

Parkside Link Road, Newton-le-Willows, Merseyside

Archaeological Strip, Map and Record Report

January 2023

Client: TEP on behalf of Ramboll UK

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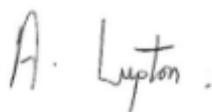
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Parkside Link Road, Newton-le-Willows, Merseyside

Archaeological Strip, Map and Record Report

Written by Selina Dean

With illustrations by Mark Tidmarsh

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Summary

Oxford Archaeology (OA) North was commissioned by The Environment Partnership (TEP) on behalf of Ramboll UK to undertake a strip, map and record (SMR) of an area east of Newton-le-Willows comprising a new road to link the proposed Parkside development to the east of the A49 and the M6 (NGR: SJ 61381 94390).

The work was undertaken as condition 24 of Planning Permission (planning ref.: P/2018/0249/FUL). During consultation for the application, the archaeological advisors to St Helens Council and Warrington Borough Council, Merseyside Environmental Advisory Service (MEAS), recommended that an area of 20m by 20m be subject to a SMR excavation. A written scheme of investigation (WSI) was produced by TEP 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 three days, 21st, 22nd and 25th April 2022.

The 20 by 20m SMR area was successfully excavated in its intended location, with few archaeological features being identified, which comprised two linear features **103** and **105**, as well as a natural feature, most likely a tree throw, **113**. The features likely related to former field boundaries identified on the 1849 Ordnance Survey mapping, with no evidence for the targeted circular geophysical anomaly. As such, the remains are of limited significance.

Acknowledgements

Oxford Archaeology (OA) North would like to thank Sarah Hannon-Bland, Amir Bassir and Jason Clarke of The Environment Partnership (TEP) and Robert Ridge of Ramboll UK 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 St Helens Council.

The project was managed for OA North by Paul Dunn. The fieldwork was directed by Helen Stocks-Morgan and Katie Sanderson, who were supported by Jessica Elleray. Survey was undertaken by Katie Sanderson and this report was written 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 The Environment Partnership (TEP) on behalf of Ramboll UK to undertake a strip, map and record at the site of an area east of Newton-le-Willows comprising a new road to link the proposed Parkside development to the east of the A49 and the M6 (NGR: SJ 61381 94390; Fig 1).

1.1.2 This work was undertaken as condition 24 of Planning Permission (planning ref. P/2018/0249/FUL). Condition 24 stated:

No development shall take place until a written scheme of investigation for archaeological work, which includes reporting mechanisms, has been submitted to and agreed in writing with the Local Planning Authority. The development shall be carried out in accordance with the agreed scheme.

1.1.3 During consultation for the application, the archaeological advisors to St Helens Council and Warrington Borough Council, Merseyside Environmental Advisory Service (MEAS), recommended that an area of 20m by 20m be excavated for a strip, map and record evaluation (Fig 2). A written scheme of investigation (WSI) was produced by TEP 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 three days, 21st, 22nd and 25th April.

1.2 Location, topography and geology

1.2.1 The development site is located to the east of Newton-Le-Willows and comprises a new road to link the proposed Parkside Development to the east of the A49 and the M6 (NGR: SJ 61381 94390; Fig 1). The topography of the site is undulating, varying from 32m Above Ordnance Datum (AOD) to 21m AOD.

1.2.2 The solid geology is recorded as sandstone of the Chester Formation, formed in the Triassic Period (BGS 2023). There are no superficial deposits recorded for the location of the SMR (*ibid*). The soils of the site are recorded as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (Cranfield 2023)

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site is provided as a summary of the environmental statement (Ramboll 2019) in the WSI (*Appendix A*), produced by TEP. A summary is provided here.

1.3.2 Prehistoric activity in the vicinity of the proposed development comprises a prehistoric flint dagger found at Croft, a scheduled bowl barrow at Castle Hill motte and bailey to the north of Newton-le-Willows (SM list entry: 1009867), with another scheduled bowl barrow to the south (SM list entry: 1011124). There are also other non-designated barrows within the vicinity of the site.

1.3.3 There is evidence from previous excavations of a Romano-British farmstead to the south-east, Southworth Hall Farm, which indicated a brief two-phase period of occupation during the mid-2nd century (Cheshire SMR ref. 2410).

- 1.3.4 The majority of the evidence from the surrounding area indicates a varied and continuous occupation of the locale through the early to later medieval period, examples of which include Southworth Hall Farm Cemetery and St Oswald's Well (SM list entry: 1018082) from the early medieval period. The battleground of the Battle of Winwick is located to the west of the site (SM list entry: 1412878)
- 1.3.5 Due to agricultural productivity increasing during the 18th century, there has been evidence for the expansion of Rough Farm at the proposed site, coupled with continual changes to the medieval field systems (Fig 3).
- 1.3.6 An archaeological evaluation undertaken in 2018 by OA North identified a linear feature at the southern end of Trench 4 (OA North 2018; Fig 2), this feature potentially related to an anomaly identified on an earlier geophysical survey undertaken by Stratascan (2007). As such, a strip, map and record area was requested to the south of this trench.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The main aim of the project was 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. The program of work was designed to then allow the recording of any heritage assets, proportionate to their heritage significance, effected by the development.

2.1.2 The project objectives were as follows:

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

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 (ClfA 2020a; 2020b; 2022 and Historic England 2015). A programme of field observation accurately recorded the character of the deposits within the excavations.

2.2.2 The topsoil and subsoil were removed by a 13-ton 360° tracked excavator, fitted with a toothless ditching bucket, to the surface of the first significant archaeological deposit, natural geology or a safe working depth, 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.

2.2.3 The SMR area was located by 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. Prior to excavation, the area was

scanned using a Cable Avoidance Tool (CAT) and Signal Generator (Genny), to identify any potential services.

- 2.2.4 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.
- 2.2.5 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).
- 2.2.6 A full professional archive has been compiled in accordance with the WSI, and in accordance with current ClfA (2020b), Historic England (2015) and National Museums Liverpool (NML 2021) guidelines. Due to the lack of finds recovered during the fieldwork, the archive will be deposited with the Archaeology Data Service (ADS), in due course. An online access to index of archaeological investigations (OASIS) form will also be uploaded, along with a copy of this report.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the strip, map and sample are presented below, and include a stratigraphic description of the 20m by 20m area excavated and the archaeological remains it contained. Full context details are included in *Appendix B*.

3.2 Strip, map and sample

3.2.1 The soil sequence across the area was fairly uniform. The natural geology of mid red-orange sandy clay, **102**, was overlain by a mid-orange grey-brown silty clay subsoil, **101**, 0.05m in thickness, which was, in turn, overlain by a mid grey-brown silty clay topsoil, **100**, approximately 0.37m thick. A representative section can be seen below (Plate 1).



Plate 1: South-west-facing representative section of the site geology, 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 form of two linear features, were present in the 20m by 20m strip, map and sample area excavated, with an additional natural feature also found and investigated.

3.3.2 The first linear feature **103** (Fig 2 and 4; Plate 2), was encountered towards the north-western side of the excavation area and was aligned approximately north/south. It measured 1.45m wide and survived to a depth of 0.39m, containing one fill, **104**, a mid grey-brown silty clay which contained some coal.



Plate 2: South-facing section of linear 103, scale 1m

- 3.3.3 A second linear, **105** (Figs 2 and 4; Plate 3), was found towards the eastern side of the excavated area, the terminus of which was excavated. It was aligned approximately east/west, measuring 1.35m wide and surviving to a depth of 0.24m. It contained one fill, **106**, a mid grey-brown silty clay from which no finds were recovered.



Plate 3: North-facing section of linear terminus 105, scale 1m

- 3.3.4 A natural feature, tree throw **113**, was encountered between the terminus of ditch **105** and ditch **103** (Figs 2 and 4; Plate 4), measuring 1.5m by 1.55m and surviving to a depth of 0.54m. Due to its very irregular shape in plan and undulating and uneven base it was determined to be a natural feature and most likely a tree throw. It contained one fill **114**, a mid grey-brown sandy silt in which a piece of natural flint was found.



Plate 4: Record shot of natural feature **113**, showing west-facing section, scale 1m

3.4 Environmental and finds summary

- 3.4.1 Environmental samples were recovered from the three features excavated on site, ditches **103** and **105**, and tree throw **113**. The samples were processed and assessed for their potential (*Appendix C*), the samples from the two ditches were identified as having limited potential, whilst the sample from the tree throw contained a greater amount of charred plant remains, with the potential for radiocarbon dating if required.
- 3.4.2 Three finds were recovered from the features excavated: a fragment of coal from fill **104**, recovered from ditch **103**, a small sherd of post-medieval ceramic recovered from topsoil **100**; and a small fragment of flint from fill **114**, recovered from tree throw **113**. The flint was deemed to have been fractured naturally.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The SMR excavation is reliable, the full extent of the area was excavated in its intended location. The ground conditions throughout the evaluation were generally good, although the sunlight was very strong, and archaeological features were easily identifiable against the underlying natural geology.

4.2 Evaluation objectives and results

4.2.1 One of the principal aims, 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 these aims the SMR area was designed to provide adequate coverage across the site. The full extent of the area was successfully excavated, and succeeded in characterising the area of archaeological remains.

4.3 Interpretation

4.3.1 Archaeological remains were identified in the form of two ditches, **103** and **105**. Ditch **103** contained no finds to provide an immediate date, however there was coal present in its fill **104**, possibly suggesting a post-medieval date. Similarly linear **105**, contained no finds to immediately date or determine its function, however, it was interpreted as a post-medieval field boundary ditch respecting ditch **103**. This would coincide with the known increase in agricultural productivity in the area during the eighteenth century and onwards, as well as the continual changes to the medieval field systems in the area, as depicted on the Ordnance Survey map of 1849, where the two ditches appear to correlate with the field boundaries fairly well (Fig 3).

4.4 Significance

4.4.1 The SMR area confirmed that the two ditched features, **103** and **105**, correlated fairly well with post-medieval field boundaries as depicted on historic mapping (Fig 3) and were not related to the large circular anomaly identified on the geophysical survey (Stratascan 2007). There was also limited potential to undertake further dating from the soil samples recovered from these features. The only other features recorded, tree throw **113**, was confirmed as being natural in origin, due to its form, although the sample recovered from its fill, **114**, contained a greater amount of charcoal and a mixed assemblage including charred hazelnut, possibly suggesting that the tree stump was burnt. As such, the results of the SMR are of limited significance.

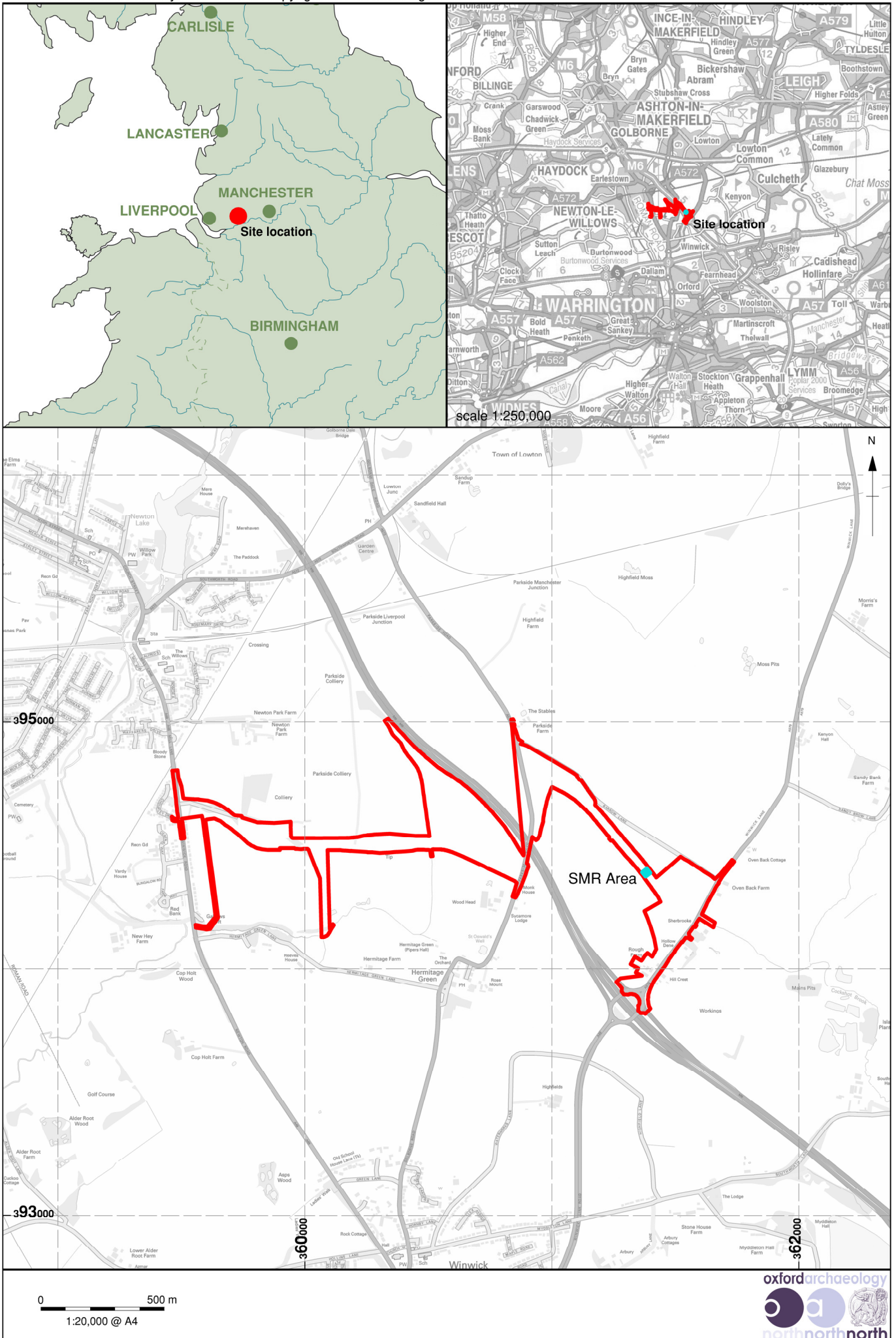


Figure 1: Site location

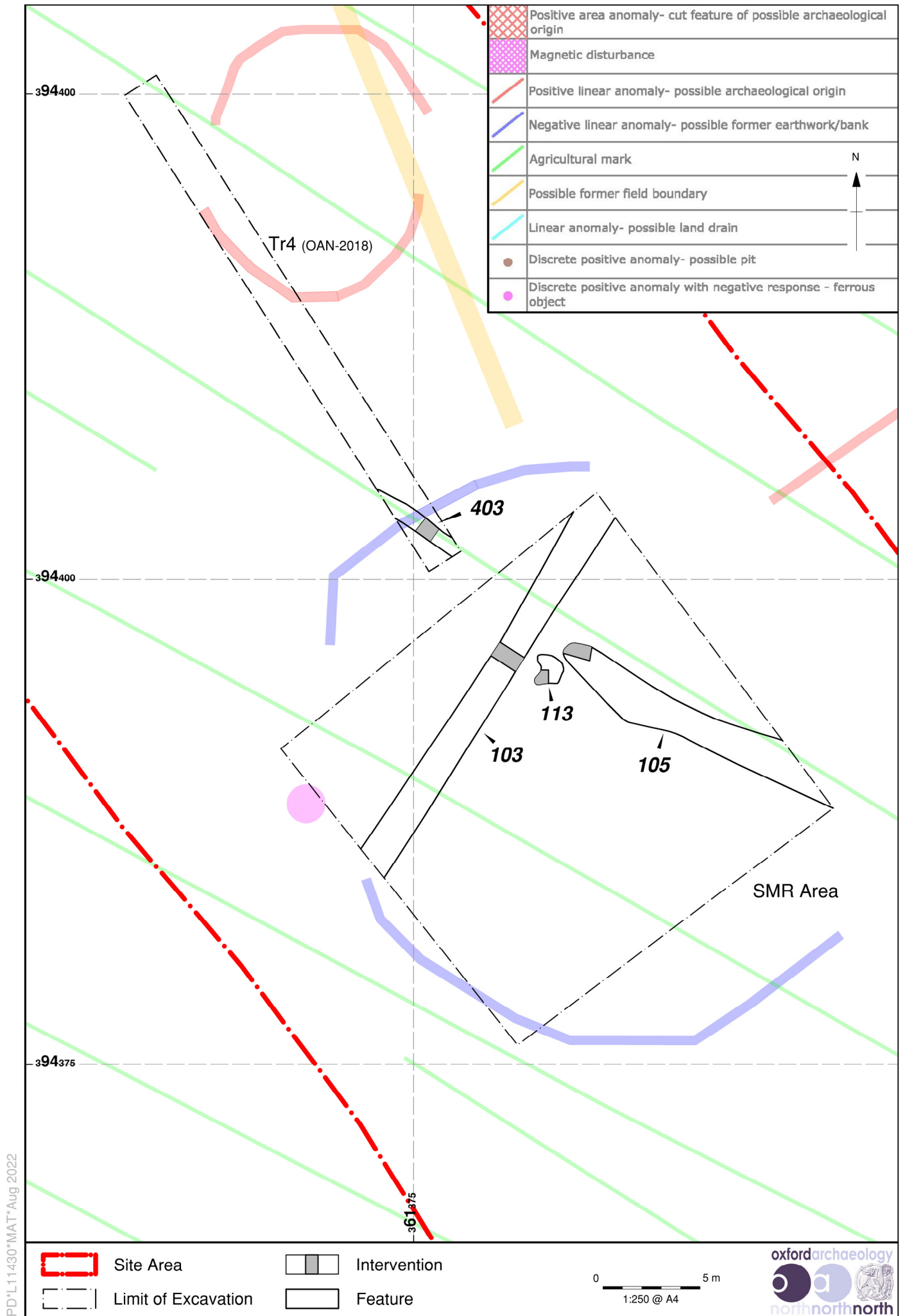


Figure 2: Plan of SMR Area and former Trench 4 superimposed on the results of the geophysical survey

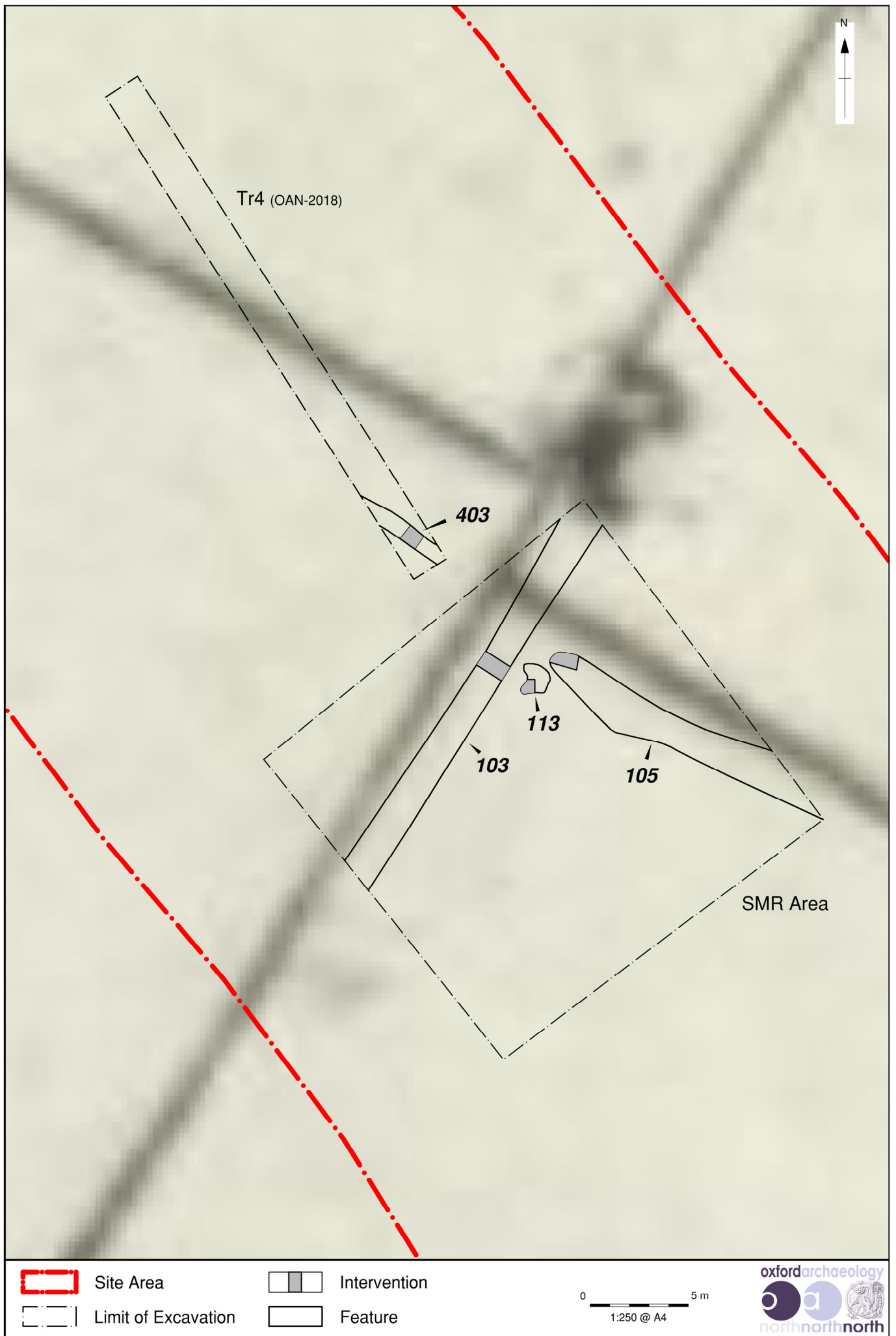
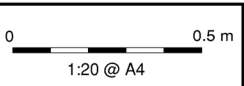
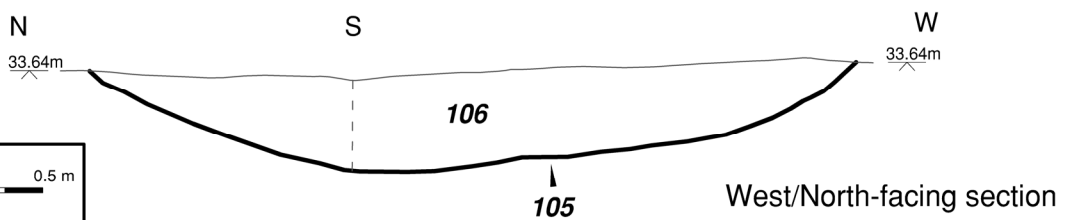
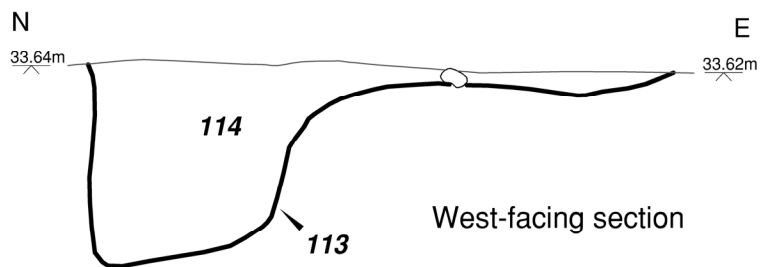
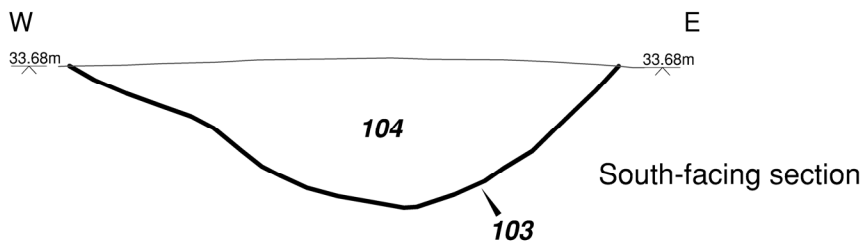
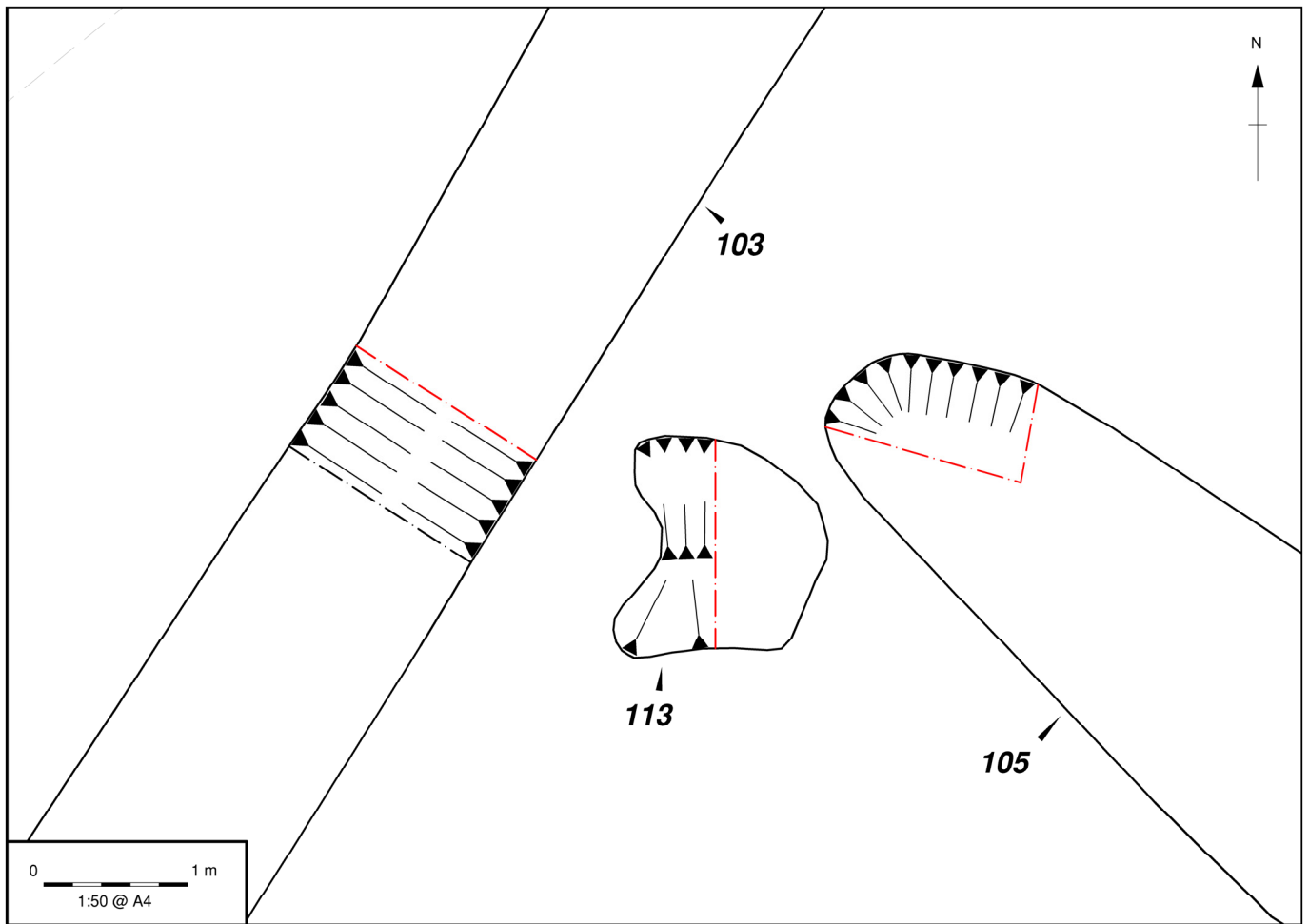


Figure 3: Plan of SMR Area and former Trench 4 superimposed on the Ordnance Survey first edition 6":1mile map of 1849




 Limit of Excavation

Figure 4: Detail plans and sections of features in SMR Area

APPENDIX A WRITTEN SCHEME OF INVESTIGATION

Intended for

Balfour Beatty / St Helens Council

Document type

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September 2019

PARKSIDE LINK ROAD ARCHAEOLOGICAL WRITTEN SCHEME OF INVESTIGATION

**PARKSIDE LINK ROAD
ARCHAEOLOGICAL WRITTEN SCHEME OF
INVESTIGATION**

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1. INTRODUCTION

- 1.1 This Written Scheme of Investigation (WSI) has been commissioned by Ramboll UK, on behalf of St Helens Metropolitan Borough Council, in association with obtaining planning permission for the Parkside Link Road project.
- 1.2 The development is located to the east of Newton-Le-Willows and comprises a new road to link the proposed Parkside Development to the east of the A49 and the M6. It will also link the A49 and the M6 for through traffic. The proposed development is centred on Ordnance Survey Grid Reference 360670E 394450N.
- 1.3 This WSI sets out the mitigation measures that will be undertaken to achieve the aims and commitments of the Environment Statement (ES) and consultation response of MEAS in relation to mitigating the predicted effects of the Parkside Link Road on archaeology, geo-archaeology and the built environment.
- 1.4 This WSI provides a method for undertaking an archaeological controlled strip, map and sample, historic building recording and archaeological observation, and has been prepared by TEP, a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), it has been approved by a full member of the CIfA. The programme of work outlined in this WSI will be undertaken by suitably qualified and experienced archaeological contractor that is also registered with the CIfA.

Aims and Objectives

- 1.5 The following programme has been designed to identify any archaeological deposits or features which may be present within the area of mitigation and to record any built heritage affected by the development.
- 1.6 The programme of work is designed to then allow the recording of any heritage assets, proportionate to their heritage significance, effected by the development. This approach is in accordance with paragraphs 189 and 199 of the National Planning Policy Framework.
- 1.7 The research objectives for the archaeological mitigation works will be determined by what, if any, archaeological remains are present within the defined mitigation area. However, ensuing assessment and analysis will be in accordance with relevant objectives outlined in the Archaeological Research Framework of the North-West of England (2006).

2.0 POLICY, STANDARDS AND GUIDANCE

- 2.1 Section 16 of The National Planning Policy Framework (NPPF), February 2019, describes the provisions specifically relating to conserving and enhancing the historic environment.
- 2.2 Paragraph 189 advises local planning authorities to require an applicant to describe the significance of any heritage assets affected by their proposal, including any contribution made by their setting, including *"where a site on which development is proposed includes, or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation"*. It states that *"the level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance"*.
- 2.3 Paragraph 199 states that *"local planning authorities ... should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible"*. The condition attached to planning consent, and this corresponding WSI, are in accordance with this policy provision of the NPPF.

Guidance

- 2.4 The guidance most relevant to this WSI is provided in:
- Chartered Institute for Archaeologists 2014, Standard and Guidance for Archaeological Watching Brief,
 - Historic England, 2015 Management of Research Projects in the Historic Environment (MoRPHE),
 - English Heritage, 2011, Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition), and
 - Historic England, 2016 Understanding Historic Buildings: A Guide to Good Recording Practice.

Monitoring

- 2.5 The implementation of the works outlined in this WSI will be monitored by Merseyside Environmental Advisory Service (MEAS), advisers to the local planning authorities of St Helens Council and Warrington Borough Council (LPAs). MEAS will be kept up to date with progress during all phases of the archaeological works.
- 2.6 All archaeological field work will be undertaken by a suitably qualified archaeologist, working under the direction of a full Member of the Chartered Institute for Archaeologists, or equivalently qualified project director.

3.0 BACKGROUND AND CONTEXT

Geology and Topography

- 3.1 The solid geology is recorded by the British Geological Survey as Chester Pebble Beds Formation in the west and east of the site, the centre of the site is recorded as a combination of Pennine Middle Coal Measures Formation and Collyhurst Sandstone Formation, overlain by mudstone, siltstone, and sandstone, and deposits of sand and gravel.
- 3.2 The topography of the site is undulating, varying from 32m Above Ordnance Datum (AOD) to 21m AOD.

Historic Background

- 3.3 An Environmental Statement Chapter has been undertaken by TEP in 2017 which contains a detailed historic background of the site and wider area. A summary of the information included follows below:

Prehistoric

- 3.4 There is an absence of evidence for early prehistoric activity within the vicinity of the proposed development, with the exception of a broadly dated prehistoric flint dagger found during the 1960s at Croft. However, there is evidence to suggest that the area and beyond was a focus of Bronze Age funerary activity. In Newton le Willows lies Castle Hill scheduled monument. It is believed to be a Bronze Age barrow. To the south of the proposed development site lies the scheduled monument Bowl Barrow West of Highfield Lane, a Bronze Age round barrow. There are also a number of non-designated barrows within the study area; Kenyon Hall tumulus, Southworth Hall Barrow (NDHA1) and Highfield Lane East Barrow, the former containing a number of cremation burials.

Roman

- 3.5 The route of the Wilderspool to Wigan Roman road is believed to broadly follow the alignment of the modern A49, which runs east of the site.
- 3.6 There is evidence for Romano-British rural settlement within the area. To the south east of the site lies Southworth Hall Farm Romano-British farmstead, found through cropmarks identified during aerial reconnaissance in 1992, and confirmed through a later programme of trial trenching and excavation. The finds evidence indicates a relatively brief two-phase period of occupation during the mid-2nd century.

Early medieval to Medieval

- 3.7 There is evidence to suggest varied and continuous occupation of the surrounding area of the proposed development throughout the early to later medieval period. South east of site lies Southworth Hall Farm Cemetery: an extensive Anglo-Saxon Christian cemetery containing several hundred grave plots, and church, were revealed around and over a Bronze Age burial mound. There is further evidence of re-use of prehistoric monuments, Castle Hill was occupied during the Bronze Age Period and later re-used as a motte and bailey.

- 3.8 During the early medieval period, a site of religious veneration was located north of the hamlet of Hermitage Green. St Oswald's Well, a holy well was believed to be referred to by Bede in AD 642. The monument includes a stone well chamber supposedly on the spot where St Oswald was killed at the battle of Maserfelth. Therefore, it is possible that the battle between Oswald of Northumbria and Penda of Mercia took place within or near to the study area during the mid-7th century.
- 3.9 The site is situated south of Newton le Willows. The settlement is first mentioned in 1086 in the Domesday Book as Neweton. Newton is a very common name that derives from Old English, meaning 'the new farmstead, estate, or village'. The affix, le Willows, means 'by the Willows' (Mills 2003). Newton-le-Willows developed as a medieval market town that was focused on a typical linear 'High Street' plan. The economy of the town and surrounding area was agricultural with marked associated commodities. At this time, the site was likely situated within the agricultural land that supported the local town.
- 3.10 From the 14th century, the site was partly within Newton Park(s), with the earliest documentary evidence for Newton Park dating to 1322. There are a number of subsequent sales documented in the historical record. The park was used to graze cattle and sheep until the 17th century, when arable cultivation was also introduced. In the mid-17th century Newton Parks is recorded as having two hundred acres of 'closes closures and parcels of land...and barn'.
- 3.11 From the mid-15th century, gallows were located to the south west of Newton Park. The place name 'Gawlehille' occurs in the estate survey of 1465, later named Gallows Croft on the Tithe map of 1839.
- Post Medieval
- 3.12 In the 16th century, following the Dissolution of the Monasteries, large land sales took place, which meant that other landowners and farmers were able to acquire more land. As a result of this the post-medieval period in the North-West of England was also characterised by a continued period of enclosure, as well as the exchange and consolidation of farms, the growth of farm size and the development of the landlord-tenant system. Up until 1750 however it was uncommon for farmsteads to consist of more than a barn and a house.
- 3.13 In the 17th century, the Red Bank Civil War Battle (also known as the Battle of Winwick and the Battle of Winwick Pass), took place to the north of Winwick on the 19th August 1648. Conflict took place between Lieutenant-General Cromwell and the rear of the Duke of Hamilton's retreating army, commanded by Lieutenant-General Bailey. Hamilton's army was defeated, and the foot soldiers took refuge in Winwick Church. Local tradition records that some soldiers were executed in Gallows Croft, on the opposite side of Hermitage Green Lane to Red Bank. The battlefield site crosses the boundaries between Newton-le-Willows and Winwick, and has recently been designated a Registered Battlefield (List Entry Number: 1412878).

- 3.14 From 1750 agricultural productivity increased to match the demands of a quickly growing population and the following 100 years were an important time for farm building development. The style of small farmstead at Rough Farm appears on historic mapping to have started out as a linear plan in the late-18th century, which developed into a loose courtyard plan, with the buildings arranged around a yard with agricultural buildings to the north and west and the farmhouse to the east corner, forming this side of the farmyard with Rough Cottage to the north.
- 3.15 The rural landscape of the Mersey Valley area is characterised by continual changes to the medieval field systems, with many improvements and modifications made to the agricultural land in the 18th, 19th and 20th centuries. Cartographic evidence demonstrates that the buildings at 19th century Rough Farm comprise a long open barn in the south-west, the stable and cart shed to the north-west of the farmhouse. Rough Farm Barn is first clearly shown on the 1839 tithe map for Newton-in-Makerfield, to the north of a large house, likely Rough House, the farmhouse for the farmstead. Rough Cottage is shown on the 1839 tithe map as two cottages, which are then combined to make one large cottage by 1891.
- 3.16 Written records from the 19th century show that the land at Rough Farm was part of the borough of Newton, and large areas of the surrounding land had been under the ownership of the Legh family since at least the 17th century. The population and settlement size of Newton-le-Willows altered little until the mid-18th century, when the rapid industrialisation of nearby St Helen's, along with the arrival of the North Western Railway and Viaduct, resulted in a population increase. A number of listed buildings and former sites of post medieval houses testify to this period of growth within the study area.

Modern

- 3.17 During the modern period the wider area was urbanised, with the introduction of more residential housing around Newton-le-Willows and Winwick and the construction of the M6. Rough Farm underwent a further small period of expansion at this time. Cartographic evidence shows to the north west of the stable building, a small building comprising four pigsties is shown by the time of the 1906 OS map as part of a secondary yard to the north of the stable. This second yard was constructed in the 20th century to the west of the post medieval farmyard as the farm expanded, and further smaller outbuildings were added. The 19th century buildings were largely replaced by large modern outbuildings and in 1997 Rough House was demolished.
- 3.18 The modern period also saw the establishment of Parkside Colliery. The development site is partially within the area of the former colliery in the west. In the decade following Nationalisation, the National Coal Board embarked on a major programme of investment in the industry, most of which was spent on reconstructing existing pits rather than sinking new ones. One of the few new pits to be established was Parkside Colliery, which was one of the results of an intensive programme of deep boring carried out in the Lancashire coalfield in the 1950s. The first shaft of this colliery was sunk in 1957, and was closed in 1993.

4.0 ARCHAEOLOGICAL MITIGATION WORKS

- 4.1 The archaeological mitigation works will comprise three elements of fieldwork. The first element will comprise an archaeological strip, map and sample of an area measuring 20m by 20m immediately to the south of evaluation trench 4.
- 4.2 The second element will be a Level 2-3 Historic Building Survey (Historic England) of Rough Farm Barn, the associated remains of 19th century farm structures, and Rough Cottage.
- 4.3 The third element will comprise archaeological observation and monitoring of the removal of foundations or site clearance of the footprints of the barn and cottage to inspect works for underlying earlier structures. The archaeological observation will also be undertaken during the stripping of the historic farmstead area (shown on Figure PD-TEP-02-00-RP-EN-249).
- 4.4 All field work will be carried out by suitably qualified archaeologists, working under the direction of a full Member of the Chartered Institute for Archaeologists, or equivalently qualified project director.

Archaeological Strip, Map and Sample at Trench 4

- 4.5 Archaeological strip, map and sample aims to remove overburden under the direction of a suitably qualified archaeologist, within the defined mitigation area.
- 4.6 The objective is to allow the monitoring archaeologist a clear view of previously undisturbed horizons which may reveal archaeological features, sites, artefacts or structures.
- Method
- 4.7 All stripping of overburden within an area designated for the strip, map and sample would be carried out by 360° excavator equipped with a toothless ditching bucket, and under constant archaeological supervision.
- 4.8 Archaeological excavation initially requires the removal of overburden in areas of impact scheduled in the construction programme, down to the first archaeological horizon, or the natural substrata, whichever is encountered first. The overburden and depth of subsoil removed, therefore, will be under the direction of a suitably qualified archaeologist.
- 4.9 The site will be fenced prior to excavation works and fitted with adequate signs, describing that there is an archaeological site and that access is restricted until the archaeological mitigation work is completed. Construction staff will be made aware of the presence of archaeological sites and the need to preserve them through the site induction, as well as regular toolbox talks.
- 4.10 The site will be excavated and recorded according to accepted professional standards described in the relevant Chartered Institute for Archaeologist Standard and Guidance Documents and in Historic England guidance documents, by the archaeological contractor, and in accordance with the asset-specific or archaeological mitigation proposal method statements. Features will be recorded and excavated stratigraphically and all relationships will be investigated. All archaeological features and deposits will be sampled in order to provide the information required.

- 4.11 The archaeological works will provide an accurate record of any archaeological and paleo-environmental finds, features, artefacts or ecofacts identified.
- 4.12 In the event that any such finds or features are identified, subsequent excavations will be undertaken by hand. Any archaeological surfaces that are present will be cleaned sufficiently to enhance any features, site levels will be related to the Ordnance Survey National Grid and Datum. The general site plans will be hand drawn at a scale of 1:50 or 1:100.
- 4.13 Discrete features will be half-sectioned, or fully excavated if features are part of recognisable structures, contain deposits or artefacts of particular value, or likely to hold significant artefact or environmental assemblages. Intersections will be investigated to establish strategic relationships. Representative sections of linear and curvilinear features will be sample excavated away from intersections or other features or deposits, to obtain unmixed samples of material. Sections will be drawn at a scale of 1:10 or 1:20, as appropriate. Environmental bulk samples (usually 40 litres) will be taken where the deposit is likely to contain significant environmental assemblage. All records will be undertaken using pro form record sheets.
- 4.14 Sampling strategies will be in accordance with the archaeological sub-contractor fieldwork manual and described in their method statement as well as the requirements of MEAS.
- 4.15 The archaeological contractor will make appropriate pre-and post-excavation site records. All finds and features will be accurately located and planned accurately at appropriate scales. All site photographs will be taken using a digital SLR camera with a sensor of a minimum of 12 megapixels and supplemented with black and white film photography. All photography will be undertaken in accordance with Historic England guidance, Digital Image Capture and File Storage: Guidelines for Best Practice, 2015

Finds

- 4.16 All finds or environmental samples recovered during the archaeological works will be assessed and reported on by external specialists. A list of specialists for the project will be provided by the archaeological sub-contractor when required.
- 4.17 All finds will be treated in accordance with current best practice as set out in Chartered Institute for Archaeologists and Historic England guidance. All metal detecting will be undertaken by the archaeological contractors

Human Remains

- 4.18 If human remains are encountered during the archaeological mitigation works, they will be left in situ and the coroner notified. If it is deemed appropriate to excavate human remains, this will be done in accordance with appropriate Historic England and Chartered Institute for Archaeologists guidance (e.g. CIfA Technical Paper 13 Excavation and Post-excavation Treatment of Cremated and Inhumed remains). Excavation, removal from site, analysis and final placing will all be subject to the requirements of the appropriate Ministry of Justice licence.

Treasure

- 4.19 If any artefacts are encountered that would constitute 'treasure' as defined by The Treasure Act, 1996, they will be reported to the local Coroner and relevant Finds Liaison Officer. Any artefacts deemed to be Treasure should be excavated on the day they are discovered and removed to a secure site. If this is impractical then appropriate security provided until full excavation and removal can occur.

Paleo-environmental sampling and analysis

- 4.20 The paleo-environmental assessment aims to identify areas within the development footprint where conditions are such that deposits suitable for the development of past environments are preserved. These most commonly occur in the form of subsurface peat layers, but are also taken to include all waterlogged deposits. The identification of any suitable areas will take place during the archaeological works.

- 4.21 Should any such deposits exist within the area of impact, samples will be taken by a suitably qualified specialist sub-contractor and in accordance with Historic England's guidance, *Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*.

- 4.22 The samples would be assessed for their potential by a specialist, and suitable techniques applied to sub-sample from select cores to determine the preservation and taxonomic diversity within the samples. This is likely to include assessing for one or more of the following:

- Pollen (focussing on organic units)
- Diatoms (focussing upon lithological transitions within and at the base of the Holocene sediment stack)
- Foraminifera (focussing on mineral strata and in particular on transitions)
- Plant macro-remains (focussing on organic units)

- 4.23 Having assessed the potential for analysis a project design will be produced that will provide a detailed proposal for analysis (including, for example, C14 dating, loss-on-ignition to measure organic carbon content, humification and mass specific magnetic susceptibility) of any present selected samples.

- 4.24 If necessary and appropriate the advice of the Historic England Science Advisor for the North West will be sought.

Historic Building Record

- 4.25 The historic building recording of Rough Farm Barn, associated 19th century structural remains, and Rough Cottage will be undertaken by a suitably qualified archaeologist and comprise a Level 2-3 (Historic England 2016) historic building survey and photographic record. The survey will be undertaken prior to demolition and when the buildings are vacant.

- 4.26 The photographic survey will be undertaken using high resolution digital photography, using a camera of at least 12 megapixels. The camera will take images in TIFF or RAW format, the resulting files will be saved in TIFF file format for archive stability.

- 4.27 The survey will comprise photographs of external and internal elevations, interior spaces and roof interiors (if safe to access), as well as general context shots, including the remains of the 19th century smaller outbuildings. The survey will also record any architectural or decorative detail. Where appropriate a scale will be placed with any detail shots. A photographic register will include a brief written description and photograph location, with photographs of external features and elevation to include dimensions where possible. Photographs will be accurately located to a base map at a suitable scale.
- 4.28 A written description of the building will be undertaken, which will include a description of the buildings' history and development, as well as its historic context and a description of the site historic land use. Evidence for phasing and alterations will also be noted, along with detail of construction techniques and materials as appropriate.
- 4.29 A drawn record of the building's plan will be provided, as well as internal and external elevations where appropriate.
- 4.30 The survey outlined above will provide a record and advance understanding of the heritage assets in a manner that is proportionate to their importance. The record will be made publically accessible (see Section 6.0). This level of record is therefore considered to be a proportionate response to the significance of the non-designated heritage assets.

Archaeological Observation and Recording at Rough Farm

- 4.31 Archaeological observation aims to determine whether the buildings of Rough Farm Barn and Rough Cottage were constructed to overlie earlier 17th and 18th century structures, and will explore any remains of the earlier farmstead, should any evidence of this still be extant within the site. Therefore archaeological observation will also take place during the stripping of the defined mitigation area of the historic farmstead, comprising an area of approximately 60m by 25m.
- 4.32 The objective is to allow the monitoring archaeologist a clear view of previously undisturbed horizons which may reveal archaeological features, sites, artefacts or structures associated with the earlier occupation of the Rough Farm site.

Method

- 4.33 After demolition of the standing structures of Rough Farm Barn and Rough Cottage, removal of the foundations and site clearance of the buildings' footprint would be undertaken under archaeological supervision.
- 4.34 All stripping of overburden within the defined mitigation area, would be carried out by 360° excavator equipped with a toothless ditching bucket, and under constant archaeological supervision.
- 4.35 Archaeological excavation initially requires the removal of overburden in areas of impact scheduled in the construction programme, down to the first archaeological horizon, or the natural substrata, whichever is encountered first. The overburden (including any hardstanding) and depth of subsoil removed, therefore, will be under the direction of a suitably qualified archaeologist.

- 4.36 The site will be fenced prior to excavation works and fitted with adequate signs, describing that there is an archaeological site and that access is restricted until the archaeological mitigation work is completed. Construction staff will be made aware of the presence of the archaeological site and the need to preserve it through the site induction, as well as toolbox talks.
- 4.37 Any surviving archaeological features or structures will be excavated by hand and recorded according to accepted professional standards described in the relevant Chartered Institute for Archaeologists Standards and Guidance Documents and in Historic England guidance documents, by the archaeological contractor, and in accordance with the asset-specific or archaeological mitigation proposal method statements.
- 4.38 The archaeological works will provide an accurate record of any archaeological features, structures and artefacts identified. The general site plans will be hand drawn at a scale of 1:50 or 1:100.
- 4.39 Discrete features will be half-sectioned, or fully excavated if features are part of recognisable structures, contain deposits or artefacts of particular value, or likely to hold significant artefact assemblages. Intersections will be investigated to establish strategic relationships. Sections will be drawn at a scale of 1:10 or 1:20, as appropriate. All records will be undertaken using pro forma record sheets.
- 4.40 The archaeological contractor will make appropriate pre-and post-excavation site records. All finds, features and structures will be accurately located and planned accurately at appropriate scales. All site photographs will be taken using a digital SLR camera with a sensor of a minimum of 12 megapixels and supplemented with black and white film photography as appropriate. All photography will be undertaken in accordance with Historic England guidance, Digital Image Capture and File Storage: Guidelines for Best Practice, 2015.

Finds

- 4.41 All finds or environmental samples recovered during the archaeological works will be assessed and reported on by external specialists, as necessary. A list of specialists for the project will be provided by the archaeological sub-contractor when required.
- 4.42 All finds will be treated in accordance with current best practice as set out in Chartered Institute for Archaeologists and Historic England guidance.

Human Remains

- 4.43 If human remains are encountered during the archaeological mitigation works, they will be left in situ and the coroner notified. If it is deemed appropriate to excavate human remains, this will be done in accordance with appropriate Historic England and Chartered Institute for Archaeologists guidance (e.g. CIfA Technical Paper 13 Excavation and Post-excavation Treatment of Cremated and Inhumed remains). Excavation, removal from site, analysis and final placing will all be subject to the requirements of the appropriate Ministry of Justice licence.

Treasure

- 4.44 If any artefacts are encountered that would constitute 'treasure' as defined by The Treasure Act, 1996, they will be reported to the local Coroner and relevant Finds Liaison Officer. Any artefacts deemed to be Treasure should be excavated on the day they are discovered and removed to a secure site. If this is impractical then appropriate security provided until full excavation and removal can occur.

Organisation and Key Personnel

- 4.45 TEP is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA). The heritage team is under overall management of **Ian Grimshaw, Director (TEP)**.
- 4.46 The archaeological works will be undertaken by an Archaeological Contractor and will be managed by **Jason Clarke BSc MA MCIfA Principal Historic Environment Consultant (TEP)**.

5.0 REPORTING

- 5.1 In accordance with the principles of Management of Research Projects in the Historic Environment (MoRPHE) (Historic England 2015) and the Management of Archaeological Projects, 2nd Ed (MAP2) (English Heritage 1991), a programme of reporting will be undertaken for the archaeological controlled strip and historic building survey, to commence on completion of each element of the archaeological works.
- 5.2 The programme will be proportionate to the findings of the fieldwork, and it may be that a single phase of assessment, analysis and reporting is sufficient in the event of non-complex findings. A report will be produced detailing the results of fieldwork within 4 weeks of the end of surveys and archived within 6 months.
- 5.3 In the event of complex findings requiring specialist input, the 'MAP2' assessment and analysis approach would be adopted, with a post-excavation assessment report produced within six months of the completion of fieldwork, and a post excavation analysis report, a publication report, and site archive prepared within two years of the completion of fieldwork.
- 5.4 In the event of negative, or non-complex findings, separate reports will be produced detailing the results of each phase of fieldwork within eight weeks of the end of the fieldwork and archived within six months. The reports will include;
- a front cover to include the NGR, and HER reference number
 - a concise, non-technical summary of the results
 - the circumstances of the project and the dates on which the fieldwork was undertaken
 - description of the methodology, including the sources consulted
 - the historical background of the development area
 - the results of the archaeological survey
 - a copy of this project design, and indications of any agreed departure from that design
 - the reports will also include a complete bibliography of sources from which data has been derived, and a list of any further sources identified but not consulted
 - a site location plan related to the national grid
 - appropriate plans showing the location and position of features or sites located
 - plans and sections showing the positions of deposits and finds
 - illustrative photographs as appropriate
 - coordinates (latitude/longitude) of relevant sites if archaeological remains have been discovered
 - coordinates of the archaeological mitigation areas to be accurately located by means of four 12-figure NGRs (i.e. one at each corner) in order to enable them to be plotted on the HER GIS
 - a detailed description of the form, layout and any architectural detail of the buildings
 - appropriate plans showing the location and floor plan of the building
 - plan showing the positions of where the survey photographs were taken
 - illustrative photographic survey of the building as appropriate

- 5.5 In the event of archaeologically significant finds, the results of fieldwork will also be published in a relevant and appropriate journal, or other publically disseminated publication, as appropriate.

6.0 ARCHIVE

- 6.1 A copy of the report provided as a PDF, will be submitted to the Merseyside HER within 6 months of the completion of the report.
- 6.2 An archive of the results of the archaeological work will be produced, in accordance with current English Heritage guidelines (Management of Archaeological Projects, Appendix 3, 2nd edition, 1991), Chartered Institute for Archaeologists Standards and Guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA 2014) and Guidelines for the Transfer of Archaeological Archives to the Museum of Liverpool (2015). The archive will contain any site matrices, and summary reports of the artefact record, context records, and any other records or materials recovered.
- 6.3 The original record archive of projects (paper, magnetic and plastic media), and a full copy of the record archive (microform or microfiche), together with the material archive (artefacts, ecofacts, and samples) will be deposited with the National Museums of Liverpool.
- 6.4 Details of the work will be entered on the OASIS database at <http://ads.ahds.ac.uk/projects/oasis>. The OASIS record for this site will be created upon the commencement of the fieldwork, and the final report will be entered on to OASIS within 6 months of the completion of the project.

7.0 HEALTH AND SAFETY

- 7.1 All work on site would be undertaken strictly in accordance with the project health and safety plan and task specific risk assessments. All companies working on the project will adhere to the main works contractor required quality, health, safety and environment controls.
- 7.2 Access routes to working areas would be specified by the client and access would only be permitted to those routes and the area of the fieldwork.
- 7.3 All site staff, including subcontractors and visitors, will prove that they have attended a site induction and have the necessary competencies (e.g. CITB training for machine operators) and any other necessary health and safety qualifications.

REFERENCES

CIfA, 2014, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*. Chartered Institute for Archaeologists

CIfA, 2014, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*. Chartered Institute for Archaeologists

CIfA, 2014, *Standard and guidance for an Archaeological Watching Brief*. Chartered Institute for Archaeologists

CIfA, 2017, *Code of Conduct*. Chartered Institute for Archaeologists

CIfA, 2019, *Standard and guidance for Archaeological Investigation and Recording of Standing Buildings or Structures*. Chartered Institute for Archaeologists.

Cheshire Historic Environment Record

Cheshire Shared Services: Archaeological Planning Advisory Service

English Heritage, 1991, *The Management of Archaeological Projects*, 2nd edn, London

English Heritage, 2011, *Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition)

Historic England, 2015, *Management of Research Projects in the Historic Environment* (MoRPHE)

Historic England, 2015 *Digital Image Capture and File Storage: Guidelines for Best Practice*.

Historic England, 2016, *Understanding Historic Buildings: A Guide to Good Recording Practice*.

Magnitude Surveys, 2017, *Report Geophysical Survey of Land at Parkside Link Road, Warrington*: Magnitude Surveys Ref: MSSJ208

Merseyside Environmental Advisory Service (MEAS)

Merseyside Historic Environment Record (MHER)

National Planning Policy Framework, 2019

National Museums of Liverpool 2015 *Guidelines for the Transfer of Archaeological Archives to the Museum of Liverpool*

Mills, A., 2003, *Oxford Dictionary of British Place Names*. Oxford: Oxford University Press.

Oxford Archaeology North, 2018, *Parkside Link Newton-le-Willows, Archaeological Evaluation Report*: OA Ref: L11104

Stratascan, 2007, *Geophysical Survey Report, Newton-Le-Willows, Merseyside*. Stratascan Report: J2324

Websites:

British Geological Survey <https://www.bgs.ac.uk/>

Past Scape www.pastscape.co.uk

Old Maps <http://www.old-maps.co.uk>

British History Online <http://www.british-history.ac.uk>

APPENDIX B CONTEXT INVENTORY

SMR area						
General description					Orientation	NW-SE
A 40 by 40m strip, map and record (SMR) area. Topsoil and subsoil were removed across the whole area, exposing natural geology, cut by two ditches and a tree throw.					Length (m)	40
					Width (m)	40
					Avg depth (m)	0.5
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
100	Layer	-	0.37	Topsoil	-	-
101	Layer	-	0.05	Subsoil	-	-
102	Layer	-	-	Natural geology	-	-
103	Cut	1.45	0.39	North-east/south-west-aligned ditch	-	-
104	Deposit	1.45	0.39	Fill of ditch 104 . Mid grey brown silty clay and contained some coal	-	-
105	Cut	1.35	0.24	North-west/south-east-aligned ditch	-	-
106	Deposit	1.35	0.24	Fill of ditch 105	-	-
107	Void	-	-	Void	-	-
108	Void	-	-	Void	-	-
109	Void	-	-	Void	-	-
110	Void	-	-	Void	-	-
111	Void	-	-	Void	-	-
112	Void	-	-	Void	-	-
113	Cut	1.5	0.54	Tree throw	-	-
114	Deposit	1.5	0.54	Fill of tree throw 114	-	-

APPENDIX C ENVIRONMENTAL REPORT

Environmental remains

Introduction

C.1.1 A targeted programme of palaeoenvironmental sampling was implemented in accordance with the Oxford Archaeology *Environmental Sampling Guidelines* (OA 2017), which resulted in the retrieval of three samples. Two of the samples comprised the fills (**104** and **106**) from two linear features, **103** and **105**, and the third a fill (**114**) from a possible tree throw (**113**). To comply with accepted professional guidelines (EH 2011) between 30 and 40-litre samples, or the entirety of a deposit, were taken to assess their potential for containing archaeobotanical remains, primarily charred plant remains and charcoal, and for identifying suitable material for radiocarbon dating if warranted.

Methodology

C.1.2 The samples were floated, where the flots were captured in a 250 µm mesh, and air dried. The retents of the floated samples were washed through 2mm and 500 µm meshes and air dried. For the assessment, the samples were scanned using a *Leica* stereo-microscope and any plant material, including fruits, seeds, charcoal and wood fragments, was quantified. Other remains, such modern roots and seeds were also quantified to determine levels of modern contamination. Quantification was based on a scale of 1–4 where 1 is rare (one to five items); 2 is frequent (6 to 50 items); 3 is common (51–100 items); and 4 is abundant (greater than 100 items). The assessment results were recorded on a pro-forma, which will be kept with the site archive. Plant nomenclature follows Stace (2010).

C.1.3 Charcoal fragments over 2mm in size were quantified and scanned to assess preservation and wood diversity. Wood maturity was also noted to assess wood type (ie heart wood, sap wood, or round wood) and to identify suitable material for radiocarbon dating. Alder (*Alnus glutinosa*) and hazel (*Corylus avellana*), which are anatomically similar in transverse section were not separated during assessment. Similarly, the anatomical structure of wood from the hawthorn family (Maloideae), which includes hawthorn, apple, pear, or whitebeam means these cannot be separated. Identification and classification of the charcoal was aided by Hather (2000).

Results

C.1.4 The results of the archaeobotanical assessment are presented in Table 1, which also shows potential for any further analysis or radiocarbon dating. Given the generally free-draining soil conditions at the site, preservation was through charring. The two ditches (**103** and **105**) contained only limited charred material, represented by comminuted charcoal fragments. Although oak and possible hawthorn-type charcoal was noted, most of the fragments were too small for species identification. Tree throw **113** contained significantly more charcoal, and although this preliminary assessment indicates it comprises predominantly oak, it also contained rare fragments of alder/hazel charcoal. The sample also contained rare fragments of charred hazelnut

shell and frequent fungal sclerotia. The latter being the fruiting bodies of certain fungi, which develop during periods of environmental stress, including burning (Shay and Kapinga 1997).

Sample no	Context no	Feature	Sample size (l)	Flot size (ml)	Charred plant remains	Charcoal	Other remains	Radiocarbon potential
1	104	Ditch 103	24	50		<2mm (2), >2mm (1) Includes <i>Quercus</i>	Modern roots (3), insect eggs (4), modern seeds (1), coal/havm (2)	no
2	106	Ditch 105	18	30		<2mm (2), >2mm (1) Includes <i>Quercus</i> and Maloideae	Modern roots (3), insect eggs (4), modern seeds (1), coal/havm (2)	no
3	114	Tree throw 113	26	130	<i>Corylus avellana</i> shell fragments (1)	<2mm (4), >2mm (4), mostly <i>Quercus</i> , with rare diffuse porous wood charcoal, including <i>Alnus/Corylus</i>	Modern roots (2), insect eggs (3), modern seeds (1), coal/havm (2), fungal sclerotia (2)	yes

Table 1: Archaeobotanical assessment results

Remains are quantified on a scale of 1–4 where (1) is rare (one to five items); 2 is frequent (6 to 50 items); 3 is common (51–100 items); and 4 is abundant (greater than 100 items)

C.1.5 All three samples contained modern roots, and the remains of the likely modern soil matrix, including uncharred seeds, insect eggs, mollusc shell, comminuted coal fragments, heat affected vesicular (havm), small fragments of ceramic building material (cbm).

Statement of potential

C.1.6 The paucity of archaeobotanical material from the ditches means there is no scope for either further analysis or radiocarbon dating. The presence of frequent charcoal in the ditches may indicate nearby burning activity, however, the paucity of the material, and its small size, means there is little scope for radiocarbon dating or further analysis. The amount of charcoal recorded in tree throw **113**, however, including relatively short-lived taxa such as alder and or hazel, means there is scope for further dating and further analysis of this feature. Of note, is the presence of charred hazelnut shell fragments, and a single flint artefact from the same feature, as charred hazelnut shell fragments and other wild, collected, food stuff is commonly recorded from early prehistoric sites (Greig 1991, Druce 2007, Hall and Huntley 2007).

C.1.7 The paucity of archaeobotanical material from early prehistoric contexts, particularly from North West England, means that such material remains a very high priority for further study (Hall and Huntley 2007, Huntley 2010, Myers 2017). Given this, recommendations are made for radiocarbon dating of this feature alongside further analysis if warranted.

APPENDIX D BIBLIOGRAPHY

British Geological Survey (BGS), 2023 *BGS geology viewer* [online] available at: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (accessed on 24/01/2023)

Chartered Institute for Archaeologists (CIfA), 2020a, *Standard and guidance for archaeological excavation*, Reading

CIfA, 2020b, *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*. Reading

CIfA, 2022, *Code of Conduct: professional ethics in archaeology*, Reading

Cranfield Soil and Agrifood Institute, 2023 *Soilscapes map* [online] available at: <https://www.landis.org.uk/soilscapes/> (accessed on 24/01/2023)

Druce, D, 2007 The plant remains (pp 360-373), in: F Brown, F, C Howard-Davies, M Brennand, A Boyle, T Evans, S O'Connor, A Spence, R Heawood, and A Lupton, *The Archaeology of the A1 (M) Darrington to Dishforth DBFO Road Scheme*, Lancaster Imprints **12**, Lancaster

English Heritage, 2011, *Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* 2nd edn, London

Hall, AR, and Huntley, JP, 2007 A review of the evidence for macrofossil plant remains from archaeological deposits in northern England, Research Department Report Series 87/2007, Historic England (formerly English Heritage)

Hather, JG, 2000 *The identification of Northern European woods. A guide for archaeologists and conservators*, London

Historic England, 2015 *Management of research projects in the historic environment* (re-issue), London

Huntley, J, 2010 *Northern England: A Review of wood and charcoal recovered from archaeological excavations in northern England*, Research Department Report Series 68-2010, Historic England (formerly English Heritage)

Myers, A, 2017 *North West Regional Research Framework, Prehistory, Resource Assessment Update* [online] available at: https://archaeologynorthwest.files.wordpress.com/2017/12/nwrrf_prehistoryupdate2017.pdf, accessed on November 6/11/17

National Museums Liverpool (NML), 2021 *Guidelines for the transfer of archaeological archives to the Museum of Liverpool* [online], available at:

<https://images.liverpoolmuseums.org.uk/2021-02/Archive-deposition-guidelines-v8-2021.pdf>
(accessed 24/01/2023)

Oxford Archaeology, 2017 *Oxford Archaeology Environmental Sampling Guidelines*, unpubl report

Oxford Archaeology North, 2018 *Parkside Link Newton-le-Willows, Archaeological Evaluation Report*, unpubl rep

Ramboll UK, 2019 *Parkside Link Road: Environmental statement*, unpubl rep

Shay, CT, and Kapinga, MRM, 1997 *Cenococcum geophilum* sclerotia from an archaeological site in western Canada, *North American Archaeologist*, 18, 363-70

Stace, C, 2010 *New Flora of the British Isles*, 3rd Edition, Cambridge

Stratascan, 2007, *Geophysical Survey Report, Newton-Le-Willows, Merseyside*, unpubl rep

APPENDIX E

SITE SUMMARY DETAILS

Site name:	Parkside Link Road, Newton-le-Willows, St Helens
Site code:	PLR22
Grid Reference	SJ 61381 94390
Type:	Strip, map and sample evaluation
Date and duration:	21st, 22nd & 25 th April 2022; 3 days
Area of Site	20m by 20m
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 National Museums Liverpool in due course.
Summary of Results:	<p>Oxford Archaeology (OA) North was commissioned by The Environment Partnership (TEP) on behalf of Ramboll UK to undertake a strip, map and record (SMR) of an area east of Newton-le-Willows comprising a new road to link the proposed Parkside development to the east of the A49 and the M6 (NGR: SJ 61381 94390).</p> <p>The work was undertaken as condition 24 of Planning Permission (planning ref.: P/2018/0249/FUL). During consultation for the application, the archaeological advisors to St Helens Council and Warrington Borough Council, Merseyside Environmental Advisory Service (MEAS), recommended that an area of 20m by 20m be subject to an SMR excavation. A written scheme of investigation (WSI) was produced by TEP 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 three days, 21st, 22nd and 25th April 2022.</p> <p>The 20 by 20m SMR area was successfully excavated in its intended location, with few archaeological features being identified, which comprised two linear features 103 and 105, as well as a natural feature, most likely a tree throw, 113. The features likely related to former field boundaries identified on the 1849 Ordnance Survey mapping, with no evidence for the targeted circular geophysical anomaly. As such, the remains are of limited significance.</p>



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