



NORTH FALLS

Offshore Wind Farm

Archaeological Geophysical Survey Report (Feb 2025) Part 1 of 8

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Onshore Geophysics Five Estuaries, Essex

Detailed Gradiometer Survey Report

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Summary

A detailed gradiometer survey was commissioned by Five Estuaries Offshore Wind Farm Limited ('the client') with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of a Development Consent Order (DCO).

The survey has taken place between December 2021 and November 2024, with a total of 716.2 ha of data collected.

Little Bromley

The gradiometer survey has detected several anomalies that are identified as archaeological in origin. The clearest one is the Roman Road which runs east – west through the north of the site and forms a junction with the road that links Mistley with Colchester just north-west from the site.

In the southern part of the field is evidence of an enclosure, likely Romano-British or earlier. The survey has covered only the northern part, but a larger rectilinear enclosure can be identified from aerial photography. This contributes to the overall image of this area being intensively occupied during the Iron Age and Romano-British period.

The evidence for a possible Romano-British field system is present just to the south of the Roman Road. The intense Roman presence in the area is indicated by the double ditched enclosure at the road junctions and the possible Romano-British enclosure that is present to the north of the site.

The majority of the site is dominated by superficial geology. These features occur when freezing and thawing of the ground water happen throughout an extended period of time. They have been identified as ditches or water channels likely formed during the last Ice Age.

Area 4

The gradiometer survey has identified anomalies which may be archaeological in origin. The rectilinear enclosure with a possible kiln, located in the north-western portion of the site indicates an area of possible industrial activity. However, intrusive investigation would be required to confirm this interpretation.

The remains of an older field system, absent from available map sources, have been identified across the majority of the site. In addition, several ring-ditch features, similar to the circular features, identified from aerial photographs in the wider area could indicate further settlement activity.

A field boundary identified on 1923 OS mapping is located in the south-eastern portion of the survey area.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with periglacial geomorphological processes across the landscape.

Area 5

Geophysical survey has identified areas of archaeological interest. The rectilinear enclosure in the centre of the survey area indicates prehistoric activity within the site, however, this interpretation would have to be confirmed by additional investigation. Two other smaller enclosed areas within the survey extent indicate further settlement activity or animal husbandry within the site.

Numerous features that are noted on the 1898 Second Edition OS mapping are identified throughout the survey. Most of them pertain to former field boundaries. Additionally, two locations of backfilled ponds and a demolished farmhouse have been identified.

The remaining anomalies are thought to be modern or natural in origin, including agricultural activities, such as drainage and ploughing. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.



Area 7

The gradiometer survey detected a possible ditch-like feature, which may pertain to a former field boundary, pre-dating historical mapping. Former field boundaries, identified within 1898 Second Edition OS mapping were also identified.

The remaining anomalies are thought to be modern or natural in origin. This includes field drains, ploughing, and a service. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Area 9

The gradiometer survey did not detect any anomalies of archaeological origin. Two field boundaries, which are known from 1898 Second Edition OS mapping have been identified.

The remaining anomalies are thought to be modern or natural in origin, such as field drains, ploughing, and a service. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Area 10

The gradiometer survey has identified the location of a possible Bronze Age round barrow. Similar barrows are known to be in the general vicinity of the site. However, this feature could as well be natural in origin and this interpretation would require additional investigation for confident confirmation.

Several field boundaries, as well as a demolished dwelling and a pond, which correspond with features from the 1898 Second Edition OS map have been identified within the survey area.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Tendring Green North

The gradiometer survey has identified the location of a truncated round ditch that could relate to a Bronze Age round barrow. This interpretation is tentative at best and would require additional investigation to be confirmed. There is no evidence for the barrows identified from cropmarks elsewhere in the survey area.

Several field boundaries, as well as a path, which are known from the 1898 Second Edition OS map have been identified within the survey data.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Area 12

The gradiometer survey has identified a possible field boundary that predates the available maps. Additionally, five field boundaries that were known from the 1898 Second Edition OS map have been identified as very weak positive responses.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

East of Tendring

The gradiometer survey has successfully identified features that are considered archaeological in origin. A possible round barrow with a central pit has been identified within the survey area, located 70 m north-west of a tumulus known from the historical maps and aerial photography. However, the known barrow is not evident in the data, suggesting a low level of preservation.



Former field boundaries that have been indicated on 1898 OS mapping have been identified across the survey area.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Area 15

The gradiometer survey did not identify any anomalies that would be considered archaeological in origin.

Indication for modern farming has been identified in form of a spread of surface material and land drains.

Area 17

The gradiometer survey did not identify any anomalies that are considered archaeological in origin. Two former field boundaries that are known from the 1898 Second Edition OS map have been identified in the area.

There is no evidence of the ring ditches and pits noted as crop marks, however the area is dominated by natural geological responses, which may make the identification of weak archaeological anomalies difficult.

Indication for modern farming has been identified in the form of land drains.

Area 18

The gradiometer survey has successfully identified features that are considered to be possibly archaeological in origin. A roundhouse or a barrow identified in the north-western part of the survey correlates with cropmark evidence recorded in Essex HER.

The remaining anomalies indicate former field boundaries, and modern agricultural activities in the form of ploughing and land drains or are thought to be natural or modern in origin.

Area 20

The gradiometer survey has identified the remains of a possible small enclosure of an unknown date, however, it could equally indicate a field boundary that predates available mapping.

Several former field boundaries that are known from the 1898 Second Edition OS map have been identified in the area.

An area of strong magnetic enhancement has been identified and may relate to extraction or infilling of material.

The remaining anomalies are natural or modern in origin, including land drains and services.

Kirby Cross West

The gradiometer survey has detected several features, which can be identified as possibly archaeological in origin. A rectilinear enclosure has been identified at the eastern part of the site that could relate to a livestock enclosure. It could as well be a result of periglacial processes and as such natural in origin. This does not correspond with any of the cropmarks recorded across the area. None of the recorded cropmarks have been identified. It is possible that the cropmarks are a product of natural processes or that sediments across the site are obscuring their detection.

A ring ditch feature in the southern part of the survey likely indicates a prehistoric roundhouse or a round barrow and may be associated with the Bronze Age activity noted in the surrounding area.

Several pits of unknown origin have been identified. While these have the potential to be archaeological, they could equally be the result of the natural undulation in the underlying deposits.



The remaining anomalies are thought to be modern or natural in origin. The modern anomaly relates to a service along the north-eastern edge of the area.

Little Clacton road

The gradiometer survey has not identified any anomalies that can confidently be interpreted as archaeology. However several areas of possible archaeology have been identified.

A possible roundhouse or round barrow is located in the north-eastern along with associated pit and ditch features. A small enclosure is also located to the north of this. This may relate to prehistoric settlement activity.

A large enclosure has been identified in the north-western part of the survey area. However, it could equally relate to a past channel of the Holland Brook River.

The remains of a coaxial field system have likely been identified as a series of possible ditch features. These are likely to be medieval in date, possibly associated with cropmarks noted in the area.

The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

Holland Haven North

The gradiometer survey has detected several features, which can be identified as archaeological in origin. The clearest one is the ring ditch feature in the northern part of the survey. It indicates a prehistoric roundhouse or a ring barrow and may be associated with the limited Bronze Age activity noted in the surrounding area.

A possible embankment or water management system has been identified along the western edge of Gunfleet Estuary. This appears to be a ditch and bank feature with angular turns suggesting a manmade rather than natural origin.

Towards the northern end, and extending into, Gunfleet Estuary are two parallel ditch features. The origin of these is unclear from the geophysical data alone. They may represent an archaeological trackway or feature associated with the estuary. However, they could equally relate to modern agricultural activity.

The remaining anomalies are thought to be modern or natural in origin. These include land drains and areas of alluvial deposits.

Area 30

The gradiometer survey has detected several features, which can be identified as possible archaeological in origin. Several linear anomalies that could relate to past field arrangements were identified. Additionally, a linear and a circular pit arrangement were identified in the western portion of the survey area.

A broad oval feature that indicates a burning area or a large pit of an unknown origin was identified in the centre of the western area. The limited nature of geophysical information does not allow for a more accurate interpretation.

The remaining anomalies relate to a path, modern farming practices and superficial geology.



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Onshore Geophysics Five Estuaries, Essex

Detailed Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by Five Estuaries Offshore Wind Farm Limited to carry out a series of geophysical surveys to support the development of the Five Estuaries Offshore Wind Farm (VE) (**Figures 1 – 15**).
- 1.1.2 A data-sharing agreement has been agreed upon with North Falls Offshore Wind Farm Limited which has been undertaking a series of magnetic gradiometer surveys along its proposed route. This report includes results from surveys undertaken across both schemes.

1.2 Scope of document

- 1.2.1 This report presents a brief description of the methodology followed by the detailed survey results and the archaeological interpretation of the geophysical data.

2 METHODOLOGY

2.1 Introduction

- 2.1.1 The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2018), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

2.2 Aims and objectives

- 2.2.1 The aims of the survey comprise the following:
- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
 - To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.
- 2.2.2 In order to achieve the above aims, the objectives of the geophysical survey are:
- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
 - To clarify the presence/absence of anomalies of archaeological potential; and
 - Where possible, to determine the general nature of any anomalies of archaeological potential.

2.3 Fieldwork methodology

- 2.3.1 The cart-based gradiometer system used a Leica Captivate RTK GNSS instrument, which receives corrections from a network of reference stations operated by the Ordnance Survey (OS) and Leica Geosystems. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceeds European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).
- 2.3.2 The detailed gradiometer survey was undertaken using four SenSys FGM650/3 magnetic gradiometers spaced at 1 m intervals and mounted on a non-magnetic cart. Data were collected with an effective sensitivity of $\pm 8 \mu\text{T}$ over $\pm 1000 \text{ nT}$ range at a rate of 100 Hz, producing intervals of 0.02 m along transects spaced 4 m apart.
- 2.3.3 The detailed gradiometer survey was undertaken using four Bartington Grad-01-1000L gradiometers spaced at 1 m intervals and mounted on a non-magnetic cart. Data were collected with an effective sensitivity of 0.03 nT at a rate of 10 Hz, producing intervals of 0.15 m along transects spaced 4 m apart.

2.4 Data processing

- 2.4.1 Data from the survey were subjected to minimal correction processes. These comprise a background removal median function with an effective window of 50 m, applied to correct for any variation between the sensors, a discard overlaps function where transects have been collected too close together and an interpolation used to grid the data.
- 2.4.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

3 LITTLE BROMLEY (NGR 608400, 228700)

3.1 Location, topography, and geology

- 3.1.1 The survey comprises 122.9 ha of agricultural land, distributed over 10 areas. It is centred around Norman's Farm on Ardleigh road, 1 km to the west of Little Bromley. The site is bounded to the west by Cattsgreen Farm, Grange Road, and an unnamed track to the north and east, and leads onto further open agricultural to the south. There is also a 250 m buffer surrounding Norman's Farm and Jennings's Farm in the centre of the survey area.
- 3.1.2 Despite the large size of the area, the topography of the site is very flat at around 33 m aOD, dipping very slightly to the south.
- 3.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits Cover Sand, with a small area of Sand and Gravel of Kesgrave Catchment subgroup (BGS 2022).
- 3.1.4 The soils underlying the site are likely to consist of stagnogleyic paleo-argillic brown earths of the 582a (Batcombe) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

3.2 Archaeological and historical context

- 3.2.1 There are a small number of early prehistoric findspots within the area, including a scatter of flints at North Jennings's Farm, in the north-east of the survey area and Mesolithic finds 625 m south-east of the site.
- 3.2.2 In the southern part of the site, there is cropmark evidence for a possible Neolithic Henge monument and there are also numerous Bronze age records within the study area. This includes three ring ditches extending from the northern part of the site, with a further example on the south-eastern boundary, as well as a findspot in the north-eastern field. In addition, numerous further Bronze Age round barrows have been recorded, particularly 625 m south of the site, where a group of at least 25 ring ditches plus other linear features has been identified near Great Bromley.
- 3.2.3 Numerous cropmarks have been recorded across the site and wider landscape that are likely prehistoric in origin. There is also a Late Iron Age findspot in the easternmost field. However, the majority of evidence is attributable to the Romano-British period.
- 3.2.4 Directly north of the site, there is a junction of two Roman roads. The first runs on a south-west to north-east trajectory, linking Mistley with Colchester, and the second is on an east – west alignment through Horsleycross Street. At the intersection of these roads is a dense concentration of cropmarks comprising a double-ditched rectangular enclosure, with entrances, a curvilinear enclosure, trackways, linear features, and field boundaries. Further to the north and east of this is a complex of linear features, and rectilinear and oval enclosures which may suggest the presence of a roadside settlement, although some of these cropmarks may be geological.
- 3.2.5 Linear features extending from the Roman roads continue into the northern portion of the site, and cropmarks of field systems or trackways are visible covering a large portion of the southern part of the site to the south and west of Little Bromley Hall. These are of unknown date, but date to anywhere between the Bronze Age and medieval periods. However, there are a large number of findspots dating to the Romano-British period to the south of the site.

- 3.2.6 There are a small number of medieval and post-medieval findspots within the site, mostly relating to agriculture objects such as horse harness hooks, as well as two post-medieval coins in the eastern part of the site. First edition OS mapping also illustrates the character of the landscape was predominantly agricultural, although numerous field boundaries are no longer extant.

3.3 Introduction

- 3.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 29 March – 19 October 2022 in several separate campaigns. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 119.2 ha was achieved.
- 3.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 16 – 29**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 3.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 17, 19, 21, 23, 25, 27, 29**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 3.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 3.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 3.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

3.4 Gradiometer survey results and interpretation

- 3.4.1 In the northern part of the survey area, in LB_1 at **4000**, two parallel negative linear anomalies have been identified on an east – west alignment for 193 m (**Figure 17**). They are 1.3 m wide and positioned 10 m apart. The anomalies have an 80 m break and continue to the west for an additional 150 m. They indicate verges of the ditches of the Roman road that runs across the site. There is no indication for the preserved road surface, however, this could be attributed to the low contrast between that and aeolian superficial deposits across the site.
- 3.4.2 A weakly positive curvilinear anomaly is located 30 m north of the Roman road at **4001** (**Figure 17**). It indicates a ditch-like feature that occupies an area of 17 m by 17 m and is open towards the west. This could relate to a rectangular enclosure, similar to the ones recognised from cropmarks, however, it could as well be natural in origin.
- 3.4.3 To the south of **4000** is a weak positive linear anomaly at **4002** on an east – west orientation (**Figure 17**). It is 120 m long and up to 3 m wide. It indicates ditch features that likely relate

to a past field system. A very weak positive linear trend is extending toward the west, and likely represents a section of the ditch that has been ploughed down. Several responses on a similar alignment are located 100 m to the south at **4003**, and **4004** (**Figure 17**). They are noted as weakly positive linear anomalies on the same east – west alignment. They are up to 2 m wide and are 76 m and 83 m long respectively, spaced 360 m apart, however, weakly positive trends in between could form part of the same feature. It is likely these anomalies are all boundaries forming part of the same field system. It is not possible to offer a confident date for these features based on the geophysics data alone.

- 3.4.4 A similar group of linear anomalies is located within the same area as **4003** and **4004**. An area of weakly positive linear anomalies has been identified at **4005** – **4010** on an orthogonal north-east to south-west by north-west to south-east alignment (**Figure 17**), covering an area of 285 m by 265 m. They are up to 2 m wide and up to 240 m long and indicate ditch-like features. The five linear anomalies on a south-east to north-west orientation (**4006** – **4010**) form are separated by 55 m to 65 m. They are bounded at the north-western end by a perpendicular ditch at **4005** and are open on the south-eastern side. These ditch features indicate a field system of an unknown date. Several weakly positive linear trends have been identified on the same alignment. While these could relate to the wider field system, their magnetic response is too weak for a confident archaeological interpretation.
- 3.4.5 A weakly positive linear anomaly **4011** is at the southern end of the survey area, in LB_9 (**Figure 25**). It is orientated north-west to south-east and is 52 m long by 1.5 m wide. Two additional, weakly positive linear anomalies branch off towards the north-east and south-west from its western side. They measure 18 m and 24 m respectively and are up to 1.5 m wide. These anomalies indicate ditch-like features that are likely related to past field systems.
- 3.4.6 To the south of **4011** is a stronger positive linear anomaly at **4012** that is on a north-west to south-east orientation (**Figure 25**). It is 71 m long by 3.5 m wide and it is noted on aerial photography to extend beyond the southern survey boundary. To the south of the anomalies at **4012** is a weakly positive linear anomaly at **4013** that forks into two. The anomaly is on a north-west to south-east orientation and is 14 m long by 2 m wide, extending beyond the southern edge of the survey area. These anomalies indicate ditch-like features that could be of archaeological origin, most likely a part of a former field system. However, considering aeolian processes on site, they could as well be natural in origin.
- 3.4.7 A group of weakly positive linear anomalies on an orthogonal arrangement are located 25 m south-east of **4013** at **4014** and **4015** (**Figure 25**). They are on a north-west to south-east and south-west to north-east orientation, up to 37 m long and 1.5 m wide. They extend towards the south, outside of the survey boundary. The anomalies indicate ditch-like features that likely form the northern part of a possible enclosure. Evidence that allows this interpretation has been identified in available aerial photography, where linear features extend to the south and form a possible Romano-British enclosure of 98 m by 52 m. However, this interpretation is tentative, considering partial coverage of the feature and the aeolian geology on site.
- 3.4.8 A positive oval anomaly is located in the centre of LB_5 **4016** (**Figure 21**). It is 8 m long and 4.5 m wide on a south-west to north-east alignment, indicating a pit-like feature of an unknown origin. The north-eastern part has a stronger magnetic signature which could indicate deeper deposits or more magnetic material. It could indicate a ground dwelling or a large pit feature, however, it could just as well be natural in origin.

- 3.4.9 A weak positive curvilinear anomaly **4017** is located in the LB_6 (**Figure 25**). It is up to 1 m wide and 20 m long, opened towards the south-west. It pertains to a ditch-like feature and could indicate a small field enclosure. However, it is equally possible that it is a result of geological processes and as such natural in origin.
- 3.4.10 Numerous weakly positive linear anomalies (**4018 – 4032**) have been identified throughout the site that are predominately on a north – south or east – west orientation. They are up to 380 m long and up to 2 m wide indicating ditch-like features. These features have been identified as former field boundaries and are present on 1898 OS mapping.
- 3.4.11 Within the northern part of the survey, in LB_1, is an area of increased magnetic response at **4033 (Figure 17)**. It covers an irregularly shaped area of about 40 m by 50 m and extends beyond the northern survey boundary. It has been identified as a spread of material and corresponds with the location of the former Lower Barn, known from 1896 OS mapping.
- 3.4.12 A similar anomaly is located to the south, in LB_4, at **4034 (Figure 21)**. This irregularly shaped anomaly covers an area of 55 m by 45 m and indicates a surface distribution of more magnetic material, such as burned clay bricks. It corresponds with the location of the now demolished Cole's Farm noted on the 1896 OS mapping.
- 3.4.13 In the south-eastern corner of LB_4 is a further area of increased magnetic response at **4035 (Figure 21)**. It covers an area of 46 m by 20 m and extends beyond the eastern edge of Field 4. It indicates an area of made ground, likely modern in origin.
- 3.4.14 A linear dipolar anomaly has been identified near **4035**, at **4036 (Figure 21)**. It is 60 m long by 3 m wide and extends beyond the eastern border of Field 4. It is noted as a path on the 1955 OS mapping.
- 3.4.15 A strong dipolar anomaly at **4037** runs along the northern border of LB_9 (**Figure 25**) on an east – west alignment. It is 410 m long by 3 m wide and indicates a path visible on 1955 OS mapping.
- 3.4.16 An increased magnetic response anomaly is located to the south, in LB_7, at **4038 (Figure 23)**. This irregularly shaped anomaly covers an area of 65 m by 34 m and indicates a surface distribution of more magnetic material, such as burned clay bricks. It has been identified as a spread of material and corresponds with the location of the former Rudkin's farm, known from 1896 OS mapping. A similar anomaly **4039** is located 70 m to the south. It indicates a further spread of material with enhanced magnetic properties.
- 3.4.17 Numerous broad weakly positive linear, curvilinear, and sinuous anomalies have been identified throughout the site as superficial geology. They indicate natural ditches formed in a periglacial environment on aeolian soils during the last glacial period. Being a surface feature, they could accumulate archaeological material and could have been used as field boundaries in the past, however, further investigation would be required to confirm this theory. In addition, very broad weakly positive anomalies have been recognised in the survey. This suggests the presence of aeolian sediments with a very weak magnetic response. Such sediments could form on top of archaeological features and obscure detection.
- 3.4.18 Weakly positive parallel linear anomalies in Fields 2, 5 and 8 are the result of modern agricultural practices, such as ploughing.



3.5 Discussion

- 3.5.1 The gradiometer survey has detected several anomalies that are identified as archaeological in origin. The clearest one is the Roman Road which runs east – west through the north of the site and forms a junction with the road that links Mistley with Colchester just north-west from the site.
- 3.5.2 In the southern part of the field is evidence of an enclosure, likely Romano-British or earlier. The survey has covered only the northern part, but a larger rectilinear enclosure can be identified from aerial photography. This contributes to the overall image of this area being intensively occupied during the Iron Age and Romano-British period.
- 3.5.3 The evidence for a possible Romano-British field system is present just to the south of the Roman Road. The intense Roman presence in the area is indicated by the double ditched enclosure at the road junctions and the possible Romano-British enclosure that is present to the north of the site.
- 3.5.4 The majority of the site is dominated by superficial geology. These features occur when freezing and thawing of the ground water happen throughout an extended period of time. They have been identified as ditches or water channels likely formed during the last Ice Age.

4 AREA 4 (NGR 609200 227600)

4.1 Location, topography, and geology

- 4.1.1 The survey comprises 17.6 ha of agricultural land, distributed over one area. It is 1.7 km to the north-east of Great Bromley and 3 km north-west of Little Bentley. The site is bounded to the west by Tendring Green, to the north by Stone Green Road, Fairly Farm to the east, with further open agricultural land to the east and south. The survey area is bisected by Wolves Hall Lane.
- 4.1.2 The topography of the site is a gentle slope at around 34 m aOD in the north-west, down to 32 m aOD in the south.
- 4.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand to the north-east, and sand and gravel of the Kesgrave Catchment subgroup south-west (BGS 2022).
- 4.1.4 The soils underlying the site are likely to consist of Stagnogleyic argillic brown earths of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey

4.2 Archaeological and historical context

- 4.2.1 There are nine Grade II Listed Buildings and one Grade II* Listed Building within the 1 km search radius of the site. The Grade II* Listed Building is the Church of St Mary a medieval parish church located 25 m from the northern boundary of the site. The Old Rectory built in the post-medieval period is located 59 m to the north-east of the site. The remaining listed buildings are three farmhouses, two from the post-medieval and one from the 16th century.
- 4.2.2 A linear feature has been identified as a field boundary from aerial photography within the site. Additionally, spreading to its south and west is a large area which Essex HER describes as containing linear features, many ring ditches, enclosures and what may be a henge.
- 4.2.3 Bronze Age activity is widespread in the wider area. A concentration of at least 25 ring ditches/round barrows, were identified from cropmarks 620 m to the south-west of the site. Other cropmarks of ring ditches are located 230 m, 620 m, and 890 m to the west, and 170 m to the south-west.
- 4.2.4 Spread across the wider 1 km search area there are various ditches and field boundaries, extraction pits, and field systems, many of which may be prehistoric in origin.
- 4.2.5 Map regression shows that the site has retained its character since the late 1800s. The only change to the site was the removal of a field boundary changing it from one field, to two.

4.3 Introduction

- 4.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 9 – 16 November 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 17.7 ha was achieved.
- 4.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of

1:2,000 (**Figures 30 – 33**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 4.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 31 and 33**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 4.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 4.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

4.4 Gradiometer survey results and interpretation

- 4.4.1 A weakly positive linear anomaly is located in the north-western portion of the survey area, at **4100 (Figure 31)**. The anomaly is 70 m long and 43 m wide on a south-west to north-east alignment and may extend beyond the survey area to the north. This may relate to a ditched feature, possibly an enclosure. Furthermore, a strong circular dipolar anomaly is located within the wider anomaly. This anomaly has a diameter of 8 m and indicates a thermoremanent feature produced from high temperature burning. This may relate to a kiln or a hearth. Geophysical survey alone cannot truly categorise these anomalies and further intrusive investigation would be required. Alternatively, due to their magnetic character and alignment, these features may be part of the wider presence of extensive rectilinear periglacial anomalies across the site.
- 4.4.2 Evidence of widespread perpendicular weakly positive linear anomalies is evident across this portion of the site. These are located to the south of **4100** and are on a similar alignment (**4101 – 4109; Figure 31**). The anomalies are up to 2 m wide and the largest is 150 m long. These anomalies indicate ditch-like features, potentially forming field systems. Alternatively, due to their magnetic character and alignment, these features may be part of the wider presence of extensive periglacial anomalies across the site.
- 4.4.3 A group of weakly positive linear and subcircular anomalies (**4110**) is located 140 m to the east of **4100 (Figure 31)**. It occupies an area of 25 m by 17 m on a north-east to south-west alignment. The ditch features could pertain to a small enclosure; however, it is just as likely that they are natural in origin.
- 4.4.4 Several weakly positive penannular anomalies at **4111** and **4112** have been identified in the eastern portion of the site (**Figure 31**). The penannular anomalies have overall diameters of up to 15 m, with the individual magnetic anomalies 2 m wide, and are open towards the east and south-east. Several small discrete circular anomalies have been identified near the ring ditches that have diameters of up to 2 m. These anomalies indicate possible ring-ditch structures, such as round houses with associated pit features. These could be the remains of settlement activity, with dwellings and associated storage or refuse

pits. Features of this character may pertain to a wide range of dates, from the prehistoric through to the Romano-British period. However, due to the previously mentioned periglacial geology underlying the site, these features could also be associated with that, rather than archaeological activity.

- 4.4.5 Two linear alignments of dipolar anomalies are located in the survey area at **4113** and **4114** (**Figure 31, 33**). They are 65 m long by 3 m wide and 292 m long by 2 m wide respectively. They correspond to the location of former field boundaries visible on 1923 OS maps.
- 4.4.6 Numerous weak positive linear trends have been identified within the survey area. However, their weak magnetic nature and lack of further anomaly context prohibit further interpretation.
- 4.4.7 Modern agricultural processes have been identified through linear positive, or weak dipolar, anomalies. These are likely associated with plough lines and land drains.
- 4.4.8 Broad weakly positive anomalies have been identified, across the survey area. As previously discussed, these anomalies indicate variability in the magnetic character of the underlying superficial geology. Considered to be natural in origin, these features most likely relate to geomorphological changes associated with periglacial activity across the landscape.

4.5 Discussion

- 4.5.1 The gradiometer survey has identified anomalies which may be archaeological in origin. The rectilinear enclosure with a possible kiln, located in the north-western portion of the site indicates an area of possible industrial activity. However, intrusive investigation would be required to confirm this interpretation.
- 4.5.2 The remains of an older field system, absent from available map sources, have been identified across the majority of the site. In addition, several ring-ditch features, similar to the circular features, identified from aerial photographs in the wider area could indicate further settlement activity.
- 4.5.3 A field boundary identified on 1923 OS mapping is located in the south-eastern portion of the survey area.
- 4.5.4 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with periglacial geomorphological processes across the landscape.

5 AREA 5 ACCESS (NGR 610300, 227600)

5.1 Location, topography, and geology

- 5.1.1 The survey comprises 77.3 ha of agricultural land distributed over six fields. It is located 2 km to the south-east of Little Bromley and 4.5 km to the south of Manningtree. The site is bounded by Spratts Lane to the west, Stow Farm Kennels, Payne's Lane, and further fields to the south, west, and north.
- 5.1.2 The topography of the site is flat situated around 33 m aOD.
- 5.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of clay, silt, and sand Cover Sands. (BGS 2022).
- 5.1.4 The soils underlying the site are likely to consist of stagnogleyic paleo-argillic brown soils of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

5.2 Archaeological and historical context

- 5.2.1 There are six Grade II Listed Buildings within the 1 km search radius of the site. They are predominately located in the village of Little Bromley.
- 5.2.2 A prehistoric leaf-shaped arrowhead was found within the survey area (Area 5_LP 5). In addition, numerous cropmarks have been identified across the survey area.
- 5.2.3 Prehistoric activity in the wider area has been identified in the form of a few findspots such as a Palaeolithic hand axe located at Marsh Farm (Great Bromley) 2 km to the south-west from the site, a scatter of flints 2 km to the west of the site, a Mesolithic biconical perforated sandstone mace head located at 1.5 km north of the site, and a Bronze Age tripartite collared urn located 1.7 km west of the site.
- 5.2.4 The whole landscape surrounding the survey area presents numerous undated cropmarks, some of which appear to be ring ditches, enclosures, tracks, parish boundaries, and a Roman road (located 1.5 km north of the site). However, some of these crop marks could also be of geological origin.
- 5.2.5 A map regression analysis has shown no major changes in the landscape over the last two centuries apart from the presence of former field boundaries, disappeared farm buildings, and infilled ponds within the survey area.

5.3 Introduction

- 5.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 8 August – 22 November 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 72.3 ha was achieved. Overgrown terrain and the building in the southern corner of Field 1 obstructed the total coverage of the area.
- 5.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 32 – 43**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 5.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 33, 35, 37, 39, 40, 43**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 5.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 5.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 5.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

5.4 Gradiometer survey results and interpretation

- 5.4.1 A weak positive rectilinear anomaly is located in field Area 5_05 at **4200**. It is up to 2.5 m wide and occupies a space of 48 m by 39 m on a west – east alignment (**Figure 35, 37**). These anomalies indicate a ditch-like feature, likely an enclosure. The eastern boundary has an 8 m wide gap, which could be an entrance to the enclosure. Several positive circular anomalies have been identified within **4200**. They are up to 3.5 m in diameter and indicate pit-like features. Additionally, several weakly positive linear anomalies lie within the enclosure, which indicate further internal divisions. Weakly positive linear anomalies to the east of **4200** continue on the same alignment at **4201**. Their magnetic response is weaker, and they have been identified as possibly archaeological in origin. They extend for a further 30 m to the east. The prehistoric activity within the area suggested by the finding of a leaf-shaped arrowhead and cropmarks indicate that this enclosure and associated pits and ditches are related to the prehistoric period.
- 5.4.2 A weak negative linear anomaly at **4202** has been identified within **4200** (**Figure 35, 37**). It is up to 1 m wide and occupies a space of 12 m by 7 m on a north-east to south-west orientation. This anomaly may relate to a small stone wall and is likely, not contemporary with the enclosure at **4200**. Further investigation would be required to confirm the origin of this feature.
- 5.4.3 Another rectilinear arrangement of weakly positive anomalies is located 220 m to the north-west at **4203**, in field Area 5_04 (**Figure 35**). It occupies a square area of 21 m by 21 m and is 2 m in width, pertaining to ditch-like features. An oval dipolar anomaly is located in the north-western corner of it that occupies an area of 6 m by 3.5 m. This kind of anomaly could relate to an oven or a kiln, however, it could equally indicate a ferrous object. The feature at **4203** has been interpreted as a ditched enclosure, however, further investigation would be required to determine its origin.
- 5.4.4 In the central portion of field Area 5_03 is a weak positive curvilinear anomaly at **4204** that is up to 1.5 m wide (**Figure 35**). It runs on a WSE – ENE orientation for 28 m and curves towards the north at its eastern end for an additional 5 m. It indicates a ditch-like feature. A circular positive anomaly is located 3 m to the west of it, with a diameter of 3.5 m, which likely relates to a pit feature. The anomalies suggest a former field boundary that predates the available mapping, or a small, truncated enclosure of an unknown origin.

- 5.4.5 In the south-eastern portion of the survey area is a positive curvilinear anomaly at **4205 (Figure 39)**. It is 12 m long by 2 m wide and indicates a ditch-like feature that could relate to archaeological activities; however, it is more likely that it is a result of modern farming practices or geological processes. Numerous weak positive linear anomalies (**4206 – 4221**) have been identified throughout the survey area (**Figures 33, 35, 37, 39**). They are up to 3 m wide and up to 500 m long and have been identified on the 1898 Second Edition OS mapping as former field boundaries.
- 5.4.6 To the south of **4200** are two irregular areas of increased magnetic responses at **4222, 4223 (Figures 35, 37)**. They occupy an area of up to 24 m by 17 m. and are marked on 1898 Second Edition OS mapping as ponds. Another area of increased magnetic response is noted along the southern side of field Area 5_03 (**4224**) and relates to the demolition of a part of the Hawkings Farm noted on 1898 Second Edition OS mapping. Amorphous areas of increased magnetic response in the fields Area 5_01 (**4225**), Area 5_03 (**4226, 4227**), and Area 5_06 (**4228**) (**Figures 35, 39**) indicate a surface spread of magnetically enhanced material, likely related to a man-made ground.
- 5.4.7 Numerous weak positive linear trends have been identified within the survey area which were considered too weak for confident interpretation.
- 5.4.8 Indications of modern agricultural processes have been identified in the form of plough lines and land drains.
- 5.4.9 Broad positive anomalies dominate the centre of the survey area. They are amorphous in shape and indicate layers of periglacial superficial geology, which could obscure weaker archaeological features.

5.5 Discussion

- 5.5.1 Geophysical survey has identified areas of archaeological interest. The rectilinear enclosure in the centre of the survey area indicates prehistoric activity within the site, however, this interpretation would have to be confirmed by additional investigation. Two other smaller enclosed areas within the survey extent indicate further settlement activity or animal husbandry within the site.
- 5.5.2 Numerous features that are noted on the 1898 Second Edition OS mapping are identified throughout the survey. Most of them pertain to former field boundaries. Additionally, two locations of backfilled ponds and a demolished farmhouse have been identified.
- 5.5.3 The remaining anomalies are thought to be modern or natural in origin, including agricultural activities, such as drainage and ploughing. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

6 AREA 7 ACCESS (NGR 611300 228000)

6.1 Location, topography, and geology

- 6.1.1 The survey comprises 22.9 ha of agricultural land situated across two fields. It is located 1 km to the south-east of Little Bromley and 3.5 km to the south of Manningtree. The site is bounded by agricultural fields from all sides.
- 6.1.2 The topography of the site is flat situated around 33 m aOD.
- 6.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of clay, silt, and sand Cover Sands. (BGS 2022).
- 6.1.4 The soils underlying the site are likely to consist of stagnogleyic paleo-argillic brown soils of the 582e (Tendring) association in the western part of the survey and pelo-stagnogley soils of the 712c (Windsor) association in the eastern part of the survey (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

6.2 Archaeological and historical context

- 6.2.1 There are six Grade II Listed Buildings within the 1 km search radius of the site. They are predominately located in the village of Little Bromley.
- 6.2.2 Prehistoric activity in the wider area has been identified in the form of a few findspots such as a Palaeolithic hand axe located at Marsh Farm (Great Bromley) 2 km to the south-west from the site, a scatter of flints 2 km to the west of the site, a Mesolithic biconical perforated sandstone mace head located at 1.5 km north of the site, and a Bronze Age tripartite collared urn located 1.7 km west of the site. A prehistoric leaf-shaped arrowhead was found to the south of the survey area, within Area 5 in LP_5.
- 6.2.3 The whole landscape surrounding the survey area presents numerous undated cropmarks, some of which appear to be ring ditches, enclosures, tracks, parish boundaries, and a Roman road (located 1 km north of the site). However, some of these crop marks could also be of geological origin.
- 6.2.4 A map regression analysis has shown no major changes in the landscape over the last two centuries apart from the presence of former field boundaries, disappeared farm buildings, and infilled ponds within the survey area.

6.3 Introduction

- 6.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 11 January – 13 January 2023. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 28.2 ha was achieved.
- 6.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 41 – 45**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 6.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 45** and

47). Full definitions of the interpretation terms used in this report are provided in Appendix 2.

- 6.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 6.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 6.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

6.4 Gradiometer survey results and interpretation

- 6.4.1 A weak positive linear anomaly at **4300** is located in the centre of Area_7_02 (**Figures 43**). It is up to 2 m wide and 220 m long on an east – west orientation. It indicates a ditch-like feature that likely relates to a past field boundary that predates available maps. It has the same orientation as the possible prehistoric enclosure **4300**, located 500 m to the south in Area 5, however, it could as well be later in origin.
- 6.4.2 Two weak positive linear anomalies **4301** and **4302** were identified traversing the site on east – west and south-west to north-east orientations and one (**4303**) on a east to west orientation (**Figures 43, 45**). They are up to 2 m wide and 476 m, 355 m and 84 m long respectively. These ditch-like features were identified on the 1898 Second Edition OS mapping as former field boundaries.
- 6.4.3 Two strong dipolar anomalies at **4304** has been identified as modern services.
- 6.4.4 Numerous weak positive linear trends have been identified within the survey area which were considered too weak for confident interpretation.
- 6.4.5 Indications of modern agricultural processes have been identified in form of plough lines and land drains.
- 6.4.6 Broad positive anomalies dominate the centre of the survey area. They are amorphous in shape and indicate layers of periglacial superficial geology, which could obscure weaker archaeological features.

6.5 Discussion

- 6.5.1 The gradiometer survey did detect a linear anomaly that was considered to be of possible archaeological origin. It is likely part of a past field system that predates available mapping.
- 6.5.2 Two field boundaries, which are known from 1898 Second Edition OS mapping have been identified.
- 6.5.3 The remaining anomalies are thought to be modern or natural in origin, such as field drains, ploughing, and a service. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

7 AREA 9 (NGR 610300, 227600)

7.1 Location, topography, and geology

- 7.1.1 The survey comprises 43 ha of agricultural land, distributed over four areas. It is 3.7 km to the west of Wix and 2.2 km north-east of Little Bentley. The site is bounded to the west by the B1035 and waterworks, to the south by the A120, and further agricultural land to the east and north. The survey area is bisected by a farm track orientated north – south heading from the A120 to the farmyard.
- 7.1.2 The topography of the site is gently sloping from around 38 m aOD in the south to 32m aOD in the north.
- 7.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand (BGS 2022).
- 7.1.4 The soils underlying the site are likely to consist of Stagnogleyic argillic brown earths of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

7.2 Archaeological and historical context

- 7.2.1 There are four Grade II Listed Buildings of post-medieval origin within the 1 km search radius of the site. These consist of one farmhouse and three dwellings.
- 7.2.2 Within the central section of the site, a Bronze Age round barrow has been identified from cropmarks. Close to the round barrow and still within the site are several linear features also identified from cropmarks. These are thought to be ditched features, potentially field boundaries of unknown date.
- 7.2.3 Other Bronze Age round barrows have been identified from cropmarks 710 m to the east, 655 m to the south, and 515 m to the south-west of the site.
- 7.2.4 A large (110 m x 135 m) enclosure has been detected 200 m to the north-west of the site. Just to the west of this is a partial round barrow, and to the north are a series of ditched features comprising an enclosure and field system.
- 7.2.5 In the wider 1 km search area various other ditches, field boundaries, pits, a mill mound, and trackways which have been detected by aerial photography.
- 7.2.6 Map regression shows that the site has retained its character since the late 1800s. Changes to the site include the removal of several field boundaries to create fewer, larger, fields, the removal of a pond and the addition of a field boundary. The building and associated outbuilding bordering the south of the site are a modern addition.

7.3 Introduction

- 7.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 29 November – 7 December 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 39.5 ha was achieved. The remaining area will be surveyed at a later date.
- 7.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of

1:2,000 (**Figures 46 – 50**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 7.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 47- 51**). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 7.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 7.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 7.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

7.4 Gradiometer survey results and interpretation

- 7.4.1 A positive linear anomaly has been identified in Field Area_09_01 at **4400**. It is on an east – west orientation for 145 m and is 2 m wide (**Figure 47**). A similar anomaly at **4401** has been identified in field Area_09_03 on a south – north orientation, running for 125 m, before it turns to the west for 13 m. A similar anomaly has been identified in the Area_09_02, at **4402**. It is up to 1.5 m wide and traverses the area on the north – south orientation. They relate to former field boundaries noted on the 1898 Second Edition OS map.
- 7.4.2 A broad area of increased magnetic response at **4403** is located at the northern side of Field Area_09_01 (**Figure 47**). It indicates a spread of magnetically enhanced material on the surface, likely the consequence of modern agricultural practices such as manuring or a spread of material to improve wet ground.
- 7.4.3 Five amorphous areas of increased magnetic responses at **4404 – 4408** are located in fields Area_09_02, Area_09_03 and Area_09_04 (**Figure 47, 49**). They indicate areas of man-made ground along the modern field boundaries.
- 7.4.4 Several weak positive linear trends have been identified within the survey area which were considered too weak for confident interpretation.
- 7.4.5 Indication for modern agricultural practices in form of land drains and plough lines have been identified.
- 7.4.6 A strong dipolar magnetic anomaly at **4509** traverses field Area_09_01(**Figure 47**). This is indicative of a modern service, such as a pipe or cable.
- 7.4.7 Broad positive anomalies have been identified throughout the site. They indicate superficial deposits of Cover Sands and periglacial processes.



7.5 Discussion

- 7.5.1 The gradiometer survey did not detect any anomalies of archaeological origin. Two field boundaries, which are known from 1898 Second Edition OS mapping have been identified.
- 7.5.2 The remaining anomalies are thought to be modern or natural in origin, such as field drains, ploughing, and a service. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

8 AREA 10 (NGR 613100, 227100)

8.1 Location, topography, and geology

- 8.1.1 The survey comprises 45.8 ha of agricultural land, distributed over 4 areas. It is 3.2 km to the west of Wix and 1.7 km north-east of Little Bentley. The site is bounded to the west by the B1035, to the north by the A120, Stones Green Road to the south-east, and further open agricultural land to the south-west and east. The survey area is bisected by a farm track orientated north – south heading from the A120 to the farmyard at the centre of the survey area.
- 8.1.2 The topography of the site is gently sloping at around 38 m aOD in the north down to 32m aOD in the south.
- 8.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand (BGS 2022).
- 8.1.4 The soils underlying the site are likely to consist of Stagnogleyic argillic brown earths of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

8.2 Archaeological and historical context

- 8.2.1 There are five Grade II Listed Buildings of post-medieval origin within the 1 km search radius of the site. These consist of one farmhouse, three dwellings, and a workhouse. Abbot's Hall is located 65 m to the south of the northern section of the site.
- 8.2.2 Within the north of the site several ditches, potentially old field boundaries, have been identified from cropmarks visible in aerial photography.
- 8.2.3 Four Bronze Age round barrows, one with a central pit, have been identified 70 m to the west, 270 m to the west, 455 m to the north, and 460 m to the east of the site respectively. Two further barrows as well as a partial one, are located 1 km to the south-east
- 8.2.4 Numerous unidentified ditches, potential field boundaries and an enclosure have been identified as cropmarks from the analysis of aerial imagery for the area.
- 8.2.5 Map regression shows that the site has retained its character since the late 1800s. Changes to the site include the removal of several field boundaries to create fewer, larger, fields and the removal of a small building and a pond in the north.

8.3 Introduction

- 8.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 28 November – 2 December 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 43.2 ha was achieved.
- 8.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 52 – 57**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 8.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 53, 55, 57**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 8.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 8.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 8.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

8.4 Gradiometer survey results and interpretation

- 8.4.1 In the western part of field Area_10_02 is a very weak negative semi-circular anomaly at **4500** that is 20 m in diameter and up to 3.5 m wide (**Figure 55**). The southern side of it does not appear in the geophysical data, which could either indicate an opening or that perseveration is poor. It pertains to a possible earthen bank of unknown origin. The presence of Bronze Age barrows and round houses in the wider landscape suggests this could be of the same origin. It could as well be a response from superficial deposits and as such reflect a natural feature.
- 8.4.2 A broad weak positive curvilinear anomaly at **4501** is located in the south-western portion of field Area_10_01. It runs on a south-west to north-east orientation for 26 m and turns towards at south-east at a right angle for 14 m. This indicates a ditch-like feature and relate to a small enclosure. However, it is more likely a result of geological processes on site and natural in origin.
- 8.4.3 Six weak positive linear anomalies at **4502 – 4507** are located in fields Area_12_01 – 02 running on an orthogonal arrangement (**Figures 53, 55**). A similar anomaly with a line of strong dipolar anomalies at **4508** is located in field Area_12_04 (**Figure 57**). These anomalies relate to former field boundaries on 1898 Second Edition OS mapping.
- 8.4.4 An amorphous area of increased magnetic response at 4609 has been identified along the north-western edge of Area_10_02 (**Figure 55**). It occupies an area of 72 m by 40 m, where a building is noted on the 1898 Second Edition OS map. A circular area at **4510** with a diameter of 18 m has been identified in the south-western corner of field Area_10_02. This corresponds with the location of a pond visible on the 1898 Second Edition OS map that has been backfilled. A similar area of increased magnetic response at **4511** is located along the northern edge of field Area_10_01 (**Figure 53**). This indicates manmade ground along the side of the field.
- 8.4.5 Three strong dipolar anomalies at **4512 – 4514** have been identified within the survey area (**Figures 53, 55**). They are indicative of modern services, such as pipes and cables.
- 8.4.6 Numerous weak positive linear trends have been identified within the survey area which are considered too weak for confident interpretation.



8.4.7 Indication for modern agricultural practices in the form of land drains and plough lines have been identified.

8.4.8 Broad positive anomalies have been identified throughout the site. They indicate superficial deposits of Cover Sand and periglacial processes.

8.5 Discussion

8.5.1 The gradiometer survey has identified the location of a possible Bronze Age round barrow. Similar barrows are known to be in the general vicinity of the site. However, this feature could as well be natural in origin and this interpretation would require additional investigation for confident confirmation.

8.5.2 Several field boundaries, as well as a demolished dwelling and a pond, which correspond with features from the 1898 Second Edition OS map have been identified within the survey area.

8.5.3 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

9 TENDRING GREEN NORTH (NGR 614400, 226100)

9.1 Location, topography, and geology

- 9.1.1 The survey comprises 41.4 ha of agricultural land, distributed over five areas. It is 420 m north-east of Tendring Green and 3 km south-west of Wix. The site is bounded to the north by Barlon Road, to the east and south by Spratts Lane, and further agricultural land to the west. The survey area is bisected by Wolves Hall lane.
- 9.1.2 The topography of the site is sloping at around 36 m aOD in the north-west down to 27m aOD in the south.
- 9.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits over the north and south of the site is Cover Sand (BGS 2022).
- 9.1.4 The soils underlying the site are likely to consist of pelo-stagnogley soils of the 712c (Windsor) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

9.2 Archaeological and historical context

- 9.2.1 There are five Grade II Listed Buildings of post-medieval origin within the 1 km search radius of the site. These consist of one farmhouse, three dwellings, and a workhouse. Brockett's Hall is located just outside the northern boundary of the site.
- 9.2.2 Two Bronze Age double-ditched round barrows, and potentially a further partial one, identified via cropmarks, are located within field TGN_01. Two other Bronze Age round barrows, identified via aerial photography are located 410 m north-west and 920 m north of the site.
- 9.2.3 In the central section of the site, two linear cropmarks indicate ditched features, potentially being old field boundaries.
- 9.2.4 Numerous other cropmarks are located within the 1 km search area comprising field boundaries, ditches, extraction pits, enclosure, round barrows, and a trackway.
- 9.2.5 Map regression shows that the site has retained its character since the late 1800s. Changes to the site include the removal of several field boundaries to create fewer, larger, fields and the addition of one field boundary in the north.

9.3 Introduction

- 9.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 13 October – 7 December 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 41.2 ha was achieved.
- 9.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 58 – 37**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 9.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 59 – 63**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 9.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 9.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 9.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

9.4 Gradiometer survey results and interpretation

- 9.4.1 A weak positive semi-circular anomaly is located in the southern portion of TGN_04 at **4600** (**Figures 59, 61**). It has a diameter of 27 m and a width of up to 2 m. The anomaly is truncated by a modern service on its south-western portion. It indicates a ring ditch, possibly a barrow or small enclosure. Similar features have been recognised from aerial photography in the wider landscape and have been identified as Bronze Age barrows. This interpretation is tentative due to the very weak magnetic anomaly and would require additional investigations for confident interpretation.
- 9.4.2 To the south of **4600**, are parallel positive linear anomalies at **4601** and **4602** (**Figure 61**). They traverse the site on a south-west to north-east alignment running at a slight angle from each other, measuring 135 m and 77 m long respectively. Both potentially extend beyond the edge of the survey area to south. They indicate ditch features, potentially the remains of former field boundaries, absent from historical maps. However, their relatively strong magnetic response suggests that they could as well be modern in origin, related to the field's drainage system.
- 9.4.3 A two weak positive linear anomalies (**4603, 4604**) that are on a rectilinear alignment are noted in the southern portion of the survey in field TGN_01 (**Figure 63**). They delimit a 90 m by 90 m area on a south-west to north-east orientation and indicate a ditch features. They could pertain to an older field arrangement; however, it is equally possible that they are the result of geological processes.
- 9.4.4 Four weak positive linear and curvilinear anomalies at **4603 – 4606** have been identified in fields TGN_02 – 04 (**Figures 59, 61, 63**). They are up to 3 m wide and correspond with former field boundaries identified on the 1898 Second Edition OS map.
- 9.4.5 Two areas of increased magnetic response at **4607** and **4608** have been identified in field TGN_05 (**Figures 59, 61**). They are oblong in shape, covering an area of 49 m by 15 m on a north – south orientation. They correspond with the location of a track noted on the 1898 Second Edition OS map.
- 9.4.6 A strong dipolar anomaly at **4609** traverses field TGN_04 on a north-west to south-east orientation (**Figures 59, 61**). This is indicative of a modern service.



- 9.4.7 Numerous weak positive linear trends have been identified within the survey area which are considered too weak for confident interpretation.
- 9.4.8 Indication for modern agricultural practices in form of land drains and plough lines have been identified.
- 9.4.9 Broad positive anomalies have been identified throughout the site. They are indicative of superficial deposits of Cover Sand and periglacial processes.

9.5 Discussion

- 9.5.1 The gradiometer survey has identified the location of a truncated round ditch that could relate to a Bronze Age round barrow. This interpretation is tentative at best and would require additional investigation to be confirmed. There is no evidence for the barrows identified from cropmarks elsewhere in the survey area.
- 9.5.2 Several field boundaries, as well as a path, which are known from the 1898 Second Edition OS map have been identified within the survey data.
- 9.5.3 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

10 AREA 12 (NGR 615100, 225300)

10.1 Location, topography, and geology

- 10.1.1 The survey comprises 28.2 ha of agricultural land, distributed over three areas. It is 1.25 km to the north-east of Tendring and 3.5 km south of Wix. The site is bounded to the south-east by the Tendring Brook, to the north by the Wolves Hall Land and Fairley James Farm, and further open agricultural land to the west and east.
- 10.1.2 The topography of the site is gently sloping at around 28 m aOD in the north down to 19m aOD in the south.
- 10.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand, with a small area of sand and gravel of the Kesgrave Catchment subgroup near the southern farmyard, and an area with no recorded superficial deposits following the Tendering Brook (BGS 2022).
- 10.1.4 The soils underlying in the north of the site are likely to consist of Stagnogleyic argillic brown earths of the 582e (Tendring) association, to the south consist of gleyic argillic brown earths of the 573b (Wix) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

10.2 Archaeological and historical context

- 10.2.1 There are seven Grade II Listed Buildings within the 1 km search radius of the site. They consist of a farmhouse and six dwellings from the post-medieval period. Two of the houses are located in the Conservation Area of Tendring located close to the south-west boundary of the 1 km search radius.
- 10.2.2 In the south-east of the site, there are cropmarks indicating the presence of medieval to post-medieval field boundaries. In the immediate surrounds of the site, there are a series of undated field boundaries, also identified via cropmarks, located 80 m to the west and 90 m to the north-east. An area of extraction has also been identified 80 m to the west.
- 10.2.3 Prehistoric activity is evidenced by location of a tumulus marked on 6" OS series of 1874-5 and visible in aerial and satellite imagery 270 m to the east of field Area_12_03. additionally two Bronze Age double-ditched round barrows, and potentially one further partial one (identified via cropmarks) 239 m to the north-west of the site. Prehistoric activity in the wider area is evidenced by a trackway, enclosure and pits dated between the palaeolithic to Roman periods.
- 10.2.4 The suggested route of a Roman road runs along the current Thorpe Road 815 m to the south of the site.
- 10.2.5 Numerous cropmarks are located within the 1 km search area comprising old field boundaries, ditches, trackways, extraction pits, a ring ditch, enclosures, a pond, and a medieval moat.
- 10.2.6 An abandoned railway is noted on the 1898 Second Edition OS map, 250 m to the south-west of field Area_12_03.
- 10.2.7 Map regression shows that the site has retained its character since the late 1800s. Changes to the site include the removal of several field boundaries to create fewer, larger fields.

10.3 Introduction

- 10.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 23 November – 8 December 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 28.4 ha was achieved.
- 10.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 64 – 67**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 10.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 65, 67**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 10.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 10.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 10.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

10.4 Gradiometer survey results and interpretation

- 10.4.1 A broad weakly positive linear anomaly at **4700** is located in the western portion of field Area_12_03 (**Figure 67**). It is 3 m wide and runs on a general north – south orientation for 55 m. It indicates a ditch-like feature that could pertain to a former field boundary that predates available maps. However, it is equally possible that this is a response from a variation in the superficial geology and as such natural in origin.
- 10.4.2 Five very weak positive linear anomalies at **4701 – 4705** have been identified in fields Area_12_01 and Area_12_03 (**Figures 65, 67**). They are amplified by dipolar ferrous anomalies and relate to former field boundaries on the 1898 Second Edition OS map. In addition, an oval area of increased magnetic response at **4706** is located at the northern portion of field Area_12_01 and corresponds with a pond on the map.
- 10.4.3 Three strong dipolar anomalies at **4707 – 4709** traverse the site indicating modern services such as pipes or cables (**Figures 65, 67**).
- 10.4.4 Numerous weak positive linear trends have been identified within the survey area which were considered too weak for confident interpretation.
- 10.4.5 Indication for modern agricultural practices in form of land drains and plough lines have been identified throughout the site.



- 10.4.6 Broad positive anomalies have been identified throughout the site. They indicate superficial deposits of Cover Sand and periglacial processes.

10.5 Discussion

- 10.5.1 The gradiometer survey has identified a possible field boundary that predates the available maps. Additionally, five field boundaries that were known from the 1898 Second Edition OS map have been identified as very weak positive responses.
- 10.5.2 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

11 EAST OF TENDRING (NGR 615800, 224500)

11.1 Location, topography, and geology

- 11.1.1 The survey comprises 45.3 ha of agricultural land over seven fields. It is located 1.5 km from Tendring and 3 km to the west of the town of Thorpe-le-Soken. The area is bounded by field boundaries to the south-east and north-west, to the north-east and south-west it extends as further agricultural land.
- 11.1.2 The topography of the site rises from 18 m aOD at the western edge to 28 m aOD along the eastern edge.
- 11.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand noted in the north-western portion of the site (BGS 2022).
- 11.1.4 The soils underlying the site are likely to consist of stagnogleyic paleo-stagnogley soils of the 712c (Windsor) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

11.2 Archaeological and historical context

- 11.2.1 There are nine Grade II Listed Buildings within the 1 km search radius of the site. They consist of four farmhouses and five dwellings. Two, the Old Post Cottage and 1 The Street, are located within the Conservation Area of Tendring in the south-west of the 1 km search radius. Hannam's Hall dating from the 17th century is located immediately to the west of field EOT_03.
- 11.2.2 In the north of the site is the location of a tumulus marked on the 1874-5 OS map and visible in aerial and satellite imagery. Prehistoric activity in the wider area is evidenced by palaeolithic worked flints, a Mesolithic tranchet axe, and a prehistoric blade all discovered 885 m to the south-east of the site.
- 11.2.3 The suggested route of a Roman road runs along the current Thorpe Road immediately outside the southern boundary of the site.
- 11.2.4 Within the south-west corner of the site, possible medieval activity is recorded in the form of cropmarks indicating a possible moat.
- 11.2.5 A cast iron signpost is located on the south-east border of the site.
- 11.2.6 Cropmarks indicating undated field boundaries are located in the central area of the site. Numerous cropmarks are located within the 1 km search area comprising old field boundaries, ditches, trackways, extraction pits, ring ditches, and enclosures.
- 11.2.7 An abandoned railway is noted on the 1898 Second Edition OS map 260 m to the west of field EOT_01.
- 11.2.8 Map regression shows that the site has retained its character since the late 1800s. Changes to the site include the removal of several field boundaries to create fewer, larger fields.

11.3 Introduction

- 11.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 9 August – 14 December 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 41.8 ha was achieved.
- 11.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 68 – 73**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 11.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 69, 71, 73**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 11.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 11.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 11.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

11.4 Gradiometer survey results and interpretation

- 11.4.1 A very weak positive annular anomaly is located in the central portion of Field EOT_01 at **4800 (Figure 69)**. It has a diameter of 20 m and is up to 1.5 m wide. At the centre of it is a circular positive anomaly with a diameter of 2.5 m. This indicates a ring ditch with a central pit and could represent prehistoric funerary activity, which is known from the wider area. This feature is located 70 m to the north-west of a tumuli known from aerial photography and historic maps. Further investigation would be required to confirm the preservation and function of the feature.
- 11.4.2 A positive linear anomaly at **4801** is on an east – west orientation in field EOT_05 (**Figure 73**). It is 66 m long by 2 m wide and truncated by a modern service. It pertains to a ditch-like feature, possibly a field boundary that predates the available maps. However, it is more likely to be a field drain and is as such modern in origin.
- 11.4.3 10 positive linear anomalies at **4802 – 4811** have been identified throughout the survey area (**Figures 69, 71, 73**). They relate to former field boundaries on the 1898 Second Edition OS map.
- 11.4.4 Three strong dipolar anomalies at **4812 – 4814** traverse the site indicating modern services, such as pipes or cables (**Figures 69, 71, 73**).

- 11.4.5 Numerous weak positive linear trends have been identified within the survey area which are considered too weak for confident interpretation.
- 11.4.6 Indication for modern agricultural practices in form of land drains and plough lines have been identified throughout the site.
- 11.4.7 Broad positive anomalies have been identified throughout the site. They are indicative of superficial deposits of Cover Sand and periglacial processes.

11.5 Discussion

- 11.5.1 The gradiometer survey has successfully identified features that are considered archaeological in origin. A possible round barrow with a central pit has been identified within the survey area, located 70 m north-west of a tumulus known from the historical maps and aerial photography. However, the known barrow is not evident in the data, suggesting a low level of preservation.
- 11.5.2 Former field boundaries that have been indicated on 1898 OS mapping have been identified across the survey area.
- 11.5.3 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

12 AREA 15 (NGR 616273, 223934)

12.1 Location, topography, and geology

- 12.1.1 The survey comprises 10.8 ha of agricultural land, distributed over two areas. It is 1.8 km to the east of Tendring and 2.2 km north-west of Thorpe-le-Soken. The site is bounded to the north and east by Thorpe Road B1035, to the south by Whitehall Lane and a farmyard, and further open agricultural to the west. The survey area contains two large ponds, one within each area.
- 12.1.2 The topography of the site is gently sloping at around 24 m aOD in the south down to 18 m aOD in the north.
- 12.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with no recorded superficial deposits (BGS 2022).
- 12.1.4 The soils underlying in the north of the site are likely to consist of pelo-stagnogley soil of the 712c (Windsor) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

12.2 Archaeological and historical context

- 12.2.1 There are eight Grade II Listed Buildings within the 1 km search radius of the site. These consist of four farmhouses and four dwellings that are located across the study area.
- 12.2.2 Prehistoric activity in the wider area is evidenced by palaeolithic worked flints, a Mesolithic tranche axe and a prehistoric blade all discovered 680 m to the south-east of the site. 1 km to the north-west is the site of a tumulus marked on 1874-5 OS mapping and visible in aerial and satellite imagery.
- 12.2.3 The suggested route of a Roman road runs along the current Thorpe Road immediately outside the northern boundary of the site.
- 12.2.4 Medieval activity in the area comprises cropmarks of a possible medieval moat 150 m to the north.
- 12.2.5 A cast iron signpost is located on the opposite side of Thorpe Road immediately outside the northern boundary of the site.
- 12.2.6 Numerous cropmarks are located within the 1 km search area comprising possible ring ditches 295 m to the south-east and 500 m to the south; potential field boundaries, trackways and ditches 580 m to the south-east and 830 m to the north-east; and a series of cropmarks in a field 840 m to the west comprising possible double-ditched trackways, linear features, pits, a sub rectangular enclosure, and a possible ring ditch.
- 12.2.7 Map regression shows that the site has retained its character since the late 1800s with no major changes apart from the removal of two field boundaries.

12.3 Introduction

- 12.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 8 and 9 November 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 8.8 ha was achieved.

- 12.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 72 – 75**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 12.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 73, 75**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 12.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 12.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 12.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

12.4 Gradiometer survey results and interpretation

- 12.4.1 An amorphous area of increased magnetic response is located in the centre of field Area_15_01 at **4900 (Figures 73, 75)**. It occupies an area of 108 m by 60 m and indicates a spread of magnetically enhanced material. This is likely a result of modern agricultural practices in the area.
- 12.4.2 Weak dipolar linear anomalies have been identified across the area. They are associated with land drains.
- 12.4.3 The entire survey area is dominated by superficial geological responses. They could obscure archaeological features with weak responses.

12.5 Discussion

- 12.5.1 The gradiometer survey did not identify any anomalies that would be considered archaeological in origin.
- 12.5.2 Indication for modern farming has been identified in the form of a spread of surface material and land drains.

13 AREA 17 (NGR 616510, 223624)

13.1 Location, topography, and geology

- 13.1.1 The survey comprises 10.1 ha of agricultural land, distributed over two areas. It is 2.2 km to the south-east of Tendring and 2 km north-west of Thorpe-le-Soken. The site is bounded to the east by Thorpe Road B1035, to the north by Whitehall Lane, and further open agricultural land to the south.
- 13.1.2 The topography of the site is gently sloping to the centre of the area at around 24 m aOD in the south and north, down to 22m aOD following the field boundary at the centre.
- 13.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with no recorded superficial deposits (BGS 2022).
- 13.1.4 The soils underlying in the north of the site are likely to consist of Stagnogleyic argillic brown earths of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

13.2 Archaeological and historical context

- 13.2.1 There are six Grade II Listed Buildings within the 1 km search radius of the site consisting of dwellings and farmhouses from the post-medieval period. The northernmost edge of the Conservation Area of Thorpe-le-Soken is located 900 m to the south-east of the site.
- 13.2.2 Within the site are cropmarks comprising pits and two ring ditches.
- 13.2.3 Prehistoric activity in the wider area is evidenced by palaeolithic worked flints, a Mesolithic tranche axe, and a prehistoric blade all discovered 245 m to the south of the site.
- 13.2.4 The suggested route of a Roman road runs east – west 215 m to the north of the site.
- 13.2.5 Various other potential features have been identified from aerial photography within the surrounding area including possible ditches or field boundaries 75 m to the east, a penannular ring ditch 360 m to the south, linear features, pits, and possibly two ring ditches 650 m to the east, field boundaries 815 m to the north-west, and several linear cropmarks indicating possible trackways and ditches 1 km to the north.
- 13.2.6 Map regression shows that the site has retained its character since the late 1800s with no major changes apart from the removal of a field boundary.

13.3 Introduction

- 13.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 2 and 3 November 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 9.6 ha was achieved.
- 13.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 74, 77**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 13.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figure 75**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 13.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 13.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 13.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

13.4 Gradiometer survey results and interpretation

- 13.4.1 Two very weak positive linear anomalies at **5000** and **5001** have been identified within the survey area (**Figures 75, 77**). They indicate ditch features that are 2 m wide by 25 m and 163 m long respectively and correspond with field boundaries noted on the 1898 Second Edition OS map.
- 13.4.2 Weak dipolar linear anomalies have been identified across the area. They are indicative of land drains.
- 13.4.3 Field Area_17_01 and the western portion of Area_17_02 are dominated by broad positive anomalies indicating superficial geology. These anomalies could obscure weaker archaeological features present on site.

13.5 Discussion

- 13.5.1 The gradiometer survey did not identify any anomalies that are considered archaeological in origin. Two former field boundaries that are known from the 1898 Second Edition OS map have been identified in the area.
- 13.5.2 There is no evidence of the ring ditches and pits noted as crop marks, however the area is dominated by natural geological responses, which may make the identification of weak archaeological anomalies difficult.
- 13.5.3 Indication for modern farming has been identified in the form of land drains.

14 AREA 18 (NGR 617500, 223200)

14.1 Location, topography, and geology

- 14.1.1 The survey area comprises 29 ha of agricultural land, distributed over seven fields. The survey area is a corridor located 1.6 km east of Tendring at its western edge and extends to 200 m north of Thorpe le Soken at the south-east edge. It is bounded by Tendring Road to the west, Landmere Road to the east, and is surrounded by further agricultural fields. The corridor is bisected by Golden Lane.
- 14.1.2 The topography of the site is on an undulating slope from 26 m aOD at the north-west extent to 20 m aOD in the south-west extent.
- 14.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with no recorded superficial deposits (BGS 2022).
- 14.1.4 The soils underlying in the west of the site are likely to consist of stagnogleyic argillic brown earths of the 582e (Tendring) association and to the east of pelo-stagnogley soil of the 712c (Windsor) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

14.2 Archaeological and historical context

- 14.2.1 There are 20 Grade II listed buildings within 500 m of the survey area. Most are concentrated within Thorpe le Soken and reflect 18th and 19th century farmsteads, cottages and, village buildings.
- 14.2.2 Possible archaeological activity has been recorded within Area 18 in the form of cropmarks showing linear features, pits, and possibly two ring ditches. The ring ditches are recorded on grassland and could be marks created by grazing rather than archaeology.
- 14.2.3 Potential features of archaeological interest have been identified from aerial photography within 500 m of the survey area. These comprise cropmarks of possible field boundaries and enclosures
- 14.2.4 The suggested route of a Roman road runs east-west 440 m to the north of the site.
- 14.2.5 In an agricultural field, 445 m to the north of the site the location of a WWI airfield used as a night landing ground is recorded.

14.3 Introduction

- 14.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team on 22 November 2022 and between 20 – 28 September 2023. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 25.9 ha was achieved.
- 14.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 74 – 83**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 14.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figure 75 – 85**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 14.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 14.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 14.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

14.4 Gradiometer survey results and interpretation

- 14.4.1 A weak, annular positive anomaly has been identified in Area_18_02 at **5100 (Figures 77, 79)**. The anomaly is 13 m in diameter and 1.3 m wide. It indicates a ditch-like feature related to a possible roundhouse or a barrow and correlates with cropmarks recorded in HER.
- 14.4.2 Weak positive linear anomaly has been detected at **5101** in Area_18_2 (**Figures 79, 83**). They both are up to 2 m wide and traverse the site on an east to west and north-east to south-west orientation respectively. They indicate ditch features associated with former field boundaries identified on the 1898 Second Edition OS mapping.
- 14.4.3 A weak positive oval anomaly at **5103** has been identified in Area_18_05 (**Figure 81**). It is 18 m long by 13 m wide. The relatively large area with a weakly positive magnetic response indicates a large pit they may be associated with material extraction and is not considered to be of archaeological importance
- 14.4.4 A series of strong, linear anomalies have been identified as land drains across the survey area. Further weak dipolar anomalies have been identified likely indicating clay-fired land drains.
- 14.4.5 Areas of weak, positive enhancement across the survey area have been identified as the result of changes in underlying or superficial geology.
- 14.4.6 Several strong dipolar linear anomalies (**5104 – 5106**) have been identified in Area_18_05 and Area_18_08 (**Figures 85, 87, 89**). These anomalies are indicative of modern services.

14.5 Discussion

- 14.5.1 The gradiometer survey has successfully identified features that are considered to be possibly archaeological in origin. A roundhouse or a barrow was identified in the north-western part of the survey. This correlates with cropmark evidence recorded in Essex HER. Further investigations would be required to confirm a time period and the function of the feature.
- 14.5.2 The remaining anomalies indicate former field boundaries, and modern agricultural activities in the form of ploughing and land drains or are thought to be natural or modern in origin.

15 AREA 20 (NGR 618673 222900)

15.1 Location, topography, and geology

- 15.1.1 The survey comprises 24 ha of agricultural land stretching across nine fields. The western edge of the survey area is directly north of Thorpe-le-Soken, and extends 2 km to the ESE. The site is bounded to the southeast by Thorpe Road, to the west by Landermere Road, to the south by a mixture of agricultural land, houses and gardens, and further open agricultural land to the north. Damant's Farm Lane and Sneating Hall Lane (B1034) bisect the survey area.
- 15.1.2 The topography of the site is undulating, with various areas measuring between 26 m aOD to 21 m aOD across the survey area.
- 15.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with no recorded superficial deposits (BGS 2022).
- 15.1.4 The soils underlying in the north of the site are likely to consist of in the west of stagnogleyic argillic brown earths of the 582e (Tendring) association and to the east of pelo-stagnogley soil of the 712c (Windsor) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

15.2 Archaeological and historical context

- 15.2.1 There are 4 Grade II* and 25 Grade II listed buildings within the 1 km search radius of the site. Aside from a cottage and two halls located to the north of the site, these listed buildings are all located to the south-west of the site, mainly within the Conservation Area of Thorpe-le-Soken. They consist of mostly post-medieval dwellings, a hotel, churches, and a police station.
- 15.2.2 The site of the former Gunfleet estuary which was used as a port and haven in the medieval period and was gradually silted up in the post-medieval period is located 240 m to the west of the site.
- 15.2.3 A post-medieval brick kiln is recorded 250 m to the north-west of the site.
- 15.2.4 There are numerous features of the unknown date recorded from cropmarks. These include an extensive system of field boundaries and a possible enclosure within the site boundary. An area comprising ditches, pits, and small penannular ring ditches has been identified to the north-west of the site.
- 15.2.5 Additional features have been identified from aerial photography within the surrounding area. A number of linear features, potentially former field boundaries or ditches, have also been identified.

15.3 Introduction

- 15.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 07 August 2023 and 20 September 2023. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 21.9 ha was achieved. The remaining areas were not available for survey.
- 15.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of

1:2,000 (**Figures 84 – 91**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.

- 15.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 85 – 91**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 15.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 15.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 15.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

15.4 Gradiometer survey results and interpretation

- 15.4.1 A weak positive curvilinear anomaly **5200** has been identified in Area_20_07 (**Figure 89**). It is up to 2 m wide and 46 m long. On the western side, it likely extends beyond the survey area and is cut off by an area of increased magnetic response at the east, where it forms a rectilinear area of 8 m by 5 m. It indicates a ditch-like feature of unknown date. It could pertain to a small enclosure or a field boundary that predates the available mapping, however, additional investigation would be required to confirm this. The increased magnetic anomaly at the eastern end of it is 14 m by 10 m large, and likely indicates an area of extraction, or a backfilled pond not identified on historical mapping.
- 15.4.2 A weak positive linear anomaly **5201** was identified in Area_20_08 (**Figure 91**). It is up to 2 m wide and traverses the site on a north-east – south-west orientation. This anomaly is indicative of a ditch-like feature and could relate to a field boundary that predates available mapping. It is equally possible, however, that it relates to the B1034 road nearby.
- 15.4.3 Weak, positive linear anomalies have been detected at **5202 – 5205** (**Figure 89**). They indicate ditch features that are up to 2 m wide. These correspond with field boundaries noted on the 1898 Second Edition OS map.
- 15.4.4 An area of increased magnetic response at **5206** has been detected (**Figure 87**). It covers an area of 27 m by 25 m, likely indicating an area of a spread of magnetically enhanced material. .
- 15.4.5 A series of strong, linear anomalies have been identified as land drains across the survey area. Further weak dipolar anomalies have been identified indicating clay-fired land drains.
- 15.4.6 Areas of weak, positive enhancement are present across the survey area. Their amorphous nature and lack of discernable pattern suggests they are the result of changes in underlying or superficial geology.



- 15.4.7 A strong dipolar anomaly at **5207** traverses the site indicating a modern service, such as a pipe or cable (**Figure 87**).

15.5 Discussion

- 15.5.1 The gradiometer survey has identified the remains of a possible small enclosure of an unknown date, however, it could equally indicate a field boundary that predates available mapping. Additionally, a ditch was identified that likely pertains to an old field boundary that predates the available mapping. It could relate to linear features identified with aerial photography.
- 15.5.2 Several former field boundaries that are known from the 1898 Second Edition OS map have been identified in the area.
- 15.5.3 An area of strong magnetic enhancement has been identified and relates to a spread of magnetic material near the field boundary. The remaining anomalies are natural or modern in origin, including land drains and services.

16 KIRBY CROSS WEST (NGR 619610, 220650)

16.1 Location, topography, and geology

- 16.1.1 The survey comprises 87.3 ha of agricultural land distributed over nine fields. It is located 1 km to the west of Kirby Cross and 5 km to the north-east of Clacton-on-Sea. The northern part is bounded by a railway line to the south and extends as further agricultural land to the west, north, and east. The area to the south of the railway is bounded by field boundaries to the north-west and south-east and continues as further agricultural land towards the north-east and south-west.
- 16.1.2 The topography of the site is gently sloping from 25 m aOD at the northern edge to 22 m aOD to the north of the railway and from 14 m aOD – 18 m aOD to the south of the railway.
- 16.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group with overlying superficial geological deposits of Cover Sand, with a small area of sand and gravel of the Kesgrave Catchment subgroup (BGS 2022).
- 16.1.4 The soils underlying the site are likely to consist of stagnogleyic paleo-argillic brown soils of the 582e (Tendring) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

16.2 Archaeological and historical context

- 16.2.1 There are six Grade II Listed Buildings within the 1 km search radius of the site. The earliest of these buildings is the 16th century 178 Thorpe Road, a timber-framed and plastered cottage, but the majority of the buildings are 17th century onwards.
- 16.2.2 The Portable Antiquities Scheme reports a findspot of Roman date 550 m to the north of the site.
- 16.2.3 The site of the former Gunfleet estuary which was used as a port and haven in the medieval period and was gradually silted up in the post-medieval period is located 240 m to the west of the site. A possible landing spot is recorded 800 m to the south of the site.
- 16.2.4 A post-medieval brick kiln is recorded 250 m to the north-west of the site.
- 16.2.5 Grove Fruit Farm is noted on the OS 1:25 000, 1937 – 61 and OS 1:10 560, 1949 – 71 maps, which coincide with the north-eastern boundary of the site.
- 16.2.6 The Walton on the Naze Branch of the Great Eastern Main Line is noted in the OS One Inch, 1885 – 1900 map, which corresponds to the southern boundary of the site.
- 16.2.7 There are numerous features of the unknown date recorded from cropmarks. These include an extensive system of field boundaries and a possible enclosure within the site boundary. An area comprising ditches, pits, and small penannular ring ditches has been identified to the north-west of the site.

16.3 Introduction

- 16.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 31 May – 14 October 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 82.4 ha was

achieved. Overgrown terrain and the building in the southern corner of Field 1 obstructed the total coverage of the area.

- 16.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 92 – 103**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 16.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 93 – 103**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 16.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 16.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 16.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

16.4 Gradiometer survey results and interpretation

- 16.4.1 A weakly positive set of rectilinear anomalies is located in the eastern part of Field KWC_04 at **5300** (**Figures 97, 99**). It is 94 m long by 60 m wide and is orientated north – south, forming a possible ditched enclosure. A smaller internal division has been identified along the southern boundary, occupying a space of 28 m by 14 m. This has been interpreted as possible archaeology due to its weak magnetic signature making more confident interpretation difficult. It is equally possible that it was formed by natural processes in the periglacial environment, although it could still contain archaeological artefacts.
- 16.4.2 A weakly positive penannular anomaly at **5301** is located in the centre of field KCW_07 (**Figure 103**). It has a diameter of 11 m and a width of 1 m. It indicates a ditch-like feature with an opening to the north-west. This may relate to prehistoric activity, such as a roundhouse or a round barrow.
- 16.4.3 A very weak positive L-shaped anomaly at **5302** is located in the southern portion of field KCW_02 (**Figure 95, 97**). It is on a west – east orientation for 40 m where it turns toward the north for 25 m. A similar anomaly is located at **5303**, 230 m to the west. It is on a south – north orientation for 36 m where it turns to the west for 14 m. These anomalies indicate ditch-like features that may relate to agricultural activity, such as field boundaries or parts of small enclosures. Due to their weak magnetic signature, they could as well be a result of natural undulation in the superficial deposits.
- 16.4.4 Nine weakly positive linear anomalies at **5304 – 5312** have been identified throughout the site that are predominately on a north-west to south-east and north-east to south-west orientation (**Figures 93, 95, 97, 99, 101, 103**). They relate to former field boundaries on 1898 Second Edition OS maps.

- 16.4.5 Numerous discrete weakly positive anomalies have been identified throughout the survey area. They are up to 2 m in diameter and are associated with pit-like features, such as storage or refuse pits. However, they may equally be the result of natural undulation in the geological layers.
- 16.4.6 A small dipolar anomaly at **5313** located in KCW_02 is 12 m long and 3 m wide (**Figure 95**). The shape and form of this anomaly is indicative of a lightning strike.
- 16.4.7 Several amorphous areas of increased magnetic response at **5314 – 5319** have been identified along the edges of the field boundaries (**Figures 95, 97, 103**). They indicate spreads of magnetically enhanced material on the surface and relate to made ground.
- 16.4.8 A strong positive anomaly traverses the area at **5320**. It follows the modern field boundaries and is considered to be a modern service, such as a pipe or cable (**Figures 95, 99**).
- 16.4.9 Numerous broad, weakly positive, linear, curvilinear, and sinuous anomalies have been identified throughout the site as superficial geology. They indicate natural ditches formed in a periglacial environment on aeolian soils during the last glacial period. Being a surface feature, they could accumulate archaeological material and could have been used as field boundaries in the past, however, further investigation would be required to confirm this theory. In addition, very broad weakly positive anomalies have been recognised in the survey. This suggests the presence of aeolian sediments with a very weak magnetic response. Such sediments could form on top of archaeological features and obscure detection.

16.5 Discussion

- 16.5.1 The gradiometer survey has detected several features, which can be identified as possibly archaeological in origin. A rectilinear enclosure has been identified at the eastern part of the site that could relate to a livestock enclosure. It could as well be a result of periglacial processes and as such natural in origin. This does not correspond with any of the cropmarks recorded across the area. None of the recorded cropmarks has been identified. It is possible that the cropmarks are a product of natural processes or that sediments across the site are obscuring their detection.
- 16.5.2 A ring ditch feature in the southern part of the survey likely indicates a prehistoric roundhouse or a round barrow and may be associated with the Bronze Age activity noted in the surrounding area.
- 16.5.3 Several pits of unknown origin have been identified. While these have the potential to be archaeological, they could equally be the result of the natural undulation in the underlying deposits.
- 16.5.4 The remaining anomalies are thought to be modern or natural in origin. The modern anomaly relates to a service along the north-eastern edge of the area.

17 LITTLE CLACTON ROAD (NGR 620800 219200)

17.1 Location, topography, and geology

- 17.1.1 The survey comprises 71.8 ha of agricultural land. The site is bounded by Mill Lane and a wooded area to the north-west. All other sides are bounded by field boundaries.
- 17.1.2 The site is on a slight incline from 19 m above Ordnance Datum (aOD) at the south-western corner to 25 m aOD at the north-eastern corner.
- 17.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group. Overlying superficial geological deposits comprise sands and gravels of the Kesgrave Catchment Subgroup and clay, silt, and sand cover sands (BGS 2022).
- 17.1.4 The soils underlying the site are likely to consist of gleyic argillic brown earths of the 573b (Wix) association (SSEW SE Sheet 6, 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

17.2 Archaeological and historical context

- 17.2.1 Five Grade II listed buildings are located within the 500 m study area. They relate to 17th – 19th century farm dwellings. Great Holland Mill from 19th century (NHLE 1111532) is located just outside of the north-western side of the site.
- 17.2.2 Neolithic findspots include a polished axe head found within the Little Clacton Road.
- 17.2.3 Findspots of a medieval to post-medieval sword and coin hoard are recorded 240 m to the west of the Little Clacton Road area.
- 17.2.4 Numerous cropmarks were recorded within the study area that likely relate to medieval and post-medieval pit and ditch-like features indicating field boundaries and trackways.
- 17.2.5 Several cropmarks were identified from aerial photography indicating a broad double ditched trackway aligned almost north – south, several possible penannular ditches that are located in the western part of the field, and numerous pits scattered across the field. In addition, possible medieval field boundaries were recognised at the eastern and northern sides of the site that extend beyond the edge of the survey area.
- 17.2.6 Immediately to the west of the area, there are a series of cropmarks indicating a sub-rectangular enclosure and possible small ring ditches recorded from aerial photography. In addition, extensive, possible medieval field boundaries are marked on 1st edition OS mapping.
- 17.2.7 The former site of the Gunfleet Estuary on the Tendring peninsula between Frinton and Clacton is located to the west of the study area. The current area of low, flat, marshy land formed the estuary of Holland River (or Brook) which was known as the Gunfleet estuary in the medieval and Tudor periods.

17.3 Introduction

- 17.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 7 December 2021 and 1 November 2022 in several field campaigns. Field conditions at the time of the survey were acceptable for the period of the survey. An overall coverage of 62.7 ha was achieved.

- 17.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 102 – 111**) The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 17.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 103 – 111**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 17.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 17.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 17.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

17.4 Gradiometer survey results and interpretation

- 17.4.1 In the north-eastern part of the centre of the survey area, in field LCR_04, a weakly positive penannular anomaly is located at **5400 (Figures 105, 107)**. It is 17 m in diameter and 1.4 m wide. A weakly positive discrete anomaly, which is 2 m in diameter, is located in the middle of it and three similar anomalies are located on the ditch alignment. These anomalies indicate a ditch-like feature such as a roundhouse or a round barrow. Small discrete anomalies could relate to postholes or pits. However, given the alluvial sediment present in the area, they could as well be natural in origin.
- 17.4.2 To the north of the circular anomaly at **5400**, is a weak linear anomaly at **5401 (Figures 105, 107)**. It is 40 m long by up to 3 m wide and is surrounded by eight weakly positive sub-circular anomalies that are between 2.5 m and 4.5 m in diameter. The linear anomaly runs on an east – west orientation and curves towards the south-east at the eastern side. It indicates a ditch-like feature or a hardened surface, such as a path. The circular anomalies indicate pit-like features that could relate to wider settlement activity in the area, considering the proximity to the ring ditch. However, given the alluvial sediments present in the area they could as well be natural in origin.
- 17.4.3 About 80 m further to the north from **5400, 5401**, is an array of weakly positive responses at **5402 (Figures 105, 107)**. These occupy an area of 12.5 m by 18 m, with the perimeter delimited by a weakly positive linear anomaly that is up to 1.5 m wide and appears to have a 3 m wide entrance towards the west. Located within are two orthogonal weakly positive anomalies that occupy an area of 4 m by 3 m. They could relate to dwellings of uncertain date. It is equally possible that they are a result of natural undulation in the subsurface.
- 17.4.4 A broad weakly positive curvilinear anomaly is located 150 m to the west of **5400**, at **5403 (Figure 107)**. It is up to 5 m wide, aligned west – east for 65 m before it turns towards the south for 101 m and then to the west for 55 m. This indicates a ditch-like feature that could

form a large enclosure opened to the west. However, it could just as well be a past course of the Holland Brook River that runs to the west of the site.

- 17.4.5 In the northern part of the survey area, a circular dipolar anomaly has been identified at **5404 (Figure 105)**. It is 10 m in diameter, with its negative pole orientated towards the north and a magnetic intensity between -2 and 5 nT. These kinds of anomalies are indicative of thermoremanent features that are a consequence of intense burning. This feature is likely a remnant of one such event of an unknown time frame. Due to the isolated nature of the feature, it is equally possible, that it indicates a pit-like feature of archaeological or natural origin.
- 17.4.6 Several small weakly positive discrete anomalies have been identified as possible archaeology throughout the site. They indicate pits and could relate to human activities, such as refuse pits or storage pits. However, they could as well be a result of natural undulations in the bedrock or variation within the cover sands.
- 17.4.7 Numerous broad, weakly positive linear anomalies have been identified throughout the survey area. They are predominately sinuous in shape and do not follow any specific orientation. These features are considered to be natural in origin such as alluvial deposits. However, it cannot be excluded that some of them could indicate past coaxial field systems that predate modern mapping.
- 17.4.8 Several weakly positive linear anomalies (**5405 – 5413**) have been identified within the survey area (**Figures 103, 105, 107, 109, 111**). These ditch-like features are up to 400 m long and 3 m wide and relate to field boundaries on 1898 OS mapping.
- 17.4.9 In field LCR_01, 125 m north-east of **5404**, is an area of increased magnetic response of irregular shape at 4014 that measures 35 m by 27 m (**Figure 109**). About 50 m to the east of here is another area of increased magnetic response, **5415**. It is linear in its shape on the east – west orientation and measures 20 m in length and 3 m in width. They correspond with a building and a road depicted on the 1896 OS mapping.
- 17.4.10 Two amorphous areas of increased magnetic response **5416** and **5417 (Figure 111)** are located in the field LCR_07. They likely relate to a reinforced ground at the edges of the field with magnetically enhanced material.
- 17.4.11 A strong linear dipolar anomaly **5418 (Figure 103, 105)** traverses the northern part of the survey area on the south-west to north-east orientation. This kind of anomaly is indicative of a modern service, such as a pipe or cable.

17.5 Discussion

- 17.5.1 The gradiometer survey has not identified any anomalies that can confidently be interpreted as archaeology. However several areas of possible archaeology have been identified.
- 17.5.2 A possible roundhouse or round barrow is located in the north-eastern along with associated pit and ditch features. A small enclosure is also located to the north of this. This may relate to prehistoric settlement activity.
- 17.5.3 A large enclosure has been identified in the north-western part of the survey area. However, it could equally relate to a past channel of the Holland Brook River.



- 17.5.4 The remains of a coaxial field system have likely been identified as a series of possible ditch features. These are likely to be medieval in date, possibly associated with cropmarks noted in the area.
- 17.5.5 The remaining anomalies are thought to be modern or natural in origin. Numerous geological anomalies are thought to be associated with former water channels and alluvial deposits.

18 HOLLAND HAVEN NORTH (NGR 622000 218500)

18.1 Location, topography, and geology

- 18.1.1 The survey comprises 62.7 ha of agricultural land. The site is bounded by Frinton Golf Club to the south-east. To the east, north, and west, it extends as further agricultural land.
- 18.1.2 The site slopes downwards from 17 m aOD at the north-western side to 1 m aOD at the south-eastern side.
- 18.1.3 The solid geology comprises Clay, Silt, and Sand of the Thames Group. Overlying superficial geological deposits comprise alluvial clays and silts (BGS 2021).
- 18.1.4 The soils underlying the site are likely to consist of paleo alluvial gley soils of the 813f (Wallasea) association (SSEW SE Sheet 6 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

18.2 Archaeological and historical context

- 18.2.1 A record of a findspot of a Neolithic polished axe head that was recorded 210 m north of the Holland Haven North area.
- 18.2.2 A recorded findspot of a Late Bronze Age socketed axe head in the Portable Antiquities Scheme is located 80 m to the north of Holland Haven North.
- 18.2.3 Numerous cropmarks are recorded within the study area that likely relate to medieval and post-medieval pit and ditch-like features indicating field boundaries and trackways.
- 18.2.4 The former site of the Gunfleet Estuary on the Tendring peninsula between Frinton and Clacton is located in the southern part of the study area. The current area of low, flat, marshy land formed the estuary of Holland River (or Brook) which was known as the Gunfleet estuary in the medieval and Tudor periods.
- 18.2.5 The site of post-medieval copperas settling pans are shown on the 1783 plan of the Tendring levels, 280 m to the south of Holland Haven North. While these are likely related to the copperas industry as settling pans, there is no evidence for a copperas house on the site.
- 18.2.6 The location of a post-medieval Martello tower that guarded Holland marshes is known 240 m to the south-east of Holland Haven North. It was located in the centre of the present Frinton Golf Course.
- 18.2.7 Little Holland marsh is an area of grazing marsh located in the southern part of the study area. It occupies the southern part of the Holland Haven North area. It originates in the post-medieval period.
- 18.2.8 Four WWII pillboxes are located along the southern part of the study area.

18.3 Introduction

- 18.3.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 14 – 15 December 2021 and 7 – 16 March 2022. Field conditions at the time of the survey were acceptable throughout the period of the survey. An overall coverage of 48.6 ha was achieved.

- 18.3.2 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:2,000 (**Figures 110 to 117**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale images.
- 18.3.3 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 111 - 117**). Full definitions of the interpretation terms used in this report are provided in Appendix 2.
- 18.3.4 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 18.3.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 18.3.6 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

18.4 Gradiometer survey results and interpretation

- 18.4.1 In the central part of the survey area is a weakly positive annular anomaly at **5500 (Figure 113)**. It has a diameter of 14 m, is up to 1 m wide, and indicates a ditch feature. This may relate to prehistoric activities, such as a roundhouse or a round barrow.
- 18.4.2 In the eastern part of the survey area are two parallel positive linear anomalies at **5501** that have a north-west – south-east orientation (**Figure 117**). They are both 37 m long and up to 1 m wide indicating ditch-like features. They extend into an area of strong superficial geology to the south and cannot be followed further. A curvilinear anomaly extends from the southern ditch. It is 23 m long by 1 m wide and is obscured by a strong magnetic response from superficial geology towards the south-east. While it is possible these anomalies relate to archaeological activity, such as a trackway, it is equally likely that they relate to modern agricultural activity. The strong geological response makes more confident interpretation difficult.
- 18.4.3 Several small weakly positive discrete anomalies have been identified throughout the site. They indicate pit-like features that are likely the result of undulation in the natural geology.
- 18.4.4 Positive anomalies with corresponding negative parts **5502, 5503** are noted along the Gunfleet estuary (**Figure 117**). They run on a north – south alignment with an average width of 15 m, but it extends to 30 m in the southern part of the survey area. The negative part is located at the western part of the feature, indicating a ditch and bank that may relate to a water management system or an embankment for shore protection. However, given the location at the western edge of Gunfleet estuary, it could as well be natural in origin.
- 18.4.5 Three weak positive linear responses have been identified in HHN_02 and HHN_03 (**5504, 5505, 5506**) (**Figure 113**). They are up to 2 m wide and on north-east – south-west and north-west – south-east orientation. They are 106 m, 186 m and 407 m long respectively and have been identified on a 1896 OS mapping as field boundaries.

- 18.4.6 Broad weak responses were recorded in the northern part of the survey area at **5507, 5508 (Figure 113)**. These are indicative of the alluvial deposits recorded in the area. Further geological anomalies are recorded as strong dipolar areas in the southern part of the surveyed area at **5509 – 5511 (Figure 117)**. They correspond to the Gunfleet Estuary in the lower part of the Holland Brook River.
- 18.4.7 Numerous weakly dipolar linear anomalies have been identified throughout the area. They run parallel to each other with a distance of 9 m – 25 m between them indicating land drains.
- 18.4.8 A strong linear dipolar anomaly (**5512**) was identified in the centre of the survey area (**Figure 113**). It is 335 m long and 7 m wide and runs on the south-west – north-east orientation. A similar anomaly was identified along the western edge of the northern part of the survey, at **5513 (Figure 111)**. This is 210 m long and up to 6 m wide and extends beyond the western edge of the survey. These two features indicate modern roads or tracks.

18.5 Discussion

- 18.5.1 The gradiometer survey has detected several features, which can be identified as archaeological in origin. The clearest one is the ring ditch feature in the northern part of the survey. It indicates a prehistoric roundhouse or a ring barrow and may be associated with the limited Bronze Age activity noted in the surrounding area.
- 18.5.2 A possible embankment or water management system has been identified along the western edge of Gunfleet Estuary. This appears to be a ditch and bank feature with angular turns suggesting a manmade rather than natural origin.
- 18.5.3 Towards the northern end, and extending into, Gunfleet Estuary are two parallel ditch features. The origin of these is unclear from the geophysical data alone. They may represent an archaeological track way or feature associated with the estuary. However they could equally relate to modern agricultural activity.
- 18.5.4 The remaining anomalies are thought to be modern or natural in origin. These include land drains and areas of alluvial deposits.



NORTH FALLS

Offshore Wind Farm



RWE

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