

**A1 ALNWICK TO ELLINGHAM
IMPROVEMENTS SCHEME:
NORTH CHARLTON (Area 1C)**

EVALUATION REPORT

OCTOBER 2019

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PRE-CONSTRUCT ARCHAEOLOGY

A1 Alnwick to Ellingham Improvements Scheme: North Charlton, Northumberland

Site Code: NCN 19

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DOCUMENT VERIFICATION

**A1 ALNWICK TO ELLINGHAM IMPROVEMENTS SCHEME: NORTH CHARLTON,
NORTHUMBERLAND**

EVALUATION REPORT

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CONTENTS

1.	NON-TECHNICAL SUMMARY	1
2.	INTRODUCTION	3
2.1	PROJECT BACKGROUND	3
2.2	SITE LOCATION AND DESCRIPTION	3
2.3	GEOLOGY AND TOPOGRAPHY	3
2.4	PLANNING BACKGROUND	4
2.5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	5
3.	PROJECT AIMS AND RESEARCH OBJECTIVES	9
3.1	PROJECT AIMS	9
3.2	RESEARCH OBJECTIVES	9
4.	ARCHAEOLOGICAL METHODOLOGY	11
4.1	FIELDWORK	11
4.2	POST-EXCAVATION	12
5.	RESULTS: THE ARCHAEOLOGICAL SEQUENCE	13
5.1	PHASE 1: SUPERFICIAL GEOLOGY	13
5.2	PHASE 2: UNDATED DEPOSITS	14
5.3	PHASE 3: MODERN DEPOSITS & INTRUSIONS	14
6.	CONCLUSIONS AND RECOMMENDATIONS	16
7.	REFERENCES	17
8.	ACKNOWLEDGEMENTS AND CREDITS	19
	APPENDIX 1: FIGURES	20
	FIGURE 1: SITE LOCATION	21
	FIGURE 2: DETAILED SITE LOCATION	22
	APPENDIX 2: CONTEXT INDEX	23
	APPENDIX 3: STRATIGRAPHIC MATRIX	24
	APPENDIX 4: PHOTOGRAPHIC PLATES	26
	<i>Plate 1: Trench 1: view north, scale: 2m</i>	<i>26</i>
	<i>Plate 2: Trench 2: view north, scale: 2m</i>	<i>26</i>
	<i>Plate 3: Trench 3: view north, scale: 2m</i>	<i>27</i>
	<i>Plate 4: Trench 4: view south, scale: 2m</i>	<i>27</i>
	<i>Plate 5: Test Pit 1: view north, scale: 1m</i>	<i>28</i>

Plate 6: Test Pit 2: view west, scale: 0.5m 28
Plate 7: Test pit 3: view south, scale: 1m 29

1. NON-TECHNICAL SUMMARY

- 1.1 Pre-Construct Archaeology were commissioned by WSP, on behalf of Highways England, to undertake an archaeological evaluation of land along the proposed improvement scheme for the A1, Alnwick to Ellingham, Northumberland. The proposed scheme involves the duelling of a c. 8km stretch of the A1 between Denwick and North Charlton. The existing carriageway will form the new north bound carriageway and a new southern carriageway would be built to the east. Several areas have been identified along the route as being of potential archaeological interest.
- 1.2 The site was approximately 0.45 hectares in size and was located 10km north of Alnwick, to the east of the A1 at North Charlton, Northumberland (centred at National Grid Reference NU 17042 22685). The evaluation was required in accordance with the National Policy Statement for National Networks.
- 1.3 The proposed scheme would run immediately adjacent to the boundary of the North Charlton medieval village and open field system Scheduled Monument (List Entry 1018348). A walkover survey, undertaken by WSP, identified earthworks extending from the Scheduled Monument into the site which could be of archaeological or geological origin. There was also potential for buried archaeological remains to be present at the site.
- 1.4 Paragraph 5.124 of the National Planning Policy for National Networks state that “[non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets”. The aim of the evaluation was to establish if there were buried archaeological features within the site that are equivalent to those in the Scheduled Monument. The archaeological evaluation also aimed to establish whether the earthworks on site were archaeological or geological in origin.
- 1.5 A geophysical survey of the proposed scheme was undertaken between November 2018 and February 2019 (SUMO 2018). The survey identified no magnetic anomalies thought to represent archaeological remains.
- 1.6 The archaeological evaluation comprised four trenches (Trenches 1-4) and three test pits (Test Pit 1-3). The trenches were sited to establish the presence/absence of archaeological remains at the site that would relate to the adjacent Scheduled Monument. The test pits were sited to establish whether the north-south earthwork was of geological or archaeological origin (the east-west earthworks on top of the north-south earthwork did not extend into the proposed scheme).
- 1.7 Three phases of activity were encountered during the evaluation: Phase 1: superficial geology; Phase 2: undated deposits and Phase 3: Modern topsoil, intrusions and made ground. No features or deposits of archaeological significance were observed during the evaluation. The north-south earthwork appeared to be comprised of glacial sands and gravels and conceivably represented a geological moraine.

2. INTRODUCTION

2.1 Project Background

2.1.1 This report details the results of an archaeological evaluation undertaken at North Charlton, Northumberland in October 2019 (Figure 1 & 2). The archaeological investigation was commissioned by WSP on behalf of Highways England and was undertaken by Pre-Construct Archaeology Limited (PCA).

2.1.2 The proposed scheme would run immediately adjacent to the boundary of North Charlton medieval village and open field system Scheduled Monument (List Entry 1018348). The walkover survey, undertaken by WSP, identified earthworks extending from the Scheduled Monument into the site which could be of archaeological or geological origin. There was also potential for buried archaeological remains. Paragraph 5.124 of the National Planning Policy for National Networks state that “[non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets”. The aim of the evaluation was to establish if there were buried archaeological features within the site that are equivalent to those in the Scheduled Monument. The archaeological evaluation also aimed to establish whether the earthworks on site were archaeological or geological in origin.

2.1.3 A geophysical survey of the proposed scheme was undertaken between November 2018 and February 2019 (SUMO 2018). The survey identified no magnetic anomalies thought to represent archaeological remains.

2.1.4 The scope of works for the archaeological evaluation was set out in the WSI produced by WSP (WSP 2019). The aim of the evaluation was to clarify the presence, nature, date, extent and significance of any archaeological remains that might be present in the areas of proposed impact. The WSI was produced in consultation with Northumberland County Council Assistant County Archaeologist (NCC) and Historic England. Four trenches (Trenches 1 to 4) were mechanically excavated during this phase of archaeological work. Three hand excavated test pits (Test Pit 1-3) were also undertaken as part of the works to establish the origin of the north-south aligned earthwork that crossed the site.

2.1.5 The Online Access to the Index of Archaeological Investigation (OASIS) reference number of the project is preconst1-370226.

2.2 Site Location and Description

2.2.1 The site was approximately 0.45 hectares in size and was located 10km north of Alnwick, to the east of the A1 at North Charlton (centred at National Grid Reference NU 17042 22685; Figure 1 & 2). The Scheduled Monument of North Charlton Medieval village and open field system (List Entry 1018348) extends to the east and west of the site.

2.3 Geology and Topography

- 2.3.1 The solid geology underlying the site comprises Tyne Limestone Formation and limestone, sandstone, siltstone and mudstone of the Alston Formation, formed during the Carboniferous Period. The bedrock geology is overlaid by glaciofluvial deposits of sand and gravel, laid down during the Devensian Stage of the Quaternary Period (British Geological Survey website).
- 2.3.2 The site lies at a height of approximately 100m above Ordnance Datum (AOD) and the ground rises gradually from west to east, before rising sharply to form a linear bank which runs on an approximate north-south alignment. The earthwork is potentially of geological origin; however, natural features are often incorporated into the human landscape. The linear nature of this earthwork may have helped define a cultural boundary and it appears to have been incorporated into the anthropogenic earthworks of the Scheduled Monument. A series of parallel linear earthworks running east-west are located at the top of the linear earthworks. These are potentially the fragmented remains of ridge and furrow cultivation which have been preserved within the bank. None of the east-west aligned earthworks extended into the area of the proposed scheme.

2.4 Planning Background

- 2.4.1 The archaeological investigation was required, as part of the planning process (pre-determination), to inform the Local Planning Authority (LPA), Northumberland County Council of the character, date, extent and degree of survival of archaeological remains at the site.
- 2.4.2 A geophysical survey undertaken in 2018 (SUMO 2018) as part of the Development Consent Order (DCO) application identified potential buried archaeological remains within the Scheme which could represent remains within the Scheme which could be associated with the Scheduled Monument. Paragraph 5.124 of National Planning Policy for National Networks (Department for Transport 2014) states that “non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets”. The aim of the evaluation was to establish if the geophysical anomalies do represent buried archaeological features and are equivalent to those in the Scheduled Monument.
- 2.4.3 A Written Scheme of Investigation (WSI) was produced by WSP (WSP 2019) prior to works commencing at the site.

2.5 Archaeological and Historical Background

Information in this section is largely extracted from the WSP DBA (forthcoming) and the WSI (WSP 2019). The research and writing of those responsible is acknowledged. The assessment employed a 1km study area for designated heritage assets and one of 500m for non-designated heritage assets. The following section provides an overview of the assessment, presented by period.

Prehistoric

- 2.5.1 No evidence of Palaeolithic or Mesolithic activity was identified within the 500m study area around the scheme. Potential Neolithic activity is represented by the site of a Scheduled Monument bowl barrow (NHLE 1018499) 600m to the south of the site, although this funerary monument type was still in use during the Bronze Age. Two worked flints of either Neolithic or Bronze Age provenance were found at Charlton Mires 2km to the southeast of the proposed development.
- 2.5.2 Bronze Age activity is attested to by the site of two stone cists 300m to the southwest of North Charlton. The features were excavated prior to 1824 revealing an inhumation burial associated with a bronze, flat riveted knife/dagger. Ellsnook round barrow, typical of the Bronze Age, is located 4km to the south of site.
- 2.5.3 The Iron Age is represented by defended settlement sites. The Camp Plantation is located almost 900m to the northwest of the site. The Scheduled Monument (List Entry 1017955) comprises roughly triangular earthworks incorporating a raised natural feature. The Camp at West Linkhall (List Entry 1006500), located 1.3km south of the site, has never been intrusively investigated but it is considered to be of Iron Age date. A further possible camp represented by earthwork remains is located 750m south of the site, alongside Shipperton Burn (HER 5043).

Romano-British

- 2.5.4 There is no evidence of Romano-British activity within the 1km study area around the Proposed Scheme.

Early Medieval

- 2.5.5 Evidence of Early Medieval activity within the Proposed Scheme 1km study area is limited to place names. The settlement of Rock lies 4km to the southeast of site and its name is likely to be derived from the Old French words *roche* and *roke*, meaning 'outcrops of limestone'. The place name of *Ealnwic* (now Alnwick) is of Saxon origin derived from its situation near the River Alne 10km to the south of site.

Medieval

- 2.5.6 Following the Conquest, Alnwick Castle became the baronial residence of Ivo de Vescy, Lord of Alnwick until the castle was besieged by Malcolm II, King of Scotland in 1093. In 1135, Alnwick Castle was taken by David, King of Scotland, besieged by William in 1174, Robert Bruce in 1328 and again by the Scots in 1448. From the mid-15th century onwards, Alnwick was the seat of the Percy family (Lewis 1848).

- 2.5.7 The origins of the townships within the area surrounding the scheme can be traced back to the 13th century. The township of North Charlton, where the site was located, was originally held by the lords of Ditchburn, and in the 13th century was the property of Ralph Fitz Roger, followed by the Beaumont family in the 14th century until the 16th century.
- 2.5.8 Population numbers in the region were reduced by the combined impacts of the war with Scotland, (late 13th century to early 16th century), and also by the arrival of the Black Death in 14th century which wiped out a quarter of the population. These factors led to a decline in population and thus a shrinkage in settlements located throughout the area, including Heckley (HER 4430), Charlton Hall (HER 5054), Linkhall (HER 5055), Broxfield (HER 5650) and Denwick (HER 5711).
- 2.5.9 The largest is the Scheduled site of North Charlton medieval village and open field system (List Entry 1018348). The Scheduled site is aligned east/west and divided by low banks into small plots. To the east of the village, now separated from by the A1 trunk road are part of the medieval open fields which once surrounded the whole village. They survive in the form of a series of furlongs or fields, each containing well preserved ridge and furrow cultivation. The earthworks representing the remains of the North Charlton Medieval village and open field system was designated a Schedule Monument in 1998. The following is the asset's description from the National Heritage List:

Reasons for Designation

Medieval rural settlements in England were marked by great regional diversity in form, size and type, and the protection of their archaeological remains needs to take these differences into account. To do this, England has been divided into three broad Provinces on the basis of each area's distinctive mixture of nucleated and dispersed settlements. These can be further divided into sub-Provinces and local regions, possessing characteristics which have gradually evolved during the last 1500 years or more. The Tweed local region includes the Kyloe Hills, the Till Valley and Milfield Plain, as well as the rolling ridges of the Tweed Valley proper. Its rectangular fields, low densities of dispersed farmsteads, tenant cottages and estate villages all signify agrarian improvement in the 18th and 19th centuries. Earthworks, usually in or near present villages, sometimes indicate the earlier medieval farming communities which have been replaced.

Medieval villages were organised agricultural communities, sited at the centre of a parish or township, that shared resources such as arable land, meadow and woodland. Village plans varied enormously, but when they survive as earthworks their most distinguishing features include roads and minor tracks, platforms on which stood houses and other buildings such as barns, enclosed crofts and small enclosed paddocks. They frequently included the parish church within their boundaries and, as part of the manorial system, most villages included one or more manorial centres which may also survive as visible remains as well as below ground deposits. In the central province of England, villages

were the most distinctive aspect of medieval life and their archaeological remains are one of the most important sources of understanding about rural life in the five or more centuries following the Norman Conquest. Medieval villages were supported by a communal system of agriculture based on large, unenclosed open arable fields. These large fields were subdivided into strips (known as lands) which were allocated to individual tenants. The cultivation of these strips with heavy ploughs pulled by oxen teams produced long, wide ridges, and the resultant 'ridge and furrow' where it survives is the most obvious physical indication of the open field system. Individual strips or lands were laid out in groups known as furlongs defined by terminal headlands at the plough turning-points and lateral grass balks. Furlongs were in turn grouped into large open fields. Well-preserved ridge and furrow, especially in its original context adjacent to village earthworks, is both an important source of information about medieval agrarian life and a distinctive contribution to the character of the historic landscape. It is usually now covered by the hedges or walls of subsequent field enclosure. Although the remains of North Charlton medieval village are partly built over, considerable areas survive and contain significant archaeological deposits. Together with the remains of its open field system, it will add greatly to our knowledge and understanding of medieval settlement and land use in the region.

Details

The monument includes part of the shrunken remains of the medieval village of North Charlton and its open field system, situated in the coastal plain of north Northumberland. The monument is divided into three areas. The township of North Charlton was held by the lords of Ditchburn and in the 13th century was the property of Ralph Fitz Roger. In 1296 a document records 12 inhabitants eligible to pay taxes. North Charlton passed to the Beaumont family in the early 14th century and, apart from a 20-year spell in the late 15th century, it remained in their hands until the early 16th century. A map of 1769 shows a two-row village at North Charlton. The village is aligned east-west and is divided by low banks into small plots with the remains of one building standing up to 0.4m high on the north side. To the south west of this building, across a slight hollow way, is a probable market cross consisting of a stone shaft 1.3m tall, set in a socket stone on a square base of three steps; a cross is referred to in a survey of 1578 as standing on South Row. The cross is Listed Grade II. The Charlton Burn separates the north side of the village from an area of ridge and furrow cultivation and a prominent mound called Castle Close. However, there is no evidence for there having been a castle at North Charlton and building foundations on top of the mound have been interpreted as those of the Chapel of St Giles. The foundations measure 15m by 8m with a structure 6m square attached to the north west side; the interior is slightly raised. The chapel is mentioned in documents in the mid-12th century and had fallen into ruin by the 14th century. Around the base of the mound is a stony bank up to 1m high. The site of a graveyard is thought to lie to the south of the mound where numerous graves were found when the land was under cultivation. To the

west of the mound is a sub-rectangular enclosure which overlies the ridge and furrow and is interpreted as a later farmstead. To the east of the village, and now separated from it by the A1 trunk road, are part of the medieval open fields which once surrounded the whole village. They survive in the form of a series of furlongs or fields, each containing well preserved ridge and furrow cultivation. Other earthwork remains of the village survive to the west and are not included in the scheduling as their nature and date are not fully understood. A number of features are excluded from the scheduling; these are the telegraph poles and their supports, a concrete slab bridge across the Charlton Burn, post and wire fencing, a brick reservoir, stone field walls and track across the eastern area of ridge and furrow, and a water tank, although the ground beneath all these features is included.

- 2.5.10 The 15th century was more prosperous which led to many deserted villages being reinstated and an expansion of the rural hinterland surrounding them. During this time, existing defences at Alnwick castle were strengthened and a new type of building, the tower house, was introduced in many Northumberland villages as part of the Lord's residence. An example of this is found c. 3.5km south of the site, comprising the Scheduled and Grade I Listed Heiferlaw Tower House (List Entry 1014061 & 1304282). Located in a prominent position, the 15th century tower was built with intended views for the monks of Alnwick Abbey (c. 1km from the scheme) and is attributed to the abbot of Alnwick Abbey and the Percy family.

Post-medieval

- 2.5.11 Post-Medieval activity is represented by the Grade II Listed Malcolm's Cross (NHLE 1153333) dedicated to Malcolm III, King of Scotland (1058-1093), erected in 1774. The gradual industrialisation of the region is represented in the HEDBA study area by the Grade II listed assets of Barn and Engine House (NHLE 1041755) and Smithy (NHLE 1303729) at Broxfield Farm and limekilns to the north-west of Peppermoor (NHLE 1153931) and at Kiln plantation to the west of Rock (NHLE 1154647). The HER identified a mill at North Charlton (HER 25114) and several wells (HER 5037, 22425, 22429, 22431, 22433 and 22435).

Modern

- 2.5.12 Assets of the Modern era comprise World War commemoration monuments including the Grade II listed Denwick War Memorial (NHLE 1433767) and the South Charlton War Memorial (NHLE 1439802). Military activity during the Second World War is represented by pill boxes (HER 19936, HER 19874, HER 447) and a Scheduled Zero Station (NHLE 1014080), located within the Heiferlaw defended settlement. The underground station comprises three separate chambers with vertical access shaft and a cylindrical escape tunnel.

Geophysical Survey

- 2.5.13 A geophysical survey of the Scheme was undertaken between November 2018 and February 2019 (SUMO 2018). The survey of the site identified no magnetic anomalies thought to be associated with human activity.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

- 3.1.1 The aim of the evaluation was to clarify the presence, nature, date and extent of any archaeological remains that might be present within the site. Specifically, to identify if there were non-designated heritage assets of archaeological interest that were of equivalent significance to the Scheduled Monument located immediately to the east, and should therefore be considered subject to the policies for designated heritage assets, in line with paragraph 5.124 of NPP NN (Department of Transport 2014). This was to inform the DCO application and an appropriate mitigation strategy for any significant archaeological remains.
- 3.1.2 The objective of trial trench evaluation as defined by the Chartered Institute for Archaeologists (CIfA) is to 'determine, as far as is reasonably possible, the nature of the archaeological resource within a specified area using appropriate methods and practices' (CIfA 2014a). The results of the evaluation will inform an appropriate mitigation strategy for any archaeological remains, if required.

3.2 Research Objectives

- 3.2.1 The project was undertaken with reference to the research framework set out in *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF) (Petts and Gerrard 2006), which highlights the importance of research as a vital element of development-led archaeological work. By setting out key research priorities for all periods of the past, NERRF allows archaeological projects to be related to wider regional and national priorities for the study of archaeology and the historic environment.
- 3.2.2 The WSI set out the research aims of the works and are summarised as follows:
- Evaluate whether the linear earthwork which extends north-south through the site and Scheduled Monument is a geological feature or of archaeological origin;
 - Evaluate whether the series of smaller east-west earthworks on the top of the linear earthwork are of archaeological origin;
 - Where any of the earthworks are proven to be of archaeological origin, what are their date and function;
 - Confirm the presence of, extent, nature and date of any buried archaeological features to the east of the Scheduled Monument and west of the A1;
 - Establish the level of disturbance resulting from the construction of the A1 in the area;

- Establish if there are any remains of medieval date associated with the Deserted medieval village.

3.2.3 An appropriate level of reporting on the work was required, including, if necessary, full analysis and publication of any notable archaeological findings upon completion of the evaluation. Thus, the results of the work constitute the preservation by record of any archaeological remains encountered and subsequently removed during the course of works.

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

- 4.1.1 The fieldwork was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant ClfA standard and guidance document (ClfA 2014 a & b). PCA is a CIFA 'Registered Organisation'. All fieldwork and post-excavation was carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011).
- 4.1.2 The project was managed in line with principles set out in Historic England's *'Management of Research Projects in the Historic Environment'* (MoRPHE) published in 2006.
- 4.1.3 All archaeological staff involved in the project were suitably qualified and experienced for their project roles. The project was overseen for PCA by Aaron Goode, Project Manager at PCA's Durham Office. All relevant Health and Safety legislation, regulations and codes of practice were respected. PCA's Health and Safety (H&S) Policy is the starting point for managing H&S at all locations where PCA carries out its operations.
- 4.1.4 The scope of the work for the archaeological evaluation was set out in a detailed Written Scheme of Investigation compiled by WSP (WSP 2019). The archaeological evaluation comprised the mechanical excavation of four trial trenches (Trench 1-4), measuring c. 30m in length and c. 1.8m wide and the hand excavation of three c. 1m x 1m test pits (Test Pit 1-3) located on the north-south earthwork at the southern end of the site (Figure 2). Together these provided a 4% sample of the site.
- 4.1.5 The trial trenches have been positioned to avoid any obvious obstructions and to provide good coverage of the site. The test pits were sited over the north-south aligned earthwork (the east-west aligned earthworks were outside the limits of the site).
- 4.1.6 The archaeological evaluation was carried out between the 7th to 11th October 2019 over four days and consisted of four c. 30m trenches and three hand-excavated test pits (Figure 2). Trenches and test pits were set-out using a Leica Viva Smart Rover Global Navigation Satellite System (GNSS), with pre-programmed co-ordinate data determined by an office-based CAD operative.
- 4.1.7 Ground level in the trenches was reduced using a tracked 6-tonne mechanical excavator utilising a toothless ditching bucket. Successive spits of no more than 100mm depth were removed until either the top of the first archaeological horizon or the top of superficial geological deposits was reached. All ground reduction was carried out under archaeological supervision.
- 4.1.8 The investigation of archaeological levels was by hand, with cleaning, examination and recording both in plan and in section, where appropriate. Investigations within the trenches followed the normal principles of stratigraphic excavation and were conducted in accordance

with the methodology set out in the field manual of PCA (PCA 2009) and the Museum of London Site Manual (Museum of London 1994).

4.1.9 Deposits and cut features were individually recorded on the *pro-forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. All site records were marked with the unique-number NCN19 (site code).

4.1.10 The height of all principal strata and features was calculated in metres above Ordnance Datum (m AOD). A detailed photographic record of the evaluation was prepared using SLR digital photography. All detailed photographs included a legible graduated metric scale. The photographic record illustrated both in detail and general context archaeological exposures and specific features in all trenches.

4.2 Post-excavation

4.2.1 The stratigraphic data for the project comprises written and photographic records. A total of 22 archaeological contexts were defined within the four trenches and three test pits (Appendix 2). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described in Section 5.

4.2.2 During the evaluation, no artefactual material was retained from the deposits encountered, as no archaeological deposits or features were noted.

4.2.3 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker, UKIC 1990) and the most recent ClfA publication relating to archiving (ClfA 2014c).

4.2.4 At the time of writing the Site Archive was housed at the Durham Office of PCA, The Rope Works, Broadwood View, Chester-le-Street, County Durham, DH3 3AF. When complete, the site Archive will be deposited at the Great North Museum, Newcastle-upon-Tyne, under the site code NCN19.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the archaeological investigation, separate stratigraphic entities were assigned unique and individual context numbers, which are indicated in the following text as, for example [123]. The context numbers have been assigned per trench therefore contexts from Trench 1 are in the 100s and contexts from Trench 2 in the 200s etc. Test pit context numbers are in the 1000s. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data and correlate these phases with recognised historical and geological periods. The figures can be found in Appendix 1 with the context index and stratigraphic matrix located in Appendix 2 and 3 respectively. A selection of plates can be found within Appendix 4. Trench 1 is shown within Plate 1, Trench 2 within Plate 2 and test pit photos from Plate 5.

5.1 Phase 1: Superficial Geology

5.1.1 Phase 1 represents superficial geological deposits that were observed within all trenches and within Test Pit 2 and 3 (superficial geology was not encountered within TP1). The composition of the superficial geological deposits varied across the site. Within the trenches, geological material was comprised of light brownish grey silty sand [101] in Trench 1; mid greyish brown sandy clay [201] in Trench 2; light greyish yellow sand [301] in Trench 3 and mid greyish brown silty clay [402] in Trench 4.

5.1.2 Geological deposits were also encountered within Test Pits 2 and 3. These comprised mid reddish-brown sand [2003] in Test Pit 2 and layers of mid reddish-brown sand, mid reddish-brown clayey sand and light grey gravel [3003] in Test Pit 3. The presence of geological material in the two southern test pits proves that the north-south earthwork is conceivably a glacial moraine (the east-west earthworks on top lay outside the proposed scheme so could not be targeted). No geological material was observed within Test Pit 1 as the north-south moraine had been truncated/reworked within this area perhaps relating to past agricultural practices or construction work related to the A1 trunk road.

5.1.3 The table below summarises the depth below ground level and metres above Ordnance Datum (AOD) height of geological deposits within the trenches/test pits:

No.	Context	Depth (below ground level)	m AOD	
			Highest	Lowest
Trench 1	[101]	0.32m	101.92m	
Trench 2	[201]	0.34m	101.66m (north)	101.39m (south)
Trench 3	[301]	0.44m	100.92m (north)	100.75m (south)
Trench 4	[402]	0.41m	100.46m (north)	99.96m (south)
Test Pit 2	[2003]	0.67m	102.20m	
Test Pit 3	[3003]	0.18m	102.04m	

Summary of superficial geology depths and levels

5.2 Phase 2: undated deposits

- 5.2.1 Phase 2 represents undated deposits noted within the southern end of Trench 4 and within Test Pits 1 and 2. Although no artefactual material was observed within any of the deposits so they are likely to be either late post-medieval or modern in origin; perhaps derived from agricultural practices or from the construction of the A1 trunk road. Within Trench 4 these deposits comprised dark greyish brown sandy clay [401] with frequent small sub-rounded pebbles that was recorded for a maximum distance of 4.13m north-south and extended to the limits of excavation at the southern end of the trench.
- 5.2.2 Several deposits were noted within Test Pit 1 that were attributed to this phase. These comprised light brownish grey clay and gravel [1002]; dark brownish grey sandy clay [1003]; light greyish brown clay with occasional fragments of stone and gravel [1004] and mid greyish brown silty sand [1005] with frequent inclusions of small pebbles to the limit of excavation at base, c. 1m below ground level. In Test Pit 2, an undated deposit comprising mid reddish-brown silty sand [2001] had inclusions of gravel and frequent large rounded stones.
- 5.2.3 The table below summarises the thickness and Ordnance Datum height of all undated deposits encountered during the scheme:

No.	Context	Thickness	m AOD	
			Highest	Lowest
Trench 4	[401]	0.18m	100.36m	
Test Pit 1	[1002]	0.13m	100.85m	
	[1003]	0.18m	100.72m	
	[1004]	0.07m	100.54m	
	[1005]	0.18m	100.47m	
Test Pit 2	[2001]	0.49m	102.69m	

Summary of undated deposits thickness and levels

5.3 Phase 3: Modern deposits & intrusions

- 5.3.1 Phase 3 represents a modern intrusion recorded in Test Pit 3, as well as modern deposits and topsoil.
- 5.3.2 In Test Pit 3, a modern feature [3002] was noted. It was filled by loose sub rounded cobbles with a matrix of dark grey clayey sand [3001]. No finds were recovered from the fill; however, modern iron rebar was noted sticking out of the topsoil c. 2m to the north of the test pit. Conceivably this iron rebar was also within cut [3002] that was situated in a slight depression on top of the glacial moraine.
- 5.3.3 A modern deposit was also noted in Test Pit 1 that comprised mid greyish brown sandy clay. A fragment of clay tobacco pipe and modern machine pressed glass was also recovered

from this deposit. It perhaps represented some disturbance either by local farmers or spoil from the construction of the A1 trunk road.

5.3.4 Topsoil was encountered within all trench and test pit locations and comprised dark brownish grey sandy clay. The table below summarises the thickness and metres above Ordnance Datum height for topsoil within all areas:

No.	Context	Thickness	m AOD	
			Highest	Lowest
Trench 1	[100]	0.32m	102.24m (south)	102.19m (north)
Trench 2	[200]	0.34m	102.00m (north)	101.72m (south)
Trench 3	[300]	0.44m	101.39m (north)	101.07m (south)
Trench 4	[400]	0.23m	100.73m (north)	100.54m (south)
Test Pit 1	[1000]	0.21m	101.42m (south)	101.36m (north)
Test Pit 2	[2000]	0.18m	102.87m (south)	102.85m (north)
Test Pit 3	[3000]	0.18m	102.22m	

Summary of topsoil thickness and levels

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 The archaeological investigations comprised the excavation of four trenches and three test pits during the A1 Alnwick to Ellingham Road Improvements North Charlton scheme (Area 1C), Northumberland. Geological deposits, undated deposits as well as modern made ground and topsoil were encountered. This activity was assigned to three phases of activity:

- Phase 1: Superficial geological deposits comprising glaciofluvial deposits of clayey sand were encountered within all trenches, however it was only encountered within Test Pits 2 & 3;
- Phase 2: Undated deposits relating to either agricultural disturbance or from the construction of the A1 trunk road;
- Phase 3: Modern topsoil, deposits and a modern intrusion.

6.1.2 No features of archaeological significance were recorded within any of the evaluation trenches or test pits. The evaluation has established that the north-south earthwork crossing the southern part of the site was a glacial moraine due to the laminated sands and gravels observed within Test Pit 2. The north-western end of the moraine had been truncated and reworked either by former agricultural practices or during the construction of the A1 trunk road.

6.1.3 The east-west aligned earthworks on the top of the glacial moraine have conceivably been altered by past human activity however, none of these mounds lie within the proposed scheme and will be left *in situ* as part of the Scheduled Monument.

6.1.4 East-west aligned furrows can be seen on historic aerial photos of the site however, at some point in the 20th century these had all been ploughed out. Evidence of this was seen in Trenches 1-3 as north-south plough scars were noted in the bases of all trenches.

6.2 Recommendations

6.2.1 No further work is required on the information recovered during the evaluation, with the Site Archive (including this report), forming the permanent record of the strata encountered. A watching brief may be requested during the stripping of the site due to the close proximity to the Scheduled Monument of North Charlton medieval village and open field system. This is to be agreed between WSP and NCC.

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7.2 Online Sources

The **British Geological Survey** website: www.bgs.ac.uk. This was consulted for information regarding the geology of the study area.

8. ACKNOWLEDGEMENTS AND CREDITS

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APPENDIX 1: FIGURES

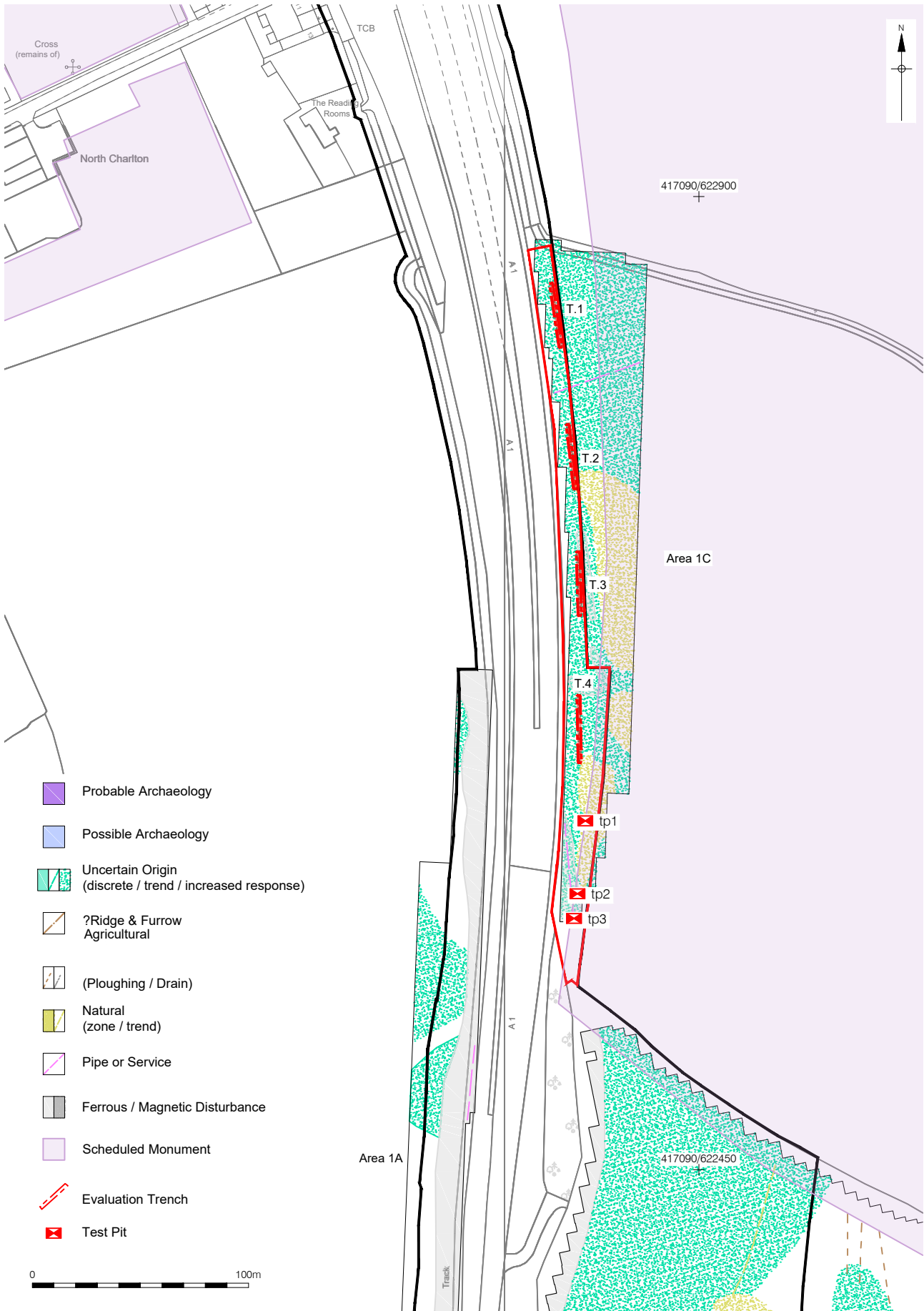
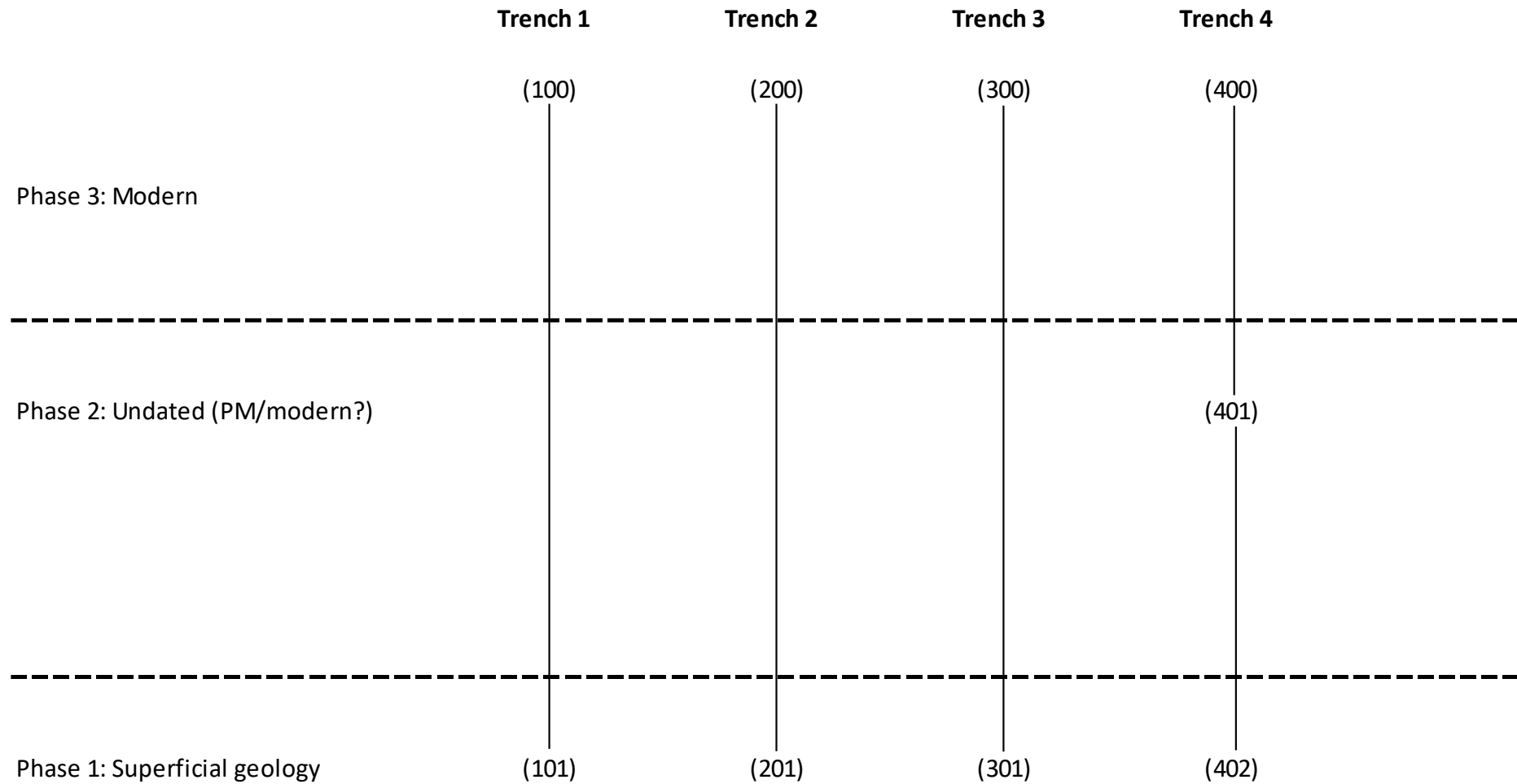


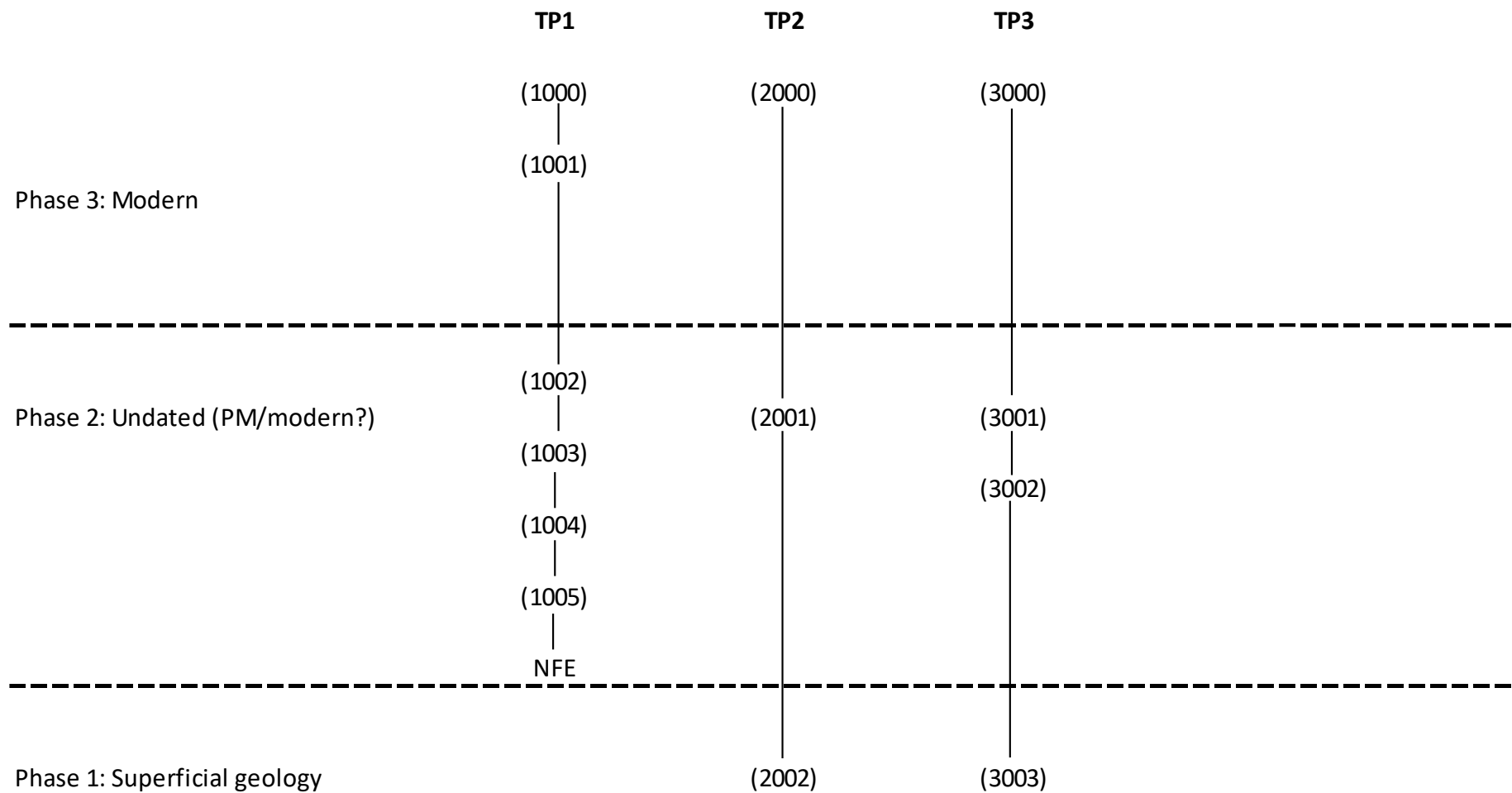
Figure 2
 Evaluation and Test Pit Locations overlain on Geophysical Survey (Area 1C)
 1:2,500 at A4

APPENDIX 2: CONTEXT INDEX

Context	Phase	Type 1	Type 2	Fill of	Interpretation
Trench 1					
100	3	Deposit	Layer		Topsoil
101	1	Deposit	Layer		Superficial geology
Trench 2					
200	3	Deposit	Layer		Topsoil
201	1	Deposit	Layer		Superficial geology
Trench 3					
300	3	Deposit	Layer		Topsoil
301	1	Deposit	Layer		Superficial geology
Trench 4					
400	3	Deposit	Layer		Topsoil
401	2	Deposit	Layer		Dark sandy clay
402	1	Deposit	Layer		Superficial geology
Test Pit 1					
1000	3	Deposit	Layer		Topsoil
1001	3	Deposit	Layer		Sandy clay and gravel
1002	2	Deposit	Layer		Clay and gravel
1003	2	Deposit	Layer		Sandy clay
1004	2	Deposit	Layer		Redeposited clay and gravel
1005	2	Deposit	Layer		Silty sand and gravel
Test Pit 2					
2000	3	Deposit	Layer		Topsoil
2001	2	Deposit	Layer		Silty sand and gravel
2003	1	Deposit	Layer		Superficial geology
Test Pit 3					
3000	3	Deposit	Layer		Topsoil
3001	3	Deposit	Fill	[3002]	Fill of modern intrusion [3002]
3002	3	Cut	Linear		Modern intrusion
3003	1	Deposit	Layer		Superficial geology

APPENDIX 3: STRATIGRAPHIC MATRIX





APPENDIX 4: PHOTOGRAPHIC PLATES

Plate 1: Trench 1: view north, scale: 2m



Plate 2: Trench 2: view north, scale: 2m



Plate 3: Trench 3: view north, scale: 2m



Plate 4: Trench 4: view south, scale: 2m



Plate 5: Test Pit 1: view north, scale: 1m



Plate 6: Test Pit 2: view west, scale: 0.5m



Plate 7: Test pit 3: view south, scale: 1m



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