



Hodder Wastewater Treatment Works, Slaidburn, Lancashire

Walkover Survey Report

August 2020

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Hodder Wastewater Treatment Works, Slaidburn, Lancashire

Walkover Survey Report

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Summary

Oxford Archaeology (OA) North was commissioned by Mott MacDonald Bentley to undertake a walkover survey at the site of the new compound related to Hodder Wastewater Treatment Works, Slaidburn, Lancashire (NGR: SD 71455 54475). The work was undertaken in advance of the planning application (planning ref. 3/2020/0275) being determined. Ground works had already commenced on site prior to discussions between Doug Moir, Planning Officer (Archaeology) for Lancashire County Council, and Kay Morris, Environmental Coordinator for Mott MacDonald, which identified that the work required would involve a walkover survey to record any surviving earthworks identified on previous surveys, undertaken on behalf of United Utilities (LUAU 1997; OA North 2007). OA North were subsequently commissioned by Mott MacDonald to undertake the walkover survey, which was completed on 19th May 2020.

Two fields (Fields 1 and 2) were walked over, the majority of Field 2 had been stripped of topsoil and the northern part of Field 1 had also been stripped with a temporary haul road having been constructed. The fields were also under relatively deep grass, which made identifying shallow earthwork features difficult. However, two earthwork features, Site **1**, a north/south aligned bank earthwork located parallel with the eastern boundary of Field 1, and Site **3**, a north-east/south-west aligned hollow, on a similar alignment to the surviving boundary between Fields 1 and 2, were identified. A third feature, Site **2**, a stone-lined drain, was identified within the southern part of Field 1.

There was no evidence of the ridge and furrow or the banks and hollows identified by the earlier surveys undertaken in 1997 and 2007. However, this may have been due to them having been truncated by the current works or that they were not visible due to the deep grass.

Acknowledgements

Oxford Archaeology (OA) North would like to thank Kay Morris of Mott MacDonald Bentley for commissioning this project. Thanks are also extended to Doug Moir of Lancashire County Council, who monitored the work on behalf of Ribble Valley Borough Council.

The project was managed for OA North by Paul Dunn. The fieldwork was undertaken by Debbie Lewis. Survey and digitizing was carried out by Debbie Lewis and Mark Tidmarsh.

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 Oxford Archaeology (OA) North was commissioned by Mott MacDonald Bentley to undertake a walkover survey at the site of the new compound related to Hodder Wastewater Treatment Works, Slaidburn, Lancashire (NGR: SD 71455 54475).
- 1.1.2 The work was undertaken in advance of the determination of Planning Application (planning ref. 3/2020/0275). Ground works had already commenced on site prior to the determination of the planning application, determined 6th July 2020.
- 1.1.3 Consultation between Doug Moir, Planning Officer (Archaeology) for Lancashire County Council, and Kay Morris, Environmental Coordinator for Mott MacDonald, identified that the work required would be a walkover survey to record any surviving earthworks identified on previous surveys, undertaken on behalf of United Utilities (LUAU 1997; OA North 2007). OA North were subsequently commissioned by Mott MacDonald Bentley to undertake the walkover survey, which was completed on 19th May 2020.

1.2 Location, topography and geology

- 1.2.1 The site lies immediately to the south-west of Stocks Reservoir on land between Phynis, to the south-west, and Hodder Wastewater Treatment Works, to the east (NGR: SD 71455 54475). The area of the proposed development is currently pastoral land.
- 1.2.2 The solid geology of the area is mapped as Mudstone of the Hodder Mudstone Formation, formed in the Carboniferous Period (BGS 2020). The overlying superficial deposits are mapped as Diamicton, Devensian Till, formed in the Quaternary Period (*ibid*). The soils are recorded as slowly permeable seasonally wet acid loamy and clayey soils (Cranfield 2020).

1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical background of the site has been described in detail in the Archaeological Survey Report produced by Lancaster University Archaeological Unit (LUAU 1997). A further archaeological survey was undertaken by OA North prior to the construction of a new service reservoir, access road and pipeline (2007), which also included a desk-based assessment (DBA) of the area. However, a summary of the historical background is included here.
- 1.3.2 **Prehistoric Period:** there is very little evidence relating to this period within the immediate vicinity of the site. However, to the south-west, there are several enclosures in the Dunnow Area. There are also hillforts dating to the later prehistoric period at Portfield, near Whalley (Beswick and Coombs 1986) and at Ingleborough (Haselgrove 1996).
- 1.3.3 **Roman:** to the west of the study area there is a known Roman Road, which effectively joins the forts of Ribchester to the south and Low Borrow Bridge, Tebay, to the north (7c Margary 1973, 377-382). The road is described as having a visible *agger* crossing

fields either side of the River Hodder. No further Roman remains are known within this area.

- 1.3.4 **Early Medieval:** little is known of Yorkshire and Lancashire in the early medieval period, although it seems that the North of England, in general, fragmented into numerous small 'kingdoms' before the growing power of the Anglian kingdom of Northumbria began the process of coalescence (Newman, RM 1996a, 93). The early medieval origins of the area are traceable through local place names. The name Slaidburn is of probable Old English derivation, meaning sheep-pasture stream from *slaeget* and *burna*. The name Hamerton, again from Old English (*hamor* and *tun*), may derive from the personal name of the owner, or from a place where hammers were made (Smith 1961). It is presumed that the names relate to the expansion of the English kingdom of Northumbria in the seventh century AD. Other names such as gill, thwaite, fell, beck, Bu (meaning cattle), and Pen (meaning hill), indicate influences resulting from Norse settlement in the late first millennium AD (Kenyon 1991).
- 1.3.5 **Later Medieval:** prior to the Norman Conquest, the Forest of Bowland seems to have formed part of the holding of Earl Tostig, brother of Harold Godwinson (Mitchell 1971). In the early twelfth century the Forest was held by Roger de Poitou, until Henry I granted it to Robert de Lacy in 1102 (Farrer 1902, 383-3). Hammerton is listed as a vill in the Forest of Bowland, in the Domesday survey of 1086 (Higham 1985, 119). Slaidburn is referred to in the thirteenth century as 'Sclatbournewarde' (Mitchell 2004, 31), and during the same century the Forest of Bowland appears to have been owned by John de Lacy (*op cit*, 121).
- 1.3.6 Documentary references highlight the presence of a settlement at Hammerton (Beresford 1954, 238). The earliest examples are the 1377 and 1379 Poll Taxes for the Staincliffe Wapentake in Yorkshire (Fenwick 2005), with the former recording the constable for Hammerton as Robertus del Grene, and the *probi homines* (good men) as Johannes Piper and Willelmus Jackson. Two years later, the 1379 Poll Tax records 18 people eligible to pay in Hammerton. There is a possibility that Hammerton settlement became deserted, as were the nearby sites of Easington and Battersby, although their abandonment may relate to a change in settlement pattern rather than depopulation of the area (Newman R 1996b, 119).
- 1.3.7 **Post-Medieval:** there was some increase in settlement within the Forest of Bowland, as the medieval forest laws had become largely defunct by the late seventeenth century (Rackham 1998, 172). Although the majority of land for settlement had been enclosed by 1850 (Stansfield 2006), the Industrial Revolution had only a limited impact on the Forest of Bowland, unlike the remainder of Lancashire and Yorkshire. The area lacked coal reserves and had no fast flowing river valleys of a type sufficient to supply the power required for the textile industries. Flax processing, however, is known from the Newton area to the south-west (Higham 1989). There is limited evidence for the use of water-powered mills, mostly for grinding corn, and an example is known in Slaidburn in 1609 (Rothwell 1990, 35). The builders of turnpike roads, canals and railways also largely ignored the Forest of Bowland, and thus it remained essentially rural in character and economy.

1.3.8 **Modern Day:** the most significant change and development in the area was the construction of Stocks Reservoir. Initially agreed in 1912, the work was not undertaken until 1923, with works extending over nine years at a cost of £1,400,000 (Clitheroe Advertiser and Times 1932). The reservoir was opened on the 9th July 1932 by Prince George (Mitchell 2004, 132; Rothwell 1990). During the building of the reservoir a temporary settlement called Hollins was constructed for the workers. This included living accommodation for between 330 and 500 workmen or ‘navvies’. There were fifteen wooden huts, each allotted a housekeeper responsible for the catering and upkeep of the place. The workmen slept in cubicles with a communal living space. Apparently, each hut had a garden at the front and back in which vegetables were grown. Effectively Hollins was a small temporary community. Contemporary accounts, such as those found in the Blackpool Gazette, described it as having a main street and side streets, which had been named, shops and stores, a hospital, electric lighting, a water supply, sewerage scheme and even a cinematic theatre. The works also involved the construction of a 3- foot gauge railway for the removal and import of goods and waste (Mitchell 2004, 132).

2 WALKOVER SURVEY AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

- i. to determine or confirm the general nature of any remains present;
- ii. to fully record any surviving earthwork features;
- iii. to adhere to and fulfill the requirements of the planning condition associated with the archaeological potential of the development and, consequently, to provide further information so a subsequent scheme of mitigation can be accurately costed for or to discharge the condition;
- iv. to compile a professional archival record of any archaeological features within the site ahead of their potential disturbance during the subsequent development of the area.

2.2 Methodology

2.2.1 **Walkover Survey:** was carried out by an archaeologist who traversed the full extents of Field 1 and Field 2, as far as practicable, in accordance with current ClfA (2019; 2020a) and Historic England guidelines (2017). Records of identified assets were compiled through digital photographic record, hand-written notes and annotation on to printouts of the area. GPS was used to locate features and to contribute to measurements where appropriate. Otherwise, measurements were taken by hand tools where feasible, by pacing or other such techniques for larger assets. Information from the survey was collated digitally, with spatial data uploaded into the project GIS (Fig 2).

2.2.2 **Photographic Record:** a Canon EOS digital SLR (18-megapixel) camera, with a selection of lenses, was used for the photographic record. The record comprises detailed photography; the detailed photographs of archaeological features incorporated a scale bar, where appropriate. Archival images comprise JPEG and Canon RAW format files (CR2). The data are stored on two separate servers on different sites, with appropriate back-up and disaster plans in place.

2.2.3 **Constraints:** construction work had already commenced within Field 1 and Field 2 upon arrival. The areas that had already been disturbed were recorded with GPS and spatial data uploaded into the project GIS (Fig 2).

2.2.4 **Archive:** a full professional archive has been compiled in accordance with current ClfA (2020b) and Historic England guidelines (2015).

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the walkover survey are presented below and include a description of the earthworks recorded during the survey. The survey was undertaken during May 2020, within two fields in the location of the proposed compound (Fig 2). Both fields were unimproved pasture and the construction works had already commenced, with the majority of Field 2 having been completely stripped of its topsoil and the temporary access road having been constructed through the northern part of Field 1.

3.2 Results

3.2.1 **Field 1:** located directly north-east of Phynis Farm. The construction works had already commenced within the northern and western areas of Field 1 prior to arrival. These included the construction of a temporary road and a trench for the relocation of electrical overheads. Due to these works, any archaeological features that may have been present within this area, or proximity were no longer visible (Plate 1).



Plate 1: Field 1, facing north, showing topsoil stripping for the relocation of overhead wires, located within western area of Field 1

3.2.2 A possible earthwork bank, Site 1, measuring approximately 85 m long by 7m wide and 0.5m high, was observed running on a north/south alignment parallel with the eastern boundary of the field (Fig 2; Plate 2). The western side of the feature was more prominent, possibly due to the visible hollow associated with the surviving eastern boundary.



Plate 2: Site 1, facing south, possible earthwork bank, with 1m scale

- 3.2.3 A stone-lined drain, Site 2, had been unearthed, prior to arrival, and fenced off (Fig 2; Plate 3). The drain appeared to be running in a north-west/south-east alignment and was constructed from roughly-hewn limestone and limestone cobbles.



Plate 3: Site 2, facing north, a stone-lined drain on a north-west/south-east alignment

- 3.2.4 **Field 2:** located directly to the north of Phynis Farm and to the west of Field 1. The construction works had been extensively carried out in this area prior to the walkover survey being undertaken. These works involved the construction of a temporary haul

road, topsoil stripping across the area and also a substantial topsoil bund. Due to these works, any earthwork features which may have been present within this field will have been destroyed or covered (Plate 4).



Plate 4: View of works that had been carried out in Field 2, looking south-east

3.2.5 The only feature identified within Field 2 was a shallow hollow, Site 3, aligned north-east/south-west. The feature was observed between Field 1 and Field 2, appearing to have originally continued to the northern boundary of Phynis Farm.



Plate 5: Site 3, facing south, showing visible hollow suggesting continuation of surviving boundary, with 1m scale

4 DISCUSSION

4.1 Overview

- 4.1.1 Two fields were subject to a walkover survey undertaken during the construction of a new compound for Hodder Wasterwater Treatment Works. The majority of Field 2 had already been stripped of topsoil, with the northern part of Field 1 having been stripped of topsoil and a haul road constructed. As such, the remainder of the area was systematically walked over and any earthworks were recorded. Earthwork features were difficult to discern due to the depth of the grass across the area, however, two earthworks (Site **1** and **3**) were identified, whilst a stone-lined drain (Site **2**) was identified in a trial trench which had been left open.
- 4.1.2 Site **1** was located parallel with the eastern boundary of Field 1 and appeared to be an earthwork bank, whilst Site **3** was a hollow located on a similar alignment to the surviving hedgerow separating the two fields. There was no evidence of the ridge and furrow or the banks and hollows identified by the survey undertaken in 1997 (LUAU); however, this is likely due to the depth of the grass, but also due to it having been truncated by the topsoil stripping works.

APPENDIX A BIBLIOGRAPHY

Beresford MW, 1954 *The Lost Villages of Yorkshire: Part III*, in *Yorks Arch Jour* **38:150** p215-40, Maney

Beswick, P, and Coombs, DG, 1986 Excavations at Portfield Hillfort, 1960, 1970, and 1972, in TG Manby and P Turnbull (eds) *Archaeology in the Pennines*, *Brit Archaeol Rep ser*, **158**, 137-179

British Geological Survey (BGS), 2020 *Geology of Britain Viewer* [Online], available at <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed July 2020)

Chartered Institute for Archaeologists (CIfA), 2019 *Code of conduct*, Reading

CIfA, 2020a *Standard and guidance for archaeological field evaluation*, Reading

CIfA, 2020b *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, Reading

Clitheroe Advertise and Times 1932 [Online], available at: <https://www.oldclitheroe.co.uk/page155.htm> (accessed 10th July 2007)

Cranfield Soil and Agrifood Institute, 2020 National Soil Resources Institute's *Soilscapes of Britain Map* [Online], available at: <http://www.landis.org.uk/soilscapes>, Cranfield University (accessed July 2020)

Farrer, W, 1902 *Lancashire Pipe Rolls and Early Lancashire Charters*, Liverpool

Fenwick, CC, 2005 *The Poll Taxes of 1377, 1379 and 1381, part 3 Wiltshire and Yorkshire*, Oxford

Haselgrove, C, 1996 The Iron Age, in R Newman (ed), *The Archaeology of Lancashire*, Lancaster, 61-74

Higham, MC, 1985 Pre-Conquest Settlement in the Forest of Bowland, in JR Baldwin and ID Whyte (eds), *The Scandinavians in Cumbria*, Edinburgh, 119-134

Higham, MC, 1989 Some Evidence for 12th and 13th Century Linen and Woollen Textile Processing, *Medieval Archaeol*, **33**, 38-52

Historic England, 2015 *Management of research projects in the historic environment (MoRPHE)*, London

Historic England, 2017 *Understanding the archaeological landscapes*, 2nd edn, Swindon

Kenyon, D, 1991 *The origins of Lancashire*, Manchester

Lancaster University Archaeological Unit (LUAU), 1997 *North West Water's Forest of Bowland Estate, Lancashire: Archaeological survey report*, unpubl rep

Margary, ID, 1973 *Roman roads in Britain*, 3rd edn, London

Mitchell, WR, 1971 *Bowland and Pendle Hill*, Chichester

Mitchell, WR, 2004 *Newton and Pendle Hill: A Tourist Guide*, Clapham

Newman, R, 1996a Medieval rural settlement, in R Newman (ed) *The Archaeology of Lancashire*, Lancaster, 109-124

Newman, R, 1996b The Dark Ages, in R Newman (ed) *The Archaeology of Lancashire*, Lancashire, 93-108

Oxford Archaeology (OA) North, 2007 *Hodder Service Reservoir and access works, Slaidburn, Lancashire: Archaeological desk-based assessment, walkover survey and topographic survey*, unpubl rep

Rackham, O, 1998 *Trees and Woodland in the British Landscape: the complete history of Britain's Trees, Woods and Hedgerows*, London

Rothwell, M, 1990 *Industrial Heritage, A Guide to the Industrial Archaeology of the Ribble Valley*, Accrington

Smith, AH, 1961 *The Placenames of West Riding of Yorkshire*, English Placename Society, **8**, Cambridge

Stansfield, A, 2006 *The Forest of Bowland and Pendle Hill*, Tiverton

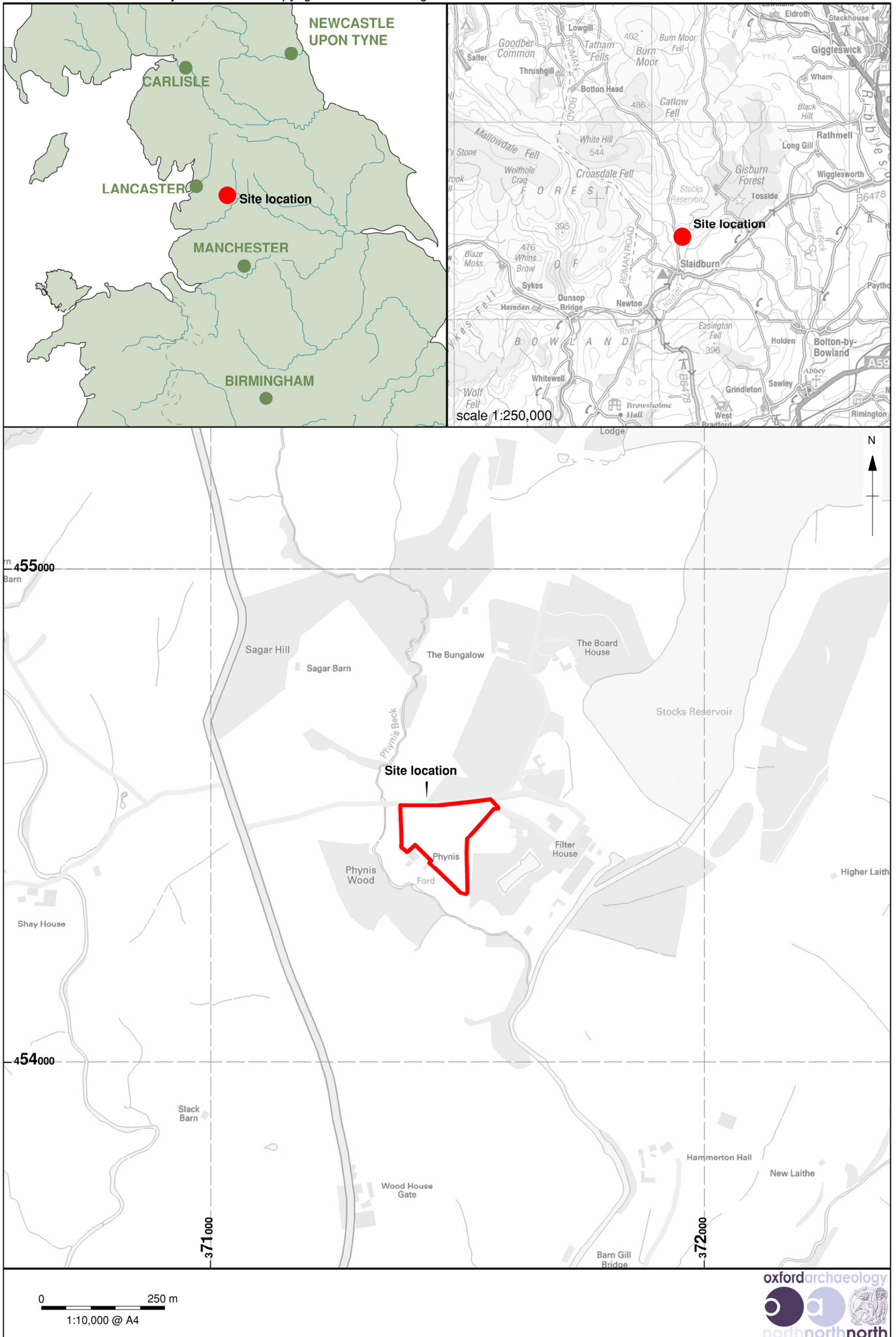


Figure 1: Site location

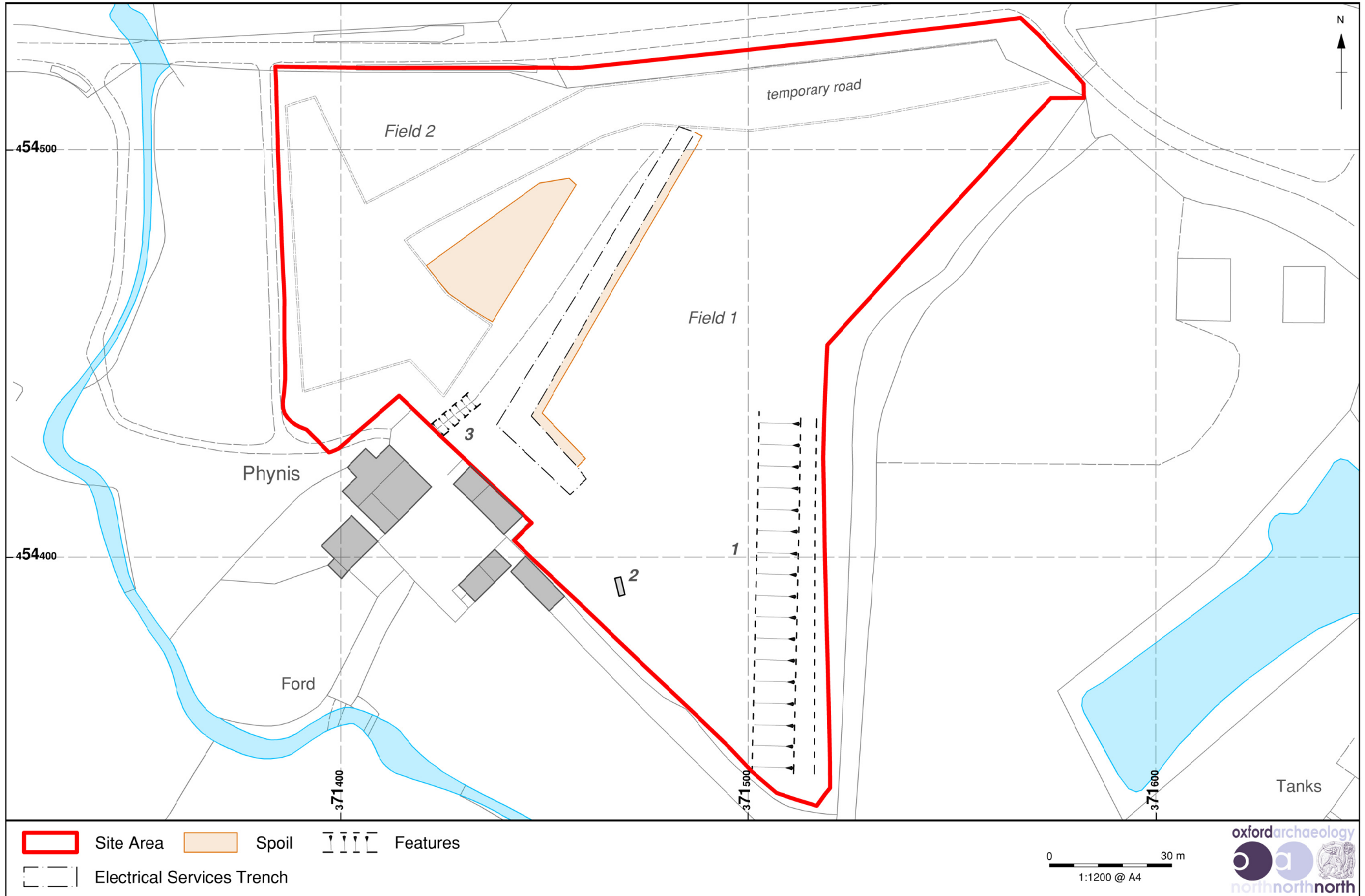


Figure 2: Site plan

APPENDIX B**SITE SUMMARY DETAILS**

Site name:	Hodder Wasterwater Treatment Works
Grid Reference	SD 71455 54475
Type:	Walkover Survey
Date and duration:	May 2020, 1 day
Location of archive:	The archive is currently held at OA North, Mill 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited with Lancashire County Record Office in due course.
Summary of Results:	Two fields (Fields 1 and 2) were walked over, the majority of Field 2 had been stripped of topsoil and the northern part of Field 1 had also been stripped with a temporary haul road having been constructed. The fields were also under relatively deep grass, which made identifying shallow earthwork features difficult. However, two earthwork features, Site 1 , a north/south aligned bank earthwork located parallel with the eastern boundary of Field 1, and Site 3 , a north-east/south-west aligned hollow, on a similar alignment to the surviving boundary between Fields 1 and 2, were identified. A third feature, Site 2 , a stone-lined drain, was identified within the southern part of Field 1.

There was no evidence of the ridge and furrow or the banks and hollows identified by the earlier surveys undertaken in 1997 and 2007. However, this may have been due to them having been truncated by the current works or that they were not visible due to the deep grass.



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