



WRITTEN SCHEME OF INVESTIGATION
Arrochar, 14 Prescott Road, Melling, Merseyside
Detailed Historic Research and Archaeological Watching Brief



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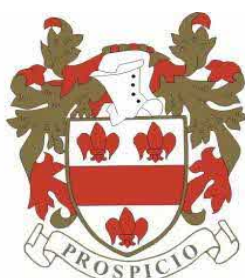
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Written Scheme of Investigation for Detailed Historic Research and Archaeological Watching Brief at Arrochar, 14 Prescott Road, Melling, Merseyside

ARS LTD REPORT 2023



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Issue	Author	Checked by	Approved by	Date approved	Reason for issue
1	Rebecca Trow	Jenny Doole	Rebecca Trow	06/04/23	Initial draft for consultation
2	Rebecca Trow	Jenny Doole	Rebecca Trow	18/04/23	Final Version following LPA comment and approval

Prepared on behalf of: [REDACTED]
Planning Reference: N/A
Local Authority: Sefton Council
Site central NGR: SD 40387 03035

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1 INTRODUCTION

1.1 Project and Planning Background

1.1.1 This is a Written Scheme of Investigation (WSI) for a scheme of Detailed Historic Research and Archaeological Watching Brief that has been prepared by Archaeological Research Services Ltd (ARS Ltd) on behalf of the Estate of Edna Bride.

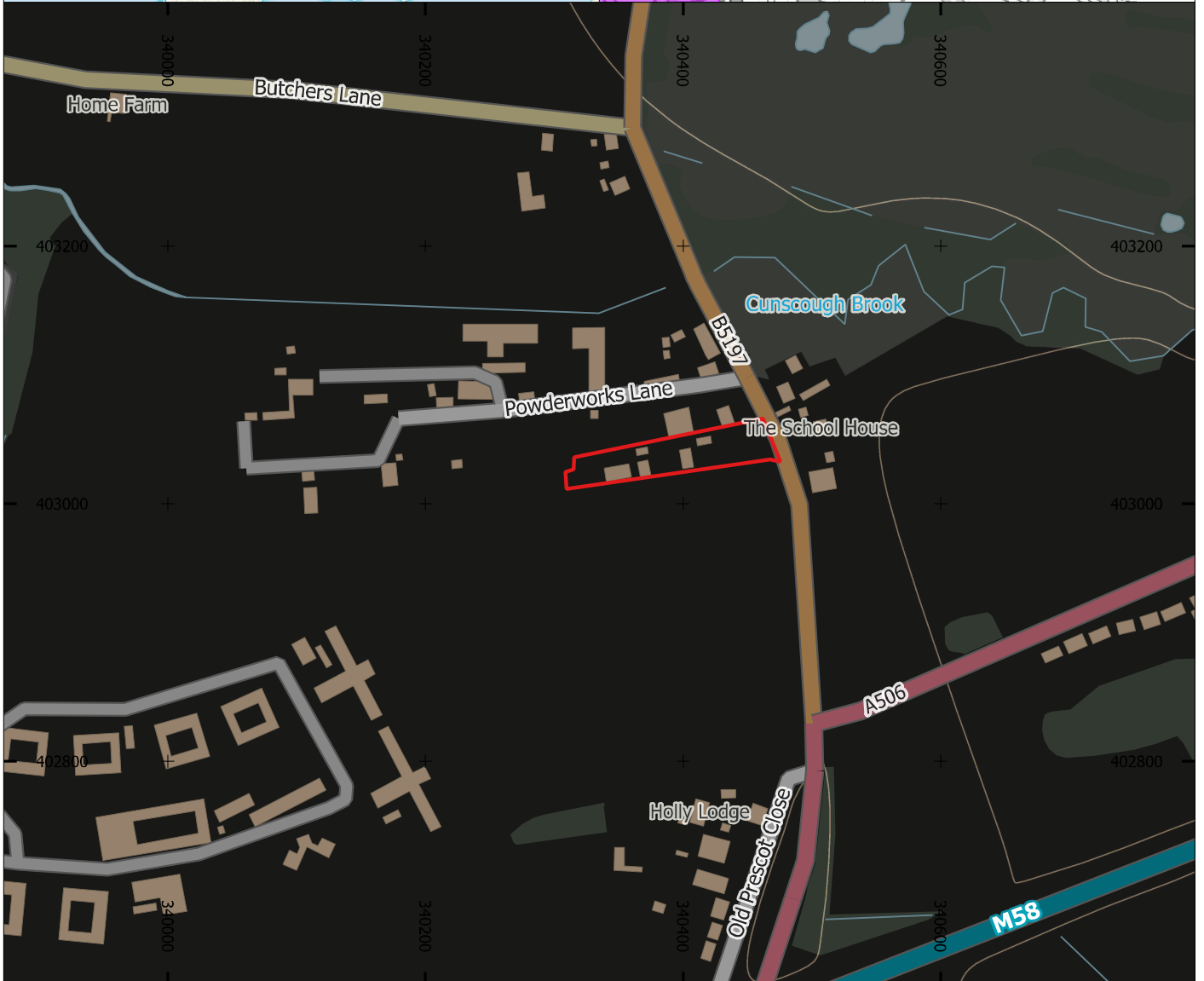
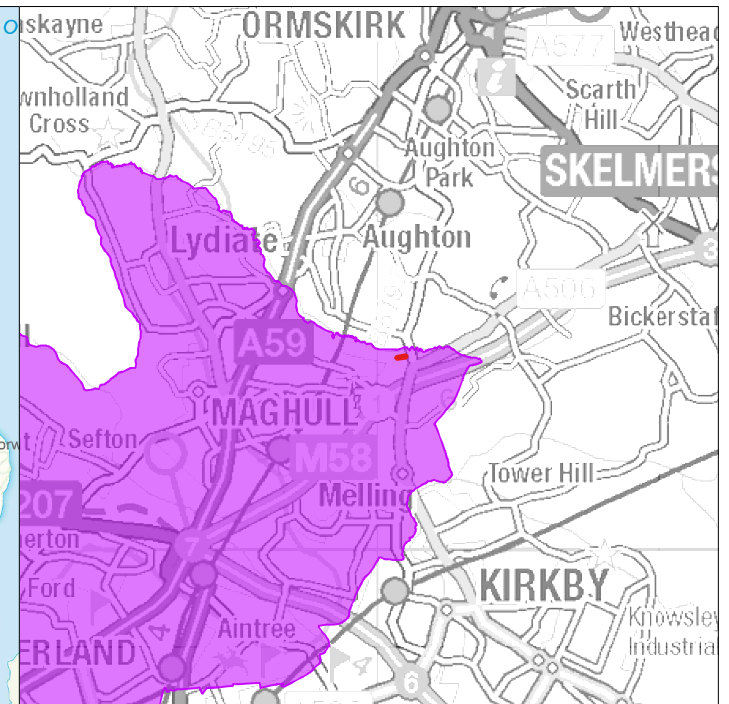
1.1.2 The WSI sets out a scheme of historic research and subsequent archaeological mitigation by Watching Brief in support of a planning application for development at Arrochar, 14 Prescott Road, Melling, Merseyside comprising a residential development on a previously mixed use site.





1.1.3 No previous work has been undertaken on the site but there is a non-designated asset in the site in the form of a former house or toll-house (MME4741) as well as a magazine associated with the adjacent Cotton Powder Works (MME15059) shown within the site and therefore any proposed development may have an impact on these and any other unknown archaeological remains present.

1.1.4 A scheme of archaeological mitigation is required in compliance with the National Planning Policy Framework (NPPF) to record the archaeology in the mitigation area prior to development, and to make this information publicly accessible (MHCLG 2022, para 205). Pre-application planning advice provided by the Merseyside Environmental Advisory Service stated that a WSI should be submitted with the application and that the works outlined within should then be undertaken.

1.1.5 In consultation with [REDACTED], Planning Archaeologist at MEAS, the scope of this WSI is to evaluate and mitigate the impact of the proposed development through the preparation of a detailed historical research document and the archaeological monitoring of any subterranean groundworks undertaken within the site. Dependent on the results of the Watching Brief it may be necessary to undertake more significant fieldwork in the form of open area excavations in order to more appropriately mitigate damage to any such remains, should results prove to be of greater significance than anticipated.

1.1.6 Any variations to this scope of works will be by agreement of the Client and the Planning Archaeologist at MEAS, as archaeological advisor to the Local Planning Authority (LPA). Should further mitigation requirements be deemed appropriate by the LPA that arise from discoveries during the works outside the scope of this WSI, then these will be informed to the Client and only proceed if agreed by both parties prior to implementation. Any such additional work would be subject to an addendum to this WSI.



<p>Site name: Arrochar, Melling Date: April 2023 Drawn by: RLT Scale: Varies</p>	<p> Site Boundary  Sefton Council</p>	<p>Archaeological Research Services Ltd  Suite 1 First Floor Dunham House Cross Street Sale M33 7HH Tel: 01619 762544  ARCHAEOLOGICAL RESEARCH SERVICES LTD Digging with Purpose</p>
<p>This drawing: © ARS Ltd Contains Ordnance Survey data. © Crown copyright and database right 2023</p>	<p>Figure 1: Site location</p>	<p>www.archaeologicalresearchservices.com</p>

1.2 Site Location and Description

1.2.1 The proposed development encompasses a total area of 0.4 ha and is located on the outskirts of the village of Melling, 2.7km to the north-east of Maghull town centre (Figure 1; NGR SD 40387 03035). The site is a long rectangular shape, currently occupied by an area of hardstanding at the eastern side, a mid-20th century bungalow in the centre and various outbuildings to the west either side of a driveway. Trees and shrubs are present in and around the buildings and around the edges of the site.

1.2.2 Ordnance Survey maps show the site to lie at around 29m above Ordnance Datum (aOD). It is bounded to the east by Prescott Road, to the south by arable fields, to the west by overgrown grassland and to the north by residential and commercial properties fronting Powderworks Lane. The M58 motorway is located c.400m to the south of the site and c.400m to the west is Ashworth High Security Hospital and the outskirts of Maghull. The north and east are occupied by farmland with Cunsough Brook running east to west c. 120m to the north of the site and forming the boundary between Merseyside and Lancashire in this area.

1.3 Geology and Soils

1.3.1 The underlying solid geology of the site consists of sandstone of the Wilmslow Sandstone Formation, sedimentary bedrock formed between 252.2 and 247.1 million years ago during the Triassic period (BGS 2023). The superficial geology is described as Devensian Till-Diamicton, sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period (BGS 2023).

1.3.2 The soils are characterised by the Cranfield Soil and Agrifood Institute as Soilscape 15: Naturally wet very acid sandy and loamy soils (Cranfield University 2023).

1.4 Archaeological and Historical Background

1.4.1 Evidence for Prehistoric and Roman settlement in the area are scarce but surface finds of flints and worked stone tools, as well as pieces of Roman pottery and a Roman coin have been found this part of Merseyside during fieldwalking and during the construction of the M58, although no settlements have been identified (MHCP 2011, 57).

1.4.2 Both Maghull and Melling are listed in the Domesday Survey of 1086, with no recorded population but containing Woodland and were part of the lands of Roger de Poitou in the West Derby Hundred (Williams and Martin 1992). From the 14th century the woodland was being cleared and the land used for agriculture (MHCP 2011, 58). The manor of Melling was in the hands of the Molyneux family by the 14th century and they retained it until the Civil War although two thirds of their land had been sequestered by this point for recusancy (refusal of Catholics to attend Church of England services). Robert Molyneux and his son were killed fighting for Royalists and their lands subsequently seized by Parliamentarians (Farrer and Brownbill 1907).

1.4.3 A house (MME4741) was located in the north-eastern corner of the site and appears to have extended into the road making it possible that it acted as a toll-house (HE 2012a). The 1846 Ordnance Survey map shows a garden to the south-west of the house. The building existed at least from the time of Greenwood's map in 1818 but by the 1893 Ordnance Survey the house had gone (Figure 2).

1.4.4 The land in the vicinity of the site seems to have remained largely agricultural until the late 18th century when the Leeds-Liverpool Canal opened. The canal was used to transport night soil

from the city to spread on the fields around Maghull and Melling (MHCP 2011, 58). A pottery works, The Midland Pottery, located adjacent to the canal to the south of Melling Village was opened in the late 19th century, producing stoneware items with clay shipped directly to the pottery from Devon via Liverpool. The factory was purchased by Hartley's Jam in 1922 and was used to make the jam pots until 1929 when a severe fire put the factory out of use (MPC 2023).

1.4.5 Closer to the site a gunpowder factory was opened in 1873, by the Cotton Powder Company Limited of Faversham, Kent then passed through several hands over the next few years (HE 2012b). The factory was largely located to the north and west of the site although it did at least partly encroach on the site with the presence of a small magazine (MME15059) in the central part of the site, adjacent to the southern boundary (Figure 2). The factory buildings appear unlabeled on the 1926 Ordnance Survey map although they are still shown until the 1940s maps. Originally the company were making sawdust-based explosives and later gun-cotton (nitrocellulose) which was a replacement for traditional gunpowder and used in shells and later grenades.

1.4.6 The proposed development area appears to have been largely left undeveloped until the mid-20th century when the existing bungalow and associated outbuildings were constructed.

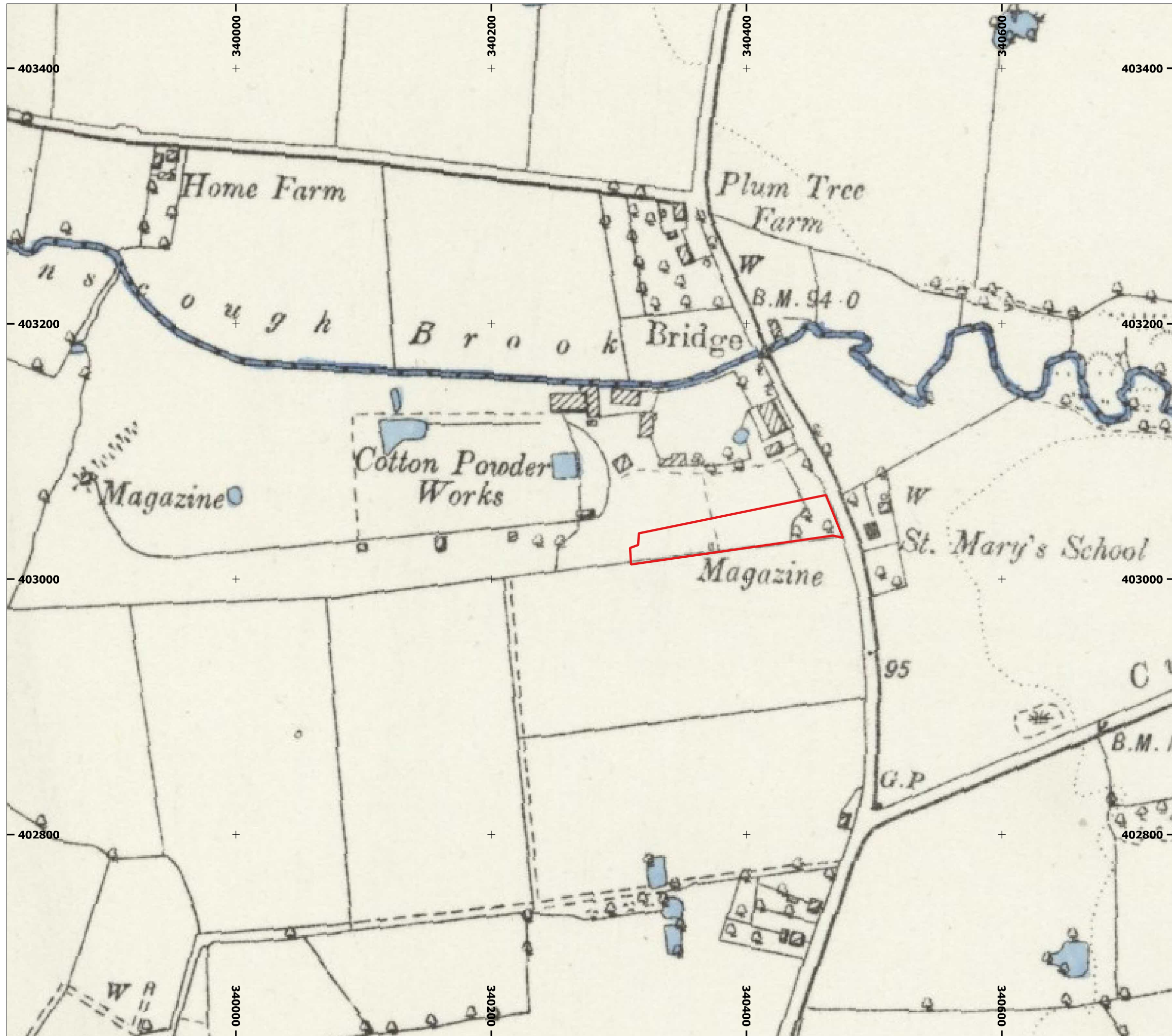
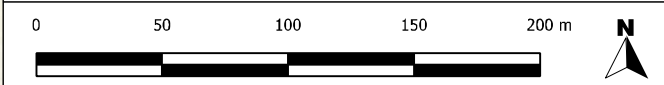


Figure 2: Site Boundary overlaid onto 1893 OS map

Site Boundary



Site name: Arrochar, Melling
 Date: April 2023
 Drawn by: RLT
 Scale: 1:3000 @ A3

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2 AIMS AND OBJECTIVES

2.1 Detailed Historic Research Aims and Objectives

2.1.1 The aim of the Detailed Historic Research is to ‘describe the significance of any heritage assets affected’ by the proposed development (MHCLG 2022, para 194) and to provide context and background to the site and any subsequent archaeological remains that may be encountered during the subsequent watching brief.

2.1.2 The objectives of the detailed historic research are to investigate the extent of the proposed development area in order to:

- ◆ Collate and assess any historical documentation regarding the study area available through archives and secondary sources
- ◆ Undertake historic map regression of the site
- ◆ Produce a detailed historic background of the site and of its development
- ◆ Assess, where possible, the potential significance of any archaeological remains that may be present on the site

2.2 Fieldwork Aims and Objectives

2.2.1 The aim of the fieldwork is to ‘to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportional to their importance, and to make this evidence (and any archive generated) publicly accessible.’ (MHCLG 2022, para 205).

2.2.2 The objectives of the fieldwork are to:

- ◆ monitor the groundworks that may encounter archaeological remains and inform the planning archaeologist when archaeological remains have been found;
- ◆ investigate and record any archaeological features/deposits encountered;
- ◆ establish a relative chronological sequence and, if possible, recover datable materials from archaeological deposits and features; and,
- ◆ establish the character, extent, form, function, and likely status of the archaeological remains where found.

2.3 Research Aims and Objectives

2.3.1 The investigations will be conducted with a view to addressing objectives suggested by the published research priorities set out in the North West Regional Research Framework (Research Frameworks 2023). Research priorities that might become relevant are those that focus upon changing landuse through the Medieval and early Post-Medieval periods and technology and small-scale factory production of chemicals, gunpowder and munitions in the Industrial Period.

2.3.2 The following specific themes may be relevant:

- ◆ LM05: How can we recreate the medieval land-use patterns within townships?
- ◆ Ind52: What Industrial and Modern period type sites need further study?
- ◆ Ind60: How can we make sense of the relative significance of historic industrial processes and building types perceived as poorly understood and recorded?

2.3.3 Other research objectives may become relevant should any archaeological features investigated during investigations produce significant findings of regional or greater importance.

3 STRATEGY- DETAILED HISTORIC RESEARCH

3.1 Coverage

3.1.1 The entirety of the site, as well as a study area around the site agreed with the Planning archaeologist, will be subject to detailed historic research in order to provide context and background for the work and enable assessment of impacts of the proposed development.

3.2 Methodology

3.2.1 The archive research and historic map regression will be undertaken in accordance with the guidelines set out in The Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk Based Assessment (CIfA 2020a).

3.2.2 Any significance of archaeological findings will be assessed according to the guidelines set out in Conservation Principles (English Heritage 2008), which states that the significance of heritage assets derives from the 'heritage values' that they possess, which may be evidential, historical (either illustrative or associative), aesthetic or communal. Reference is also made to 'heritage significance' as described in the National Planning Policy Framework (NPPF), which is defined as the 'value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting' (MHCLG 2021, 71-72).

3.2.3 The following sources of information will be consulted to inform this assessment:

- ◆ The Merseyside Historic Environment Record (HER), maintained by MEAS for information regarding heritage assets, details of previous fieldwork, and Historic Landscape Characterisation (HLC) mapping.
- ◆ The National Record of the Historic Environment (NRHE) maintained by the Historic England Archives.
- ◆ The National Heritage List for England (NHLE) maintained by Historic England for information regarding designated assets.
- ◆ The Sefton Local Archive, for historic maps, plans and other documents relevant to the study area, housed at Crosby Library.
- ◆ Groundsure Historic Mapping Report, for historic Ordnance Survey maps.
- ◆ The British Geological Survey onshore digital maps at 1:50 000 scale (DiGMapGB-50 – WMS)
- ◆ Cranfield University's Soilscape free interactive online viewer for a simplified version of the 1:250,000 scale Digital National Soil Map for England and Wales (Cranfield University 2022)
- ◆ Environment Agency Lidar data.
- ◆ Google Earth and Bing online, for historical satellite imagery.

3.2.4 Various other relevant books, journals and publications may be identified during the course of the research, details of which will be found in the references section of the report.

3.2.5 A site walkover to Historic England (2017) Level 1 standard will be undertaken to assess current site conditions, visible or partially visible archaeological remains (such as derelict buildings or earthworks) and any constraints that may impact the subsequent fieldwork.

3.2.6 The results of the historic research may highlight necessary alterations to the scope of the watching brief outlined here. Any such changes to the scope of works would be subject to an addendum to this WSI and would be designed in consultation with MEAS.

4 STRATEGY- FIELDWORK

4.1 Coverage

4.1.1 There are currently no finalised plans for the development, although it is likely to comprise five new houses, thus specific coverage cannot be given. However, any work which breaks ground as part of the new development will be subject to archaeological watching brief.

4.1.2 The fieldwork will be undertaken in accordance with the Chartered Institute for Archaeologists' Standard and guidance for an archaeological watching brief (2020b) and will comprise the continuous monitoring of all groundworks within the mitigation area required to prepare the site for development. This would include any removal of old foundations or services, any topsoil or subsoil stripping, any ground reduction, excavation of new foundations, insertion of new services/drainage, landscaping activities and tree planting. Attendance will be required as appropriate to monitor groundworks and to clean, excavate and record any archaeological remains encountered. Intermittent monitoring will not be permitted without agreement of the planning archaeologist.

4.1.3 Sufficient time should be allowed for in the Clients' programme for archaeological recording to avoid impact on the overall delivery of groundworks.

4.1.4 Should human remains, structures or deposits of archaeological interest be uncovered during the fieldwork, the Planning Archaeologist will be consulted on the acceptable course of action. It is anticipated that this will entail the archaeological investigation, recording and recovery of artefacts/samples and other remains.

4.2 Methodology

4.2.1 All excavation will be conducted under archaeological supervision. The archaeologist will be given the opportunity to stop excavation to investigate potential archaeological features/deposits where they arise, and adequate time will be allowed for recording any such remains.

4.2.2 There is to be no disturbance of archaeological remains until archaeological investigation and recording has been undertaken, and the archaeologist confirms that this has been completed.

4.2.3 As a minimum (i.e. where no archaeology is found) there will be an accurate site plan and photographic record. The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

4.2.4 The site will be accurately tied into the National Ordnance Survey Grid and located at a suitable scale. Survey data of features will be collected using survey grade equipment typically providing accuracy of $\pm 0.05\text{m}$ (Historic England 2016). Digital data will be surveyed with equipment using Real Time Kinematic (RTK) corrections from a Global Navigation Satellite System (GNSS) network. The same equipment will be used to record known points on drawn plans and sections and to take spot heights to supplement other available planning/survey techniques as applicable.

Machine Excavation

4.2.5 Excavation will be undertaken by a suitable mechanical excavator fitted with a toothless bucket or by hand. Where excavation requires digging through existing foundations, hard standing or tarmac, a breaker and toothed bucket may be used but the area will be subsequently cleared

and cleaned using toothless buckets. No machinery will track over areas that have previously been stripped until investigation and recording has been undertaken and the on-site archaeologist has been consulted.

4.2.6 Machine excavation will seek to avoid disturbing, breaking, or grubbing out large foundations or tree stumps that may damage the surrounding archaeological remains. Where these are found they will be left in situ until recorded and then, if removal is necessary, broken up in manner to avoid disturbing any other surviving remains.

4.2.7 Excavation areas will be machined cleanly, sufficient to identify and establish the extent of any archaeological features present. Photographs will be taken during the machine works to record the process.

4.2.8 Machine operations will cease if unexpected, complex, or undated archaeological remains are encountered, the Client will be informed, and the planning archaeologist will be consulted to discuss and agree proportionate requirements. Significant archaeological remains may necessitate further mitigation through targeted open area excavation.

Investigation and Recording

4.2.9 All archaeological features and deposits will be sample excavated to achieve the mitigation objectives where they are exposed in plan during the monitoring of groundworks:

- ◆ Isolated discrete features such as individual pits, postholes, or scattered features without clear associations, will be half sectioned.
- ◆ Where pits/postholes form structural features or are representative of industrial activities they will be fully excavated and recorded in association with each other.
- ◆ If features contain deposits of particular value or significant artefactual or environmental assemblages, these may be fully excavated and sampled.
- ◆ Archaeological linear features, such as ditches and gullies that are not of a structural nature will be sample excavated at dispersed intervals. Where possible, interventions will be a minimum of 1m in width, and incorporating a minimum of 20% of the total length. All junctions and terminal will be investigated.
- ◆ Where repetitious features occur in abundance, such as a pit alignment or stakeholes/postholes in their hundreds, then a sample of such remains will be selected for excavation in discussion with the planning archaeologist.

4.2.10 If the features are exposed in section only (i.e. they are in the side of a foundation trench), then the sectional profile of the foundation trench will be recorded and its location/extent surveyed.

4.2.11 Features requiring more specialist attention such as burials, kilns, wells, floor levels and other significant industrial or domestic features or deposits will be cleaned, planned, and photographed in the first instance but will be left in situ, and will be protected/fenced off pending a suitable form of mitigation which would need to be agreed with the planning archaeologist and subject to a WSI addendum.

4.2.12 Deep features such as well or ponds will not be investigated by under the scope of these works. An augur may be employed to establish the anticipated full depth of a well or pond. Further excavation would be by consultation with the planning archaeologist and Client (as deep excavations may affect foundation designs).

4.2.13 Area deposits, such as buried soils and former land surfaces, will be investigated by hand during the process of machining. Once the deposit is understood and has been recorded, provided that it represents a non-structural layer, machine excavation will be allowed to proceed.

4.2.14 Representative samples of bricks from brick-built structures will be retained for specialist analysis where appropriate. For brick structures, the record will include details of brick dimensions, and type (handmade/machine made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins). Brick samples will be taken for structures likely to pre-date the mid-19th century.

4.2.15 All excavated spoil will be visually scanned to retrieve any artefacts. Artefacts will be collected by hand and retained, provided they are uncontaminated, receiving appropriate care prior to removal from site (CIfA 2020b; Walker 1990; Watkinson & Neal 2001). No contaminated finds or samples will be retained. Unstratified animal bones and modern material will not be collected. Selected examples of material that comprise a large quantity of a standard product, such as brick or tile, will be retained for assessment by a specialist.

4.2.16 All archaeological features will be tied into the Ordnance Survey National Grid using survey grade equipment. Sections or profiles through features and stratigraphic sequences will normally be drawn at a scale of 1:10, or 1:20 for long sections, hand drawn plans will be at 1:20 for detailed areas or 1:50 for large area plans. All levels will be related to Ordnance Datum and all plans will be tied to the Ordnance Survey National Grid.

4.2.17 All archaeological deposits and artefacts encountered during the investigation will be fully recorded. Recording will follow the Company's field recording practices appropriate to the archaeology under investigation (ARS Ltd 2020). All archaeological features will be given a separate context number and will be described on pro-forma context or structure sheets. The information given will include details of the context, its relationships, interpretation and a checklist of associated finds and samples. Stratigraphic matrices will be compiled where archaeological sequences can be discerned.

4.2.18 Digital photographs will form the principal photographic record for report purposes and will follow the standards of Historic England where applicable (Historic England 2015a). A photographic record will be maintained by high resolution digital photography. Overall images of the site will be taken prior to excavation. Detailed images of individual features will be recorded. All photographs, except general site images or specific images for publication, will include a north arrow and suitable photographic scale.

Soil Samples

4.2.19 Should environmental deposits be encountered that appear appropriate for sampling, the Client and planning archaeologist will be consulted. One or two bulk soil samples may be collected for rapid assessment by agreement of the Client. Only deposits of clear archaeological origin, with the potential to provide paleoenvironmental evidence, industrial residues, small animal/fish bones, datable charred remains and micro artefacts significant to the site will be considered.

4.2.20 Sampling methods will typically follow guidelines issued by Historic England (Campbell et al. 2011) and will be targeted in order to assess the quality of organic preservation that may be present.

4.2.21 Typically, bulk environmental samples will be collected from contexts that have potential for further analysis. Bulk sample sizes will be 40 litres per context or the entire excavated portion of smaller features if less than 40 litres and collected and stored in sealable buckets.

4.2.22 The application of specialist sampling techniques such as column sampling, geoarchaeological sampling, or samples for scientific dating purposes will be considered where appropriate. If such a variation is required by the LPA, advice from the Historic England Regional Scientific Advisor (RSA) may be sought. Close attention will be paid to retrieve samples that have the potential to contribute to the proposed mitigation objectives.

Human Remains

4.2.23 If any human remains are encountered, they will be investigated sufficiently to confirm identification and then left in situ. They will not be exposed, disturbed, cleaned, or recorded in detail. The Client, local Coroner and the planning archaeologist will be informed immediately upon discovery of human remains by the Project Manager.

4.2.24 If removal is deemed necessary and appropriate on the requirement of the LPA it will be completed following the issue of the relevant Ministry of Justice license in accordance with the relevant legislation and according to the conditions set out therein. Any exhumation will be undertaken following current best practice guidelines (APABE/Historic England 2017; Mitchell and Brickley 2017).

Treasure

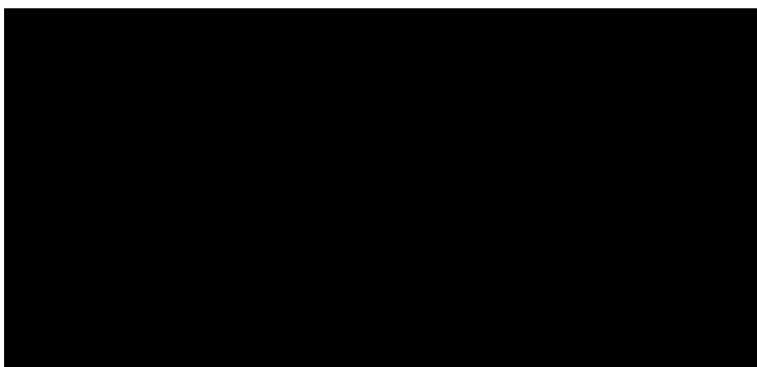
4.2.25 Finds coming under the definition of ‘treasure’ as defined by the Treasure Act 1996 will be reported to the Portable Antiquities Finds Liaison Officer within 48 hours of discovery by the Project Manager and dealt with under the procedures of the Treasure Act and Code of Practice (DCMS 2008). This includes both precious metals and base metals where they are of prehistoric date. Suitable measures will be taken to ensure their security where removal cannot take place (e.g. they are within a human burial).

4.2.26 The planning archaeologist will also be notified and, if necessary, a meeting arranged to determine if further investigation in the vicinity of the find spot is required.

5 MONITORING ARRANGEMENTS

5.1.1 Notice in writing will be given to the Planning archaeologist at MEAS at least one week prior to the start of the archaeological work on the site. Work will not commence until the WSI has been formally approved.

5.1.2 The Planning Archaeologist is:



5.1.3 ARS Ltd will liaise with the planning archaeologist at regular intervals throughout the course of the work to update on progress and results. The Client will afford reasonable access to the planning archaeologist for the purposes of monitoring the archaeological work.

6 VARIATIONS TO THE SCOPE OF WORKS

6.1.1 If an archaeological discovery is made for which the resources allocated to the project itself are not sufficient to support treatment to a satisfactory and proper standard then work in the relevant area will cease until the client and planning archaeologist have been consulted and appropriate resource put in place to meet the necessary disbursements. On occasion this may require a new WSI or an addendum to the approved WSI.

6.1.2 Any variations to the coverage, methodology or scope of works will be made in agreement with the Client and the planning archaeologist.

6.1.3 Variations prior to the commencement of works will be agreed in writing by updating and recirculating the WSI or an addendum. Variations on site will be tracked by the Project Manager as part of the course of monitoring the works.

6.1.4 Additional works that trigger contingency items or extra overs will be notified to the Client and agreed before they are implemented. Where no contingency agreement exists such works will only be implemented where they are reasonably practicable with the resources already available, or unless the Client grants further resource.

7 TIMETABLE, STAFFING AND RESOURCES

7.1.1 ARS Ltd is a Chartered Institute for Archaeologists (CIfA) Registered Organisation. Registered Organisations are regularly assessed to ensure that high standards of work, processes and training are embedded in the organisation, in line with the professional Code of Conduct (CIfA 2021) and the Chartered Institute's Standards and Guidance documents.

7.1.2 The fieldwork will be managed and conducted by a suitably qualified Project Manager and archaeological staff, as necessary.

7.1.3 All staff employed on the project will be suitably qualified and experienced for their respective project roles and will be briefed on the archaeological context of the area and the work required by this specification.

7.1.4 All artefact and sample processing will be undertaken swiftly following the completion of fieldwork whilst archive consolidation and post-excavation analysis of the plans and records are brought together.

7.1.5 Information will be provided to specialists by context and site location, appropriate to the relevant assemblages.

7.1.6 Specialist analysis will be undertaken by the following individuals where needed, subject to availability, and other specialists will be found as appropriate:

Worked flint and prehistoric pottery:

Iron Age/Roman pottery:

Medieval and post-medieval pottery:

Ceramic Building Materials:

Faunal remains:

Plant macros, charred wood, and pollen:
Post medieval objects (clay tobacco pipe, glass, coins etc):



7.1.7 Sufficient time will be given for adequate specialist assessment of the materials recovered, and the production of the accompanying specialist reports. The specialist reports will include a selection of images to illustrate significant finds or to illustrate the general composition of the assemblage.

8 FINDS AND SAMPLE PROCESSING

8.1.1 All finds processing, conservation work and storage of finds will be conducted in accordance with the Standard and guidance for the collection, documentation, conservation, and research of archaeological materials (ClfA 2020b) and the Guidelines for the preparation of archives for long-term storage (Walker 1990).

8.1.2 Artefact collection and discard policies will be appropriate to the contextual and stratigraphic circumstances of the material identified, its quality as a resource and the practicality of retention (e.g. stone gate posts would be photogrammetrically recorded and not retrieved).

8.1.3 Bulk finds worthy of retention will be washed and marked. Bone will only be marked where required by the receiving repository. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed, and recorded.

8.1.4 All small finds will be recorded and appropriately packaged according to context (e.g. lithics in self-sealing plastic bags, ceramic in acid-free tissue paper etc.). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. Ceramics will be bagged by context, whereas small finds such as chipped lithics, coins etc. will be recorded as individual finds by context.

8.1.5 Bulk soil samples taken for environmental purposes will be sieved and scanned during processing by ARS Ltd using the flotation technique to retrieve botanical macrofossils, charcoal and mollusc remains. All the resultant residues will then be hand sorted to retrieve any other items such as bone, flint, and other finds.

8.1.6 During and after the fieldwork, all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information. ARS Ltd undertake controlled storage, correct packaging, regular monitoring, and immediate selection for conservation of vulnerable material as part of the archive process. All storage will have appropriate security provision.

8.1.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum, which in this case would most likely be National Museums Liverpool (Stewart 2016).

9 REPORTING

9.1.1 Following completion of the fieldwork, ARS Ltd will produce a combined report containing the results of the Detailed Historic Research and the Fieldwork that will comprise:

- ◆ Non-technical summary
- ◆ Introductory statement
- ◆ Aims and objectives

- ◆ Method statement
- ◆ Detailed historical and archaeological background of the proposed development area
- ◆ An objective statement of results
- ◆ Specialists' assessments of artefacts and samples, where found
- ◆ Discussion outlining conclusions and significance of results
- ◆ Supporting data – tabulated or in appendices to include
 - Gazetteer of assets, trade directories, census returns, etc compiled from detailed historic research
 - Context information
 - Any stratigraphic information
- ◆ Index to archive and details of archive location
- ◆ Bibliography
- ◆ Confirmation of archive transfer arrangements
- ◆ A copy of this WSI and the OASIS form

9.1.2 The report illustrations will contain the following as a minimum:

- ◆ A location map showing the site in reference to its surroundings with at least four NGR coordinates marked
- ◆ A site plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads and with at least four NGR coordinates marked for reference.
- ◆ Photographs of the proposed development site before work commenced
- ◆ Extracts from relevant historic maps (subject to reproduction rights)
- ◆ Illustrations of all archaeological features with appropriately scaled plans and sections
- ◆ Photographs of the site during the watching brief to illustrate general site appearance and any significant features, even if no archaeological remains are present

9.1.3 A draft report will be submitted to the planning archaeologist for agreement and comment before being issued as a planning document to the client.

9.1.4 A digital copy of the report in PDF/A format will be deposited with the Historic Environment Record (HER). A copy of the report will be uploaded as part of the OASIS record, and a hardcopy will be included in the physical archive.

10 PUBLICATION

10.1.1 Any publication requirements contained within the archaeological planning brief will be reviewed between the Project Manager, Client, and planning archaeologist prior to preparation of the final archive report. A suitable form of publication will be agreed, should publication be deemed necessary, so as to fulfill the needs of the NPPF by making the significant knowledge and understanding gained accessible to the public.

10.1.2 As a minimum publication would be as a c.300-word summary of the project with, if appropriate, selected illustration for inclusion the annual summary of fieldwork in Post Medieval Archaeology. A copy of this summary will also be sent to MEAS. Submission of the summary will occur by March the year following fieldwork completion. This summary is a requirement even if no archaeological remains are encountered during fieldwork.

10.1.3 In the event that significant archaeological remains are encountered there may be the need for more formal publication. The requirement for, and final form of any such publication will be agreed with MEAS and the client and will be proportionate to the results of the fieldwork.

11 PROJECT ARCHIVE

11.1 Archive Selection Strategy

11.1.1 Selection of the working project archive will be guided by the aims and objectives of the project, as set out in this Written Scheme of Investigation.

11.2 Documentary Archive

11.2.1 All original documentary material created and collected during the archaeological works will be selected according to the ARS Ltd Retentions and Discard Policy for inclusion in the final archive. Any duplicates (including photocopies) of original documents will not be included in the final archive.

11.3 Digital Archive

11.3.1 All digital data created over the course of this project will be collected, stored, and selected for final deposition in line with the project's Data Management Plan.

11.3.2 The key types of digital data produced will include:

Type	Data
Text	Digital copies of the WSI and final report
Images	Site photographs, scans of site drawings, report illustrations, digital drawings
Finds data	Finds reports and tables, conservation records, images

11.3.3 Only the final copies of any digital data will be selected and deposited in the final project archive.

11.3.4 Digital data to be included in the final archive will be reviewed during the post-excavation and archiving phase of works. Digital photographs will be assessed and selected in line with Historic England guidelines (Cole and Backhouse 2015). Any data to be excluded from the archive will be removed in accordance with ARS Ltd retention and discard policy.

11.4 Material Archive

11.4.1 The selection of material finds for final deposition in the archaeological archive will be decided in line with the ARS Ltd Retention and Discard Policy during the post-excavation phase. This policy draws on guidance provided by the Chartered Institute for Archaeologists (CIfA 2019). Any items for deselection and disposal will be based on specialist advice and with agreement of the planning archaeologist.

11.4.2 In general, all digital and paper records, drawings, photographs and surveys will be retained together with their background supporting documentation. Artefacts and samples collected in the field will be from secure contexts able to inform the archaeological development of the site. No artefact assemblages will be discarded without following specialist assessment and recommendation to do so. Sieved residues will be discarded following acceptance of the report.

11.4.3 The planned deposition of artefacts will be agreed with the legal owner prior to the works taking place. All finds except treasure trove are the property of the landowner.

11.4.4 No material will be discarded without processing and recording. Deselected material may be retained as part of a handling or teaching collection, returned to the landowner, or discarded.

11.5 Archive Deposition

11.5.1 The archaeological archive will be deposited with National Museums Liverpool (Stewart 2016). Should the archaeological works produce no archaeologically significant finds, then it is not deemed necessary to deposit an archive with the repository museum. ARS Ltd will contact the museum and the planning archaeologist following the quantification and assessment of the archive to confirm and finalise archiving requirements.

11.5.2 Archaeologically significant finds and project archives will be prepared for deposition by ARS Ltd. The archive will comprise the primary record and synthetic works arising from the project, including documents, plans, sections, photographs, and electronic data and an accompanying metadata statement.

11.5.3 High resolution digital photographs will typically be submitted to the Archaeological Data Service (ADS) digital archive repository with the associated photographic registers and metadata. The digital archive will be prepared in line with current best practice (ADS/Digital Antiquity 2011; Archaeological Data Service 2023).

11.5.4 The archive will be deposited in line with industry standards and best practice guidelines (SMA 1993; Brown 2011; ClfA 2020c). In addition, the recommendations of the receiving repository will be adhered to. The archive will be deposited at the next available opportunity agreed with the museum after completion of the report.

11.5.5 All projects have an Online Access to the Index of Archaeological Investigations (OASIS) registration form within the report. All parts of the OASIS online form will be completed for submission to the Historic Environment Record (HER). This will include an uploaded PDF/A version of the entire report. Upon final completion of the project, a final copy of the report will be deposited with the county HER in an agreed format.

12 PUBLICIT Y, ENGAGEMENT AND COPYRIGHT

12.1.1 The Client will manage media publicity. ARS Ltd will not undertake media engagement except where approved and directed by the Client.

12.1.2 Any form of public community engagement, presentations, exhibitions or otherwise lie outside the scope of this WSI. Any such opportunities will by separate agreement of the Client.

12.1.3 ARS Ltd will retain the copyright of all documentary, photographic and video material under the Copyright, Designs and Patent Act (1988).

13 PROFESSIONAL STANDARDS

13.1.1 The project will be managed according to the Historic England guidance for research projects (Historic England 2015b).

13.1.2 As a Registered Organisation Archaeological Research Services Ltd follows the Chartered Institute for Archaeologists (ClfA) Code of conduct (2022). All archaeological works will follow the ClfA Standard and guidance for an archaeological watching brief (2020b).

14 HEALTH AND SAFETY

14.1.1 All works will be undertaken in full compliance with the Health and Safety at Work Act 1974 and with the Management of Health and Safety Regulations 1992.

14.1.2 A risk assessment will be produced before commencement of the work that will be updated and adhered to throughout the course of the project.

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