Land at Windy Arbor Brow/Windy Arbor Road, Whiston, Knowsley

Archaeological Evaluation Report

July 2022

Client: Lanpro Services on behalf of Forth Homes

Issue No: V. 2
OA Reference No: L11433
NGR: SD 4636 8973

oxfordarchaeology

Client Name:	Lanpro Services on behalf of Forth Homes
Document Title:	Land at Windy Arbor Brow/Windy Arbor Road, Whiston, Knowsley
Document Type:	Archaeological Evaluation Report
Report No.:	2022-23/2207
Grid Reference:	SD 4636 8973
Planning Reference:	20/00329/FUL
Site Code:	WAWM22
Invoice Code:	L11433
Receiving Body:	Archaeology Data Service (ADS)
OASIS Reference	oxfordar2-506489
OA Document File Location:	X:\Paul\Projects\L11433_Windy_Arbor_Whiston\Report
OA Graphics File Location:	X:\Paul\Projects\L11433_Windy_Arbor_Whiston\OAN_CAD
Issue No:	V. 2
Date:	July 2022
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Land at Windy Arbor Brow/Windy Arbor Road, Whiston, Knowsley

Archaeological Evaluation Report

Written by Selina Dean

With illustrations by Mark Tidmarsh

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Summary

Oxford Archaeology (OA) North was commissioned by Lanpro Services on behalf of Forth Homes to undertake a trial trench evaluation and level 1/2 historic building recording at the site of a proposed residential development on land east of Windy Arbor Brow, Whiston, Merseyside (NGR: SD 4636 8973).

The work was undertaken as condition 30 of Planning Permission (planning ref. 20/00329/FUL). During consultation for the application, the archaeological advisors to Knowsley Council, Merseyside Environmental Advisory Service (MEAS), recommended that an archaeological evaluation be undertaken comprising five trial trenches measuring 30m x 2m, as well as an historic building recording of the extant Carr Cottage outbuilding. A written scheme of investigation (WSI) was produced by Lanpro Services detailing the Local Authority's requirements for work necessary to discharge the planning condition. OA North were subsequently commissioned to undertake the necessary fieldwork, which was carried out over two days, 28th and 29th April 2022.

Only four proposed trenches were excavated, Trench 5 was abandoned due to the presence of asbestos across the proposed trench location and the trench could not be repositioned due to asbestos being present in the wider area. In addition, Trenches 1, 2 and 3 were shortened due to the presence of trees and severe overgrowth in certain areas. The only archaeological remains found were ditches, one each in Trenches 1 and 2, most likely related to post-medieval water management.

A level 1/2 Historic England building survey was undertaken of the extant of Carr Cottage outbuilding (HER MME6283), located at the northern end of site. The outbuilding is dated to the late eighteenth century with the associated cottage having been demolished in recent years. It was agreed prior to commencement, and as stated in the WSI, the interior was not to be accessed due to the disrepair of the building.

Acknowledgements

Oxford Archaeology (OA) North would like to thank Emily Mercer and Karl Taylor of Lanpro Services and Paul Finch of Forth Homes for commissioning this project. Thanks are also extended to Alison Plummer, Planning Archaeologist for Merseyside Environmental Advisory Service (MEAS), who monitored the work on behalf of Knowsley Council.

The project was managed for OA North by Paul Dunn. The fieldwork was directed by Bryan Antoni, who was supported by Selina Dean. Survey was undertaken by Selina Dean, whilst the illustrations were produced by Mark Tidmarsh.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) North was commissioned by Lanpro Services on behalf of Forth Homes to undertake a trial trench evaluation and level 1/2 historic building recording at the site of a proposed residential development on the land east of Windy Arbor Brow, Whiston, Merseyside (NGR: SD 4636 8973; Fig 1).

1.1.2 This work was undertaken as a condition of Planning Permission (planning ref. 20/00329/FUL). Condition 30 stated:

No development shall take place, including any works of demolition, until:

(a) A programme of archaeological work has been completed. The work shall be carried out strictly in accordance with the approved Written Scheme of Investigation (Lanpro July 2020).

(b) Subsequent phases of work shall be in accordance with a second Written Scheme of Investigation if required which shall first be submitted to and agreed in writing by the Local Planning Authority.

The work shall thereafter be carried out only in accordance with the approved details.

Reason: To ensure the implementation of the required scheme of archaeological investigation and its publication and to comply with the National Planning Policy Framework (2021), Policies CS2, CS19, CS20 and SUE2 of the Knowsley Local Plan Core: Strategy, adopted January 2016, and the Halsnead Garden Village Masterplan SPD, adopted June 2017

1.1.3 During consultation for the application, the archaeological advisors to Knowsley Council, Merseyside Environmental Advisory Service (MEAS), recommended that an archaeological evaluation be devised in the form of trial trenching, comprising five 30m x 2m trenches, targeting the footprint of the former Carr Cottage (MME 13132) and a sample of the remainder of the site, as well as a Level 1/2 historic building survey of the surviving Carr Cottage outbuilding. A written scheme of investigation (WSI) was produced by Lanpro Services (*Appendix A*) detailing the Local Authority's requirements for the work necessary to discharge the planning condition. OA North were subsequently commissioned to undertake the archaeological fieldwork, which was carried out over two days; 28th and 29th April 2022. This document outlines how OA implemented the specified requirements.

1.2 Location, topography and geology

1.2.1 The site comprises a triangular shaped parcel of land on the north side of J6 of the M62 (centered at NGR SD 4636 8973; Fig 1). It is bound on the north and west side by Windy Arbor Brow and to the east by Windy Arbor Road, to the south is the link road between the M57 and M62. The area is located within the administrative boundary of Knowsley Council.

1.2.2 The site gently slopes down from *c* 31m above Ordnance Datum (aOD) in the north to *c* 26m aOD in the south. The site is heavily overgrown with self-seeded trees within the south-west area. It formerly comprised a plot containing Carr Cottage and outbuildings, to the north of which was a garden plot formerly associated with Carr House located to the north-east of the site, and two agricultural fields across the center and south of the site. However, the site effectively now comprises two plots, the former Carr Cottage garden plot within the northern tip and the remainder of the site. There is currently little evidence of former field boundaries, with the exception of three large mature trees.

1.2.3 The solid geology across the majority of the site comprises mudstone, siltstone and sandstone of the Pennine Middle Coal Measures Formation, with the very southern part of the site being sandstone of the Pennine Middle Coal Formation (BGS 2022). The superficial geology is Diamicton Devensian Till (*ibid*). The soils of the site were mapped as slowly permeable seasonally wet and slightly acid but base-rich loamy and clayey soils (Cranfield 2022).

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site is described in detail in the WSI (*Appendix A*), produced by Lanpro Services. A brief summary is provided here.

1.3.2 The location of the previous structure of Carr Cottage and its outbuildings can be identified on Yates' map of 1786 with the 1840 Tithe map showing the associated outbuilding (MME 13132) to the south-west of Carr Cottage and plots 589-562. The site remained relatively unchanged during the twentieth century until the construction of the M62 to the south, with a new junction road constructed, effectively rendering Windy Arbor Brow redundant apart from access to Carr Cottage and the houses to the west. During archaeological works surrounding the site connected to the motorway construction, evidence of activity dating to prehistoric, Roman and medieval periods has been discovered, as well as evidence of Mesolithic and Neolithic flint scatters being recorded *c* 630-650m to the south of the site, and a Romano-British enclosure containing rectilinear buildings and evidence of tile manufacturing were also discovered *c* 630m to the south (Liverpool Museums Field Archaeology Section 1991).

1.3.3 There was a low/nil potential for the discovery of remains dating to prehistoric, Roman and medieval periods. Within the northern part of the site there was potential to examine the footprint of Carr Cottage, dating to at least the eighteenth century, for which the foundations were anticipated to still be *in situ*.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The main aims of the project were; to complete an historic building recording of the Carr Cottage outbuilding in order to produce a permanent record of it prior to demolition during construction works; additionally to this, to undertake an archaeological trial trench evaluation to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the area of the proposed development. This will allow a reasoned and informed recommendation to be made regarding any potential further mitigation.

2.1.2 The project objectives were as follows:

i. provide a photographic record of the outbuilding prior to demolition, equivalent to a Level 1/2 standard (Historic England 2016);
ii. to determine the location, extent, date, character, condition and significance of any archaeological remains within the development site;
iii. to excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
iv. to assess vulnerability/sensitivity of any exposed remains;
v. to assess the impact of previous land use on the site;
vi. to assess the potential for survival of environmental evidence;
vii. to inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
viii. to undertake sufficient post-excavation assessment to confidently interpret identified archaeological features; and
ix. to report the results of the evaluation and place them in their local, regional or national context and to make this record available.

2.1.3 The WSI (*Appendix A*) made reference to one research question from the regional research framework, *The Archaeology of North West England – An Archaeological Research Framework for the North West* (RFN 2022). Which was:

i. PM15 – how well recorded and understood are farming landscapes, field patterns, distributions of buildings and building types?

2.1.4 As well as contributing to the understanding of localised building types and sequencing, as discussed in English Heritage's *Historic farmsteads: preliminary character statement – North West region* (2006), also placing the farmstead's context within the former rural landscape and character.

2.2 Methodology

2.2.1 The full methodology is outlined in the WSI (*Appendix A*) and was adhered to in full, and, as such, was fully compliant with prevailing guidelines and established industry best practice (CIfA 2020a; 2020b; 2020c; 2021 Historic England 2015; 2016). A programme of field observation accurately recorded the character of the deposits within the excavation.

2.2.2 Historic building recording was undertaken to a Level 1/2 standard in line with Historic England guidance (2016) to record the exterior of the Carr Cottage outbuilding. Scaled photographs were taken of the principal elevations placing the building in its context. Measured sketches were also made with annotations of the form and fabric of the structure, where possible, although the elevations were heavily overgrown with vegetation.

2.2.3 The trial trenching required the topsoil and subsoil to be removed by an 8-tonne 360° tracked excavator, fitted with a toothless ditching bucket, to the surface of the first significant archaeological deposit or natural geology, under direct archaeological supervision at all times. Subsequent cleaning and investigation of all archaeological deposits was undertaken manually, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions. All features of archaeological interest were investigated and recorded.

2.2.4 The trenches were located by the use of a real-time kinematic (RTK) global navigation satellite system (GNSS), accurate to within 0.02-0.03m, and altitude information was established with respect to Ordnance Survey Datum. Trenches 1, 2 and 3 were shortened by approximately 5m due to the presence of trees and severe overgrowth preventing excavation. In addition to this, Trench 5, intending to investigate the potential footprint of Carr Cottage which had been demolished, was abandoned due to the presence of asbestos across the proposed trench location and the trench could not be repositioned due to asbestos being present in the wider area. Prior to excavation, the trenches were scanned using a Cable Avoidance Tool (CAT) and Signal Generator (Genny), to identify any potential services. All trenches were excavated in a stratigraphic manner.

2.2.5 All information identified during the site works was recorded stratigraphically, using a system adapted from that used by the former Centre of Archaeology of English Heritage, with an accompanying pictorial record (plans, sections, and digital photographs). Primary records were available for inspection at all times.

2.2.6 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes both photographic images and accurate large-scale plans and sections at appropriate scales (1:50; 1:20; 1:10).

2.2.7 A full professional archive has been complied in accordance with the WSI, and in accordance with current CIfA (2020c) and Historic England (2015) guidelines. The archive will be deposited with the Archaeology Data Service (ADS), in line with National Museums of Liverpool (NML) guidelines (NML 2020), due to no finds being recovered from the evaluation. An online access to the index of archaeological investigations (OASIS) form has been uploaded (ref: oxfordar2-506489), along with a digital copy of this report.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below, and include a stratigraphic description of the trenches that contained archaeological remains (Trenches 1 and 2), the remaining trenches were devoid of archaeology and will be discussed no further. The full details of all trenches with dimensions and depths of all deposits can be found in *Appendix B*.

3.2 Evaluation Trenching

3.2.1 The soil sequence in the trenches was fairly uniform. The natural geology of mid orange and pink red clay with sandy and gravel patches, was overlain by a mid-yellow grey silty clay subsoil, approximately 0.04 to 0.25m thick, which was, in turn, overlain by topsoil, approximately 0.2 to 03m thick (Plate 1).

Plate 1: South-west-facing section of Trench 4, scale 1m

3.2.2 Ground conditions throughout the evaluation were generally good, and the site remained dry throughout. Archaeological features, where present, were easy to identify against the underlying natural geology.

3.3 General distribution of archaeological deposits

3.3.1 Archaeological features, in the forms of ditches, were only present in Trenches 1 and 2. Trenches 3 and 4 were devoid of archaeological features, with only field drains being identified cutting the natural geology and will be discussed no further.

3.4 Trench 1

3.4.1 Trench 1 (Fig 4 and Plate 2), located towards the northern part of the site development, was aligned approximately north-east/south-west and targeted the former agricultural fields. The trench was shortened by approximately 5m at the north-eastern end due to severe overgrowth that restricted the full excavation of the trench. Natural geology ***102*** was encountered throughout the trench and was cut by field drains and ditch ***103***.

Plate 2: Trench 1 looking south-west, 2m and 1m scales

3.4.2 Ditch ***103*** (Fig 4; Plate 3) was encountered towards the south-western end of the trench aligned approximately north/south and extending across the width of the trench, measured 2.25m wide and survived to a maximum depth 0.38m. Ditch ***103*** was filled by deposit ***104***, a mid-yellow brown silty clay, approximately 0.3m thick. The ditch was sealed by subsoil ***101***, approximately 0.25m thick, which was, in turn, overlain by topsoil ***100***, approximately 0.32m thick.

*Plate 3: South-facing section of ditch **103**, scale 1m*

3.5 Trench 2

3.5.1 Trench 2 (Fig 2 and Plate 4), located towards the central-eastern part of the site development, was aligned north-west/south-east and targeted the former agricultural fields similarly to Trench 1. This trench was also shortened by approximately 5m at the south-eastern end, due to the presence of a large tree, as part of the field boundary as depicted on the OS map of 1892 (Fig 3) which restricted access at this end of the trench. Natural geology ***202*** was encountered throughout the trench and was cut by field drains and ditch ***203***.

Plate 4: Trench 2 looking south-east, 2m and 1m scales

3.5.2 Ditch ***203*** (Fig 5, Plate 5) was identified at the north-western end of the trench, aligned west-north-west/east-south-east, measured 0.73m wide and survived to a maximum depth of 0.2m. It contained one deposit, fill ***204***, a light-yellow grey clay sandy silt 0.2m thick. The ditch was overlain by subsoil ***201***, approximately 0.04m thick, which was, in turn, overlain by topsoil **200**, approximately 0.27m thick.

*Plate 5: West-facing section of ditch **203**, scale 0.5m*

3.6 Environmental and finds Summary

3.6.1 There were no environmental samples taken during the evaluation, as there were no suitable deposits identified. Small fragments of late post-medieval ceramics were recovered from the fill of ditch ***203***, these were assessed and identified as being too small to be diagnostic other than to identify their period.

3.7 Historic Building Recording

3.7.1 The Carr Cottage outbuilding (Fig 6 and Plate 6) was a rectangular structure with a slate-covered roof located at northern end of the site. It was constructed of irregularly coursed, roughly-hewn, weathered, sandstone of varying size bonded with loose white-flecked soft lime mortar (Plate 7). The building was disused and had been deemed unsafe to enter, therefore there was no internal access. Large portions of the southern, eastern and northern elevations were obscured by ivy and overgrowth around the structure, which could not be removed safely, so could not be thoroughly recorded.

Plate 6: Overview of the Carr Cottage outbuilding, looking north

Plate 7: Limestone coursing of the outbuilding, southern elevation, 2m scale

3.7.2 The southern elevation of the outbuilding, measured 5m wide, there was evidence of a window, measuring approximately 1m x 1m and centrally placed and sited approximately 3.1m high in the elevation (Plate 8). A timber gate post, 0.4m wide and standing 1.36m tall was also visible at the south-west corner of the southern elevation, with the top-right side of the wall was obscured by ivy.

Plate 8: Southern elevation, 2m scale

3.7.3 The eastern elevation (Plate 9) measured approximately 10m wide, the southern-half of the elevation being obscured by ivy; however, a cart shed door was visible, with an additional smaller doorway to the north beneath a brick arch (Plate 10). A roof scar is also visible approximately 1m below the upper northern corner and angling down towards the northern edge of the brick-arched doorway, likely a later modification to the building. There is also evidence of lime-wash on the face of this part of the elevation, suggesting that this part of the building was eventually utilised as an internal space. A brick wall standing to a height of 2.3m and 0.24m wide, protrudes out from the northern corner of the eastern elevation at a 90° angle, extending approximately 0.78m from the corner of the outbuilding, and being constructed from hand-made bricks measuring 204 x 110 x 80 mm (Plate 11).

Plate 9: Eastern elevation of Carr Cottage outbuilding, scale 2m

Plate 10: Detail view of doorways in eastern elevations, scale 2m

Plate 11: Brick wall extension of outbuilding protruding from eastern elevation, scale 2m

3.7.4 The northern elevation (Plate 12) was severely obscured by ivy and overgrowth so much of the wall was not visible. The brick wall visible on the eastern elevation is also visible continuing on from the eastern side of the sandstone-built wall on the northern elevation, appearing to be keyed into the structure of the outbuilding; aside from this, not much else was visible.

Plate 12: Northern elevation looking south-west, scale 2m

3.7.5 The western elevation of the outbuilding was free of ivy and overgrowth (Plate 13). As seen on the southern elevation, the fence post at the southern-end of the elevation was visible, capped with concrete and with evidence of an iron gate chain being visible towards the top of the post. There was also evidence of the top of a dividing wall, aligned east/west, approximately in the centre of the outbuilding, visible due to the roof having collapsed on this side of the building.

Plate 13: Western elevation looking east, scale 2m

3.7.6 The roof was constructed from large rectangular slates visible from the eastern side of the building. These slates had collapsed on the western side, allowing the roof construction of timber rafters, running east to west, and ridge beam, running north/south on the apex, of the roof being visible.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 Although three trenches were shortened due to the overgrowth and presence of trees, four of the five trenches were successfully excavated, the results produced were likely representative of the surviving archaeological remains in the southern part of the area. The ground conditions throughout the evaluation were generally good, although the sunlight was very strong, however, archaeological features were easily identifiable against the natural geology.

4.2 Evaluation objectives and results

4.2.1 The principal aim, as identified above in *Section 2.1.1*, was to obtain sufficient information to establish the presence or absence, character, extent, state of preservation and date of any archaeological deposits within the proposed development, and to provide sufficient information as to the need for and scope of any subsequent mitigation strategy. To meet the aims, the programme of trenching was designed to provide adequate coverage across the site (Fig 2). Four of the five trenches were successfully excavated, with the trenches that were excavated providing an accurate representation of the surviving archaeological remains. Trench 5 was unable to be excavated due to the presence of asbestos in the proposed location of the trench and the trench could not be repositioned due to asbestos being present in the wider area.

4.2.2 The original research questions (*Section 2.1.3*; RFN 2022) identified in the WSI (*Appendix A*) did relate to the outbuilding recorded, although the results of the evaluation trenching are unlikely to contribute to answering this research question, due to minimal archaeological remains being encountered. The recording of the outbuilding could also contribute to understanding of localised building types and sequencing (EH 2006).

4.3 Evaluation interpretation

4.3.1 Only two features were identified during the evaluation, in Trenches 1 and 2. Ditch ***203*** contained small fragments of late post-medieval ceramics, whilst ditch ***103*** did not contain any dating evidence. The features were likely utilised as some form of water management, however, there was very little of the features surviving to say for definite.

4.4 Historic building record

4.4.1 ***Origins***: Carr Cottage can be seen on Yates' map of 1786, and the associated outbuilding can be seen on the 1842 Tithe map of Whiston as part of No. 562, a house and garden owned by Richard Willis and occupied by William Taylor. More detail of the outbuilding is provided on the subsequent Ordnance Survey mapping of 1850 and 1892 (Fig 3), with the outbuilding and other smaller buildings, potentially pig sties, are within the same plot as Carr Cottage, with evidence on the 1892 map of them being separated by fences. There was also evidence on satellite imagery from 2015 of hardstanding surrounding the southern parts of the outbuilding, extending as far

south as the possible pig sties (Google Earth 2022). The extension to the outbuilding, visible as scars on the eastern elevation, had clearly been constructed by the 1850 mapping. The buildings then change little throughout much of the twentieth century, with Carr Cottage being demolished in 2018 following a period of disuse, along with the extension to the outbuilding and the potential pig sties to the south.

4.4.2 ***Function***: most of the information regarding the function of the outbuilding, is provided from the eastern elevation, which appears to be the front of the building, providing access through two entrances. The southern part of the building appears to primarily be for used as a cart-shed or barn, due to the large double doors, whilst the northern part, including the now demolished brick-built extension to the south-east, was likely utilised as a workshop or for storage due to the presence of lime-wash surviving on the walls. Although there was no access to the inside of the building, there was evidence of an east/west-aligned dividing wall, which was visible from the western side of the building due to the roof having collapsed, which appeared to correlate with the separate doorways on the eastern elevation.

4.4.3 ***Development***: the surviving building appears to have changed little since the more detailed depict of the building on the 1850 OS map, with there being minimal changes to the fabric of the sandstone-built outbuilding. However, the roof scar visible on the northern half of the eastern elevation and the wall stub extending from the north-eastern corner of the building (Plate 11), suggest that the extension to the south-east, as depicted on historic mapping (Fig 3) was a later addition to the outbuilding. The lime wash on the walls of both the surviving outbuilding and the wall stub and the roof scar, suggest that this created an internal space, potentially utilised as a workshop or for storage.

4.5 Significance

4.5.1 The results of the evaluation correspond fairly well to what was expected from the historic mapping, with the features found most likely relating to possible drainage for the agricultural fields suggesting that the site remained relatively unchanged throughout much of the twentieth century until the construction of the M62 to the south. Consequently, the features identified within the evaluation trenching are considered to be of low local significance and are unlikely to contribute further to our understanding of post-medieval field systems and landscapes in the area (RFN 2022).

4.5.2 With regards to the Level 1/2 historic building recording of the associated outbuilding of Carr Cottage, the recording has provided potential information of the function of the structure and its potential extension which no longer stands but can been seen on historic maps. The recording of the structure was limited due to the unstable structure of the building and being partially covered in vegetation. Although limited in the extent of the survey due to the stability of the building and also vegetation cover, what was recorded could provide some information regarding building types in the area in support of the research question (RFN 2022; EH 2006).

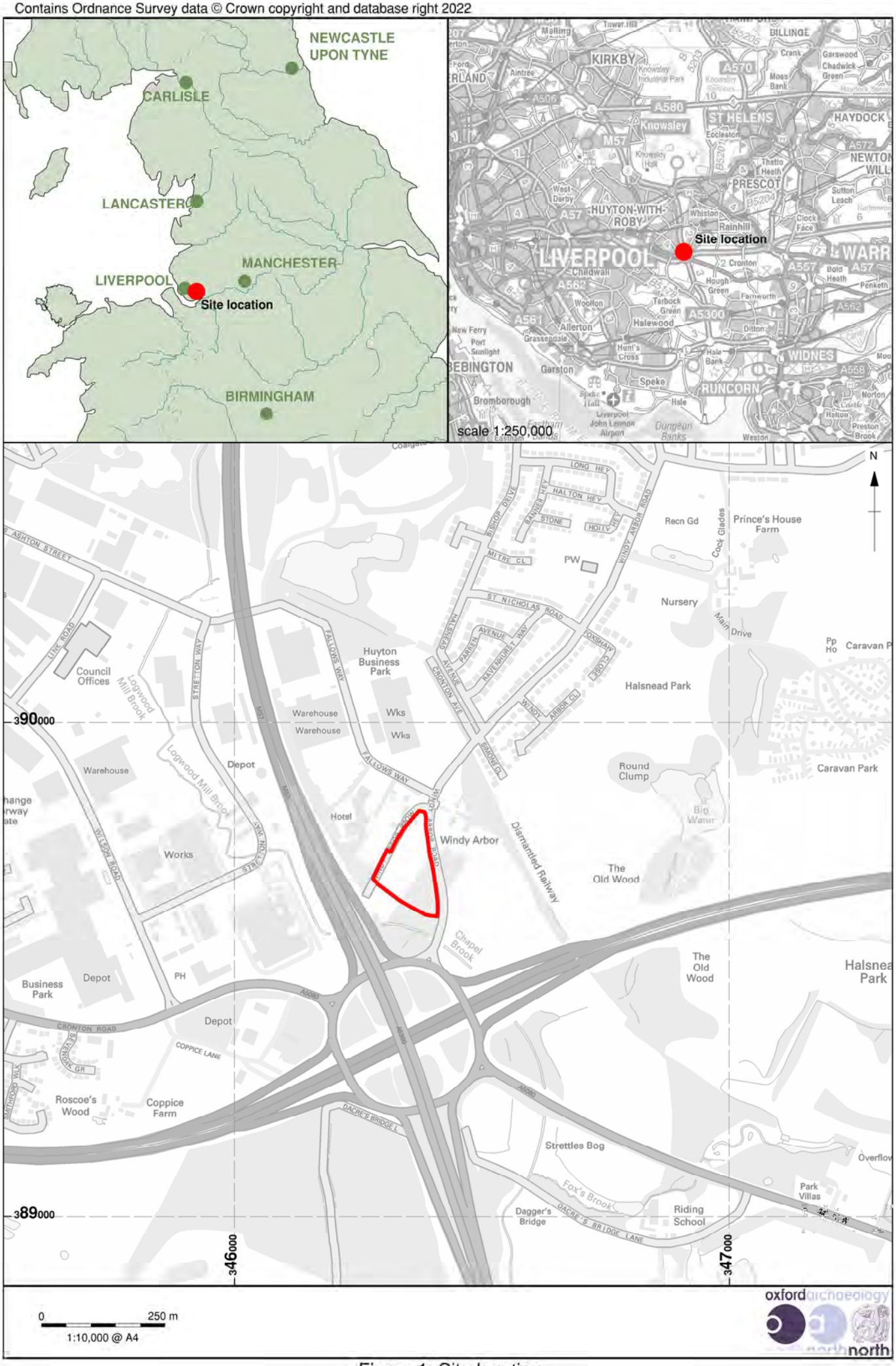

Figure 1: Site location

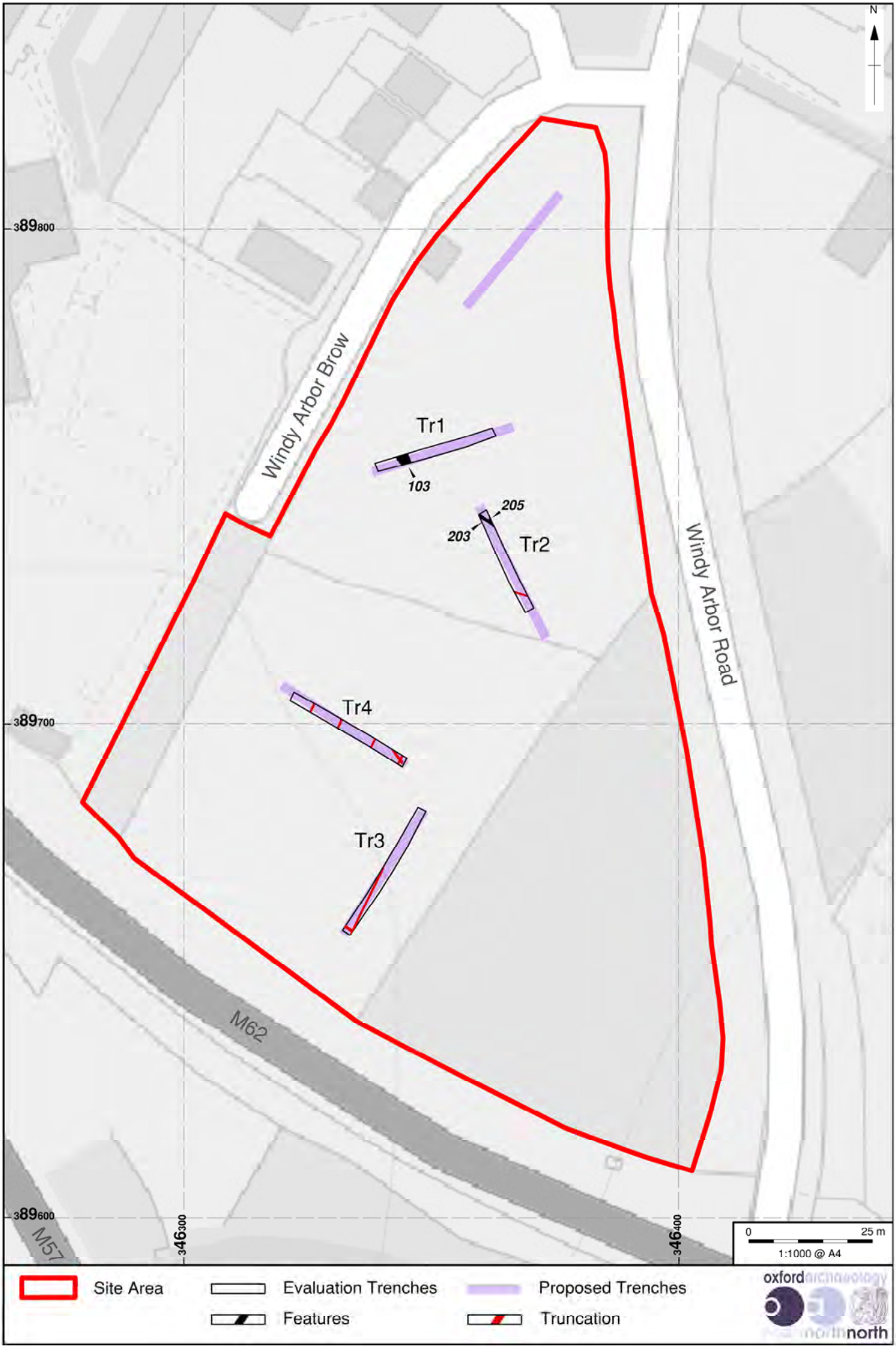

Figure 2: Evaluation trenches

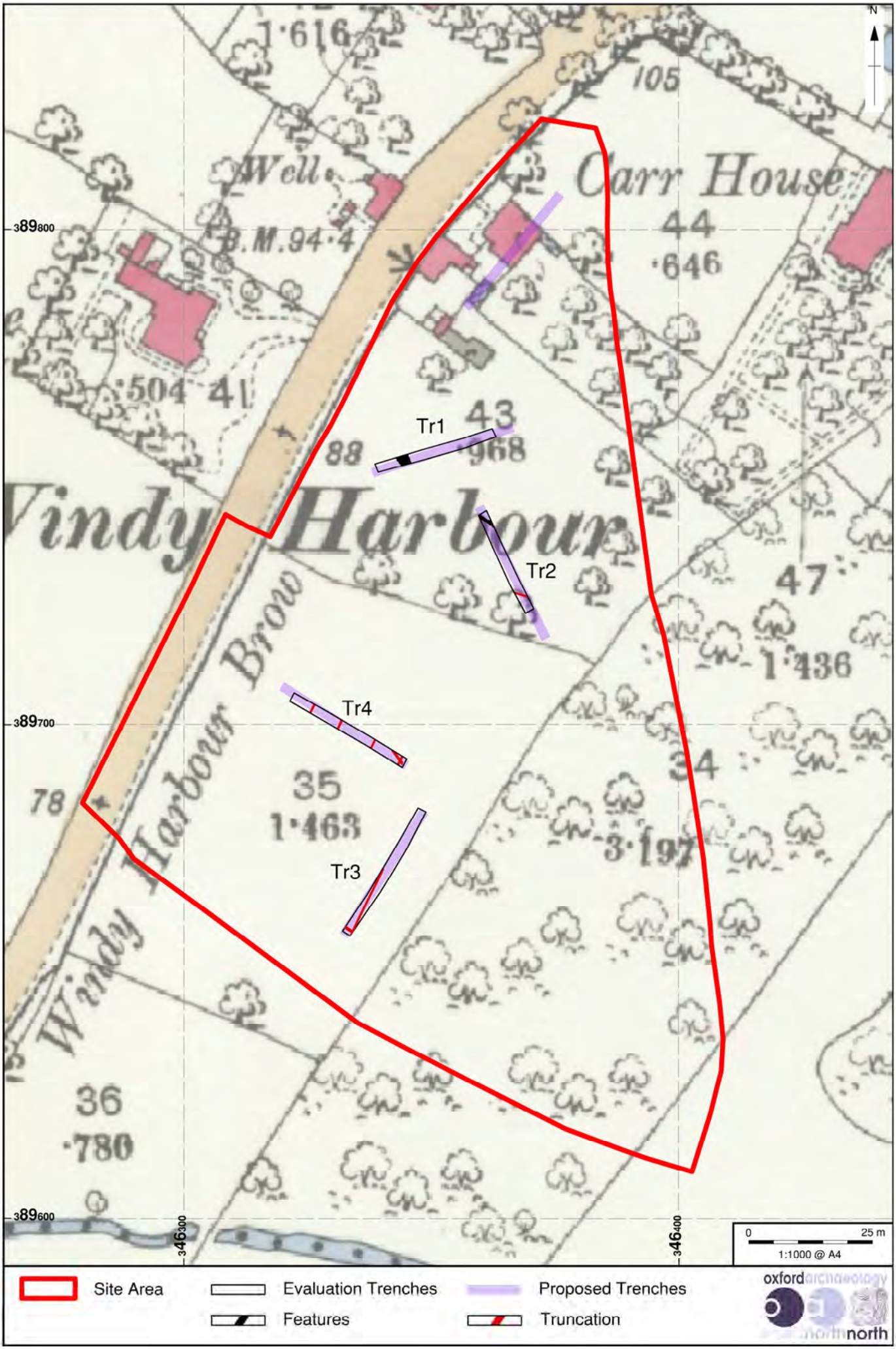

Figure 3: Evaluation trenches superimposed on the Ordnance Survey 25:1 mile map of 1892

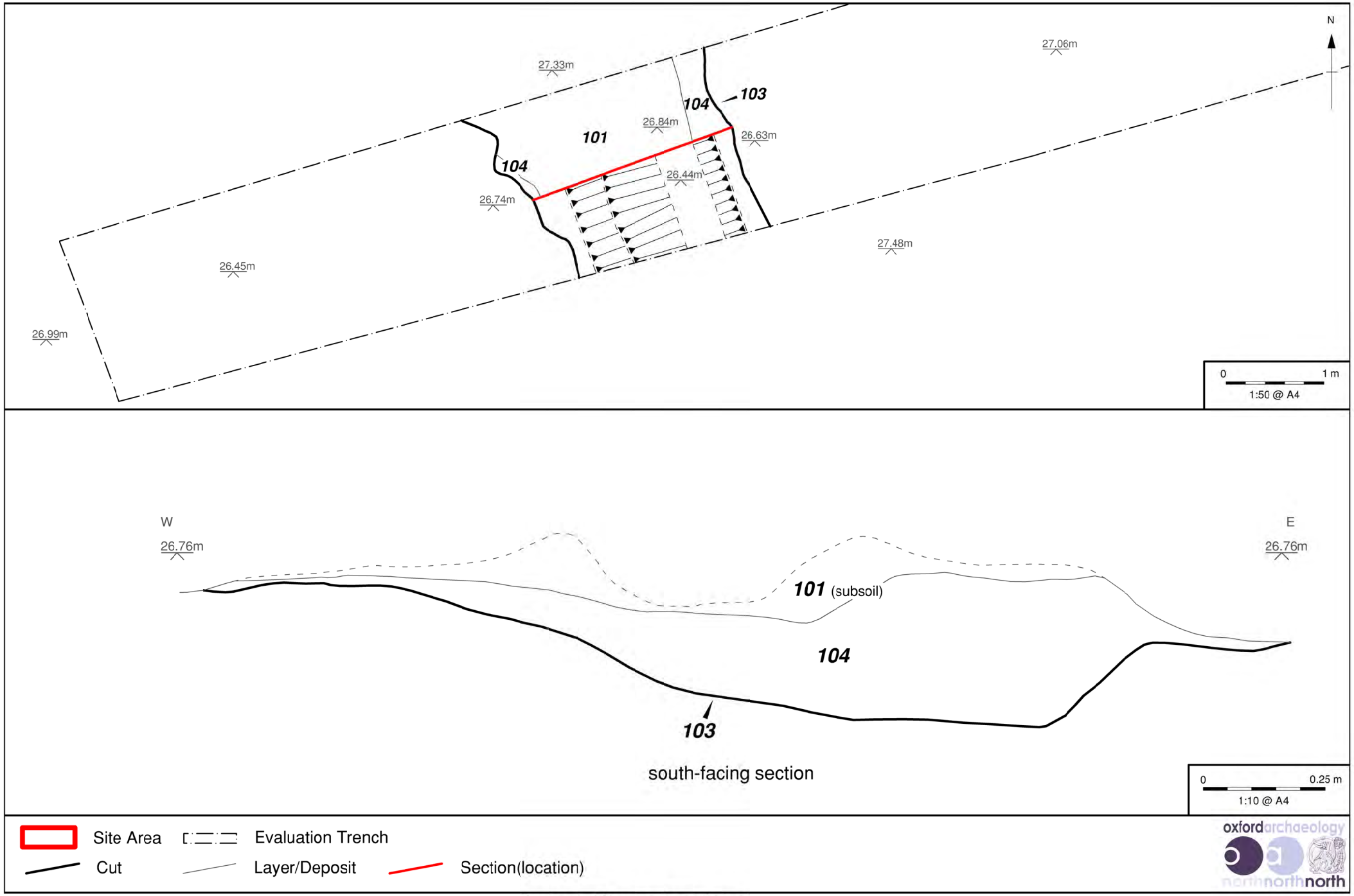

Figure 4: Plan and section of ***103*** in Trench 1

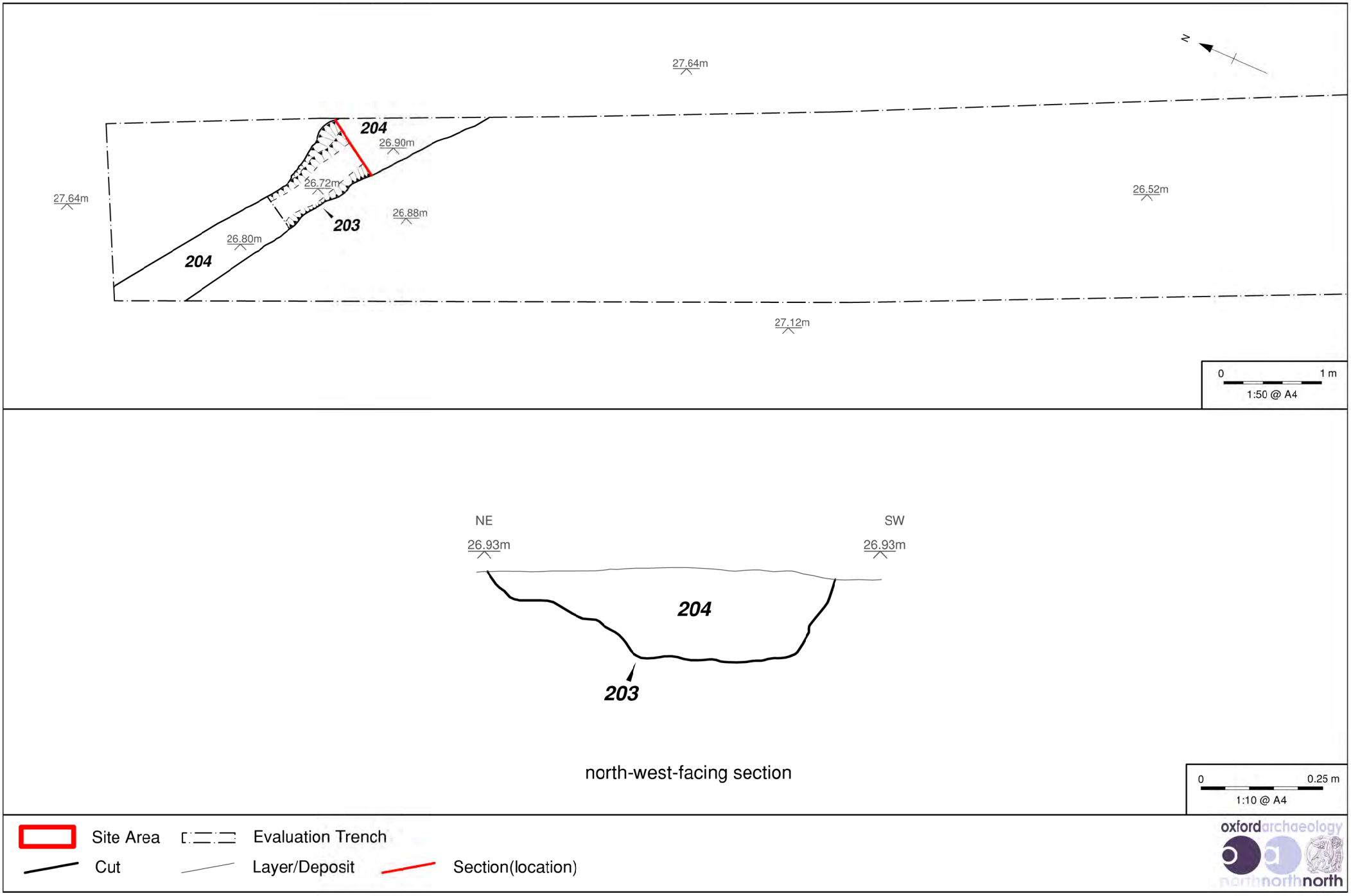

Figure 5: Plan and section of ***203*** in Trench 2

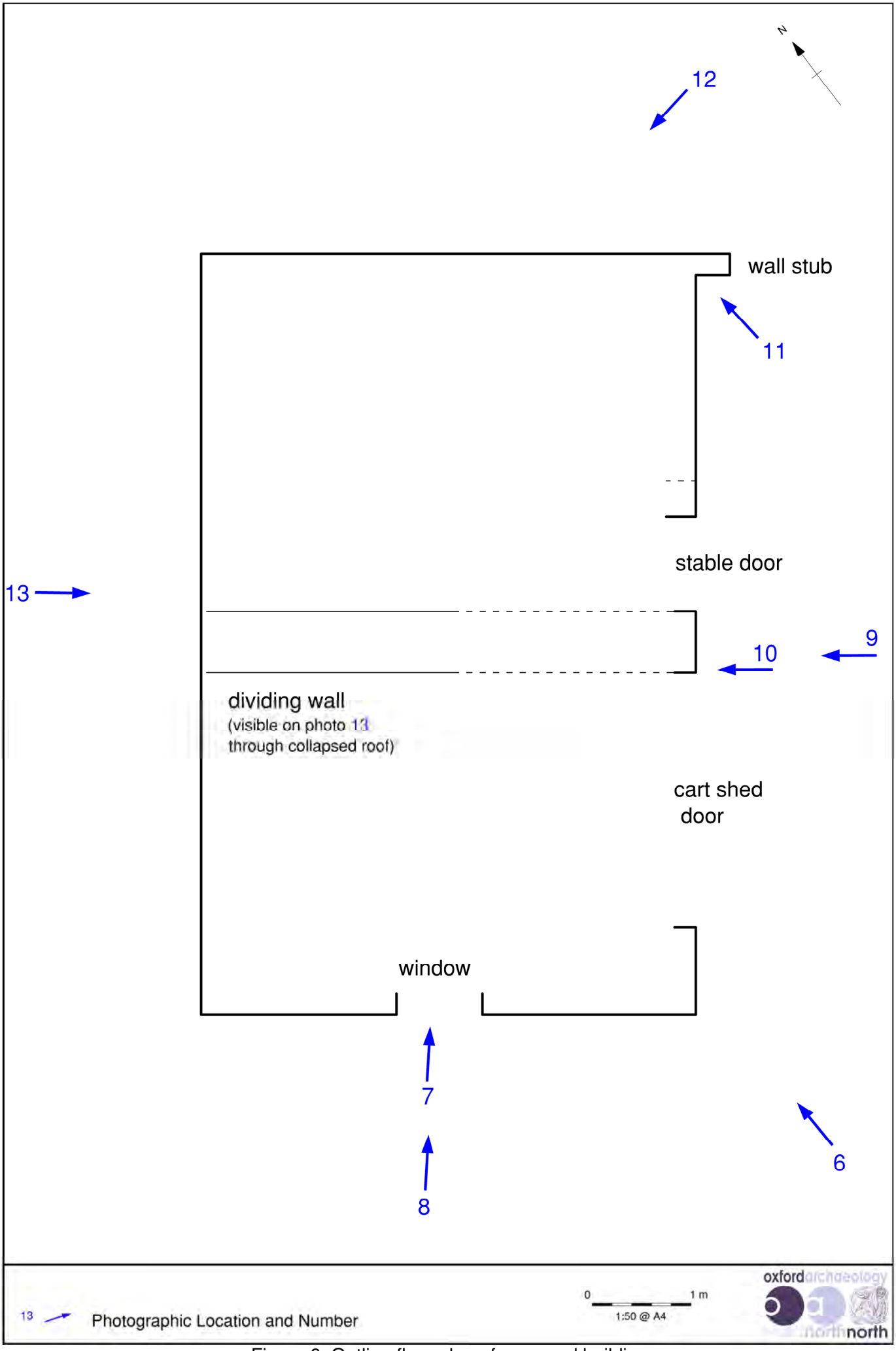

Figure 6: Outline floor plan of surveyed building

APPENDIX A WRITTEN SCHEME OF INVESTIGATION

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL INVESTIGATION

LAND EAST OF WINDY ARBOR BROW
WHISTON
MERSEYSIDE

PREPARED BY LANPRO SERVICES
ON BEHALF OF
FORTH HOMES

April 2022

Lanpro

Planning + Development | Design Studio | Archaeology + Heritage

Project Reference: 2265/01

Document Prepared by: Emily Mercer BA (Hons) MSc MCIfA

Revision	Reason for Update	Document Updated
V2	Changes to trench layout due to OHPL	April 2022

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1 INTRODUCTION

1.1 This Written Scheme of Investigation (WSI) has been prepared by Lanpro on behalf of Forth Homes (the client) and details the methodology for undertaking a scheme of archaeological evaluation to the east of Windy Arbor Brow, Whiston, Merseyside. The extent of the site is c. 1.7ha, although the developable area subject to archaeological investigation is c. 0.99ha (Figure 1).

1.2 Carr Cottage, recorded on the Merseyside Historic Environments Record (HER MME6283), was located within the north of the site and demolished in recent years. Presently, the only remaining standing structures is one of its outbuildings, also recorded on the Merseyside HER (MME13132). Both structures are of at least late 18th century date.

1.3 The archaeological investigation will comprise an historic building record of the extant Carr Cottage outbuilding (MME13132) and a programme of trial trenching targeting the footprint of Carr Cottage as well as sampling the remainder of the site. This will aim to establish the presence or absence of buried archaeological remains and their nature, date, extent and significance. The results of the evaluation will be used to inform decisions on the need for any further archaeological mitigation investigation and, should this be required, the scope of any additional excavation will be detailed in a further WSI.

2 SITE DESCRIPTION

2.1 The proposed development site comprises a triangular shaped parcel of land on the north side of J6 of the M62 (centred at NGR SD 4636 8973; see Figure 1). It is located within the administrative boundary of Knowsley Council.

2.2 Along the east side of the site is a portion of the former tree belt surrounding Halsnead Park to the east, its western extent demarcated by a length of former park wall. This woodland will remain undeveloped and is therefore excluded from the archaeological investigation. Along the south-west side of the site is a now disused stretch of the former Windy Arbor Brow road.

2.3 The remainder of the site is heavily overgrown (Plates 1-2) with self-seeded trees within the south-west area. It formerly comprised a plot containing Carr Cottage and outbuildings, to the north of which was a garden plot formerly associated with Carr House located to the north-east of the site, and two agricultural fields across the centre and south of the site. However, the site effectively now comprises two plots, the former Carr House garden plot within the northern tip and the remainder of the site. There is currently little evidence of the former field boundaries, with the exception of three large mature trees (Plate 3)

2.4 The site gently slopes down from c. 31m above Ordnance Datum (aOD) in the north to c. 26m aOD in the south. It is bound on the north and west side by Windy Arbor Brow and to the east by Windy Arbor Road. To the south is the link road between the M57 and M62.

2.5 The recorded bedrock geology across the majority of the site comprises mudstone, siltstone and sandstone of the Pennine Middle Coal Measures Formation, with the south of the site being simply sandstone of the same Pennine Middle Coal Measures Formation. This is overlain by Diamicton Devensian Till (BGS 2020).

3 PLANNING BACKGROUND

3.1 An application is being submitted for a residential development of the site. During pre-application consultation with Knowsley Council the client was advised as follows:

Archaeology -PART ONE

4. The proposed development site contains the following non-designated heritage assets recorded on the Merseyside Historic Environment Record:

MME6283 Former site of Carr Cottage on Windy Arbour Brow. Building is shown on Yates' Map of 1786 and recorded on the 1842 Tithe map as Plot No.562, House and Garden. The house is no longer extant and was demolished sometime after 2012. MME 13132 Outbuilding of Carr Cottage shown on Yates' Map of 1786 and recorded on the 1842 Tithe map. The building is still extant but in a dilapidated condition.

5. In 2007 the National Museums Liverpool Field Archaeology Unit undertook archaeological investigations to the immediate south and south-east of the proposed development are as part of the M62 Junction 6 Improvements Scheme (EME2390). The investigations revealed archaeological remains including cut features and artefact assemblages dating to the Prehistoric, Roman and medieval period sand the undated remains of a ditch, stone wall and clay floor surface.

6. There is therefore a potential that below ground remains in the form of former building foundations as well as other cut features such as pits and ditches, dating to the 18th century and possibly much earlier, might be encountered by the proposed development. Furthermore, it would also appear that a non-designated heritage asset (Carr Cottage Outbuilding) will be demolished as part of the scheme.

7. Submission of a planning application to develop the site would therefore meet with advice from MEAS that the applicant be required to undertake a programme of pre- construction archaeological works, secured by means of an appropriately worded planning condition.

3.2 Following further consultation between Lanpro and the planning archaeologist at Merseyside Environmental Advisory Service (MEAS), archaeological advisor to Knowsley Council, it was agreed that the required work would take the form of a Level 1/2 historic building survey (in accordance with Historic England guidelines, 2016) together with a programme of trial trenching targeting the footprint of the former Carr Cottage and a sample of the remainder of the site. The location and configuration of the trial trenches has been agreed with MEAS (Figure 1).

3.3 This WSI provides a detailed methodology for undertaking the programme of archaeological investigation, aimed at identifying, recording and sampling any archaeological features that may be present, and assessing the need for further mitigation excavation if required.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 A structure in the location of Carr Cottage (MME6283) can be identified on Yates' map of 1786. The 1840 Tithe map of Whiston also shows the associated outbuilding (MME13132) to the south-west of Carr Cottage and plots 589-562 which are listed under the same tenant residing in the cottage.

4.2 The 1850 Ordnance Survey map (Figure 2) shows the site in more detail, with the orchard to the rear of the cottage and the two fields within the site, all labelled as 'Windy Harbour Brow'. The site sits between the road heading south from Whiston to the west, shown on the 1892 Ordnance Survey map (Figure 3) also as 'Windy Harbour Brow', and a belt of trees surrounding Halsnead Park to the east demarcated by the park boundary wall (MME15681) which is still extant within the site.

4.3 The site remains relatively unchanged throughout much of the 20th century until the construction of the M62 to the south. As a result, a new junction road is constructed to the east of the site, Windy Arbor Road, replacing Windy Arbor Brow as the main access southwards. The effectively renders Windy Arbor Brow redundant apart from access to Carr Cottage and the dwellings to the west.

4.4 A link road between the M57 and M62 was constructed along the south side of the site and opened in 2008 (Figure 4). More recently, the pasture within the south of the site became disused approximately five years ago, with Carr Cottage demolished in 2018 following a period of being uninhabited which led to partial collapse internally.

4.5 Within the surroundings of the site, evidence of activity dating to the prehistoric, Roman and medieval periods has been discovered as a result of archaeological investigations ahead of improvements to or construction of the surrounding infrastructure network (e.g. the M62 and junction 6, M57 and the more recent link roads, and the A5300 to the south). Evidence of Mesolithic and Neolithic flint scatters are recorded c. 630-650m to the south of the site, and a Romano-British enclosure containing rectilinear buildings and evidence of a tile manufactory were also discovered c. 630m to the south. Evidence of medieval occupation preceding the post-medieval farm at Dagger's Bridge Farm c. 550m to the south was also discovered.

4.6 The origins of Halsnead Park are believed to be of early medieval date due to the use of the Old English 'snede' meaning a small piece. The vill of Halsnead is mentioned during 13th century when it was granted by Adam de Halsnead to his son, the extent of which is approximate to the Halsnead Park first recorded on 19th century maps and demarcated by the park boundary wall (MME15681).

4.7 Based on the available archaeological evidence from the site and its environs, there is a low/nil potential for the discovery of remains dating to the prehistoric, Roman and medieval periods. During the post-medieval period through to recent years the majority of the site has been in agricultural (mainly pasture) use and the potential for encountering significant (i.e.

non-agricultural) archaeological remains is considered to be low/nil. Within the north of the site there is a requirement, however, to examine the footprint of Carr Cottage which is of at least 18th century origin. Following its recent demolition, the foundations are believed to remain in situ.

4.8 It is anticipated that any archaeological remains within the site will be of local significance.

5 RESEARCH DESIGN

Aims and Objectives

5.1 The historic building recording of the Carr Cottage outbuilding will produce a permanent record of it prior to demolition during construction works.

5.2 The archaeological trial trenching intends to obtain sufficient information to establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the area of the proposed development. This will allow reasoned and informed recommendations to be made regarding any requirements for mitigation, the scope of which would be detailed in a subsequent WSI in agreement with the planning archaeologist for MEAS.

5.3 These aims will be achieved through the following objectives:

- Provide a photographic record of the outbuilding prior to demolition, equivalent to a Level 1/2 standard (Historic England 2016);
- To determine the location, extent, date, character, condition and significance of any archaeological remains within the development site;
- To excavate and record identified archaeological features and deposits to a level appropriate to their extent and significance;
- To assess vulnerability/sensitivity of any exposed remains;
- To assess the impact of previous land use on the site;
- To assess the potential for survival of environmental evidence;
- To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- To undertake sufficient post-excavation assessment to confidently interpret identified archaeological features;
- To report the results of the evaluation and place them in their local, regional or national context and to make this record available.

Research Framework

5.4 The programme of archaeological investigation has the potential to contribute to research priorities originally identified in the regional research framework *The Archaeology of North*

West England - An Archaeological Research Framework for the North West (Brennand 2006), and recently revised and updated in draft form (archaeologynorthwest.wordpress.com/ period-updates/). In particular the investigation will aim to contribute to the understanding of the vernacular post-medieval settlement in this region. This may contribute to the understanding of any localised building types or any sequencing therein, as discussed in Historic England's *Historic Farmsteads: Preliminary Character Statement – North West region* (2006), as well the farmstead's context within the former rural landscape and its character.

5.5 Specifically, the following updated research questions will look to be addressed, although this should be revised following the results of the trial trenching:

PM15 - How well recorded and understood are farming landscapes, field patterns, distributions of buildings and building types?

5.6 The investigation will also take account of the national research programmes outlined in English Heritage's *Strategic Framework for Historic Environment Activities and Programmes in English Heritage* (SHAPE) first published in 2008.

6 STANDARDS AND GUIDANCE

6.1 All work will be undertaken to fully meet the requirements of all nationally recognised guidance for such work, including standards laid down by the former English Heritage (now Historic England) and the Chartered Institute for Archaeologists (CIfA).

6.2 The programme of archaeological investigation will be managed in line with the standards laid down in the Historic England guideline publication *Management of Research Projects in the Historic Environment (MoRPHE): Project Managers Guide* (2015a), as well as to meet the requirements of the National Planning Policy Framework (NPPF; Chapter 16: 'Conserving and enhancing the historic environment'; revised 2019). All excavation will be undertaken using recording standards detailed in the *Archaeological Field Manual* (MOLAS 1994).

6.3 Guidance of particular relevance to the programme of works are:

- *Understanding Historic Buildings* (Historic England 2016);
- *Standards and guidance for the archaeological recording of standing buildings or structures* (CIfA 2014a).
- *Standard and guidance for archaeological field evaluation* (CIfA 2014b);
- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA 2014c);
- *Standard and guidance for archaeological geophysical survey* (CIfA 2016 (rev));
- *Management of Research Projects in the Historic Environment: PPN3: Archaeological Excavation* (English Heritage 2008).

7 METHODOLOGY

7.1 The programme of archaeological investigation will comprise:

- historic building survey;
- trial trenching;
- report production.

Project initialisation

7.2 Lanpro will inform the planning archaeologist for MEAS at least one week in advance of the commencement of fieldwork.

7.3 Liverpool Museums will be contacted by the archaeological fieldwork contractor to arrange for the project archive to be created and deposited in accordance with their deposition and archiving standards.

7.4 Before fieldwork commences an OASIS online record will be initiated and key fields completed on Details, Location and Creator forms.

Building Recording

7.5 The building recording will be undertaken to a Level 1/2 standard in line with Historic England guidance (2016) to rapidly record the Carr Cottage outbuilding in terms of its relationship and context.

7.6 Due to the current dilapidated state of the barn there will be no internal access. Consequently, site photography will concentrate on scaled external views demonstrating general views of the building in context and within its wider setting or landscape and a photographic location plan will be provided.

7.7 The photographic archive will be produced using a digital SLR with a selection of lenses to produce digital images in TIFF, RAW and JPEG formats. A full photographic index will be produced to accompany the photographic location plan.

7.8 An outline floor plan will also be provided together with a brief architectural description of the barn to include its fabric and any decorative elements and obviously visible phasing.

Trial Trenching

7.9 The configuration of the trial trenches have been agreed with the MEAS planning archaeologist and will comprise five 30m long trenches all measuring 2m wide. Four of the trenches are intended to sample the former agricultural fields within the central and southern portions of the site. A 30m trench is positioned to target the footprint of Carr Cottage in the north of the site. This is situated just outside a 10m buffer zone from adjacent overhead power lines (OHPL) required by SP Energy Networks.

7.10 Topsoil across the trenches will be stripped using a mechanical excavator fitted with a 2m wide toothless grading bucket, down to the first archaeological horizon or natural sub-soil.

7.11 Spoil from mechanical excavation will be scanned by eye and by metal detector to aid the recovery of artefacts, and topsoil and subsoil will be stored separately.

7.12 All excavation by mechanical excavator will be undertaken under direct archaeological supervision, by a suitably experienced and qualified archaeologist, with one archaeologist responsible for monitoring each excavator. Mechanical excavation will cease at either undisturbed natural deposits or when archaeological deposits are identified.

7.13 All archaeological features and deposits revealed will be cleaned and excavated in an archaeologically controlled and stratigraphic manner, in order to establish their extent, form, date, function and relationship to other features.

7.14 All structures, deposits and finds will be recorded according to accepted professional standards. Individual descriptions of all archaeological strata and features exposed or excavated will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used.

7.15 Any excavation, by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation in situ.

7.16 There will be a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation. Significant archaeological features (e.g. solid or bonded structural remains, building slots or postholes), will be preserved intact even if fills are sampled. For linear features, minimum 1m wide slots should be excavated across their width. For discrete features, such as pits, 50% of their fills will be sampled.

7.17 Metal detector searches will take place at all stages of the evaluation. Metal detecting of trench locations will be carried out before trenches are excavated, with trench bases and spoil scanned once trenches have been opened. Any metal finds will be located using survey-grade GPS and metal detectors will not be set to discriminate against iron. Metal detecting will also be conducted over the surface of all exposed features before the end of each working day as a countermeasure to 'nighthawking'.

7.18 Should the excavation of the trenches reach 1.2m in depth (or limit of safe working depth) without natural geology being encountered, a machine dug sondage will be excavated in order to establish the depth of natural geology. Where depth of excavation is required to be greater than 1m, suitable stepping will be employed.

7.19 All identified finds and artefacts will be collected and retained, then bagged and labelled according to their context. Finds of significant interest will be given a 'small finds' number, and information on their location in three dimensions will be entered on a separate pro-

forma sheet. No finds will be discarded without assessment by an appropriate finds specialist.

7.20 A full written, drawn and photographic record will be made of all features revealed during the course of the archaeological evaluation. The location and extent of archaeological features will be recorded by GPS. Plans will be completed at a scale of 1:20 (as appropriate), with section drawings at a scale of 1:10. All plans will be tied in with the Ordnance Survey National Grid with levels given to above OD.

7.21 A photographic record of the project will be maintained. This will include black and white and colour prints, and digital images, illustrating the detail and context of the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the progress of the programme of archaeological works.

7.22 All photography will follow the Historic England guidance for digital image capture (HE 2015b). All images will have accompanying metadata specifying; photo ID, capture device, converting software, colour space, bit depth, resolution, date of capture, photographer, caption, and any alterations made to the image.

7.23 Following excavation and recording of any archaeological remains and with the agreement of the planning archaeologist for MEAS, the evaluation trenches will be back-filled with the previously excavated spoil.

Palaeoenvironmental sampling strategy

7.24 Soil samples will be taken from all suitable features or deposits for palaeoenvironmental sampling. This will comprise the removal of a bulk sample from every securely sealed and hand-excavated context, excepting those with excessive levels of residuality or those with minimal 'soil' content (such as building rubble).

7.25 Bulk samples will comprise representative 40 litre samples. Where a context does not yield 40 litres of material, smaller samples will be taken (generally the maximum amount of material practicable to collect). Bulk samples will be used to recover a sub-sample of charred macroplant material, faunal remains and artefacts where necessary, as well as any industrial residues.

7.26 If buried soils or other deposits are encountered, column samples may be taken for micromorphological and pollen analysis. Environmental material will be stored in a controlled environment and specialists consulted during the course of the work if necessary.

7.27 The post-excavation processing of all palaeoenvironmental samples will be undertaken in line with the requirements of the former English Heritage's (now Historic England) *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).

Human remains

7.28 The discovery of human remains is not anticipated during the evaluation fieldwork. However, should these be encountered then the archaeological contractor must contact the Ministry of

Justice for an appropriate licence and the planning archaeologist for MEAS will be informed. The contractor will comply with all statutory consents and licences under the Disused Burial Grounds (Amendment) Act, 1981 or other Burial Acts regarding the exhumation and interment of human remains.

7.29 If human remains are encountered, they will be cleaned with minimal disturbance, prior to recording and removal, following receipt of the required Ministry of Justice licence. Investigation and excavation of human remains will be undertaken by, or under supervision of, suitably experienced specialist staff and in accordance with former Institute of Field Archaeologists (IFA) guidelines *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains* (McKinley and Roberts 1993) and the *Updated Guidelines to the standards for recording human remains* (Mitchell and Brickley 2017). Assessment of excavated human remains will be undertaken in line with English Heritage guidelines *Human Bones from archaeological sites: Guidelines for the production of assessment documents and analytical reports* (English Heritage 2004). The archaeological contractor will comply with all reasonable requests of interested parties as to the method of removal, re-interment or disposal of the remains or associated items. Every effort will be made, at all times, not to cause offence to any interested parties.

7.30 If required a qualified and experienced osteoarchaeologist will undertake site visits to discuss the recording and assist in the removal of any human skeletal remains.

Scientific dating

7.31 Provision will be made to recover material suitable for radiocarbon, archaeomagnetic, dendrochronological and other scientific dating. Where material suitable for dating is recovered, sufficient dating will be undertaken to meet the aims of the evaluation.

Other finds

7.32 Finds will be exposed, lifted, cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for Conservation's Conservation Guidelines No. 2 (1990) and the CIfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014c).

7.33 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). Significant iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy should be X-radiographed before assessment.

7.34 Any finds of gold and silver will be moved to a safe place. Where removal cannot be undertaken immediately, suitable security measures will be taken to protect the artefacts from theft or damage. All finds of gold and silver, and associated objects, will be reported to the coroner according to the procedures relating to the Treasure Act 1996 (and the act's amendment of 2003).

Unexpectedly significant or complex discoveries

7.35 Should unexpectedly extensive, complex or significant remains be uncovered that warrant, in the professional judgment of the archaeologist on site, more detailed recording than is appropriate within the terms of the WSI, the scope of the WSI will be reviewed.

7.36 In the event of a review of the WSI being required, Lanpro will contact the client and planning archaeologist for MEAS with the relevant information to enable them to resolve the matter. This is likely to require an on-site meeting between the relevant stakeholders to review the archaeological remains on-site and identify a way forward. Any variations to this WSI will be put in writing and agreed by the relevant stakeholders including the planning archaeologist and the client.

Plant and equipment

7.37 The archaeological contractor on site will be responsible for the provision of all required welfare, plant, and health and safety equipment during the trial trenching.

8 POST-FIELDWORK

8.1 Upon completion of the evaluation fieldwork, the artefacts, soil samples and stratigraphic information will be assessed for their potential and significance for further analysis if required and the relevant parties notified accordingly. A report on the combined stages of fieldwork will be produced within 4-6 weeks following completion which will be used to inform any further mitigation work.

Finds

8.2 Finds will be cleaned, conserved, marked, bagged and stored in accordance with the guidelines set out in United Kingdom Institute for *Conservation's Conservation Guidelines No. 2* (1990) and the CIfA guidelines *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2014c).

8.3 In accordance with appropriate procedures, significant iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy will be X-radiographed before issue of the final report.

8.4 All material will be packed and stored in optimum conditions, as described in *First Aid for Finds* (Watkinson and Neal 1998). Any waterlogged organic materials will be dealt with in line with the English Heritage guidance documents, W*aterlogged Organic Artefacts. Guidelines on their Recovery, Analysis and Conservation* (2018) and *Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood* (2010).

8.5 The preservation state, density and significance of material retrieved will be assessed, following the English Heritage guidelines *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).

8.6 Any finds for dating will be submitted to specialists promptly, so as to ensure that results are available to aid development of a project design for the analysis stage, if required.

Environmental Sample Processing

8.7 The processing of any palaeoenvironmental samples will be undertaken in line with the requirements of the English Heritage publications A*rchaeological Science at PPG16 Interventions: Best Practice Guidance for Curators and Commissioning Archaeologists* (2006b) and *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation* (2011).

8.8 The samples will be processed, and ecofacts collected and assessed with regard to the potential for detailed analysis of pollen, charred plant macrofossils, land molluscs, faunal remains (including small mammals and fish) and soil micromorphology. Samples suitable for radiocarbon, or other dating methods, will also be identified. The environmental assessment will be reported within the overall post-excavation assessment report for all phases of investigation and include proposals for full analysis if required. Unprocessed sub-samples will be stored in conditions specified by the appropriate specialists. Samples for dating will be submitted to specialists promptly, so as to ensure that results are available to aid development of the project design for any further analysis stage if required.

Conservation

8.9 If required, conservation will be undertaken by approved conservators in line with the *First Aid for Finds* guidelines (Watkinson and Neal 1998). Material considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues in or on pottery, and mineral-preserved organic material).

Report

8.10 As a minimum the report shall contain the following information:

- A title page, with the name of the project, the name of the author(s) of the report, the title of the report and date of the report;
- A non-technical summary of the scope, methodology and results of the work;
- Introduction which includes site code/project number, dates when the fieldwork took place and grid reference;
- Description of the topography and geology of the site;
- Description of the archaeological background to the site;
- Description of the aims, methodology and extent of fieldwork completed;
- Factual assessments of stratigraphic, artefactual and environmental evidence;

- An assessment of the archaeological potential of the stratigraphic, artefactual and environmental records;
- Proposed programme for further analysis and reporting if required, including the identification of specialists;
- Conclusions;
- Details of archive location and destination (with the museum accession number), together with a catalogue of what is contained in that archive;
- Copy of the OASIS entry form and any entry updates;
- Appendices, illustrations and figures, as appropriate; and
- References and bibliography of all sources used.

8.11 A draft copy of the evaluation report will be provided to the MEAS planning archaeologist in PDF format for comment.

8.12 Following approval, copies of the final reports will be produced and submitted to the Merseyside HER in a PDF/A or hard copy format as required.

9 ARCHIVING

9.1 The appointed archaeological contractor will contact the National Museums Liverpool in advance of commencing any fieldwork to determine the preparation, and deposition of the archive and finds, and obtain an accession number for all archaeological works. The landowner will be encouraged to transfer ownership of the finds to the museum.

9.2 Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent.

9.3 The archive will contain all the data collected during the archaeological works, including all digital and paper records, finds and environmental samples. The archive will be prepared in accordance with the CIfA guidelines detailed in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (*CIfA, 2014c). The preparation of the archive will also be informed by the *Guidelines for the preparation of Excavation Archives for long–term storage* (United Kingdom Institute for Conservation, 1990), *Standards in the museum care of archaeological collections* (Museums and Galleries Commission 1994), and in accordance with museum's archive deposition guidelines. Provision will be made for the stable storage of paper records and their long–term storage.

9.4 Digital copies of the assessment report and associated data will be submitted to the Merseyside HER, together with OASIS and ADS to allow the results of the work to be accessible on-line to the wider archaeological community and general public.

10 TIMETABLE

10.1 The historic building recording is expected to take one day in the field. The trial trenching is likely to take three days to complete, although progress may be slow initially due to the dumped topsoil and overgrown nature of most of the site.

10.2 The fieldwork report should be made available within approximately 4-6 weeks

10.3 The planning archaeologist for MEAS will be provided with at least one week's notice of commencement of the fieldwork in order to monitor implementation of the programme of archaeological works on behalf of Knowsley Council and evaluate the work being undertaken on site against the methodology detailed in this WSI. The planning archaeologist will be afforded the opportunity to inspect the site and all records of the appointed archaeological contractor at any stage of the work.

11 STAFFING

11.1 Emily Mercer (Principal Heritage Consultant, Lanpro) will be in overall charge of the management of the project on behalf of Forth Homes.

11.2 A suitably qualified archaeological subcontractor, yet to be appointed, experienced in similar investigations within Merseyside and the North West will be responsible for undertaking the archaeological evaluation trenching and post-excavation assessment reporting.

11.3 Curriculum Vitaes of key personnel can be provided to interested parties in advance of works commencing.

12 INSURANCE

12.1 The archaeological contractor will produce evidence of Public Liability Insurance to the minimum value of £5m and Professional Indemnity Insurance to the minimum of £5m.

13 HEALTH AND SAFETY

13.1 The management of all health and safety on site during the survey and trial trenching phase will be the responsibility of the appointed geophysical survey and archaeological contractors. All works will be undertaken by the contractor in compliance with the Health and Safety at Work Act (1974) and all applicable regulations and Codes of Practice.

13.2 All archaeological staff will undertake their operations in accordance with safe working practices and will be CSCS certified. At least one First Aider will be present on site at all times. A site-specific risk assessment will be produced by the appointed archaeological contractor, prior to the commencement of work on site, which will be subject to regular review.

13.3 Suitable Personal Protective Equipment (PPE) and welfare facilities will be provided by the archaeological contractor, including hi-visibility coats/vests, hard hats, safety boots and gloves, as well as safety glasses if required.

13.4 All staff will receive a health and safety induction prior to starting work on site to be provided by the archaeological contractor.

13.5 Regular audits of health and safety practices will be carried out during the course of the project by Lanpro and the archaeological contractor in consultation with the site workforce. Toolbox talks on health and safety issues will be conducted at minimum weekly intervals and/or after changes in working practices or identification of new threats/risks. The risk assessment will be reviewed and updated as necessary. Control measures will be implemented as required in response to specific hazards.

13.6 Safe working will take priority over the desire to record archaeological features or remains, and where it is considered that recording is dangerous, any such features will be recorded by photography at a safe distance.

13.7 All areas of excavation will be scanned with a Cable Avoidance Tool (CAT) prior to ground works commencing. Necessary measures will be taken to avoid disturbing any services.

13.8 Plant operators will be required to produce evidence of qualification within an industry accepted registration scheme. Sub-Contractors health and safety performance will be kept under review and action taken if necessary. All spoil will be stored and managed safely in line with the standards of the *Construction Code of Practice for Sustainable Use of Soils on Construction Sites* (DEFRA 2009).

13.9 Site welfare accommodation and car parking should be located within the site and the location of these facilities will be agreed between the archaeological contractor, Lanpro and the client in advance of the commencement of work.

14 COPYRIGHT AND PUBLICITY

14.1 Copyright of the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of additional licences in favour of the client and the Merseyside HER to use such documentation for their statutory and educational functions, and to provide copies to third parties as required.

14.2 Under the Environmental Information Regulations (EIR 2004), information submitted to the HER becomes publicly accessible, except where disclosure might lead to environmental damage, and reports cannot be embargoed as 'confidential' or 'commercially sensitive'.

14.3 It is recognised that the project may identify remains which are of interest to the public and these may be publicised through appropriate media. Any publicity for the project proposed by the archaeological contractor should be approved by the client in advance.

14.4 The appointed archaeological contractor will not issue any information on the work through media, internet or social media without prior agreement of the client. Care will be taken to ensure that any publicity does not compromise the security of archaeological remains that may have been identified or recovered. Any approaches by the press to the archaeological contractor should be referred to the client in the first instance.

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Figures

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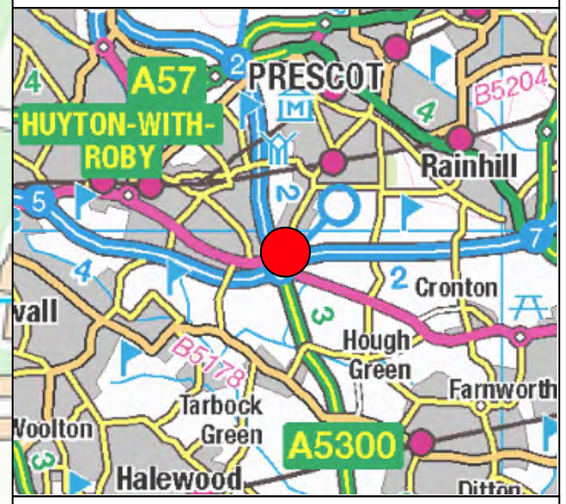

Site boundary

Developable area

Proposed trenches

N

0 100 200 300 400

Figure 1. Location of the site showing the developable area and proposed trenches

Figure 2. Extract from the Ordnance Survey 6" map of 1850

N	Site boundary	0 25 50 m	Lanpro Planning + Development | Design Studio | Archaeology + Heritage

Figure 3. Extract from the Ordnance Survey 25" map of 1892

N

Site boundary

0 25 50 m

Lanpro

Planning + Development | Design Studio | Archaeology + Heritage

Figure 4. Extract from the aerial photograph of 2018 showing the location of Carr Cottage prior to its demolition and the proposed trenches

N

Site boundary

Proposed trenches

0 25 50 m

Lanpro

Plates

Plate 1. View towards the barn from the east side of the developable area

Plate 2. East facing view across the south of the site

Plate 3. Three trees marking the west side of a former field boundary

Norwich:

Brettingham House
98 Pottergate
Norwich
Norfolk
NR2 1EQ

01603 631 319

Chelmsford:

The Aquarium
101 Lower Anchor Street
Chelmsford
Essex
CM2 0AU

01245 929 074

York:

Stanley Harrison House
The Chocolate Works
Bishopthorpe Road
York
Y023 1DE

01904 803 800

London:

70 Cowcross Street
London
EC1M 6EL

020 3011 0820

Manchester:

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Oxford Street
Manchester
Greater Manchester
M1 5AN

0161 711 1740

Cambridge:

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Cambridge
CB2 1AB

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APPENDIX B TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					**Orientation**	NE-SW
Topsoil, overlaying subsoil, overlaying natural. Ditch ***103*** cutting natural towards western end of the trench, running north/south. Trench cut short by approximately 5m at north-eastern end due to overgrowth and vegetation.					**Length (m)**	25
					Width (m)	2
					Max depth (m)	0.57
Context No	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
100	Layer	-	0.32	Topsoil	-	-
101	Layer	-	0.25	Subsoil	-	-
102	Layer	-	-	Natural	-	-
103	Cut	2.25	0.38	North/south-aligned ditch at the western end of the trench. Contained two fills	-	-
104	Fill	2.25	0.3	Secondary fill of ditch ***103***. Mid yellowish brown clayey silt	-	-

Trench 2						
General description					**Orientation**	NW-SE
Topsoil overlaying subsoil overlaying natural. Ditch present at north-western end of trench aligned east/west. One land drain present in trench. Trench shortened by approximately 5m at south-east end due to tree.					**Length (m)**	25
					Width (m)	2
					Max depth (m)	0.31
Context No	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
200	Layer	-	0.27	Topsoil	-	-
201	Layer	-	0.04	Subsoil	-	-
202	Layer	-	-	Natural	-	-
203	Cut	0.73	0.2	North/south-aligned ditch at the western end of the trench. Contained two fills	-	-
204	Fill	2.73	0.2	Fill of ditch ***203***. Comprised loosely friable pale yellow brown fine grained slightly clay sand silt, occasional small pebbles	Small fragments of ceramic	Post-medieval

Trench 3						
General description					**Orientation**	NNE-SSW
Trench devoid of archaeology. Consists of topsoil and subsoil, overlaying natural geology of orangey-red silty clay. Two land drains present.					**Length (m)**	30
					Width (m)	2
					Max depth (m)	0.66
Context No	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
300	Layer	-	0.27	Topsoil	-	-
301	Layer	-	0.39	Subsoil	-	-
302	Layer	-	-	Natural	-	-

Trench 4						
General description					**Orientation**	NW-SE
Trench devoid of archaeology. Consists of topsoil and subsoil, overlaying natural geology of pinkish red silty clay. 5 land drains present. Trench cut short by approximately 5m at NW end due to overgrowth and vegetation.					**Length (m)**	25
					Width (m)	2
					Max depth (m)	0.28
Context No	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
400	Layer	-	0.2	Topsoil	-	-
401	Layer	-	0.08	Subsoil	-	-
402	Layer	-	-	Natural	-	-

APPENDIX C BIBLIOGRAPHY

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APPENDIX D SITE SUMMARY DETAILS

Site name:	Windy Arbor, Windy Arbor Brow, Whiston, Merseyside
Site code:	WAWM22
Grid Reference	SD 4636 8973
Type:	Evaluation
Date and duration:	28th-28th April 2022; 2 days
Area of Site	1.7ha
Location of archive:	The archive is currently held at OA North, Mills 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited with ADS in due course
Summary of Results:	Only four proposed trenches were excavated, Trench 5 was abandoned due to the presence of asbestos across the proposed trench location and the trench could not be repositioned due to asbestos being present in the wider area. In addition, Trenches 1, 2 and 3 were shortened due to the presence of trees and severe overgrowth in certain areas. The only archaeological remains found were ditches, one each in Trenches 1 and 2, most likely related to post-medieval water management. A level 1/2 Historic England building survey was undertaken of the extant of Carr Cottage outbuilding (HER MME6283), located at the northern end of site. The outbuilding is dated to the late eighteenth century with the associated cottage having been demolished in recent years. The building was in a state of disuse and deemed unsafe to enter due to its unreasonable structural condition.

APPENDIX E OASIS SUMMARY REPORT

Summary for oxfordar2-506489

OASIS ID (UID)	oxfordar2-506489
Project Name	Evaluation at Windy Arbor, Whiston, Merseyside
Sitename	Windy Arbor, Whiston, Merseyside
Activity type	Evaluation
Project Identifier(s)	L11433
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Oxford Archaeology North
Project Dates	28-Apr-2022 - 30-Jun-2022
Location	Windy Arbor, Whiston, Merseyside NGR : SJ 46353 89704 LL : 53.401418682418, -2.80833707443896 12 Fig : 346353,389704
Administrative Areas	Country : England County : Merseyside District : Knowsley Parish : Whiston
Project Methodology	Oxford Archaeology (OA) was commissioned by Lanpro Services on behalf of Forth Homes to undertake a trial trench evaluation and level 1 historic building recording at the site of a proposed residential development on land east of Windy Arbor Brow, Whiston, Merseyside (NGR: SD 4636 8973). The work was undertaken as a condition of Planning Permission (planning ref. 20/00329/FUL). During consultation for the application, the archaeological advisors to Knowsley Council, Merseyside Environmental Advisory Service (MEAS), recommended that and archaeological evaluation be undertaken comprising of 5 trial trenches measuring 30m x 2m, as well as an historic building recording of the extant Carr Cottage outbuilding. A written scheme of investigation (WSI) was produced by Lanpro Services detailing the Local Authority's requirements for work necessary to discharge the planning condition. OA North were subsequently commissioned to undertake the necessary fieldwork, which was carried out over two days, 28th and 29th April.
Project Results	Only four proposed trenches were excavated, Trench 5 could not be excavated due to the presence of asbestos in the trenches proposed location. In addition to this Trenches 1,2 and 3 were shortened due to the presence of trees and severe overgrowth in certain areas, however, Trench 3 was excavated to its full extent. The only archaeological remains found were ditches, one each in Trenches 1 and 2, most likely related to post-medieval water management.
Keywords	
Funder	
HER	Merseyside HER - unRev - STANDARD
Person Responsible for work	
HER Identifiers	

Archives	Documentary Archive, Digital Archive - to be deposited with Archaeology Data Service Archive;

oxfordarchaeology

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