

ARCHAEOLOGICAL EXCAVATION
UPDATED WRITTEN SCHEME OF
INVESTIGATION

LAND TO THE NORTH OF
NEWTON PARK SERVICES

NEWTON PARK

COATHAM MUNDERVILLE

COUNTY DURHAM

prepared for
Forrest Park

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Client Forrest Park

Location Land to the north of Newton Park Services, Newton Park, Coatham Munderville, County Durham DL1 3NL

Grid Ref NZ 2785 2105

Planning reference DM/19/00283/OUT

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COATHAM MUNDERVILLE, COUNTY DURHAM
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1.0 INTRODUCTION

1.1 This document presents a Written Scheme of Investigation (WSI) for a programme of archaeological excavation ('strip, map and record') of four areas on land to the north of Newton Park Services, Newton Park, Coatham Munderville, County Durham (formerly known as 'Forrest Park'), centred at NGR: NZ 2785 2105 (Fig. 1). The work is to be undertaken in connection with a planning proposal for a new industrial and trade park, with ancillary office space, a hotel, pub, roadside restaurant, retail units, petrol station and associated infrastructure, parking and landscaping (Planning reference DM/19/00283/OUT, approved November 2019).

1.2 Condition 7 of the Planning Consent for the scheme states that

"No development shall commence (other than demolition in accordance with condition 6) until a written scheme of investigation setting out a phased programme of archaeological work in accordance with 'Standards For All Archaeological Work In County Durham And Darlington' has been submitted to and approved in writing by the Local Planning Authority. The submitted information shall include timing/phasing of investigation work and reporting of analysis. Development shall thereafter take place in accordance with the approved details.

Reason: To safeguard any archaeological interest in the site, and to comply with part 16 of the National Planning Policy Framework."

1.3 This document has been prepared by Northern Archaeological Associates Ltd (NAA) for Forrest Park (the Client). The proposed scheme of works has been recommended by Durham County Council Archaeology Section (DCCAS) and has been informed by the results of a desk-based assessment (ASDU 2017) and two phases of evaluation of the site comprising geophysical survey and trial trenching (ASDU 2018; Watson 2018).

- 1.4 The WSI will be submitted to the Client and DCCAS, to ensure that the archaeological evaluation constitutes a scheme of works approved by the local planning authority.
- 1.5 Following the stripping of topsoil within Areas A to D at Newton Park, it became apparent that there was a far greater density of archaeological features in Trenches A and C than had been foreseen by the evaluation and geophysical survey. Following consultation with the DCCAS archaeologist, Trenches A and C are being expanded in order to establish the extent of the archaeological features in these areas. This document represents an updated Written Scheme of Investigation in response to the above.

2.0 LOCATION, TOPOGRAPHY, GEOLOGY

- 2.1 The site consists of a largely rectangular shaped parcel of land located at the southern edge of Newton Aycliffe. The site extends to approximately 55.15 hectares (ha) in area and comprises agricultural fields including the farmstead of Hill House Farm. A small portion of the site (2.4ha), adjacent to the A167, has been recently re-graded and an electricity substation has been installed. The site is bounded by existing industrial and distribution units to the north, the Stockton to Darlington Railway to the west, agricultural fields to the south and a combination of Newton Park Services, the A1(M) and the A167 to the east. An existing access taken off the Newton Park Service Road provides vehicular access. The site is crossed from north-west to south-east by an unnamed stream, which meets a second unnamed stream at the southern site boundary from where the combined flows continue eastwards past Coatham Munderville as a tributary of the River Skerne.
- 2.2 The land within the site varies in elevation from highs of 89m and 92m OD on its northern boundary, sloping down to the stream which lies at 81m OD in the west, descending to 67m OD at the south-eastern corner of the site. To the south of the stream the land rises again, to a maximum height of 88m OD. In the central part of the southern side is a slight spur of land at 87m OD, with the ground falling away to the north, east and south.
- 2.3 Along the south-western part of the site the underlying solid geology comprises Permian dolostone of the Ford Formation. A band of Permian calcareous mudstone of the Edlington Formation extends through the central part of the site and Permian dolomitic limestone of the Seaham Formation is present in the north-east corner. The underlying strata are overlain by Devensian diamicton till (BGS 2021).

3.0 SCOPE OF WORKS

3.1 The proposed works comprise the continuing excavation of two areas totalling c.63,500m² (Fig. 2):

Area A - c.61,000m²

Area C - c.2,500m²

The excavation and recording of Areas B and D have been completed in accordance with the previous WSI (v.2, 25/02/2022).

3.2 Area A is known to contain a square ditched Iron Age enclosure, at least 40 roundhouses and a number of other features including ditches, gullies and pits. The extension to Area C contains ditches and other discrete features.

3.3 The areas shown for work are indicative and not hard boundaries. Should the archaeological features extend beyond these areas, the trench size will need to be increased and further work will be required, in consultation with the DCCAS archaeologist.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Previous work within the development area

4.1 An archaeological desk-based assessment carried out for the proposed development (ASDU 2017) identified that the development area contained a probable enclosed settlement identified from aerial photography. The study concluded that further remains from the later prehistoric and Roman periods might survive within the site boundary and that there was potential for evidence of medieval and post-medieval cultivation to be present.

4.2 Following the assessment, a geophysical survey (ASDU 2018) identified the probable Iron Age or Romano-British farmstead in the southern part of the site (Fig. 2). This was seen to comprise a large square ditched enclosure containing at least one ring-gully, probably representing a roundhouse, and a series of pits. Other geophysical anomalies included a series of possible field boundaries and other features such as pits.

4.3 A second stage of evaluation, comprising excavation of 144 trial trenches, was undertaken by Archaeological Services Durham University (ASDU) in April and May 2018 (Fig. 2). Many of the trenches across the site contained evidence for ridge and

furrow cultivation, former field boundaries and post-medieval land drains. A smaller number of trenches revealed evidence for earlier remains.

Area A

- 4.4 In Area A, Trenches 85-89 targeted the square enclosure and associated features (Fig. 3). In Trench 85 the enclosure ditch contained hand-built pottery and animal bones. This had been recut at least twice, the recuts also containing hand-built pottery. A linear gully and another ditch did not produce finds. In Trench 86 the enclosure ditch again contained animal bones, and there was a smaller parallel ditch, while in Trench 89 the enclosure ditch contained burnt bone. Several other gullies (one of which contained a whetstone, and another tiny pottery fragments and burnt bone) and ditches were also identified in these trenches.
- 4.5 Trenches 87 and 88 targeted a ring-gully and several other geomagnetic anomalies within the enclosure. Trench 87 identified a linear gully containing ironworking residue and two undated pits. In Trench 88 two sections of the ring-gully contained animal bone, large quantities of vitrified clay fragments and concentrations of charcoal. Trench 88 also contained another gully and two undated pits.
- 4.6 Elsewhere in Area A, Trench 74 was crossed by a gully running from east to west which contained hand-built pottery, but the second anomaly proved to be a geological feature. An undated small pit containing large stones was encountered in Trench 78. To the north-east were two parallel gullies which had been truncated by a large ditch containing hand-built pottery and animal bones.
- 4.7 Trench 79 was crossed by an undated linear gully while Trench 81 contained a slightly curving undated ditch. Another ditch investigated in Trench 82 contained a medieval or early post-medieval horseshoe which may have been intrusive. This ditch had been truncated on its south-western side by a second ditch which had in turn been cut by an undated gully terminal, and the earlier ditches and gullies were also truncated by two post-medieval field boundaries. In Trench 84, several linear or curved gullies were identified, one of which contained hand-built pottery while another produced a Mesolithic or early Neolithic flint blade.
- 4.8 A gully terminal in Trench 90 contained fragments of animal bone and a possible dog coprolite. It was cut by a later ditch running on the same alignment. Near the southern end of the trench was another shallow linear gully which had been truncated by a ditch,

while to the south lay another ditch which contained hand-built pottery. Trench 91 targeted a curving gully linear geomagnetic anomaly which had been heavily truncated by a later curving gully. Approximately 2m north-east of the gullies was a large ditch which contained part of a horse mandible. Trench 92 was crossed at the north-eastern end by a linear ditch which had been recut as a smaller gully.

Area B

- 4.9 Trenches 40 and 143 investigated a small ring-gully identified by the geophysical survey (Fig. 3). Trench 51 targeted a sub-circular geomagnetic anomaly. Two parallel gullies c.8m apart corresponded to the anomalies and represented two sides of the ring-gully. No artefacts were recovered from any of these features.

Area C

- 4.10 Towards the north-eastern corner of the site, 48 and 50 identified several features including a small curving gully and three ditches (Fig. 2). No artefacts were recovered from any of these features.

Area D

- 4.11 This is located in the area of Trial Trench 6 which identified two parallel gullies (Fig. 2). No artefacts were recovered and these features remained undated.
- 4.12 Overall, the evaluation produced only a small finds assemblage. Thirty-nine fragments of pottery were assessed. Although the report does not state as much, this pottery appears to have been hand-built and was suggested to have been of Late Iron Age or Romano-British date although such material is notoriously difficult to date and could be earlier; nevertheless, it remains the best indicator of the main period of early occupation within the site. An abraded fragment from a beehive quern would be consistent with a Late Iron Age or early Romano-British date. Other artefacts included two residual worked flints of probable Late Mesolithic or Early Neolithic date and a naturally-shaped pebble which had been used as a sharpening or rubbing stone. A fragment of an iron horseshoe was probably of medieval or early post-medieval date. Several excavated contexts also produced fragments of fired clay some of which may have come from a structure such as an oven.
- 4.13 Poorly preserved faunal remains were sparsely distributed within ditch and gully fills. Species represented included cattle and horse, and a possible dog coprolite was also

found. Twenty-two soil samples produced a small assemblage of charcoal and charred plant remains. The charcoal came from oak, heather, hazel, alder and holly. Crop remains included barley, indeterminate cereal grains and chaff of spelt wheat, while hazelnut shells indicated exploitation of wild resources. Weeds included redshank, ribwort plantain, grasses, vetches, bedstraws and buttercups, heath-grass, false oat-grass and a possible pignut tuber.

Archaeology in the wider locality

Early prehistoric

- 4.14 The earliest evidence for occupation within the general area comprises Mesolithic struck flints found during excavations at Faverdale Business Park c.4km south of the current site (NZ 274 176; Proctor 2012), and more Mesolithic finds have been recovered along the course of the River Skerne to the east. Evidence from pollen cores taken from peat deposits in the Skerne valley indicates small-scale tree clearance during the Neolithic (4th millennium BC) with more extensive deforestation in the Bronze Age (2nd millennium BC), and cereal pollen occurred shortly after (Bartley, Chambers and Hart-Jones 1976). The excavations at Faverdale Business Park found three stone-lined cist burials of possible Bronze Age date (Proctor 2012).
- 4.15 Two Early Bronze Age cremation burials, one associated with Early Bronze Age flint tools, were found during excavations in advance of construction of the Hitachi rail plant c.1km north-west of the current PDA (Churchill 2014).

Iron Age

- 4.16 Until recently, few Iron Age settlement sites had been excavated in County Durham compared to neighbouring areas of Northumberland and North Yorkshire, although commercial and research projects are gradually reducing this disparity. Iron Age rectilinear enclosures similar to that at Newton Park have been investigated at West Brandon, Coxhoe West House, Strawberry Hill, Dene House Farm West and Old Cassop (Mason 2021, 10). In addition, increasing numbers of unenclosed Iron Age settlements are being discovered. These are generally considered to pre-date the enclosed sites (ibid) although some of the enclosed sites in north-east England have been shown to have in turn reverted to unenclosed settlement prior to the Roman invasion, as at Thorpe Thewles near Stockton (Heslop 1987).

- 4.17 Several Iron Age sites have been excavated in the area to the south and west of the current PDA. Excavations at Rise Carr c.5km to the south (NZ 282 168) revealed evidence for a Middle-Late Iron Age enclosed settlement which did not appear to continue into the Roman period (CFA Archaeology 2013). An evaluation undertaken by NAA at Burtree Lane, Darlington, c.3km to the south of the current site (at NZ 286 179) identified intercutting ditches containing hand-built pottery of Iron Age or Roman date together with several curving gullies probably representing roundhouses (NAA 2016).
- 4.18 The excavations at Faverdale Business Park (NZ 274 176) showed that in the Late Iron Age, an unenclosed settlement included at least nine roundhouses and an associated field system (Proctor 2012).
- 4.19 Closer to the current PDA (c.1km to the north-west), two previously unknown Late Iron Age settlements were discovered on what subsequently became the Hitachi site during an evaluation in 2002 (NAA 2002) and these were fully investigated prior to construction of the train plant in 2014. The smaller southern settlement was severely truncated by later agricultural activity. However, the larger northern settlement had comprised 11 structures and associated features (Churchill 2014). The settlement was contained within an extensive complex of ditched enclosures.

Romano-British

- 4.20 Although there is widespread evidence for Romano-British settlement and agricultural activity in County Durham (Mason 2021), there is relatively little known about this period from the vicinity of the current development. The main evidence comes from Faverdale East Business Park, where the Late Iron Age field system gradually evolved and by the 2nd century AD a rectilinear enclosure system had been established associated with multiple structures (Proctor 2012). These included stone buildings possibly representing a villa, a bathhouse with underfloor hypocaust and a possible shrine. A cobbled road surface and an inhumation cemetery were also found.
- 4.21 At the Hitachi rail factory, c.1km north-west of the current site, intrusive and unstratified Romano-British finds suggested continued occupation of the landscape into the 2nd century AD although no specifically Romano-British features were identified (Churchill 2014).

5.0 STANDARDS AND GUIDELINES

5.1 The methodology contained in this WSI is based upon NAA's previous experience of undertaking similar work and with reference to the following published standards and guidelines of practice:

- *Standards for all Archaeological Work in County Durham and Darlington* (Durham County Council Archaeology Section 2017, revised 2021);
- *Conserving and Enhancing the Historic Environment* (NPPF Planning Practice Guidance 2014);
- *Standard and Guidance for Archaeological Excavation* (ClfA 2014a, updated 2020);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b, revised 2020);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015a);
- *Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment* (Historic England 2015b);
- *A Strategy for the Care and Investigation of Finds* (English Heritage 1995);
- *Conservation Principles, Policies and Guidance: For the sustainable management of the historic environment* (English Heritage 2008); and
- *First Aid for Finds* (Watkinson and Neal 2001).

6.0 AIMS AND OBJECTIVES

6.1 The planned development will have an adverse impact on any surviving archaeological remains within the PDA. Given the known archaeological remains within the PDA, it is considered that there is a high potential for previously unrecorded heritage assets of prehistoric to post-medieval date to be present in within the investigated areas. The following aims and objectives have therefore been compiled in accordance with the relevant archaeological research agenda (Petts and Gerrard 2006) to mitigate the potential loss of any and/or all heritage assets present.

6.2 The main purpose of the archaeological excavations is to investigate and record any archaeological remains that may be adversely impacted by construction of the development. The main objectives are to:

- provide a detailed record of the archaeological remains that may be present within the area of the development in advance of their loss through the proposed works;
- recover and assess any associated structural, artefactual and environmental evidence;
- undertake a programme of post-excavation analysis, to make the results of the archaeological works accessible via an illustrated report and, if appropriate, to undertake further analysis and publish the results in a local, regional or national journal;
- deposit the results of the work with the County Durham HER, the County Durham Archaeological Archives (CoDAA) and the Archaeology Data Service; and
- undertake a scheme of work that meets national and regional standards (Historic England 2015a; South Yorkshire Archaeology Service 2018).

Research themes

- 6.3 The work at Newton Park has the potential to contribute to a number of research themes set out in the North East Regional Research Framework (NERRF) (Petts and Gerrard 2006).

Mesolithic

- 6.4 Given the presence of evidence for Mesolithic/Early Neolithic activity within the site (in the form of struck lithics), relevant research priorities for this period include:
- Miv: The Mesolithic/Neolithic transition;
 - Mv: Mesolithic lithics in the North-East; and
 - Mvii: Activity and occupation sites in the wider landscape.

Neolithic and Early Bronze Age

- 6.5 Apart from the two flints of probable Late Mesolithic/Early Neolithic date, the main evidence identified so far which could be of Neolithic or Early Bronze Age date comprises the undated pits identified in several parts of the site. Despite small pits being, both in the North East and nationally, the most common type of structural evidence for the period they do not constitute a significant focus in NERRF. Recent research just to the south of County Durham in lowland North Yorkshire has demonstrated that the great majority of these discrete features are likely to be of early prehistoric date (Mesolithic, Neolithic or Bronze Age). Although commonly dispersed across the landscape, collectively these features can provide an important insight into changing patterns of

landscape exploitation through time (Speed 2021). Other research themes in NERRF to which the excavations could contribute include:

- NBiii: Monumentality (with reference to the nearby barrows);
- NBv: Material culture (general); and
- NBvii: Material culture: ceramics.

Late Bronze Age and Iron Age

6.6 There is currently no later Bronze Age evidence from the PDA. Iron Age (or probably Iron Age) evidence is extensive and includes a ditched settlement enclosure, roundhouses, probable field boundaries, pits, gullies, a quernstone, a modest pottery assemblage and faunal and plant remains. Relevant research themes include:

- li: Chronology;
- lii: Settlements;
- liii: Changing landscapes;
- Iv: Material culture: general; and
- Ivi: Material culture: ceramics.

Roman

6.7 There is currently no clear evidence for Roman period activity within the site. Should it be demonstrated that any of the settlement features or field system continued in use, relevant research priorities laid out in NERRF which the current project could contribute to include:

- Riv: Native and civilian life;
- Rv: Material culture;
- RiX: Landscape and environment; and
- Rx: Roman-early medieval transition.

Anglo-Saxon/early medieval

6.8 There is currently no evidence for early medieval activity within the site. Should it prove possible to demonstrate that any of the boundary features within the site either originated or continued in use into the early medieval period, this could inform the research theme:

- Emi: Landscape.

Later medieval and post-medieval

6.9 The main evidence present within the site consists of evidence for agriculture, in the form of furrows from ridge-and-furrow cultivation, boundary and drainage ditches. Potsherds are likely to have been spread across the landscape by manuring. The geophysical survey (ASDU 2018) has provided an important record of the medieval and post-medieval agricultural landscape of the site; excavation is likely to add detail. Relevant research priorities are:

- MDii: Landscape;
- MDvii: Medieval ceramics and other artefacts; and
- MDxi: The medieval to post-medieval transition.

7.0 METHODOLOGY

7.1 Recent guidance from DCCAS indicates that information included in the *Standards for all Archaeological Work in County Durham and Darlington* (2021) no longer needs be repeated in WSIs prepared by contractors. In the following section the presumption is that methods detailed in the Standards will be employed unless stated otherwise.

Topsoil and subsoil stripping and excavation

7.2 Mechanical stripping of topsoil and subsoil from the trenches will be carried out in accordance with the guidelines laid out in the Standards.

7.3 Following initial stripping of each area, a measured survey will be made of the archaeological features visible. Once this survey has been carried out, NAA will supply initial site plans of the archaeology to the client and DCCAS in order to determine at an early stage whether any variation to the proposed evaluation strategy is likely to be necessary, and to minimise the need for site meetings. Sample excavation and recording of all visible archaeology will be required. This will be carried out in accordance with the guidelines laid out in the Standards.

7.4 Hand excavation of selected archaeological features will be undertaken to fulfil the aims and objectives of this WSI. This is intended to record all significant archaeological features on the site and to undertake sufficient excavation to enable the date, character, form and stratigraphic relationships to be understood. The excavation strategy will depend on the nature of any archaeological remains present and will be discussed and

agreed with the client and DCCAS prior to commencement. It is anticipated that the following level of sample excavation will be required:

- 100% of features of a ritual and ceremonial nature (including burials);
- 10–50% sample (minimum 1m length) of domestic and settlement related linear features, depending on their nature and significance;
- 50% of discrete features (such as pits and postholes) as a minimum, though some will be 100% excavated to confirm function or for ease of excavation (in the case of small features);
- 10–20% sample (minimum 1m length) of the overall length of non-settlement-related linear features, such as medieval or earlier field boundaries, depending on their nature and significance; and
- 5% sample (minimum 1m length) of the overall length of linear features of lesser archaeological significance such as post-medieval or later boundary ditches.

7.5 Excavation of linear features will target intersections to enable the relationship between components to be established. Additionally, all terminals or interruptions of linear features will be investigated. Other types of archaeological deposits such as flint scatters, hearth sites, areas of industrial activity, areas of waterlogged preservation, etc. will be excavated and sampled as appropriate. If present, such special deposits and features will be excavated in line with the Standards, and specialist advice will be sought.

7.6 Site recording and recovery of finds will follow the guidelines set out in the Standards.

Scientific sampling

Environmental sampling

7.7 Forty-litre bulk soil samples will be taken from appropriate deposits and submitted to the named environmental specialist for assessment of environmental potential. This will include charcoal, small bones, cereal grains, molluscs and macro-environmental material. Particular attention will be paid to the recovery of samples from any waterlogged deposits that may be present. Recovery and sampling of environmental

remains will be in accordance with published guidelines (English Heritage 2011). The Historic England Science Advisor for the North East will be invited to visit the site if significant or unusual deposits are revealed, which may have potential to hold important environmental or functional information.

- 7.8 In the event that well-preserved faunal remains are discovered, there will be hand collection of large mammal bones, and bulk samples will be taken to retrieve smaller assemblages. The bulk samples will be used to investigate the frequencies and identities of bird and fish bones, and to investigate the relative frequencies of bones of different species (ameliorating size-based biases in hand-recovered collections).

Date sampling

- 7.9 Secure contexts will be sampled for dating as appropriate (whether on site or as subsamples of processed bulk samples). For different periods and features, dating methods might include radiocarbon (C-14) dating, archaeomagnetic dating, optically stimulated luminescence (OSL) and dendrochronological dating (should suitable waterlogged timbers be located).
- 7.10 It is anticipated that the primary means of absolute dating will be radiocarbon dating within a Bayesian model at the post-excavation stage. If suitable deposits are found, sampling for archaeomagnetic dating will be discussed in advance with the Historic England Science Advisor, and will take into account the strengths and weaknesses of this method. Samples for dendrochronological dates (if appropriate) will be taken either on site or from recovered timbers by a relevant specialist in accordance with published guidelines (English Heritage 1998). Samples will be processed after post-excavation assessment.
- 7.11 Where appropriate, sampling strategies will be reviewed in consultation with the environmental and botanical specialists and the Historic England Science Advisor for the North-East.

8.0 POST-EXCAVATION REPORTING

- 8.1 On completion of the excavation, an assessment of the results will be carried out and a report will be prepared in accordance with national guidance (Historic England 2015a; Association of Local Government Archaeological Officers 2015), even if no archaeological remains are found. The report will include the following:

- a summary of the project's results;
 - national and regional policy context;
 - location, geology and topography;
 - methodology and data sources;
 - archaeological and historical background;
 - a summary of all previous archaeological investigations at the site and their relevance to the current work;
 - a site narrative describing the results of the works;
 - an assessment of the stratigraphic, written, drawn and photographic records;
 - a catalogue and post-excavation assessment of each category of artefact recovered by the works, where required (including a conservation assessment);
 - a catalogue and post-excavation assessment of all palaeobotanical and/or industrial residue material;
 - summary reports of all scientific dating procedures and other analyses carried out;
 - a summary of the significance of the recovered evidence and potential for further analysis, if appropriate;
 - an assessment of the potential, extent and significance of archaeological remains;
 - a bibliography;
 - an appendix containing a list and summary description of all contexts recorded; and
 - a summary of the contents of the project archive and its location.
- 8.2 The report will be accompanied by plans, sections and photographs as appropriate.
- 8.3 A draft assessment report will be submitted to the client, and DCCAS no later than nine months after fieldwork completion.
- 8.4 If further analysis is required, an Updated Project Design will be produced in accordance with national and regional guidance (English Heritage 2008, Annex 2; ClfA 2014b, updated 2020; Historic England 2015a). The Updated Project Design will be submitted to the Client and DCCAS no later than 1 year after the completion of fieldwork, and will include a timetable for the further works to be implemented.
- 8.5 Should the site investigations produce results of sufficient significance to merit publication, allowance will be made for the preparation and publication of a summary

in a suitable journal such as the Durham Archaeological Journal. An associated task list, work programme and timetabling for publication will be included in the Updated Project Design.

- 8.6 Any amendment to the timetabling of the stages of work presented above, or those detailed in the Updated Project Design will be agreed in writing by the relevant parties (Client and DCCAS) before the deadlines have passed.

9.0 PROGRAMME OF WORK

- 9.1 The excavation started in mid-January 2022. The exact sequence and duration of continuing site works has not, at this stage, been agreed.

10.0 ARCHIVE

- 10.1 The site archive will contain all the data collected during the investigative work, including records, artefacts and environmental samples. It will be quantified, ordered, indexed, and internally consistent.

- 10.2 Adequate resources will be provided during fieldwork to ensure that records are accurate and internally consistent.

- 10.3 Archive consolidation will be undertaken immediately following the conclusion of archaeological fieldwork. As part of this work:

- the site record will be checked, cross-referenced and indexed as necessary;
- all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
- all retained finds will be assessed and recorded by suitably qualified and experienced staff using pro-forma recording sheets. Initial artefact dating will be integrated with the site matrix; and
- all retained environmental samples will be processed by suitably experienced and qualified staff and recorded using pro-forma recording sheets.

- 10.4 The archive work will be prepared in accordance with national guidelines (Brown 2011; ClfA 2014c, updated 2020). In addition to the site records, artefacts, environmental remains and other sample residues, the archive will contain:

- site matrices, where appropriate;

- a summary report synthesising the context record;
 - a summary of the artefactual record; and
 - a summary of the environmental record.
- 10.5 The integrity of the primary field record will be preserved. Security copies will be maintained where appropriate.
- 10.6 In determining which material will form part of the archive, the ClfA Archive Selection Toolkit will be used (available online at <http://cifa.heritech.net/selection-toolkit>).
- 10.7 The archiving of any digital data arising from the project will be undertaken in a manner consistent with professional standards and guidance (Archaeology Data Service/Digital Antiquity 2011). Preparation of the digital archive will follow policy, guidance and procedures issued by the Archaeology Data Service (2020), Historic England (<https://historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt-toolkit/>) and DigVentures (<https://digventures.com/projects/digital-archives/>). NAA is actively working to prepare a data management plan, but the document is not yet available.
- 10.8 An OASIS form will be compiled for each stage of reporting of the work (assessment, analysis etc). These will include submission of a pdf version of each report to the Archaeology Data Service via the OASIS form. The form will be submitted following approval of the report by DCCAS.
- 10.9 In accordance with *National Planning Policy Framework* (MHCLG 2021), a copy of all reports and the full site archive will be deposited with the CoDAA at Sevenhills, Spennymoor, subject to the agreement of the landowner with respect to the finds. Deposition will be in accordance with written guidelines on archive standards and procedures (ClfA 2014c, updated 2020). NAA will liaise with the CoDAA curator regarding requirements in ordering, boxing and labelling the archive. The archive will be maintained by NAA until deposition with CoDAA.

11.0 STAFFING

Key staff

- 11.1 NAA's Associate Director ensures the maintenance of quality standards within the organisation and will have overall responsibility for the project. A Project Manager will

oversee the day-to-day execution of the project and be the main point of contact with the client and DCCAS. A Post-excavation Officer will be responsible for the materials arising from the excavations and the programming and production of the assessment report. A Project Officer, assisted by a Fieldwork Supervisor, will be responsible for the excavation and recording, and for writing the report on the results of the work. NAA field staff and any subcontractors as may be required will be employed on the excavation fieldwork. All NAA field staff possess degrees in archaeology or related disciplines and have a minimum of three years' practical experience.

11.2 The senior staff employed by NAA on this project will be:

- Andrew Crowson, Technical Director (Quality and project delivery);
- David Fell, Associate Director (Overall project management);
- Cath Ross, Project Manager (Day-to-day project management);

11.3 The project officer, supervisor and excavation staff will be selected closer to the start date for the fieldwork.

11.4 NAA reserves the right to change its personnel at any time should project programmes change.

Subcontractors

11.5 The analysis and reporting of artefacts and ecofacts will be co-ordinated by NAA and will be undertaken by NAA staff, or nominated subcontractors drawn from the list below (Table 2) as required. Each of the nominated NAA staff and subcontractors has a proven record of expertise in their field of study and has previously provided reports for NAA. Material assemblages will be studied only if they have come from secure contexts and/or are relevant to answering specific questions on activities at the site, consumption and the site environment. Further details are available on request.

Table 2: NAA finds and environmental staff and subcontractors consulted by NAA.

Material	Name	Institution/Organisation
Early prehistoric pottery	Dr Alex Gibson	Freelance
Later prehistoric pottery	Dr Chris Cumberpatch	Freelance
Roman pottery	Ian Rowlandson	Freelance
Samian ware	Dr Gwladys Monteil	Freelance
Medieval/post-medieval pottery	Charlotte Britton Dr Chris Cumberpatch	NAA Freelance
Anglo-Saxon pottery	Dr Gareth Perry	University of York

Material	Name	Institution/Organisation
Ceramic building materials	Chrystal Antink	NAA
Small finds and glass	Julie Shoemark Alex Croom	NAA Freelance
Lithics	Barry Bishop	Pre-Construct Archaeology
Industrial material/metalworking	Rod Mackenzie	Freelance
Ferrous metalworking	Rod Mackenzie	Freelance
Coins	Julie Shoemark	NAA
Querns	John Cruse	Freelance
Inscriptions and graffiti	Dr Roger Tomlin	University of Oxford
Leather	Quita Mould	Freelance
Textiles	Dr Margarita Gleba	University of Cambridge
Conservation and x-ray	Karen Barker	Freelance
SEM-EDS	Durham Archaeomaterials Research Centre	Durham University
OSL	Dr Eric Andrieux	Durham University
Radiocarbon dating	Scottish Universities Environmental Research Centre	Universities of the Scottish Consortium
Human bone	Malin Holst	York Osteoarchaeology
Animal bone	Dr Julia Cussans	Freelance
Fish bone, molluscs	TBC	
Charcoal and charred plant remains	Palaeoecology Research Services	

12.0 COPYRIGHT AND PUBLICITY

- 12.1 Northern Archaeological Associates shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive license to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification or Design subject to due acknowledgement.
- 12.2 Northern Archaeological Associates will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79).
- 12.3 Northern Archaeological Associates will also grant license to the repository accepting the archive and Historic Environment Record held by DCCAS to use such documentation for their statutory and related functions and to provide copies to third parties as an incidental to such functions.

- 12.4 Paragraph 205 of the NPPF (2021) states that there is a requirement for ‘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’. As part of this, public engagement and interpretation where possible should be considered in order to advance public understanding and appreciation of the historic environment.
- 12.5 During the archaeological investigations, no publicity will be entered into concerning the results of the work without the express consent of the client. On completion of the works, NAA reserves the right to include a short summary of the project’s conclusions and selected images on its website and for use in promotional and marketing material, unless expressly requested not to do so by the client.

13.0 ACCESS, HEALTH AND SAFETY

- 13.1 NAA expects the client to arrange suitable safe access to the site for its staff, equipment and welfare facilities on the agreed start date.
- 13.2 Reasonable access to the site on the basis of prior notification will be granted by NAA to representatives of DCCAS and of the client who wish to be satisfied, through site inspections, that the archaeological works are being conducted to appropriate professional standards and in accordance with the agreements made. DCCAS will be kept informed of progress and notified of the discovery of any unexpected or important archaeological remains.
- 13.3 In advance of works commencing, NAA will prepare and submit a Health and Safety Risk Assessment and Method Statement to the client. All NAA staff will be briefed on the contents of the Risk Assessment and required to read it. Personal protective clothing and equipment (a minimum of safety helmets, reflective jackets and safety boots) will be worn at all times. The excavation staff will be provided with first-aid boxes, an accident book and a mobile telephone.
- 13.4 NAA will ensure that all work is carried out in accordance with NAA’s Health and Safety Policy, to standards defined in the *Health and Safety at Work, etc. Act, 1974* and *The Management of Health and Safety at Work Regulations, 1999*, and in accordance with the latest health and safety advice from the Federation of Archaeological Managers and Employers (www.famearchaeology.co.uk).

- 13.5 NAA has a Covid-19 Policy and complies with legislation, codes of practice and guidance in relation to Covid-19. NAA will provide copies of all company Health and Safety-related policies on request.
- 13.6 All NAA personnel will be in possession of a Construction Skills Certification Scheme (CSCS) card and a relevant Health and Safety qualification. NAA Project Officers have certified Emergency First Aid at Work training. Appropriate personal protective clothing and equipment will always be used.
- 13.7 The client will provide NAA with all information reasonably obtainable on the location of live services including overhead utilities before site works commence.
- 13.8 Whether or not CDM regulations apply to this work, NAA expects the client to provide information on the nature, extent and level of any soil contamination present. Should unanticipated contaminated ground be encountered during the works, excavation will cease until an assessment of risks to health has been undertaken and on-site control measures implemented. NAA will not be liable for any costs related to the collection and analysis of soils or other assessment methods, on-site control measures, and the removal of contaminated soil or other materials from site. In case of contaminated soil, it may be necessary for NAA to produce a revised Risk Assessment and/or adapt the agreed WSI in consultation with the client and DCCAS.
- 13.9 Should any disease restrictions be implemented for the area during the excavation, fieldwork will cease, and staff will be redeployed until they are lifted. NAA will not be liable for any costs related to on-site disease control measures or for any additional costs incurred to complete the fieldwork after the restrictions have been removed.

14.0 QUALITY STANDARDS

- 14.1 All staff employed or subcontracted by NAA will be required to operate in line with the Chartered Institute for Archaeologists' Code of Conduct (CIfA 2014d, revised 2019). The archaeological work will be carried out in line with the relevant standards and guidance from CIfA (2014a, b and d).
- 14.2 NAA operates under a recognised Quality Management System certified to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

14.3 Provision will be made for monitoring the work by the client and DCCAS in accordance with the procedures outlined in *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015a). Monitoring opportunities for each stage of the work are suggested as follows:

- upon receipt of the WSI;
- during archaeological excavation;
- during post-fieldwork processing;
- upon receipt of the report on the archaeological project; and
- upon deposition of the integrated archive and finds with CoDAA.

15.0 INSURANCE

15.1 NAA maintains the following insurance and further details can be supplied on request.

Employers' Liability	£10,000,000	Aviva Insurance	UN/000593
Public and Products Liability	£5,000,000	Aviva Insurance	UN/000593
	£5,000,000	Zurich Insurance	PC003360
Professional Indemnity	£5,000,000	Hiscox Underwriting	PL-PSC10002387623/00

15.2 Northern Archaeological Associates will not be liable to indemnify the client or any third party against any costs, compensation or damages for or with respect to:

- Damage to crops, structures, etc., being on the site which is the unavoidable result of the site operations being carried out in accordance with the agreed scope of works;
- The use or occupation of land (which has been provided by the client) for the purpose of carrying out site operations (including consequent losses of crops), or interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi-easement which are the unavoidable result of the site operations being carried out in accordance with the agreed scope of works;
- Damage to the site which is the unavoidable result of the site operations in accordance with the agreed scope of works;
- Removal or remediation in respect of the disturbance or exposure of hazardous waste or other hazardous substances including but not limited to asbestos; or

- Injuries or damage to persons or property resulting from any act of neglect or breach of statutory duty done or committed by the client or his agents, servants or their contractors or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.

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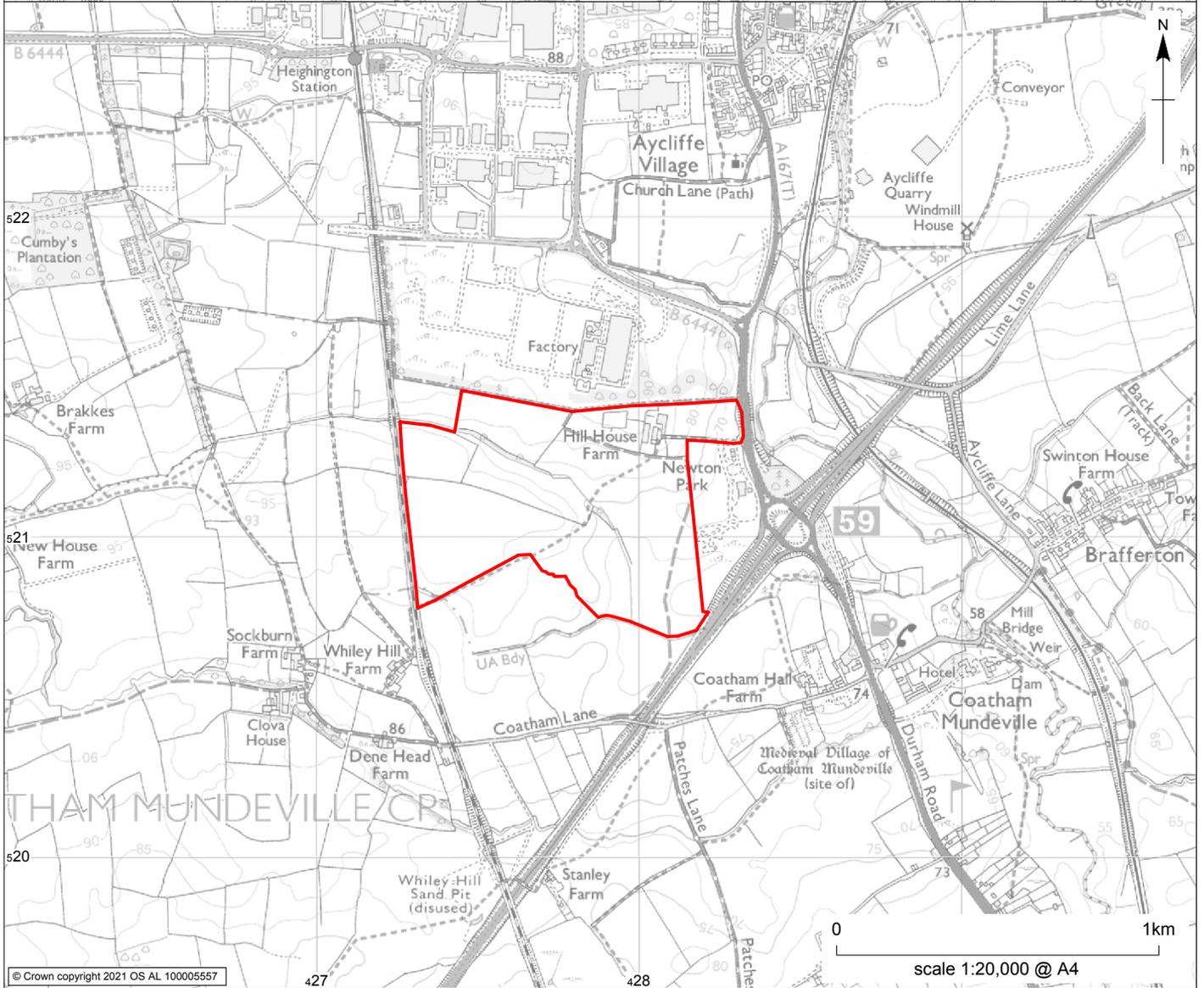
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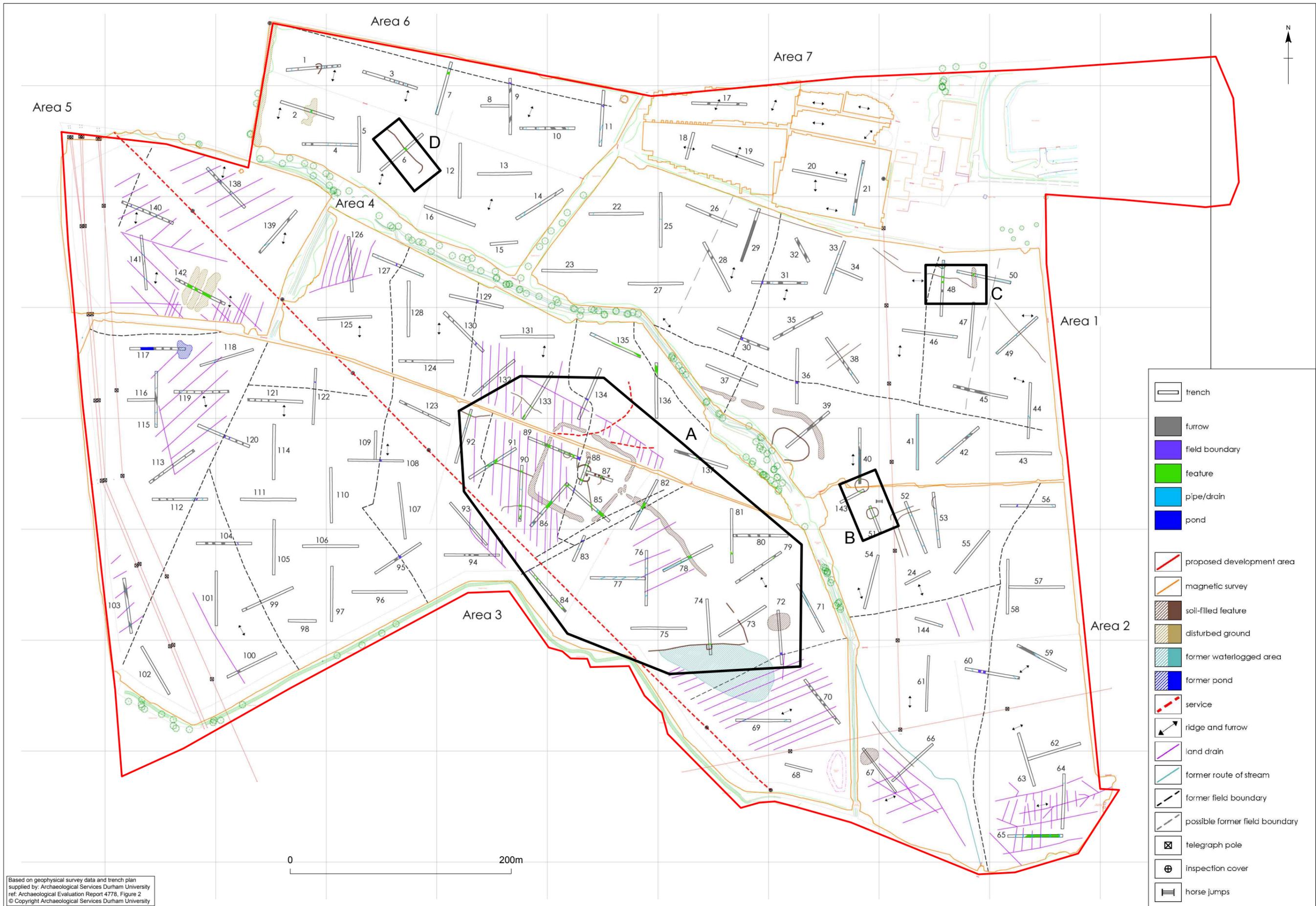
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Land to the north of Newton Park Services: site location

Figure 1

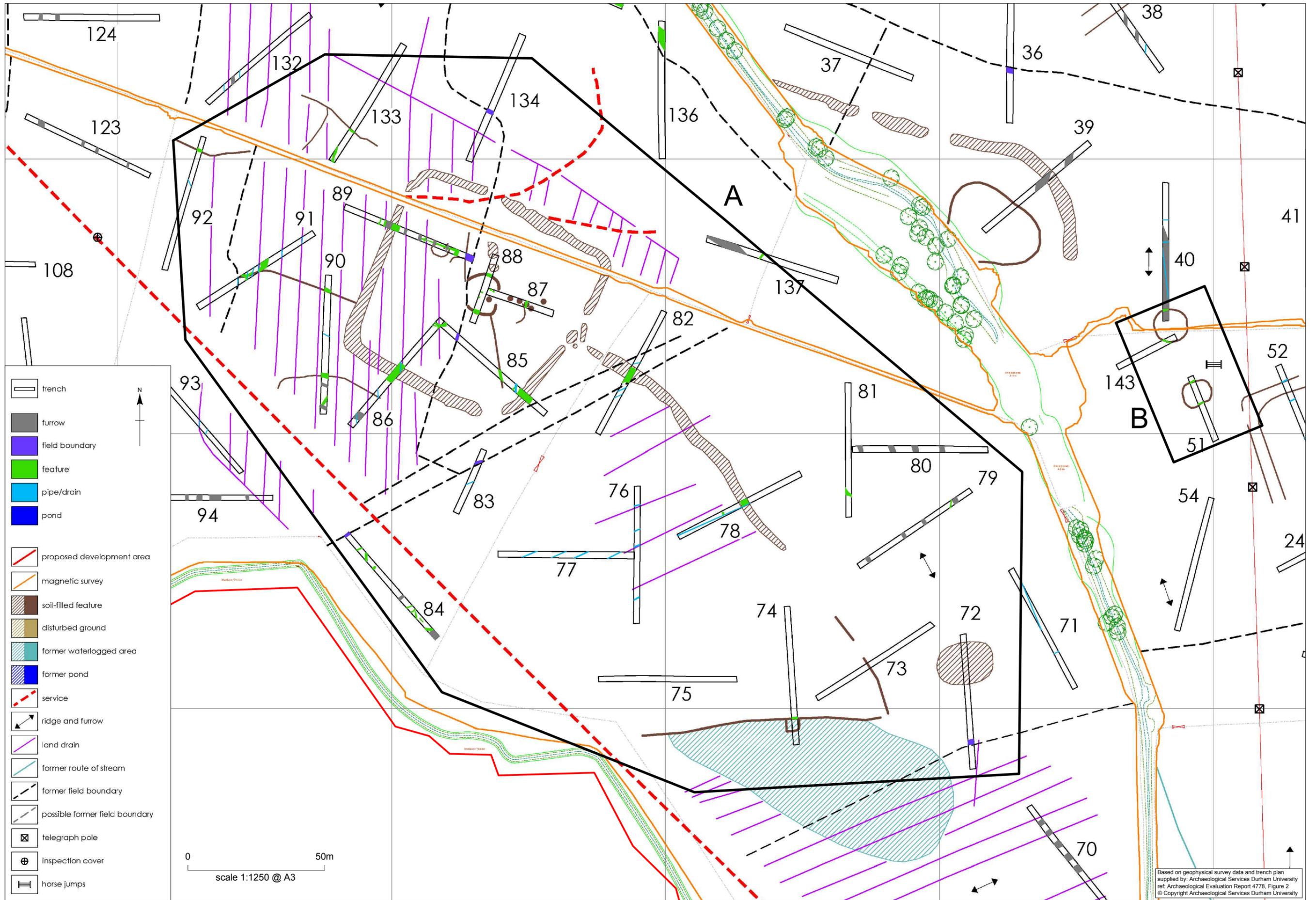


Based on geophysical survey data and trench plan supplied by: Archaeological Services Durham University ref: Archaeological Evaluation Report 4778, Figure 2 © Copyright Archaeological Services Durham University

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Land to the north of Newton Park Services: proposed excavation areas A-D (black outline) overlain on plan showing geophysical survey interpretation and trial trenching results

Figure 2



Land to the north of Newton Park Services: detail of proposed excavation areas A and B

