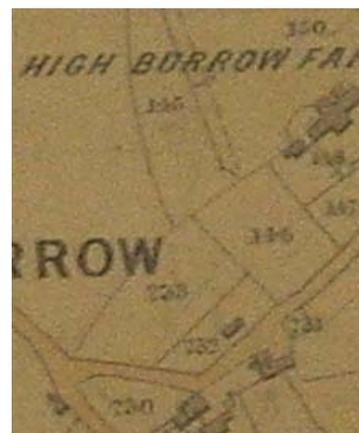


LAND ADJACENT TO TEMPLE COTTAGE, OVER BURROW, LANCASHIRE

Archaeological Desk-Based Assessment



Client: Allan Livesey
Planning ref.: 09/00069/FUL
NGR: 361534 476010

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Greenlane Archaeology Ltd,
2 Albrights Yard, Theatre Street,
Ulverston, Cumbria, LA12 7AQ

Tel: 01229 588 500
Email: info@greenlancearchaeology.co.uk
Web: www.greenlancearchaeology.co.uk

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Non-Technical Summary

Following a planning application for the addition of an extension to Temple Cottage and the construction of a new dwelling on adjacent land at Over Burrow, Lancashire, a programme of archaeological investigation was requested by English Heritage. The initial phase of this work comprised a desk-based assessment of the site in order to assess its potential and make recommendations for further work. The site is situated within the Scheduled Monument area for the Roman fort at Over Burrow, and as a result it is considered to be of high archaeological interest and potential. The desk-based assessment was carried out by Greenlane Archaeology in August 2009.

An examination of the results of previous excavations and available published sources revealed that although the fort had been identified at an early date its extent and actual location was not established until the early 20th century. Excavations in the 1940s and 1950s revealed that it was established in the late 1st century, with considerable activity in the 3rd and 4th centuries AD, with some evidently late reorganisation. Temple Cottage and its associated grounds are probably situated within the civilian settlement, or *vicus*, which is thought likely to have been situated to the north and west of the fort. More recent excavations to the north-east have found no significant archaeological remains, suggesting the *vicus* is located further to the west.

A map regression analysis revealed that Temple Cottage was constructed prior to 1844 but there has been relatively little change to the building following that date, although an examination of aerial photographs revealed that a building, which was presumably only temporary, stood on part of the land to the east of Temple Cottage in the late 20th century. The aerial photographs also showed earthworks to the north-east of the site that might be related to the extent of the *vicus*. If so, the proposed development site would be likely to be situated well within its extent.

In view of the likelihood of the proposed development site being situated within the *vicus*, its proximity to the expected location of the north defences of the fort, and the apparent lack of disturbance to this part of the Scheduled Monument area, it is recommended that further archaeological work be undertaken prior to the development taking place. As a minimum this should comprise an evaluation of a percentage of the site, although a more effective method, given the size of the site as a whole, might be simply to excavate it. The undertaking of a geophysical survey is not considered an appropriate method of further investigation, again because of the small size of the site.

Acknowledgements

Greenlane Archaeology would like to thank Allan Livesey for commissioning the project and his agent, Digby Harris at Francis Johnson and Partners, for his help. Additional thanks are due to Ken Davies, Planning Officer (HER) at Lancashire County Council for providing information about the site, and Jenny Stopford at English Heritage for approving the project design. Further thanks are due to John Gater and Jane Anderson at GSB Prospection for their comments and advice.

The desk-based assessment was carried out by Steve Clarke, who also wrote the report. The project was managed by Dan Elsworth, and the report was edited by Dan Elsworth and Jo Dawson and copy-edited by Tom Mace.

1. Introduction

1.1 Circumstances of the Project

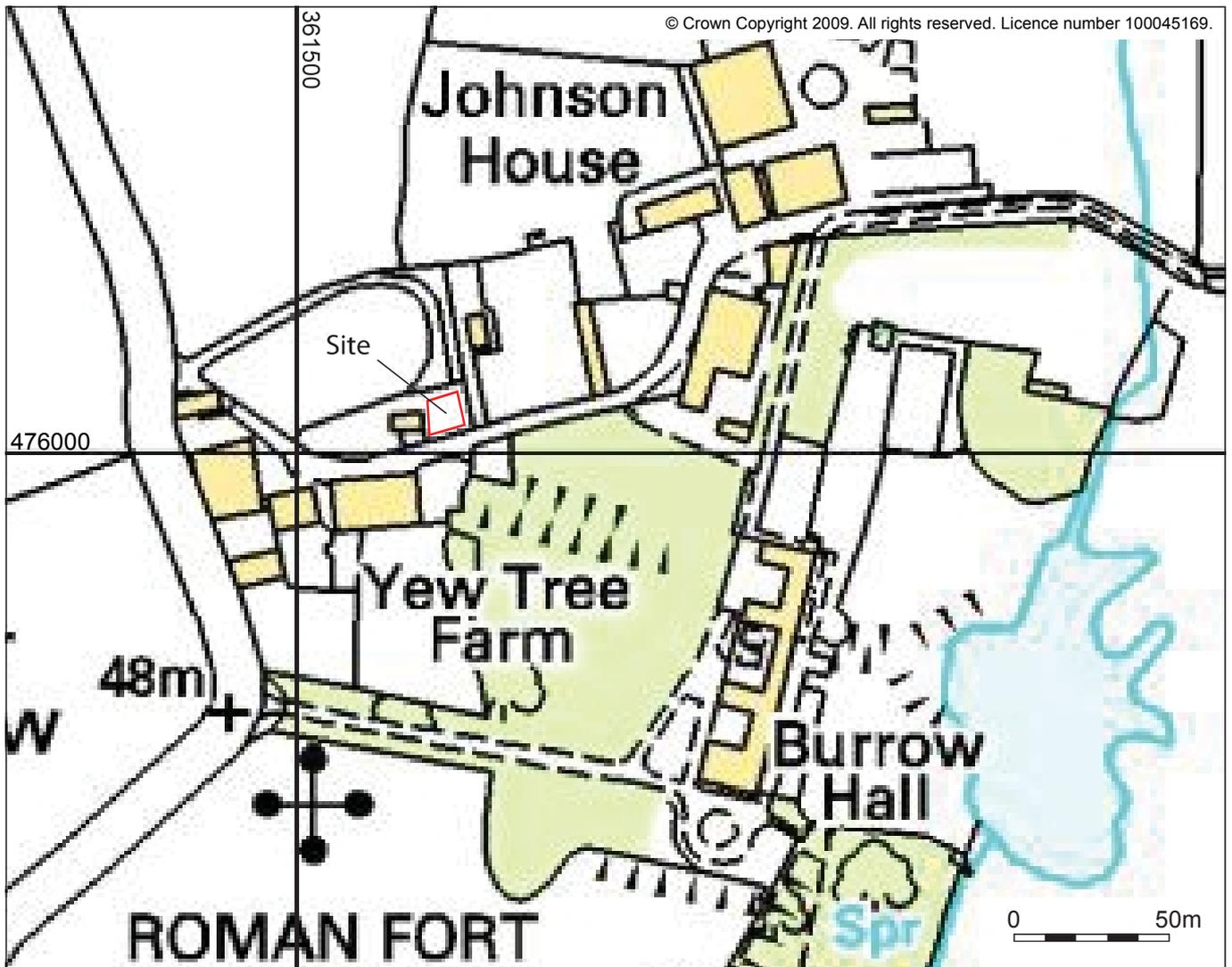
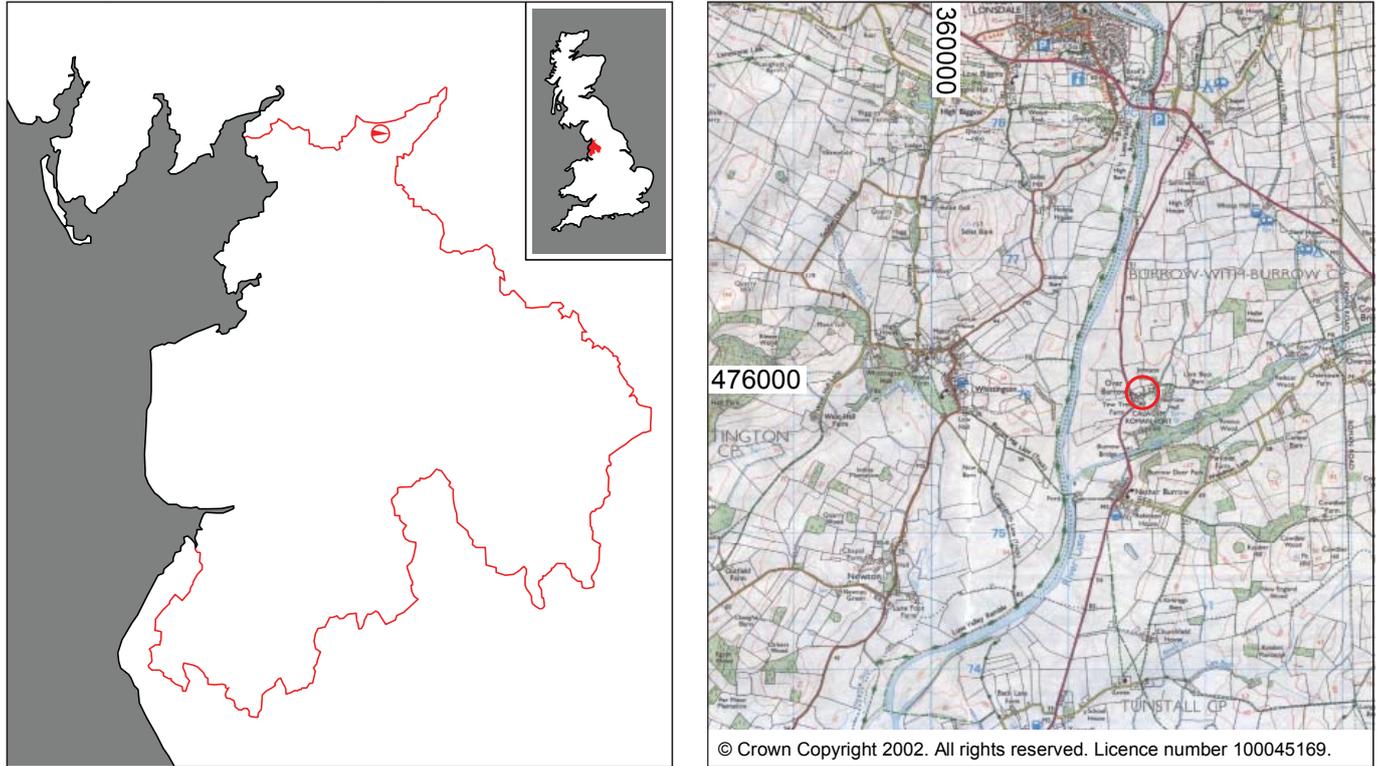
1.1.1 A planning application (09/00069/FUL) was made by Allen Livesey for the addition of an extension to the west side of Temple Cottage, Over Burrow, Lancashire (NGR 361534 476010) and the erection of a new dwelling on land to the east. As the site is situated within the Scheduled Monument area for the Roman fort at Over Burrow, a programme of archaeological work was requested by English Heritage. This was to comprise a desk-based assessment which is potentially to be followed by geophysical survey and evaluation, depending on the results of this preliminary work.

1.1.2 Following consultation with Dr Jenny Stopford at English Heritage regarding the requirements for the work, Greenlane Archaeology produced a project design (Greenlane Archaeology 2009; *Appendix 1*). Following its acceptance, Greenlane Archaeology carried out the desk-based assessment in August 2009.

1.2 Location, Geology, and Topography

1.2.1 Temple Cottage is situated in Over Burrow, approximately 1km south of Kirkby Lonsdale between Cowan Bridge and Whittington. Over Burrow lies in what is largely the level country bordering on the Lune, which forms its western boundary. The country soon becomes hilly to the east, and attains 275m above sea level in the north-east corner on the side of Barbon Fell. Leck Beck runs near the south-east border till the more level ground is reached, passing under Cowan Bridge. It then heads south-west to join the Lune, thus dividing Over Burrow on the north from Nether Burrow on the south (Ordnance Survey 2002).

1.2.2 Over Burrow is situated on the edge of an area of Bannisdale Slates, with a large area of Carboniferous limestone to the south (Moseley 1978, plate 1). The overlying drift deposits comprise glacial material, such as boulder clay, which form undulating low fells and ridges (Countryside Commission 1998, 64-66).



Client: Allan Livesey

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Figure 1: Site location

2. Methodology

2.1 Introduction

2.1.1 This project forms the first part of an assessment intended to establish the extent, nature, and, where possible, date of any buried deposits of archaeological interest present on the site. This element comprises the completion of a desk-based assessment in order to establish the extent of the known archaeological resource in the area and produce an outline history of the site environs. It is anticipated that it will be followed by a geophysical survey, should this be deemed necessary, and then an evaluation of the site which will record any archaeological features that may be revealed and establish the need for any further work.

2.1.2 All aspects of the desk-based assessment were carried out according to the standards and guidance of the Institute for Archaeologists (IfA; previously the Institute of Field Archaeologists – IFA; IFA 2001).

2.2 Desk-Based Assessment

2.2.1 The general area around the site, covering an area of approximately 500m around Temple Cottage and incorporating the majority of the hamlet (the study area), was examined in order to identify sites of archaeological interest. More specifically, details relating to the roman fort and its immediate surroundings were acquired in order to identify evidence of any associated structures that might have formerly been present. In addition, the results of previous pieces of archaeological and historical research relating to structures within Over Burrow were examined together with other secondary sources to provide relevant background information. Several types of information were consulted in order to compile a history of the site and assess the presence of any known remains of historical or archaeological interest:

- **Lancashire County Council Historic Environment Record (HER):** this is a list of all the known sites of archaeological interest within the county, which is maintained by Lancashire County Council and is the primary source of information for an investigation of this kind. A list of all of the known sites of archaeological interest within approximately 500m of the centre of the proposed development area was acquired; each identified site comes with a grid reference, description and source, and any additional information referenced was also examined as necessary. The locations of these sites are shown in Figure 2 and a brief summary is given in *Appendix 2*;
- **Lancashire County Record Office, Preston (LRO):** this was visited in order to examine early maps and plans of the site, original documents relating to businesses and properties on the site, and local and regional histories and directories;
- **Greenlane Archaeology Library:** additional secondary sources were also used to provide information for the site background.

2.3 Archive

2.3.1 A comprehensive archive of the project has been produced in accordance with the project design (*Appendix 1*), and current IfA and English Heritage guidelines (Brown 2007; English Heritage 1991). Three copies of this report will be deposited with the Lancashire County Council Historic Environment Record (HER), one with the client, and one will be retained by Greenlane Archaeology. A record of the project, together with a digital copy of the report, will be added to the *Online Access to the Index of Archaeological Investigations* (OASIS) scheme.

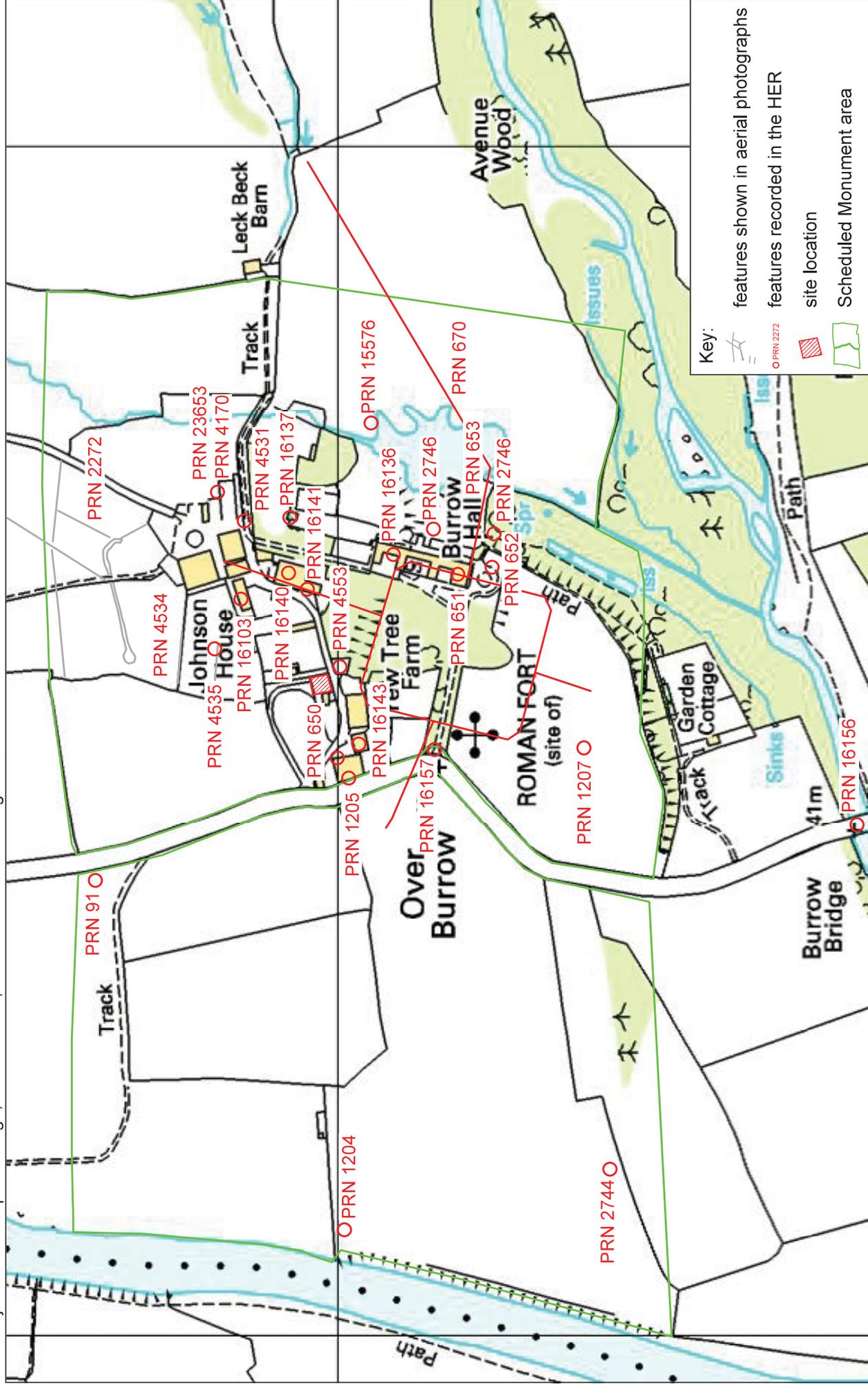


Figure 2: Location of sites and features located in the HER

3. Desk-Based Assessment Results

3.1 Background History

3.1.1 **Introduction:** the background history is intended to place the site in its local and regional context by providing a brief summary of what is already known about the site. Reference is made to sites in the general area recorded in the Lancashire HER where these are relevant; a full list is given in *Appendix 3* and shown in Figure 2. A number of the HER sites, however, seem to have erroneous or inaccurate grid references: PRN 2746 is a fragment of Roman tombstone described as being found outside the south gate of the fort and yet the grid reference puts it to the east of the fort, PRN 4534 and 4535 are a floodgate and millstream shown on the Ordnance Survey map 1850 and yet the location given in the HER is in the middle of a field, and PRN 15576 is a Roman road said to be running north-west from the fort and yet it is shown as being to the east and there appears to be some confusion between it and PRN 670.

3.1.2 **Prehistoric:** evidence for early prehistoric remains is not widespread in the region, although of the few remains of the immediately post-glacial (Late Upper Palaeolithic) period that have been discovered in the North West, a considerable number have come from the limestone caves around Morecambe Bay (Young 2002, 21). Evidence for people living in the local area is more prevalent in the following Mesolithic period, although this tends to be restricted to scatters of flint artefacts (*op cit*, 24), and little in the way of more obvious settlement activity. Large quantities of these have, however, been discovered in the lower Lune Valley, particularly in the vicinity of the Crook O'Lune (Hodgson and Brennand 2006, 26). During the following Neolithic period more tangible, structural remains such as stone circles, enclosures and burial mounds do start to appear, but these are relatively rare. A more common discovery is the typical tool of the period, the polished stone axe. Examples of these have been found in the Lune valley in the area around Burrow (Middleton, 1996, 44). Settlement of the Lune valley in this area continued into the Bronze Age with evidence of several sites following the valley northwards (*op cit*, 47).

3.1.3 Although scarce and hard to date in the Lune valley, there is evidence of Iron Age activity in the area. The settlement just to the north at Eller Beck, near Kirkby Lonsdale, is a good example of this. Although it is regarded as having also been occupied in the Roman period, this is thought to be a continuation of earlier Iron Age settlement (Haselgrove 1996, 64). A curvilinear site at Leck is also ascribed an Iron Age date (*ibid*).

3.1.4 **Romano-British:** Over Burrow is the site of the Roman fort known as *Calacum* or *Aluana* (Shotter and White 1995, 46; PRN 651), the north wall of which is situated some 20-30m to the south of Temple Cottage. The location of the fort suggests it was sited to protect a crossing on the Lune and to keep open the route to the Lake District. There are three Roman roads running through Lonsdale, two of which are thought to run through the fort: the road from Ribchester to Penrith, and the road from Ilkley to the Lake District crossing the Lune just to the west of the fort (Birley 1946, 144). The third road runs from Lancaster, past Ingleton, towards Catterick (*ibid*). It is thought that the majority of activity at the fort dates from the 3rd or early 4th century AD, but the evidence suggests an earlier timber fort (or forts) was established in the area probably in the Flavian period - that is the late 1st century (Shotter and White 1995, 40). (More detail of the previous phases of archaeological excavation that revealed this phasing is presented in *Section 3.2* below). There are, in addition, several stray finds of Roman date recorded within the study area, excluding the pieces of previous excavation outlined below, including a presumed cremation urn (PRN 652), pottery (PRN 1204), a coin (PRN 31963), and five pieces of inscribed stone, the majority of which are probably from tombstones or similar mortuary structures (PRNs 650, 1205, 1207, 2744, 2746). The lines of possible roads to the east and west of the study area are also recorded (PRN 670 and 15576 respectively).

3.1.5 **Early Medieval to Medieval:** there is some evidence for late reorganisation of the Roman fort, which has been considered indicative of possible sub-Roman occupation, but there is as yet nothing to otherwise confirm this (Shotter and White 1995, 41). Historically it is recorded that prior to the Norman Conquest the manor of Burrow was held between Earl Tostig and Orm (Farrer and Brownbill 1914, 238).

Later these lands were granted to the Gemets which were then subdivided among the family (*ibid*). By 1252 it appears that Richard de Burgh and Matthew de Burgh held Nether and Over Burrow respectively. In 1370 William de Tunstall acquired both manors, which have remained part of the fee or lordship of Thurland and Tunstall. The Botelers of Warrington had some lordship in Burrow, but its origin and extent are unknown (*op cit*, 239). Physical evidence demonstrating the extent of any settlement in the area during this period is limited.

3.1.6 Post-Medieval: the principal estate was that of Burrow Hall of which Temple Cottage is part. Burrow Hall (PRN 653) is said to have been sold by the Giringtons about 1650 to a Tatham, whose heiresses Jane and Alice carried it in marriage to John Fenwick of Nunriding in Northumberland and Thomas Robson of Bishop Auckland in the 1680s, the former eventually succeeding to the whole (Churchill 2005). By the marriage (in 1841) of Sarah Fenwick Bowen, granddaughter and heiress of Thomas Fenwick (formerly Lambert) of Burrow, to Edward Matthew Reid, who afterwards took the surname of Fenwick, the estate descended to their grandson Robert Fenwick (*op cit*, 240). It was subsequently sold to Lord Stowe in 1945, who sold it on again in 1996 (*ibid*). The property comprises the hall, which is a Grade I Listed Building (Images of England 2007), but also a stable block dated c1740 (PRN 16136), a summerhouse of similar date (PRN 16137), and a pair of gate posts (PRN 16157), which are also Listed Grade II*. There are a number of sites of post-medieval date recorded in the HER within the study area, including a tithe barn (PRN 91), pin fold (PRN 4533), inscribed stones on the bridge (PRN 16156), floodgate (PRN 4534 – although the grid co-ordinates given appear to be incorrect), and a mill stream (PRN 4535 – although the grid co-ordinates again seem to be incorrect), as well as two farmhouses (PRN 16103 and 16143) and a barn (PRN 16141). All of these features serve to indicate the essentially rural character of the area in the post-medieval period, dominated by the Burrow Hall estate and the various neighbouring farms. A lane shown on the early Ordnance Survey maps and now effectively just a track may also be post-medieval in date (PRN 4531).

3.1.7 Temple Cottage: although Temple Cottage has probably been occupied for much of its existence, the records are vague. The census does not name Temple Cottage specifically, possibly because it was only given this name in the last 100 years, so it was not possible to be sure who the occupiers were. The schedule for the tithe map for 1849 does list an Edward Beetham as occupier (LRO DRB1/32 1850) and the Land Valuation of 1910 lists the occupier as James A Hayton (LRO DVLA/7/3 1913). There is little evidence to explain the relevance of the name 'Temple Cottage'; the name could be taken to refer to the discovery of such a building nearby, especially given the numerous fragments of monumental remains relating to mortuary buildings found to the west at Yew Tree Farm (Edwards 1971, 17-23) and the carved capital present within the grounds of Burrow Hall, which is also thought to have come from a temple or shrine (Birley 1946, 142n; Shotter and White 1995, 45). However, in the mid 20th century Burrow Hall was owned by Lord and Lady Temple of Stowe (see *Section 3.1.5* above) and so Temple Cottage could be so named because of this connection. The cottage was, however, clearly standing in the early 19th century, at which time the estate was owned by the Fenwick family.

3.2 Previous Investigation

3.2.1 Introduction: antiquarians were aware of Burrow's Roman significance from as early as the 16th century when William Camden described the discovery of ancient monuments and roman coins at the site (Shotter and White 1995, 36). In 1746 a considerable volume was written about the fort by the Rev. Richard Rauthmel, *Antiquitates Bremetonacenses of the Roman Antiquities of Overborough*, which was reissued in 1824. Both the original and the revised editions of this publication relate to phases of extensive building at the site, which would undoubtedly have exposed remains relating to the fort (*op cit*, 37). Ironically, given its supposed subject, Rauthmel's book contained remarkably little information about the fort and it was not until the early 20th century that any serious excavation was undertaken. Even then the results of the first excavations were never published and it was not until trial trenches were dug in 1947 and further excavations undertaken in 1952-53 that the actual details of the fort and settlement were elucidated (*op cit*, 38).

3.2.2 1905 excavation: Anthony Moorhouse, an amateur archaeologist, carried out excavations mainly to the north of the fort, perhaps within the civilian settlement, and probably discovered the north wall. He

may also have dug to the west of the site (Shotter and White 1995, 39). The only published account of his work seems to indicate that he was excavating largely in the area around High Burrow Farm (Hildyard 1954, 97-101).

3.2.3 1930 description: a brief description of the site was given by RG Collingwood, who had evidently spent some time examining its topography, in 1930 (Anon 1930, 216-217). He suggested that the construction of the hall had probably removed much of the Roman fort, on account of the removal of the top of the hill on which it was situated. He was, however, able to identify earthworks that he considered defined the perimeter of the fort, many of which had been incorporated into the grounds associated with Burrow Hall. A single piece of masonry thought to have come from the fort, a carved capital decorated with cherubic faces, was also recorded as still standing in the grounds of the hall.

3.2.4 1947 excavation: four trial trenches were dug by Lieutenant Colonel OH North and EJW Hildyard to the north and north-west of Burrow Hall, outside the area of the fort, to the east of the current site, which is outlined in red (see Plate 1 and Plate 2; see also Figure 1). The features and finds from the trial trenches lead North and Hildyard to conclude that the existence of the fort is now proved (North 1949, 31). Trench one was clearly within the interior of the fort, and Trenches 2, 3, and 4 gave the approximate line of the north rampart and the position of a gate and road running northwards (*ibid*). There was relatively little pottery recovered, but what was found seemed to date from the 1st to 3rd centuries. A road uncovered in Trench 1 was presumed to be Agricolan. A trumpet fibula, a plated denarius, and segmented bead were also found (*op cit*, 34).

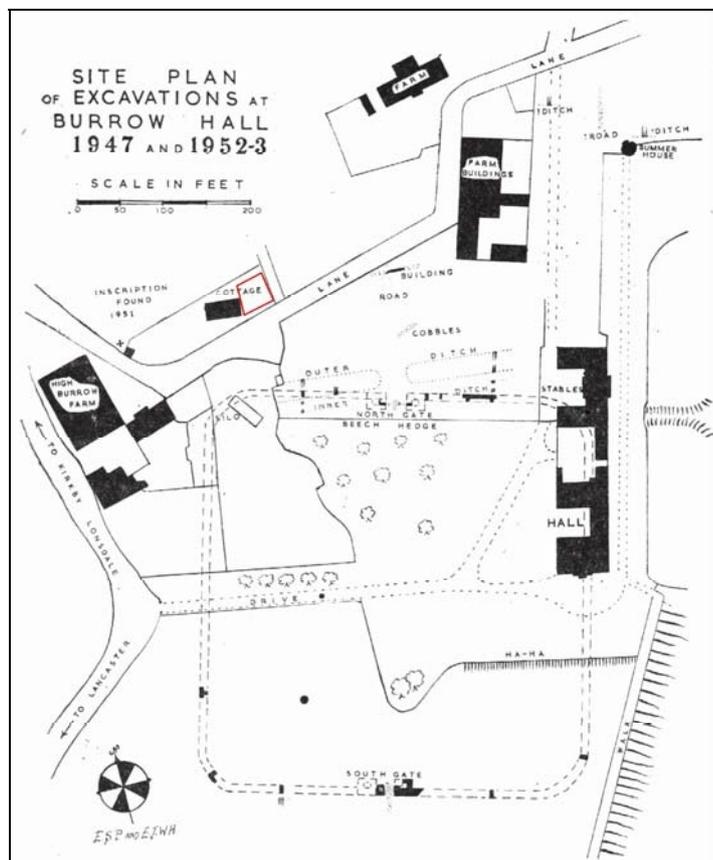
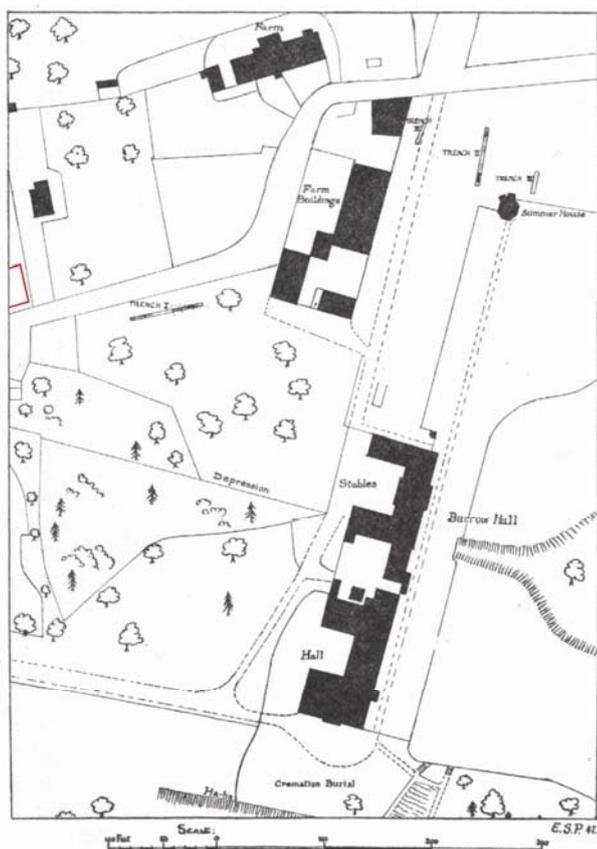


Plate 1 (left): Plan of trial trenches, 1947 excavation (after North 1949, 24)

Plate 2 (right): Plan of excavations, 1947 and 1952-53 (after Hildyard 1954, 86)

3.2.5 1952-53 excavations: in 1952 North and Hildyard commenced excavations to determine the position and dimensions of the fort (see Plate 2 and Plate 3). They found the south gateway; a double gateway which had been reduced to a single portal. The east guard chamber was identified, and a later structure had been built on the site of the western guard chamber. The south wall was traced to the west corner and half of the west wall was also identified. The position of the southwest corner was identified

approximately, and the east wall, at that time, was covered by the terrace of Burrow Hall. The fort wall had been drastically robbed, though in places its outer footing course with chamfered stones had survived (Hildyard 1954, 211).

3.2.6 In 1953 excavations were made to locate the north wall, when it was found it had been extensively robbed with the outer footing course completely removed. The north gateway was also completely robbed but the running through it was traced. Two ditches to the north of the wall were also discovered, one 'V' and one 'W' shaped. Pottery dating to late 1st or early 2nd century was found in this area. A section was put through the roman road running through the north gateway and below it was found a massive oak post. The post was level with the inner ditch, the edge of which was below the foundation of the western guard chamber (*op cit*, 212).

3.2.7 **1971 research:** in 1967 an inscribed piece of stone was discovered in the base of a hedge (PRN 2744) near Yew Tree Farm. Research by BJN Edwards revealed that it formed part of a funerary inscription, made up of fragments that had already been discovered on the site (Edwards 1971). The newly discovered piece allowed an improved reading of the inscription to be produced.

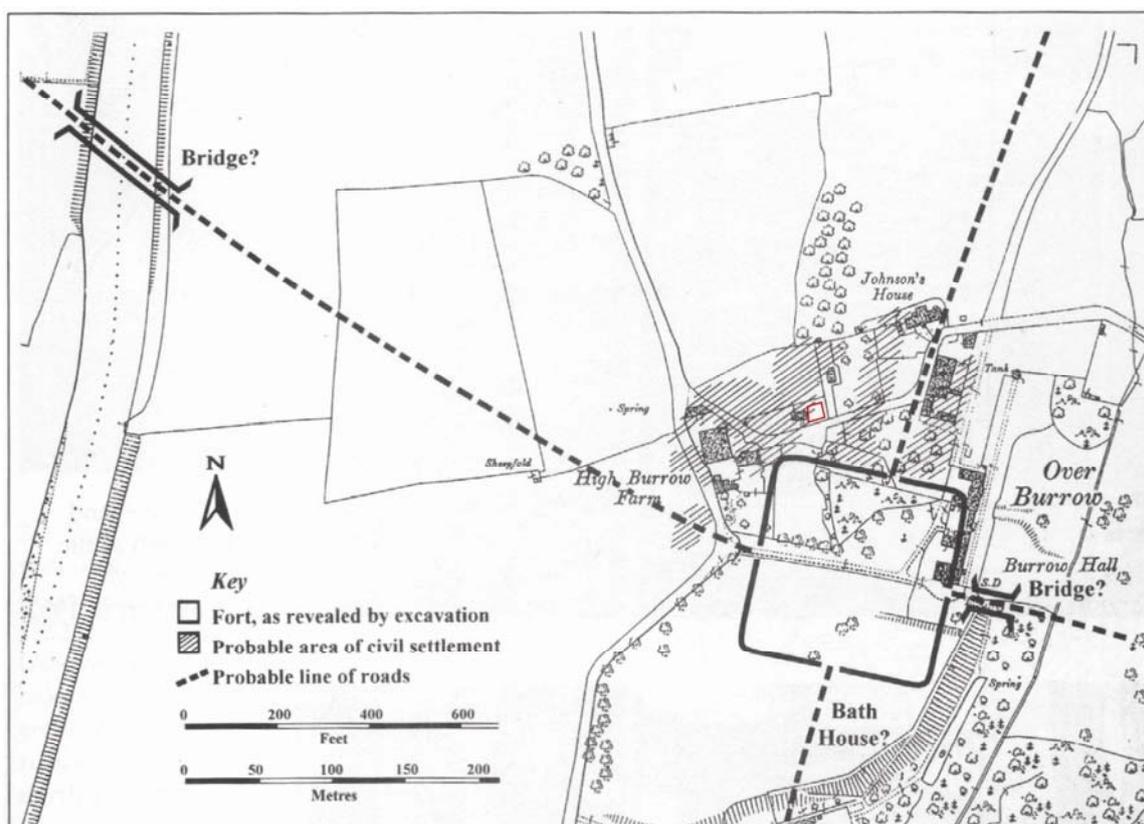


Plate 3: Plan of the fort based on the excavations of the 1950s and more recent research (after Shotter and White 1995, 41)

3.2.8 **1974 Excavation:** this excavation was carried out prior to the building of a bungalow within Burrow Hall grounds. The site lies north-east of the fort, some 60-70m east of where North and Hildyard found the road and ditch. No features were present, although two pieces of 2nd century samian ware, a fragment of Roman coarseware, and three fragments of dressed masonry were found, leading to the conclusion that the site lay outside the area of the *vicus* (Potter 1975, 376).

3.2.9 **1997 Evaluation:** this evaluation took place on the site of proposed agricultural buildings at Johnson House, c120m north of the fort and 50m to the east of the projected alignment (PRN 4170 and 23653). The evaluation consisted of four trial trenches which followed the line of the footings for the proposed building. No evidence of any features of archaeological significance was revealed (LUAU 1997, 3).

3.2.10 **2007 Watching Brief:** a watching brief took place during the excavation of a pit, to facilitate the installation of service cables, on the east side of the Lune. The pit measuring 2m by 3.5m, and 2m deep was situated some 18m east of the river and 30m south of the boundary of the Scheduled Monument area. Only a single alluvial deposit was revealed, which was sterile with no traces of human activity (Greenlane Archaeology 2007).

3.3 Map Regression

3.3.1 **Introduction:** a number of historical maps of the site were examined in order to provide information about the recent development of the site. Of particular interest was evidence relating to the date of construction of Temple Cottage, and evidence for relatively recent disturbance on the site, although information about the wider area was also gathered.

3.3.2 **Ordnance Survey 1847:** this detailed map (Plate 4) shows the building within a small plot, probably a garden which also has a water pump situated just to the west.

3.3.3 **Tithe Map of 1849:** the map shows a similar arrangement to the earlier Ordnance Survey map, but apparently with additional divisions in the plots to the east (LRO DRB/1/32 1849; Plate 5). The schedule (LRO DRB 1/32 1850) lists the owner of the plot (No. 232) as Alexander and Francis Pearson, trustees of the late Thomas Fenwick of Burrow Hall. The occupier is listed as Edward Beetham and the land described as cottage and garden.



Plate 4 (left): Ordnance Survey map 1847

Plate 5 (right): Tithe map of 1849

3.3.4 **Ordnance Survey 1891:** this shows the cottage and its garden unchanged although the pump is no longer extant (Plate 6). The surrounding area is also largely unchanged since the previous map although the plot immediately to the east has been subdivided to create a long narrow enclosure within it and a small building has been constructed within this.

3.3.5 **Ordnance Survey 1913:** this shows little change at the site since the previous map of 1891. The accompanying valuation schedule for 1910 (LRO DVLA 2/1/20/5) lists the owner of the land containing the site (plot 32 on the map; Plate 7) as RE Fenwick of Burrow Hall, and the occupier as James A Hayton. It is described as a cottage and garden.



Plate 6 (left): Ordnance Survey map 1891



Plate 7 (right): Ordnance Survey map 1913

3.3.6 **Ordnance Survey 1956:** this shows little change since 1913, although it is not as detailed as the previous three maps.



Plate 8: Ordnance Survey map 1956

3.4 Aerial Photographs

3.4.1 A variety of aerial photographs were examined which are held in the Lancashire HER. Taken between 1969 and the 1980s by JK St Joseph and Adrian Olivier, the majority of the photographs are shot obliquely but some are more directly overhead. Many of these clearly show earthworks, some of which are evidently connected to the Roman fort at Over Burrow (see for example Shotter and White 1995, 39), while the purpose and date of the other earthworks is less clear. Two HER numbers relate to this group of earthworks (PRN 2690 and 2727). Those that were in relatively close proximity to the study area were approximately transcribed from the photographs and are shown in grey in Figure 2. These

comprise: a very clear ditched feature orientated east/west to the north of the site, two shorter ditched features running parallel to this to the south, a long apparently ditched feature to the east and north-east of the larger ditch, orientated north-east/south-west (Plate 9 and Plate 10), and a bank and ditch feature to north of the large ditch on a similar east/west alignment (Plate 11). The purpose of the three clear ditched features is not certain; the larger one has been described as marking '*the northern limit of the disturbed ground*' although it is not clear what this is in reference to (HER No. 2690). The assumption is presumably that the larger ditch is a boundary around the *vicus* of the Roman fort, thought to be located to the north of the fort itself. If this is the case then the two parallel ditches to the south of the large ditch might represent property boundaries within the *vicus*.

3.4.2 It is worth noting that the farm track running to the north-west from Johnson House turns north, and eventually crosses an obvious causeway through the large ditch (see Plate 9 and especially Plate 11); it might be that this track denotes the line of the original road to the north from the fort. There is, however, another track-like feature visible as a crop mark (Plate 11), which also appears to cross the same causeway over the large ditch, but heads north-east; this fits more closely with the suggested line of the road to the fort as outlined by Shotter and White (Plate 3). The eastern limits of the two smaller ditches seem to adhere to the extrapolated line of this track as it continues south-west towards Johnson House; the two small ditches might have formed plot boundaries within the *vicus* respecting the road (Plate 11). However, the large ditch appears to correspond to a field boundary still shown as extant on the Ordnance Survey map of 1847 and the Tithe Map of 1849 (Plate 4 and Plate 5) so this feature may have no great antiquity. Similarly, the most northerly of the two smaller ditch features is marked on the modern mapping as a field boundary (see Figure 2), so it too may not be of any great antiquity. The other features do not appear to be marked on any available mapping and so might be of greater antiquity. However, the long ditch feature orientated north-east/south-west seems to truncate the larger east/west ditch and therefore might be expected to be more modern; it perhaps also represents a former field boundary. It is also notable that there is what appears to be a small building evident in the plot of land immediately to the east of Temple Cottage (Plate 9), within the proposed development area. The purpose of this structure is not known, nor is its date; it is not shown on the Ordnance Survey map of 1956 (Plate 8) nor on any later maps so it must have been very short-lived. It might perhaps have been a temporary garden structure such as a shed.

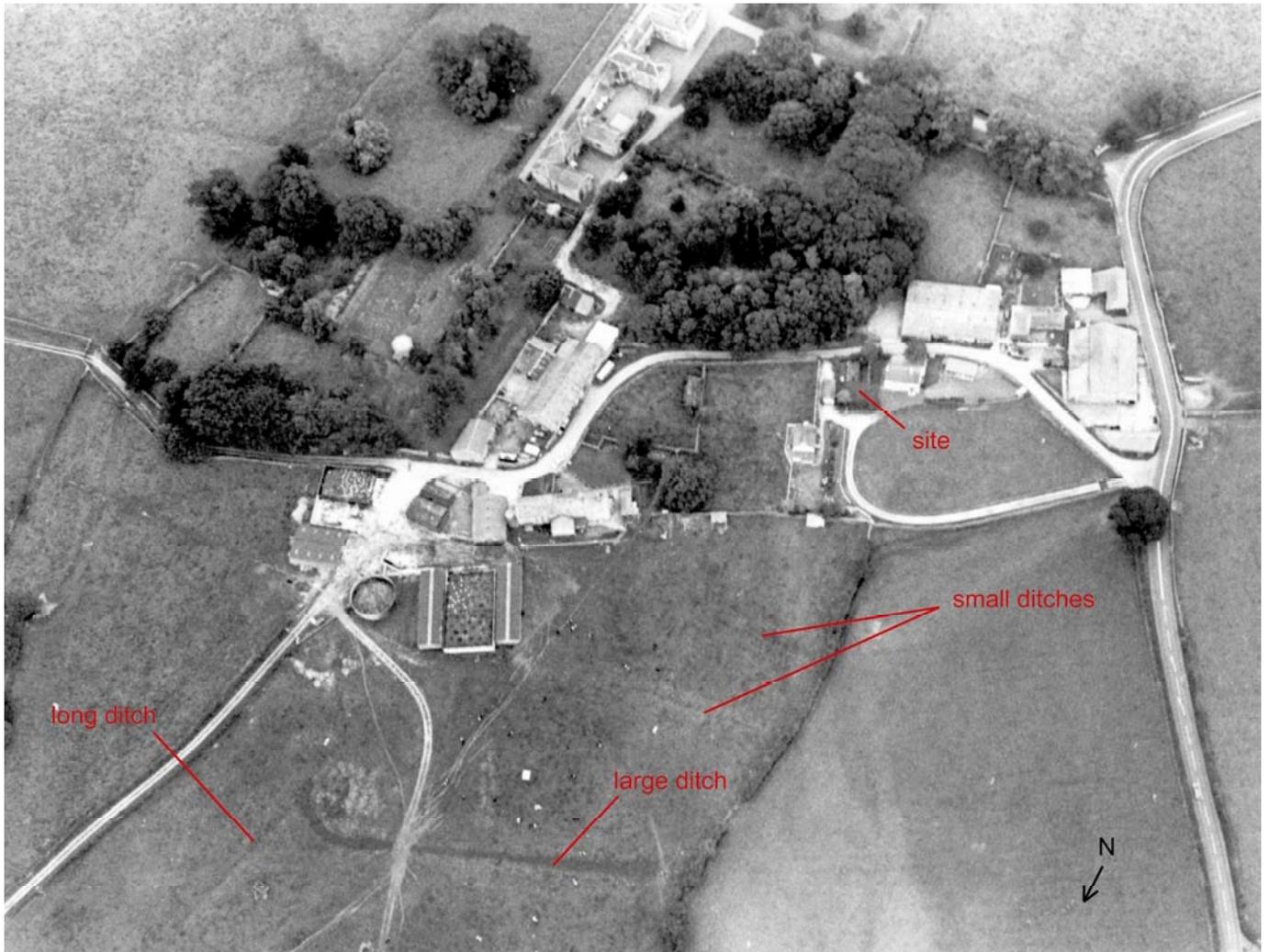


Plate 9: Aerial photograph showing ditch features to the north-east of the site (Ref 2483)

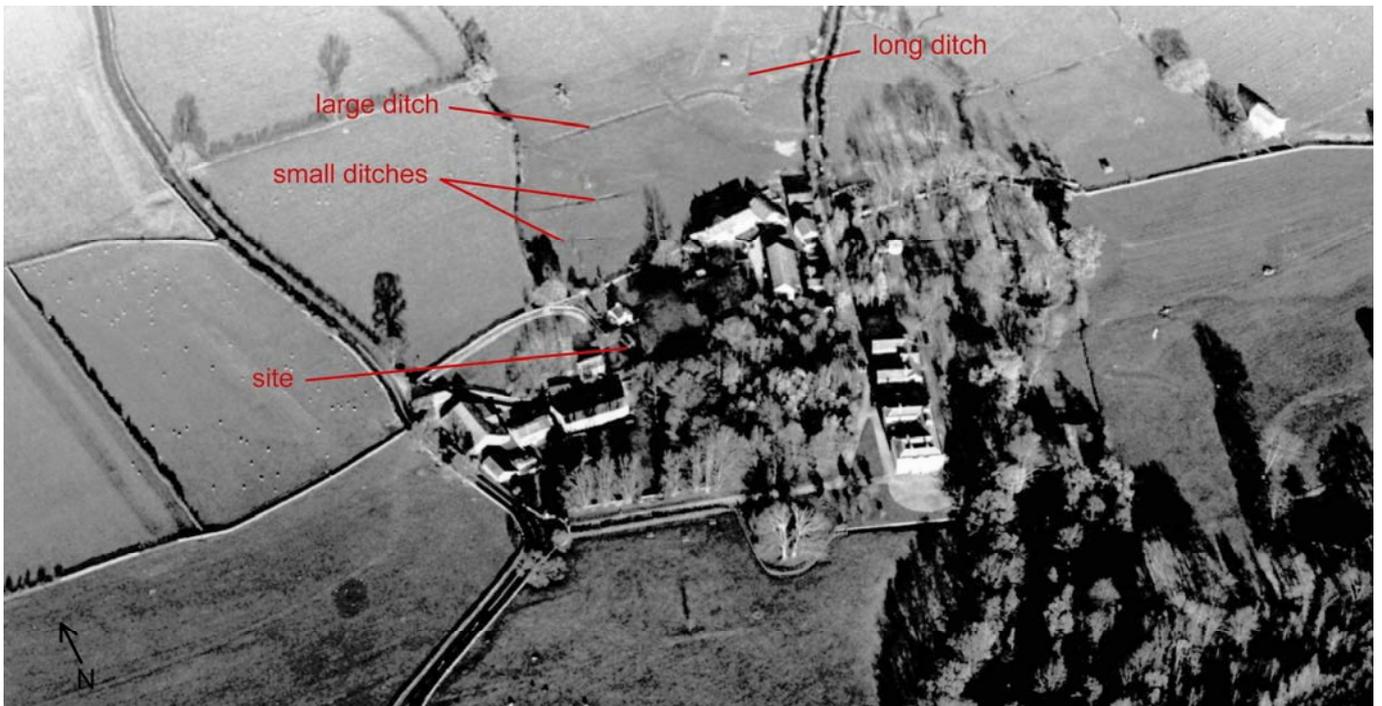


Plate 10: Aerial photograph showing ditch features picked out in low light (Ref N1174)

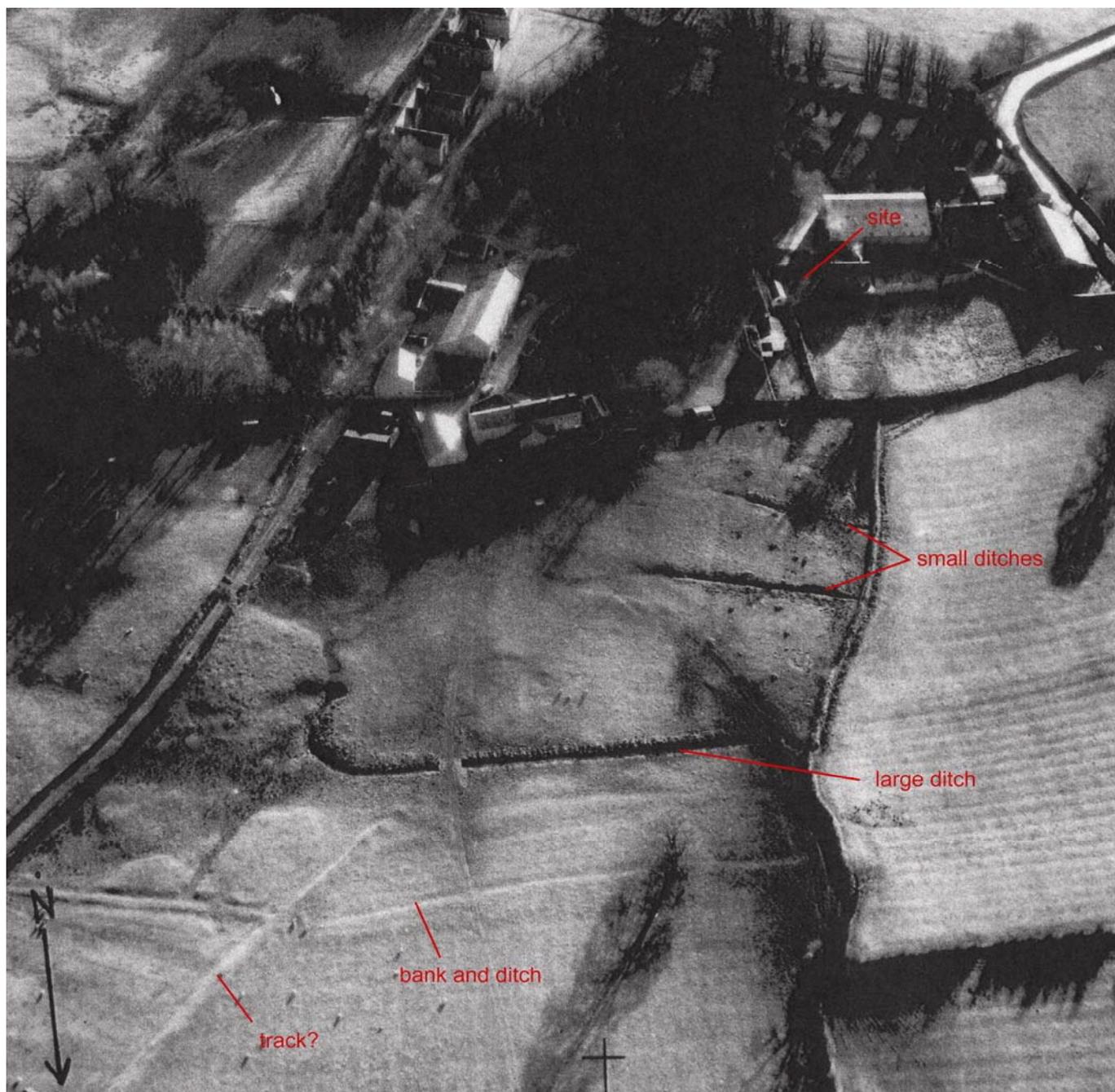


Plate 11: Aerial photograph showing features to the north-east of the site (Ref 2690 III)

3.5 Conclusion

3.5.1 Although the documentary and cartographic evidence is not extensive it shows that with the exception of the construction of Temple Cottage itself, which was clearly constructed before the Ordnance Survey map of 1847 (surveyed in 1844-5), the site has seen very little development apart from a small and apparently temporary building constructed in the late 20th century.

3.5.2 The evidence from previous excavations in and around Over Burrow and the aerial photographs shows that the site is not only a short distance from the northern defences of the Roman fort but is almost certainly within the *vicus* or civilian settlement. The earthworks evident in the aerial photographs may relate to the position of the *vicus*, but even if they don't the evidence from previous excavations would indicate that it was concentrated, if not entirely situated to the west of the road running north from Johnson House.

4. Discussion and Recommendations

4.1 Discussion

4.1.1 There is a high likelihood that the proposed development site is situated within the *vicus* or civil settlement that seems to have been situated to the north and west of the Roman fort at Over Burrow. Evidence slightly further west, from around Yew Tree Farm, might even suggest that it is close to an area of formal burials outside the fort. Little excavation work has been carried out within the civilian settlement, however, and its extent is not fully known. It is possible that one of the earthworks to the north-east of the site might represent some form of enclosure demarking the boundary of the *vicus*, but without more extensive work over a wider area this is impossible to determine. However, such features do occur and are recorded in association with the *vici* at the forts at Ambleside (Leach 1993) and Maryport (Biggins and Taylor 2004) to name two examples. If there is indeed a boundary, the site is clearly located inside the enclosure, and, being within only 60-70m of the presumed line of the road running north from the fort, is within the range of a plot within a typical *vicus* (see for example Biggins and Taylor 2007).

4.1.2 What is not known is how much disturbance there might have been to the site. The building shown in the aerial photograph seems to have been quite short-lived and might therefore have been related to gardening. It is also not known exactly where Anthony Moorhouse excavated in 1905, although it is said to have been '*mainly to the north of the fort, perhaps within the civilian settlement*' (Shotter and White 1995, 39). The only detailed and published account of his work indicates that he excavated in and around High Burrow Farm and there is no evidence to suggest that he investigated the ground around Temple Cottage.

4.1.3 There is also some potential for earlier prehistoric remains, as yet unidentified, to be present in the area. The Lune Valley is already well known for its prehistoric sites, particularly later prehistoric sites (see *Section 3.1.2-3*), but numerous earlier prehistoric, particularly Mesolithic sites, have also been found lower down the Lune (Hodgson and Brennand 2006, 26), and such remains are likely to be present in other locations along it as well.

4.2 Recommendations

4.2.1 The high likelihood of there being remains related to the Roman fort or, more likely, *vicus* means that the proposed development is liable to impact upon them, so further mitigation work should be carried out. A proposal has already been made for carrying out a geophysical survey of the site as part of the assessment phase (Stopford pers comm.) but discussions with John Gater and Jane Anderson at GSB Prospection have indicated that this is unlikely to prove useful in such a small area.

4.2.2 With this in mind it is recommended that as a minimum the site be subject to evaluation excavation of a reasonable minimum area (perhaps $c12m^2$ or 5% of the total development area of $c237m^2$). However, given the likely cost of this, and the overall size of the proposed development a more sensible strategy might simply be to excavate the entire footprint of the new building and extension and associated groundworks or even the entire plot of land containing the new building, which is estimated to only be $c206m^2$. This would probably prove more cost-effective, less time consuming, and ultimately more productive in understanding the archaeology of the site.

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Appendix 1: Project Design

TEMPLE COTTAGE, OVER BURROW, LANCASHIRE

Archaeological Desk-Based Assessment Project Design

Client: Mr Allan Livesey

May 2009

Planning Application No. 09/00069/FUL

NGR: 361534 476010



Client: Allan Livesey

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1. Introduction

1.1 Project Background

1.1.1 Following the submission of a planning application (09/00069/FUL) for the addition of an extension to the west side of Temple Cottage, Over Burrow, Lancashire (NGR 361534 476010) and the construction of a new dwelling on land to the east, a programme of archaeological work was requested by English Heritage. The site is situated within the Scheduled Monument area defining the Roman fort at Over Burrow, and the archaeological work was therefore required in order to satisfy the granting of Scheduled Monument consent, prior to building work taking place.

1.1.2 The Roman fort at Over Burrow has been excavated on a number of occasions, most extensively in 1952-3 when all the fort walls and the north and the south gate were located (Hildyard 1954). These excavations revealed that the area of the fort was approximately five acres, which was somewhat larger than normal, and could perhaps hold 500 cavalry or 1,000 infantry (Shotter and White 1995, 40). Much of the structural evidence suggested that the fort was 3rd or 4th century in date; however, features revealed in the trenches suggested an earlier fort or defences on a slightly different alignment. Work carried out to the north of the fort has revealed road surfaces and finds associated with the *vicus*, although work carried out by the Ministry of Works to the north-east revealed no archaeological deposits. On the basis of these results, in combination with the lie of the land, it would seem that the *vicus* would have been located to the north and west of the fort (*op cit*, 41). This means that that Temple Cottage is in a prime location for the discovery of remains belonging to the Roman civil settlement.

1.2 Greenlane Archaeology

1.2.1 Greenlane Archaeology is a private limited company based in Ulverston, Cumbria, and was established in 2005 (Company No. 05580819). Its directors, Jo Dawson and Daniel Elsworth, have a combined total of over 16 years continuous professional experience working in commercial archaeology, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Institute for Archaeologists' (IfA; previously the Institute of Field Archaeologists - IFA) Code of Conduct. The desk-based assessment will be carried out according to the Standards and Guidance of the Institute of Field Archaeologists (IFA 2001).

1.3 Project Staffing

1.3.1 The project will be managed by **Dan Elsworth (MA (Hons), AIFA)**. Daniel graduated from the University of Edinburgh in 1998 with an honours degree in Archaeology, and began working for the Lancaster University Archaeological Unit, which became Oxford Archaeology North (OA North) in 2001. Daniel ultimately became a project officer, and for over six and a half years worked on excavations and surveys, building investigations, desk-based assessments, and conservation and management plans. These have principally taken place in the North West, and Daniel has a particular interest in the archaeology of the area. He has recently managed a wide variety of projects including building recordings of various sizes, watching briefs, and excavations, most of which have associated desk-based assessment elements.

1.3.2 The desk-based assessment will be carried out by **Steve Clarke** or **Sam Whitehead (BSc (Hons), MA)**, depending on scheduling constraints. Steve began working for Albion Archaeology in 2001, before moving to OA North in 2004, where he worked in a supervisory capacity principally on excavation projects, and has carried out large numbers of watching briefs on sites across the north-west of England. He joined Greenlane Archaeology in 2008 and has since been involved in a wide variety of projects including building recordings, desk-based assessments, and excavations. Sam has extensive experience of excavations, evaluations, and watching briefs, as well as report writing and illustration production. He joined Greenlane Archaeology in 2006 having work for several previous companies including Pre-Construct Archaeology, Network Archaeology, and Cambridge County Council Archaeological Field Unit, and since then he has increasingly been involved in running larger excavations and evaluations, as well as all aspects of building recording projects.

2. Objectives

2.1 Desk-Based Assessment

2.1.1 To examine early maps of the site and any other relevant primary and secondary sources in order to better understand the development of the site.

2.2 Report

2.2.1 To produce a report detailing the results of the desk-based assessment, which will outline the extent of any known remains of archaeological interest on and around the site, and assess the likelihood of earlier remains being present.

2.3 Archive

2.3.1 Produce a full archive of the results of the desk-based assessment.

3. Methodology

3.1 Desk-Based Assessment

3.1.1 An rapid examination of both primary and secondary sources, particularly maps, but also published and unpublished local histories, pieces of research, articles and studies relating to the proposed development site and a suitable area around it (the 'study area') will be carried out. These sources will be consulted at the following locations:

- **Lancashire Historic Environment Record (HER):** this is a list of all of the recorded sites of archaeological interest recorded in the county, and is the primary source of information for a study of this kind. The details of sites recorded in the HER from a suitably sized study area around the development site will be obtained. Each HER site is recorded with any relevant references, a brief description, and location related to the National Grid. All of the references relating to sites identified in the HER will be examined in order to verify them and add any necessary background information. In addition, relevant secondary sources, particularly details of previous archaeological investigations in the immediate area and relevant aerial photographs, will also be examined;
- **Lancashire Record Offices:** the majority of original and secondary sources relating to the site are deposited in the Lancashire Record Offices in Preston. Of principal importance are early maps, especially those produced by the Ordnance Survey, and accounts of previous work undertaken in the vicinity. These will be examined in order to trace the development of the study area, its previous uses, and details of any structures present within it. This is particularly useful in order to identify the potential for further, as yet unknown, sites of archaeological interest and areas of likely disturbance that might be present. In addition, information relating to the general history and archaeology will also be consulted, in order establish the local context of the site;
- **Greenlane Archaeology:** a number of copies of maps, local histories, unpublished reports, and journals are held in Greenlane Archaeology's library. These will be consulted in order to provide further information about the development of the site, and any other elements of archaeological interest.

3.1.2 The results of this assessment will be used to establish the location, extent, date, and development of any sites of archaeological interest demonstrated to be present within the proposed development area. The extent of all of the sites identified will be shown on an appropriately scaled map. In addition, areas of archaeological interest or significance will be shown and the extent or level of their potential expressed.

3.2 Report

3.2.1 The results of the desk-based assessment will be compiled into a report, which will contain the following sections:

- A front cover including the appropriate national grid reference (NGR);
- A concise non-technical summary of results, including the date the project was undertaken and by whom;
- Acknowledgements;
- Project Background;
- Methodology, including a description of the work undertaken;
- Results of the desk-based assessment;
- Discussion of the results, with specific reference to their relationship with previous discoveries in Over Burrow and their significance and an assessment of the likely extent of as yet unknown remains;
- Illustrations at appropriate scales including:
 - a plan showing the location of the site;

- a plan showing the location of other archaeological sites and previous work in the vicinity of the site;
- extracts of historic maps of the area.

3.3 Archive

3.3.1 The archive formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Lancashire Record Office in Preston. The archive will be compiled according to the standards and guidelines of the IFA (Brown 2007), and in accordance with English Heritage guidelines (English Heritage 1991). In addition details of the project will be submitted to the Online Access to the Index of archaeological investigations (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public.

3.3.2 A copy of the report will be supplied to the client, and within six months of the completion of desk-based assessment, a copy or copies will be provided for English Heritage. In addition, a copy will be provided to the Lancashire HER, Greenlane Archaeology Ltd will retain one copy, and a digital copy will be provided to the OASIS scheme as required.

4. Work timetable

4.1 Greenlane Archaeology will be available to commence the project on **7th May 2009**, or at another date convenient to the client. It is envisaged that the project will involve tasks in the following order:

- **Task 1:** rapid desk-based assessment;
- **Task 2:** production of draft report and illustrations;
- **Task 3:** feedback, editing and production of final report, completion of archive.

5. Other matters

5.1 Health and Safety

5.1.1 Greenlane Archaeology carries out risk assessments for all of its projects and abides by its internal health and safety policy and relevant legislation. Health and safety is always the foremost consideration in any decision-making process.

5.2 Insurance

5.2.1 Greenlane Archaeology has professional indemnity insurance to the value of **£250,000**. Details of this can be supplied if requested.

5.3 Environmental and Ethical Policy

5.3.1 Greenlane Archaeology has a strong commitment to environmentally- and ethically-sound working practices. Its office is supplied with 100% renewable energy by Good Energy, uses ethical telephone and internet services supplied by the Phone Co-op, is even decorated with organic paint, and has floors finished with recycled vinyl tiles. In addition, the company uses the services of The Co-operative Bank for ethical banking, Naturesave for environmentally-conscious insurance, and utilises public transport wherever possible. Greenlane Archaeology is also committed to using local businesses for services and materials, thus benefiting the local economy, reducing unnecessary transportation, and improving the sustainability of small and rural businesses.

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Appendix 2: Gazetteer of HER Sites

PRN 91	Site of Tithe Barn, pre-1847
Site Name	A693 north of Over Burrow
NGR	SD 61400 76200
PRN 650	Engraved stone found in garden 40 yds west of Burrow fort
Site Name	Area of Yew Tree farm, Over Burrow
NGR	SD 61490 76000 (point)
PRN 651	Roman Fort, possibly Calacum or Galacum
Site Name	Over barrow Roman Fort
NGR	SD 61550 75870
PRN 652	An urn containing a (presumed) roman cremation found
Site Name	Burrow Hall, Over Burrow
NGR	SD 61650 75870
PRN 653	Mansion, extant pre-1650, but rebuilt c.1740, located centrally within roman fort site
Site Name	Burrow Hall, A683, Over Burrow
NGR	SD 61646 75907
PRN 670	Roman road down the Lune and remains of a possible bridge
Site Name	West of Over Burrow Fort
NGR	SD 61780 75910
PRN 1204	Late C2 Roman pottery found near river
Site Name	Yew Tree Farm, Burrow with Burrow
NGR	SD 61110 76000
PRN 1205	Part of a roman tombstone built into a wall of a barn at Yew Tree Farm
Site Name	Yew Tree Farm, Over Burrow
NGR	SD 61467 75990
PRN 1207	Portion of Roman tombstone pre-1698, now lost
Site Name	Over Burrow fort area
NGR	SD 61500 75800
PRN 2690	Crop mark
Site Name	Burrow Hall, Over Burrow
NGR	SD 61610 76000
PRN 2727	Field to the north shows linear earthwork
Site Name	Johnson House Farm, near Burrow Hall, Over Burrow
NGR	SD 61680 76200
PRN 2744	Roman tombstone fragment found in hedge base
Site Name	West of Burrow Hall, Over Burrow
NGR	SD 61140 75770
PRN 2746	Roman tombstone found during excavations of the roadway at the south gate of Burrow fort in 1952
Site Name	Over Burrow Fort

NGR	SD 61680 75920
PRN 4170	Archaeological evaluation 1997
Site Name	Johnson House Farm, Over Burrow
NGR	SD 61634 76097
PRN 4531	Lane shown on OS 1 st edition map, now partly a farm track
Site Name	Rake Lane Over Burrow
NGR	SD 61660 76090
PRN 4533	Pinfold shown on the 1 st edition map, 1847
Site Name	East of Yew Tree Farm, Over Burrow
NGR	SD 61562 75997 (point)
PRN 4534	Floodgate marked on OS 1 st edition map, 1847
Site Name	Leck Beck, north of Nether Burrow
NGR	SD 61580 76100
PRN 4535	Millstream shown on OS 1 st edition map
Site Name	Leck Beck to Burrow Mill, Nether Burrow
NGR	SD 61580 76100
PRN 15576	Roman road, Over Burrow
Site Name	Whittington to Lupton Roman Road (Margery 706)
NGR	SD 61770 75970
PRN 16136	Stables to Burrow Hall, c.1740
Site Name	Burrow Hall Stable Block, Burrow Hall, Over Burrow
NGR	SD 61660 75950
PRN 16137	Summer house, now used as a conservatory, mid-18 th century
Site Name	Summer House, Burrow Hall, Over Burrow
NGR	SD 61688 76038
PRN 16103	House, 1680, Grade II Listed, and later farm buildings
Site Name	Johnson House Farm, Over Burrow
NGR	SD 61626 76080
PRN 16141	Late C18 barn, Grade II Listed
Site Name	Johnson House Farm, Over Burrow
NGR	SD 61630 76030
PRN 16143	House, 1706, altered
Site Name	Yew Tree Farmhouse, Over Burrow
NGR	SD 61496 75980
PRN 16156	Pair of inscribed stones from a previous bridge, built into the central pedestrian refuges on Burrow Bridge, which was rebuilt in 1968
Site Name	Burrow Bridge, A683, Burrow
NGR	SD 6142 7556
PRN 16157	Pair of piers on drive to Burrow hall. Mid-C18 th . Rusticated sandstone ashlar, Square on Plan with moulded bases modillioned cornices
Site Name	Burrow Hall, Over Burrow

NGR SD 6149 7591

PRN 23653 Archaeological evaluation
Site Name Johnson House Farm, Over Burrow
NGR SD 61709 76099

PRN 31963 As/dupondius of Lucilla
Site Name Over Burrow
NGR SD 61 76