

**BARTON LINK ROAD, LAND OFF CAISTOR ROAD, BARTON  
UPON HUMBER, NORTH LINCOLNSHIRE:  
Written Scheme of Investigation for archaeological mitigation**



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K. Steedman and P. Connelly (19th December 2024; revised 14th January 2025)

## **1 SUMMARY**

- 1.1 The purpose of this written scheme of investigation is to present an archaeological strategy for archaeological mitigation through excavation on land off Caistor Road, Barton Upon Humber, North Lincolnshire in advance of construction by North Lincolnshire Council of the Barton Link Road.
- 1.2 Humber Field Archaeology have been appointed to undertake the work following submission of a tender to Ove Arup & Partners Limited, acting for North Lincolnshire Council.
- 1.3 Two excavation areas totalling 2.1ha are to be excavated in the corridor affected by construction of the new road at its junction with Caistor Road, on the south-eastern side of Barton, the areas having been defined following earlier desk-based assessment, geophysical survey and trial trenching evaluation.
- 1.4 Following completion of the fieldwork, an interpretative report, including post excavation assessment, publication and a project archive will be produced.

## **2 INTRODUCTION**

### **2.1 Background**

- 2.1.1 This written scheme of investigation has been produced by Humber Field Archaeology (HFA) following their appointment to undertake excavation as archaeological mitigation in advance of construction by North Lincolnshire Council (NLC) of the Barton Link Road, on the south-eastern side of Barton Upon Humber, North Lincolnshire (Planning application reference PA/2023/1981). The archaeological work has been commissioned to satisfy the requirements of Conditions 8-10 on planning permission for the new highway granted 6<sup>th</sup> September 2024.
- 2.1.2 Following submission of a tender in response to an archaeological specification (Specification for Archaeological Mitigation; ref. NLC01-ARP-EHR-LR-SP-LH-050002, 31<sup>st</sup> July 2024), produced by Ove Arup & Partners Limited (Arup) on behalf of NLC, HFA have been appointed to undertake the archaeological excavation of two areas (totalling 2.1ha) which will be affected by construction of the new road at its junction with Caistor Road, south-east of Barton. The areas were defined following earlier desk-based assessment, geophysical survey and trial trenching evaluation carried out or commissioned by Arup.
- 2.1.3 The written scheme of investigation (WSI) has been produced to set out the methodologies and approaches which HFA will adopt in execution of the required archaeological mitigation, covering the on-site work through to production of a post-excavation assessment report, archive production and an Updated Project Design (UPD) for any subsequent analysis and/or dissemination. Production of the WSI and its submission for approval to the local planning authority (NLC) satisfy the requirements of Condition 8 on the planning permission. No work can commence on site until the WSI has been approved in writing by the local planning authority, advised by the Council's Archaeologist.
- 2.1.4 The archaeological excavations are currently planned to commence in January 2025. In line with Condition 9 on the planning permission, at least 10 days' notice of the start date must be given in writing by the applicant to the North Lincolnshire Historic Environment Record (NLHER) and the local planning authority, with the programme of archaeological works thereafter being carried out as per the approved Arup Specification for Archaeological Mitigation and this WSI.
- 2.1.5 As further specified in Condition 9, the new road shall not be opened until the post-excavation assessment is complete, the local planning authority has approved the UPD, and until any further analysis work as set out in the UPD has been commissioned, including provision for the publication and dissemination of results and archive deposition.

2.1.6 Condition 10 requires that copies of any end-products of the programme of archaeological mitigation (analysis, reporting, publication, or archiving) shall be deposited at the NLHER, the archive at the North Lincolnshire Museum and reports submitted to the Archaeological Data Service within 24 months of the commencement of the archaeological programme of work, or another period as agreed in writing by the local planning authority.

## **2.2 Site location and geology**

2.2.1 The two proposed areas of excavation (approximate centre TA 0436 2069) lie at the southern end of the planned new Barton Link Road, at its junction with Caistor Road (see Fig. 1, reproduced from the Archaeological Specification).

2.2.2 The excavation areas occupy agricultural land under arable production lying west and east of a small triangular wooded area and a hedge boundary extending north from it. The smaller area (Area A), a roughly rectangular area of c. 0.4ha, lies around 30m north of the wooded area, set back from Caistor Road by 35m, while Area B, a roughly triangular area of c. 1.7ha, extends east and south-east from the edge of the wood along the field edge bordering Caistor Road.

2.2.3 The areas overlie superficial geological deposits of Devensian Till, over bedrock of the Burnham Chalk Formation (British Geological Survey Geology Viewer; accessed December 2024). Topsoil in the immediate area comprises freely draining slightly acid but base-rich soils (Soilscape 7; LandIS® Soilscales Viewer; accessed December 2024).

## **2.3 Archaeological background/pre-mitigation assessments**

2.3.1 A number of episodes of archaeological assessment have taken place prior to this mitigation stage, undertaken or commissioned by Arup, the results of which provide an archaeological baseline for the mitigation. Summaries of these were included in the Archaeological Specification (Arup 2024) and the text of these summaries have been reproduced below in order to provide context to the work proposed; references cited are listed in the Bibliography.

### *Desk-Based Assessment (Arup 2023)*

2.3.2 The historic environment baseline includes a very large number of heritage assets, including 227 designated heritage assets within a 3km study area. There is only one previously recorded heritage asset within the site – which is the alignment of a former carriageway which connected Caistor Road to Barrow Hall, a Grade I listed building approximately 2.4km to the east of the site. However, the density of archaeological remains of all periods in the surrounding area and evidence from aerial imagery and geophysical survey indicated that there are likely to be archaeological remains within the site beyond any remains of the carriageway.

2.3.3 Prior to the current scheme, the site had been subject to geophysical survey at its northern extent as part of both a 2006 tranche of works (Gardner & Bunn 2006) and a more recent survey carried out in advance of a proposed housing development in the northern part of the site (Magnitude Surveys 2022). The 2022 survey identified possible archaeological features, in the form of historic field systems and double ditch trackways, to the immediate west of the site boundary. A number of features of undetermined origin (natural, agricultural or archaeological) were also noted. Follow up trial trenching (PCAS Archaeology 2022) encountered a lower level of archaeological remains than had been anticipated based on the results of the geophysical survey. The majority of anomalies targeted by the trenching were not identified, suggesting that differential weathering and natural fissuring of the chalk geology had impacted the quality of the survey results. A known post-medieval field boundary was investigated, as were three linear features, a possible penannular ditch and horse-shoe shaped ditch. Aside from the field boundary, all features were notably shallow indicating that the level of the site is likely to have been lowered by soil erosion and long-term ploughing

*Geophysical survey (ASWYAS 2023)*

2.3.4 The geophysical survey identified anomalies within the site which were considered likely to indicate the presence of archaeological remains. A possible ring ditch was visible in the northern part of the site, within the area of the previous Strata Homes evaluation but not previously examined through trial trenching. In the southern part of the site there was a clear double linear feature, possibly the remains of the prehistoric and Roman road recorded to run through this location. There are a series of rectilinear enclosures aligned along the road, potentially a Roman or Romano-British roadside settlement.

*Surface artefact collection and metal detecting (Allen Archaeology 2024)*

2.3.5 Prior to undertaking trial trenching, systematic fieldwalking and surface artefact collection was carried out across the site using a 10m grid. A metal detecting survey was carried out at the same time. Seventeen artefacts were collected through this process, although there were no obvious concentrations.

2.3.6 A single sherd of medieval Humberware pottery (dating between 1250-1550 AD) was found towards the north end of the route and a copper alloy strap end, also medieval, was found towards the south end. However, the artefacts were predominantly post-medieval in date, including part of a horseshoe, pottery and clay tobacco pipe, a button and several small metal objects which included a lead plumb-bob, copper alloy a button and copper alloy thimble.

*Trial trenching evaluation (Allen Archaeology 2024)*

2.3.7 A trial trenching evaluation of twenty-seven 50 x 2m trenches, three 30m x 2m trenches, three 10m x 10m trenches and one 5m x 5m trench was undertaken in February-March 2024, totalling approximately 3205m<sup>2</sup>. The trenches

included those targeting geophysical anomalies and others targeting blank areas.

- 2.3.8 Two parallel ditches were identified in several trenches in the southern part of the site, running roughly parallel to the current Caistor Road. Although less strongly indicated from the geophysics than other features, this feature was of considerable depth (exceeding the maximum excavation depth of 1.3m in places). However, presence of a layer of colluvium overlying the archaeological features in the central and southern parts of the site may have obscured it in the geophysics results.
- 2.3.9 Artefacts found within the parallel ditches suggest their origin was in later prehistory, although an earlier date is possible due to the presence of an early Neolithic flint blade and a small amount of Middle Bronze Age pottery. However, the majority of the pottery (88.1%) dates from the Iron Age, with some 2<sup>nd</sup> - 3<sup>rd</sup> century AD Roman pottery indicating continued use into the Roman period. In the central part of the site a ditched enclosure was excavated, plausibly contemporary with the parallel ditches but more likely a later addition, perhaps in the Roman period. Although no direct evidence of settlement was found, the parallel ditches are similar to 'multiple ditch systems' found elsewhere in the region which date to the Late Iron Age, and are often associated with other activity. The pottery and animal bone found suggests that domestic rubbish was dumped into the ditches and environmental evidence, including cereal and charcoal, show farming activities in the vicinity.
- 2.3.10 The central and northern parts of the site had very limited evidence of archaeological features. No evidence was found of the possible ring ditch in the northern area and only one feature, an undated shallow gully was identified in the central area. The plough soil depth in these areas is relatively shallow, which may mean that archaeological features have been lost to ploughing with the faint traces within the geophysics results reflecting a magnetic 'shadow' of a ploughed out feature.
- 2.3.11 The evaluation confirmed both the presence of archaeological features and 'blank' areas suggested by the geophysical survey. From this, a high confidence can be had in the results of the geophysical survey for the areas beyond the evaluation trenches, although the depth of colluvium recorded in the southern part of the site could mean that there are more features than those identified to date.

### 3 PROJECT OBJECTIVES AND RESEARCH FRAMEWORK

#### *Specific project objectives*

3.1.1 The results of the geophysical survey and trial excavations highlighted the archaeological potential of the site of the planned mitigation. Long parallel ditches were recorded, pottery recovered from them predominantly being of an Iron Age date, though finds of Roman pottery perhaps indicate continued use of the ditches for several centuries, as well as the addition of a rectangular enclosure to the ditch alignments. Small quantities of Middle Bronze Age and Anglo-Saxon pottery were also recovered from the ditch fills, suggesting activity of those periods in the vicinity. The features were observed and recorded in narrow trial trenches, so stripping and examination of larger areas around the trenches, with the removal of overlying colluvial layers, will potentially uncover further details of the ditches and any intervening features.

3.1.2 Specific objectives of the archaeological mitigation, informing the excavation approach, will be to:

- Further establish the presence or absence of archaeological remains within the area of investigation, characterise their depth and extent, establish the degree of preservation of any archaeology and environmental remains and investigate sufficient samples to establish their date and function;
- Characterise and interpret the linear ditch alignments, recover further dating evidence to enhance and refine the chronological sequence of the ditches and their re-cuts;
- Determine the nature and extent of any Roman/Romano-British features, including establishing the dating of any later enclosures added to the ditch alignments;
- Establish the nature and extent of any activity of Middle Bronze Age date (including the potential for burials), activity of this date having been suggested by recovery of pottery from linear ditch fills during the evaluation;
- Establish the nature and extent of any activity of Anglo-Saxon date (including the potential for burials), activity of this date having been suggested by recovery of pottery from linear ditch fills during the evaluation;
- Establish if evidence of the post-medieval carriageway, or other features associated with Barrow Hall, survive within the investigation area;
- Evaluate the likely impact of past land uses, and the impact which the presence of masking deposits (e.g. colluvium) will have on the survival of features and their subsequent archaeological “visibility”;
- Help determine the effectiveness of remote-sensing techniques (in this case geophysical survey) as a predictor of archaeology.

#### *Regional research framework*

3.1.3 It is imperative that high quality research is carried out as part of the mitigation process. The archaeological mitigation on the Barton Link Road will take place

within the area covered by the East Midlands Archaeological Research Framework (Research Frameworks 2024). Frameworks such as this help to coordinate and focus research, informing the establishment of research questions which will help to fill gaps in current knowledge.

3.1.4 On the basis of the results of the evaluation, the Archaeological Specification (Arup 2024, 9-10) included a non-exhaustive list of research questions from the framework’s research agenda which were considered likely to be appropriate; in addition, HFA have included further questions considered potentially relevant and have added observations based on the earlier evaluation report; see Table 1.

3.1.5 Note that the research objectives will be kept under review. During the excavations, they will be reviewed in response to discoveries being made on site, while assessment during the post-excavation assessment stage of the excavation results and the excavated finds and environmental assemblages may generate further research questions. The Updated Project Design will list all research questions or topics considered relevant to the proposed analysis and dissemination stage works.

**Table 1:** Research questions derived from the research agenda in the East Midlands Archaeological Research Framework (2024), with observations by HFA

Period	Overarching agenda theme	EMARF Questions	HFA Observations Based On Evaluation Report
NEOLITHIC AND EARLY TO MIDDLE BRONZE AGE	3.1 Dating	3.1.2: How can we date more precisely the various regional styles of Neolithic and earlier Bronze Age pottery?	-----
	3.3: Introduction, character and development of agriculture	3.34: When did the first field and boundary systems develop, how did this vary regionally and what processes may underlie their development?	Middle Bronze Age pottery recovered from the parallel ditches that run E-W across the site could suggest that the boundary system has an origin in the MBA, though at least some of this MBA material is residual (for example fill 2610 also contains Anglo-Saxon pottery). Therefore, further clarity required on this aspect during the open area excavation.
	3.4 Exploitation of different landscape zones	3.4.3: Can we further refine our knowledge of the selective use of particular landscapes for ritual, agriculture and other activities?	The parallel ditches appear to roughly follow the 40m contour potentially defining higher ground from the lower valley that runs SE from Barton to Barton Vale (roughly, although not quite, following the line of Caistor Road -see here: <a href="#">Georeferenced Maps viewer - Map images - National Library of Scotland</a> ). Is this alignment the

Period	Overarching agenda theme	EMARF Questions	HFA Observations Based On Evaluation Report
			consequence of MBA agricultural practices or territorial markers?
	3.9 Raw material resources and exchange networks	3.9.2: How far may petrographic and other scientific analyses contribute to our understanding of systems of ceramic production and distribution?	-----
LATE BRONZE AGE AND IRON AGE	4.1: Dating	4.1.2: How can we refine further the ceramic chronology of the first millennium BC?	Chowne suggests that the pottery from fill 2305 in the northern parallel ditch (providing 88% of the overall IA assemblage recovered during the evaluation) can be assigned to the Middle Iron Age (c.300-150 BC) (Allen Archaeology 2024, 20-21). Fill 2305 appears to be a consistently tight upper (closing?) deposit and its further excavation and study may contribute to this refinement.
	4.6: Field systems and major linear boundaries	4.6.1: Can we shed further light upon the development of field and boundary systems?	The MIA date from fill 2305, with a larger fill 2304 stratigraphically below it, may suggest that the northern ditch, at least, has its origins in the first half of the Iron Age (the MBA pottery may be residual) or even earlier. A tighter date for accumulations in the ditch will contribute to answering this question in part, balanced by topographical observations.
		4.6.2: What were the economic, social or political roles of the pit alignments and linear ditch systems that characterised many areas of the East Midlands	-----
		4.6.3: What may we deduce from studies of linear boundaries with respect to changes in the agrarian landscape	The two roughly E-W aligned parallel ditches running across the site may suggest the route of a drove track, or define the northern edge of one. If they have a EIA origin this would suggest the start of a transition from open landscape to an enclosed landscape, which may be led by agrarian landscape change – to be investigated further. Although badly fragmented with a high degree of unidentifiable bone, further excavation and analysis of fill 2305

Period	Overarching agenda theme	EMARF Questions	HFA Observations Based On Evaluation Report
			(and similar) may contribute to this discussion.
	4.7: Ritual and structured deposition and religion	4.7.1: What is the nature of structured deposits in this region and may sub-regional patterns or trends be discerned?	-----
		4.7.3: How many studies of boundaries within, around and between settlements contribute to analysis of structured deposits?	-----
	4.8: The agricultural economy and landscape	4.8.2: How may diet and land-use have varied over time and between different ecological zones? Can we identify specialist pastoral zones and elucidate coastal resource exploitation strategies?	This site could contribute to this research question but it requires a greater synthesis of landscape data at a greater resolution.
	4.10 Social relations and society	4.10.2: What may further analyses of burials and of settlement architecture and morphology contribute to studies of social and political organisation?	-----
ROMANO-BRITISH	5.1: Chronology	5.1.1: How can we enhance our knowledge of developing pottery industries, particularly during the Conquest period and 3rd to 4th centuries?	2 <sup>nd</sup> to 3 <sup>rd</sup> century Roman pottery has been recovered from this site, predominantly from fill 2204 of the southern parallel ditch. Recovery of a larger assemblage from this site (if extant), in conjunction with tightly defined fills, may contribute to this research question.
	5.4: Rural settlement patterns and landscapes	5.4.4: How did field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time?	Interesting observation from the evaluation: Chowne puts fill 2305 of the northern parallel ditch in the MIA (300-150BC), whereas Beasley dates the pottery recovered from fill 2204 in the southern ditch to 2 <sup>nd</sup> – 3 <sup>rd</sup> centuries AD (ibid., 28). Taking into consideration the happenstance of field evaluation, the difference of c.250 years between these two deposits suggest that the two ditches may not be contemporary (placement of the southern ditch perhaps informed by a traceable alignment of the northern ditch

Period	Overarching agenda theme	EMARF Questions	HFA Observations Based On Evaluation Report
			fossilised in the landscape as an earthwork) or these two ditches are accumulating waste material over a long period of time and a ditch sequence cut in the EIA/MIA (putting aside a BA origin for the time being) continues to be used though the 3 <sup>rd</sup> century AD. This sequence/narrative plays into this research question.
	5.5: The agricultural economy	5.5.4: Can we chart more closely the processes of agricultural intensification and expansion and the development of field systems?	The potential increase of enclosure ditches to the north of the two large parallel ditches may help address this question. The animal bone and environmental data recovered from ditch fill 2204 suggests that there is potential in the archaeological assemblage to contribute to this research question, but only if contrasting earlier deposits survive equally as well (as suggested by fill 2305).
	5.6: Artefacts, production, distribution and social identity	5.6.3: How may studies of the production, movement and consumption of pottery contribute to understanding of the regional economy?	This site could contribute to this research question but it requires a greater synthesis of the regional landscape data at a greater resolution.
	5.7 Roads and waterways	5.7.3: To what extent may communication routes have been influenced by Late Iron Age settlement patterns and routes of movement?	See observation against 5.4 which applies to this as well.
EARLY MEDIEVAL	6.6 Industry, trade and the emergence of a monetary economy	6.6.6: Can additional fabric analyses clarify further the production and distribution of Anglo-Saxon pottery, particularly that produced in Charnwood Forest?	The A/S pottery recovered in the evaluation was positively identified as Charnwood fabric. There is potential therefore that further discoveries of this material (and/or other A/S fabrics) and their subsequent analysis could contribute to this research question.

## 4 STANDARDS AND QUALITY

### 4.1 Standards and guidance

- 4.1.1 All archaeological excavation and recording will conform to the standards outlined by the Chartered Institute for Archaeologists (CIfA) Standard for archaeological excavation (CIfA 2023a) and Universal guidance for archaeological excavation (CIfA 2023b).
- 4.1.2 HFA's work is aligned with CIfA's Code of conduct: professional ethics in archaeology (Oct 2022) and Professional conduct (July 2024).

### 4.2 Quality Control

- 4.2.1 HFA have a Quality Statement (*Humber Field Archaeology: Achieving Quality Through Excellence*) which was supplied as part of the tender documentation. HFA's Quality Statement is underpinned by Hull City Council's Five Values, which are People First; Ambition; Respect; Partnership; and Learning. Hull City Council is also an Investors In People employer.
- 4.2.2 Humber Field Archaeology (HFA) is a professional services and community engagement/public benefit archaeology and heritage provider. The quality of our services relies on the quality of our staff; the data and artefacts that are gathered by them; the way in which we store data and artefacts; and how we disseminate that data to clients, the public and other stakeholders. To achieve our quality assurance we employ an iterative process that combines four key elements: Learning, Leadership, Alignment & Measures.
- 4.2.3 Our quality management structure for projects covers the following topics:
- Tendering & Project Numbering;
  - Project Resourcing, Risk Assessments and Method Statements;
  - Project Set Up and Live Projects;
  - Project Monitoring;
  - Completion of Fieldwork and Record Review;
  - Implementing Post-Excavation, Resourcing and Monitoring;
  - Draft Report Review;
  - Report Sign Off and Distribution;
  - Archive Integrity, Consolidation and Deposition;
  - Large Project Review & Lessons Learnt.
- 4.2.4 The quality management system extends to sub-contractors, specialists and their services. At the project planning stage the quality of a suitable subcontractor/specialist is verified. Organisations and individuals not on HCC's suppliers list will be vetted, using HCC's internal quality system, before being added to the verified suppliers list. HFA can only use vetted suppliers on HCC's suppliers list.

**4.2.5** Further project specific checks, carried out by HFA, in addition to the financial checks carried out by HCC, may include verifying that the sub-contractor has their own Quality Control Policy, H&S Policy (if they have over 5 employees), Environmental Policy, evidence for staff competencies, staff handbook and associated staff policies, etc.

## 5 METHOD STATEMENTS

### 5.1 Archaeological excavation

#### *Excavation areas/site establishment*

- 5.1.1 The Archaeological Specification (Arup 2024, 5) defined the location and extent of two excavation areas totalling approximately 2.1ha (see Fig.2). Setting out of the excavation areas and the red-line site boundary will be undertaken by HFA staff using survey-grade GPS equipment from co-ordinate data provided by the client. Where site grids are required in excavation areas they will be set out by HFA staff and tied into the Ordnance Survey national grid.
- 5.1.2 The site compound will be enclosed by Heras-type fencing and the excavation areas will be enclosed by the appropriate style of fencing. The compound will be situated immediately to the east of Area B, with access from Caistor Road (via an existing field entry). The compound will contain site accommodation, welfare and staff and visitor parking. Access for excavation plant to the site will also be from Caistor Road via an existing field entry by Area B. The compound will be overlooked by a mobile CCTV security rig for security purposes.
- 5.1.3 Before site mobilization and erection of fencing, an Ecological Clerk of Works appointed by HFA will conduct checks for nesting birds and other species as required; should affected species and nesting sites be identified, then precautionary working method statements will be prepared by the Ecologist and exclusion zones agreed.
- 5.1.4 It will also be necessary to identify, from the Landscape Design for the scheme, any trees or hedgerows which are intended to be retained. Demarcation of such will then take place by taping/fencing off and their avoidance will be highlighted in site inductions for all staff, sub-contractors and visitors. This work will be the responsibility of HFA staff as part of the site set-up.

#### *Soil stripping and storage*

- 5.1.5 Topsoil (and subsoil where present) will be removed from each area by 360° tracked mechanical excavator(s) fitted with a toothless ditching bucket, under direct archaeological supervision. Soils will be removed in spits of no more than 200mm depth and care will be taken to make the surface excavated as smooth as possible to aid the identification of archaeological remains. Machine excavation will proceed until the top of the archaeological deposits are reached or undisturbed natural deposits are encountered.
- 5.1.6 The machine excavation will be constantly monitored by an experienced archaeologist. The mechanical excavator will not be allowed to track over any areas until they have been inspected and cleared by the archaeological team.
- 5.1.7 In the southern part of the site, in Area B, a subsoil layer beneath topsoil was identified as a possible colluvium which could potentially mask earlier archaeological remains; where necessary an experienced geoarchaeologist will

be engaged to assist in the identification of this as colluvium. It will be important to be confident that the presence or absence of any such buried archaeological remains has been established and an appropriate record made of them before Area B is signed off as completed. The intention is that the colluvium will be treated as a subsoil and will be stripped off across the whole excavation area before excavation by hand commences. Photographic and drawn records presented in the April 2024 evaluation report present a good record of the nature and extents of the colluvium and this will be used to guide the site strip. The evaluation record illustrates that the colluvium seals all of the known archaeology and does not appear to separate one period of archaeology from another and therefore full excavation of the colluvium in one phase of closely supervised machine stripping is intended. In areas where a significant depth of the subsoil colluvium layer is present and where its depth precludes its full removal as part of the overall soil strip, discussion will take place with the Council's Archaeologist and the Client's Advisor (Arup) as to the implementation of suitable means of investigation and recording in these areas, whether, for instance, by test-pitting or hand- or power-driven augering/window sampling, in order to help artefact recovery and further inform understanding of the site sequence. Methodologies for use of auger equipment can be found below.

- 5.1.8 Soils will be transported using dump trucks and stored in areas within the red-line boundary, alongside excavation areas or over them, the latter being either prior to stripping or following completion of archaeological investigations. Separate topsoil and subsoil heaps will be maintained in each location. Space for soil storage is available to the north of the excavation area, within the red-line boundary, but the use of this space would require passing beneath a low-level overhead power line. If spoiling to the north of the overhead power line is required, suitable mitigation measures, including the installation of overhead cable goalposts, would be implemented. In order to entirely avoid any risks and restrictions potentially involved in the movement of plant into the area north of the power line, however, and to maximise the areas available for temporary soil storage nearer to the investigations, a staggered excavation approach is proposed below. *Note that this approach for soil management will very likely be adjusted and amended on the basis of changing site conditions and evolving site requirements, as well as following on-site discussions with the Council's Archaeologist.*
- 5.1.9 The staggered approach will involve excavation of Area B in two tranches, initially targeting its northern end. During the previous trial excavations, the highest concentrations of finds – principally pottery and animal bone, potentially indicative of nearby settlement activity – came from the trenches cut in the northern part of Area B. For this reason, it is planned to strip and investigate the northern third (approximately) of Area B first, considered to be the “busiest” area archaeologically, with stripped soil being stored to the north, in the area

east of Area A and south of the power line; if needed, soil will also be stored to the south within Area B. Upon completion and sign off of the investigated area, any soils stored within Area B will be used to partially backfill the investigated area, allowing the remaining areas further south in Area B to be stripped and investigated. The soils from the southern part of Area B will be stored at the northern end, partially over the investigated area (where backfilled), extending the heaps lying to the north southwards. Composite drone imagery will be used to enable full pictures of Area B to be created despite its staggered excavation.

5.1.10 The aim will be to keep the mechanical stripping team working constantly. Work in Area A will therefore be programmed in when necessary to permit this; it is planned for soils stripped from Area A to be stored to the west (with an appropriate stand-off area from the Caistor Road boundary). The timing of work in Area A would also be affected should appointment of the Main Contractor and establishment of their compound take place during the HFA period of investigation.

5.1.11 Soil from hand-excavation of archaeological features will be transported manually (by wheelbarrows, buckets) for storage with the subsoil heaps. Small heaps of hand-excavated soils – no more than 3.5m across – can be sited along the eastern/north-eastern strip of land (around 7m wide) between the edge of Area B and the red line. These will be re-instated ahead of placement of the stored subsoils.

5.1.12 Soil storage will be in line with DEFRA's Code of Conduct for the Sustainable Use of Soils on Construction Sites; although it is envisaged that the soil heaps will be in place for a relatively brief period of time, compaction and contamination will be prevented by appropriate means. No material will be placed on top of heaps, nor will plant track over them.

#### *Feature identification and recording*

5.1.13 Once the archaeological horizons have been revealed, all further excavation will be carried out by hand by qualified and suitably-experienced archaeologists. The stripped area will be cleaned using hand tools and then metal-detected to allow archaeological features, structures and finds to be identified, after which features will be investigated through hand-excavation. Excavated spoil will be regularly checked for finds and metal-detected. Metal-detection of exposed features in stripped areas will be carried out promptly and routinely to reduce impact of unauthorized detectors ("night-hawkers") should the site become a target.

5.1.14 All features present will be recorded in plan and/or section to establish the stratigraphic sequence and all archaeological features will be investigated, being either fully excavated or sampled-excavated, as follows:

- All features relating to burial or other ritual activity will be fully excavated;

- All fills/layers with potential for detailed scientific analysis and/or dating (e.g. post hole fills or features associated with industrial activity) will be fully excavated;
- All structural remains, such as wall foundations roundhouse drop gullies, and beam slots; as well as features including industrial/domestic hearths, ovens and similar will be fully excavated;
- All terminals and junctions of linear features will be fully excavated to retrieve stratigraphic relationships;
- Fifty percent (minimum) will be excavated of the fill of remaining features, such as pits;
- Twenty percent (minimum) will be excavated of linear features along their length (each slot a minimum 1m sample section)

5.1.15 Investigative slots across the long ditches which cross the site will generally be positioned at regular intervals along the ditches in order to comply with the required excavation percentage of 20% by length. In one case, however, there is a need to revisit the area of a trench (Trench 23) from the earlier evaluation, in order to attempt the comprehensive excavation of a particular ditch fill. This will require relocation of the earlier ditch and the excavation of areas either side of the earlier trench in order to determine the extent of the relevant deposit and enable more extensive investigation and sampling of the significant pottery and animal bone assemblages present.

5.1.16 Where the safe excavation of particularly deep features does not prove possible, practicable or desirable though means such as the expansion of trenches and the stepping-in of trench sides, recourse to augering (hand or machine) may be required to enable determination of the depth of such features and the sampling of their lower deposits for finds recovery and/or palaeoenvironmental investigation.

5.1.17 All archaeological features will, at a minimum, have an individual context record completed on an appropriate *pro-forma* record sheet. In addition to the context record sheet, used for cut features and deposits, separate *pro forma* recording sheets are available for human burials and structures. Context records will be entered onto an MS Access database, either on site or in the HFA offices.

5.1.18 Planning/survey of features will involve use of survey-grade GPS in three dimensions, tied into the Ordnance Survey national grid, supplemented where appropriate with accurate measured hand-drawn 1:20 (or even 1:10) plans of areas of complex intersecting features and of features such as burials (animal and/or human). Local grids, tied into the Ordnance Survey national grid, will be established as necessary.

5.1.19 Where appropriate, trench edges, exposed soil sequences and sections of sample-excavated features will be cleaned and drawn (as well as photographed), usually at a scale of 1:10, or on some occasions, 1:20. The level of features or

deposits relative to Ordnance Datum will be measured using survey-grade equipment.

5.1.20 A photographic record will be maintained using high-resolution digital photography. Each photograph will include an appropriate scale, north arrow and a header board detailing (as a minimum) the site code and context/feature number. Appropriate record photographs will also be taken to illustrate work in progress. A database of photographic images will be maintained.

5.1.21 Digital image files, survey data and databases created on site will be transferred and copied regularly (at least weekly) on to the HFA network in our offices in Hull; the network is maintained and managed by the IT section of Hull City Council, ensuring frequent and regular file back-ups and operation to industry standards. A site-specific plan for digital management will be prepared in line with the Dig Digital toolkit (Historic England, ClfA and DigVentures 2019).

#### *Use of auger equipment*

5.1.22 Deeper soils at the southern end of Area B may need to be investigated through hand- or power-driven augering, while it is also possible that augering will be required where the safe excavation of particularly deep features is not possible. This work will be carried out by external specialists, in this case York Archaeology Geoarchaeology Team. The following augering methodology has been supplied York Archaeology.

5.1.23 Hand augered holes will be located using GNSS and undertaken using an Eikjelcamp gouge auger. Samples will be recovered using a Russian head attachment.

5.1.24 Machine window sampling holes will be located using GNSS and undertaken by a tracked terrier rig supplied with a qualified operator. The cores will be recovered in 1m plastic liners which will be split open and recorded on site. The holes will be backfilled with the arisings and topped up with bentonite where required. where possible samples for micromorphological and molluscan assessment will be taken from exposed sections through the colluvium.

5.1.25 The deposits will be recorded by a geoarchaeologist using the Troels-Smith (1955) system of sediment classification. The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are darkness (Da), stratification (St), elasticity (EI), dryness of the sediment (Sicc) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) and a stratigraphic breakdown of the deposits will be recorded on proforma log sheets.

- 5.1.26 The logs will be supplemented by digital photography carried out using a DSLR with a minimum sensor size of 10 megapixels. All photography will adhere to Historic England guidance for Digital Image Capture and File Storage (HE 2015b). Graduated metric scales of appropriate lengths will be used, ensuring the use of vertical scales used against deep sections in combination with horizontal scales. Digital photographs intended for archive purposes will comply with AAF and ADS guidance (i.e. high quality non-proprietary raw files (DNG) or TIFF images).
- 5.1.27 A number of complete cores, to be agreed as part of the sampling process, will be retained for sub-sampling at YA facilities. The sampling will follow procedures set out within the Historic England Guidelines for Environmental Archaeology and Geoarchaeology (HE 2011 and HE 2015a). Cores will be subsampled at measured intervals for palynological assessment and radiocarbon dating. Should waterlogged wood be encountered species identification will be carried out with reference to Schweingruber (1990) and Schoch (2004). The consideration of preservation within the deposits will be made with specific reference to Historic England's guidance document for Preserving Archaeological Remains (HE 2016).

#### *Completion of excavation and re-instatement*

- 5.1.28 The Main Works Contractor is anticipated to be appointed during the archaeological excavation programme and they will take control of the site following completion of the archaeological work and its signing off by the Council's Archaeologist.
- 5.1.29 If the main contractor has not been appointed, however, the site may need to be re-instated, and a cost for this was included as an option in the HFA tender.
- 5.1.30 On completion of the excavations, spoil heaps (subsoil and topsoil) will remain in areas at the northern end of the site, west of Area A and east of Area B. If reinstatement is required, the soils from there will be distributed into the completed investigations areas across the site. Replacement of subsoils will be followed by topsoil. Soils will be transported using dump trucks and will be distributed across the excavation areas and tracked in using a bulldozer.

## **5.2 Finds recovery and processing**

- 5.2.1 Artefacts encountered during the investigation and sample-excavation of features will be collected and grouped according to their context. The processing of the collected finds, principally their cleaning, marking, bagging and recording, will take place either on site, in HFA offices or a combination of the two.
- 5.2.2 Finds encountered will be recorded to professional standards using recognised procedures and numbering systems compatible with the accessioning system employed by the recipient museums service (North Lincolnshire Museum

Service). Recording, marking and storage materials will be of archive quality. A site-specific accession number/site code will be agreed with the relevant museum service (North Lincolnshire Museum Service) before commencement of the fieldwork.

- 5.2.3 Finds of particular interest— *i.e.* those other than bulk finds such as animal bone, pottery or ceramic building materials — will be allocated a Recorded Find number, and information such as their location in three dimensions and their description will be entered onto an appropriate *pro forma* sheet; finds such as these may require specialised treatment or storage conditions.
- 5.2.4 The approach and strategy will be informed by the ClfA *Toolkit for recording archaeological materials 2024* (<https://www.archaeologists.net/toolkits/finds-recording>). The collection, recording, analysis and conservation of artefacts and ecofacts collected during the archaeological fieldwork will comply with the ClfA *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2020a). Materials will be cleaned and packaged to recognised standards including *First Aid for Finds* (Watkinson & Neal 1998 (revised 2001)).
- 5.2.5 Any artefacts recovered which fall within the scope of the Treasure Act 1996 and the subsequent Treasure (Designation) Order 2002 and Amendment Order 2023 will be reported to the Council's Archaeologist, NLC, Arup and the North Lincolnshire Finds Liaison Officer immediately. Such finds will be removed to a safe place after careful recording; where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft. All subsequent works will take account of the relevant legislative requirements.
- 5.2.6 Where possible, identification or examination of finds concurrent with the fieldwork – such as spot-dating of pottery – will allow interpretations of objects to be developed and refined on site, as well as potentially informing excavation approach or method.

### **5.3 Human remains**

- 5.3.1 If human remains are encountered, it is anticipated that all will be fully excavated, recorded and subsequently lifted. A licence for their exhumation has been obtained from the Ministry of Justice to permit this; the licence (Licence Number 24-0336; issued 16<sup>th</sup> December 2024) expires on 15<sup>th</sup> December 2029 and any remains are to be deposited in North Lincolnshire Museums Service no later than 16<sup>th</sup> December 2029. The licence application estimated 1-5 burials potentially of Bronze Age to Roman date.
- 5.3.2 The excavation of human remains will be undertaken in line with the provisions of the burial license and following best practice guidance and codes of practice

and ethics for dealing with human remains (BABAO 2019a, 2019b; ClfA and BABAO 2017; and Brickley and McKinley (eds) 2004).

5.3.3 Human remains will be treated with due respect and dignity and will be adequately recorded using existing recording forms designed specifically for such use, in line with procedures outlined in the guidance cited above and with the advice of staff of York Osteoarchaeology. Any skeletal material will be lifted and arrangements made for storage until such time as the remains are deposited in the recipient museum.

5.3.4 All human remains which are revealed, including disarticulated or disturbed material, will be collected and assessment will be carried out by York Osteoarchaeology.

#### **5.4 Strategy for the recovery and sampling of biological remains**

5.4.1 Soil samples will be taken from all features or deposits deemed likely to have palaeoenvironmental potential; this will potentially include: ditch and pit fills; soil layers; and, material from structures, fills or features associated with industrial activity.

5.4.2 The sampling and subsequent assessment and/or analysis of samples will be in line with relevant Historic England guidelines (English Heritage 2011).

##### *Sediment sampling*

5.4.3 Sediment samples will generally be collected as multiples of 10-litre soil samples, taken from targeted deposits and stored in plastic tubs. In line with HE guidelines, sample types would be as follows:

- *bulk flotation sample* – for all non-waterlogged organic remains, including carbonised plant remains and artefacts; between 40 and 60 litres in volume;
- *bulk coarse-sieved sample* – principally for when high concentrations of artefacts and large non-waterlogged organic remains (i.e. animal bones) are present; potentially as much as 100 litres in volume (or more);
- *large sample* – for waterlogged organic remains; around 20 litres in volume (to allow for sub-sampling for the various categories of ecofact).

5.4.4 Any samples taken will come from appropriately cleaned surfaces, be collected with clean tools and be placed in clean containers. They will be adequately recorded and labelled and a register of all samples will be kept. Once the samples have been taken they will be stored appropriately in a secure location prior to being sent to the appropriate specialist. Samples will be sent for assessment to York Archaeology's Environmental Team.

##### *Column samples*

5.4.5 In selected locations, sequences of deposits exposed in section will have column (monolith) samples taken, either as close sequences of smaller

samples taken to represent a stratigraphic column, or as intact soil columns collected from the section face in one or more metal or plastic containers arranged as such to provide a continuous deposit sequence. Samples taken in this way will be assessed and/or analysed in the laboratory by York Archaeology, enabling detailed geoarchaeological descriptions to be made of deposits; in addition, they can be sub-sampled for microfossils – such as pollen and diatoms – and in some cases can provide stratified material suitable for C14 dating.

#### *Spot/ID samples*

5.4.6 A small number of spot samples, such as concentrations of small bones, seeds etc. might be taken, as may samples of wood for identification.

#### *Animal bones*

5.4.7 Animal bones will be hand-collected from sample-excavated features, and will be bagged and labelled according to their excavated context. Collection from unstratified contexts, such as topsoil or modern overburden, will not be attempted. Where deposits are noted to contain dense concentrations of bones, then these will be sampled for coarse sieving. Collected bones will be examined by Dr Clare Rainsford, an independent zooarchaeology specialist.

#### *Soil micromorphology*

5.4.8 If buried topsoil horizons are encountered, then a soil micromorphology specialist will be consulted and samples taken as required.

### **5.5 Scientific dating**

5.5.1 Where other means of dating are not available, it may be necessary to submit samples for scientific dating. Such dating will follow relevant Historic England guidelines (currently English Heritage 2004, 2006a, 2008a).

5.5.2 Organic material recovered either from soil samples or taken as Spot/ID samples for scientific dating may be submitted for radiocarbon dating; alternatively fired clay structures or preserved timbers may be suitable for other methods (e.g. archaeomagnetic dating or dendrochronology). For radiocarbon dating, the guidelines in Bayliss and Marshall 2022 will be followed.

### **5.6 Off-site works/Post-excavation assessment**

#### *Completion Statement*

5.6.1 Two working weeks from completion and sign off of the work on site, HFA will produce a Completion Statement for submission to the Council's Archaeologist.

5.6.2 This will provide a brief summary of what was found, an overall excavation plan and quantification of records and materials.

#### *Assessment*

5.6.3 Following completion of the excavation, the artefacts, soil samples, and written and drawn information will be organised for assessment. The assessment

programme will aim to establish the full potential and significance of the results of the fieldwork.

- 5.6.4 The site records will be indexed and collated, enabling the production of a written account of the archaeological features and deposits encountered during excavation, with a phasing structure based on the stratigraphic sequence. There will be discussion of the excavation results, integrating the results of specialist assessments of artefacts and samples.
- 5.6.5 Any finds recovered will be cleaned and examined; recording, marking and storage materials will be of archive quality. If necessary, finds – such as metalwork – will be despatched to the York Archaeology Conservation Laboratory to assess any conservation measures required to ensure the stabilisation of the material for long-term storage. The radiography and investigation of stratified metal finds will follow guidance of Historic England (see English Heritage 2006b, 2008).
- 5.6.6 Finds will be assessed by relevant HFA or external artefact specialists (see 6.2). Soil samples will be sent to York Archaeology for specialist assessment. Specialists will include consideration of the assemblages from the earlier evaluation in their assessments (see 5.6.8, below).

#### *Post-excavation Assessment Report*

- 5.6.7 Consultation will take place with the Council's Archaeologist at the outset of the post-excavation assessment programme and they will be provided with updates during production of the assessment report. It is expected that discussion with them and their feedback will be a significant element of the formulation of any subsequent programme of analysis and dissemination and its scope and scale, taking account of any additional research objectives that may have emerged through the fieldwork.
- 5.6.8 The post-excavation assessment report will include:
- An illustrated descriptive account of the results of the excavations, presenting details of the recorded features and/or deposits in accordance with a phasing structure derived from the stratigraphic sequence and available dating evidence;
  - Assessment of the artefacts, with a view to their potential for further study. This will take account of an assessment of the long-term conservation and storage needs of the objects;
  - Assessment of the environmental samples taken, with a view to their potential for subsequent study;
  - Discussion and interpretation of the results with integration, as appropriate, of information from artefact or environmental sample assessments;
  - Assessment of the quantity and perceived quality of the data in the site archive and its potential to answer the project research aims, with determination of the extent to which the aims have been met, including the potential identification of new research questions;

- Recommendations for further analysis of data and material from the site, for dissemination of the results and for storage and curation of the site archive; this would include Integration of recommendations for further analysis derived from the earlier trial trenching (Allen Archaeology 2024);
- Recommendations made in the assessment report will form the basis of any programme of analysis and dissemination set out in the Updated Project Design (see below).

5.6.9 Production of the post-excavation assessment will follow best practice as included in ClfA's *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA, 2020a) and ALGAO *Advice note for post-excavation assessment* (ALGAO, 2015).

5.6.10 Copies of the assessment report and an archive index containing details of the archive contents, will be supplied to the client, Arup and the North Lincolnshire Historic Environment Record.

#### OASIS

5.6.11 Details of the project will be submitted to OASIS, the online system for reporting investigations into the historic environment and linking research outputs and archives.

5.6.12 The trial trenching and other evaluation fieldwork carried out so far by Allen Archaeology have OASIS Reference Number: allenarc1-523921.

## **5.7 Updated Project Design/Analysis and dissemination**

- 5.7.1 Following the recommendations made for further analysis and dissemination in the Post-excavation assessment, and following discussion with the Council's Archaeologist, an Updated Project Design (UPD) will be produced.
- 5.7.2 The UPD will set out details of the methods and approaches to be adopted during the programme of analysis and dissemination, the project team (HFA and external specialists), the proposed timetable and the cost requirements for the identified analyses and reporting/publications. A provisional sum approximately equal to that proposed for the post-excavation assessment phase has so far been budgeted, and any variations deemed necessary to this budgeted sum will be identified at as early a stage as possible during formulation of the programme.
- 5.7.3 The proposed scope and content of the programme of analysis, as set out in the Updated Project Design, will be appropriate to the nature, scale and significance of the findings as stated in the recommendations of the post-excavation assessment report and will be agreed following consultation with the Council's Archaeologist. The programme will include incorporation of analysis recommended in the trial trenching (Allen Archaeology, 2024), including pottery drawing and petrological analysis of ceramics and the integration of the evaluation finds assemblage into the overall site assemblage.
- 5.7.4 Analysis of the finds and environmental samples will follow ClfA standard and guidance (ClfA 2020a), as well as specific guidance appropriate to the materials which are to be analysed.
- 5.7.5 A final report will be produced detailing the results of the archaeological excavation, integrated with the results of the programme of analysis. The reporting of the archaeological work will synthesise the results within their landscape context, reflecting on the influence of topography, intervisibility, communication routes and other factors which may be pertinent to understanding and interpretation of the features recorded on the site, as well as potential connections to other known sites in the area.
- 5.7.6 As per the scope and content of the analysis programme, the length, format, destination, number of copies and means of dissemination of the results of the fieldwork will be appropriate to the nature, scale and significance of the findings, and will be decided through consultation with the Council's Archaeologist. It is considered likely at this stage – on the basis of the evaluation work carried out so far – that the principal means of dissemination will be in the form of an illustrated synthetic article in a regional, or period specific, archaeological journal, accompanied by non-academic output in digital media. It is also proposed that a brief note on the findings will be submitted for publication in a local or regional archaeological journal which publishes a round up of archaeological work. The number of hard copies of any final report will be

predicated on the print run of the recipient journal, while the number of digital copies will depend on the form(s) of digital dissemination which are eventually chosen. Copies of all reports, as per Condition 10 of the planning permission, will be submitted to the Archaeological Data Service.

- 5.7.7 Draft copies of the report(s) will be provided to the Client (North Lincolnshire Council), the Client's Advisor (Arup) and the Council's Archaeologist for comment and revision prior to final submission to the Council's Archaeologist.

#### *Community engagement*

- 5.7.8 The archaeological specification did not require that the archaeological contractors should specifically undertake community engagement as part of the project.

- 5.7.9 However, following suggestions from the Council's Archaeologist, HFA intend submitting an article to the Barton Town Council newsletter describing the results of the excavations. Given that public open days are not feasible due to safety concerns, especially at this time of the year, production of such an article, soon after completion of the site work, will not only update the local population on what was found and what will happen next, but it will provide good publicity for all parties involved.

- 5.7.10 In addition to the article suggested above, HFA will offer to give illustrated talks and potentially finds viewings to the Barton Heritage Group and the Barton Civic Society.

### **5.8 Archive preparation and deposition (including finds retention/disposal)**

- 5.8.1 It is intended that the site archive will be deposited with a suitable repository which meets the criteria for the storage of archaeological material, in this case the North Lincolnshire Museum Service (NLMS); the NLMS accession code for the project is BNHA.

- 5.8.2 The site archive will be labelled, conserved and stored according to recent guidelines (Brown 2011; ClfA 2020b). Finds will remain the property of the landowner until such time as they may grant title to the recipient museum.

- 5.8.3 The digital archive will be stored at HFA. Digital records will comply with industry accepted digital data standards and will be stored in an appropriate location and backed up regularly, with the backups held separately. Relevant guidance includes, but is not limited to, the Archaeology Data Service (ADS) *Digital Antiquity Guides to Good Practice* (ADS, 2024) and Historic England's *Digital image capture and file storage* (Cole & Backhouse, 2015). The HFA network is maintained and managed by the IT section of Hull City Council, ensuring frequent and regular file back-ups and operation to relevant industry standards.

- 5.8.4 Upon completion of post-excavation work, ownership of the finds can be transferred to the museum, with the written archive, and a copy of the digital archive, also being transferred by the archaeological contractor.

5.8.5 All Recorded Finds will be deposited as a matter of course, but discussions would take place with NLMS upon completion of post-excavation work to determine which bulk finds were of sufficient importance to be deposited. An allowance will be made as a contribution to the recipient museum towards the long-term curation and storage of materials.

## **5.9 Copyright, confidentiality and publicity**

5.9.1 Unless the client wishes to state otherwise, the copyright of any written, graphic or photographic records and reports will rest with HFA, though the interests, contribution and support of the client and/or commissioning body will always be taken into consideration. The North Lincolnshire Historic Environment Record and the North Lincolnshire Museum Service will also be able to make appropriate use of information contained within the reports and archive for their own purposes, and may publish or reproduce material with the permission of HFA. To this end, copies of suitable digital images will be provided for future information and educational purposes.

5.9.2 HFA would retain the option to make information from this fieldwork available to interested parties when it is no longer considered confidential. This takes into account both the duty of confidence to the client commissioning the work, and also the professional obligation to make the results of archaeological work available to the wider archaeological community within a reasonable time.

5.9.3 All aspects of publicity will be agreed at the outset of the project between the client and the contractor. Publicity, including social media, during the excavation and post-excavation stages of the project will be made through NLC.

## **5.10 Health and Safety, Insurance**

5.10.1 Health and Safety will take priority over archaeological matters. Under the terms of the *Management of Health and Safety Regulations 1999*, HFA prepare a Risk Assessment for projects being undertaken. Overall policy is in line with Hull City Council's H&S Policy (September 2024) and recommendations set out in the FAME (previously SCAUM) manual *Health and Safety in Field Archaeology* (2007).

5.10.2 A Risk Assessment Method Statement (RAMS) and Safe System of Work (SSOW) document will be produced for sign off by the client prior to any work commencing. HFA staff are either SMSTS or IOSH trained to cover Health and Safety requirements and we have a complete SHEQ package to cover our SHEQ credentials.

5.10.3 Humber Field Archaeology, as a section of Hull City Council, is covered by the Council's Public Liability Insurance Policy; the indemnity for this policy currently stand at £50 million. For further details contact: Zurich Municipal, Zurich House, 2 Gladiator Way, Farnborough, Hampshire, GU14 6GB. In addition, HFA, as a

section of Hull City Council, is covered by the Council's £2m Professional Indemnity Insurance with Zurich Municipal. Copies of appropriate documentation can be supplied on request.

### **5.11 Monitoring and liaison – PR/Dissemination**

5.11.1 The fieldwork will be monitored by Arup, on behalf of North Lincolnshire Council, most likely on a weekly basis, and by the Council's Archaeologist on behalf of the local planning authority.

5.11.2 The timings of the site meetings will be agreed no later than one week in advance and the meetings will be chaired by the archaeological project officer. The HFA project manager will also attend site meetings on a regular basis.

5.11.3 During the post-excavation assessment programme and the subsequent analysis/dissemination programme, there will be regular liaison between the HFA project team, the Council's Archaeologist and Arup.

## 6 TIMETABLE AND STAFFING

### 6.1 Timetable for the work

- 6.1.1 It is proposed that the work will commence on Monday 20<sup>th</sup> January 2025, with the fieldwork expected to last seven weeks.
- 6.1.2 The on-site works will be followed by a post-excavation period, during which the Completion Statement and Post-excavation Assessment Report will be produced. This period, which will include time for review of the draft post-excavation assessment report and UPD, their revision and final issue, could last up to 6 months.
- 6.1.3 Details of the timetable of the programme of analysis and dissemination will be set out in the forthcoming Updated Project Design. However, Condition 10 of the planning permission (see 2.1.6, above) requires the analysis and dissemination programme and archive deposition to have been completed within 24 months of the commencement of the archaeological programme of work (or another period as agreed in writing by the local planning authority). While it is not currently considered that an extension to the 2-year period would be required, timings for publication will be in the control of the recipient journal.

### 6.2 Project team, staff experience and technical expertise

- 6.2.1 The on-site team will comprise three HFA Archaeological Project Officers and/or Archaeological Supervisors (Pen Portraits have been supplied previously) and four experienced Field Archaeologists.
- 6.2.2 The off-site team will comprise Archaeological Project Officer/Supervisor and Finds Manager/Officer, with assessment of the pottery being undertaken by a sub-contracted pottery specialist, and contributions from other artefact and environmental specialists as required.
- 6.2.3 The above will be under the overall direction of a Project Manager and/or the Archaeology Manager. The project team includes the following, with expertise drawn as necessary from the external specialists listed below.

<b>Position/Specialism</b>	<b>Name/Organisation</b>
Archaeology Manager	Peter Connelly
Project Manager/Post-Excavation Manager	Ken Steedman
Project Officer	Douglas Jobling
Archaeological Supervisors	Stephen Kennedy and Bradley Eyre
Finds Manager	Lisa Wastling

<b>Position/Specialism</b>	<b>Name/Organisation</b>
Finds Officer	Pamela Cartwright
Pottery Specialist (Prehistoric)	Sarah Percival
Pottery Specialist (Iron Age/Roman)	Ian Rowlandson
Lithics	York Archaeology
Environmental Specialist	Stacey Adams, York Archaeology
Conservation Services	York Archaeology Conservation (conservation, specialist reports on wood and leather)
Archaeometallurgy	Gerry McDonnell Archaeometals
Archaeomagnetism	University of Bradford
Human Remains	York Osteoarchaeology Ltd
Geoarchaeology	York Archaeology Geoarchaeology
Dendrochronology	Ian Tyers
Radiocarbon/AMS	SUERC

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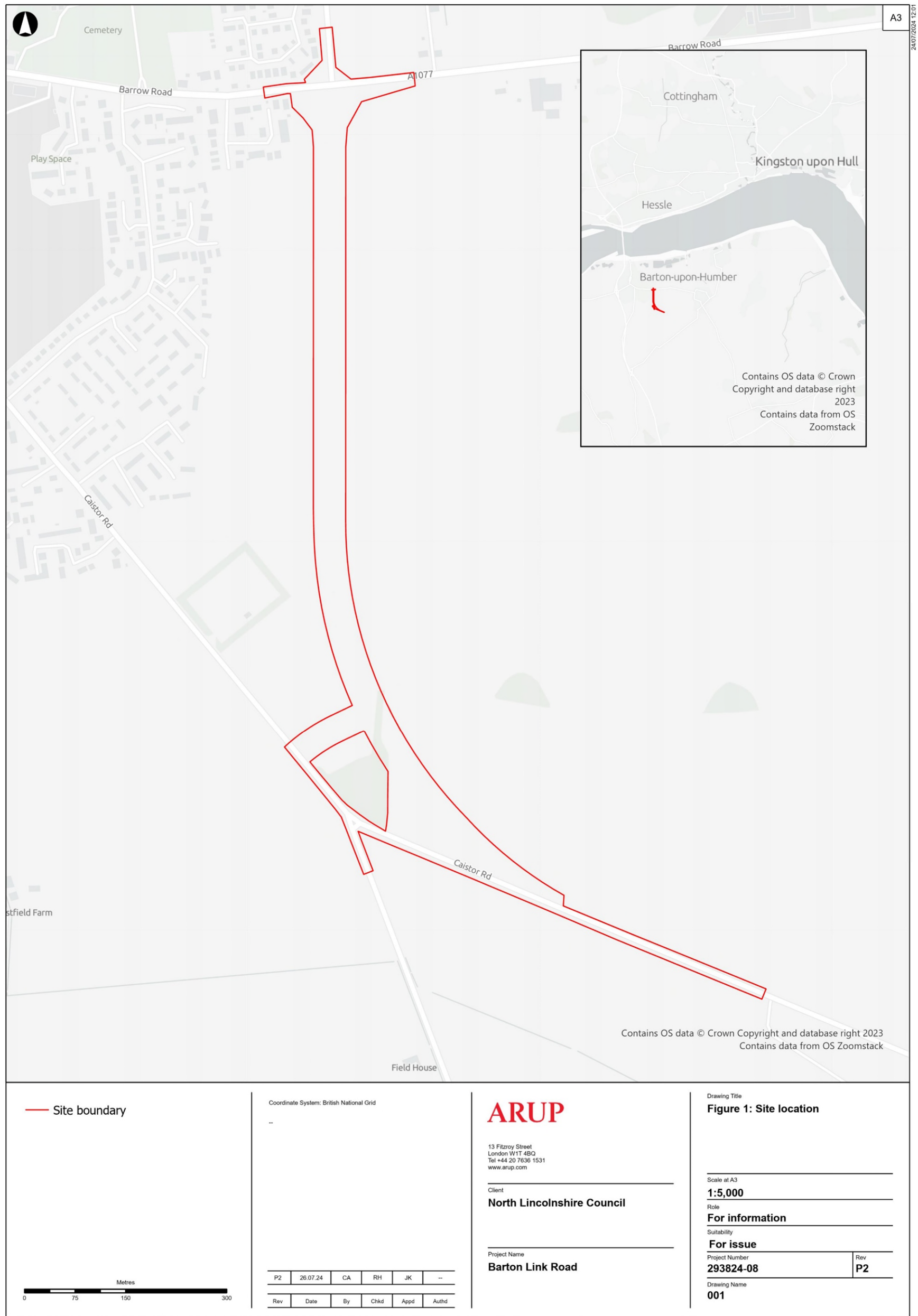


Figure 1: Location of Barton Link Road (reproduced from Archaeological Specification; Arup 2024)

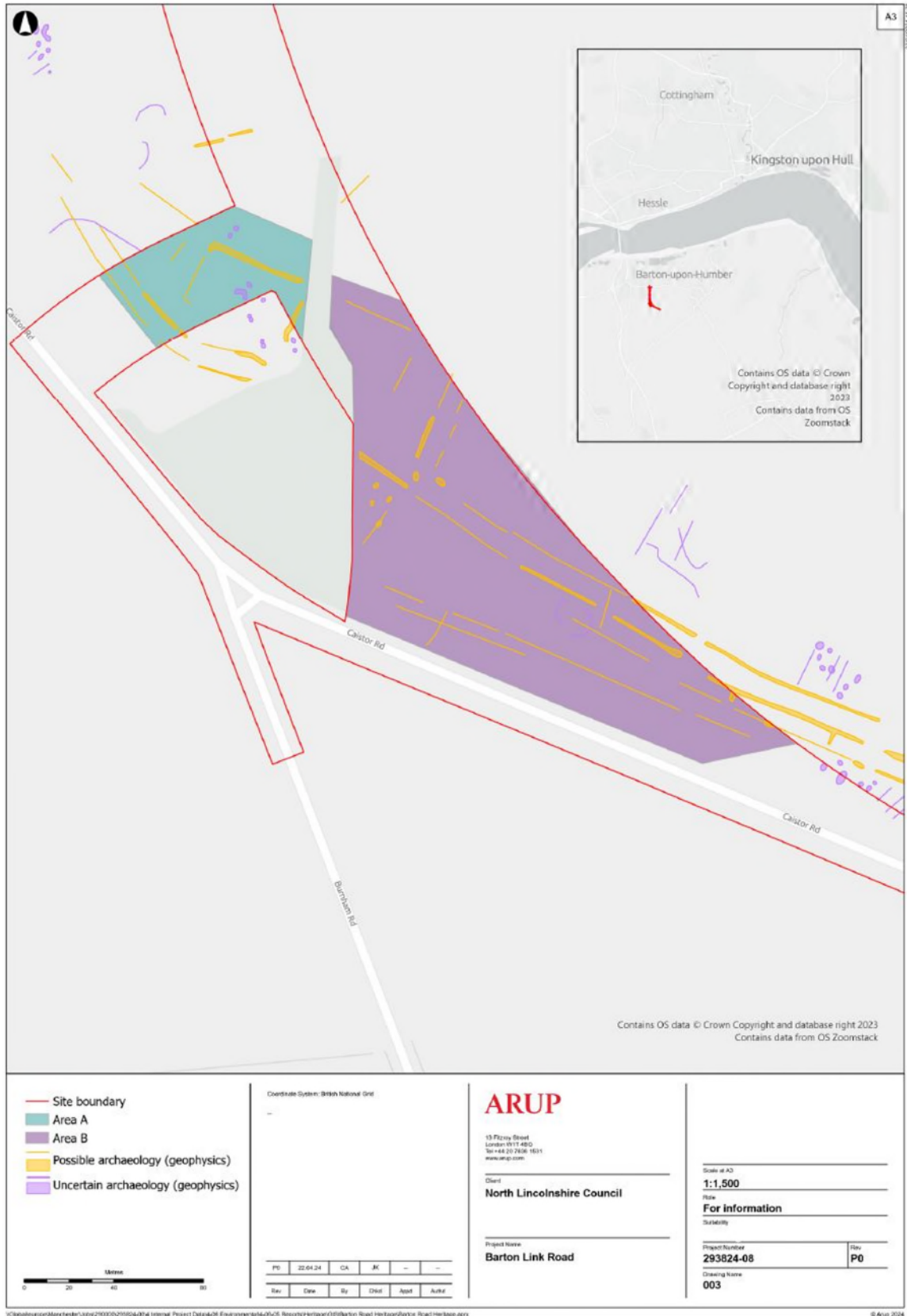


Figure 2: Layout of excavation areas A and B at the southern end of the proposed Barton Link Road (reproduced from Archaeological Specification; Arup 2024)