

**AN ARCHAEOLOGICAL EVALUATION
AT SPITAL HOUSE FARM,
NEWBIGGIN-BY-THE-SEA,
NORTHUMBERLAND**

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DECEMBER 2015


PRE-CONSTRUCT ARCHAEOLOGY

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**SPITAL HOUSE FARM, NEWBIGGIN-BY-THE-SEA,
NORTHUMBERLAND**

EVALUATION REPORT

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**An Archaeological Evaluation at Spital House Farm, Newbiggin-by-the-Sea,
Northumberland**

Central National Grid Reference: NZ 3040 8721

Site Code: SHF 15

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1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological trial trenching evaluation was undertaken at Spital House Farm, Newbiggin-by-the-Sea, Northumberland by Pre-Construct Archaeology Limited on 23rd November–3rd December 2015. The site is situated at the southern boundary of the small town of Newbiggin-by-the-Sea in south-east Northumberland on the north side of the B1334 road. The farmstead is located approximately 0.5km from the foreshore and at the time of the investigations was occupied by the buildings of Spital House Farm and an area of open pasture to the north-east. The central national grid reference of the site is NZ 3040 8721.
- 1.2 The work was commissioned by Ryder Architecture; an Outline Planning Application (15/01888/OUT) has been submitted for the redevelopment of Spital House Farm into residential use that will consist of 78 dwellings ranging in size from one to four bed homes.
- 1.3 An archaeological desk-based assessment of the site was carried out in 2014 by The Archaeological Practice. The assessment found that there were no sites listed in the Historic Environment Record within the development area, however two sites of potential cultural heritage significance were identified; the early mid-19th-century Spital House Farm and ridge and furrow earthworks in the field between the farm and the housing estate to the north-east. No sites of prehistoric or Romano-British date had been identified in the development area however recent archaeological work across south-east Northumberland has identified a number of previously unrecorded prehistoric sites. The coastal location of Spital House Farm would have been a particularly attractive site for prehistoric settlement.
- 1.4 A programme of archaeological trial trenching was recommended to establish whether significant archaeological remains survived within the development area and if so, in what specific locations. This was to determine what the precise impact of the development would be and in what way that impact might be avoided or otherwise mitigated. A Written Scheme of Investigation was produced by Pre-Construct Archaeology before the work commenced and was approved by the Assistant County Archaeologist, Northumberland County Council Conservation Team.
- 1.5 A total of eleven trenches were excavated to evaluate the archaeological potential of the site. Two 2m x 12.5m trenches were placed within the farmstead between areas of hardstanding and a further nine 2m x 25m trenches were situated in a field of open pasture located to the north-east of the farm.
- 1.6 No deposits or features of archaeological significance were encountered during the evaluation. The trial trenching evaluation has established that the ridge and furrow earthworks identified in the desk-based assessment are of post-medieval date.

- 1.7 Natural boulder clay - representing the drift geology of the area - was exposed across the base of all of the evaluation trenches. The maximum depth below existing ground level at which boulder clay was recorded was 0.77m in Trench 2, located in the north-west part of the site at 10.38m aOD, this depth being due to the deposition of ground raising dumps/demolition material.
- 1.8 Evidence of post-medieval agricultural activity was recorded in Trenches 3–11 in the form of NE–SW aligned ridge and furrows. The narrow spacing of the furrows, which on average were 2.60m apart, is typical of post-medieval ploughing.
- 1.9 A sub-soil was recorded in Trenches 1 and 2, and ranged in thickness from 0.10m in Trench 1 to 0.35m in Trench 2. Ground raising deposits of rubble and stone were noted in Trenches 1 and 2 and perhaps represent demolition material from farm buildings that once occupied the north-west corner of the farmstead.

2. INTRODUCTION

2.1 General Background

2.1.1 This report describes the methods and results of an archaeological evaluation carried out by Pre-Construct Archaeology (PCA) between the 23rd November and 3rd December 2015 on land at Spital House Farm, Newbiggin-by-the-Sea, Northumberland. The work was commissioned by Ryder Architecture (the Client). The site is located at the southern boundary of the town on the north side of the B1334 road (Figure 1).

2.1.2 The archaeological potential of the site was established by a desk-based assessment (DBA) (The Archaeological Practice 2014). The assessment found that there were no sites listed in the Historic Environment Record within the development area, however, two sites of potential cultural heritage significance were identified; 19th-century Spital House Farm and ridge and furrow earthworks to the north-east of the farm. The site was also considered to be of interest as recent archaeological work across south-east Northumberland has identified a number of previously unrecorded prehistoric sites. The coastal location of Spital House Farm, adjacent to a stream, would have been a particularly attractive site for prehistoric settlement.

2.1.3 A Written Scheme of Investigation (WSI) was prepared by PCA (PCA 2015) prior to the fieldwork and was approved by Nick Best, Assistant County Archaeologist at Northumberland County Council Conservation Team. The Conservation Team provide archaeological advice to the Local Planning Authority (LPA).

2.1.4 At the time of writing, the Site Archive is housed at the Northern Office of PCA, at Unit 19a, Tursdale Business Park, Durham. The completed Site Archive, comprising the written, drawn and photographic records, will be deposited at the Great North Museum in Newcastle-upon-Tyne, under the site code SHF15. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the evaluation is: preconst-234076.

2.2 Site Location and Description

2.2.1 The site lies on the Northumberland coast on the southern edge of the town of Newbiggin-by-the-Sea, c. 2.5km east of Ashington, at National Grid Reference NZ 3040 8721 (Figure 1). It is located north of the B1334, approximately 0.5km from the foreshore and at the time of the investigations was occupied by the buildings of Spital House Farm and an area of pasture to the north-east.

2.2.2 The development area comprises a trapezoidal block of land which measures a maximum of 190m NW–SE by 120m NE–SW, covering c. 2.34h (Figure 2). It is bounded to the north-east by the rear gardens of properties on Spital Road, open pasture to the north-west, and the Spital Burn to the south-west, with arable fields

beyond the stream. To the south-east, across North Seaton Road, lies an open field of pasture and an allotment area.

- 2.2.3 The development site includes a substantial former farmhouse that faces onto the B1444. A disused farmstead lies to the rear which is enclosed by stone walls and fences. The farmstead comprises, on the east side, a two-storey mid-19th-century building with a single-storey range projecting forward at its east end. Behind this to the north there are two steel-framed sheds typical of modern farms. On the west side lie the remains of three parallel building ranges that are perhaps former barns and byres. To the north-west are two Dutch barns and another steel-framed shed and at the northern end of the site are areas of hard standing, a silage clamps and paddock where rows of pig sties or similar structures once stood (The Archaeological Practice 2014).

2.3 Geology and Topography

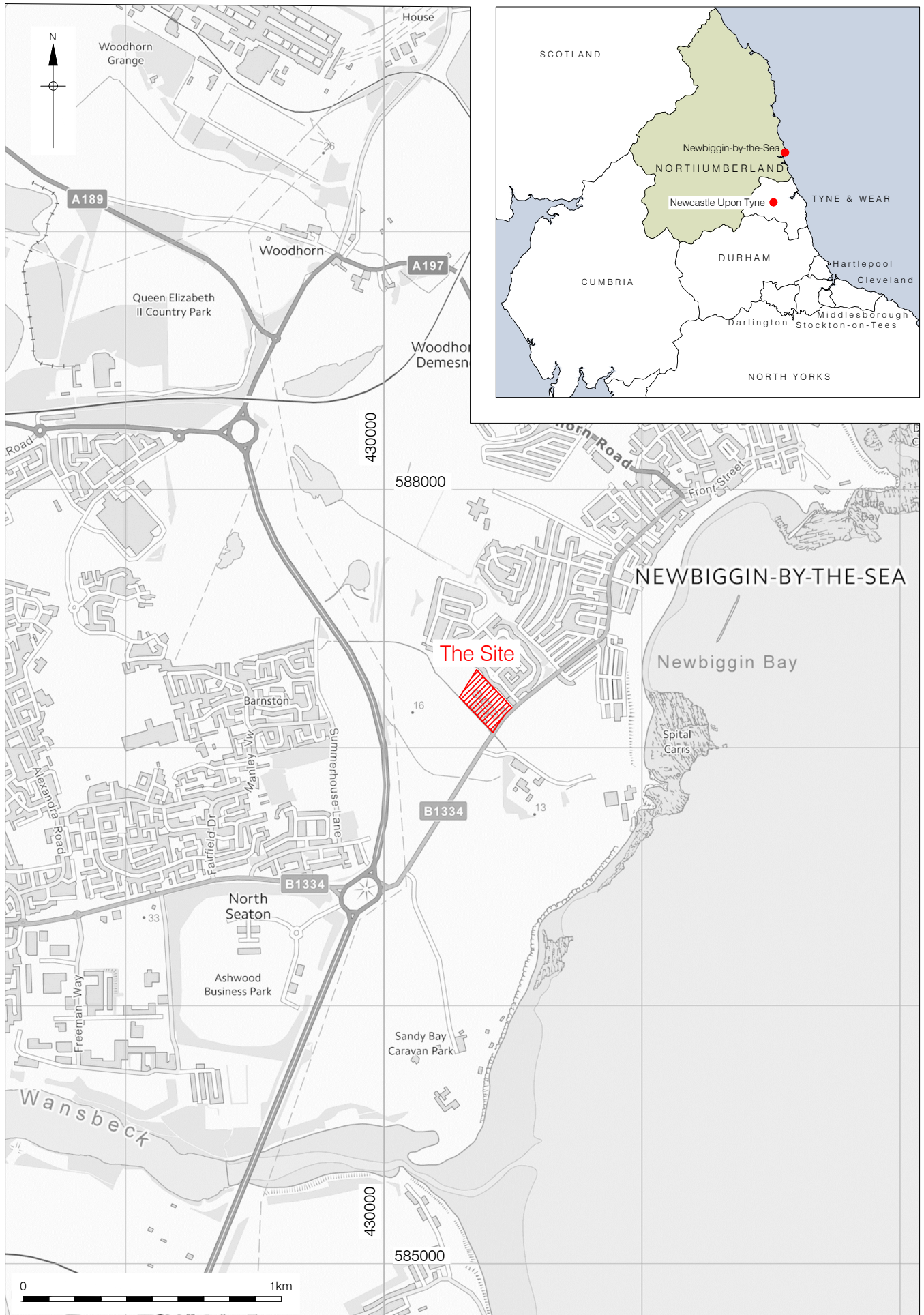
- 2.3.1 The solid geology of this part of Northumberland broadly comprises mudstones, siltstones and sandstones of the Pennine Middle Coal Measures Formation. The superficial deposits comprise Devensian tills (British Geological website).
- 2.3.2 The development area is situated within the coastal lowlands of south-east Northumberland. The Spital Burn, which forms the south-western boundary of the site, flows south-eastwards past the farmstead, then eastwards issuing into the sea just north of Spital Point. The site slopes down from a level of c. 11m aOD in the north corner to c. 8.90m in the southern corner.

2.4 Planning Background

- 2.4.1 An application for Outline Planning Permission has been submitted to Northumberland County Council (15/01888/OUT). The outline application entails the redevelopment of Spital House Farm and the construction of 78 dwellings in the immediate area.
- 2.4.2 The *National Planning Policy Framework* (NPPF) (Department for Communities and Local Government 2012) enables planning authorities to request trial trenching within areas of archaeological potential in order to ascertain the nature and extent of any below ground remains likely to be impacted by development. The NPPF aims to balance the demands of development with conservation, respecting both national standards and local empowerment but carries a presumption in favour of sustainable development.
- 2.4.3 The work to be undertaken prior to the determination of the application was in line with paragraph 128 of NPPF:

“Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation”

- 2.4.4 As described in the DBA (The Archaeological Practice 2014) and noted by Nick Best, Assistant County Archaeologist for Northumberland, this part of the Northumberland coastal plain is known as being an area of high archaeological potential.
- 2.4.5 No Specification for the archaeological work was produced; instead a WSI was produced by PCA (2015) and approved by the Conservation Team. This included methodologies for the fieldwork and post-excavation stages of work (Appendix 4).



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Figure 1
 Site Location
 1:2,000,000 & 20,000 at A4

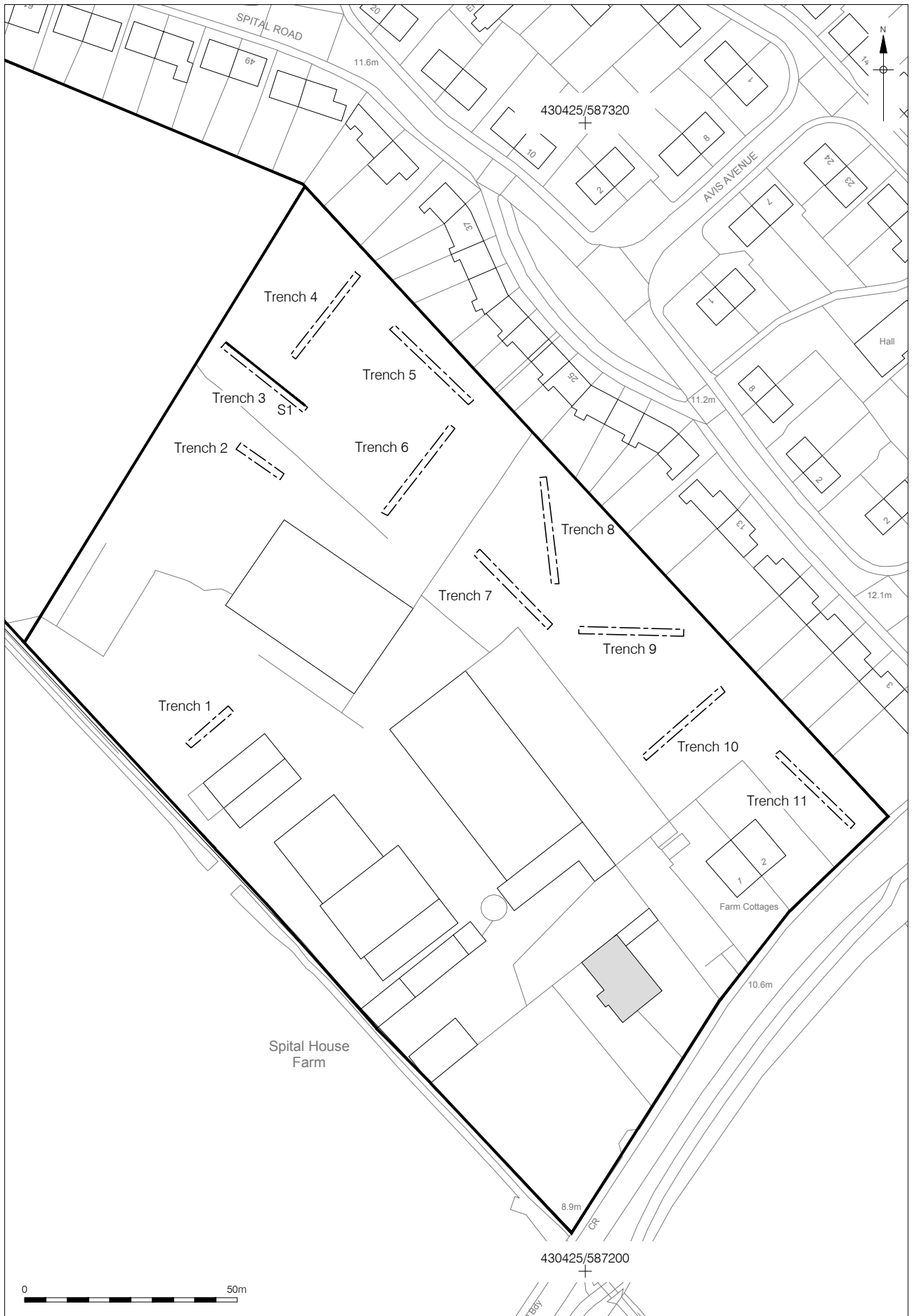


Figure 2
 Trench Locations
 1:1,250 at A4

2.5 Archaeological and Historical Background

The archaeological DBA undertaken in 2014 has been used as the basis of the following summary, the research and writing of those responsible for the DBA is gratefully acknowledged. Keys to the Past, which summarises the Historic Environment Record (HER) of Northumberland and Durham, and the Northumberland Communities website, have also been used as resources for this background.

- 2.5.1 The area around Newbiggin has produced a large amount of material relating to the earliest periods of human activity in northern Britain, specifically assemblages of flint tools and waste debris left by Mesolithic hunter-gatherers. The coastal district around the mouth of the Wansbeck (1.7km to the south) represented a relatively resource rich area providing wildlife habitats suitable for hunter-gatherer exploitation (The Archaeological Practice 2014).
- 2.5.2 There is much less evidence for the presence of early farming communities associated with the subsequent Neolithic period and the early Bronze Age. However, flint scrapers recovered from work at Sandy Lane between 2004 & 2006 are dated to the late Neolithic/Early Bronze Age. More substantial remains representing an Early Bronze Age burial site have been uncovered 0.7km south-east of the development site in the form of a stone-capped cist burial (HER 12045).
- 2.5.3 The archaeological desk-based assessment of the site noted that no monument of the later prehistoric or Roman periods has been identified within the site or the wider 1km search area around the site. However, considerable evidence for these periods has been identified in the wider landscape of the Wansbeck valley. The site is set within a landscape which was widely occupied during the Late Iron Age and early Roman period by agricultural settlements. A pattern of late prehistoric and early Roman small farmstead ditched enclosures is now well documented on the south-east Northumberland coastal plain. Numerous rectilinear enclosures have been identified on aerial photographs (Burgess 1984, 163; Petts and Gerrard 2006, 37).
- 2.5.4 Several examples of such small ditched settlements, thought to represent single household farmsteads, were excavated in Northumberland by George Jobey from the 1950s to the 1980s, including at Hartburn towards the western extent of the Wansbeck (Jobey 1973). These investigations were generally conducted as 'rescue excavations' ahead of the destruction of the sites by development and with limited time and resources excavation focused on the ditch circuit and internal areas. More recent large-scale developer funded excavations in advance of housing schemes and opencast mining have revealed evidence for a wider range of settlement types and in some case for extensive field systems associated with settlements (Proctor 2009, 101; Hodgson *et al.* 2012).

- 2.5.5 Large-scale excavation in 2000 at Pegswood Moor, Morpeth, (c. 10km to the west of the site), ahead of opencast mining revealed a multi-phase settlement with areas of habitation set within extensive field and enclosure systems (Proctor 2009). Roundhouses were enclosed by ditches of much smaller proportions than the ditched enclosures previously identified in the region and it is noteworthy that this settlement and its extensive field systems were not visible as cropmarks on aerial photographs of the site. This was presumed to be due to a combination of the relatively insubstantial nature of most of the features coupled with the fact that the ditches contained little organic or occupation debris and were infilled with soils of very similar composition to the natural clay through which they were cut. This work was instrumental in highlighting the fact that it is possible for hitherto unknown substantial and extensive settlements to be present on the south-east Northumberland coastal plain.
- 2.5.6 Numerous cropmarks of enclosures identified on aerial photographs are listed on the HER in the region. The density of such cropmarks in the Wansbeck Valley implies that this area of the Northumberland coastal plain was intensively exploited by later prehistoric and early Roman period communities. The settlement distribution along both the north and south banks of the Wansbeck and along its major tributary streams suggests that the proximity to watercourses was a significant factor in determining their of the study site. Without excavation it is not possible to determine their date of origin, but the form of the cropmarks broadly indicates that they are likely to represent Iron Age settlements. As discussed above, the excavated examples of such sites along the coastal plain in the vicinity of the site are all of late Iron Age date, with many having earlier origins as unenclosed settlements. This work has also revealed that occupation of these enclosed settlements ceased by the second century AD at the latest (Proctor 2009; Hodgson *et al.* 2012).
- 2.5.7 Relatively little is known of the early medieval period in the wider area. The area of Woodhorn possibly formed the principal centre of the late Saxon period which formed part of the barony of Balliol (The Archaeological Practice 2014). During the 11th/12th centuries a distinct settlement pattern became apparent on the coastal plain, with the rural populations being concentrated in nucleated villages. Control over these rural communities was exercised from baronial earthwork castles such as Mitford, Haw Hill or Bothal or alternatively from ecclesiastical institutions such as those found at the Cistercian Abbey of Newminster or local parish churches at Woodhorn.
- 2.5.8 In the early medieval period, Newbiggin had its own market charter; the first recorded charter dates from 1204. The first reference to fishing was made in the twelfth century when a home and fishing boat were linked to the monks of Newminster Abbey. By the fourteenth century, Newbiggin was an important maritime centre and was called upon by Edward II for support in his campaigns against the Scots in 1336. There are

records of a pier being on the north side of the bay, however this fell into disrepair by 1352. Newbiggin was a major port for the shipping of grain at one time and thought to have been the third most important on the east coast after London and Hull. Traces of the layout of the medieval town can be seen in outlines of burgage plots that run off from Front Street.

- 2.5.9 Newbiggin thrived as a fishing village in the nineteenth century and until 1910 was primarily a fishing village. A colliery was sunk in 1908, which opened after many difficulties being experienced by its engineers in 1910. At its peak, in the 1940s, the colliery employed 1400 men and produced 470,000 tons of coal. The colliery closed in 1967.
- 2.5.10 By the late 1800s, Newbiggin was a popular beach resort. Facilities included a number of hotels and boarding houses. Many prominent families from Northumberland and Newcastle had summer residences here. A promenade along most of the bay, with a bandstand and several shelters along its length was built between 1929 and 1932.
- 2.5.11 Spital House and farmstead is first shown on the tithe map of 1844, but it does not appear on Greenwood's 1828 map of Northumberland indicating a date of construction between these two maps. As described in the DBA, the original layout can be seen on the Ordnance Survey First edition map of 1859 when it consisted of a substantial farmhouse, T-shaped in plan set within a walled garden, facing south-east onto Newbiggin Road with farm buildings behind; a two-storey central range (perhaps a granary over a livestock hemmel) with a single-storey range projecting forward at either end forming an inverted U-plan. A further L-shaped building was attached to the rear of the central, two-storey building. By the end of the 19th century, three parallel NE-SW aligned building ranges had been erected to the west of the original group of farm buildings. Some of these ranges may have housed livestock. Another NW-SE aligned building was added on to the L-shaped building. A further NW-SE aligned row had been added to this group by the 1920s to form a narrow U-plan. At the very rear of the farm compound in the west angle of the plot a pair of small conjoined structures had been added by the 1890s, with a further trio appearing by the 1920s; small yards in front these perhaps represented pig sties or the like. In the later 20th century, large steel and breeze-block built sheds filled much of the farm compound to the north of the earlier buildings and replaced the most northerly U-plan group. The pig sties along the north side of the site were demolished and replaced with silage clamps and open yard areas
- 2.5.12 At the time of the investigations the farm was disused. The original central range plus its east wing survived along with the farmhouse itself. The three NE-SW aligned buildings and rows towards the west also survived, though much altered.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

3.1.1 The project is 'threat-led' with potential to disturb or destroy important sub-surface archaeological remains, if present. Therefore, the broad aim of the project was to inform the Local Planning Authority of the character, date, extent and degree of survival of archaeological remains at the site. Additional aims of the project were:

- to compile a Site Archive consisting of all site and project documentary and photographic records, as well as all artefactual and palaeoenvironmental material recovered;
- to compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, *etc.*

3.2 Research Objectives

3.2.1 Archaeological work at the site provides potential opportunities to address key research objectives as set out in *Shared Visions: The North East Regional Research Framework for the Historic Environment* (NERRF) (Petts and Gerrard, 2006). The NERRF highlights the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.

3.2.2 The site is considered to have the potential to provide a contribution to several 'Key Research Themes' in the NERRF 'Research Agenda and Strategy' for the Bronze Age and Iron Age:

- **ii.** Chronology;
- **iii.** Settlements;
- **iiii.** Landscapes;
- **iv.** The Later Prehistoric Coastal Zone;

3.2.3 In addition, the investigations could also have contributed to research priorities concerning the Roman period as set out in the NERRF Research Agenda:

- **Ri.** The Iron Age to Roman Transition

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

- 4.1.1 The trial trenching evaluation was undertaken 23rd November–3rd December 2015. All fieldwork was undertaken in accordance with the relevant standard and guidance document of the Chartered Institute for Archaeologists (CIfA) (CIfA 2014a). PCA is a CIfA-Registered Organisation. The evaluation was undertaken according to the WSI (Appendix 4) which should be consulted for full details of methodologies employed regarding archaeological excavation, recording and sampling (PCA 2015). PCA's standard manual for fieldwork procedures was also adhered to (PCA 2009).
- 4.1.2 Trial trenching was considered as the most appropriate investigative tool to test the archaeological potential of the site. A total of 11 trenches (Trenches 1–11) were excavated at the locations shown on the attached figure (Figure 2). The trenches were sited at specific locations designed to maximise the potential of the site and to provide the most productive archaeological information and address the research Aims and Objectives.
- 4.1.3 The total area of the trenches was 500 square metres, amounting to an approximate 2.1% sample of the site in total, but around 7% of the area to the north-east, considered to be relatively undisturbed by the former farmstead:
- Trenches 1 & 2 measured 12.5m x 2m at ground level. The trenches were located between the buildings of Spital House Farm. Trench 1 was located at the northern end of the western range of barns and Trench 2 was located to the north of the farm.
 - Trenches 3–11 measured 25m x 2m at ground level. The trenches were all located in a field of pasture with visible signs of ridge and furrows.
- 4.1.4 All trenches were set-out by PCA using a Leica Global Navigation Satellite System (GNSS), with pre-programmed co-ordinate data determined by an office-based CAD operative. The instrument provides corrected Ordnance Survey co-ordinates in real time, to an accuracy of 1cm.
- 4.1.5 All trenches were mechanically-excavated by a wheeled back-acting 'JCB' excavator with toothless ditching bucket under archaeological supervision. The trenches were excavated to the top of the first significant archaeological horizon, or the clearly defined top of the natural sub-stratum, whichever was reached first. All potential archaeological features were identified and marked with sprayline at the time of machine clearance of overburden.
- 4.1.6 Hand cleaning was undertaken in trenches where archaeological features were identified. All potential features were subject to partial or complete excavation within the trenches with photography and archaeological recording taking place at

appropriate stages in the process. All trenches were recorded to some degree, irrespective of whether or not they contained archaeological features.

- 4.1.7 Where archaeological remains were encountered, they were examined in plan and recorded using the 'single context recording' method using the *pro forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. Relevant scale drawings were made and a photographic record was compiled using an SLR camera with black and white 35mm film and a digital SLR camera. Graduated metric scales were used and, in addition, general 'working shots' were taken to show the overall scale of the archaeological operation mounted. A selection of digital photographs from the evaluation is included as Appendix 3 to this report.

4.2 Post-excavation

- 4.2.1 The stratigraphic data for the project is represented by the written, drawn and photographic records. A total of 46 archaeological contexts were defined during the work (Appendix 1). Post-excavation work involved checking and collating site records, and phasing the stratigraphic data (Appendix 2). A written summary of the archaeological sequence was then compiled, as described below in Section 5.
- 4.2.2 During the evaluation, no artefactual material was collected and thus no material was recovered that required assessment. No suitable deposits were encountered to warrant the recovery of bulk samples for palaeoenvironmental material.
- 4.2.3 The complete Site Archive, in this case comprising written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long-term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker 1990) and the ClfA standard and guidance document on archaeological archives (ClfA 2014b). The depositional requirements of the Great North Museum in Newcastle upon Tyne will be met in full.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the evaluation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [123]. The archaeological sequence has been assigned to broad phases on a site-wide basis. Interpretation has been added to the data, where possible, and the phases have been correlated with recognised historical and geological periods, again where possible.

5.1 Phase 1: Natural Sub-stratum

5.1.1 Phase 1 represents the superficial geological material at the base of each of the 11 evaluation trenches. The sub-stratum was variable throughout the area investigated with various compositions of clays, silts and sands being observed. The maximum depth below existing ground level at which the natural sub-stratum was recorded was 0.77m in Trench 2 at 10.38m aOD; this depth due to ground raising dumps/demolition material being deposited in the north-west part of the site.

5.1.2 The maximum height recorded for geological sub-stratum was c. 11.34m aOD in Trench 11, in the eastern part of the development area, and the minimum recorded height was c. 10.20m aOD in Trench 7, located in the centre of the development area. A summary of the strata encountered in each trench is provided in the table below.

Trench	level of natural (m aOD) (highest)	thickness of subsoil (max)	thickness of topsoil (max)	level present ground surface (m aOD)
1	10.45	0.36m	0.15m	10.73
2	10.55	0.35m	0.10m	10.88
3	11.04	n/a	0.44m	10.06
4	11.14	n/a	0.32m	11.08
5	11.02	n/a	0.30m	10.94
6	10.49	n/a	0.38m	10.60
7	10.37	n/a	0.37m	10.71
8	10.64	n/a	0.32m	10.89
9	11.00	n/a	0.35m	11.07
10	11.30	n/a	0.34m	11.07
11	11.34	n/a	0.50m	11.42

5.2 Phase 2: Post-Medieval

5.2.1 Phase 2 represents post-medieval activity at the site in the form of subsoil deposits and ridge and furrows. Subsoil was observed within Trenches 1 and 2, and ridge and furrows were observed in Trenches 3 to 11.

5.2.2 Subsoil [102] and [203] was only recorded in Trenches 1 and 2, the trenches that were located around the farm buildings. The subsoil generally comprised firm, mid greyish brown silty clay, with a maximum recorded thickness of 0.35m in Trench 2 and a minimum thickness of 0.10m recorded in Trench 1. The maximum height recorded for the subsoil was 10.19m aOD in Trench 1.

5.2.3 Within the field of open pasture in the north-eastern part of the development site, ridge and furrow was observed in all trenches (Trenches 3-11). The furrows (Figure 3) were aligned north-east to south-west and had a gradual break of slope at the top and base, with a concave base. The furrows were spaced between 0.54 to 2.80m apart with an average width of 2.60m being observed; details are provided in the table below. The furrows were filled by a single uniform mid brownish grey silty clay fill. One sherd of post-medieval pottery was observed in the fill of a furrow.

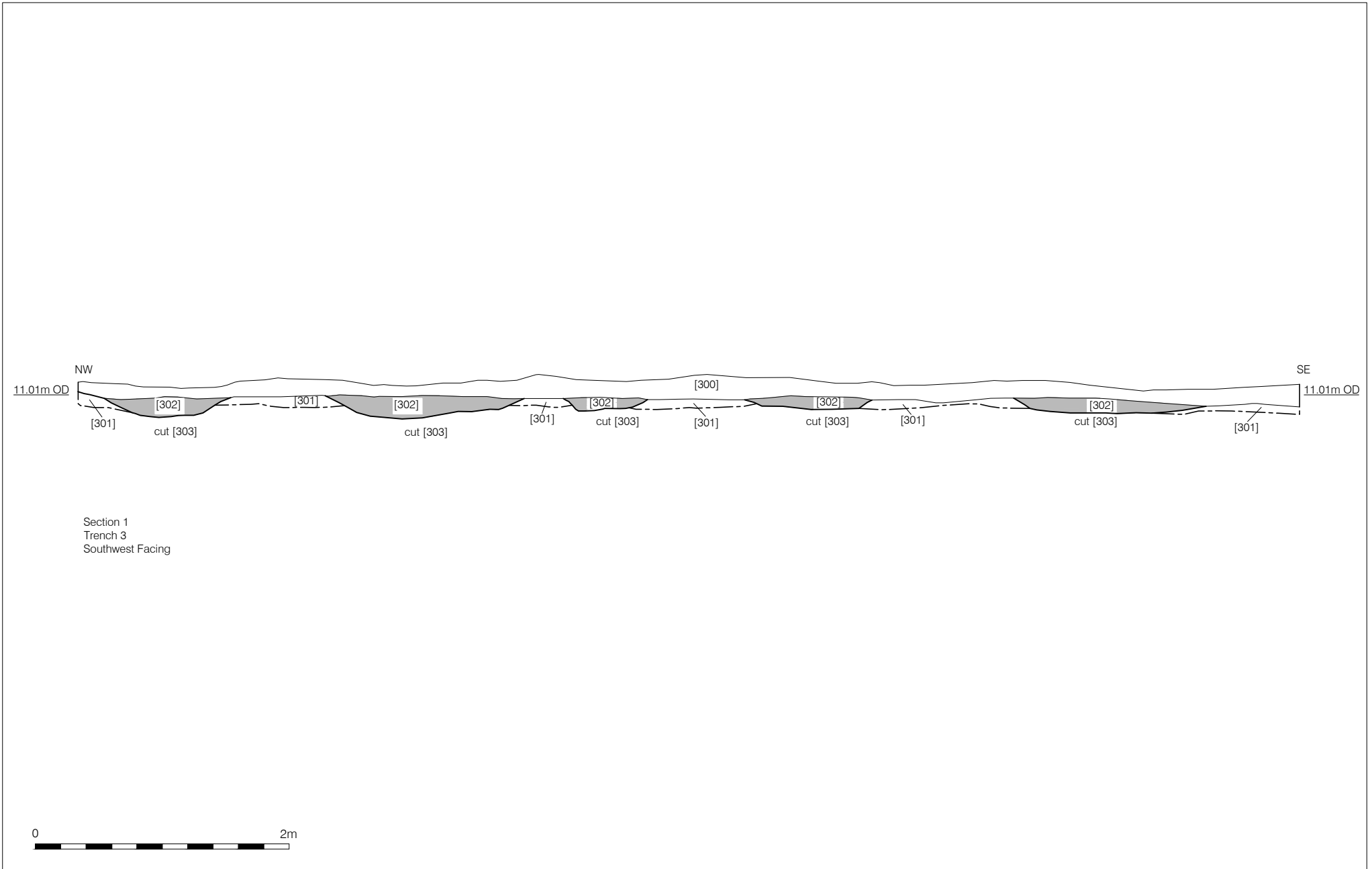
Trench	number of furrows	average width	average depth	average distance apart
1	n/a	n/a	n/a	n/a
2	n/a	n/a	n/a	n/a
3	5	2.6m	0.32m	1.81m
4	1	0.70m to LOE	0.24m	n/a
5	5	2.62m	0.22m	3.12m
6	1	1.26m to LOE	0.14m	n/a
7	6	2.58m	1.14m	2m
8	5	2.60m	0.12m	2.75m
9	4	2.20m	0.12m	2.66m
10	1	0.62m to LOE	0.14m	n/a
11	4	2.25m	0.15m	3m

5.3 Phase 3: Modern

5.3.1 Phase 3 represents modern ground raising dumps and demolition material observed within Trenches 1 and 2, probably derived from the demolition of farm buildings in the northern part of the farm in the late 20th century. This phase also includes topsoil that formed the existing ground surface across site.

5.3.2 A 0.31m thick ground raising dump [104] was observed in Trench 1 which comprised firm mid greyish red coarse sand. The deposit was observed at a maximum height of 10.78m aOD and was visible throughout the trench to the limit of excavation. The demolition deposit in Trench 1 comprised compact sandstone fragments with a matrix of dark greyish brown clayey sand [101]. This deposit was 0.22m thick and was exposed for 2m north-west/south-east and 13.60m to the limit of excavation.

- 5.3.3 Within Trench 2 the modern demolition deposits were composed of dark greyish brown sandy clay with frequent brick inclusions [201] (0.26m thick) and dark brownish grey silty clay [202] with frequent inclusions of sub-angular sandstone fragments and CBM (0.35m thick). The maximum height of the demolition deposits was recorded as 11.21m aOD.
- 5.3.4 Topsoil forming the existing ground surface across the site was recorded in all 11 trenches. It generally comprised friable, dark greyish brown silty clay and the maximum thickness recorded for any deposit was 0.50m, in Trench 11, and the minimum was 0.08m, in Trench 1. The maximum and minimum heights recorded were 11.76m aOD, in Trench 11, and 10.06m aOD, in Trench 3.



6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 No features of archaeological significance were recorded within any of the trenches investigated. Deposits and features recorded within the evaluation trenches were assigned to three phases of activity; natural geological deposits, post-medieval agricultural activity and modern activity.

Phase 1: Natural sub-stratum

6.1.2 Devensian till drift geology was observed in the base of all 11 trenches. This comprised firm light reddish yellow silty clay (Trenches 1-10) and compact mid reddish brown clayey sand at the south-eastern end of Trench 11. The maximum height at which the natural sub-stratum was encountered was 11.34m aOD in Trench 11 in the eastern corner of the site and the lowest was 10.20m aOD in Trench 7, towards the centre of the site.

Phase 2: Post-Medieval

6.1.3 Post-medieval activity was noted in Trenches 1 and 2 in the form of mid greyish brown silty clay sub-soil [102] & [203]. The maximum height that the subsoil was observed was 10.19m aOD.

6.1.4 Evidence of post-medieval agricultural activity in the form of linear plough furrows aligned NE–SW, in line with the field boundaries around the farmstead, were recorded in Trenches 3 to 11. It was suggested on the DBA that these may have dated from the medieval or early post-medieval period as the earthworks appeared to be broad, however the furrows recorded within the evaluation trenches were spaced fairly close together. The relatively narrow width of the ridge and furrow agricultural system recorded at Spital Farm, with the furrows on average 2.60m apart, is typical of ridge and furrow dating from the post-medieval period, which rarely exceeds 5m in width (English Heritage 2011, 5). This part of the development site originally formed the western side of a much larger field; by the 1960s the majority of this field was occupied by a housing estate including Spital Road which now forms the eastern boundary of the farm and area proposed for development. Cartographic evidence indicates that the farm and its surrounding fields originated in the period between 1828 and 1844, although the area may have been in agricultural use prior to this. The remaining part of the large field, which was used for arable agriculture as demonstrated by the ridge and furrow, may have been put to pasture after the constriction of this housing estate.

Phase 3: Modern

6.1.5 The demolition deposits recorded in Trenches 1 & 2 were derived from the former farm buildings that once occupied the north-western part of the site. The buildings

were demolished in the late 20th century and the rubble forms the current hard standing in the farm yard.

- 6.1.6 Topsoil was recorded in all 11 trenches, along with its developed turf line forming the existing ground surface of the former farm yard and pasture field.

6.2 Recommendations

- 6.2.1 No further work is required on the information recovered during the evaluation, with the Site Archive, including this report, forming the permanent record of the strata encountered.

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8. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

Project Management: Paul G Johnson

Post-Excavation Management: Jenny Proctor

Fieldwork: Scott Vance (Site Supervisor), Danni Parker & Lucy Robinson.

Report: Scott Vance

CAD: Ray Murphy

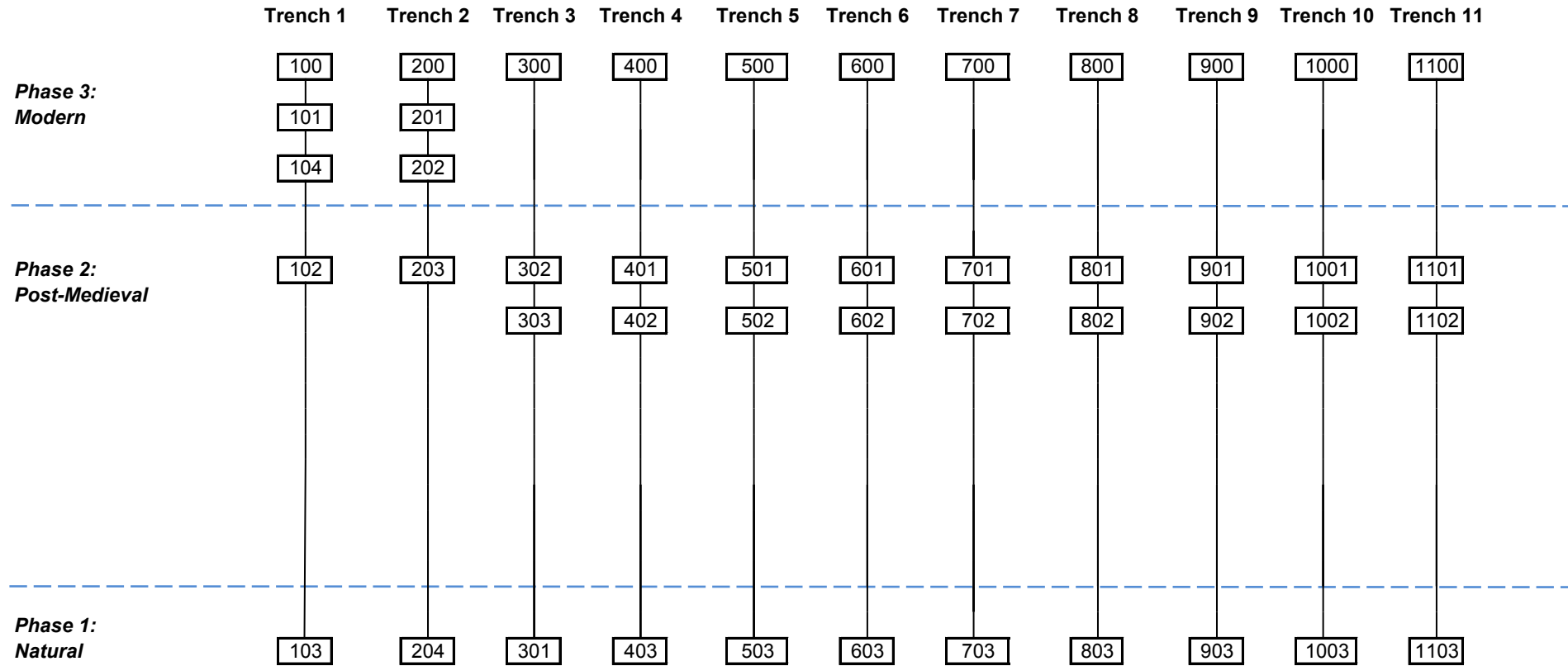
**APPENDIX 1
CONTEXT INDEX**

SHF 15: CONTEXT INDEX

Context	Trench	Phase	Type 1	Type 2	Interpretation
100	1	3	Deposit	Layer	Topsoil
101	1	3	Deposit	Layer	Ground raising dump
102	1	2	Deposit	Layer	Subsoil
103	1	1	Deposit	Layer	Natural
104	1	3	Deposit	Layer	Ground raising dump
200	2	3	Deposit	Layer	Topsoil
201	2	3	Deposit	Layer	Ground raising dump
202	2	3	Deposit	Layer	Ground raising dump
203	2	2	Deposit	Layer	Subsoil
204	2	1	Deposit	Layer	Natural
300	3	3	Deposit	Layer	Topsoil
301	3	2	Deposit	Layer	Natural
302	3	2	Deposit	Fill	Fill of furrow [303]
303	3	1	Cut	Linear	Furrow
400	4	3	Deposit	Layer	Topsoil
401	4	2	Deposit	Fill	Fill of furrow [402]
402	4	2	Cut	Linear	Furrow
403	4	1	Deposit	Layer	Natural
500	5	3	Deposit	Layer	Topsoil
501	5	2	Deposit	Fill	Fill of furrow [502]
502	5	2	Cut	Linear	Furrow
503	5	1	Deposit	Layer	Natural
600	6	3	Deposit	Layer	Topsoil
601	6	2	Deposit	Fill	Fill of furrow [602]
602	6	2	Cut	Linear	Furrow
603	6	1	Deposit	Layer	Natural
700	7	3	Deposit	Layer	Topsoil
701	7	2	Deposit	Fill	Fill of furrow [702]
702	7	2	Cut	Linear	Furrow
703	7	1	Deposit	Layer	Natural
800	8	3	Deposit	Layer	Topsoil
801	8	2	Deposit	Fill	Fill of furrow [802]
802	8	2	Cut	Linear	Furrow
803	8	1	Deposit	Layer	Natural
900	9	3	Deposit	Layer	Topsoil
901	9	2	Deposit	Fill	Fill of furrow [902]
902	9	2	Cut	Linear	Furrow
903	9	1	Deposit	Layer	Natural
1000	10	3	Deposit	Layer	Topsoil
1001	10	2	Deposit	Fill	Fill of furrow [1001]
1002	10	2	Cut	Linear	Furrow
1003	10	1	Deposit	Layer	Natural
1100	11	3	Deposit	Layer	Topsoil
1101	11	2	Deposit	Fill	Fill of furrow [1102]
1102	11	2	Cut	Linear	Furrow
1103	11	1	Deposit	Layer	Natural

APPENDIX 2
STRATIGRAPHIC MATRICES

SHF 15: Stratigraphic Matrix



**APPENDIX 3
PLATES**



Plate 1. Overview of evaluation area, looking north-west



Plate 2. Ridge and furrow in field to the north-east of Spital House Farm, looking north (Source: The Archaeological Practice 2014)



Plate 3. Overview of Trench 9 showing furrows in base, looking east (2m scale)

APPENDIX 4
WRITTEN SCHEME OF INVESTIGATION

Written Scheme of Investigation for an Archaeological Evaluation in Association with a Housing Development at Spital House Farm, Newbiggin-by-the-Sea, Northumberland. NGR: NZ 3040 8721

Prepared on behalf of Ryder Architecture by Pre-Construct Archaeology Limited

28 10 2015

1. INTRODUCTION

1.1 GENERAL

- 1.1.1 An appropriately specified programme of archaeological work is required in association with a housing development at Spital House Farm, Newbiggin-by-the-Sea, Northumberland. Pre-Construct Archaeology Limited (PCA), have been commissioned by Ryder Architecture to conduct an archaeological trial trenching field evaluation. A total of 11 trial trenches located across the development area will be investigated.
- 1.1.2 An Outline Planning Application (15/01888/OUT) has been submitted for the redevelopment of Spital House Farm into residential use that will consist of 78 dwellings ranging in size from one to four bed homes. No Specification for the work has been prepared but this WSI document sets out the scope of work.
- 1.1.3 An archaeological desk-based assessment of the site was carried out in 2014 by The Archaeological Practice. The assessment found that there were no sites listed in the Historic Environment Record within the development area, however, two sites of potential cultural heritage significance were identified; the early mid-19th-century Spital House Farm and ridge and furrow earthworks in the field between the farm and the housing estate to the north-east. No sites of prehistoric or Romano-British date have been identified in the development area, however, recent archaeological work across south-east Northumberland has identified a number of previously unrecorded prehistoric sites. The coastal location of Spital House Farm would have been a particularly attractive site for prehistoric settlement (although the vulnerability of insubstantial archaeological remains often associated with such sites to destruction by later cultivation regimes should be noted).
- 1.1.4 A programme of archaeological trial trenching was recommended to establish whether significant archaeological remains do indeed survive within the development site and, if so, in what specific locations, in order to determine what the precise impact of the development would be and in what way that impact might be avoided or otherwise mitigated.
- 1.1.5 A total of 11 trenches will be excavated to evaluate the archaeological potential of the site. Two 2m x 12.5m trenches will be placed within the farmstead between areas of hardstanding and a further nine 2m x 25m trenches will be situated in the pasture field located to the north-east of the farm (Figure 1). A contingency of a further 25 linear metres of trial trenching will be drawn upon should significant archaeological features or deposits requiring further elucidation be encountered.

1.2 SITE LOCATION AND DESCRIPTION

- 1.2.1 The site is situated at the southern boundary of Newbiggin-by-the-Sea in south-east Northumberland on the north side of the B1334 road. The farmstead is located approximately 0.5km from the foreshore and is presently occupied by the buildings of Spital House Farm, and an area of pasture to the north-east (NGR NZ 3040 8721).
- 1.2.2 The development area is bounded to the north-east by the rear gardens of properties on Spital Road, open pasture to the north-west, with arable fields and the Spital Burn to the south-west. To the south-east, across North Seaton Road, lies an open field of pasture and an allotment area.
- 1.2.3 The development site measures 2.3ha and comprises a substantial former farmhouse that faces onto the B1444. A disused farmstead lies to the rear which is enclosed by stone walls and fences. The farmstead comprises, on the east side, a two-storey mid-19th-century building with a single-storey range projecting forward at its east end. Behind this there are two steel-framed sheds typical of modern farms. On the west side lie the remains of three parallel building ranges that are perhaps former barns and byres. To the north-west are two Dutch barns and another steel-framed shed and at the northern end of the site are areas of hard standing, a silage clamp and paddock where rows of pig sties or similar structures once stood (The Archaeological Practice 2014).
- 1.2.4 The solid geology of this part of Northumberland broadly comprises mudstones, siltstones and sandstones of the Pennine Middle Coal Measures Formation. The superficial deposits comprise Devensian tills (information from the *British Geological Survey* website).

1.3 Historical Background

- 1.3.1 The area around Newbiggin has produced a large amount of material relating to the earliest periods of human activity in northern Britain, specifically assemblages of flint tools and waste debris left by Mesolithic hunter-gatherers. The coastal district around the mouth of the Wansbeck (1.7km to the south) represented a relatively resource rich area providing wildlife habitats suitable for hunter-gatherer exploitation (The Archaeological Practice 2014).
- 1.3.2 There is much less evidence for the presence of early farming communities associated with the subsequent Neolithic period and the early Bronze Age. However, flint scrapers recovered from work at Sandy Lane between 2004 & 2006 are dated to the late Neolithic/Early Bronze Age. More substantial remains representing an Early Bronze Age burial site have been uncovered 0.7km south-east of the development site in the form of a stone-capped cist burial (HER 12045) (*ibid*).
- 1.3.3 The archaeological desk-based assessment of the site noted that no monument of the later prehistoric or Roman periods has been identified within the site or the wider 1km search area around the site. However, considerable evidence for these periods has been identified in the wider landscape of the Wansbeck valley. The site is set within a landscape which was widely occupied during the Late Iron Age and early Roman period by agricultural settlements. A pattern of late prehistoric and early Roman small farmstead ditched enclosures is now well documented on the South-East Northumberland Coastal Plain. Numerous rectilinear enclosures have been identified on aerial photographs (Burgess 1984, 163; Petts and Gerrard 2006, 37).

- 1.3.4 Several examples of such small ditched settlements, thought to represent single household farmsteads, were excavated in Northumberland by George Jobey from the 1950s to the 1980s, including at Hartburn towards the western extent of the Wansbeck (Jobey 1973). These investigations were generally conducted as 'rescue excavations' ahead of the destruction of the sites by development and with limited time and resources excavation focused on the ditch circuit and internal areas. More recent large-scale developer funded excavations in advance of housing schemes and opencast mining have revealed evidence for a wider range of settlement types and in some case for extensive field systems associated with settlements (Proctor 2009, 101; Hodgson *et al.* 2012).
- 1.3.5 Large-scale excavation in 2000 at Pegswood Moor, Morpeth, c. 10km to the west of the site Newbiggin-by-the-sea, ahead of opencast mining revealed a multi-phase settlement with areas of habitation set within extensive field and enclosure systems (Proctor 2009). Roundhouses were enclosed by ditches of much smaller proportions than the ditched enclosures previously identified in the region and it is noteworthy that this settlement and its extensive field systems were not visible as cropmarks on aerial photographs of the site. This was presumed to be due to a combination of the relatively insubstantial nature of most of the features coupled with the fact that the ditches contained little organic or occupation debris and were infilled with soils of very similar composition to the natural clay through which they were cut. This work was instrumental in highlighting the fact that it is possible for hitherto unknown substantial and extensive settlements to be present on the South East Northumberland Coastal Plain.
- 1.3.6 Numerous cropmarks of enclosures identified on aerial photographs are listed on the HER in the region. The density of such cropmarks in the Wansbeck Valley implies that this area of the Northumberland coastal plain was intensively exploited by later prehistoric and early Roman period communities. The settlement distribution along both the north and south banks of the Wansbeck and along its major tributary streams suggests that the proximity to watercourses was a significant factor in determining their of the study site. Without excavation it is not possible to determine their date of origin, but the form of the cropmarks broadly indicates that they are likely to represent Iron Age settlements. As discussed above, the excavated examples of such sites along the coastal plain in the vicinity of the site are all of Late Iron Age date, with many having earlier origins as unenclosed settlements. This work has also revealed that occupation of these enclosed settlements ceased by the second century AD at the latest (Proctor 2009; Hodgson *et al.* 2012).
- 1.3.7 Relatively little is known of the early medieval period in the area. The area of Woodhorn possibly formed the principal centre of the late Saxon period which formed part of the barony of Balliol (The Archaeological Practice 2014). During the 11th/12th centuries a distinct settlement pattern became apparent on the coastal plain, with the rural populations being concentrated in nucleated villages. Control over these rural communities was exercised from baronial earthwork castles such as Mitford, Haw Hill or Bothal or alternatively from ecclesiastical institutions such as those found at the Cistercian Abbey of Newminster or local parish churches at Woodhorn.

2. PLANNING BACKGROUND

- 2.1 An application for Outline Planning permission has been submitted to Northumberland County Council (15/01888/OUT). The outline application entails the redevelopment of Spital House Farm and the construction of 78 dwellings in the immediate area.
- 2.2 The *National Planning Policy Framework* (NPPF) (Department for Communities and Local Government 2012) enables planning authorities to request trial trenching within areas of archaeological potential in order to ascertain the nature and extent of any below ground remains likely to be impacted by development. The NPPF aims to balance the demands of development with conservation, respecting both national standards and local empowerment but carries a presumption in favour of sustainable development.
- 2.3 The work to be undertaken prior to the determination of the application will be in line with paragraph 128 of the NPPF:
- “Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation”*
- 2.4 The archaeological desk-based assessment (The Archaeological Practice 2014), along with Nick Best, Assistant County Archaeologist for Northumberland, have noted that the Northumberland coastal plain, around Spital House Farm is known as being an area of high archaeological potential.
- 2.5 No Specification for the archaeological work was produced by the local planning authority, instead this document comprises the Written Scheme of Investigation (WSI), which is to be submitted for approval by Northumberland County Council prior to works commencing.

3. PROJECT AIMS AND OBJECTIVES

- 3.1 The archaeological work is being undertaken following consultation with Nick Best, Assistant County Archaeologist at Northumberland County Council.
- 3.2 The primary aim of the programme of works is to determine the absence/presence of archaeological remains. The archaeological work will identify, investigate and record any archaeological remains observed during the evaluation. The results will be used to inform decisions regarding further archaeological mitigation measures that may be required.
- 3.3 Archaeological work at Spital House Farm provides potential opportunities to address key research objectives as set out in *Shared Visions: The North East Regional Research Framework for the Historic Environment (NERRF)* (Petts & Gerrard 2006). The NERRF highlights the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.
- 3.4 The site is considered to have potential to provide a contribution to several ‘Key Research Themes’ in the NERRF ‘Research Agenda and Strategy’ for the Bronze Age and Iron Age:

- **ii.** Chronology;
- **iii.** Settlements;
- **iiii.** Landscapes;
- **liv.** The Later Prehistoric Coastal Zone.

3.5 In addition, the investigations may also contribute to research priorities concerning the Roman period, as set out in the NERRF Research Agenda:

- **Ri.** The Iron Age to Roman Transition.

3.6 An appropriate level of reporting on the work is required, including, if necessary, full analysis and publication of any notable archaeological findings upon completion of the project. Therefore the results of the work will constitute the preservation by record of any archaeological remains encountered and subsequently removed during the course of works. The full scheme of archaeological work required is described in the following section.

4. METHOD STATEMENT

4.1 GENERAL STANDARDS

4.1.1 All archaeological work will be carried out in compliance with the codes and practice of the Chartered Institute for Archaeologists (CIfA) and will follow the relevant CIfA standard and guidance document for archaeological evaluation (CIfA 2014a). PCA is a CIfA 'Registered Organisation'.

4.1.2 All archaeological staff involved in the project will be suitably qualified and experienced for their project roles. The project will be overseen for PCA by Paul G Johnson, Regional Manager of the Northern Office.

4.1.3 All archaeological staff involved in the project will be aware of the work required, as detailed in this document, and will understand the aims and methodologies of the project.

4.1.4 All relevant Health and Safety legislation, regulations and codes of practice will be respected. PCA's Health and Safety (H&S) Policy is the starting point for managing H&S at all locations where PCA carries out its operations. The full H&S Policy of PCA can be supplied on request.

4.1.5 This project will not be 'H&S Executive (HSE) notifiable' due to its anticipated short duration.

4.1.6 In general, all PCA staff are required to:

- *Take care of their own safety and that of any other person on the site or in the vicinity;*
- *Co-operate with the Site Supervisor and the Directors of PCA to allow them to comply with their statutory obligations;*
- *Be mindful of the requirements of the Sponsor/their Agent;*
- *Be careful to minimise the environmental impact of their operations and activities.*

4.2 Archaeological Methodology – Fieldwork

4.2.1 The research Aims & Objectives of the project will be achieved by the undertaking of an archaeological field evaluation by trial trenching. The existing ground surface and topsoil will be

removed by 360° tracked excavator or JCB using a toothless ditching bucket under strict archaeological supervision. Mechanical excavation will cease at the direction of the supervising archaeologist.

- 4.2.2 In all trenches, undifferentiated topsoil and any subsoil will be removed by the mechanical excavator in spits of no more than 100mm, moving along the length of the trench. Successive spits will be removed until the first significant archaeological horizon or the natural sub-stratum is reached, whichever is first. The maximum depth of any trench will be 1.20m, although the machine may excavate limited sondages, where it is safe to do so, to allow the examination of deep strata.
- 4.2.3 There will be no separation of different soil types during trench opening. The mechanical excavator will mound spoil alongside trenches, allowing c. 1m between the base of the mound and the trench edge.
- 4.2.4 A total of 11 trenches (Trenches 1–11) are proposed at the locations shown on the attached figure (Figure 1). The trenches are sited at specific locations designed to maximise the potential of the site and to provide the most productive archaeological information and address the research Aims and Objectives. A contingency of a further 25 linear metres of trial trenching may be required in order to elucidate any significant archaeological features or deposits encountered in any of the other trenches.
- 4.2.5 The total area of the trenches is 500 square metres, amounting to an approximate 2.1% sample of the site in total. but around 7% of the area to the north-east considered to be relatively undisturbed by the former farmstead.
- Trenches 1 & 2 will each measure 12.5m x 2m at ground level. These trenches are located between the buildings of Spital House Farm. Trench 1 is located at the northern end of the western range of buildings. Trench 2 is located to the north of the farm.
 - Trenches 3–11 will each measure 25m x 2m at ground level. These trenches are all located in the field of ridge and furrow at the north-eastern side of the development area.
- 4.2.6 Archaeological excavation may require work by pick/mattock and shovel. Such techniques will be used only for the removal of homogeneous and 'low grade' layers, where it can be reasonably argued, firstly, that more detailed attention would not produce information of value and, secondly, that their removal provides a window onto the underlying archaeological levels. Such tools will not be employed on complex stratigraphy, and where deposits are removed in this manner they will have been properly recorded first.
- 4.2.7 An adequate proportion of features encountered will be excavated by hand in order to determine their form and function, where possible. However, care will be taken not to compromise the integrity of archaeological features or deposits that may be more appropriately excavated under the remit of a full excavation. The following sampling policy will apply:
- stakeholes – 100%
 - postholes and pits with a diameter up to 1.5m – 50%
 - pits with a diameter greater than 1.5m – 25% minimum and 50% maximum (a complete cross section will be excavated across such features where possible);

- Linear/curvilinear features with non-uniform fill – 25% minimum;
 - Linear/curvilinear features with uniform fill – 10% minimum.
- 4.2.8 Any archaeological remains of possible significance exposed during the evaluation are to be immediately examined, hand cleaned, excavated and recorded, to an appropriate level and in accordance with the methodology set out in PCA's *Fieldwork Induction Manual* (PCA 2009) and the long-established Museum of London *Site Manual* (Museum of London 1994). Depending upon the significance of any archaeological remains, preservation *in situ* may be required, although it is envisaged that, for most remains, preservation by record will be suitable mitigation.
- 4.2.9 Archaeological recording will be carried out by means of unique numeric based context records and will be written, drawn and photographic (and any other appropriate means). All archaeological exposures (layers, cuts, fills, structures) will be recorded using *pro forma* recording sheets. Harris Matrix stratification diagrams will be used to record stratigraphic relationships and these records will be compiled and fully checked during the course of the evaluation.
- 4.2.10 The area of investigation will be located by appropriate means to ensure its accurate location relative to the Ordnance Survey National Grid. Drawn records of archaeological features and deposits will normally be at a scale of 1:10 (sections) or 1:20 (plans) and will be prepared in a suitable form of digitisation. Where possible, archaeological features and deposits will be logged relative to Ordnance Datum. The height of all principal strata and features will be calculated in metres above Ordnance Datum (m aOD) and indicated on the appropriate plans and sections.
- 4.2.11 A photographic record will be compiled using a) a SLR camera with black and white 35mm film to provide negatives from which a set of prints will be generated b) a digital SLR camera of at least 6 megapixels. Graduated metric scales will appear in all photographic frames and, in addition, general 'working shots' will be taken to show the overall scale of the archaeological operation mounted. Full and detailed photographic record sheets cross-referenced to the black and white negatives/prints and the colour digital images/prints will be completed. For digital photography, the 'RAW plus JPEG' camera setting will be used (with the camera set for the largest image size with least compression to produce the highest quality possible JPEG images). The RAW setting allows all the information that the camera is capable of producing to be saved and images retained using this setting will form a key component of the photographic archive along with the black and white negatives generated by 35mm film. RAW images will be converted to the uncompressed format TIFF before they are burnt onto archival quality CD to form the digital element of the photographic archive. A selection of colour printed images (standard 6x4-inch) will be generated from the JPEG images.
- 4.2.12 The photographic element of the Site Archive (for deposition with the appropriate repository) will comprise: black and white negatives, black and white prints generated from the negatives, a selection of colour prints generated from digital images, colour digital TIFF images on CD. The Northumberland HER will be provided directly with a selection of digital images, as required.

- 4.2.13 During the archaeological work, a high priority will be given to dating any archaeological remains. Therefore, all relevant artefacts and finds would be retained.
- 4.2.14 Consideration would also be given to the recovery of specialist samples for scientific analysis, particularly samples of structural materials, samples for absolute dating and bulk or column samples of deposits for palaeoenvironmental evidence. Different sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Bulk sample size will take into account the frequency with which material is likely to occur. In general, however, samples will be of the order of 40 litres where sufficient material is available, although with the expectation that smaller quantities (c. 5-10 litres) will be processed and assessed initially. Thus if no subsequent excavation is undertaken at the site adequate material will remain for further processing and full analysis of the material should that prove necessary.
- 4.2.15 Assessment of sufficient samples will be undertaken to cover the range of feature types and dates represented by any archaeological remains of note that are encountered. The samples processed and assessed may be a sub-set of a larger number of samples actually recovered during the fieldwork.
- 4.2.16 The overall aim of the fieldwork with respect to archaeological science is to determine the types of material preserved and in what quantity and condition, thereby enabling the Aims and Objectives of the project as a whole to be addressed. The advice of Historic England's Regional Advisor for Archaeological Science (RAAS) will be sought, as appropriate.
- 4.2.17 Deposits would be assessed for their potential for absolute dating by radiocarbon, archaeomagnetism or by any other means and, if appropriate, samples would be recovered for these purposes. Specialist analysis of the recovered material would be a requirement.
- 4.2.18 Appropriate procedures involving discoveries classed as 'treasure' under *The Treasure Act 1996* (and its 2003 revision) will be followed, as appropriate.
- 4.2.19 In the event of human burials being discovered, PCA will procure and comply with all statutory consents and licences. Any *in situ* human remains would be recorded to an appropriate level by the use of photography and a *pro forma* 'Skeleton Recording Sheet' and including *in situ* examination by a palaeo-pathologist, if required, then exhumed following receipt of an appropriate licence from the Ministry of Justice (MoJ). In 2012 the MoJ reconsidered its approach to burial licenses that it had adopted in 2007: in sum, exhumation license applications under *The Burial Act 1857* will now be considered wherever human remains are buried in sites to which *The Disused Burial Grounds (Amendment) Act 1981* or other burial ground legislation does not apply. The MoJ exhumation licence is now known as an 'Authority to Exhume Buried Human Remains for Archaeological Purposes'.
- 4.2.20 Waterlogged organic materials, if encountered, would be dealt with according to guidelines set out in relevant English Heritage (now Historic England) documents (English Heritage 2010 and 2012).
- 4.2.21 All processing of artefacts and ecofacts would be undertaken away from the site. All finds will be treated in a proper manner and will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in *First Aid for Finds* (Watkinson and Neal 2001), *Packaging and Storage of Freshly Excavated Artefacts from Archaeological Sites* (UKIC

1983) and *Standard and guidance: for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b).

- 4.2.22 All stakeholders will be informed immediately if remains likely to be of national significance are encountered. Any such areas will be protected from the weather or other forms of deterioration. While investigation will not be at the expense of any structures, features, or finds which might reasonably be considered to merit preservation, it is imperative that an adequate sample of the site is studied in order to fulfil the Aims and Objectives of the project. Where archaeological remains are to be preserved in situ they will be adequately protected from deterioration.
- 4.2.23 Upon completion of the archaeological investigation, the trenches will be backfilled by mechanical excavator.

4.3 Archaeological Methodology – Post-Excavation

- 4.3.1 Irrespective of whether or not any archaeological remains of note are encountered during the fieldwork, the archaeological investigation will be summarised in a report. The results of the field evaluation will be disseminated in the form of written and illustrated evaluation report, to be compiled following completion of the trial trenching fieldwork. The report will include:
- an introductory section setting out the general background to the project, details of the planning history, a summary of the site geology and topography, and the archaeological and historical background of the site;
 - a section outlining the Aims and Objectives of the project;
 - a section detailing the methods adopted during the fieldwork project;
 - a section describing the archaeological findings, including the nature, extent, date, condition and significance of the archaeological remains;
 - a prediction of the degree of survival of archaeology across the site and an appraisal of the likely impact of the development;
 - illustrative material including maps, plans, sections, drawings, photographs, as necessary;
 - as an appendix, a list of archaeological contexts, with summary descriptions of each;
 - as one or more of the appendices, as necessary, specialist reports on artefacts and palaeoenvironmental remains.
- 4.3.2 The report will include a location plan of the site, tied into the Ordnance Survey National Grid and at an appropriate scale. The report would also include a plan at an appropriate scale showing the location of the evaluation trenches within the overall site.
- 4.3.3 The report will include a statement regarding the location of the Site Archive at the time of writing, and the intended depository of the Site and, if applicable, Research Archive.
- 4.3.4 All recovered artefacts (e.g. ceramic, metallic) and samples (e.g. bulk soil samples for biological remains) would be examined off-site by appropriate specialists. For each category of artefact and ecofact, an assessment report would be produced, that would include a basic quantification of the material, a statement of its potential for further analysis and

recommendations for such work. The results of all specialist assessment reports would be incorporated into the overall report on the evaluation.

- 4.3.5 PCA's ceramic specialist for Late Iron Age and Roman period pottery is Dr James Gerrard (University of Newcastle upon Tyne). PCA's in house 'small finds' specialist is Dr Marit Gaimster.
- 4.3.6 PCA's palaeoenvironmental specialist is Marta Fernandez-Perez (PCA). Human remains and animal bone would be examined by James Langhorne and Kevin Rielly, respectively (both PCA).
- 4.3.7 PCA's conservation specialist is Karen Barker, a freelance archaeological conservator.
- 4.3.8 Where one or more elements of the recovered data-set from the evaluation is identified as having potential for further analysis (irrespective of whether or not extensive, significant and/or unexpectedly complex archaeological remains are discovered), an 'Updated Project Design' would be produced to accompany the report on the evaluation and this would detail any requirements for further analysis of material, the results of which would likely require reporting on in a subsequent published paper or report. Costs for any such further analysis and publication can only be established after an initial assessment of the material. The scope of any such further analysis and publication would be agreed with the commissioning client before being undertaken. The 'Updated Project Design' would detail the post-excavation methodologies to be employed, as well as outlining the likely form of a publication paper.
- 4.3.9 Copies of all reports will be sent to relevant organisations in hardcopy and electronic format, as required. The requirements of relevant organisations with regard to report format and number of copies will be followed. PCA grant licence to the Northumberland HER to use the report and its content.
- 4.3.10 Northumberland County Council Conservation Team support the Online Access to Index of Archaeological Investigations (OASIS) Project. PCA will complete an OASIS form for the project during the compilation of the report on the work. The OASIS reference number will be included in the report. When the report has become a public document by incorporation into the HER, NCCCT will validate the OASIS form, thus placing the information into the public domain on the OASIS website.

4.4 Site Archive

- 4.4.1 The undertaking of the evaluation fieldwork will, through Data Collection, result in the establishment of a Site Archive. In preparing the Site Archive for deposition all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document Archaeological Archives. Brown's (2007) *'Guide to best practice in creation, compilation transfer and curation'* would be adhered to, as well as *'Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives'* (ClfA 2014c) and *'Guidelines for the preparation of excavation archives for long term storage'* (Walker, UKIC 1990).
- 4.4.2 The Site Archive will include all materials recovered (or a comprehensive records of such materials) and all written, drawn, and photographic records generated by the Data Collection Stage of the project. In line with MoRPHE. PPN3: Archaeological Excavation- Appendix 1 the

site archive will be quantified, ordered, indexed, and internally consistent before transfer to the recipient museum (English Heritage 2006). It will also contain a site matrix, a site summary and brief written observations on the artefactual and environmental data.

- 4.4.3 Prior to the Closure Stage of the project, the Site Archive will be deposited with an appropriate body, in this case the Great North Museum (managed by Tyne and Wear Archives & Museums on behalf of Newcastle University). The digital photographic archive will be lodged with ADS if appropriate. The Site Archive will be organised as to be compatible with the other archaeological archives produced in Northumberland. Copyright of the written component of the Site Archive will be vested in the receiving body. An accession number for the Site Archive will be assigned at the time of deposition.
- 4.4.4 The finds (i.e. the artefactual and palaeoenvironmental material) recovered by archaeological fieldwork contribute data of immeasurable academic worth towards the Site and Research Archive, but the bulk of the material is of little or no financial value. The landowner is urged to donate all finds to the receiving body as part of the Site Archive. Appropriate guidance set out in *Standards in the museum care of archaeological collections* (Museum and Galleries Commission 1992) and *Selection, retention and dispersal of archaeological collections* (Society of Museum Archaeologists 1993) will be followed in all circumstances.

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