SPENNYMOOR TO NORTON 400KV OVERHEAD CABLE SCHEME

Archaeological Monitoring, Controlled Strip & Excavation

Client Report

NETWORK ARCHAEOLOGY LTD

for

MWH (UK Ltd)

on behalf of

National Grid

Report No 589

March 2012







Document Control Sheet

Project title	Spennymoor to Norton					
Document title	SPENNYMOOR TO NORTON 400KV OVERHEAD CABLE SCHEME Archaeological Monitoring, Controlled Strip & Excavation					
Document ref.	SPN report v3.0					
Project code	SPN16, SPN 27, SPN 35					
Network report no.	589					
Accession number	pending					
Client 1	MWH (UK Ltd), National Grid					
Distribution	MWH (UK Ltd), Durham County Council, Tees Archaeology					
Document Comprises	Doc. Control	Table of contents	Report text	Figures	Plates	Specialist analysis reports
	1	1	48	28	8	12

Version	Status	Author(s)	Reviewer	Approver	Date
0.1	Internal draft	Paul Flintoft Project Officer	Mike Wood Project Manager		23 rd December 2011
0.2	Internal draft	Mike Wood Project Manager	Chris Taylor Senior Project Manager		
1.0	1 st draft for client review	Mike Wood Project Manager	Chris Taylor Senior Project Manager	Chris Taylor Senior Project Manager	3 rd February 2012
1.1	Edits following client comments	Mike Wood Project Manager	Chris Taylor Senior Project Manager		
2.0	Submission to stake holders	Mike Wood Project Manager	Chris Taylor Senior Project Manager	Chris Taylor Senior Project Manager	5 th March 2012
2.1	Edits following consultant comments	Mike Wood Project Manager	Chris Casswell Senior Project Supervisor		
3.0	Submission to curators	Mike Wood Project Manager	Chris Casswell Senior Project Supervisor	Chris Taylor Senior Project Manager	24 th April 2012
4.0	Final version	Mike Wood Project Manager	Chris Casswell Senior Project Supervisor	Chris Taylor Senior Project Manager	16 th May 2012

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1 Summary

An archaeological scheme of work, including strip, map and record, a watching brief and limited excavation was undertaken by Network Archaeology during upgrading and replacement of the electricity network between Spennymoor in County Durham and Norton in Teesside.

Two small, Romano-British rural farmsteads were revealed at Butterwick Road (Access 27) near Fishburn in southern County Durham, and at Low Middlewood (Access 37) near Thorpe Thewles on Teesside. A single, heavily truncated, Roman pit was also recorded at East Close (Access 35) near Thorpe Larches on Teesside.

Later remains were restricted to remnants of medieval ridge and furrow agriculture, particularly noticeable near the deserted and shrunken medieval settlements along the route such as near Layton on Teesside.

It is noticeable that stretches of the route appear to be devoid of both archaeological features and metal detected finds, particularly between Coxhoe and Trimdon where the route crosses open farmland. This may suggest that parts of the landscape have remained relatively uninhabited and under utilised away from existing settlements and the known abandoned or shrunken medieval communities.

Systematic metal-detecting recovered a moderate collection of metalwork, strongly biased towards agricultural and domestic 19th and 20th century objects. However, several notable finds included a 16th century silver hairpin at Cornforth Lane (Access 13) in County Durham, a 4th century Roman coin from Trimdon (Access 22) in County Durham, an Edward I silver penny at Carlton (Access 40) on Teesside, and a medieval lead spindle whorl at Norton (Access 41) on Teesside.

2 Introduction

2.1 Scheme background

2.1.1 Reasons for development

The aim of the development was to upgrade and replace a section of the national electricity transmission network. This replacement system will be able to transmit increased amounts of electricity from newly built installations, which harness renewable energy sources in northern England and Scotland. The pre-existing network, constructed in 1975, had the capacity to transmit 275kV of electricity, while the replacement system will be able to relay almost double the capacity of its predecessor (Environmental Statement Volume 1, National Grid 2009).

2.1.2 Scheme details

A total of 69 replacement towers, which facilitated the new network, were constructed between the Spennymoor Substation in County Durham and the Norton Substation in Teesside. The route of the replacement tower scheme, namely the ZXC overhead line, was dictated by the route of the earlier XC overhead line scheme. In some instances the routes converged and some ZXC towers were constructed directly in place of the dismantled XC towers. Two short sections of the 4TF route were also constructed as part of the scheme. The 4TF system was required to swap circuits from the XC route to the ZXC route.

The development primarily required access to plots of land which contained the XC overhead line network for a programme of tower dismantlement, as well as access to the proposed site of the ZXC towers. To assist in accessing the fields whilst minimising the burden of the construction traffic, a series of temporary access tracks, 4m wide, totalling an approximate length of 20km, were constructed.

In most cases construction of each access track entailed the removal of the topsoil to an approximate depth of 0.3m with a mechanical 360 excavator. A thin membrane of a geocomposite membrane (Tensar's TriAx T160-G) was cut to the correct width and placed within the access track which then received an appropriate amount of crushed aggregate up to ground level. Once the access tracks were connected with the proposed tower site, a square working area and crane pad was instated around the footprint of the tower.

The entrances to the overhead line tower accesses were mostly located at intermittent points off category A or B roads. Funnel shaped 'bell-mouths' were built at the entrances to assist in safe access and egress to the site. The bell mouths were constructed using the same methodology as the access tracks.

The foundations for the towers consisted of four square pits distributed in a square formation. Each foundation pit was 4m deep and between 3.6m and 5.8m square dependant on the size of the tower.

On smaller plots of land which were expected to receive smaller amounts of construction traffic, a series of steel plates were positioned on the ground to reduce the amount of ground works within the field. Once the overhead line was in operation, all of the temporary access installations were removed and the fields were re-instated.

2.1.3 Project commission

Network Archaeology was commissioned by MWH (UK Ltd) to undertake all required archaeological fieldwork and reporting relating to the project. Network worked alongside the Electricity Alliance East who controlled the project on behalf of National Grid.

The Electricity Alliance East employed Balfour Beatty Civil Engineers Limited (BBCEL) to undertake work on all access tracks, bell-mouths, tower working areas, steel track installation and crane pads along with smaller sundry works. The tower foundations, tower erection and dismantlement teams were from Balfour Beatty Utility Solutions Limited (BBUSL).

2.1.4 Route (Figs 1-4)

The 21.5km long ZXC overhead line route progresses directly east from the Spennymoor Substation, (NGR 428900 534200), sited 3km east-north-east of the centre of the town of Spennymoor. The route proceeds east and crosses the route of the East Coast Main Line railway and continues in a straight line north of Cornforth where it crosses the A1. The easterly alignment changes at this point to an east-southeast alignment which continues towards Trimdon. At Trimdon, the route sharply turns to the south-south-east in the direction of Fishburn. The route turns south where it runs parallel to the town of Sedgefield and crosses the A689 where it gradually bends to the south-east. This section of the overhead line progresses to the east of the A177 and continues in broad alignment with the road for roughly 5km. Approximately half way along this stretch of the overhead line, at Thorpe Larches, the route passes from County Durham into Teesside. The route finally turns south where it crosses the A177 and terminates at the Norton Substation (NGR 441100 522000).

2.15 Construction

The principal construction activities requiring archaeological investigation were:

- Soil stripping of new access tracks to new towers and the creation of associated bellmouths at roads;
- Soil stripping of working areas around 69 new towers, and
- Excavation of tower foundation pad pits.

Access to the towers was via a combination of existing tracks (which did not require stripping) supplemented by a series of new tracks which were stripped under archaeological monitoring.

2.16 Construction programme

Construction was programmed to start the week commencing 4th January 2010, taking a period of approximately 29 months to complete. Archaeological field work began on the 4th January 2010 and was concluded by the 30th of September 2011.

2.17 Legislation, regulations and guidance

National Grid submitted an application to the Department of Energy and Climate Change (DECC) on 3rd July 2009 for consent, under Section 37 of the Electricity Act 1989, for the installation of above ground of electricity lines and for a direction that planning permission be deemed to be granted. The application was supported by an Environmental Statement, Planning Statement and Consent Application Drawings.

DECC granted consent to National Grid on 10th Dec 2009, subject to a pre-commencement condition relating to archaeology: Condition 3: 'No development shall take place until a programme of archaeological work in accordance with a mitigation strategy as set out in the attached conditions provided by Durham County Council has been submitted and approved by Durham County Council. Reason: To protect areas of archaeological interest. Durham County Council's Form B records a series of 'suggested conditions'.

These Conditions were addressed by an archaeological Specification and a Written Scheme of Investigation (Network Archaeology 2010).

2.2 Geology and topography of the route (Fig 5)

The route of the overhead line replacement scheme can be partitioned into three distinct geological zones. The north-westernmost of these, on the largely undulating ground between the 110m and the 80m AOD contour, is the Pennine Middle Coal Measure (BGS 2012). The bedrock of this part of the Coal Measure can be characterised as sandstone and mudstone, mixed with occasional beds of siltstone. It extends from Spennymoor until the northern peripheries of Cornforth. The superficial geology is Devensian diamicton till and remains so until Fishburn and Sedgefield.

In contrast, the magnesian limestone hills towards the east, on which the villages of Trimdon and Fishburn are located, has fewer dramatic undulations and reaches up to 120m AOD. Both the Raisby and Ford dolostone formations account for the dominant bedrock of the limestone hills. The superficial geology becomes far more variable and includes alluvial clays, sands, silts and gravels. This mixed and variable geology continues south until Stockton on Tees.

At the river Skerne, approximately 100m AOD, the bedrock changes to the Roxby formation of calcareous mudstone. Within the Skerne valley there are other stratified bedrock deposits such as Seaham limestone and Edlington calcareous mudstone. The relief gradually becomes gentler with fewer severe hills and a more rolling landscape. The bedrock continues to be the Roxby formation and the height decreases to 40m AOD at Thorpe Thewles towards the Tees Valley.

2.3 Modern landuse (Figs 1-4, 6)

The north-west section of the route avoids major settlements and passes through farmland comprising mixed managed pasture and arable crop with little or no woodland. The seasonally wet acid and clay loams found near Spennymoor allow some arable cultivation, though are historically more suited to grazing and woodland. The route then passes through cultivated lime-rich loams on the edge of the limestone escarpment and the adjacent slightly acid loams before passing to the north of a pocket of Carr and fenland formed from glacial meltwater. Finally, the route crosses a large expanse of seasonally wet clay loam which stretches to the edge of Norton and is utilised as mixed pasture and managed grassland.

The landscape immediately northwest of the route, lies over rich coal measures, and has been historically mined for coal and other minerals, though most of the mines and quarries are now abandoned.

3 Previous Archaeological Work

3.1 Previous work

Preliminary work conducted prior to fieldwork included a Desk Based Assessment (Cultural Heritage Chapter 10) and a walkover survey. The assessment was required to consider the cultural heritage resources including Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens, Battlefields and palaeoenvironmental deposits within a 2km radius of the existing XC route. Information pertaining to these cultural heritage assets was obtained from various government departments and institutions including English Heritage, Durham University Library Archives and Special Collections, cartographic sources, and Tees Archaeology Historic Environment Record. The significance of the cultural resource was assessed as well as the potential impact imposed by the development.

Potential resources identified included stray finds of un-stratified prehistoric artefacts and the cropmarks of several possible Bronze Age ring ditches present within the route corridor. A number of enclosure sites of possible Iron Age/Romano-British date have also been recorded. The ZXC overhead line crosses the line of Cade's Roman Road to the east of Cornforth, though there are no other recorded Roman period sites along the development route. Unstratified Roman finds have been recorded southwest of Metal Bridge, west of Wynyard Park and to the south-west of the Norton Substation. There was no substantial archaeological evidence for settlement or activity dating to the early medieval period within the study area. Whilst the potential for unrecorded settlement of medieval date was also considered to be low, evidence of the former medieval agricultural landscape is widespread, primarily in the form of field system complexes of ridge and furrow cultivation. This has mainly been recorded from aerial photographs and the majority has been ploughed-down with little surviving as upstanding earthworks. A range of post-medieval industrial features, comprising former railways, coal mining remains and quarries of various types are recorded within the route corridor both as extant features and from documentary/cartographic sources.

3.2 Research aims

Research aims have been drafted in consultation with The North-East Regional Research Framework for the Historic Environment (Petts, D and Gerrard, C 2006), Tees Archaeology, and Durham County Council.

- The metal detecting survey across the entire route of the development is an unprecedented venture for a developer-funded project in the region. The survey should characterise the quantity and type of metal artefacts likely to be discovered in this part of north-east England.
- Mesolithic flints are found in large concentrations between the Tyne and the Tees. This has led some (Harding 1995) to suggest that there were significant Mesolithic migratory routes from east to west. Casual flint finds discovered during the monitoring may allude to more defined routes.
- The project has an opportunity to assist with the understanding of Iron Age and Romano-British settlements on the Magnesian Limestone escarpment and the upland fringe of the Coal Measures. Chronologies and morphologies of settlements from these two periods are poorly understood, especially on the lowlands.
- Understanding the impact of Roman control in the North-East of England varies greatly across the region. Little is known about the impact of Roman frontier expansion between the Tyne and the Tees and to the west of the Stainmore and Lanchester forts. Any Roman remains encountered during the project may assist in understanding this topic.
- Parts of the development pass very close to 'Cades' Roman road. This presents an opportunity whereby finds or features associated with the construction of the road

may be encountered. The date and chronologies of surrounding contemporary settlements such as West House enclosed settlement and Garmondsway may therefore be better understood (Clark, P.A.G and Gosling, P.F 1976/Proctor, J 2009).

- The noticeable absence of Early Medieval settlements within close proximity of the development will be further investigated. There is a genuine opportunity to understand more about the apparent abandonment of the lowlands or alternatively investigate if the absence is a condition of archaeological preservation.
- Ridge and Furrow is likely to be a common feature during the programme of archaeological works. Certain aspects of later medieval agricultural development, such as the formation of ridge and furrow, are still uncertain. A more focused investigation may provide evidence for such developments.
- Certain parts of rural County Durham are known to have had dramatic fluctuations in population during the 14th century. This is believed to have been as a result of the Black Death, as well as several other plagues, soil exhaustion and crop failures. Any noticeable prolonged absences in this period may be identifiable in the archaeological record.
- The development of major industrial intensifications began in the 16th and 17th centuries. The genesis and development of industry may be understood more in the Tyne Tees corridor as a result of this programme of works.

The significant scale of the development has the potential to increase our understanding of the effects which modern industry and land use have had on archaeological remains.

3.3 **Potential impacts**

The WSI noted known archaeology at risk during construction; this is detailed in Table 3.1 below, with the site name given during post-excavation added for clarity:

Tower	Site Name	Known Archaeology	Date
9	Grindon	Field system	Medieval
12	Grindon	Flint findspot	Prehistoric
27	Butterwick Road	Unclassified earthwork	unknown
49-50	Stobb Cross Lane	Roman Road	Roman
51	Stobb Cross Lane	Railway	Modern
52	Cornforth Lane	Mill	Postmed/Modern
54	Cornforth	Circular cropmark	unknown
12.1	Grindon	Limekiln and quarry	Postmed/Modern

Table 3.1 Potential Impacts

4 Scope of Works

4.1 **Objectives**

The general objectives detailed in the WSI are as follows:

• • To identify, appropriately manage and fully mitigate the archaeological resource affected by the proposed development;

- \cdot To consider, in all cases of archaeological discovery, whether preservation *in situ* is desirable and achievable as the foremost response;
- • To determine, where preservation *in situ* is not desirable or achievable, an appropriate strategy for preservation by record;
- • To develop, where possible, knowledge and understanding of the historic landscape and archaeological resource through recording of threatened remains;
- • To determine and understand the nature, function and character of any archaeological remains in their cultural and environmental setting;
- • To obtain a chronological sequence for the human activity and to place it within its regional context;
- • To establish the ecofactual and environmental sequence and context of archaeological deposits and features;
- • To engage in a programme of post-excavation, archiving, synthesis and study, leading to publication and dissemination of results, and
- To ensure the long-term survival of the information through deposition of a project archive and any reports generated at the County Durham and Tees Archaeology Historic Environment Records and the National Monuments

4.2 Strip map and record

The monitoring archaeologist supervised the machine excavation of a controlled strip of the soils to reveal the natural drift geology and any archaeological features.

Each tower was recorded with a pro-forma specifically designed for the project. The proforma recorded the geographic position of each of the four foundations along with a representative section of the stratigraphy of one of the foundations. Context numbers were allocated where appropriate. A suite of photographs were taken of the foundations regardless of the presence or absence of archaeology.

The context numbers allocated to the monitoring and excavation of the tower foundations are five digits long. The tower number is indicated by the first two numbers whilst the following three numbers relate to the context, such as 221001

Tower bases were routinely visited at various stages to maintain a record of the natural drift geology.

4.3 Watching brief

A programme of archaeological monitoring in the form of a watching brief was conducted on all access tracks and sundry works under the code SPN16.

The watching brief comprised permanent presence supervision by an archaeologist during access track construction. The archaeologist monitored the removal of the topsoil and any subsoil to reveal the natural drift geology or any archaeological deposits or features. Any remains of limited extent were excavated and recorded immediately in order to maintain the work programme. Similarly, remains considered to be of particular sensitivity or at imminent risk were appropriately excavated and recorded by the archaeologist conducting the watching brief. Any discoveries which were considered to require resources beyond the immediate reach of the watching brief archaeologist (extensive and/ or complex) and sufficiently robust to survive covered under a geo-membrane were preserved *in situ* and shelved for excavation during the programme of re-instatement.

Numbers allocated to the watching brief are six digits long. The access track number is represented by the first two numbers whilst the following two numbers indicate the division of the track and the final two numbers relate to that particular context.

4.4 Excavation

Excavation of selected groups of features identified during the watching brief was undertaken during 2011. The programme of excavation was intended to work alongside the reinstatement works. This was mostly achieved with a team of three archaeologists. Context numbers associated with the excavations are four digits long ranging from 0001 to 0132. The site code for the excavations is SPN 35. Excavations were conducted on towers ZXC21 and ZXC5A, access 2701, access 2401, and access 2603 and 2605.

The excavations were carried out accordance with Network Archaeology's Written Scheme of Investigation for excavation (Network Archaeology 2010).

4.5 Metal detecting survey

The metal detecting survey commenced in January 2011 and continued throughout the project. The operator was a trained archaeologist who could identify and appropriately treat metal artefacts upon discovery. The survey was conducted on all ground before any disturbance. When it was deemed necessary, spoil heaps were also subject to the survey to retrieve any stray metal artefacts. All artefacts located during the metal detecting survey were geographically referenced with a Garmin handheld (GPS) unit.

All numbers allocated for the metal detecting survey are 6 digits long. The first two numbers refer to the access track number; the following two numbers relate to the division of the access track (see location mapping) and the final two numbers are specific to that particular context such as 400100. Most of the finds recovered from the metal detecting survey were from the topsoil.

5 Archaeological Background

5.1 Palaeolithic and Mesolithic

The Palaeolithic period covers the earliest anatomically modern humans, approximately 40,000BC, and extends to more complex groups of humans in the Mesolithic period. The Mesolithic begins with the retraction of the southernmost glacial frontier of the Pleistocene ice sheets, approximately 10,000 BC, and ends around 4,400 BC (Scarre, C 2005). The Palaeolithic and Mesolithic are not particularly well understood periods of British prehistory. The nature of the nomadic lifestyles of these ancient communities has resulted in ephemeral evidence for their daily activities (Petts, D and Gerrard, C 2006, 121).

The more frequently discovered early prehistoric remains include flint artefacts used as tools and hunting equipment. Palaeolithic flint is only very occasionally discovered in the northeast. The majority of the flint which has been found in the region pertains to the later Mesolithic period (Petts, D and Gerrard, C 2006). These flints have been found in their greater concentrations between the Tees and the Tyne close to Stanhope, Weardale and Plawsworth (Clark, P.A.G and Gosling, P.F 1976).

Although the discovery of early prehistoric settlements is rare, the north-east does boast one of the few Mesolithic houses found in Britain. The internationally significant house at Howick was a sunken floored circular building which is believed to date to 7, 800 BC (Petts, D and Gerrard, C 2006) (The Howick Project). Further settlement remains in Hartlepool, excavated by Trechmann in 1939, have tentatively been dated to the 7th millennium BC (Clark, P.A.G and Gosling, P.F 1976). A possible Mesolithic land surface has also been

identified at Darlington Bowden Doors and Goatscrag, and a possible late Mesolithic/early Neolithic ditch has been identified at South Shields (Petts, D and Gerrard, C 2006, 121).

The landscape exploited by the Palaeolithic and Mesolithic communities would have been densely wooded with an abundance of wild animals for hunting. The majority of evidence for the density and the types of woodland comes from the pollen records from Holowell Moss near Durham. This moss has been the major contributors to the palynological record for the prehistory of north-east England (Turnbull, P and Jones, R.F. J 1978, 13).

5.2 Neolithic

The emergence of permanent settlement and the advent of agriculture are commonly associated with the Neolithic period which is broadly dated to between 4,500BC and 2,250BC. Identifying the remains of Neolithic settlements and activities can prove to be difficult as these actions do not frequently leave many recognisable residues. Although the north-east of England demonstrates evidence of Neolithic occupation, these remains are less frequent between the Tyne and the Tees and locations surrounding the route of the development.

Early Neolithic settlements were deliberately sited within parts of the landscape which were conducive to the rigors of these communities' new lifestyles. The sedentary way of life adopted in the Neolithic required a shift from hunting and gathering as the main means of food procurement to the cultivation of crops and domestication of animals for consumption (Clark, P.A.G and Gosling, P.F 1976,13). The acquisition of land for animal grazing and agronomic activities would have been one of the necessary first steps for the early farmers.

Desirable land intended for settlement would require open plots of land on fertile soils which would encourage reliable crop yields. Once selected, the land was deforested, removing large swathes of forest and woodland which would have dominated the landscape (Turnbull, P and Jones, R.F. J 1978). The type of woodland coverage and approximate dates of major deforestation events can be determined by pollen remains from trees and plants which have been preserved in waterlogged deposits such as bogs and peat beds. Examples of such deposits within the region which have produced pollen cores include (Harding 1995 et al, 194) which are predominantly in the northern part of the region. The information from these pollen cores has demonstrated that deforestation occurred in isolated pockets rather than a few large scale events.

The landscape more immediate to this project unfortunately suffers from poor preservation, partially due to the wide scale damage of the lowlands and coastal areas during the 18th and 19th century quarrying and mining (Petts, D and Gerrard, C 2006, 127). This poor preservation has resulted in the absence of any pollen information pertaining to the Neolithic settlement between the river Tees and the Tyne (Turnbull, P and Jones, R.F. J 1978).

The paucity of environmental remains, such as pollen, within the south Durham lowlands is reflected by the archaeological evidence. There have been very few settlement remains in the Tyne/Tees corridor (Clark, P.A.G and Gosling, P.F 1976, 21). The majority of the Neolithic settlement within the region is again echoed by the environmental evidence clearly displaying a clear preference for settling the northern coal measures and the Millfield Basin in Northumberland and the Cumbrian hills (Clark, P.A.G and Gosling, P.F 1976). Domestic structures like the ones found at sites such as Thirlings and Old Yeavering are often characterised by a series of pits and post holes which may be diffusely distributed or ordered in a rectilinear arrangement (Clark, P.A.G and Gosling, P.F 1976, 16). Concentrations of finds such as pottery and worked flint may also allude to the location of Neolithic settlements.

The earlier Neolithic settlements would have been a mélange of small isolated farmsteads. Geographical boundaries of larger communities would have been delineated by natural features such as water courses, as well as deliberately constructed monuments (Pollard 2009). In the later Neolithic, the cairn fields in the Millfield basin in Northumberland may have supported an extended population. Unfortunately the ephemeral nature of Neolithic settlement and the fact that the landscape has been re-worked throughout the subsequent periods of history leaves little evidence of such settlement.

Typical types of materials frequently associated with this period include flint artefacts, similar to those used by the Mesolithic communities. Langdale, in Cumbria, is regarded as one the most prolific producers and distributors of finished flint artefacts. The 'flint factory' would have been in operation at the beginning of the 4th millennium BC and would have produced axes, pikes and sickles. Fragments of these artefacts from the Langdale flint factory have been discovered in Weardale and on the magnesian limestone between the Tyne and the Tees (Clark, P.A.G and Gosling, P.F 1976, 21). Although small amounts of worked flint is frequently found as 'background noise' within the topsoil, higher densities of flint may suggest trade networks, settlements or flint working platforms. Such fragments of un-worked flint and worked flint artefacts have been recorded close to Raisby Hill Quarry and to the south of Garmondsway during refurbishment of the existing Spennymoor to Norton overhead line. A scatter of worked flints and a separate single flint artefact have been recorded within the vicinity of Grindon. Other discreet flint finds have been found close to Fulthorpe and Wynyard Park.

At approximately the same time as the 'axe factory' in Langdale was in full production, early pottery such as Grimston ware was being produced (world timelines.co.uk). A succession of new pottery types came to fruition through the Neolithic and culminated with Beaker wares in the transition of the Late Neolithic to the Early Bronze Age. The amount of Neolithic pottery which has been found within the region pre-dating the advent of Beaker pottery is extremely low. Most pottery has been found in Northumberland and has been rarely recovered on the magnesian limestone escarpment between the Tyne and Tees.

The appearance of monuments constructed out of earth and stone is a phenomenon associated with the emergence of the Neolithic ritual landscape. The earlier of these monuments are the causewayed enclosures and un-chambered long mounds and chambered tombs (Scarre 2007, 82; Cummings in Pollard 2009). Causewayed enclosures are a class of monument which is not usually found in northern England. Despite their scarcity in northern England, a possible causewayed enclosure has been identified through aerial photography at Flodden Hill in Northumberland. The interpretation of this earthwork has not been confirmed by excavation.

In the later Neolithic period, monuments of various distinctions became more prominent. Burial monuments such as cairns and long barrows are constructed as physical reminders on the landscape intended to emboss the memories of the ancestors into everyday life. A possible Neolithic burial mound has been discovered at Coffee Pot Plantation close to Bishop Auckland and a long cairn in the western region of county Durham in Irehopeburn has been identified (Turnbull, P and Jones, R.F. J 1978).

The excavation of a Bronze Age round barrow at Hasting Hill, Sunderland, identified an earlier burial interred underneath the barrow which has been carbon dated to 2,890BC, firmly placing it in the late Neolithic period. Two round barrows believed to be either Bronze Age or Neolithic have also been identified in Warden Law (Clark, P.A.G and Gosling, P.F 1976).

The end of the Neolithic period is marked by the emergence of metals and new technologies. There are distinct changes in the dynamics of the societies and the ways in which people live their everyday life, and the way they are ultimately treated upon their death is noticeably different.

Further evidence for Neolithic activities from the wider region can clearly be seen at How Tallon, where the boundary between Yorkshire and Co Durham on Barningham Moor is scattered with round barrows and a Cairn (Burl 2005).

The changes in people's lifestyles, beliefs and economies through the transition between the Mesolithic and the Neolithic are poorly understood. Casual finds and excavations on the lowlands between the Tyne and the Tees do not particularly contribute to a wider understanding of this topic. The amount of stray flint finds discovered around the route of the

development does suggest that whilst there was not the same level of permanent settlement, such as on the northern coal measures, there was a certain sustained amount of activity. The amount of settlement activity appears to have gradually increased around the transition between the Neolithic and the Bronze Age.

5.3 Bronze Age

The Bronze Age is broadly dated between 2,250BC and 800BC. Along with the advent of metals, the use of monuments to inter and commemorate the dead results in heightened levels of material culture discovered during this period of prehistory. Rock art on Barmington Moor and Northumberland also add to the distinct character of Bronze Age activities in the north east. The intensification of settlements and the amount of land cleared for crop production and animal husbandry also occurs in the Bronze Age.

The agricultural economy of the Late Neolithic continued unabated into the Bronze Age. Hundreds, and in some cases, thousands of years of sedentary life of the early farmers had evolved and changed their methods and techniques. By the Bronze Age, farms had become larger requiring more open farm land. Pollen evidence from Bishop Middleton, 5km southeast-south of Ferryhill, suggests that there was large scale woodland clearance and intensified cereal production in 1,400BC (Turnbull, P and Jones, R.F. J 1978, 13-14 and Bartley, Chambers and Hart Jones 1976). The same model of clearance followed by cereal production can be seen at other sites such as Mordon Carr and Neasham Fen. With the exception of these sites, there has been very little evidence for the cultivation of cereals associated with settlements on the magnesian limestone escarpment. This use of the landscape for agricultural practices continued until the end of the Bronze Age when there is evidence for large scale forest clearing.

The appearance of what we today recognise as a field is regarded as a Bronze Age innovation. Neolithic field systems are scarce. This may be because physical boundaries were not created or have been destroyed by subsequent activities (Pryor 2006). Neolithic fields in Northumbria were possibly delineated by stones cleared from the fields (Johnston in Pollard 2009). In some parts of Britain, such as the Thames Valley and the East Anglian Fens, large systems of coaxial field systems and droveways would have enclosed large parts of the landscape. These field systems would have been constructed from ditches and hedges. Existing boundaries observed in the Neolithic delineated by monuments may have been maintained and become part of the later landscape (Pryor 2006).

Bronze Age settlement activity was again proportionately much higher in the Cheviots and fell sandstone than the magnesian lime escarpment (Petts, D and Gerrard, C 2006). The evolution of the upland settlements and how the landscape changed are altogether much better understood (Petts, D and Gerrard, C 2006, 129). Palisade enclosures have been discovered at Fenton Hill near Wooler and underneath the Roman fort at Corbridge.

Little evidence for Bronze Age settlement has been discovered on the magnesian limestone between the Tyne and the Tees. The absence of typical Bronze Age landscape features such as large field systems does suggest that the farmers in the lowlands would have grazed their animals within natural forests without clearing, and were probably living in dispersed settlements (Turnbull, P and Jones, R.F. J 1978).

The types of buildings expected to be found within Bronze Age contexts would have had a circular footprint. The physical remains of such buildings are often found as a circular arrangement of post holes or a penannular ditch which would have acted as a drainage gully (Harding, D 2009). Examples of such houses can be seen at West Brandon, Esh and Brancepeth. These settlements are all believed to be Iron Age but some of the structures or elements of the settlements such as boundaries may be Bronze Age (Turnbull, P and Jones, R.F. J 1978, 14).

Funerary monuments continued to be built through the Neolithic and into the Bronze Age. A more common funerary monument in the Bronze Age would have been the round barrow, a

circular mound of earth with a circular ditch surrounding it and at least one body interred within the mound. Round barrows do, on occasion, survive as visible upstanding earthwork mounds. Unfortunately many of these have been 'ploughed out' in an attempt to create more farmable land. The absence of the upstanding mound means that in most cases the only remains of these features are the circular ditch which surrounded the mound. These circular features can be identified as a cropmarks from aerial photographs. A series of circular cropmarks have been recorded from such aerial photographs in the 1970s in the area between Coxhoe and Cornforth all located close to the Coxhoe Beck (Jones 1977). As there are no formal excavations to confirm the interpretations of these features, they may be relating to later activity such as quarrying or ancient watercourses.

Two further sites of ring ditches have been identified through cropmark analysis. The first of these comprises five annular or penannular cropmarks along the southern bank of the Coxhoe Beck. The second of these comprises further ring ditches possibly representing the sites of barrows at Catley Hill to the west of Trimdon. Both of these proposed sites may have formed part of a wider series of Early Bronze Age funerary monuments to the south of the current route of the Coxhoe Beck.

A barrow at Trimdon Grange was the focus of antiquarian excavations in the 19th century (Petts, D and Gerrard, C 2006). A burial cist believed to belong to the later Bronze Age and containing five inhumations was found at Kelloe Law Farm in 1948 (Turnbull, P and Jones, R.F. J 1978). The Tyne-Tees region has far less Bronze Age burials and remains than surrounding areas like Cumbria, Northumberland and Yorkshire (Clark, P.A.G and Gosling, P.F 1976).

Beyond the use of funerary monuments to dispose of and commemorate the dead, the practice of cremation becomes prominent in the Late Neolithic and throughout the Bronze Age. Fragments of cinerary urns have been discovered at Trimdon (Clark, P.A.G and Gosling, P.F 1976, 23).

Aerial photographs taken as part of the current project have identified cropmarks of another ring ditch some 25m in diameter to the east of Grindon. A second possible ring ditch of similar size may also be present just to the north-east.

The appearance of nationally significant rock art is attributed to the Late Neolithic/Early Bronze Age. Rock art is not an isolated expression; many of the examples of rock art exist in conjunction with other monuments within the landscape (Petts, D and Gerrard, C 2006). Examples of rock art can be seen in several places around Barningham Moor and one of the best resources for rock art in the UK can be seen in Northumberland (Petts, D and Gerrard, C 2006, 128-133).

Before the casting of bronze, copper was the brief forerunner. Copper was the first metal to be worked but is rarely discovered in archaeological contexts within the British Isles and is not thought to be domestically produced. The casting of bronze was developed in the British Isles relatively late when compared to the rest of Europe. Once bronze casting had become established, the occurrence of bronze artefacts becomes more common. One of the earliest types of artefact that was casted out of bronze was the axe. An example of one of these axes was found to the south east of Coxhoe, immediately to the east of the A177.

Flint continues to be worked and shaped into tools. Fragments of worked flint dating to the Bronze Age have been found to the south of Garmondsway. A flint arrowhead and a stray worked flint have been found near Thorntree Farm.

There were communities on the lowland magnesian limestone which continued to develop the landscape but at a lesser extent than the uplands. Nevertheless, the chronologies of many of the settlements on the uplands and lowlands are poorly understood. More excavation and better dating techniques in the future will hopefully tighten the chronologies (Petts, D and Gerrard, C 2006, 129).

5.4 Iron Age

The Iron Age is the final period of British Prehistory. It is traditionally dated from 800 BC, with the advent of iron materials in British contexts such as the Llyn Fawr hoard, and culminated at the Roman Conquest in 43 AD.

The settlements of the tribal communities in the north-east, believed to be the Brigantes, would have been a mix of dispersed enclosed and unenclosed settlements.

There is a growing body of evidence for increased levels of settlement during the Iron Age. Both enclosed and unenclosed settlements such as Ingleby Barwick and Thorpe Thewles can be seen to develop and prosper across the region. Many rudiments of these settlements and patterns of domestic organisation found within County Durham and Teesside Iron Age contexts appear to be broadly similar to those encountered within contemporary examples across the majority of Northern England.

Many settlements from the Bronze Age continue into the Iron Age. The overall distribution of many of the later Bronze Age settlements is very similar to the Iron Age sites (Clark, P.A.G and Gosling, P.F 1976, 28). Many of the palisade enclosures witnessed in the Bronze Age change during the Bronze Age/Iron Age transition were adapted into hillforts (Clark, P.A.G and Gosling, P.F 1976, 24).

Hillforts were essentially defended hilltop settlements. Within these settlements it was common to find round houses and ancillary storage structures. The defensive facets of the settlement would have been in the form of at least one large ditch and bank and may have used timber ramparts to enforce the bank (Darvill 1987). Examples of hillforts in county Durham include Shackleton Beacon Hill near Redworth, Toft Hill near Bishop Auckland, Stockley Beck in the Brancepeth Parish, and Maiden Castle south of Durham (Petts, D and Gerrard, C 2006, 139 and Clark, P.A.G and Gosling, P.F 1976, 24). Many more hillforts are known to exist to the north in the Coquet and Breamish valleys (Discovering Our Hillforts Heritage Project). The amount of hillforts in the Coquet and Breamish valleys suggests that there was a significant political or cultural boundary, possibly delineated by the Tyne.

A class of settlement which is common in the north-east of England is the enclosed settlement. The purpose of an enclosed settlement is the protection of the settlement by the inclusion of a ditch and bank around the perimeter of the settlement. Typical enclosed settlements identified in the region are both rectangular and sub-circular. These have largely been recognized by the extensive research of George Jobey (Petts, D and Gerrard, C 2006, 138). Rectilinear ditch enclosures have been identified at Brancepeth, Esh, North Finchale, Etherley, Croxdale, Hartburn, Burradom, Wickham, Brawns, Thorpe Thewles, Den, Broomsdale, and Thornley (Petts, D and Gerrard, C 2006, 138 and Clark, P.A.G and Gosling, P.F 1976, 27). The majority of these settlements are located to the north of the Tyne suggesting the continued preference for settling on the coal measures.

There are several enclosure sites believed to be Iron Age in date within the vicinity of the development. These include a possible earthwork enclosure near Coxhoe Bridge, and a cropmark of a possible Iron Age square enclosure (variously recorded as Harap Hill, Fishburn or Harup, Trimdon) to the west of Trimdon. Further similar enclosures have been observed between Thorpe Larches and Grindon Grange with a crop mark to the south of Thorpe Thewles.

The variety of settlement variation in the Iron Age is demonstrated by the array of settlements in the region which do not display a surrounding bank and ditch. These unenclosed settlements have been identified at Holburn Wood, Plawsworth, and Ingleby Barwick (Petts, D and Gerrard, C 2006, 138).

Beyond the obvious physical differences of the enclosed and unenclosed settlements, little else is known. The differing functions and statusus of the inhabitants is difficult to glean due to the limited excavation of the sites and the low frequency of finds. Increased use of

thermoluminescence dating of pottery may assist in the greater understanding of the dating of settlement types which would in turn assist in creating a chronology for settlement morphology and function (Petts, D and Gerrard, C 2006, 136-7).

All settlements pertaining to the Iron Age appear to be distributed in greater numbers to the north of the Tyne and are in greater numbers to the east than the west (Clark, P.A.G and Gosling, P.F 1976, 24-28). With the exception of Thorpe Thewles, Hartburn, West Brandon, Coxhoe and the possibility of Garmondsway, there has been little evidence for Iron Age settlement in the immediate vicinity of the development.

The presence of the forts at Piercebridge near Darlington (*Magin/Morbium*, South Shields *Arbeia*, Ebchester (*Vindomora*), Lanchester (*Longovicivm*), Chester le street (*Concangis*), Binchester within Teesside, and County Durham do suggest that there may have been a larger presence of Iron Age communities in the Teesside and County Durham area than the evidence suggests (Clark, P.A.G and Gosling, P.F 1976, 32).

The increase in population required a greater quantity of land for food production as well as settlement. Most of the landscape was cleared by the Iron Age/Romano British period (Clark, P.A.G and Gosling, P.F 1976). Evidence for the variety of crops grown has been identified on the magnesian limestone escarpment including cereals and hemp.

The earliest examples of iron discovered in Britain are all imported from Europe. Bowl furnaces in the south east of England are the earliest recognisable domestic iron furnaces. Once production had been established by the use of bowl furnaces, iron production gathered momentum and after the introduction of slag tapping furnaces, high quality iron became more available (Ehrenreich 1985, 87). By the end of the Iron Age, La Tene style iron weaponry was been deliberately deposited as a votive offering in British contexts. Very little evidence for iron working has been discovered in the region. This may be due to low production of iron or the repeated action of re-cycling which is one of the advantages of iron as a material.

Very little is known about the chronologies of late prehistoric pottery in the region (Petts, D and Gerrard, C 2006). This is due to a general paucity of pottery remains which have been discovered on late Bronze Age and Iron Age sites.

There has been little evidence for the role of industry in the land between the Tees and the Tyne. An example of the rare evidence for salt production has been discovered at Coalham Marsh on the mouth of the river Tees (Petts, D and Gerrard, C 2006). The role that the production of salt played in Iron Age Britain is still relatively ill-understood (Darvil 1987).

5.5 Romano British

At the time of Roman contact with Britain, the project area was under the control of the Brigantes, who dominated a vast area of Northern England. The Brigantes may have been a confederation of smaller tribes, who typically built small fortified hill crofts and relatively small enclosed settlements (such as at Thrope Thewles). Initially the Brigantes welcomed Roman influence in Britain, becoming a client kingdom in the first half of the 1st century AD. Relations became strained in the following decades and by AD79/80, Agricola had pushed his forces north of the Tees and crushed any signs of revolt. Once Hadrian's Wall was constructed in 122AD, Brigantian territory lay firmly under Roman influence, with the movement of people and goods controlled by limiting access through the Wall except at manned gates. Roman influence would have expanded outwards from forts, milecastles and new settlements as Brigantian farms were encouraged to deliver to these new markets, plausibly absorbing Roman goods in exchange.

Periods of peace in northern eastern England were short lived. The Roman civil war at the end of the second century was a major drain on military resources and resulted in a shortage of soldiers in Britain. After the civil war there was 10 years of peace in northern England and the reluctance of many indigenous communities to indulge in typical Roman activities and styles appears to have been partially abandoned (Millett 1992). This peace did not last and the

barbarian conspiracy in AD 367 unsettled the already weak administration of the late Roman 4th century and by AD 400 the Roman army officially withdrew from Britain.

The established way of life, which for the most part had remained broadly similar since the end of the Neolithic was threatened by the expansion of the Roman frontier. The dynamics of settlement had changed from the dispersed settlements of the early farmers to a much more nucleated arrangement of enclosed settlements and hillforts. Part of the package of new innovations that the Romans transmitted across the empire was the *vici* and town.

Vici were towns which developed around the forts. The influx of soldiers and associated staff facilitated a peripheral economy all of their own. Workshops and kitchens would have been established around such military installations by the native populations to financially profit from the relatively wealthy soldiery. The *vici* would have steadily grown, accommodating auxiliary soldiers and their families as well as the craftsmen and workers. Once the fort had gone out of use, the *vici* may have continued and developed into a larger town or may have dwindled without the support of the fort. Examples of *vici* can be found close to Piercebridge, Corbridge, York and Vindolanda forts (Clark, P.A.G and Gosling, P.F 1976, 35- 36). Some *vici* continued to prosper and developed into defended walled settlements. These include Kirkby Thorpe, York and Carlisle.

A typical facet of the Romano British landscape would have been the villa. Villas have been identified at Holme House, Old Durham, Faverdale and Quarry farm (Turnbull, P and Jones, R.F. J 1978, 17; Petts, D and Gerrard, C 2006, 148).

Both the *vici* settlement and the villas represent a more typically Roman way of living. There was a large contingent of the indigenous population which continued to live in the same way as the Iron Age communities had (Turnbull, P and Jones, R.F. J 1978, 17). This can prove to be difficult for archaeologists to distinguish between a pre Roman conquest settlement and a post conquest settlement as there is no cultural difference.

Some of the larger indigenous settlements which grow and prosper in the Roman period include Faverdale, Ingleby Barwick and Sedgefield East Park and Catcote (Petts, D and Gerrard, C 2006, 134). These settlements are all to the west and north of the development, while to the east along the coast between the Tyne and the Tees settlement appears sparse compared to Yorkshire and Northumberland (*ibid*). The relationship between the rural communities which continued in the indigenous way of life is poorly understood. Future work may reveal more about the dynamics of these relationships (Petts, D and Gerrard, C 2006, 150).

The adoption of Christianity in the Roman period may have originally been within the forts and *vici*. Travelling soldiers from across the Empire would have brought elements of the religion which would have gradually percolated into the indigenous population (Petts, D and Gerrard, C 2006, 152).

The relationship between the indigenous populations of northern England and the expanding Roman frontier is obscure (Clark, P.A.G and Gosling, P.F 1976). The placement and development of Roman forts and military installations can be used to allude to areas which were likely to be influenced by the Roman military.

Forts located in the Tyne-Tees corridor include South Shields (*Arbeia*) which began construction in AD 163, Piercebridge near Darlington (*Magin/Morbium*) built in the late third century (Clark, P.A.G and Gosling, P.F 1976, 34) Lanchester (*Longovicivm*) built sometime in the Hadrianic period AD 117-138, Binchester, Ebchester (*Vindomora*) built between AD 69 to AD 117 and Chester le street (*Concangis*), built in the late first on early second century BC, all in County Durham. With the exception of the few hillforts between the Tyne and the Tees there was little to suggest overt rebellion from the native population. The high amount of forts in the area may suggest that there was more than a single military strategy in place with the positioning of the forts (Petts, D and Gerrard, C 2006). There is a suggestion that the forts

may have facilitated a certain level of urbanisation which later became indigenous administrative centres.

Forts to the north of the River Tyne include Corbridge (*Corstopitvm/Coriosopitvm*), built in the first or second century Wallsend, Vindolanda and Stanegate (Turnbull, P and Jones, R.F. J 1978, 15). These forts existed in one way or another for over three centuries.

Both Hadrian's and the Antonine Wall are World Heritage sites. The first of the walls to be constructed was Hadrian's Wall in 122AD. The wall extended from the east coast to the west coast and displayed impressive mile castles and turrets. A decade after the completion of the wall, a second wall between the forth and the Clyde was commissioned by Emperor Antoninus Pius and constructed in the 140s AD. The Antonine wall was under constant pressure and abandoned by 160AD, with troops falling back to the more defendable Hadrian's Wall, which was manned until at least the late 4th century AD. The Hadrian's Wall Research Framework which includes Tim Gates' aerial survey has highlighted how well conceived and executed aerial surveys can locate and map sites (Huntley et al 2007).

Although there were roads in Britain before the Roman conquest, the Romans were accredited with the formalisation of the road system. There are two roads which proceeded north to south between the Tyne and the Tees, Dere Street and Cades Road. Cades Road is the closest known Roman road to the route of the development and crosses the route close to Coxhoe where there is a noticeable turn to the west.

Cades road would have run from Brough-on-Humber (Petuaria) to Newcastle, passing to the west of Thorpe Thewles (Margary 1973). The road would have passed close to the West House enclosed settlement at Coxhoe, before crossing the Wear Valley. Parts of the route of Cades road are poorly understood and it has no named corresponding Roman road has been found (Petts, D and Gerrard, C 2006, 146). The development of the medieval settlement at Garmondsway may be attributed to the close proximity to the Cades Road (Clark, P.A.G and Gosling, P.F 1976, 34).

The final decades of Roman occupation in Britain and the century after the Romans leave are poorly understood. The level of stability and continuity within the towns and forts is difficult to determine due to poor dating and issues with identifying the difference between the Roman era occupation of forts and *vici* and post-Roman continuity (Petts, D and Gerrard, C 2006, 153).

5.6 Early medieval (5th-10th Century AD)

This period is marked by a limited amount of archaeological data, particularly securely stratified sites and accurate scientific dating. This is exasperated by the shifting political borders, invasions, border and sea raids and migrations of peoples which give northern England its distinctive character. Conversely, there is a reasonable level of historical sources for the period, mainly provided by the ecclesiastical communities which emerged in the north-east in the early medieval period.

The Roman Empire began a terminal decline in the late 4th century as increased incursions from hostile cultures, notably the Visigoths, forced Rome to begin withdrawing troops from the fringes of the Empire to defend home territories. By 399 AD, troops began to leave Britain and by 400 AD, when the Visigoths sacked a weakened Rome, there were few soldiers left on the borders, other than those who had settled in Britain. Although Rome and the Visigoths agreed a treaty soon afterwards, Roman influence in Britain was diminishing and frontiers were left exposed to revolt and raids. North-east England was particularly exposed on two major fronts, to the north notably from Scots and Picts and the east where an expanse of previously defended coastline allowing access to continental Europe and Saxon and Angle raiders. Anglo-Saxon settlement can be noted north of the Humber by 450 AD and the protokingdom of Deira became established. By the 5th century there were well established field systems in some part of the region, largely hangovers from the Roman occupation. In other parts of the region such as the lowlands around the Tees valley, parts of the landscape were abandoned (Dunsford, Roberts and Harris in Liddy and Britnell 2005). During this abandonment, any cleared landscape is believed to have returned to open woodland and shrubs. The returning wilderness did not last long and is thought to have been returned to agricultural land soon after the 7th century. The absence of well dated pollen cores from the lowlands unfortunately means that an accurate date cannot be attributed to this event (Petts, D and Gerrard, C 2006). This suggests a period of depopulation and regression from cultivated land, which may have been expected in the initial years after the exodus of Roman influence.

Despite the difficulties posed by the degree of interpretational uncertainty, excavations at Roman forts such as South Shields and Birdoswald suggest that the forts do continue into the 5th century but are not occupied throughout the transition into the 6th century, perhaps suggesting a decreased importance to defence or a breakdown of established military groups. Excavations at Norton on Teesside indicate an Anglo-Saxon presence by the mid-late 5th century AD implying a steady migration north of the Humber by the Angle and Saxon settlers. An important 5th-6th century Anglo-Saxon cemetery excavated at Norton, revealed over 100 burials, some with weapons and grave goods donating status, with the cemetery reusing Roman boundary ditches (Rowe 2000). This suggests settlement had reached the boundary of the study area shortly after the Roman period, implying steady migration and a constant population warranting a large cemetery.

Gildas, writing in the 6th century, suggests that agreement was reached between Britons and Anglo-Saxon mercenaries or federates to settle in north-east Britain and contain the threat from the northern border, effectively creating a new strong border by approximately 480 AD (Dumville, D 1989). This northern part of Britain lying between the Scots and Picts and Deira became known as Bernicia. Bede, writing in the early 8th century, describes the detachment of Deira and Bernicia from Romano-British control, effectively becoming separate kingdoms controlled by powerful Anglo-Saxon settlers in the 6th century. In 547, Ida the Flame bearer, a powerful Angle chief seized the historic coastal stronghold of Bamburgh and added territory around the Tyne. Wear and south of the Tees to his burgeoning kingdom. Bernica was retained by Ida's family, though was tested for decades by incursions from British tribes in the west and the Scots and Picts from the north. By 593 Aethilfrith, Ida's grandson, held Bernicia and in 598 he defeated a large combined army of Britons at Catterick. For the next few years, Aethilfrith consolidated his power and finally usurped the kingdom of Deira, uniting all Angle land north of the Humber to form the basis of the kingdom of Northumbria in the early 600s, at this point modern Teesside and Durham would have lain near the centre of this Kingdom.

Despite unification, the north-east remained turbulent throughout the 7th century AD. Aethilfrith was killed in battle by Raedwald of East Anglia in 616 barely a decade after unifying the kingdoms. Edwin, son of the former king of Deira took the throne and once again made Northumbria a major power, including defeating an army of West Saxons in Wessex, arguably making Edwin overking and Northumbria the most powerful Kingdom in Britain at the time. Edwin converted to Christianity in 627, partly in order to maintain relations with the Kent Anglo-Saxons, to whom he was due to be related in marriage through Princess Ethelberga. Edwin was baptised at St Peter's in York by the Roman Christian missionary Paulinus who was soon engaged as Bishop of York and travelled throughout the kingdom converting Northumbrians. St Peter's was rebuilt in stone at Edwin's order and would later become the site of York Minster. Edwin's rule as a the first Christian King of Northumbria would not last long; he was defeated and killed in 633 by the combined forces of Cadwallon ap cadfan, King of Gwyneth and the Mercian chief Penda, at the Battle of Hatfield Chase.

The new kingdom was broken back into Bernicia and Deira following Edwin's defeat until Oswald, the younger son of Aethilfrith, returned from exile on Iona and defeated Cadwallon near Hexham in 634. Oswald was soon recognised as King of Northumbria and like Edwin,

chose to support the Christian faith, including bringing Aidan, an Irish monk (later St Aidan) over from Iona to found a monastery on Lindisfarne. Oswald, like Edwin, expanded the power of Northumbria, bringing the Lothian area of modern Scotland under his control and seizing Edinburgh, fortress of the Gododdin. Oswald's expansion was brought to an abrupt end in 642 at the Battle of Maserfelth, by an army again led by Penda, now King of Mercia.

Oswy, Oswalds brother, took the Bernician throne, while a rival, Oswine, seized control of Deira; Penda having also made a land grab in to Deira as a result of his recent victory. The following years were often violent with Mercia and a split Northumbria almost at civil war. By 655 matters had been resolved in Oswy's favour. Oswine had been murdered at Catterick by Oswy's men and Penda and many of his chieftains killed in battle near Leeds. Oswy took control of all of Northumbria and parts of Mercia. By the time of Oswy's death in 669 and through the remainder of the 7th century Northumbria controlled a huge area and was arguably the foremost Kingdom in Britain.

The modern towns of Hartlepool, Newcastle, Durham and Darlington are believed to have their roots in this period (Petts, D and Gerrard, C 2006). There appears to be diversity in settlement typologies in the 7th and the 9th centuries. This may be a result of status as well as ethnicity and political allegiances (Turnbull, P and Jones, R.F. J 1978). There is a noticeable absence of settlements within the proximity of the development. The deserted village of Garmondsway may have originally been settled in this period, though dating is tenuous. The establishment and expansion of major settlements, known to have existed near modern day towns such as Yeavering, Seaton Holme, Bamburgh, Bishop Auckland and Simy Folds also may have been started in this period (Petts, D and Gerrard, C 2006 and Turnbull, P and Jones, R.F. J 1978). However, there is little understanding of settlements outside of these more powerful centres (Turnbull, P and Jones, R.F. J 1978). With the exception of Hartlepool, very little evidence for settlement has been found in any proximity to the development or the river Tees (Clark, P.A.G and Gosling, P.F 1976). It is believed that during the reign of King Oswald in the 7th century the land between the Tyne and the Tees was a 'wilderness inhabited only by beasts' (Turnbull, P and Jones, R.F. J 1978).

Large monastic sites such Monkwearmouth Lindesfarne and Jarrow were built towards the end of the 7th century and were major centres of learning, with well-travelled scholars adding to their growing library. King Oswy's sister, Ebba is also believed to have founded Urbs Coludi (Colud's Fort in Berwickshire) in AD 660 (Turnbull, P and Jones, R.F. J 1978). Further evidence for the scale in which Christianity became the dominant faith and the gaining influence of the church is demonstrated at Escomb. This church is one of the most complete examples of a church from this period in England. There is clear evidence for the use of stone from the nearby fort at Binchester in the church (Gelderd 2008).

In 692, Bede, a scholar at Jarrow monastery was ordained a Deacon at just 19 and by 703 was a fully ordained priest. Bede was perhaps the most notable British writer of the age, producing several important texts including his History of the English Church and People, completed in 731 and detailing Anglo-Saxon history from the preceding centuries. Bede's work is still one of the most important historical documents for this period. Bede's influence with the church was sufficient for the Pope to elevate York to an Archbishopric, making it independent of Canterbury for the first time and further endorsing Northumbria's status as a powerful Kingdom. During this time Northumbrian monasteries were producing fantastically decorated books such as the Codex Amiatinus, an early illuminated bible made as a gift to the Pope.

Whilst the 8th century was notable for the growing power of the church and the scholarship of Northern monasteries; politically the Kingdom was growing weak as the Royal houses of Bernicia and Deira openly rebelled into civil war. Between 737 and 806, Northumbria had ten kings, three of which were murdered, five exiled and three who became monks. Amongst this background of instability, Viking raids along the coast began at the end of the 8th century.

Viking raids targeted the wealthy monasteries, often conveniently accessible by boat. The great house of learning and Christianity at Lindisfarne was raided in 793, robbing and killing

many of the monks, which shocked Europe, causing Charlemagne's court to describe it as God's vengeance for the lack of morality in Northumbria. Over the next few decades, raids would be targeted against the major monasteries of Lindisfarne (again), Jarrow, Hartlepool, Whitby and Tynemouth. The monks began to flee the coastal monasteries and move inland in search of safer places of worship as it became clear Northumbria could no longer be sure of defending its coastline.

In 829, Eanred the latest king of a weakened Northumbria was forced to accept Egbert, King of Wessex as overking of England, formally acknowledging the transfer of power from Northumbria to Wessex, where it would remain until 1066. Eanred and his descendents clung onto power throughout the decades of Viking raids until in 866 a Danish army travelled from the Low Countries under the command of Ivar the Boneless. York was taken that winter despite its defences and the Northumbrian King Aelle, captured trying to relieve the city. The Danes brutally executed King Aelle and installed Egbert as a puppet ruler. As the Danes consolidated power by claiming Mercia, they settled across Deira, in modern Yorkshire and parts of Lancashire. In 875, Halfdene, Ivar's brother, declared himself the first Danish King of Northumbria, quelling any rebellions and chose York as his capitol, ignoring the old power of Bamburgh. Danish influence appears to have been relatively subdued in Bernicia, beyond a few notable place names and the settlement at Tynemouth used to control the Tyne and as a stopping point for coastal ships. Bamburgh was retained in Anglo-Saxon hands, though they were now only allowed to be High Sheriffs, no longer Kings. Halfdene's son, Guthred became King in 877 and was a more moderate ruler, allowing the creation of a new area in southern Bernicia for the Christian population, including a number of displaced monks, between the now Danish controlled Deira and northern Bernicia, which retained a largely Anglo-Saxon population. This new area lay between the Tyne and Tees, centred at the old Anglian church at Chester-le-street and would eventually become a new Bishopric encompassing the modern county of Durham and much of the study area.

The 10th century witnessed destabilisation again, as the Danish and Anglo-Saxon kings fought over land. Viking settlers in Ireland led by King Ragnald attacked Northumbria, capturing York and making it a client kingdom subject to Dublin. Ragnald also seized land from the Bishopric of Durham to give to his supporters including land at Billingham, School Aycliffe and parts of the east coast between Hartlepool and Sunderland. Over the next decades Anglo-Saxon armies from Wessex would fight against the Danes and Scots for control of the North. York changed hands between the Wessex and Viking Kings several times. The Scots saw an opportunity to advance their own claims and raided Northumbria as far as the Tees, finally claiming back Edinburgh, with an eye on claiming northern Bernicia and their old territory of Lothian.

By 955 Northumbria was back in Anglo-Saxon hands as Edgar, overking of Wessex, took control of the country backed by powerful regional earls. The Scots under King Malcolm would frequently raid into Bernicia, through their former land of Lothian and past the Tees, though the threat of a combined Anglo-Saxon army including Danish settlers was enough to defy outright war, it left the northern Kingdom ravaged. This was exasperated when Viking raids recommenced along the Northumbrian coastline, once again targeting monasteries. Monks from Chester-le-street fled to Ripon for safety in 995 and when the dangers had passed set up a new community in the better defended Dunholm (modern Durham) rather than return to Chester-le-street. King Malcolm continued to raid deep into Bernicia, including reaching as far south as Durham City, where they were defeated. However, the threat from the north was more apparent than ever and a weak Northumbria was heavily exposed, and further ravaged as plague rolled across the Kingdom in the 10th century.

5.7 Later medieval (11th-16th Century AD)

The later medieval period in the north-east again shows little archaeological evidence for the time prior to the Norman Conquest, though there is again historical data. The early 11th century starts much as the preceding ones, with a Viking army again landing in England, this

time defeating the Wessex armies and putting a Danish King, Swein Forkbeard on the throne. The next few years were chaotic with Swein dying only months after taking the throne and warring Anglo-Saxon and Dane factions again contesting the throne. By 1016, Canute, Swein's son, had claimed the throne and married into the previously ruling Anglo-Saxon family.

Canute separated England into Earldoms, installing Danes as Earls of Northumbria and York. The Bishopric of Durham was however flourishing, and incorporated more territory under his control including land near Sedgefield. Stockton on Tees and Norton were both passed into Dane hands. Dane rule in Northumbria suffered a major blow in 1019, when Malcolm finally claimed back Lothian and also grabbed all the land north of the Tees. Canute continued to patronise the Bishops of Durham by gifting them land at Staindrop and their power waxed, with Canute allegedly walking barefoot from Garmondsway to visit St Cuthbert's shrine at Durham. Northumbria remained in Dane hands, and prior to the conquest, the Danes were involved in a tit-for-tat border struggle with the Scots

Following the Norman Conquest of 1066, the north initially remained in Viking and Anglo-Saxon hands, with King William leaving many Danish or Anglo-Saxon earls in place, while rewarding his own men with new titles. However the North chafed under Norman rule and by 1069, King William's appointed northern earls were murdered and the Norman garrison at Durham slaughtered by a combined force of Anglo-Saxons, Danes and Scots. William retook and wintered at York, before beginning his infamous campaign 'Harrying of the North'. Northumbria was methodically ravaged; crops burnt, houses destroyed and any rebellion brutally crushed. The outcome was a famine in Yorkshire, with Simeon an 11th century chronicler at Durham describing no village left inhabited between York and Durham, the land becoming 'lurking places for wild beasts and robbers' (Tees Archaeology nd). Simeon described the famine as being such that survivors were forced to eat cats, dogs, and horses and even adopt cannibalism. Without people to work the damaged fields, they fell fallow and rapidly regressed to wilderness. The Norman army also took the opportunity to sack Durham, taking many of their religious treasures. Orderic Vitalis, a monk writing in the early 12th century at Shrewsbury wrote that William left the North to starve to death.

The following years saw a series of raids from the Scots north of the border and Norman troops coming from York, all ravaging the land north of the Tees, with both sides seeming to rob and pillage without much discrimination. An indication of this desolate wasteland or perhaps simply its dangers can be seen in the Domesday survey of 1086: the survey does not extend north of the Tees.

By 1091, William St Carileph was restored as Bishop of Durham following exile and given royal prerogative to purchase political land rights. William becomes the first 'Prince Bishop' having a vast amount of autonomy and acting as lesser king in the North.

By the end of the 11th century, Malcolm III of Scotland had been killed in a failed raid at Alnwick and a truce was declared between England and Scotland. Northumbria has been reduced to Northumberland stretching from the Tweed to Tyne, though parts of Durham were retained.

The 12th century saw another civil war in England as the crown was fought over by Stephen and Mathilda. The Scots openly support Mathilda and use the opportunity to invade Northumberland. Although defeated in 1138 at Northallerton, Scotland was given Northumberland and seized the Bishop of Durham's throne in 1141, leaving Northumberland and Durham effectively under Scottish rule, with the Tees the new border. The remaining years of the century saw further border conflict, with the Scots finally pushed back to the liberty of Tynedale and Berwick surrendered to the English in the 1170s.

In 1183, Hugh Pudsey, Bishop of Durham, carried out the Bolden Bude (book), a survey of the church land in Durham and Northumberland. This includes much of the land missed out in the Domesday survey. When King Richard went on Crusade in 1189, Pudsey was granted

more powers becoming Justiciar of England and Regent of the North, taking the Earldom of Sandberge, which included Teesside and the Earldom of Northumberland and further extending Durham's hold on the North.

Major medieval towns began to emerge in this period, often developing alongside palaces and castles, such as Stockton. Notable medieval towns in the region include Bishop Aukland, Barnard Castle, Billingham, Chester-le-street, Darlington, Guisborough, Yarm, Stockton, Redcar and Hartlepool. Hartlepool and Yarm were also important medieval seaports. Known medieval settlements within the area include earthworks from East House Farm, near Coxhoe; Garmondsway village; Layton village, Thulthorpe village; and Grindon and Trimdon, which contain Norman churches. Other villages such as Cornforth, Tursdale, Ferryhill, Fishburn, Sedgefield and Norton are of likely early medieval origin and many settlements in the region retain elements of Anglo-Saxon or Norse etymology which suggest early medieval origins (Ekwell 1960). The rural landscape comprises small settlements often in the Norman style where rows of farmsteads were separated by a central green. The farms worked individual furlongs and kept a mixed arable and livestock economy.

Mining is recorded in the area from the 12th century, with the Boldon Bude highlighting coal mining at Escomb. Inland sea coal was mined as early as 1298 near Spennymoor. Mining is also suggested as taking place at Coxhoe, Ferryhill and Thrislington. From the 14th century onwards, coal mining became a lucrative trade, using the shipping routes from established sea-ports, particularly the large port at Newcastle. Iron was also mined in Durham attested by a parliamentary petition in 1306 against the Bishop of Durham for felling parts of Weardale forest for charcoal to power the iron bloomeries. Salt was also being created at Hartlepool in the 14th century, though it is unlikely it would have been made as far inland as the study area.

Border disputes continued into the 15th century with raids from Scotland including William Wallace's campaign at the end of the 13th century and Robert Bruce in the 14th century. At various stages, areas including Hartlepool, Swaledale, York, Durham and Newcastle were attacked. The Black Death reaches the North in 1349 and infects many villages already weakened by near constant border warfare. Once again parts of the study area may be wasteland.

Tynedale, to the northwest of the study area had been a liberty since the Norman Conquest, often in Scottish hands and if not outside the law, very much out of sight. The liberty was abolished in 1495 and from that point on the Tynedale clans became a law unto themselves, frequently taking up reiving (rustling); taking livestock and goods from neighbouring land. The constant threat of reiving led to the construction of peel towers, small defendable towers, found in many villages in Northumberland. Whilst County Durham largely avoided the reach of the reivers, they were opportunists and raided Weardale during the 16th century rising of the north when much of the fighting age population was absent.

Three battles were thought during the War of the Roses in Northumberland, but all outside of the immediate study area. By the Tudor period, England held Berwick, with the border firmly established along the Tweed-Esk-Solway. After Flodden Field in 1513, the Scots army was in disarray and in the 1530s the Scottish borders were ravaged by the Earl of Northumberland, destroying castles, churches and towers.

Henry VIII's desire to divorce Catherine of Aragon and cut off the flow of money to Rome brought about the English Reformation, closely followed in the 1530s by dissolution of many monasteries across England including notable houses in the north-east; Hartlepool Greyfriars, Guisborough, Yarm, Finchale Priory, Egglestone Abbey, Durham Cathedral Priory and Whitby Abbey.

In the mid 16th century the northern landowners rebelled against Queen Elizabeth in the rising of the north, and sought to re-establish Catholic rule by allying with the Scots and their imprisoned Queen. The rebellion was put down and executions carried out across villages and towns between Wetherby to Newcastle from 1570 to 1572. It is unknown if any of the

settlements within the study were affected. The northern ports were also hit by plague in the later 16th century, striking Newcastle, Hartlepool, Darlington, Aycliffe and Chester-le-street.

5.8 Post-medieval and modern (17th-20th century AD)

The long standing problem of Border reivers was resolved by King James in the early years of the 17th century when he started deporting troublesome clans to Ireland. Reiving died out with a few years of this harsh measure. From the 1630s onwards the North was subject to plagues and warfare. Plague struck Newcastle again in 1636, killing over 5000 people and leaving the city devastated. It is not known to what extent this reached the outlying communities. By 1640 the Scots invaded and crossed the Tyne, seizing Newcastle and Durham, though the more southerly communities in the study area would have escaped. As the Civil War escalated, the Scots army again crossed the Tyne skirmishing near Sunderland and fighting alongside parliamentarians at Marston Moor before capturing Stockton Castle.

Following Cromwell's victory and the execution of King Charles, Durham and Stockton Castles, once owned by the Bishop of Durham are passed into private hands. Stockton Castle is then destroyed in the mid 1600s. Stockton's fortunes do recover by the 1700s as an agricultural and mineral port, when it gains independent parish status from Norton. Stockton starts shipping coal by the early 17th century and soon overtakes Yarm and Hartlepool as the largest port in the immediate area.

Coal mining, long a commodity in the north-east began to be more extensively mined outside of Tyneside and reached County Durham in the 1800s. From this point on, there was a dramatic increase in the number of mines and settlements sprang up around the mining areas. Spennymoor lay within the coalfields and over 100 pits and drifts were opened in its vicinity in the 19th century. Cornforth, Tursdale and Thinford were also noted for their collieries in this period. Quarrying of sand, gravel, limestone and clay is also known to have taken place near Tursdale, Trimdon, Thorpe Thewles, Cornforth, Fishburn and Coxhoe. Lead mining took place in the wider region, particularly in Weardale and Teesdale.

Outside of the coal measures, the landscape was dominated with agricultural production, with many of old furlong fields finally enclosed under the 17th parliamentary act. The common land around Thorpe Thewles is believed to have been enclosed prior to the act in the 16th century. Earthworks of ridge and furrow agriculture are scattered across the study area and are difficult to accurately date. Some of the fields may well have their origins in the medieval period, though furrows could equally have been formed much later. Wool mills begin to develop in the area, making use of the large local flocks.

Railways revolutionised the north-east in the 19th century at a time when several of the historic ports had faded, with Hartlepool and Yarm declining to no more than fishing villages. This changed with Hartlepool becoming a coal port and ship yard, connected by rail. Other nearby settlements which gained at this time included Middlesbrough, a hamlet with a population of 30 in 1829. After being connected by rail to form a new coal port and later a shipyard, iron and steelworks, the town grows exponentially until by 1900 the population stood at over 90,000.

Two railway lines crossing the study area; the Clarence Railway line was opened in the 1830s, with a section running north through Coxhoe Junction and another past Norton substation. In 1844, the North Eastern Railway, York and Berwick Branch from Darlington to Newcastle was opened, with the line passing to the west of Cornforth.

The 19th century also saw an increase in industry across the north-east, fuelled by coal and steel. An alkali works was set-up at Middlesbrough in the mid 19th century using buried rock salt. Salt production was also undertaken in Billingham in the late 19th century, which then became a centre for chemical production in the early 20th century, including producing ammonia, fertilisers and later, plastics.

By the 20th century, the region begins to decline, hitting a nadir in the 1930s with large-scale unemployment and business closures. Although the region recovers post-war, by the late 20th century colliery and ship-yard closures have again caused rising unemployment and towns to shrink. Many of the colliery settlements which expanded in the 1800s begin to shrink back towards their pre-19th century size.

6 Results

Twenty-six access tracks were monitored within County Durham, with eight tracks producing sufficient archaeology to warrant full reporting in Section 6. The most significant of these was Butterwick Road (Access 27), which revealed part of a Romano-British farmstead. Of the other seven access tracks, the majority revealed limited archaeology, typically remnants of medieval ridge and furrow agriculture or relatively recent field boundaries and drains. Eighteen access tracks contained either no or minimal archaeology such as palaeochannels, modern hedgerows, modern tracks and modern drains.

Seven access tracks were monitored across Teesside, with four tracks producing notable archaeology. The most significant of these was Low Middlewood (Access 37), which revealed part of a Romano-British settlement alongside medieval furrows and a large medieval ditch. The other three tracks revealed similar archaeology to those in County Durham, typically medieval ridge and furrow and discrete features. Three access tracks contained no archaeological features at all.

All sites are summarised in Appendix N; those sites containing no or minimal archaeology are tabulated in Appendix O.

6.1 Spennymoor: Access Track 2/ Tower ZXC 60

The access track servicing tower ZXC60 (NGR 429020 534501) was located in the field to the east of the Spennymoor Sub-station and 1.6km to the west of Cornforth (Figs 7 and 13). The entrance utilised an existing, concrete, private road located to the north of Metal Bridge cemetery. This concrete road progressed west for 600 metres where the newly constructed road turned 90° south across a field towards tower ZXC60.

Tower ZXC60 and its track way were located on the edge of a valley, with a slope rising to the north, west and to the east which gradually increases towards Spennymoor. The valley drops to 80m OD to the west of the site where the modern train line runs past.

Background

Remnants of medieval or post-medieval ridge and furrow agriculture have been identified approximately 500m south-west of the Spennymoor sub-station in a programme of geophysical survey and trial trenching undertaken at High Whitworth Farm.

Spennymoor was once part of Whitworth Estate. Whitworth Hall, which lay approximately 5km west of Spennymoor was built in the 12th century and was bought by the Shafto family in the mid 17th century. The Shafto's were prominent politicians and included Robert Shafto, popularly identified as Bobby Shafto in a local folk song during the 18th century. The original manor was demolished in the mid 19th century.

Spennymoor itself was a minor settlement until the 1800s when it was enlarged into a town to cope with the increase in population as part of the Sedgefield colliery work. Since the decline of the coal industry, Spennymoor has been in economic decline.

Metal detection

No artefacts were recovered during the metal-detecting survey of this site.

Site Description

Two 0.3m wide, parallel ditches, **60014** and **60020**, oriented north to south were exposed in legs C and D (Fig 13). Both features were linked by a further two ditches, **60023** and **60025**, which were aligned on a 90 angle forming a northerly aligned ladder pattern of ditches. The northern most extent of ditch **60014**, within leg C, demonstrates what appears to be a sharp 90 turn to the west recorded as **60018** but part of the same ditch system.

Ditch 60014/60018 truncates earlier ditch 60012, which extended to the east beyond the site dimensions. East west aligned ditch 60003 extends from leg C into leg B and may have been part of the same system as ditch 60014/60018. Modern, east west aligned drains 60005 and 60022 were also recorded and represent further recent drainage work. An undated circular post hole 60006 was revealed in leg B, though there is no indication how this related to the drainage system in place.

Finally a north-east south-west aligned furrow **60008**/**60012** was present, crossing both legs B and C and extending beyond the site dimensions. A narrow north-west south-east ditch **60010** crossed the edge of one of the tower bases and probably represents another drainage feature.

Conclusion

A network of ditches and drains were discovered during the monitoring of tower ZXC60. Artefactual dating was limited, but these features appear fairly recent in date presumably representing drainage put in place in the modern era prior to the construction of the nearby sub-station

6.2 Thinford Access Track 3/Towers ZXC58 and ZXC59

Access 3 and towers ZXC59 (NGR 429337 534643) and ZXC58 (NGR 429617 534720) were located 1.3 km to the east of Thinford and 1.5km to the west of Cornforth (Figs 7 and 14). The entrance utilised an already existing concrete private road located to the north of Metal Bridge cemetery. This concrete road progressed west where the newly constructed road turned 90° south across a field towards Cooksons Green and tower ZXC59. The track then turned 90° east and terminated at tower ZXC58.

The Thinford complex of towers and track way was located on an inclining slope which gradually increases towards Spennymoor situated between 105m-108m AOD. The valley drops to 80m AOD to the west of the site where the modern train line runs.

Background

Thinford is a small hamlet of uncertain date of origin located on the former Great North Road. Thinford may be a mutation of Thenford, which would have been derived from the Old English *Thane* Ford, literally ford of the thanes (a servant or retainer). The settlement is known to have existed in the mid 14th century, when a fulling mill was recorded (possibly on the site of the current Thinford Mill). However, the mill was noted as ruined by 1384. Little is recorded regarding the settlement, until the construction of the Thinford Inn (Grade II listed) in the mid 18th century. The settlement presumably existed as a staging post in the post-medieval period with a coaching inn and continued at this size into the modern era. With the

creation of modern road systems, the Great North Road became obsolete and the Inn's and purpose will have disappeared.

A single sherd of Roman pottery (D412) has been previously located just south of Access 3.

Description

During the monitoring of the access track, a series of north to south aligned furrows were discovered (Fig 14). The presence of these furrows suggests a larger medieval or post medieval system of fields and land division existed across the local landscape. Two of these furrows, **030304** and **030404**, were excavated in an attempt to find datable material which may allude to the date of the furrows. Both of these furrows were revealed to be very shallow, measuring only 0.15m in depth by 2m wide (Fig 14).

The excavation of tower bases revealed further evidence of medieval/post-medieval field systems. Leg C in tower ZXC59 revealed an undated furrow, **59005**, and a narrow undated ditch, **59003**, which was aligned perpendicular to the furrow.

The soil shadows left by the remains of tree root systems were also found in leg A of tower ZXC59 and leg A of tower ZXC58.

Conclusion

The presence of furrows and potential remnants of medieval/post-medieval ditches suggest this site may have been under plough for some time, making use of the till soils.

6.3 Cooksons Green Access Track 5/Tower ZXC57

The entrance to access 5 was located off the Metal Bridge to Ferryhill road (Fig 7). Initially advancing east from the main road, the track sharply turned north after approximately 120m. The northern part of the track terminated at tower ZXC57 (NGR 429995 534732).

Cooksons Green access tracks and towers were located between 90m and 100m AOD approximately 1km to the west of Cornforth and 0.1km north of Cooksons Green. The access was sited on a relatively flat field with a steep incline immediately to the east which slumped down to 80m down to the route of the modern train line. The sudden declivity in ground level was a result of the constant modification and clearance for the train track.

Background

Access 5 lies in open farmland near Cooksons Green Farm. An unidentified cropmark lies directly north of the access adjacent to Metal Bridge, a former railway bridge. The route of the North Eastern Railway, York and Berwick Branch from Darlington to Newcastle opened in 1844 and passes directly east of the site. Some land clearance and dumping of waste material may be expected within the vicinity of the rail track.

Metal detection

A Victorian penny was recovered during metal detecting.

Description

The first part of the access track revealed a series of furrows, all of which were broadly aligned north to south. The furrows within this field are part of a series of ridge and furrows

which would have been part of the medieval and post-medieval agricultural landscape. Very subtle remains of ridge and furrow could be seen on the surface of the field during the monitoring. The furrows did not appear to occur at regular intervals suggesting that they mostly been removed by modern agricultural practice. Two of the furrows, **050103** and **050107**, were excavated to confirm there interpretation and attempt to discover some datable material.

A small regular linear arrangement of stones, **050105**, was discovered approximately 10m from the modern road and on the same alignment.

Conclusion

Remnants of ridge and furrow agriculture reflect the pre-industrial land-use in this area, while the remains of a linear stone alignment probably marks the base of a robbed out farm boundary wall.

Pottery and glass were found in a modern dump within the tower foundations of legs A and B. This dumping is probably present due to the ground clearance and levelling prior to construction of the North East Railway train track in the 1840s, directly to the east. A Victorian penny was discovered in the topsoil during the metal detecting survey as well as fragments of mid to late 19th century pottery and glass.

6.4 Cornforth Lane Access Track 13

Access 13 was located on Cornforth Lane immediately east of the A1(M), 1km south of the centre of Coxhoe (NGR).

Metal detection

Two artefacts were recovered from the topsoil (context 130101) during metal detecting. An item of treasure, a sixteenth century cast silver hairpin (FAKL-860142), was found (NGR 431300, 534700), as was an eighteenth century cast copper alloy buckle frame (Appendix G).

6.5 Stobb Cross Lane Access Track 14/Towers ZXC49, ZXC50 and ZXC51

Located 1.5km to the east of Cornforth and 0.5km north of Stobb Cross Lane, the entrance was on the west of the A177 just before a distinct 90° bend near to Coxhoe (Fig 7). The access was located on the 120m contour on a slope with the inclining gradient to the south. The access track progressed north westerly servicing towers ZXC49 (NGR 432713 534634), ZXC50 (NGR 432340 534750) and terminated at tower ZXC51 (NGR 431946 534855) next to the A1.

Background

Stobb Cross Lane lies near the route of Cade's Roman Road (named after an 18th century antiquarian), which passes to the east of the site and once ran from Brough-on-Humber to Newcastle and the eastern end of Hadrian's Wall (D3182).

Undated circular cropmarks (D8017) have been noted just west of the A1 and to the north of the site. Other undated cropmarks have been noted near Coxhoe (D2732, D2735). A possible earthwork enclosure has been noted south of the site (D1122), while part of the course of Coxhoe Beck has also been picked up on nearby cropmarks (D8009). Two World War Two pill boxes are also located near Coxhoe Bridge, just north of Stobb Cross Lane.

Nearby find-spots include a Bronze Axe (D5631) and medieval pottery (D3181).

Metal detection

A selection of 18th, 19th and 20th century artefacts was recovered during metal-detecting including a D.L and Co. Ltd colliery tally. This tally belonged to Dorman Long and Co Ltd, who owned nearby Tursdale Colliery from 1923-1947 (Durham Mining Museum 2011-accessed 19th December 2011).

Also recovered, were two Victorian pennies, a George I farthing, lead metalworking waste and lead casting waste. Thirteen fragments of late 18th to mid 19th century clay pipe were also found in topsoil, suggesting casual discard or accidental loss of personal objects in the field.

Description

A series of furrows which are the remains of the medieval/post medieval agricultural landscape were broadly aligned north to south and located intermittently along the route of the access track. Three of the furrows **140904**, **140906** and **140908** were excavated to prove the interpretation of the furrows and also attempt to retrieve some datable material. A single sherd of medieval pottery was recovered from one of these furrows (Appendix C). An upstanding ridge **140303/140304** was found next to an extant hedge line which is on the same alignment as the furrows. A spread of north-south aligned cobbles was discovered below the topsoil next to a modern public right of way. These cobbles probably represent a former track or footpath in the same place as the modern right of way.

An undated ditch **140902** was discovered underneath furrow **140904**, and is potentially of pre-medieval date.

Conclusion

The monitoring of Access 14 was expected to reveal background levels of archaeology due to the proximity of the Roman Road, abundance of cropmarks and several independent find spots. However, archaeological evidence was restricted to an undated ditch of probable premedieval date and a series of medieval-post-medieval furrows, such as have been noted across the project. This suggests that despite the presence of a nearby Roman Road, the majority of cropmarks nearby are likely further remnants of ridge and furrow field systems or part of Coxhoe Beck.

The presence of a tally from Tursdale Colliery adds to the social history revealed in this project.

6.6 Catley Hill Farm Access Track 19 and Towers ZXC39 and 4TF38C

Access 19 was located 0.5km to the west of Trimdon and 0.2km to the north-east of Catley Hill Farm (Figs 8 and 15). The entrance to access 19 was to the south of West Lane and was aligned north to south. The track serviced towers ZXC39 (NGR 435680 534022) and 4TF38C (NGR 435686 534026). The access and towers were on a fairly even plateau close to the top of a ridge of a prominent hill. Approximately 50m to the south the land begins to drop away and form a steep hill.

Background

The cropmark of a possible prehistoric ring ditch lies near Catley Hill (D1091), and the cropmark of a possible Iron Age enclosure is noted at nearby Harap Hill (D377). Undated crop marks are also known near Trimdon (D2800 and D3252).

Trimdon (Old English for wooden cross/monument on hill) and Catley (Old English for wildcat wood or clearing) Hill probably both has their origins in the early medieval period. Trimdon's parish church was founded in the Norman period adjacent to a narrow village green and two rows of houses, typical of the Norman period settlements in this area.

Metal detection

A 19th century bronze eyelet was recovered during metal-detecting. Three flints and two pieces of Romano-British pottery were also recovered during site stripping

Description

A series of furrows of possible medieval or post-medieval date, were revealed in the access and tower working areas (Fig 15). One of the furrows **190104** was excavated and recorded to confirm the interpretation.

Furrow **64005** located in one of the foundations for tower 4TF38C, was removed and revealed an earlier, though undated, pit **64006**, which cut an earlier post hole **64015**. Another furrow **39002** was revealed in tower foundation D in ZXC39. This furrow was removed with the mechanical excavator but did not reveal any further features.

Conclusion

The remains of a series of furrows were revealed, likely dating to the medieval or early postmedieval period and possible related to the nearby medieval settlement of Trimdon. An earlier undated pit and posthole were also recorded though no finds were recovered and the fills were sterile.

6.7 Trimdon Access Track 21/Towers ZXC36 ZXC37 ZXC38 4TF38B 4TF38T 4TF38A

The Trimdon access was a large complex system of tracks and towers starting to the south of West Lane just on the western periphery of the village of Trimdon (Fig 8). The access track initially progressed south from West Lane and then angled to the south-east. The access track was on a steep gradient which was at 170m OD at the entrance and terminated at 130m OD. A series of small access tracks were aligned east to west off the main access to service other towers. The access track included tower ZXC36 (NGR 436355 533413) which was originally planned to be serviced by obsolete access 22.

Background

This access again lay close to the medieval settlement of Trimdon and its associated undated cropmarks (D2800 and D3252). Further remnants of medieval and post-medieval furrows as seen at Catley Hill were expected.

Metal detection

A 19th-20th century copper half-penny, 19th-20th century bronze buckle and an undated bronze stud were recovered during metal-detecting.

Description

A series of north-south aligned furrows were revealed during the removal of the topsoil prior to the establishment of the stone roads. One of these furrows **67004** was excavated to confirm the interpretation.

East -west aligned ditch **67002** was positioned near the furrows, though no artefacts were recovered to date the feature.

Conclusion

As with Catley Hill, the remains of a series of furrows were revealed, likely dating to the medieval or early post-medieval period and probably related to the nearby medieval settlement of Trimdon. An undated ditch was also present.

6.8 Butterwick Road Access Track 27/Towers ZXC27 ZXC28 ZXC29

Access 27 was 0.5km to the west of Bridge House, 1.5 km north-west of Butterwick. The entrance to the Butterwick road complex of towers and access was west of Three Horse Shoes Inn on the Butterwick Road (Figs 9 and 16). The access track progressed south east south and then turned 45° to the south west south where it terminated at tower ZXC27 (NGR 437391 530727) just before the river Skerne. Two further access tracks were aligned east to west and were connected to the main part of the track approximately after a third of and again at 2 thirds along the access track. Both of these serviced towers ZXC29 (NGR 437323 531423) and ZXC28 (NGR 437352 531084). The majority of the access track was on the 100 metre contour, with the centre of the access track declining 10 metres down to the route of the river Skerne.

Background

Butterwick Road lies just southeast of Fishburn, a medieval settlement first noted as *Fisseburne*. The settlement was probably named from the Old English *Fish Burn* (A Scots and Northumbrian word for stream-possibly derived from the Saxon *brunna*) and is located on a small limestone hill just north of the River Skerne, which may have been the aforementioned burn. Fishburn is recorded from at least the 11th century, owned by the Fissebourne family, their name presumably taken from the village.

This small agricultural settlement expanded in the 19th and early twentieth century with the expansion in mining across the north-east but has diminished along with many villages since the colliery closures of the late 20th century.

An 1839 tithe plan records a field named Skeleton Hill lying just east of Butterwick Road and southeast of Fishburn. This may indicate the presence of a pre-19th century graveyard, which given its location away from settlements would suggest a medieval or earlier date. Possible brick making is also highlighted by the tithe map, with Hollow Field, Brick Kiln Field and Brick Field all recorded near Mill House.

Undated earthworks (D 1096 and D 1097) are also noted lying between Access 27 and Butterwick Road itself.

Metal detection

Metal-detecting recovered nine bronze and iron objects dating from the 19th-20th century.

Description

Butterwick Road contains Roman deposits located along the north-south aligned part of the access track just south of Mill House (Fig 16). These remains included a partial ring ditch **0071/0074**, which was adjacent and outside of a larger ring ditch **0051/0065/0055** (Plate 3) and probably represents at least two phases of house construction. The larger ring ditch included three discrete and undated pits **0070**, **0072** and **0056**, which may have represented internal features. A third, curving ditch **0061**, truncated the upper fill of ring ditch **0051/0065/0055** and may represent a third phase of construction.

Further north along this length of track were located two more curving ditches **0059** and **0047**, both of which appeared heavily truncated. Ditch **0047** did however produce part of a Roman glass bangle (Appendix G; Fig 27 h)) alongside Roman pot sherds (Fig 27 a) and d)) and animal bone suggesting primary settlement deposition.

Four medieval or post-medieval furrows, aligned east-west, were located at different points along the track, including truncating ditch **0059** and furrow **050**, which truncated ring ditch **0051/0065/0055**.

A possible stone trackway **044** (Plate 4) was noted north of Roman ditch **0047**; however, the track was in poor condition with only a fairly small area of compacted stones surviving.

Conclusion

Roman remains were revealed in part of the access track, including what appeared to be fragments of several phases of ring ditches. With the limits of the track access preventing the full width of features being revealed and no known cropmarks or geophysical data for this site it is difficult to estimate the size of the settlement. However, the relative paucity of finds (glass bangle apart) suggests this is likely of Romano-British farmstead size, rather than a major community. Such farmsteads were typically fairly self-sufficient trading surplus produce between nearby farms and local markets.

Cades Road lies a few kilometres to the west, and would perhaps have been the nearest access to larger markets such as the settlements at Lanchester and Binchester though it is doubtful these would have been regularly accessed.

Fragments of ridge and furrow were noted at several points on the track and probably relate to medieval agricultural systems from farms attached to nearby Fishburn. The possible trackway remnant is of uncertain date and could represent part of a fairly recent farm track.

6.9 East Close Access Track 31/Towers ZXC22 ZXC21 ZXC20 ZXC19

Access 31 was positioned to the south of A689, 0.5km to the east of Cote Nook Farm 0.5km to the west of East Close and c.3km southwest of the Butterwick (between NGR 437613 528883 and NGR 437883 527920) (Figs 10 and 17). The access was initially aligned to the south east where it turned 135° to the west where it connected with a north to south aligned part of the access track. The East Close access was on slope gradually declining to the south.

Background

The nearest settlement to East Close is the shrunken village of Butterwick, lying c.3km to the northeast. Butterwick was an early medieval settlement, recorded in the 12th century as *Boterwyck* (Old English for butter or dairy farm). The farmsteads of East, West and South

Butterwick mark the extent of the village; the historic core has long been abandoned and can be seen as an earthwork.

Nearer Access 31, the farm of Cote Nook may also have medieval origins based on its place name etymology, showing a mix of Old English and Scots. *Cote* is from the Old English for cottage or hut and *Nook* is probably a modern translation of *neuk*, Scots dialect for corner or remote, literally being the remote cottage or hut. Nearby East Close farm is likely of more recent origin.

Field name evidence from just south of Cote Nook Farm suggests a possible post-medieval or early modern pottery kiln once existed in the vicinity. East Potters Close and West Potters Close are recorded on the 1838 Sedgefield tithe map just to the south of Cote Nook Farm. Brick Hill Field is also marked on the same map between East Close and Cowley House Farm.

Metal detection

An 18th century bronze button, an undated iron handle, a 17th-20th century lead pump valve weight and two 19th-20th century half-pennies were recovered during metal-detecting.

Description

Two east to west aligned relict tracks **310206**, **310405** comprising firm sandy clay and sub rounded cobbles were located during the monitoring of an access track and the tower working area for tower ZXC21. These tracks probably relate to post-medieval or early modern tracks laid down for farm access. A pit, **310204** just south of the A689 was excavated and revealed the base of an Iron Age-Roman pot (Appendix B, Plate 5). The pit, 0.15m in diameter, demonstrated a high level of truncation due to ensuing years of agricultural practice since the deposition of the pot.

Conclusion

The most significant feature at East Close was a pit containing the truncated remains of a native tradition pot, of a type which spans the later Iron Age and Roman period. The high levels of truncation at this point may suggest further remains were once present, but have since been removed by agriculture.

6.10 Layton Access Track 35/ Towers ZXC14 ZXC15 ZXC16 ZXC17 ZXC18 4TF14R 4TF15R

The access was located 0.3km to the west of Cowley House Farm and 1km south east of Cote Nook Farm (Fig 11). The visible remains of the deserted medieval Manor of Layton can be seen opposite the entrance to the access. Much of the access track for access 35 and the associated towers was on a pre-existing track way which provided access for Cowley House Farm and Long Plantations (between NGR 439268 526649 and NGR 438133 527622). The landscape immediately around the access tracks and the towers was dominated by rolling drumlins.

Background

A flint scatter (T2871) has previously been recorded adjacent to Access 36 and to the east near Brierley Wood, while the cropmark of a possible prehistoric enclosure has been noted near Thorpe Larches (T1460).

Medieval archaeological remains are known from the immediate area. The earthworks for the former medieval Manor of Layton (D 354/SM32731DMV) are visible just west of Access 35. Earthworks suggest the Manor once possessed buildings, fishponds, enclosures, field systems and a hollow way. Layton's place name derives from the Old English for farmstead on a stream.

To the south-east of Layton, the remnants of a medieval field system are visible near Thorpe Larches (T1477). Thorpe Larches was likely a Danish settlement, with *Thorpe* coming from the Old Danish *thorp* for a small village or farmstead tied to a larger settlement; 'Larches' is presumably a later addition referring to local woodland.

Cowley House Farm to the immediate north-east also retains remnants of ridge and furrow visible on aerial photographs. The suffix place name Cowley is probably a derivation of Old English *leah* for clearing or wood, though the first part of the name is less certain and could come from anyone of a number of translations including; *cofa* (cave or recess in a hill) and *col* (charcoal burning).

Metal detection

Metal-detecting recovered a 17th-19th century lead gunshot, an undated lead weight, an undated lead spillage, a 19th-20th century lead bag seal, a 19th century penny and a 19th-20th century whetstone. A single worked flint was also recovered.

Description

During the topsoil stripping a series of furrows cut into drift geology were revealed. These furrows are the partial remains of a larger system of ridge and furrow which would have been part of the medieval agricultural landscape. Some of these furrows **350203**, **350206** were excavated to confirm there interpretation and attempt to locate some datable material, with medieval sherds recovered from site.

Conclusion

Remnants of ridge and furrow probably relating to that seen at Cowley House Farm were recorded. The apparent abundance of remnant medieval field systems and settlements in the immediate area suggest this part of the route may have been fairly densely utilised in the medieval period. However, it is apparent that much of the medieval landscape was subsequently abandoned for some time with the resulting good levels of preservation, which perhaps indicates this is one of the areas of Teesside deserted during the turbulent later medieval period.

6.11 Low Middlewood Access Track 37/Towers ZXC3A ZXC4A ZXC5A ZXC6A

The entrance to access 37 was next to Low Middlewood Farm and 1.2km east of Thorpe Thewles. The access track ran north to south on a relatively flat part of the landscape at 30 metres OD (between NGR 441439 523212 and NGR 441229 524247) (Figs 12 and 18). The final 100 metres of the access track which serviced ZXC6A suddenly drops to 15m AOD at a water course.

Background

The Romano-British site of Thorpe Thewles lies c.3km to the west of Low Middlewood and contains the remains of a well-preserved enclosed settlement of roundhouses and associated fields, spanning the later Iron Age to early Roman period.

Thorpe Thewles, like Thorpe Larches is likely a Danish settlement tied to a larger settlement. The suffix Thewles is probably derived from the Old English *theawleas* meaning immoral. Quite why the settlement was considered immoral is not recorded.

Remnants of medieval field systems are recorded between Thorpe Thewles and Low Middlewood (T 699) and may be expected to encroach onto the access track.

Low Middlewood lies just to the east of the ruins of Blakeston Hall (T821), a medieval manor. Settlement at Blakeston is recorded from at least the 11th century, when clergy from Durham occupied the Manor at *Bleikestuna*, the place-name probably derived from the Old Norse *Bleikr* (Pale) and Old English *Tun* (farm or village), which suggests a pre-conquest date for the settlements origins. The Manor was rented out in the 13th century and the first of the de Blaykeston family soon arrived as chaplain. By the 14th century this family had successfully bought out the Manor and other land in the region. During the 16th century the family name had evolved to Blakiston; the hall, now known as Blakeston, and its associated grounds is a ruin visible on aerial photographs.

Metal detection

Metal-detecting recovered a 17th-18th century bronze buckle, two undated lead weight, three undated lead spillages, a lead off-cut, a 19th-20th century lead bag seal, an undated bronze off-cut, two 19th-20th century bronze rivets, a 19th century sixpence, a 19th century halfpenny, and an undated iron blade.

Description

Low Middlewood contains remains of both Romano-British and medieval date, all within the immediate area of Tower 5A (Figs 12, 18 and 19). The term Romano-British is taken in this context to describe remains which could span the later part of the Iron Age through the Roman period. As little pottery was recovered, and much was in poorly dateable native tradition fabrics, no attempt at has been made at refining the site phasing beyond these broad periods.

Romano-British

This site includes several partial ring-ditches, including **0107**, located in the western side of the site with an entrance to the east and an estimated diameter of 8m. This ditch was truncated by a larger north-west by south-east aligned ditch **0110**, which extended beyond the site dimensions.

Directly outside of ring ditch **107** (Plate 7), was located a possible furnace or field oven, comprising a clay-lined pit **0111**, and possible flue or rake out features **0116**, **0118** and **0114** (Plate 6). Very little slag was recovered from this site (three pieces and none from the vicinity of these features), which may indicate this is more likely an oven, possibly utilised for communal bread making. Identification of the function of this feature was hampered because of heavy truncation as a result of later agricultural practices.

Another ring ditch **0098** was located in the eastern part of the site and had an estimated internal diameter of 8m and an east facing entrance. This ditch was truncated by a curving feature **05038**, which was re-cut itself by ditch **0100**.

Neither of these curving features appears to be a ring ditch and is more likely part of a small curving boundary which terminates opposite an east-west aligned ditch **05035/05025/05023/05021**, forming a probable entranceway c2.5m wide.

North-west by south-east aligned ditch **0045/05012** was aligned perpendicular to ditch **05035/05025/05023/05021**, terminating 1m away from its northern margin. These ditches appear to represent part of a field system, which overlay an earlier and similar arranged layout of ditches, aligned approximately northwest by southeast.

The earlier field layout is marked on the west by ditch **0019/05016/05014**, which lies parallel to ditch **0045/05012** (Plate 8). A discrete pit **0042** lies between the two ditches; however no artefactual dating was recovered from its fills.

The eastern side of the field was formed from north-west by south-east ditch 0016/05045, which terminates c.2m beyond and is truncated by ditch 05035/05025/05023/05021. The southern side of this suggested field is formed from ditch 05043, which terminates adjacent to ditch 0016/05045 and extends west before being truncated by ditch 05035/05025/05023/05021

Within the southern margin of the site are located several more Romano-British features. A large north-west by south-east aligned ditch **0096/0094** extends from the south-east corner of the site before terminating. It is uncertain what this ditch could relate to, however connected features may lie beyond the area of investigation.

Towards the south-west corner of the site, a narrow curving ditch **0040**, which extended to the north before terminating, was revealed. This ditch lay on the western side of a slightly larger ditch **0032** on a similar alignment. Ditch **0032**, was then truncated by a 1.5m wide ditch **05007/0031**, which probably marked a second phase of boundary creation. This ditch extended to the north into the unexplored central area of site, but does not appear to continue through to the areas stripped in the north. The terminal of another ditch **0035** was recorded truncating ditch **05007/0031**; however it is uncertain what period this feature belongs too.

Two large areas of spread subsoil (05017) containing occasional Romano-British finds were present near the northern part of the site. Given the number of furrows also in this area, it is likely this represents a build-up of ploughed out Romano-British material from abandoned and likely buried, features during the medieval period.

Medieval

Several medieval furrows were recorded on site; all aligned approximately north-south and were only recorded on the northern half of the site. These furrows included features **0122**, **0018/05003/05019**, **0017** and **0105**. A large north-east by south-west ditch **0023/0025** containing medieval and Roman pottery (Fig 27 e)) extended across the south-east corner of the site and potentially represents a previously unrecorded medieval boundary. At its widest point, this ditch measured over 4m wide; however, after careful cleaning it was resolved that the upper fill had been artificially spread by ploughing and the true width was closer to 2.5m wide by 0.48m deep.

Undated

Several linear features were present on site, which do not easily fall into either of the previously described phases. There is a reasonable probability that these are all of recent date.

North-south ditch **0120** truncated ring ditch **0107** at the northwest corner of the site and resembles a recent, though undated, drainage feature.

Two narrow, north-south aligned, parallel ditches **0011** and **0007** were located in the northeast corner of the site, neither contained any dating material and both were cut from just below the topsoil, suggesting these may be fairly recent. A discrete, shallow, irregular feature **0104** truncated the upper fill of Romano-British ditch **0100/05036** and probably represents part of an animal burrow.

Conclusion

The fragments of at least two phases of Romano-British field systems and associated ring ditches were revealed in excavations at Low Middlewood. Neither phase produced high levels of artefacts suggesting these features were either on the periphery of a larger settlement or this represents a fairly modest farmstead. Many of the features extend beyond the excavated areas and further archaeological remains will almost certainly exist in the immediate area.

Environmental evidence (Appendix L) suggests that deposits may have lain exposed to the elements for some time rather than been rapidly buried, which may indicate periods of abandonment, certainly there is limited evidence for recleaning/cutting the apparent field system ditches which might be expected.

The presence of several ring ditch fragments and a probable bread oven suggests habitation certainly took place onsite adjacent to the probable field systems, likely as a farmstead sized settlement rather than a larger village. Environmental evidence suggests hearth sweepings including burnt bone fragments were included in feature fills, which would be typical of burnt food waste being disposed of. The level of truncation suggested by spreads of apparent ploughed out subsoil in the northern part of the site suggests any middens have been removed by later agriculture.

A large medieval ditch against the southern edge of the site suggests an old field boundary, with the furrows lying to the north marking the remnants of ridge and furrow agriculture. These furrows lie only a few hundred metres east of known ridge and furrow crop marks (T 699) and probably once formed part of the outlying fields associated with Blakiston Manor.

7 Discussion

7.1 General discussion

The absence of prehistoric remains beyond find spots of worked flint is perhaps not surprising given these are the most common evidence of prehistoric human activity, and the acknowledged paucity of known prehistoric remains between the River Tyne and Tees. This has been exasperated by the exploitation of the coalfields and coastlines in the 19th century, which will have removed much of the evidence of settlement within these zones.

Romano-British and medieval remains were present, although medieval remains were largely restricted to fragments of field systems, and typically close by known medieval settlements. There were, however, no archaeological remains or find spots dating to the period between the end of Roman occupation and the late medieval period (11th century onwards), with dated finds starting to appear by the 13th century. The apparent absence of any early medieval artefacts or remains is intriguing, and while sites from this period are historically rarer, a tentative connection to the wide-scale uninhabited landscape following the centuries of border conflict and Norman Harrying of the North can perhaps be made.

Post-medieval and modern remains were largely restricted to remnants of abandoned farm tracks, ditches, dug out hedgerows and drainage features. The majority of the metal-detected finds date from this period, which covers the remarkable increase in population density and land-use in the late 18th – early 20th century when the North-East of England became a major industrial power and small settlements became large towns within a few decades, such as at nearby Middlesbrough. The current landscape crossed by the route is largely agriculturally based, with settlements deliberately avoided, which will have limited the impact on post-medieval and earlier remains to some extent.

7.2 Results of potential impacts

Eight potential sites were highlighted in the Environmental Statement and WSI based on known find spots, cropmarks or other data (Table 7.1).

Cornforth (Access 11) contained a circular cropmark of unknown date; upon investigation this was revealed to be part of the backfilled Coxhoe Beck. This same Beck passed through Cornforth Lane (Access 13); there was no evidence of deposits related to a mill.

Stobb Cross Lane (Access 14) passed near a Roman Road and part of a disused railway line, indicating both Roman and early Modern remains may have been present. The site revealed medieval ridge and furrow and a scatter of 19th and 20th century artefacts, recovered from topsoil.

Butterwick Road (Access 27) contained an unknown and undated earthwork; excavation suggests this may be related to the Romano-British features revealed on site.

Three possible sites were proposed for Grindon (Access 36); however no artefacts or archaeological remains were revealed during monitoring. This suggests the medieval field systems note in the area either do not extend across the route of the track, or have been ploughed out. There was no evidence for any activity associated with quarrying or limekilns within the site.

Access	Site Name	Known Archaeology	Date	Results
11	Cornforth	Circular cropmark	unknown	Remnants of Coxhoe Beck
13	Cornforth Lane	Mill	Postmed/Modern	Remnants of Coxhoe Beck
14	Stobb Cross Lane	Roman Road	Roman	No evidence
14	Stobb Cross Lane	Railway	Modern	19 th and 20 th century findspots
27	Butterwick Road	Unclassified earthwork	unknown	Roman ditches
36	Grindon	Field system	Medieval	No evidence
36	Grindon	Flint findspot	Prehistoric	No evidence
36	Grindon	Limekiln and quarry	Postmed/Modern	No evidence

Table 7.1 Results of potential impacts

7.3 Roman period discussion (Fig 28)

The two Romano-British sites revealed during the project lie within a few kilometres of each other, one in southern County Durham, the other in Teesside. Both appear to represent fairly small rural settlements, likely no more than large farmsteads with perhaps two distinct phases of land-use. Each site also suffers from limited artefactual dating, which appears to show occupation from at least the 2nd to 4th century with some native tradition wares which could conceivably be later Iron Age or Roman mixed in the assemblage. This contrasts with the nearest well-published site of Thorpe Thewles, which spans the late Iron Age to 1st century AD, but lacks a significant later Roman occupation (Heslop 1987). This perhaps indicates the creation of newly cultivated land and newly founded farms following the conquest by Agricola. It is notable that the sites of Low Middlewood and Butterwick Road appear to be in

use after Thorpe Thewles (which lies a few kilometres away) has been abandoned. Roman control of the region may have also encouraged settlement of land by army veterans being rewarded with parcels of farmland for years of service.

Roman material culture influence at the two sites appears fairly limited. Pottery recovered tends towards the native tradition, though there are a few sherds of Crambeck Ware and a scrap of Samian. This is however typical of sites in the North-East, particularly rural settlements (Wright 2007). The fragment of glass bangle at Butterwick Road may also suggest access to wider markets and further remains will undoubtedly lie beyond the dimensions of the excavated sites, which could have contained more in the way of status or imported goods.

A lack of Roman finds within rural sites does not necessarily mean a lack of Roman influence or a lack of social status; feasting, possession of status livestock (including breeding animals) and ceremonial observance can all reflect status and are largely invisible in the archaeological record (Mattingly 2006).

Both of these sites appear to have been abandoned sometime in the 4th century, with no evidence of continued occupation into the early medieval period. There is no evidence of destruction (such as burnt structures) or environmental disaster, which perhaps suggests either the farms yields were simply dropping or markets no longer existed to cater for. The abandonment of Roman fortifications in the region and exodus of soldiers (and likely loss of the wider empire's markets) would have had a profound impact on rural settlements. Rome absorbed much of Britain's grain and woollen goods in the 3rd and 4th centuries, much of which went to the military campaigns. Without this market, many farms may have suddenly had their consumer base collapse and have been forced to take drastic measures to survive. This may have meant turning to subsistence only farming, catering for dwindling local markets or moving to areas with a larger consumer base and greater protection from neighbouring tribes no longer held in check by the threat from Rome.

Angle settlers passed north of the Humber in the 5th century and by the 5th-6th century nearby Norton contained an Anglo-Saxon community; however by this point both farms had been abandoned and were not re-cultivated until the medieval period.

7.4 Later medieval period discussion

Later medieval (Post 11th century AD) remains along the route are mostly restricted to fragments of ridge and furrow agriculture. This is not surprising as the route passes many settlements either known, or suspected, on place name evidence, of having been settled in this period, including Trimdon, Cornforth, Fishburn, Norton, and the probable Danish settlements of Thorpe Larches and Thorpe Thewles. Several abandoned or shrunken medieval settlements are also known from within the area, such as Garmondsway (Plate 2), Layton, Grindon, and Blakeston (Blakiston).

Whilst there appears to be no evidence for early medieval land-use in the area, there is an expansion in settlement and agriculture from the later medieval period onwards, with the earliest artefacts dating from the 12th and 13th century. The lack of earlier material and land-use could be due to a number of factors, though the threat of an unsettled north with border threats from Scots, Danes and Anglo-Saxon raids throughout this period may have limited the number of settlements. The northern rebellion against King William and subsequent Harrying of the North has to also be considered a factor. Rural settlement prior to the 12th to 13th century in this area may have been sporadic and restricted to more fertile or better defended parts of the region, with the widespread abandonment of rural areas during the late 12th century leaving the area through which the route passes without much in the way of cultivated land.

From the 13th century onwards, a more stable North, aided by the growing power of the Bishops of Durham, would have encouraged settlement and cultivation to feed the monasteries and growing towns, particularly when the wool trade became so profitable.

Ridge and furrow developed due to fixed blade ploughs working in straight lines, often with individual families taking a strip of an open, commonly held field. Open fields began to disappear in the later medieval period, with enclosed fields becoming common by the 16th century. Changing ownership of Manors could also influence the survival of early open field systems, as well as the rise of sheep grazing, encouraged by the value of wool, which required enclosed fields. Sir Thomas More, writing in the early 16th century, claimed that sheep were devouring men and towns as avaricious clergymen forcibly enclosed open pasture and displaced traditional farmers so as to graze their sheep.

The investigations revealed little further evidence for agriculture, other than relatively modern boundaries, drainage features, and manure scatters, dating to the 19th and 20th centuries. Ridge and furrow can date into the post-medieval period, as plough technology improved dramatically in the early modern era; particularly with the advent of mechanised ploughing, allowing exploitation of previously difficult to work fields. The enclosure acts of 18th and 19th century parliaments also formalised much of the remaining commonly held fields, ending any still active ridge and furrow fields.

7.5 Effectiveness of the metal detecting survey

Metal-detecting was undertaken in accordance with an agreed scheme (Network Archaeology 2010). Principally this encompassed:

- Scanning access tracks prior to and after topsoil stripping, and associated spoil heaps;
- Scanning working areas of the tower bases prior to and after topsoil stripping, and associated spoil heaps

All metal-detecting was undertaken by an experienced field archaeologist, also skilled in the use of metal-detecting and proficient with use of hand-held GPS equipment. Finds were individually logged and recorded. At the reporting stage, the assemblage was studied by a specialist with a proven record both with metal artefacts and with a background of working with metal-detected assemblages from the Portable Antiquities Scheme (PAS).

One hundred and twenty-five artefacts were recovered and are reported on in Appendix G. Each item's location was spatially recorded with hand-held GPS equipment to an accuracy of c.5m. While heavily biased towards the 19th and 20th century, some notable earlier finds included two Roman finds (a 4th century coin and a glass bangle) and three medieval finds (an Edward I silver penny, a lead spindle whorl, and a 16th century silver hairpin). The remaining finds date from more recent history and are dominated by domestic items, agricultural parts and occasional small coinage and tokens.

As a technique, metal-detecting is relatively low-cost, non-destructive and where accurately spatially recorded, can provide important data towards manuring patterns, casual loss and material culture studies (English Heritage 2006). For the Spennymoor to Norton project, metal-detecting also provided valuable artefactual information from sites which contained no visible archaeological features; this is particularly useful for sites in a modern agricultural landscape which may have suffered appreciable plough damage but retain artefacts within the ploughsoil.

The project produced a limited number of finds, mostly due to a low number of cut features across the route. However, it is notable that metal-detected finds account for 12% of the total artefacts collected, highlighting how valuable this element of the project methodology was in retrieving dateable information.

8 Conclusion

An archaeological scheme of work, including strip and record, a watching brief and limited excavation was undertaken by Network Archaeology on behalf of MWH (UK Ltd) during upgrading and replacement of the electricity network between Spennymoor in County Durham and Norton on Teesside. The programme allowed for the rapid recording of limited archaeological remains, whilst more significant remains could be located by GPS, preserved under a protective membrane and returned to fully record at an appropriate time.

The most significant archaeology recorded comprised two small, Romano-British rural farmsteads, revealed at Butterwick Road (Access 27) near Fishburn in southern County Durham and at Low Middlewood (Access 37) near Thorpe Thewles on Teesside. A single, heavily truncated, Roman pit was also recorded at East Close (Access 35) near Thorpe Larches on Teesside.

Remnants of medieval ridge and furrow agriculture were noted at several points, particularly near the deserted and shrunken medieval settlements along the route such as near Layton on Teesside and near the ruined medieval Manor of Blakiston Hall.

It is noticeable that stretches of the route appear devoid of both archaeological features and metal-detected finds, particularly between Coxhoe and Trimdon where the route crosses open farmland. This perhaps indicates that parts of the landscape have remained relatively uninhabited until the population increase in the 19th century due to mining and improved access with the introduction of rail lines.

Systematic metal-detecting was undertaken throughout the project and recovered a moderate collection of mixed metalwork, strongly biased towards agricultural and domestic 19th and 20th century objects. However, several notable finds were also recovered from metal-detecting including a 16th century silver hairpin at Cornforth Lane (Access 13) in County Durham, a 4th century Roman coin from Trimdon (Access 22) in County Durham, an Edward I silver penny at Carlton (Access 40) on Teesside and a medieval lead spindle whorl at Norton (Access 41) on Teesside. Without metal-detecting these objects are unlikely to have been recovered and many of the apparent blank areas investigated along the route would have provided no further archaeological information beyond the apparent absence of cut features.

8.1 Summary of Recommendations

No recommendations for further analysis work have been made following initial assessment of the archive by the appointed finds specialists.

Recommendations were made for the illustration of selected sherds of Roman pottery and registered finds, all of which have been included in this client report (Fig 27).

Provision for long term storage of all ceramics, worked flint, registered finds, animal bone and clay tobacco pipes have been made, but the stone and production waste assemblages can be discarded because they no longer hold any potential for further work. It has also been recommended that the glass items be passed to suitable teaching collections or discarded.

Particular mention should been made of the fragment of Roman glass bangle and the medieval lead spindle whorl in any subsequent publication that arises from this project, although all assessed material shall be recognised.

9 Archive

The documentary archive comprises:

- A copy of this report
- Relevant and non-confidential documents and correspondence relating to the site held by Network Archaeology

- Finds catalogues and reports
- Site records, as detailed in Table 9.1 below:

Item	Count
Context registers	15
Context sheets	782
Drawing registers	7
Drawing sheets	62
Photographic registers	49
Metal-detector index sheets	7
Sample registers	1
Sample sheets	10
Black and white photographs	840
Colour slide photographs	840
Digital colour photographs	737

Table 9.1 Quantification of the site archive

On completion of the reporting stages of the project, the archive will be prepared for longterm storage, to a standard from which post-excavation assessment could proceed and in a format agreed in advance with the relevant local depository. This will be in accordance with guidelines prepared by the UK Institute of Conservation (Walker 1990) and the Museums & Galleries Commission (MGC 1992). The project archive will be managed in accordance with current guidelines (Ferguson & Murray 1997).

The recipient museums are the Bowes Museum in County Durham and Tees Archaeology respectively.

The recipient museum will receive the document archive, and with the permission of the landowners, any finds generated from the archaeological works.

Prior to the deposition of the archive, the necessary arrangements will be made with the site owners regarding the transfer of ownership of any archaeological finds to the recipient museums. In the event that deposition of the archive cannot be concluded, Network Archaeology will store the archive to a suitable standard until deposition can be arranged. In this event, Network Archaeology will retain ownership of the document archive until the document archive and its ownership is passed to the recipient museums

10 Acknowledgements

Network Archaeology Ltd would like to thank the following for their contribution to the project:

Name	Position	Organisation
Caroline Wynne	Environmental Project Manager/Principal Environmental Scientist	MWH (UK Ltd)
Janet	Principal	MWH (UK Ltd)

Langsford	Environmental Planner	
Robert Stephenson	Site Delivery Manager	Electricity Alliance - East
Lee McFarlane (nee White)	Assistant Archaeology Officer	Durham County Council
Peter Rowe	Sites and Monuments Officer	Tees Archaeology
Alex Croom	Keeper of Archaeology	Tyne and Wear Archives and Museums
Ray McBride	Roman pottery specialist	Tyne and Wear Archives and Museums
Jenny Vaughan	Medieval pottery specialist	NCAS
Dr Anne Irving	Post-Roman ceramics specialist	The Ceramic Consultancy
Dr Hugo Anderson- Whymark	Lithics specialist	Flintwork
Jen Wood	Osteologist	Osteoarchaeology Services
Dr Rod Mackenzie	Archaeometalurgist	freelance
Dr Kevin Leahy	Finds Researcher	freelance
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Matt Gault	Project Assistant	Network Archaeology Limited
Jacqueline Harding	Illustrations Manager	Network Archaeology Limited
Dave Watt	Illustrator	Network Archaeology Limited
Caroline Kemp	Finds Supervisor	Network Archaeology Limited

 Table 10.1
 Acknowledgements

11 References

Bartley D, Chambers C, Hart-Jones D. 1976. The vegetational history of parts of south and east Durham. New Phytologist 77: 437-468.

British Geological Society 2012 *Geology of Britain* viewer http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html

Burl, A. 2005. *A guide to the stone circles of Britain, Ireland and Brittany*. Yale University Press.

Cantor, L.M 1982. The English Medieval landscape. Croom Helm Limited. London

Clark, P.A.G and Gosling, P.F 1976. Archaeology of the North; Report of the Northern Archaeological survey.

Cummings, V. 2009. 'The Architecture of Monuments' in Pollard, J (eds) *Prehistoric Britain*. Blackwell Series in Global Archaeology. Blackwell.

Cramp, R. 1969. 'Excavation of he Saxon Monastic Sites of Wearmouth and

Jarrow, County Durham, An Interim Report'. Medieval Archaeology XIII

Dark, K and Dark, P. 1998, Landscape of Roman Britain. Sutton Publishing Limited

Darvill, T. 1987. Prehistoric Britain. Routledge.

Dumville, D., 1989 'The Origins of Northumbria: some aspects of the British background' in S. Bassett (ed) *The Origins of Anglo-Saxon Kingdoms* Studies in the Early History of Britain. Leicester University Press: London

Ehrenreich, R. M. 1985, *Trade, Technology and the Ironworking Community in the Iron Age of Southern Britain.* BAR 144

Ekwell, E. 1960, *The Concise Oxford Dictionary of English Place Names*. Oxford University Press: 4th Edition

English Heritage., 2006 *Our Portable Past*. Statement of English Heritage policy and good practice for Portable Antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal-detectors).

Geldard, E.2008. Northumberland and the land of the Prince Bishops. Breedon Books.

Harding, J. 1995. 'Social histories and regional perspectives in the Neolithic of lowland England' *Proceedings of the Prehistoric Society*, Vol **61**: 117-136

Harding, D.W. 2009. The Iron Age Round-House; Later Prehistoric Building in Britain and Europe.

Heslop, D.H., 1987 The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982 Cleveland County Archaeology and the Council for British Archaeology: London

Huntley, J, Gates, T and Stallibrass, S. 2007, Hadrian's Wall Research Framework: Landscape and Environment resource assessment.

Johnston, R. 2009, *Later Prehistoric Landscapes and Inhabitation*. in J Pollard eds. *Prehistoric Britain*. Blackwell Series in Global Archaeology. Blackwell.

Jones, R., 1977, *Magnesian Limestone Escarpment Plan the Archaeological and Historical Resources- Preliminary Report.* Bowes Museum: Unpublished Report

Liddy, C.D, Britnell, R.H. eds. 2005, North East England in the Later Middle Ages. Regions and Rationalism in History

Margary, Ivan D. 1973, Roman Roads in Britain (third ed.), London: John Baker

Mattingly, D., 2006, *An Imperial Possession: Britain in the Roman Empire, 54BC – AD109.* Penguin: London

Millet, M. 1992, The Romanisation of Britain. An essay in archaeological interpretation. Cambridge University Press.

National Grid. 2009. Proposed Spennymoor to Norton 400kV Overhead Line Application for Consent under Section 37 of the Electricity Act 1989 Environmental Statement Volume 1-Text.

Network Archaeology 2010 Spennymoor to Norton 400KV Overhead Line Written Scheme of Investigation for Archaeological Monitoring, Controlled Strip & Excavation. Unpublished document

Parker Pearson, M. 2005. Bronze Age Britain. English Heritage

Petts, D and Gerrard, C. 2006. Shared Visions; The North-East Regional Research Framework for the Historic Environment. English Heritage

Proctor, J 2009. Pegswood Moor, Morpeth. A Later Iron Age and Romano-British Farmstead Settlement. Pre-construct Archaeology Limited, Monograph No. 11

Pollard, J 2009. Prehistoric Britain. Blackwell Series in Global Archaeology. Blackwell.

Pryor, F. 2006. Farmers in Prehistoric Britain. Tempus

Roberts, B. K, Dunsford, H and Harris, S.J. 2005. *Framing Medieval Landscapes: Region and Place in County Durham* in Liddy, C. D, Britnell, R. H eds.

Rowe, P., 2000 Anglo-Saxon Teesside Archaeology Booklet 1. Tees Archaeology

Scarre, C. 2005. *The human past: world prehistory & the development of human societies*. Thames & Hudson

Scarre, C. 2007. The Megalithic Monuments of Britain and Ireland. Thames and Hudson

Tees Archaeology., nd, Medieval Teesside Archaeology Booklet 5. Tees Archaeology

Turnbull, P and Jones, R.F. J 1978. *The Bowes Museum Archaeological Reports; The Archaeology of the Coal measures and the Magnesian Limestone Escarpment on County Durham.* The Bowes Museum, Barnard Castle, County Durham

Wright, N., 2007, Romans and Barbarians Unpublished MA Dissertation

Appendices

Context	Туре	Interpretation	Filled by	Fill of	Description	Name of Access	Area	Access/Division
0001	Layer	Loosely compacted surface	n/a	n/a	Loosely compacted surface	Trimdon	Tower foundation 21	Access 31
0002	Fill	Fill of ditch	n/a	0003	Dark brown clayey silt with occ. angular and sub- angular stones.	Trimdon	Tower foundation 21	Access 31
0003	Cut	Cut of ditch	0002	n/a	Shallow linear feature	Trimdon	Tower foundation 21	Access 31
0004	Fill	Fill of ditch	n/a	0005	Dark brown clayey silt with occ. Angular and sub- angular stones.	Trimdon	Tower foundation 21	Access 31
0005	Cut	Cut of ditch	0004	n/a	Shallow linear ditch	Trimdon	Tower foundation 21	Access 31
0006	Fill	Fill of ditch	n/a	0007	Dark brown clayey silt with occ. angular and sub- angular stones.	Trimdon	Tower foundation 21	Access 31
0007	Cut	Cut of ditch	0006	n/a	Shallow linear feature	Trimdon	Tower foundation 21	Access 31
0008	Fill	Fill of ditch	n/a	0009	Dark brown clayey silt with occ. angular and sub- angular stones.	Trimdon	Tower foundation 21	Access 31
0009	Cut	Cut of ditch	0008	n/a	Shallow linear feature	Trimdon	Tower foundation 21	Access 31
0010	Deposit	Subsoil	n/a		Subsoil	Low Middlewood	Tower foundation 5A	Access 37
0011	Cut	Cut of ditch	0084	n/a	Ditch, orientation NW-SE	Low Middlewood	Tower foundation 5A	Access 37
0012	Fill	Remnant soil layer	n/a	0013	Dark grey firm silty clay	Low Middlewood	Tower foundation 5A	Access 37
0013	Cut	Cut/natural undulation	0012	n/a	Possible cut	Low Middlewood	Tower foundation 5A	Access 37
0013	Fill	Fill of irregular feature	n/a	0015	Dark grey firm silty clay	Low Middlewood	Tower foundation 5A	Access 37
0015	Cut	Cut of irregular feature	0014	n/a	Irregular depression	Low Middlewood	Tower foundation 5A	Access 37
0016	Cut	Cut of ditch	0020; 0021	n/a	Straight linear ditch	Low Middlewood	Tower foundation 5A	Access 37
0017	Cut	Fill of ditch	0022	n/a	Straight linear feature. Possible undulation in the natural	Low Middlewood	Tower foundation 5A	Access 37
0018	Cut	Cut of ditch	0030	n/a	Straight linear ditch	Low Middlewood	Tower foundation 5A	Access 37
0019	Cut	Cut of ditch	0043	n/a	Straight linear ditch. Associated with [0042] and [0045]	Low Middlewood	Tower foundation 5A	Access 37
0020	Fill	Fill of ditch	n/a	0016	Mid-dark brown grey silty clay	Low Middlewood	Tower foundation 5A	Access 37
0021	Fill	Fill of ditch	n/a	0016	Mid-dark brown grey silty clay	Low Middlewood	Tower foundation 5A	Access 37
0022	Fill	Subsoil	n/a	0017	Subsoil(?)	Low Middlewood	Tower foundation 5A	Access 37
0023	Cut	Cut of ditch	0026;0027;0028;00 29	n/a	Large E-W linear ditch	Low Middlewood	Tower foundation 5A	Access 37
0024	Fill	Fill of ditch	n/a	0025	Mid grey brown clay sand	Low Middlewood	Tower foundation 5A	Access 37
0025	Cut	Ditch re-cut	0024	n/a	Possible re-cut	Low Middlewood	Tower foundation 5A	Access 37
0026	Fill	Fill of ditch	n/a	0023	Upper fill of ditch	Low Middlewood	Tower foundation 5A	Access 37
0027	Fill	Fill of ditch	n/a	0023	Dark grey silty clay	Low Middlewood	Tower foundation 5A	Access 37
0028	Fill	Fill of ditch	n/a	0023	Light to mid grey and yellow sand clay	Low Middlewood	Tower foundation 5A	Access 37
0029	Fill	Fill of ditch	n/a	0023	Loose light yellow brown and grey sand clay	Low Middlewood	Tower foundation 5A	Access 37
0030	Fill	Fill of ditch	n/a	0018	compact blue/grey clay silt	Low Middlewood	Tower foundation 5A	Access 37
0031	Cut	Cut of ditch	0039	n/a	Double ditch	Low Middlewood	Tower foundation 5A	Access 37
0032	Cut	Cut of ditch	0039	n/a	Double ditch	Low Middlewood	Tower foundation 5A	Access 37
0033	Cut	Cut of ditch	0034	n/a	Possible terminus of large E-W ditch	Low Middlewood	Tower foundation 5A	Access 37
0034	Fill	Fill of ditch	n/a	0033	Dark brown grey sand clay	Low Middlewood	Tower foundation 5A	Access 37
0035	Cut	Cut of ditch	0036	n/a	Gully possibly associated with [0031] and [0032]	Low Middlewood	Tower foundation 5A	Access 37
0036	Fill	Fill of ditch	n/a	0035	Mid dark brown grey pliable sand clay	Low Middlewood	Tower foundation 5A	Access 37
		Cut of ditch	0038	n/a	U-shaped cut seen only in section	Low Middlewood	Tower foundation 5A	Access 37
0037	Cut							

0039	Fill	Fill of ditch	n/a	0031;0032	Mid brown grey pliable sand clay	Low Middlewood	Tower foundation 5A	Access 37
0040	Cut	Cut of ditch	0041	n/a	Narrow drainage channel	Low Middlewood	Tower foundation 5A	Access 37
0041	Fill	Fill of ditch	n/a	0040	Mid dark grey brown sand clay	Low Middlewood	Tower foundation 5A	Access 37
0042	Cut	Ditch terminus	0081	n/a	Ditch terminus. Associated with [0019] and [0045]	Low Middlewood	Tower foundation 5A	Access 37
0043	Fill	Primary fill of ditch	n/a	0019	Dark brown silty clay	Low Middlewood	Tower foundation 5A	Access 37
0044	Deposit	Part of trackway	n/a	n/a	Dark grey brown friable clay sand	Low Middlewood	Tower foundation 5A	Access 37
0045	Cut	Cut of ditch	0082	n/a	Straight linear ditch. Associated with [0019] and [0042]	Low Middlewood	Tower foundation 5A	Access 37
0046	Layer	Subsoil	n/a	0019;0042;0045	Dark brown silty clay	Low Middlewood	Tower foundation 5A	Access 37
0047	Layer	Fill of natural depression	n/a	n/a	Mid-light brown clay silt	Butterwick road	Access 27	1
0048	Cut	Natural depression	0053	n/a	Natural depression	Butterwick road	Access 27	1
0049	Cut	Cut of ditch	0062	n/a	Straight linear ditch	Butterwick road	Access 27	1
0050	Cut	Cut of ditch	0080	n/a	Straight linear ditch	Butterwick road	Access 27	1
0051	Cut	Cut of ditch	0063	n/a	Linear ditch associated with [0055]	Butterwick road	Access 27	1
0052	Cut	Cut of ditch	0078;0079	n/a	Linear ditch	Butterwick road	Access 27	1
0053	Fill	Fill of natural depression	n/a	0048	Dark brown clay silt	Butterwick road	Access 27	1
0054	Fill	Fill of ditch	n/a	0055	Dark grey brown silt clay	Butterwick road	Access 27	1
0055	Cut	Cut of ditch	0054	n/a	Curving linear. Segment of ring ditch	Butterwick road	Access 27	1
0056	Cut	Cut of pit	0057	n/a	Possible pit/posthole	Butterwick road	Access 27	1
0057	Fill	Fill of pit	n/a	0056	Mid grey firm silty clay	Butterwick road	Access 27	1
0058	Fill	Fill of ditch	n/a	0059	Dark brown silty clay	Butterwick road	Access 27	1
0059	Cut	Cut of ditch	0058	n/a	Drip gully	Butterwick road	Access 27	1
0060	Fill	Fill of ditch	n/a	0061	Dark brown grey sandy clay	Butterwick road	Access 27	1
0061	Cut	Ring ditch	0060	n/a	Possible ring ditch	Butterwick road	Access 27	1
0062	Fill	Fill of ditch	n/a	0049	Mid grey brown silty clay	Butterwick road	Access 27	1
0063	Fill	Single fill of ring ditch	n/a	0051	Mid grey firm silty clay	Butterwick road	Access 27	1
0064	Fill	Single fill of irregular feature	n/a	0065	Dark grey firm silty clay	Butterwick road	Access 27	1
0065	Cut	Cut of irregular feature	0064	n/a	Shallow irregular feature in centre of track	Butterwick road	Access 27	1
0066	Cut	Cut of ditch	0067	n/a	Shallow linear feature. Possible beam slot	Butterwick road	Access 27	1
0067	Fill	Fill of ditch	n/a	0066	Redeposited natural geology and firm silty clay	Butterwick road	Access 27	1
0068	Cut	Cut of ring ditch	0069	n/a	Excavated portion of segment of ring ditch	Butterwick road	Access 27	1
0069	Fill	Fill of ring ditch	n/a	0068	Mid grey firm silty clay	Butterwick road	Access 27	1
0070	Cut	Cut of pit	0076	n/a	Circular pit. Bell shaped profile	Butterwick road	Access 27	1
0071	Cut	Cut of curvilinear ditch	0075	n/a	Shallow curving linear feature	Butterwick road	Access 27	1
0072	Cut	Cut of pit	0077	n/a	Small cicular pit	Butterwick road	Access 27	1
0073	Fill	Modern fill	n/a	0074	Dark grey brown silty clay sand	Butterwick road	Access 27	1
0074	Cut	Cut of modern feature	0073	n/a	Shallow modern intrusion	Butterwick road	Access 27	1
0075	Fill	Fill of ring ditch	n/a	0071	Dark brown firm grey silt clay	Butterwick road	Access 27	1
0076	Fill	Fill of pit	n/a	0070	Dark brown/black silty clay	Butterwick road	Access 27	1
0077	Fill	Fill of pit	n/a	0072	Dark brown silty clay	Butterwick road	Access 27	1
0078	Fill	Primary fill of ditch	n/a	0052	Dark grey blue firm silty clay	Butterwick road	Access 27	1
0079	Fill	Secondary fill of ditch	n/a	0052	Mid grey with orangey brown patches silty clay	Butterwick road	Access 27	1
0080	Fill	Single fill of ditch	n/a	0050	Dark grey brown clay sand	Butterwick road	Access 27	1
0081	Fill	Fill of ditch	n/a	0042	Fill of linear [0042]	Low Middlewood	Tower foundation 5A	Access 37
0082	Fill	Fill of ditch	n/a	0045	Fill of linear [0045]	Low Middlewood	Tower foundation 5A	Access 37
0083	Void	VOID	Void	Void	Void	Low Middlewood	Tower foundation 5A	Access 37
0084	Fill	Single fill of ditch	n/a	0011	Single fill of linear feature	Low Middlewood	Tower foundation 5A	Access 37

0085	Fill	Single fill of ditch	n/a	0086	Single fill of linear feature	Low Middlewood	Tower foundation 5A	Access 37
0085	Cut	Cut of ditch	0085	n/a	NW-SE ditch	Low Middlewood	Tower foundation 5A	Access 37
0087	Fill	Fill of ditch	n/a	0088	Fill of shallow linear	Low Middlewood	Tower foundation 5A	Access 37
0087	Cut	Cut of furrow	0087	n/a	Possible remains ridge and furrow	Low Middlewood	Tower foundation 5A	Access 37
0089	Void	VOID	Void	Void	Void	Low Middlewood	Tower foundation 5A	Access 37 Access 37
0089	Void	VOID	Void	Void	Void	Low Middlewood	Tower foundation 5A	Access 37
0090	Unstrat	Unstrat	N/A	N/A	Unstrat to plot	Low Middlewood	Tower foundation 5A	Access 37
0091	Void	VOID	Void	Void	Void	Low Middlewood	Tower foundation 5A	Access 37 Access 37
0092	volu	VOID		volu	Volu	Eow Middlewood	Tower foundation SA	Access 57
0093	Fill	Single fill of ditch	0094	Single fill of ditch	Animal bone	Low Middlewood	Access 37	
0094	Cut	Cut of ditch	0093	n/a	Deep, straight SE-NW linear ditch	Low Middlewood	Tower foundation 5A	Access 37
0095	Fill	Fill of ditch	n/a	0096	Fill of ditch terminus	Low Middlewood	Tower foundation 5A	Access 37
0096	Cut	Cut of ditch	0095	n/a	SE-NW ditch terminus	Low Middlewood	Tower foundation 5A	Access 37
0097	Fill	Fill of ring ditch	n/a	0098	Single fill of possible ring ditch	Low Middlewood	Tower foundation 5A	Access 37
0098	Cut	Cut of ring ditch	0097	n/a	Possible ring ditch or windbreak	Low Middlewood	Tower foundation 5A	Access 37
0099	Fill	Fill of ring ditch	n/a	0100	Single fill of possible ring ditch	Low Middlewood	Tower foundation 5A	Access 37
0100	Cut	Cut of ring ditch	0099	n/a	Possible ring ditch or windbreak	Low Middlewood	Tower foundation 5A	Access 37
0101	Fill	Single fill of pit	n/a	0102	Single fill of pit	Low Middlewood	Tower foundation 5A	Access 37
0102	Cut	Cut of pit	0101	n/a	Elongated sub-circular pit	Low Middlewood	Tower foundation 5A	Access 37
0103	Fill	Fill of irregular feature	n/a	0104	Dark brown fgrey firm silty clay	Low Middlewood	Tower foundation 5A	Access 37
0104	Cut	Cut of ring ditch	0103	n/a	Irregular feature. Truncated ring ditch	Low Middlewood	Tower foundation 5A	Access 37
0105	Fill	Fill of ditch	n/a	0106	Mid brown firm grey silty clay	Low Middlewood	Tower foundation 5A	Access 37
0106	Cut	Cut of feature	0105	n/a	NW-SE linear feature. Possibly remains of ridge and furrow	Low Middlewood	Tower foundation 5A	Access 37
0107	Cut	Cut of ditch	n/a	0108	Ring ditch	Low Middlewood	Tower foundation 5A	Access 37
0108	Fill	Single fill of ring ditch	0107	n/a	Mid ornage grey sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0109	Fill	Single fill of ditch	n/a	0110	Mid-dark grey brown sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0110	Cut	Cut of ditch	0109	n/a	North to south aligned ditch	Low Middlewood	Tower foundation 5A	Access 37
0111	Cut	Cut of pit	0112	n/a	Kiln pit	Low Middlewood	Tower foundation 5A	Access 37
0112	Fill	Mixed burnt fill of kiln pit	n/a	0111	Burnt orange/pink/black firm sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0113	Fill	Fill of shallow feature	n/a	0114	Mid grey brown loose clay sand	Low Middlewood	Tower foundation 5A	Access 37
0114	Cut	Cut of irregular feature	0113	n/a	Shallow feature. Function uncertain	Low Middlewood	Tower foundation 5A	Access 37
0115	Fill	Burnt clay fill of kiln flue	n/a	0116	Burnt orange/pink/black firm sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0116	Cut	Flue associated with kiln	0115	n/a	North-south aligned	Low Middlewood	Tower foundation 5A	Access 37
0117	Fill	Heavily burnt fill	n/a	0118	Dark grey brown firm sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0118	Cut	Raking pit	0117	n/a	Irregular shaped feature thought to be the result of raking	Low Middlewood	Tower foundation 5A	Access 37
0119	Fill	Single fill of linear feature	n/a	0120	Dark greyish orange silty clay	Low Middlewood	Tower foundation 5A	Access 37
0120	Cut	Cut of ditch	0119	n/a	NW-SE linear ditch	Low Middlewood	Tower foundation 5A	Access 37
0121	Fill	Single fill of very shallow linear feature	n/a	0122	Mid brownish grey friable sandy clay	Low Middlewood	Tower foundation 5A	Access 37
0122	Cut	Cut of furrow	0121	n/a	North to south aligned. Very straight	Low Middlewood	Tower foundation 5A	Access 37
0123	Group	Group number for kiln	n/a	n/a	N/A	Low Middlewood	Tower foundation 5A	Access 37
0124	Layer	Subsoil overburden	n/a	n/a	Mid dark grey brown friable sandy clay	Hope House	Access 24	1
0125	Natural	Gradually sloping natural ground	n/a	n/a	Mid orange brown clay	Hope House	Access 24	1
0126	Layer	Plough soil	n/a	n/a	Dark grey brown firm sandy clay	Hope House	Access 26	3
0127	Natural	Natural drift geology	n/a	n/a	Light-mid firm orangy clay	Hope House	Access 26	3
0128	Layer	Subsoil	n/a	n/a	Very dark grey black firm sandy silt	Hope House	Access 26	3
0129	Deposit	Stones within subsoil	n/a	n/a	Sandstone/limestone	Hope House	Access 26	3
0130	Deposit	Stones within subsoil	n/a	n/a	Sandstone/limestone	Hope House	Access 26	5
0131	Unstrat	Unstrat	N/A	N/A	Unstrat to plot	Low Middlewood	Tower foundation 5A	Access 37
0132	Unstrat	Unstrat	N/A	N/A	Unstrat to plot	Low Middlewood	Tower foundation 5A	Access 37

01000	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Carlton	Tower foundation 1A	Access 40
01003	Layer	Subsoil	N/A	N/A	Soft mid orange brown sand silt	Carlton	Tower foundation 1A	Access 40
01004	Layer	Natural	N/A	N/A	Mid brown orange clay silt	Carlton	Tower foundation 1A	Access 40
02000	Layer	Topsoil	N/A	N/A	Soft mid brown sand clay silt	Carlton	Tower foundation 2	Access 38
02003	Layer	Colluvium	N/A	N/A	Soft mid orange brown sand silt clay	Carlton	Tower foundation 2	Access 38
02004	Layer	Natural	N/A	N/A	Firm pale to mid orange brown clay sand	Carlton	Tower foundation 2	Access 38
03000	Layer	Topsoil	N/A	N/A	Soft grey brown silt clay	Carlton	Tower foundation 3A	Access37
03003	Layer	Natural	N/A	N/A	Pale brown orange clay	Carlton	Tower foundation 3A	Access37
04100	Layer	Topsoil	N/A	N/A	Firm dark grey brown sandy clay	Carlton	Tower foundation 4A	Access37
04101	Layer	Natural	N/A	N/A	Mid orange brown sandy clay	Carlton	Tower foundation 4A	Access37
05000	Layer	Topsoil	N/A	N/A	Grey brown firm silt clay	Low Middlewood	Tower foundation 5A	Access37
05003	Cut	Furrow	5004	N/A	Irregular linear	Low Middlewood	Tower foundation 5A	
05004	Fill	Fill of furrow	N/A	05003	Grey orange firm sany caly	Low Middlewood	Tower foundation 5A	Access37
05005	Unstrat	Unstrat	N/A	N/A	N/A	Low Middlewood	Tower foundation 5A	Access37
05006	Unstrat	Unstrat	N/A	N/A	N/A	Low Middlewood	Tower foundation 5A	Access37
05007	Cut	Linear	05008 05009	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05008	Fill	Tertiary fill of ditch	N/A	5007	Brown firm silt clay	Low Middlewood	Tower foundation 5A	Access37
05009	Fill	Primary fill of ditch	N/A	5007	Grey orange compact silt clay	Low Middlewood	Tower foundation 5A	Access37
05010	Layer	Natural	N/A	N/A	Red grey firm clay silt	Low Middlewood	Tower foundation 5A	Access37
05011	Fill	Fill of ditch	N/A	05012	Dark grey brown compact silt clay	Low Middlewood	Tower foundation 5A	Access37
05012	Cut	Cut of ditch	5011	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05013	Fill	Fill of ditch	N/A	05014	Grey compact silt clay	Low Middlewood	Tower foundation 5A	Access37
05014	Cut	Cut of ditch	5013	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05015	Fill	Fill of ditch	N/A	5016	Grey orange compact silt clay	Low Middlewood	Tower foundation 5A	Access37
05016	Cut	Linear	5015	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05017	Layer	Natural	N/A	N/A	Orange grey firm clay	Low Middlewood	Tower foundation 5A	Access37
05018	Fill	Grey firm sand caly	N/A	5019	Orange grey firm sandy clay	Low Middlewood	Tower foundation 5A	Access37
05019	Cut	Irregular ditch	5018	N/A	Irregular linear	Low Middlewood	Tower foundation 5A	Access37
05020	Fill	Fill of ditch	N/A	05021	Grey mid-brown gritty sand clay	Low Middlewood	Tower foundation 5A	Access37
05021	Cut	Cut of ditch	5020	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05022	Fill	Fill of ditch	N/A	05023	Mid grey brown firm clay sand	Low Middlewood	Tower foundation 5A	Access37
05023	Cut	Cut of ditch	5022	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05024	Fill	Fill of ditch	N/A	5025	Mid grey brown firm clay sand	Low Middlewood	Tower foundation 5A	Access37
05025	Cut	Cut of ditch	5024	N/A	Curvilinear	Low Middlewood	Tower foundation 5A	Access37
05026	Fill	Fill of ditch	N/A	05028	Dark brown grey firm sand clay	Low Middlewood	Tower foundation 5A	Access37
05027	Fill	Fill of ditch	N/A	05028	Dark grey firm clay	Low Middlewood	Tower foundation 5A	Access37
05028	Cut	Recut of ditch	05026 05027	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05029	Fill	Fill of ditch	N/A	5031	Dark brown grey firm sand clay	Low Middlewood	Tower foundation 5A	Access37

05030	Fill	Fill of ditch	N/A	05031	Dark grey firm clay	Low Middlewood	Tower foundation 5A	Access37
05031	Cut	Recut linear	05030 05029	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05032	Fill	Fill of ditch	N/A	05033	Orange grey brown firm sand clay	Low Middlewood	Tower foundation 5A	Access37
05033	Cut	Cut of ditch	5032	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05034	Fill	Fill of ditch	N/A	5035	Dark grey brown friable clay sand	Low Middlewood	Tower foundation 5A	Access37
05035	Cut	Ditch terminus	5034	N/A	Curvilinear	Low Middlewood	Tower foundation 5A	Access37
05036	Cut	Cut of curvilinear	5037	N/A	Curvilinear	Low Middlewood	Tower foundation 5A	Access37
05037	Fill	Fill of curvilinear	N/A	05036	Mid dark brown sand clay	Low Middlewood	Tower foundation 5A	Access37
05038	Cut	Cut of curvilinear	5039	N/A	Curvilinear	Low Middlewood	Tower foundation 5A	Access37
05039	Fill	Fill of curvilinear	N/A	5038	Mid-dark grey brown firm sand clay	Low Middlewood	Tower foundation 5A	Access37
05040	Cut	Cut of ditch	05041	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
05041	Fill	Fill of ditch	N/A	05040	Mid dark grey brown firm sand clay	Low Middlewood	Tower foundation 5A	Access37
05042	Fill	Fill of ditch	N/A	05043	Grey brown firm clay	Low Middlewood	Tower foundation 5A	Access37
05043	Cut	Cut of ditch	5042	N/A	Steep sided flat bottomed	Low Middlewood	Tower foundation 5A	Access37
05044	Fill	Fill of ditch	N/A	05045	Mid orange brown sandy clay	Low Middlewood	Tower foundation 5A	Access37
05045	Cut	Cut of ditch	5044	N/A	Linear	Low Middlewood	Tower foundation 5A	Access37
06000	Layer	Topsoil	N/A	N/A	Dark-mid brown soft clayey silt	Trimdon	Tower foundation 4TF38B	Access37
70000	Layer	Topsoil	N/A	N/A	Soft mid brown sand silt	Grindon	Tower foundation 7A	Access 36
07003	Layer	Subsoil	N/A	N/A	Soft orange mid brown sand clay silt	Grindon	Tower foundation 7A	Access 36
07004	Layer	Natural	N/A	N/A	Soft mid brown sand clay silt	Grindon	Tower foundation 7A	Access 36
07005	Layer	Natural	N/A	N/A	Soft red orange clay silt	Grindon	Tower foundation 7A	Access 36
08000	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Grindon	Tower foundation 8A	Access 36
08001	Layer	Subsoil	N/A	N/A	Soft mid orange brown clay silt	Grindon	Tower foundation 8A	Access 36
08002	Layer	Natural	N/A	N/A	Soft pink brown silt clay	Grindon	Tower foundation 8A	Access 36
09000	Layer	Topsoil	N/A	N/A	Soft mid brown sand clay silt	Grindon	Tower foundation 9	Access 36
09003	Layer	Subsoil	N/A	N/A	Soft mid to dark brown sand clay silt	Grindon	Tower foundation 9	Access 36
09004	Layer	Natural	N/A	N/A	Soft orange brown sand clay	Grindon	Tower foundation 9	Access 36
10000	Laver	Topsoil	N/A	N/A	Soft mid to dark brown silt clay	Grindon	Tower foundation 10	Access 36
10003	Layer	Natural	N/A	N/A	Soft orange brown silt clay	Grindon	Tower foundation 10	Access 36
11000	Laver	Topsoil	N/A	N/A	Mid brown clay silt	Grindon	Tower foundation 11	Access 36
11003	Layer	Natural	N/A	N/A	Mid orange brown silt clay	Grindon	Tower foundation 11	Access 36
12001	Layer	Topsoil	N/A	N/A	Mid brown silt clay	Grindon	Tower foundation 12	Access 36
12002	Layer	Natural	N/A	N/A	Firm dark brown orange clay	Grindon	Tower foundation 12	Access 36
13001	Layer	Topsoil	N/A	N/A	Mid brown soft silt clay	Grindon	Tower foundation 13	Access 36
13002	Layer	Natural	N/A	N/A	Orange/yellow mottled clay	Grindon	Tower foundation 13	Access 36
14001	Layer	Topsoil	N/A	N/A	Brown firn clay silt	Layton	Tower foundation 14	Access 35
14002	Layer	Natural	N/A	N/A	Mid yellow grey firm clay	Layton	Tower foundation 14	Access 35
14003	Layer	Natural	N/A	N/A	Light grey thick heavy clay	Layton	Tower foundation 14	Access 35
15000	Layer	Topsoil	N/A	N/A	Mid brown silty clay	Layton	Tower foundation 15	Access 35
15003	Layer	Natural	N/A	N/A	Mid yellow/orange firm silty clay	Layton	Tower foundation 15	Access 35
16000	Layer	Topsoil	N/A	N/A	Friable sand clay dark grey brown	Layton	Tower foundation 16	Access 35
16001	Layer	Subsoil	N/A	N/A	Mid dark grey brown sand clay	Layton	Tower foundation 16	Access 35
16002	Layer	Natural	N/A	N/A	Mid dark orange brown clay sand	Layton	Tower foundation 16	Access 35
17000	Layer	Topsoil	N/A	N/A	Dark brown/grey silty clay	Layton	Tower foundation 17	Access 35
17004	Layer	Subsoil	N/A	N/A	Grey/red/brown plastic silty clay	Layton	Tower foundation 17	Access 35
17005	Layer	Natural	N/A	N/A	Dark brown/red silty clay	Layton	Tower foundation 17	Access 35
18000	Layer	Topsoil	N/A	N/A	Mid dark brown silty clay	Layton	Tower foundation 18	Access 35
18001	Layer	Subsoil	N/A	N/A	Mid orange brown silt sand	Layton	Tower foundation 18	Access 35
18002	Layer	Natural	N/A	N/A	Pink orange brown silt clay	Layton	Tower foundation 18	Access 35
19000	Layer	Topsoil	N/A	N/A	Firm dark red grey brown clay sand	East Close	Tower foundation 19	Access 31
19003	Layer	Natural	N/A	N/A	Firm mid red brown to orange brown clay sand	East Close	Tower foundation 19	Access 31

20000	Layer	Topsoil	N/A	N/A	Mid to dark brown sand silt	East Close	Tower foundation 20	Access 31
20003	Layer	Subsoil	N/A	N/A	Mid to dark brown sand silt	East Close	Tower foundation 20	Access 31
20003	Layer	Natural	N/A	N/A	Mid orange sand clay	East Close	Tower foundation 20	Access 31
21000	Layer	Topsoil	N/A	N/A	Loose dark grey brown silt clay	East Close	Tower foundation 21	Access 31
21003	Layer	Subsoil	N/A	N/A	Loose mid orange brown sand clay	East Close	Tower foundation 21	Access 31
21004	Layer	Natural	N/A	N/A	Firm mid orange brown clay sand	East Close	Tower foundation 21	Access 31
22000	Layer	Topsoil	N/A	N/A	Firm dark grey brown clay sand	East Close	Tower foundation 22	Access 31
22003	Layer	Natural	N/A	N/A	Firm pale orange brown sand clay	East Close	Tower foundation 22	Access 31
23000	Layer	Topsoil	N/A	N/A	Loose dark grey brown clay	Green Hill	Tower foundation 23	Access 33
23003	Layer	Natural	N/A	N/A	Mid orange brown sand clay	Green Hill	Tower foundation 23	Access 33
24000	Layer	Topsoil	N/A	N/A	Firm dark grey brown silt clay	Redcar House	Tower foundation 24	Access 30
24003	Layer	Natural	N/A	N/A	Firm pale yellow brown sand clay	Redcar House	Tower foundation 24	Access 30
25000	Layer	Topsoil	N/A	N/A	Soft orange mid brown sand silt	Bridge House	Tower foundation 25	Access 29
25003	Layer	Natural	N/A	N/A	Very soft mid orange brown sand silt	Bridge House	Tower foundation 25	Access 29
26000	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Bridge House	Tower foundation 25	Access 29
26003	Layer	Subsoil	N/A	N/A	Soft mid orange brown clay silt	Bridge House	Tower foundation 25	Access 29
26004	Layer	Natural	N/A	N/A	Firm mid orange pale brown silt clay	Bridge House	Tower foundation 25	Access 29
27000	Layer	Topsoil	N/A	N/A	Soft grey mid brown silt clay	Butterwith Road	Tower foundation 27	Access 27
27003	Layer	Natural	N/A	N/A	Soft mid orange mid brown silt clay	Butterwith Road	Tower foundation 27	Access 27
28000	Layer	Topsoil	N/A	N/A	Soft mid brown silt clay	Butterwith Road	Tower foundation 28	Access 27
28003	Layer	Natural	N/A	N/A	Soft mid orange clay silt	Butterwith Road	Tower foundation 28	Access 27
28004	Layer	Natural	N/A	N/A	Soft mid grey brown	Butterwith Road	Tower foundation 28	Access 27
29000	Layer	Topsoil	N/A	N/A	Firm mid brown silt clay	Butterwith Road	Tower foundation 29	Access 27
29003	Layer	Natural	N/A	N/A	Firm mid orange brown silt clay	Butterwith Road	Tower foundation 29	Access 27
29004	Layer	Natural	N/A	N/A	Firm mid grey brown silt clay	Butterwith Road	Tower foundation 29	Access 27
31001	Layer	Topsoil	N/A	N/A	Mid brown clay silt	Fishburn	Tower foundation 31	Access 26 A
31002	Layer	Natural	N/A	N/A	Light brown yellow silt sand clay	Fishburn	Tower foundation 31	Access 26 A
32001	Layer	Topsoil	N/A	N/A	Mid brown clay silt	Galley Law Farm	Tower foundation 32	Access 26
32002	Layer	Natural	N/A	N/A	Mixed yellow/orange/grey sand clay	Galley Law Farm	Tower foundation 32	Access 26
34000	Layer	Topsoil	N/A	N/A	Firm mid-orange silt clay	Hope House	Tower foundation 34	Access 24
34003	Layer	Subsoil	N/A	N/A	Soft mid orange brown clay silt	Hope House	Tower foundation 34	Access 24
34004	Layer	Natural	N/A	N/A	Firm mid orange silt clay	Hope House	Tower foundation 34	Access 24
34005	Layer	Natural	N/A	N/A	Mid orange brown clay sand	Hope House	Tower foundation 34	Access 24
35001	Layer	Topsoil	N/A	N/A	Dark brown silty clay	Salters Lane	Tower foundation 35	Access 23
35002	Layer	Natural	N/A	N/A	Light yellow white clay	Trimdon	Tower foundation 36	Access 23
36001	Layer	Topsoil	N/A	N/A	Mid/light brown silty clay	Trimdon	Tower foundation 36	Access 21
36002	Layer	Natural	N/A	N/A	Light brown yellow firm clay	Trimdon	Tower foundation 36	Access 21
37000	Layer	Topsoil	N/A	N/A	Dark brown grey clay sand	Trimdon	Tower foundation 37	Access 21
51000								

38000	Layer	Topsoil	N/A	N/A	Soft mid brown sand silt	Trimdon	Tower foundation 38	Access 21
38003	Layer	Subsoil	N/A	N/A	Soft mid orange brown sand silt	Trimdon	Tower foundation 38	Access 21
38004	Layer	Natural	N/A	N/A	Soft pale orange brown clay silt	Trimdon	Tower foundation 38	Access 21
39000	Layer	Topsoil	N/A	N/A	Dark grey brown firm silty clay	Catley Hill Farm	Tower foundation 39	Access 19
39001	Layer	Natural	N/A	N/A	Yellow dark grey blue clay	Catley Hill Farm	Tower foundation 39	Access 19
39002	Cut	Furrow	39003	N/A	Linear	Catley Hill Farm	Tower foundation 39	Access 19
39003	Fill	Fill of furrow	N/A	39002	Mid yellow/orange firm clay silt	Catley Hill Farm	Tower foundation 39	Access 19
40000	Layer	Topsoil	N/A	N/A	Loose mid-dark brown grey silty clay	Green side Farm	Tower foundation 40	Access 18
40003	Layer	Natural	N/A	N/A	Firm mid yellow brown sand clay	Green side Farm	Tower foundation 40	Access 18
41000	Layer	Topsoil	N/A	N/A	Mid brown-dark clay sand silt	Garmondsway Middle Farm	Tower foundation 41	Access 17
41003	Layer	Natural	N/A	N/A	Soft pale to mid brown clay silt	Garmondsway Middle Farm	Tower foundation 41	Access 17
42000	Layer	Topsoil	N/A	N/A	Friable dark grey brown sand clay	Garmondsway Middle Farm	Tower foundation 42	Access 17
42001	Layer	Natural	N/A	N/A	Firm dark orange brown sand clay	Garmondsway Middle Farm	Tower foundation 42	Access 17
43000	Layer	Topsoil	N/A	N/A	Friable dark grey brown clay silt	Garmondsway Middle Farm	Tower foundation 43	Access 17
43001	Layer	Natural	N/A	N/A	Firm grey brown clay	Garmondsway Middle Farm	Tower foundation 43	Access 17
44000	Layer	Topsoil	N/A	N/A	Soft mid brown sand silt	Garmondsway Middle Farm	Tower foundation 44	Access 17
44003	Layer	Subsoil	N/A	N/A	Pale to mid brown sand silt	Garmondsway Middle Farm	Tower foundation 44	Access 17
44004	Layer	Natural	N/A	N/A	Soft mid orange brown sand clay silt	Garmondsway Middle Farm	Tower foundation 44	Access 17
44005	Layer	Solid geology	N/A	N/A	Very loose sand	Garmondsway Middle Farm	Tower foundation 44	Access 17
45000	Layer	Topsoil	N/A	N/A	Loose mid grey brown sand clay	Garmondsway Middle Farm	Tower foundation 45	Access 17
45003	Layer	Solid geology	N/A	N/A	Hard pale yellow brown limestone	Garmondsway Middle Farm	Tower foundation 45	Access 17
46000	Layer	Topsoil	N/A	N/A	Very loose mid brown sand silt	Harap Road	Tower foundation 46	Access 16
46002	Layer	Drift geology	N/A	N/A	Very loose pale yellow orange sand	Harap Road	Tower foundation 46	Access 16
46003	Layer	Solid geology	N/A	N/A	Angular stones	Harap Road	Tower foundation 46	Access 16
46004	Cut	Ditch	46006 46005	N/A	Linear	Harap Road	Tower foundation 46	Access 16
46005	Fill	Fill of ditch	N/A	46004	Red brown loose clay silt	Harap Road	Tower foundation 46	Access 16
46006	Fill	Slump deposit	N/A	46004	Red brown loose clay silt	Harap Road	Tower foundation 46	Access 16
46007	Cut	Cut of paleochannel	46008	N/A	Linear	Harap Road	Tower foundation 46	Access 16
46008	Fill	Fill of paleochannel	N/A	46007	Brown loose clay silt	Harap Road	Tower foundation 46	Access 16
46009	Cut	Cut of ditch	46010	N/A	Linear	Harap Road	Tower foundation 46	Access 16
46010	Fill	Fill of ditch	N/A	46009	Red brown loose clay silt	Harap Road	Tower foundation 46	Access 16
46011	Cut	Cut of paleochannel	46012	N/A	Irregular linear	Harap Road	Tower foundation 46	Access 16
46012	Fill	Fill of paleochannel	N/A	46011	Mid brown loose clay silt	Harap Road	Tower foundation 46	Access 16
46013	Layer	Solid geology	N/A	N/A	Yellow limestone	Harap Road	Tower foundation 46	Access 16
47000	Layer	Topsoil	N/A	N/A	Loose mid to dark brown clay silt	Garmondsway	Tower foundation 47	Access 15
47003	Layer	Natural	N/A	N/A	Soft mid orange clay silt	Garmondsway	Tower foundation 47	Access 15
49000	Layer	Topsoil	N/A	N/A	Firm dark brown grey sand clay	Stobb Cross Lane	Tower foundation 49	Access 14
49001	Layer	Subsoil	N/A	N/A	Mid-dark orange grey brown sand	Stobb Cross Lane	Tower foundation 49	Access 14
49003	Layer	Natural	N/A	N/A	Firm pale orange/brown sand clay	Stobb Cross Lane	Tower foundation 49	Access 14
50000	Layer	Topsoil	N/A	N/A	Loose mid brown sand silt	Stobb Cross Lane	Tower foundation 50	Access 14
50003	Layer	Subsoil	N/A	N/A	Soft orange brown sand silt	Stobb Cross Lane	Tower foundation 50	Access 14
51000	Layer	Topsoil	N/A	N/A	Loose dark brown grey silty clay	Stobb Cross Lane	Tower foundation 51	Access 14
51001	Layer	Subsoil	N/A	N/A	Mid grey brown firm sandy clay	Stobb Cross Lane	Tower foundation 51	Access 14
51002	Layer	Natural	N/A	N/A	Pale yellow brown firm clay	Stobb Cross Lane	Tower foundation 51	Access 14
52000	Layer	Topsoil	N/A	N/A	Soft to mid dark brown sand clay	Cornforth Lane	Tower foundation 52	Access 13A

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52003	Layer	Natural	N/A	N/A	Soft pale orange brown clay silt	Cornforth Lane	Tower foundation 52	Access 13A
52005	Luyer	- Cucurui	1011		Son pare orange oronn endy sin	Connoran Eanlo	rower toundation 52	100055 1511
53000	Layer	Topsoil	N/A	N/A	Loose dark brown sand clay	Cornforth Lane	Tower foundation 53	Access 13A
53003	Layer	Natural	N/A	N/A	Pale orange brown sand mid grey sand clay	Comforth Lane	Tower foundation 53	Access 13A
53004	Layer	Fill	N/A	53005	Grey mixed deposit	Cornforth Lane	Tower foundation 53	Access 13A
53005	Cut	Cut	53004	N/A	Curvilinear	Cornforth Lane	Tower foundation 53	Access 13A
54000	Layer	Topsoil	N/A	N/A	Firm dark brown sand clay	Cornforth	Tower foundation 54	Access 11
54001	Layer	Natural	N/A	N/A	Pale mid yellow brown sand clay	Cornforth	Tower foundation 54	Access 11
55000	T	T	NT/A	27/4	T	Com 6 st	The second second second second	A 11
55000	Layer	Topsoil	N/A	N/A	Loose mid/dark brown clay silt	Cornforth	Tower foundation 55	Access 11
55003	Layer	Natural	N/A	N/A	Soft mid brown clay silt	Cornforth	Tower foundation 55	Access 11
56000	Layer	Topsoil	N/A	N/A	Loose mid grey brown sand clay	Brandon House	Tower foundation 56	Access 9
56003	Layer	Natural	N/A	N/A	Mid orange brown sandy clay	Brandon House	Tower foundation 56	Access 9
56004	Fill	Hedgeline fill	N/A	56005	Dark grey sandy clay	Brandon House	Tower foundation 56	Access 9
56005	Cut	Hedgeline	56004	N/A	Irregular linear	Brandon House	Tower foundation 56	Access 9
58000	Layer	Topsoil	N/A	N/A	Dark brown firm clay silt	Thinford	Tower foundation 58	Access 3
57004	Layer	Modern dump	N/A	N/A	Loose dark grey ash/coal sand clay	Cooksons Green	Tower foundation 57	Access 5
57000	Layer	Topsoil	N/A	N/A	Firm dark grey brown sand clay	Cooksons Green	Tower foundation 57	Access 5
57003	Layer	Natural	N/A	N/A	Firm mid grey brown sand clay	Cooksons Green	Tower foundation 57	Access 5
57004	Layer	Modern dumping	N/A	N/A	Dark grey loose ashy coal sand clay	Cooksons Green	Tower foundation 57	Access 5
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58003	Cut	Tree root	58004	N/A	Shallow slope sides, very uneven base	Thinford	Tower foundation 58	Access 3
58004	Cut	Tree root	58003	N/A	Shallow slope sides, very uneven base	Thinford	Tower foundation 58	Access 3
58005	Layer	Natural	N/A	N/A	Pale orange silt clay	Thinford	Tower foundation 58	Access 3
59001	Layer	Topsoil	N/A	N/A	Dark brown firm clay silt	Thinford	Tower foundation 59	Access 3
59002	Layer	Natural	N/A	N/A	Yellow grey sand clay	Thinford	Tower foundation 59	Access 3
59003	Cut	Cut of ditch	59004	N/A	Linear	Thinford	Tower foundation 59	Access 3
59004	Fill	Fill of furrow and ditch	N/A	59005 59003	Mid brown loose clay sand silt	Thinford	Tower foundation 59	Access 3
59005	Cut	Furrow	59004	N/A	Linear	Thinford	Tower foundation 59	Access 3
60000	Layer	Topsoil	N/A	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60002	Layer	Natural	N/A	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60003	Cut	Cut of dirch	60004	N/A 60003		Spennymoor sub-station	Tower foundation 60	Access 2
60004 60005	Fill Cut	Fill of ditch	N/A 60027			Spennymoor sub-station	Tower foundation 60 Tower foundation 60	Access 2
60005	Cut	Cut of drain Cut of post hole	60027	N/A N/A		Spennymoor sub-station Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60008	Fill	Fill of post hole	N/A	N/A 60006		Spennymoor sub-station Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60007	Fill Cut	Cut of ditch	N/A 60009	00006 N/A		Spennymoor sub-station Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60009	Fill	Fill of ditch	N/A	60008		Spennymoor sub-station Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60010	Cut	Cut of ditch	60011	N/A		Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60011	Fill	Fil of ditch	N/A	60010		Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60012	Cut	Cut of ditch	60013	N/A		Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60012	Fill	Fill of ditch	N/A	60012		Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60013	Cut	Cut of ditch	60015	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60015	Fill	Fill of ditch	N/A	60014		Spennymoor sub-station	Tower foundation 60	Access 2
60015	VOID	Void	1971	00017		Spennymoor sub-station	Tower foundation 60	Access 2
60017	VOID	Void				Spennymoor sub-station	Tower foundation 60	Access 2
00017	VOID	Volu	I	1		Spennymoor sub-station	Tower ioundation of	ACC 35 2

60018	Cut	Cut of ditch	60019	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60018	Fill	Fill of ditch	N/A	60018		A	Tower foundation 60	Access 2 Access 2
60020	Cut	Cut of ditch	60021	N/A		Spennymoor sub-station Spennymoor sub-station	Tower foundation 60	Access 2 Access 2
60020	Fill	Fill of ditch		60020			Tower foundation 60	Access 2 Access 2
60021	Fill Cut		N/A N/A			Spennymoor sub-station		
		Drain cut	N/A 60024	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60023	Cut	Cut of ditch		N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60024	Fill	Fill of ditch	N/A	60023		Spennymoor sub-station	Tower foundation 60	Access 2
60025	Cut	Cut of ditch	60026	N/A		Spennymoor sub-station	Tower foundation 60	Access 2
60026 60027	Fill	Fill of ditch	N/A	60025 60005		Spennymoor sub-station	Tower foundation 60	Access 2
		Fill of drain	N/A			Spennymoor sub-station	Tower foundation 60	Access 2
62000	Layer	Topsoil	N/A	N/A	Soft mid brown silt clay	Layton	Tower foundation TF14T	Access 35
62003	Layer	Natural	N/A	N/A	Soft light brown orange clay	Layton	Tower foundation TF14T	Access 35
64004	Fill	Fill of furrow	N/A	64005	Mid grey red brown clay silt	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64005	Cut	Cut of furrow	64004	N/A	Linear	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64006	Cut	Cut of large pit	64007 64013	N/A	Sub circular	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64007	Fill	Fill of pit	N/A	64006	Grey brown clay silt	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64008	Fill	Fill of pit	N/A	64006	Black soft organic silt	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64009	Fill	Fill of pit	N/A	64006	Mid brown firm clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64010	Fill	Fill of pit	N/A	64006	Mid brown yellow firm clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64011	Fill	Fill of pit	N/A	64006	Orange soft clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64012	Fill	Fill of pit	N/A	64006	Grey brown silt clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64013	Fill	Fill of pit	N/A	64006	Orange soft clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64014	Fill	Fill of post hole	N/A	64015	Light brown firm silty clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64015	Cut	Cut of post hole	64014	N/A	Circular	Catley Hill Farm	Tower foundation 4TF38C	Access 19
64016	Layer	Natural	N/A	N/A	Brown yellow firm clay	Catley Hill Farm	Tower foundation 4TF38C	Access 19
65000	Layer	Topsoil	N/A	N/A	Loose mid brown sand clay silt	Trimdon	Tower foundation 4TF38A	Access 21
65003	Layer	Natural	N/A	N/A	Soft mid orange brown clay silt	Trimdon	Tower foundation 4TF38A	Access 21
66000	Layer	Topsoil	N/A	N/A	Firm mid grey brown sand clay	Trimdon	Tower foundation 4TF38B	Access 21
66003	Layer	Natural	N/A	N/A	Firm mid red brown sandy clay	Trimdon	Tower foundation 4TF38B	Access 21
67000	Layer	Topsoil	N/A	N/A	Dark grey brown firm sand clay	Trimdon	Tower foundation 4TF38D	Access 21
67001	Fill	Fill of ditch	N/A	67002	Mid-dark orange grey brown sand clay	Trimdon	Tower foundation 4TF38D	Access 21
67002	Cut	Cut of ditch	67001	N/A	Linear	Trimdon	Tower foundation 4TF38D	Access 21
67003	Fill	Fill of furrow	N/A	N/A	Mid brown firm sand silt clay	Trimdon	Tower foundation 4TF38D	Access 21
67004	Cut	Cut of furrow	67003	N/A	Linear	Trimdon	Tower foundation 4TF38D	Access 21
67005	Layer	Natural	N/A	N/A	Light brown yellow soft clay	Trimdon	Tower foundation 4TF38D	Access 21
69000	Layer	Topsoil	N/A	N/A	Dark brown organic mix	Layton	Tower foundation 4TF14R	Access 35
69003	Layer	Natural	N/A	N/A	Mid orange grey clay	Layton	Tower foundation 4TF14R	Access 35
70000	Layer	Topsoil	N/A	N/A	Dark grey brown firm silt clay	Trimdon	Tower foundation 4TF38T	Access 21
70001	Layer	Subsoil	N/A	N/A	Mid-dark orange brown firm silt clay	Trimdon	Tower foundation 4TF38T	Access 21
70002	Layer	Natural	N/A	N/A	Mid yellow brown firm silt clay	Trimdon	Tower foundation 4TF38T	Access 21
70002	Layer	Natural	N/A	N/A	Mid yellow brown firm silt clay	Layton	Tower foundation 4TF38T	Access 35
70003	Layer	Solid geology	N/A	N/A	Yellow solis limestone	Trimdon	Tower foundation 4TF38T	Access 21
71000	Layer	Topsoil	N/A	N/A	Dark brown firm clay silt	Thinford	Tower foundation 59T	Access 3
71002	Layer	Natural	N/A	N/A	Yellow grey sand clay	Thinford	Tower foundation 59T	Access 3
72000	Layer	Topsoil	N/A	N/A	Dark firm grey brown silt clay	Layton	Tower foundation 4TF15R	Access 35
72001	Layer	Natural	N/A	N/A	Firm red orange clay	Layton	Tower foundation 4TF15R	Access 35
030300	Layer	Topsoil	N/A	N/A	Dark brown firm clay silt	Thinford	Access 3	3
030303	Fill	Fill of furrow	N/A	30304	Firm mid brown sandy clay	Thinford	Access 3	3
030304	Cut	Cut of furrow	30303	N/A	Shallow U shape	Thinford	Access 3	3
030305	Layer	Natural	N/A	N/A	Yellow grey sand clay	Thinford	Access 3	3
030400	Layer	Topsoil	N/A	N/A	Dark brown firm clay silt	Thinford	Access 3	4
030403	Fill	Fill of furrow	N/A	30404	Mid brown sandy clay	Thinford	Access 3	4
030404	Cut	Cut of furrow	30403	N/A	Shallow U shape	Thinford	Access 3	4
030405	Layer	Natural	N/A	N/A	Yellow grey sand clay	Thinford	Access 3	4
030600	Layer	Topsoil	N/A	N/A	Mid dark grey brown firm sandy clay	Thinford	Access 3	6

050100		T 11	NT/ 4	27/4				
050100	Layer	Topsoil	N/A	N/A	Dark brown grey sticky silty clay	Cooksons Green	Access 5	1
050103	Cut	Ditch	50104	N/A	Gradual shallow scoop shape	Cooksons Green	Access 5	1
050104	Fill	Fill of ditch	N/A	50103	Grey brown clay sand silt	Cooksons Green	Access 5	1
050105	Layer	Wall	N/A	N/A	Sand stone	Cooksons Green	Access 5	1
050106	Fill	Fill of furrow	N/A	50107	Mid brown silt clay	Cooksons Green	Access 5	1
050107	Cut	Cut of furrow	50106	N/A	Gradual with rounded base	Cooksons Green	Access 5	1
050108	Layer	Colluvium	N/A	N/A	Dark grey brown silt clay	Cooksons Green	Access 5	1
050109	Layer	Natural	N/A	N/A	Yellow whilte clay sand	Cooksons Green	Access 5	1
050110	Layer	Subsoil	N/A	N/A	Yellow orange grey sand clay	Cooksons Green	Access 5	1
050200	Layer	Topsoil	N/A	N/A	Dark brown grey silty clay	Cooksons Green	Access 5	2
050300	Layer	Topsoil	N/A	N/A	Firm dark brown grey silt clay	Cooksons Green	Access 5	3
060100	Layer	Topsoil	N/A	N/A	Mid brown silt clay	Metal Bridge	Access 6	1
060101	Layer	Natural	N/A	N/A	Mottled orange/yellow silt sand clay	Metal Bridge	Access 6	1
090101	Layer	Subsoil	N/A	N/A	Charcoal, slag, clinker, plastic, limestone	Brandon House	Access 9	1
090200	Layer	Topsoil	N/A	N/A	Loose mid grey brown sand clay	Brandon House	Access 9	2
090400	Layer	Topsoil	N/A	N/A	Dark brown friable clay sand	Brandon House	Access 9	4
090403	Layer	Natural	N/A	N/A	Mid orange brown sandy clay	Brandon House	Access 9	4
090404	Layer	Track	N/A	N/A	Cobbles and pebbles	Brandon House	Access 9	4
090501	Unstrat	Unstrat	N/A	N/A	Unstrat	Brandon House	Access 9	
110400	Layer	Topsoil	N/A	N/A	Firm dark brown grey sand clay	Cornforth	Access 11	4
110403	Layer	Subsoil	N/A	N/A	Friable mid-dark yellow/brown sand clay	Cornforth	Access 11	4
110404	Layer	Natural	N/A	N/A	Firm mid yellow brown sand clay	Cornforth	Access 11	4
110405	Cut	Paleochannel	110406	N/A	Sharp v shape	Cornforth	Access 11	4
110406	Fill	Fill of paleochannel	N/A	110405	Very dark grey black silt clay sand	Cornforth	Access 11	4
110800	Layer	Topsoil	N/A	N/A	Firm dark brown grey sand clay	Cornforth	Access 11	8
120100	Layer	Topsoil	N/A	N/A	Dark brown silt	East Pasture House	Access 12	1
130101	Layer	Topsoil	N/A	N/A	Firm mid dark grey brown silt clay	Cornforth Lane	Access 13A	1
130103	Layer	Drift geology	N/A	N/A	Firm orange clay	Cornforth Lane	Access 13A	1
130104	Cut	Paleochannel	130105	N/A	Sharp v shape	Cornforth Lane	Access 13A	1
130105	Fill	Fill of paleochannel	N/A	130104	Cinders and fire debris	Cornforth Lane	Access 13A	1
130500	Layer	Topsoil	N/A	N/A	Loose mid/dark grey brown silt sand clay	Cornforth Lane	Access 13	5
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140100	Layer	Topsoil	N/A	N/A	Very dark grey brown firm silt clay	Stobb Cross Lane	Access 14	1
140103	Layer	Buried topsoil	N/A	N/A	Dark grey silt clay	Stobb Cross Lane	Access 14	1
140104	Layer	Re-deposited subsoil	N/A	N/A	Grey yellow brown silt clay	Stobb Cross Lane	Access 14	1
140303	Layer	Bank/ridge	N/A	N/A	Grey orange sand clay	Stobb Cross Lane	Access 14	3
			- //					2
140304	Layer	Bank/ridge	N/A	N/A	Orange, yellow brown sand clay	Stobb Cross Lane	Access 14	3

140400	Layer	Topsoil	N/A	N/A	Dark grey brown clay silt	Stobb Cross Lane	Access 14	4
140403	Layer	Post Med cobbled track	N/A	N/A	Cobbles	Stobb Cross Lane	Access 14	4
140600	Layer	Topsoil	N/A	N/A	Grey brown silt clay	Stobb Cross Lane	Access 14	6
140603	Cut	Drain cut	140604	N/A	Shallow scoop	Stobb Cross Lane	Access 14	6
140604	Fill	Fill of drain cut	N/A	140603	Brown grey silt clay	Stobb Cross Lane	Access 14	6
140900	Layer	Topsoil	N/A	N/A	Dark grey brown silt clay	Stobb Cross Lane	Access 14	9
140902	Cut	Gully	140903	N/A	Curvilinear ditch	Stobb Cross Lane	Access 14	9
140903	Fill	Fill of gully	N/A	140908	Light brown yellow grey clay silt	Stobb Cross Lane	Access 14	9
140904	Cut	Cut of furrow	140905	N/A	Wide shallow U shape	Stobb Cross Lane	Access 14	9
140905	Fill	Fill of furrow	N/A	140904	Dark grey brown clay silt	Stobb Cross Lane	Access 14	9
140906	Cut	Cut of furrow	140907	N/A	Linear	Stobb Cross Lane	Access 14	9
140907	Fill	Fill of furrow	N/A	140906	Orange, yellow brown clay sand	Stobb Cross Lane	Access 14	9
140908	Cut	Cut of furrow	140903	N/A	Steep sided U shape	Stobb Cross Lane	Access 14	9
140909	Layer	Natural	N/A	N/A	Brown yellow clay silt	Stobb Cross Lane	Access 14	9
141000	Layer	Topsoil	N/A	N/A	Dark grey brown silt clay	Stobb Cross Lane	Access 14	10
150100	Layer	Topsoil	N/A	N/A	Loose mid to dark brown clay silt	Garmondway	Access 15	1
170800	Layer	Topsoil	N/A	N/A	Friable mid-dark brown clayey silt	Garmondsway Middle Farm	Access 17	8
180101	Layer	Topsoil	N/A	N/A	Loose mid-dark brown grey silty clay	Green side Farm	Access 18	1
190100	Layer	Topsoil	N/A	N/A	Dark grey brown silt clay	Catley Hill Farm	Access 19	1
190101	Layer	Subsoil	N/A	N/A	Dark brown silty clay	Catley Hill Farm	Access 19	1
190103	Fill	Fill of furrow	N/A	190104	Silt clay sand	Catley Hill Farm	Access 19	1
190104	Cut	Cut of furrow	190103	N/A	Wide shallow U shape	Catley Hill Farm	Access 19	
190105	Layer	Subsoil	N/A	N/A	Dark orange brown silt clay	Catley Hill Farm	Access 19	1
190200	Layer	Topsoil	N/A	N/A	Grey brown silt clay	Catley Hill Farm	Access 19	2
210200	Layer	Topsoil	N/A	N/A	Dark grey brown silt clay	Trimdon	Access 21	2
210500	Layer	Topsoil	N/A	N/A	Dark grey brown silt clay	Trimdon	Access 21	5
210601	U/S	Unstrat	N/A	N/A	Dark grey brown silt clay	Trimdon	Access 21	6
211000	Layer	Topsoil	N/A	N/A	Dark greyish brown silty clay	Trimdon	Access 21	10
211100	Layer	Topsoil	N/A	N/A	Bricks, rubble	Trimdon	Access 21	11
220100	Layer	Topsoil	N/A	N/A	Dark grey brown firm sandy silt	Trimdon	Access 22	1
220103	Layer	Subsoil	N/A	N/A	Mid yellow brown firm silty clay	Trimdon	Access 22	1
220200	Layer	Topsoil	N/A	N/A	Mid yellow brown firm silty clay	Trimdon	Access 22	1
250100	Layer	Topsoil	N/A	N/A	Loose dark grey brown sand clay	West Carrside Farm	Access 25	1
260100	Layer	Topsoil	N/A	N/A	Loose dark grey brown clay sand	Galley Law Farm	Access 26	1
260201	Layer	Topsoil	N/A	N/A	Mid yellow brown firm silty clay	Galley Law Farm	Access 26	2
260204	Fill	Stone clearance	N/A	260206	Sub-circular	Galley Law Farm	Access 26	2
260205	Fill	Aolien deposit	N/A	260206	Dark brown sand clay	Galley Law Farm	Access 26	2

260206	Cut	Tree throw	260204/260205	N/A	Sub-circular	Galley Law Farm	Access 26	3
260303	Cut	Midden	260304	N/A	Sub-rectangular	Galley Law Farm	Access 26	3
260304	Fill	Midden deposit	N/A	260303	Dark grey brown firm clay	Galley Law Farm	Access 26	3
260305	Cut	Foundation	260306	N/A	Linear	Galley Law Farm	Access 26	3
260306	Layer	Aolien deposit	N/A	N/A	Orange brown silt clay sand	Galley Law Farm	Access 26	3
270100	Layer	Topsoil	N/A	N/A	Firm mid dark grey brown clay sand	Butterwick Road	Access 27	1
270200	Layer	Topsoil	N/A	N/A	Firm mid dark grey brown clay sand	Butterwick Road	Access 27	2
270303	Layer	Natural	N/A	N/A	Firm, pale orange brown silt clay	Butterwick Road	Access 27	3
270400	Layer	Topsoil	N/A	N/A	Firm dark brown grey clay sand	Butterwick Road	Access 27	4
270700	Layer	Topsoil	N/A	N/A	Firm dark brown grey silt clay	Butterwick Road	Access 27	7
270800	Layer	Topsoil	N/A	N/A	Firm mid dark grey brown clay sand	Butterwick Road	Access 27	8
270803	Layer	Subsoil	N/A	N/A	Firm mid grey brown clay sand	Butterwick Road	Access 27	8
271300	Layer	Topsoil	N/A	N/A	Soft dark grey brown silty clay	Butterwick Road	Access 27	13
271301	Layer	Topsoil	N/A	N/A	Soft dark grey brown silty clay	Butterwick Road	Access 27	13
271400	Layer Layer	Topsoil Topsoil	N/A N/A	N/A N/A	Soft dark brown grey sandy clay Soft dark brown grey sandy clay	Butterwick Road	Access 27 Access 27	14
		-						
271503 271801	Layer Layer	Subsoil Topsoil	N/A N/A	N/A N/A	Mid grey brown clay sand Loose dark grey brown sand clay	Butterwick Road Butterwick Road	Access 27 Access 27	15
2/1801	Layer	1 opson	IN/A	IN/A	Loose dark grey brown sand clay	Butterwick Road	Access 27	18
280100	Layer	Topsoil	N/A	N/A	Dark orange brown firm silt clay	Three Horse Shoe Inn	Access 28	1
280103	Layer	Natural	N/A	N/A	Mid orange brown firm silty clay	Three Horse Shoe Inn	Access 28	1
280200	Layer	Topsoil	N/A	N/A	Dark orange brown firm silt clay	Three Horse Shoe Inn	Access 28	2
280203	Layer	Natural	N/A	N/A	Mid orange brown firm silty clay	Three Horse Shoe Inn	Access 28	2
300200	Layer	Topsoil	N/A	N/A	Firm mid grey brown clay sand	Redcar House	Access 30	2
310100	Layer	Topsoil	N/A	N/A	Mid brown sand silt	East Close	Access 31	1
310200	Layer	Topsoil	N/A	N/A	Dark grey brown clay sand silt	East Close	Access 31	2
310201	Layer	Topsoil	N/A	N/A	Dark grey brown clay sand silt	East Close	Access 31	2
310203	Laver	Subenil	N/A	N/Δ	Firm vellow clay cand silt	Fact Close	Access 31	2

510205	Layei	3005011	11/24	11/21	FILIT YOHOW CLAY SAILU SITE	Last Close	ACCESS 31	
310204	Cut	Pit	310205	N/A	Circular	East Close	Access 31	2
310205	Fill	Fill of pit	N/A	310204	Brown grey firm clay silt	East Close	Access 31	2
310206	Layer	Relict track way	N/A	N/A	Dark brown friable clay sand silt	East Close	Access 31	2
	-		27/1					
310300	Layer	Topsoil	N/A	N/A	Dark grey brown clay sand	East Close	Access 31	3
			1					
310400	Layer	Topsoil	N/A	N/A	Firm dark brown grey clay sand	East Close	Access 31	4
310403	Layer	Natural	N/A	N/A	Firm pale yellow brown clay sand	East Close	Access 31	4
310404	Fill	Fill of track way	N/A	310405	Dark grey brown sand clay	East Close	Access 31	4
310405	Cut	Trackway	310404	N/A	Linear	East Close	Access 31	4
310500	Layer	Topsoil	N/A	N/A	Loose mid dark grey brown clay sand	East Close	Access 31	5
211(02	, Turna	Subsoil	N/A	N/A	To an and the second	East Close	4	6
311603	Layer		N/A	N/A	Loose mid orange brown clay	East Close	Access 31	
330203	Layer	Subsoil			Firm mid grey brown clay sand	Green Hill	Access 33	2
330300	Layer	Topsoil	N/A	N/A	Firm mid grey brown sand clay	Green Hill	Access 33	3
330303	Layer	Natural	N/A	N/A	Firm dark brown grey sand clay	Green Hill	Access 33	3
330304	Layer	Trackway?	N/A	N/A	Grey brown firm sand clay	Green Hill	Access 33	3
350100	Layer	Topsoil	N/A	N/A	Dark grey brown firm silty clay	Layton	Access 35	1
350101	Finds	Û/S	N/A	N/A	Dark grey brown firm silty clay	Layton	Access 35	1
350102	Layer	Topsoil	N/A	N/A	Dark grey brown firm silty clay	Layton	Passing point 2, 35	1
350103	Fill	Fill of natural hollow	N/A	350104	Black grey sand silt	Layton	Access 35	1
350104	Cut	Cut of feature/Geology	350103	N/A	Linear with 90 bend south and curve	Layton	Access 35	1
350200	Layer	Topsoil	N/A	N/A	Mid dark red grey brown silt clay	Layton	Access 35	2
350201	Layer	Subsoil	N/A	N/A	Mid light red grey brown silt clay	Layton	Access 35	2
350202	Fill	Fill of furrow				Layton	Access 35	2
350203	Cut	Cut of furrow				Layton	Access 35	2
350205	Fill	Fill of furrow			Grey yellow brown silty clay	Layton	Access 35	2
350206	Cut	Cut of furrow	350205	N/A	Linear	Layton	Access 35	2
350300	Layer	Topsoil	N/A	N/A	Dark grey brown clay silt	Layton	Access 35	3
350600	Layer	Topsoil	N/A	N/A	Dark orange brown firm silty clay	Layton	Access 35	6
350701	Layer	Topsoil	N/A	N/A	Soft dark brown sand silt clay	Layton	Access 35	7
361200	Layer	Topsoil	N/A	N/A	Soft dark brown sand silt endy	Grindon	Access 36	12
	ž	<u>^</u>			Dark grey brown firm silt clay			
370100	Layer	Topsoil	N/A	N/A		Low Middlewood	Access 37	1
370200	Layer	Topsoil	N/A	N/A	Dark grey brown firm silt clay	Low Middlewood	Access 37	2
370203	Cut	Ditch	370204	N/A	Linear	Low Middlewood	Access 37	2
370204	Fill	Fill of ditch	N/A	370203	Dark grey brown soft silt clay	Low Middlewood	Access 37	2
370205	Fill	Fill of ditch	N/A	370203	Yellow brown firm clay	Low Middlewood	Access 37	2
370206	Layer	Subsoil	N/A	N/A	Yellow brown firm silt clay	Low Middlewood	Access 37	2
370207	Layer	Natural	N/A	N/A	Orange brown firm silt clay	Low Middlewood	Access 37	2
370300	Layer	Topsoil	N/A	N/A	Dark grey brown firm silt clay	Low Middlewood	Access 37	3
370301 370303	Layer Cut	Subsoil Cut of pit	N/A 370304	N/A	Mid orange brown firm silt clay Sub-circular	Low Middlewood Low Middlewood	Access 37 Access 37	3
370303	Cui	Cut of pit	370304	IN/A	Sub-circular	Low Middlewood	Access 37	3

370304	Fill	Fill of pit	N/A	370303	Grey brown firm silt clay	Low Middlewood	Access 37	3
370305	Layer	Subsoil	N/A	N/A	Yellow brown firm silty clay	Low Middlewood	Access 37	3
370306	Layer	Natural	N/A	N/A	Yellow brown firm silty clay	Low Middlewood	Access 37	3
370300	Layer	Topsoil	N/A	N/A	Dark grey brown firm silt clay	Low Middlewood	Access 37	4
370400	Fill	Fill of curvilinear	N/A N/A	370404	Dark grey firm silty clay	Low Middlewood	Access 37	4
370403	Cut	Curvilinear ditch	370403	N/A	Curvilinear	Low Middlewood	Access 37	4 4
370404	Layer	Subsoil	N/A	N/A N/A	Orange brown firm clay silt	Low Middlewood	Access 37	4
370400	Layer	Natural	N/A N/A	N/A N/A	Yellow orange firm clay	Low Middlewood	Access 37	4
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370500	Layer	Topsoil	N/A	N/A	Grey brown firm silt clay	Low Middlewood	Access 37	5
370700	Layer	Topsoil	N/A	N/A	Grey brown firm silt clay	Low Middlewood	Access 37	7
370701	Layer	Subsoil	N/A	N/A	Orange brown firm silt clay	Low Middlewood	Access 37	7
370800	Layer	Topsoil	N/A	N/A	Dark grey brown firm silty clay	Low Middlewood	Access 37	8
370801	Layer	Subsoil	N/A	N/A	Orange brown firm clay silt	Low Middlewood	Access 37	8
371000	Layer	Topsoil	N/A	N/A	Grey brown firm silt clay	Low Middlewood	Access 37	10
380100	Layer	Topsoil	N/A	N/A	Firm dark grey brown silty clay	Howden Hall	Access 38	1
380300	Layer	Topsoil	N/A	N/A	Soft mid brown sand	Howden Hall	Access 38	3
380303	Layer	Subsoil	N/A	N/A	Soft mid orange brown clay silt	Howden Hall	Access 38	3
390100	Layer	Topsoil	N/A	N/A	Firm mid dark grey brown clay sand	Howden Hall	Access 39	1
400100	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	1
400200	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	2
400300	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	3
400303	U/S	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	3
400400	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	4
400403	U/S	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	4

400500	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	5
400503	Layer	Subsoil	N/A	N/A	Mid orange brown firm silt clay	Carlton	Access 40	5
400600	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	6
400700	Layer	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	7
400703	U/S	Topsoil	N/A	N/A	Dark brown firm sand clay	Carlton	Access 40	7
410100	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Norton	Access 41	1
410300	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Norton	Access 41	3
410900	Layer	Topsoil	N/A	N/A	Soft mid brown clay silt	Norton	Access 41	9

Appendix B The Iron Age and Roman pottery

by A. T. Croom and R. McBride

Introduction

The project produced 128 sherds of Iron Age and Roman pottery, weighing 1.494kg, from 5 different sites.

Methodology

The assemblage was sorted into fabric types, and counts and weights per context recorded in an excel spreadsheet noting any form elements present.

Fabrics

Local traditional ware (LTW)

The vessels are likely to have been made locally, but the range of fabrics is typical of those used throughout the whole of the north-east; there are close similarities with fabrics found on Iron Age settlements in Northumberland, such as Pegswood Moor, Morpeth (Willis 2009, 44). The pottery continued to be made into the Roman period without any major typological changes, and so cannot be dated closely.

Fabric 1: dolerite tempering Soft, hand-made dark grey fabric with angular fragments of dolerite up to 12mm in size

Fabric 2: granitic tempering

Hard, rough fabric with abundant inclusions (up to 6mm in size) of angular quartz, feldspar and mica, giving the sherd a glittery appearance. Hand-made, grey and brown fabric.

Fabric 4: quartz-grain tempering

Fairly soft, handmade fabric with dark grey core and brown to buff surfaces. Tempered with white/semi-transparent quartz grains (*c*.1mm in size).

Crambeck reduced ware and calcite-gritted ware National Reference Collection codes CRAM RE and HUN CG (Tomber and Dore 1998).

Catalogue

Access 19

There were two small sherds from a single vessel, likely to be local traditional ware. The small diameter vessel appears to have a plain rim reduced in width to form an external ledge (cf Swain 1987, fig. 45, no. 53), but the sherd is small and in poor condition (context 191010).

Access 27

This produced a small number of samian sherds in poor condition, each vessel represented by a single sherd. These were two Dr 18/31 bowls (*c*.120-150), a decorated body sherd, and a possible Curle 21 (second half of second century). Other second-century pottery included a campanulate bowl (Fig. 27, d)) and a small flanged bowl, both probably made locally. There were at least four vessels in local traditional wares; two jars (Fig. 27, a) and b)) and fragments of two squared rims from either a bowl or jar, probably from the same vessel (context 0053), as well as other body sherds. There was one sherd of calcite-gritted ware, likely to be fourth-century in date (Fig. 27, c)). The local traditional ware could be residual, but local traditional ware has been found in association with fourth-century material

nearby at Butterwick Moor, Sedgefield, suggesting that the ware continues to be made throughout the Roman period.

Access 31

The fill of the pit **310204** produced the base of a thick-walled local traditional ware vessel (context 310205).

Access 37

This site produced the largest amount of pottery. There was a single, very small scrap of samian ware (context 0026), and a number of small sherds in grey wares without any diagnostic features, which could be second or third century in date. There were sherds from at least three different local traditional ware vessels from two areas of the site. Thick-walled sherds, likely to come from large bucket-shaped vessels, came from the ring-ditch (contexts 0097 and 0099), and sherds from two different vessels from ditch fill 26, associated with the samian (Fig. 27, e)).

The rest of the pottery dates to the late Roman period and comes from a number of different areas of the site. There were three sherds of Crambeck reduced wares, from more than one vessel, dating to the late third century or later, and three Huntcliff-type rims dating to 360+ (Fig. 27, f)).

Foundation 59

Undiagnostic scrap.

Catalogue of Illustrated Pottery

Figure 27

a) Jar, with sooting on exterior of rim. Six joining sherds, and smaller fragments. LTW Fabric 4. Ditch 0047, Access 27.

b) Jar with squared rim, with sooting on exterior of rim and on body with an unsooted where the rim joins the body. Cf Catcote: Long 1988, fig. 3, nos 59-65. Two joining sherds. LTW Fabric 2. Context 0060, Ditch **0061**, Access 27.

c) Cooking pot, calcite-gritted ware. Layer 270100, topsoil, Access 27.

d) Campanulate bowl. Gritty buff fabric with wide grey core, with plentiful quartz inclusions. Likely to be locally produced. Ditch **0047**, Access 27.

e) Plain-rimmed bowl, with external groove. Cf Thorpe Thewles: Swain 1987, fig. 47, no. 285. Small fragment of rim and single body sherd. LTW Fabric 1, oxidised surfaces. Context 0026, Ditch **0023**, Tower Foundation 5A, Access 37.

f) Cooking pot with Huntcliff-type rim, with an unusual flattened top. Calcite-gritted ware. Context 05011, Ditch **05012**, Tower Foundation 5A, Access 37.

Conclusion

The pottery assemblage consists of wares that are typical for the area and includes wares from the second century up to the very late fourth century. Of interest is the high proportion of

local traditional wares, and especially those pieces associated with possible fourth century pottery at Access 27 (and possibly also at Tower Foundation 5A, Access 37). The vessel forms in local traditional ware were first made in the Iron Age and continue unchanged into the Roman period, making it difficult to date them closely, but this association with fourth-century material may be an important indication that they continued to be produced up until the end of the Roman period.

Recommendations

No further work is recommended.

Bibliography

Long, C. D., 1988 'The Iron Age and Romano-British settlement at Catcote, Hartlepool, Cleveland', *Durham Archaeol. J.* **4**, 13-35

Swain, H. P. 1987 'The Iron Age pottery', in Heslop, D. H., *The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982,* Council British Archaeol. Rep. 65

Tomber, R. and Dore, J. 1998. *The National Roman Fabric Reference Collection: a Handbook,* MoLAS Mono. **2**, London

Willis, S., 2009 'Pottery', in Proctor, J., Pesgwood Moor, Morpeth. A Later Iron Age and Romano-British Farmstead Settlement, Pre-Construct Archaeol. Mono. 11

Catalogue

Context	Fabric	Туре	Sherd no.	Weight (g)	RimEVE	Draw	Comments
0026	Fabric 1: Granular dolerite tempered		2	12	4	a	groove on ext rim.
0026	Fabric 1: Granular dolerite tempered		3	75			
0026	Fabric 2: Granitic tempering		1	2			
0026	Samian		1	1			
0026	Samian		1	2			
0026	Unsourced medieval/post- medieval		1	15			
0026	Unsourced reduced		1	10	4		may imitate calcite gritted ware forms
0027	Unsourced medieval/post- medieval		1	18			
0039	Crambeck Reduced		1	5			
0041	Unsourced oxidised		1	1			hard orange fabric, sandy
0047	Fabric 4: Quartz grain and fragment tempering		2	9			
0047	Fabric 4: Quartz grain and fragment tempering		12	46	4	d	
0047	Unsourced oxidised		1	24	12	c	
0053	Fabric 2: Granitic tempering		5	27			smoothed exterior surface
0053	Fabric 2: Granitic tempering		8	43	10		
0053	Samian	Dr 37	1	6	6		
0060	Fabric 2: Granitic tempering		22	91	13	b	
0063	Fabric 2: Granitic tempering		2	3			
0076	Samian		1	4			
0076	Samian	Dr18/31	1	6	6		
0076	Unsourced oxidised		1	2			
0097	Fabric 1: Dolerite tempering		7	363			
0099	Fabric 1: Dolerite tempering		1	145			
0109	Crambeck Reduced		1	5			
0109	Fabric 1: Dolerite tempering		1	6			

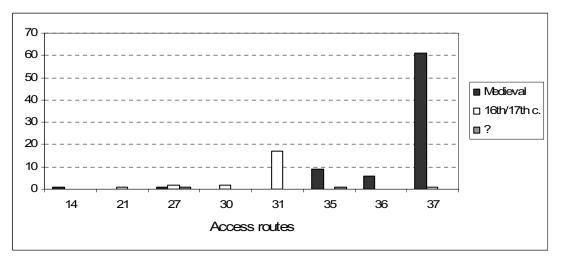
05000	Calcite Gritted		1	3			
05004	Calcite Gritted		5	50			
05004	Unsourced reduced		3	16			hard grey ware with occassional black inclusions. Closed vessel. Micaceous.
05005	Calcite Gritted	Huntcliff	1	25	8		
05011	Calcite Gritted	Huntcliff	1	20	11	e	
05020	Calcite Gritted	Huntcliff	2	24	11		
05020	Unsourced medieval/post- medieval		1	3			
05020	Unsourced medieval/post- medieval		1	6			sandy orange fabric
05022	Calcite Gritted	Huntcliff	2	21			horizontal lines on body, prob from a huntcliff type
05022	Crambeck Reduced		1	3			
05026	Calcite Gritted		1	11			
190101	Unsourced reduced		2	10			extremely worn, dark grey fabric, sandy with a cindery feel
270100	Calcite Gritted		1	47	11	f	large everted rim, no groove
270100	Fabric 1: Dolerite tempering		2	29			
310205	Fabric 1: Dolerite tempering		9	247			flat base
310205	Fabric 1: Dolerite tempering		12	36			
59004	Unsourced oxidised		1	1			soft orange fabric with some ferrous inclusions

Appendix C Medieval Pottery

By Jenny Vaughan NCAS

Introduction

A small assemblage of 103 sherds of pottery weighing 835 grams was examined for this report. Sherds came from both the watching brief/monitoring phase of the project and from the 'set piece' excavations. The majority of the pottery was medieval with a date range of 12^{th} to 14^{th} century but 23 sherds were early post medieval (i.e. $16^{th}/17^{th}$ century). The distribution of the pottery relative to the access routes is shown in the chart below (using sherd count).



Pottery types present (see catalogue for further details)

There was a single sherd from 370800 of coarse gritted 'pimply' type possibly dateable to the 12th century. The majority of the medieval sherds were pink or buff fabrics. Many were small and otherwise undiagnostic, but a number of fragments had features characteristic of Tees Valley ware, eg. a bifid jar rim and a chamfered jug rim from context 0010.

Wrathmell has put forward a three part division of Tees Valley wares (Wrathmell 1987, 39-41, and 1990, 379-383): TVA - buff firing jars, TVB - more iron rich (pink to red) glazed wares, and TVC - softer, lighter pink fabric but with bands of white clay. In practice, and when dealing with small fragments, these types are not always distinguishable and many fragments (as in this small assemblage) have pink or light red cores with buff margins and surfaces.

There were six fragments of reduced green glazed (rg) pottery. One was a piece of base, the rest were body sherds. This type of pottery becomes dominant by the mid to late 14th century throughout the north east region.

For miscellaneous other medieval fragments see the catalogue.

The post-medieval pottery present was almost all either red earthenware or a type identified as 'local post-medieval'. This type is less iron-rich than the redware, firing to shades of buff, pink or orange, sometimes part reduced, and usually with greenish brown glaze. This is post-medieval coarseware typical of the 16th and 17th centuries. This type of pottery appears in the 16th century, for example at Hart (Addis 1976, 103), and in Hartlepool (Wrathmell 1987, 39), but similar pottery was being used in Durham in the later 17th/early 18th century (Ellison 1993, 96) and has been noted elsewhere by the current writer. Fragments from open vessels (dishes or bowls) and a possible jug were present. One fragment, probably not a local ware, had part of a design in red clay trailed onto the surface. There was also a red earthenware slipware rim of 17th century type. Slipwares are not known to have been made

in the region in the early post-medieval period. The other fragments of red earthenware may well also be locally made but there were no diagnostic features.

One interesting vessel was a dish in a buff fabric with internal green glaze and a well -formed rolled rim. This may be a continental import but has not been positively identified.

Methodology

The assemblage was sorted into types, and counts and weights per context recorded in an Access database table noting any form elements present.

Discussion

The small size, fragmentation and limited nature of this assemblage give little scope for discussion or interpretation, its main value being in the dating evidence it provides for activity in the areas from which it was recovered.

The medieval pottery was concentrated in the area of Access 37, Low Middlefield farm with sherds recovered during all phases of the project. It indicates 13^{th} to 14^{th} century activity in this area. Quantities from elsewhere were very small. The post-medieval pottery was concentrated at Access 31, East Close where no medieval pottery was found. The few sherds of reduced green glazed wares are the only indication of possible later medieval activity (i.e. later $14^{th}/15^{th}$ century) anywhere along the route of the overhead line.

Recommendations

There is no potential for any further work on this small group of pottery.

Bibliography

Addis, L., 1976, 'The Pottery' in Austin, D 'Fieldwork and Excavation at Hart, Co. Durham 1965-75', *Archaeologia Aeliana* (5th series) 4, 69-132

Ellison, M., 1993, 'The Pottery' in P. Lowther, L. Ebbatson, M. Ellison and M. Millet, 'The City of Durham: An Archaeological Survey', *Durham Archaeol. J.* 9, 27-119

Wrathmell, S., 1987, 'Medieval pottery' in Young, G.A.B., 'Excavation at Southgate, Hartlepool, Cleveland 1981-2', *Durham Archaeol. J.* 3, 37-46

Wrathmell, S. 1990 in Daniels, R., 'Medieval Hartlepool: Excavations at Church Close' *Archaeological Journal*, 147, 377-392.

Context	Fabric	Sherds	Weight (g)	Form sh	Comments
0004	local pm	1	18		With pitted int glaze
0010	late Roman?	1	6	r	Coarse black fabric
0010	buff gritty	2	9		
0010		1	26	r	Bifid jar rim. Hard fired and mainly reduced to light grey.
0010	TV	3	19	r	Simple rounded jug rim, pink fabric
0010	TVB	9	55	b	Light red
0010	TVB	6	23	r	Chamfered jug rim . Light red fabric with buff surfaces
0010	med	1	6		Iron rich dark grey fabric with dull red brown m/s, sooted ext
0010	med	9	8		Small fragments
0012	TVB?	2	4		Joining frags red fabric
0012	med	2	1		Small
0022	pink	3	8		TV?
0024	white	2	5	b	
0093	white	2	18	r	Rectangular bowl rim, sooted
0121	TV	1	10	r	Rect jar rim, pink core, buff surfaces
0121	pink	2	10	b	
05000	TV	2	23	r	Bifid rim, pink with buff m/s
05000	pink	1	6		Abraded
05000	med	1	10		Red brown m/s with grey core
11000	TVB	6	3		
16001	pink	3	14		
140907	rg	1	13		With ox int
211000	red slip	1	13	r	Chipped rim from slip trailed dish - slip trailing worn away
270100	TVB	1	17	h	Small section of rod handle
270200	local pm	1	25		Dish or bowl with smooth green/brown gl int and zone ext.
	local pm?	1	18		Rather worn, with int green gl and ext appl cordon.
271400		1	1		Small abraded red fragment
300200	red pm	2	28		Joining sherds with green/brown int gl
310200	local pm	1	30	h	Handle scar - looks like quite large strap. Pale pinkish buff with smooth yellow gl int and ext.
310200	local pm	1	26	r	Rim slightly bevelled with ext cordon/flange below, ?dish. Smooth green int glaze.
310200	red pm	4	72		?local
310200		2	42		Dish rim with int green slightly speckled glaze. Possibly an import. Rim is rolled but at an acute angle (i.e. top is almost pointed)
310203	local pm	1	52		Pitted green gl int. Buff ext m/s rest reduced.
310203		2	21		Sandy fabric
310203	red pm	4	17		Light red fabric
310400	local slip?	1	22		Buff fabric with yellow brown gl, traces of red clay slip trail with gl flaked off.
350201	rg	4	21		Not all same vess

Context	Fabric	Sherds	Weight (g)	Form sh	Comments
	white gr	1	10		Not sure what this is. Chunky frag with applied strip, or abraded grooved rim
350300	TV?	1	4		Grey with red margin and buff surface
350300	pink	1	7		
370205	local pm?	1	7		Grey/pink fabric with smooth green gl int.
370406	pink	1	11		Sooted
370406	med	1	9		Dark grey with brownish ext surface.
370406	rg	1	43	b	
370701	buff	1	1		
370701	TV	1	11	r	Just the wide flat topped bit of rim but probably of bifid form. Buff surface, pink margins, buff core.
370800	gritty	1	9		Coarse gritted ware - light pinkish brown.
370800	buff	2	11		Abraded
370800	pink	1	2		
370800	med	1	9		Grey with one buff surface.
370801	buff	1	3		Abraded.
370801	pink	1	4		Pale pink glazed

Abbreviations used

appl applied external ext fragment frag gl glazed internal int medieval med margins/surfaces m/s pm post medieval \mathbf{sh} sherd vess vessel

Forms and form sherds:

b base

h handle

r rim

Appendix D Post-Medieval Pottery

Dr Anne Irving

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001). A total of 433 sherds from 333 vessels, weighing 5594 grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The pottery was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the pottery is included in Archive Catalogue 1, with a summary in Table 1. The pottery dates from the Medieval to the early modern period.

Condition

The pottery is generally in abraded condition and shows signs of being redeposited.

Results

Table 1, Summary of the Pottery

Period	Cname	Full name	Earliest	Latest	NoS	NoV	W (g)	
			date	date			(0)	
Medieval	MEDLOC	Medieval local fabrics	1150	1450	2	2	6	
	ST	Stamford Ware	970	1200	1	1	8	
	YG	Yorkshire gritty ware	1050	1250	4	2	12	
Post-	BERTH	Brown glazed earthenware	1550	1800	35	33	326	
medieval	BL	Black-glazed wares	1550	1750	21	20	227	
	CIST	Cistercian-type ware	1480	1650	3	3	8	
	FREC	Frechen stoneware	1530	1680	1	1	69	
	GRE	Glazed Red Earthenware	1500	1650	4	4	34	
	LERTH	Late Earthenwares	1750	1900	15	14	77	
	LHUM	Late Humber-type ware	1550	1750	1	1	13	
	PGE	Pale Glazed Earthenware	1600	1750	1	1	6	
	SLIP	Unidentified slipware	1650	1750	125	39	2297	
	SWSG	Staffordshire White	1700	1770	4	4	22	
		Saltglazed stoneware						
	TGE	Tin-glazed earthenware	1550	1750	1	1	8	
	WEST	Westerwald stoneware	1600	1800	3	3	23	
Early	BS	Brown stoneware (generic)	1680	1850	4	4	74	
Modern	CREA	Creamware	1770	1830	35	33	233	
	ENGS	Unspecified English	1690	1900	15	14	1316	
		Stoneware						
	ENPO	English Porcelain	1750	1900	20	20	96	
	NCBW	19th-century Buff ware	1800	1900	2	2	22	
	PEARL	Pearlware	1770	1900	35	30	147	
	TPW	Transfer printed ware	1770	1900	4	4	4	
	WHITE	Modern whiteware	1850	1900	90	90	531	
-	MISC	Unidentified types	-	-	1	1	8	
	PROP	Kiln Prop	-	-	4	4	21	
		-		TOTAL	433	333	5594	

Range

Medieval

Five vessels date to the medieval period: two are unknown wares which are probably local (MEDLOC), two Yorkshire Gritty wares (YG) and a single light firing ware which may be Stamford ware (ST) or a product of the recently discovered Pontefract kiln which produced Stamford-type wares.

Post Medieval

One hundred and twenty four vessels date to the post-medieval period. Many of these are earthenwares which were produced at many centres across Yorkshire and Staffordshire. Stoneware imports from the continent are also present (WEST, FREC).

Early Modern

Two hundred and two vessels date from the 18th to the 20th century. All the ware types present in the Spennymoor to Norton groups are extremely common in assemblages of this date. Several kiln props may also fall into this period.

Potential

All of the pottery is stable and poses no problem for long-term storage. No further work is required on the assemblage.

Provenance

Bridge House

Twenty-nine sherds of post-medieval and early modern pottery weighing 145 grams, and two fragments of pantile were recovered from topsoil (context 26000) and subsoil (26003).

Butterwick Road

Fourteen sherds of post-medieval and early modern pottery weighing 182 grams, and ten fragments of brick and tile were recovered from topsoil (context 270100), (270200), (270400), (271300), (271400), (271500), (28000) and subsoil (270803) and (271300). Modern drain pipe was recovered from cut **0074**.

Carlton

Forty-three sherds of post-medieval and early modern pottery, weighing 302 grams, were recovered from topsoil (context 01000) and subsoil (400503). Ten fragments of fired clay, weighing 188 grams, came from subsoil (01003).

Cooksons Green

Nine early modern sherds weighing 97 grams came from topsoil (context 050100), (050200) and dump (57004).

Cornforth

Three sherds of 19th to 20th century pottery, and two sherds of modern tile, came from fill of paelochannel (context 11406) and topsoil (55000).

Cornforth Lane

Five contexts produced post-medieval and early modern pottery: fill of paelochannel (context 13105), topsoil (130500), (52000) and layer (52003). A single sherd of 19th to 20th century pottery came from

(53004) fill of curvilinear **53005**. Early modern tile came from topsoil and layer (52000) and (52003), with a single example of Roman tile occurring in (52000).

East Close

A single medieval sherd came from subsoil (context 311603). A total of 53 post-medieval and early modern sherds from 50 vessels weighing 585 grams, and 13 fragments of modern tile, came from topsoil (21000), (22000), (310100), (310200), (310300), (310400), (310500) and subsoil (310203). Two fragments of pantile were retrieved from trackway (310405).

East Pasture House

Two sherds of late 18th to 19th century came from topsoil (context 120100).

Garmondsway Middle Farm

Six early modern sherds came from topsoil (context 41000) and (44000).

Grindon

Seven post-medieval and early modern sherds were retrieved from topsoil (context 361200), along with flat roofing tile from topsoil (09000) and fired clay (361200).

Hope House

Five sherds weighing 44 grams came from topsoil (context 3400), with a single fragment of nondiagnostic building material from soil overburden (0124).

Howden Hall

Ten sherds weighing 147 grams and a single fragment of pantile came from topsoil (context 380100), (380300) and subsoil (380303).

Low Middlewood

Nine sherds weighing 85 grams came from topsoil (context 370100), (370701) and (370800), along with building material of mixed date from fill of ditches **5012** and **370203**, remnant soil layer (0012) and subsoil (0022).

Metal Bridge

Ten early modern sherds were retrieved from topsoil (context 060100).

Norton

Twenty-eight sherds of early modern pottery, weighing 142 grams, were retrieved from topsoil (context 410100) and (410300).

Stobb Cross Lane

Sixty sherds from 52 vessels, weighing 673 grams came from six contexts. Two Yorkshire Gritty ware sherds were recovered from topsoil (context 140600). Four circular kiln props, of a type associated with early modern pottery production, were associated with topsoil (140600). The remaining pottery dates to the post-medieval and early modern periods and came from topsoil (140100), (140400), (140600), (141000), (51000) and cobbled track (140403).

Thinford

Thirteen sherds of post-medieval and early modern pottery came from topsoil (context 58000) and (59001).

Trimdon

Thirteen sherds of post-medieval and early modern pottery came from topsoil (context 210200) and (220100).

West Carrside Farm

A single late 18th to 19th century sherd and a fragment of pantile came from topsoil (context 250100).

Recommendations

No further work is required on this assemblage

Abbreviations

Archaeological Ceramic Building Materials Group
Body sherd
Ceramic Building Material
Context
Lower Handle Join
Number of Fragments
Number of sherds
Number of vessels
Trench
Weight (grams)

References

~ 2010, *Lincolnshire Archaeological Handbook* [internet]. Available at <u>http://www.lincolnshire.gov.uk/ section.asp?catId=3155</u> Darling M 1994 *Guidelines for the Archiving of Roman Pottery*. Study Group for Roman Potter

Darling, M., 1994, *Guidelines for the Archiving of Roman Pottery*, Study Group for Roman Pottery [internet]. Available at <u>http://www.sgrp.org.uk/05/Contents.htm</u>

Slowikowski, A. M., Nenk, B., and Pearce, J., 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2

Young, J., Vince, A.G. and Nailor, V., 2005, A Corpus of Saxon and Medieval Pottery from Lincoln (Oxford)

Appendix E Ceramic Building Material

Dr Anne Irving

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001). A total of 80 fragments of ceramic building material, weighing 5288 grams was recovered from the site.

Methodology

The material was laid out and viewed in context order. Fragments were counted and weighed within each context. The ceramic building material was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the ceramic building material is included in Archive Catalogue 2, with a summary in Table 2.

Condition

All the material is abraded and is likely to be redeposited.

Results

Cname	Cname Full name		W (g)
BRK	Brick	11	1791
CBM	Ceramic building material	7	86
FCLAY	Fired Clay	13	298
MODDRAIN	Modern land drain	4	208
MODTIL	Modern tile	2	50
PANT	Pantile	39	2699
PNR	Peg, nib or ridge tile	1	7
RTIL	Roman tile	3	149
	TOTAL	80	5288

Table 1, Summary of the Ceramic Building Material

Range

Brick, roofing tile and modern drain pipe are all present in the assemblage.

Recommendations

All the material is stable and poses no problem for long-term storage. No further work is required on the assemblage.

Abbreviations

ACBMG	Archaeological Ceramic Building Materials Group
BS	Body sherd
CBM	Ceramic Building Material
CXT	Context
LHJ	Lower Handle Join
NoF	Number of Fragments
NoS	Number of sherds
NoV	Number of vessels
TR	Trench
W (g)	Weight (grams)

Appendix F The struck flint

By Hugo Anderson-Whymark

Introduction

Nineteen struck flints were recovered from excavations and a watching brief along the route of the ZXC overhead pylons. The majority of these flints were recovered from topsoil or the fills of comparatively recent archaeological features (e.g. furrows), but a few artefacts were recovered from undated ditches. The flints were in reasonably fresh condition, with the exception of a few that exhibited minor edge-damage; this potentially indicates that the majority of these flints may be close to their original places of deposition. The flint was of variable colour, including shades of orange, grey, white, light brown and light red, and where present the cortex was heavily abraded. The colour of the flints and condition of the cortex indicates that the raw material was obtained from a fluvial source, such as river gravels.

Results

The lithic assemblage was dominated by regular flakes although a small number of blades and bladelike flakes were recovered; the latter typically exhibited platform edge-abrasion. The flakes and blades are not intrinsically datable but the technology is most characteristic of the Mesolithic and Neolithic to early Bronze Age. Six retouched tools were recovered comprising a three scrapers, an edge retouched blade-like flake, a notched blade and an arrowhead (Fig 27 i)). The arrowhead is broken and missing its tip, but it is identifiable as a British oblique arrowhead dating from the late Neolithic through the presence of a single slight barb. The arrowhead is relatively crudely manufactured on a flake by the application of slightly invasive edge-retouch. The scrapers comprise an end scraper, a proximal end scraper and a thumbnail scraper. The latter is neatly manufactured and measures only 17 mm long by 16 mm wide and 7 mm thick. This artefact probably dates from the late Neolithic/early Bronze Age, but comparable small scrapers are occasionally recovered from Mesolithic assemblages. The other scrapers are not intrinsically datable. The notched blade exhibits two notches - one on the left hand side and the other on the distal end – and extensive use-wear on both sides. The notch on the side of the blade is A-symmetric and may result from an attempt to manufacture a microlith, potentially indicating the artefact is Mesolithic, but the presence of a second distal notch may indicate that the notches were produced as tools.

Conclusion

The lithic assemblage, although small, provides some evidence for Mesolithic to early Bronze Age activity in the landscape. The limited size of the assemblage however precludes accurate dating or consideration of the nature of the activity undertaken.

Recommendations

No further analytical work is recommended, but this report should be edited for inclusion in the publication and the arrowhead should be illustrated.

Catalogue

SPN35. Context 0063. Base of broken British oblique arrowhead. A single slight barb is present on the right hand side. Crudely manufactured with semi invasive edge-retouch. Late Neolithic

SPN35. Context 0063. Broken utilised blade with platform edge abrasion and dorsal blade scars. Mesolithic?

SPN16. Context 05000. Thumbnail scraper. Abrupt distal edge retouch forms a slightly curving distal edge. Addition slight abrupt retouch on the ventral surface on the right hand side forms a slight spur. 17 mm long by 16 mm wide and 7 mm thick. Late Neolithic/early Bronze Age?

SPN 16. Context 05006. Blade like flake with slight abrupt edge retouch on right hand side. Soft hammer flake with platform-edge preparation. Struck from regular blade-orientated core. Translucent orange brown flint. Mesolithic or early Neolithic?

SPN16. Context 52000. Leg D. Broken flake of gravel flint.

SPN 16. Context 090400. GPS 5102084. Flake of opaque mid grey flint. Moderate edge damage.

SPN 16. Context 090400. GPS 5102082. Broken flake of grey flint.

SPN 16. Context 090400. GPS 5102083. Flake of translucent light white gravel flint.

SPN 16. Context 190100. Proximal end scraper on a mid brown gravel flint flake. Smooth abraded cortex.

SPN16. Context 190103. Flake of opaque light red flint.

SPN 16. Context 190200. GPS 5110007. Utilised blade with notches in the left hand side and distal end. Date uncertain, but possibly Mesolithic.

SPN16. Context 211100. GPS 5110003. Burnt and broken end scraper exhibiting semi-abrupt edge retouch. Edge exhibits extensive use-wear.

SPN 16. Context 280100. GPS 5104007. Flake of translucent orange brown flint.

SPN 16. Context 280200. Broken flake of translucent orange brown flint.

SPN 16. Context 280200. Broken blade-like flake of translucent orange brown flint.

SPN 16. Context 280200. Chip of translucent orange brown flint.

SPN 16. Context 300200. GPS 5102208. Broken flake of an opaque mid grey flint.

SPN 16. Context 350300. GPS 5102031. Utilised flake of mid grey gravel flint.

SPN 16. Context 370100. Irregular waste or possibly unworked pebble of gravel flint.

Appendix G Report on the Recorded Finds and Treasure

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Introduction

The finds produced by this project were received in an 'as found' condition and no radiographs were available at the time of writing. It was found that the material was stable and in a generally good condition, although corrosion and concretions obscured some coins making a full identification impossible, they could only be classified by module.

Methodology

Objects were examined at x10 magnification using a binocular microscope, sketched and described in detail. Materials were identified visually and dimensions recorded using vernier callipers. Masses were obtained on an electronic balance to an accuracy of 0.01g. In the report the finds are listed in order of Context number and then by GPS number. Objects recovered as part of SPN 35 are placed at the end of the report.

Discussion

The archive contained 125 items which could be broken down by material as follows:

Copper alloy	Cupro- nickel	Glass	Iron	Lead	Pewter	Silver	Slag	Stone
83	1	1	10	23	2	3	1	1

It was found that 44 (35.2%) of the objects lacked any diagnostic features which would allow them to be identified and/or dated. Two Roman objects were present, a fourth century coin (context 220103) US and a fragment of a glass bangle (0053) <003>. There were two Medieval finds, a coin of Edward I (context 400403) and a lead spindle whorl (context 410300) GPS 3102321 which can be broadly dated to the twelfth to sixteenth century. The assemblage also included one item of treasure, a sixteenth century cast silver hairpin recovered during metal detecting (context 130101). The rest of the material was of recent date.

It was found that the numbers of finds from each period could be broken down as follows:

Undated	Roman	Medieval	16-17C	18C	19C	19-20C	20C
44	2	2	5	9	16	36	11

Although heavily biased towards later material this record does have a story to tell. Roman and Medieval material, while rare, shows that there was some activity in the area during these centuries. The increasing number of finds from the seventeenth century onward clearly shows the quickening of human activity. This is most evident in the dating of the 28 coins; there was one coin from the 350 years of Roman Britain, one from the whole of the Medieval period, one from the eighteenth century with the remaining 25 being nineteenth or twentieth century, all of small denomination.

Included amongst the finds is some metalworking debris; 13 pieces of casting spillage (four copper alloy and nine lead) and 12 metal off-cuts (nine copper alloy and three lead). These finds are, however, best seen as 'background noise' and it would be unsafe to see them as evidence for anything more than small scale, domestic metalworking. Although recent, some objects are historically interesting, the shell fragment (SPN 35; context 0100) representing Second World War anti-aircraft fire. The colliery tally (context 140100) GPS 5110017 shows an important local industry and the token from the 'West Cornforth Working Mens Store' (SPN 35, 26A) indicates the growth of the labour movement. The archaeological evidence presented by the finds gives a useful impression of the history of the area through which the pipeline passed.

Recommendations

It is recommended that two of the finds from this project should be published; the Roman glass bangle fragment (context 0053) <003>.and the Medieval lead spindle whorl (context 410300) GPS 3102321. The Roman fourth century coin (context 220103) and the coin of Edward I (context 400403) should be catalogued but not illustrated. No further action is required on any of the other finds.

Catalogue

Context:	(0053)	<003>	GPS
Material	Glass		
Condition:	Good but brok	ten	
			le with an original internal diameter of c. 60mm. It is ng large numbers of small (up to 0.5mm diameter)
Dimensions:	Leng	th 24.8mm; Wi	dth 10.4mm; Thickness 7.2mm
Mass:	2.73g		
Identification:	Glass bangle		
Dating of find:	Roma	an	
Context description			
Further action	Publi	sh and illustrate	2

Context:	(0503) 🗇	GPS 5104001
Material	Copper alloy	
Condition: Good		
Description: Coin, p	enny	
Dimensions:	Diameter 30.7mm	
Mass:	8.27g	
Identification:	Penny of Victoria	
Dating of find:	Dated 1867	
Context description		
Further action	Not required	

Context:	(0503)	\diamond	GPS 5104002		
Material	Copper alloy	7			
Condition:	Good				
Description: thread within op	Description: Cast metal finial, baluster shape with multiple mouldings and grooves, hollow with a screw thread within open end				
Dimensions:	Len	igth 67.8mm;	Diameter (maximum) 32.6mm		
Mass:	53.00g				

Identification:	Finial from a brass bedstead or fire surround
Dating of find:	Nineteenth century
Context description	
Further action	Not required

Context:	(05039) 🗢
Material	Iron
Condition:	Corroded and encrusted
Description: Strip of section tapers from 11.7	covered with concretions which conceal most of the detail. Its flattened, round edged mm to 7.3mm
Dimensions:	Length 54.3mm; Width 11.7mm; Thickness 11.7mm
Mass:	10.46g
Identification: Knife	blade? The section, however, seems inappropriate for this interpretation.
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(030600)	\diamond	GPS 5104010
Material	Pewter		
Condition:	Good		
Description: Cast bu remains of iron loop on b		rated with pellets w	with some openwork. Edge denticulate,
Dimensions:	Diameter 23.9m	ım; Height 4.2mm	; Thickness 1.3mm
Mass:	4.19g		
Identification:	Button		
Dating of find:	Seventeenth cen	ntury	
Context description			
Further action	Not required		

Context:	(36001)	\diamond	GP S 4116231
Material	Copper alloy		

Condition:	Good bu	ut crushed	
Description:	Pressed sheet metal bell, domed with a 5.0mm diameter central hole.		
Dimensions:		Diameter 56.2mm; Height 18.7mm; Thickness 1.4mm	
Mass:	25.37g		
Identification:	Bell		
Dating of find:		Nineteenth or twentieth century	
Context descripti	on		
Further action		Not required	

Context:	(110406) <>
Material	Iron and copper alloy
Condition:	Corroded and encrusted
project from one end. The	tation containing a copper alloy object consisting of two leaves of sheet metal which ese measure 11.1 mm wide x c. 1.1 mm thick, their length is unknown. They were set by a 2.4mm diameter rivet.
Dimensions:	Length 84.2mm; Width 30.3mm; Thickness 18.8mm
Mass:	47.08g
Identification:	Frame from a penknife
Dating of find:	Recent
Context description	
Further action	Not required

Context:	(110800)	\diamond	GPS 5104011
Material	Copper alloy		
Condition:	Corroded but good		
Description: Coin, l	nalfpenny		
Dimensions:	Diameter 25.7m	ım	
Mass:	5.61g		
Identification:	Halfpenny of George V		
Dating of find:	Dated 1932		
Context description			

Further	action
1 01 0101	action

Context:	(110800)	\diamond	GPS 5104012
Material	Copper alloy		
Condition:	Good		
Description: Piecoriginal.	ce of sheet metal, taperi	ng from 18.0mm t	o 4.7mm, now bent across length, neither end
Dimensions:	Length (estimated original)	29.0mm; Thickness 1.0mm
Mass:	1.75g		
Identification:	Metal working of	f-cut	
Dating of find:	Not data	ble	
Context description			
Further action	Not requ	ired	

Context:	(110800)	\diamond	GP S 5104013
Material	Copper alloy		
Condition:	Corroded and end	crusted, all detail hid	lden
Description: Cas flange set above a tru		af shaped top with a	medial band, lower section tapering to a small
Dimensions:	Length	45.0mm, Diameter 2	23.0mm
Mass:	57.40g		
Identification:	Finial from a pok	ker or hearth fender	
Dating of find:	Nineteer	nth or earlier twentie	eth century
Context description			
Further action	Not requ	uired	

Context:	(110800)	\diamond	GPS 5104014	
Material	Copper alloy			
Condition:	Corroded and dirty			
Description:	Coin, penny			
Dimensions:	Diameter	30.8mm		

Mass:	9.41g
Identification:	Penny of George VI
Dating of find:	Dated 1937
Context description	
Further action	Not required

Context:	(130101)	\diamond	GPS 5104019
Context.	(130101)	\checkmark	015 5104019
Material	Copper alloy		
Condition:	Good but incomplete		
	hold the transverse buckle	-	ith rounded ends, section flat, 6.9 x 2.4mm, but ad with stamped ring and dot motifs, edges
Dimensions:	Length (project	ed) 64.0mm;	Width 47.6mm
Mass:	8.08g		
Identification:	Hat buckle		
Dating of find:	Eighteen centur	су (с. 1720-17	90)
Context description			
Further action	Not required		

Context:	(140100)	\diamond	GPS 5110017	
Material	Copper alloy			
Condition:	Good			
Description: Stamped sheet metal disc bearing, in raised lettering 'D.L. & Co Ltd [] SDALE COLLERY' stamped in centre '654'. At the top is a 4.5mm diameter hole				
Dimensions:	Diameter 38.3m	m; Thickness 1.3r	nm	
Mass:	9.57g			
Identification:	Colliery tally			
Dating of find:	Nineteenth or tw	ventieth century		
Context description				
Further action	Not required			

Context: (140100) \Leftrightarrow GPS 5110018

Material	Copper alloy
Condition:	Fair
Description: Coin, p	enny
Dimensions:	Diameter 30.6mm
Mass:	8.01g
Identification:	Penny of Victoria, bronze issue
Dating of find:	Dated 1894
Context description	
Further action	Not required

Context:	(140100)	\diamond	GPS 5110019
Material	Lead		
Condition:	Good		
Description: Spillag	e, irregular		
Dimensions:	22.2 x 19.0 x 8.0	0mm	
Mass:	6.86g		
Identification:	Metalworking waste		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(140900)	\diamond	GPS 5110010
Material	Lead		
Condition:	Good		
Description: Irregul end is a crude boss.	ar object, bar shaped with a	flattened lentoid	section, striations down one face. At each
Dimensions:	Length 78.2mm	; Width 30.5mm; '	Thickness 10.0mm
Mass:	128.4g		
Identification:	Casting waste		
Dating of find:	Not datable		
Context description			

Further	action
1 01 0101	action

Context:	(140900)	\diamond	GPS 5110011	
Material	Copper alloy			
Condition:	Poor with little detail surv	viving		
Description: Coin, f	arthing			
Dimensions:	Diameter 21.9m	m		
Mass:	3.59g			
Identification:	Farthing of George I			
Dating of find:	1717-1718			
Context description				
Further action	Not required			

Context:	(140900)	\diamond	GPS 5110011	
Material	Copper alloy			
Condition:	Worn, corroded and dirty	7		
Description: Coin, p	enny			
Dimensions:	Diameter 30.2m	m		
Mass:	6.61g			
Identification:	Penny, bronze issue			
Dating of find:	1861-1971			
Context description				
Further action	Not required			

Context:	(141000)	\diamond	GPS 5110008	
Material	Copper alloy			
Condition:	Worn, corroded an	ıd dirty		
Description:	Coin, halfpenny			
Dimensions:	Diameter	28.0mm		
Mass:	5.79g			

Identification:	Copper halfpenny
Dating of find:	1827-1860
Context description	
Further action	Not required

Context:	(141000)	\diamond	GPS 5110009	
Material	Copper alloy			
Condition:	Corroded and dirty			
Description: Coin, p	penny			
Dimensions:	Diameter 33.6m	ım		
Mass:	5.79g			
Identification:	Copper penny of George	III, Fourth issue		
Dating of find:	1806-1807			
Context description				
Further action	Not required			

Context:	(150100)	\diamond	GPS 5104007
Material	Copper alloy		
Condition:	Good		
Description: L shape	ed fragment of metal, flat so	ectioned irregular	
Dimensions:	31.3 x 19.0 x 5.2	2mm	
Mass:	6.45g		
Identification:	Part of a burnt buckle fra	me or spillage?	
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(180101)	\diamond	GPS 5104006
Material	Copper alloy		
Condition:	Corroded and encrusted		

1	uckle frame, oval, back curved with a 40mm radius, section flat 5.9 x 2.8mm expanded in missing iron base. Decorated but much of the detail is hidden, there is some openwork in the	e
Dimensions:	Length 51.5mm; Width 45.4mm; Thickness 2.8mm	
Mass:	14.78g	
Identification:	Shoe buckle	
Dating of find:	Eighteenth century (1720-1790)	
Context description		
Further action	Not required	

Context:	(210200)	\diamond	GPS 5110022
Material	Copper alloy		
Condition:	Corroded and dirty, all de	etail lost	
Description: Coin, p	probably a halfpenny		
Dimensions:	Diameter 25.6m	m	
Mass:	5.63g		
Identification:	Halfpenny, bronze issue		
Dating of find:	1861-1971		
Context description			
Further action	Not required		

Context:	(210500)	\diamond	GPS 5110006
Material	Copper alloy		
Condition:	Good		
Description: Cast bu strongly off-set bar.	ckle frame, round with a sc	quare central open	ing 21.4 x 19.0mm, flattened D section,
Dimensions:	Diameter 37.1 x	36.5mm; Height	0.0mm; Thickness 3.5mm
Mass:	15.31g		
Identification:	Harness buckle		
Dating of find:	Nineteenth-twen	tieth century	
Context description			
Further action	Not required		

Context:	(210601)	\diamond	US	
Material	Copper alloy			
Condition:	Good			
Description: expanded end.	Cast stud, top oval with an i	ntegral stud on ba	ck. This is 8.8 x 7.7mm ar	nd has a slightly
Dimensions:	Head 27.0	x 22.5mm; Heigh	nt 6.0mm; Thickness 2.0m	m
Mass:	10.41g			
Identification:	Decorative stud			
Dating of find:	Not databl	le		
Context descriptio	n			
Further action	Not requir	ed		

Context:	(220103) <>
Material	Copper alloy
Condition:	Good
Description: Fragme backwards to form a broa	nt of sheet copper alloy, two edges missing, a projection on one edge is curved d hook.
Dimensions:	Length 59.9mm; Width 41.2mm, Thickness 2.0mm
Mass:	25.41g
Identification:	Clasp
Dating of find:	Recent
Context description	
Further action	Not required

Context:	(220103)	\diamond	US
Material	Copper alloy		
Condition:	Good, broken		
-	face of the buckle frame is		. Rectangular with rounded moulded 10.7mm diameter. Bar slightly off-set,
Dimensions:	Width 43.3mm;	Length 26.7mm;	Thickness 3.2mm

Mass:	9.62g	
	seen on these objects and	es a sixteenth-seventeenth century sword suspender the loop is set at I the form of the off-set bar and pin suggests a later date. It is likely
Dating of find:	Ninetee	enth century
Context description	n	
Further action	Not rec	uired

Context:	(220103)	\diamond	US
Material	Copper alloy		
Condition:	Poor, corroded with much	n loss of surface	
Description: Little d the House of Constantine		se appears to show	a camp gate which appears on coins of
Dimensions:	Diameter 15.0m	m	
Mass:	0.79g		
Identification:	Coin, nummus of the Hou	use of Constantine	
Dating of find:	AD 324-330, Re	ece Period 16	
Context description			
Further action	Catalogue in rep	ort, do not illustra	te

Context:	(220104)	\diamond	GPS 5104056
Material	Copper alloy		
Condition:	Good		
Description: Oval pi	iece of metal		
Dimensions:	26.1 x 14.8 x 7.2	emm	
Mass:	8.09g		
Identification:	Spillage		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(220200)	\diamond	GPS 5104052	

Material	Copper alloy
Condition:	Poor, corroded and encrusted
Description: Button	, face plain, loop on back missing, originally set within an incised ring.
Dimensions:	Diameter 20.0mm; Thickness 2.0mm
Mass:	2.93g
Identification:	Button
Dating of find:	Eighteenth century
Context description	
Further action	Not required

Context:	(220200)	\diamond	GPS 5104053
Material	Copper alloy		
Condition:	Good		
Description: Pressed	l sheet metal button, dished	top with a wire lo	oop, face plain but tinned
Dimensions:	Diameter 19.3mm; Heigh	nt 2.2mm; thicknes	ss 1.0mm
Mass:	1.52g		
Identification:	Button		
Dating of find:	Nineteenth or tw	ventieth century	
Context description			
Further action	Not required		

Context:	(250100)	\diamond	GPS 5104051
Material	Cupro-nickel		
Condition:	Fair		
Description: Coin, s	sixpence		
Dimensions:	Diameter 19.2m	ım	
Mass:	2.41g		
Identification:	Sixpence of Elizabeth II		
Dating of find:	Dated 1954		
Context description			

Further action	Not required	

Context:	(260100)	\diamond	GPS 5104055	
Material	Silver			
Condition:	Fair			
Description: Coin	n, sixpence			
Dimensions:	Diameter	r 19.0mm		
Mass:	2.29g			
Identification:	Sixpence of Geor	ge V		
Dating of find:	Dated 19	026		
Context description				
Further action	Not requ	ired		

Context:	(270100) <>
Material	Iron
Condition:	Corroded and encrusted
Description: Bar, on	e end bent at 90 degrees, all detail hidden by corrosion, section unknown
Dimensions:	Length 87.2mm; Width 22.7mm; Diameter 11.mm
Mass:	30.5g
Identification:	Unknown
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(270100)	\diamond	GPS 5104058	
Material	Copper alloy			
Condition:	Good			
Description:			oken. It originally consisted of a round ended ba	r

with a 9.0mm diameter hole at each of its ends, one of which is now oval. Both sides of the bar's central section are expanded, with a large rounded projection on one side and a narrower lug on the other. Through the lug is a 7.0mm diameter hole. In the centre of the plate is a slot, 30.6×6.2 mm one side of which bears of triangular

projection, the other a corresponding notch. The plate has a general thickness of 2.0mm but around its edge 2.3mm wide x 2.0mm thick edging		
Dimensions:	Length 123.5mm; Width 61.2mm	
Mass:	70.66g	
Identification:	Strap fitting from a box or harness	
Dating of find:	Nineteen-twentieth century	
Context description		
Further action	Not required	

Context:	(270100)	\diamond	GPS 5104059
Material	Iron		
Condition:	Corroded but good		
diameter hole, on one fac	,	pikes, 8.0mm diar	s, others broken. Through it is a 8.4mm neter, now surviving to 14.4mm long. not nails.
Dimensions:	Length 85.3mm	, Width 58.0mm,	Thickness 3.8mm
Mass:	56.58g		
Identification:	Unknown		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(270200)	\diamond	US
Material	Copper alloy		
Condition:	Good		
Description: Coin, h	alfpenny		
Dimensions:	Diameter 25.3m	m	
Mass:	5.61g		
Identification:	Halfpenny of George V		
Dating of find:	Dated 1920		
Context description			
Further action	Not required		

Context:	(270700) <>		
Material	Iron		
Condition: have come from	Corroded and encrusted, all detail hidden. No joints can be made but these fragments may the same object.		
Description:	Three fragments of wire or bar		
Dimensions:	a. 25.0 x 15.0 x 11.2mm		
	b. 39.6 x 8.2 x 5.8mm		
	c. 24.2 x 6.6 x 3.7mm		
Mass:	Total 7.93g		
Identification:	Nails?		
Dating of find:	Not datable		
Context descript	ion		
Further action	Not required		

Context:	(270803) <>
Material	Iron
Condition:	Corroded, good
Description: Penann	ular ring, section flat 6.0mm wide x 3.3mm thick. Narrow gap in ring.
Dimensions:	Diameter (outside) 27.5mm; Diameter (inside) 16.2mm
Mass:	5.77g
Identification:	Washer?
Dating of find:	Nineteenth-twentieth century
Context description	
Further action	Not required

Context:	(271400)	\diamond
Material	Iron	
Condition:	Corroded and encrusted	
Description:	All details hidden, but the break s	uggests a blade with a wedge-shaped section 14.8 x 5.3mm
Dimensions:	Length 52.2mm	1

Mass:	13.96g	
Identification:	Knife blade?	
Dating of find:	Not datable	
Context description		
Further action	Not required	

Context:	(271500) 🗢
Material	Iron
Wateriai	non
a th	
Condition:	Poor, corroded and exfoliating
Description: Wire n	ail, head 10.5mm diameter, shaft diameter lost
1	
Dimensions:	Length 89.0mm
Dimensions.	Lengur 69.0mm
Mass:	7.97g
Identification:	Wire nail
Dating of find:	Recent
Dating of find.	Recent
~	
Context description	
Further action	Not required

Context:	(271801)	\diamond	GPS 5104062
Material	Copper alloy		
Condition:	Good		
web, set 6.4mm away fro two angled cuts/slots At t	m the opening, which is su	rrounded by a 3.0r ed 4.6mm diamete	n. One end closed off with a 1.0mm thick nm wide flange. In the side of the tube are er holes set 14.0mm from the opening.
Dimensions:	Length 50.8mm,	Diameter 24.2mm	n
Mass:	44.92g (including earth fi	lling)	
Identification:	Unknown		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(280100)	\diamond	GPS 5104015	

Material	Copper alloy
Condition:	Good
-	teckle frame, rectangular, decorated with raised scrolls and diamonds, surface slightly ved. Traces of an iron pin.
Dimensions:	Length 36.0mm; Width 27.8mm; Thickness 2.4mm
Mass:	10.41g
Identification:	Shoe buckle
Dating of find:	Eighteenth century (1720-1790)
Context description	
Further action	Not required

Context:	(280100)	\diamond	GPS 5104016	
Material	Copper alloy			
Condition:	Good			
Description: Coin,	penny			
Dimensions:	Diameter	30.8mm		
Mass:	8.64g			
Identification:	Penny of George V	V		
Dating of find:	Dated 192	21		
Context description				
Further action	Not requi	red		

Context:	(310200)	\diamond	GPS 5104057
Material	Lead		
Condition:	Good		
Description: Cast lease bearing traces of leather	ad disc with a 31.9mm dian	neter x 8.3mm hig	h boss on one face, its edge undercut and
Dimensions:	Diameter 57.2m	m; Thickness 11.3	3mm
Mass:	344.50g		
Identification:	Flap-valve weight from a	pump	
Dating of find:	Not datable		

Context description

Further action

Context:	(310200) 🗇
Material	Copper alloy
Condition:	Good
Description: Cast bu	atton back, slightly dished with a flat rim around edge. Integral loop, now broken
Dimensions:	Diameter 21.4mm; Height 2.8mm; Thickness 1.3mm
Mass:	2.88g
Identification:	Button back
Dating of find:	Eighteenth century
Context description	
Further action	Not required

Context:	(310203) <>
Material	Iron
Condition:	Poor, corroded and encrusted
	in the form a low, bridge-like loop its two ends flattened for attachment to a surface. ngular, 12.8 x 9.0 mm, the ends are round and c. 14 mm in diameter.
Dimensions:	Length 62.4 mm; Width 13.0 mm; Height 21.7mm; Thickness 9.0 mm
Mass:	40.45g
Identification:	Handle or strap slider
Dating of find:	Recent
Context description	
Further action	Not required

Context:	(310203)	\diamond	GPS 5104060		
Material	Copper alloy	Copper alloy			
Condition:	Corroded, worn, al	Corroded, worn, all detail lost			
Description:	Coin, halfpenny				
Dimensions:	Diameter	27.0mm			

Mass:	4.33g	
Identification:	Copper halfpenny	
Dating of find:	1827-1861	
Context description		
Further action	Not required	

Context:	(310400)	\diamond	US	
Material	Copper alloy			
Condition:	Worn and corroded, all d	etails lost		
Description: Disc, o	ne edge clipped			
Dimensions:	Diameter 25.9m	m		
Mass:	3.67g			
Identification:	Probably a bronze halfpe	nny		
Dating of find:				
Context description				
Further action	Not required			

Context:	(350100)	\diamond	GPS 5110001	
Material	Lead			
Condition:	Good			
Description: Cast c	cylinder, top slightly	v domed, central hole	7.2mm diameter	
Dimensions:	Diamet	er 18.3mm; Height 10	0.0mm	
Mass:	18.75g			
Identification:	Weight			
Dating of find:	Not dat	able		
Context description				
Further action	Not req	uired		

Context:	(350101)	<us></us>
Material	Lead	

Condition:	Good	
Description:	Spillage, plano-c	onvex
Dimensions:		29.2 x 19.9 x 5.8mm
Mass:	11.26g	
Identification:	Metal w	vorking waste
Dating of find:		Not datable
Context descript	ion	
Further action		Not required

Context:	(350102)	\diamond	GPS 5110028		
Context.	(550102)	~	015 5110020		
Material	Lead				
Condition:	Poor, with m	uch loss of detail			
Description: Discoid	l seal in two fo	lded layers			
O] ENDO [O] ENDO [] in centre '& Co London'				
R. All detail lost	R. All detail lost				
Dimensions:	Dia	meter 20.8mm; Thicl	kness 4.5mm		
Mass:	11.26g				
Identification:	Bag seal				
Dating of find:	Rec	ent			
Context description					
Further action	Not	required			

Context:	(350600)	\diamond	GPS 5104009	
Material	Lead			
Condition:	Good			
Description: Ba	11			
Dimensions:	Diameter	· 17.8mm		
Mass:	31.99g			
Identification:	Ball for the 0.750	inch 'Brown Bess'	Musket	
Dating of find:	1685-185	50		

Context description	
Further action	Not required

Context:	(350600)	\diamond	GPS
Material	Stone composition		
Condition:	Good but broken		
1 0	, section square with round		position stone (corundum/emery). Broken signs of use present and traces of iron
Dimensions:	Length 60.4mm;	Width 30.2mm,	Thickness 30.9mm
Mass:	82.16g		
Identification:	Mower's whetstone		
Dating of find:	Nineteenth-twen	tieth century	
Context description			
Further action	Not required		

Context:	(350701)	\diamond	GPS 5104008
Material	Copper alloy		
Condition:	Good		
Description: Coin, p	enny		
Dimensions:	Diameter 30.5m	ım	
Mass:	7.82g		
Identification:	Penny of Victoria		
Dating of find:	Dated 1874		
Context description			
Further action	Not required		

Context:	(370200)	\diamond	GPS 5104005	
Material	Lead alloy			
Condition:	Good			
Description:	Roughly cast object, one fac	e recessed, possib	bly casting waste	

Dimensions:	Length 32.8mm; Width 27.2mm; Thickness 19.2mm
Mass:	25.16g
Identification:	Casting waste?
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(370500) <>
Material	Lead
Condition:	Good
Description: Roughl	y cast disc, slightly dished, with a 10.0mm diameter hole set slightly off centre
Dimensions:	Diameter 29.2mm, Height 7.8mm
Mass:	32.75g
Identification:	Weight
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(370700)	\diamond	GPS 5110020
Material	Copper alloy		
Condition:	Good		
Description: Folded	strip of sheet metal		
Dimensions:	Length (estimated) 40.6n	nm; Width 16.5 ta	pering to 10.4mm; Thickness 0.7mm
Mass:	2.73g		
Identification:	Metal working off-cut		
Dating of find:	Not datable		
Context description			
Further action	Not required		

|--|

Material	Lead
Condition:	Good
Description: Spills	age, irregular, open shape
Dimensions:	30.3 x 26.8 x 5.6mm
Mass:	26.02g
Identification:	Metal working waste
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(370700)	\diamond	GPS 5110022
Material	Lead		
Condition:	Good		
Description: Spillag	e, flat, plate-like form		
Dimensions:	64.0 x 49.6 x 2.	1mm	
Mass:	81.89g		
Identification:	Metalworking waste		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(370700)	\diamond	GPS 5110025
Material	Copper alloy		
Condition:	Good		
	alloy rivet, head 17.7mm n diameter x 1.3mm thick v		thick, shank 8.3mm diameter. Over this is
Dimensions:	Diameter 17.7m	nm; Length 8.0mm	I
Mass:	5.24g		
Identification:	Copper rivet from a leath	ner drive belt.	
Dating of find:	Nineteenth or ea	arlier twentieth cer	atury
Context description			

Further	action
1 GIUIUI	

Context:	(370701)	\diamond	GPS 5110024
Material	Copper alloy		
Condition:	Good		
Description: Rivet, l diameter and appears bro	1	m diameter x	10.6mm high, shank cylindrical 9.3mm
Dimensions:	Length 34.6mm	n	
Mass:	28.44g		
Identification:	Rivet		
Dating of find:	Nineteenth-twe	entieth century	
Context description			
Further action	Not required		

Context:	(370701)	\diamond	GPS 5110028
Material	Lead		
Condition:	Fair, some loss of deta	il	
Description: Discoid	seal made up of two lay	yers of lead, or	nly part of the inscription can be read:
] EW PROC [] in th	ne centre is 'FLOUR'		
] C NEUMUHL []S	SHAFT, in the centre is	'IFL'	
Dimensions:	Diameter 18.0	0mm; Thickne	ss 3.0mm
Mass:	4.78g		
Identification:	Flour bag seal		
Dating of find:	Nineteenth ce	entury	
Context description			
Further action	Not required		

Context:	(370701)	\diamond	GPS 5110037	
Material	Silver			
Condition:	Good			
Description:	Coin, sixpence			

Dimensions:	Diameter 19.2mm
Mass:	2.62g
Identification:	Sixpence of Victoria
Dating of find:	Dated 1889
Context description	
Further action	Not required

Context:	(370800)	\diamond	GPS 5110014
Material	Copper alloy		
Condition:	Good but incomplete		
Description: Fragme	ent of a cast buckle frame d	ecorated with rais	ed leaves
Dimensions:	Length 37.6mm	; Width 12.7mm; '	Thickness 3.4mm
Mass:	5.73g		
Identification:	Buckle frame		
Dating of find:	Seventeenth-eig	hteenth century (1	.690-1720)
Context description			
Further action	Not required		

Context:	(370800)	\diamond	GPS 5110015
Material	Copper alloy		
Condition:	Good		
Description: Piece o	f sheet metal, original edge	es cannot be define	d
Dimensions:	23.2 x 21.0 x 0.4	4mm	
Mass:	2.04g		
Identification:	Metal working off-cut		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(370800)	\diamond	GPS 5104021	

Material	Lead
Condition:	Good
Description: Fragme	ent, slightly curved across width
Dimensions:	Length 28.4mm; Width 23.0mm; Thickness 5.4mm
Mass:	17.21g
Identification:	Metalworking waste?
Dating of find:	Not datable
Context description	
Further action	Not required

Context:		(370801)	\diamond	GPS 5110023
Material		Copper alloy		
Condition:		Poor, total loss of surface	;	
Description:	Disc			
Dimensions:	Diamet	er 26.2mm		
Mass:		4.75g		
Identification:		Copper halfpenny?		
Dating of find:		Pre 1861		
Context description	on			
Further action		Not required		

Context:	(371000)	\diamond	GPS 5110013	
Material	Lead			
Condition:	Good, corroded			
Description: C	Cylindrical weight with a	rounded top		
Dimensions:	Diamete	er 21.2mm; Height 1	7.4mm	
Mass:	61.12g			
Identification:	Weight			
Dating of find:				
Context description	1			

Further	action
1 01 0101	action

Context:	(390100)	\diamond	GPS 5110004
Material	Copper alloy		
Condition:	Fair		
	-		tion which is passed through a hole in the cumferential groove between the two
Dimensions:	Diameter (outside) 29.0m	ım; Diameter (insi	de) 15.0mm. Thickness 7.0mm
Mass:	7.03g		
Identification:	Eyelet from a tarpaulin or	r tilt	
Dating of find:	Nineteenth-twen	tieth century	
Context description			
Further action	Not required		

Context:	(400100)	\diamond	GPS 5104026
Material	Copper alloy		
Condition:	Good		
Description: Cast fin diameter x 4.7mm long sh		er then waisted to	8.4mm diameter, set on a 5.5mm
Dimensions:	Diameter 18.2m	m, Length 24.9mn	1
Mass:	15.88g		
Identification:	Knob or finial		
Dating of find:	Nineteenth-twen	tieth century	
Context description			
Further action	Not required		

Context:	(400100)	\diamond	GPS 5104027
Material	Copper alloy		
Condition:	Good		
Description: N apparently chisel c	, e	lar with curved sid	es and rounded corners, one end broken,

Dimensions:	Length 37.4mm; Width 32.0mm; Thickness 20.0mm
Mass:	129.61g
Identification:	Unknown
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(400100)	\diamond	GPS 5104032
Material	Copper alloy		
Condition:	Corroded and encrusted		
Description: Disc w	ith a 6.0mm diameter centr	al hole set in a 10.	0mm diameter boss
Dimensions:	Diameter 33.4m	m; Thickness 2.0r	nm
Mass:	10.72g		
Identification:	Washer?		
Dating of find:	Nineteenth or tw	ventieth century	
Context description			
Further action	Not required		

Context:	(400200)	\diamond	GPS 5104020	
Material	Lead			
Condition:	Good			
Description: Spill	lage, plate-like, one fa	ce rough, other oper	i cast	
Dimensions:	87.2 x 6	1.2 x 6.3mm		
Mass:	143.82g			
Identification:	Metalworking wa	ste		
Dating of find:	Not data	ble		
Context description				
Further action	Not requ	ired		

Context: (400200) \Leftrightarrow GPS 5104021

Material	Lead
Condition:	Good
Description: Sp	illage, plate-like, one face rough, other open cast
Dimensions:	64.1 x 50.2 x 5.9mm
Mass:	62.36g
Identification:	Metalworking waste
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(400200)	\diamond	GPS 5104022
Material	Copper alloy		
Condition:	Good, but folded and bro	ken	
Description: Piece o	f what appears to have been	n a sheet metal dis	c, originally 60mm diameter
Dimensions:	26.1 x 23.8mm;	Thickness 0.8mm	
Mass:	2.52g		
Identification:	Unknown		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(400200)	\diamond	GPS 5104023
Material	Lead		
Condition:	Good		
Description: Cast of 5.2mm diameter x 2.4mm		diameter boss on	one face in the centre of which is a
Dimensions:	Diameter 46.0m	m; Height 24.7mr	n
Mass:	276.00g		
Identification:	Weight?		
Dating of find:	Unknown		
Context description			

Further	action
1 ununor	action

Context:	(400200)	\diamond	GPS 5104024	
Material	Copper alloy			
Condition:	Good			
Description:	Triangular piece of sheet m	etal, now folded w	ith one corner cut off.	
Dimensions:	Originally 37.0 x 22.2mm;	Thickness 0.4mm		
Mass:	2.04g			
Identification:	Metal working off	-cut		
Dating of find:	Not datab	le		
Context descripti	on			
Further action	Not requi	red		

Context:	(400200)	\diamond	GPS 5104025	
Material	Copper alloy			
Condition:	Good			
Description:	Piece of folded sheet metal			
Dimensions:	Length (estimated) 40.6mm	; Width 19.0mm	apering to 8.0mm; Thickness 0.6mm	
Mass:	3.14g			
Identification:	Metal working off	-cut		
Dating of find:	Not datab	le		
Context description	on			
Further action	Not requi	red		

Context:	(400200)	\diamond	GPS 5104028	
Material	Copper alloy			
Condition:	Good			
Description:	Cast button with integral lo	op, top dished, plai	n	
Dimensions:	Diameter	13.8mm; Height 2	2mm; Thickness 1.2mm	
Mass:	1.04g			

Identification:	Button	
Dating of find:		Nineteenth or twentieth century
Context description		
Further action		Not required

Context:	(400200)	\diamond	GPS 5104029
Material	Copper alloy		
Condition:	Poor, much loss of detail		
Description: Coin, h	alfpenny		
Dimensions:	Diameter 25.5m	m	
Mass:	5.05g		
Identification:	Penny of Victoria, old he	ad issue	
Dating of find:	1895-1901		
Context description			
Further action	Not required		

Context:	(400200)	\diamond	GPS 5104030	
Material	Copper alloy			
Condition:	Good			
Description:	Fack, head circular, dished	d, shaft now bent, s	quare sectioned shank 2.8 x 2.8mm x 10.0m	ım
Dimensions:	Diamete	er 18.9mm; Height	4.5mm; thickness 1.0mm	
Mass:	1.70g			
Identification:	Tack			
Dating of find:	Eighteer	n-nineteenth centur	y	
Context description	1			
Further action	Not requ	uired		

Context:	(400200)	\diamond	GPS 5104031
Material	Copper alloy		
Condition:	Good		

Description: Fitting, spherical set on a 5.5mm diameter flange with milled edge, below this is a 1.8mm diameter shank which passes through a fragment of sheet metal. In the side of the sphere is a 1.5mm diameter hole and on its top is a 3.3mm diameter stub.			
Dimensions:	Length 21.0mm, Diameter 7.1mm		
Mass:	1.16g		
Identification:	Decorative fitting		
Dating of find:	Nineteenth or twentieth century		
Context description			
Further action	Not required		

Context:	(400200)	\diamond	GPS 5104033
Material	Copper alloy		
Condition:	Poor, all detail lost		
Description: Coin, h	alfpenny		
Dimensions:	Diameter 25.4m	ım	
Mass:	4.43g		
Identification:	Halfpenny, bronze issue		
Dating of find:	1861-1971		
Context description			
Further action	Not required		

Context:	(400300)	\diamond	GPS 5104034
Material	Copper alloy		
Condition:	Good		
Description: Partly f	folded strip of sheet metal		
Dimensions:	Length (folded)	28.5mm; width 11	1.9mm; Thickness 0.4mm
Mass:	2.17g		
Identification:	Metal working off-cut		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(400303) A	\diamond	US
Material	Copper alloy		
Condition:	Good		
Description: Piece o	f sheet metal, triangular, ed	lges cut an angle	
Dimensions:	37.5 x 26.3 x 1.5	ōmm	
Mass:	5.64g		
Identification:	Metal working off-cut		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(400303) B	\diamond	US
Material	Copper alloy		
Condition:	Good		
Condition.	0000		
Description: Piece	of sheet metal, trapezoid with	th one incurved e	end.
Dimensions:	43.6 x 17.9 x 3.4	4mm	
Mass:	8.14g		
11435.	0.1 - g		
11			
Identification:	Metal working off-cut		
Dating of find:	Not datable		
C .			
Context description			
context description			
Further action	Not required		

Context:	(400303) C	\diamond	US	
Material	Copper alloy			
Condition:	Good			
Description:	Piece of sheet metal, taperin	g to a point, folded	d.	
Dimensions:	20.5 x 8.6	x 3.4mm		
Mass:	0.98g			
Identification:	Metal working off-	cut		

Dating of find:	Not datable
Context description	
Further action	Not required
	Not required

Context:	(400303) D	\diamond	US
Material	Copper alloy		
Condition:	Good		
	nt of a cast copper alloy ob 5.0mm diameter, cylindric	•	vith the remains of a small hole at one ugh which is a hole.
Dimensions:	Length 26.0mm	; Width 12.1mm; T	Thickness 2.0mm
Mass:	3.21g		
Identification:	Hinge?		
Dating of find:	Recent		
Context description			
Further action	Not required		

Context:	(400303) E	\diamond	US
Material	Copper alloy		
Condition:	Poor		
-	l sheet metal button, raised ble. Through the centre are		d by a ring of pellets within which was the
Dimensions:	Diameter 15.9m	ım; Height 2.3mm	; Thickness 0.3mm
Mass:	1.02g		
Identification:	Trouser button		
Dating of find:	Nineteenth-twer	tieth century	
Context description			
Further action	Not required		

Context:	(400303) F	\diamond	US
Material	Copper alloy		
Condition:	Poor		

Description: Pressed sheet metal button, dished, originally bore the makers name, now illegible. Through the centre are four holes.			
Dimensions:	Diameter 13.5mm; Height 2.5mm; Thickness 1.0mm		
Mass:	0.76g		
Identification:	Trouser button		
Dating of find:	Recent		
Context description			
Further action	Not required		

Context:	(400303) G	\diamond	US
Material	Copper alloy		
Condition:	Poor		
Description: Cast co	opper alloy button, face slig	ghtly bossed with a	raised edge. Wire loop in centre of back
Dimensions:	Diameter 17.5r	nm; Thickness 1.81	nm
Mass:	3.10g		
Identification:	Button		
Dating of find:	Eighteenth cent	tury	
Context description			
Further action	Not required		

Context:	(400400)	\diamond	GPS 5104036
Material	Copper alloy		
Condition:	Good		
Description: Coin, h	alfpenny		
Dimensions:	Diameter 25.3m	m	
Mass:	5.04g		
Identification:	Halfpenny of Victoria, br	conze issue	
Dating of find:	Dated 1888		
Context description			
Further action	Not required		

Context:	(400400)	\diamond	GPS 5104037
Material	Lead		
Condition:	Good		
Description: Square	piece of sheet metal, sides	cut at 45 degrees,	underside hollowed
Dimensions:	16.2 x 15.0 x 2.0	0mm	
Mass:	3.55g		
Identification:	Off-cut		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(400400)	\diamond	GPS 5104042	
Material	Copper alloy			
Condition:	Good			
-			with a high central boss surrounded by two er flange below which is a rivet, 6.0mm diamete	er
Dimensions:	Height 2	7.0mm; Width 25.2	2mm; Thickness 16.4mm	
Mass:	14.92g			
Identification:	Handle from a ves	ssel, tobacco jar?		
Dating of find:	Nineteen	th century		
Context description				
Further action	Not requ	ired		

Context:	(400400)	\diamond	GPS 5104043	
Material	Copper alloy			
Condition:	Good but dirty and	d damaged		
Description:	Coin, halfpenny			
Dimensions:	Diameter	25.4mm		
Mass:	4.98g			
Identification:	Halfpenny of Vict	oria		

Dating of find:	Dated 1867
Context description	
Further action	Not required

Context:	(400400)	\diamond	GPS 5104045
Material	Copper alloy		
Condition:	Good		
Description: Buckle strongly off-set. Traces o		diameter section	notched at one point for the pin. Bar
Dimensions:	Width 40.9mm; Length 3	38.0mm; Height 10	0.8mm; Thickness 6.1mm
Mass:	25.16g		
Identification:	Harness buckle		
Dating of find:	Nineteenth-twee	ntieth century	
Context description			
Further action	Not required		

Context:	(400403)	<>	US
Material	Silver		
Condition:	Fair but worn		
Description: Silver	penny of Edward I, Canterb	oury mint	
O. [Ed] W'R'ANGL'DI	NS [hyb]		
R. [civi] TAS/CAN/TO	[r]		
Dimensions:	Diameter 18.0m	ım	
Mass:	1.11g		
Identification:	Penny of Edward I (class	s not determined)	Canterbury mint
Dating of find:	1272-1307		
Context description			
Further action	Catalogue in rep	port, do not illustra	ate

Context:	(400403)	\diamond	US
Material	Copper alloy		

Condition:	Fair		
Description:	Coin, penny		
Dimensions:		Diameter 30.4mm	
Mass:	7.69g		
Identification:	Penny of	f Victoria	
Dating of find:	·	Dated 1863	
Context descript	ion		
-			
Further action		Not required	

Context:	(400403)	\diamond	GPS	
Material	Stone/slag			
Condition:	Good			
Description:	Ball comprised of stone or	slag, not calcareou	is, not magnetic, hardness c	c. 6.0 Mohs, vesicular.
Dimensions:	Diameter	r 24.0mm		
Mass:	15.01g			
Identification:	Steel making slag	?		
Dating of find:	Nineteen	th-twentieth centu	ry	
Context descript	ion			
Further action	Not requ	ired		

Context:	(400500)	\diamond	GPS 5104041
Material	Copper alloy		
Condition:	Poor, all detail lost		
Description: Coin, p	enny		
Dimensions:	Diameter 30.4m	ım	
Mass:	8.46g		
Identification:	Penny of Victoria, bronze	e issue	
Dating of find:	1861-1901		
Context description			
Further action	Not required		

Context:	(400500)	\diamond	GPS 5104044	
Material	Copper alloy			
Condition:	Good but damage	ed		
1	ce of sheet metal folded step. Clearly a fragmen	e	form a complex section made up of a scroll	
Dimensions:	Length	32.8mm; Width 7.0n	ım	
Mass:	2.41g			
Identification: Rir	n from a sheet metal ve	essel with an estimate	ed diameter of 60mm	
Dating of find:	Not data	able		
Context description				
Further action	Not requ	uired		

Context:	(400500)	\diamond	GPS 5104046
Material	Copper alloy		
Condition:	Good		
Description: Rivet an 13.6mm diameter x 1.5mm	·	nm diameter x 1.5	mm thick; shaft 6.5mm diameter. Washer
Dimensions:	Diameter 11.8m	m; Height 9.0mm	
Mass:	4.29g		
Identification:	Rivet and washer		
Dating of find:	Recent		
Context description			
Further action	Not required		

Context:	(400500)	\diamond	GPS 5104047
Material	Copper alloy		
Condition:	Good		
suspension loop (7.8 x 6.	8mm) at the top, this contai	ins traces of an iro	Slightly curved with a pear-shaped on pin. The bar has a rounded section, 3.7 x es, beneath it are two rounded projections.
Dimensions:	Length 24.4mm	; Height 18.0mm;	Thickness 3.7mm

Mass:	2.41g
Identification:	Unknown
Dating of find:	Sixteenth-eighteenth century?
Context description	
Further action	Not required

Context:	(400500)	\diamond	GPS 5104048
Material	Copper alloy		
1. Tutor ful	copper unoy		
Com l'iterat	C 1		
Condition:	Good		
Description: Cast cy	linder with 3.5mm deep ho	le in one end	
Dimensions:	Length 33.0mm	: Diameter 7.8mm	tapering to 6.8mm
		,	
Mass:	8.58g		
Iviass.	8.38g		
	~		
Identification:	Cotter pin?		
Dating of find:	Nineteenth-twen	tieth century	
		•	
Context description			
Context description			
Further action	Not required		

Context:	(400500)	\diamond	GPS 5104049
Material	Copper alloy		
Condition:	Poor, corroded and encru	usted	
Description: Coin, h	nalfpenny		
Dimensions:	Diameter 26.7n	nm	
Mass:	5.84g		
Identification:	Halfpenny, bronze issue		
Dating of find:	1861-1971		
Context description			
Further action	Not required		

Context:	(400600)	\diamond	GPS 5104050
Material	Lead		

Condition:	Good	
Description:	Spillage, plate with some proje	ections on one face
Dimensions:	45.4 x 26.7 x	x 5.9mm
Mass:	34.80g	
Identification:	Metalworking waste	
Dating of find:	Not datable	
Context descripti	on	
Further action	Not required	

Context:	(400700)	\diamond	GPS 5104035
Material	Lead		
Condition:	Good		
Description: Cast ba	11		
Dimensions:	Diameter 15.8m	ım	
Mass:	21.76g		
Identification:	Musket ball		
Dating of find:	Unknown		
Context description			
Further action	Not required		

Context:	(400700)	\diamond	GPS 5104038	
Material	Lead			
Condition:	Good			
Description: Ca	st lead object, plano-co	nvex, top domed, ba	se slightly hollow, deep cut across base	
Dimensions:	Diamete	er 21.6mm, Height 8	1mm	
Mass:	26.03g			
Identification:	Weight?			
Dating of find:	Unknow	'n		
Context description				
Further action	Not requ	uired		

Context:	(400700)	\diamond	GPS 5104039
Material	Copper alloy		
Condition:	Good		
Description: Irregula	ar piece of spillage		
Dimensions:	14.8 x 14.0 x 5.3	5mm	
Mass:	3.10g		
Identification:	Casting waste		
Dating of find:	Not datable		
Context description			
Further action	Not required		

Context:	(400700)	\diamond	GPS 5104040
Context.	(400700)	\checkmark	0155104040
Material	Copper alloy		
Condition:	Good		
Description: Sheet n other containing the rema		coove around sides	s. At each end is a hole, one broken, the
Dimensions:	Length 27.6mm;	Width 7.0mm; T	hickness 0.8mm
Mass:	1.09g		
Identification:	Unknown		
Dating of find:	Nineteenth or tw	entieth century	
Context description			
Further action	Not required		

Context:	(400703) A <>
Material	Copper alloy
Condition:	Good
Description:	Irregular piece of metal
Dimensions:	Length 35.0mm; Width 18.9mm; Thickness 15.7mm
Mass:	28.32g
Identification:	Spillage or a badly burnt object

Dating of find:Not datableContext descriptionFurther actionNot required

Context:	(400703) B <>
Material	Copper alloy
Condition:	Good but broken and incomplete
Description: Cast fit	ting, circular with a recessed centre containing traces of iron
Dimensions:	Diameter 28.7mm; Height 7.8mm; Thickness 1.3mm
Mass:	13.75g
Identification:	Machine part?
Dating of find:	Nineteenth or twentieth century
Context description	
Further action	Not required

Context:	(400703) C <>
Material	Copper alloy
Condition:	Good but incomplete
Description: Disc of	of pressed sheet metal, slightly dished
Dimensions:	Diameter 11.0mm; Height 3.2mm; Thickness 1.2mm
Mass:	1.01g
Identification:	Button cover?
Dating of find:	Nineteenth or twentieth century
Context description	
Further action	Not required

Context:	(400703) D <>
Material	Copper alloy
Condition:	Good but incomplete
Description: diameter holes, o	Fragment of an 80mm diameter sheet metal disc, outer edge bent down to 1.9mm. Two 3.5mm ne broken

Dimensions:	52.0 x 41.0mm; Thickness 1.2mm
Mass:	11.14g
Identification:	Unknown
Dating of find:	Nineteenth or twentieth century?
Context description	
Further action	Not required

Context:	(400703) E <>
Material	Copper alloy
Condition:	Poor, all surface lost
Description: Disc, co	ould have been a farthing
Dimensions:	Diameter 23.0 x 22.0mm
Mass:	3.89g
Identification:	Farthing?
Dating of find:	1826-1860?
Context description	
Further action	Not required

Context:	(410300)	\diamond	GPS 3102321
Material	Lead		
Condition:	Good		
			a on each face. Decorated with pellets ce damaged by a heavy transverse blow.
Dimensions:	Diameter (outsid	de) 27.2mm; (insid	le) 9.9mm; Height 11.3mm
Mass:	39.63g		
Identification:	Spindle whorl		
Dating of find:	Twelfth to sixtee	enth century	
Context description			
Further action	Publish and illus	strate	

Context:	(410300)	\diamond	GPS 3102322	

Material	Lead
Condition:	Good
Description: Two la into the shape of a rough	yers of irregularly shaped, 3.2mm thick, sheet metal rolled to form an S, compressed cone.
Dimensions:	Length 63.4mm; Width 46.9mm; Thickness 46.0mm
Mass:	192.85g
Identification:	Metal working waste
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(410300)	\diamond	GPS 3102323
Material	Copper alloy		
Condition:	Corroded, good		
Description: Two pi	eces of sheet metal tube se	ction flattened 18	3.8 x 8.6mm with 1.3mm thick walls. A
	· · · · · · · · · · · · · · · · · · ·		t to a wavy line with a pitch of 2.8/cm.
4./IIIII while slot rulis do	wir uie lengur of the tube, b	our of its edges et	it to a wavy line with a pitch of 2.8/cm.
Dimensions:	Length, one piec	ce 55.0mm, the oth	her 24.3mm
Mass:	27.45g		
Identification:	Reinforcement from a ho	se?	
Dating of find:	Recent		
Context description			
Further action	Not required		

Context:	(410900)	\diamond	GPS 5110012	
Material	Pewter			
Condition:	Poor			
Description:	Piece of oval cast metal wit	h a longitudinal ri	o running down its length	
Dimensions:	Length 4	1.0mm; Width 16.0	Omm; Thickness 2.8mm	
Mass:	4.57g			
Identification:	Handle fragment f	rom a cast pewter	spoon	
Dating of find:	Eighteen	or nineteenth cent	ıry	

Context description	
Further action	Not required
Context:	(0100) <>
Context.	
Material	Copper
Condition:	Corroded, some loss of surface
Description: Fragme	ent of the driving band from a shell, one face marked by the splines by which it was
located onto the steel casi	ing, the other face bear the marks left by the rifling
Dimensions:	Length 48.5mm; Width 30.3mm; Thickness 3.5mm
Mass:	25.83g
Identification:	Munition, probably an anti-aircraft shell
Dating of find:	Second World War
Context description	
Further action	Not required

Context:	(0130) A 🗢
Material	Iron
Condition:	Corroded and encrusted
Description: Hook,	S shaped, one limb with a 90 degree bend. Oval eye, section square
Dimensions:	Length 98.0mm; Width 54.6mm; Section 10.2 x 10.0mm tapering to 7.9 x 7.2mm
Mass:	88.99g
Identification:	Meat hook?
Dating of find:	Unknown
Context description	
Further action	Not required

Context:	(0130) B <>	
Material	Iron	
Condition:	Corroded and encrusted	
Description:	Fragment of bar	
Dimensions:	Length 27.6mm; Width 12.9mm; Thickness 8.7mm	

Mass:	4.89g
Identification:	Unknown
Dating of find:	Not datable
Context description	
Further action	Not required

Context:	(+)	\diamond	Access 26A?
Material	Copper alloy		
Condition:	Good		
Description: Token	or tally, inscriptio	n raised	
'WORKING MI	ENS STORE. WE	ST CORNFORTH	I' in the centre: '2s/- // JWW'
Dimensions:	Diamet	ter 28.9mm; Thick	ness 0.8mm
Mass:	1.92g		
Identification:	Token or tally is	ssued by the epony	mous Co Durham store
Dating of find:	Late ni	neteenth – early tv	ventieth century
Context description			
Further action	Not rec	quired	

Context:	(+)	\diamond	Access 26A?
Material	Copper a	lloy	
Condition:	Fair, son	ne corrosion	
-			l with a low, rounded top, upper part covered with rows of bears four rings of milled oblique lines.
Dimensions:		Height 20.0mm;	Diameter 15.0mm tapering to 10.8mm;
Mass:	4.27g		
Identification:	Thimble		
Dating of find:		Recent	
Context description			
Further action		Not required	

Artefacts classed as Treasure

Treasure Case: 2011 T575

PAS ID: FAKL-860142

Context 130101, Topsoil, Access 13

Date: Post-Medieval; 16th Century

Description: Cast silver pin, circular head with a cabled edge surrounding a raised heart above which is an oval hole. Soldered to the underside is a sharply pointed, S shaped pin, now crushed flat against the plate. This follows the line of a small projection on the edge of the disc.

Dimensions :

Length: 19.1 mm Thickness: 2.2 mm Diameter: 13.2 mm Weight: 2.11 g

Discussion: This object is related to a well known group of sixteenth century dress fittings which Gaimster et. al. (2002, 157-196) described as 'cap hooks'. None of the examples described in his paper had the S shaped pin seen this object but the type is known from other finds, in particular the Farnham pin (Cherry, J. 'The Farnham pin', The Antiquaries Journal, 77, 1997, 388-393), see also Read (2008, 189-196) for this, and further examples. It is highly likely that Cherry's interpretation of these as hat pins is correct, the S shaped form of the pin shank ensuring that they were securely fixed into the fabric of the hat, something that would be difficult to achieve with a hook.

Consequently, in terms of age and as the object contains a minimum of 10% precious metal it qualifies as Treasure under the stipulations of the Treasure Act 1996.

Dr Kevin Leahy National Finds Advisor



Appendix H The Faunal Remains

Jennifer Wood

Introduction

A total of 422 (1851g) refitted fragments of animal bone were recovered by hand during a scheme of archaeological works undertaken by Network Archaeology, along the route of an overhead cable project from Spennymoor to Norton.

The remains were recovered from a total of six individual sites across the scheme of works. The animal remains from each site are quantified within Table 1.

Table 1, Quantification of Remains, by Site							
Site	Number	Weight (g)					
Brandon House	1	1					
Bridge House	3	7					
Carlton	1	23					
Cornforth Lane	2	5					
Low Middlewood	414	1814					
Redcar House	1	1					
Total	422	1851					

Table 1, Quantification of Remains, by Site

As can be seen, the majority of the assemblage was recovered from a single site: Low Middlewood. The animal bone from the additional sites were all recovered from topsoil, subsoil and a modern hedgerow and have therefore been omitted from further discussion.

The assemblage recovered from Low Middlewood which was characterised by a Romano-British settlement with overlying medieval furrows and a large medieval ditch at the southern extent of the site. The majority of the remains were recovered from ditches, ring ditches, a furrow and subsoil deposits.

Results

The remains were generally of a poor overall condition, averaging at grade 4 on the Lyman criteria (1996). Many of the remains were highly fragmentary and of general poor overall preservation, which may have limited the number of observable traits.

A single fragment of cattle metatarsal recovered from Romano-British ditch **0094** displayed evidence of butchery marks on the posterior shaft, consistent with meat removal.

A total of 14 fragments of animal bone recovered from Romano-British ditches **5031**, **5033** and **5037** displayed evidence of burning, which may be a result of incidental burning rather than cooking or method of disposal.

Three fragments of animal bone recovered from Romano-British ditch **0094** and medieval ditch **0025** displayed evidence of carnivore gnawing. The presence of carnivore gnawing suggests that dogs were present on site during both phases of occupation.

A single cattle astragalus recovered from Romano-British ditch **0094** had been purposely modified, with a single hole drilled through the centre. The function of the piece is uncertain; it may possibly have been used as a toggle or a gaming piece.

	Romano-British	Medieval	Undated	Total
Equid (Horse Family)	3			3
Cattle	26	10	1	37
Sheep/Goat	10			10
Pig	2			2
Dog (Canis Sp.)	1			1
Large Mammal	115	17	4	136
Medium Mammal	25	2		27
Unidentified	163	35		198
N=	345	64	5	414

Table 2, Summary of Identified Bone

As can be seen from Table 2, the most abundantly identified species were cattle, followed by smaller numbers of sheep/goat, *equid* (Horse Family), pig and dog (*Canis Sp.*) remains.

The assemblage is too small to provide meaningful information on animal husbandry and utilisation on site, save the presence of the animals on site. There is too little aging data surviving within the assemblage to suggest any generalised underlying patterns of animal husbandry.

As can be seen from Table 2, the assemblage is dominated by large mammals and large mammal size animal bone, which are more robust and therefore likely to survive in poor preservation conditions. Therefore the assemblage abundances of species identified may be affected by a bias of collection, rather than being a true representation of animal utilisation.

The skeletal elements represented suggest the remains were probably from a mixture of butchery discard and food waste.

Recommendations

No further work is required.

References

Lyman, R L, 1996 Vertebrate Taphonomy, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge

Appendix I Stone finds

By Gary Taylor

Introduction

Nine artefacts weighing a total of 5242g were recovered.

Condition

All of the other finds are in good condition.

Results

Table1, Stone

Cxt	Material	Description	NoF	W (g)	Date
0026	stone	Burnt stone, sandstone. One worn concave face, possibly used as whetstone	1	197	
	stone	Burnt stone, sandstone, 2 sets of 2 linking pieces	4	182	
0039	stone	Burnt stone, limestone	1	20	
	stone	Flaggy sandstone, 26mm thick, burnt. One side very smooth – paving?	1	675	
05011	stone	Burnt stone, sandstone, roughly square but no other evidence of use as building stone	1	215	
	stone	Natural waterworn dolerite cobble, approximately triangular section	1	3953	

Provenance

The other finds were recovered from ditch fills 0026, 0039 and 05011, all at Low Middlewood. All of the materials are probably fairly local to the area.

Range

All of the other finds are of stone, most of which is burnt. The majority of these are sandstone, though one is limestone. One piece may have been used as a whetstone while another is probably part of a paving slab. One very large piece is natural, being an approximately triangular cobble of dolerite. This is waterworn and the majority of the surface has weathered to a pale grey.

Conclusion

In general, the stones have limited potential but provide some functional evidence. Fires/hearths are indicated by the burnt stones and the piece of probable paving suggests the presence of tracks, yards or buildings. There is also a possible whetstone, although this may have been an ad hoc usage of a conveniently shaped stone as it does not appear to have been deliberately fashioned as a hone.

Recommendations

This group of artefacts is recommended for discard.

Abbreviations

CXT	Context
NoF	Number of Fragments
W (g)	Weight (grams)

Appendix J Glass report

Mike Wood BA (hons) MLitt MIfA

Introduction

Thirty-nine items of glass weighing 4.3kg were recovered during an archaeological investigation along the route of the Spennymoor to Norton project. The material was derived from a variety of contexts including topsoil, subsoil a modern dump and the fill of a ditch and channel.

Methodology

The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. A summary of the material is recorded in Table 1.

Discussion

The assemblage contained a mix of forms spanning the later 19th and twentieth century including various bottles for food, drink and pharmacy related items. There was also the base of a finger oil lamp, fragments of glass tableware and window glass shards. A summary of the larger assemblages by site is discussed below.

Brandon House

Four artefacts likely dating from the 1930s-1940s were recovered from topsoil including an early Brylcreem jar, a Boutique Lentharic perfume bottle dating from 1936, and less accurately dated food and sauce bottle. The food bottle was stamped 'ff', which may relate to the American bottle company Foster-Forbes, which produced similar products with this logo in the 1940s. This assemblage probably represents discard from household waste, which has gradually been spread over a field.

Carlton

A collection of late 19th century-early twentieth glass stoppers, chemist bottles and an ink bottle were recovered from topsoil and subsoil. This assemblage contains only larger more durable fragments and had suffered damage from ploughing suggesting it may have been part of a manure spread, gradually fragmented into smaller shards through agriculture in the 20th century.

Cornforth Lane

The largest individual assemblages along the route, ten items were recovered from the fills of a ditch and disused channel with artefacts spanning the end of the 19th century through to mid twentieth. Much of the assemblage was composed of sauce and food bottles suggesting either a dump of domestic waste or perhaps a nearby inn or public house disposing of empty bottles. A seemingly intact oil lamp was also recovered suggesting the upper shade or oil heating mechanism was damaged beyond repair.

Recommendations

The material warrants no further work or illustration. The artefacts are in a stable condition and require no conservation. All of the artefacts could be passed to suitable teaching collections, returned to the landowner or be discarded.

References:

Davis, Derek. C., 1972, *English Bottles and Decanters 1650-1900*. Charles Letts and Company Ltd

Dumbrell, R., 1983, Understanding Antique Wine Bottles. Antique Collectors' Club

С	atalogu	е						
Context	Site	Deposit	Form	Colour	Date	Shds	Wt (g)	Comments
090501	Brandon House	topsoil	Sauce bottle	clear	1910+	1	180	square with plastic lid
090501	Brandon House	topsoil	food bottle	clear	1940s+	1	147	circular bottle with flat rim. Embossed 'A623 'ff [cursive and joined in a circle=Foster- Forbes Illinois?] 17V'
090501	Brandon House	topsoil	jar	clear	1928+	1	106	Stylised jar embossed 'Brylcreem trade mark UK DSCN RECD 62'
090501	Brandon House	topsoil	perfume bottle	clear	1936	1	32	Oval bottle with white plastic cap. Marked 'Bouquet lentheric Tweed' c.1936
271503	Butterwick Road	subsoil	window glass	clear	20th	1	1	shard
400503	Carlton	subsoil	stopper	clear	19th	1	14	flat topped and chipped
400505	Cariton	5005011	stopper	cicai	17th	1	14	thick walled
01003	Carlton	subsoil	Bottle	brown	19th-20th	1	23	fragment
01000	Carlton	topsoil	ink bottle	clear	late 19th	1	29	part of hollow base
400403	Carlton	topsoil	marbles	opaque	late 19th- 20th	2	16	marble bottle stoppers
01000	Carlton	topsoil	bottle?	clear	19th-20th	1	16	heavily scarred and fractured
01000	Carlton	topsoil	chemist bottle	blue	19th	1	6	slight irredescene
050200	Cooksons Green	topsoil	Bottle	Green	19th-20th	1	34	fragment of base
030200	Cooksons	topson	Food	Green	19th-20th	1	54	square bottle,
57004	Green	modern dump	bottle	clear	late 19th	1	266	flat rim
57004	Cooksons Green	modern dump	Sauce bottle	clear	Mid-late 19th	1	81	Poorly made- mould lines visible
53004	Cornforth Lane	fill of ditch 53005	Sauce bottle	clear	early-mid 20th	1	237	square bottle, embossed 'Bob's Sauce'
53004	Cornforth Lane	fill of ditch 53005	Sauce bottle	clear	early-mid 20th	1	190	square bottle for brown sauce, embossed 'Hoe's sauce'.
53004	Cornforth Lane	fill of ditch 53005	Sauce bottle	clear	early 20th	1	226	circular bottle, embossed 'Goodall Backhouse & Co.' and 'Yorkshire Relish'

								Square bottle, with embossed
								vertical stroke decoration and
	C f th	611 - 6 4:4-1						jar lid fitting.
53004	Cornforth Lane	fill of ditch 53005	Food jar	clear	early-mid 20th	1	330	Pontil mark '147 A +'
	Cornforth	fill of ditch			early-mid			Cut glass finger oil lamp with thick applied handle and heavy
53004	Lane	53005	lamp	clear	20th	1	537	base.
130105	Cornforth Lane	fill of channel 130104	bottle	clear	c.1880- 1920	1	478	Beer bottle embossed 'J.T.P - J.T.Pickering Spennymoor' punt mark 'W 17 9' with stopper. Tooled finish.
								circular bottle,
	Cornforth	fill of channel			early-mid			ABM manufacture, punt mark
130105	Lane	130104	bottle	clear	20th	1	227	'265E' square bottle,
130105	Cornforth Lane	fill of channel 130104	Sauce bottle	clear	early-mid 20th	1	212	embossed 'Bob's Sauce'
150105	Lane	150104	boule	cical	2000	1	212	square bottle
	Cornforth	fill of channel	Sauce		early-mid			embossed 'Hazlewood & Co Products) Ltd'. Punt mark 'L4c' 1916+
130105	Lane	130104	bottle	clear	20th	1	238	<u> </u>
130105	Cornforth Lane	fill of channel 130104	chemist bottle	clear	1820-1890	1	63	Cylindrical clear glass chemist's bottle with a flared flat lipped rim. Applied finish
310400	East Close	topsoil	window glass	Clear- opaque	20th	1	1	Shard of possible drawn sheet glass
								thick walled fragment
310203	East Close	subsoil	bottle	Green	19th-20th	1	29	fragment
22000	East Close	topsoil	Bottle	Green	19th-20th	1	7	flat glass
								headlight
310300	East Close	topsoil	headlight	clear	mid-late 20th	1	14	fragment wide mouth
0902	Grindon	topsoil	Food bottle	clear	late 19th	2	334	and beaded rim. Stamped '2' on base
			chemist		late 1880s-			Cylindrical clear glass chemist's bottle with a flat
0902	Grindon	topsoil	bottle	clear	1920	1	100	lipped rim broken handle
280300	Howdon Hall Low	topsoil	table glass	clear	19th-20th	1	57	chip
05006	middlewood	topsoil	misc	brown	19th-20th	1	1	
060100	Metal Bridge	topsoil	table glass	clear	late 19th- early 20th	1	15	scalloped decoration small bowl
40100	Norton	tonsoil	chemist	clear	10th 20th	1	2	fragment
40100	Norton	topsoil	bottle	clear	19th-20th	1	3	

40100	Norton	topsoil	poison bottle	blue	19th	1	1	blue ribbed fragment
	Stobb Cross					1	1	fragment
140400	Lane	topsoil	misc	clear	19th-20th	1	1	
58000	Thinford	topsoil	Food bottle	clear	late 19th- early 20th	1	31	neck with internal lip for stopper
58000	Thinford	topsoil	stopper	clear	late 19th- early 20th	1	7	broken end of a stopper, possibly links with food bottle
220100	Trimdon Grange	topsoil	chemist bottle	clear	late 19th	1	10	rectangular bottle fragment
220100	Trimdon Grange	topsoil	bottle	clear	20th	1	4	part of bottle neck

Table 1 Glass

Appendix K Clay tobacco pipe report

Mike Wood BA (hons) MLitt MIfA

Introduction

Forty-five fragments of clay tobacco pipes were recovered from archaeological works along the Spennymoor to Norton project. The material was derived from topsoil and subsoil, with no stratified assemblages present.

Methodology

The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. Reference was made to published guidelines (Higgins & Davey 2004). Where no other identification has been possible, stems have been dated by established stem bore guidelines (Oswald 1975). It should be noted that dates provided by stem bore size can have an appreciable margin for error and are intended only as a general guide. A summary of the material is recorded in Table 1.

Discussion

The assemblage comprises a mixture of 19th century clay pipes, alongside earlier examples from the 18th and 17th centuries. There is also a single fragment which may date to the late 16th century to early 17th century, although this is based on a small fragment of wide-bored stem and should perhaps be viewed with caution.

Condition

Several of the pipes exhibit signs of weathering as would be expected from their recovery from topsoil and subsoil. Unsurprisingly, the earlier stems are small and heavily abraded, particularly the potential late 16th- early 17th century stem from Trimdon. Two stems from separate sites (Stobb Cross Lane and Trimdon) both exhibited a form of vitrified coating and suggest they had been heated to a high temperature, perhaps in a domestic hearth or a farm clearance bonfire alongside discarded glass.

Contexts of interest

Trimdon

This site produced three fragments of stem, two dating to the late 17th-mid 18th century and one small fragment of a potential late 16th to early 17th century pipe. This early fragment has a very large bore and has been rolled and weathered for some time.

Stobb Cross Lane

This site produced the largest assemblage, comprising thirteen fragments all dating from the end of the 18th to mid 19th century, when the village of Coxhoe expanded dramatically due to nearby mining (Bell's pit opened in 1827; Coxhoe Colliery 1935; West Hetton 1837; Cornforth Colliery 1838; Clarence Hetton Colliery 1839 and Bowburn Colliery in 1840). The size of the group may also be related to the proximity of this site to a branch of the Great North of England, Clarence and Hartlepool Junction Railway, which was opened at the southern end of Coxhoe village in 1839. The presence of labourers to create the line and later, engineers and passengers may have created more casual discard of broken pipes into

neighbouring fields. A pottery was established at Coxhoe in 1769, which began officially making clay pipes in 1851 as William Row (of the Row pipe making family) moved into the pottery. Pipe making lasted in Coxhoe until 1860 (Keys to the Past Coxhoe-accessed 23rd September 2011). This indicates by the mid-19th century, people in the village had ready access to such pipes as were found on this project, though by the mid 1800s clay pipes were readily available across the country.

East Close

The topsoil from this site contained a mixed selection of pipes including a group of nine late 17th to mid 18th century stems and bowls, four late 18th century stems and two early-mid nineteenth century bowls. This may suggest the topsoil has been frequently night soiled, including centuries of middened household waste onto adjacent fields.

Recommendations

None of the material warrants any further work or illustration. The complete bowls would, however, benefit from a photographic record. All the artefacts are in a stable condition and require no further conservation.

Reference:

Higgins, D A & Davey, P J, 2004, 'Appendix 4: Draft guidelines for using the clay tobacco pipe record sheets' in S D White, *The Dynamics of Regionalisation and Trade: Yorkshire Clay Tobacco Pipes* c1600-1800, The Archaeology of the Clay Tobacco Pipe, **XVIII**, British Archaeological Reports (British Series 374), Oxford, 487-490 (567pp)

http://www.keystothepast.info/durhamcc

Oswald, A, 1975 Clay Pipes for the Archaeologist BAR 14, Oxford

Catalogue

			Date		Weight	Stem	
Context	Site	Deposit	range	Count	(g)	Bore	Comments
01000	Carlton	Topsoil	1767- 1782	1	1	4/64"	stem
01000	Carlton	Topsoil	1880- 1900	1	3	2/64"	Decorative hand supporting bowl, snapped before bowl.
26003	Bridge House	Subsoil	1605- 1695	1	6	7/64"	stem
34000	Hope House	Topsoil	1750- 1900	1	2	3/64"	stem
44000	Garmondsway Middle Farm	Topsoil	1767- 1782 1682-	1	4	4/64"	stem
52000	Cornforth lane	Topsoil	1757 1767-	1	2	5/64"	stem
52000	Cornforth lane	Topsoil	1782	1	6	4/64"	stem
140100	Stobb Cross Lane	Topsoil	1780+	1	3	3/64"	Vitrified coating?
140100	Stobb Cross Lane	Topsoil	1780+	2	4	3/64"	snapped stems
140100	Stobb Cross Lane	Topsoil	1840- 1860	1	4	3/64"	End of stem, short spur, visible flute decoration. Marked 'de'?
140100	Stobb Cross Lane	Topsoil	1780- 1860	1	4	3/64"	end of stem, short spur, partial bowl (no decoration visible)
140400	Stobb Cross Lane	Topsoil	1780+	1	2	3/64"	snapped stem partial bowl-leaf design on spine,
140400	Stobb Cross Lane	Topsoil	1810- 1830	1	1	-	partial obwi-lear design on spine, partial cursive lettering visible ' <i>R</i> ' probably Row of Yarm
140600	Stobb Cross Lane	Topsoil	1767- 1782	1	2	4/64"	stem
140600	Stobb Cross Lane	Topsoil	1780+	2	4	3/64"	stems
140600	Stobb Cross Lane	Topsoil	1840- 1860	1	6	3/64"	Bowl, fluted, milled at top, leaf decoration on spine, visible mould lines. Similar to Harrison Row (Yarm) types
140600	Stobb Cross Lane	Topsoil	1840- 1860	1	4	3/64"	Partial bowl. Same form as above.
141000	Stobb Cross Lane	Topsoil	1800- 1860	1	1	-	Partial bowl-leaves, trowel? and sunburst? motif
210200	Trimdon	Topsoil	1682- 1757	1	4	5/64"	stem
210200	Trimdon	Topsoil	1592- 1607	1	2	8/64"	Very worn-appears to be early based on bore size.
220100	Trimdon	Topsoil	1767- 1820	1	3	4/64"	Stem. Marked '[ENG] LAND' in a dotted lozenge. Possibly military.
270100	Butterwick Road	Topsoil	1780+	1	3	3/64"	Vitrified coating?
270200	Butterwick Road	Topsoil	1682- 1757	1	3	5/64"	stem
271400	Butterwick Road	Topsoil	1605- 1695 1682-	1	2	7/64"	stem
310100	East Close	Topsoil	1682- 1757 1687-	2	7	5/64"	stems
310200	East Close	Topsoil	1687- 1712	4	19	6/64"	thick stems
310200	East Close	Topsoil	1800- 1850	1	2	-	Partial bowl-woman (dancer?) with anchor motif and shield? as with 141000
310200	East Close	Topsoil	1660- 1680	1	4	-	Partial bowl-traces of milling, thick walls, grey stained. Sim to Oswald no.14

310300	East Close	Topsoil	1800- 1850	1	9	-	Complete bowl-leaves, cross keys, shield, group of women holding hands (1 with anchor) dancers? Possibly represents a public house
			1767-				
310400	East Close	Topsoil	1782	4	12	4/64"	stems, 1 with a short spur
			1687-				
310400	East Close	Topsoil	1712	2	12	6/64"	thick stems
			1680-				Partial bowl-milling around rim.
400503	Carlton	Subsoil	1710	1	3	-	Sim to Oswald no.19
			1767-				
410100	Norton	Topsoil	1782	3	9	4/64"	snapped stems

Table 1 Clay tobacco pipe

Sample No.	003	004	005	010	013	014	015	016	017	018	4000	4001	4004	4005	4007
Context No.	0063	0060	0076	0024	0097	0108	0112	0115	0117	0099	05013	05011	05020	05022	05032
Feature No.	0051	0061	0070	0025	0098	0107	0111	0116	0118	0100	05014	05012	05021	05023	05033
Feature type	R.ditch	Ditch	Pit	Ditch	R.ditch	R.ditch	Kiln pit	Kiln flue	Feature	R.ditch	Ditch	Ditch	Ditch	Ditch	Ditch
Area	Acc.27	Acc.27	Acc.27	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A	TF 5A
Cereals															
Hordeum sp. (grains)	х		х												
Triticum sp. (grains)			xcf				х					xcf			
Cereal indet. (grains)			х	xcffg	х	xcffg		xcffg		xcffg		x			
Herbs															
Fabaceae indet.							х		х						
Small Poaceae indet.	х														
Tree/shrub macrofossils															
Corylus avellana L.		xcf													
Other plant macrofossils															
Charcoal <2mm	XX	XX	XX	х	XX	х	XX	х	XX	XX	х	х	х	х	х
Charcoal >2mm	х	XX	х		х	х	XX			х				х	х
Charred root/stem	XX	х	XX		х		х	х	х	х	х	х	х	х	х
Ericaceae indet. (stem)	xcf	х	xcf	х					х						
Indet.seeds	х								х						
Indet.tuber		х	х												
Other remains															
Black porous 'cokey' material	х				х	х	х	х			х	х	XX	XX	х
Black tarry material											х		х		
Bone					XX			х	х	XX	х	XX	х	XX	XX
Burnt/fired clay	х	х			х	х	х	х	х			х		х	
Small coal frags.	XX	XX	XXX	х	XX	х	х	х	х	х	х	х	XX	XX	х
Vitreous material	х				х	х									
Sample volume (litres)	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 1. Charred plant macrofossils and other remains from the Spennymoor to Norton electricity transmission network

Appendix L Environmental Report

Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF

Introduction and method statement

Excavations along the line of the Spennymoor (County Durham) to Norton (Teesside) electricity transmission network were undertaken by Network Archaeology. The work revealed pits, ditches, ring ditches and a kiln of probable Late Iron Age to Romano-British date, most of which were concentrated within the areas of Access route 27 and Tower Foundation 5A. Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated areas. Twenty-nine were taken during the course of the project, of which fifteen were selected by Network Archaeology for assessment. Those that were not assessed were considered to have low potential because they were either duplicate samples or were from isolated and undated features.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred.

The non-floating residues were collected in a 1mm mesh sieve and sorted when dry. Artefacts/ecofacts were not recorded.

Results

The recovered assemblages were all small (<0.1 litres in volume) and sparse, and it was noted that most of the remains, particularly within the features from Tower Foundation 5A, were severely weathered/abraded. It is currently unknown whether this was a result of the prolonged exposure of the material prior to deposition, or some subsequent disturbance of the deposits.

Barley (Hordeum sp.) and wheat (Triticum sp.) grains were noted (almost invariably as single specimens within an assemblage) along with a number of other cereals, which were too poorly preserved for close identification. Weed seeds occurred within only three assemblages. All were of common grasses (Poaceae) or grassland herbs (namely small legumes (Fabaceae)). A single fragment of hazel (Corylus avellana) nutshell was recorded within the assemblage from sample 004 (ditch [0061]). Charcoal/charred wood fragments were present at a low to moderate throughout along with pieces of charred root or stem, including fragments of heather (Ericaceae).

Small pieces of coal were present throughout, but at the time of writing it was unclear whether these were contemporary with the features from which the samples were taken, or later contaminants. Although some fragments of the black porous and tarry material were possible residues of the combustion of organic remains at very high temperatures, most were very hard and brittle, and were probable bi-products of the combustion of coal. Small fragments of severely weather bone were noted within all but six of the assemblages studied.

Conclusions

In summary, the composition of the three assemblages from Access Route 27 (samples 003, 004 and 005) is consistent with their being derived from small deposits/scatters of domestic hearth waste. Heather was often used as fuel within both domestic and light industrial contexts as it was easy to ignite and maintained an even, high temperature throughout combustion. It is assumed that it would also have been readily available within the local area.

The assemblages from Tower Foundation 5A are more difficult to interpret as all are very sparse. All would appear to be consistent with small scatters of refuse, possibly from within the kiln (cf the small pieces of burnt or fired clay), but the precise origin of the material is unclear. The near consistent presence of bone fragments may indicate that hides, meat or bones were being processed within the near vicinity, but it is not known if there is any corroborative evidence for this within the artefact assemblage from the site.

Recommendations

As none of the assemblages contain a sufficient density of material for quantification (i.e.100+ specimens), no further analysis is recommended. However, a summary of this assessment should be included within any publication of data from the site.

Reference

Stace, C., 1997 New Flora of the British Isles. Second edition. Cambridge University Press

Key to Table

x = 1 - 10 specimens xx = 11 - 50 specimens xxx = 51 - 100 specimens cf = comparefg = fragment R.ditch = ring ditch

Appendix M The Post-Production residues

by Dr R. Mackenzie

Introduction

This report covers the post-excavation assessment of 12 fragments of slag-like residue recovered during archaeological fieldwork between Spennymoor, County Durham and Norton in Teeside. The aims of the assessment have been to try and identify the process origin of the residues by visual inspection, and establish whether there is potential for more detailed analysis of any of the fragments.

The results of the visual inspection are summarised below in Table 1.

Results

Context Number	Number of pieces	Approx. Weight	Type of material
05039	1	175g	Possible metalliferous slag relating to ferrous metal
		8	production.
05039	2	20g	Undiagnostic slag.
52000	1	112g	Undiagnostic slag.
55000	4	19g	Possible fuel ash slag (clinker).
55000	4	5g	Undiagnostic or possible fuel ash slag.

 Table 1: Summary of slag residues recovered during archaeological fieldwork between

 Spennymoor and Norton.

Discussion

The three fragments from context 05039 are potentially Roman in date, the largest of the three weighs approximately 175g; although this fragment may relate to the smelting or smithing of iron, it is undiagnostic of a specific production method. The two smaller fragments recovered from context 05039 are very heavily weathered and it has not been possible to determine whether these are metalliferous in origin.

The remainder of the assemblage consists of either possible fuel ash or undiagnostic slag. It is worth noting that contexts 52000 and 55000 are undated topsoil layers. Fuel ash slag can be produced as a by-product of wood or coal fuelled fires that are burnt over a relatively long period, so slag recovered could relate to either a domestic source, such as a cooking/heating hearth, or 'industrial' source, such as the firebox from a steam boiler or hearth of a mobile blacksmith/farrier.

In some cases, scientific analysis can help to determine the process origin of slag, although this is normally only justified where there is supporting archaeological or historical evidence, or the particular slag found is of an archaeometallurgically significant type.

Conclusion

The only item of note in the assemblage is the fragment of possible metalliferous slag recovered from context 05039, which is thought to date from the Roman period. Supporting evidence of iron smelting or smithing does not appear to have been found, which makes it

difficult to justify any further analysis of the fragment of slag; however, the presence of this fragment of slag should be noted for any future archaeological research in the area.

Recommendations

The presence of the fragment of possible metalliferous slag should be noted in the site archive. The fragments of undiagnostic and possible fuel ash slag recovered are of limited archaeological significance and no further action is required.

No further analytical work is recommended on any of the slag assemblage covered by this assessment, and the fragments can be disposed of in the usual manner.

Appendix N

All Sites

Table 1.1 Overview of identified remains in County Durham

Access	Tower numbers	Track numbers	Average OD	Land use	Description	NGR
	722050					420.400
Access 3 Thinford	ZXC58 ZXC59	0301- 0307	105m	Arable	Medieval/Post Medieval Furrows	429400 534788
Access 5 Cooksons Green	ZXC57	0501- 0503	95m	Arable	Medieval/Post Medieval furrows and a wall	429976 534696
Access 6A Metal Bridge	N/A	N/A	80m	Arable	Negative	430171 535226
Access 9 Brandon House	ZXC56	0901- 0904	80m	Arable	A former hedge line and relict track way	430416 534586
Access 11 Cornforth	ZXC54 ZXC55	1101- 1108	90m	Arable and grazing	Former route of the Coxhoe Beck	431196 535081
Access 12 East Pasture House	N/A	1201	90m	Arable and grazing	Negative	431005 535016
Access 13 Cornforth Lane	ZXC52 ZXC53	1301- 1305	95m	Grazing	Former route of Coxhoe Beck	431761 534797
Access 14 Stobb Cross Lane	ZXC49 ZXC50 ZXC51	1401- 1414	120m	Arable	Medieval/Post Medieval furrows, relict trackway, earlier feature	432823 534581
Access 15 Garmondsway	ZXC47	1501	140m	Arable	Negative	433145 534514
Access 16 Harap Road	ZXC46	1601- 1603	150m	Arable	A ditch and a palaeochannel	433510 534440
Access 17 Garmondsway Middle Farm	ZXC41 ZXC43 ZXC44 ZXC45	1701- 1719	150m	Arable	Negative	434048 534317

Access 18						436183
Greenside Farm	ZXC40	1801	160m	Arable	Negative	534237
Access 19	ZXC39	1901-	160m	Arable	Medieval/Post Medieval	435704
Catley Hill Farm	4TF38C	1903	10011	Arable	furrows	533987
	ZXC36					
	ZXC37					
Access 21	ZXC38	2101-	170m	Arable	Medieval/Post Medieval furrows and a ditch	436183
Trimdon	4TF38B	2110		Alable		534237
	4TF38T					
	4TF38A					
Access 22						436183
Trimdon Grange			130m	Arable	Negative	534237
Access 23		2301-				436518
Salters Lane	ZXC35	2302	120m	Arable	Negative	533160
Access 24		2401	110			436726
Hope House	ZXC34	2401	110m	Arable	Negative	532828
Access 25 West	ZXC33	2501-	110m	Arable	Nagativa	436882
Carrside Farm	ZAC55	2502	110111	Arable	Negative	532642
Access 26 Galley Law	ZXC32	2601-	100m	Arable	Tree roots and	437042
Farm	ZAC32	2602	10011	Alable	stone clearance	532381
Access 26A	ZXC31	2603-	100m	Arable	Midden deposit, wall	437042
Fishburn	ZACSI	2605	10011	Alable	foundation	532381
A 20055 27	ZXC27			Arable	Roman	437045
Access 27 Butterwick	ZXC28	2701- 2718	100m	and	farmstead and Medieval	531228
Road	ZXC29			grazing	furrows	
						437335
Access 28 Three Horse Shoe Inn	ZXC30	2801- 2802	100m	Arable	Negative	531754

Access 29 Bridge House	ZXC25 ZXC26	2901- 2907	100m	Arable	Negative	437388 530004
Access 30 Redcar House	ZXC24	3001- 3002	100m	Arable	Negative	437537 529680
Access 31 East Close	ZXC19 ZXC20 ZXC21 ZXC22	3101- 3117	95m	Arable	Roman pit and two relict trackways	437785 528464
Access 33 Green Hill	ZXC23	3301- 3304	90m	Arable	Relict trackway	437466 529093

Table 1.2 Overview of identified remains in Teesside

	Tower	Track		Land	D	NGD
Access	numbers	numbers	Average OD	use	Description	NGR
Access 35 Layton	ZXC14 ZXC15 ZXC16 ZXC17 4TF14R 4TF15R	3501-3509	80m	Arable	Medieval/Post Medieval furrows	438474 527430
Access 36 Grindon	ZXC7A ZXC8A ZXC9 ZXC10 ZXC11 ZXC12 ZXC13	3602-3613	80m	Arable and grazing	Negative	441024 524687
Access 37 Low Middlewood	ZXC3A ZXC4A ZXC5A ZXC6A	3701-3712	25m	Arable	Roman farmstead and medieval furrows	441448 523496
Access 38 Howden Hall	ZXC2A	0201-0202	45m	Grazing	Negative	441144 523114
Access 39 Middlewood			45m	Grazing	Negative	441195 522899
Access 40 Carlton	ZXC1 ZXC1A 4TF2	4001-4007	45m	Arable	Negative	440961 522619
Access 41 Norton			50m	Arable	Negative	440670 522004

Appendix O

Sites with no or minimal archaeology

County Durham							
Access	Name	Description	Land- use	Ht OD	NGR		
Access 6A	Metal Bridge	Several pieces of modern pottery were located within the topsoil. Beyond these finds, there was nothing of archaeological interest found during the monitoring.	Arable	80m	430171	535226	
Access 9	Brandon House	A former hedge line 56005 and a modern trackway 090404 were revealed. A layer of 20 th century household waste artefacts had been dumped across the site and probably represents a minor levelling episode.	Arable	80m	430416	534586	
Access 11	Cornforth	The frame from a recent pen-knife, a George V half penny, a George VI	Arable and grazing	90m	431196	535081	

penny, a copper alloy off-cut and a 19th or 20th century cast metal poker finial were all recovered during the metaldetecting survey.

The probable route of the extant Coxhoe Beck 110405 was located on the south to north-west curve of the track. The beck has not been utilised as a water system for some time, and was likely dammed and backfilled in the early

20th century

East Pasture

House

Access 12

Several fragments of modern pottery were recovered from the

exception of the pottery,

nothing of archaeological interest was located during the monitoring

topsoil. With the

Arable

grazing

90m

431005

535016

and

£ 41 .. -4 14

A 12	C C	A 1 cth and a 1	Con :	05	421761	524707
Access 13	Cornforth Lane	A 16 th century silver hairpin (Appendix G) was recovered from topsoil during the metal- detecting survey, this item as been classed as treasure. There is nothing to suggest the hairpin is anything other than casual loss, presumably from a traveller passing near the village of Cornforth, which is known to have existed since at least the 12 th century. Further traces of the former Coxhoe Beck 130104/53005 were located. The circular earthwork, D8016, which is recorded as been present within the vicinity of tower ZXC12 may be part of the former Coxhoe beck.	Grazing	95m	431761	534797
Access 15	Garmondsway	No archaeology was revealed, despite the presence of the nearby Deserted Medieval Village of Garmondsway.	Arable	140m	433145	534514
Access 16	Harap Road	An undated ditch 46004 was aligned east to west near a north-east to south-west aligned palaeochannel 46007/46011 . Neither feature produced any dating evidence.	Arable	150m	433510	534440
Access 17	Garmondsway Middle Farm	Despite the presence of the nearby DMV of Garmondsway, the only archaeological material recovered was 18 th and 19 th century in date and derived from topsoil.	Arable	150m	434048	534317

Access 18	Greenside Farm	The lack of archaeological features and artefacts suggests the discovery of a single metal-detected 18 th century bronze buckle represents accidental discard and does not suggest any nearby buried remains	Arable	160m	436183	534237
Access 22	Trimdon Grange	No archaeology was present. However, the metal-detecting survey recovered: a 4 th century Roman coin; two bronze buttons (18 th to 20th century), a bronze buckle and a bronze clasp (both dating to the 19 th -20 th century) and a bronze spill.	Arable	130m	436518	533160
Access 23	Salters Lane	No archaeology or finds were present.	Arable	120m	436726	532828
Access 24	Hope House	No archaeology or finds were present.	Arable	110m	436882	532642
Access 25	West Carrside Farm	A 20 th century copper sixpence was recovered during metal-detecting as well as modern pottery and tile.	Arable	110m	436183	534237
Access 26	Galley Law Farm	No archaeological remains were present beyond evidence of casual stone clearance from farmland, which could have happened at any point in the last few centuries and bioturbation from tree roots encroaching across the access	Arable	100m	437042	532381
Access 28	Three Horse Shoe Inn	An 18 th century bronze buckle and 20 th century copper coin were recovered during metal- detecting.	Arable	100m	437335	531754
Access 29	Bridge House	Modern pottery was recovered from topsoil.	Arable	100m	437388	530004

Access 30 Access 33	Redcar House Green Hill	No archaeology was present. However, worked flint, animal bone, medieval pottery and modern cbm were recovered from topsoil. A partial track way 330304 was revealed, which may have provided access to a farm or ancillary storage sheds.	Arable Arable	100m 90m	437537 437466	529680 529093
		Teeside				
Access	Name	Description	Land- use	Ht OD	NG	iR
Access 36	Grindon	No archaeology was revealed, despite proximity to a number of known medieval sites including the shrunken medieval settlement of Grindon, the deserted medieval settlement of Fulthorpe and nearby remnants of field systems.	Arable and Grazing	80m	441024	524687
Access 38	Howden Hall	Modern pottery, cbm and glass were collected from topsoil.	Grazing	45m	441144	523114
Access 39	Middlewood	No archaeology was revealed despite the proximity to a medieval field system (T 699). An 18 th century bronze eyelet was recovered during metal-detecting.	Grazing	45m	441195	522899
Access 40	Carlton	This site revealed no archaeological features; however it did produce a large number of finds from topsoil including; modern pottery, glass, clay tobacco pipes, a 13 th century coin and forty- five 18 th -20 th century metal finds.	Arable	45m	440961	522619

Access 41 Nor	No archaeology was present. Topsoil finds included; clay tobacco pipe, modern pottery and glass, a medieval lead spindle whorl and three $18^{\text{th}}-20^{\text{th}}$ century metal items (an off-cut, a fitting and a spoon).	Arable	50m	440670	522004
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Appendix P

OASIS

OASIS DATA COLLECTION FORM: England

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Printable version

OASIS ID: networka2-120080

Project details

Project name	Spennymoor to Norton
Short description of the project	Linear overhead cable project from County Durham to Teesside. Two Romano-British sites were revealed.
Project dates	Start: 04-01-2010 End: 30-09-2011
Previous/future work	Yes / Not known
Any associated project reference codes	SPN - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	RIDGE AND FURROW Medieval
Monument type	SETTLEMENT Roman
Significant Finds	POTTERY Roman
Significant Finds	METALWORK Post Medieval
Investigation type	'Part Excavation','Systematic Metal Detector Survey','Watching Brief'
Prompt	Direction from Local Planning Authority - PPS

Project location

England
DURHAM SEDGEFIELD SPENNYMOOR Butterwick Road
TS21 4BE
500.00 Square metres
NZ 376 311 54.6734519375 -1.416877038640 54 40 24 N 001 25 00 W Point
Unknown
Min: 90.00m Max: 100.00m

Project creators

Name of Organisation	Network Archaeology Ltd
Project brief originator	Consultant
Project design originator	Network Archaeology Ltd
Project director/manager	Michael Wood

Project supervisor	Paul Flintoft
Type of sponsor/funding body	Developer
Name of sponsor/funding body	MWH (UKLTD)

Project archives

Physical Archive recipient	Bowes Museum
Physical Contents	'Animal Bones', 'Ceramics', 'Glass', 'Metal'
Digital Archive recipient	Bowes Museum
Digital Contents	'Animal Bones', 'Ceramics', 'Glass', 'Metal', 'Stratigraphic'
Digital Media available	'Database','GIS'
Paper Archive recipient	Bowes Museum
Paper Contents	'Animal Bones', 'Ceramics', 'Glass', 'Metal', 'Stratigraphic'
Paper Media available	'Context sheet','Matrices','Photograph','Plan','Report'

Project bibliography 1

	Grey literature (unpublished document/manuscript)
Publication type	
Title	SPENNYMOOR TO NORTON 410KV OVERHEAD CABLE SCHEME Archaeological Monitoring, Controlled Strip and Excavation
Author(s)/Editor(s)	Wood, M
Other bibliographic details	589
Date	2012
Issuer or publisher	Network Archaeology Ltd
Place of issue or publication	Network Archaeology Ltd Lincoln
Description	A4 Spiral bound with clear plastic covers.
Entered by	Mike Wood (michaelw@netarch.co.uk)
Entered on	27 February 2012



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Printable version

OASIS ID: networka2-120099

Project details

Project name	Spennymoor to Norton
Short description of the project	Linear overhead cable project between county Durham and Teesside. Two Romano-British sites were revealed
Project dates	Start: 04-01-2010 End: 30-09-2011
Previous/future work	Yes / Not known
Any associated project reference codes	SPN - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	RIDGE AND FURROW Medieval
Monument type	SETTLEMENT Roman
Significant Finds	POTTERY Roman
Significant Finds	METALWORK Post Medieval
Investigation type	'Part Excavation','Systematic Metal Detector Survey','Watching Brief'
Prompt	Direction from Local Planning Authority - PPS

Project location

Country	England
Site location	CLEVELAND STOCKTON ON TEES STOCKTON ON TEES Low Middlewood
Postcode	TS21 3LQ
Study area	500.00 Square metres
Site coordinates	NZ 412 234 54.6039689351 -1.362133950140 54 36 14 N 001 21 43 W Point
Lat/Long Datum	Position derived from charts
Height OD / Depth	Min: 85.00m Max: 100.00m

Project creators

Name of Organisation	Network Archaeology Ltd
Project brief originator	Consultant
Project design originator	Network Archaeology Ltd

Project director/manager	Michael Wood
Project supervisor	Paul Flintoft
Type of sponsor/funding body	Developer
Name of sponsor/funding body	MWH (UKLTD)

Project archives

Physical Archive recipient	Tees Archaeology
Physical Contents	'Animal Bones','Ceramics','Glass','Metal'
Digital Archive recipient	Tees Archaeology
Digital Contents	'Animal Bones','Ceramics','Glass','Metal'
Digital Media available	'Database','GIS'
Paper Archive recipient	Tees Archaeology
Paper Contents	'Animal Bones','Ceramics','Glass','Metal'
Paper Media available	'Context sheet','Matrices','Photograph','Report'

Project bibliography 1

	Grey literature (unpublished document/manuscript)
Publication type	
Title	SPENNYMOOR TO NORTON 410KV OVERHEAD CABLE SCHEME Archaeological Monitoring, Controlled Strip and Excavation
Author(s)/Editor(s)	Wood, M
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Description	A4 Spiral bound report with clear plastic covers
Entered by	Mike Wood (michaelw@netarch.co.uk)
Entered on	27 February 2012



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Plates



Plate 1 Stripping an access track and laying down protective membrane



Plate 2 The remains of Garmondsway village



Plate 3 Ring ditch 0055 at Butterwick Road



Plate 4 Remnant of a trackway at Butterwick Road



Plate 5 A Romano-British pit and pottery from East Close



Plate 6 Oven 0111 at Low Middlewood

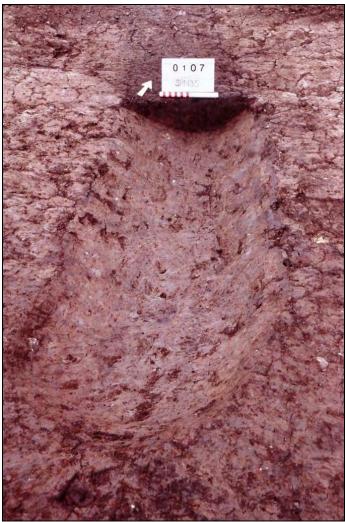
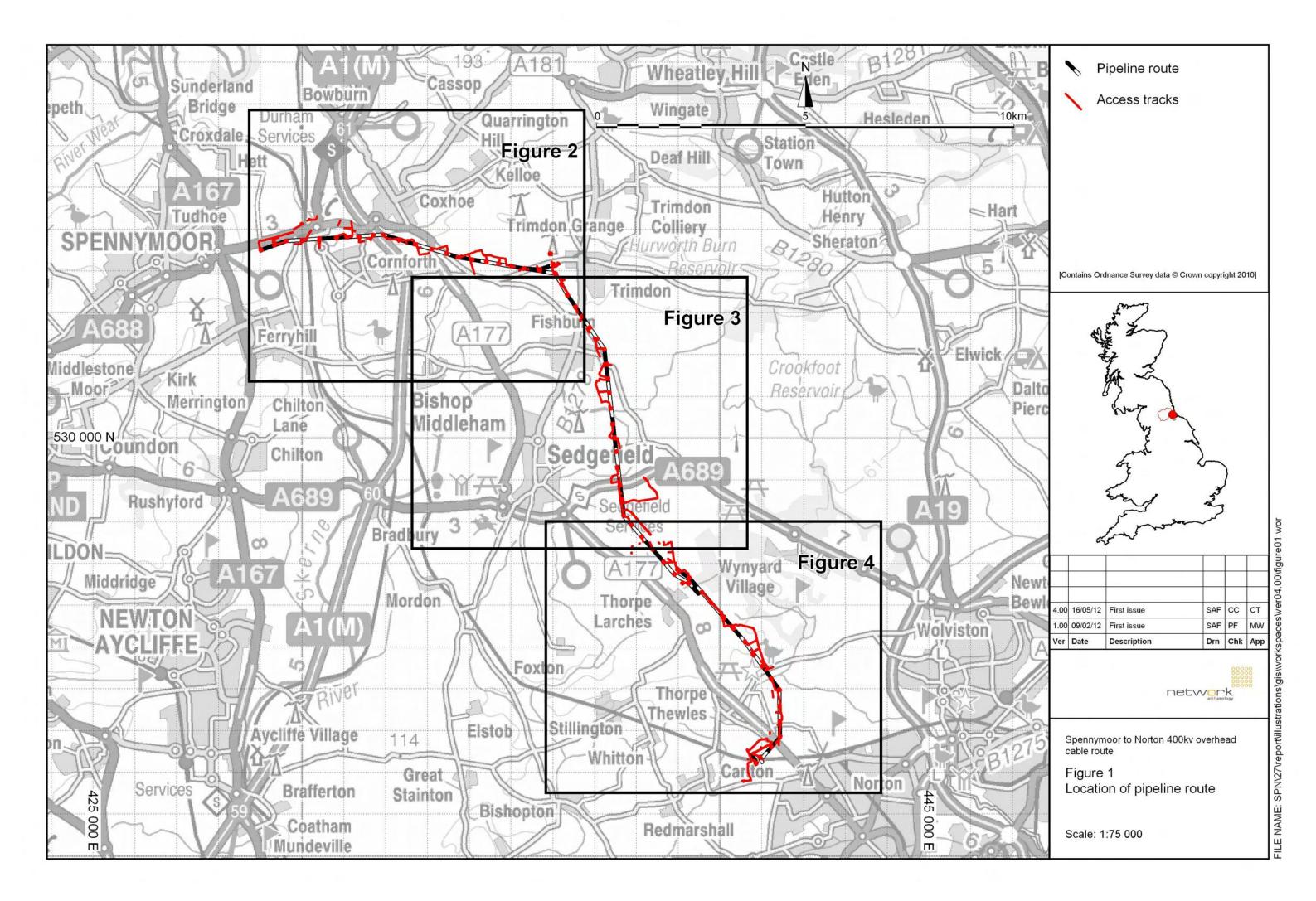
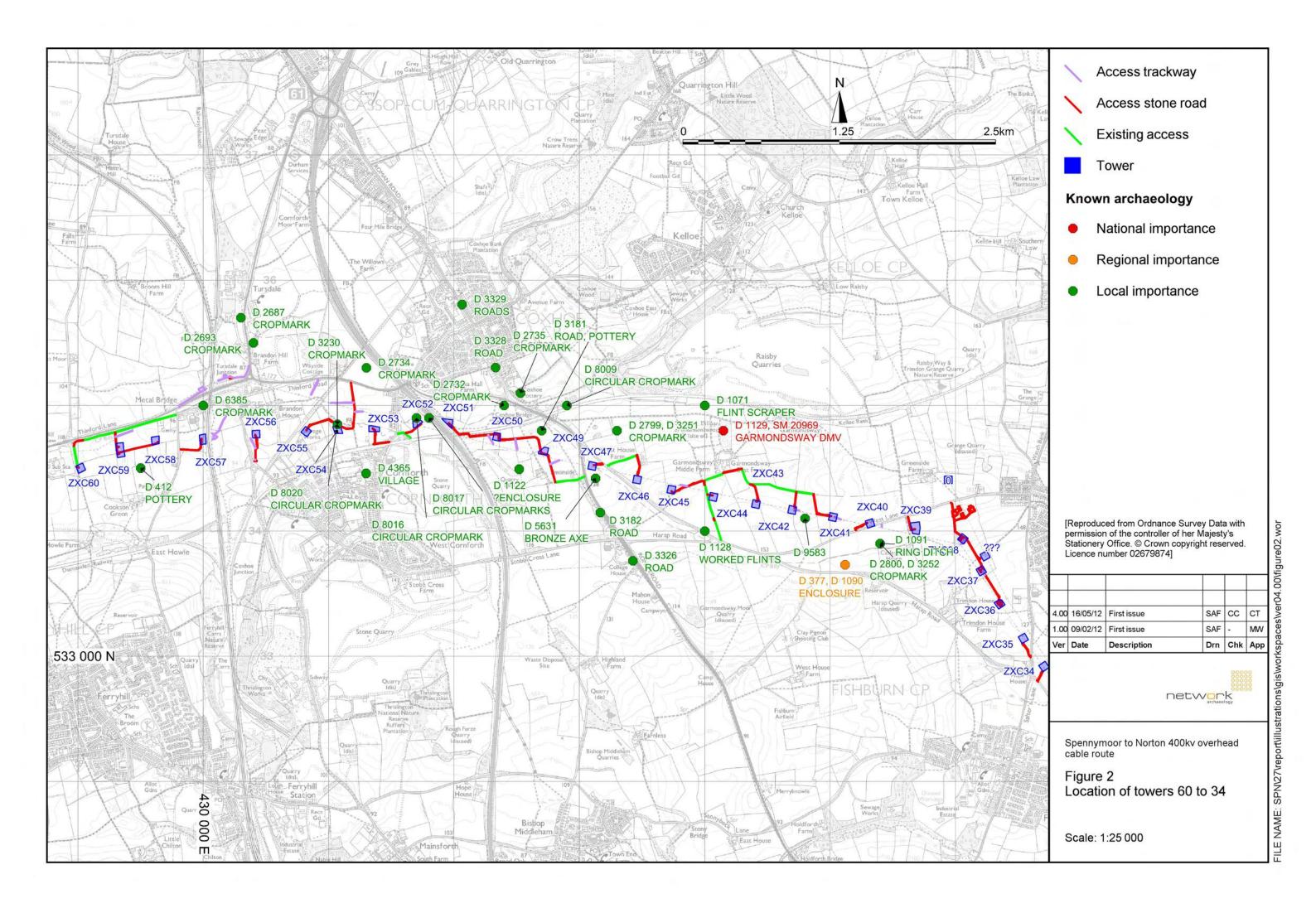


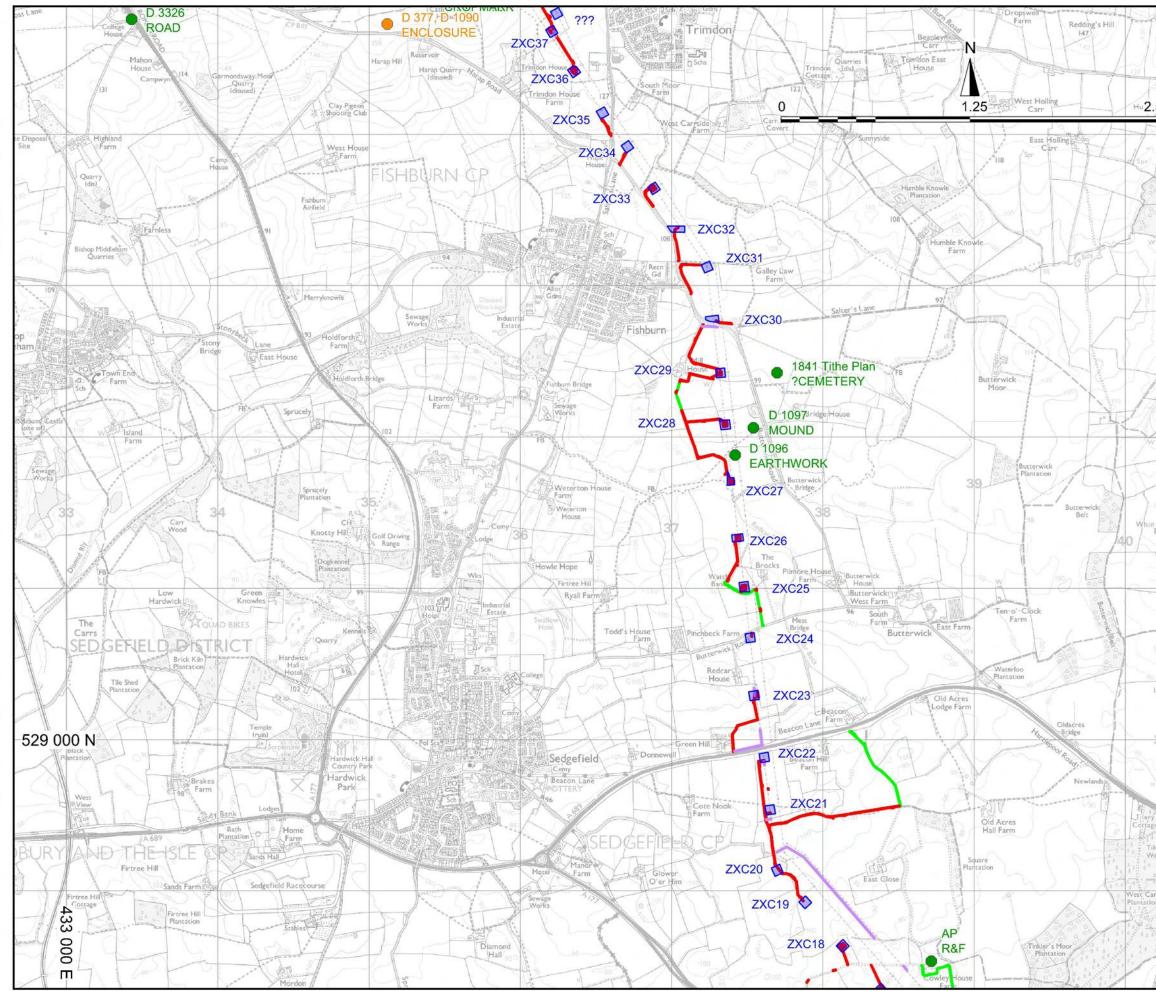
Plate 7 Ring ditch **107** at Low Middlewood



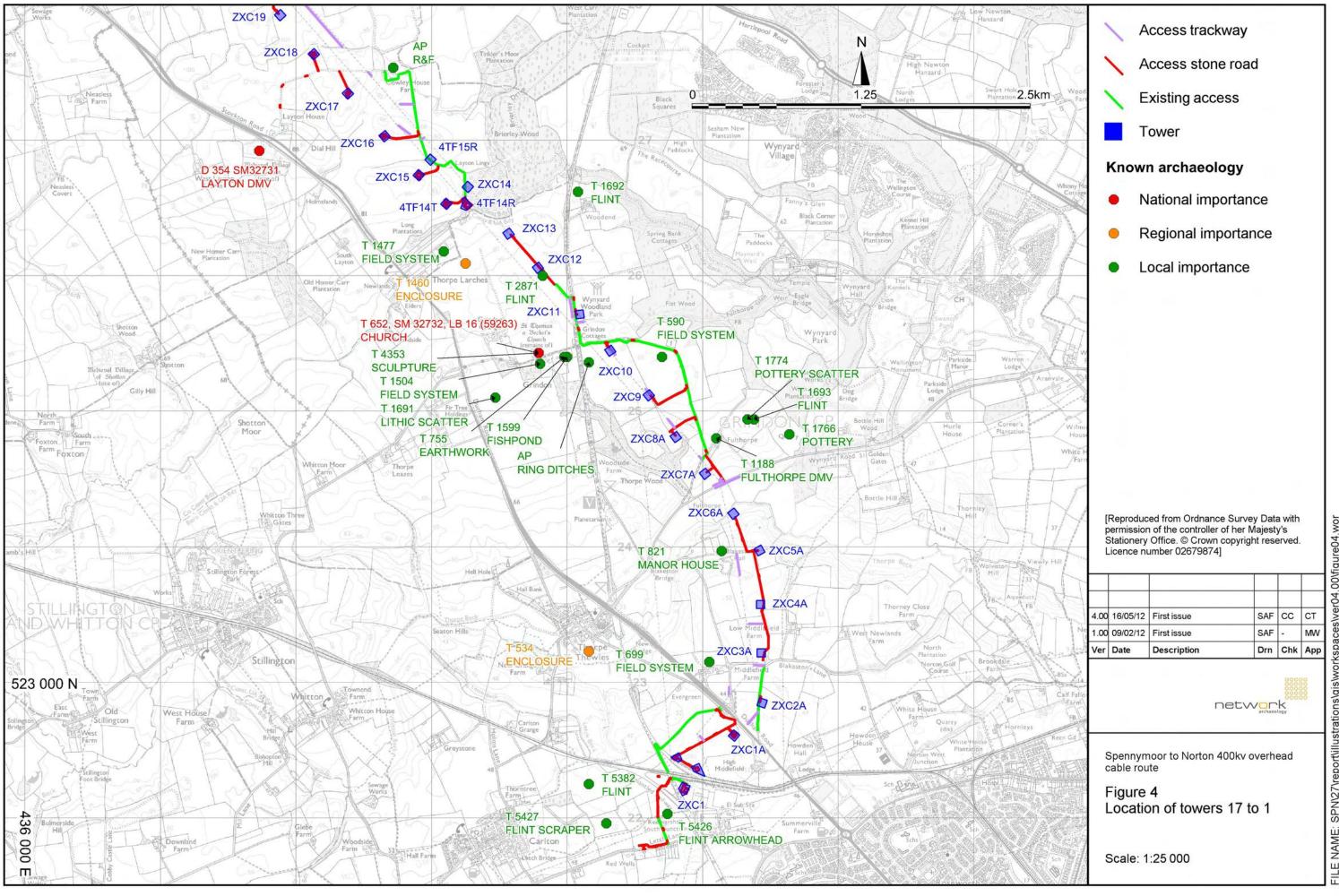
Plate 8 Ditches 05014 and 05012 at Low Middlewood



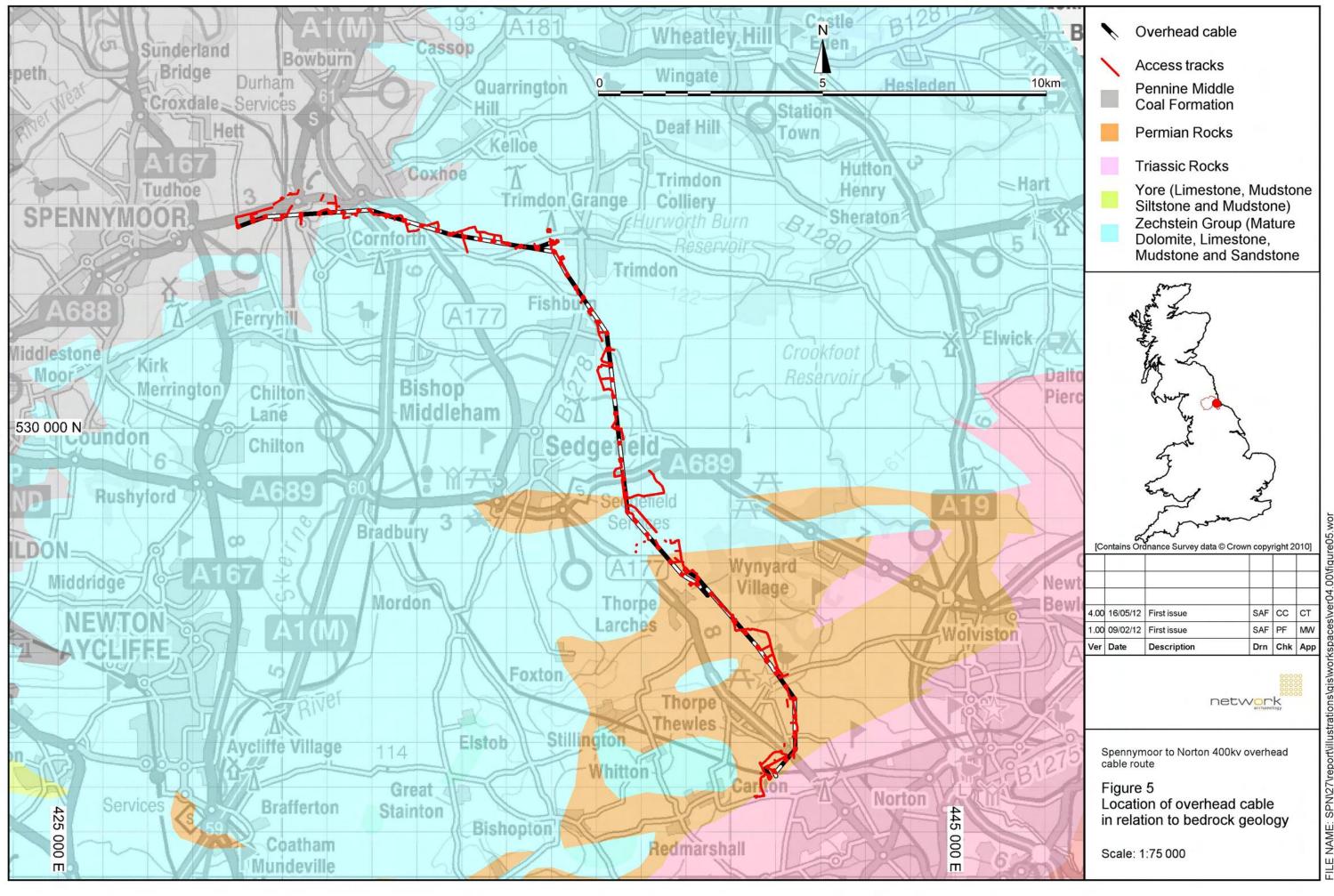




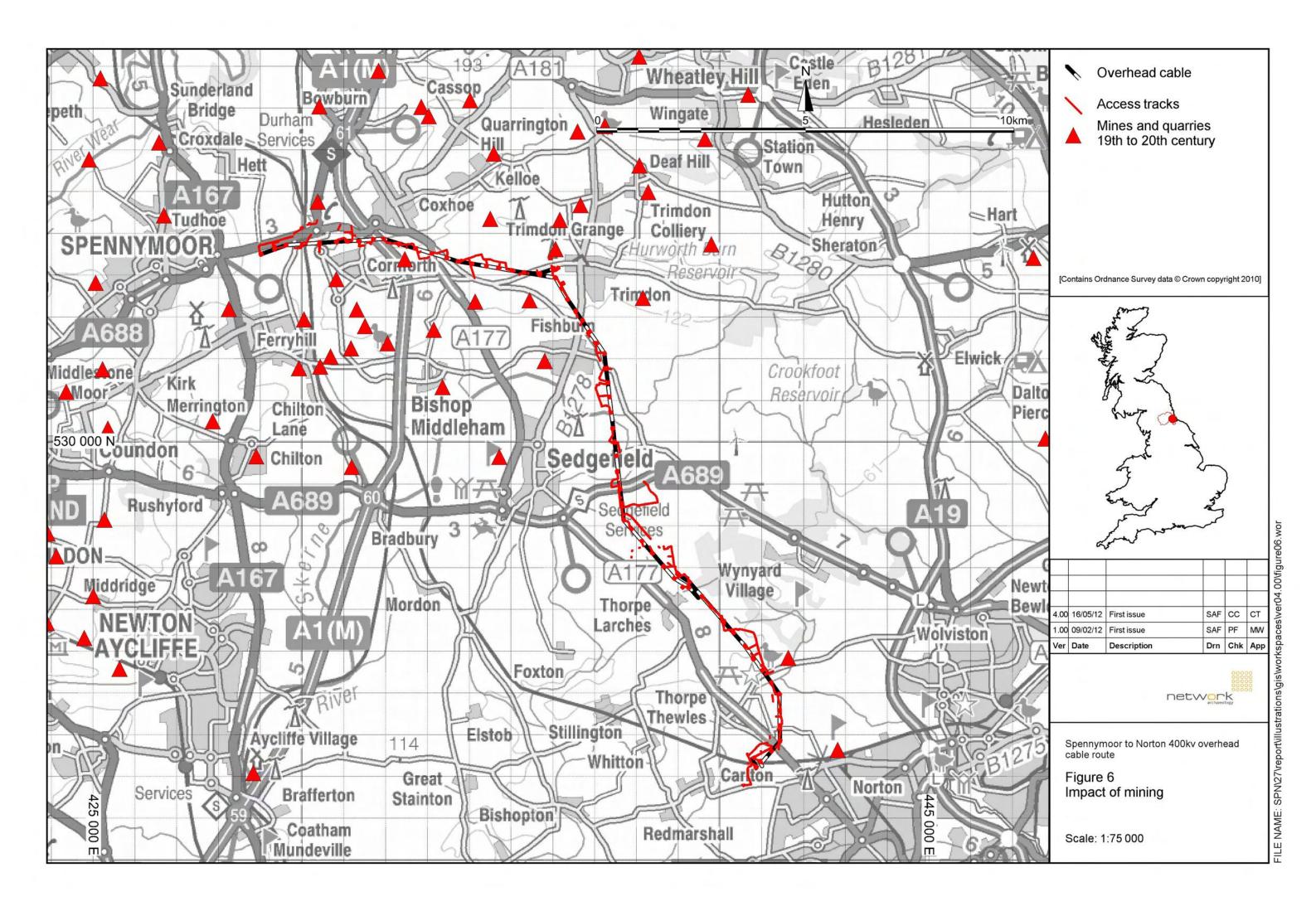
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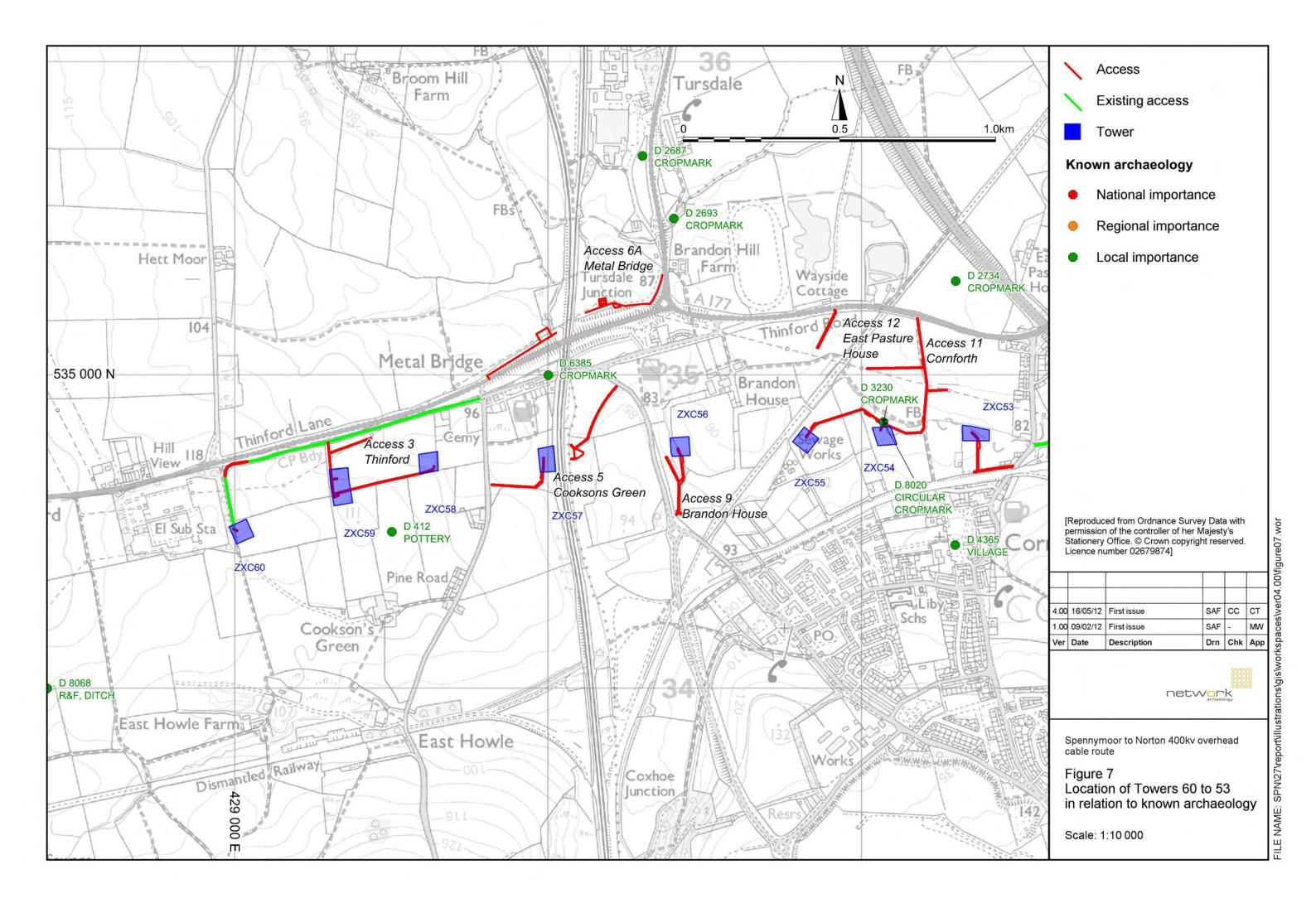


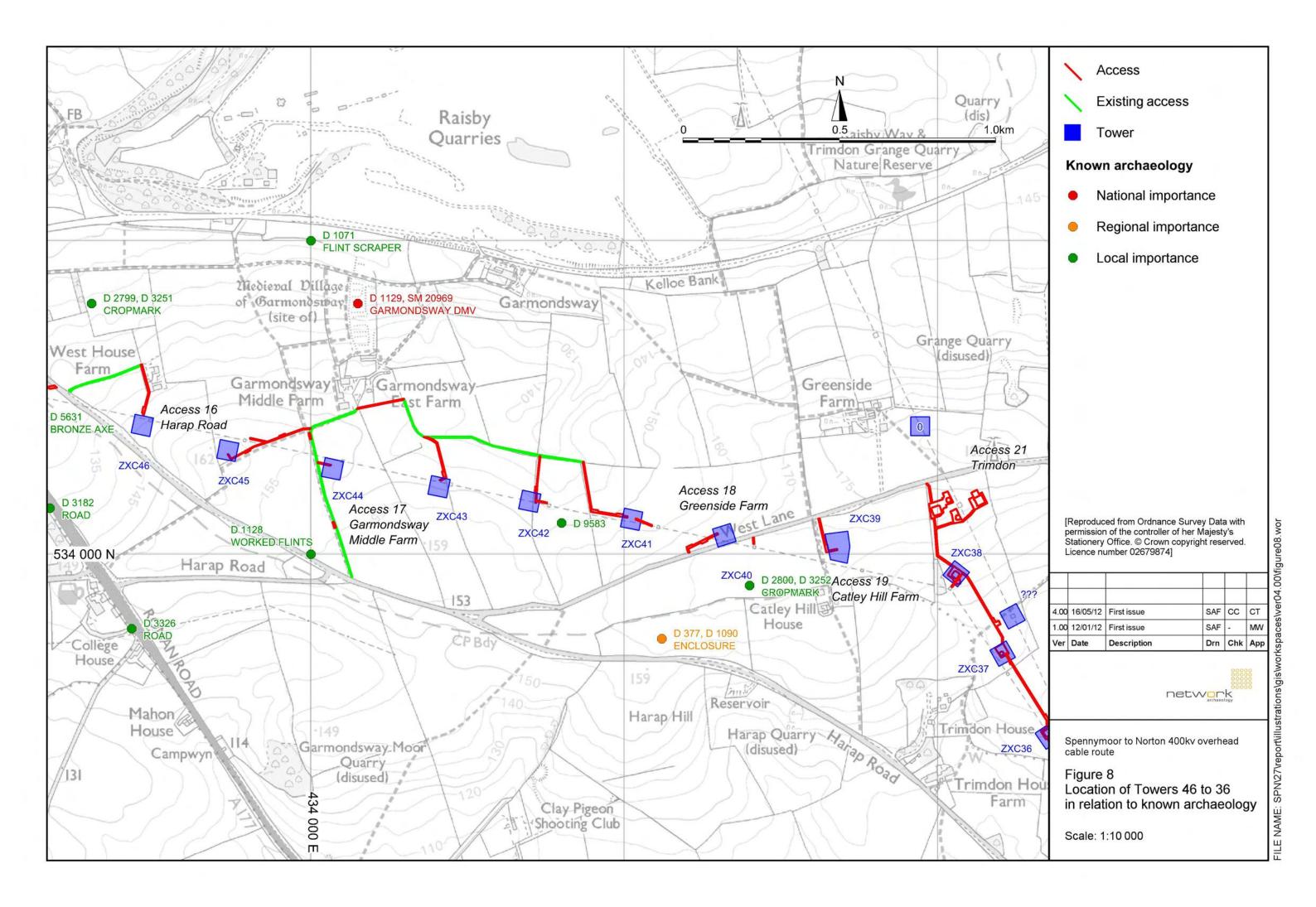
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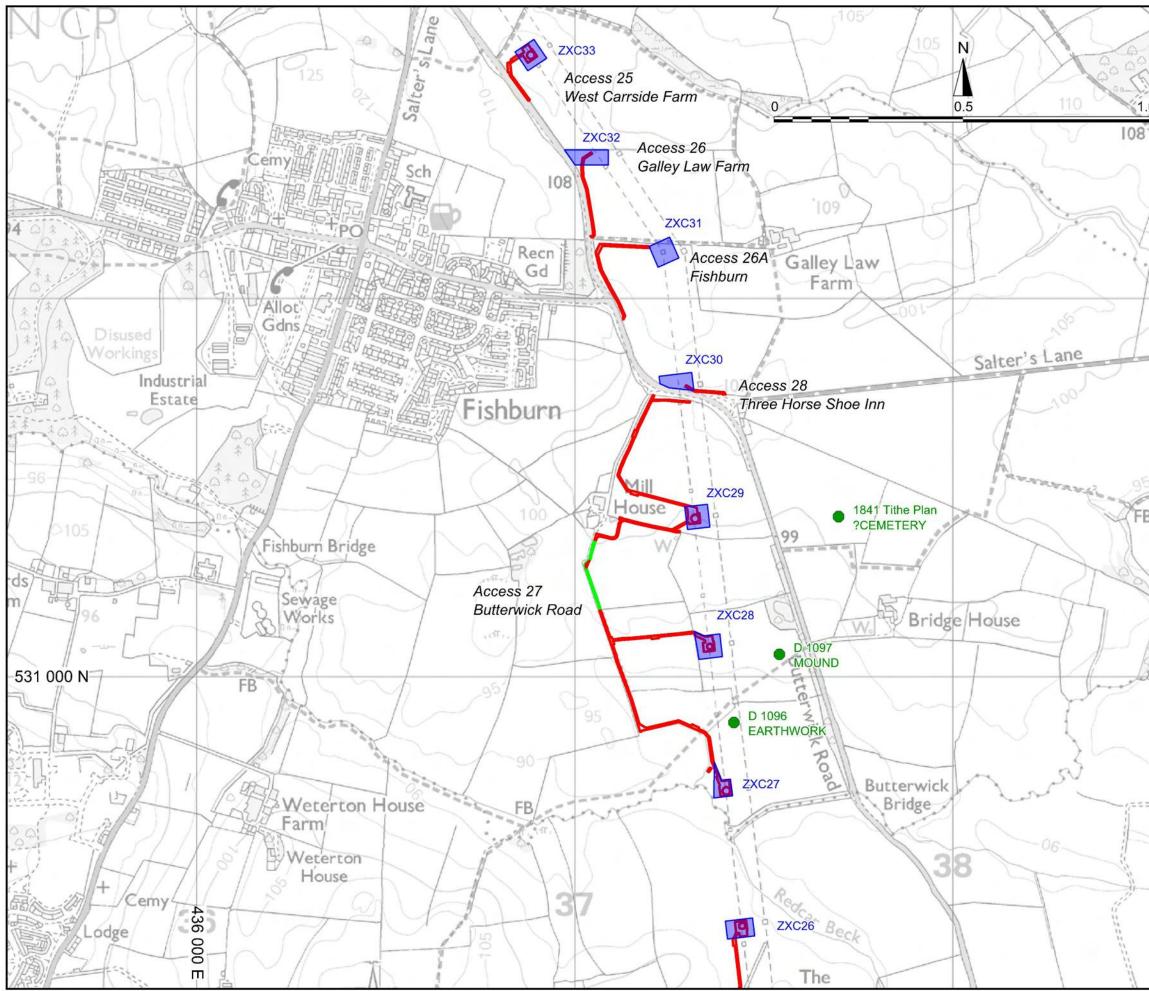


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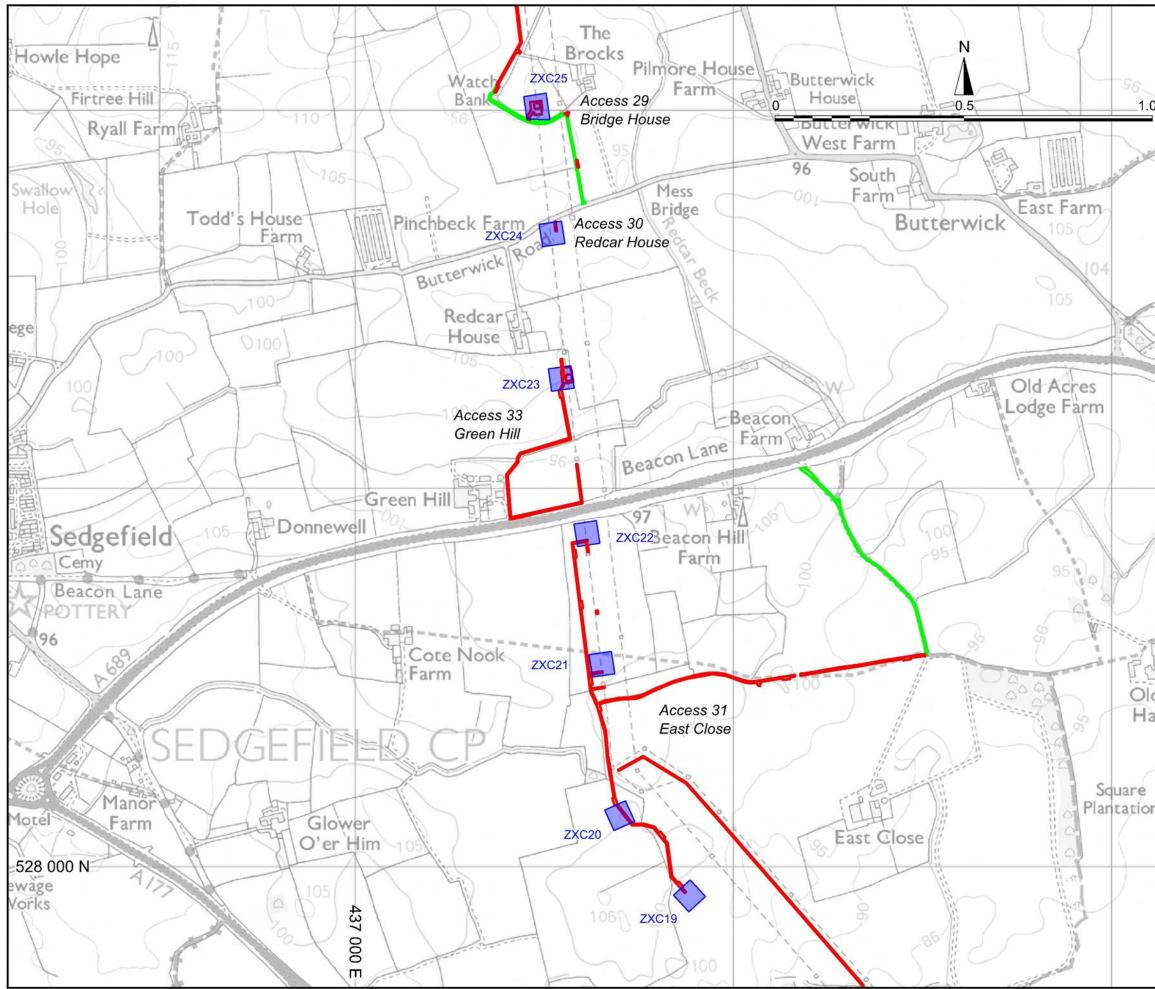




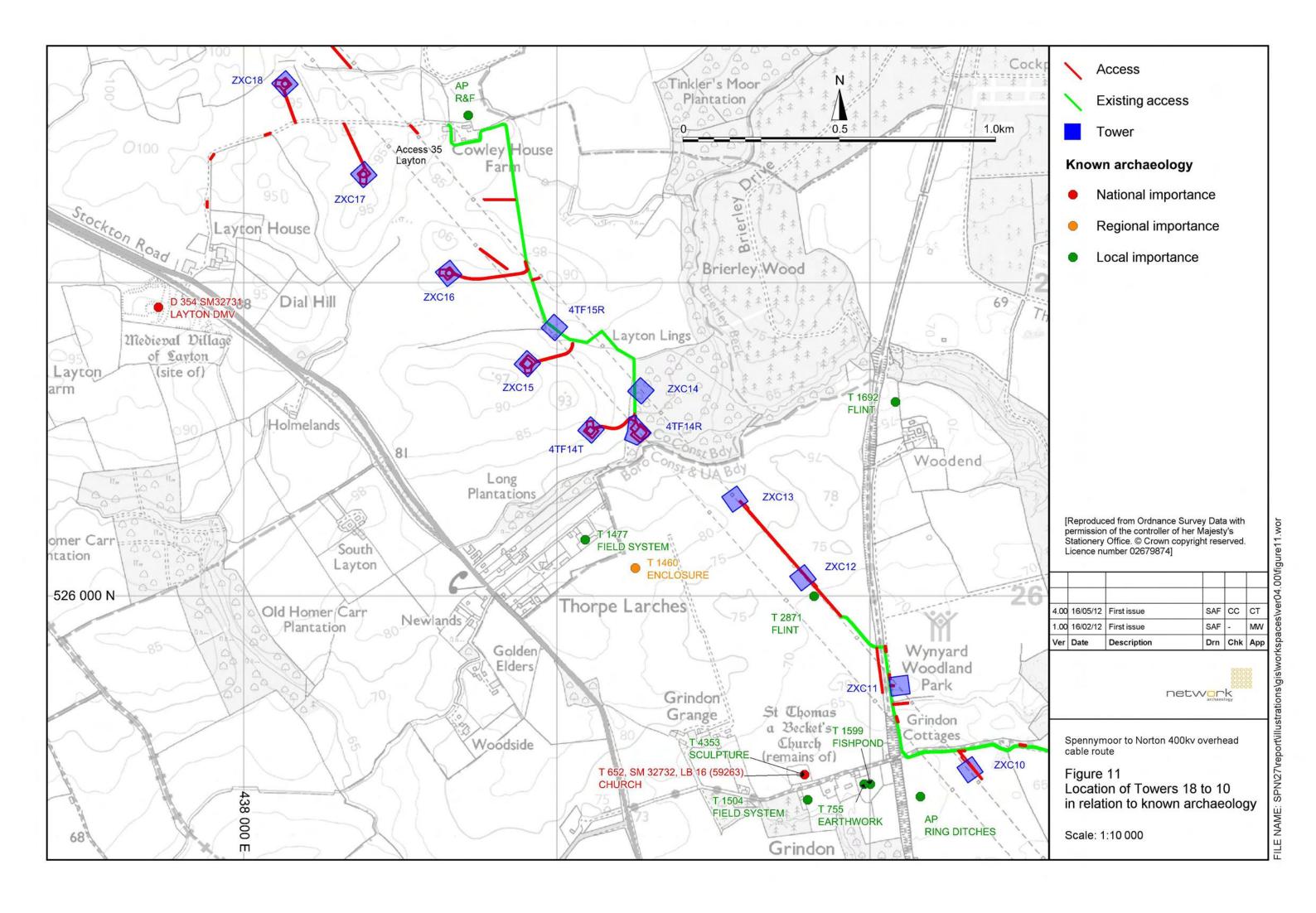


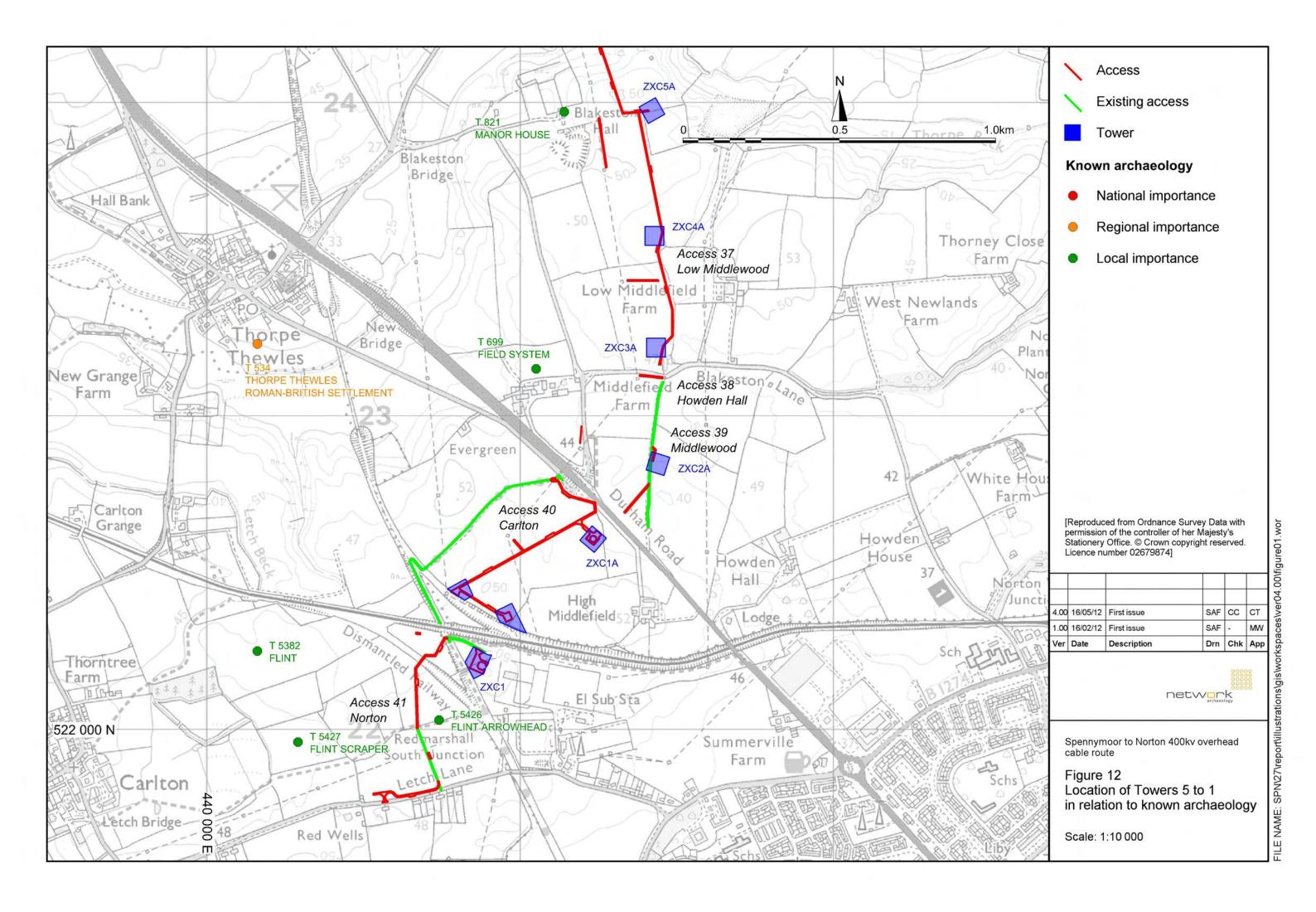


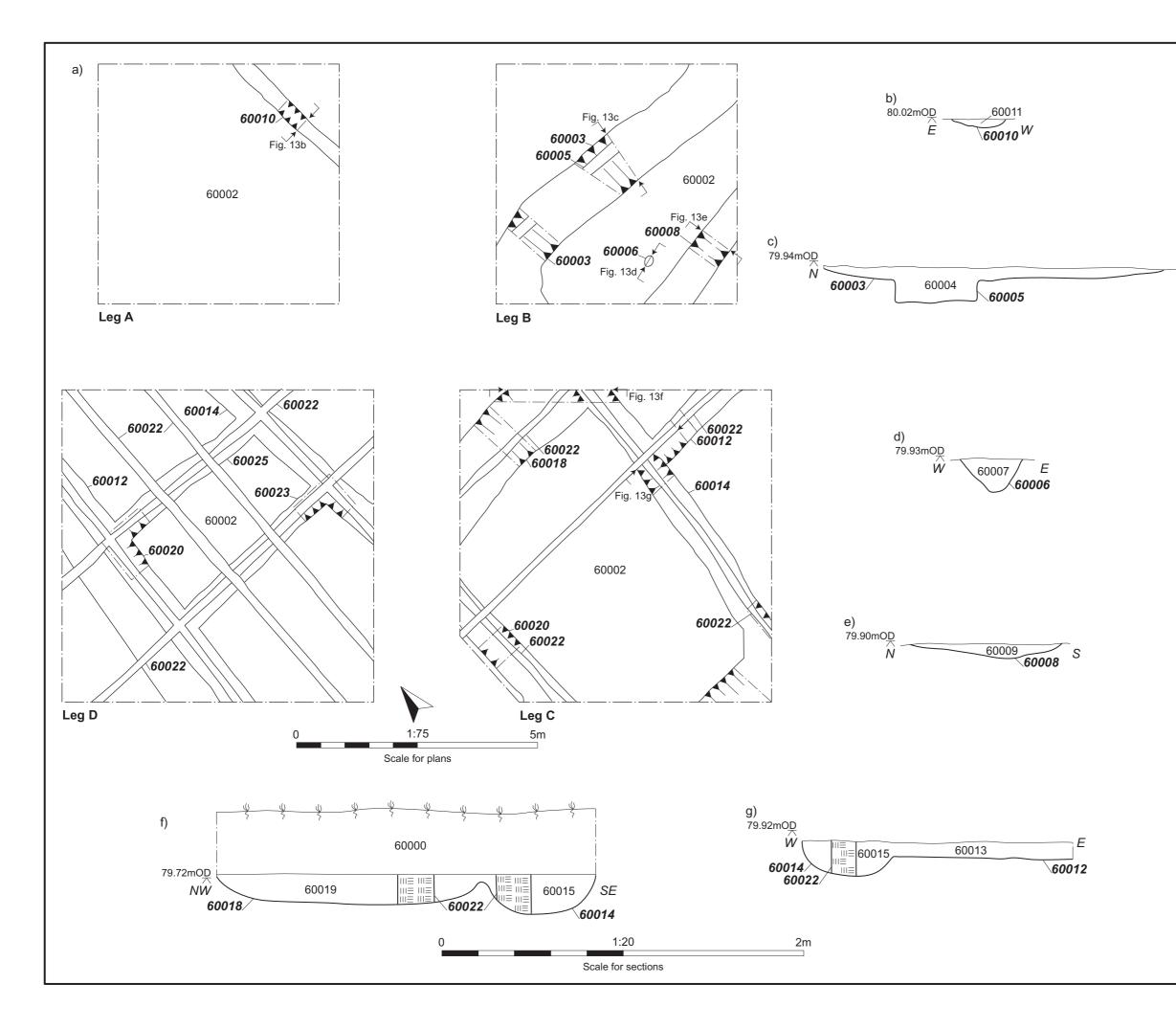
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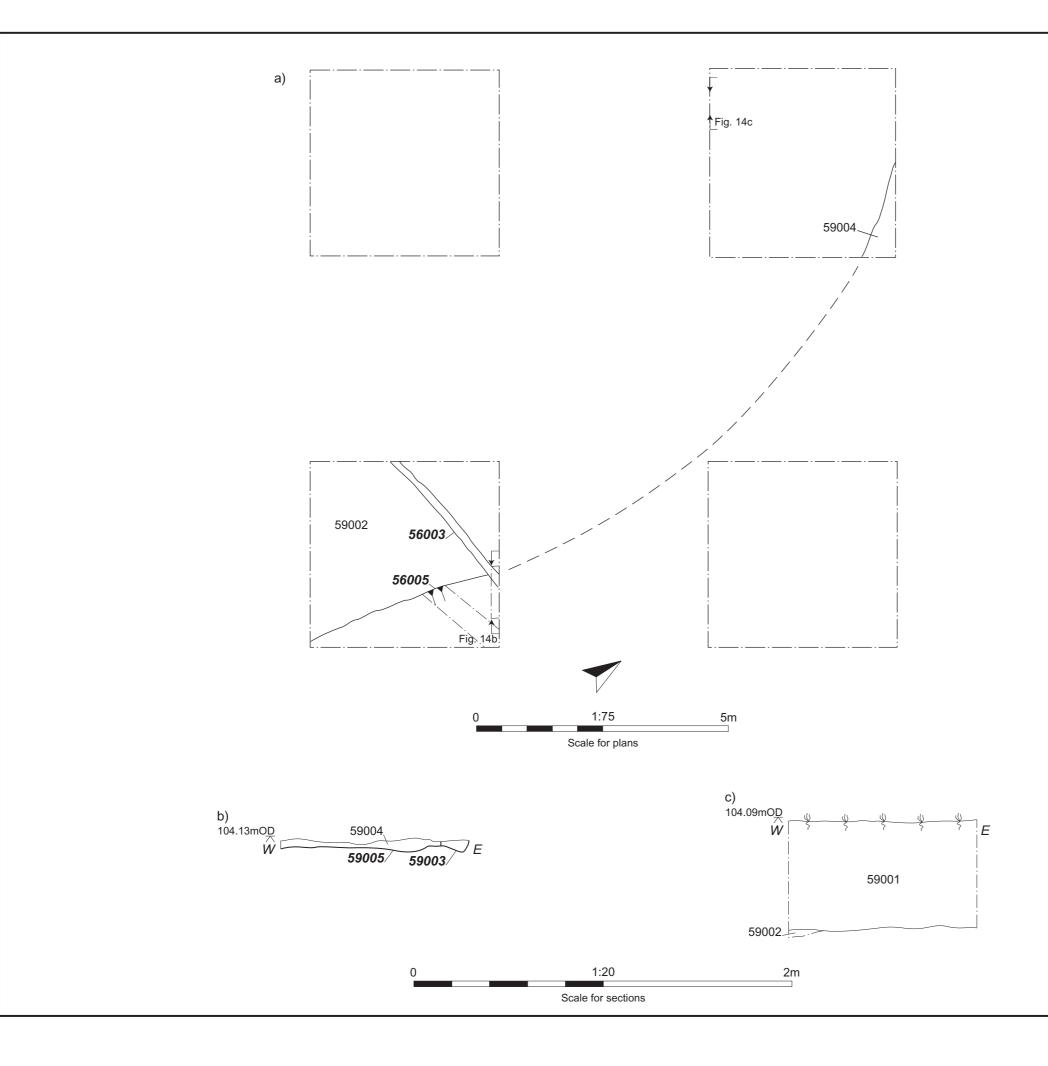


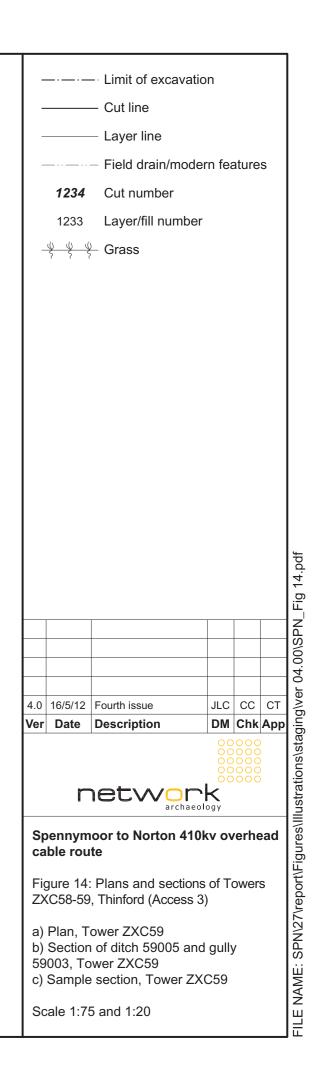


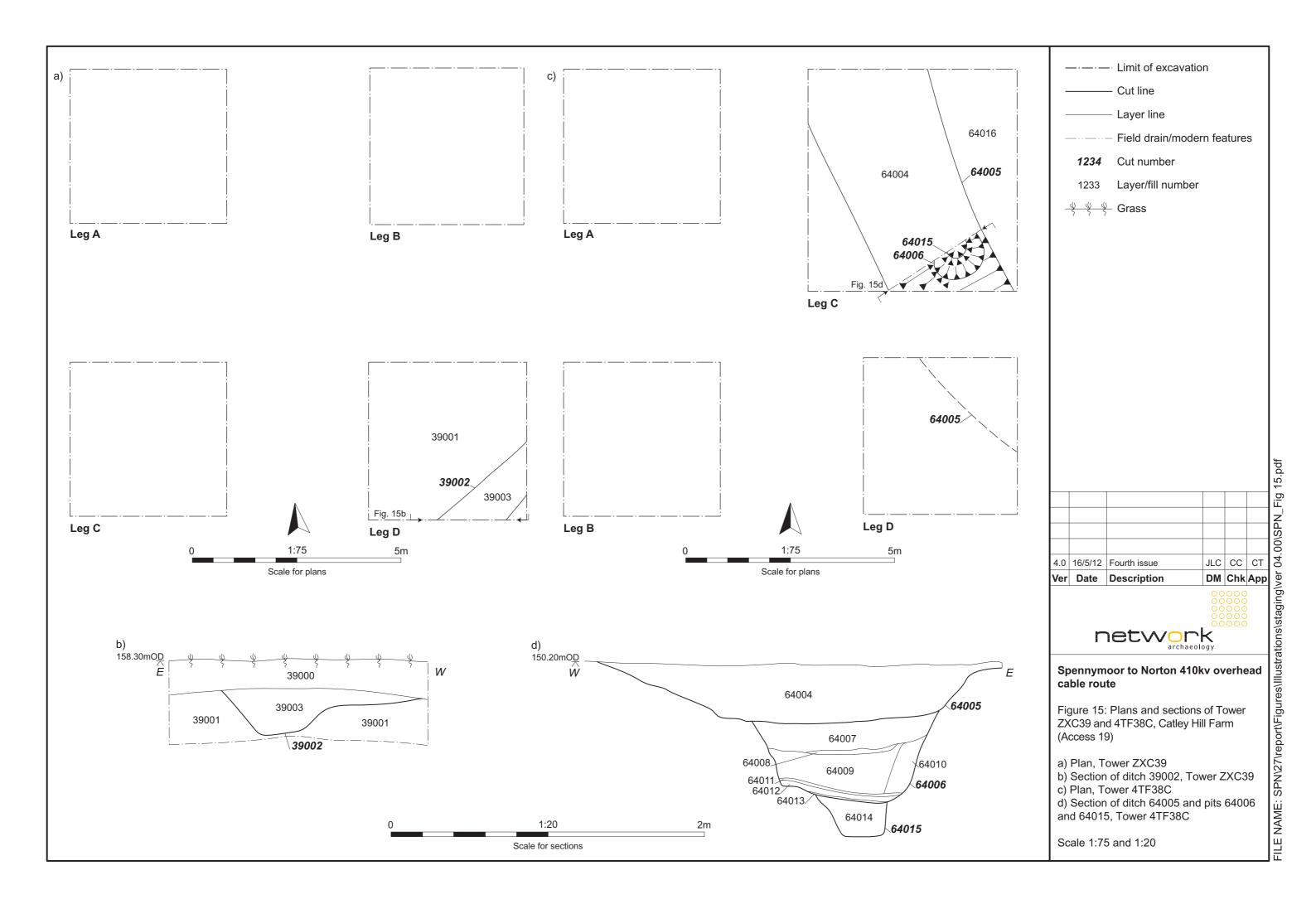


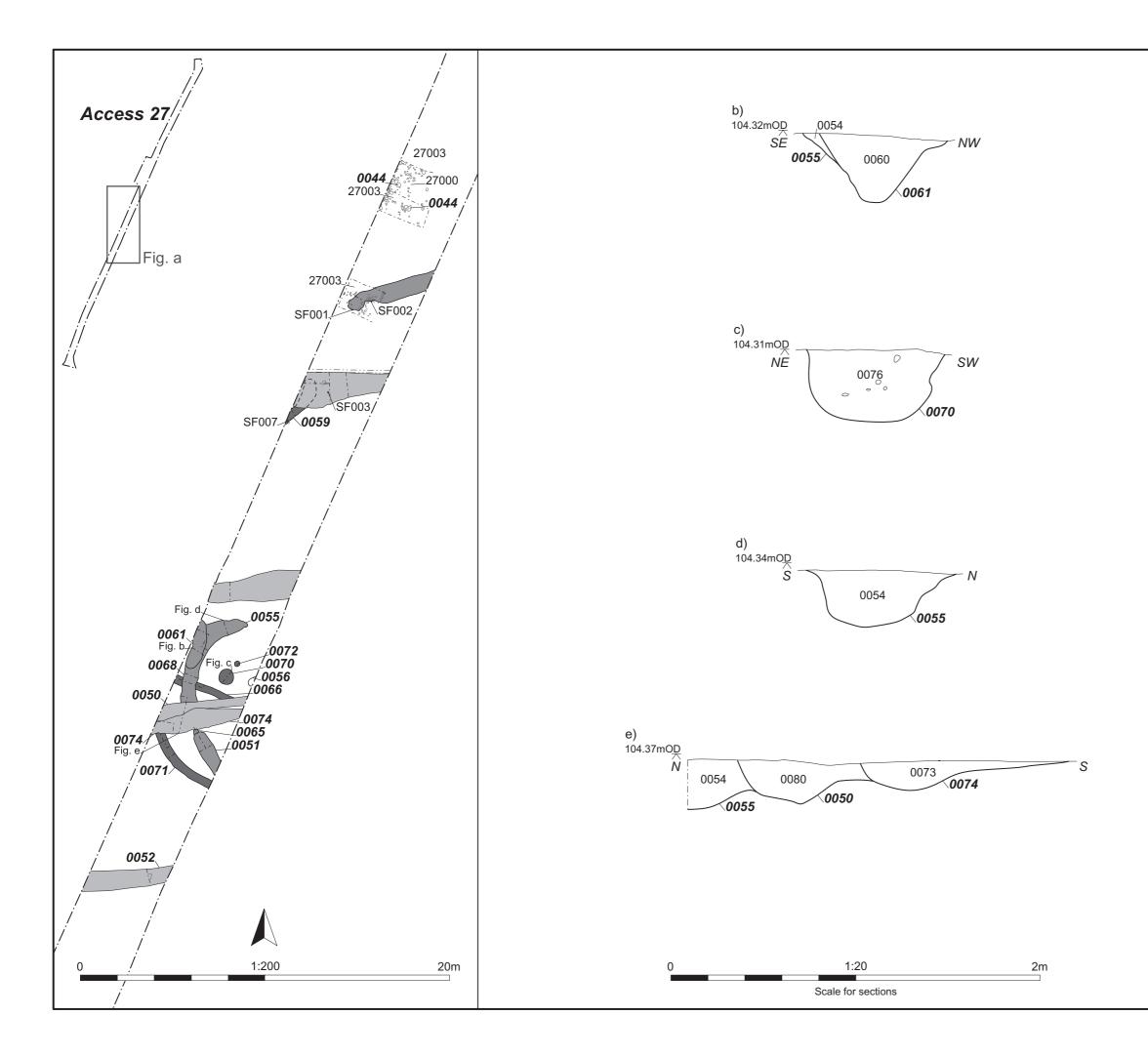
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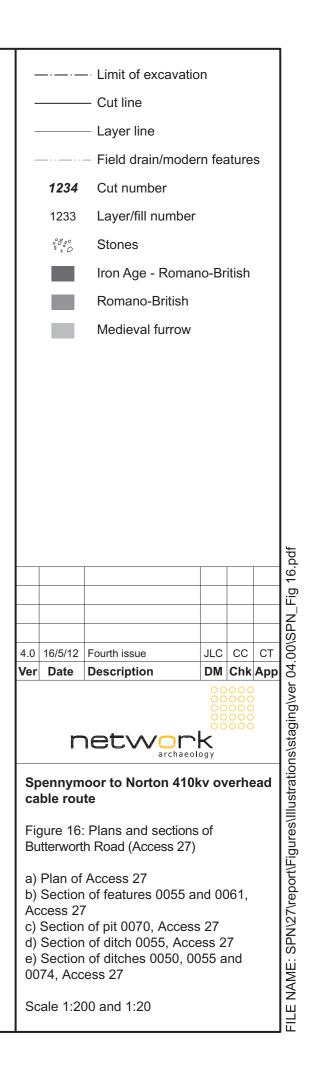
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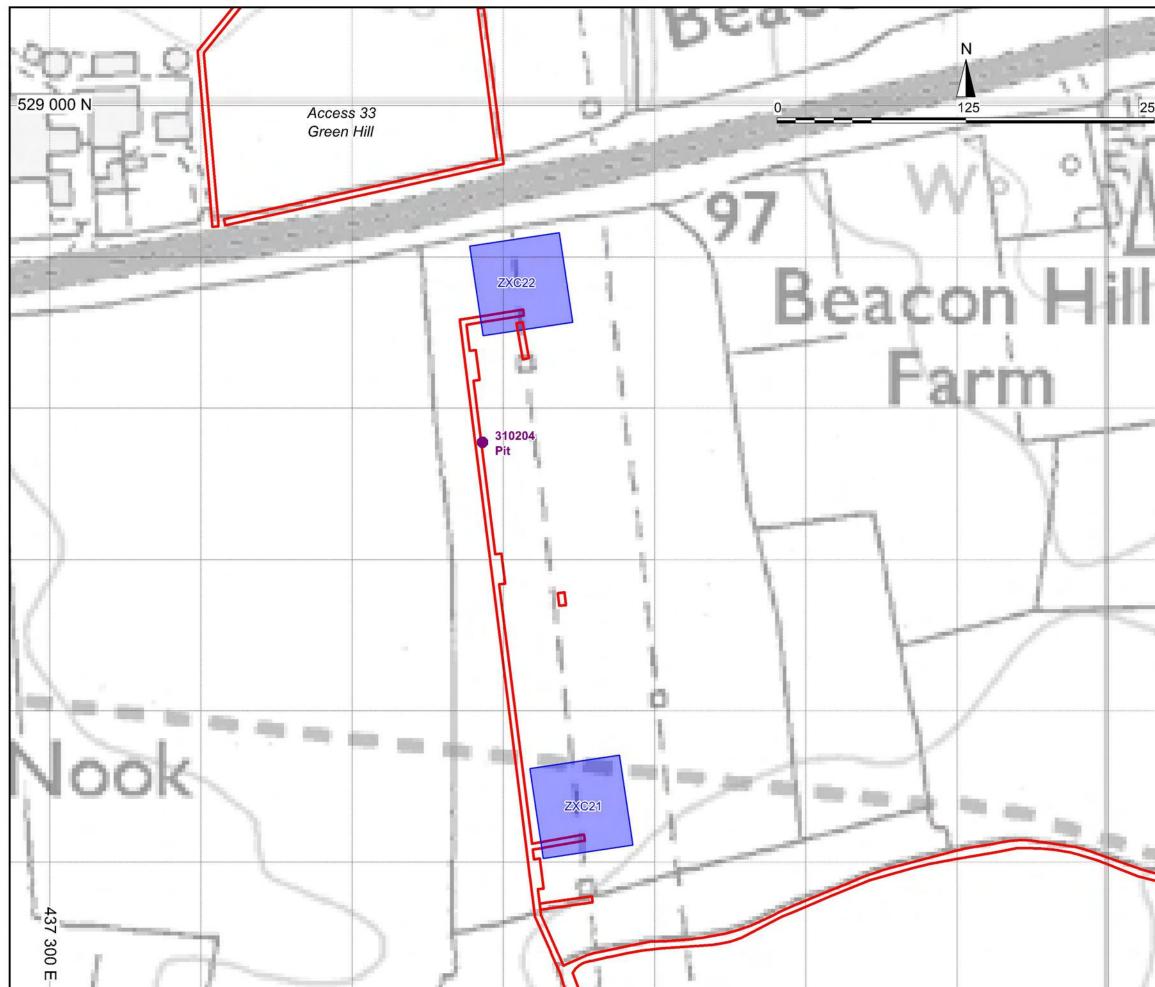




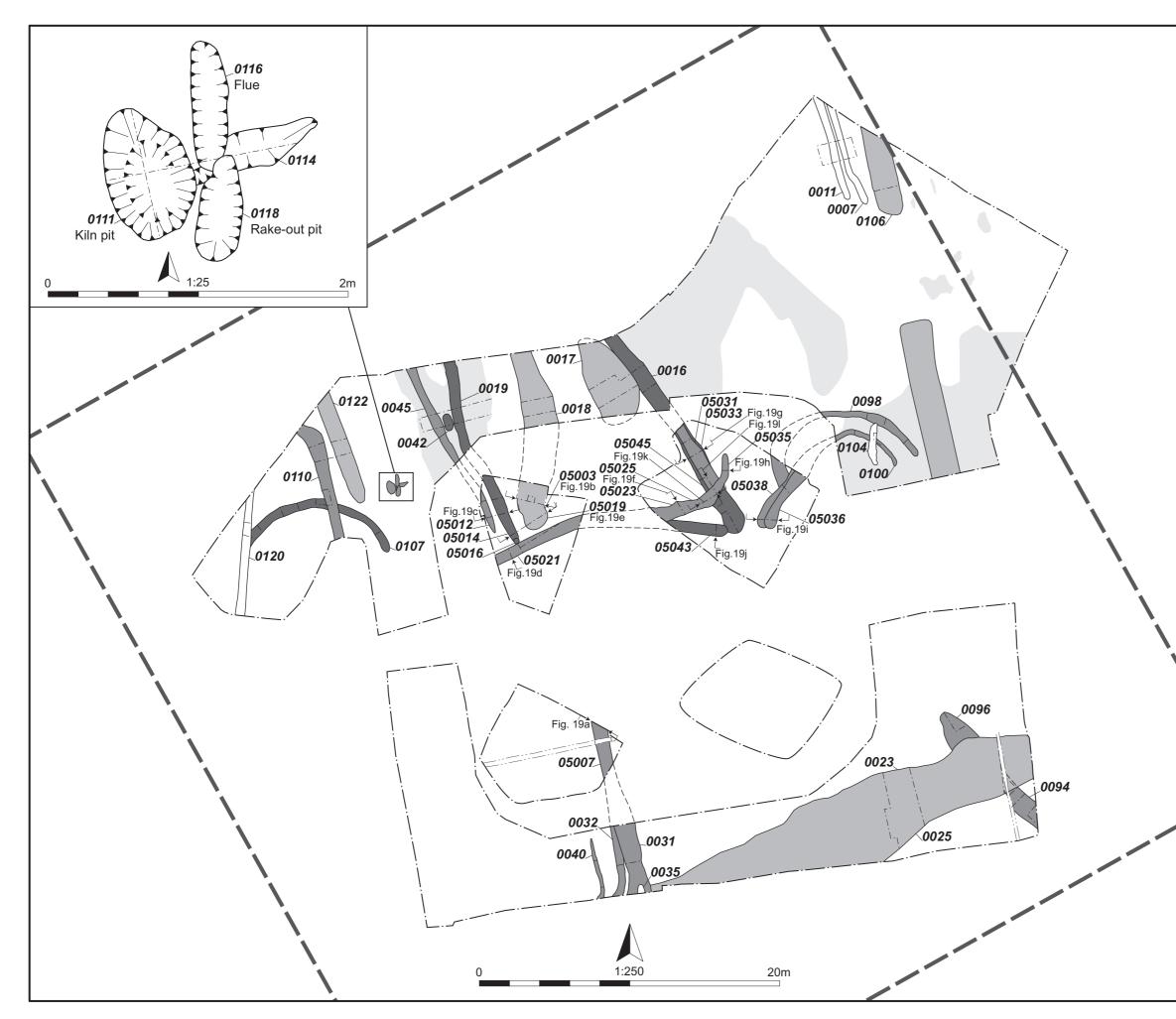


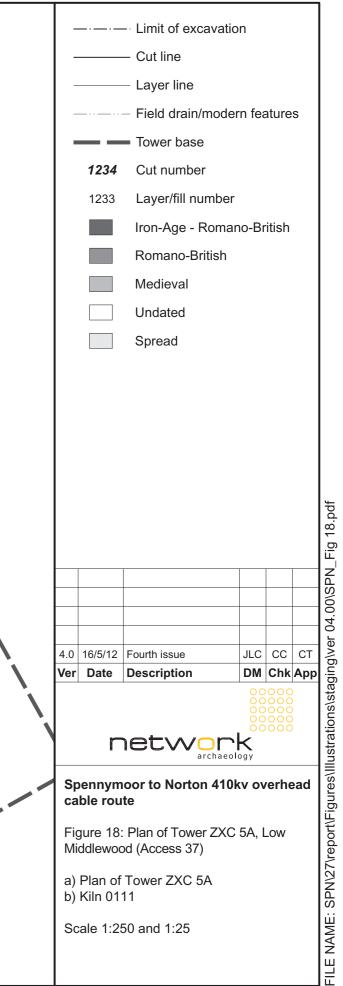


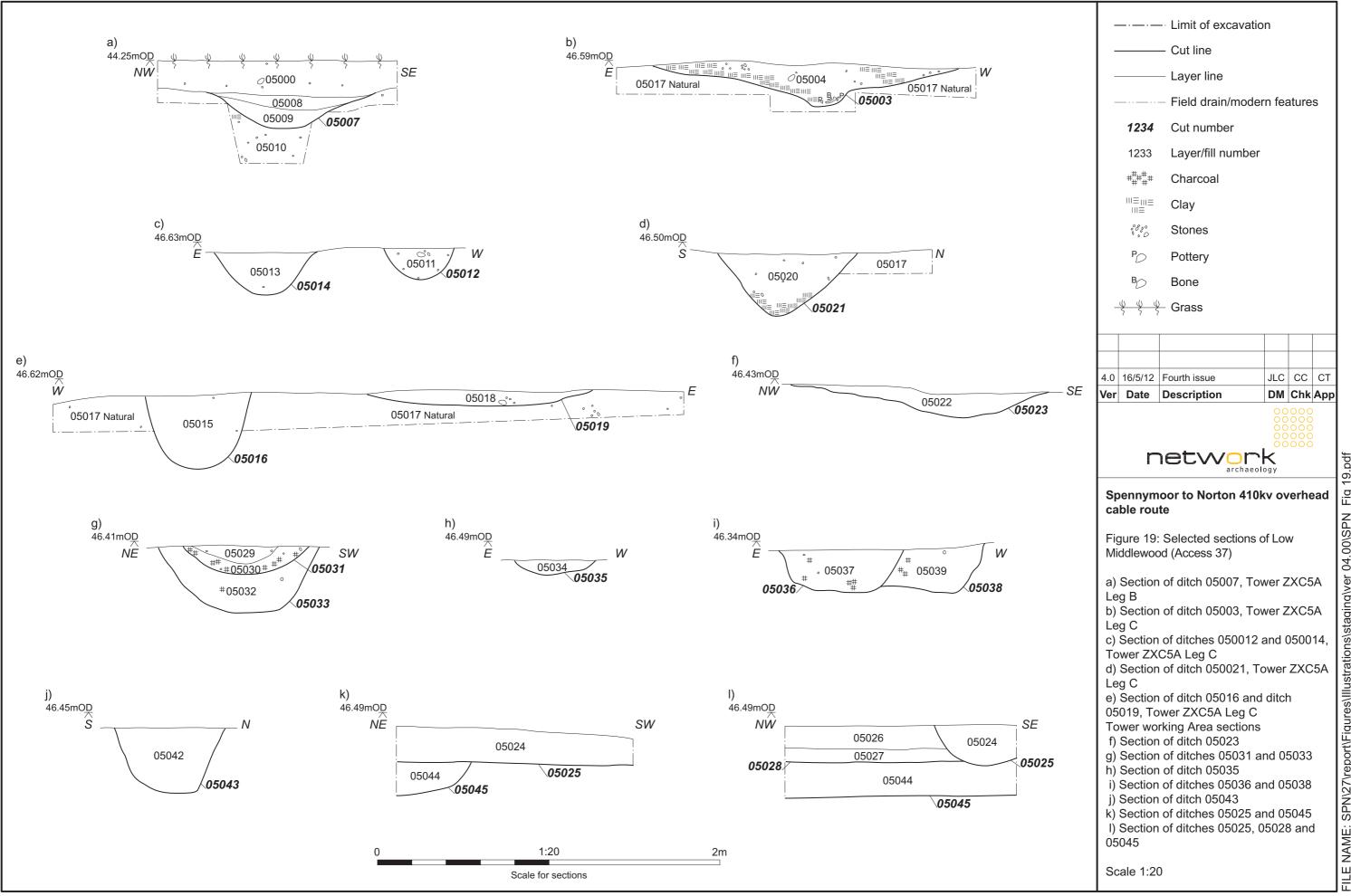


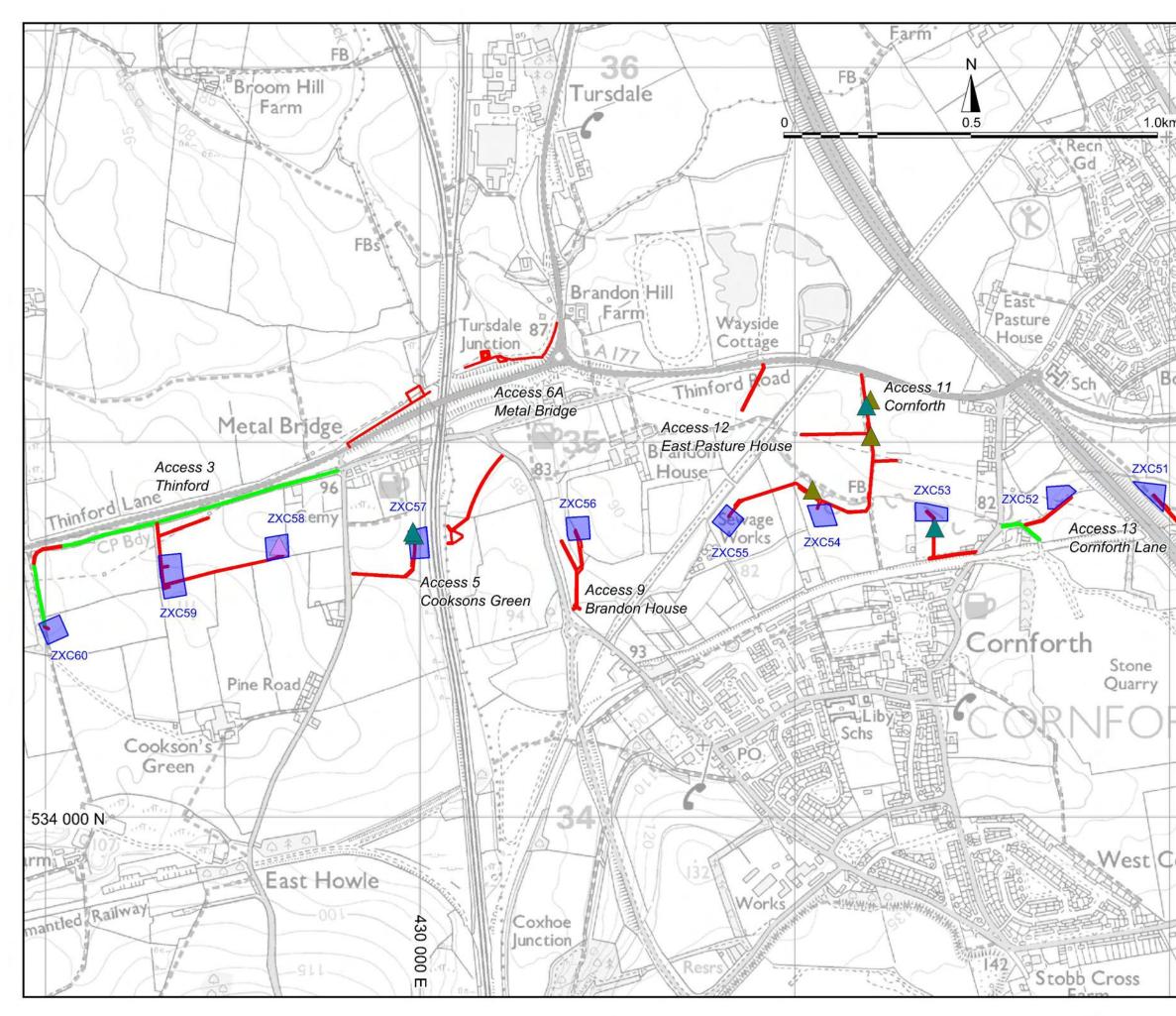


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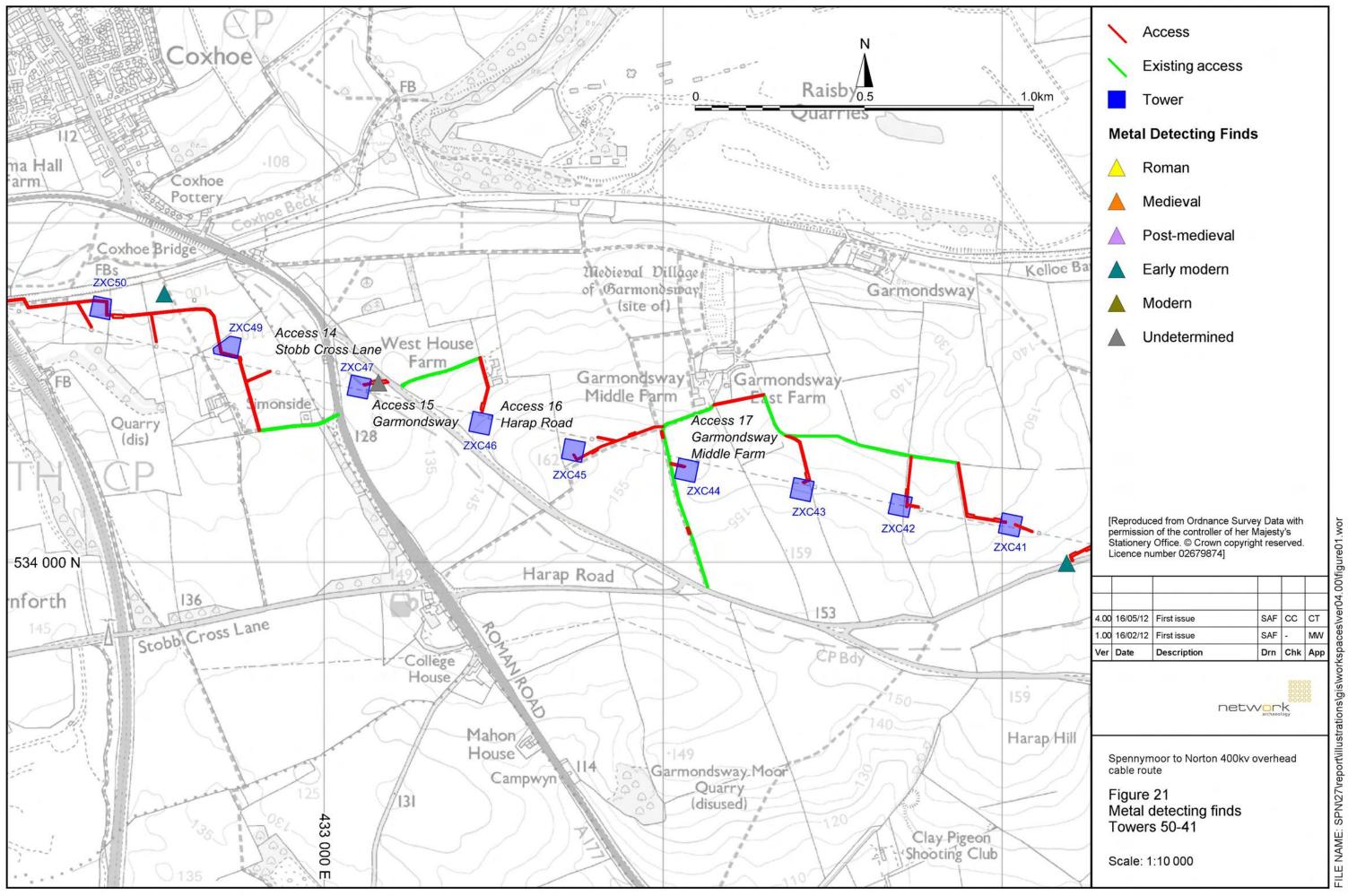




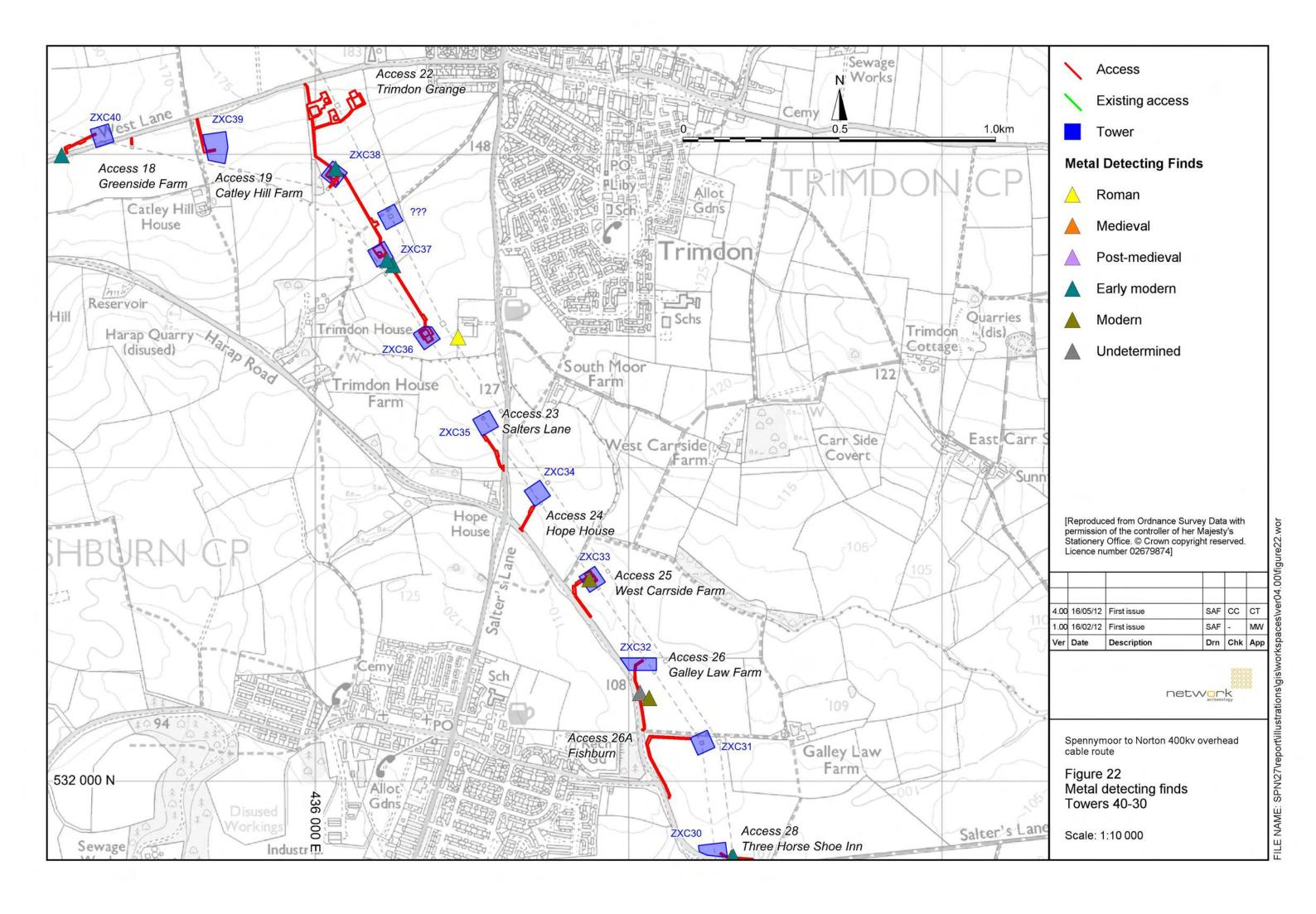


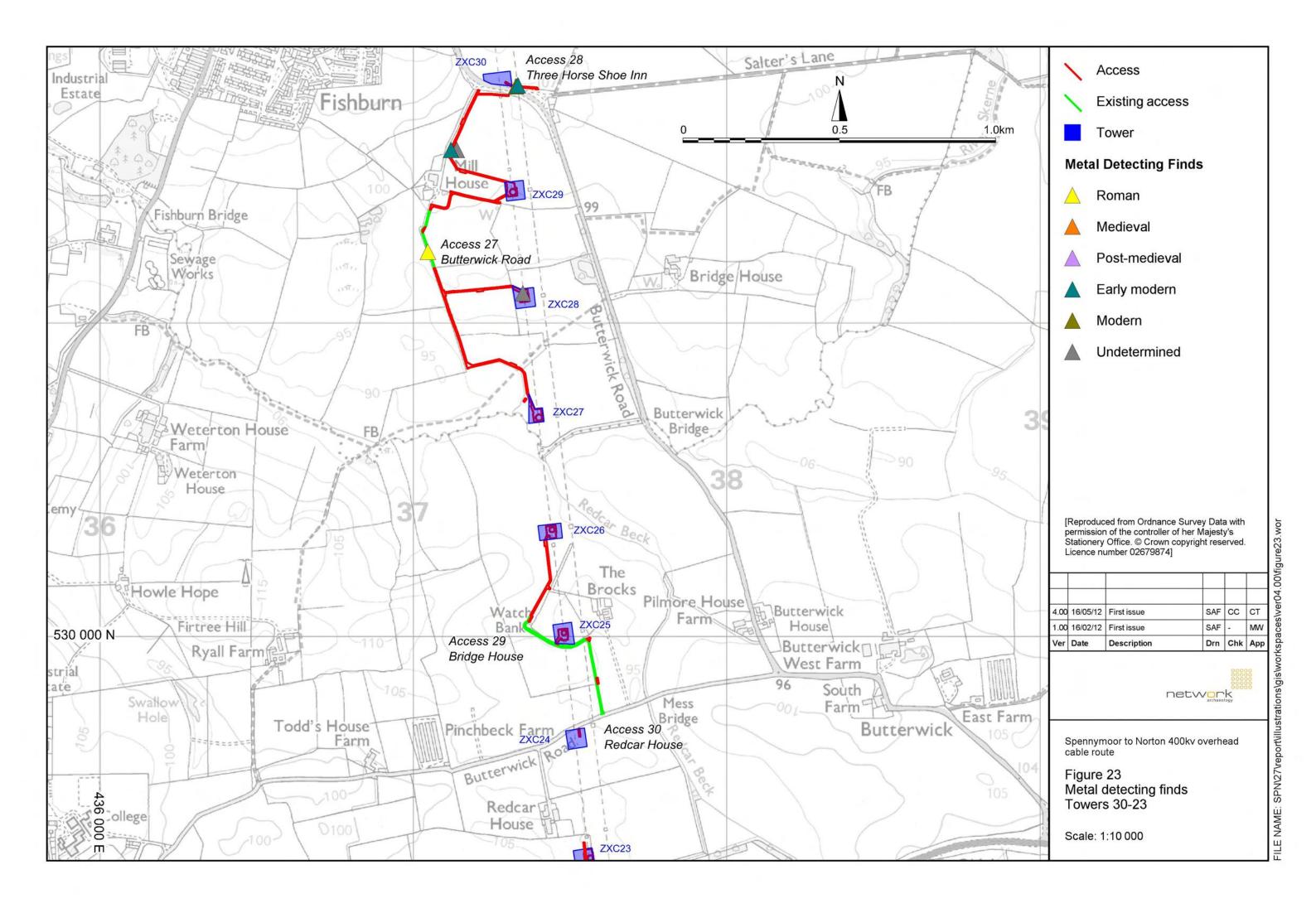
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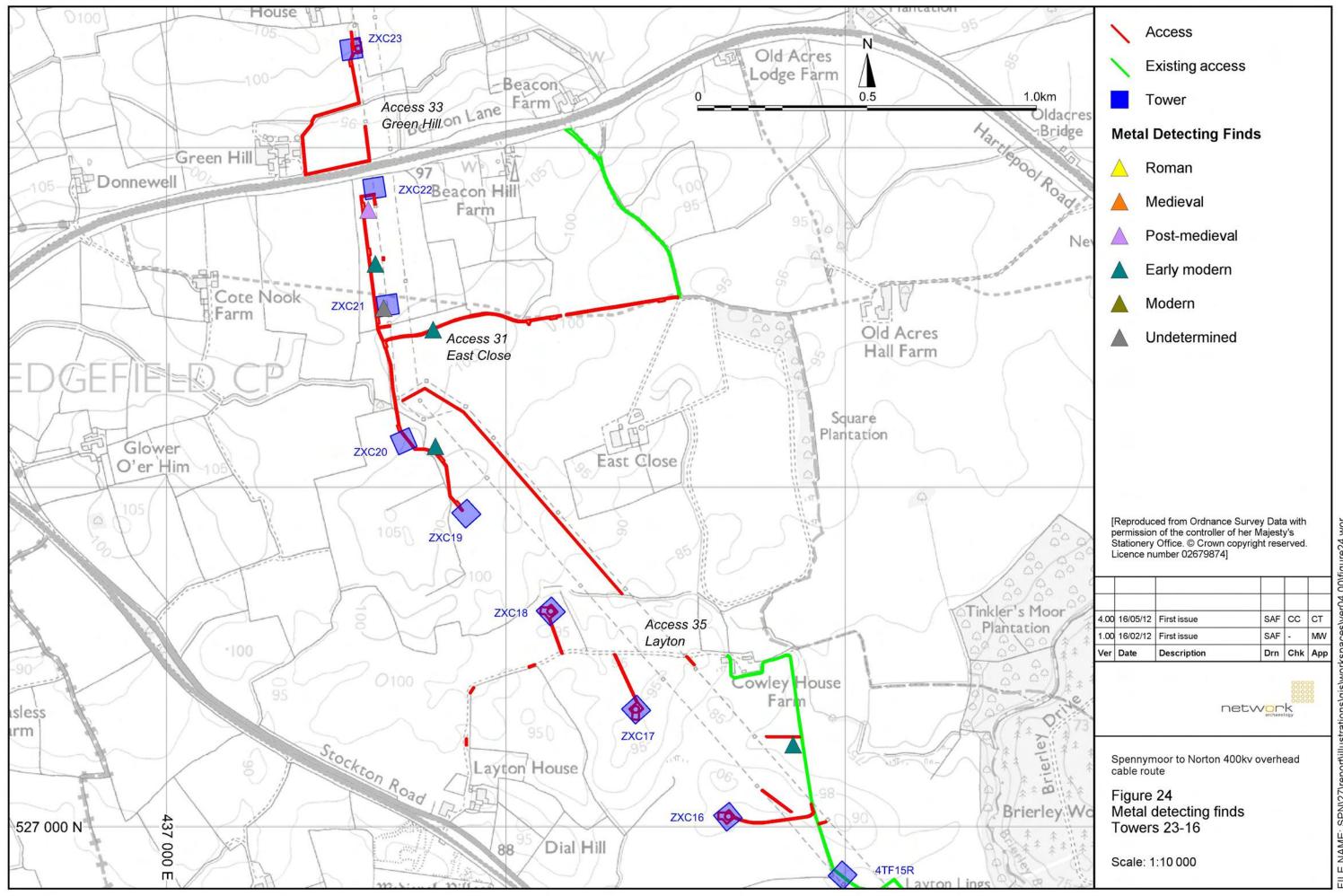
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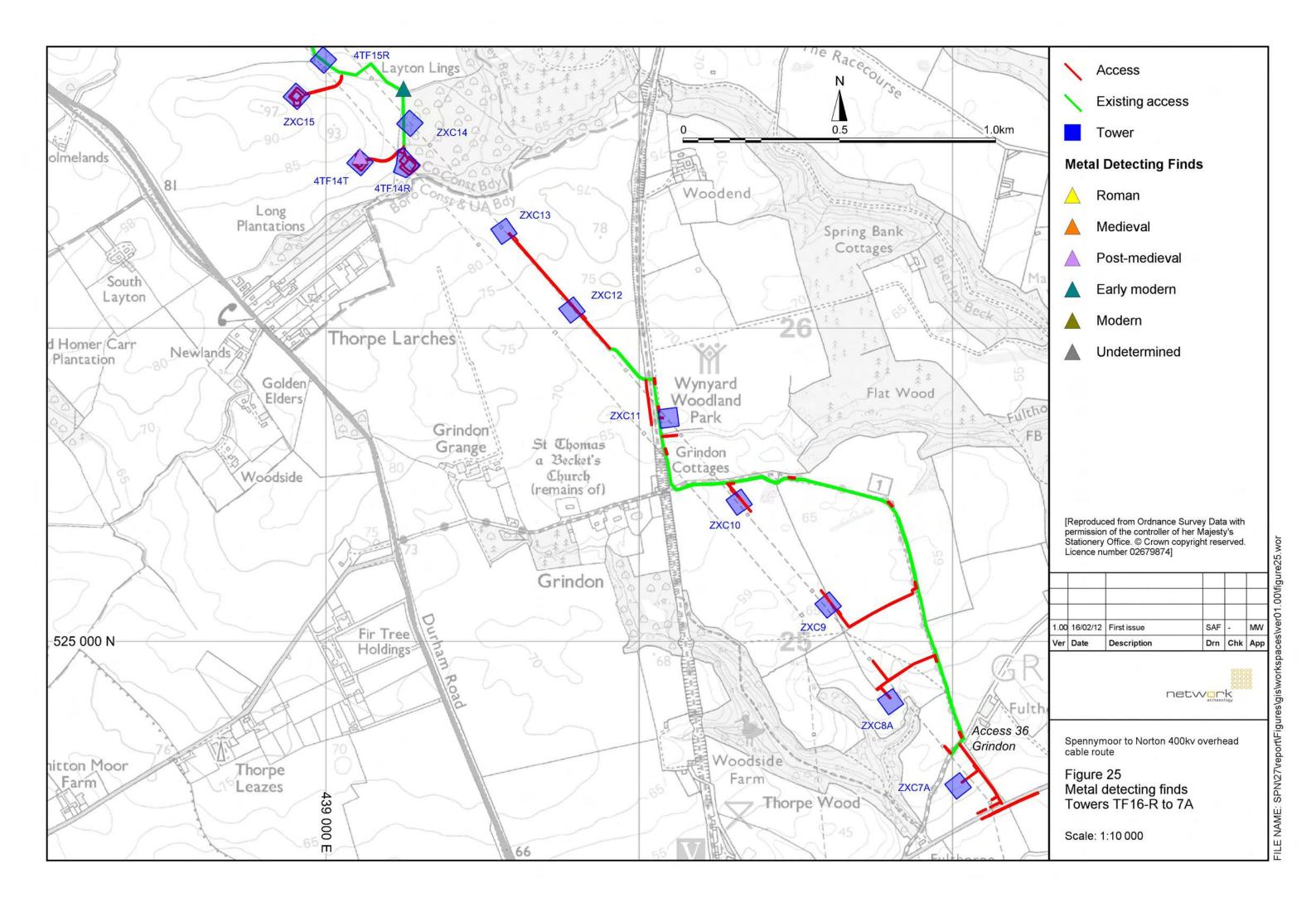
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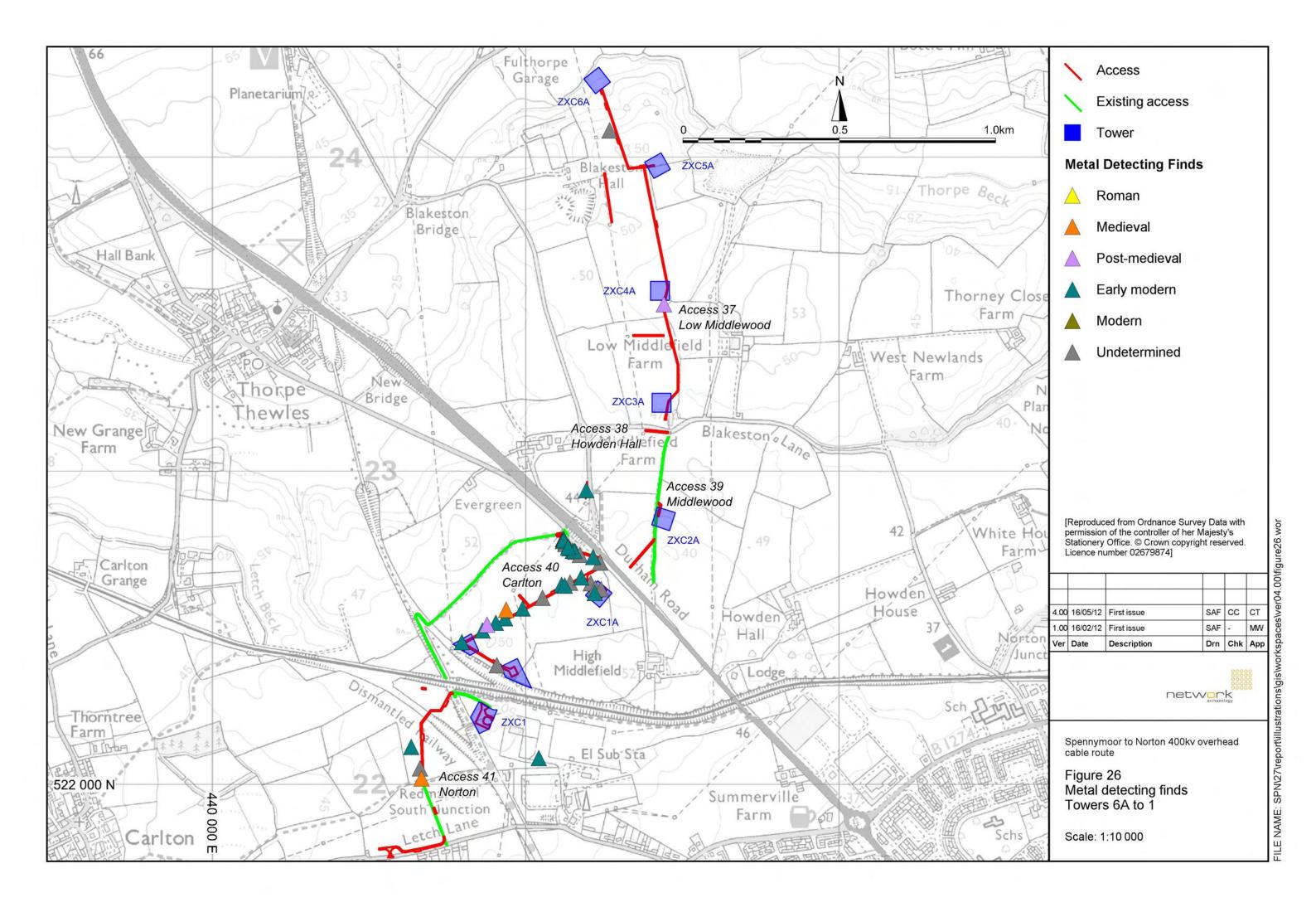


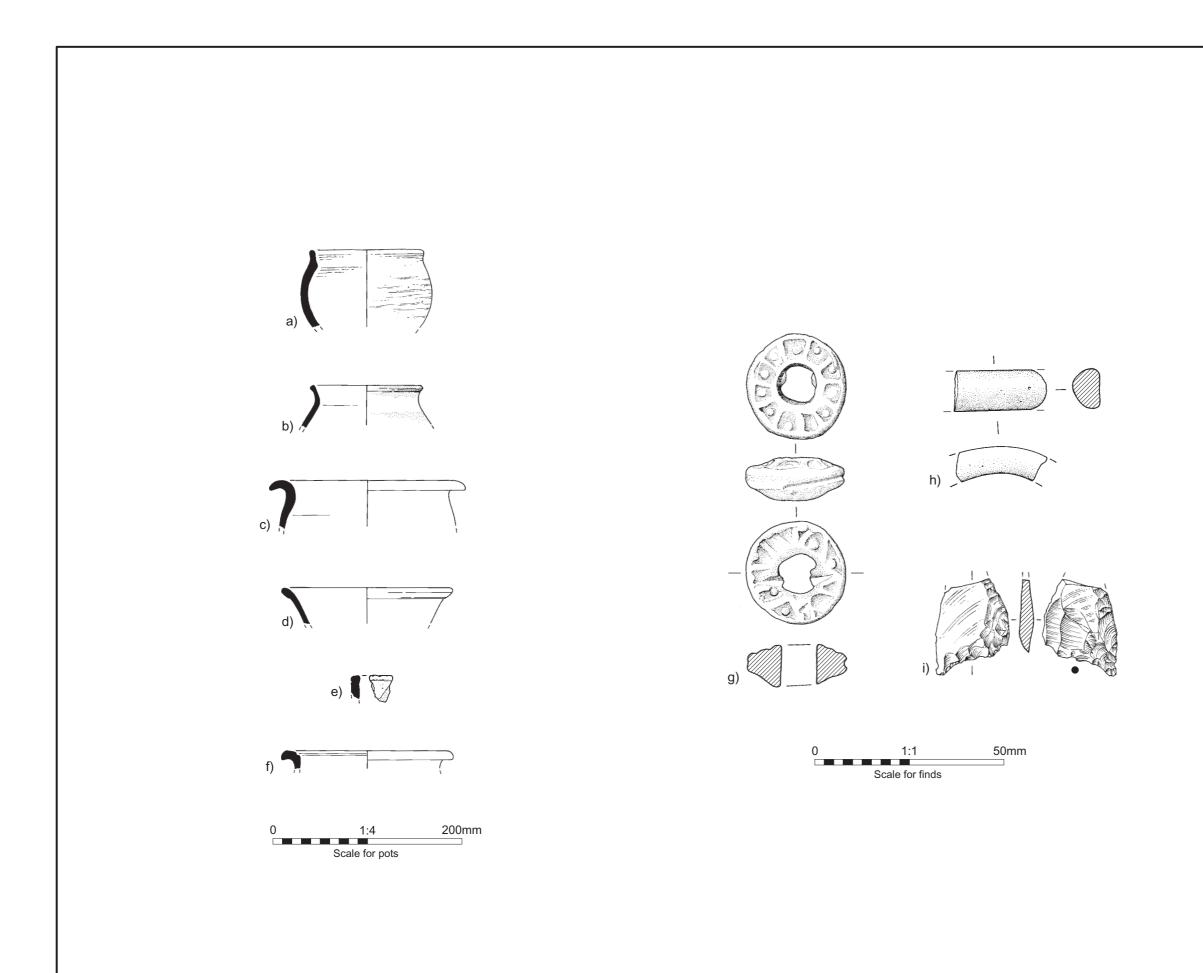




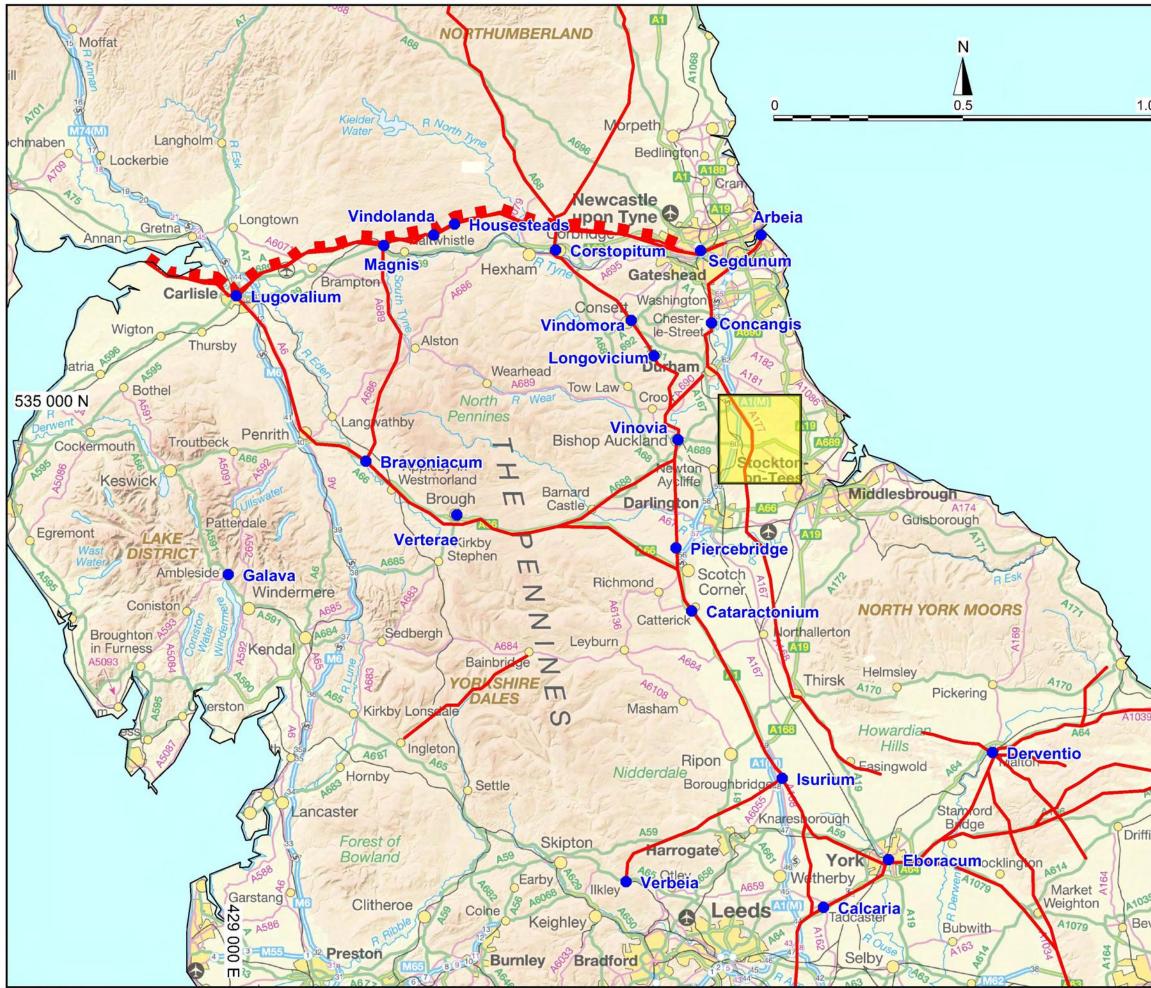
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