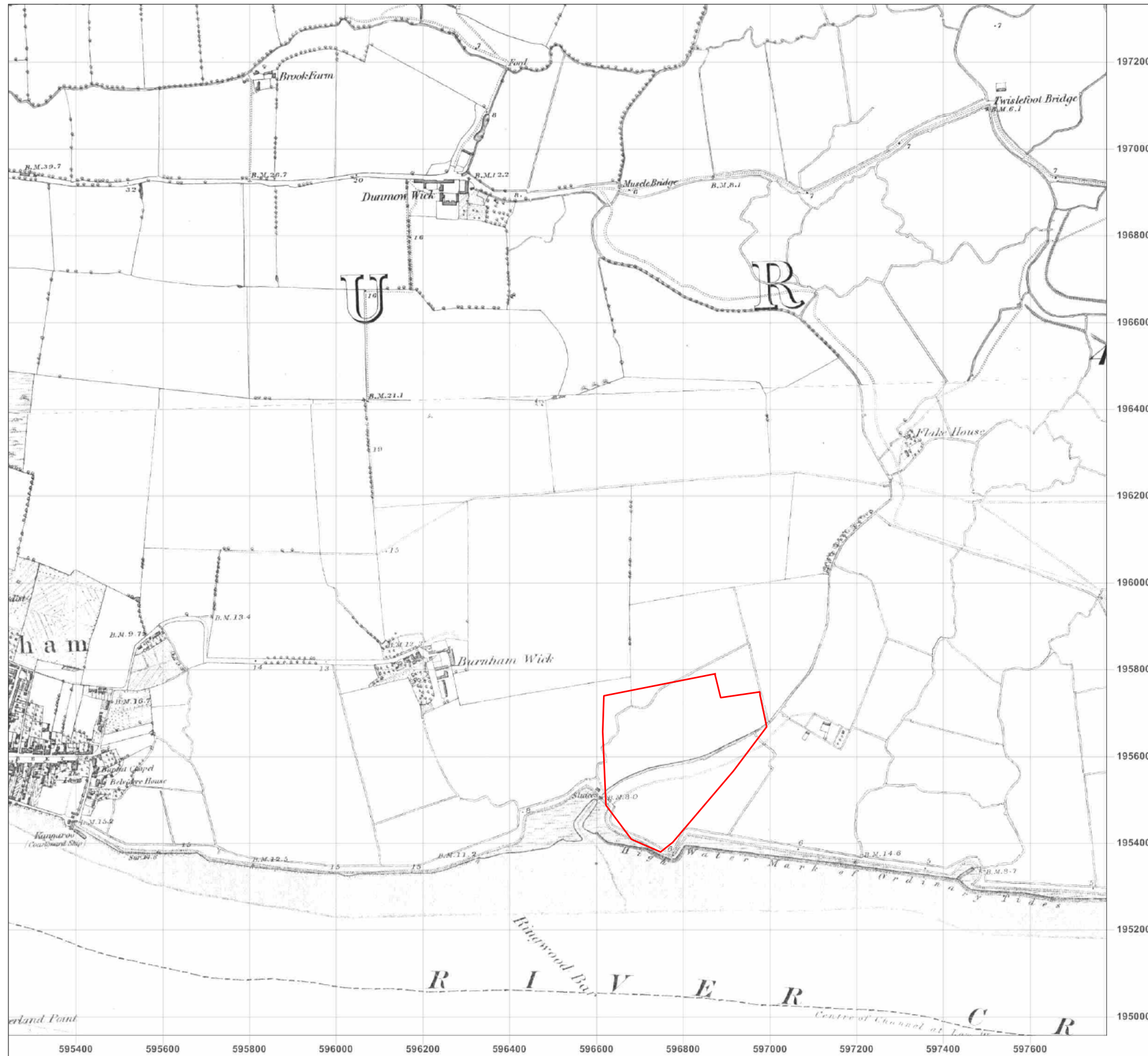
Figure 2: Site location map showing proposed development and all HER entries within a 1km radius of the Site



Figure 3: Ogilby and Morgan's Map of Essex (1678)



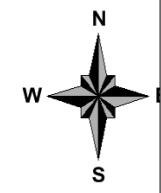
Figure 4: Tithe award map of 1850



1874-A3PDF-10000

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Grid Ref: 596456, 196275

Map Name: County Series
Map date: 1873-1874
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1874
 Revised 1874
 Edition N/A
 Copyright N/A
 Levelled N/A

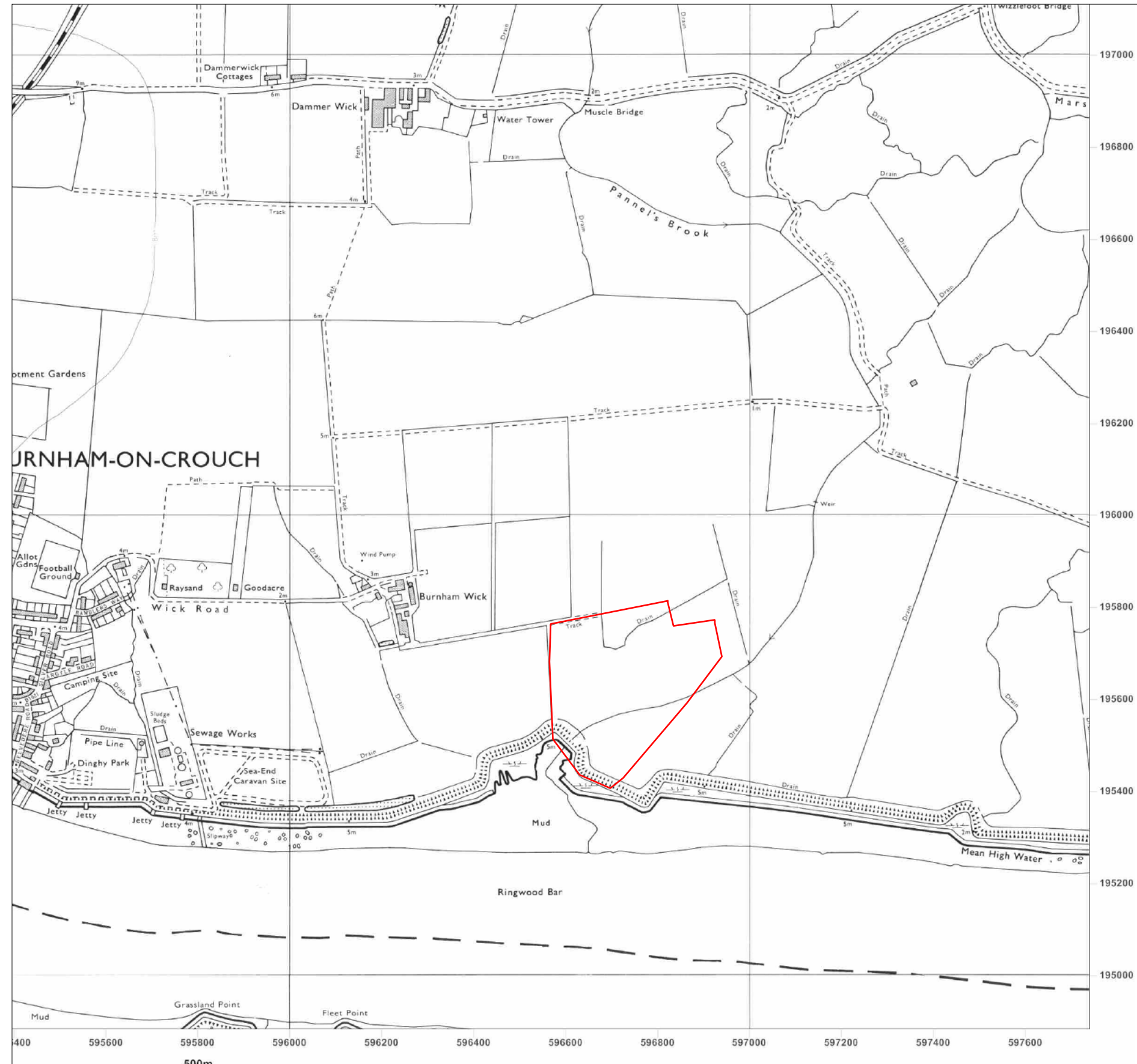
Surveyed 1873
 Revised 1873
 Edition N/A
 Copyright N/A
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Figure 5: First edition OS map 1874



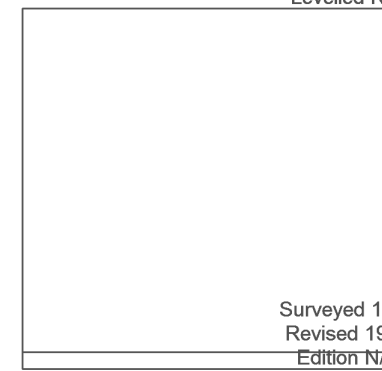
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Grid Ref: 596489, 196132

Map Name: National Grid
Map date: 1973
Scale: 1:10,000
Printed at: 1:10,000



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 Revised 1973
 Edition N/A
 Copyright N/A
 Levelled N/A



Surveyed 1972
 Revised 1973
 Edition N/A
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 Levelled N/A



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Figure 6: OS Map of 1974



Plate 1: 11339 North of Burnham Wick: Iron Age rectilinear enclosure



Please note there is some image distortion (data supplied by HER) these lines are not archaeological

Plate 2: 11315 East of Boreham Wick: Roman red hill deposits



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