



A report for Mr D. Cheetham

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Project: PJ 144

WSM 34486

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1. Project Background

1.1. Location of the Site

Wineberry is located on the eastern peripheries of the village of Bishampton off the road towards Throckmorton, known as Broad Lane (NGR SP 0014 4441). Bishampton lies around 8 kilometres to the north-east of the market town of Pershore and around 11 kilometres to the south-east of Worcester. It is set back along an unadopted road to the south of the A442 road from Worcester to Stratford-upon-Avon (Figure 1).

1.2. Project Details

A planning application has been made to Wychavon District Council by Mr D.Cheetham of Wineberry, Bishampton, to construct an artificial lake for drainage purposes (reference W/02/01230). The planning process determined that the proposed development may affect an area of possible prehistoric or Roman activity, which was determined in the vicinity from a cropmark enclosure noted on an aerial photograph. The curvilinear enclosure and associated cropmarks are located on the opposite side of Broad Lane, but it was anticipated that the site might extend to the south and into the site. As a result, the Planning Archaeologist, Worcestershire County Council, placed a 'programme of archaeological work' planning condition on the application, for which a brief of work was written (WHEAS 2005).

1.3. Site Description

The proposed development site is a roughly triangular shaped enclosed field, bounded on the south, west and east by mature and more recent hedges and steel wire fencing. Broad Lane runs along the northern side and Wineberry (20th century house) is located on the opposite side of the road. The field is set to permanent grass and there are remnant traces of medieval ridge and furrow agriculture across much of the site. There is a small pond on the west of the site, which is probably shrunken from a larger and possibly artificial pond. The site is relatively flat, with a very slight tendency to slope to the south, the fields to the south and east slope up from the site and the land on the opposite side of the road also slopes to the north. This has resulted in periodic flooding of the site and attempts to drain the field were noted during the fieldwork, where three phases of field-drainage and ditches cut across the southern and northern field boundaries at some stage.

2. Methods and Process

2.1. Project Specification

- □ The archaeological project conforms to the Standard and Guidance for Archaeological Field Evaluation (IFA 1999).
- □ The archive conforms to the standards and guidelines established by the Archaeological Data Service.
- □ The project conforms to a brief prepared by the Planning Archaeologist, Worcestershire Historic Environment and Archaeology Service (WHEAS, 2005) and for which a project proposal and detailed specification was produced (Mercian Archaeology 2005).

2.2. Specific Aims of the Project

- □ To evaluate the proposed development site by a combination of intrusive and non-intrusive methods in order to develop an understanding of how either natural processes, cultural processes or a combination of both, resulted in the formation of the site.
- □ To determine how any prehistoric remains, should they be encountered, relate to the cropmark features that were recognised from an aerial photograph to the north of the site, which is listed on the Worcestershire County Historic Environment Record (WSM 02940).
- To place the site and any archaeological deposits encountered into a wider context, using readily available background information, including cartographic sources, historic documents, photographs and primary and secondary written sources.
- □ To use the results of the archaeological work to produce a report highlighting: -
 - 1. The survival and location of any archaeological deposits.
 - 2. Analysis of identified natural and cultural deposits and their interpretation.

3. The Documentary Research

3.1. The Topographical, Archaeological and Historic Background

Bishampton lies in the south-east of the county of Worcestershire. It is bounded to the north by the Whitsun Brook, which flows into the River Avon. The parish boundary skirts the higher wooded ground on the eastern side, which rise to around 90 metres above sea level. Early in

the 20th century, it was recorded that the parish extended to some 1,910 acres of which 1,032 were arable, 733 set to permanent grass and there were around 32 acres of woodland (VCH II, 261). The rural nature of the parish suggests that these figures will still be reasonably accurate today.

The clay-marl soils and the subsoil and parent material of lower lias and Keuper marl are ideal for growing wheat, barley, turnips and market garden produce.

The village is laid out along the main north-south street with the church and location of the former manor farm at the northern end. Wineberry is a relatively modern property and lies outside the historic ribbon development of the medieval and later settlement.

The first documentary reference to Bishampton appears to have been in the mid 10th century, when King Edgar granted land here to the church of Worcester (VCH II, 261). At Domesday, Bishampton was part of the manor of Fladbury and was held by Roger de Lacy (who appears to have been the under-tenant of the Bishop of Worcester. The estate extended to 10 hides with 2 ploughs in the lordship and 8 villagers and 2 smallholders with 5 ploughs. There was a priest, 4 male slaves and 4 female slaves (Morris 1982). 'Two French men' had previously held the manor.

There has been little archaeological work in the vicinity and the Worcestershire Historic Environment Record contains only 3 entries within the study area. The main reason for the archaeological project is the recognition of a double-ditched enclosure cropmark in a field to the north of Wineberry (WSM02940; NMR ref no, 099514 film 1859), indicating prehistoric activity in the area. According to the topographic and cartographic research carried out by Della Hooke, an Anglo-Saxon route-way ran approximately north-south on the ridge of higher ground to the west, less than 200 metres away (WSM 30402) and the site of a medieval mill is also recorded in this area (WSM 02445).

3.2. The Cartographic Sources

The earliest available and significantly detailed plan of the area was the 2nd edition Ordnance Survey map of 1904, which shows the site in the same triangular shape in plan as today. The pond appears on the map and is approximately the same size as the modern pond. The site was surrounded by areas of allotments and orchard (Figure 3).

There is an earlier inclosure map of the parish dating from 1795, however, the area of the site is fairly indistinguishable on the plan (Figure 2). The map does show the general direction of ridge and furrow from north to south.

Cartographic Sources Consulted

WRO ~ Worcestershire Records Office

Source	Reference Number
Inclosure Plan of Bishampton Parish (1795)	WRO BA 10112 r898.9:597
Ordnance Survey 2nd Edition 25". Worcestershire Sheet XXXV.13 and XXXV.14 (1904)	

Other sources used are referenced within the report.

3.4. The Fieldwork Methodology

The archaeological evaluation was undertaken on 16th August 2005.

The areas to be trenched were surveyed using a Garrett Ultra GTA metal detector configured to detect all metals to a maximum depth of 15 centimetres. The spoil was also scanned during the excavation process.

The evaluation trenches, totalling 160 square metres, were excavated by JCB equipped with a 1.60 metre ditching bucket. The trenches are shown in Figure 4

A basic level 1 survey was made of the remnant ridge and furrow earthworks across the site and a basic photographic record was made using digital imaging

Paul Williams carried out the evaluation for Mercian Archaeology.

The methodology adopted and the favourable working conditions meant that the aims and objectives of the brief could be fully met and the fieldwork was successfully concluded.

4. The Archaeological Fieldwork

4.1. The Evaluation Results

The metal detector survey of the area to be trenched produced no signals to suggest the presence of metals of any type. The only metal encountered during the work was a modern pair of pliers, which were unstratified, but probably came from the topsoil.

Two trenches were excavated, Trench A running north-west to south-east and measuring 70 metres and Trench B running north to south off Trench A (see Figure 4).

The site was overlain by a turf and topsoil layer of around 0.08 metres [100]. This was a greyish-brown blocky silty-clay with occasional small round stones and roots.

A soil layer below was probably mainly the result of medieval plough action with some transformation by natural processes. This was a 0.25 metre thick blocky layer of reddish-brown silty-clay, which was generally stone and inclusion free [101].

This layer sealed a subsoil layer derived from the natural parent material. This was a blocky reddish-brown silty-clay with occasional medium to small round stones and rare charcoal flecking [102]. This layer was similar in make-up to the plough-soil above, but less blocky and slightly less silty.

This layer sealed the undisturbed red and whitish-grey stiff clay parent material [103 – the 'natural']. In areas, this showed a tendency to be laminated. It was noted that the areas of

purely grey clay were wetter than the red and only grey was seen in all the drainage channels (see below) that had been cut into the bottom two layers.

The evaluation identified three different phases of land drainage. The earliest, of small bore orange ceramic land-drain, was seen at the lowest level about 0.60 metres below present ground level, cut into the furrows of the above ground ridge and furrow. Further drainage had been laid in the furrows just above this, possibly only a few generations later. This had a slightly wider bore and it is likely (and evidenced in places) that this was necessary, as the small-bore pipes had become blocked. A more recent drain was noted cut into a furrow at a higher level. This was an earthenware drain, probably around 30 years old, in a gravel backfilled trench. The drain ran from the pond and was probably an outlet for floodwater, which would have been carried away into a drainage ditch on the northern side of the field. The early drainage is likely to date from the early 19th century.

There were no significant archaeological deposits or features encountered during the evaluation. There were no stratified dateable artefacts recovered during the work.

4.2. The Above Ground Earthworks

Although not part of the brief of works, it was felt that making a brief record of the upstanding archaeological features (ridge and furrow) would be a valuable exercise and add to the existing pattern of ridge and furrow agriculture as contained on the Worcestershire County Historic Environment Record.

The features encountered during the survey were generally well preserved. The ridges varied slightly in width, but generally averaged around 10 metres wide, with the noticeable exception of on the western side, where two ridges measured some 15 metres across and were noticeably flatter than the others. The ridges survived to around 50 centimetres high, giving a good impression of the form and nature of the earthworks before they grassed over after ploughing ceased.

There were two distinct areas of earthworks on the site. On the eastern half the ridges run approximately east to west with a slight tendency to curvature to the north, whilst on the west of the pond the ridges run about 10 degrees off north-to south.

The ridge and furrow on the east appear to drain towards the existing pond and the flatness of the area around the pond suggests that it was once a larger feature.

Further ridge and furrow was noticed in the adjacent field to the south, running in a north-south direction (Plate 4). There was a possible headland, partly in the subject field and partly in the adjacent field to the south, although this was difficult to interpret.

5. Discussion of the Physical and Documentary Evidence

5.1. Below Ground

The intrusive evaluation work indicates that the land was used as agricultural land with no evidence for any form of prehistoric or later settlement in the immediate vicinity. A thick plough-soil was encountered and the upstanding ridge and furrow across the site indicate that this was the result of medieval ploughing. There was notably no finds within the material, suggesting that any manuring of the site was by animal grazing, rather than from the deposits off the village midden dump being spread over the land, which would have no doubt contained much broken pottery.

5.2. Above Ground: Ridge and Furrow, Form and Background

Ridge and furrow is easily recognisable and survives in swathes across the clay soils of the midland counties, giving the impression of a corrugated land surface.

The basic principal behind the existence of ridge and furrow is one of co-operative farming, whilst still retaining individual holdings within the common fields. The category of field system pre-dates the enclosed field landscape that forms the mosaic of hedged fields that we see today across the modern rural landscape. A village, or settlement was surrounded by two or three large open fields, which were farmed in 'strips', or 'lands'. These fields were commonly, although not always, named North Field, South Field, West Field or East Field, the name(s) often surviving into the modern day, even if the area has been 'urbanised'. The Lord of the Manor allocated each farmer within the community strips of land within the fields. The strips would be spread across the fields, so that each farmer had a share of the good and bad land equally and no two strips farmed by an individual farmer were located together. Each farmer's allocation extended to (generally) around 20 acres across some 70 strips. Each strip measured about a quarter of an acre.

Various nomenclature is used when commenting on ridge and furrow agriculture and this may cause confusion. For example, a furlong, as we know it today, is the length of a ridge, i.e. 200 metres (220 yards). But a furlong when referring to medieval agriculture was the area of a strip, or block of ridges within a field. The extent of an individuals land holding was known as a yardland or virgate in the south and an oxgang or bovate in the north.

The lands were usually farmed on a three year rotation, with one field planted with wheat and barley in the first year, beans and peas the next, and left fallow in the third year and the rotation began again on the second or third field. Animals would then be grazed on the stubble of the fallow field (Hall 1982, 17). The ridges were the result of the action of the plough throwing the soil into the centre of a two directional plough corridor, but it is without doubt that the method was deliberate and the ridges were created to provide a well drained seed bed with drainage channels either side (furrows), which also acted as boundaries between

individually owned strips. The ridges were formed by a clockwise ploughing mode starting in the middle of the strip by a single-directional plough throwing the soil only to the right. During the fallow season the strips were ploughed in an anti-clockwise mode so that some soil was thrown back towards the shallower build up near the furrows, so as to and prevent later cutting into less fertile subsoil.

From the air, the pattern of medieval ridge and furrow appears as a reverse 'S' or elongated 'C' pattern in plan. This is because there was a tendency of the oxen plough-team to veer to the left in preparation for making a turn at either end of the strip (Muir and Muir 1989, 61-2). At the end of each ridge a 'head' was formed by accumulation of soil from the plough coming up out of the earth and being cleaned off. This is noticeable where strips are orientated end to end and a double head is formed, also referred to as a 'joint'. Where a series of strips lies at right angles to another, a wider and flatter ridge was created, this was known as a 'headland' and it would have been used as an access track and turning area.

From the late 14th century narrow strips of un-ploughed land were left to demarcate 'special' strips, such as those belonging to the church or the lord of the manor. Other groups of strips were left to generate permanent grass, which were known as 'leys'. These areas are now recognisable as they have a now have a lower profile than frequently ploughed ridges (much of the above is based on Hall 1998).

The origins of ridge and furrow agriculture lie in the Anglo-Saxon period, although the form is commonly associated with post-conquest agricultural practice. Excavation and fieldwork at Hen Domen in Powys has revealed evidence for a pre-Norman ridge and furrow field system (CPAT; Aston 1985, 121) and other early ridge and furrow has been noted at Gwithian in Cornwall and on the Somerset uplands (Aston 1985, 122). Anglo-Saxon charters of the 10th - 11th centuries often contain references to furrows and headlands. Sometimes, these can be located on modern maps and associated with modern parish boundaries, which remain in the same place as Anglo-Saxon boundaries. A charter of AD 903 concerning boundaries at Compton Beauchamp in the Vale of the White Horse, refers to the boundary travelling along two furrows and over a headland (Hooke1998, 126), indicating that the furrow were already a permanent fixture in the landscape at this time.

However, dating individual systems without historic sources is problematic as it generally relies on the dating of features cut into or crossing the field system, therefore, proving the ridge and furrow to be earlier. For example, at Hen Domen, the early timber-framed motte and bailey castle built in AD 1070 was constructed directly over ridge and furrow.

There are also suggestions that ridge and furrow has a much older origin and may date from the Iron Age. Ridges lying around a deserted settlement on Haystack Hill on the Cheviot Hills of Northumberland, are said to 'respect' dated Iron Age landscape features, including boundary ditches, dykes and hut circles, suggesting that the ridges were formed when the features were still in use (Adams 1996), although, it is difficult to see how the Iron–Age and medieval forms can be related. If this were the case, then surely there would be expanses of ridge and furrow readily dateable to the intermediate Roman period. Perhaps the term 'ridge and furrow' confuses questions of development, as the simple act of ploughing will create a ridge and a furrow, although some forms are more distinct than others. The long straight narrow plough ridges that appear to be earlier than the laying out of the Bronze Age stone circle of Mitchell's Fold, near Chirbury in Shropshire, clearly differ in form from the wide reverse 'S' profile of the medieval ridge and furrow that swathe the landscape across the clay soils of the midland counties. Earlier medieval (Anglo-Saxon) ridge and furrow, seems to have

been narrower (Taylor 1975), as does a further type of ridge and furrow created by the Victorian steam plough, which formed long narrow straight and uniform ridges (Hall 1982).

This report is not the place for commentary on the social aspects of the common field system and ridge and furrow agriculture. However, it is easy to see that, whilst the theory of cooperative farming sounds commendable, this type of common farming must have had social implications at a local level. For example, where a farmer with more than one male heir died, the lands may have had to be split, creating smaller holdings. This was usually overcome by 'impartial inheritance', where the lands would be passed entirely to the eldest son (Taylor 1975). Also, the fact that the farmers were allocated land by the Lord of the Manor, meant that they were indelibly tied to the land and the feudal system that developed through into the middle ages.

5.3. The Bishampton Ridge and Furrow in Context

The remnant ridge and furrow at Bishampton is only a small snapshot of part of the open field system operated around the settlement; there are traces of the earthworks in the adjacent field to the south, although there are no visible remains to the north and east. The inclosure map (enclosure) of Bishampton dating from 1795 shows the extent of ridge and furrow at this time, as the strips are marked on the plan and are shown to completely surround the village and cover a wide area. Unfortunately, the map is very feint and actual analysis of the strips on the development site was impractical. Generally, it may be assumed that ridges and furrows used any slight land gradient to drain water away from the land to be cultivated and this is noticeable on the site, with furrows following the slope of land to the south and on the east seemingly heading towards the pond. This was also very noticeable in a survey of ridge and furrow at Battlefield in Shrewsbury, where the furrows all converged on two artificial ponds, which would have been kept wet by natural drainage (Williams 1998).

There is one unexplained anomaly within the correlation between the documentary and fieldwork evidence however. The 1795 inclosure plan *appears* to show the ridge and furrow on the east of the site running north to south, where on the ground the earthworks actually run westwards towards the pond. There are three logical explanations for this; firstly, that the earthworks (ridges) in this area post date the inclosure of this field and are early 19th century in date; secondly, that the inclosure here was earlier than indicated by the map and the map is suggesting re-alignment of the ploughing direction and finally, the information in the map is has been misinterpreted due to its poor quality.

6. Condusion

The results of the archaeological evaluation at land adjacent to Wineberry, Broad Lane, Bishampton, were negative with no significant below ground archaeological deposits or features observed. However, it was noted that there was surviving well-preserved ridge and furrow across the field, probably dating from the medieval period.

The proposed modern development, to provide a pond to aid drainage in the field, is somewhat compatible with the archaeological evidence on the site. Three phases of below ground field drainage were noted and the existing pond on the east of the site, which may be artificial, is probably denuded from a larger form, indicating previous efforts through the centuries to combat the poor drainage of the clayey soils.

7. Acknowledgements

The author would like to thank the client Mr Don Cheetham for his co-operation. Thanks are also due to Deborah Overton of Worcestershire Historic Environment and Archaeology Service for carrying out the HER search; Mike Glyde, Planning Archaeologist, Worcestershire Historic Environment and Archaeology Service and the staff of Worcester Records Office.

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Worcestershire Historic Environment and Archaeology Section (WHEAS 2005) Requirements for a Programme of Archaeological Work at Land Adjacent to Wineberry, Broad Lane, Bishampton, Worcestershire

Clywd-Powys Archaeological Trust CPAT)

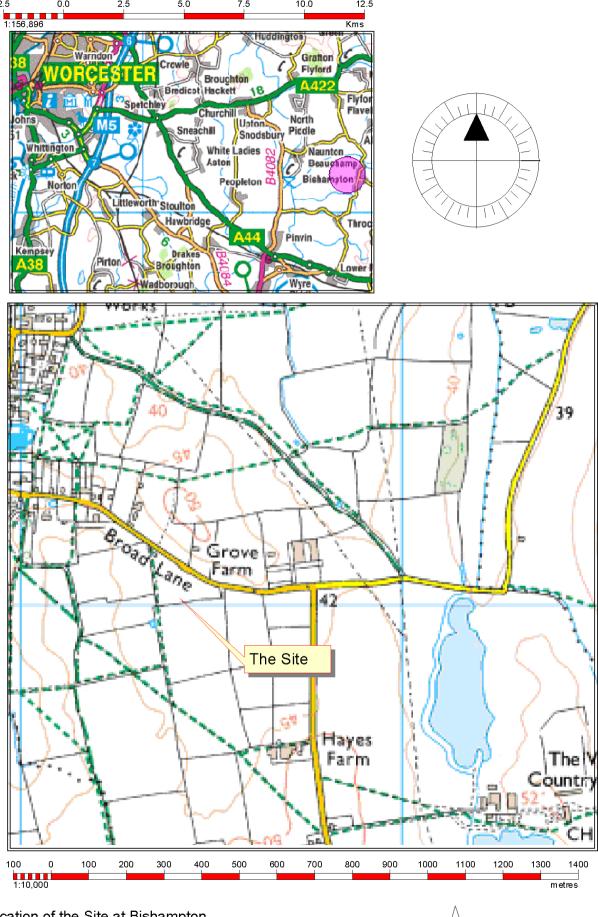
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Figure 1: Location of the Site



Location of the Site at Bishampton

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Figure 2: Extract from the 1795 Inclosure Award Plan of Bishampton



The inclosure plan shows the direction of ridges and the proposed new enclosed fields. The quality of the original was very poor. The development site is highlighted

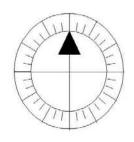
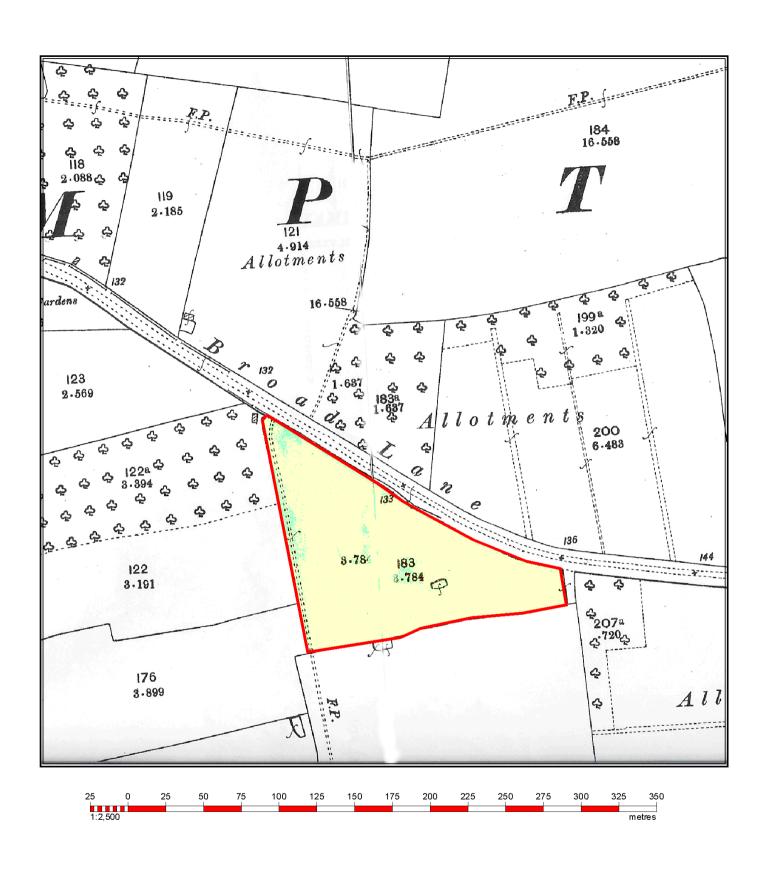
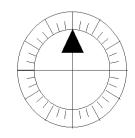




Figure 3: 2nd Edition Ordnance Survey (1904)



The 2nd edition Ordnance Survey map with the development site highlighted.





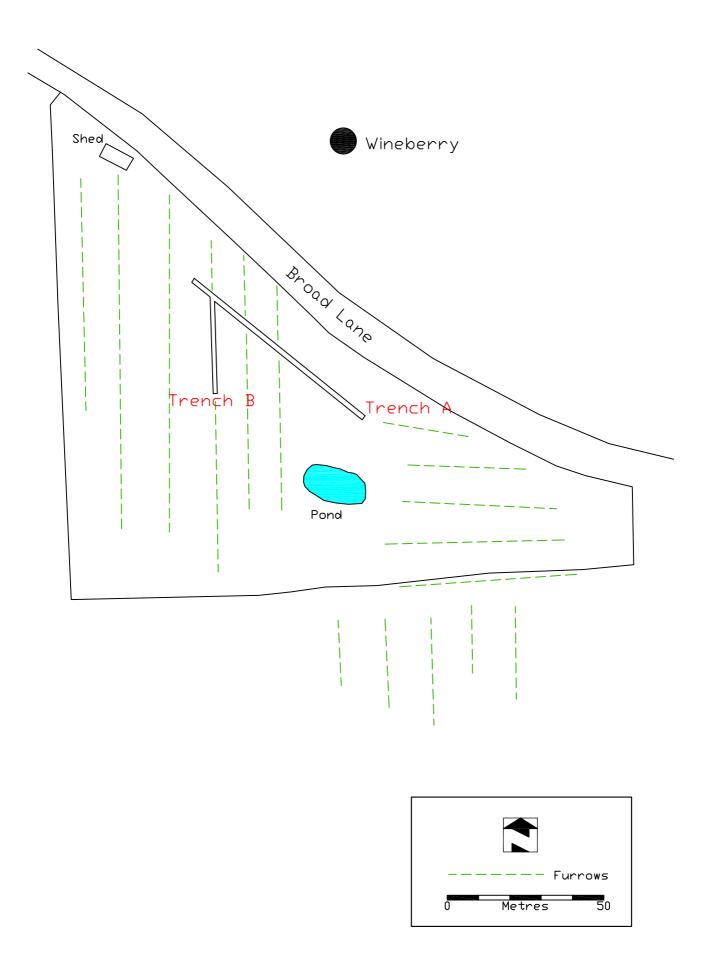


Figure 4: Plan of Trench location and Ridge and Furrow

Plates

Plate 1



Ridge and furrow earthworks looking south from the centre of the site

Plate 2



Ridge and furrow enhanced in section of Trench A, view to the east

Plates

Plate 3



Trench B during excavation, looking south

Plate 4



Ridge and furrow in the field to the south, view to the south-east