



LOW HOUSE, HUTTON ROOF, KIRKBY LONSDALE, CUMBRIA

Archaeological Desk- Based Assessment, Buildings Investigation and Watching Brief



Oxford Archaeology North

December 2006

**Norman Jackson
Contractors**

Issue No: 2006/594
OA North Job No: L9647
NGR: SD 35697 47805

Document Title: **LOW HOUSE, HUTTON ROOF, KIRKBY LONSDALE,
CUMBRIA**

Document Type: **Archaeological Desk-Based Assessment, Buildings
Investigation and Watching Brief**

Client Name: Norman Jackson Contractors

Issue Number: 2006/594
OA North Job Number: L9647
National Grid Reference: SD 35697 47805

Prepared by:	Tony Lee	Chris Ridings	Andy Bates
Position:	Supervisor	Assistant Supervisor	Project Officer
Date:	October 2006	November 2006	October 2006

Checked by:	Stephen Rowland	
Position:	Project Manager	
Date:	December 2006	Signed.....

Approved by:	Alan Lupton	
Position:	Operations Manager	
Date:	December 2006	Signed.....

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster
LA1 1TF
t: (0044) 01524 848666
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

© Oxford Archaeological Unit Ltd (2006)

Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

CONTENTS

SUMMARY	3
ACKNOWLEDGEMENTS.....	4
1. INTRODUCTION	5
1.1 Circumstances of the Project.....	5
2. METHODOLOGY.....	6
2.1 Project Design	6
2.2 Rapid Desk-Based Assessment.....	6
2.3 Visual Inspection.....	6
2.4 Buildings Investigation	7
2.5 Watching Brief.....	7
2.6 Archive.....	7
3. BACKGROUND	8
3.1 Location, Topography and Geology	8
3.2 Historical and Archaeological Background.....	8
3.3 Map Regression Analysis.....	9
3.4 Archaeological Interventions	10
3.5 Visual Inspection.....	10
4. GAZETTEER OF SITES	11
5. SIGNIFICANCE OF THE REMAINS.....	16
5.1 Introduction.....	16
5.2 Criteria	16
5.3 Significance.....	17
6. BUILDING INVESTIGATION	18
7. WATCHING BRIEF RESULTS.....	22
7.1 Introduction.....	22

7.2	Trenches 1 to 38 (Plots 3 to 9)	22
7.3	Trenches 39 to 49 (Plots 1 and 2)	23
7.4	Finds.....	24
8.	DISCUSSION.....	25
8.1	Building Investigation.....	25
8.2	Watching Brief.....	26
9.	BIBLIOGRAPHY	27
9.1	Cartographic Sources	27
9.2	Aerial Photographs.....	27
9.3	Secondary Sources	27
ILLUSTRATIONS		29
Figures.....		29
Plates		29
APPENDIX 1: PROJECT BRIEF		30
APPENDIX 2: PROJECT DESIGN.....		31
APPENDIX 3: TRENCH DESCRIPTIONS		39
APPENDIX 4: SUMMARY LIST OF CONTEXTS.....		46

SUMMARY

Oxford Archaeology North (OA North) was commissioned by Norman Jackson Contractors to undertake a programme of archaeological desk-based assessment, building recording and a watching brief at Low House, Hutton Roof, Cumbria (NGR 35697 47805) in advance of a proposed residential redevelopment at the site. The development entails the demolition of the existing dilapidated farm buildings and the construction of several new dwellings. The programme of investigation was carried out from January to August 2006.

Through visits to the Cumbria Historic Environment Record (CHER), the Cumbria County Record Office in Kendal, and consultation of OA North's library, the desk-based assessment identified 23 sites of archaeological interest within a 1km radius of the development site. Although Hutton Roof is mentioned in the Domesday Book, no extant remains date to this period. Low House Farm (Site 1) is recorded by the CHER as a collection of farm buildings shown on nineteenth century maps. Elsewhere, four Listed Buildings, including the local church and three old farmhouses, were identified in the vicinity of the development site (Sites 18-21), whilst the majority of the remainder of sites related to post-medieval agricultural and industrial activity.

The buildings investigation determined that the large square barn at the west of the site (*Building One*), was originally a farmhouse dating to the later seventeenth century. This had been superseded by the currently-occupied (and, therefore, unrecorded) Georgian house to the north, and was thus converted to a stables and later a barn. The remaining buildings would all appear to have been constructed in phases over the course of the nineteenth century and are likely to indicate agricultural expansion and intensification.

Following demolition of the existing buildings, an archaeological watching brief was conducted on the excavation of the foundation trenches for the new construction, in the hope of providing further dating evidence for the known buildings, but also to identify any previous unrecorded activity on the site. The presence of a network of stone-built culverts demonstrated that several phases of drainage activity had occurred on site but, whilst foundations of the recently-demolished buildings were located on the eastern half of the site, no evidence for previously unknown structures or activity was found.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Roy Jackson and Mike Newton of Norman Jackson Contractors for commissioning the project and also to Richard Coathup of that organisation for his assistance and liaison on site. Thanks are also due to Jo Macintosh at the Cumbria Historic Environment Record and the staff of the Cumbria County Record Office in Kendal for their assistance with this project.

The desk-based assessment was researched by Tony Lee and the building recording was undertaken by Karl Taylor, Tony Lee and Christina Clarke. The watching brief was carried out by Vix Hughes, David Tonks, Andy Bates and Chris Healey. The report was written by Tony Lee, Christopher Ridings and Andy Bates, with the drawings produced by Marie Rowland and Anne Dunkley and the finds examined by Rebekkah Pressler. The project was managed by Stephen Rowland, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Following a proposal by Norman Jackson Contractors to demolish a complex of derelict farm buildings at Low House, Hutton Roof, Cumbria (NGR 35697 47805) and replace them with a residential development, Cumbria County Council Historic Environment Service (CCCHES) issued a brief (*Appendix 1*) for a programme of archaeological work to be undertaken on the site. This was to consist of a desk-based assessment, including a visual inspection; a RCHME level II buildings investigation of three standing structures, and a watching brief undertaken on any groundworks associated with the development of the site. Following submission of a project design (*Appendix 2*) to meet the requirements of the CCCHES brief, Oxford Archaeology North (OA North) were commissioned to undertake the project.

1.1.2 The rapid desk-based assessment comprised a search of both published and unpublished records held by the Historic Environment Record in Kendal, the Cumbria County Record Office in Kendal, and the archives and library held at OA North. In addition to this, a visual inspection of the site was carried out, in order to relate the landscape and surroundings to the results of the desk-based assessment. The buildings investigation was conducted to RCHME (1996) Level II standard in January 2006. The survey included written descriptions, an extensive photographic record, and a plan of the farmstead in order to provide a lasting record, prior to its demolition. Under normal circumstances this level of survey would include both external and internal features. However, due to the dilapidated nature of the buildings, the interior was deemed unsafe to survey and the majority of the investigation and subsequent report concerns exterior detail only. The watching brief was carried out during the excavation of the foundation trenches for the new construction between June and August of 2006. This report sets out the results of all three phases of the investigation.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (*Appendix 2*) was submitted by OA North in response to a brief issued by Cumbria County Council Historic Environment Service (*Appendix 1*). The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 RAPID DESK-BASED ASSESSMENT

2.2.1 An area of 1km radius centred on the proposed development site was considered as the overall study area. Where appropriate, sites within a wider area were briefly considered to allow a greater understanding of the overall historical and archaeological context of the development area (*Section 3*). Sites within the survey area were collated within a gazetteer (*Section 4*) and the overall results analysed (*Section 5*) in accordance with the criteria used to assess the importance of Scheduled Monuments, as detailed in Annex 4 of PPG 16 (DoE, 1990).

2.2.2 **County Historic Environment Record (CHER):** the County Historic Environment Record for Cumbria, held in Kendal, was consulted. The CHER consists of a database of known archaeological sites within the county, and is maintained by CCCHES. All sites recorded within the study area were accessed and an entry, including grid reference, sources and a brief description, was added to the gazetteer (*Section 4*).

2.2.3 **County Record Office (CRO), Kendal:** the County Record Office was consulted for historic maps of the development site. These comprised nineteenth- and twentieth-century Ordnance Survey maps as well as the nineteenth-century tithe maps for the area.

2.2.4 **Oxford Archaeology North:** OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU). These were consulted where necessary.

2.3 VISUAL INSPECTION

2.3.1 A visual inspection of the site and its immediate surroundings was undertaken to relate the existing landscape to any research findings and to determine the presence of any potential features of archaeological interest. The site inspection was also undertaken to identify any areas of potentially significant disturbance to archaeological remains and to highlight any hazards or constraints to the undertaking of the subsequent programme of works. The inspection was undertaken on 11th January 2006.

2.4 BUILDINGS INVESTIGATION

- 2.4.1 **Descriptive Record:** written records using OA North *pro-forma* record sheets were made of all principal building elements, as well as any features of historical or architectural significance. Particular attention was also paid to the relationship between parts of the building, especially those that would show development and any alterations to the structure. These records are essentially descriptive, although interpretation is carried out on site as required.
- 2.4.2 **Site drawings:** an architect's 'as existing' drawing was annotated to produce a plan of the farmstead. This was produced in order to show the form and location of structural features and/or features of historic interest. Where necessary, the drawing was manually enhanced using hand survey techniques. The hand-annotated field drawing was digitised using an industry standard CAD package to produce the final drawing.
- 2.4.3 **Photographs:** photographs were taken in both black and white and colour print 35mm formats. The photographic archive consists of both general shots of the whole building and shots of specific architectural details.

2.5 WATCHING BRIEF

- 2.5.1 A watching brief was conducted of the excavation of foundation trenches for the new construction. The work aimed to record any surviving archaeological features or deposits by means of detailed observation and recording in the course of the groundworks for the development.
- 2.5.2 Any significant features were sample-excavated (i.e. selected pits and postholes were only half-sectioned and linear features were subject to no more than a 10% sample). Recording comprised a full description and preliminary classification of all features and horizons on OA North *pro-forma* sheets as recommended by English Heritage Centre for Archaeology and a photographic record, using colour slide and monochrome formats, was compiled. A plan of the areas of groundworks was produced, showing the location and extent of the ground disturbance and the structures or features located and, where appropriate, scaled sections were drawn of the stratigraphic sequence revealed by the groundworks.

2.6 ARCHIVE

- 2.6.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). On completion of the project the field archive and a copy of the report will be deposited with the Cumbria County Record Office, Kendal. Any finds will be deposited with the nearest museum that conforms to the Museums and Galleries Commission (MGC) archiving guidelines (MGC 1992).

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

3.1.1 The village of Hutton Roof stands at the foot of the Hutton Roof Crag, an upland limestone formation rising to 300m Ordnance Datum, laid down during the Carboniferous period 350 million years ago. Since being deposited this limestone has been folded and faulted into shape by movements in the earth's crust. The present landscape character of limestone pavement and glacial erratics deposited at the end of the last Ice Age (*c* 12000 BP), such as the well-known landmark of Cuckoo Rocking Chair on Hutton Roof Crag (Countryside Commission 1998, 69-70).

3.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.2.1 **Prehistoric Period:** evidence of prehistoric settlement in the area is chiefly derived from the discovery of isolated scatters of tools (Pearson 1930, 8). A relatively high number of stone axes has been found in the Kirkby Lonsdale area and it is generally assumed that the Aire Gap was one of the routes used for the transportation of axes quarried at Langdale in the Lake District to the east and south of the country (Higham 1986, 61). The remains of an Iron Age defended enclosure can be found at Sellet Bank, 3.5km to the south-east of Hutton Roof, but no prehistoric sites are known from the Hutton Roof area.

3.2.2 **Romano-British Period:** the Roman military occupation of the North West was completed in the last quarter of the first century AD and established forts at Lancaster, Watercrock, and Overburrow, 5km south-east of Hutton Roof. These policed a network of roads acting as communication and supply routes from the south and east. One such road crosses the River Lune near to Kirkby Lonsdale, 5km to the east of Hutton Roof (Marr 1909, 95) leading in a north-westerly direction to the fort at Watercrock, south of Kendal, where it joins the road from Lancaster. Little is known of the fort at Overburrow, although it appears to have been occupied until the later years of Roman rule (Shotter 1997, 96).

3.2.3 For the majority of the native population, life is likely to have changed little under Roman rule and many rural farmsteads retained a continuation of settlement form from the later prehistoric period. The nearest identified Romano-British farmstead to Hutton Roof is at Russell Farm, 3km to the south-west. No Romano-British sites are known from the study area.

3.2.4 **Early medieval:** little is known of early medieval society in the North West, although it seems that following the end of Roman administration, a number of independent kingdoms developed (Higham 1986, 250). It is thought that by the seventh century the area had become part of the kingdom of Northumbria, although this collapsed into anarchy in the ninth century under pressure from Hiberno-Norse raiding and subsequent settlement (*op cit*, 308). No early medieval sites are known from the study area.

- 3.2.5 **Medieval:** Hutton Roof was mentioned in the Domesday survey of 1086 and a portion of the Manor was included in the grant of Ivo de Taillebois to St Mary's Abbey in York, sometime between 1090 and 1097 (Pearson 1930, 12). In 1357, the name of John de Hutton Roof appears as then being in possession of the other portion (Bulmer 1885, 669). There was formerly an extensive park in the area, which, in the reign of Edward VI belonged to Judge Carus (Mannex and Co 1851). Hutton Roof Church (Site **18**) is of very ancient foundation, and its original income, twelve nobles, was barely sufficient for the maintenance of a medieval curate (*ibid*). No other medieval sites are known from the study area.
- 3.2.6 **Post-medieval:** following the Burton, Dalton and Holme Enclosure Act of 1818, much of the land was taken into private ownership and miles of drystone walls were built, changing the landscape dramatically. The principal landowners in the Hutton Roof area in the nineteenth century were the Earl of Lonsdale, John Bradley, and W.R. Gregg (*ibid*). The date of Low House itself is uncertain, with the earliest currently-known sources comprising the 1843 Tithe Award and map, which do include the site.
- 3.2.7 Hutton Roof village church (Site **18**) was rebuilt in 1880-81 at a cost of £2500 and was paid for by subscriptions and donations. The present edifice replaced an earlier chapel built in 1757, which had been endowed with three estates purchased by Queen Anne's Bounty and benefactions (Bulmer 1885, 669).
- 3.2.8 The burning of limestone in kilns was a common practice in the post-medieval period and land was improved for agriculture by adding the resulting quicklime. Evidence of this practice can be found from the numerous ruined lime kilns in the area (Sites **2**, **3**, **4** and **14**), mostly found on the boundary between the fells and the farmed land. Lime produced this way was also used for mortar and plaster for houses.
- 3.2.9 There were several fine sandstone, limestone and millstone quarries in the vicinity of the village (Sites **11**, **12** and **13**), most of which fell out of use in the twentieth century. The quarries produced good quality stone for the houses in Kendal and the local area (English Nature 2004).

3.3 MAP REGRESSION ANALYSIS

- 3.3.1 **Tithe Map 1843** (Fig 3): this shows the village aligned on a north/south axis along the main road. Low House and its associated farm buildings were at this time five separate structures, with the longest of these split into two, probably representing two phases of construction. The Tithe Award recorded that William Wilson owned the property and the adjacent fields. Field number 67 was named 'Bull Copy', and probably indicated where the farms' bull was kept (CRO WDRC/8/22).
- 3.3.2 **Ordnance Survey first edition 1:10560, 1862** (Fig 4): an extension had been built onto the longest building of the Low House farm complex, creating an L-shaped structure. Several small extensions had also been made to the two other principal buildings. An orchard had been created in the small field immediately

to the north of the house; it is possible that this had existed when the tithe map was surveyed but that it had not been marked on it.

- 3.3.3 **Ordnance Survey first edition 1:2500, 1898** (Fig 5): a man-hole in the field behind Low House to the west indicated the presence of the Thirlmere Aqueduct, which had been built in the 1880s. The lime kilns marked on the 1862 map had by this time fallen out of use and were identified as 'Old Limekilns'. Little change to the layout of the farm complex had taken place although another building had been constructed to the south of the L-shaped structure. The expansion of the farm had by this time reached its limit; the buildings present on the site at the time of this assessment were all shown on this map.
- 3.3.4 **Ordnance Survey second edition 1:2500, 1914**: the orchard garden had been reduced in size but otherwise the farm complex remained as it had been since the previous OS survey.

3.3 ARCHAEOLOGICAL INTERVENTIONS

- 3.3.1 No archaeological interventions are known to have taken place in the study area. The ruined lime kilns (Sites **2**, **3**, **4** and **14**) appear on the Index Record for Industrial Sites (1993) and a basic field survey of these remains was undertaken by the Holme and District Local History Society (HDLHS) in 1995; the survey notes are held at the CHER.

3.4 VISUAL INSPECTION

- 3.5.1 The remains of the lime kilns (Site **2**) were found to be as described by HDLHS in 1995 (*Section 4*). A view of Hutton Roof from the vantage point of Cuckoo Rocking Chair clearly showed the area of ridge and furrow (Sites **9** and **10**), as well as the previously unrecorded ridge and furrow in the field to the north-east (Site **22**; Plate 1). In a large field to the south of Low House, a series of former field divisions could be discerned as faint linear earthworks (Site **23**).

4. GAZETTEER OF SITES

Site number	1
Site name	Low House Farm, Hutton Roof
NGR	356970 478050
Site type	Farmstead
Period	Post-medieval
CHER No	19982
Sources	CRO WDRC/8/222; Ordnance Survey 1862
Description	A collection of farm buildings and a farmhouse are shown on the Hutton Roof Tithe map and the first edition 1:10560 OS map
Assessment	The farm buildings will be affected by the proposed development

Site number	2
Site name	Hutton Roof Lime Kilns
NGR	356840 478180
Site type	Lime kiln
Period	Post-medieval
CHER No	784
Sources	IRIS 1993; Ordnance Survey 1862
Description	Two disused and ruined lime kilns situated on the hillside above Low House
Assessment	The site lies outside the proposed development area and is unlikely to be affected

Site number	3
Site name	Hutton Roof Lime Kilns
NGR	356780 478470
Site type	Lime kiln
Period	Post-medieval
CHER No	785
Sources	IRIS 1993; Ordnance Survey 1862
Description	Two disused lime kilns. The understructure of the lower one is fairly well-preserved with the rectangular opening still intact. Part of the inner walls of the chimney are also still visible
Assessment	The site lies outside the proposed development area and is unlikely to be affected

Site number	4
Site name	Hutton Roof Lime Kilns
NGR	356780 478470
Site type	Lime kiln
Period	Post-medieval
CHER No	788
Sources	IRIS 1993; Ordnance Survey 1862
Description	The grassed over remains of a lime kiln are still visible as fairly prominent earthworks
Assessment	The site lies outside the proposed development area and is unlikely to be affected

Site number	5
Site name	The Rakes Unclassified Earthworks, Hutton Roof
NGR	356450 478500
Site type	Earthwork
Period	Unknown
CHER No	16576
Sources	AP/CLAU 13/ 2-3
Description	Unclassified earthworks identified from aerial photographs

Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 6
Site name Moor End Settlement Earthworks/Hutton Roof Park Earthworks, Hutton Roof
NGR 356500 477560
Site type Earthwork
Period Unknown
CHER No 16665, 16666
Sources AP/CLAU 1886, 22-25
Description Various earthworks indicating the remains of a settlement site, including foundations, enclosures, ridge and furrow and some possible lynchets
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 7
Site name Moor End Earthworks, Hutton Roof
NGR 357100 477700
Site type Earthwork, ridge and furrow
Period Unknown
CHER No 16667
Sources AP/CLAU 4, 26-27
Description Earthworks and ridge and furrow shown on aerial photographs
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 8
Site name Demolished Barn, Associated Earthworks at Hutton Roof
NGR 357250 478400
Site type Barn, field boundary, earthwork
Period Post-medieval
CHER No 19886
Sources Field notes taken by Rick Turner in 1982 (held with SMR entry)
Description A small group of earthworks in the field immediately north of Mill Lane
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 9
Site name Moor End Earthworks, Hutton Roof
NGR 357200 477900
Site type Earthwork, ridge and furrow
Period Unknown
CHER No 16668
Sources AP/CLAU 4, 28
Description Earthworks and ridge and furrow shown on aerial photographs
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 10
Site name Croftlands Hill Earthworks, Hutton Roof
NGR 357300 477900
Site type Earthwork, ridge and furrow
Period Unknown
CHER No 16669
Sources AP/CLAU 4, 29
Description Earthworks and ridge and furrow shown on aerial photographs
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 11
Site name Hutton Roof Quarries, Hutton Roof
NGR 357165 477035
Site type Quarry
Period Post-medieval
CHER No 17485
Sources Ordnance Survey 1862
Description The quarry was the source of Gleaston Formation sandstone for houses in the Kendal area; some grindstones were also exported to Australia. Working ceased in the 1910s and the quarry is now much overgrown
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 12
Site name Longfield Quarries, Hutton Roof
NGR 357730 478575
Site type Quarry
Period Post-medieval
CHER No 17486
Sources Ordnance Survey 1862
Description A quarry shown on the first edition 1:10560 OS map
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 13
Site name Park Wood Quarries, Hutton Roof
NGR 356575 477645
Site type Quarry
Period Post-medieval
CHER No 17496
Sources Ordnance Survey 1862
Description A quarry shown on the first edition 1:10560 OS map
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 14
Site name Park Wood Lime Kiln, Hutton Roof
NGR 356350 477505
Site type Lime kiln
Period Post-medieval
CHER No 17497
Sources IRIS 1993; Ordnance Survey 1862
Description A ruined lime kiln that had been built into the hillside
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 15
Site name Hutton Roof Park
NGR 356400 477300
Site type Park
Period Post-medieval
CHER No 17499
Sources Ordnance Survey 1862
Description Hutton Roof Park lies on the wooded flank of Hutton Roof Crags south-west of Hutton Roof. It is referred to in documents from 1641 as 'le Parke in Hutton Rooffe'
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 16
Site name Hutton Roof Mill
NGR 357360 478345
Site type Water mill
Period Medieval/post-medieval
CHER No 17501
Sources Ordnance Survey 1862
Description Hutton Roof Mill was a long narrow building at the fork of Mill Lane and a trackway to the east of Hutton Roof. Sealford Beck was used as the water source. The 1843 Tithe Award refers to a mill dam
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 17
Site name Crag Side Potash Kiln, Hutton Roof
NGR 356930 478340
Site type Site of a potash kiln
Period Post medieval
CHER No 17862
Sources CHER only
Description Site of a potash kiln measuring 4m x 4m x 2m
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 18
Site name Church of St John, Hutton Roof
NGR 356929 478789
Site type Church
Period Medieval/post-medieval
Listed Building number 27663 (Grade II)
Sources CHER
Description A church built by Paley and Austin in 1881-82. Dressed stone with ashlar dressings and a slate roof. Two stones, one dated 1616, the other a key, dated 1757, are from an earlier church on the site. Documentary evidence suggests that a church has existed on the site since at least the thirteenth century.
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 19
Site name Glebe Cottage and attached building
NGR 357050 478322
Site type House
Period Post-medieval
Listed Building number 27664 (Grade II)
Sources CHER
Description House and outbuilding, probably late seventeenth or early eighteenth century with later additions
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 20
Site name Turner's Farmhouse and attached barn
NGR 357062 478239
Site type Farmhouse and barn
Period Post-medieval
Listed Building number 27665
Sources CHER
Description Farmhouse and barn, probably late seventeenth or early eighteenth century, although the datestone reads 'C/1874'

Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 21
Site name Yew Tree Farmhouse
NGR 357046 478127
Site type House
Period Post-medieval
Listed Building number 27666
Sources CHER
Description Dated lintel reads 'FAH/1720'. Stone rubble construction with ashlar dressings and slate roof
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 22
Site name Ridge and Furrow east of Croftlands Plantation, Hutton Roof
NGR 357767 478018
Site type Ridge and furrow
Period Medieval/Post-medieval
CHER No -
Sources Visual inspection
Description An area of ridge and furrow observed from the vantage point of Cuckoo Rocking Chair on Hutton Roof Crag
Assessment The site lies outside the proposed development area and is unlikely to be affected

Site number 23
Site name Former field divisions north-west of Moor End, Hutton Roof
NGR 356875 477717
Site type Former field/plot divisions
Period Medieval/post-medieval
CHER No -
Sources Visual inspection
Description Faint traces of former field divisions were observed from the field behind Low House as low, linear earthworks
Assessment The site lies outside the proposed development area and is unlikely to be affected

5. SIGNIFICANCE OF THE REMAINS

5.1 INTRODUCTION

5.1.1 In total, 23 sites of cultural heritage interest were identified within the study area. Of these, four have statutory designation: Sites **18-21** (the Church of St John, Glebe House, Turner’s Farmhouse and Yew Tree Farmhouse) are all Grade II Listed Buildings. Of the remaining sites, 17 were included in the Cumbria HER (Sites **1-17**), and two were identified by the visual inspection (Sites **22** and **23**).

5.1.2 The types of sites identified are summarised by period in the table below:

Period	No of sites	Sites
Medieval	1	Church (foundations, 18)
Post-medieval	17	Listed Buildings (19-21), Low House farm complex (1), kilns (2, 3, 4, 14 and 17), quarries (11-13), park (15), water mill (16), ridge and furrow (22), former field boundaries (23), earthworks (7)
Unknown	5	Earthworks/ridge and furrow (5, 7, 9 and 10), settlement remains (6)

Table 1: Number of sites by period

5.2 CRITERIA

5.2.1 There are a number of different methodologies used to assess the archaeological significance of undesignated sites; that to be used here is the ‘Secretary of State’s criteria for scheduling ancient monuments’ which is included as Annex 4 of PPG 16 (DoE 1990). The sites previously listed (*Section 4*) were each considered using the criteria, with the results below.

5.2.2 **Period:** all identified sites which can be dated are considered to be of local significance for their period, with many representing post-medieval agricultural and industrial expansion.

5.2.3 **Rarity:** none of the sites are particularly rare, and the disused lime kilns (Sites **2, 3, 4** and **14**) and quarries (Sites **11-13**) are considered to be locally common features of the landscape.

5.2.4 **Documentation:** Low House farm (Site **1**) and the water mill (Site **16**) have an increased significance since some documentation pertaining to their history survives, and it is possible that more extensive research could reveal further documents. However, in the majority of instances, the supporting documentation for each site is largely cartographic.

5.2.5 **Group Value:** none of the sites display any particularly significant group value. The series of kilns, earthworks and ridge and furrow in the vicinity of the development site (Sites **2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 17, 22** and **23**) represent

part of the general agricultural landscape and can be considered to be of local significance.

- 5.2.6 **Survival/Condition:** the condition of Low House Farm barn and outbuildings (Site 1) is very poor, although many elements of the original fabric survive. The poor condition of these standing structures would make internal recording impossible in the majority of cases. The kilns, earthworks and ridge and furrow in the vicinity of the development site (Sites 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 17, 22 and 23) are currently in a stable condition due to the predominance of pasture in the area.
- 5.2.7 **Fragility/Vulnerability:** the remains of Low House Farm barn and outbuildings (Site 1) are extremely fragile, so much so that they are considered beyond repair. Any below ground remains of these buildings are vulnerable to destruction by the groundworks for the proposed redevelopment. The Listed Buildings (Sites 18-21) are not considered to be vulnerable to adverse impact by the proposed development. Those sites that survive as earthworks (Sites 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 17, 22 and 23) may be vulnerable to future development or plough damage.
- 5.2.8 **Diversity:** none of the sites are particularly diverse, although the earthworks and ridge and furrow in the vicinity of the development site (Sites 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 17, 22 and 23) are part of a more complex, diverse landscape.
- 5.2.9 **Potential:** the standing remains of Low House Farm (Site 1), together with any associated buried remains, possess considerable potential to provide information from the medieval to post-medieval periods. It is also likely to provide information on lifestyles, artefacts and activities in the general area and can be tied into existing historic records.

5.3 SIGNIFICANCE

- 5.3.1 The village of Hutton Roof was known to have existed at the time of the Domesday survey in 1086. Low House Farm (Site 1) has a documented history stretching back to the early nineteenth century but is likely to have been occupied for much longer. The upstanding remains of the buildings provide confirmation of seventeenth- and eighteenth-century occupation and there is the potential for below-ground remains to contain evidence of continuity of settlement since the medieval period.
- 5.3.2 The four Listed Buildings (Sites 18-21) are of early post-medieval date, and are of regional or national significance. They are unlikely, however, to be affected by the proposed development.
- 5.3.3 The other sites, whilst not threatened by the proposed development, have the potential to provide information about the enclosure of the landscape as well as post-medieval settlement in Hutton Roof. While none of the sites might be considered of national significance, further work could reveal them to be of regional or at least local significance.

6. BUILDING INVESTIGATION

6.1 INTRODUCTION

- 6.1.1 The farmstead comprises a main farmhouse and extensions, with a series of outbuildings and shippens to the south. The presently-occupied main farmhouse, to the north of the structures to be demolished, and another outbuilding, to the west, do not form part of the development, and accordingly were not recorded. For the purposes of the investigation and this report, those buildings scheduled for demolition have been divided into six separate areas, each of which have been accorded a building number (Fig 6). The severe state of disrepair in the majority of the structures at the farmstead precluded any meaningful investigation of their interiors. Some internal detail was observed through doors and windows where possible, but the following outline is essentially a description of their exterior features only.
- 6.1.2 **Building One:** this building has more recently served as a barn or stables, but the presence of mullioned windows and the position of the door confirm its earlier existence as a farmhouse. It is square in plan, with its frontage lying to the east (Plate 2). The roof is mono-pitched, and features Cumbrian slate, which is laid in diminishing courses and finished with sandstone ridge tiles. To the south there is a later extension, whilst an outshut has been appended to the rear (west) of the building.
- 6.1.3 The walls of this former farmhouse are constructed from roughly-coursed sandstone and lime mortar, and are dressed with sandstone quoins featuring pronounced toolmarks. Occasionally, limestone is employed, but it is mainly used as padstones in the three to four foundation courses at the base of the structure. Of additional note are the intermittent through stones on the north elevation.
- 6.1.4 The windows all feature chamfered and rebated sandstone mullioned surrounds (Plate 3), with nine-pane casements to the front of the building and four-pane casements to the rear. Of equal quality is the surround on the original door of the farmhouse, which features dressed sandstone quoins and a matching lintel.
- 6.1.5 The interior of the ground floor features plain white-washed walls, a concrete floor, and a ceiling of roughly-fashioned beams and joists, including a substantial cross-beam down the centre of the room. Partitions for livestock and shelving have been added, but evidence of an inglenook, with bressummer and spice rack on the south wall, again betray the building's earlier domestic function.
- 6.1.6 The first floor is inaccessible, although the partial collapse of the roof offers some indication of its construction. Only two trusses are visible, but it would appear to be constructed from four or possibly five tie-beam trusses with additional collars. Their roughly-fashioned nature would suggest that these are the original timbers. However, a series of joint-holes are evident, which may

simply be the remains of removed struts or braces, but equally, the timbers may have been removed from elsewhere and reused here for renovations or repairs.

- 6.1.7 The extension to the south was originally a two-storey structure, but now barely survives beyond the height of the ground floor (Plate 2). The build features a combination of roughly-coursed sandstone and limestone, dressed with sandstone quoins, and it appears to be partially keyed-in to the main build of the former farmhouse. On the front (east) elevation, there is a doorway comprising two round arches, probably wagon doors, which are dressed with neat voussoirs and quoins of sandstone (Plate 4) and the more northerly of which has been infilled and a window inserted.
- 6.1.8 The outshut at the rear (west) of *Building One* is a two-storey shippon, with access to the upper level provided by a set of stone steps on the exterior of the south elevation (Plate 5). Structurally, the building remains intact and features coursed sandstone and limestone, with slate frequently employed between courses. However, neither the roof nor the internal first floor has survived. On the ground floor, there are three doors and windows, one for each of the small square calf-holes within. The floor is obscured due to the collapse from above, whilst the walls are whitewashed, with an additional concrete render applied to the central pen. This central pen also featured the remains of a manger on the south wall.
- 6.1.9 **Building Two:** located at the west end of the farmstead, the two-storey, square cattle pen (former owner *pers comm*) is constructed from a markedly reddish sandstone, and is dressed with limestone quoins. Although the rough quality of the build remains constant, the stones on the north elevation clearly are somewhat larger than that of the west and south. As on the former farmhouse (*Building One*), the roof is constructed from diminished courses of Cumbrian slate and appears to be in a reasonable state of repair.
- 6.1.10 There are two heck doors on the north elevation of the ground floor, which are of ledged and braced matchboard design, and which still retain their original stone lintels and quoins. In addition, there are two casement windows on the first floor of the north elevation, and a further pair on the ground floor at the rear of the building. The latter casements have been fitted with iron bars and subsequently blocked with sheets of corrugated asbestos. The building is generally in a poor state of repair, but is still probably the best-preserved of the remaining structures on the farmstead.
- 6.1.11 **Building Three:** the remains of a rectangular outhouse or barn, which is located towards the west end of the east/west axis of the farmstead. It is constructed of yellow sandstone rubble with limestone dressings and, as is the case with the majority of buildings on the farmstead, the barn is in a dilapidated condition. The roof appears to have been very much in keeping with the fabric and build of those extant roofs of the other buildings, but little now remains. The walls have fared only marginally better, although the gable ends appear to be in reasonable condition compared to the rest of the structure. The west gable reaches up to two storeys high, whilst the east stands at three storeys, and features two strings of through stones and a slightly stepped base of large limestone blocks. In contrast, the north and south walls are in a particularly

poor condition, with the east extent of the south elevation reduced almost to foundation level.

- 6.1.12 There are eight doors on the north-facing elevation, of which the five most easterly doors are shorter with large sandstone lintels. All are of ledged and braced matchboard construction with iron fittings. In addition, four of the doors have vertical ventilation slits, which are closed by a sliding shutter on the interior. There are also two large wagon doors with segmental, voussoir arches, which are detailed in limestone (Plate 6). Above these two doors, there are several beam slots and a bearing box, which relate to a saw mill (former owner *pers comm*) that was once appended to this elevation. Due to the severe dilapidation of the south elevation, only one small square casement is identifiable at the west end of the wall.
- 6.1.13 **Building Four:** the shippon is a single-storey, rectangular building of yellow limestone rubble, which butts *Building Three* on the east/west axis of the farmstead (Plate 7). The structure stands in a very poor condition, with only half of the Cumbrian slate roof remaining, whilst the external facings of the walls are in a state of collapse.
- 6.1.14 Access into the building is provided by two doors on the north elevation, which are ledged and braced matchboard, with the vertical slits noted before. In addition, there are three casements on the north elevation, which have small square lights and sandstone lintels. The window lying furthest to the west has cement render around the lintel.
- 6.1.15 **Building Five:** the building is a rectangular shippon aligned north/south and which comprises most of the north/south axis of the farmstead (Plate 8). The building has been divided into three sections with the shippon occupying most of the space in the building. At the north end of the building are two calf holes, whilst to the south, there is storage area for turnips. The build comprises coarse sandstone rubble dressed with roughly-fashioned sandstone quoins, whilst the roof features a monopitched roof of tie beam design, with a solitary king post arrangement at the south end. As with the other buildings, this timber structure is again overlaid with diminishing courses of Cumbrian slate. The condition of the building is generally poor, with collapse particularly prevalent at the north end. Despite this, the roof would appear to be largely intact.
- 6.1.17 On the west elevation, there are four ledged and braced matchboard doors with the vertical ventilation slits noted earlier. In addition, the doors are dressed with sandstone lintels and roughly-fashioned quoins. Furthermore, on the substantially collapsed south elevation, there is a doorway with the remains of a sandstone wall on the west side of the surround, and a limestone build on the east side.
- 6.1.18 Four casement windows with timber frames have been inserted on the eastern elevation. No stone lintels are present, which adds credence to their later insertion. A further three casements with steel frames are situated on the west elevation. All three windows have received some attention, as evidenced by the cement repairs around each of them. This would probably relate to the early twentieth century, during which, the original frames were replaced by the steel

frame casements. In addition, the outer casements have sandstone lintels, whilst the central window has both a concrete head and rebuild over it, which suggests that it may have received extensive repairs at a later date.

- 6.1.19 On the eastern elevation, at the interface between *Buildings Four* and *Five* there are cast iron drainpipes. Also of interest is the semi-circular column of sandstone, which is exposed on the partially-collapsed western elevation.
- 6.1.20 **Building Six:** a square outbuilding, which has been appended onto the north elevation of *Building Five*, at the end of the north/south axis of the farmstead. As elsewhere on the farmstead, the build comprises both roughly-coursed limestone and sandstone, with occasional quoins, whilst the roof is again laid with diminished courses of Cumbrian slate.
- 6.1.21 There are two large doors on the west elevation, of which the most northerly is a set of wagon doors (Plate 9). Its counterpart directly to the south, appears to have originally been a sliding door, but it has since been partially blocked with concrete to create a single doorway, complete with matchboard door. Between these doors, stands a sandstone column, comprising seven circular blocks topped by a square plinth. In addition, on the south corner of the elevation, the quoins would appear to be later additions, which feature both sandstone and limestone, and which incorporate half of a column section.
- 6.1.22 On the east elevation there is an inserted window, with a concrete lintel and an additional window or ventilation hatch lies to the north end of the elevation. A further casement with sandstone sill and lintel is located in the centre of the north elevation. The surround has been repaired with cement mortar and brick, which would suggest repairs to an original window, rather than a later insertion.

7. WATCHING BRIEF RESULTS

7.1 INTRODUCTION

7.1.1 The watching brief monitored the excavation of a series of foundation trenches by a mechanical excavator, fitted with toothed buckets of either 0.9m or 1.2m width (Plate 10). Each section of work was given a separate trench number and the overall layout can be seen in Figure 7. A summary account of the results is presented below, whilst detailed descriptions of each trench are given in *Appendix 3*, and context descriptions in *Appendix 4*.

7.2 TRENCHES 1 TO 38 (PLOTS 3 TO 9)

7.2.1 Footings and drainage features relating to the demolished structures of the Low House Farm complex were located within several foundation trenches in the eastern half of the development (Fig 7). These included north-west/south-east and north-east/south-west aligned footings **101** and **112** at the north-eastern extent of the new building (Plate 11) and which are likely to represent elements of *Building Five*. They comprised roughly-hewn sandstone blocks measuring a maximum of 1m by 0.6m by 0.2m, forming a foundation 0.8m in width. Of drystone construction, footings **101** and **112** were built within construction cuts into the glacial till and recorded respectively as **102** and **113**. The entire structure was sealed by recent demolition debris of the current groundworks.

7.2.2 Foundation **149**, orientated north-west/south-east and measuring 0.38m in height and 3.2m in length, was located in the southern baulk of Trench 24 (Fig 7). It comprised two courses of roughly-hewn sub-rectangular sandstone, measuring 0.63m by 0.4m by 0.36m and bonded with a dark grey coarse sand. The construction cut, **150**, truncated the glacial till, **148**, by 0.28m, with the remainder of the foundation sealed by overburden **138**.

7.2.3 Four culverts were located during the watching brief. Culvert **108** was located towards the south-east corner of the development in the eastern baulk of Trench 1, just outside of wall **112** and was orientated north-west/south-east (Fig 7; Plate 12). Culvert **108** comprised edges of roughly-hewn sandstone blocks with a flat capping stone laid within construction cut **109**, which measured 0.65m wide and 0.35m deep, truncating glacial till **123**. The structure was sealed below a thin layer of soil, **122**, which is likely to have developed outside of *Building Five*. Culvert **108** was separated from a similarly aligned ceramic drain, **106**, by foundation **112** and it seems probable that these unconnected features represent two separate drainage schemes, with culvert **108** likely to be the earlier.

7.2.4 Culvert **110** was located across the north-eastern part of the current development (Fig 7) and was orientated north/south. It was of drystone construction, with sub-rounded stone sides and a large capping stone. It was located within construction cut **111**, which measured 1.2m wide and 0.6m deep,

and at least 19m in length. The structure was sealed below deposit **100**, a mix of topsoil and recent demolition debris.

- 7.2.5 Culvert **115** was located in the north-east-facing section of Trench 2 only. The sides were constructed of small rounded stones and capped with a large flat stone. The whole structure was located within construction cut **116**, which measured 0.3m wide and 0.2m deep, cutting the glacial till, **103**. It was sealed by the aforementioned deposit **100**.
- 7.2.6 Culvert **117** was located in the corner formed by Trenches 3 and 27 (Fig 7) and was aligned north-west/south-east. It comprised small rounded stones forming the sides of the structure, capped with a large sandstone slab. The structure was located within construction cut **118**, which measured 0.4m wide and 0.55m deep, and which truncated the glacial till, **103**. The structure was sealed below deposit **100**.
- 7.2.7 Towards the centre of the new development, a large drain was located in the south-western baulk of Trench 20 (Fig 8), and is likely to be associated with the shippon recorded as *Building 4* (Section 6.1.13-14). A glazed ceramic pipe, **144**, had been placed within pipe trench **145**, which had been cut through overburden **138** into the glacial till, **148**, and then backfilled with redeposited till, **143**. Cut **145** continued upwards more squarely as cut **142**, approximately 1m wide, against which two courses of red brick, **140** and **147**, on the south-east and north-west sides respectively, had been placed. The base of the drain was formed by concrete layer **146**, through which pipe **144** protruded. Red brick **140** had been sealed by several surviving courses of sandstone, **139**, above which the original floor level of the shippon is likely to have lain. No trace of this was found however, since the recent demolition had removed any features down to concrete **146**, before levelling-up with demolition debris **137**.
- 7.2.8 To the west of Trench 23 it became evident that quite an extensive area had previously been truncated, with either no, or very little, overburden (deposit **138**) being present above the glacial till (**148**); no archaeological features of deposits were located within this area.

7.3 TRENCHES 39 TO 49 (PLOTS 1 AND 2)

- 7.3.1 The ground surface in the area of Building Plots 1 and 2 (Fig 7) had been entirely terraced-out prior to the archaeological watching brief. The area had been cut into the base of the hillside to a maximum depth of 0.95m revealing a stratigraphy which comprised mid-brownish grey stony, gravely sandy-clay glacial till containing lenses of laminated, off-white and greyish-pink, very fine sandy silt.
- 7.3.3 The foundation trenches were being excavated a further 0.5m into these natural deposits. However, any archaeological features of horizons present would have been entirely removed by the terracing event and no further record was made of the excavations.

7.4 FINDS

7.4.1 A very small group of artefacts and ecofacts was recovered from the site, only five fragments in all. The group, detailed within Table 2, comprised a complete horseshoe, three fragments of pottery, and a fragment of clay tobacco pipe stem. All were in relatively good condition and unabraded, seeming unlikely to have been regularly disturbed since deposition. All but one fragment from soil layer **122** came from context **100**, representing a mixture of topsoil and recent demolition debris.

7.4.2 The pottery comprised a single fragment of black-glazed redware from layer **122**, and two of transfer-printed blue and white ware from deposit **100**. There is no reason to believe that any of these pre-date the late nineteenth or early twentieth century. The tobacco pipe fragment is small and undiagnostic. The horseshoe, probably steel, is probably of late twentieth century date. It can be stated with confidence that the finds add little to the understanding and interpretation of the site, and do not warrant further analysis.

Context	OR no	Material	Category	Qty	Description	Date
100	1000	Iron/Steel	Horseshoe	1	Complete horseshoe with countersunk rectangular nail holes.	Late twentieth century
100	1002	Ceramic	Vessel	2	Two body fragments blue and white underglaze transfer printed whiteware	Late nineteenth century or later
100	1003	Ceramic	Tobacco pipe	1	Undiagnostic stem fragment	Not closely dateable
122	1001	Ceramic	Vessel	1	Body fragment large redware vessel with internal glaze and simple slip decoration.	Late nineteenth century or later

Table 2: Summary of finds from the watching brief

8. DISCUSSION

8.1 BUILDING INVESTIGATION

- 8.1.1 The building investigation has been extremely valuable in providing further information to that of the desk-based assessment, and has revealed that the recorded farmhouse, *Building One* dates back to the late seventeenth century, if not before. It has also been possible to determine that through various stages of demolition and construction, the farmstead has grown steadily in a series of building phases, all of which are outlined below.
- 8.1.2 **Phase 1, late seventeenth to early nineteenth century:** the original farmhouse, which now forms part of *Building One* was built during the late seventeenth century. The exterior of the house shows some evidence of this, not least the rebated and chamfered sandstone surrounds of the windows, which are typical of the period (Brunskill 2002; OA North 2004, 2006a, 2006b). Although access to the interior was restricted due to the hazardous condition of the building, a cursory inspection revealed an inglenook fireplace, complete with bressummer beam and a spice cupboard, all of which add credence to a seventeenth century date of construction (Brunskill 2002). It would be feasible to presume that at least one other building required for various agricultural functions, was constructed at a similar date, but any such structures would appear to have been demolished in the early nineteenth century, certainly before the publication of the Tithe Map of 1843. During the early nineteenth century, the (still extant and so unrecorded) Georgian house lying to the north of the farmhouse was constructed, replacing *Building One* as the principal dwelling at Hutton Roof.
- 8.1.3 **Phase 2, early nineteenth century:** during this phase, which took place subsequent to the construction of the Georgian farmhouse but prior to the survey for the Tithe Map of 1843, *Building One* was converted into a stable and tack room and was appended to the south through the construction of a two-storey extension. The presence of the wagon doors suggests that this was some sort of barn, with the first floor likely to have formed a hayloft.
- 8.1.4 **Phase 3, early nineteenth century:** this occurred within a few years of Phase 2 and still before the publication of the 1843 Tithe Map. As in the previous phase, *Building One* was added to, with the appending of a two-storey outshut, identified as a shippon, onto the west elevation of the building.
- 8.1.5 **Phase 4, early to mid-nineteenth century:** during the same period, or within a negligible period of time, *Buildings Three* and *Four* and also the outbuilding to the west, just outside of the development area (and, therefore, outside the remit of the investigation) were all added to the farmstead, confirmed by their appearance on the Tithe Map of 1843. The addition of these structures presumably marks the expansion of the farmstead through the addition of a larger, purpose-built barn and shippon. Such changes may relate to the adoption of more intensive agricultural practices as much as to an expansion of farming land.

- 8.1.6 **Phase 5, mid-nineteenth century:** within the next twenty years, the outbuildings to the south were added to, with the appending of *Building Five* onto the east elevation of *Building Four* (Ordnance Survey 1862). The fact that the majority of *Building Five* was occupied by a shippon implies that there has been further expansion or intensification of pastoral farming.
- 8.1.7 **Phase 6, later nineteenth century:** over the next forty years, both *Building Two* and *Six* were appended to the ends of the by-then L-shaped complex of outbuildings (Ordnance Survey 1898). It is not necessarily clear if these were completed at the same time or constructed individually. Although the predominant use of sandstone for *Building Two* and limestone for *Building Six* would suggest two separate phases of construction, the farmstead as a whole indicates a practical attitude to building, with materials seemingly chosen on availability, convenience and probably cost. The fact that many of the buildings include both types of stone would attest to this.
- 8.1.8 **Phase 7, twentieth century:** the farmstead had reached the height of its expansion by the turn of the twentieth century. A saw mill (former owner *pers comm*), which was apparently little more than a corrugated lean-to, was added and subsequently removed in the last century. Due to the building materials employed, there is little evidence for its existence, aside from a bearing box and information kindly supplied by the previous owner. This lean-to would appear to be the extent of the structural changes over the last century. Indeed, the only visible changes appear to have been cosmetic rather structural. The original windows were replaced by steel-framed casements during the early twentieth century. In addition, several of the elevations show signs of repair, including the concrete lintels, brick inserts and cement render, which are particularly prevalent around the windows.

8.2 WATCHING BRIEF

- 8.2.1 Although the majority of footings found during the watching brief are likely to relate to those buildings recorded during the buildings investigation, the presence of several phases of drainage activity, some of it truncated by early nineteenth-century buildings, provides further evidence for the remodelling and development of the farmstead. Although it seems quite likely that the seventeenth-century farmhouse would have had one or more associated agricultural structures, it was not possible through the watching brief to conclusively define their presence. It is possible that they lay in similar positions to the later outbuildings, in which case a combination of truncation and reuse of their building materials is likely to have removed all but the most subtle traces. The possibility remains that they may have been shallowly-founded or even located outside of the present development area.
- 8.2.2 Similarly, the finds assemblage from the watching brief has done little to contribute to a fuller understanding of the chronology of the site, with all such finds being late in date and deriving from recently-disturbed deposits. It seems probable that refuse would have been removed from site on a regular basis for use as fertiliser, a process which is likely to have been exacerbated by the various phases of re-organisation and rebuilding.

9. BIBLIOGRAPHY

9.1 CARTOGRAPHIC SOURCES

CRO WDRC/8/222, 1843 *Plan of the Township of Hutton Roof in the Parish of Kirkby Lonsdale and County of Westmorland*

CRO WDRC/8/22, 1843 *Apportionment of the rent charge in lieu of tithes in the Township of Hutton Roof in the Parish of Kirkby Lonsdale and County of Westmorland*

Ordnance Survey, 1862 *Cumbria Sheet XLVII*, first edition 6":1 mile

Ordnance Survey, 1898 *Cumbria Sheet XLVII.10*, first edition 25":1 mile

Ordnance Survey, 1914 *Cumbria Sheet XLVII.10*, second edition 25":1 mile

Ordnance Survey, 1981 *Burton-in-Kendal & Caton, Sheet SD 56/57*, 1:25000

9.2 AERIAL PHOTOGRAPHS

Cumbria and Lancashire Archaeological Unit, 1984 13/2, 13/3, 4/18, 4/19, 4/20, 4/21, 1886/22, 1886/23, 1886/24, 1886/25, 4/26, 4/27, 4/28, 4/29

9.3 SECONDARY SOURCES

Bulmer, TF, 1885 *Directory of Westmorland*, Manchester

Brunskill, RW, 2002 *Traditional Buildings of Cumbria: The County of the Lakes* Casell

Countryside Commission, 1998 *Countryside Character; the Character of England's Natural and Manmade Landscape, vol 2: the North West*, Cheltenham

DoE, 1990 *Planning Policy Guidance Note 16: Archaeology and Planning*, London

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn.

English Heritage, 2006 *Understanding Historic Buildings: A Guide to Good Practice*

English Nature, 2004 *Limestone Landscapes: Holme, Burton and Hutton Roof*, unpub rep

Higham, N, 1986 *The Northern Counties to AD1000*, London

Holme and district Local History Society, 1995 *Field survey of Lime Kiln near Hutton Roof*, unpubl

Index Record for Industrial Sites (IRIS), 1993

Mannex, PJ, and Co., 1851 *History, Topography and Directory of Westmorland with Lonsdale and Amounderness in Lancashire*, London

Marr, JE, 1909 *Cambridge County Geographies: Westmorland*, Cambridge

Museum and Galleries Commission, 1992 *Standards in the Museum care of Archaeological Collections*

OA North, 2004, *Levens Hall, Kendal: Archaeological Building Investigation*. (unpubl rep)

OA North, 2006a *Holland Fold Farm, Heath Charnock, Archaeological Building Investigation* (unpubl rep)

OA North, 2006b, *Middle Salter Farm, Roeburndale, Lancashire: Archaeological Building Investigation* (unpubl rep)

Pearson, A, 1930 *Annals of Kirkby Lonsdale and Lunesdale in Bygone Days*, Kendal

Shotton, DCA, 1997 *Romans and Britons in North-West England*, rev edn, London

Turner, R, 1982 *A Demolished Barn and Associated Earthworks at Hutton Roof, Kirkby Lonsdale* unpubl fieldnotes

ILLUSTRATIONS

FIGURES

Figure 1: Location Map

Figure 2: Plan of Gazetteer Sites

Figure 3: Tithe map of 1843

Figure 4: Ordnance Survey 1862, first edition 6":1 mile map of Lancashire

Figure 5: Ordnance Survey 1898, first edition 25":1 mile map of Lancashire

Figure 6: Plan of the recorded farmstead buildings at Low House

Figure 7: Trench location plan

Figure 8: North-east-facing section of Trench 20

PLATES

Plate 1: Ridge and furrow of Site **22**, viewed from the south-west

Plate 2: The east elevation of *Building One*, with the south extension to the left of the plate

Plate 3: Detail of the chamfered and rebated mullioned windows

Plate 4: The double-arched wagon of the south extension

Plate 5: The outshut with its external stone staircase

Plate 6: Detail of a wagon door on the north elevation of *Building Three*

Plate 7: The north elevation of *Building Four*

Plate 8: The west elevation of *Building Five*

Plate 9: The west elevation of *Building Six*

Plate 10: Working shot taken during excavation of Trench 1, looking west

Plate 11: Foundation **101** in Trench 1, looking west

Plate 12: Culvert **108** in Trench 1, looking west

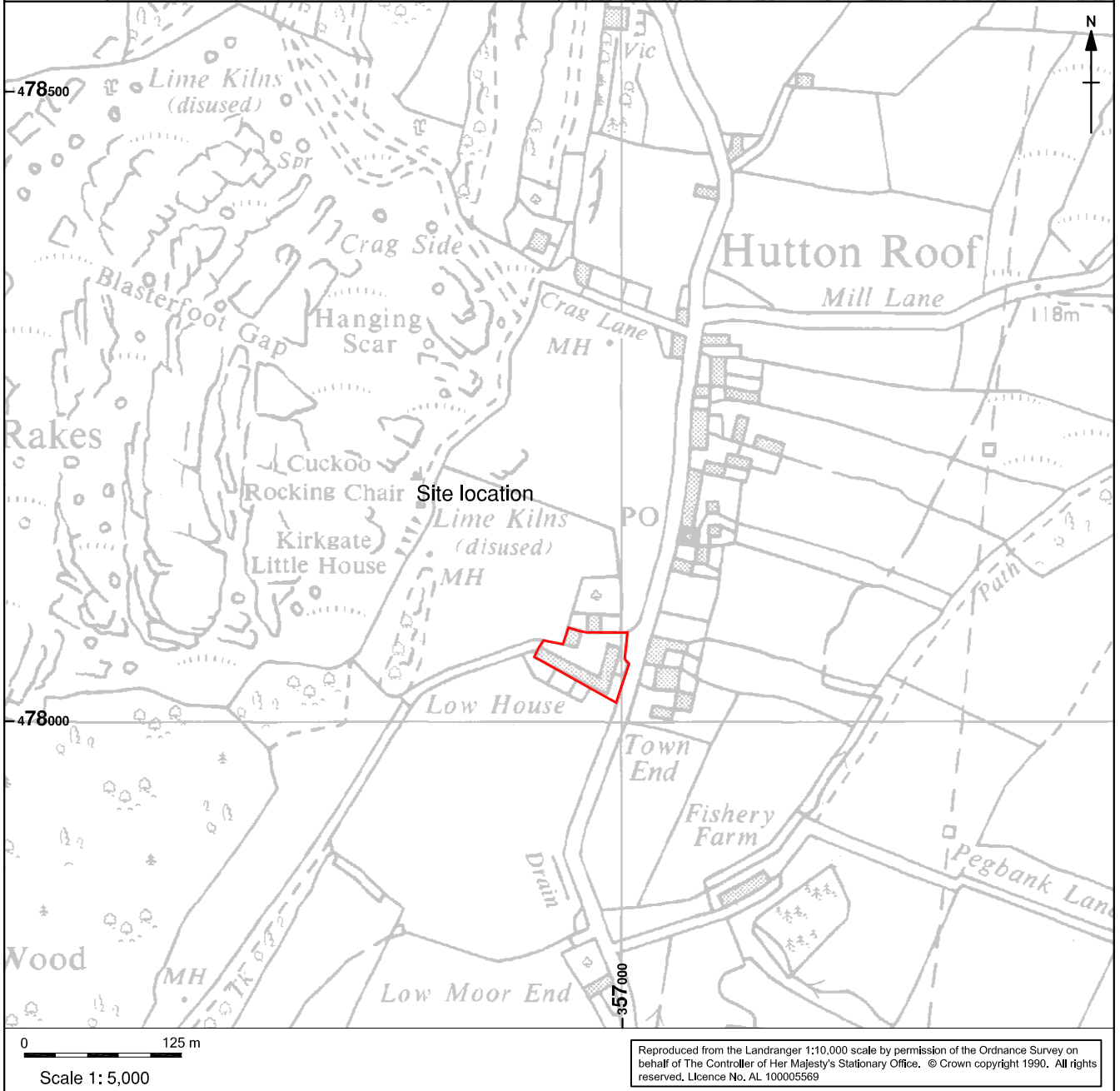
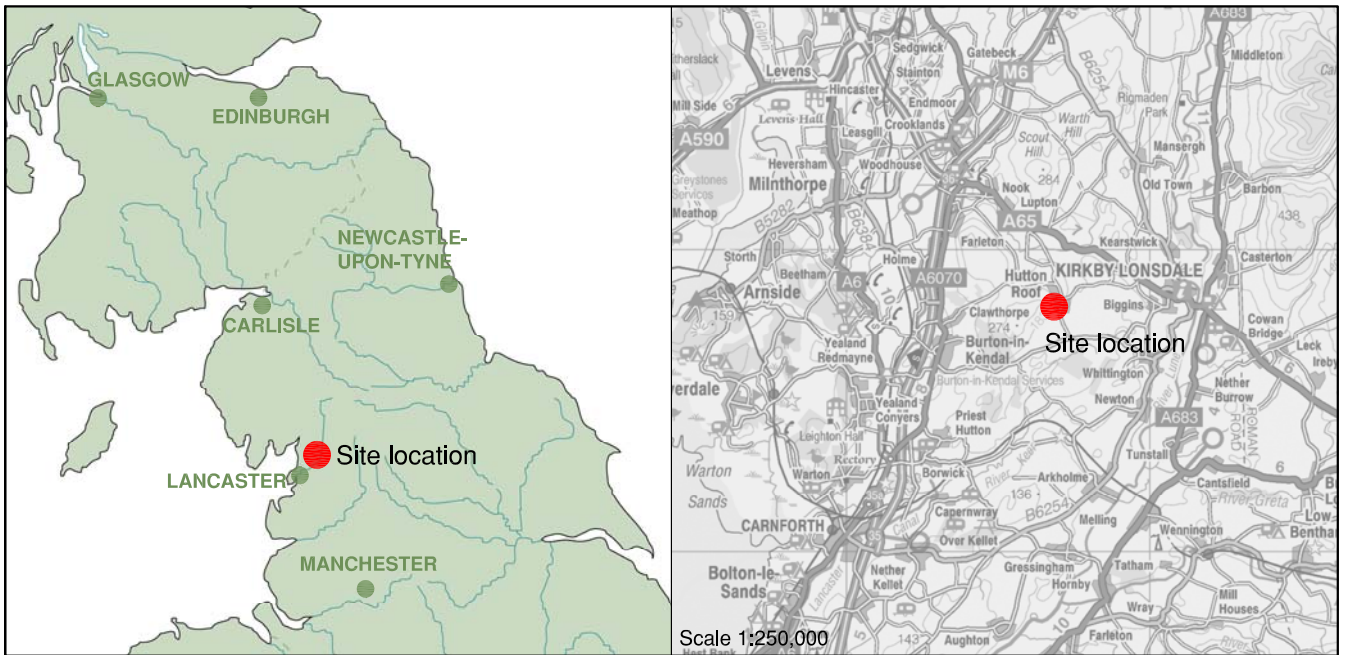
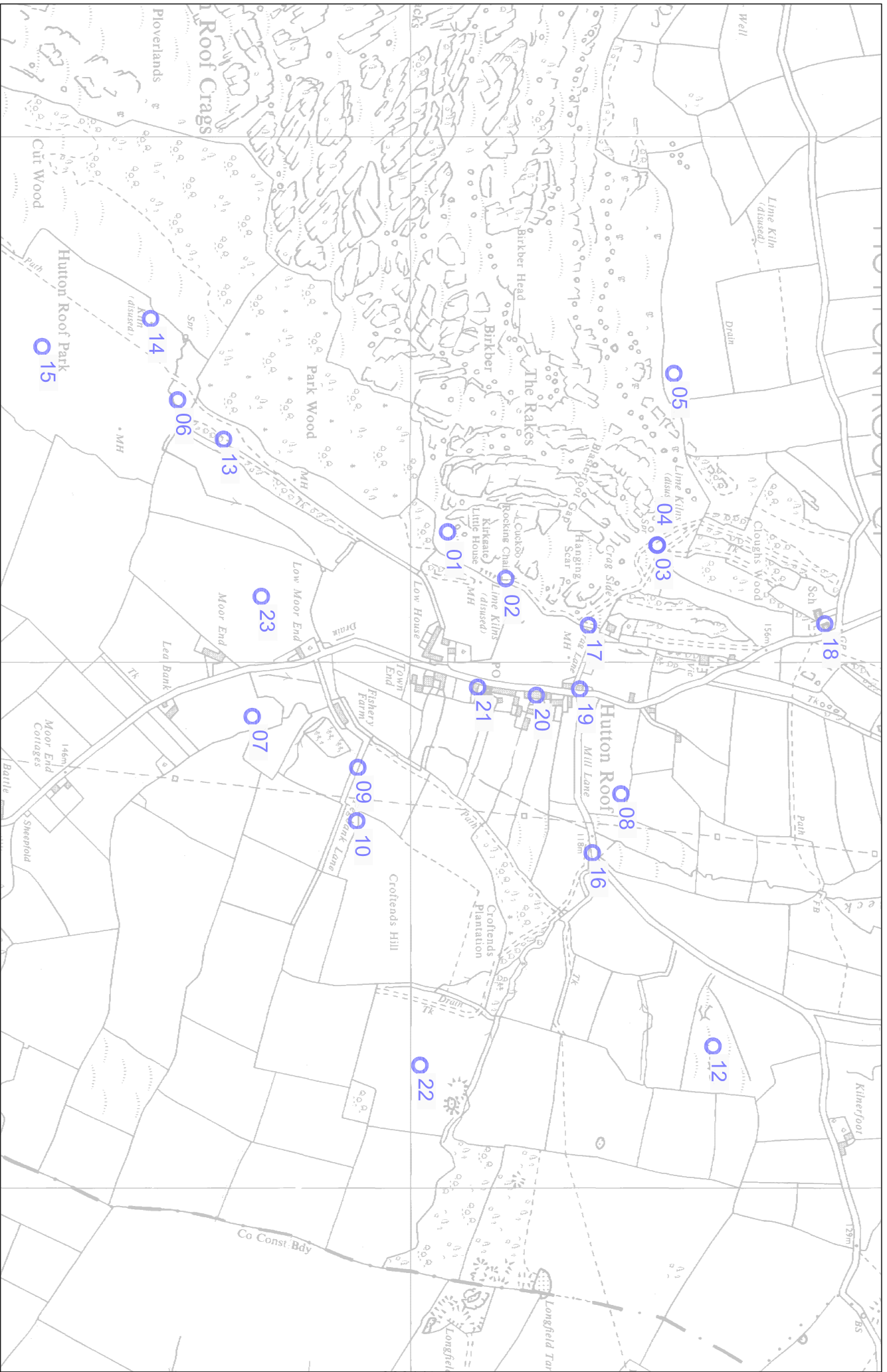


Figure 1: Site Location



▲ Reproduced from the Landranger 1:10,000 scale by permission of the
 Office of the Controller of Her Majesty's Stationery
 Licence No AL 100005569

357000

Scale 1:10000 at A4



Figure 2: Plan of Gazeteer Sites

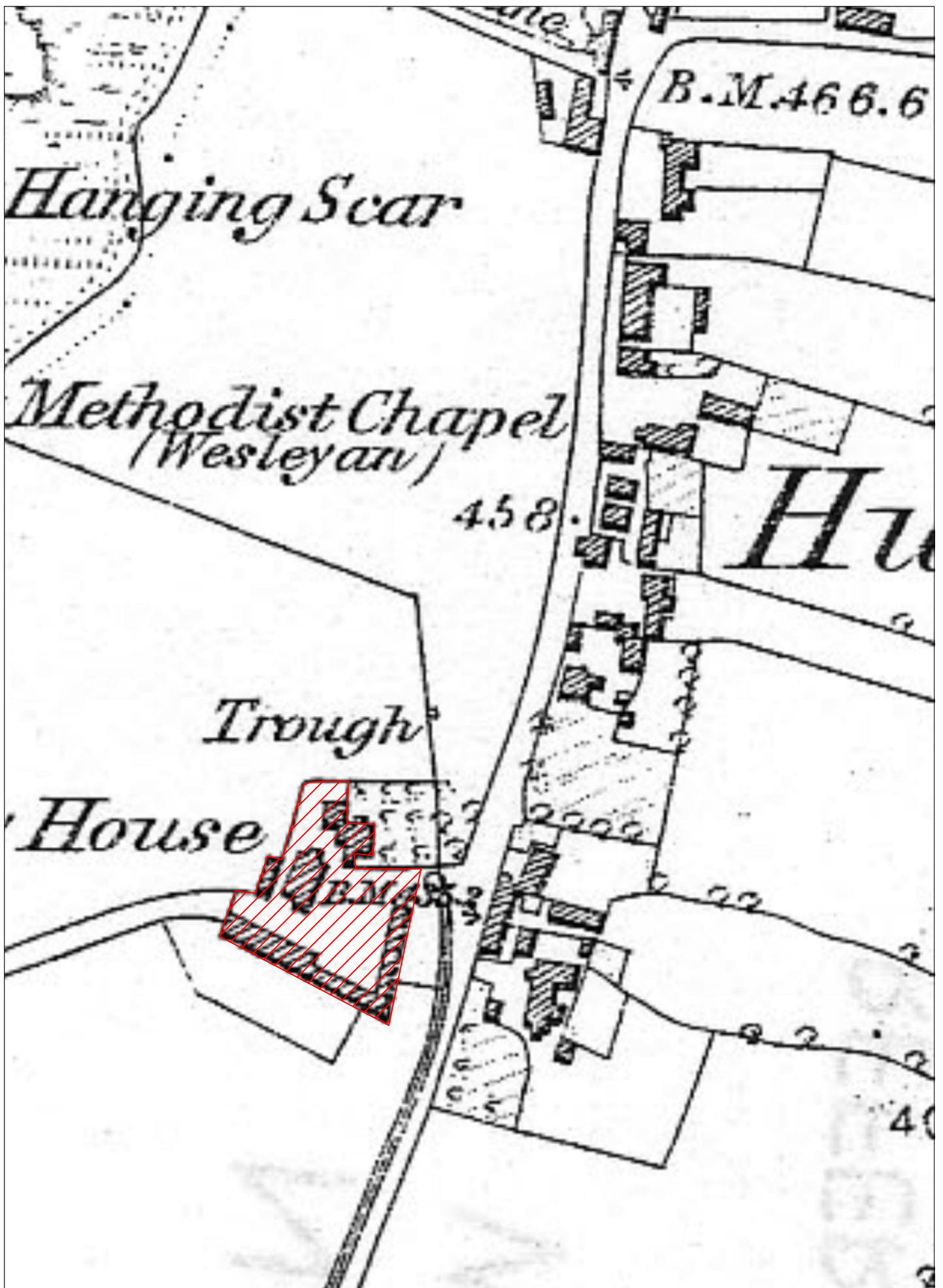


Low House Complex

Not to scale



Figure 3: Tithe Map of 1843



Low House Complex

Not to scale



Figure 4: Ordnance Survey Map of 1862

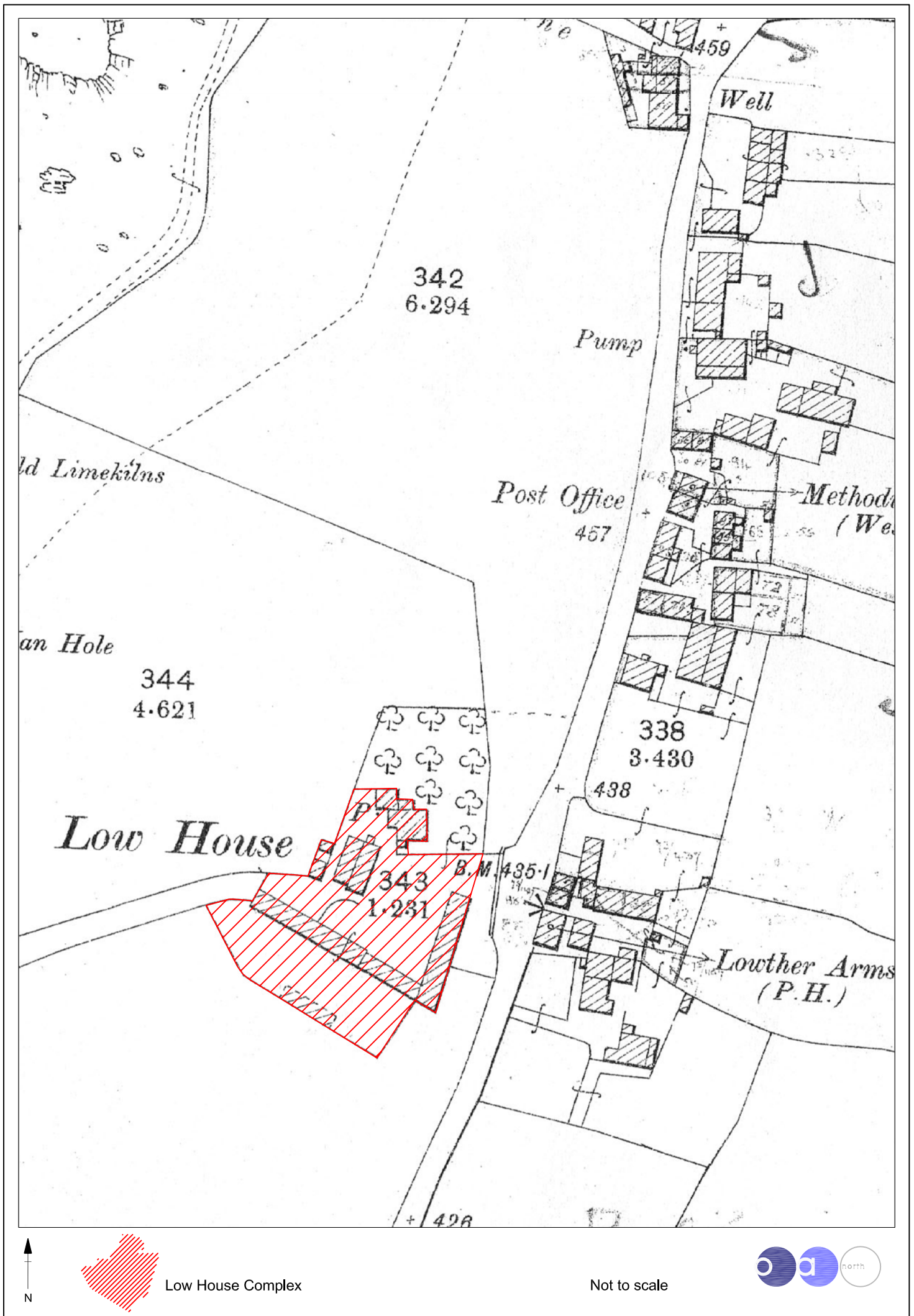


Figure 5: Ordnance Survey Map of 1898

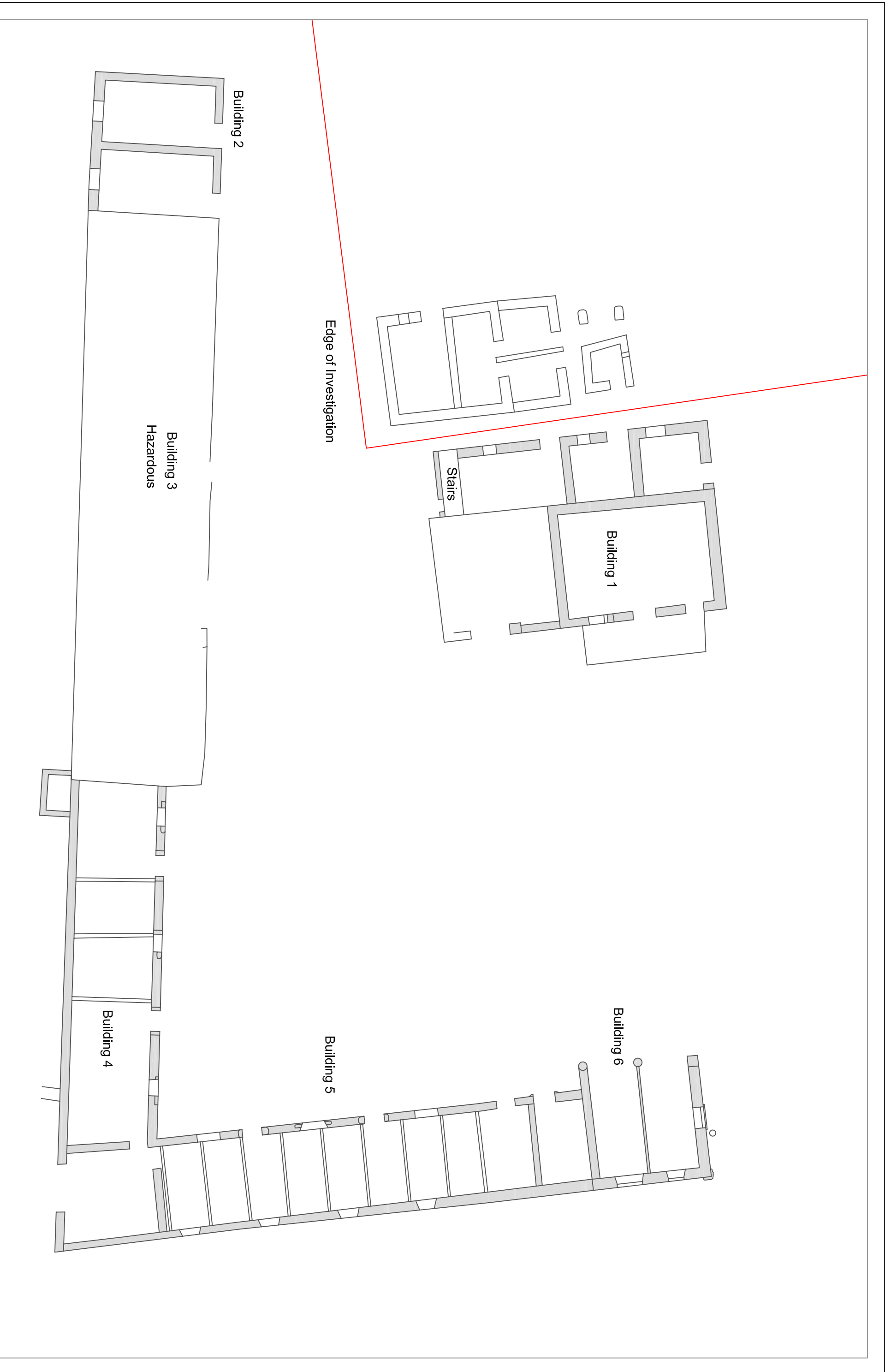


Figure 6: Plan of the recorded farmstead buildings at Hutton Roof

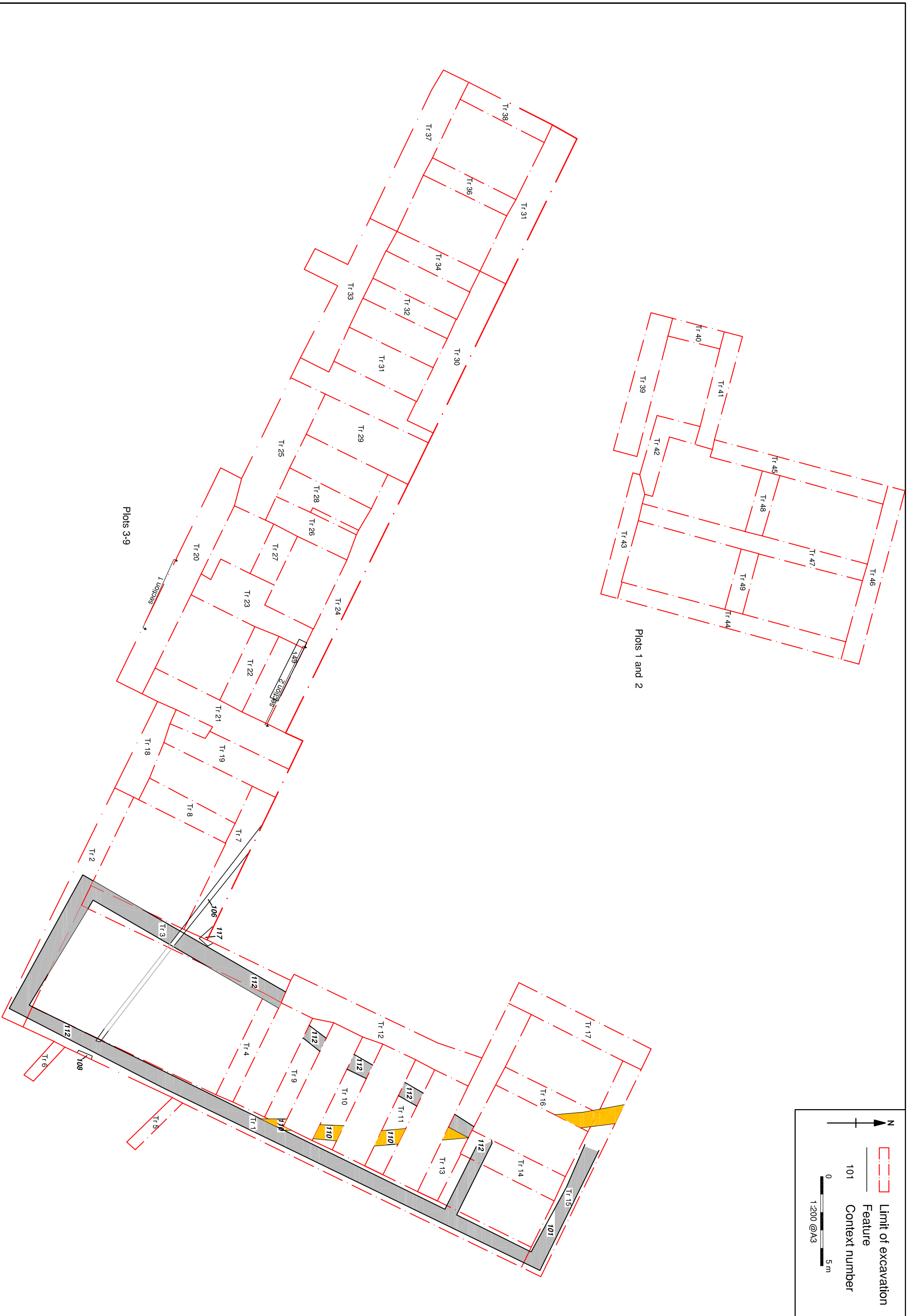


Figure 7: Trench location Plan

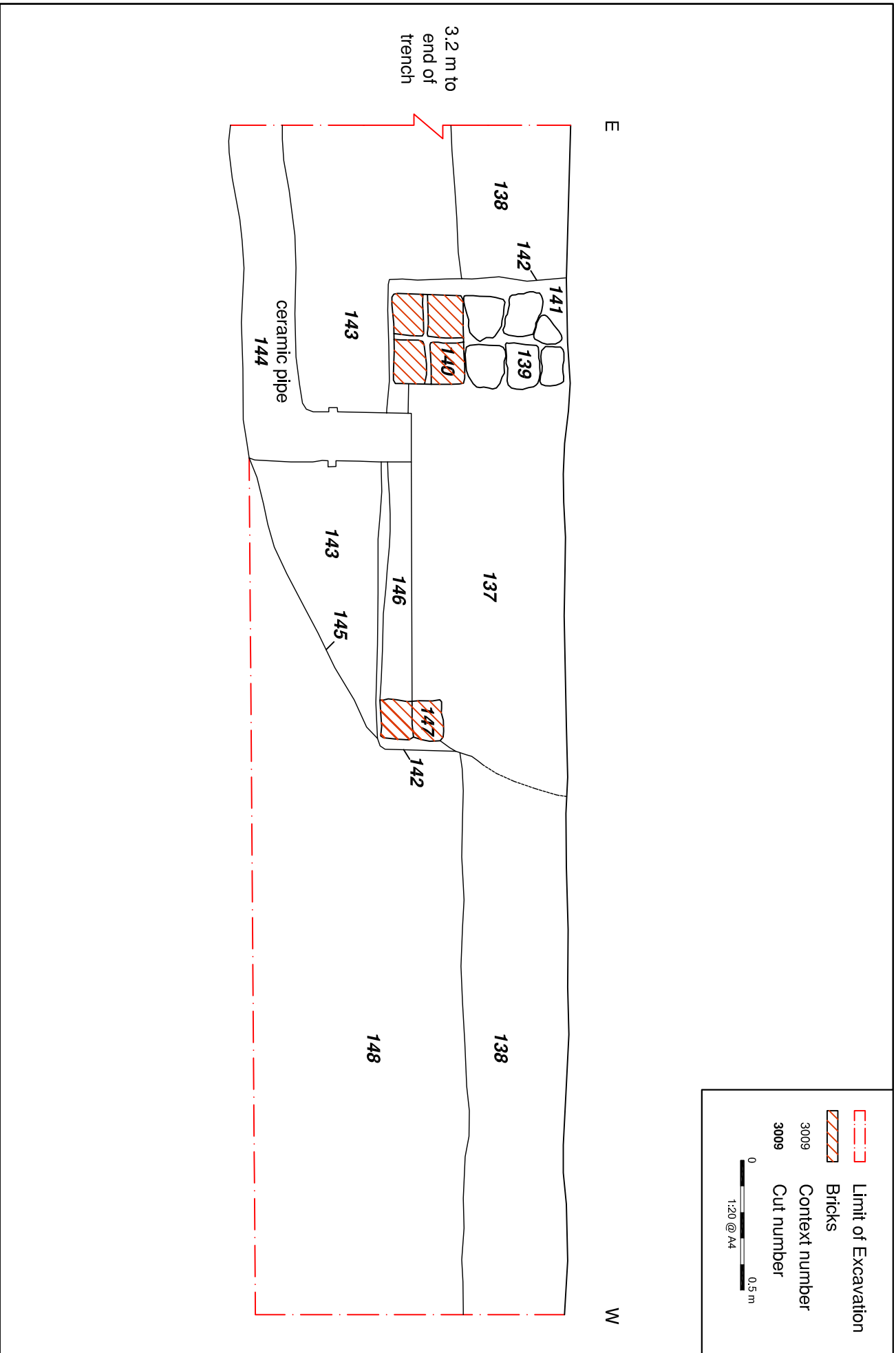


Figure 8: North-east-facing section of Trench 20



Plate 1: Ridge and furrow of Site **22**, viewed from the south west



Plate 2: The east elevation of *Building One*, with the south extension to the left of the plate



Plate 3: Detail of the chamfered and rebated mullioned windows



Plate 4: The double-arched wagon door of the south extension



Plate 5: The outshut with its external stone staircase



Plate 6: Detail of a wagon door on the north elevation of *Building Three*



Plate 7: The north elevation of *Building Four*



Plate 8: The west elevation of *Building Five*



Plate 9: The west elevation of *Building Six*



Plate 10: Working shot taken during excavation of Trench 1, looking west



Plate 11: Foundation *101* in Trench 1, looking west



Plate 12: Culvert *108* in Trench 1, looking west

APPENDIX 1: PROJECT BRIEF

APPENDIX 2: PROJECT DESIGN

LOW HOUSE, HUTTON ROOF, KIRKBY LONSDALE, CUMBRIA

ARCHAEOLOGICAL ASSESSMENT, BUILDINGS INVESTIGATION AND WATCHING BRIEF: PROJECT DESIGN



Oxford Archaeology North

September 2005

Norman Jackson Contractors

OA North Job No: T2543

NGR: SD 5697 7805

Planning Application No: 5021495

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Norman Jackson Contractors Ltd (hereafter, 'the client') has requested that Oxford Archaeology North (OA North) submit proposals for a programme of archaeological recording at Low House, Hutton Roof, Cumbria in advance of a proposed residential development at the site. The following document was compiled in accordance with the requirements of a brief prepared by Cumbria County Council Historic Environment Service (CCCHES) and represents a project design for a rapid desk-based assessment, including a visual inspection; a RCHME level II buildings investigations of three standing structures and for a watching brief, to be undertaken during any groundworks associated with the development of the site.

1.1.2 The village of Hutton Roof is a medieval village documented in the Domesday Book, and there is evidence for medieval field systems and cultivation surviving around the southern and eastern parts of the village. The buildings proposed for demolition form an integral part of Low House Farm, and are shown on the first edition OS map (Sites & Monuments Record no. 19982). Low House Farm itself is first documented in 1738, and there is the potential that the present structure overlies an earlier building. Within the development area, there are three buildings scheduled for demolition, comprising a modern concrete portable-framed structure, a partially-roofed 'L'-shaped complex of barns and a two-storey building. It is the latter two buildings that will be the main focus of the programme of archaeological investigation, both of which are in a dilapidated state.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 Oxford Archaeology North (OA North) has considerable experience of the archaeological survey and evaluation of sites and monuments of all periods, having undertaken a great number of small and large projects during the past 24 years. Projects have been undertaken to fulfil the different requirements of various clients and planning authorities, and to very rigorous timetables. OA North has considerable experience of the recording of historic buildings together with the evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 20 years. Fieldwork has taken place within the planning process and construction programmes, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.2.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed, in accordance with a brief by Cumbria County Council Archaeological Service (CCCHES) to provide a desk-based assessment, a fabric survey of the farm buildings, and a watching brief during groundworks. The required stages to achieve these ends are as follows:

2.2 DESK-BASED ASSESSMENT

2.2.1 To provide a rapid desk-based assessment of the site in order to place the extant features within a historical and archaeological context and to outline the potential for further archaeological features within the development area and also to undertake a visual inspection of the development area to establish the presence of both constraints to, and areas of potential for, the programme of archaeological investigation.

2.3 BUILDINGS INVESTIGATION

- 2.3.1 To provide a basic survey record of the extant fabric of the existing historic barn complex and associated two-storey structure, in accordance with Royal Commission on the Historical Monuments (England) (RCHME) Level II-type survey. This would involve the production of ground-floor plans, where possible of each building. The survey would provide for a basic analysis of the fabric and would result in a textual assessment of the development, form and function of the building.

2.4 WATCHING BRIEF

- 2.4.1 To record any surviving archaeological features or deposits by means of detailed observation and recording in the course of the groundworks for the development. To record the presence of buried features by appropriate recovery techniques, where applicable.

2.5 REPORT AND ARCHIVE

- 2.5.1 A written report will assess the significance of the data generated by this programme within a local and regional context. It will present the desk-based study, fabric survey and watching brief results and would make an assessment of the development of the building and site. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHOD STATEMENT

3.1 DESK- BASED ASSESSMENT

- 3.1.1 A rapid desk-based study will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the timescale of the project.
- 3.1.2 **Documentary and cartographic material:** this work will consult the range of potential sources of information, both primary and secondary and any relevant aerial photographs, referenced in the Cumbria Historic Environment Record, including OS First Edition maps (both 6" to 1 mile and 25" to 1 mile).
- 3.1.3 **Visual Inspection:** a visual inspection of the site will be made prior to any development works and will examine the areas to be developed. It will put the site within a general context, will examine areas of archaeological interest and highlight areas of disturbance, as well as any constraints to the undertaking of the programme of archaeological investigation.

3.2 BUILDINGS INVESTIGATION

- 3.2.1 The buildings investigation will be carried out to establish the nature, function, origins, survival, quality, and importance of the complex of historic buildings proposed for demolition as part of the redevelopment of the site.
- 3.2.2 **Health and Safety:** the issue of safe working conditions will be paramount during the building investigation, as it will entail the recording of a number of buildings in a state of dereliction. A risk assessment will be compiled at the start of the project, and will be updated as appropriate over the course of the works. At all times, the OA North Supervisor will consider health and safety issues before and during the recording of each structure. If the OA North Supervisor

deems that at any time it is unsafe to enter, or even to be near any structure, recording of that structure will either cease or will be conducted in a manner appropriate to the maintenance of good health and safety conditions. It is not proposed to examine any of the first floor levels of any of structures. Similarly, the potential effect of adverse weather conditions upon the derelict structures means that, during periods of adverse weather, all recording of the structures will cease and an alternative time to record the structures will be arranged with the client.

3.2.3 **Photographic Archive:** a photographic archive will be produced utilising a 35mm camera to produce both monochrome prints and colour slides. The archive will comprise:

- i. general shots of the buildings, both internal and external and its surroundings,
- ii. detailed scaled coverage of architectural features and structural or decorative detail (both internal and external),
- iii. the building's relationship to its setting, other buildings or significant viewpoint.

3.2.4 The location of each photograph will be marked on either any architect's plans that are received or on working plans produced during the course of the investigation.

3.2.5 **Site Drawings:** the supplied architects drawings will be annotated, as far as health and safety considerations allow, to produce for the buildings the following:

- i. plans of the ground floors as existing, annotated to show form and location of any structural features of historic significance and recording the form and location of any significant structural and agricultural details.
- ii. drawings recording the form and location of significant structural elements details.
- iii. any 'as existing' elevations (if available) will be annotated to reference the photographic archive.

3.2.6 **Ground Plan of Building:** within the confines of health and safety, a ground-floor plan will be created for each building and its environs which will be tied into a 1:10,000 digital base for the site. Where possible, the building will be surveyed by means of a reflectorless total station. The positioning of this device and, therefore, the amount of data captured, will be dependant upon the consideration of any health and safety implications by the OA North Supervisor in charge of the investigation.

3.2.7 Data from the survey will be incorporated into a CAD system and output as a series of plots for further annotation. Where necessary and appropriate, any drawings supplied by the client will be corrected/enhanced utilising hand survey techniques. The graphic results of the survey will be digitised into an industry standard CAD package (AutoCAD Release 14) for the production of the final drawings the CAD system. The drawings will usually be produced at a scale of 1:100.

3.2.8 A site plan relating the building to related topographical and landscape features will be included at a scale of 1:500 or 1:1250, and any earlier plans relating to the building's history.

3.2.9 **Interpretation and Analysis:** a visual inspection of the building will be undertaken utilising the OA North buildings *pro-forma* sheets. An outline description will be maintained to RCHM(E) Level II-type survey. This level of recording is descriptive and will produce an analysis of the development and use of the building but will not discuss the evidence on which the analysis is based. From this, the history, nature and importance of the structures will be discussed, as well as the building's landscape and historic context at a regional or local context.

3.3 WATCHING BRIEF

- 3.3.1 **Health and Safety:** OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). OA North will liaise with the client to ensure all health and safety regulations are met. A detailed risk assessment will be completed in advance of any on-site works, with continuous monitoring and updating during the fieldwork. This can be supplied to all interested parties on request. All project staff will be CSCS qualified. Archaeological contractors have not yet been recognised for the receipt of CSCS cards. However, proof of qualification can be provided.
- 3.3.2 Any contamination issues must also be made known to OA North in order that adequate PPE can be supplied prior to commencement. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Any specialist safety requirements may be costed as a variation.
- 3.3.3 **Methodology:** all topsoil stripping, footings, service trenches, and trench cutting will be undertaken during a programme of field observation. This will accurately record the location, extent, and character of any surviving archaeological features and/or deposits within the proposed ground disturbance. This work will comprise observation during the excavation for these works, including building foundations and service trenches, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 3.3.4 The watching brief will cover the whole of the area to be disturbed by the development including building foundations, service trenches and all other earthmoving activities.
- 3.3.5 Putative archaeological features and/or deposits identified by the machining process, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and where appropriate sections will be studied and drawn. Any such features will be sample excavated (i.e. selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal). Finds and environmental samples will be retrieved as appropriate.
- 3.3.6 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a **large-scale plan provided by the client**. A photographic record will be undertaken simultaneously.
- 3.3.7 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.
- 3.3.8 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations.
- 3.3.9 **Finds:** all finds recovered during the evaluation investigation (metal detecting and trial trenching) will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.

- 3.3.10 Finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC).
- 3.3.11 Neither artefacts nor ecofacts will be collected systematically during the mechanical excavation of the topsoil unless significant deposits, for example clay pipe waster dumps, are encountered. In such an eventuality, material will be sampled in such a manner as to provide data to enhance present knowledge of the production and dating of such artefacts, although any ensuing studies will not be regarded as a major element in any post-excavation analysis of the site. Other finds recovered during the removal of overburden will be retained only if of significance to the dating and/or interpretation of the site. It is not anticipated that ecofacts (eg unmodified animal bone) will be collected during this procedure.
- 3.3.12 Otherwise artefacts and ecofacts will be collected and handled as per specification. Objects deemed to be of potential significance to the understanding, interpretation and dating of individual features, or of the site as a whole, will be recorded as individual items, and their location plotted in 3-D. This may include, for instance, material recovered from datable medieval pit groups.
- 3.3.13 Finds will be processed and administered at regular intervals (on a daily basis) and removed from the site. All finds will be treated in accordance with OA standard practice, which is cognisant of IFA and UKIC Guidelines. In general this will mean that (where appropriate or safe to do so) finds are washed, dried, marked, bagged and packed in stable conditions; no attempt at conservation will be made unless special circumstances require prompt action.
- 3.3.14 **Environmental Sampling:** subject to survival environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). Subject to the results of the watching brief an assessment of any environmental samples will be undertaken by the in-house palaeoecological specialist, who will examine the potential for further analysis. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect appropriate deposits are identified and will be subject to the agreement of CCCHES and the client. All waterlogged finds will be treated as appropriate. In the case of large deposits of waterlogged environmental material (e.g. unmodified wood), advice will be sought with the OA North consultant with regard to an appropriate sampling strategy.
- 3.3.15 Where possible, spot dates will be obtained on pottery and other finds recovered from the site. Artefacts will be examined and commented upon by OA North in-house specialists.
- 3.3.16 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.3.16 **Contingency plan:** in the event of significant archaeological features being encountered during the watching brief, discussions will take place with the Assistant CCCHES Archaeologist or his representative, as to the extent of further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it would be necessary to discuss and agree a programme of palaeoenvironmental sampling and or dating with the Assistant CCCHES Archaeologist.

3.4 ARCHIVE/REPORT

- 3.4.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the CHER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the County Record Office,

and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum.

3.4.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further three copies submitted to the Cumbria HER within eight weeks of completion. A further copy will also be offered to the National Monuments Record. The report will include;

- a site location plan related to the national grid
- a front cover to include the planning application number and the NGR
- a concise, non-technical summary of the results
- the dates on which the fieldwork was undertaken
- description of the methodology and results
- an interpretation of identified deposits
- a finds list, including dates, and any other environmental/specialist work should it be undertaken
- appropriate plans and sections, showing the location and position of deposits and finds located
- a brief photographic record, showing any features of archaeological interest. Where no archaeological features are revealed, a photograph of an indicative section will be included

3.4.3 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

4 PROJECT MONITORING

4.1 **Access:** liaison for access to the buildings during the assessment will be arranged by the client, unless otherwise instructed prior to commencement of the archaeological investigation.

4.2 Monitoring of this project will be undertaken through the auspices of the County Council Archaeologist or a representative, who will be informed of the start and end dates of the work.

5 WORK TIMETABLE

5.1 **Desk-based Assessment:** this element is expected to take two days.

5.2 **Buildings Investigation:** a three day period would be required for this element

5.3 **Watching Brief:** the duration of the archaeological presence required for the watching brief is as yet unknown, being dictated by the schedule of works.

5.4 **Report and Archive:** the client report will be completed within approximately eight weeks following completion of the fieldwork. The archive will be submitted within six months.

6 STAFFING

- 6.1 The project will be under the direct management of **Stephen Rowland BSc (Hons) MSc** (OA North Project Manager) to whom all correspondence should be addressed.
- 6.2 The desk-based assessment and visual inspection is likely to be undertaken by either **Daniel Elsworth MA (Hons) AIFA** or **Joanne Dawson MA (Hons) PIFA** who have great experience of the undertaking of such projects.
- 6.3 The building investigation will be undertaken by **Karl Taylor BSc (Hons) AIFA** (OA North Supervisor) who has a wealth of experience in the recording and analysis of historic industrial buildings. Karl will be accompanied on site by **Chris Ridings BA MA** (OA North Assistant Supervisor) who is also experienced in recording historic buildings.
- 6.4 The watching brief will be supervised in the field by an OA North Project Supervisor experienced in such work and capable of carrying out projects of all sizes.
- 6.5 Assessment of any finds from the watching brief will be undertaken under the auspices of OA North's in-house finds specialist **Chris Howard-Davis BA (Hons)** (OA North Project Officer). Chris acts as OA North's in-house finds specialist and has extensive knowledge of all finds of all periods from archaeological sites in northern England.

7 INSURANCE

- 7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

8 BIBLIOGRAPHY

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, London

SCAUM (Standing Conference of Archaeological Unit Managers), 1991 *Health and Safety Manual*, Poole

United Kingdom Institute for Conservation (UKIC), 1990 *Guidelines for the preparation of archives for long-term storage*, London

United Kingdom Institute for Conservation (UKIC), 1998 *First Aid for Finds* London

APPENDIX 3: TRENCH DESCRIPTIONS

Trench No: 1
Alignment: North-east/south-west
Length: 24m
Depth: 1.75m

Description: The earliest deposit seen in Trench 1 was a mid-blue stoney clay, **105**, which was clearly the lowest visible layer of glacially deposited material. Above this at the northern end of the trench was a mid-grey stoney clay layer, on average 0.3m thick, **104**. At the southern end of the trench the deposit was browner in colour, had fewer stone inclusions and was observed as **119**. Overlying this was a 1.1m thick layer of mid-brown sandy clay with frequent, small stone inclusions, **103**, which was the uppermost deposit of drift geology. A pale to mid-grey firm clay with numerous rounded stone inclusions, **123**, was seen to intermittently overlie **103** and was below **100**. This layer seemed slightly mixed and may have been the interface between the drift geology and the disturbed ground level.

Truncating the top layer of drift geology, as well as those below, were a number of features. At the northern end of the trench, a section of wall foundation, **101**, was seen (Plate 10). The foundation was constructed of roughly-hewn yellow sandstone blocks of varying dimensions, in a dry stone method. The foundations were 0.8m in width and approximately 1.5m in depth with near-vertical sides. The stones had been deliberately constructed within a straight-sided, flat based linear trench, **102**. The present trench was not dug in a continuous manner and this section of wall foundation was recorded separately.

The continuation of the wall foundation, **112**, was seen at the southern end of the trench. It had the same sandstone construction material and the same dry stone method of building as **101**. At the southern end the wall foundation and cut were seen to turn westwards, thus demonstrating the corner of the foundations. To the immediate east and south of the wall foundation was a mid-brown silty clay deposit, with a moderate frequency of small rounded stones and a larger number of roots throughout. This deposit, **122**, was seen to be thickest at the corner and perhaps represents a later modification of layers through root action due to plants growing up around the perimeter of the building.

In addition to the wall foundations there were also two culverts and a drain visible within the trench. The culverts were either contemporary with the wall foundations or post-dated them. The southern culvert, **108**, was visible only in the eastern section. It was built of sandstone slabs resting on small sandstone blocks or cobbles, thus forming a channel, allowing water to pass easily (Plate 12). The culvert measured 0.4m in width and was 0.55m in depth from the surface. The culvert had been cut through the earlier surrounding deposits, the latest of those being **103**. However there was evidence to show that layer **122** had accumulated over the top of the culvert and, therefore, post-dated the construction of the culvert.

In the same position but seen only on the western side of the trench, was the drain, **106**. The two features, **106** and **108**, were not connected, since wall foundation **112** was seen to run along the length of Trench 1. The drain, **106** was a modern annular, large diameter unglazed ceramic pipe. This was contained in a straight-sided, flat based cut **107** that measured 0.35m in width by 0.75m in depth from the surface.

The northern culvert, **110**, consisted of large thin flat slabs of roughly-worked sandstone supported by cobbles forming a channel. It was orientated roughly north-north-west/south-south-east and was visible for over 2m. This culvert was still active and, given that it was within the perimeter of the building, it is suggested that it may have been constructed prior to the building in what may have been an area that was notably wet or prone to water logging.

Trench: 2
Orientation: North-west/south-east
Length: 15m
Depth: 1.2m

Description: The earliest deposit seen in this trench was the mid-blue stony clay, **105**, which was seen in the base of the trench at the eastern end. At the western end the earliest layer seen was the mid-grey

stony clay layer **104**. Above these was mid-yellow silty clay **114**, with stone inclusions. This was in turn overlain by **121**, a dark blackish-brown clayey silt, 0.3m thick which sloped downwards from west to east and was only visible in the western part of the trench. Over this was a mid-orange loose, sandy clay, **120**, which was 0.7m thick and again only visible in the western-most part of the trench. This sequence of deposits were all consistent with being layers of archaeologically sterile glacial till.

There were only two features visible within Trench 2: the continuation of wall foundation **112** ran westwards before being seen to turn north in the section and a second smaller feature, **115**. Feature **115** was a possible culvert which was 0.3m in width and 0.2m in depth. It consisted of small sandstone slabs supported by small rounded cobbles and it was seen in the southern section only, east of the wall foundation. This suggests that the culvert was within the perimeter of the building but did not run outside at this point. The culvert may have allowed internal under-floor drainage for the building but no other area was disturbed and the plan remained unknown.

Trench: 3

Orientation: North-east/south-west

Length: 12m

Depth: 1.35m

Description: The earliest deposit seen in this trench was the yellow silty clay, **114**, overlain by a thick layer of mid-brown sandy clay with frequent, small stone inclusions, **103**, the uppermost deposits of glacial till.

Truncating the drift geological deposits were the continuation of the wall foundation, **112**, which had turned northwards at the junction with Trench 2 and continued along the length of the trench at a slightly oblique angle. The foundations continued to be of dry stone construction but there was a noticeable change in colouration. The stones were blackened, not through burning but through waterlogging. The dry stone construction had evidently acted as a water conduit and the deposits below showed similar discolouration due to waterlogging. The foundations were seen to have similar dimensions as initially recorded, being 0.7m in width and 1.2m in depth.

Apparently truncating the wall, although this was not seen within the confines of Trench 3 but inferred from the physical association, was ceramic drain **106**. It was seen to continue westwards from Trench 1, and crossed Trench 3, north of the wall foundations.

Further north was culvert, **117**, constructed of thin slabs of yellow sandstone resting on small block and cobbles, measuring 0.4m wide and 0.55m deep. Below both the ceramic drain and the culvert, the underlying deposit had been discoloured and there was some seepage of a black organic deposit, clearly the result of waterlogging and the contents of the drain and culvert.

Trench: 4

Orientation: North-west/south-east

Length: 4m

Depth: 1.3m

Description: The earliest deposits within this trench was the sequence of glacial drift deposits with the mid-blue stony clay, **105** at the base, overlain by a mid-brown clay **119**, followed by the mid-grey stony clay layer, **104** and then the mid-brown sandy clay with frequent, small stone inclusions, **103**. Finally, over the top was a pale to mid-grey firm clay with numerous rounded stone inclusions **123**, also seen in Trench 1.

The only feature seen within this trench was wall foundation **112**, which traversed the trench perpendicularly.

Trench: 5

Orientation: North-west/south-east

Length: 3.5m

Depth: 1.45m

Description: This was only a small trench dug to facilitate the removal of accumulated ground water within the works. It was located on the eastern side of Trench 1 (Fig 7), and revealed the same sequence of stratigraphy.

Trench: 6
Orientation: North-west/south-east
Length: 2.5m
Depth: 1.5m

Description: As with Trench 5, Trench 6 was dug to facilitate the removal of accumulated ground water within the works. It was located on the eastern side of Trench 1 (Fig 7), and revealed the same sequence of stratigraphy as this earlier trench.

Trench: 7
Orientation: North-west/south-east
Length: 6.4m
Depth: 1.3m

Description: At the base of this trench the exposed glacial drift geology was a mid-yellowish-orange, stony, sandy clay, **120**. Above this was the mid-grey stony clay layer, **104**, and at the top was the mid-brown sandy clay with frequent, small stone inclusions, **103**, which was the uppermost deposit of drift geology.

Truncating layer **103** was the modern annular, large diameter unglazed ceramic drain pipe, **106**. This was contained in a straight-sided, flat-based cut, **107**, that measured 0.35m in width by 0.75m in depth from the surface and was seen to have continued from Trench 1 to the east.

There was also the small culvert, **117**, composed of thin slabs of yellow sandstone, which measured 0.4m in width by 0.55m in depth from the ground surface, as seen in Trench 3. Below both the ceramic drain and the culvert the underlying deposit had been discoloured and there was some seepage of a black organic deposit, clearly the result of waterlogging and the contents of the drain and culvert. Both the drain and the culvert were features that continued from Trench 3 westwards through Trench 7.

In addition to the drain and culvert was another small glazed ceramic pipe, which was aligned north/south and appeared to have been truncated by the drain **106**. It was seen only in the northern section and continued in that direction.

Trench: 8
Orientation: North-east/south-west
Length: 8.2m
Depth: 1.45m

Description: The earliest deposit seen in this trench was the mid-blue stony clay, **105** which was seen in the base of the trench, although more stony and less blue than downslope in the other trenches. Above this was a mid-yellow silty clay **114**, with stone inclusions. This was in turn overlain by **121**, a dark blackish-brown clayey silt, which was only visible in the southern and western part of the trench. Over this was a mid-orange loose, sandy clay, **120**, which was 0.7m thick. This sequence of deposits were all consistent with being archaeologically sterile glacially deposited drift geology layers.

At the extreme northern end the modern drain **106** was visible in the western section continuing from Trenches 1, 3 and 7. The drain truncated layer **120**.

Trench: 9
Orientation: North-west/south-east
Length: 7m
Depth: 1.05m

Description: In the western half of the trench, Foundation **112** continued in a north-east/south-west direction from Trench 4, its construction cut, **113**, truncating glacial till **103**. To the east, culvert **110**,

was orientated north/south. Its construction cut, **111**, truncated glacial till **103**. The area of the trench was covered by c 0.2m, of overburden, deposit **100**.

Trench: 10
Orientation: North-west/south-east
Length: 7m
Depth: 1.45m

Description: The same sequence of deposits and features were located as those found in Trench 9, with foundation **112** continuing in a north-east/south-west direction and culvert **110** in a north/south direction. Their respective construction cuts truncated glacial till **103** below c 0.2m of overburden **100**.

Trench: 11
Orientation: North-west/south-east
Length: 7m
Depth: 1.3m

Description: The same sequence of deposits and alignment of features as those found in Trenches 9 and 10 were located.

Trench: 12
Orientation: North-east/south-west
Length: 11.6m
Depth: 1.75m

Description: Below c 0.2m of overburden, **100**, glacial till **103** was located. No deposits of archaeological significance were present.

Trench: 13
Orientation: North-west/south-east
Length: 13.2m
Depth: 1.6m

Description: The same sequence and alignments of deposits and features as those found in Trenches 9, 10 and 11 were located. The two features intersect within this trench, with foundation **112** built over culvert **110**. Above foundation **112** within the north-facing section, mid-nineteenth- to twentieth-century red brick formed a surround for a glazed ceramic pipe.

Trench: 14
Orientation: North-east/south-west
Length: 6m
Depth: 1.6m

Description: The same sequence of deposits and features as those found in Trenches 9, 10, 11 and 13 were located, with a north-western corner of foundation **112** located in the southern end of the trench.

Trench: 15
Orientation: North-west/south-east
Length: 14.35m
Depth: 2m

Description: Foundation **101**, first described in Trench 1, ran along the length of the trench, truncating glacial till **103**. The north-eastern corner of the new development, formed by Trenches 1 and 15, is also the location of the south-eastern corner of recently demolished *Building Six*. A lead water pipe also ran the along the northern baulk of Trench 15. The area was covered with c 0.2m of overburden, **100**.

Trench: 16
Orientation: North-east/south-west

Length: 6m

Depth: 2m

Description: Culvert **110**, previously described in Trench 1 and also located Trenches 9 to 11, 13 and 14, continued across Trench 16 in a north-west/south-east direction. Its construction cut, **111**, truncated glacial till **103** below c 0.2m of overburden **100**. In the eastern baulk a lead water pipe was also visible.

Trench: **17**

Orientation: North-east/south-west

Length: 14.35m

Depth: 2m

Description: Overburden **133** measured c 0.2m thick, beneath which three separate layers of glacial till **134**, **135** and **136**, were located. No deposits of archaeological significance were located.

Trench: **18**

Orientation: North-west/south-east

Length: 7m

Depth: 0.9m

Description: Overburden **127** measured c 0.1m thick above 0.1m thick disturbed glacial till layer **128**. Below **128**, layers **129**, **130**, **131** and **132** represent successive deposits of glacial till. No deposits of archaeological significance were encountered.

Trench: **19**

Orientation: North-east/south-west

Length: 5.5m

Depth: 2.6m

Description: The sequence within this trench mirrored that within Trench 18. No deposits of archaeological significance were encountered.

Trench: **20**

Orientation: North-west/south-east

Length: 12.7m

Depth: 1.28m

Description: Overburden **138** measured 0.4m thick. In the north-facing section, part of the recently demolished farmstead was visible comprising a section of concrete floor, **146**, 0.1m thick and 0.92m wide bound to the east and west by walls **139/140** and **147**, and located 0.6m below the current ground surface. The red brick of these structures were frogged and stamped with the lettering "Cloughton Manor Brick Co Caton". A ceramic drain, **144**, terminated at the floor surface, within cut **145**. Deposits **143** represents backfilled glacial till around this pipe. It is likely that the whole structure forms a sub-surface drain of a shippon or dairy.

Trench: **21**

Orientation: North-east/south-west

Length: 7m

Depth: 0.9m

Description: Overburden **138** measured 0.36m thick, below which glacial till, **148**, was located. No archaeologically significant deposits were present.

Trench: **22**

Orientation: North-west/south-east

Length: 4.5m

Depth: 1.27m

Description: Overburden **138** measured 0.4m thick, below which glacial till **148** was located. No archaeologically significant deposits were located.

Trench: 23
Orientation: North-east/south-west
Length: 6m
Depth: 1.4m
Description: Overburden **I38** measured 0.3m thick. Below this glacial till, **I48**, was located. No deposits of archaeological significance were located.

Trench: 24
Orientation: North-west/south-east
Length: 6m
Depth: 1.3m
Description: Overburden **I38** measured up to 0.65m thick, below which glacial till, **I48**, was located. In the north-facing baulk, at the eastern end of the trench between Trenches 21 and 23, foundation **I49** was visible. The construction cut for this structure truncated the glacial till, the foundation itself being covered with overburden. The foundation comprised two courses of roughly-squared stone for up to 3.3m. However, it was evident that the foundation has been heavily disturbed, most likely by recent demolition activity, as well as one block being removed at its western end. Therefore, although the eastern end appears to be a true terminus of this feature, the extent of the western end is uncertain, although no robber trench was identified in the north-facing section to west of Trench 23.

Trench: 25
Orientation: North-west/south-east
Length: 7.8m
Depth: 1.35m
Description: Overburden **I38** measured 10mm thick, below which glacial till, **I48**, was located. No deposits of archaeological significance were present.

Trench: 26
Orientation: North-east/south-west
Length: 4.5m
Depth: 1.03m
Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 27
Orientation: North-west/south-east
Length: 5m
Depth: 1.7m
Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 28
Orientation: North-east/south-west
Length: 4.5m
Depth: 1.1m
Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 29
Orientation: North-east/south-west
Length: 6.4m
Depth: 4.3m

Description: The area of Trench 29 was reduced by 0.5m prior to the excavation of the evaluation trenches. The excavation removed 0.10m of overburden, **I38**, before encountering glacial till, **I48**. No archaeologically significant deposits were located.

Trench: 30

Orientation: North-west/south-east

Length: 10m

Depth: 1.8m

Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 31

Orientation: North-east/south-west

Length: 4.5m

Depth: 1.4m

Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 32

Orientation: North-east/south-west

Length: 8.27m

Depth: 1.54m

Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 33

Orientation: North-west/south-east

Length: 10m

Depth: 1.5m

Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 34

Orientation: North-east/south-west

Length: 4.5m

Depth: 1.3m

Description: The stratigraphy mirrored that observed within Trench 25. No deposits of archaeological significance were present.

Trench: 35 to 39

Depth: 1.8m

Description: Prior to the watching brief taking place, the area of Trenches 35 to 39 had been stripped down to the glacial till, **I38**. No archaeological deposits were observed.

Trench: 40 to 50

Depth: 0.95m

Description: Prior to the watching brief taking place, the area of Trenches 40 to 50 had been terraced into the glacial till, **I38**. No archaeological deposits were observed.

APPENDIX 4: SUMMARY LIST OF CONTEXTS

Context Number	Description	Above	Below
100	Overburden at the modern ground surface	101, 106, 122, 110, 117, 115, 151	-
101	Wall foundation	102	100
102	Foundation cut	103	102
103	Mid-brown clay	104	102, 113, 123, 111, 118, 116
104	Mid-grey clay	119, 120	103
105	Mid-blue clay	-	114, 119
106	Drain fill	107	100
107	Drain cut	112, 124	106
108	Culvert and fill	109	122
109	Culvert cut	112 ?, 123	108
110	Culvert and fill	111	100
111	Culvert cut	103	110
112	Wall foundation	113	107, 109 ?
113	Foundation cut	103	112
114	Mid-yellow clay	105	121
115	Drain fill?	116	100
116	Drain cut?	103	115
117	Culvert and fill	118	100
118	Culvert cut	103	117
119	Brown clay	105	104
120	Mid-orange sandy clay	121	104
121	Blackish-brown clayey silt	114	120
122	Brown soil layer	108	100
123	Pale grey clay	103	109
124	Drain fill	125	107
125	Drain cut	103	124
126	Not used		
127	Overburden. A mid-greyish-brown clay. Same as deposit 100 .	128	-
128	Disturbed glacial till. A dark grey/brown sandy clay with occasional small stone inclusions.	129	127
129	Glacial till. A mid-orange-brown sandy clay with c 40% small to large sub-rounded stone inclusions.	128	130
130	Glacial till. A very dark grey sandy silt with c 80% small to large sub-rounded stone inclusions. A lens of manganese staining within the till.	129	131
131	Glacial till. A mid-yellowish-brown compact clay with c. 25% small to medium sized sub-sounded stone inclusions.	-	130
132	Glacial till. Light grey, loose, sandy clay with c 15% small to medium sized sub-rounded stone inclusions.	-	131
133	Overburden. A mid-grey/brown building debris. Same as 100 .	134	-
134	Glacial till. A mid-orange-brown sandy	135	133

	clay with <i>c</i> 15% small sub-rounded stone inclusions.		
135	Glacial till. A yellowish-brown sandy clay with <i>c</i> 15% medium to large sizes sub-angular and sub-rounded stone inclusions.	136	134
136	Glacial till. Light grey, loose, sandy clay with <i>c</i> 15% small to medium sized sub-rounded stone inclusions.	-	135
137	Dark grey coarse sandy clay with 5% to 10% sub-rounded stone inclusions of a maximum size of 0.18m by 0.15m by 0.14m. Disturbance of 138 caused by recent demolition of farm buildings	138, 139, 146, 147	-
138	Overburden. Dark grey coarse sandy clay with 5% to 10% sub-rounded and sub-angular stone inclusions of a maximum size of 0.18m by 0.15m by 0.14m. A mix of glacial till, stone rubble and topsoil. Same as deposit 100 .	142, 148	137
139	Stone element of foundation. Roughly squared stone, three courses high, bonded with a mid-grey, consolidated, mortar.	140	137, 141
140	Red brick base of foundation. Two courses of twentieth-century frogged red brick stamped with the lettering "Claughton Brick Co Caton", measuring 20cm by 10.5cm by 7.5cm. Bricks were laid as stretchers, bonded with a mid-grey, consolidated, mortar.	142	139
141	Mid-grey coarse sandy clay. Backfill between construction cut 142 and foundation 139/140	142	140
142	Construction cut for foundation 137/140 with straight sides and a flat base, orientated in a north/south direction.	138	141
143	Redeposited glacial till. Mid-orange-grey coarse sand clay with <i>c</i> 25% sub-rounded stone inclusions of a maximum size of 80mm by 50mm by 20mm.	144	138
144	Drain-pipe. Glazed, twentieth-century, ceramic pipe with diameter of 0.2m.	145	143
145	Cut of pipe trench, with straight sides and a flat base. To the east the cut appears near-vertical, but to the west falls at a gradient with a ratio of 1:1.	148	144
146	Concrete, 0.1m thick	142	137
147	Foundation or footing. Two courses of red brick laid as stretchers, bonded with a mid-grey consolidated mortar. Bricks measured 200mm by 105mm by 75mm in size.	142	137
148	Glacial till. A mid-orange-grey coarse sandy clay with <i>c</i> 25% sub-rounded stone of a maximum size of 0.14m by 0.12m by 0.1m. Contains a lens of manganese staining.	-	145

149	Wall footing. Two courses of roughly-squared stone, a maximum size of 0.63m by 0.4m by 0.36m, bonded with a friable, dark grey, coarse sand. Heavily truncated, most likely by recent demolition activity.	150	138
150	Construction cut, with straight, near-vertical sides, and a flat base, for footing 149 .	148	149
151	Red brick surround for glazed ceramic pipe, 0.6m wide. The bricks measured 230mm by 110mm by 75mm, and were frogged on one side.	112	100