



## Wash Cable Route Corridor

Archaeological Desk-based Assessment



**WASH CABLE ROUTE CORRIDOR  
ARCHAEOLOGICAL DESK-BASED ASSESSMENT**

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### **Summary**

Wessex Archaeology was commissioned by AMEC Wind Energy and Renewable Energy Systems Ltd., on behalf of Centrica Renewable Energy Limited to undertake an archaeological desk-based assessment of the potential impact upon archaeological remains from the proposed cable route for the Docking Shoal Offshore Wind Farm (Wessex Archaeology 2006b), Race Bank Offshore Wind Farm (Wessex Archaeology 2006b) and Lincs Offshore Wind Farm (Wessex Archaeology 2006a). This report relates to a proposed, although as yet unconfirmed cable route through the Wash.

To include all potential routes a broad Cable Route Study Area was created, covering the eastern half of the Wash in a rough rectangle of approximately 48 by 20 kilometres.

Searches for known archaeological material were conducted within the Study Area. Information was sought from a wide range of local and national bodies, including the Historic Environment Record maintained by Norfolk County Council, the National Monuments Record and the UK Hydrographic Office. The data were then filtered in order to focus only on those sites that lie within the footprint of this scheme (i.e. up to the mean high water mark). The remaining data were used as part of a wider assessment of archaeological potential.

This report sets out the methodology employed in carrying out the study and an account of the policy and legal framework affecting archaeological sites and wrecks in the UK. The archaeological heritage is discussed with particular reference to the maritime and prehistoric archaeology and history of the Wash. Maritime sites and the potential for the survival of former prehistoric land-surfaces offshore form the main focus of this assessment.

In summary, the known and potential archaeology within the Study Area comprises:

- 40 known wrecks and obstructions;
- 172 documented shipping losses;
- Unknown and undocumented wrecks from various periods dating back to at least the Iron Age;
- Stray finds of ship borne debris from various periods; and
- The potential for the presence of submerged prehistoric land-surfaces dating from 700,000 BP to 0 AD, possibly containing archaeological data and sites.

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Datasets were provided by the National Monuments Record, Metoc plc (Seazone) and Norfolk Historic Environment Record. Wessex Archaeology is grateful to the staff of all these organisations for their co-operation.

Margaret Christie and Brian Hession carried out the assessment and compiled this report. Kitty Brandon prepared the illustrations, and the project was managed for Wessex Archaeology by John Gribble.

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## ARCHAEOLOGICAL DESK-BASED ASSESSMENT

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# WASH CABLE ROUTE CORRIDOR

## ARCHAEOLOGICAL DESK-BASED ASSESSMENT

**Report ref. 62550.03**

### 1. INTRODUCTION

#### 1.1. PROJECT BACKGROUND

1.1.1. Wessex Archaeology (WA) was commissioned by AMEC Wind Energy and Renewable Energy Systems Ltd., on behalf of Centrica Renewable Energy Limited to prepare a desk-based assessment of the potential effect upon archaeological remains by the construction of a cable route through the Wash. The cable route will serve the proposed Race Bank, Docking Shoal and Lincs Offshore Wind Farm developments off the Lincolnshire and Norfolk coasts to the north of the Wash.

1.1.2. The proposed cable route will run north through the Wash to the south eastern corner of the consented Lynn and Inner Dowsing Offshore Wind Farms and proposed Lincs Offshore Wind Farm. From there it will also extend to the east to the proposed Docking Shoal and Race Bank Offshore Wind Farms. There are a number of options under consideration for the route of the export cable, and the desk-based assessment has taken this into account by defining a Cable Route Study Area (CRSA) which covers a large portion of the Wash (**Figure 1**). The broad CRSA also ensures that the wider archaeological context of the area to be affected by the cable route is considered and understood. The co-ordinates for the CRSA are as follows:

Point	UTM Easting	UTM Northing
0	304005	5858098
1	311320	5865894
2	331380	5890148
3	334471	5889165
4	339259	5891855
5	347694	5880454
6	337549	5873471
7	337477	5873362
8	337391	5873264.
9	337239	5873139
10	337066	5873047
11	336942	5873005
12	336812	5872979
13	332752	5869857
14	331342	5867459
15	330355	5863933
16	329227	5861677
17	329086	5859844
18	328522	5857446
19	325806	5856251
20	324713	5855483
21	324008	5854458
22	323365	5853288
23	322739	5850536.

24	304005	5858098
<i>Projection: WGS 84 UTM 31N</i>		

**Table 1: CRSA Co-ordinates**

- 1.1.3. This assessment outlines the known and potential archaeological resource within the CRSA. The full range of data searches includes maritime sites and those elements of the local terrestrial archaeology that may be represented below the low water mark as a result of sea-level change.
- 1.1.4. This assessment will inform the Environmental Statements on the potential impacts of the offshore elements of the Race Bank, Docking Shoal and Lincs schemes. A summary of this report will be included in these Environmental Statements.

## **2. RELEVANT LEGISLATION AND POLICY**

### **2.1. INTRODUCTION**

- 2.1.1. England's heritage-related planning guidance and legislation is currently going through a period of major review. As a consequence, it is appropriate to highlight that changes, to both legislation and the planning process, may be made over the next three to five years. The majority of what is set out in this section reflects the situation as of April 2006.

### **2.2. PROTECTION OF WRECKS ACT (1973)**

- 2.2.1. Under the Protection of Wrecks Act (1973) (PWA), wrecks and wreckage of historical, archaeological or artistic importance can be protected by way of designation. It is an offence to carry out certain activities in a defined area surrounding a wreck that has been designated, unless a licence for those activities has been obtained. Generally, the relevant Secretary of State must consult appropriate advisors prior to designation (English Heritage in the case of the Wash cable route area), though it is also possible to designate a wreck in an emergency without first seeking advice.
- 2.2.2. There are no sites presently designated under this legislation within the CRSA. However, if any important wreck or ship borne artefact is discovered during construction, the designation of an area around the find remains a possibility.

### **2.3. MERCHANT SHIPPING ACT (1995)**

- 2.3.1. Within the context of the Merchant Shipping Act (1995), 'wreck' refers to flotsam (floating material from a ship), jetsam (a vessel's equipment or cargo that is deliberately thrown overboard to lighten the load in an emergency), derelict (material or a vessel abandoned at sea) and lagan (goods or wreckage on the sea bed that is attached to a buoy so it can be recovered) found in or on the shores of the sea or any tidal water. It includes a ship, aircraft or hovercraft, parts of these, their cargo or equipment. It may be of antique or archaeological value such as gold coins, a yacht or dinghy abandoned at sea, or items such as drums of chemicals or crates of foodstuffs (Definition from the Receiver of Wreck).



- 2.3.2. The ownership of underwater finds that turn out to be ‘wreck’ is decided according to procedures set out in the 1995 Act. If any such finds are brought ashore the salvor is required to give notice to the Receiver of Wreck that he/she has found or taken possession of them and, as directed by the Receiver, either hold them pending the Receiver's order or deliver them to the Receiver. This applies whether material has been recovered from within or outside UK Territorial Waters, unless the salvor can prove that title to the property has been vested in him/her (e.g. by assignment to him/her of rights devolving from the owner of the vessel or its contents at the time of loss). Even if ownership can be proved the salvor is still required to notify the Receiver.
- 2.3.3. The Crown makes no claim on wreck found outside UK Territorial Waters that remains unclaimed at the end of the statutory one year, and the property is returned to the salvor. Ownership of unclaimed wreck from within Territorial Waters lies in the Crown, or in a person to whom rights of wreck have been granted.
- 2.3.4. The Receiver of Wreck has a duty to ensure that finders who report their finds as required receive an appropriate salvage payment. In the case of material considered being of historic or archaeological importance, a suitable museum is asked to buy the material at the current valuation and the finder receives the net proceeds of the sale as a salvage payment. If the right to, or the amount of salvage cannot be agreed, either between owner and finder, or between competing salvors, the Receiver of Wreck will hold the wreck until the matter is settled, either through amicable agreement or by court judgement.

#### **2.4. PROTECTION OF MILITARY REMAINS ACT (1986)**

- 2.4.1. Under the Protection of Military Remains Act (1986) (PMRA), all aircraft that have crashed in military service are protected and the Ministry of Defence (MoD) has powers to protect vessels that were in military service when they were wrecked. The MoD can designate named vessels as Protected Places, even if the position of the wreck is not known. In addition, the MoD can designate Controlled Sites around wrecks whose position is known. In the case of Protected Places, the vessel must have been lost after 4<sup>th</sup> August 1914, whereas in the case of a wreck protected as a Controlled Site no more than 200 years must have elapsed since the loss.
- 2.4.2. In neither case is it necessary to demonstrate the presence of human remains on the site. Diving is not prohibited at a Protected Place but it is an offence to tamper with, damage, move or remove items from the wreck. However, diving, salvage and excavation are all prohibited on Controlled Sites, though licences for restricted activities can be sought from the MoD. Additionally, it is an offence to carry out unauthorised excavations for the purpose of discovering whether any place in UK waters comprises any remains of an aircraft or vessel which has crashed, sunk or been stranded while in military service.
- 2.4.3. In November 2001, the MoD reported on the *Public Consultation on Military Maritime Graves and the Protection of Military Remains Act 1986*. The report recommended that a rolling programme of identification and assessment of vessels against set criteria be established to designate all other British vessels in military service when lost, as Protected Places. These criteria include:

- Whether or not human remains are known or likely to be present;
- Whether or not there is evidence of sustained disturbance and looting;
- Whether or not designation is likely to curb or put a stop to such disturbance and looting;
- Whether or not diving on the vessel or site attracts sustained and significant public criticism or approval.

## 2.5. PLANNING POLICY GUIDANCE

2.5.1. Planning law only applies within local authority regions which, as a general rule, extend only to the mean low water mark. However, English Heritage (EH) included the following statement in *England's Coastal Heritage* (1996):

‘Although it remains government policy not to extend the Town and Country Planning system to the territorial sea, the principles set out in Planning Policy Guidance Note 16: Archaeology and Planning (PPG16) (Department of the Environment 1990) should be applied to the treatment of sub-tidal archaeological remains in order to secure best practice’.

2.5.2. PPG16 sets out the Secretary of States’ policy on archaeological remains. It acknowledges the potentially fragile and finite or irreplaceable nature of such remains (para. 6), and states that the desirability of preservation of archaeological remains and their setting is a material consideration within the planning process (para. 18). PPG16 provides that there is a presumption in favour of the physical preservation of nationally important archaeological remains (para. 8), and that where preservation *in situ* is not justified it is reasonable for planning authorities to require the developer to make appropriate and satisfactory provision for excavation and recording of remains (para. 25).

2.5.3. Paragraph 19 of PPG16 suggests that it is in developers’ own interests to include an initial assessment of whether the site is known or likely to contain archaeological remains as part of their research into the development potential of a site. Paragraph 22 adds: ‘Local planning authorities can expect developers to provide the results of such assessments as part of their application for sites where there is good reason to believe there are remains of archaeological importance’. PPG16 also notes that in spite of the best pre-planning application research, there may be occasions when the presence of archaeological remains only becomes apparent once development has commenced (para. 31).

2.5.4. *England's Coastal Heritage: A Statement on the Management of Coastal Archaeology* was published in 1996 by EH and the Royal Commission on the Historical Monuments of England (RCHME). The document sets out a number of principles for managing coastal archaeology:

- The coastal zone of England includes a finite, irreplaceable, and, in many cases, highly fragile archaeological resource which by virtue of its value, variety, and vulnerability justifies a presumption in favour of the physical preservation *in situ* of the most important sites, buildings, and remains;
- Although archaeological remains situated within inter-tidal and sub-tidal areas may be less visible and accessible than remains on dry land, this does not affect

their relative importance and they should be managed in accordance with the principles which apply to terrestrial archaeological remains;

- As historic landscapes can extend seamlessly from dry land, through the inter-tidal zone, and into sub-tidal areas, effective management of the coastal archaeological resource cannot be achieved without due consideration of marine as well as terrestrial archaeological remains.

2.5.5. The document also made a number of detailed recommendations, which include the following notes under the heading Development Control and Environmental Assessment:

‘Coastal archaeological interests should be adequately reflected in structure and local plans, and consistently and comprehensively included in Environmental Assessment procedures for coastal and marine developments (including harbour works, mineral extraction, oil and gas related projects, capital dredging projects, cable projects, and waste water treatment and disposal) and other activities requiring sectoral consent’.

2.5.6. *England’s Coastal Heritage* identifies the Lincolnshire coast as an area of High Archaeological Potential. It goes on to state that within such areas:

‘Survey priorities will be determined through a consideration of the level of threat to important archaeological remains and the need to contribute adequate archaeological data to wider coastal zone management initiatives such as Coastal Zone Management Plans, River Catchment Management Plans, Estuary Management Plans, Shoreline Management Plans and Coastal Planning Strategies, in partnership with other agencies’.

2.5.7. *Identifying and Protecting Palaeolithic Remains; Archaeological Guidance for Planning Authorities and Developers* (English Heritage 1998) draws attention to the importance of Palaeolithic remains and states that they must be considered in line with PPG16 when potentially affected by development proposals. Palaeolithic archaeological sites are defined as any land where artefacts or traces of a human presence of Pleistocene date have been found. The document notes that Palaeolithic remains have particular importance if:

- Any human bone is present in relevant deposits;
- The remains are in an undisturbed, primary context;
- The remains belong to a period or geographic area where evidence of a human presence is particularly rare or was unknown;
- Organic artefacts are present;
- Well-preserved indicators of the contemporary environment (floral, faunal, sedimentological) can be directly related to the remains;
- There is evidence of lifestyle (such as interference with animal remains);
- One deposit containing Palaeolithic remains has a clear stratigraphic relationship with another;
- Any artistic representation, no matter how simple, is present;
- Any structure, such as a hearth, shelter, floor, securing device, etc. survives;
- The site can be related to the exploitation of a resource, such as a raw material;
- Artefacts are abundant.

- 2.5.8. The document goes on to note that sites containing any of these features are so rare in Britain that they should be regarded as of national importance and whenever possible should remain undisturbed.
- 2.5.9. The advice offered to developers and planning officers includes the following:
- It is advisable for prospective developers to research the archaeological potential of their sites (including that for Palaeolithic remains) at an early stage;
  - It is the responsibility of developers to supply the relevant planning authority on the archaeology of their sites, with proposals for the way in which this will be accommodated within the development scheme, so that an informed planning decision can be reached. Information on the Palaeolithic remains or the potential for such remains within a certain site may be acquired from a desk-based assessment but when this is inadequate it may be necessary to obtain further information from a limited field evaluation by suitably qualified archaeologists;
  - Planning authorities may apply a condition to a consent which prohibits the start of development until the applicant has ensured appropriate provision has been made for an adequate record of the site's archaeological remains.

## **2.6. PREHISTORIC ARCHAEOLOGICAL REMAINS**

- 2.6.1. In 2002 the Department of Trade and Industry produced a document: *The scope of Strategic Environmental Assessment of North Sea areas SEA3 and SEA2 in regard to prehistoric archaeological remains*. Although not legislative the paper makes suggestions for discussion of protocols and a reporting regime for the commercial sector:

‘The ideal structure would require or encourage the industry and its sub-contractors to check whether their activities are in archaeological prospective zones, and to identify, and report, when their activities positively detect prehistoric artefacts, or, in the case of acoustic surveys, provide very strong evidence. If this can be achieved at a minimal or acceptable cost/delay to industry, then there is a positive advantage in allowing operators to start activities in zones of archaeological potential, while avoiding positively identified sites, if any.’ (8.6).

## **2.7. PROTECTING OUR MARINE HISTORIC ENVIRONMENT**

- 2.7.1. In March 2004, a consultation document was circulated setting out the key issues and questions in relation to legislation and the management of the marine historic environment (DCMS, 2004). The document includes various suggestions for change, including a more unified designation scheme (combining the PWA and the Ancient Monuments and Archaeological Areas Act 1979). The document also includes provision for publishing the criteria that marine cultural heritage sites will need to satisfy in order to be designated. Standardised restrictions are also proposed, so that all sea-users can broadly anticipate what activities are allowed.

## **2.8. MARITIME DESIGNATIONS**

- 2.8.1. There are no sites within the CRSA subject to designation under the PWA (1973).

- 2.8.2. There are 16 sites protected as ‘Protected Places’ under the PMRA. All of these sites are military aircraft lost during WWII (with the exception of **WA2280** lost in 1925) for which the exact point of loss is not known. They are:

WA No	Name	Location
WA2280	Avro 504k E3760	Not known
WA2281	Heinkel He1115b S4+Gh	Not known
WA2282	Heinkel He 1115b S4+Dh	Not known
WA2283	Hurricane Mk I V7376	Not known
WA2284	Armstrong Whitworth Whitley Mk V T4201	Not known
WA2285	Wellington Mk IC P9276	Not known
WA2286	Master Mk I N7510	Not known
WA2287	Wellington Mk IC R1470	Not known
WA2288	Whitley Mk V Z9204	Not known
WA2289	Martinet Mk I HP464	Not known
WA2290	Mosquito Mk II DZ305	Not known
WA2291	Master Mk II EM330	Not known
WA2292	Stirling Mk III EH960	Not known
WA2293	Lancaster Mk III ED826	Not known
WA2294	Wellington Mk XIII MF234	Not known
WA2295	Mosquito Mk II DD629	Not known

**Table 2: Sites Protected under the Protection of Military Remains Act (1986)**

### 3. METHODOLOGY

#### 3.1. INTRODUCTION

- 3.1.1. This assessment is intended to inform the preparation of an Environmental Statement that will accompany the application for the Docking Shoal, Race Bank and Lincs Offshore Wind Farms. The methodology adopted reflects best practice in carrying out archaeological desk-based assessments, as codified by the Institute of Field Archaeologists (IFA) *Standard and Guidance for Archaeological Desk-based Assessment* (Institute of Field Archaeologists 1999).
- 3.1.2. Although much of this assessment is derived from desk-based (i.e. secondary) sources, provision was also made for the archaeological interpretation of primary geophysical data. An audit and review by WA of geophysical data supplied by AMEC is ongoing at the time of writing of this report and will be reported separately.
- 3.1.3. The approach adopted also reflects the requirements of Environmental Assessment arising from European Council Directive 85/337/EEC as amended by Directive 97/11/EC.

#### 3.2. SEARCH AREAS

- 3.2.1. In order to assess the potential for prehistoric sites within the area of the CRSA models of sea level change in the Wash and the Southern North Sea were analysed in order to establish the periods when the area was dry land, and hence inhabitable.

3.2.2. Records of known maritime sites and casualty positions within the CRSA were overlaid on a base map of the development area in a Geographical Information System (GIS). The Wash CRSA, as well as the Docking Shoal Study Area (DSSA), Race Bank Study Area (RBSA) and the Lincs, Lynn and Inner Dowsing Data Search Areas are shown in **Figure 1**.

### 3.3. SOURCES

3.3.1. The principal sources consulted in this assessment are as follows:

- Records of wrecks and obstructions collated by the UK Hydrographic Office (UKHO) and obtained from Metoc plc as Seazone data.
- Records of known sites and recorded losses held in the maritime section of the National Monuments Record (NMR).
- Records of known terrestrial archaeological sites and finds held by the NMR.
- Records of known archaeological sites held by the Norfolk Historic Environment Record (NHER).
- Aerial photographs held by the NMR.
- Various secondary sources relating to the palaeo-environment and to the Palaeolithic and Mesolithic archaeology of Northern Europe.
- Secondary sources relating to known and potential wreck sites and casualties, as well as historical charts and sailing directions held by the UKHO.
- The MoD (Naval Staff Directorate) was approached with respect to the PMRA (1986).
- The Receiver of Wreck at the Maritime and Coastguard Agency was approached with regards to historic wrecks.

### 3.4. SITE NUMBERING

3.4.1. The numerical sequences used in this report follow on from the sequences used in the Lynn and Inner Dowsing Offshore Wind Farms (WA 2002a) and the Lincs Offshore Wind Farm (WA 2006a).

3.4.2. Maritime records were tabulated under the numerical sequence **WA2088-2127** for the Known Sites and **WA2128-2299** for Recorded Losses. These sites are listed in **Appendix I** and illustrated in **Figure 2**.

3.4.3. Terrestrial records from the NMR and NHER were tabulated under the numerical sequences **WA1453-1659** and **WA1660-1876** respectively. The terrestrial sites are listed in **Appendix II** and illustrated in **Figures 3-6**.

### 3.5. MARITIME RECORDS

3.5.1. In order to assess the maritime archaeological resource within the CRSA, records of wrecks and casualties were obtained, principally from the NMR, Seazone, and NHER. Known wreck sites and obstructions as well as recorded losses were superimposed on a base map of the area within ArcMAP GIS software.

- 3.5.2. Recorded Losses refer to records of known losses for which there are no known seabed remains. They are often based on descriptive definitions or dead reckoning and they tend to be less accurate, particularly for older shipwrecks.
- 3.5.3. As a general rule, positions of live wrecks given in the NMR, Seazone and NHER data were plotted, whilst casualty records which are based on the NMR's recording practice of assigning documentary records to Named Locations were mapped to central buffered points (**Figure 2**). These points do not necessarily represent the wreck locations.

### **3.6. TERRESTRIAL RECORDS**

- 3.6.1. Records of terrestrial archaeological sites of all time periods were obtained from NMR and NHER for use within this document. ArcMAP 9 was used to display the records.

### **3.7. CHRONOLOGY**

- 3.7.1. Archaeological dating of remains relies on three distinct chronologies. These are as follows:
- Absolute (or calendar) dates, which are suffixed with **BC (Before Christ)**, generically known as **big BC**. Such dates can be considered as part of our present day calendar, i.e. a date of 3,523 BC occurred 5,529 years ago.
  - Calibrated radiocarbon dates, which are either related to our modern calendar as **BC (calBC)** dates, or presented as **BP (before present)** dates. BP dates are calculated in years before 1950, and take into account the increased radioactivity background count following the proliferation of nuclear testing after this date. Therefore, a calibrated date of 4,500 BP indicates a point in time 4,556 years before today (i.e. 2,550 BC).
  - Uncalibrated radiocarbon dates, which are suffixed with **bc (i.e. little bc)**, and are the original radiocarbon determinations based on the half-life of C14 without compensating for changes in the background count.

### **3.8. MARINE GEOPHYSICAL ASSESSMENT**

- 3.8.1. Marine Geophysical data provided by AMEC are currently undergoing audit and review by Wessex Archaeology and was not available for inclusion in the discussion of archaeological features at the time of writing this report.

## **4. BASELINE CONDITIONS**

### **4.1. MORPHOLOGY, GEOLOGY AND SEASCAPE**

- 4.1.1. The CRSA consists of an irregular shaped polygon encompassing a large part of the Wash and extending inland in the south and east (**Figure 1**).
- 4.1.2. The Wash is described by the British Geological Survey (BGS 1991) as a 'low lying coastal embayment'. The morphology of the CRSA consists of an undulating seabed and shifting sandbanks many of which are exposed at all states of the tide. The seabed reaches a maximum depth of 24 metres and the tidal range exceeds 6 metres

during spring tides. Sediment in the area is made up of sand, shell and pebbles. The coast of the CRSA is made up of sandy and gravelly beaches in the south-east, some marsh and chalk cliffs in the north and is formed of salt marsh and mud flats in the south-west.

- 4.1.3. Cretaceous chalk forms the base geology in the area. In places this is overlain by the Swarte Bank Formation, laid down at the end of the Anglian glaciation (c.478 – 423,000 BP). It is formed of poorly sorted, gravelly coarse-grained sands. Hunstanton Till is also likely to be found in the north-east of the study area. This is described by the BGS (1991) as reddish brown sandy clay with erratics of chalk, flint, Bunter and Carboniferous sandstones, igneous and metamorphic rocks.
- 4.1.4. The seabed sediments within the CRSA mainly consist of sand and gravel. The gravelly sediments are mostly confined to channels and the outer parts of the Wash while sandy sediments dominate in subtidal areas. Muddy sediment exists largely in the mud flats and salt marshes in the south and south-west of the CRSA.

## 4.2. PREHISTORIC ARCHAEOLOGY

### Glaciation and Sea Level Change

- 4.2.1. The archaeological potential of the CRSA is closely related to relative sea level change through time. During the last 700,000 years the area has been shaped by a series of glacial and marine transgressions and regressions, and for long periods much of the North Sea Basin was exposed as dry land as sea water was taken up in the polar ice sheets. These exposures of areas of the current seabed would have presented opportunities for prehistoric human occupation of these areas at a number of times since c.700,000 BP (Wenban-Smith 2001: 2). **Table 3** below summarises the main warm and cold periods and estimates of the sea level that prevailed during those periods:

Oxygen Isotope Stage (OIS)	Age in years BP/BC	British Conventional Chronology	Archaeological Period	Climate	Sea Level Age	Relative Sea Level
–	4,000 BC	Flandrian	Mesolithic	Warm	c. 4,000 BC	-6m
	5,500 BC				c. 5,500 BC	-10m
					c. 6000 BC	-17m
					c. 6300 BC	
					c. 6,700 BC	-20m
1	10,000 BP/ 8,000 BC	Devensian	Early Mesolithic	Warm	c. 9,000 BP c. 7,000 BC	-25m
					c. 9,500 BP c. 7,500 BC	-30m
					c. 10,000 BP c. 8,000 BC	-35m
2	12,000 BP/ 10,000 BC		Late Upper Palaeolithic		c. 11,000 BP c. 9,000 BC	-40m
						-50m
					c. 12,000 BP c. 10,000 BC	-60m
2	16,000 BP/ 14,000 BC				c. 13,500 BP c. 11,500 BC	
2	25,000 – 18,000 BP		Early Upper Palaeolithic	Mainly cold	c. 18,000 BP c. 16,000BC	-120m
3	50,000 – 25,000 BP		Early Upper Palaeolithic	Mainly cold	c. 40,000 BP c. 38,000BC	-50m



Oxygen Isotope Stage (OIS)	Age in years BP/BC	British Conventional Chronology	Archaeological Period	Climate	Sea Level Age	Relative Sea Level
4	70,000 – 50,000 BP		Middle Palaeolithic			
5a-d	110,000 – 70,000 BP					
5e	130,000 – 110,000 BP	Ipswichian		Warm	c. 122,000 BP	+8m
6	186,000 – 130,000 BP	Wolstonian		Cold	c. 128,000 BP	-100
7	245,000 – 186,000 BP			Warm	c. 186,000 BP	High?
8	303,000 – 245,000 BP		Cold	c. 250,000 BP	Low?	
9	339,000 – 303,000 BP		Warm	c. 300,000 BP	High?	
10	380,000 – 339,000 BP	Hoxnian	Lower Palaeolithic	Cold	c. 339,000 BP	
11	423,000 – 380,000 BP			Warm	c. 380,000 BP	High?
12	478,000 – 423,000 BP			Anglian	Cold	c. 425,000 BP
13	478,000 BP	Cromerian		Variable	c. 480,000 BP	Varying
17 or 19?	700,000 BP				c. 700,000 BP	

**Table 3: Relative Sea Level Changes (after Wymer (1999), Shennan et al. (2000), Wenban-Smith (2002), Coles (1998), Jeglersma (1979), Parfitt et al (2005) and the work of the Land-Ocean Evolution Perspective Study (LOEPS)).**

- 4.2.2. Immediately before and after some of the colder periods of the Lower and Middle Palaeolithic and since the end of the last very cold period of the Devensian glaciation (known as the Loch Lomond Stadial 13,000-11,500 BP) all or part of the CRSA was free of ice and exposed as dry land. A potentially habitable environment for human communities has thus been available at various periods in the past in the now submerged areas of the CRSA.
- 4.2.3. New evidence from Pakefield in Suffolk has pushed the previous dates for the human occupation of Britain back by 200,000 years. This has revealed evidence of human occupation during a warm period c.700,000 BP, on what is described as a floodplain that extended off the east coast of Britain (Parfitt et al. 2005: 1008). It suggests that the CRSA area may have been dry at this time, although subsequent glaciations have made any confident reconstruction of the shoreline of this period difficult.
- 4.2.4. A warm climate might suggest that sea levels were the same or even higher than at present, but the processes of isostatic and eustatic change since these deposits were laid down make it difficult to be more specific about the landscape of the region. The Cromerian period is also likely to have contained a number of other temperate phases possibly suitable for human occupation before the Anglian glacial phase c.450,000 BP (Parfitt et al. 2005: 1008).
- 4.2.5. The most extensive ice cover of Britain occurred during the Anglian glacial phase at the height of which the CRSA was completely covered by ice. However, it is likely that there would have been periods when land was exposed and possibly inhabitable before and after the glacial maximum.
- 4.2.6. It is widely accepted that the Wash and the surrounding Fenlands were excavated by the Anglian ice sheet (Clayton 2000: 811) with the Wash becoming a marine embayment during later marine transgression. There are some suggestions that the Wash embayment was first formed due to fluvial processes. It is possible that a pre-

glacial 'Wash River' breached the cretaceous chalk escarpment that runs across the present coast to form the Wash, and the gap created by this river was then further excavated by the Anglian ice (Brew 1997: 136).

- 4.2.7. The full extent of the Wolstonian (c.380 – 130,000 BP) ice sheet is unknown, but it is considered likely that it may have reached as far south as the Wash (May 1976: 17-18). During the later Devensian glacial maximum (c.18,000 BP) the advance of the ice reached approximately as far as the southern limit of the present-day Wash (Brew 1997: 137).
- 4.2.8. The post-Devensian development of the Wash requires an examination of the surrounding fenland as the embayment formerly included a large area of land that now lies behind the modern banks that define the present coastline of the Wash (Brew and Williams 2002: 314). Following the retreat of the Devensian ice cover parts of the Wash would have remained above sea level until the late Bronze Age (c.1,000 BC). There is evidence that areas of Fenland may have existed as lakes at the end of the Devensian, as meltwater from the retreating ice sheet collected in hollows in the Wash. The duration or existence of these lakes is unclear (Brew 1997: 137).
- 4.2.9. In addition, based on the present day seabed contours, it seems likely that the Great Ouse and Nene were combined with the Welland and Witham to form a single large river within the present area of the Wash. This Greater Ouse River flowed to the north out to the Dogger Bank (Coles 1998). A reconstruction of the changes in sea level toward the end of the Devensian is presented in **Figure 7**.
- 4.2.10. During the Holocene, the Wash and Fenland embayment began to fill with sediments in response to rising sea levels. The Wash would have been gradually turned from a fluvial to estuarine and then marine environment as sea levels rose (Brew 1997: 138). The Wash embayment was probably substantially larger than at present along the south-west and western coasts, but the higher relief of the shoreline along many parts of the south eastern coast of the Wash would have contained the extent of the rapid sea level rise to some degree. The Fenland edges of the Wash would have been increasingly inundated, reaching a maximum c.3,000 calBP. Following this the intertidal areas of the Wash would have expanded due to increased sedimentation in the embayment, pushing the low-lying marshy coastline of the Fenland seaward.
- 4.2.11. The greatest extent of this coastline accretion was reached c.100 AD and although sea levels were rising again by the end of the Roman period (c.400 AD) the effects of this were negated by sedimentation, so the coast moved seaward again (Grady 1998: 86), burying the Roman land surface of the fens under 2-3 metres of alluvial deposits (Owen 1984: 46-49). The low-lying Fenland coast of the Wash stabilised by the 16th century and after this the major changes to the coastline were the product of human reclamation activities rather than natural processes, with reclamations of land occurring throughout the Post-medieval period.
- 4.2.12. The relief of the south eastern edge of the Wash is substantially different to the Fenlands surrounding the rest of the Wash. In places there are chalk cliffs that would have presented a barrier to sea level rise for some time. Sea level rise would have started the process of marine erosion on these soft chalk and greenstone cliffs.

- 4.2.13. The rate of past erosion of the cliffs is not clear, but substantial collapses of the cliff face can occur (**Plate 1**). To the north of these cliffs, the sediment sequence reveals thin basal peats dating to c.9,450 – 6,950 calBC (representing a relatively dry land surface), turning to mud flat and saltmarsh sediments from 5,900 – 4,850 calBC with some back barrier sediments representing areas immediately behind and probably protected by sand dune formations (Brennand and Taylor 2003: 2).
- 4.2.14. After this the exact nature of transgression is unclear, although there is evidence from the ‘Seahenge’ site (**WA 1033**) that the present intertidal area at Holme-next-the-Sea was a back barrier saltmarsh environment when the timber circle was constructed in the spring or summer of 2,049 BC. Based on this evidence there has been an overall inland movement of the barrier beaches of this kind in the area since the Bronze Age, driven by continued sea level rise (Murphy 2005: 6-7).

### **Topography and Climate**

- 4.2.15. The Lower and Middle Palaeolithic landscape of Britain is difficult to reconstruct, but it is possible to make some generalisations based on existing evidence.
- 4.2.16. There is recently discovered evidence from Pakefield in Suffolk of a phase of hominid (*Homo Heidelbergensis*) occupation in Britain during the Cromerian interglacial c.700,000 BP, during a period when a warm, seasonally dry, Mediterranean-type climate prevailed (Parfitt et al. 2005: 1010).
- 4.2.17. Evidence suggests this climate supported a number of habitat types with large grazing mammals such as the steppe mammoth, rhino, giant deer and bison, and predators including lions, grey wolves, and spotted hyenas. Broad leaf vegetation and forests existed, and a number of rivers, such as the Ancaster and Bytham Rivers flowed through the region, with the Ancaster and related tributaries possibly flowing through the present Wash embayment (**Figure 8**) (Rose et al. 2001: 1).
- 4.2.18. The Anglian glaciation (c. 423,000 BP) brought ice cover and a periglacial climate to Britain. The earlier drainage systems of the region around the Wash, such as the Bytham and Ancaster Rivers were largely destroyed and ice completely covered the Wash. Sea level dropped substantially and Britain would have formed a continuous dry land surface with the European mainland. Fossil evidence of any flora and fauna that may have inhabited Britain in the periglacial conditions is sparse and it is highly unlikely there was any human occupation during this phase.
- 4.2.19. The subsequent Hoxnian interstadial (c. 380,000 BP) brought warmer conditions and it is suggested that rising sea levels cut Britain off from mainland Europe. Sea levels may have been higher than at present and the Wash and most of the CRSA may have submerged in this period. Deposits dating from the Hoxnian have produced bones of straight-tusked elephant, rhinoceros, wild boar, deer, beaver and lion from sites such as Swanscombe and Hoxne in Britain, as well as the skull fragments of a hominid (Wymer 1999: 21 and 75).
- 4.2.20. White and Schreve (2000: 1-14) state that Britain then reverted to a peninsula of the European mainland until the Wolstonian (186,000 BP / Oxygen Isotope Stage (OIS) 7) when it became an island again (Schreve et al. 2002: 1426). It is likely that areas of the CRSA would have been inhabitable by humans at either side of the glaciations.

- 4.2.21. Oxygen, or Marine Isotope Stages are alternating cold and warm periods in the Earth's palaeoclimate, deduced from the study of the relative percentages of the two common, stable isotopes of oxygen,  $^{16}\text{O}$  and  $^{18}\text{O}$  in deep sea and ice cores. The ratio of these two isotopes in water is temperature dependent and is altered whenever water undergoes a phase change. During glacial periods, for example, isotopically light water ( $^{16}\text{O}$ ) was taken up in ice sheets, causing an enrichment of  $^{18}\text{O}$  in sea water, a record of which is preserved in glacier ice and in fossils buried on the sea floor.
- 4.2.22. The Wolstonian period appears to have comprised a number of warm and cold periods. There have been no substantial studies for this period specifically dealing with the Wash or southern North Sea, but evidence from elsewhere in Britain has revealed some details of the interglacial periods of this period, such as the Purfleet (320,000 - 290,000 BP / OIS 9) and Aveyley (180,000- 230, 000 BP / OIS 7) interglacials.
- 4.2.23. The Purfleet interstadial has been identified as a period when Britain was inhabited by a forest fauna of elephant, rhino, deer, monkeys and a Neanderthal hominid presence (Schreve 2001: 1698). Evidence from the River Nar, a tributary of the Great Ouse, suggests high sea levels for this period (White and Schreve 2000: 9).
- 4.2.24. The warm and cold climatic variations of the Wolstonian were followed by the Ipswichian interstadial (110,000 BP), which is also believed to have seen higher sea levels than at present. Climatic change continued and by c.70,000 BP cooler conditions began to take hold, signalling the onset of the Devensian, and sea levels fell, exposing inundated areas once again. However, as conditions became increasingly cooler, the landscape was predominantly glacial and the ice sheets covered the region down as far as the southern boundary of the Wash (Brew 1997: 137).
- 4.2.25. By 13,000 BP the Devensian ice sheets were in retreat and the Wash was part of an extensive lowland landscape. The immediate post-glacial landscape was colonised by grasses, sedges and herbs and increasingly mild temperatures provided a suitable environment for initial birch, willow, poplar, hazel and pine vegetation (Fryer et al. 2005: 10). A further improvement in climate allowed the establishment of oak and elm forests. It is possible that waterlogged areas of the early Wash embayment area may have contained some aquatic vegetation including waterlilies, pondweeds and reeds because of its low-lying but still freshwater character (Fryer et al. 2005: 10).
- 4.2.26. A feature of the prehistoric landscapes described above is the remains of former river systems or 'palaeochannels'. These systems incised new valleys into the landscapes, and often cut through previous layers, removing and re-depositing sediments. These include remnants of the pre-Anglian Ancaster River and preserved remains of courses of the Great Ouse and Nene. These rivers passed through the prehistoric dry-land landscape that existed in the Wash in the later Devensian, and would have provided a variety of resources that would attract human occupation (Coles 1998).
- 4.2.27. After 13,000 BP sea levels began to rise again, initially quite swiftly, and the Wash embayment would have undergone significant changes. Evidence from seismic profiles shows that areas of the Wash embayment were probably flooded before

c.6,400 BP (Brew 1997: 140), with the embayment growing slowly larger as sea levels rose and the coastline moved west.

- 4.2.28. At first sea level rise would have brought estuarine conditions to the embayment, before it became a shallow but fully marine embayment. The effect of sea level rise on the Wash during the Holocene is hard to determine precisely, although it is considered that by the Neolithic in 4,000 BC the Norfolk coastline was broadly similar to that of today (Murphy 2005: 6). Evidence from the ‘Seahenge’ site (**WA 1033**) near the entrance to the Wash however, indicates there has been some inland movement of the shore since the Bronze Age (Brennand and Taylor 2003: 2) in this part of the CRSA, before the Post-medieval reclamation established the current shoreline.

### **Known and Potential Terrestrial Archaeology**

- 4.2.29. The landscape within the CRSA has been repeatedly reworked by successive glaciations since the earliest known Lower Palaeolithic occupation of Britain in the Cromerian. In addition, material remains from the earliest periods of occupation in Britain are relatively sparse, so it is necessary to refer to the wider nature of human occupation in Britain and its wider environmental context to establish the potential for its presence within the CRSA.
- 4.2.30. Archaeological remains can be moved from their original site of deposition (primary context) to other locations (secondary context) through glacial movements, and fluvial and marine processes. Despite the extensive reworking of the landscape, some deposits from these earlier periods may survive *in situ* in the North Sea and therefore in the CRSA (Hosfield 2001). Together with possible material in secondary contexts in the CRSA this could provide information relating to patterns of human land use and demography (Hosfield and Chambers 2004).

### **Lower Palaeolithic (700,000 – 245,000 BP)**

- 4.2.31. The recent discovery of worked flints dating to c.700,000 BP at Pakefield in Suffolk, and also in deposits at Happisburgh in Norfolk suggests that the potential for evidence of human occupation in the CRSA may date back at least as far as these new discoveries. The surviving deposits at Pakefield from this period have been identified as part of the Bytham river system, a pre-Anglian river that flowed from midland England and the southern Pennines through North Central East Anglia (Rose et al. 2001: 10).
- 4.2.32. The Ancaster River is another pre-Anglian river system thought to have existed in the region, flowing eastwards through the Wash, possibly at the same time as the Bytham (Rose et al. 2001: 10) (**Figure 8**).
- 4.2.33. Deposits associated with the Ancaster have been identified as part of the Cromer forest-bed formation, which also contained the early flint artefacts from Pakefield (Parfitt et al. 2005: 1008-9). Before the Anglian glaciation the CRSA area is likely to have been part of a low-lying wetland landscape that characterised the southern North Sea that would have been an ideal habitat with a wide range of resources attractive to early humans.

- 4.2.34. The Ancaster River was largely destroyed by subsequent glacial erosion (Rose et al. 2001: 10), although there is a possibility that some material associated with it could survive in a secondary context. As the Wash embayment is also believed to have been largely excavated by ice during the Anglian glaciation, it seems likely that most traces of the Ancaster were destroyed, along with any associated *in situ* pre-Anglian archaeological deposits (Clayton 2000: 811). Any archaeological material of this period remaining in the Wash is unlikely to survive in a primary context.
- 4.2.35. Britain is believed to have been cut off from the European mainland by the rising sea level during the Hoxnian (423,000 – 380,000 BP), although there were probably periods when it existed as a peninsula. Human remains from this period have been found in Swanscombe, Kent, (Wymer 1999: 75) and a flint flake with trimmed edge (**WA1662**), interpreted as Clactonian industry (c. 400,000 BP), was found in Hunstanton in 1951. If the date for this flint is accurate there is the possibility of further material of this date occurring in the CRSA, either in primary context, or as derived material from deposits in the Wash or from the eroding cliffs at Hunstanton.

#### **Middle Palaeolithic (245,000 – 50,000 BP)**

- 4.2.36. There is evidence to suggest that the Wolstonian consisted of a number of cold and warm phases. As Palaeolithic groups appear to have favoured more open landscapes during the cool periods at the beginning and end of interglacial periods, there is the possibility of human occupation at times throughout this period (Wymer 2005: 13). The Middle Palaeolithic Ipswichian interglacial (130,000 BP) has produced no certain evidence of occupation of Britain, and the lack of artefacts from this period suggests Britain may have been uninhabited at this time (Wymer 1999: 33). A number of *in situ* flint artefacts have been recovered from a site of national importance at Lynford Quarry in Mundford, Norfolk, dating to the later Middle Palaeolithic period (65,000 - 32,000 BP) and attributed to Neanderthal inhabitants (Wymer 2005, 13).

#### **Late Upper Palaeolithic and Mesolithic (50,000 – 4,000 BP)**

- 4.2.37. The arrival in Britain of modern, Upper Palaeolithic humans before the onset of the Devensian glacial maximum (35,000 – 49,000 BP) is evidenced by a number of sites in Britain, particularly cave sites such as Kent's Cavern, Paviland and Eel Point (Schulting et al. 2005: 493). Finds from the earlier part of the Upper Palaeolithic are unlikely in the CRSA as the Devensian ice sheet covered the north Norfolk coast (Wymer 2005: 13-14).
- 4.2.38. *In situ* worked flint from Titchwell, c.8km east of the Wash, has been interpreted as belonging to a late Upper Palaeolithic tradition of tool making and may date to just after the glacial maximum (11,000 - 10,000 BC). The extent of human occupation in Britain so soon after the Devensian glaciation is believed to have been very limited (Wymer and Robins 1994: 35-36).
- 4.2.39. As a post-Devensian, *in situ* site within peat deposits exposed by marine erosion, Titchwell suggests some potential for similar sites occurring elsewhere on the Norfolk coast. The nature and effect of marine transgression on the Norfolk coast may have varied substantially due to local conditions however, so the survival of similar deposits in the CRSA is not certain

- 4.2.40. During the Mesolithic (8,500 - 4,000 BC) Norfolk would have formed the western extremity of a great plain extending over what is now the North Sea. Much of what is now referred to as the Wash is thought to have been dry land in the early Mesolithic, rapidly becoming inundated by the middle of the period. From the middle Mesolithic the Wash is likely to have existed as an estuary within the surrounding lowland plain that lay off the present Norfolk coast.
- 4.2.41. In Norfolk the western coast of this plain is likely to have been seaward of today's coastline, while the southern coast of the Wash would have been far inland of its present position. As the sea level rose during the Mesolithic, most of the CRSA would have been inundated, with the exception of the more elevated areas already referred to along the coast in the south east.
- 4.2.42. During the Mesolithic the southern North Sea is likely to have consisted of low-lying fresh and brackish-water wetlands and lagoons supporting animals such as deer and aurochs (Murphy 2005: 6). This is the type of terrain known to have been favoured by Mesolithic hunters and fishers who would have hunted the game and used the waterways to navigate through the landscape
- 4.2.43. Small Mesolithic flint tools known as microliths and distinctive Mesolithic long blades have been found in Norfolk, particularly along waterways, suggesting occupation by small groups of hunter-gatherers during this period (Wymer 2005: 15).
- 4.2.44. There are a number of Mesolithic sites known in Lincolnshire, from upland and low-lying marshlands, which might suggest some early Mesolithic material could survive in the low-lying Wash. In the CRSA a small number of Mesolithic finds are recorded. A tool made from the metatarsal of red deer from an intertidal context near Holme-next-the-Sea (**WA1540**) suggests some preservation of organic Mesolithic material below the current high water mark. There is some question, however regarding the date of this find, and it may date from the early Neolithic.
- 4.2.45. Mesolithic flints from Hunstanton or the Hunstanton cliff section (**WA1455**, **WA1663**, **WA1614**) suggest that some Mesolithic material in the area may be derived from these cliffs.
- 4.2.46. In summary, while there is the potential for Early Mesolithic material in the CRSA, areas of the Wash would have been inundated for much of this period. It is believed that the Fenland shore only began accreting with the influx of marine sediments brought by sea level rise only from the late Bronze Age onwards (c.3,000 BP) (Brew et al. 2000: 269). In addition there has been substantial reclamation of the Fenland shore since Roman times. The effects of natural accretion and human reclamations on the shore mean that some of the evidence for terrestrial, later Mesolithic occupation in the vicinity of the Wash would now be buried some distance inland.

#### **Neolithic (4,000 – 2,400 BC)**

- 4.2.47. By the beginning of the Neolithic (4,000 BC) sea-level in this area had risen to a point approximately 6 metres below its present level (Shennan et al. 2000: 291). The east coast of the Wash would have been further to the west. The chalk cliffs that exist in the Hunstanton area probably existed further to the West, but it is not clear where, as the rate of erosion on the cliffs since this period is not known.

- 4.2.48. During the Neolithic the south western coast of the Wash would have been inland of the present shoreline. The higher elevation of the sections of the south eastern coast of the Wash means that the coast would have been quite close to its present position in places, but where the shoreline sloped more gently it probably lay some distance to the north west of its present position and may have had an extensive intertidal area.
- 4.2.49. A widespread Neolithic presence in Norfolk and Lincolnshire is attested by the presence of flint axes and pottery. The adoption of farming during this period led to a steady increase in population and as during the Mesolithic, activity was once again concentrated around coastal areas and in river valleys. Large numbers of flint finds (**WA1458, WA1459, WA1460, WA1462, WA1476**) have been located on the east coast of the Wash within the CRSA, and evidence of Neolithic flint industry has been found at Hunstanton (**WA1477**).
- 4.2.50. There is no known evidence for Neolithic settlement within the CRSA. The nearest existing settlement of this period lies further inland at West Rudham. This may not be representative of the true pattern of Neolithic settlement in the vicinity however, as other evidence for settlement may have been removed through later land use, or may still remain undiscovered due to the absence of widespread development outside of the existing urban areas (Ashwin 2005: 17). Taking this, and the extended coast of the Neolithic period into consideration there may be some potential for more isolated Neolithic finds and settlement within the CRSA.

#### **Bronze Age (2,400 – 700 BC)**

- 4.2.51. A steady rise in sea level continued throughout the Bronze Age (2,400 - 700 BC). In tandem with this, it is believed that from the late Bronze Age (c.1,000 BC) onwards the Fenland shore began accreting with the influx of marine sediments brought by sea level rise (Brew et al. 2000: 269). This expanded the mudflats and saltmarshes along the coast of the Wash.
- 4.2.52. The Bronze Age saw a rise in human population, although settlement patterns remained similar to those of the Neolithic. Settlement sites from the Bronze Age are notably hard to find in Norfolk, although environmental evidence indicates large-scale land clearance across the county during this period (Ashwin 2005: 21). Much of the CRSA was inundated by this period although some areas remained above the maximum line of transgression along the south east of the CRSA.
- 4.2.53. The most significant archaeological features known from this period within the CRSA are the ‘Seahenge’ site (**WA1485**), and another timber circle (**WA1488**) approximately 95m to the south east of ‘Seahenge’. Evidence from the ‘Seahenge’ site suggests that it was built in a Bronze Age back barrier saltmarsh at Holme-next-the-Sea (Brennand and Taylor 2003: 2-3).
- 4.2.54. Both of these circles were found in the present intertidal zone and became exposed due to natural lowering of the beach level in the area and erosion of the seaward dune system during recent storm events. This exposed the peat deposit in which the circles were preserved. The ‘Seahenge’ circle and its central inverted tree stump was completely excavated and removed in 1999, and the other circle is being recorded as it is exposed by the sea. The process of erosion along this shoreline is continuing,



and it is possible further archaeological deposits may be exposed in future. (Brennand and Taylor 2003: 2-3).

- 4.2.55. During a site visit undertaken by WA in April 2006, large chunks of peat that had clearly been recently eroded from the intertidal zone were recorded on the beaches at Holme-next-the-Sea and Hunstanton, confirming the continued erosion of peat within the intertidal zone (**Plate 2**).
- 4.2.56. A full examination of the archaeology and various interpretations of these timber circle sites lies outside the scope of this assessment, but they do represent a form of Bronze Age ritual practice sited near the boundary between the sea and the land, the exact purpose of which is open to a great deal of speculation. The construction of the monuments would have required the efforts of a large number of people working together and as such illustrate organised Bronze Age activity in the CRSA along the Bronze Age coastline.
- 4.2.57. There are a number of other isolated Bronze Age finds such as pottery and tools recorded within the CRSA, mostly in the Holme and Hunstanton areas (**WA1478, WA1482, WA1484, WA1486, WA1487, WA1489**). Bronze Age remains in the Fenland areas of the CRSA have probably been buried beneath the natural accretion of sediments and human reclamation of the Fenland that have been underway since the late Bronze Age.

#### **Iron Age to Medieval Period (700 BC – 1539 AD)**

- 4.2.58. The maximum transgression of the Fenland coast is believed to have been reached by the late Bronze Age (c.1000 BC), and in this area of the Wash the coastline then began to move seaward due to the build up of sediments brought by transgression. However, this accretion was probably not sufficient for any further terrestrial occupation to have taken place in this part of the CRSA. A quantity of wood and a Roman coin (**WA1504**) of Philip I (3<sup>rd</sup> century AD) was dredged up from the Breast Sands area in the south of the CRSA, but it is not clear whether it represents a terrestrial site located on the post-Bronze Age accreted land surface, a maritime site such as a wreck, derived material or an isolated, *in situ* occurrence.
- 4.2.59. Terrestrial occupation along the top of the cliff line in the Hunstanton area is attested by finds of Iron Age date and later in the town, and from the cliff area. Marine transgression would have contributed to the erosion of the cliffs at Hunstanton, possibly earlier than the late Bronze Age maximum. The exact rate of erosion in the past is not known, so it is possible that there is potential in the CRSA for derived terrestrial material originating from the cliffs of almost any period.
- 4.2.60. The presence of a Saxon fishtrap (**WA1519**) in the intertidal area near Holme suggests the coastline in this part of the CRSA was very close to its present location by that period. The archaeology of the CRSA after this period is predominantly maritime and is discussed separately below.
- 4.2.61. By the end of the Roman period sea level in the CRSA had begun to rise again, although on the Fenland coast of the Wash continued deposition of silts and marine sediments meant the coastline continued to accrete (Grady 1998: 86). This process would have buried earlier archaeological deposits, which means most of the earlier

evidence for coastal occupation in this area is now buried onshore of the high water mark and lies some distance inland of the modern shoreline within the CRSA.

- 4.2.62. Evidence for coastal activity in later periods includes medieval pottery finds (**WA1522**), possible medieval saltpans (**WA1530**) and a possible cockle boiling site near the Great Ouse River (**WA1528**). Hunstanton (**WA1532**) is a medieval town with a number of medieval period finds and sites.

#### **Post-medieval to Modern (1540 AD - Present)**

- 4.2.63. Post-medieval finds include a variety of buildings, including a water tower and churches. Navigational activity is represented by the now disused Hunstanton Lighthouse (**WA1544**) (**Plate 3**).
- 4.2.64. The modern period is dominated by sites related to the defence of the Norfolk coast during World War II, including pillboxes, other gun emplacements, tank traps, road blocks and spigot mortar bases. Many of these structures have been incorporated into modern sea defences and lie above the high water mark, but in some areas the movement of beaches and sand dunes means that some features such as spigot mortar bases (**WA1588**) seen at Holme (**Plate 4**) may be eroding and lie at the upper edges of the intertidal zone.

### **4.3. KNOWN WRECKS AND ANOMALIES**

- 4.3.1. A full listing of all known wrecks and aircraft within the CRSA can be found in **Appendix I**. The status of the sites can be divided into three categories:

<b>Wreck Classification</b>	<b>Number</b>
Live - a wreck/obstruction considered to be a hazard to navigation by the UKHO or to exist by the Receiver of Wreck	29
Dead - a wreck/obstruction not detected by repeated survey and therefore considered to no longer pose a hazard to navigation by the UKHO	7
Unknown - a wreck/obstruction detected by the Norfolk HER and therefore not categorised as Live or Dead	4

**Table 4: Wreck Classification**

- 4.3.2. The known wrecks within the CRSA are generally concentrated in the south and east of the area where the water is shallower and sand banks are more prolific (**Figure 2**). While wrecking may have occurred in the channels leading to King's Lynn and Spalding the intense use of these passages since the Medieval period is likely to have meant the clearance of wrecks, for reasons of navigation, since this period. The known sites within the study are as follows.
- 4.3.3. Only one known pre-20<sup>th</sup> century wreck exists within the CRSA. This is the English brig *Vicuna* (**WA2088**), lost in strong winds in 1883 whilst carrying a cargo of ice. Owned by the Hull ice company the ship was of wooden construction with copper fastenings, sheathed in felt and yellow metal. The wreck was last reported in 2005 when it was noted to be deteriorating.
- 4.3.4. The motor vessel *Grainthorpe* (**WA2089**) was lost in 1920 and is now considered to be buried under the sand.

- 4.3.5. Four wrecks that may have been used as practice targets during WWII exist within the study area. **WA2090** was lost in 1944 and is 21.3m long and has a 6m beam. Of the two barges that make up **WA2093** one is thought to be a tank landing barge measuring 41m long, 11m beam and with a 2.4m draught. It is likely that they were deliberately holed in 1947 to be used as practice targets. **WA2118** is a small barge or landing craft measuring 28.5m long by 7m wide and may have been used as a bombing target in WWII. **WA2092** is a modern wreck that may also be related to WWII but nothing else about it is known. **WA2091** is thought to be British ex-trawler *Sheridan* lost in 1944. It was a radar detection vessel in WWII and later used as a RAF bombing target.
- 4.3.6. Six wrecks within CRSA are known to have sunk between 1972 and 1995. This includes two British yachts *Kings Cruiser* (**WA2094**), an 8.8m long vessel lost in 1972, and *Strumpet* (**WA2097**) lost in 1980. Two British fishing vessels were also lost: *Fertility* (**WA2095**) a 15m long vessel with a beam of 5m lost in 1976 and the 18m long *Myndroom* (**WA2096**) lost in 1979. In 1982 the 14m long ex-military motor torpedo boat *Borderer* (**WA2098**) was lost and in 1995 the 10m long British/Bermudan sloop *Octopussy* (**WA2099**) was lost.
- 4.3.7. Within the study area ten of the known wrecks have no recorded date. There are two possible sailing vessels **WA2112** and **WA2113** the latter which was first reported in 1958. **WA2108** and **WA2109** are two barges and are now both classified as dead. **WA2114** is a concrete coaster first reported in 1958, and **WA2115** is an unknown steamship approximately 100 years old.
- 4.3.8. There are three wrecks of unknown origin: **WA2104**, a wooden wreck first reported in 1960 (**WA2111**) and *Dusty Miller* (**WA2116**), a wreck of which nothing else is currently known.
- 4.3.9. **WA2103** is recorded as a two-masted vessel and was first reported in 1944 with both masts visible. It is noted by the NMR as a possible admiralty wreck although no further confirmation of this is available.
- 4.3.10. Six of the sites within the CRSA are known not to be wrecks. **WA2100** and **WA2102** are modern beacons, **WA2106** is unexploded ordnance, **WA2105** is dumped stone covering a 120m area, and **WA2107** and **WA2110** are the remains of refuse bins.
- 4.3.11. There are a further eleven sites within the study area which are recorded only as obstructions (**WA2101**, **WA2117** and **WA2119-2127**). **WA2119** is classed as a possible wreck by Norfolk HER and measures 15m by 5m. **WA2120** and **WA2121** were first reported in 1917 and are both classified as dead. **WA2125** is classed as a possible wreck by the UKHO. **WA2126** is classed as an obstruction and was first reported in 1971. **WA2127** is classified as a foul and was first detected by fishermen.

#### 4.4. RECORDED LOSSES AND ARCHAEOLOGICAL POTENTIAL FOR FURTHER MARITIME SITES

- 4.4.1. The list of known maritime sites within the CRSA shows a bias that is a result of a reliance predominantly on UKHO survey records. The distribution of known wreck sites may reflect the intensity of past UKHO surveys in areas important to navigation rather than a true indication of the number and extent of all vessel remains across the

entire seabed of the CRSA. The UKHO data also reflect the UKHO's concern in identifying metal wrecks that present a hazard to navigation.

- 4.4.2. In addition to the known sites in the CRSA, there are records of vessels lost in the area for which the exact position and extent of survival (if any) is not known. Records of these losses are limited in what they can tell us about the true extent of past losses as they are generally dependent on the survival written records, and records of losses were not systematically kept until the 18th century. Even then, the records cannot be considered comprehensive.
- 4.4.3. As the known and recorded sites in the CRSA may not be representative of the true number of sites that survive there, the potential for as yet unrecorded and unknown archaeological material representing the past maritime use of the CRSA is considered here in addition to the recorded losses.
- 4.4.4. The NMR records 172 losses within the CRSA. The earliest recorded losses are an unnamed ship lost in 1308 (**WA2128**) on a voyage between England and Flanders and the *Solebay* (**WA2129**), a sixth rate ship of the line lost in 1709. The most recent loss is a military training aircraft lost in 1951 (**WA2296**). A breakdown of the recorded losses is displayed in **Table 5** below:

<b>Date of Loss</b>	<b>No of wrecks</b>	<b>No of Aircraft</b>
Pre 1709	1	0
1709 – 1749	1	0
1750 - 1849	85	0
1850 – 1913	62	0
1914 – 1918	3	0
1919 – 1938	0	1
1939 – 1945	0	15
1946 – 2001	1	0
Unknown	3	0
<b>Totals</b>	<b>156</b>	<b>16</b>

**Table 5: Wrecks and Aircraft classified by date of loss**

- 4.4.5. As noted above the list of recorded losses in the CRSA is not comprehensive, and it is possible that no records exist for many lost vessels. Estimates of the true number of vessels lost around the UK coast vary substantially, and cannot be considered wholly reliable, but ‘best guesses’ suggest anything from 100,000 - 500,000 losses. This gives an average of between 8 and 40 wrecks for every mile of coastline, which suggests that the CRSA, which covers c.45km (c. 28 miles) of coastline, could conceivably contain between c.220 and 1120 wrecks.
- 4.4.6. The inundation of the Wash is believed to have occurred during the Mesolithic so exploitation of the coastal region by boat may also have taken place in this period. While this implies potential for Mesolithic finds within the Wash, the survival of wooden artefacts of this date would be extremely unusual.
- 4.4.7. It is possible that the Neolithic inhabitants of the area made use of water transport to exploit the resources of the Wash and its waters in vessels such as log boats which are well documented from this period (McGrail 2004: 173). The possible use of the

Wash as a focus for vessels used in seafaring across the southern North Sea at this time is speculative, but McGrail suggests distributions of stone artefacts within the British Isles indicate a seafaring tradition dating to the Neolithic (2004: 171).

- 4.4.8. Vessels dating to the Bronze Age have been discovered to the north, in the Humber Estuary. The Brigg raft and Ferriby boats are believed to have been restricted to tidal waters, and possibly used as cargo ferries on the Humber (McGrail 2004: 184-188). Similar vessels may have been used in the Wash during the Bronze Age, and the possibility of coastal traffic, possibly engaged in voyages across the southern North Sea cannot be excluded.
- 4.4.9. The large quantity of gold required for the manufacture of torcs found in Norfolk may indicate that people in the north and west of Norfolk obtained substantial wealth in gold by controlling trade in and out of the Wash (Hutcheson 2005: 26). By the Roman period, maritime activity in the area can be inferred from the late Roman construction of shore forts.
- 4.4.10. One of the earlier shore forts was built in the 3<sup>rd</sup> century AD at Brancaster to the east of the CRSA and another is suspected on the opposite side of the Wash at Skegness (Pearson 2002: 54-55). These forts have been interpreted as defensive structures against attacks by seaborne raiders, but they probably functioned primarily as centres for coastal trade (Gurney 2002: 5). Either interpretation suggests maritime activity in the Wash throughout this period. In addition there is speculation that a 'ferry' crossed the Wash in this period (Robinson 1981: 13).
- 4.4.11. The seafaring abilities of the people who settled Britain from the continent, including the Angles (who lent their name to the modern region of East Anglia) are clearly evident from the well known Saxon period boat burials at Sutton Hoo and Snape (Carver 1990: 117).
- 4.4.12. The later Viking centres of activity to the north west in the Humber and the major settlement in York and around the North Sea coast of the UK, illustrate the possibility of vessels from this period crossing the waters of the CRSA (Binns 1985: 50-56). Raids and large-scale landings by Vikings from Denmark and Norway are known in this region in the 9th century although the precise location of many of these landings is not clear (Wade-Martins 1997: 27).
- 4.4.13. The earliest recorded loss for the CRSA dates to AD 1308 (**WA2128**) and points to trade between Flanders and this part of England. The Wash area is home to the ports of King's Lynn (known as Bishop's Lynn until the mid 16<sup>th</sup> century but commonly referred to as Lynn) and Boston and the waters of the CRSA would have had substantial traffic travelling to and from these ports. Lynn was a major port of the medieval period, flourishing after the Norman Conquest. Its position on the Great Ouse allowed it to serve as a port for an extensive hinterland in West Norfolk and Suffolk (Rutledge 2005: 78)
- 4.4.14. Lynn supported an extensive foreign trade at various times in the past, exporting corn, wool, cloth and herring. In the 13<sup>th</sup> century the port of Lynn collected the fourth highest duties of any south or east coast port, including London (Rutledge 2005: 78).

- 4.4.15. Bishop's Lynn was in decline by the 15<sup>th</sup> century, but it became very active again during the 16<sup>th</sup> century with coastal traffic in coal from Newcastle. Smaller ports on the Norfolk coast of the Wash are believed to have suffered from the continued coastal accretion in the area, although many remained engaged in the fishery trade, and these vessels could also have engaged in coastal trade or longer voyages across the North Sea (Rutledge 2005: 78).
- 4.4.16. The waters of the Wash are noted as hazardous in sailing directions from the 19<sup>th</sup> century:
- ‘... Lynn Deep and the Wash, is for the most part occupied by numerous and dangerous sands.’ (North Sea Pilot 1858: 100)
- 4.4.17. Further sailing directions from 1914 note:
- ‘The rapidity of the tides in this deep bight, the low character of its shores, and the mist which almost constantly prevails, render this the most difficult portion of the navigation of the east coast...’ (North Sea Pilot 1914: 181)
- 4.4.18. These statements make it clear that the waters of the Wash are and were hazardous and the potential for wrecked vessels in the Wash, possibly dating as far back as the Mesolithic, is high. The surviving remains of any known and unknown wrecks may also be widely spread across the seabed, beyond the original confines of the vessels' hull, depending on the circumstances of loss and the effects of post-depositional processes. These remains may contain significant elements of structure, artefacts and stratified deposits, and consequently they must be considered an integral part of the wreck site.
- 4.4.19. In addition to the potential for shipwrecks within the CRSA, there is potential for stray finds of items lost or thrown overboard from vessels crossing the area that may indicate past sea routes.
- 4.4.20. In summary, the marine archaeological potential for the CRSA consists of:
- 40 known wrecks and obstructions in the CRSA.
  - 172 documented shipping losses some of which may lie within the CRSA, or potentially within the DSSA and RBSA.
  - Unknown and undocumented wrecks or other watercraft from various periods possibly dating back to the Mesolithic.
  - Stray finds of ship borne debris from various periods.

## **4.5. IMPORTANCE OF THE KNOWN SITES**

- 4.5.1. Ten of the known sites within the CRSA, dating from the 20<sup>th</sup> century, are of possibly limited archaeological importance. While those associated with the World Wars are also of possibly limited archaeological importance, they should be viewed within the context of English Heritage initiatives in the form of the Defence of Britain Project on the recording of wartime remains (English Heritage 2003). This initiative has not yet been formulated as formal guidance that clearly states that the sites in question are of a specified level of importance, but in this instance it may be

appropriate to assume that **WA2092**, as a possible WWII wreck has special importance.

- 4.5.2. Little information is readily available for the English brig *Vicuna* (**WA2088**) wrecked in 1883. The 19<sup>th</sup> century was a period of unprecedented industrial development (Greenhill 1980: 22) and saw the wooden merchant sailing ship gradually develop, becoming larger, shallower and sharper in hull shape. In terms of tonnage, the size of the largest British-built ordinary merchant ships roughly doubled between 1820 and 1860 (Greenhill 1980: 20-23). This trend was quickly reversed with the development of steamships that could compete with the sailing merchant vessels and by 1870 iron vessels were more common than wooden ships in Britain (Greenhill 1980: 30).
- 4.5.3. The potential importance of the *Vicuna* hinges partially on the date it was built, whether at the height of construction of vessels of this type in the early to mid-1800s or later in the period as the number of vessels of this type diminished. Depending on a number of factors this vessel may be of importance to the archaeological record but this is currently unquantifiable with the information available.
- 4.5.4. **WA2115** may also be of archaeological interest if it is, as suggested, a late nineteenth or early 20<sup>th</sup> century steamboat. Again importance is unquantifiable based on the information available.
- 4.5.5. The remainder of the known wrecks have little or no information associated with them and therefore their importance is unknown.
- 4.5.6. There are a number of undated and unidentified sites noted in the intertidal area near Holme-next-the-Sea. Given the national if not international importance of the Bronze Age “Seahenge” site, and the other less famous but no less important timber circle also found near Holme, the other undated and unidentified sites could possibly be of national or international importance once they have been properly dated and identified.

#### **4.6. IMPORTANCE OF ANY UNKNOWN SITES**

- 4.6.1. Any further wreck sites that come to light during the course of development will have to be assessed for importance on a site by site basis. A level of importance from negligible to wrecks of international importance is possible for each site.
- 4.6.2. Although no submerged prehistoric remains are known at the present time, were any to come to light during the course of the development they are likely to be of national or international importance. This assessment is based on the relative paucity of such sites within the British and European record.
- 4.6.3. The importance of any isolated chance finds of submerged prehistoric material is more problematic. Although the finds themselves will be associated with a high level of importance, where they are derived (i.e. removed from their original depositional context) the physical area from which they come may not necessarily be important.
- 4.6.4. *England’s Coastal Heritage* notes that the Wash has an apparent lack of intertidal archaeology as much of the Saxon and medieval intertidal zones are now extensively buried under more recent land reclamations. While, this is true of the Fenland edges

of the Wash, certain areas such as those near Holme have not undergone reclamation and must be considered to be of high potential. The reduction of the beach deposits in this area suggest further as yet unknown material may be exposed which may be of national or international importance.

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Reference	Date	Title	Seen	Copy
OCB108	1843-2006	The Wash – Skegness to Blakeney	Y	N
OCB1177	1920-1985	Approaches to Kings Lynn and Wisbech	Y	N
OCB1455	1843-1874	England East Coast Sheet IV from Cromer to Trusthorpe	Y	N

**APPENDIX I: GAZETTEER OF MARITIME ARCHAEOLOGICAL SITES****KNOWN WRECKS AND OBSTRUCTIONS THAT LIE WITHIN THE CRSA**

WAID	UHKO/HER ID	State	Name	Description	Date Lost	UTM Easting	UTM Northing	Notes
WA2088	MNF21961/ NMR1198073	Unknown	Vicuna	English Brig. Owned by the Hull ice company. Lost in strong winds whilst carrying a cargo of ice. Felt and yellow metal; copper fastened	1883	335531	5872801	Possibly related to UKHO10173
WA2089	UKHO8583/ NMR907534	Live	Grainthorpe	British motor vessel. Considered to be submerged under sand	10/11/1920	332093	5877034	
WA2090	UKHO10125/ NMR892275	Live	Unknown	Barge. Bombing target. Length: 21.3, beam: 6m	15/06/1944	319870	5854805	
WA2091	UKHO10167/NMR9 07510/NMR134972/ MNF38608	Live	Sheridan (possibly)	British ex-trawler. Reported to have been used as radar detection vessel WWII. Later used as RAF target	1944	331594	5869692	
WA2092	MNF38248	Unknown	Unknown	Modern wreck. Located from RAF aerial images. 71 x 15m	WWII	317174	5855601	
WA2093	UKHO10126/ NMR892276	Live	Unknown	2 target barges. One tank landing barge. Dry out at low tide. Length: 41, beam: 11, draught: 2.4m	09/06/1947	316934	5855470	
WA2094	UKHO10142	Live	King's cruiser	British yacht. 8.8 metres long	21/04/1972	329757	5871611	
WA2095	UKHO10141	Live	Fertility	British motor fishing vessel. Length: 15, beam: 5m	17/11/1976	327499	5871135	
WA2096	UKHO8589	Live	Myndroom	British fishing vessel. 18.3m long	01/03/1979	343250	5880059	
WA2097	UKHO9024	Live	Strumpet	British yacht	12/08/1980	327672	5885324	
WA2098	UKHO10160	Live	Borderer	Ex motor torpedo boat. 14m long	01/11/1982	318563	5871871	
WA2099	UKHO10174	Live	Octopussy	British Bermudan sloop. Length: 10, draught: 1.5m	20/09/1995	324205	5862628	
WA2100	UKHO10175	Live	Obstruction	Ruined beacon	Feb 1996	317376	5859014	
WA2101	UKHO60310	Live	Obstruction	Obstruction	2001	322676	5862990	
WA2102	UKHO62056	Dead	Foul	Remains of beacon	2003	323625	5863624	
WA2103	UKHO10133/ NMR913176	Live	Unknown	Two masted vessel thought to be an admiralty wreck. First reported in 1944	Unknown	312675	5862064	

WAID	UHKO/HER ID	State	Name	Description	Date Lost	UTM Easting	UTM Northing	Notes
WA2104	UKHO10128/ NMR913175	Live	Unknown	Wreck	Unknown	314639	5859642	
WA2105	UKHO10132	Live	Foul	Dumped stone. Covers a 120m area	Unknown	315251	5861474	
WA2106	UKHO10156	Live	Unknown	Unexploded ordnance	Unknown	315836	5859131	
WA2107	UKHO10129	Live	Obstruction	Remains of refuse bin	Unknown	317681	5860361	
WA2108	UKHO10134	Dead	Unknown	Sunken barge	Unknown	320046	5862067	
WA2109	UKHO10131	Dead	Unknown	Sunken barge	Unknown	320734	5860854	
WA2110	UKHO10130	Dead	Obstruction	Remains of refuse bin	Unknown	324081	5860310	
WA2111	UKHO10137/ NMR892311	Live	Unknown	Wooden wreck. First reported 1960	Unknown	328631	5866703	
WA2112	UKHO8593/ NMR913195	Live	Unknown	Sailing vessel. First reported 1958	Unknown	329598	5882410	
WA2113	UKHO8592/ NMR913194	Live	Unknown	Possible remains of sailing vessel	Unknown	330219	5881389	
WA2114	UKHO8595/NMR89 2342/NMR913196	Live	Unknown	Concrete coaster. First reported 1958	Unknown	331521	5883580	
WA2115	UKHO8600/ NMR913198	Live	Unknown	Steamboat believed to be approximately 100 years old	Unknown	334284	5888485	
WA2116	UKHO8586	Live	Dusty Miller		Unknown	335501	5877834	
WA2117	UKHO8599	Live	Unknown		Unknown	337048	5888235	
WA2118	MNF42599	Unknown	Unknown	Modern. Small barge or landing craft, 28.5 x 7m. Possible bombing target	Unknown	335531	5872801	Possibly related to UKHO10126
WA2119	MNF43027	Unknown	Unknown	Possible wreck. 15 x 5m in size	Unknown	324073	5859840	
WA2120	UKHO10135	Dead	Unknown	First reported in 1917	Unknown	314512	5863667	
WA2121	UKHO10136	Dead	Unknown	First reported in 1917	Unknown	326777	5866614	
WA2122	UKHO10173	Live	Unknown		Unknown	335256	5872720	
WA2123	UKHO8585	Live	Unknown		Unknown	321428	5878058	
WA2124	UKHO10127	Dead	Unknown		Unknown	320147	5856143	
WA2125	UKHO10159/ NMR892307	Live	Obstruction	Unidentified obstruction reported by fishermen. Possible wreckage or a submerged feature.	Unknown	322835	5865537	
WA2126	UKHO8597	Live	Obstruction	First reported in 1971	Unknown	334775	5887209	

WAID	UHKO/HER ID	State	Name	Description	Date Lost	UTM Easting	UTM Northing	Notes
WA2127	UKHO8596/ NMR892345	Live	Foul	Fisherman's fastener	Unknown	334970	5886234	

### DOCUMENTED LOSSES WITHIN THE ARCHAEOLOGICAL DATA SEARCH AREA

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
WA2128	926649	3	Unknown	Wreck of craft which stranded at Terrington St. Clement en route from Flanders to England; a wooden sailing vessel.	1308	319054	5854929
WA2129	1030311	11	Solebay	British sixth rate ship of the line which stranded on lynn knock while escorting a convoy of ships in the north sea. Built in 1694, she was a wooden sailing vessel.	1709	329643	5884145
WA2130	926716	13	Unknown	Swedish cargo vessel	1763	330776	5868788
WA2131	926718	14	Sophia Albertina	Swedish cargo vessel	1764	330777	5868798
WA2132	1386103	15	Tryal	English craft which was wrecked near Thornham; a wooden sailing vessel.	1765	334265	5872384
WA2133	1320348	14	Adventure	British cargo vessel which was beached near Hunstanton on her passage from Kings Lynn to Newcastle-upon-Tyne with corn and flour; a wooden sailing vessel.	1767	330777	5868798
WA2134	1386614	14	Industry	English cargo vessel which was lost near Hunstanton en route to Kingston-Upon-Hull with wheat; a wooden sailing vessel.	1771	330777	5868798
WA2135	1325753	15	Hope	British cargo vessel	1771	334265	5872384
WA2136	1217090	18	Hope	British craft	1771	327815	5857948
WA2137	926747	13	Good Intent	English craft	1772	330776	5868788
WA2138	1217120	5	Eight Friends	English craft which foundered off Kings Lynn, possibly after departing from Brancaster; a wooden sailing vessel.	1773	323075	5872784
WA2139	1311399	6	Anna Maria	German brigantine	1774	324859	5875497
WA2140	1301906	6	Unknown	Craft	1775	324859	5875497
WA2141	1301908	6	Unknown	Craft	1775	324859	5875497
WA2142	1301903	6	Unknown	Craft	1775	324859	5875497
WA2143	1301930	6	William And	British cargo vessel which foundered following a collision off King's	1776	324859	5875497

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
			Ann	Lynn, en route from Sunderland to king's lynn with coal; a wooden sailing vessel.			
WA2144	1387304	8	Brothers Endeavour	English cargo vessel which foundered in the well after springing a leak on her passage from Sunderland to great Yarmouth with coal; a wooden sailing vessel.	1776	326668	5879150
WA2145	1324487	6	John And Sarah	English craft	1777	324859	5875497
WA2146	1387330	6	Forrest	English craft which foundered near Lynn deep; a wooden sailing vessel.	1777	324859	5875497
WA2147	1328352	5	Samuel	British craft which foundered in the wash en route from Blyth to Herne Bay; a wooden sailing vessel.	1786	323075	5872784
WA2148	1390033	6	Wasp	British brig which foundered in Lynn deep on her passage from Sunderland with coal; a wooden sailing vessel.	1787	324859	5875497
WA2149	926776	6	Endeavour	British craft	1789	324859	5875497
WA2150	1384568	6	Sunderland	British collier which foundered in lynn deeps en route from sunderland to london with coal; a wooden sailing vessel.	1789	324859	5875497
WA2151	1336286	6	Jannet	English cargo vessel which was lost near Lynn deeps en route from Sunderland to Rotterdam with coal; a wooden sailing vessel.	1792	324859	5875497
WA2152	1336237	17	John And Ann	English craft which stranded on Burnham flats; a wooden sailing vessel.	1792	343546	5882281
WA2153	1391845	6	Friends Increase	English craft which foundered in Lynn deep; a wooden sailing vessel.	1793	324859	5875497
WA2154	1393291	6	Courageux	French lugger which foundered in Lynn deep following gun action and capture by an English collier. On a privateering cruise from Dunkirk, she was a wooden sailing vessel.	1797	324859	5875497
WA2155	1393459	10	Aurora	English cargo vessel which stranded near Heacham en route from Kingston-Upon-Hull to King's Lynn; a wooden sailing vessel.	1798	328340	5863314
WA2156	1393937	11	Unknown	Brig which stranded on Lynn knock during a gale; a wooden sailing vessel.	1800	329643	5884145
WA2157	1338964	8	Providence	English craft which foundered in the well deep; a wooden sailing vessel.	1802	326668	5879150
WA2158	1339363	6	Cotton Planter	English craft	1803	324859	5875497
WA2159	1397719	6	Lynn Packet	English packet which foundered in Lynn deep; a wooden sailing vessel.	1806	324859	5875497
WA2160	1340464	6	Medea	British collier which foundered in King's Lynn roads en route from	1807	324859	5875497

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
				Newcastle-Upon-Tyne to King's Lynn with coal; a wooden sailing vessel.			
WA2161	1340542	6	Ventriloquist	Craft	1807	324859	5875497
WA2162	1341582	6	Union	English craft which foundered near Lynn roads; a wooden sailing vessel.	1810	324859	5875497
WA2163	1401496	6	John And Sarah	English cargo vessel which foundered off Boston after springing a leak. En route from Sunderland to Boston with coal, she was a wooden sailing vessel.	1814	324859	5875497
WA2164	1401644	17	Endeavour	English cargo vessel which stranded on Burnham flats with her cargo of coal; a wooden sailing vessel.	1814	343546	5882281
WA2165	1343376	17	Unknown	Craft which stranded on Burnham flats; a wooden sailing vessel.	1814	343546	5882281
WA2166	1343383	17	Elizabeth And Mary	English cargo vessel which stranded on Burnham flats; a wooden sailing vessel.	1814	343546	5882281
WA2167	1344180	1	Ceres	Welsh craft	1815	316602	5864484
WA2168	1344794	15	William And Jane	Craft	1816	334265	5872384
WA2169	1218616	17	Leipsic	Craft which stranded on Burnham flats en route from Newcastle-Upon-Tyne to London; a wooden sailing vessel.	1816	343546	5882281
WA2170	1346835	5	Hester	English craft	1820	323075	5872784
WA2171	1346833	5	Unknown	Sloop	1820	323075	5872784
WA2172	1346834	5	Alliance	English craft	1820	323075	5872784
WA2173	1346836	6	Unknown	Brig	1820	324859	5875497
WA2174	1346747	14	Pandora	English craft	1820	330777	5868798
WA2175	1348672	6	Lord Wellington	British craft which foundered off Boston during a gale; a wooden sailing vessel.	1821	324859	5875497
WA2176	1348709	6	Endeavour	English craft which foundered in Lynn roads during a gale; a wooden sailing vessel.	1821	324859	5875497
WA2177	1349453	1	Fortune	English cargo vessel which was wrecked at the entrance to Lynn channel, bound for Wisbech with coal; a wooden sailing vessel.	1822	316602	5864484
WA2178	930137	4	Economy	English sloop	1822	320485	5863230
WA2179	930136	5	Providence	English craft	1822	323075	5872784
WA2180	1349547	6	Sophia	English galliot which foundered off Boston during a gale. Bound from Sunderland to Southwold, she was a wooden sailing vessel.	1822	324859	5875497
WA2181	1351099	5	Agenoria	English craft	1823	323075	5872784
WA2182	1351101	6	Neutral	English schooner which capsized and was wrecked in lynn roads	1823	324859	5875497



WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
			Fisher	during a gale; a wooden sailing vessel.			
WA2183	1351885	14	Vrow Wickgardina	Cargo vessel	1824	330777	5868798
WA2184	1358796	17	Christina	British brig	1824	343546	5882281
WA2185	1219027	6	Haphazard	English humber sloop which foundered in Lynn roads en route from Kingston-Upon-Hull to King's Lynn. Laden with deals and tar, she was a wooden sailing vessel.	1825	324859	5875497
WA2186	1359957	10	Peggie	English craft	1825	328340	5863314
WA2187	1315839	5	Neutral	British cargo vessel which foundered off king's Lynn while en route from London to Wisbech. Laden with nuts and oranges, a wooden sailing vessel.	1826	323075	5872784
WA2188	1236800	6	Fortune	British cargo vessel	1827	324859	5875497
WA2189	1348580	15	Ocean	English brig	1827	334265	5872384
WA2190	1237122	16	Lottery	English cargo vessel	1827	339016	5880573
WA2191	1357622	12	Farmer	Scottish craft	1828	329761	5871616
WA2192	1315929	6	Unknown	English barque	1829	324859	5875497
WA2193	1356190	11	Wilton	Craft	1829	329643	5884145
WA2194	1237179	16	Vine	Scottish craft which stranded on the woolpack on her passage from Perth to London. Constructed of wood, she was a sailing vessel.	1830	339016	5880573
WA2195	1237918	1	Augusta	Prussian cargo vessel	1832	316602	5864484
WA2196	1316121 /131610 3	5	Unknown	Craft which foundered between the outer knock buoy and the long sand; a wooden sailing vessel.	1833	323075	5872784
WA2197	1238107	5	John	British craft which foundered off King's Lynn during a gale, while en route from Blyth to Dover; a wooden sailing vessel.	1833	323075	5872784
WA2198	1316122	5	Unknown	Craft which foundered between the outer knock buoy and the long sand; a wooden sailing vessel.	1833	323075	5872784
WA2199	927734	6	Margaret	English brig which foundered in lynn roads during a gale; a wooden sailing vessel.	1833	324859	5875497
WA2200	927733	6	Amicus	English craft	1833	324859	5875497
WA2201	1238105	7	Lucy And Mary	English craft	1833	326049	5862091
WA2202	928418	7	Nil Desperandum	English smack	1833	326049	5862091

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
WA2203	1238009	9	Gute Verwachting	Dutch craft which stranded on Snettisham beach following a gale, having apparently been abandoned; a wooden sailing vessel.	1833	328048	5861280
WA2204	1238008	9	Mayflower	British craft which stranded on Snettisham beach during a gale, while on her passage from Seaham; a wooden sailing vessel.	1833	328048	5861280
WA2205	927732	6	Peggy	Craft	1834	324859	5875497
WA2206	1316130	11	Heckington	English craft	1834	329643	5884145
WA2207	1238295	17	Ant	English craft	1834	343546	5882281
WA2208	1238288	6	Ann	English craft	1836	324859	5875497
WA2209	1350305	6	Unknown	Unknown lighter	1836	324859	5875497
WA2210	1350417	7	Maria	English cargo vessel which stranded on the breast sand after grounding on the bulldog sand on her passage from King's Lynn. Laden with rye, she was a wooden sailing vessel.	1836	326049	5862091
WA2211	1239681	19	Themis	French cargo vessel	1841	334359	5875164
WA2212	928949	8	Integrity	British craft	1842	326668	5879150
WA2213	1316393	16	Donaldson	English craft	1842	339016	5880573
WA2214	928936	17	Henry Davis	English cargo vessel	1842	343546	5882281
WA2215	942821	11	Lord Mountstewart	Irish brig	1853	329643	5884145
WA2216	927845	15	Skytsengelen	Danish sloop	1853	334265	5872384
WA2217	1243988	17	Goddens	English craft	1853	343546	5882281
WA2218	927869	13	Robert	Polish brig	1854	330776	5868788
WA2219	927860	15	Montezuma	Canadian cargo vessel	1854	334265	5872384
WA2220	1245319	15	Minerva	English craft	1854	334265	5872384
WA2221	1245335	15	Jane	English cargo vessel	1854	334265	5872384
WA2222	927871	17	London	English barque	1854	343546	5882281
WA2223	1300799	10	Sarepta	English brig	1861	328340	5863314
WA2224	927899	12	Undaunted	English schooner	1861	329761	5871616
WA2225	1245430	6	True Friends	English snow	1866	324859	5875497
WA2226	943067	6	Medora	English cargo vessel	1867	324859	5875497
WA2227	927945	6	Enterprise	Welsh brigantine	1867	324859	5875497
WA2228	1341950	14	Speedwell	English cutter	1868	330777	5868798
WA2229	1384613	11	Orb	English brig which stranded on lynn knock sands. This sailing vessel	1871	329643	5884145

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
				was constructed from wood.			
WA2230	942831	11	James	English brig	1871	329643	5884145
WA2231	942830	11	Regina	English brig	1871	329643	5884145
WA2232	928643	16	Fidget	English sloop	1879	339016	5880573
WA2233	1221281	1	Endeavour	English sloop	1880	316602	5864484
WA2234	1221232	15	New Catherine	English smack	1880	334265	5872384
WA2235	1302414	5	Henretta	English sloop	1881	323075	5872784
WA2236	1315879	14	Unknown	Sloop	1881	330777	5868798
WA2237	1221785	1	Mary Ann	English sloop	1882	316602	5864484
WA2238	1221755	4	Saucy Polly	English dandy	1882	320485	5863230
WA2239	928988	16	Garibaldi	English cutter	1882	339016	5880573
WA2240	928402	8	Johanna	Danish schooner	1883	326668	5879150
WA2241	1347636	15	Margaret	Norwegian barque	1883	334265	5872384
WA2242	928415	17	Fraternitas	Norwegian brig	1883	343546	5882281
WA2243	928440	13	Alabama	Swedish barque	1884	330776	5868788
WA2244	928445	15	New Defiance	English cutter	1884	334265	5872384
WA2245	928486	2	Queen	English smack	1886	317621	5861846
WA2246	928468	10	Doris	Norwegian brig	1886	328340	5863314
WA2247	928649	5	Greyhound	British smack	1887	323075	5872784
WA2248	1347779	7	Good Intent	English smack	1887	326049	5862091
WA2249	928487	17	Venus	Norwegian schooner	1887	343546	5882281
WA2250	928492	1	Joseph And Mary	British cutter	1889	316602	5864484
WA2251	1347994	7	Golden Hair	British smack	1889	326049	5862091
WA2252	928686	13	Salacia	English brig	1889	330776	5868788
WA2253	928505	2	John And Mary	English lugger	1890	317621	5861846
WA2254	928496	13	Prosperity	English ketch	1890	330776	5868788
WA2255	928502	13	Seagull	British cutter	1890	330776	5868788
WA2256	928513	6	Advance	English brigantine	1891	324859	5875497
WA2257	1348436	15	Rensche	German schooner	1892	334265	5872384

<b>WA ID</b>	<b>NMR ID</b>	<b>NLO</b>	<b>Name</b>	<b>Description</b>	<b>Date</b>	<b>UTM Easting</b>	<b>UTM Northing</b>
WA2258	928259	17	Felix	German brig	1892	343546	5882281
WA2259	1351808	6	Tankerton Tower	English schooner	1893	324859	5875497
WA2260	1348619	14	Katy And Hanna	Swedish brig	1893	330777	5868798
WA2261	1348588	15	Maria	Norwegian galliot	1893	334265	5872384
WA2262	928292	10	Amalie	Norwegian brig	1895	328340	5863314
WA2263	928304	16	Silver King	English ketch	1896	339016	5880573
WA2264	1351909	20	Eagle	English schooner	1896	312331	5855558
WA2265	928334	16	John Lee	English ketch	1897	339016	5880573
WA2266	928347	6	Acorn	Norwegian schooner	1898	324859	5875497
WA2267	928694	9	Chance	British sloop	1899	328048	5861280
WA2268	930147	12	Northumberl and	English ketch	1903	329761	5871616
WA2269	927501	21	Evening Star	English ketch	1905	322862	5851446
WA2270	1348003	1	Wick Bay	English cargo vessel	1908	316602	5864484
WA2271	927530	1	Victor	English smack	1908	316602	5864484
WA2272	927534	5	Lizzie	English smack	1909	323075	5872784
WA2273	927563	5	Unknown	English lugger	1911	323075	5872784
WA2274	1225434	6	Caprice	Norwegian schooner	1911	324859	5875497
WA2275	1225605	17	Good Cheer	Scottish lugger	1912	343546	5882281
WA2276	1226081	7	Fox	English sloop	1913	326049	5862091
WA2277	1349202	17	Nancy	English schooner	1914	343546	5882281
WA2278	1225989	10	Panther	English ketch	1916	328340	5863314
WA2279	1349396	5	Hms Oceans Gift Ii	British fishing vessel	1917	323075	5872784
WA2280	1324420	14	Avro 504k E3760	British trainer	1925	330777	5868798
WA2281	1399688	5	Heinkel He1115b S4+Gh	German Heinkel he 111 bomber which was shot down in the wash.	1939	323075	5872784
WA2282	1399693	5	Heinkel He 1115b S4+Dh	German Heinkel he 111 bomber which was shot down in the wash. It was part of the coastal flying corps.	1939	323075	5872784

WA ID	NMR ID	NLO	Name	Description	Date	UTM Easting	UTM Northing
WA2283	1357686	5	Hurricane Mk I V7376	British fighter	1940	323075	5872784
WA2284	1352258	5	Armstrong Whitworth Whitley Mk V T4201	British heavy bomber	1940	323075	5872784
WA2285	1322653	5	Wellington Mk Ic P9276	British bomber	1940	323075	5872784
WA2286	1329643	12	Master Mk I N7510	British trainer	1941	329761	5871616
WA2287	1322741	3	Wellington Mk Ic R1470	British bomber	1941	319054	5854929
WA2288	1354560	17	Whitley Mk V Z9204	British heavy bomber	1941	343546	5882281
WA2289	1355156	17	Martinet Mk I Hp464	British target tug	1943	343546	5882281
WA2290	1318466	5	Mosquito Mk Ii Dz305	British fighter	1943	323075	5872784
WA2291	1357010	1	Master Mk Ii Em330	British trainer	1944	316602	5864484
WA2292	1356979	5	Stirling Mk III Eh960	British heavy bomber	1944	323075	5872784
WA2293	1356978	5	Lancaster Mk Iii Ed826	British heavy bomber	1944	323075	5872784
WA2294	1340802	14	Wellington Mk Xiii Mf234	British bomber	1944	330777	5868798
WA2295	1317710	17	Mosquito Mk Ii Dd629	British fighter	1944	343546	5882281
WA2296	1349848	6	Unknown	Unknown brig	1951	324859	5875497
WA2297	892339	22	Unknown	Craft	Unknown	330103	5881435
WA2298	892347	23	Unknown	Unidentified seabed obstruction reported by fishermen. Possibly indicative of wreckage or a submerged feature.	Unknown	334774	5887209
WA2299	892348	24	Unknown	Unidentified wreck or obstruction	Unknown	336932	5888280

**APPENDIX II: KNOWN TERRESTRIAL SITES WITHIN CRSA**

<b>WAID</b>	<b>HER(MNF)/ NMR ID</b>	<b>Description</b>	<b>Date</b>	<b>UTM Easting</b>	<b>UTM Northing</b>
WA1453	MNF1144	Flint flakes	Palaeolithic	331094	5868056
WA1454	NMR356788	Flint flakes	Palaeolithic	331413	5868573
WA1455	MNF1101	Flint Blade	Mesolithic	333371	5870233
WA1456	NMR 867878	Probable Mesolithic flints were found.	Mesolithic	331912	5868539
WA1457	MNF1088/NM R356791	Tool of metatarsal of red deer picked up at "The Firs" beach embedded in lump of peat washed up by the sea	Mesolithic/ Neolithic	333826	5871788
WA1458	MNF1144	Flint flakes	Neolithic	331094	5868056
WA1459	MNF1147	Polished axehead	Neolithic	333281	5871092
WA1460	NMR356792	A Neolithic flaked flint axe	Neolithic	333166	5871138
WA1461	MNF1250	Flint fabricator	Neolithic	331326	5867789
WA1462	MNF1251	Flint artefacts	Neolithic	331483	5868179
WA1463	MNF1255/NM R356773	Flaked axehead	Neolithic	332818	5870061
WA1464	MNF1256/NM R356807	Knife with polished edges	Neolithic	333462	5870387
WA1465	MNF16487	Axe	Neolithic	330588	5865254
WA1466	MNF1404	Flint axe	Neolithic	330136	5865362
WA1467	NMR 356811	A Neolithic ground flint axe was said to have been found fixed in a tree in a submarine forest at Hunstanton.	Neolithic	331448	5869072
WA1468	NMR356785	Site of Neolithic flint industry, Old Hunstanton.	Neolithic	331796	5869750
WA1469	NMR356643	Findspot of a small Neolithic stone axehead.	Neolithic	329986	5865365
WA1470	NMR356759	Flaked flint axehead	Neolithic	328042	5860488
WA1471	NMR356808	Leaf shaped flint	Neolithic	331065	5867896
WA1472	NMR356793	Neolithic flint industry.	Neolithic	331369	5868226
WA1473	NMR356742	A fragment of a Neolithic polished flint axe	Neolithic	328593	5861192
WA1474	NMR356794	Flint flakes.	Neolithic	331180	5867818
WA1475	NMR356809	Findspot of a Neolithic flint spearhead.	Neolithic	331492	5868267
WA1476	NMR867849	Probable Neolithic leaf points, originally thought to be Palaeolithic	Neolithic	330172	5865151
WA1477	NMR356786	Neolithic flint industry.	Neolithic	331953	5869137
WA1478	MNF42242	Undatable hammerstone	Prehistoric	335514	5872500

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1479	MNF45997	Flint tool or core	Prehistoric	332156	5870031
WA1480	MNF45998	Flint flake	Prehistoric	332112	5870006
WA1481	MNF42242	Early Bronze Age button. Late Bronze Age chisel. 5 Bronze Age sherds.	Bronze Age	335436	5872535
WA1482	MNF1101/NM R870788	Middle Bronze Age Hoard	Bronze Age	333371	5870233
WA1483	MNF4372	Pit	Bronze Age	331811	5869711
WA1484	MNF33910	Palstave	Bronze Age	334960	5872177
WA1485	MNF33771/NM R1220736	Seahenge timber circle	Bronze Age	335441	5872528
WA1486	MNF39811	Late Bronze Age pegged spearhead fragment	Bronze Age	332237	5869981
WA1487	MNF17810	Beaker pottery	Bronze Age	331269	5867549
WA1488	MNF42245	Timber circle	Bronze Age	335547	5872500
WA1489	NMR870790	Findspot of Bronze Age pottery.	Bronze Age	331154	5867599
WA1490	MNF1266	Pottery and human remains	Iron Age	331811	5869711
WA1491	NMR356779	Potsherds of Iron Age 'ABC'	Iron Age	331582	5869564
WA1492	MNF1107	Pottery find spot	Roman	334082	5870795
WA1493	MNF1266	Pottery and human remains	Roman	331811	5869711
WA1494	MNF1267	Roman features and finds	Roman	331215	5868639
WA1495	MNF1272	Coin	Roman	331094	5868056
WA1496	MNF1273	Coin	Roman	331767	5868360
WA1497	MNF2188	Shell midden	Roman	322784	5851241
WA1498	MNF14059	Samian bowl	Roman	329706	5862539
WA1499	MNF19412	Pottery	Roman	331249	5868557
WA1500	MNF20904	Coin	Roman	331707	5869517
WA1501	MNF41435	Mortarium sherds.	Roman	335055	5872522
WA1502	MNF1276	Coin	Roman	331749	5868173
WA1503	MNF13959	Pottery	Roman	331652	5869542
WA1504	NMR 868204	A Roman coin of Philip I and a quantity of wood were dredged up from mussel beds on Breast Sand.	Roman	318572	5856938
WA1505	NMR 356774	A series of footings, tessellated floor indicating site of a Roman villa. Flue tiles and 1st to 4th century pottery sherds were also recovered.	Roman	332809	5869951
WA1506	NMR 356772	Romano-British pottery findspot, Kiln debris and a possible pottery kiln	Roman	333671	5870772

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
		site.			
WA1507	MNF16479	Coin	Roman	329730	5863832
WA1508	NMR356675	A scatter of worked flints and sherds of Romano British pottery found on surface of field.	Roman	331280	5867239
WA1509	NMR356737	Findspot of Roman pottery	Roman	328715	5858637
WA1510	NMR867875	Findspot of Romano-British pottery, near Hunstanton War Memorial.	Roman	331134	5868603
WA1511	NMR356760	Three Roman rubbish pits and three urns	Roman	331100	5868685
WA1512	NMR356782	A very worn coin of Hadrian (AD 117-38)	Roman	330979	5868102
WA1513	NMR356780	Third century Roman bronze coin found in a garden at Old Hunstanton.	Roman	332515	5870000
WA1514	NMR356801	Bronze coin of Constantine (AD 306-37)	Roman	331264	5867882
WA1515	NMR356784	Roman coin, Sestertius of Hadrian (AD 117-38)	Roman	331585	5868160
WA1516	NMR356796	Silver coin of Antoninus Pius (AD 138-61)	Roman	331643	5868417
WA1517	MNF2188	Shell midden	Saxon	322784	5851241
WA1518	MNF19409/NM R 356662	Middle Saxon pottery	Saxon	332065	5869913
WA1519	MNF42244	Fish trap	Saxon	335631	5872537
WA1520	NMR867874	Findspot of an Anglo-Saxon potsherd	Saxon	331951	5869959
WA1521	MNF2188	Shell midden	Medieval	322784	5851241
WA1522	MNF22588	Pottery finds	Medieval	322322	5850942
WA1523	MNF1278	Probable Medieval pit	Medieval	332667	5870172
WA1524	MNF17151	Remains of Medieval to modern buildings	Medieval	332646	5869657
WA1525	MNF1279	Stone cross	Medieval	331321	5868504
WA1526	MNF44206	Fragment of copper alloy buckle frame	Medieval	333756	5871374
WA1527	NMR 356795	Alleged medieval moated homestead.	Medieval	332920	5870044
WA1528	NMR 355808	The site of a low mound. Pottery probably Medieval (circa 16th century) and fragments of Bellarmine jars. Numerous cockle shells suggest an old boiling site.	Medieval	322660	5851290
WA1529	NMR356765	Remains of medieval chapel extant in 1505, but excavations suggest it may have originated in the Norman period or in the reign of Edward I	Medieval	331559	5869526
WA1530	NMR356591	Possible Medieval or later saltpans identified from aerial photographs.	Medieval	330492	5866583
WA1531	NMR866750	Findspot of a Grimston Ware jug which was found at a depth of 18 inches in the peat of a submerged forest in 1977.	Medieval	335589	5872392
WA1532	NMR982823	Medieval town - HUNSTANTON	Medieval	332495	5869721



WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1533	NMR867873	Findspot of Ipswich ware, shell tempered ware and a glass bead. Thetford ware was also recorded on a medieval house site.	Medieval	332565	5869856
WA1534	MNF1281	Brick kiln	Post-medieval	333786	5870726
WA1535	MNF16001	Farmhouse	Post-medieval	332819	5869759
WA1536	MNF17152	A building that was constructed around 1800	Post-medieval	332648	5869695
WA1537	MNF17151	Cliff Farm, Old Hunstanton Village	Post-medieval	332646	5869657
WA1538	MNF1282	Post-medieval buildings	Post-medieval	332508	5869658
WA1539	MNF1290	Post-medieval buildings	Post-medieval	331730	5869565
WA1540	MNF1292	St. Edmund's Church	Post-medieval	331490	5868605
WA1541	MNF42617	Mission Church	Post-medieval	320408	5852515
WA1542	MNF43138	Water tower	Post-medieval	334235	5871317
WA1543	MNF16138	Two 18th century cottages	Post-medieval	332370	5869690
WA1544	NMR356810	Light house (disused)	Post-medieval	331606	5869613
WA1545	NMR867877	Cast iron water pump.	Post-medieval	332828	5870179
WA1546	NMR498123	Windmill of unknown date	Post-medieval	309463	5858575
WA1547	NMR512611	Late 17th - early 18th century houses.	Post-medieval	332245	5869728
WA1548	MNF43996	19th century water tower	Modern	331664	5868784
WA1549	MNF46565	Mooring posts	Modern	329788	5864588
WA1550	MNF46566	Mooring posts	Modern	329787	5864479
WA1551	NMR 501904	Site of railway station on the Hunstanton and West Norfolk Railway, opened in 1862 and closed in 1969.	Modern	330571	5865124
WA1552	NMR 501947	Site of railway station on the Hunstanton and West Norfolk Railway, opened in 1862 and closed in 1969.	Modern	331079	5868353
WA1553	NMR356802	Pier built 1869/70	Modern	331072	5868543
WA1554	NMR1417304	Concrete blockhouse of unusual shape and unexplained purpose.	Modern	335268	5872244
WA1555	NMR1412261	Royal observer corps monitoring post	Modern	331589	5869664
WA1556	NMR1412290	Accommodation hut	Modern	330355	5866342
WA1557	NMR1412253	Military building	Modern	335589	5872392
WA1558	NMR1412260	Royal observer corps monitoring post	Modern	331582	5869564
WA1559	MNF17148	Spigot mortar emplacement	WWII	333694	5871414
WA1560	MNF23513	Pillbox	WWII	333958	5871315

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1561	MNF23517	Underground military headquarters	WWII	335180	5872162
WA1562	MNF24558	Firing range	WWII	328793	5862382
WA1563	MNF32390	Pillbox	WWII	329091	5861188
WA1564	MNF32394	Pillbox	WWII	332126	5869919
WA1565	MNF32396/NM R1417312	Type 22 pillbox	WWII	332703	5870430
WA1566	MNF32533/NM R1417309	Underground military headquarters	WWII	334917	5871850
WA1567	MNF41686	Pillbox	WWII	332215	5870003
WA1568	MNF41689	Gun emplacement	WWII	331962	5869857
WA1569	MNF41694/NM R1417305	Type 22 pillbox	WWII	333898	5871579
WA1570	MNF41717	Tank trap	WWII	334696	5871544
WA1571	MNF17149/NM R1417307	Two Spigot Mortar bases	WWII	333956	5871609
WA1572	MNF17150	Pillbox	WWII	333846	5871529
WA1573	MNF32395	Gun emplacement	WWII	334145	5870860
WA1574	MNF17147	Pillbox	WWII	332882	5869970
WA1575	MNF23514	Royal Navy pillbox and observation tower	WWII	331775	5869625
WA1576	MNF42596	Possible WWII Pillbox	WWII	318784	5854246
WA1577	MNF32374	Pillbox	WWII	315572	5853886
WA1578	MNF42788	WWII ring ditches and gun emplacement	WWII	335312	5872120
WA1579	MNF45985	Beach defences	WWII	329786	5864479
WA1580	MNF45988	Beach defences	WWII	329789	5864718
WA1581	MNF47481	Royal Navy pillbox	WWII	331778	5869639
WA1582	MNF45996/NM R1418377	Standard type 22 pillbox	WWII	332918	5870586
WA1583	NMR 1319967	Second World War Roadblock at the beach exit.	WWII	329931	5864567
WA1584	NMR1418378	Flooded anti-tank ditch, partially filled in.	WWII	330362	5866441
WA1585	NMR1417327	Concrete pillbox in a ruinous condition.	WWII	328679	5862429
WA1586	NMR1419889	Single 4ft x 4ft anti-tank block.	WWII	308646	5861238
WA1587	NMR1419887	Infantry blockhouse with eight embrasures.	WWII	308154	5861373
WA1588	NMR1417306	Two Spigot Mortar bases about 10m apart on separate concrete bases.	WWII	333579	5871460

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1589	NMR1417308	Type 28 emplacement for 2pdr anti tank gun, facing west.	WWII	334031	5870897
WA1590	NMR1419891	Infantry blockhouse with 8 embrasures.	WWII	309519	5859373
WA1591	NMR1412254	Air raid shelter	WWII	335275	5872213
WA1592	NMR1419888	Type 23 three-bay concrete anti-aircraft pillbox.	WWII	308570	5860141
WA1593	NMR1417325	There are 4 anti tank blocks in a square pattern	WWII	329878	5864530
WA1594	NMR1417343	Described as a Lincolnshire Variant pillbox or sometimes as a type 23b pillbox.	WWII	315507	5853943
WA1595	NMR1427166	Non-standard design of pillbox.	WWII	321555	5852409
WA1596	NMR1417321	Type 28 gun emplacement pillbox with chamber for a 2pdr gun.	WWII	329974	5864464
WA1597	NMR1419890	Four 4ft x 4ft anti-tank blocks.	WWII	309368	5860085
WA1598	NMR1419893	Type 23 three-bay concrete anti-aircraft pillbox.	WWII	311083	5857359
WA1599	NMR1418379	3ft anti-tank cube.	WWII	330065	5865059
WA1600	NMR1420211	Home Guard shelter.	WWII	333843	5871361
WA1601	NMR1421374	Type 23 pillbox, rectangular structure, appears to be two square pillboxes joined together by a raised platform.	WWII	311278	5855842
WA1602	NMR1419886	Type 23 three-bay concrete anti-aircraft pillbox.	WWII	307941	5861187
WA1603	NMR1417314	Type 22 pillbox now demolished.	WWII	332011	5869965
WA1604	NMR1417311	Shelter sunken into dunes entered by steps down and door under arch.	WWII	335290	5872272
WA1605	NMR1418373	Standard spigot mortar base.	WWII	331213	5868587
WA1606	NMR1417315	The coast guard tower appears to be the Battery Observation Post of the Hunstanton Coast Defence Battery, whose other buildings have long since gone over the cliff	WWII	331649	5869660
WA1607	NMR1417322	Type 28 gun emplacement pillbox with chamber for a 2pdr gun.	WWII	329948	5864526
WA1608	NMR1412255	Tank Range Target Winch House	WWII	335582	5872292
WA1609	NMR1420156	Home Guard Shelter, standard.	WWII	328977	5861235
WA1610	NMR1417313	Type 22 pillbox with brick shuttering.	WWII	332756	5870013
WA1611	NMR1417328	A line of 17 anti tank blocks on a continuous concrete raft	WWII	328520	5861157
WA1612	NMR1417319	Royal Naval style pillbox with horizontal small arms embrasures in each face.	WWII	331649	5869660
WA1613	NMR1417324	Spigot Mortar base.	WWII	329947	5864516
WA1614	MNF1146	Post	Unknown	332096	5869490
WA1615	MNF1283	Possible building of unknown date	Unknown	332251	5869118
WA1616	MNF11306	Undated fragment of polished flint axe	Unknown	328707	5861145

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1617	MNF40774	Fragments of a peat layer	Unknown	335544	5872498
WA1618	MNF1286	Cremation of unknown date	Unknown	332716	5869982
WA1619	MNF41947	Remains of wooden structure	Unknown	335266	5872540
WA1620	MNF42243	Stake alignment on Holme Beach- unknown date	Unknown	335641	5872483
WA1621	MNF42246	Group of planks on Holme Beach	Unknown	335555	5872508
WA1622	MNF42749	Fish trap on Holme Beach	Unknown	335619	5872472
WA1623	MNF42751	Possible trackway or platform on Holme Beach	Unknown	333941	5872210
WA1624	MNF42752	Possible plank on Holme Beach	Unknown	334138	5872340
WA1625	MNF42754	Possible platform or trackway on Holme Beach	Unknown	334452	5872405
WA1626	MNF42755	Northern cluster of laid timbers on Holme Beach	Unknown	334486	5872501
WA1627	MNF42756	Post on Holme Beach	Unknown	334438	5872543
WA1628	MNF42757	Southern cluster of laid timbers on Holme Beach	Unknown	334505	5872486
WA1629	MNF42758	Post on Holme Beach	Unknown	334458	5872568
WA1630	MNF42759	Post on Holme Beach	Unknown	334454	5872572
WA1631	MNF42761	Cluster of seven upright timbers on Holme Beach	Unknown	334461	5872591
WA1632	MNF42760	Metal post on Holme Beach	Unknown	334438	5872543
WA1633	MNF42762	Two tree trunks on Holme Beach	Unknown	334548	5872442
WA1634	MNF42763	Post on Holme Beach	Unknown	334883	5872589
WA1635	MNF42764	Plank on Holme Beach	Unknown	334903	5872456
WA1636	MNF42766	Stake alignment on Holme Beach - northern end	Unknown	335086	5872535
WA1637	MNF42767	Post on Holme Beach	Unknown	335145	5872605
WA1638	MNF42768	Northern post cluster on Holme Beach	Unknown	335201	5872613
WA1639	MNF42769	Southern post cluster on Holme Beach	Unknown	335202	5872599
WA1640	MNF42770	Plank or fallen post on Holme Beach	Unknown	335337	5872547
WA1641	MNF42771	Possible plank on Holme Beach	Unknown	335349	5872556
WA1642	MNF42772	Post on Holme Beach	Unknown	335372	5872554
WA1643	MNF42773	Two timber posts on Holme Beach	Unknown	335419	5872546
WA1644	MNF42774	Possible trackway on Holme Beach	Unknown	335450	5872529
WA1645	MNF42775	Post on Holme Beach	Unknown	335460	5872514
WA1646	MNF42776	Square feature on Holme Beach	Unknown	335440	5872484
WA1647	MNF42777	Trackway on Holme Beach	Unknown	335567	5872500
WA1648	MNF42778	Possible fish trap on Holme Beach	Unknown	335661	5872467

WAID	HER(MNF)/ NMR ID	Description	Date	UTM Easting	UTM Northing
WA1649	MNF42779	Post on Holme Beach	Unknown	335676	5872458
WA1650	MNF42780	Post on Holme Beach	Unknown	335760	5872492
WA1651	MNF42781	Plank on Holme Beach	Unknown	335797	5872481
WA1652	MNF45570	Two posts	Unknown	334314	5872399
WA1653	MNF46000	Two timber posts	Unknown	335023	5872620
WA1654	MNF46268	Holme Fishtrap	Unknown	335112	5872559
WA1655	MNF46562	Undated pits or natural features	Unknown	331807	5869719
WA1656	NMR 356761	The cross on the green at New Hunstanton	Unknown	331201	5868548
WA1657	NMR356593	Probable salt pans	Unknown	330161	5865002
WA1658	NMR1417337	Site stretches from TF 58582441 to 58612440 along Sea Bank.	Unknown	321371	5852642
WA1659	NMR356621	Probable salt pans of unknown date.	Unknown	330137	5864653

#### TERRESTRIAL SITE POLYGONS WITHIN THE CRSA INDICATING LARGE SITES OR GENERAL SITE AND FIND LOCATIONS

WA ID	HER/MNF ID	Description	Date	Record type
WA1660	MNF28086	prehistoric flint spear at homefields	Prehistoric	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1661	MNF12614	Hand axe	Palaeolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1662	MNF1143	Clactonian trimmed edge flint flake	Palaeolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1663	MNF1145	Mesolithic flints and Middle Saxon inhumations	Mesolithic, Middle Saxon	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1664	MNF1253	Flint artefacts	Neolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1665	MNF16377	Neolithic flint	Neolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1666	MNF14431	Chipped flint axe near Snettisham	Neolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1667	MNF11302	Multi-period finds	Neolithic, Saxon and Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.

WA ID	HER/MNF ID	Description	Date	Record type
WA1668	MNF1275	Ring ditch	Possibly Bronze Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1669	MNF1258	Neolithic aretfacts and possible Brinze Age barrow	Bronze Age, Neolithic	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1670	MNF14388	Pottery	Bronze Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1671	MNF42241	Bronze Age Plastave found near Seahenge site	Bronze Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1672	MNF44327	Cropmark of ring ditch, possibly Bronze Age	Bronze Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1673	MNF41924	Cropmark - ring ditches	Bronze Age and unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1674	MNF20342	Iron Age pottery	Iron Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1675	MNF48506	Cropmarks of earthworks of Late Iron Age to post medieval ditches and trackways	Iron Age	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1676	MNF48507	Cropmark of a Late Iron Age to Roman trackway	Iron Age, Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1677	MNF13032	Cropmarks of Iron Age to Roman field systems and enclosures	Iron Age, Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1678	MNF1298	Beloe's Camps	Pre-Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1679	MNF41901	Cropmarks	Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1680	MNF1269	Roman coin. 3rd century radiate at Old Hunstanton	Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1681	MNF28087	Roman coin of Constantiane 306 to 337 AD 1 Willow Road	Roman	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1682	MNF1271	Roman building and multi-period finds	Roman, Saxon	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1683	MNF1291	St. Edmund's Chapel	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1684	MNF42600	Possible Medieval saltworks	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1685	MNF42620	Possible complex of Medieval saltern mounds by old saltmarsh channel	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.

WA ID	HER/MNF ID	Description	Date	Record type
WA1686	MNF42631	Possible Medieval saltmound	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1687	MNF42632	Possible Medieval salt works	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1688	MNF42634	3 saltern mounds, possibly Medieval	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1689	MNF42635	Medieval salt works, 3 mounds	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1690	MNF12951	Upper part of green glazed medieval Grimston-ware jug found in peat of submerged forest.	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1691	MNF1450	Medieval pottery, jug handle	Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1692	MNF41917	Earthworks	Medieval, unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1693	MNF41698	Earthworks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1694	MNF41702	Earthworks, pit and oyster beds	Medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1695	MNF41916	Earthworks	Medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1696	MNF41914	Earthworks	Medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1697	MNF41697	Earthworks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1698	MNF41902	Cropmarks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1699	MNF41929	Earthworks and cropmarks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1700	MNF41928	Cropmark	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1701	MNF41919	Cropmarks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1702	MNF41921	Earthworks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1703	MNF48528	Mounds, possibly medieval to Post-medieval salterns	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.

WA ID	HER/MNF ID	Description	Date	Record type
WA1704	MNF48453	Medieval to post medieval drainage ditches	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1705	MNF48454	Earthworks of medieval to post medieval ridge and furrow	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1706	MNF48469	Cropmarks and earthworks of medieval to post medieval water meadows	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1707	MNF48488	Earthwork of medieval to post medieval building platform	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1708	MNF48492	Post medieval to modern earthwork bank	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1709	MNF48493	Medieval to post medieval earthwork enclosure	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1710	MNF48503	Medieval to post medieval drainage earthworks	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1711	MNF48511	Medieval to post medieval earthwork ditches	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1712	MNF1460	Medieval to post medieval oyster beds	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1713	MNF1461	Medieval to post medieval oyster beds	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1714	MNF1462	Medieval to post medieval oyster beds	Medieval, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1715	MNF41705	Possible kiln	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1716	MNF41708	Earthwork	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1717	MNF41710	Earthwork	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1718	MNF41723	Earthwork	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1719	MNF42594	Sea defence, a post Medieval bank.	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1720	MNF42597	Linear feature, a trackway or bank?	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1721	MNF42601	Post-Medieval sea defence, earthwork bank.	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.



WA ID	HER/MNF ID	Description	Date	Record type
WA1722	MNF42625	Post-medieval sea defence bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1723	MNF42626	Post-Medieval sea defence, earthwork bank.	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1724	MNF42628	Embanked road on reclaimed saltmarsh	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1725	MNF13591	Lynn and Hunstanton Railway	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1726	MNF42815	Possible sea defence banks, may be early Post-medieval in date	Post-Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1727	MNF42976	Post-medieval salt production site visible as earthworks	Post-Medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1728	MNF42980	Probable Post-medieval salt evaporation tanks	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1729	MNF42994	Probable Post-medieval sea defence bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1730	MNF42998	Post-medieval sea defence bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1731	MNF43009	Post-medieval sea or flood defence bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1732	MNF43014	Post-medieval sea defences, earthwork banks	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1733	MNF43028	2 banks, possible sea defences	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1734	MNF43029	Sea defenceds, narrow bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1735	MNF45943	Post-mediaval quay or jetty	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1736	MNF45944	Post-medieval quay or jetty	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1737	MNF21962	Wreck - possibly the Carrington	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1738	MNF13883	A post-medieval sword with pommel hilt and german hunting knife from 2 Coastguard Cottages, Old Hunstanton	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1739	MNF48438	Post-medieval sea bank	Post-medieval	Polygon indicating a large archaeological feature or

WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1740	MNF48443	Possible Post-medieval salt extraction site	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1741	MNF48444	Possible Post-Medieval extractive site, consisting of ridge and banks.	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1742	MNF48470	Earthwork of post-medieval sea bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1743	MNF48481	Earthwork of post-medieval sea bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1744	MNF48482	Cropmarks of possible post-medieval water meadows	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1745	MNF48487	Post medieval oyster beds	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1746	MNF48486	Post medieval earthwork enclosure	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1747	MNF48501	Cropmark of post medieval sea bank	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1748	MNF48509	Post medieval oyster beds and pits	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1749	MNF48512	Cropmarks of post medieval banks and ditches	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1750	MNF48514	Earthworks of post medieval oyster beds	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1751	MNF33387	Post medieval water meadows	Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1752	MNF41684	Earthwork	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1753	MNF41903	Cropmarks	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1754	MNF41904	Cropmarks	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1755	MNF13591	Lynn and Hunstanton Railway	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1756	MNF13591	Lynn and Hunstanton Railway	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1757	MNF13591	Lynn and Hunstanton Railway	Post-medieval, modern	Polygon indicating a large archaeological feature or

WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1758	MNF17151	Cliff Farm, Old Hunstanton Village	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1759	MNF17151	Cliff Farm, Old Hunstanton Village	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1760	MNF38401	Glebe House School Grounds	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1761	MNF41918	Cropmarks	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1762	MNF41935	Earthworks	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1763	MNF43016	Length of sea banks, earthworks.	Post-medieval, Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1764	MNF43019	Sea defences	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1765	MNF43020	Sea defences	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1766	MNF43021	Sea defences	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1767	MNF43022	Sea defences	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1768	MNF43023	Jetty on mudflats	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1769	MNF43024	Sea defences, 3 linear earthworks	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1770	MNF48540	Earthwork, remains of the butt of a rifle range	Post-medieval, Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1771	MNF48494	Post medieval to modern earthwork bank	Post-medieval, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1772	MNF1254	Earthworks	Post-medieval, unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1773	MNF41680	Earthworks	Post-medieval, unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1774	MNF38608	Sheraton (wreck)	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1775	MNF41703	Earthwork	Modern	Polygon indicating a large archaeological feature or

WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1776	MNF41704	Earthworks and pit	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1777	MNF41707	Structure	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1778	MNF38402	Boston and Lincoln Squares. Structure	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1779	MNF13757	Etna Stone and Shingle Works Tramway	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1780	MNF45986	Sea defences	Modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1781	MNF42595	Ring ditch, modern possibly related to WWII activity	Modern, WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1782	MNF42750	Multiperiod finds from Holme Beach Archaeological Survey, including worked wood and a possible torpedo	Multiperiod	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1783	MNF45238	Norfolk Rapid Coastal Survey, Hunstanton, banks, mounds and ditches, observed	Multiperiod	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1784	MNF41319	Multiperiod finds Southend Road	Multiperiod	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1785	MNF1274	Earthworks and midden	Multiperiod	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1786	MNF44328	Cropmarks of unknown date	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1787	MNF41699	Earthwork	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1788	MNF23998	Timber circle	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1789	MNF11226	Glazed bricks	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1790	MNF41906	Possible wreck or structure	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1791	MNF41915	Earthworks	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1792	MNF1287	Cremation, Hunstanton	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1793	MNF16591	Undated ring-ditch	Unknown	Polygon indicating a large archaeological feature or

WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1794	MNF42627	Possible salt mounds, undated	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1795	MNF42765	Stake alignment on Holme Beach - southern end	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1796	MNF42972	Saltern mounds por sea bank?	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1797	MNF43017	Earthworks	unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1798	MNF45940	Mound maybe saltworking related	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1799	MNF45941	6 timber posts, possibly remains of a jetty	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1800	MNF45942	An undated bank	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1801	MNF45964	Possible decoy pond	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1802	MNF45967	Possible quarrying mounds	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1803	MNF45970	Hollows and mounds, quarrying or saltmaking?	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1804	MNF45983	Remains of groyne or mooring posts	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1805	MNF45991	Undated wooden groyne on Hunstanton beach	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1806	MNF45995	Group of posts in beach, related to shellfish harvesting?	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1807	MNF46563	Undated post alignment	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1808	MNF22589	Undated mound	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1809	MNF44322	Enclosure, possibly an animal enclosure, may be recent in date	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1810	MNF48529	Ditches, possibly related to land division	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1811	MNF48530	Possible Post-medieval enclosure	Unknown	Polygon indicating a large archaeological feature or

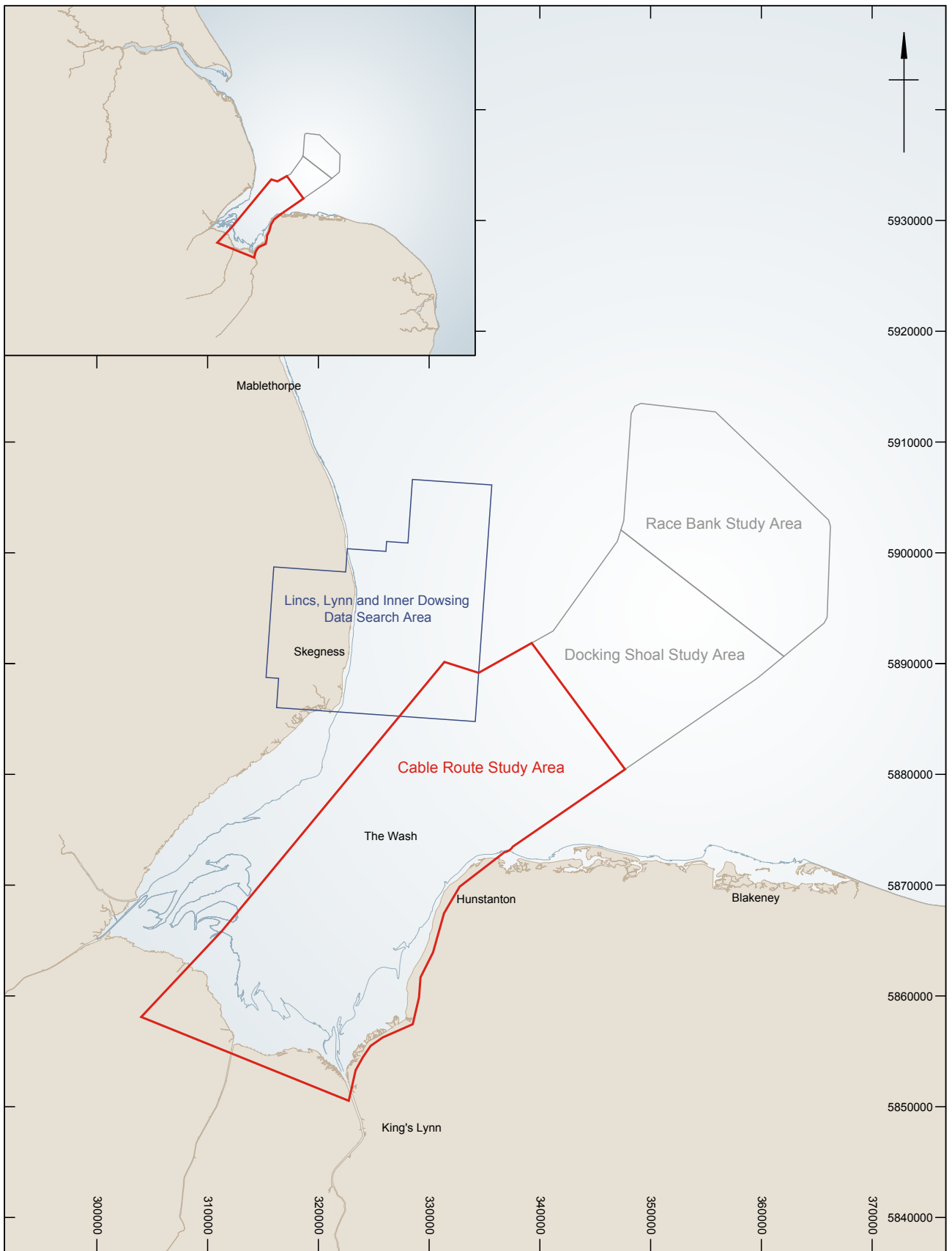
WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1812	MNF48533	Earthworks, Post-medieval saltworks?	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1813	MNF48440	Probable extraction pits, possibly Post-medieval	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1814	MNF48508	Linear cropmarks of unknown date	Unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1815	MNF45966	Wildfowlers hut or hide in saltmarsh	Unknown, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1816	MNF45969	Wildfowlers hut or hide in saltmarsh	Unknown, modern	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1817	MNF48442	Earthworks, possibly related to oyster or salt industry	Unknown, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1818	MNF48446	Earthwork banks, sea or flood defences?	Unknown, Post-medieval	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1819	MNF41679	Hunstanton Coastal Defence Battery	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1820	MNF41681	Coastal defence - minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1821	MNF41682	Coastal defence - barbed wire	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1822	MNF41683	Coastal defence -barbed wire and minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1823	MNF41685	Coastal defence - barbed wire and structure	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1824	MNF41687	Coastal defence - structure, road black and tank trap	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1825	MNF41688	Silt trench	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1826	MNF41693	Silt trench	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1827	MNF41695	Tank trap	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1828	MNF41696	Coastal defence - barbed wire and silt trench	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1829	MNF41700	Gun emplacement, spigot mortar emplacement and	WWII	Polygon indicating a large archaeological feature or


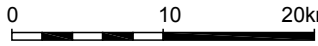
WA ID	HER/MNF ID	Description	Date	Record type
		pillbox		indicating a general location of a site or find.
WA1830	MNF41701	Earthwork	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1831	MNF41706	Silt trench	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1832	MNF41711	Bomb crater and possible minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1833	MNF41716	Earthworks and possible pillbox	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1834	MNF41717	Tank trap	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1835	MNF41719	Minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1836	MNF41720	Minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1837	MNF41721	Earthworks and military site	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1838	MNF41722	Military buildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1839	MNF24939	Coastal defence - obs post, battery, gun emplacement and pillbox	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1840	MNF41908	Beach defence	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1841	MNF41909	Earthworks	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1842	MNF41911	Earthworks	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1843	MNF42598	Bombing range marker from WWII	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1844	MNF42636	Possible military barracks, associated with nearby coastal battery	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1845	MNF25792	Coastal battery with ancillary buildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1846	MNF23518	WWII military installation	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1847	MNF42786	WWII feature, unknown	WWII	Polygon indicating a large archaeological feature or

WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1848	MNF42981	WWII military camp	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1849	MNF42990	WWII concrete emplacements or pillboxes and buildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1850	MNF23145	Snettisham Scalp, a WWII military site and gunnery school	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1851	MNF32386	WWII military defences and outbuildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1852	MNF43015	A linear stretch of WWII minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1853	MNF43025	Probable WWII buildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1854	MNF43026	Probable WWII buildings	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1855	MNF45992	Remains of WWII beach defences?	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1856	MNF45993	WWII concrete. probably from cliff top, remains of WWII defences?	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1857	MNF45994	Remains of WWII beach defences?	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1858	MNF45999	Spigot mortar emplacement	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1859	MNF46180	Remains of WWII beach defences	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1860	MNF47480	Possible WWII structure	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1861	MNF48437	A cleared WWII minefield	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1862	MNF48447	WWII defensive earthworks	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1863	MNF48449	Possible WWII structures	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1864	MNF48483	Site of WWII gun emplacements	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1865	MNF48495	WWII pit or hollow	WWII	Polygon indicating a large archaeological feature or



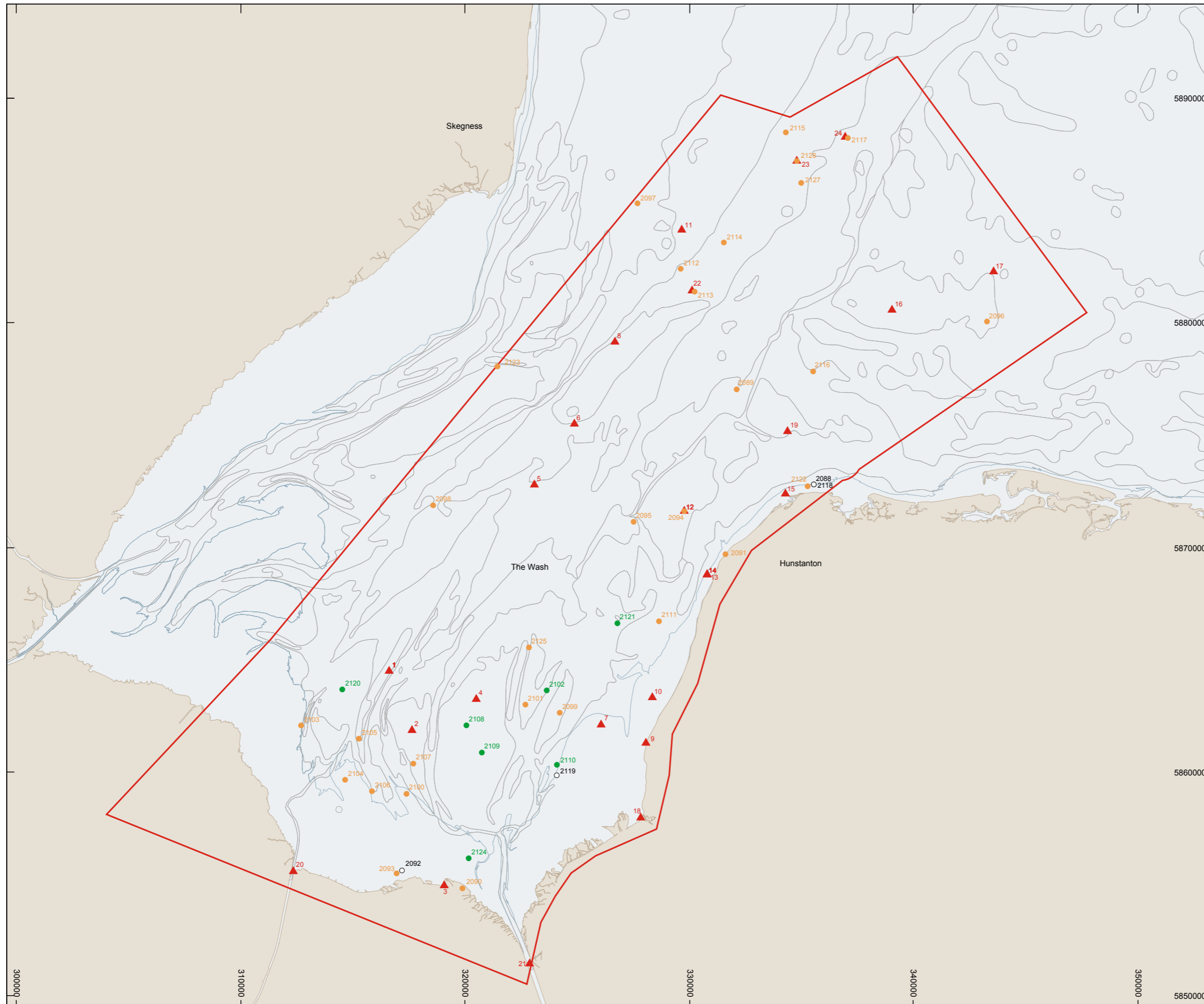
WA ID	HER/MNF ID	Description	Date	Record type
				indicating a general location of a site or find.
WA1866	MNF23516	WWII pillbox	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1867	MNF48496	Site of World War Two structure	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1868	MNF48497	Site of World War Two pillbox	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1869	MNF48498	Possible World War Two wall	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1870	MNF48499	Site of World War Two beach defences	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1871	MNF48500	Site of World War Two structure of pillbox	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1872	MNF48510	Site of World War Two gun emplacement	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1873	MNF48513	Site of World War Two gun emplacement and trench	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1874	MNF32385	World War Two anti tank cubes	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1875	MNF23515	World War Two pillbox and spigot mortar emplacement	WWII	Polygon indicating a large archaeological feature or indicating a general location of a site or find.
WA1876	MNF41913	Earthworks	WWII and unknown	Polygon indicating a large archaeological feature or indicating a general location of a site or find.



Drawing Projection: UTM WGS84 z31 	0 10 20km 		
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Scale: 1:500,000	Illustrator: KJB		
Path: W:\Projects\62550\Drawing Office\Report Figures\Wash cable route\06_04_21			

CRSA and adjacent windfarm areas

Figure 1



- Cable Route Study Area
- ▲ Named location
- Live wreck
- Dead wreck
- Unknown



Drawing Projection: UTM WGS84 z31

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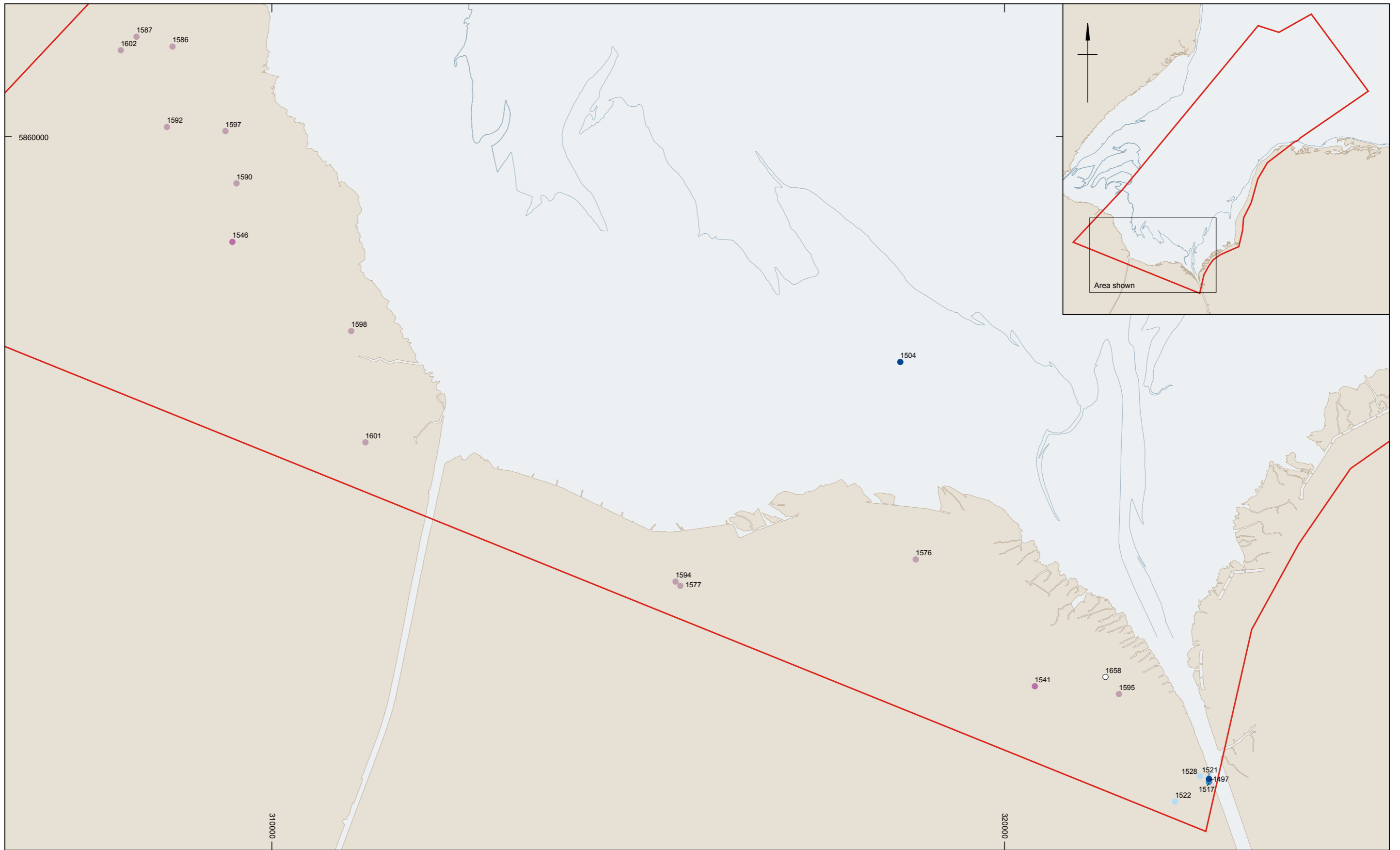
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Maritime sites in the CRSA

Figure 2



- ▭ Cable Route Study Area
- Roman
- Anglo-Saxon
- Medieval
- Post-medieval
- WWII
- Undated



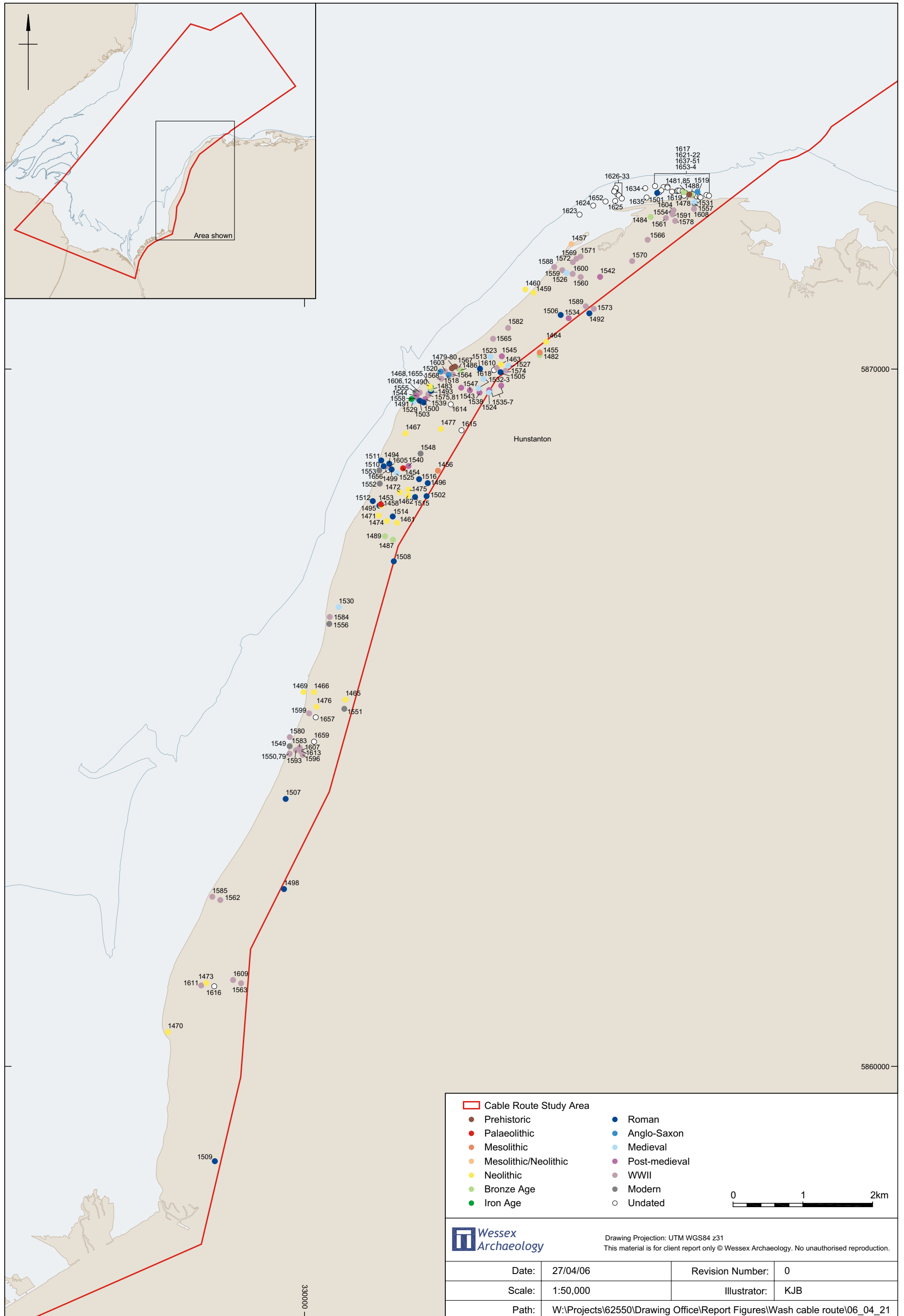
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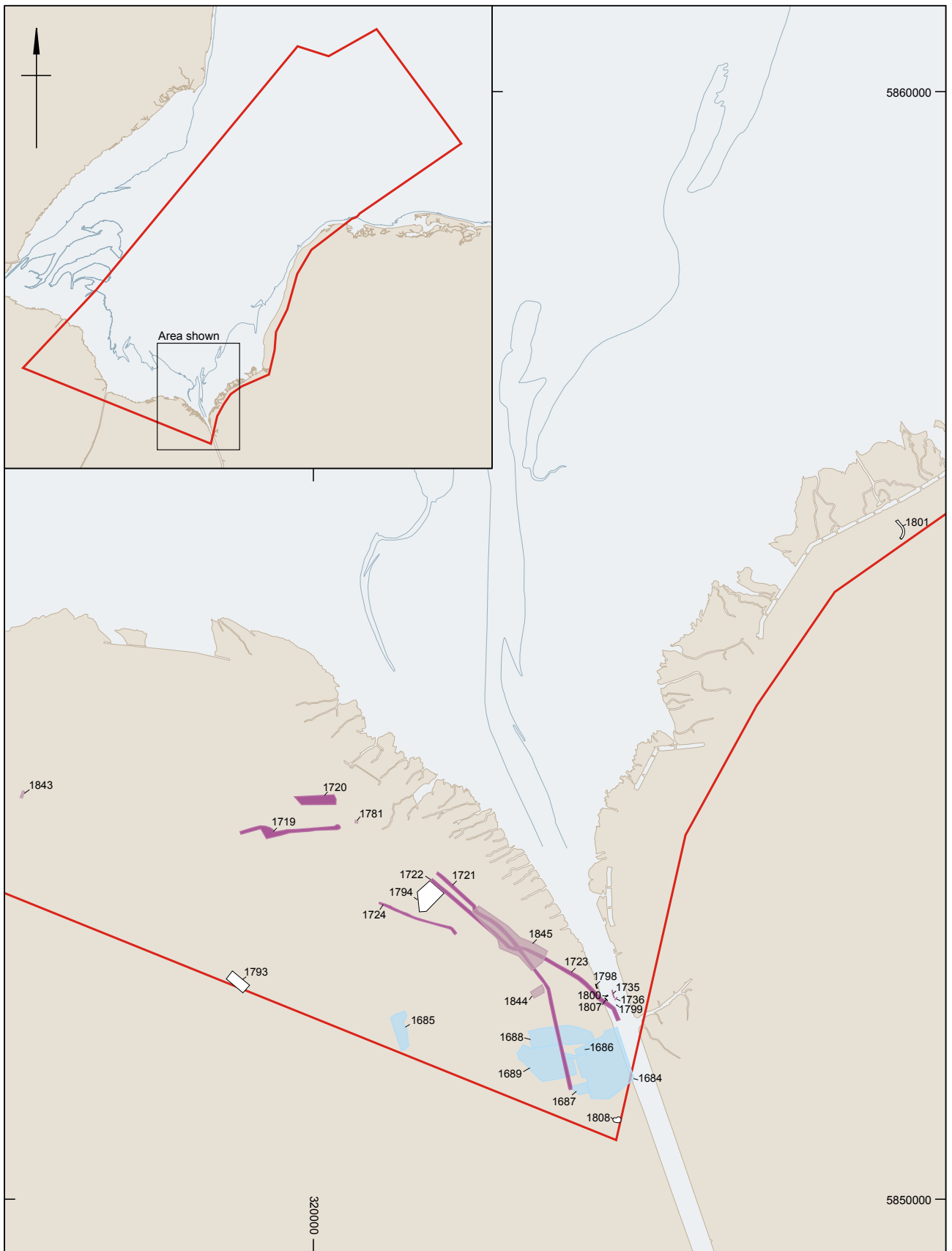
Terrestrial site point data in the CRSA


Figure 3



Terrestrial site point data in the CRSA

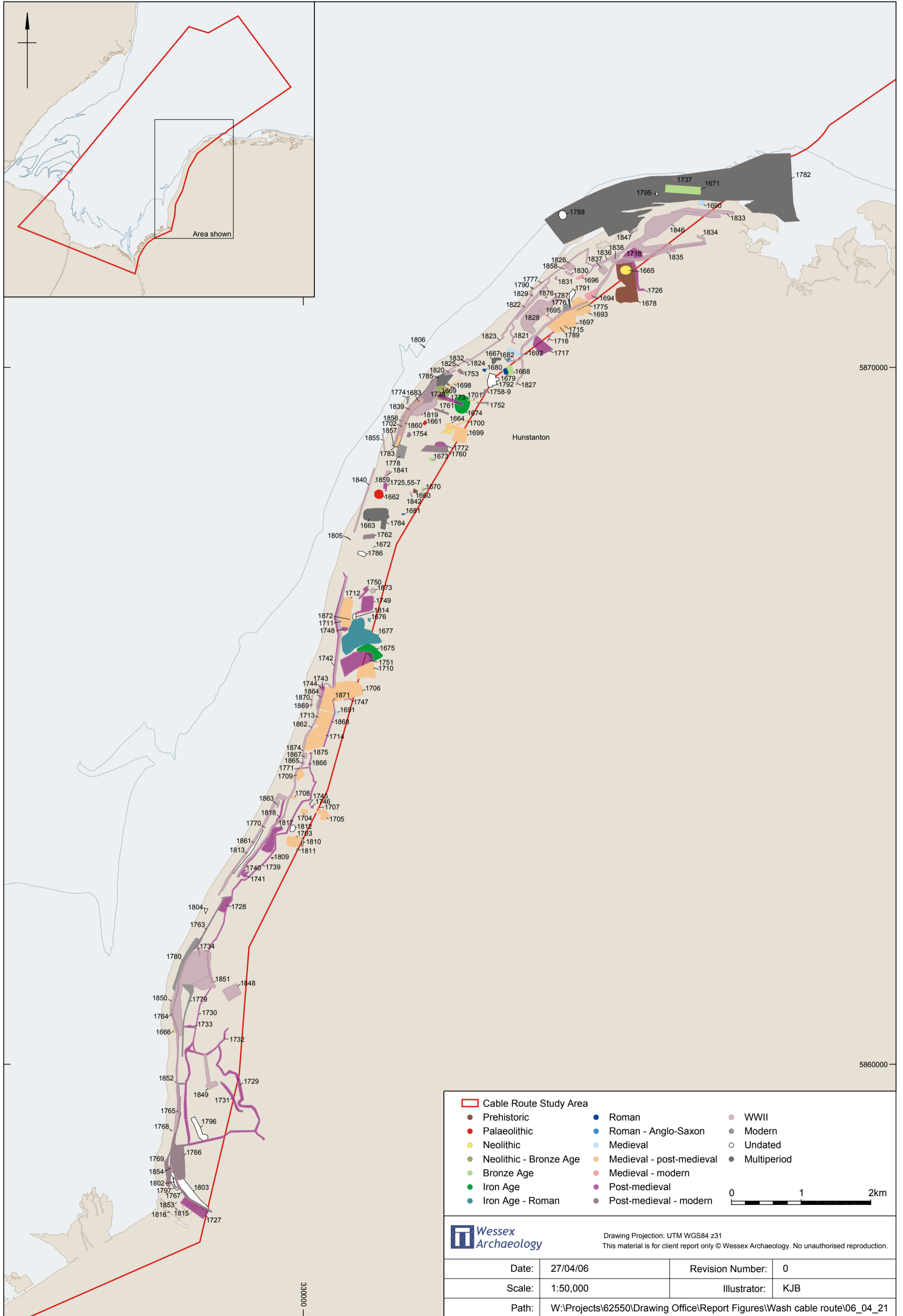
Figure 4



<ul style="list-style-type: none"> <li><span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Cable Route Study Area</li> <li><span style="color: blue; font-size: 1em; margin-right: 5px;">●</span> Medieval</li> <li><span style="color: purple; font-size: 1em; margin-right: 5px;">●</span> Post-medieval</li> <li><span style="color: brown; font-size: 1em; margin-right: 5px;">●</span> WWII</li> <li><span style="color: grey; font-size: 1em; margin-right: 5px;">○</span> Undated</li> </ul> 	<p>0 1 2km</p> <p>Drawing Projection: UTM WGS84 z31 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.</p>			
	Date:	27/04/06	Revision Number:	0
	Scale:	1:50,000	Illustrator:	KJB
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Terrestrial polygons in the CRSA

Figure 5



Terrestrial polygons in the CRSA

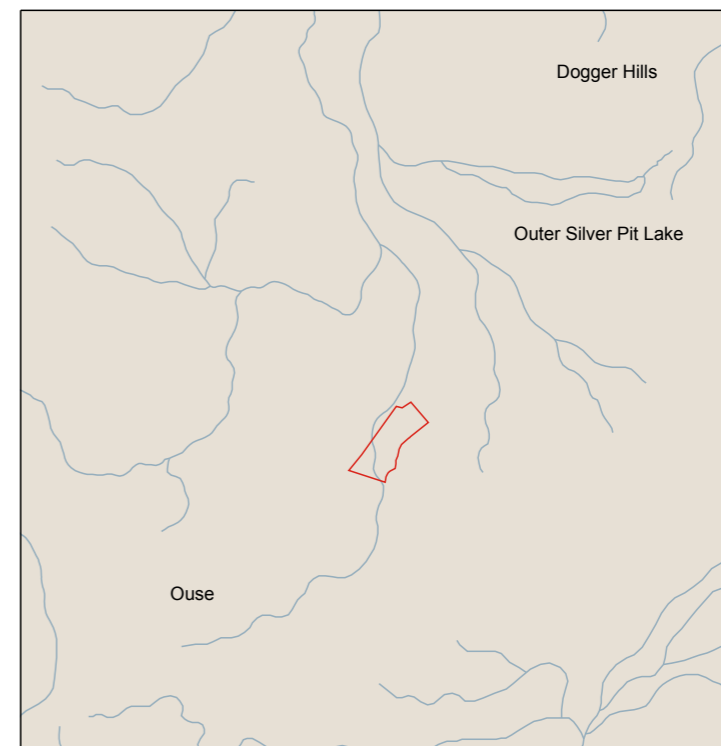
Figure 6



18,000BP



16,000BP



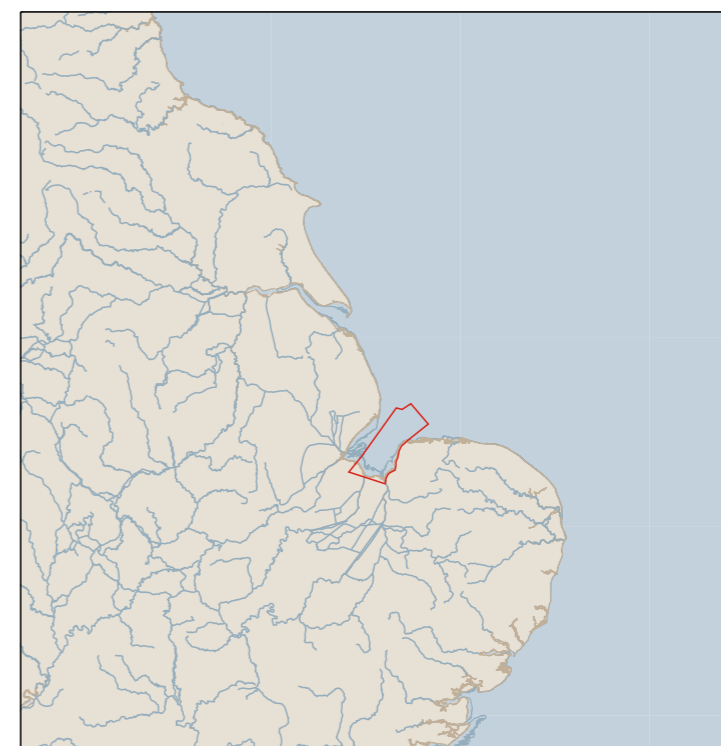
13,000BP



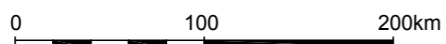
10,000BP



5,000BC



Current coastline



Cable Route Study Area

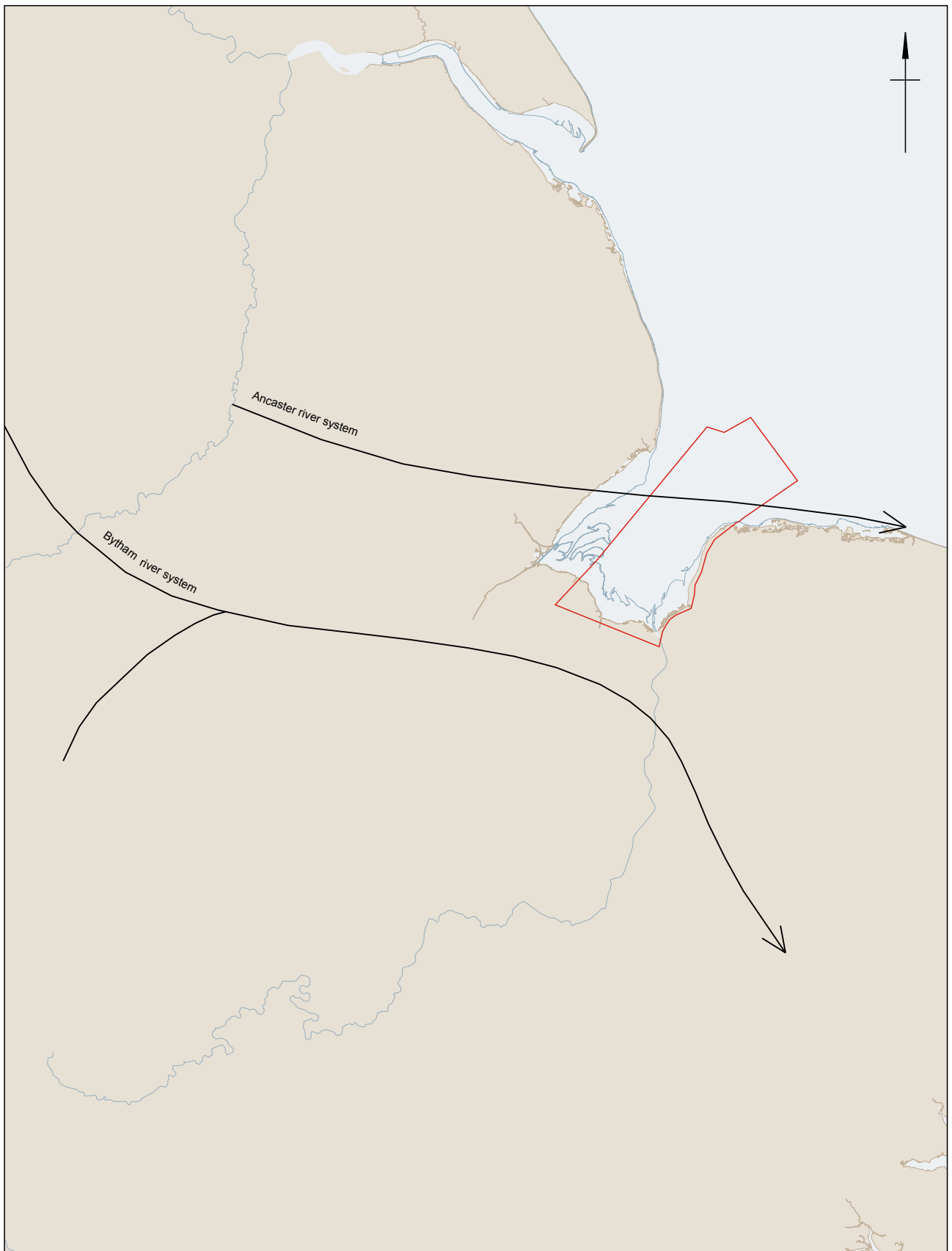
After Coles, 1998




Digital Map Data © (2006) XYZ Digital Map Company

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Date:	27/02/06	Revision Number:	0
Scale:	1:4,000,000	Illustrator:	KJB
Path:	W:\Projects\62550\Drawing Office\Report Figures\Wash Cable Route\06-04-21		





 Cable Route Study Area Drawing Projection: UTM WGS84 z31	0  50km After J.Rose et al, 2001 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	21/04/06	Revision Number:	0
	Scale:	1:1,000,000	Illustrator:	KJB
	Path:	W:\Projects\62550\Drawing Office\Report Figures\Wash cable route\06_04_21		

Estimated course of the pre-Anglian rivers Ancaster and Bytham

Figure 8



Plate 1. An example of cliff collapse at Hunstanton in the east of the CRSA



Plate 2. Peat eroded from the intertidal zone on the beach at Holme-next-the-Sea



Plate 3. Hunstanton Lighthouse, part of the post-medieval maritime infrastructure of the Wash, lying within the CRSA



Plate 4. Two WWII spigot mortar bases on the sand dunes at Holme-next-the-Sea, illustrating how even recent sites can become intertidal through coastal erosion



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