

**An Archaeological Watching Brief at
Land North of Fingringhoe Wick
Fingringhoe
Essex**

NGR: TL 05000 20210

Planning Ref: 131186

**ASE Project No: 8380
Site Code: COLEM:2014.86**

**ASE Report No: 2015407
OASIS id: archaeol6-227853**



March 2016

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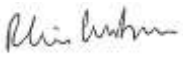
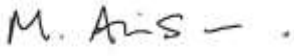
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Abstract

Archaeology South-East was commissioned by the Environment Agency to conduct a watching brief on groundworks within an area of land north of Fingringhoe Wick Nature Reserve, Fingringhoe, Essex. The works were part of a scheme to extend the nature reserve and provide a new intertidal habitat.

A previous desk top scoping document had noted the presence of a ring-shaped cropmark and soil discolouration towards the north end of the site. An archaeological evaluation had also established the presence of a Roman saltern site on the higher ground to the west of the site.

A number of groundwork operations on the site required archaeological monitoring. These included the excavation of two borrow pits to provide clay for new embankments, the creation of a pond and reed bed to the south-west, the stripping of topsoil around the existing embankments in preparation for enlarging them, the excavation of new ditches and the breaching of the sea wall to allow tidal ingress. One of the borrow pits was situated in the location of the cropmark and soil discolouration.

Little of archaeological significance was recorded during the works. A bank was partially removed revealing a previous land surface which may have dated to the 19th century. A deposit of oyster shells was found to the south and a row of stakes was observed in the sea wall breach. No features were found in the location of the cropmark. No artefacts or environmental samples were retrieved from any of the groundworks.

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1.0 INTRODUCTION

1.1 Site Background

- 1.1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by Essex County Council Place Services, on behalf of the Essex Wildlife Trust, to conduct an archaeological watching brief at land north of Fingringhoe Wick, Fingringhoe, Essex (figure 1).
- 1.1.2 The site, centred at TM 05000 20210 to the west of the village of Fingringhoe, is bordered to the south by Essex Wildlife Trust's existing Fingringhoe Wick Nature Reserve, to the west by freshwater marsh and arable land, to the east by salt marsh bordering the River Colne estuary and to the north by slurry lagoons of the Ballast Quay quarry works. The site itself comprises five fields of arable and grass, protected on the east side by a sea wall.
- 1.1.3 An archaeological scoping study was prepared by ECC Place Services in February 2013 (ECC Place Services 2013).
- 1.1.4 An archaeological evaluation comprising six trenches was conducted between 29th September and the 2nd October 2014 (locations shown on figure 2). An evaluation report on the results was submitted in November 2014 (ASE 2014). Discoveries included a Roman saltern situated on the higher ground on the west side of the site. The results of the evaluation led to the recommendation that a watching brief be conducted during the construction works.

1.2 Geology and Topography

- 1.2.1 Due to the proximity of the Colne Estuary to the site the development area lies in an area of transitional geology. The bedrock geology comprises silty clay of the Thames Group with no overlying superficial deposits. Closer to the river channel itself the clay is overlain by intertidal deposits associated with the Colne, while to the west of the development area superficial deposits of the Kesgrave Catchment Subgroup (sand and gravel) are present and actively quarried at the Ballast Quay works (BGS Geology of Britain Viewer; Accessed 22/10/2015).
- 1.2.2 The study area comprises c. 33 ha of arable land on the margins of the Colne Estuary. It consists of flat, reclaimed salt marsh and a slope up to higher ground to the west. A raised flood defence berm surrounds the north and south edges of the site and the area is traversed by drainage ditches dividing it into the five fields. The western limit of the study area runs along field boundaries and is marked by a flatter terrace (lynchet) caused by migration of ploughsoil down the hill against the hedgerow. It effectively forms a small bank between the dry land and the reclaimed marsh. The eastern limit includes the sea wall, a grassy bank dividing the arable land from the marshes. There is also a large ditch approximately 10m inside the sea wall running parallel to it. The drainage ditches between the fields flow into this main drain.

- 1.2.3 At the time of the works the southern two fields were ploughed and the crop recently harvested. The northern fields consisted of sheep pastures.

1.3 Planning Background

- 1.3.1 A planning application was submitted to Colchester Borough Council (CBC) on 21 June 2013 (131186) for the creation of intertidal habitat involving the following:

- Extending the existing sea wall to follow the inland site boundary to protect neighbouring land
- creation of small islands, a pond, footpaths and a boardwalk
- change of use of agricultural land to intertidal mudflats, saltmarsh and nature reserve
- the erection of a bird hide
- breaching the existing sea wall to allow tidal ingress

- 1.3.2 Given the potential for below ground archaeological remains identified by an archaeological scoping study (Place Services 2013), it was recommended that a programme of archaeological evaluation be undertaken as a first phase in understanding and mitigating the impact of the scheme on the historic environment, to be followed by a further scheme of investigation/mitigation.

- 1.3.3 The evaluation stage has been completed, and the results submitted (Wessex Archaeology 2014; Archaeology South-East 2014). The Planning Decision included the following condition:

5. Following receipt of the report of the archaeological evaluation and prior to development commencing a scheme of archaeological investigation/mitigation which will also include publication of the results shall be submitted to and approved, in writing, by the Local Planning Authority. The approved scheme of investigation shall be thereafter be implemented in accordance with the details approved, unless subsequently agreed in writing by the Local Planning Authority. Reason: To enable a proper archaeological investigation of the site and the identification and recording of any deposits and features of archaeological interest.

- 1.3.4 As the evaluation identified the presence of significant archaeological remains to be present within the site, ECC Place Services requested mitigation works to be done. These comprised a watching brief on groundworks undertaken to extend the nature reserve and provide new intertidal habitat. A Written Scheme of Investigation was provided by ECC Place Services (2015) for these works.

1.4 Aims and Objectives

- 1.4.1 The aims and objectives were set out in the WSI (ECC Place Services 2015). The general aim of the archaeological work, comprising a programme of archaeological monitoring during the groundwork phase of the development, was to record and/or excavate any surviving archaeological remains exposed by the construction work connected with the creation of new embankments,

the breach of the sea-wall, any areas from which soil is scraped or 'borrowed', or other associated construction works.

1.4.2 It was considered that the archaeological work had the potential to contribute to a number of research topics identified for the region, including, but not limited to: possible changes in use of saltern areas during the later Roman period (Brown and Glazebrook 2000), and the role of land reclamation in the development of the landscape of the East of England (Medlycott, 2012). Specifically, the archaeological trial trenching evaluation demonstrated the potential for the site to further understanding of the adoption and use of lead evaporating pans for salt production during the Roman period in Essex, and changes in the use of different fuels (e.g. Biddulph et al 2012. 191-192). The archaeological work was therefore designed to meet the following research objectives (ROs):

- RO1 Can the results identify and record evidence of late Iron Age/Roman activity associated with salt making activity and exploitation of the former salt marsh?
- RO2 Do the results contribute to an understanding of the development of sea walls and coastal reclamation from the medieval period onwards?
- RO3 Does the site contribute to an understanding of other exploitation of the inter-tidal zone and grazing marsh landscapes of the Colne Estuary?

1.5 Scope of Report

1.5.1 This report presents the results of the archaeological watching brief conducted intermittently on the site on the site between 20th May to 23rd September 2015 (figure 2). It followed the methodology laid out in the WSI (ECC Place Services 2015).

2.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Historic Environment

- 2.1.1 This section is modified from the scoping document (ECC Place Services 2013) and the WSI (ECC Place Services 2015).
- 2.1.2 The following archaeological and historical background is based on information in the Essex Historic Environment Record (EHER), the results of an archaeological scoping study (ECC Place Services 2013), a geophysical survey by gradiometer (Wessex Archaeology 2014), and the 2014 trial trenching evaluation (Archaeology South-East 2014).
- 2.1.3 The EHER records one known archaeological site within the study area - a cropmark of an undated ring-shaped feature (EHER 2600). Aerial photographs from 2000 show a discolouration of the soil spread over an area of approximately 75m, including the location of EHER 2600, which may indicate the presence of a plough flattened 'red hill' associated with a salt manufacturing site. During the archaeological walkover survey, two rows of vertical timbers located within the inter-tidal mud at the edge of the salt marsh were identified. The western site boundary is demarcated by a lynchet running along much of its length (ECC Place Services 2013).
- 2.1.4 Approximately 300m to the immediate south of the survey area, on the Fingringhoe Wick nature reserve, gravel extraction in the 1930s uncovered a Roman settlement (EHER 2113), which was partially excavated on an *ad hoc* basis. This comprised at least three buildings with hypocausts and tessellated pavements, rubbish-pits, two timber-lined wells, part of a cemetery and a possible landing-place on the river edge. The date range for the finds (AD 43-60) would suggest an Early Roman date for the settlement. The finds also suggest earlier occupation of the site at the end of the Late Iron Age (100 BC-AD 43). The recovery of a bronze socketed axe in 1958 (EHER 2114) suggests at least some activity in the area in the Bronze Age (2,300-700 BC). A Palaeolithic hand-axe (EHER 12593) was found by the Nature Reserve warden in Hawthorn Wilderness, this probably came from the river terrace gravels which mark the former route of the River Thames across Essex (500,000-10,000 BC).
- 2.1.5 The marshes of Essex were extensively drained from the medieval period onwards, with a notable peak for this activity in the 17th and 18th centuries with the introduction of Dutch technology (ECC Place Services 2013). No great detail is shown of the Fingringhoe area on the Chapman and André map of 1777, the earliest map of the area, although the absence of the marshland symbol may suggest that it had already been reclaimed by that date. The land was certainly drained by 1815 when an enclosure map was drawn showing the field boundaries. A brickworks was also present to the north-east from the 1790s (EHER 15476). The sea wall first appears on the 2nd edition Ordnance Survey map in 1897, but not as a complete feature, having the middle section missing. It is complete by 1920 on the 3rd edition Ordnance Survey map.

- 2.1.6 After the highly destructive floods of January 31st and February 1st 1953, which affected most of the low-lying land surrounding the North Sea, the sea wall was raised to its current level by re-excavating the ditch to its east and depositing the risings onto the older sea wall (Environment Agency, pers comm).

2.2 Archaeological background

- 2.2.1 A geophysical survey by gradiometer was commissioned by ECC Place Services and carried out by Wessex Archaeology (2014). This had the aim of establishing the presence, or otherwise, and nature of detectable archaeological features ahead of the proposed development of an inter-tidal habitat creation scheme. The gradiometer survey demonstrated the presence of a number of anomalies, none of which appeared to be of archaeological origin. Field drains were clearly present across the 16ha survey area, and on the eastern edge of the survey areas of geological responses are thought to relate to former salt marshes.
- 2.2.2 A trial trenching evaluation was conducted by ASE in 2014. Six trenches were excavated (ASE 2014). Only two yielded archaeological evidence, and only one of these (Trench 4, on fig 2) produced significant features and deposits. There was evidence of Roman industrial activity in the form of a hearth, an area of burning (a second hearth?), a ditch (also identified on the gradiometer survey) and a post hole, all linked by an occupation deposit. The presence of red soil and briquetage strongly suggests that this was a saltern, and/or red hill, situated on the extreme west side of the area of investigation. This did not relate to the cropmark EHER2600.
- 2.2.3 The evaluation report concluded that there was potential for significant archaeological survival on the site, but that it was probably limited in extent to the area of slightly higher ground to the west above the reclaimed marsh.

3.0 ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork Methodology

(see figure 2)

3.1.1 The site works comprised a number of elements requiring archaeological monitoring, divided between north and south areas of the site. Figure 2 shows the numbered areas referred to below:

3.1.2 North area

- Reinforcement of an existing earth bund (Area 1) to create north embankment
- 25 m long new extension (Area 2) to create north embankment
- Excavation of a borrow pond to the south of Area 2 in order to extract clay for the embankment (Area 3)
- Reinforcement of existing earth bund surrounding the pond to the north-west of the site (Area 4)
- Excavation of a new section of ditch draining the pond and enhancement of the existing drainage ditch (Area 5)

3.1.3 South area

- Creation of 84 m long southern embankment (part of Area 6)
- Excavation of pond to rear of southern embankment (Area 6)
- Excavation of a borrow pond to produce clay for the embankments, the islands and the bird hide base (Area 7)
- Excavation of a new ditch draining the Area 6 pond to the main drain behind the sea wall (Area 8)
- Reducing the height (by c.1 m) of a 100m length of existing sea wall to a target tide level after which the rear face of the sea wall will be cut back to reduce the depth of the embankment to the minimum required to be stable for the expected tide level (Area 9)
- Construction of the base of a bird hide and several islands in the centre of the site (Area 10)

3.1.4 The methodology for the archaeological watching brief, was set out in the WSI (ECC Place Services 2015, section 4). The applicable parts were followed without deviation.

3.1.5 All archaeological monitoring and recording was undertaken by a qualified archaeologist. The removal of topsoil and any recent overburden was achieved using a mechanical excavator fitted with a toothless bucket. All areas of potential archaeological interest were excavated in spits to the natural clay.

3.1.6 All recorded features and deposits were issued with context numbers in accordance with the established practices of ASE.

3.1.7 A photographic record was made, comprising digital images of significant features/feature groups, or in situ artefacts only. The photographic record

included a representative sample of individual feature shots and sections, in addition to working shots and elements of interest (individual features and group shots). The photographic register includes: shot number, location of shot, direction of shot and a brief description of the subject photographed.

- 3.1.8 Site plans were drawn at an appropriate scale (1:20 or 1:50). Section drawings were drawn at a scale of 1:10.
- 3.1.9 The sediments were described to include information about depth, texture, composition, colour, clast orientation, structure and contacts between deposits.
- 3.1.10 The Colchester Borough Council Archaeological Officer (CBCAO) was kept informed as to the progress of the fieldwork with interim reports on progress.

3.2 The Site Archive

- 3.2.1 ASE informed Colchester and Ipswich Museums prior to the commencement of fieldwork that a site archive would be generated. The site archive is currently held at the offices of ASE and will be deposited at informed Colchester and Ipswich Museums in due course under the accession code COLEM:2014.86. The contents of the archive are tabulated below (Table 1).

Number of Contexts	6
No. of files/paper record	1
Plan and sections sheets	2
Bulk Samples	0
Photographs	154 (digital)
Bulk finds	0
Registered finds	0
Environmental flots/residue	0

Table 1: Quantification of site archive

4.0 RESULTS

4.1 Introduction

4.1.1 The results of the watching brief are described below. Context numbers are given in square brackets thus [100]. Figure 2 shows the areas of work with each observed operation area numbered. All areas were stripped of topsoil first. The topsoil varied in thickness between 0.10m – 0.35m and consisted of turf and thin dark grey/brown soil to the north and ploughsoil in the two fields to the south. Only those operations which were observed by an archaeologist have been included.

Natural deposits

4.1.2 Across the whole site the natural deposits consisted of firm pale tan to light grey clay, occasionally with an orange hue on the surface, becoming light to mid grey with depth (generally below 200mm). A varying amount of flint pebbles, chalk fragments and flecks were present towards the surface. The same material was recorded in the sea wall and embankments, indicating that redeposited natural had been used to create these sea defences.

Area 1

4.2.3 The topsoil was stripped off the extant north embankment and the area in front (south) of it, on both sides of an east-west ditch. The stripped area extended 7-8m south of the ditch to include the slightly raised area where the risings from the ditch were originally dumped when it was dug. The ditch was backfilled with the excavated material (figure 3a) to the point where the Area 5 ditch was dug. Natural deposits were present beneath the topsoil at the base of the embankment. No archaeological features were observed.

Area 2

4.2.4 In the north-east corner of the works, where the extant embankment turned north, an area of topsoil was stripped for 35m north of the east-west ditch. This was to provide topsoil to backfill the ditch, the north-south ditch and part of a pond/reed bed to the north in order to create a platform for new length of embankment. The new embankment connected the extant east-west embankment with the sea wall on the east side of the site (figure 3b). The stripping extended to the top of the sea wall.

4.2.5 Recorded contexts in this area included the turf and topsoil [101], which was very thin and was stripped by machine down onto natural clay [104]. The north-south bank on the east side of the site was also recorded where it was excavated, consisting of redeposited natural clay [102] laid over a thin dark grey silt [103] (figure 3c). The bank was originally created by excavating the north-south ditch and depositing the risings onto vegetation, the decay of which produced the darker context [103], visible beneath the clay in figure 3c. No dating material was found in either the low bank or the material beneath.

Area 3

4.2.6 To the south, a large area measuring 81m north-south and 50.5m east-west was also stripped of its thin covering of topsoil, at only 0.1m thick, down to

natural clay. The area was then excavated to a depth of c 0.5m (figure 3d) to provide further material for backfilling and as a borrow pit for clay to create the new section of embankment in the north-east of the site. The excavation included the southern part of the low bank (context [102]) adjoining the north-south ditch. The decayed vegetation layer [103] was also present here.

- 4.2.7 The topsoil stripping and excavation of the top of the clay (figure 3e) was carefully monitored but no archaeological features or artefacts were recorded or recovered, in spite of the fact that it extended into the area of high potential, where suspected saltern deposits and the ring-shaped feature noted on the EHER (EHER2600) were situated. An examination of the deposits beneath the topsoil revealed a slightly higher concentration of chalk fragments and flecks than was the case further north, but no redness, briquetage or evidence of burning was present.

Area 4

- 4.2.8 The extant embankment forming a corner around the pond to the north-west of the site and an area at its base was stripped of topsoil and enhanced to form the new northern sea wall (figure 3f). Natural clay was observed at the base of the bank but no archaeological features were observed in this location.

Area 5

- 4.2.9 In order to divert the redundant and backfilled east-west ditch in Area 1, which drained the outflow from the pond to the west, a length of new ditch was dug from the west end to join with an extant ditch to the south. The new ditch was 8.4m long and 2.8m wide, and was dug in a U-shape to a depth of 0.65m (figure 4a) into the natural clay. The extant ditch was then recut to enhance its drainage capability (figure 4b), diverting water around the new works and into the north-south main drain beside the sea wall. A new drainage pipe was inserted over a 7m-long section and buried to provide access for machinery across the ditch. The work was partially observed and all of the freshly excavated sections were examined. The new section of ditch was planned, but no archaeological remains were observed and no artefacts recovered.

Area 6

- 4.2.10 A new pond, roughly triangular in plan, was created in the south-west corner of the site (figure 4c). Natural clay was excavated from the centre and used to make an embankment to the south and north-east. The natural upslope of the land formed the west side.

- 4.2.11 This was a part of the site where in the past the dry land met the edge of the marsh and there was considered to be a high potential for archaeological remains to be present. A Roman saltern was found during the evaluation in a similar location relative to the estuary c. 300m to the north, but higher above sea level at c. 2.35m OD on a raised terrace. In the event no archaeological remains were observed in Area 6.

Area 7

- 4.2.12 A borrow pit was excavated at the south end of the site, similar to the Area

3 operation (figure 4d). The topsoil was stripped over the entire area and the natural clay beneath was excavated to c. 0.5m deep on the north side only. The clay was used to enhance the sea wall at the south end of the site and to create islands and the base of a bird hide in Area 10. No archaeological features were observed apart from a concentration of shells in the ploughsoil which was further recorded in Area 8.

Area 8

- 4.2.13 A new drainage ditch was excavated in order to drain the new pond eastwards to the main drainage ditch behind the sea wall (figure 4e). A shell midden was bisected by the ditch and recorded as context [105] (located on figure 2; figure 4f). It was c. 5m x 5m as observed and 0.20m thick and composed almost exclusively of oyster shell. It was not obviously within a cut and was also present in the ploughsoil above, observed in Area 7. There was no indication of a date for this feature but its presence on the surface and within the ploughsoil may indicate a late post-medieval date. Natural clay was present beneath the ploughsoil elsewhere.

Area 9

- 4.2.14 The sea wall was breached in order to allow tidal ingress into the site. Two sections of the sea wall each measuring 50m long were stripped of topsoil and then reduced to the level of the marsh outside the site (figure 5a). An island was left intact in between the breaches. It was clear that the sea wall had been constructed in two stages. A thin black layer of decayed vegetation was observed within the structure of the embankment between layers of redeposited natural clay (figure 5b). This is believed to represent the repair and enlargement of the bank after the 1953 floods, with the clay being deposited onto the vegetation growing on the previous bank.
- 4.2.15 The excavation of the southern breach revealed a line of wooden stakes, context [106] (figure 5c). A total of 19 stakes had been driven into the natural alluvial clay in a curvilinear shape measuring 8.5m long. The individual stakes were mostly roundwood, (figure 5d) with one squared stake which showed evidence of having been machine-cut. Those stakes which had been pulled out by the machine were all cut to a point on the bottom end and all were decayed on the top end. The longest observed was 0.6m long and they were all 120mm – 140mm in diameter.
- 4.2.16 Their date is unknown but the signs of machine-cutting on the squared stake suggests that they were 19th century or later. They probably originally lined the edge of a creek as a revetment feature, being buried during the 1953 enhancement of the sea wall.

Area 10

- 4.2.17 A number of islands of various sizes were created in the centre of the site to provide platforms for nesting birds (figure 5e). In addition, a new bird hide is to be built on the west side on a platform of clay. The footprint areas for these new features were stripped of topsoil down to natural deposits prior to the deposition of clay for their construction (figure 5f). No archaeological features or deposits were recorded in Area 10.

Context	Type	Description	Max. Length	Max. Width	Deposit Thickness
[101] all areas	Layer (topsoil)	Turf and loose dark grey topsoil	Site wide	Site wide	Max 0.15m
[102] Area 2 and 3	layer	Firm orange/tan clay forming a low n-s bank, areas 2 and 3	c. 98m	c. 10m	Max 1.5m high
[103] Area 2 and 3	layer	Dark grey silt, buried vegetation beneath bank, areas 2 and 3	c. 98m	c. 10m	Max observed 0.1m
[104] all areas	natural	Natural clay, orange/tan and various shades of grey	Site wide	Site wide	>2m
[105]	layer	Oyster shell midden, in brown clay	5m	5m	0.2m
[106] Area 9	Line of stakes	A line of 19 stakes lining a creek at the sea wall breach	8.5m	n/a	n/a

Table 2: List of recorded contexts

5.0 DISCUSSION AND CONCLUSIONS

5.1 Discussion

- 5.1.1 The general lack of archaeological remains observed during the watching brief demonstrates that, before being drained and reclaimed in the 18th and 19th centuries, the site was marshland bordering the Colne estuary and relatively unexploited, at least in ways which leave tangible archaeological evidence. Prior to this the edge of the tidal marsh was situated at the bottom of the slope on the west side of the site where the Roman saltern was discovered during the 2014 evaluation in trench 4.
- 5.1.2 The character of the early landscape of the site was probably very similar to the salt marshes which are still present to the east of the sea wall today (figure 6a). A network of creeks which flood at each high tide divide clumps of salt-resistant vegetation which form small islands. The marshes would have been rich in resources, particularly wildfowl, but were relatively inaccessible except by boat.
- 5.1.2 In Area 3 it was anticipated that the ring-shaped cropmark and the apparent discolouration of the soil had a potential archaeological value. On excavation this proved not to be the case. The ring-shaped cropmark may perhaps be explained by the presence of fungal 'fairy rings', two of which were observed in the vicinity and one of which was several metres across. Aside from the slightly increased inclusions of chalk in the surface of the natural clay, no explanation for the soil discolouration was determined.
- 5.1.3 In Area 2 and Area 3 there was a low north-south bank of soil [102]. This was interpreted as the arisings from ditches and a reedbed. The bank was clearly deposited straight onto growing vegetation which then rotted to produce the black layer [103]. It is not known when the reed beds and ditches were dug and the bank was built but the activity may have been associated with quarrying which has been ongoing in the area since the 18th century.
- 5.1.4 The work on the sea wall breach allowed an opportunity to examine its structure and determine the method of construction. It was plainly built in two stages. The earliest bank was c. 1.8m above the land surface to the west and consisted of redeposited natural clay. The later bank was 0.4m higher and also wider, with redeposited clay draped over the whole of the previous bank. A thin black layer divided the two and was clearly composed of rotted vegetation (figure 6b). Neither bank was built on timber footings, nor was there any evidence of timber shoring or lacing for either stage. The line of stakes [106] was curved and probably originally a revetment for a creek edge rather than the sea wall itself. They were beneath the later stage of the sea wall but probably contemporary with the earlier stage.

5.2 Conclusions

- 5.2.1 With reference to the general and project-specific aims set out in section 1.4 of this report, the results of the watching brief were mainly negative. However, the negative evidence itself may contribute to addressing the research topics.

5.2.2 The general aim of monitoring the groundworks and recording any archaeological remains was achieved.

5.2.3 Concerning the role of land reclamation in the development of the landscape of the East of England (Medlycott, 2012) the area of the site was demonstrably reclaimed by the late 18th century. According to the early mapping the land use changed from estuarine salt marsh to agricultural land prior to 1815 and probably before 1777, and the evidence from the watching brief corroborates this. Although the recorded features were interpreted as 19th century or later they were clearly placed in a landscape that was already reclaimed. The position of the Roman saltern, found by the evaluation on the raised terrace to the west, shows that the entire site is on land reclaimed from the marshes.

5.2.4 The three research objectives from Section 1.4, in the form of questions, have also been addressed:

RO1 *Can the results identify and record evidence of late Iron Age/Roman activity associated with salt making activity and exploitation of the former salt marsh?*

Since none of the recorded features or deposits was demonstrably earlier than the 19th century it was not possible to contribute to the research topic regarding the Late Iron Age or Roman production of salt (Brown and Glazebrook 2000). It can only be stated that there was no further evidence for salterns apart from that recorded during the evaluation (ASE 2014).

RO2 *Do the results contribute to an understanding of the development of sea walls and coastal reclamation from the medieval period onwards?*

The sea wall was breached in the central part of the site to allow tidal ingress and create a new salt marsh. The excavation revealed the composition of the sea wall and that it was constructed in two stages (4.2.14 to 4.2.16 above). Neither appeared to be particularly ancient and it is probable that the later bank, which covered and enhanced the earlier bank, was built in the later 1950s after the devastating floods of 1953. The sea walls did not contain any strengthening elements such as timber lacing, being composed entirely of redeposited natural clay.

RO3 *Does the site contribute to an understanding of other exploitation of the inter-tidal zone and grazing marsh landscapes of the Colne Estuary.*

Other than the fact that the land was agricultural from the 18th century, the results did not enhance understanding of the intertidal zone. The second phase of the sea wall was built over a stake revetment which probably supported a creek edge (see 4.2.15). Whether this demonstrates exploitation of the inter-tidal zone is debateable.

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The watching brief was directed by Robin Wroe-Brown for ASE. Andy Lewsey produced the figures for this report; Adrian Scruby and Andy Leonard project managed the excavations and Mark Atkinson project managed the post-excavation process.

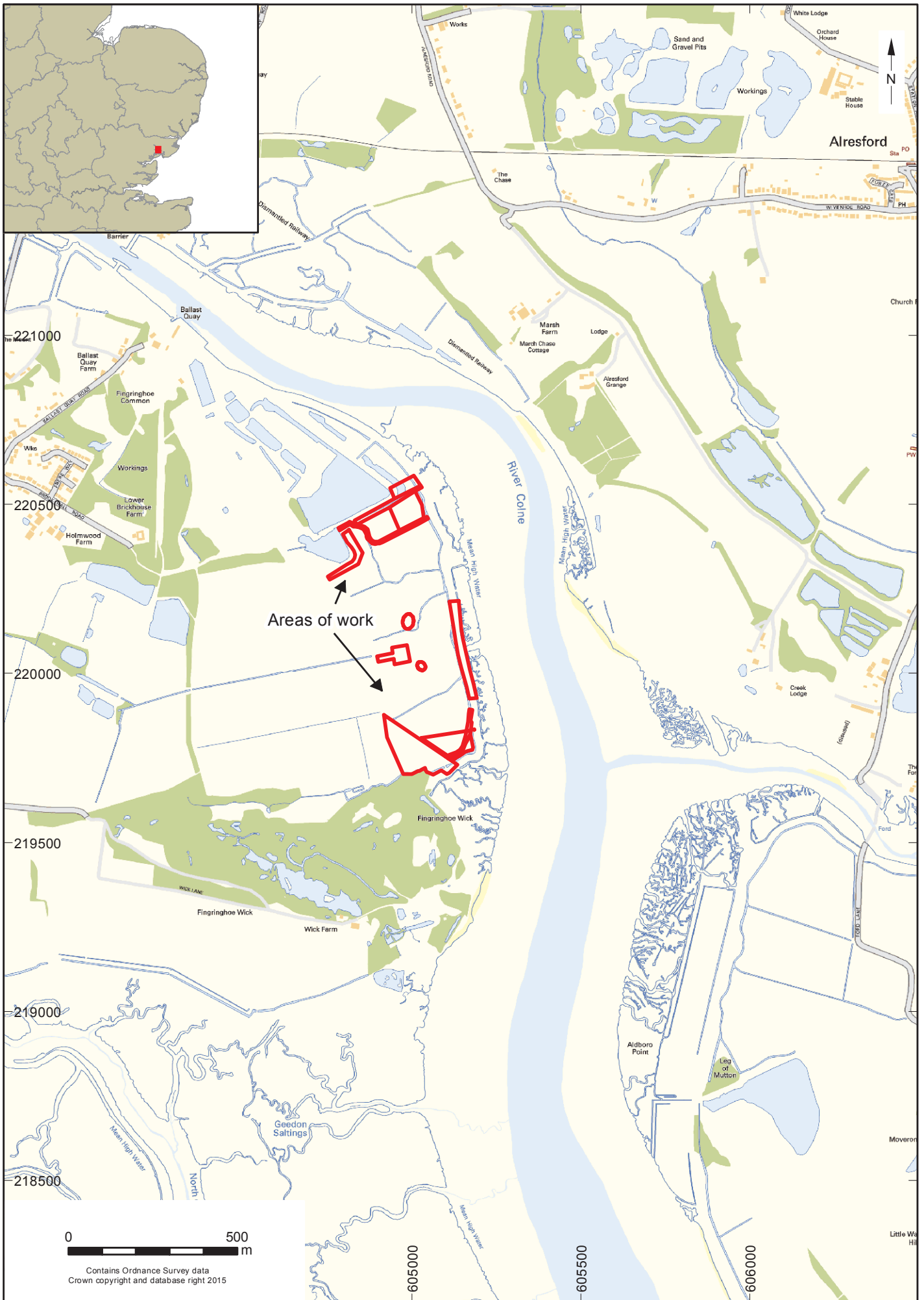
HER Summary Form

Site name/Address: Land North of Fingringhoe Wick, Fingringhoe, Essex	
Parish: Fingringhoe	District: Colchester
NGR: 05000 20210	Site Code: COLEM:2014.86
Type of Work: Watching Brief	Site Director/Group: Robin Wroe-Brown, Archaeology South-East
Date of Work: 20-05-2015 to 23-09-2015	Size of Area Investigated: 33 Ha
Location of Finds/Curating Museum: Colchester	Funding source: Environment Agency
Further Seasons Anticipated?: No	Related HER Nos:
Final Report: EAH roundup	OASIS No: archaeol6-227853
Periods Represented: Post-medieval	
SUMMARY OF FIELDWORK RESULTS:	
<p>Archaeology South-East was commissioned by the Environment Agency to conduct a watching brief on an area of land north of Fingringhoe Wick nature reserve, Fingringhoe, Essex. The works were part of a scheme to extend the nature reserve and provide a new intertidal habitat.</p> <p>A previous desk top scoping document had noted the presence of a ring-shaped cropmark and soil discolouration towards the north end of the site. An archaeological evaluation had also established the presence of a Roman saltern on the higher ground to the west of the site.</p> <p>A number of groundwork operations on the site required archaeological monitoring. These included the excavation of two borrow ponds to provide clay for new embankments, the creation of a pond and reed bed to the south-west, the stripping of topsoil around the existing embankments in preparation for enlarging them, the excavation of new ditches and the breaching of the sea wall to allow tidal ingress. One of the borrow ponds was situated in the location of the cropmark and soil discolouration. In the event little of archaeological value was recorded during the works. A bank was partially removed revealing a previous land surface which may have dated to the 19th century. A deposit of oyster shells was found to the south and a row of stakes was observed in the sea wall breach. No features were found in the location of the cropmark. No artefacts or environmental samples were retained.</p>	
Previous Summaries/Reports: Evaluation report (ASE rep no 2014359)	
Author of Summary: R Wroe-Brown	Date of Summary: 27/10/2015

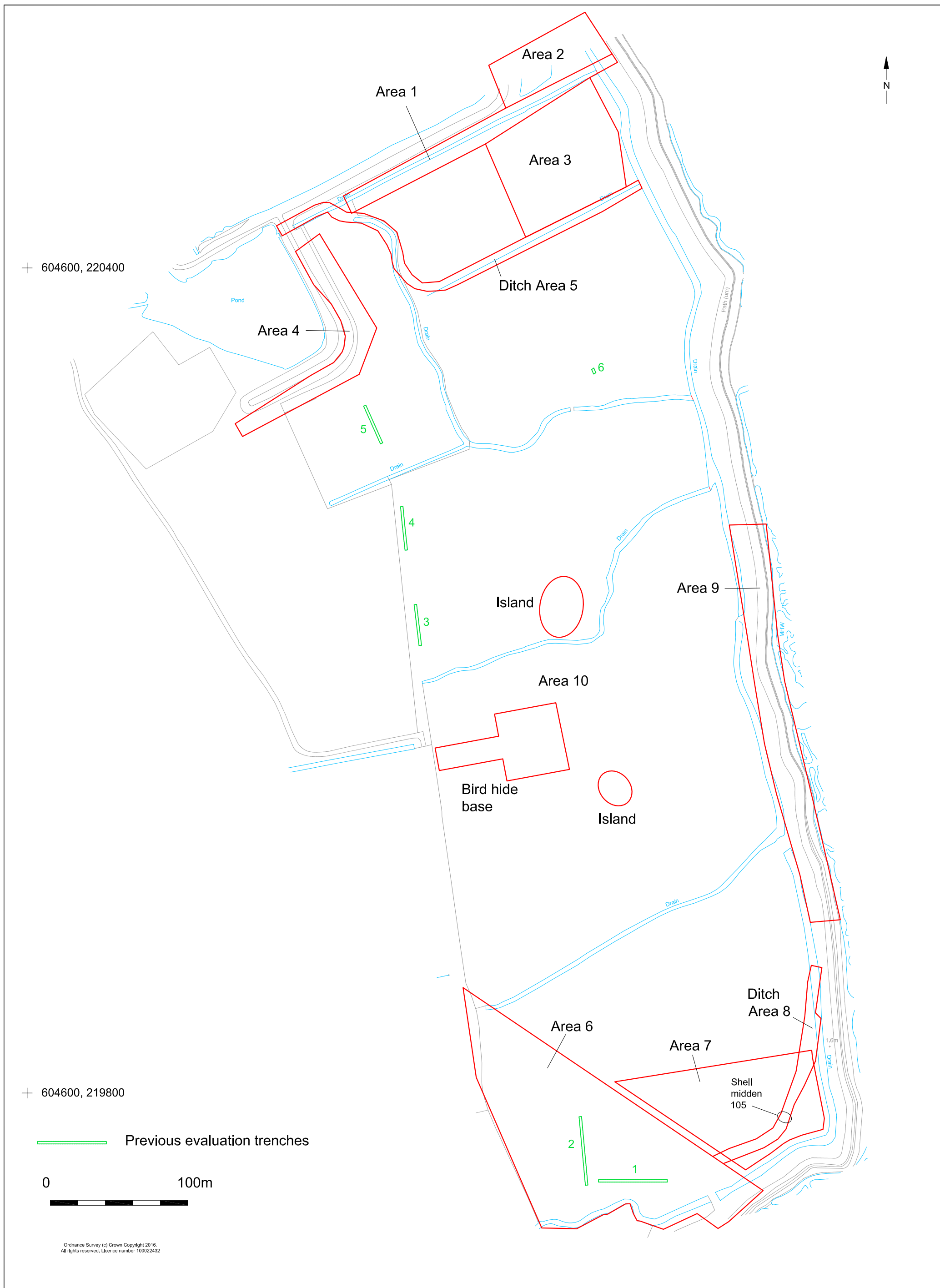
OASIS Form

OASIS ID: archaeol6-227853	
Project details	
Project name	Fingringhoe Wick intertidal habitat creation
Short description of the project	A watching brief was undertaken on an area of land north of Fingringhoe Wick nature reserve. The works were part of a scheme to extend the nature reserve and provide a new intertidal habitat. A previous desk top scoping document had noted the presence of a ring-shaped cropmark and soil discolouration towards the north end of the site. An archaeological evaluation had also established the presence of a Roman saltern on the higher ground to the west of the site. A number of operations on the site required archaeological monitoring. These included the excavation of two borrow ponds to provide clay for new embankments, the creation of a pond and reed bed to the south-west, the stripping of topsoil around the existing embankments in preparation for enlarging them, the excavation of new ditches and the breaching of the sea wall to allow tidal ingress. One of the borrow ponds was situated in the location of the cropmark and soil discolouration. In the event little of archaeological value was recorded during the works. A bank was partially removed revealing a previous land surface which may have dated to the 19th century. A deposit of oyster shells was found to the south and a row of stakes was observed in the sea wall breach. No features were found in the location of the cropmark. No artefacts or environmental samples were retained.
Project dates	Start: 20-05-2015 End: 23-09-2015
Previous/future work	Yes / No
Associated project reference codes	COLEM:2014.86 - Sitecode archaeol6-194240 - OASIS form ID 8380 –Contracting unit record
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m Cultivated Land 1 - Minimal cultivation
Monument type	SEA WALL Post Medieval BURIED LAND SURFACE Post Medieval SHELL MIDDEN Post Medieval
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Planning condition
Project location	
Country	England
Site location	ESSEX COLCHESTER FINGRINGHOE Land north of Fingringhoe Wick nature reserve
Postcode	CO5 7DN
Study area	27 Hectares

Site coordinates	TM 05000 20210 51.842259266421 0.976300513852 51 50 32 N 000 58 34 E Point
Height OD / Depth	Min: 0m Max: 3.05m
Project creators	
Name of Organisation	Archaeology South East
Project brief originator	Essex County Council Place Services
Project design originator	ASE
Project director/manager	Adrian Scruby Andy Leonard
Project supervisor	Robin Wroe-Brown
Type of sponsor/funding body	Environment Agency
Name of sponsor/funding body	Environment Agency
Project archives	
Physical Archive Exists?	No
Physical Archive recipient	Colchester and Ipswich Museums Service
Digital Archive recipient	Colchester and Ipswich Museums Service
Digital Media available	"Images raster / digital photography", "Survey"
Paper Archive recipient	Colchester and Ipswich Museums Service
Paper Contents	"Stratigraphic", "Survey"
Paper Media available	"Context sheet", "Plan", "Section"
Project bibliog	
Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief at land north of Fingringhoe Wick, Fingringhoe, Essex
Author(s)/Editor(s)	Wroe-Brown, R.
Other bibliographic details	ASE report no 2015407
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Description	A4 Report
Entered by	Robin Wroe-Brown (r.wroe-brown@ucl.ac.uk)
Entered on	27 October 2015



© Archaeology South-East		Land north of Fingringhoe Wick	Fig. 1
Project Ref: 8380	Mar 2016	Site location	
Report No: 2015407	Drawn by: APL		



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© Archaeology South-East		Land north of Fingringhoe Wick	Fig.2
Project Ref: 8380	Mar 2016	Areas of work	
Report Ref: 2015407	Drawn by: APL		



Fig. 3a. Stripping the topsoil and backfilling the ditch in Area 1, looking east



Fig.3b. The new and built-up north embankment, Areas 1 and 2, looking west



Fig.3c. A small cleaned area of 103 beneath redeposited clay 102 in Area 2, looking west



Fig. 3d. Area 3 excavated borrow pit, looking south-west



Fig. 3e. Excavation of the borrow pit, Area 3, showing the thin topsoil and the clay, looking east



Fig. 3f. The north-west bank in Area 4 being stripped, looking north

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Project Ref: 8380	Mar 2016	Selected photographs	
Report Ref: 2015407	Drawn by: APL		



Fig. 4a. The new section of ditch in the north-west corner of the site, Area 5, looking south



Fig. 4b. Recutting the Area 5 ditch, looking west



Fig. 4c. The new pond in Area 6, in the south-west corner of the site, looking south



Fig. 4d. Extent of the south borrow pit Area 7, looking north-east. The sluice pipe for the new pond in Area 6 is in the foreground.



Fig. 4e. Cut for the new drainage ditch, Area 8, looking south-west



Fig. 4f. Shell midden truncated by the new drain in Area 8, looking north

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Project Ref: 8380	Mar 2016	Selected photographs	
Report Ref: 2015407	Drawn by: APL		



Fig.5a. The south breach of of the sea wall looking south, Area 9. The water to the right was the result of the first tidal influx after the breach was cut.



Fig. 5b. Section through the sea wall at the north end of the south breach Area 9, showing the two stages of construction separated by a black layer of rotting vegetation, looking north



Fig.5c. Line of stakes 106 in the south breach Area 9, looking north-east



Fig. 5d. Detail of stakes in 106



Fig. 5e. New islands in Area 10, looking south-east



Fig. 5f. Topsoil strip of bird hide base in Area 10, looking east

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Project Ref: 8380	Mar 2016	Selected photographs	
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Fig. 6a. The salt marshes adjacent to the site from the sea wall, looking east



Fig. 6b. The layer of decayed vegetation dividing the sea wall stages of construction as it appeared during the sea wall works, looking north

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Report Ref: 2015407	Drawn by: APL		

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