



AGRICULTURAL BUILDING, CHURCH LANE, TUNSTALL

LANCASHIRE

Documentary and Building Survey Report



Oxford Archaeology North

August 2016

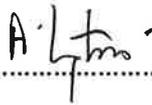
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CONTENTS

CONTENTS.....	1
ACKNOWLEDGEMENTS.....	2
SUMMARY	3
1. INTRODUCTION	4
1.1 Circumstances of Project.....	4
1.2 Location, Topography and Geology.....	4
2. METHODOLOGY	5
2.1 Introduction	5
2.2 Historic Assessment	5
2.3 Building Survey.....	6
2.4 Archive	6
3. HISTORIC BACKGROUND.....	7
3.1 Introduction	7
3.2 Designated Sites and Historic Environment Records:.....	7
3.3 Historical Background.....	8
3.4 Map Regression	13
4. BUILDING SURVEY.....	17
4.1 The Barn Exterior (Figs 5-8)	17
4.2 Barn-Interior	22
4.3 North-Eastern Lean-to	27
4.4 North-Eastern Lean-to Interior	29
4.5 South-Eastern Lean-to	31
4.6 Southern Lean-to	34
5. DISCUSSION.....	38
5.1 Conclusion.....	38
5.2 Development.....	38
5.3 Function.....	39
6. BIBLIOGRAPHY	40
6.1 Documentary and Cartographic Sources	40
6.2 Secondary Sources.....	40
6.2 Online Sources.....	41
APPENDIX 1: SITE TABLE	43
ILLUSTRATIONS	45
Figures.....	45
Plates	45

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The building survey was undertaken by Andy Phelps, who also wrote the report. Helen Quartermaine contributed the desk-based research and historic background, with the drawings produced by Anne Stewardson. The project was managed by Jamie Quartermaine, who also edited the report.

SUMMARY

Lancashire County Council has requested the completion of a Level 2 historic building survey of a barn at Church Lane, Tunstall, Lancashire (Fig 1), as mitigation in advance of its conversion to a residential property. In response, Phil Stephenson commissioned Oxford Archaeology North (OA North) to undertake the building survey and this report sets out the results of the work in the form of a short document. The fieldwork was carried out on 13th July 2016.

The agricultural barn under study is located at NGR 361120 473699, south of Church Lane and in the middle of an enclosed field north-east of Tunstall village. The area under study comprises the agricultural building and its field and a surrounding radius of *c* 500m which includes the eastern parts of Tunstall village and the Old School House to the north and Church to the east. The close proximity of Thurland Castle to the south, outside the study area, would certainly have impacted on the medieval and post-medieval development of this locality and has been examined as part of the work on the historical background.

The agricultural building is standing within a series of three or four enclosed fields which appear not to have been developed or built on, as evidenced by the available mapping, since the early nineteenth century, and reflect a notable gap between the church (which was documented in the Domesday Book) and the historic centre, or *caput*, of the village. If the two centres were linked in the past, then there exists the possibility that elements of the village may have been abandoned in the medieval or early post-medieval periods.

The barn has an eighteenth / early nineteenth century character and was seemingly first depicted on the 1824 Greenwood map, but may have been earlier. By the time of the first detailed map, the 1847 OS first edition map, the eastern and southern extensions were in place, and would indicate that the primary phase of the building was earlier than that date. The quantity and character of the reused timbers found throughout the barn suggests that it had been constructed using timbers from an earlier structure.

The original barn was designed as a multi-functional building, capable of housing live-stock when necessary but also for the storing and processing of harvested crops. The tall wide cart entrance at the centre of the western side allowed fully laden carts to enter from the fields, while the opposing doorway of the primary build, was just high enough to allow an unladen cart to leave the building on the farm side of barn. There was no wide doorway through the north-eastern extension, indicating that the use of the barn for threshing related only to the original barn, and by the time that the extensions had been constructed the barn was primarily being used for accommodating stock.

The fact that the earliest phase of the barn was a threshing barn is potentially significant, as threshing barns were typically in direct association with a farm, this contrasts with fields barns which were intended to accommodate stock. The implication is that there was formerly a farm house at the site, which is no longer extant.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 Lancashire County Council requested the completion of a Level 2 historic building survey of a barn at Church Lane, Tunstall, Lancashire (Fig 1), in advance of its conversion to a residential property. In response, Phil Stephenson commissioned Oxford Archaeology North (OA North) to undertake the building survey and this report sets out the results of the work in the form of a short document. The fieldwork was carried out on 13th July 2016.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The agricultural barn under study is located at NGR 361120 473699, south of Church Lane in the middle of an enclosed field north-east of Tunstall village. It is in an area of valley floodplains enclosed in the post-medieval period (www.lancashire.gov.uk). The soils are of clay, silt, sand and gravel alluvial deposits in an environment of rivers and river terrace deposits (www.mapapps.bgs.ac.uk). The bedrock is of the Millstone Grit group of Mudstone, Siltstone and Sandstone formed in the Carboniferous Period in an setting of swamps, estuaries and deltas (*ibid*).

1.2.2 *The Study Area:* the area under study comprises the agricultural building and its field and a surrounding radius of *c* 500m which includes the eastern parts of Tunstall village and the Old School House to the north and Church to the east (Plate 1). The close proximity of Thurland Castle to the south, outside the study area, would certainly have impacted on the medieval and post-medieval development of this locality and this has been examined as part of the work on the historical background.

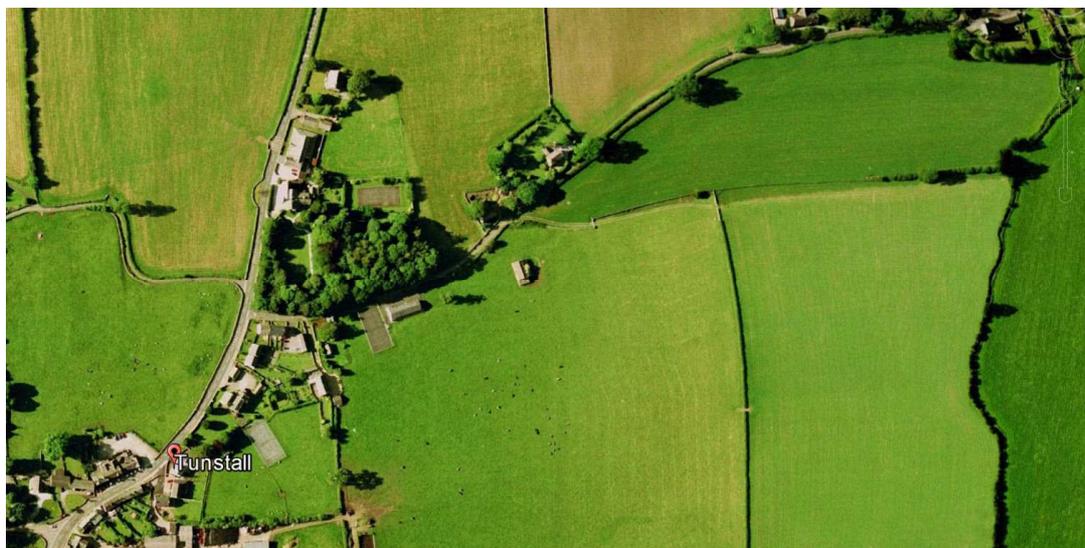


Plate 1: Google earth aerial photograph of the barn

2. METHODOLOGY

2.1 INTRODUCTION

- 2.1.1 This historic building survey was carried out in accordance with the relevant Chartered Institute for Archaeologists (IfA) and English Heritage guidelines (CIfA 2008; 2012a; 2012b; English Heritage 2006a; 2006b).

2.2 HISTORIC ASSESSMENT

- 2.2.1 **Desk-Based Research:** current policy and guidance relating to proposed development and the historic environment (National Policy Planning Framework (NPPF), DCLG 2012) refers to sites of archaeological or cultural heritage significance as ‘heritage assets’ (*ibid*). These are viewed as being an ‘*irreplaceable resource*’, and their conservation can bring ‘*wider social, cultural, economic and environmental benefits...*’ (*op cit*, Section 12.126). The policy framework states that the ‘*significance of any heritage assets affected, including any contribution made by their setting*’ should be understood in order to assess the potential impact of a proposed development (*op cit*, Section 12.128), and in line with this a ‘*desk-based assessment and, where necessary, a field evaluation*’ should be undertaken to inform the planning process (*ibid*).
- 2.2.2 The aim of the desk-based research is not only to give consideration to the heritage assets in and around the redevelopment site, but also to put the site into its archaeological and historical context. The principal sources of information consulted were historical and modern maps of the study area, although published and unpublished secondary sources were also reviewed. The sources consulted include:
- 2.2.3 **Lancashire HER:** Lancashire County Council maintains the Historic Environment Record (HER), which is a Geographical Information System (GIS) and linked database of records relating to known heritage assets. It also includes the Lancashire Historic Landscape Characterisation survey and is supported by an extensive archive, including reports, site records and publications. Much information pertaining to designated heritage and conservation sites and to the listed buildings within the study area was available from the Maps and Related Information Online on the Lancashire County Council Homepage (MARIO; www.lancaster.gov.uk). HER data was requested from Lancashire Archaeological Advisory Services; listed building data was retrieved from the online Historic England pages. A list of sites based on the HER is presented in *Appendix 1*.
- 2.2.4 **Cartographic Sources:** the digital OS maps of 1847, 1891 (Figs 2a and 2b) and of the twentieth century and online older maps were obtained from www.geog.port.ac.uk and www3.lancashire.gov.uk/environment/oldmap. A visit to the Lancashire Archives was made in order to study the Tithe Apportionment Maps for Tunstall and Cantsfield. The catalogues of the Lancashire Archives were accessed; there was one document of c 1702 relating to road repairs on Church Lane (QSP/874/17, c 1702) and a number of other documents which needed expert reading. Secondary sources were limited but included British History Online and an account of the history of *The Church and Parish of Tunstall* by Sara Mason (1995). Recent aerial photographs were accessed on the Google Earth and British Geological Survey online pages.

2.2.5 **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 BUILDING SURVEY

2.3.1 The site was visited on 13th of July 2016 to undertake an investigation of the standing structure and implement a fabric survey. Access was available to all parts of the building. The investigation entailed the compilation of a descriptive record, the production of site drawings and the generation of a photographic record.

2.3.2 **Descriptive Record:** written records to English Heritage Level II (2006b), using OA North *pro forma* record sheets, were made of the principal building elements, both internal and external, as well as any features of historical or architectural significance.

2.3.3 **Site Drawings:** the survey drawings of the barn were created by photogrammetry using photographs taken from an unmanned aerial vehicle (UAV), with survey markers placed around the building in order to provide the control for the photogrammetry. The survey control was established using a total station and adopted a local grid. Specialist photogrammetric software was used to create accurate three dimensional models of the overall building and its external elevations.

2.3.4 The photogrammetric processing was undertaken using Agisoft software which provides detailed modelling using the overlap of up to 300 photographs, and creates a very detailed DTM (Digital Terrain Model) across the site. The photographs are then digitally draped over the model to create an accurate three dimensional model of the ground surface. The primary output, however, is an accurate two dimensional image which was used to generate plans, or profiles and elevation drawings (Figs 4-8).

2.3.5 **Photographic Record:** a Canon EOS 5D digital SLR (12.8 megapixels) camera with a selection of lenses, was used for the general photographic record. Images in Canon RAW format files (.cr2 format) were captured and saved as 8 bit TIFFs for archive purposes. The data are stored on two separate servers, each on different sites and with appropriate back-up and disaster plans in place. In addition, hard copies of the images were created on paper of appropriate archival quality and will be deposited as part of the paper archive. The photography for the photogrammetry was taken using a lightweight Sone NEX5 camera which has 16 megapixel resolution.

2.4 ARCHIVE

2.4.1 Copies of this report will be deposited with the Lancashire HER for reference purposes and a copy will be deposited with the Lancashire Record Office.

3. HISTORIC BACKGROUND

3.1 INTRODUCTION

3.1.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented generally by historical period, and has been compiled in order to place the study area into a wider archaeological context. This is then followed by an assessment of the redevelopment site in more specific terms.

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 4,000 BC
Neolithic	4,000 – 2,500 BC
Bronze Age	2,500 – 700 BC
Iron Age	700 BC – AD 43
Roman	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Medieval	AD 1066 – AD 1540
Post-medieval	AD 1540 – c1750
Industrial Period	cAD1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

3.2 DESIGNATED SITES AND HISTORIC ENVIRONMENT RECORDS:

3.2.1 This information is drawn from Lancashire Archaeological Advisory Services, Historic England (www.historicengland.org.uk), and the Archaeology Data Service (archaeologydataservice.ac.uk). The village of Tunstall is sited to the south-west of the agricultural building under study, and the Church is to the north-east. South of the agricultural building is Thurland Castle, which is a building of late fourteenth century origin and has a Grade II* Listed Building status (HE 1164439); it is located within its wider estate (HER 39649).

3.2.2 **Historic Environment Record:** the HER has entries for eight Listed Sites within the study area, within the village of Tunstall and to the east of the agricultural building, reflecting the extended medieval and early post-medieval history of the village. In Tunstall village itself were four Grade II listed buildings, three of mid-eighteenth century date: Tunstall Hall (HER 5367; HE 1317407/182479), the Old Vicarage (HER 16059; HE 1071641/182478), Gabriel Cottage (HER 16061; HE 1165269/182484) and Tarnwater (HER 16095; HE 1071644/182485), which was a house with two carved datestones of 1699. A fifth site was a mid-nineteenth century milestone (HER 16058; HE 1317405/182477). A short distance north of the agricultural building under study was the Grade II listed Old School House (HER 4542; HE 1071643/182483) with a datestone of 1753 (*ibid*). North-east of the

agricultural building was the Grade I Listed Parish Church (HER 676; HE 1071642/182481), which was documented in the Domesday Survey of 1086 and has the remains of thirteenth century construction; also listed is a probable eighteenth century Sundial base (HER 675 and HE 1165259/182482) (*ibid*), which is thought to have been a stepped octagonal base for a medieval cross with the rounded shaft for a later sundial (Monument 44044; www.pastscape.org.uk).

- 3.2.3 Also within the study area, the HER had entries for a further four eighteenth century buildings. Additionally of interest was the conjectured Roman Road, twelve finds spots, including one Roman coin, a Roman steelyard weight and two Roman stones (one Altar and one Milestone) and a Medieval Cross Slab. Presented as *Appendix 1* is a tabulated list of the agricultural building (**Site 1**) and the 27 HER entries for the study area referred to by Site numbers and their HER numbers; these are denoted on Fig 3 with their site numbers. Each HER number and Site number is noted in the text, where appropriate.
- 3.2.4 **Conservation Area:** Tunstall village centre, and particular areas to the north of Church Lane, are within a Conservation Area; the agricultural building under study is just to the south of the southern edge of this (mario.lancaster.gov.uk). The Conservation Appraisal for Tunstall is not yet available (*ibid*).
- 3.2.5 **Historic Landscape Characterisation:** the Historic Landscape Character (HLC) maps detailed on MARIO for the environs of Tunstall and the agricultural building under study show that the Conservation Area of Tunstall Village is of *Ancient and Post Medieval Settlement* (that is settlements that pre-date the 1st edition OS maps of the mid-nineteenth century), and is surrounded by *Post-Medieval [field] Enclosures* (land enclosed or re-organised between 1600 and 1850). The agricultural building under study is within *Post-Medieval Enclosure*. Thurland Castle is contained by *Ancient and Post Medieval Ornamental Landscape* reflecting perhaps its nineteenth century, or earlier, park landscaping, and to the east of this is a small area of *Ancient Enclosure* which comprised small irregular fields south-east and adjacent to Cant Beck (*Lancashire's HLC*, 35 (www.pcl-eu.de); Darlington 2002).
- 3.2.6 Previous archaeological work in the study area included recording work at Churchfield Barn (north of the Church) (Ratter 2003). Two archaeological projects were undertaken at Thurland Castle, one in 1999 to record the structure of the medieval and later castle in advance of proposed works (LUAU 1999), and a second in 2000 excavating four evaluation trenches with a subsequent watching brief, but these recorded no significant archaeological features (LUAU 2000).

3.3 HISTORICAL BACKGROUND

- 3.3.1 **Prehistoric and Roman Archaeology in Tunstall:** within the North-West the evidence for Neolithic activity is often sporadic and dependant upon isolated findspots; close to the Study Area there is a findspot for a broken polished stone axe found in the grounds of Thurland Castle when digging up tree roots (Monument 44061 (www.pastscape.org.uk)). There is a perhaps an Iron Age or Romano-British site at Sellet Bank, a defended enclosure located on a gently sloping plateau on the eastern slope of Sellet Bank in an elevated position on the west side of the Lune valley (HE 1011685; www.historicengland.org.uk) approximately 3km north of Tunstall.

- 3.3.2 The Roman military occupation of this part of Lancashire and Cumbria, in the last quarter of the first century AD, established forts at Lancaster, Overburrow just north of Tunstall, and Watercrock near Kendal, which policed a network of roads acting as communication and supply routes from the south and east. One of these was a north/south road east of Cantsfield, from Ribchester fort in the south and going north to Overburrow and then on to Brougham fort. Another (conjectured) Roman road went north/south from Lancaster to Overburrow through Tunstall (**Site 10**). Cole and Roper's map of 1805 (Plate 2) showed the line of the conjectured north/south Roman Road denoted as a double dashed line going past the Church at Tunstall and then to 'Overborough' (Cole and Roper 1805). Within the Study Area an inscribed Roman Altar dedicated to the Roman Gods Asclepius and Hygiaea (probably derived from the fort at Overburrow) was found, re-used, in the fabric of the Church of St John the Baptist (**Site 8**; Monument 44048; RIB 609 (www.romaninscriptionsofbritain.org; www.roman-britain.co.uk). Also found next to Tunstall Church was a broken Roman Milestone, which was first recorded in 1884; however, it is not known where the Milestone is now (**Site 5**, Monument 4405). A Roman yard weight (**Site 12**) was found close to the conjectured Roman Road at Tunstall House Farm and a Roman sestertius of Septimius Severus has also been found close to Tunstall Hall (**Site 26**).

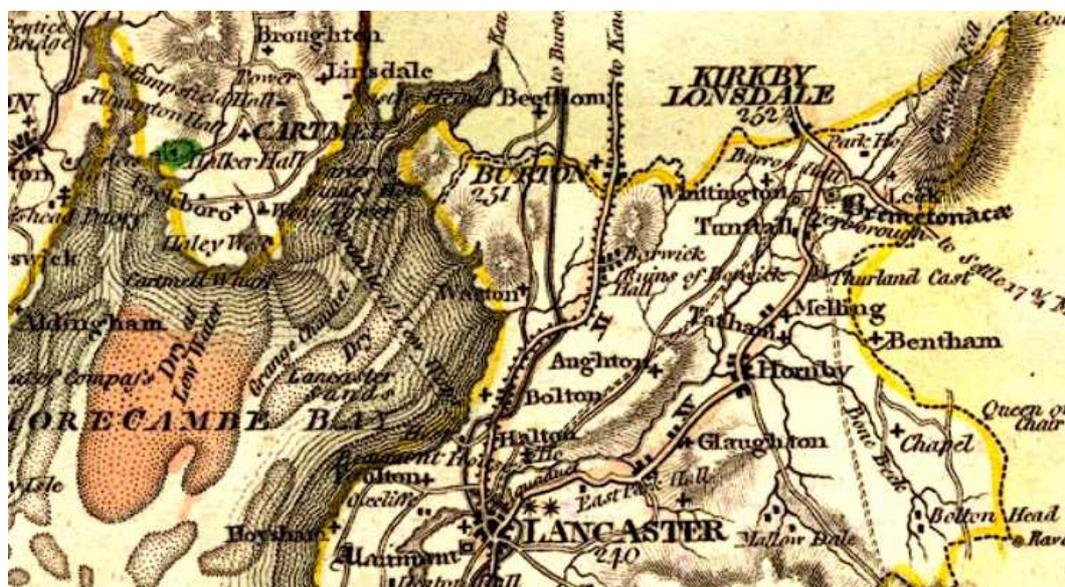


Plate 2: Cole and Roper's map of 1805 showing the line of the conjectured Roman road extending past the church

- 3.3.3 ***The Medieval Period in Tunstall:*** a church at Tunstall was cited in the Domesday record (Faull and Stinson 1986); it was originally dedicated to St Michael, and the remains of thirteenth century fabric have been identified (**Site 7**; HE 1071642). The documentary evidence of the Conquest and post-Conquest period has shown that Tunstall was a manor firstly in the fee of Bentham, then in Hornby; lands in Tunstall were held for a time in the twelfth to fourteenth centuries by the Abbots of Croxton and 1202 was the earliest mention of the Tunstall family in Cantsfield and Tunstall (Farrer and Brownbill 1914; Chippendall 1928, 292).
- 3.3.4 In the fourteenth century a knighthood was granted to a Thomas de Tunstall and, when he inherited in 1387, he began to build Thurland Castle, a house surrounded by a moat. The house was probably completed by 1397 when a chantry was granted and in 1402 the Tunstalls were given a license to crenelate, later founding a park at

Fairthwaite by Leck (Chippendall 1928, 294-5; Pearson 1942, 3-5; HE 1184439 (Fairthwaite Park); that there was also an estate surrounding the castle, at some time, may be suggested by the *Tithe Apportionment Map of Cantsfield* (1846) and the OS 1st edition map of 1847 (Fig 2a) which clearly showed a ground plan of the castle within its completely circular moat and within a small oval estate in the Cantsfield parish on the edge of the border with Tunstall parish. This small estate might perhaps have been used as a 'park', either as early as the early-mid fifteenth century or more probably later in the late fifteenth and sixteenth centuries when parks began to be built directly alongside or surrounding the houses (Lasdun 1991, 20); however, a formally emparked estate at Thurland was not depicted on any of the sixteenth, seventeenth or eighteenth century maps. The building of such a structure almost seems like a re-branding of the family status; however, it is not known where in Cantsfield the Tunstall family lived prior to the building of Thurland Castle, or whether there was an earlier castle or fortified hall. The building of the castle was in keeping with the trend of the fourteenth and fifteenth centuries to replace the early motte and bailey castles along the Lune valley centuries by fortified manor houses such as at Ashton, Borwick, Hornby, and including Thurland (Nevell 2012, 29).

- 3.3.5 ***The development of the Medieval and Post-Medieval Village at Tunstall:*** there is very little documentary evidence so far found to give a detailed account; however, the pattern of settlement depicted on the earliest detailed maps, that is Greenwood's map of 1824 (Plate 3), Hennes's map of 1829, the *Tithe Apportionment map* of 1846 and the 1st edition OS map of 1847 (Fig 2a) might suggest how the village had developed. It seems that the cluster of buildings in Tunstall village was possibly the early manorial centre of the village with a close relationship to Thurland Castle. The present building of Tunstall Hall, at the north-west corner of the Thurland estate as depicted on Hennes's map of 1829 (Plate 4) and the 1st edition OS map of 1847, is dated to the eighteenth century; however, the hall (**Site 22**) and its associated farm buildings may have had earlier antecedents at that location. At a distance to the east of the village was the Church of St John the Baptist. Both the Church and the manor originated in the period of the Domesday Book and thus were likely to have related to each other.

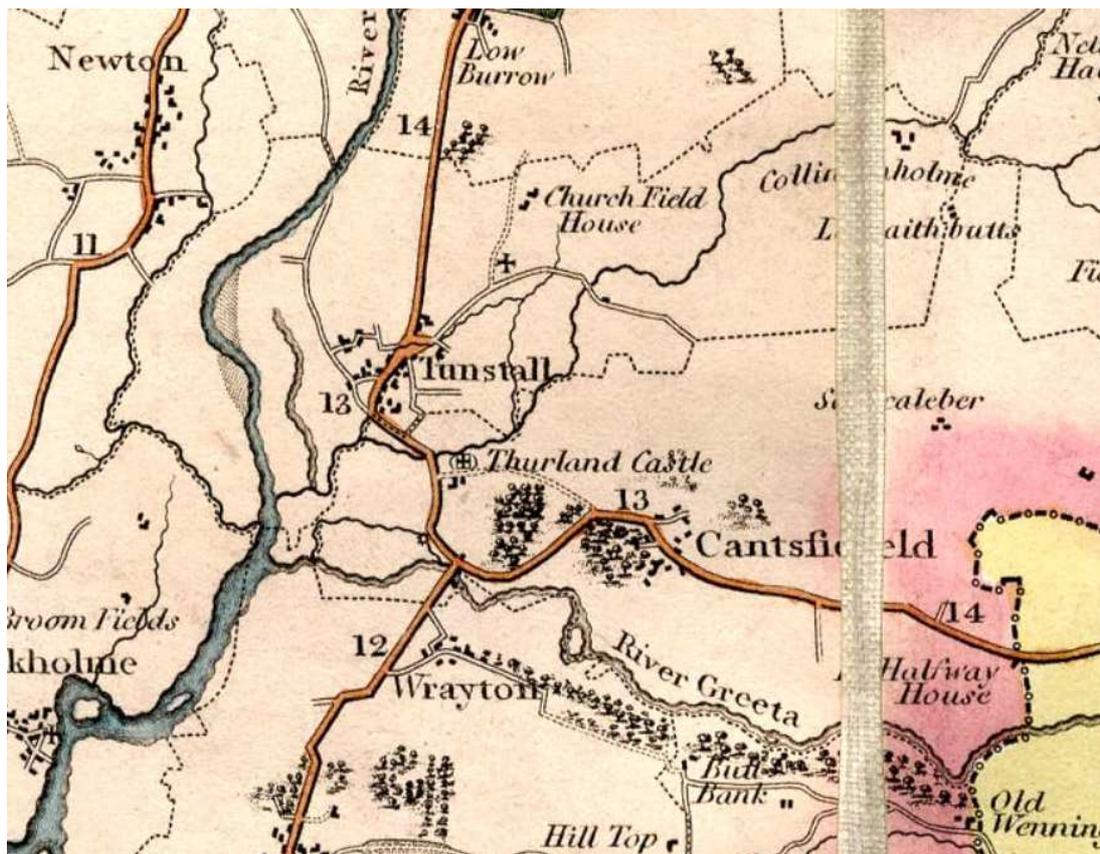


Plate 3: Greenwood's map (1824) of Lancashire showing Tunstall

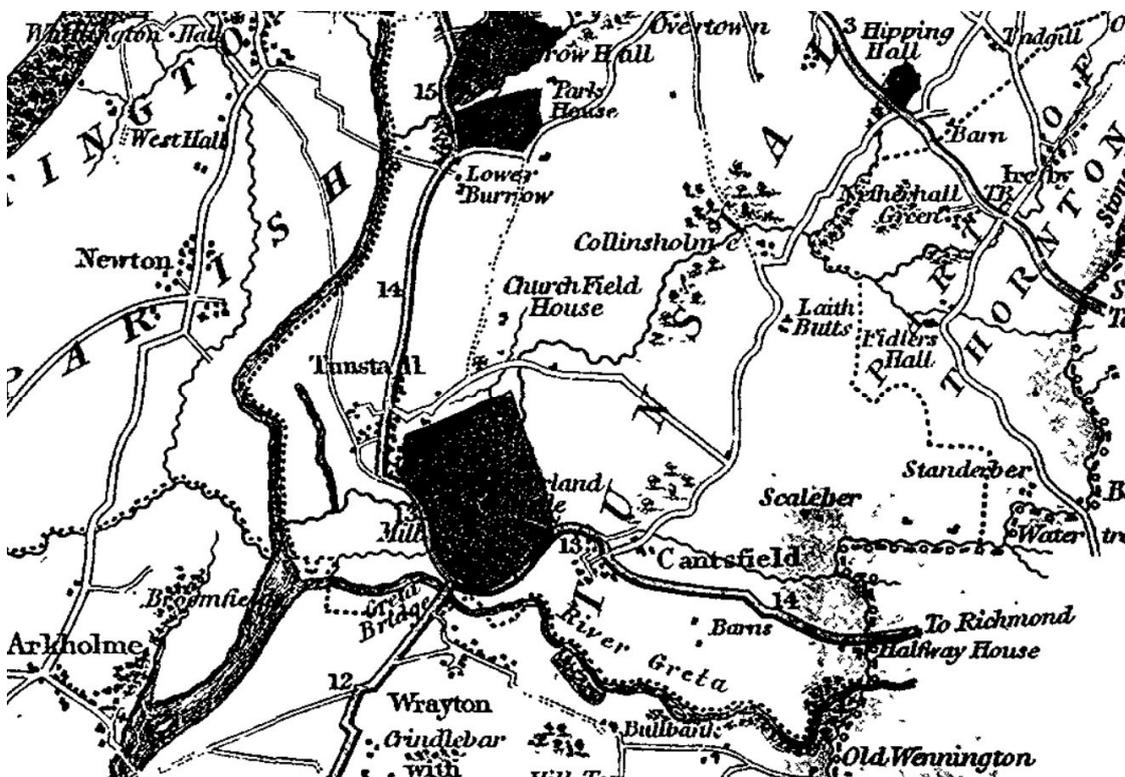


Plate 4: Hennett's map (1829) of Lancashire showing Tunstall

3.3.6 Between the possible manorial centre and the church was a series of about three to four fields presenting an undeveloped or abandoned central area; it should be noted

here that the fields on the south edge of Church Lane did not appear to be part of the later Thurland estate or 'park' to the south (*Section 3.3.10*) (Hennet's 1829; Tithe Maps 1846) and thus this area was undeveloped or abandoned for other reasons. The geographical separation between Tunstall church and its manorial *caput* and the lack of extant buildings may have been the result of the gradual movement of the village to the south-west after the church was built, perhaps due to the lessening importance of the north/south Roman road to the east and the greater use of the north/south road and river crossings along the River Lune to Borrow Bridge and Kirkby Lonsdale (White 1974, 42). There is also evidence that in the first half of the fourteenth century the parish appears to have been severely affected by the invasions from Scotland as the valuations of tithes for the vicarage and rectory had dropped by a large percentage (Farrer and Brownbill 1914, 225-30). Such losses may have been compounded by the poor harvests, cattle moraines and plagues of the first half of the fourteenth century in this northern part of England (Slavin 2010). Thus parts of the village of Tunstall may have been abandoned during the fourteenth century. A recent history of the parish and church states that 'there is a tradition that the village was once nearer the church and that the village was depleted because of 'plague' (Mason 1995, 5). This would perhaps suggest that the cluster of houses close to Tunstall Hall and the River Lune may have developed around the end of the fourteenth century or thereafter, perhaps associated with the building of Thurland Castle (**Site 28**; HE 1164439).

- 3.3.7 Thus, within this central area the agricultural building under study perhaps overlies an area of potential archaeological significance, in that there may be the archaeological remains of an earlier pre-Conquest or medieval village along Church Lane.
- 3.3.8 ***Tunstall Village and Thurland Castle in the early Post-Medieval Period:*** Tunstall was likely to have been impacted by the Civil War, in particular by the seven week seige on Thurland Castle in 1643 (Pearson 1942, 11). It is interesting to note that the church registers were uncompleted for the years 1643 to 1646 and that there were possibly no incumbents for the church for that time (NA 1932, 6). Again, this area of the agricultural building under study may have archaeological remains from the seige. Part of the castle was re-furbished to be habitable in 1663 (Pearson 1942, 13) but it was not until the early nineteenth century, in 1809 and 1829, that the Castle was rebuilt (**Site 28**; HE 1164439).
- 3.3.9 Towards the end of the seventeenth century, and during the eighteenth century, Tunstall village perhaps thrived and became more populated. The HER records, within this central cluster of the village, eight substantial stone buildings dating to the years around the eighteenth century. One document of *c* 1702 related to road repairs on Church Lane (QSP/874/17, *c* 1702). The documentary evidence also mentions a school in 1621, a school-master was licensed in 1699 (Farrer and Brownbill 1914, 225-31). The Old School House was built in 1753 (*ibid*; **Site 2**, HE 1071643/182483) on what were perhaps undeveloped or abandoned lands between the medieval village and the Church. Within the fabric of the outside wall of this building is a re-used medieval grave slab, incised with a sword and a cross within a circle (**Site 3**; HE 1071643). Similar cross slabs have been found in Hornby Parish Church and Lancaster Priory (*ibid*).
- 3.3.10 Alongside the rebuilding of the Castle in 1809 and 1829 (HE 1164439) by the owner Richard Toulmin North (Plate 5), there may perhaps have been some re-

landscaping of the surrounding estate or parklands. The earliest map to show the suggestion of a specific enclosed area around Thurland Castle was produced in 1805 by Cole and Roper (Plate 2). Hennet's map of 1829 (Plate 4) certainly depicted a large enclosure or 'park' attached to the Castle. Whether such landscaping contributed to the dispersal of village buildings and fields south of Church Lane is unknown; however, it appears that the fields north of Thurland Castle park may have been a separate land-holding. Hennet's map of 1829 clearly showed a building in the location of the agricultural building under study and that it was north of the Thurland Castle park and separate from it. Additionally, the *Tithe Map for Tunstall and Cantsfield* (1846) demonstrated that the field where the agricultural barn was sited was owned and occupied by John Turner and did not appear to be in the remit of the Thurland Castle enclosures which were owned by Richard Toulmin North Esq.

- 3.3.11 Tunstall House (HER 39915) and its barn were constructed in 1870 and 1883 respectively; Tunstall House Farm (HER 39917) was built in 1914. These are not marked on the location map (Fig 3) as they are part of the later nineteenth century development to the north of the earlier medieval and post-medieval village. Thurland Castle, after a fire, was rebuilt in by Paley and Austin the 1879-1885 (HE 1164439).

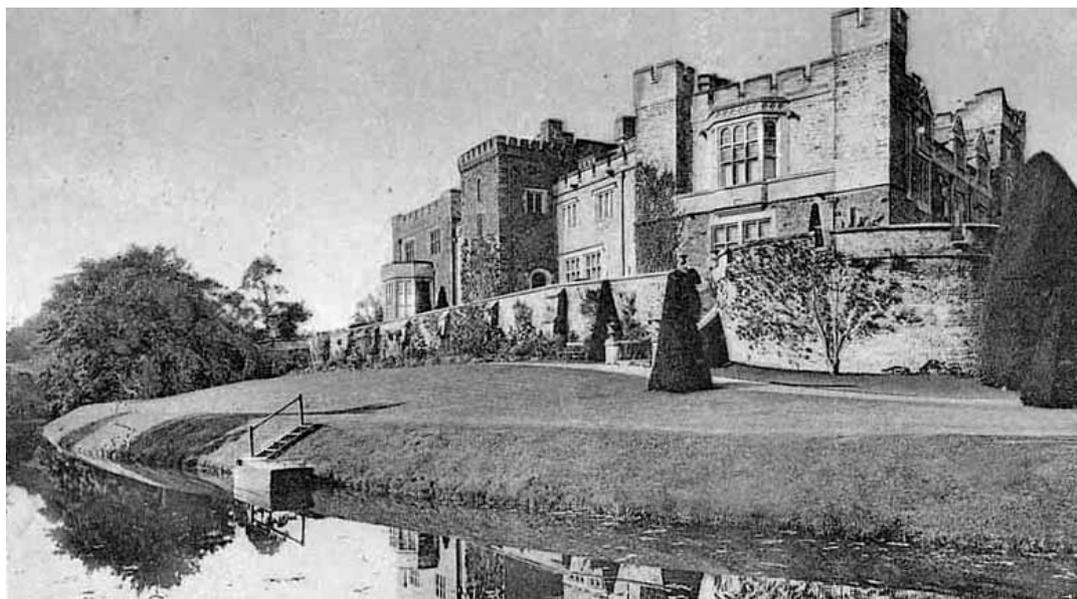


Plate 5: Engraving of Thurland Castle

3.4 MAP REGRESSION

- 3.4.1 The earliest available map with any real detail as to the individual buildings and roads in Tunstall is that of Yates in 1786 and Carey in 1789; the Church was marked on both those maps but the [Old] School House of 1753 was not noted; nor does agricultural building under study appear to be depicted. It was not marked on Cole and Roper's map of 1805 (Plate 2), although interestingly the line of the conjectured north/south Roman Road was denoted as a double dashed line going past the Church at Tunstall and then to 'Overborough'. The agricultural building does seem to have been marked on the copy of Greenwood's map of 1824 (Plate 3) (although the Old School House was not

shown) and might perhaps be discerned above the 'T' on the copy of Greenwood's map of 1824. It may have been a large building depicted, at the approximate location, on Hennes's map of 1829 (Plate 4) (www3.lancashire.gov.uk/environment/oldmap). It was clearly depicted on the Tithe map for Tunstall in 1846, which showed the same level of detail and information on houses, roads and water courses as on the 1st edition OS map surveyed in 1844-5 described below.

- 3.4.2 **1st edition OS map, 1:10,560, 1847 (Fig 2a):** the agricultural building (Plate 6) shown on this map was depicted as a substantial building, rectangular with a small square addition on the western half of the south side. It was on the south side of Church Lane in a large enclosed field opposite the Old School House. The Old School House was a small building set within its own garden plot. North-east of the agricultural building was the parish Church of St John the Baptist, which was at the centre of a square graveyard although there was a curve in the road on the southern edge. North of the Church was Church Field House perhaps referencing the ownership of the enclosed fields north of the church.



Plate 6: Western elevation of the barn

- 3.4.3 The agricultural building was south of the village beck which flowed roughly parallel to Church Lane from Cant Beck westwards to the village of Tunstall. Just east of where the village beck was piped under the road was a short length of track leading to a field east of where the agricultural building was located. This track or cul-de-sac was marked on Greenwood's map of 1824.
- 3.4.4 In Tunstall village the buildings were clustered around the main roads, the north/south road marked Sedburgh Trust, Ayr Lane (leading north to the River Lune) and Church Lane. Those buildings labelled were Back Lane House, Ducksberry, Tunstall Hall, Fenwick Arms and the Vicarage. Parcels of short rectangular fields (likely to follow the medieval patterns of field enclosure) were depicted in a series along the western side of Ayr Lane, and across Back Lane, north and west of the village. Tunstall Hall, and its associated (probable

farm) buildings, was at the north-west corner of the Thurland Castle estate or park. The agricultural building was sited in a large, rectangular field immediately to the north of the castle park boundary.

- 3.4.5 There was no church sited in the cluster of the village, the church was that of St John the Baptist on Church Lane east of the agricultural building. Thus there was a large area of three to four fields between the main village centre, including Tunstall Hall, and the church, indicating a possible hiatus in the development of the village (*Section 5.1.2*).
- 3.4.6 **OS map, 1:2,500, 1891 (Fg 2b):** the environs of the agricultural building under study were relatively unchanged since 1847, there had been some development of Tunstall village in the street from Tunstall Hall to Fenwick Arms and also, notably, Tunstall House on the road north to Burrow Bridge. The Old School House within its garden remained the same, despite the additional School (HER 39916) now noted on a small plot west of the Church. St John Baptist's Church was now marked as having a cross on the southern edge of the graveyard and this may correspond to the Sundial recorded (HER 675, HE 1165259; and Monument 44044). The agricultural building was still within its field, but the field had been enlarged by the removal of the eastern boundary of 1847. The short length of track east of the original 1847 field was no longer denoted; however, the 1960s aerial photograph demonstrated that the track had been subsumed by a boundary wall (1960s aerial photograph). The village beck was no longer marked.
- 3.4.7 **OS map, 1:2,500, 1913** (not illustrated): this map showed that there had been no changes to the environs of the Church, the Old School House and the agricultural building under study except for one additional building in a plot to the east of the Old School House; this was called Kirklands. The agricultural building itself was denoted with a small, square, three-sided, unroofed structure or fold, open on the north side, to the east of the building and this can be seen on the later aerial photographs of the 1960s (mario.lancaster.gov.uk; Plate 7). The aerial photograph also showed that there was a wall from the south-east corner extending southwards to create a funneled entrance or exit (*ibid*).
- 3.4.8 **OS map, 1:10,560, 1956:** (not illustrated) the only change to the immediate area of the agricultural building was the building of a long rectangular structure in the north-west corner of the field (labelled in the 1972 map as a village hall with a tennis court to the west). The agricultural building was still marked as having the small square three-sided structure on its east side. The south side of the building had an additional extension on the east end, thus creating a flush southern elevation, and, as the 1972 1:2,500 OS map showed, still retained the earlier extension on the west side.



Plate 7: Aerial photograph of the barn from the 1960s

4. BUILDING SURVEY

4.1 THE BARN EXTERIOR (FIGS 5-8)

- 4.1.1 The barn was a detached rectangular four and a half-bay, gabled stone structure, aligned just to the south of the east/west Church Lane (Plate 8; Figs 4-8). A full length single-storey lean-to had been appended to the eastern elevation and another had been constructed against the southern gable wall. The primary entrance was from a large, full-height, double doorway at the centre of the western elevation, but the lean-to structures each had independent external access via a pair of opposing doors in their end walls.



Plate 8: Aerial view of the Barn, facing south

- 4.1.2 ***Fabric and Construction:*** the barn was constructed of large, rounded cobbles, roughly-coursed and set within a lime mortar. Some of the cobbles had been faced up to leave a more regular wall face, while the quoins and the surrounds of each opening were typically formed of sandstone grit, tooled to a rough finish. The external elevations had been part rendered using a cementitious mortar, leaving the alternating quoins on display. The roof covering employed sandstone slates, laid in diminishing courses towards the eaves but, despite being in a poor condition, it survived across much of the building.
- 4.1.3 ***Western Elevation (Fig 8):*** the primary elevation of the barn lay to the west, where it faced the centre of the village across an open field (Plate 6). The only opening was a large cart entrance, off-set to the south slightly to leave two full bays to the north and only one and a half at the opposing end. The jambs were laid in alternating courses but were significantly smaller in character than those used at the corners of the building and a timber lintel lay across the head of the opening. The original double doors had been replaced with corrugated iron examples.

- 4.1.4 Careful inspection of this wall revealed a series of flat, horizontal, levelling courses at intervals of just over a metre, suggesting that the wall had been raised in five stages, but, unlike the other elevations, the western elevation did not display the typical projecting through stones seen in so many parts of the Yorkshire Dales. A cast iron gutter had run along the head of the elevation, and a down pipe had been attached to the northern corner, although both survived only as fragments, with the brackets indicating its original line.
- 4.1.5 **Northern Elevation (Fig 5):** the northern gable wall was constructed in a similar fashion to that just described but had moulded stone kneelers at the head of each corner and was finished with a low parapet topped by a course of flat stones (Plate 9). A vertical rectangular pitching hole was located beneath the apex, with a picked, faced, stone lintel resting upon rubble jambs and a slender stone sill beneath. The opening had been blocked, with the exception of the top left hand corner which appeared to have been retained as an owl hole or ventilation loop. A narrow ventilation loop lay immediately above the pitching hole, formed in rubble, with a small rough horizontal sill and lintel.
- 4.1.6 Evidently, there had been a series of small openings at ground-floor level but their blocking, and the application of a rough cement mortar, made it difficult to measure their dimensions. Several projecting through-stones were identified across the elevation but appeared to be arranged in three distinct courses across the height of the wall.



Plate 9: Northern elevation of the Main Barn

- 4.1.7 **Eastern Elevation (Fig 6):** the eastern elevation had been completely enclosed by the addition of two projecting lean-to structures but the collapse of the roof of the southern of the two lean-tos had once again revealed the original elevation and is described here in full.
- 4.1.8 Its construction mirrored that described on the northern gable, with regular courses of sporadic through-stones projecting from the wall face (Plate 10). A wide double

width doorway lay at the centre of the elevation, opposing that described on the western elevation but lower in height (Plate 11). Its surrounds had been coated in white paint but it appeared to have sandstone jambs. Its northern third had been infilled with stone, reducing the width of the doorway, and its head had been lowered by a similar margin, fossilising the original timber lintel in the wall above. The opening had been fitted with a timber, three plank, doorway, hung upon a wooden frame and careful inspection of the underside of the lintel revealed that the beams had been reused, preserving evidence of a redundant dovetail joint, an empty mortice and a chamfer with a lamb's tongue stop at one end (Plate 12).

- 4.1.9 A second, and smaller, doorway lay at the northern end of the elevation, and was again fitted with the remnants of a timber plank door. To the south of the northernmost door lay a blocked, vertically-set, rectangular window, much obscured by the thick white paint which covered the majority of the elevation and to the south of this lay a narrow ventilation loop with rubble surrounds. At the southern end of the elevation lay three identical ventilation loops, arranged at regular intervals the openings had been blocked on their internal faces.
- 4.1.10 At first floor level the southern half of the elevation included three ventilation loops, off-set slightly from those below, while the northern half had a similar arrangement, all of which remained open. A cement flashing ran horizontally above the heads of the southern vents and below the line of the eaves, indicating the original height of the roof of the lean-to which projected from this end of the building.
- 4.1.11 ***Southern Elevation (Fig 7)***: the southern gable wall was also enclosed by a later lean-to structure but its upper third was visible above the roof line and the remainder is described from within the lean-to (Plates 13 and 14). Its quoins, kneelers and raised parapet were identical to those described on the northern gable wall and it too had a narrow ventilation loop immediately beneath the apex; however, this elevation omitted the pitching hole and instead included an additional two ventilation loops at first-floor height arranged at thirds across the length of the wall. The remainder of the wall was coated in thick white paint and no ground floor openings were visible with the exception of a small square niche or large empty socket at the eastern end which may have housed one end of a beam. At least three courses of the projecting through-stones were visible arranged at broadly regular intervals across the height of the elevation.



Plate 10: Southern end of the original eastern elevation of the Main Barn, facing north-west



Plate 11: Central eastern doorway. Note the infilled portion to the right of frame



Plate 12: Underside of the lintel of the central eastern door showing re-used timbers



Plate 13: The southern elevation of the Main barn and southern lean-to



Plate 14: The southern wall of the Main Barn facing north, with the stalls of the southern lean-to in the foreground

4.2 BARN-INTERIOR

- 4.2.1 Internally, the barn comprised a single undivided large space with a flag-stone floor between the opposing entrances, a cobbled surface to the north and a compacted soil floor to the south (Plates 15 and 16). The walls were part rendered in lime but any white wash or paint that may have been applied to the surface has since been lost. From the interior it was evident that the northern gable wall had been constructed with three ventilation loops at ground-floor level, distributed equally across the length of the wall. All three were blocked to the full width of the wall, while those on the eastern wall and southern gable wall were splayed to the interior, had rubble jambs and timber lintels.
- 4.2.2 The window at the northern end of the eastern wall was only blocked on its external face leaving a deep niche with splayed jambs and a timber lintel over (Plate 17). The lintel had clearly been reused, having a chamfered edge and a stop at the southern end. At the back of the niche the windows original timber frame and central mullion had been preserved intact, demonstrating traditional carpentry techniques. The timber lintel of the vent immediately to its south was notable for its length, extending well beyond the southern jamb of the opening, and it is possible a wider opening once existed here to match that to the north.
- 4.2.3 The roof was constructed with four principal rafter trusses, with each end of its tie beam resting within a trench cut into the tops of the wall plates (Plate 18). The principal rafters were jointed into the upper faces of the ends of the beams, rising to the apex where they were affixed to each other via what appeared to be a hafting. Additional support was provided by a pair of slightly curved braces morticed into the underside of the principal rafters and into the tops of the tie beam. The timber appeared to be of hard wood and may well have been the structure's original roof;

however, numerous empty dovetail joints indicated that the timbers had been used on the roof of an earlier building (Plate 19). The purlins were trenched into the backs of the principal rafters and were staggered between bays, while the common rafters were affixed to the backs of these with battens above. The slates had been hung on the battens and their undersides were torched with lime mortar.

- 4.2.4 Two of the trusses were in a very poor condition and had been shored up with the addition of a matching truss immediately to the south. The original trusses were numbered on the northern face of their western joints with roman numerals from I at the southern end increasing to V at the northern end (Plate 20). Notably truss IV was not present, and again perhaps highlights the reuse of the timbers from another building. Trusses I –III were further numbered with a series of punched dots on the northern faces of their eastern joints (Plate 21).
- 4.2.5 Several pieces of wheeled farming equipment had been preserved in the barn, probably dating to the first half of the twentieth century, and a small free standing piece of equipment bearing the name ‘unchokeable’ and the manufactures name ‘J.R. Warwick’ of ‘Lancaster’ stood in one corner (Plate 22).



Plate 15: Interior of the Main Barn facing south



Plate 16: Flag-stone threshing floor, facing south-west



Plate 17: Blocked window and vent at the northern end of the eastern elevation



Plate 18: The truss design in the Main Barn



Plate 19: A failed principal rafter on the northern truss. The empty halfting joints can be seen on both rafters indicative of their reuse



Plate 20: Roman numerals marking assembly order. Note also the chamfered stops on the underside of both beams



Plate 21: Punched assembly numbers, indicating truss four



Plate 22: Free standing machinery, marked as 'unchokeable' and the manufactures name 'J.R. Warwick' of 'Lancaster'

4.3 NORTH-EASTERN LEAN-TO

- 4.3.1 ***Fabric and Construction:*** the lean-to at the northern end of the eastern elevation was constructed in a similar manner to that of the main barn to which it was abutted but was only a single storey in height. The quoins appeared to be of the same stone used to erect the barn and through-stones appeared on both the northern and eastern elevations. The sandstone roofing slates were laid in diminishing courses.
- 4.3.2 ***Northern Elevation:*** the northern elevation provided external access to the building through a doorway at the eastern end (Plate 23). The door surrounds and lintel were formed in large sandstone blocks and the opening was fitted with a six panel timber door with a sliding wooden vent in its upper half. A modern ceramic pipe had been inserted into the top of the western half of the wall, presumably to provide additional ventilation.
- 4.3.3 ***Eastern Elevation:*** the eastern elevation had no openings of any kind but the former presence of a gutter was indicated by a series of brackets located beneath the eaves. Alternating quoins at the southern end of the elevation indicated the original southern corner of the building, although this was now abutted by the northern end of the south-eastern lean-to structure (Plate 24).
- 4.3.4 ***Southern Elevation:*** the southern wall had been incorporated into this adjoining building and was in a fragile state (Plate 25). Although construction appeared much the same as the remainder of the structure, the lime core had been washed out leading to structural damage. There were doors at the eastern and western ends of the elevation, the former being partly constructed with large sandstone block work was the larger of the two, while the latter had

rubble jambs and a timber lintel. A socket just to the east of the western door at waist height had been inserted to take one end of a timber partition related to the cattle stalls in the adjoining building.



Plate 23: North wall of north-eastern lean-to, facing south



Plate 24: Stone quoins indicating the butt joint between the eastern walls of the north-eastern and south-eastern lean-to, facing west



Plate 25 : Southern wall of the north-eastern lean-to

4.4 NORTH-EASTERN LEAN-TO INTERIOR

- 4.4.1 Internally, the walls had been coated in a thick white paint, although this had all but worn off on the southern wall (Plate 26). The floor was divided into two main levels with a concrete passage along the eastern side of the building connecting the two eastern opposing doors. The remainder of the floor to the west was raised approximately 0.1m higher and had a hard wearing kerb of sandstone blocks along its eastern side, edging a concrete surface (Plate 27). The western limit of this surface clearly marked the head of the cattle stalls with a feeding passage along the western wall comprised of an informal soil floor. A large upright slate at the northern end of room had formed part of the original division between the feeding passage and stalls and a pair of empty stone sockets in the floor of the stalls indicated the position of the dividing posts and the width of the stalls. A timber tethering post survived against the southern wall, complete with its iron tethering ring.
- 4.4.2 The building's roof was formed of a single half truss mid-way across the width of the room, carrying trenched and staggered purlins on the back of its principal rafter (Plate 28). The common rafters, battens and slates were arranged in an identical manner to the Main Barn, although no torching had been applied. As with the Main Barn, the principal rafter retained two empty halftings, suggesting that it was originally used as a tie beam.



Plate 26: Interior of north-eastern lean-to facing south



Plate 27: Interior of the north-eastern lean-to facing north. Note the upstanding slate division to the left of frame



Plate 28: Half truss in the north-eastern lean-to. Note the empty half-timings on the principal rafter, indicative of its original use as a tie beam. Facing south

4.5 SOUTH-EASTERN LEAN-TO

- 4.5.1 ***Fabric and Construction:*** the single-storey lean-to at the southern end of the Main Barn's eastern elevation consisted of a southern end wall and eastern lateral wall, with the roof covering and its structure absent. The western and northern limits of the building were defined by the Main Barn and the north-eastern lean-to, but construction was again similar to these buildings with large rounded cobbles, roughly-coursed and set within a lime mortar. Large sandstone quoins had been employed at the south-eastern corner but were not present at the northern end of the eastern wall where the structure abutted the adjoining lean-to. The exterior of the building had been repointed in a rough cement mortar.
- 4.5.2 ***External Appearance:*** externally, the building could be entered via a doorway at the eastern end of the southern wall, which was topped by a large, slightly trapezoidal sandstone lintel (Plate 29). It was evident from the shape of the lintel, and two small square sockets on its outer face, that it had previously served as a vertical gate post and a shallow bell curve had been carved into its eastern end in relief (Plate 30). The doorway was fitted with a timber door of narrow vertical panels similar to that described on the adjoining lean-to, and also incorporated a sliding timber vent within its upper half. The remainder of the southern wall was in poor condition, with its upper third missing and the western half partially collapsed. A steel water trough had been placed against the base of the wall to the west of the doorway, partially obscuring the wall behind.
- 4.5.3 The eastern wall was partly obscured by vegetation but two narrow openings just beneath the height of the eaves indicated the former position of a pair of principal rafters which must once have supported the roof. Where the wall abutted the northern lean-to there was a small square window at mid-height with a narrow stone sill below a substantial stone lintel (Plate 31). The northern end of the lintel

had been inserted into the pre-existing corner of the adjoining northern lean-to and although heavily weathered a careful inspection of its underside revealed it to be moulded and therefore indicative of reuse.



Plate 29: Southern wall of the south-eastern lean-to, facing north



Plate 30: Sandstone gate-post reused as a lintel above the entrance into the south-eastern lean-to



Plate 31: Window at the northern end of the eastern wall

- 4.5.4 **Internal Appearance:** internally, the southern wall retained traces of its coating of white paint, although this was almost completely lost from the face of the eastern wall. A narrow doorway with a timber lintel lay at the western end of the southern wall, leading into the southern lean-to. The collapse of the roof had resulted in an accumulation of rubble, soil and other debris which obscured the ground surface but the rubble had been cleared across a central section of the floor. This revealed a similar basic arrangement to that described in the north-eastern lean-to, with a passage along the eastern wall, defined by a raised step along its western edge. Unlike the northern lean-to, the centre of the floor retained its original cobbled surface and there was a cement drain running along its western edge. A lateral feeding passage ran along the western side of the building, with the remnants of a timber partition surviving at the southern end alongside a wooden tethering post attached to the southern wall.



Plate 32: Interior of the south-eastern lean-to facing south

4.6 SOUTHERN LEAN-TO

- 4.6.1 ***Fabric and Construction:*** at the southern end of the Main Barn a third single-storey lean-to structure had been erected in roughly-coursed large rounded cobbles. The building employed large alternating sandstone quoins at its southern corners and the surrounds of its openings were formed of the same. The external walls had been repointed in cement but had originally been of lime mortar. The eastern half of the roof had collapsed, but the remaining western half was covered in sandstone slates, laid in diminishing courses to the top.
- 4.6.2 ***External Appearance:*** the western elevation had a single doorway at the eastern end, although its door had been removed. No other features of interest were noted, but the repointing in cement on this elevation, in common with the western elevation of the main barn, was closer to a rough render and this may have hidden additional details. The southern elevation had a vertically-arranged rectangular window towards each end topped by a large stone lintel and fitted with a pair of horizontal iron bars across its lower half (Plate 33). The lintels were unusual in that they were formed using a fine-grained sandstone not seen on any other part of the building and it was apparent that they were probably replacements, the surrounding mortar and stone work forming only a loose fit around them (Plate 34). The eastern lintel also displayed a small empty socket at its centre, perhaps a remnant of an earlier use. Nothing remained of the original guttering save for its iron brackets and two pairs of empty holes at the western end, which denoted the former position of the down pipe.
- 4.6.3 The eastern elevation was a reflection of that to the west, although it retained its internally opening timber door at the southern end. Additionally, the masonry at the northern end of the wall was slightly disturbed at about mid-height, perhaps indicating a blocked opening of some kind (Plate 35). The loss of the roof from this

end of the structure had also led to the washing out of the lime mortar joints at the head of the wall, making the structure more fragile to the east.



Plate 33: Southern elevation of the southern lean-to

- 4.6.4 **Internal Appearance:** the internal walls were coated in thick white paint, with the exception of the eastern wall where the weather had stripped this away but the layout of the interior was perhaps the best preserved of any of the three lean-to's (Plate 36). A cobbled feeding passage ran along its northern side defined to the south by a half-height timber partition that denoted the head end of the stalls (Plate 37). Additional partitions extended at right angles from these at regular intervals along the buildings length, indicating the width of the stalls, which would have been further sub-divided by intermediary posts. The positions of the intermediary posts were revealed by a series of empty sockets in the concrete floor, indicating stalling for up to eight animals. Timber tethering posts survived against the eastern and western walls, with a third at the centre of the room, all retained their tethering iron. A stone kerb defined the rear of the stalls, beyond which there was a step down to a concrete drain running along the length of the building. An access passage located against the southern wall between the two opposing doors retained its original cobbled floor to the east but this had been replaced in concrete to the west.
- 4.6.5 At the northern end of the eastern wall was a rectangular niche, with splayed jambs and a timber lintel, which matched the position of the disturbed masonry noted on the exterior. The two features can probably be identified as a window, blocked on its external face to leave a recess on the internal elevation.
- 4.6.6 Unlike the remainder of the buildings the roof was constructed of soft wood and the major timbers were bolted together rather than jointed. A single half truss at the centre of the building was composed of a tie beam, principal rafter, king post and diagonal brace. The tie beam had been cut into the head of the wall to the south and socketed into the southern wall of the Main Barn to the north. The principal rafter

carried a pair of purlins on its back which in turn supported the common rafters and battens upon which the slates were mounted.



Plate 34: Eastern elevation of the southern lean-to, facing north-west



Plate 35: Area of disturbed masonry at the northern end of the eastern wall



Plate 36: Interior of the southern lean-to facing west



Plate 37: Stall partitions, facing north-west

- 4.2.1 The character of the stone work suggested there may have been a seventh vent between the two sets but this could not be confirmed.

5. DISCUSSION

5.1 CONCLUSION

- 5.1.1 A mitigative archaeological survey has been undertaken of the agricultural building itself, which is not listed or designated or included within any designated conservation or heritage areas. This survey provides for the recording of the building as mitigation for its alteration and renovation as part of the proposed development.
- 5.1.2 There has been no previous archaeological work undertaken on this structure and it is not known when it was originally built, although it has been ascertained from the map regression that it may have been built after 1789 but before 1824. Of interest is the fact that the agricultural building is standing within a series of three or four enclosed fields which appear not to have been developed or built on, as evidenced by the available mapping, since the early nineteenth century. These fields lying on Church Lane, between the parish church to the east and the possible manorial village or *caput*, may have been abandoned sometime during the medieval or early post-medieval history of Tunstall village. The cause of any abandonment is uncertain, but could relate to Scottish invasions, poor harvests, cattle diseases or the plague of the fourteenth century. There is also the possibility that its abandonment relates to the adjacent Thurland Castle, as a result of the temporary expansion of the parkland for the castle, although by the time of the 1829 Hennet map (Plate 4) the northern edge of the park was located just to the south of the agricultural building. There was a documented siege of the castle in 1643 during the Civil War and while this may have affected the locality of the building, it is more likely that this resulted in the construction of siegeworks than the abandonment of parts of the village. Thus, within this central area the agricultural building possibly overlies an area of potential archaeological significance, in that there may be the archaeological remains of an earlier pre-Conquest or medieval village along Church Lane.
- 5.1.3 It is not known if the siting of the agricultural building related to the location of the Church or the Old School House. Certainly, the size of the building and the bold emphasis it was given on Hennet's map of 1829 and the OS map of 1847, imply a building of significance. The location of the agricultural building so close to the Church may suggest that there was a continued connection to the Church, although it is more probable that Church Field, north of the Church, was associated with church business; and perhaps provided church lands or was used for the storage of church tithes.

5.2 DEVELOPMENT

- 5.2.1 The barn has an eighteenth / early nineteenth century character, and was seemingly first depicted on the 1824 Greenwood map, but may have been earlier. By the time of the first detailed map, the 1847 OS first edition map, the eastern and southern extensions were in place, and would indicate that the primary phase of the building was earlier than this date. The quantity and character of the reused timbers found throughout the barn suggests that it was constructed using timbers from an earlier structure. The chamfered stops found upon many of these, including upon former tie beams, suggest this earlier structure may have been a house, probably with its roof

timbers exposed to the floor below. The implication is that the barn may have been constructed from an earlier domestic building on this site or elsewhere.

5.3 FUNCTION

- 5.3.1 The original barn was designed as a multi-functional building, capable of housing live-stock when necessary but also for the storing and processing of harvested crop. The tall entrance at the centre of the western side allowed fully laden carts to enter from the fields, while the opposing doorway of the primary build, was just high enough to allow an un-laden cart to leave the building on the farm side of barn. Once dried, the crop could be processed on the threshing floor at the centre of the cross-passage, using the through-draft from the open doors to assist the winnowing of wheat or corn from the chaff. The wheat or corn could then be stored on the mezzanine platform, which from the position of the first-floor loading hatch must have been located at the northern end of the Main Barn. There was no wide doorway through the north-eastern extension, indicating that the use of the barn for threshing only related to the original barn (Phase 1), and by the time that the extensions were constructed the barn was primarily being used for accommodating stock.
- 5.3.2 Over time the cattle stalls appear to have been organised with an east/west feeding passage against the partition wall of the atrium and an open drain running along the foot of the opposing wall. The cattle were probably stalled in pairs, divided by timber partitions, and would have faced the feeding passage, leaving the drain to be cleared of manure out through one of the doors at either end of the gable walls. Until the late nineteenth century, cows were typically tethered across the width of the building, after which it became more common to stall them across its length (EH 2006c, 64). The cart entrances at each end of the through-passage could also have served as cart houses if no other accommodation existed for them.
- 5.3.3 The fact that the earliest phase of the barn was a threshing barn is potentially significant, as threshing barns were typically in direct association with a farm in contrast with fields barns which were intended to accommodate stock. The implication is that there was formerly a farm house at the site, which is no longer extant. Just to the east of the barn is a square structure with large slabs at the base, and is clearly visible on the 1960s aerial photograph. The present owner reports that this is currently in use a cess pit, but given its substantial size there exists the possibility that this may have formerly been part of an earlier structure.

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Aerial Photography

Aerial photograph 1960s (MARIO <www.lancashire.gov.uk>)

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APPENDIX 1: SITE TABLE

Site	HER no.	NGR	Period	Description
1	-	361120 473699	see text	Tunstall agricultural building, Church Lane
2	4542	361093 473741	18th C	Listed Building (Grade II) HE 1071643 Old School House, 1753
3	2716	361098 473742	Medieval	Findspot: Incised Cross slab in the fabric of the Old School House (Site 2)
4	39916	361340 473891	19th C	Old School, Church Lane, built in 1871.
5	661	361330 473890	Roman	Findspot: Milestone reported in 1184 but not recorded since.
6	675	361407 473906	Medieval	Listed Building (Grade II) HE 1165259: Base for a standing Cross with an 18th C sundial shaft.
7	676	361410 473930	Medieval	Listed Building (Grade I) HE 1071642: Church of St. John the Baptist.
8	677	361430 473940	Roman	Findspot: Altar stone dedicated to Asclepius and Hygiaea found in the fabric of the Church wall (Site 7).
9	1208	361410 473920	13th C	Findspot: Three floriated grave slabs at the Church of St. John the Baptist.
10	26149	355310 467758	Roman	Conjectured north-south Roman Road through Tunstall
11	32071	360900 473800	17th C	Findspot: Rowel spur
12	32110	360900 473800	Roman	Findspot: Steelyard Weight
13	33779	360600 473600	Medieval	Findspot: Groat of 1422-1427 AD
14	33798	360600 473600	Medieval	Findspot: Groat of 1427-30 AD
15	33799	360600 473600	Medieval	Findspot: Groat of 1427-30 AD
16	33755	360700 473600	Late BA / Early IA	Findspot: Late Bronze Age/Early Iron Age Bracelet
17	16095	360707 473573	17th C	Listed (Grade II) HE 1071644 Tarnwater
18	16061	360687 473563	18th C	Listed (Grade II) HE 1165269 Gabriel

				Cottage
19	39914	360667 473494	18th C	Ducksberry
20	16058	360894 473632	19th C	Listed (Grade II) HE 1317405 Milestone
21	16059	360900 473600	18th C	Listed (Grade II) HE 1071641 The Old Vicarage
22	5367	360762 473446	18th C	Listed Building (Grade II) HE 1317407: Tunstall Hall Farmhouse
23	39911	360797 473545	18thC	Fenwick Arms
24	39912	360769 473488	18th C	Barnfield
25	39913	360781 473510	18th C	4, Main Street
26	18846	360800 473500	Roman	Findspot: Sestertius of Septimius Severus
27	32052	361200 473300	Medieval	Findspot: Chape of Dagger or sword 1400-1600 AD
28	39649	361157 473053	Medieval	Listed (Grade II*) HE 1164439: for Thurland Castle. HER 39649 for the Estate

ILLUSTRATIONS

FIGURES

Figure 1: Site Location

Figure 2a: Excerpt of the First Edition Ordnance Survey, 6" to 1 mile map, 1847

Figure 2b: Excerpt of the First Edition Ordnance Survey, 25" to 1 mile map, 1891

Figure 3: Gazetteer of Sites

Figure 4: Ground Floor Plan

Figure 5: North-Facing Elevation

Figure 6: East-Facing Elevation

Figure 7: South-Facing Elevation

Figure 8: West-Facing Elevation

PLATES

Plate 1: Google earth aerial photograph of the barn

Plate 2: Cole and Roper's map of 1805 showing the line of the conjectured Roman road extending past the church

Plate 3: Greenwood's map (1824) of Lancashire showing Tunstall

Plate 4: Hennett's map (1829) of Lancashire showing Tunstall

Plate 5: Engraving of Thurland Castle

Plate 6: Western elevation of the barn

Plate 7: Aerial photograph of the barn from the 1960s

Plate 8: Aerial view of the Barn, facing south

Plate 9: Northern elevation of the Main Barn

Plate 10: Southern end of the original eastern elevation of the Main Barn, facing north-west

Plate 11: Central eastern doorway. Note the infilled portion to the right of frame

Plate 12: Underside of the lintel of the central eastern door showing reused timbers

Plate 13: The southern elevation of the Main barn and Southern lean-to

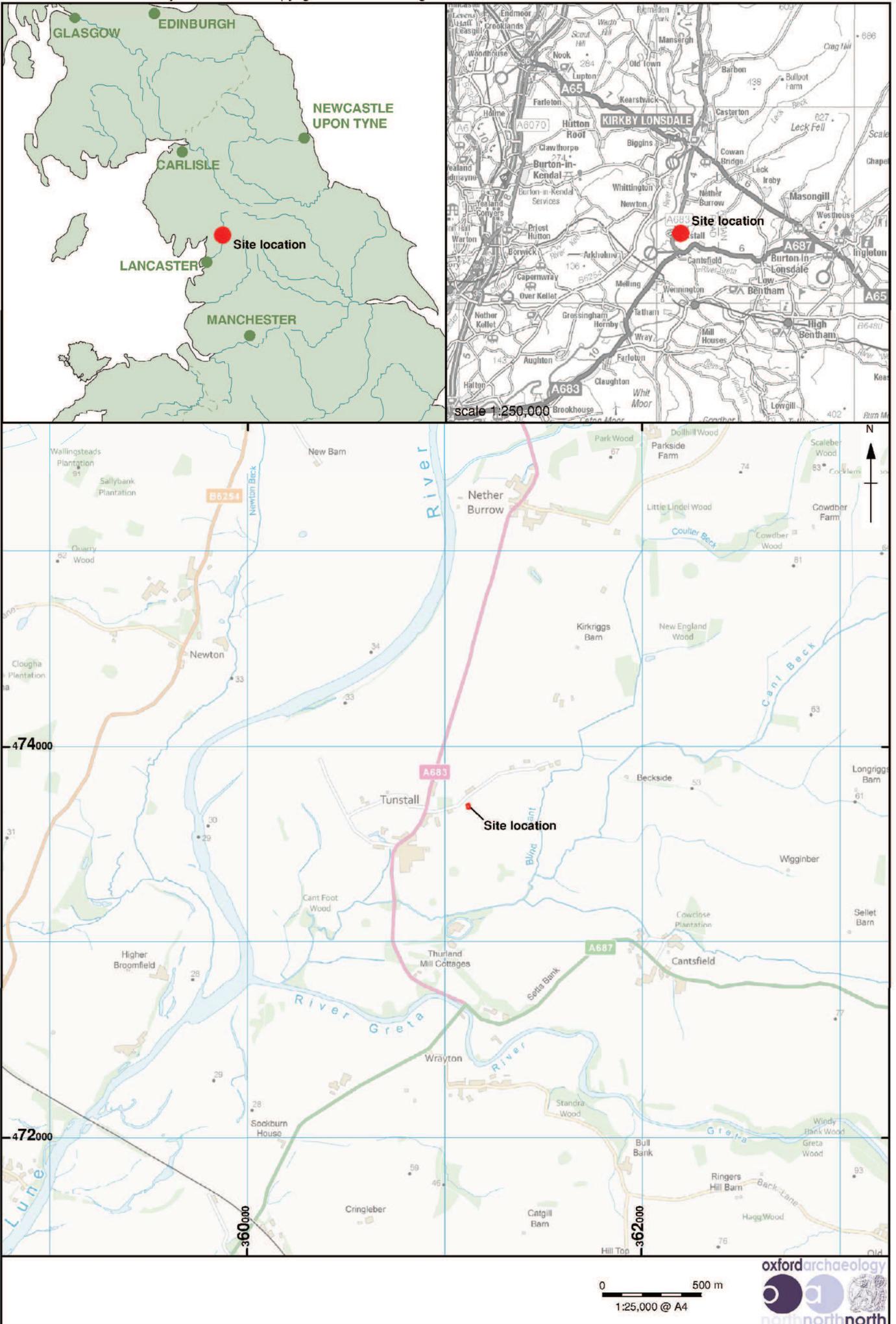
Plate 14: The southern wall of the Main Barn facing north, with the stalls of the Southern lean-to in the foreground

Plate 15: Interior of the Main Barn facing south

Plate 16: Flag-stone threshing floor, facing south-west

Plate 17: Blocked window and vent at the northern end of the eastern elevation

- Plate 18: The truss design in the Main Barn
- Plate 19: A failed principal rafter on the northern truss. The empty halfting joints can be seen on both rafters indicative of their reuse
- Plate 20: Roman numerals marking assembly order. Note also the chamfered stops on the underside of both beams
- Plate 21: Punched assembly numbers, indicating truss four
- Plate 22: Free standing machinery, marked as 'unchokeable' and the manufactures name 'J.R. Warwick' of 'Lancaster'
- Plate 23: North wall of north-eastern lean-to, facing south
- Plate 24: Stone quoins indicating the butt joint between the eastern walls of the north-eastern and south-eastern lean-to, facing west
- Plate 25 : Southern wall of the north-eastern lean-to
- Plate 26: Interior of north-eastern lean-to facing south
- Plate 27: Interior of the north-eastern lean-to facing north. Note the upstanding slate division to the left of frame
- Plate 28: Half truss in the north-eastern lean-to. Note the empty halftings on the principal rafter, indicative of its original use as a tie beam. Facing south
- Plate 29: Southern wall of the south-eastern lean-to, facing north
- Plate 30: Sandstone gate-post reused as a lintel above the entrance into the south-eastern lean-to
- Plate 31: Window at the northern end of the eastern wall
- Plate 32: Interior of the south-eastern lean-to facing south
- Plate 33: Southern elevation of the southern lean-to
- Plate 34: Eastern elevation of the southern lean-to, facing north-west
- Plate 35: Area of disturbed masonry at the northern end of the eastern wall
- Plate 36: Interior of the southern lean-to facing west
- Plate 37: Stall partitions, facing north-west



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Figure 1: Site location



Figure 2a: Excerpt of the First Edition Ordnance Survey, 6" to 1 mile map, 1847

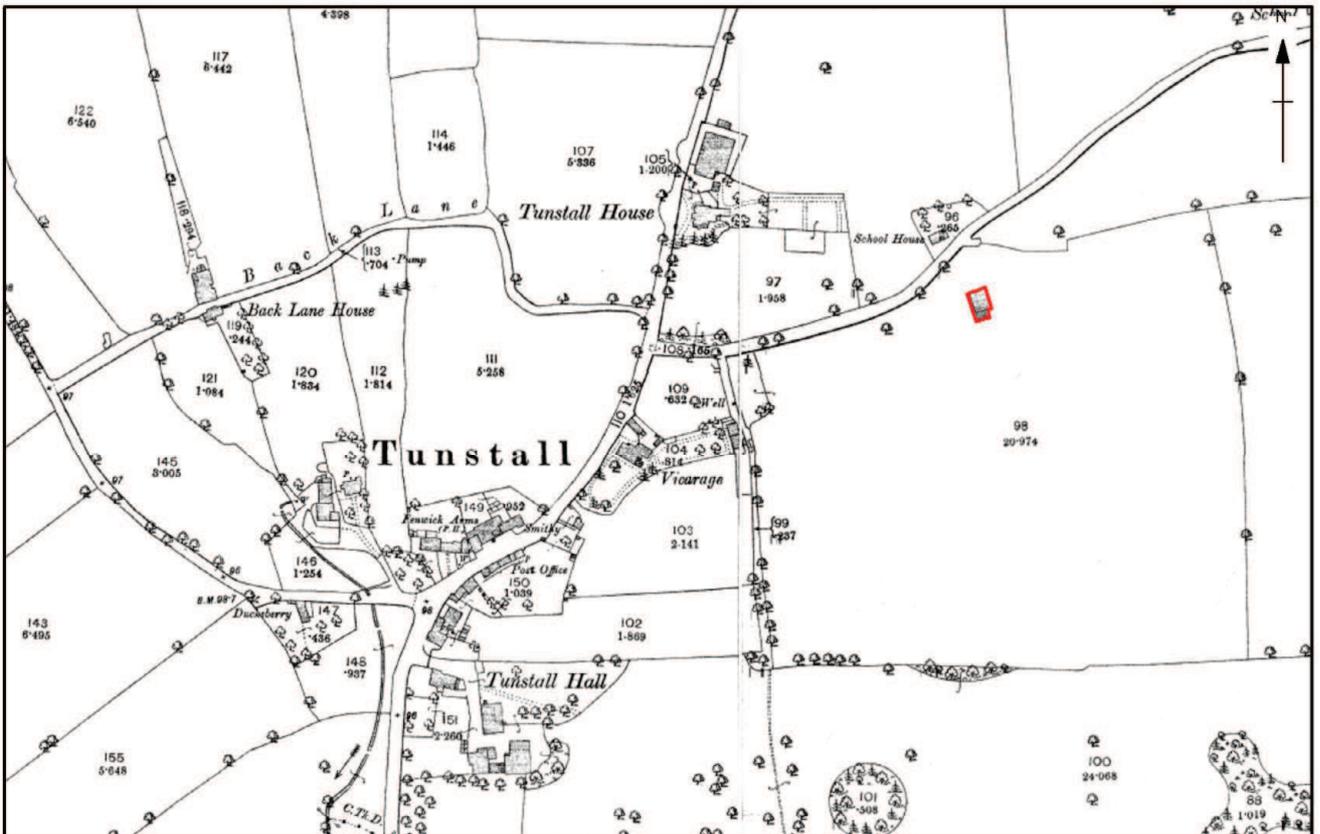


Figure 2b: Excerpt of the First Edition Ordnance Survey, 25" to 1 mile map, 1891

Site location

0 100 m
1:5000 @ A4

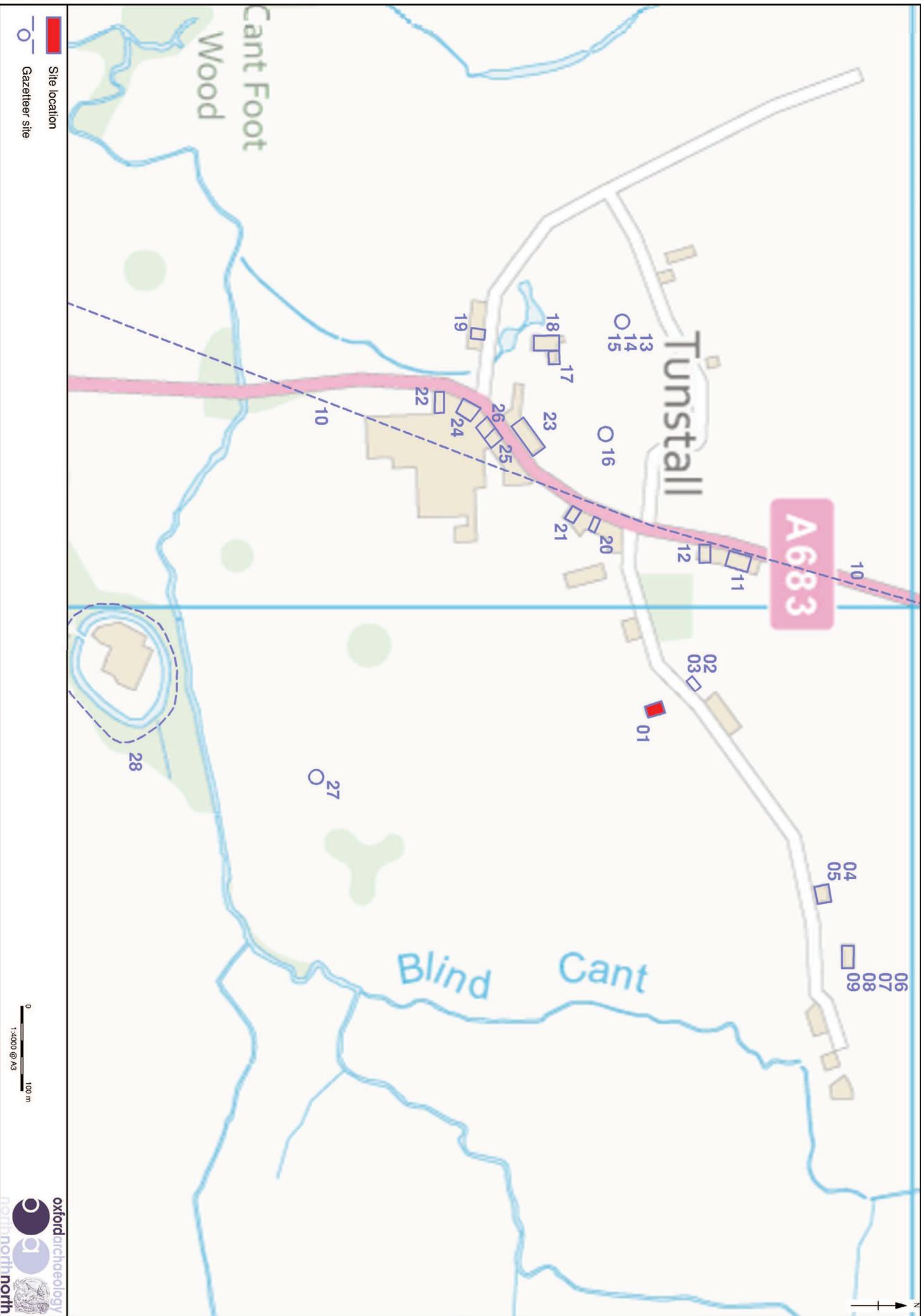


Figure 3: Gazetteer of sites



- Wall
- Blocking
- Wood
- Floor
- Stone

0 2 m
1:75 @ A3

Figure 4: Ground floor plan

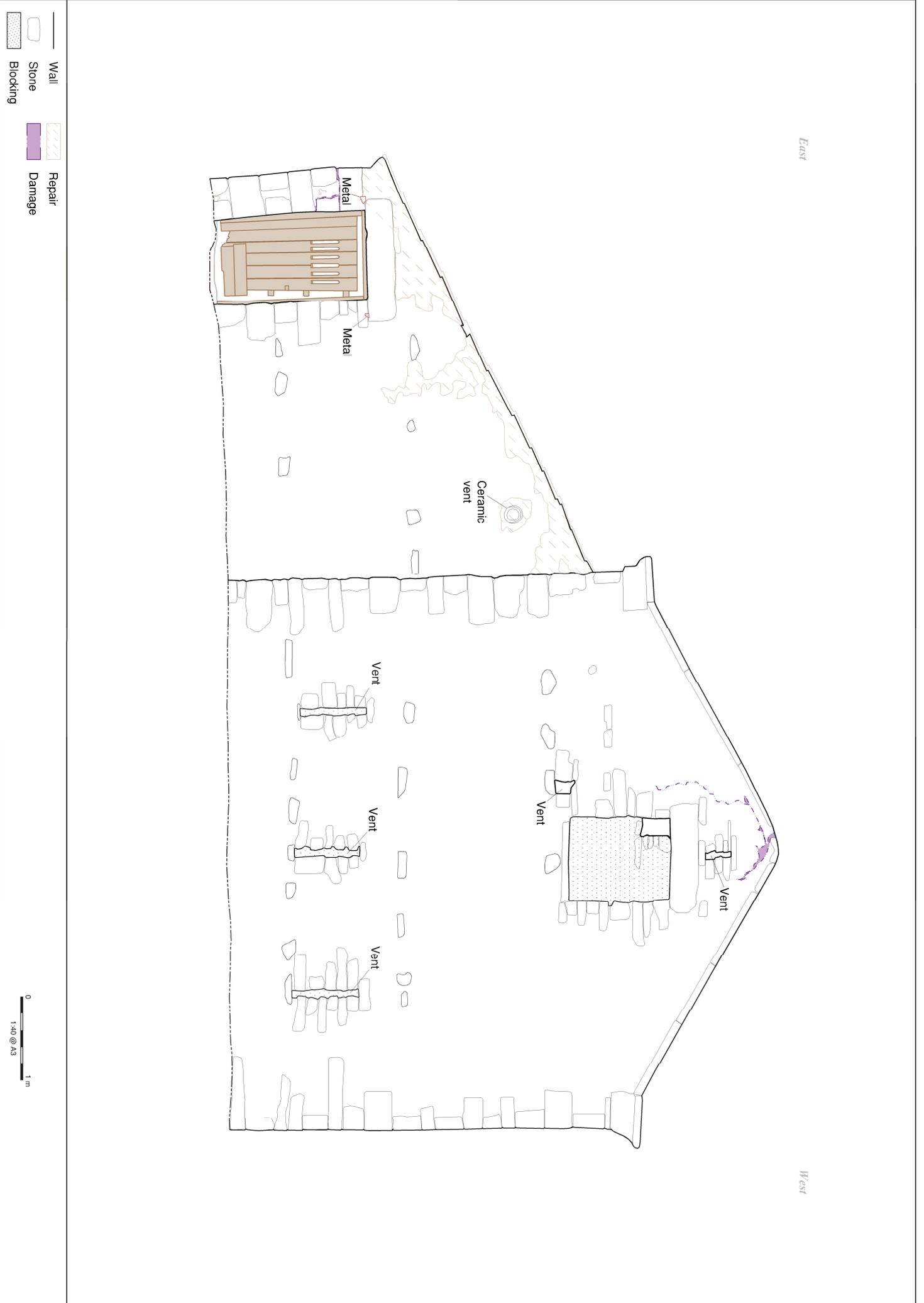


Figure 5: North-facing elevation



Figure 6: East-facing elevation

West

East

-  Wall
-  Stone
-  Blocking
-  Wood
-  Damage
-  Obscured



0
1:40 @ A3
1 m

Figure 7: South-facing elevation



Figure 8: West-facing elevation



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