

Orford Park, Orford, Warrington, Cheshire

Archaeological Desk- Based Assessment



Oxford Archaeology North

May 2009

Capita Symonds

Issue No: 2009-10/951

OA North Job No: L10149

NGR: SJ 610 900

Document Title: Orford Park, Orford, Warrington, Cheshire

Document Type: Archaeological Desk-Based Assessment

Client Name: Capita Symonds

Issue Number: 2009-10/951

OA Job Number: L10149


National Grid Reference: SJ 610 900

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SUMMARY

As part of the 'Building Schools for the Future' (BSF) project, proposals are to be submitted to redevelop Orford Park, Orford, near Warrington in Cheshire (NGR SJ 610 900). Capita Symonds commissioned Oxford Archaeology North (OA North) to undertake a desk-based assessment to identify the known archaeological resource in order to inform the planning process, and consider whether there is a requirement for any further archaeological work.

The desk-based assessment, which was carried out in May 2009, comprised a search of both published and unpublished records held by the Cheshire Historic Environment Record (CHER) in Chester, the Cheshire Record Office in Chester, the local studies section of Warrington library, and the archives and library held at OA North. In addition to this, the site was visited in order to relate the landscape and surroundings to the results of the desk-based assessment.

The study area lies approximately 1km to the north of Warrington town centre, and was a rural hamlet in the township and parish of Warrington, before being surrounded by urban development. The site is generally flat and lies at approximately 10m OD. It is bounded to the north by Long Lane (A50), to the west by Winwick Road (A49), the east by Hallfields Road and to the south by Alder Lane.

Twenty-two sites have been identified within the study area, seven of which are Grade II Listed Buildings (Sites **13-19**). There are no Scheduled Monuments, Registered Parks or Gardens, or Battlefields within the study area, nor is the study area within a Conservation Area. Of the 22 sites identified, 11 are within the proposed development area and range in date from the Neolithic to the modern periods (Sites **01-08, 10, 20** and **22**).

The development plans show that, for the most part, the area including Orford Hall (Site **01**), and the gardens and associated structures (Site **02**), will not be severely impacted upon. However, a duck decoy pond (Site **03**) is to be remodelled. It is therefore recommended that a watching brief be carried out during any groundworks. Similarly, any groundworks around the area of Site **08** (linear water features) are recommended to be conducted under watching brief conditions. Site **05** (gateposts) appeared not to be affected by the proposed works, but as the gateposts are the last remaining structures relating to the house, it is recommended that they be preserved *in situ*; although they are not listed, they are of equal status to many surviving examples of these included on the List.

Of all the sites within the development area, that most likely to be impacted upon is a Roman road (Site **04**). In addition, two prehistoric axe finds (Sites **06** and **07**) may be associated with other prehistoric remains. Therefore, due to the potential of Site **04, 06** and **07**, combined with the undeveloped nature of the site, it is recommended that a programme of evaluation, for example geophysical survey and targeted trial trenching, be carried out prior to any groundworks to establish the presently unknown archaeological resource.

ACKNOWLEDGEMENTS

OA North would like to thank Richard Henson of Capita Symonds for commissioning the project. Thanks are also due to Mark Leah, the Development Control Archaeologist for Cheshire Shared Services for his help, Robert Edwards, Historic Environment Record Officer, and the staff at the Cheshire Record Office and Warrington Library for their kind assistance.

The desk-based assessment and site visit were undertaken by Karl Taylor, with the drawings produced by Alix Sperr. The project was managed by Emily Mercer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 As part of the 'Building Schools for the Future' (BSF) project, it is proposed to redevelop Orford Park, Orford, Warrington, Cheshire. In order to inform the planning process, and consider whether there is a requirement for any further archaeological work, information regarding the archaeological potential of the site and any subsequent risk or impact by the proposed redevelopment is required. A desk-based assessment is therefore necessary to identify the known archaeological resource; Capita Symonds commissioned Oxford Archaeology North (OA North) to undertake the work, which was carried out in May 2009.
- 1.1.2 The desk-based assessment comprised a search of both published and unpublished records held by the Cheshire Historic Environment Record (CHER) in Chester, the Cheshire Record Office in Chester, the local studies section of Warrington Library, and the archives and library held at OA North. In addition to this, the site was visited in order to relate the landscape and surroundings to the results of the desk-based assessment. This report sets out the results of the desk-based assessment in the form of a short document, outlining the findings, followed by a statement of the archaeological potential and significance, and an assessment of the impact of the proposed development. The significance criteria detailed in PPG 16 (DoE 1990) were employed during the assessment.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 Orford Park is located approximately 1.5km to the north of Warrington town centre (NGR SJ 610 900; Fig 1). Historically, it was a rural hamlet in the township and parish of Warrington, but the site is now surrounded by urban sprawl. It is generally flat and lies at approximately 10m OD. It is bounded to the north by Long Lane (A50), to the west by Winwick Road (A49), the east by Hallfields Road and to the south by Alder Lane. The study area is predominantly surrounded by residential estates.
- 1.2.2 The study area lies within the densely populated and industrialised Warrington area, within the Mersey Valley. The Mersey Valley contains dense communication networks, including road and rail links, and power transmission lines (www.naturalengland.org), and the Manchester ship canal passes to the south of the town.
- 1.2.3 The wider landscape beyond the urban development is of a highly cultivated appearance, with a wide band of farmland following the Mersey. This is bisected by drainage channels and ditches that drain the large expanses of former mosses which characterised much of the area until relatively recently (*ibid*). Indeed, historically, much of the area was sparsely populated owing to the extent of the mosses until the proximity of available raw materials allowed the rapid industrialisation of the area in the nineteenth century (*ibid*).

- 1.2.4 In the past, towns like Warrington were of similar character to those on the Cheshire, Shropshire and Staffordshire plain, with half-timbered and thatched buildings. Most of these were swept away by urban expansion and development, and the predominant building material is now red brick (*ibid*).
- 1.2.5 The underlying solid geology comprises undifferentiated Triassic rocks of interbedded sandstone and conglomerate. This is overlain by drift geology of river terrace deposits, consisting of sands and gravels (<http://www.bgs.ac.uk/geoindex/beta.html>).

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

- 2.1.1 The work was consistent with the relevant standards and procedures of the Institute of Archaeologists (IfA 1999), and generally accepted best practice.
- 2.1.2 The aim of the desk-based assessment is not only to give consideration to the potential for archaeological remains on the development site, but also to put the site into its archaeological and historical context. The study has focused on the proposed development area, although information from the immediate environs has been summarised in order to place the results of the assessment into context. All statutory and non-statutory sites within a 250m radius of the development site were identified and collated into a gazetteer (*Section 4*), and their location plotted on Figure 2. The principal sources of information consulted were historical and modern maps of the study area, although published and unpublished secondary sources were also reviewed. The results were considered using the Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 4 of *Planning Policy Guidance 16: Archaeology and Planning* (DoE 1990).
- 2.1.3 ***Cheshire Historic Environment Record (CHER)***: the Historical Environment Record (known formerly as the Sites and Monuments Record), maintained by the Historic Environment Team at Cheshire East Council, holds records of archaeological sites within East and West Cheshire, as both paper and digital information. A record, including grid reference and description, was obtained for each of the various sites within the defined redevelopment area, and for the immediate environs.
- 2.1.4 ***Cheshire County Record Office (CRO)***: the County Record Office in Chester was visited to consult historical maps of the study area. A search was also made for any relevant historical documentation.
- 2.1.5 ***Warrington Library***: the local studies section of Warrington Library was visited in order to consult historical documentation pertaining to Orford.
- 2.1.6 ***Oxford Archaeology North***: OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of the Lancaster University Archaeological Unit (LUAU). These were consulted where necessary.

2.2 SITE VISIT

- 2.2.1 A visual inspection of the site was undertaken on Friday 15th May 2009, in order to relate the existing topography and land use with the results of the desk-based assessment.

2.3 CLIENT DATA

- 2.3.1 The client provided a masterplan of the proposed development, which was consulted when establishing recommendations for any further work.

3. HISTORICAL BACKGROUND

3.1 INTRODUCTION

- 3.1.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Period	Date Range
Palaeolithic	c 30,000 – 10,000 BC
Mesolithic	c 10,000 – 4,000 BC
Neolithic	c 4,000 – 2,200 BC
Bronze Age	c 2,200 – 700 BC
Iron Age	c 700 BC – AD 43
Romano-British	c AD 43 – AD 410
Early Medieval	c AD 410 – 1066
Late Medieval	1066 – c 1540
Post-medieval	c 1540 – 1750
Industrial Period	c 1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

3.2 BACKGROUND

- 3.2.1 **Prehistoric Period:** relatively numerous prehistoric remains have been found in and around the Mersey Valley, but fewer sites are known in the vicinity of Warrington. However, evidence of activity around the site is suggestive of settlement at times within the prehistoric period. A prehistoric flint scraper was found near Warrington Docks, to the south of the town, with another possible prehistoric scraper found near Arpley, also to the south. The flints found may date to the Neolithic period, when there was considerable activity in and around the Cheshire Plain, although there is no firm evidence for this (Grealey 1976). Prehistoric timber piling was also found near the Warrington Docks entrance, and suggests that the Mersey was probably being exploited, perhaps using the timber piling to allow deeper foraging into the marsh (*ibid*). There is evidence of prehistoric activity within the site with the discovery, in the nineteenth century, of two stone axes (Sites **06** and **07**), which are both of hornstone flint and are thought to date to the late Neolithic period (HER 491 and 569).
- 3.2.2 Two Bronze Age barrows are known in the area, one of which contained a decorated cremation urn (Hall 1826), and a second was reused as the mound for a windmill (May 1903). A Bronze Age palstave was also discovered in

Latchford, to the south-east of Warrington. There is an Iron Age settlement site known at Loushers Lane (also to the south-east of Warrington), where excavations revealed a series of enclosures and timber-framed buildings, including an early round-house. The site was still in use into the Roman period, when fulling and dyeing took place (Higham 1993).

3.2.3 Several human skulls were found during construction work on the river diversion across Arpley Meadows in 1893 (Madeley 1894), one skull of which was preserved. Although the exact date of the remains is unknown, it was described as a ‘human skull of Celtic type’ and was possibly had an Iron Age or Romano-British origin. It was preserved in the possession of a Mr May. The Warrington Museum acquired the bulk of Mr May’s collection on his death, but the skull has not been located (*ibid*).

3.2.4 **Romano-British Period:** the Roman period is well represented in this area. A large settlement lies at Wilderspool, to the south of Warrington, on the south bank of an earlier channel of the Mersey. This major settlement was dictated by the meeting of roads from Middlewich, Chester, and possibly Manchester (Strickland 1995). The precise position of the settlement was determined by the presence of a patch of well-drained sand, in an area of peat bog, which provided a dry approach to the river-crossing. There was large-scale Roman industrial activity, with kilns and furnaces, ditched complexes and timber-framed structures (Higham 1993), and it included some buildings of status as at least one was hypocausted. The settlement does not seem to have had any military function, being similar to other industrial settlements in the Roman military hinterland, such as that at Walton-le-Dale in a similar position on the River Ribble (Shotter 2004). Two areas of occupation have been excavated and are considered to have formed part of a single settlement c10ha in size, predominantly industrial in character, and in production for much of the second century AD (Crosby 1996). Evidence for Roman activity, consisting of structural remains and domestic and industrial waste, exists in and around the modern town centre of Warrington, and represents the earliest reliable evidence for human activity in central Warrington (LUAU 2000). Further sites showing residential activity, with structural remains and domestic waste pits, include the settlement sites at the Greenall Whitley Brewery and Wilderspool House (Strickland 1995; Gifford and Partners 1991, 1992, 2001; LUAU 2000, 2001).

3.2.5 The main Roman road north from Wilderspool appears to have run east to ford the Mersey at Latchford; thereafter, it turned north, and parts of the road have been traced beyond Bridge Street (Margary 1957). The projected line of the Roman road (Site 04) runs through the south-west corner of the proposed redevelopment. The route is plotted on the 1961-3 Ordnance Survey map (see *Section 3.3.19*) and thereafter.

3.2.6 Evidence for the presence of Roman activity other than the road plotted on the Ordnance Survey map of 1961-3 is lacking, although ribbon development along the road may have occurred. An outlying settlement seems to have developed on the north bank of the Mersey along the road to Wigan (Strickland 1995, 29), which is probably the same road passing through the site.

- 3.2.7 **Medieval Period:** the Domesday survey demonstrates the existence of a manor and church in 1086, approximately 1km to the south of the site, where the medieval parish church of St Elphin's still stands (Grealey 1976, 30). The church and manor almost certainly had Anglo-Saxon antecedents on the same site, and Warrington is known to have become the head of a hundred sometime before the Norman Conquest (Farrer and Brownbill 1911, 305).
- 3.2.8 In 1066, the county of Lancashire did not exist, south Lancashire being described in the Domesday Book as 'between the Ribble and the Mersey' (Crosby 1998, 33). Warrington is mentioned in Domesday as 'Walintune', the name possibly originating from the Old English meaning the village at the weir (Mills 1998, 366). It is mentioned in the 1246 Assize Rolls as 'Werington' and those of 1259 as 'Werinton' (Grealey 1976, 14). At the time of Domesday, Orford was a small manor attached to the capital manor of Warrington. The Norris family held Orford until 1595, when it passed through marriage to the Tildesley family, who rebuilt the hall (Cheshire County Council 2006).
- 3.2.9 The medieval period is represented in the study area by Orford Hall (Site **01**) and the surrounding park (Site **02**). During this time, the town of Warrington expanded, with the Barony of Warrington being created in the early twelfth century. The early lords of Warrington established themselves at Mote Hill, c1km east of the modern town centre, suggesting that a twelfth-century motte and bailey castle stood there (Grealey 1976, 39). To the west of Mote Hill and the church, the plan of a small, linear settlement has been identified in the modern street pattern, laid out to the north and south of Church Street, with a single back lane to the north; although undated, the historical context suggests that this may have been a planned settlement established in the early twelfth century, although the character of the settlement may initially have been more rural than urban (Wells nd). Nevertheless, it had certainly been granted a borough charter before the end of the twelfth century (Carter 1953). It is thought that the inhabitants of the settlement began to build industrial sites in the twelfth century, with Walton Mill, a water mill first recorded in 1154 (*ibid*).
- 3.2.10 The borough flourished during this period, with its first fair and market being established in 1277 (Grealey 1976, 19). At around this time, Latchford, Orford, Sankey and Burtonwood were not yet part of the town, but close links were forged, with most of their land being held under service by the de Boteler family, Barons of Warrington, who built a manor house at Bewsey Old Hall in about 1264 (*ibid*), which is not far to the west of Orford.
- 3.2.11 By the early fourteenth century, Warrington was one of the most important towns in Lancashire, and, in the lay subsidy of 1334, was assessed at a similar level to Wigan, Lancaster, Preston, and Liverpool (Cheshire County Council 2001). Excavations carried out in areas such as Warrington Friary show the extent of the residential and industrial development of the town, with ditches, mosaic floor tiles, and medieval pottery (Heawood *et al* 2002)
- 3.2.12 The hamlet of Orford, situated to the north-east of the development site (the name Orford probably means upper ford (Mills 1998, 261)), was tenanted by

various well-established local families, including the Haydocks, the Leghs and then the Norris family from the thirteenth century (Farrer and Brownbill 1911; Wells 1996). It is believed that the Norrises built a moated house at Orford Hall (Site **01**) and lived there until the sixteenth century. An earlier house may have existed on higher ground to the north-east but this is pure conjecture. They were succeeded by the Tildesleys following a marriage between Elizabeth Norris and Thomas Tildesley in the early seventeenth century (Wells 1996).

- 3.2.13 The area that is now Orford Park (Site **02**) and Longford Fields (those fields to the west of the hall within the development site) constituted the demesne lands of the hall, and were subject to frequent floods (*ibid*). This is confirmed by the mapping evidence (Section 3.3) that shows large areas of marshy ground and even lakes (Site **10**). Longford was thought to be the site of the main ford across the Longford Beck, but in times of flood the ford at Orford (upper ford) was used. The site of the upper ford is thought to have been quite close to the hall (Site **01**) (Wells 1996).
- 3.2.14 **Post-medieval and Industrial Periods:** the barony of Warrington had passed to the Earl of Leicester by 1586, and Warrington had flourished and became prosperous (Grealey 1976). The Civil War interrupted this settled period and, owing to its geographical position as crossing point of the River Mersey, Warrington became embroiled in the conflict. The town was garrisoned by The Earl of Derby, but fell to the Parliamentarians in 1643 (*op cit*, 19). Further skirmishes ensued, including the routing of a Scottish army at Winwick Quay by Oliver Cromwell (*ibid*). The town had suffered terrible structural damage and that, combined with episodes of the plague in 1647 and 1654, led to a depression in trade (*ibid*).
- 3.2.15 Tanning had been established in Warrington from an early date, and after 1690, when the Mersey was made navigable from Liverpool to Warrington, the cattle trade from Ireland expanded rapidly (*ibid*). This, combined with easy access to resources such as brine from the Cheshire Plain, led to an increase in tanning activity in the area. Longford Tannery (Site **12**), just outside the site boundary on Long Lane, is testament to the continuing prominence of this industry (Ordnance Survey 1928, 3.3.15), and there was also a tannery (HER 4252) in Orford hamlet, just to the north of the study area.
- 3.2.16 The hall at Orford (Site **01**), was thought to have been mainly seventeenth century in date, much of which was thought to have been completed in 1616 by Thomas Tildesley, who lived at the hall (Wells 1996, 1). The house had nine bays wide with three storeys, the main elevation of which faced Alder Lane (*op cit*, 2). During this period, the enclosure of Orford and Warrington heaths was being carried out, which seems to have offered the opportunity to create a large estate. Thomas Tildesley apparently commissioned surveys (of unknown type) in 1607 and 1627 (*op cit*, 6), and the description of the demesne lands contained therein remained consistent up until the twentieth century. The boundaries of the demesne lands were Hallfields Road, Long Lane, Winwick Road and Alder Road (*op cit*, 10). It is possible that the layout of Orford Park was created during the act of enclosure and, prior to this, had been open heath land.

- 3.2.17 In around 1638, the hall and estate were bought by Thomas Blackburne and much of the former demesne lands were sold off (*op cit*, 11). Jonathan Blackburne, his son, carried out major alterations to the house (and possibly the grounds) in 1716 (*ibid*). A new front was added, together with new sash windows and entrance hall. The east end of Alder Lane was diverted slightly to accommodate the extended grounds (*ibid*). The gateposts (Site **05**) were erected at this time, and are the only part of the hall to have survived intact (Plate 5). To the south of this was a lime avenue, illustrated on Yates' Map of 1786 (Fig 3); there was also a separate walled garden, which was removed when the railway was constructed in 1883 (*op cit*, 12).
- 3.2.18 John Blackburne, the son of Jonathan, who attained the position of High Sheriff of Lancashire in 1743 (*op cit*, 14), probably laid out the gardens following his father's rebuilding of the south front. John was also responsible for the construction of the glasshouses (Site **01**) which housed exotic plants (*ibid*). The head gardener in 1779 was Adam Neale, who compiled a catalogue of the plants in the collection. This included, amongst other exotics, pineapples, grapes, tea, coffee and cotton. A quincunx of trees was planted in the south-east corner of the gardens, which consisted of a group of five trees laid out like the dots on a domino (*ibid*). Many other exotic trees were planted, including one of the first Cedars of Lebanon in the country (blown down in 1868) (*ibid*). Blackburne also planted a Royal Palm or *Sabal bermundiana* in its own hot house, which, unfortunately, later died and the trunk was taken to Kew gardens (*ibid*). Longford Fields were a popular venue for ice skating, but Winwick Road was treacherous, until John created a causeway in the area in the eighteenth century (Longford Bridge on the maps (Site **12**) (*ibid*).
- 3.2.19 Reference to a Col J Blackburne MP, who went to live at Hale Hall near Liverpool in 1754, is made by Payne-Gallwey in his *Book of Duck Decoys* (Payne-Gallwey 1886, 100). The Blackburnes were probably living at both properties, both of which possessed duck decoy ponds (Site **03**); the details of the Hale pond are described in detail by Payne-Gallwey (*ibid*). Duck decoys were an essential constituent of the country estate in the post-medieval period.
- 3.2.20 The daughter of John, Anna, was an avid collector of birds and corresponded with Carl Linnaeus (called the Father of Taxonomy). She even received samples from Johann Reinhold Forster, who accompanied Captain Cook as his naturalist on his second Pacific voyage of 1772-5 (*op cit*, 18). Her collection was later transferred to Fairfied Hall and then Hale Hall, both within Warrington, along with some of the more notable plants from Orford (*op cit*, 19).
- 3.2.21 Following the death of John Blackburne in 1786, his grandson John Ireland Blackburne inherited the estate at Orford, and also had become the High Sheriff of Lancashire in 1781, and Knight of the Shire in 1784 (*op cit*, 23). He erected an Obelisk as a memorial to his grandfather in the vicinity of Winifred Street, to the south of the study area, which was placed in a direct line with the avenue and main entrance to the hall. The monument was moved in 1858 and then destroyed after 1890 when new housing was built (*op cit*, 26).

- 3.2.22 After the Blackburnes left Orford in around 1812, the hall was let a number of times, and the occupants even included a school for young ladies (*op cit*, 27). In 1866 it was let to William Beamont, who became the first mayor of Warrington (*ibid*). He wrote many a book about the history of Warrington and was a local benefactor who financed the village school in Orford (now demolished) (*op cit*, 31). Following his death, his wife Letitia continued to live at the hall and the 1891 Census provides details of the staff, including cook, waitress, kitchen maid and housemaid (*ibid*). There was a head gardener who lived in a separate cottage, as well as a coachman, whose cottage was situated on the west side of the hall, accessed from Alder Lane (Ordnance Survey 1893, 3.3.11). After Letitia Beamont's death the house and contents were sold (*ibid*).
- 3.2.23 In 1861, a cottage, together with the plantation called Orford Park were apparently leased to a John Litton (although Beamont still lived at the hall then) 'of Orford Hall' who adapted it as a firing range (*op cit*, 10). In 1875, the land was sold at auction, the catalogue of which reveals some information pertaining to the park; it incorporated 24 acres and included some fine timber, consisting of about 900 trees, 600 of which were oak. The park was sold for £1810 (*ibid*).
- 3.2.24 A description of the hall was presented during the public enquiry held during the planning for the Manchester to Liverpool railway in the 1860s (Site **09**). The house was described as being deeper than it was wide and it contained a handsome entrance hall and a commanding staircase (*op cit*, 13). There was a dining room some 30 feet by 20 feet, two drawing rooms measuring 28 feet by 17 feet, and 22 feet by 15 feet, and a library measuring 22 feet by 15 feet. All of these rooms were on the ground floor, together with kitchens and offices (*ibid*). This provides an impression of the size of the hall. It was let to William Beamont (Section 3.2.22) following the construction of the railway (*ibid*). The lease describes the property as a mansion, garden, lawns and pleasure grounds, with coach house, stables, a granary and other outbuildings (Sites **01** and **02**).
- 3.2.25 Warrington continued to act as a market centre for the surrounding agricultural hinterland and, around 1800, its Wednesday market was noted for its fish, cattle, and sheep (May 1903). However, industry was becoming an increasingly important part of Warrington's economy, particularly from the late seventeenth century. Industries included chemical works (Ashmore 1982), while Yates's map of 1786 (Section 3.3.2-3 shows a glass and copper works in the area of Bank Quay. This industrial development was mainly due to improvements in the Mersey navigation, with the river being made navigable from Liverpool to Warrington in 1690, and from Warrington to Manchester in 1720, and the position of the town on the best route across the Mersey and north into Lancashire.
- 3.2.26 As a result of the improved navigation of the Mersey, Bank Quay was constructed in 1690, allowing the town's manufacturers easy access to waterborne transport. Although there is evidence for a great variety of manufacturing, the most significant industries have been identified as textile making, particularly linen and coarse textiles, such as sailcloth, and metal

working. Copper smelting was important for much of the eighteenth century, with wire-working and the manufacture of files and other tools becoming significant before 1800. By 1825, sugar refining and copper working had largely ceased, but iron foundries and soap works were increasingly important, and supplemented the remaining established industries (Ashmore 1982). The Crosfield and Sons Chemical Works was a large soap producer, and it was Joseph Crosfield who built the Transporter Bridge from 1913-15. This construction shows the extent to which Warrington's rail importance had grown, as the bridge was the world's first transporter bridge designed primarily for rail traffic. Further evidence of the importance of rail to Warrington can be seen in the Bank Quay Station, which linked the industrial towns of the region, and the Grand Junction Station, which linked Warrington with the main London line (Norton 1984). The Cheshire Lines railway, which was constructed in 1873 and connected Liverpool and Manchester, passes to the south of the site (Site 09).

- 3.2.27 During the industrial period, Orford is mentioned specifically in various directories and gives the impression of an area still relatively rural in nature, and little affected by the industrial activities of nearby Warrington. Worrall's 1871 *Directory of Lancashire* lists mainly farmers, and a tannery owned by Reynolds and Mortimer. In Kelly's *Directory of Lancashire* (1887), Thomas Corbett, foreman and tanner, and William Morimer, tanner, are listed. Kelly's *Directory* of 1892 lists the same tanners, as well as Richard Whiteman, brickmaker.
- 3.2.28 The trade directories of the twentieth century reflect the increasing urbanisation of the area. Kelly's *Directory* of 1905 still lists the same tanners as that of 1892 but Orford Hall was then occupied by Warrington Training College as an additional residence for students. However, by 1907 the training college left the site and the hall and gardens were in decay (Wells 1996, 10). A laundry, and a Walter at Warrington Corporation Sanitary Department manure manufacturers (which is shown on the Ordnance Survey map of 1896 (Fig 6)) is mentioned. Kelly's *Directory* of 1924 mentions the purchase of the hall and its subsequent gift to the town, as well as the same tanners and various other businesses, including a motor engineers. Also listed are Parry and Rock Ltd, tanners, Longford Tannery, which presumably pertains to the tannery on Long Lane (Site 12).
- 3.2.29 Orford Hall was offered to the town of Warrington by Col Robert Ireland-Blackburne in around 1916, who himself provided £1600 of the valuation price of £3600 (*ibid*). The remaining money was raised from a group of local subscribers, who agreed to offer the hall and gardens as a memorial to the Warrington Lads who had fallen in the still on-going Great War (*op cit*, 32). The 'beautiful' hall and gardens were offered as a free gift to the Corporation by Alderman Arthur Bennett, on condition that the park be used as a public park 'in perpetuity', and that the hall and curtilage be preserved and kept in reasonable repair (*ibid*). In December 1916, after some opposition, the hall was accepted. The development of the park did not commence until the 1920s, when the bowling greens were laid out. The parallel water features (Site 08) on the north-east side were filled in and replaced by tennis courts (*ibid*). Part

of the decoy pond (Site **03**) was adapted into a paddling pool by constructing a concrete foundation (*ibid*), a bandstand was constructed close to the railway, and a surviving part of the Longford Brook was culverted (*ibid*). All these changes can be seen on the Ordnance Survey maps of 1937-9 and 1961-3 (Sections 3.3.17-3.3.20).

- 3.2.30 In 1934, following numerous unsuccessful schemes to find a use for the hall, the Town Hall, Parks and Baths Committee instructed the County Surveyor to proceed with its demolition (*op cit*, 36). Many other changes have occurred during the twentieth century, including the removal of the glasshouses and the reshaping of the rectangular paddling pool (the former decoy pond, Site **03**) to a more natural shape (*ibid*). In the later part of the twentieth century, Orford Secondary School (latterly William Beamont Community School) and Warrington Technical College were constructed on the northern part of the site.

3.3 MAP REGRESSION ANALYSIS

- 3.3.1 **Introduction:** several cartographic sources were examined, held in the OA North archives, and Cheshire Record Office, Chester. Web-based resources were also consulted (www.promap.co.uk).
- 3.3.2 **Yates' Map of Lancashire, 1786 (Fig 3):** this is the earliest available map of the site, and is the first attempt to survey the county accurately at a large scale, being produced at a scale 1 inch to 1 mile. The map is not an accurate depiction however, and some detail is omitted. Nevertheless, a collection of buildings labelled Orford is shown, together with the road layout, which is remarkably similar to the current layout of Long Lane, Alder Lane and the A49 Winwick Road to the west end of the site. The junction of Long Lane, Orford Green and School Road at the north-east corner of the area is particularly obvious.
- 3.3.3 Orford Hall is shown to the south of the hamlet and is illustrated by a single square motif (Site **01**). To the left of the hall, the name '*J Blackburn Esq*' (the owner of the estate) is present. There is a tree-lined avenue to the south of the hall, on the south side of Alder Lane, and a circular collection of trees is located to the north of the hall, which may relate to the duck decoy pond, now the current boating pond (Site **03**). There is also a watercourse (Longford Brook) apparently flowing from the west to the east (see Section 3.3.4 below) through the site, which loops to the south of the hall.
- 3.3.4 **Hennet's Map of Lancashire, 1830 (Fig 4):** Hennet's map shows a similar level of detail to Yates' map (1786) and was produced at a scale of 7½ inches to 10 miles. The layout of the main roads is, again, similar to the current layout. Orford Hall is clearly labelled, although it comprises a cluster of three structures, together with a fourth structure, slightly isolated to the north-west. A road or track is now present, to the east of the hall, connecting Alder Lane with Orford Green (Hallfields Road). This road continues to the south, where the avenue of lime trees was observed on Yates' map. That avenue is not

illustrated on this map, but a possible avenue is marked on either side of Alder Lane.

- 3.3.5 Longford Brook, which was apparently flowing in an easterly direction on Yates' map, now appears to be flowing in a westerly direction, towards what is now called Sankey Brook. It also now passes to the north of the hall and not the south. Both maps illustrate the brook as flowing beneath Winwick Road, which suggests there may have been a bridge (Site 11).
- 3.3.6 ***Plan of Orford Hall and Park, nd (DGR/A/3/13) (Plates 1 and 2):*** this map was inspected at the Chester Record Office and was in a poor and fragile condition. The map was in two parts, illustrating the east and west sides of the site. It is undated, but is thought to have been compiled in the nineteenth century, and quite possibly the early 1800s at least; several features, such as the water features (Site 08), are not shown, but are seen on the Ordnance Survey map of 1849, which suggests that the map belongs in the first half of the century.
- 3.3.7 The map is much more detailed than previous mapping (Figs 3 and 4), and includes individual field numbers, obviously pertaining to land use and ownership, suggesting that it may be an estate map. Unfortunately, there was no attendant schedule, so the associated information remains unknown, but the name '*Thos Leah Esq*' is written along a field boundary on the north side of the site. The field boundaries are consistent with the later Ordnance Survey map (1849) and drainage channels are evident. There is an additional diagonal channel in field 247 (Plate 2). Orford Hall (Site 01) is labelled as 244, and the boating pond is also illustrated.
- 3.3.8 ***Ordnance Survey First Edition 6" to one mile map, 1849 (Fig 5):*** this map is obviously more detailed than either Yates' (1786) or Hennet's (1830) maps of Lancashire. The present road layout was fixed by the time this map was produced, and other than the addition of side streets, as a result of the construction of housing estates, is almost identical to modern maps. This is the first available map to provide a detailed layout of the field boundaries within the site.
- 3.3.9 The layout of the hall and its grounds (Sites 01 and 02) is depicted in some detail, and the house is clearly discernible, along with paths and further, smaller buildings. The footprint of the hall differs slightly from the estate map (Section 3.3.6-7), although some of the smaller structures appear to be the same. There is an interesting feature to the north-east, which appears to comprise parallel water features (Site 08). The decoy is visible, together with further small ponds and two arms to the west. There is a linear feature also visible to the east of the decoy pond, with two further small ponds. All of this appears to be set within trees and other vegetation, possibly an arboretum, given the botanical interests of the Blackburnes.
- 3.3.10 The rest of the proposed development area is divided into fields, with the boundaries being clearly visible. None of the boundaries appear to correspond to current field boundaries, although an extant path beside the William Beamont Community School (Site 20) does correspond to a field boundary

beside a field marked 'Osiers' (which are willows probably cultivated for a purpose, such as the production of furniture or baskets, or the bark can be used in the tanning process). The watercourse illustrated on previous mapping is no longer visible but there now appears to be a culvert/drainage channel exiting the west end of the site below Winwick Road under 'Longford Bridge' (Site 11). The text '*Subject to Floodes*' runs through the middle of the site, illustrating the nature of the ground conditions.

- 3.3.11 ***Ordnance Survey 25" to one mile map, 1893 (Fig 6):*** as befits the scale, this map is very detailed and shows many features not previously illustrated. The road layout remains identical to that already shown on previous mapping, and the field boundaries are also fairly consistent. However, there are slight changes in some of the field boundaries, particularly on the north side of the site, the fields there having been enlarged or merged. The drainage channels are depicted in detail and it is evident that there is a network across the site, all apparently draining from east to west into the channel that passes below Longford Bridge (Site 11). A strip of marshy ground is located in the centre of the site, bounded to the north by a drainage channel. There is a small pond at the western end of field 203, below the field previously (Ordnance Survey 1849) named as 'Osiers'.
- 3.3.12 Due to the larger scale of the map than that of 1849, Orford Hall (Site 01) is shown in considerable detail, although the footprint is consistent with the previous map. The grounds contain formal gardens, including pathways and areas of trees (Site 02). Glasshouses are visible to the north-east of the house, along with various outbuildings (Site 01). To the north of the hall, the duck decoy pond (Site 03) is present (labelled 221), and appears to be connected to the parallel water feature (Site 08) first shown on the 1849 map, via a channel. The duck decoy was apparently disused by the 1830s (Payne-Gallwey 1886, 102). A further channel issues forth and follows a westerly route around the gardens. Either side of the duck decoy, labelled 220 and 222, there are interesting water features. The Cheshire Lines railway (Site 09) now passes to the south-east of the hall (Site 01).
- 3.3.13 Evidence of encroaching urbanisation from Warrington is evident for the first time on the 1893 map, in the form of terraced housing along Winwick Road.
- 3.3.14 ***Ordnance Survey 6" to one mile map, 1908 (Fig 7):*** this map is almost identical to the previous map and presents all of the same features. The duck decoy pond is, however, now labelled '*Fish Pond*'. Further encroachment of housing and industry is evident to the west of the site, along Winwick Road.
- 3.3.15 ***Ordnance Survey 25" to one mile map, 1928 (Fig 8):*** similar in detail to the 1893 map (Fig 7), this map reveals that the general layout of the field boundaries remained consistent and virtually unchanged. The west end of the site is shown as an area of marshy ground and there even appears to be a lake in the westernmost field. Documentary evidence suggesting that a lake was used for ice-skating in the winter (Section 3.2.18) would suggest what was once a seasonal lake had now become permanent. There is further encroachment of housing, both to the south of the development area and at the northern fringe, along with a '*Recreation Ground (War Memorial)*', which lies

outside the site boundary on Long Lane. A building labelled '*Longford Tannery*' is now also located on Long Lane, but this also lies outside the site boundary (Site **12**).

- 3.3.16 The most notable changes have been made to the hall, which is now labelled '*ORFORD PARK*'. This follows the presenting of the hall (Site **01**) to the people of Warrington in 1916, and a park was laid out following the Great War in 1920 (see *Section 3.2.29*). The park contains features labelled '*Bowling Greens*', '*Tennis Grounds*' and '*Tennis Courts*,' all located to the north of the hall on the site of the former water features and glasshouses. Some of the formal gardens appear to have been removed, and additional outbuildings constructed. The area around the fishpond (Site **03**) had been altered and a new field boundary inserted (this may relate to a current boundary (Site **22**)). The pond itself is now divided into two unequal parts. An interesting label '*Stone Celt found A.D. 1849*' is marked in the gardens to the south of the hall (Site **06**).
- 3.3.17 ***Ordnance Survey 25" to one mile map, 1937-9 (Fig 9)***: this map is very similar to the 1928 Ordnance Survey map, with most of the same landscape features and field boundaries. Massive encroachment of housing estates to the south of the site is visible along Alder Lane and beyond, together with housing along Long Lane and beyond, to the north. Most of the site remains open, however.
- 3.3.18 The layout of the grounds around the hall remains consistent with the previous map, but it is evident that the hall has now been demolished. The former duck decoy pond and later fish pond (Site **03**) is now labelled '*Boating Pond*' and '*Paddling Pool*'. A '*Band Stand*' has appeared to the south-east of the grounds, adjacent to the railway.
- 3.3.19 ***Ordnance Survey 1:1250, 1961-3 (Fig 10)***: major changes to the layout of the site have been made between 1939 and the date of this map, including the removal and realignment of all of the field boundaries (Site **23**) (except one that passes alongside the newly constructed Orford Secondary School at the north side of the map (Site **20**)) creating larger open spaces. The drainage ditches have been realigned and regularised, an example of which still exists (Site **22**, Plate 8). The line of a Roman road (Site **04**) is now plotted, crossing the south-west corner of the site. The layout of the hall grounds (Site **02**) is consistent with previous mapping.
- 3.3.20 On current Ordnance Survey mapping, the layout of the site remains consistent, other than the addition of sports fields for Beamont County High School, now a small industrial area, which is outside the site boundary (Fig 2).

3.4 SITE VISIT

- 3.4.1 A visual inspection of the site was undertaken on Friday 15th May 2009, in order to relate the existing topography and land use with the results of the desk-based assessment. The visit allowed for an understanding of areas of impact by the proposed redevelopment, as well as areas of more recent

disturbance that may affect the potential for the survival of archaeological deposits.

- 3.4.2 The current layout of the site is consistent with that illustrated on the 1961-3 Ordnance Survey map (Fig 10), with the exception of the Tennis Courts, which have been removed and replaced by a children's playground and a basketball court. Some rebuilding works were being carried out on the basketball court at the time of the visit. There are still areas of ornamental trees and pathways on the south side of the former hall (Site **01**), which are obviously a relic of the former formal gardens (Plates 3 and 4). There are numerous entrances to the park and the south entrance has gateposts (Site **05**) which appear to be a surviving relic of the former hall (Plate 5). They are of square ashlar (now painted) with moulded plinths, and exhibit channel-jointed rustication; they are both topped with ball finials. The gates are of wrought iron and may be original. The gateposts are consistent with an eighteenth-century date for the remodelling of the hall (see *Section 3.2.17*). All the other fencing on the site is of late twentieth-century appearance. A pond was present on the north side of the former hall, which was overgrown (Site **03**) (Plate 6). To the west of this, some undulations in the ground surface may relate to former features associated with a duck decoy, possibly those on the Ordnance Survey map of 1893 (Fig 6) (Site **03**).
- 3.4.3 The remainder of the site is open rough grassland (Plate 7), and there is a single drainage ditch to the south of the William Beamont Secondary School (Site **21**, Plate 8). The school itself is of mid-twentieth-century construction, with large playing fields to the south (Plate 9). Most of the remaining field boundaries (Site **22**) are probably late twentieth century in origin. All of the surrounding streets are suburban in nature.

3.5 PREVIOUS ARCHAEOLOGICAL WORK

- 3.5.1 Both the CHER and the OA North library and archives were consulted for records of previous archaeological work in the study area and immediate environs. No records of any previous archaeological work were forthcoming, although an environmental assessment was carried out on the Warrington Northern Expressway in 1993 (HER ref ECH3548)

4. GAZETTEER OF SITES

Site number	01
Site name	Orford Hall
NGR	SJ 61353 89737
HER No	457/1
Stat. Designation -	
Site type	Manor, house, manor house, mansion house
Period	Late medieval – post-medieval
Sources	HER/Site Visit/Map Regression
Description	Site of a medieval manor house rebuilt in the seventeenth century. At the time of Domesday, Orford was a small manor attached to the capital manor of Warrington. The Norris family held Orford until 1595 when it passed through marriage to the Tildesley family, who rebuilt the hall. The hall was owned by the Blackburne family from the middle of the seventeenth century until 1812. In the nineteenth century the hall was occupied by William Beamont, first mayor of Warrington. The hall stood in Orford Park and was demolished in 1935. Various outbuildings, including glasshouses, were present within the curtilage of the hall and were observed on all the Ordnance Survey maps.
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	02
Site name	Orford Park
NGR	SJ 61389 89700
HER No	457/2
Stat. Designation -	
Site type	Park
Period	Late medieval – post-medieval
Sources	HER/Site Visit /Map Regression
Description	A park at Orford is mentioned in 1465 (HER 457/2). In 1886 the park covered around 25 acres and was surrounded by an eighteenth-century wall. In 1916 it became a public park.
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	03
Site name	Orford Hall, Site of medieval decoy pond
NGR	SJ 61349 89914
HER No	2457
Stat. Designation	
Site type	Decoy pond
Period	Late medieval – Post-medieval
Sources	HER/Site Visit/Map Regression; Ordnance Survey 6" to 1 mile, 1908, Ordnance Survey 1:1250, 1937-9
Description	Decoy pond at Orford Hall (Site 01). The hall no longer exists and, although the remains of the decoy are much overgrown, they can still be traced. Duck decoys were built to trap wildfowl using nets over a narrow stretch of water. Artificial decoys were built in the eighteenth century, which had radiating arms called pipes, into which ducks would be enticed. Latterly illustrated on maps as a fishpond (Ordnance Survey 1908) and then a boating lake (Ordnance Survey 1937-9).
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	04
Site name	King Street Roman Road
NGR	SJ 720 695 (centroid)
HER No	436/1/0
Stat. Designation -	
Site type	Road,
Period	Romano-British
Sources	HER, Map regression; Ordnance Survey 1:1250, 1961-3
Description	This part of King Street has been traced from Sandbach to Warrington for 18 miles. Traced from Elworth to the west of Sandbach, north-west from Elworth, the road runs through Middlewich, but is covered by canal works and industrial development. From there it runs straight for 4 miles to Broken Cross, near Over Street on the east side of Northwich. It then continues north-west through Wincham, but is obliterated by saltworks, then up to Marston Church and Marston Hall, to join the angle of the present road south of Great Budworth. This road then runs directly to Frankley and Stretton and then on to the Roman settlement at Wilderspool. From Wilderspool it runs north to Wigan, the line passing through the development site; it is traced on the Ordnance Survey 1961-3 map.
Assessment	Any surviving remains of the road will be impacted on as well as any possible Roman ribbon development.

Site number	05
Site name	Gateposts, Orford Hall
NGR	SJ 61321 89732
HER No	-
Stat. Designation -	
Site type	Gateposts
Period	Post-medieval
Sources	Site Visit
Description	Situated at the south entrance to the park (Site 02) on Alder Lane, the gateposts appear to be a surviving relic of the former hall (Site 01). They are of rusticated square ashlar, with moulded plinths and ball finials. The gates are of wrought iron. The gateposts are consistent with an eighteenth-century date for the remodelling of the hall (Wells 1996).
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	06
Site name	Prehistoric Stone Axe, Houghton Brook
NGR	SJ 61300 89700
HER No	491
Stat. Designation -	
Site type	Find spot
Period	Neolithic
Sources	HER, Ordnance Survey, 6" 1928
Description	Stone axe found in November 1848, near Houghton Brook in Orford. Made of polished hornstone flint, 4 inches long x 2 inches wide x 1½ inches thick. Found by John Stringer, whilst cutting a drain in a field called 'the Canks', at a depth of 2 feet. First illustrated on maps as ' <i>Stone Celt Found AD 1848</i> '.
Assessment	The site lies within the proposed development area, and any associated remains may be impacted on by construction works.

Site number	07
Site name	Flint Axe, Orford
NGR	SJ 61000 90000
HER No	569
Stat. Designation -	

Site type	Find spot
Period	Neolithic
Sources	HER
Description	Neolithic flint axe found at Orford, June 1851. Clouded hornstone flint axe, 5 5/8ins long, found at Orford.
Assessment	The site lies within the proposed development area, and any associated remains may be impacted on by construction works

Site number	08
Site name	Orford Hall, parallel water features
NGR	SJ 61400 89800
HER No	-
Stat. Designation -	
Site type	Water features
Period	Post-medieval/Industrial
Sources	Ordnance Survey, 6" 1849
Description	Parallel water features first illustrated on the 1849 Ordnance Survey map, probably fishponds. Tennis courts and a children's play area replaced the features in the early twentieth century.
Assessment	The site lies within the proposed development area, and any surviving remains may be impacted on by construction works.

Site number	09
Site name	Cheshire Lines Railway
NGR	SJ 612 895 (centroid)
HER No	-
Stat. Designation -	
Site type	Railway
Period	Industrial
Sources	Ordnance Survey 25", 1893; Site visit
Description	The Cheshire Lines Railway, constructed in 1873, connected Liverpool and Manchester. This is now disused, but a tall brick embankment remains.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	10
Site name	Lake, east of Winwick Road
NGR	SJ 60800 89900
HER No	-
Stat. Designation -	
Site type	Lake
Period	Industrial
Sources	Ordnance Survey 1928; Ordnance Survey 1937-9; Wells 1996
Description	A large seasonal lake, probably permanent by the time of the 1928 map. Ice skating was apparently popular in winter.
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	11
Site name	Longford Bridge, Winwick Road
NGR	SJ 60595 90084
HER No	-
Stat. Designation -	
Site type	Bridge/Causeway
Period	Industrial
Sources	Ordnance Survey 1849; Ordnance Survey 1893; Ordnance Survey 1908; Ordnance Survey 1928; Ordnance Survey 1937-9; Ordnance Survey 1961-3.

Description	John Blackburne created a causeway in the eighteenth century (Longford Bridge) (Wells 1996). It is first illustrated on the Ordnance Survey 6" map, 1849, but there is possible evidence of a bridge on Yates' (1786) and Hennett's (1830) maps.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	12
Site name	Tannery, Long Lane
NGR	SJ 60845 90243
HER No	-
Stat. Designation	-
Site type	Tannery
Period	Industrial
Sources	Ordnance Survey 1928; Ordnance Survey 1937-9; Ordnance Survey 1961-3; Kelly's <i>Directory of Lancashire</i> , 1924
Description	A structure labelled 'Longford Tannery' is first illustrated on the Ordnance Survey 6", 1928 map. The building also appears on the Ordnance Survey 1961-3 map.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	13
Site name	Nos 1, 2 and 3 Vale Owen Road, Orford
NGR	SJ 6165 9009
HER No	DCH1668
Stat. Designation	Listed Grade II 58857
Site type	Farm Cottages
Period	Industrial
Sources	HER
Description	Early nineteenth-century farm cottages, on lane to Orford Green Farm. Two low storeys, brick, new roofs. No 1 is larger and covered with cement, with two windows, the others with one window on each floor. No 2 has horizontal sliding sashes, others have modern windows, all segmental headed of three lights. Orford Green Farmhouse Barn (Site 18) to east and Nos 1 to 3. Farm Cottages form a group.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	14
Site name	No 55 Long Lane, Orford
NGR	SJ 6111 9030
HER No	DCH1698
Stat. Designation	Listed Grade II 58816
Site type	Barn and workshop
Period	Industrial
Sources	HER
Description	Late eighteenth century to early nineteenth century. Roughcast over brick, slate roof, two storeys of low proportions. Centre modern glazed door with segmental head. Two six-light casement windows on each floor with louvred shutters. Steeper-roofed former barn attached to left, with hipped slate roof, now a workshop.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	15
Site name	No 16 School Road, Orford, Chetham House
NGR	SJ 6143 9012
HER No	DCH1709
Stat. Designation	Listed Grade II 58848
Site type	Entrance gates and piers
Period	Industrial
Sources	HER

Description	No 16 entrance gates and gate piers. Mid-eighteenth-century house of medium size, standing in grounds, empty since 1973 but apparently in good condition. Three storeys, brick with stone base and strings, and 'long and short' end quoins. New roof, stone eaves cornice with consoles. Gable ends roughcast. four-panel door in moulded stone surround with pediment. Four windows on ground floor boarded over, five windows on upper floors, first floor, 12-paned sashes, top floor casements; stone sills and lintels, and keystones. Two stone gate piers with vases, and iron gates (all now restored). No 16, Entrance gates and gate piers, 59A and farm building to north form a group.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	16
Site name	Orford Green Farmhouse, Vale Owen Road
NGR	SJ 6162 9003
HER No	DCH1801
Stat. Designation	Listed Grade II 58855
Site type	Farmhouse
Period	Industrial
Sources	HER
Description	Early nineteenth century, scored stucco, new slate roof, two storeys. Studded door with fanlight, two five-light sliding sash windows on each floor with keystones. End chimneys. Orford Green Farmhouse (Site 18), barn to east and Nos 1 to 3 Farm Cottages (Site 13) form a group.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	17
Site name	The Orford Hotel and attached range of outbuildings and boundary wall
NGR	SJ 6161 8959
HER No	DCH1853
Stat. Designation	Listed Grade II 471562
Site type	Public House and former hotel
Period	Industrial
Sources	HER
Description	Public house and former hotel with attached outbuildings <i>c</i> 1908 by Wright & Hamlyn for the Greenall Whitley Brewery Company. Buff terracotta facings to principal elevations, red brick elsewhere. Westmorland slate roof, laid to diminishing courses. Prominent ridge, gable and mid-slope stacks. Tudor Gothic style. Courtyard plan, occupying corner site with the long, main facade facing east across Gorsey Lane, and service courtyard with range of outbuildings to the east. Two courtyards divided by a brick wall, the southerly one containing low storage buildings, the northerly one with a two-storey stable. Hay-loft opening under a shaped gable; two two-light mullioned windows to Gorsey Lane. A substantial and well-detailed public house and hotel which demonstrates the level of investment made by an influential regional brewery company in new and remodelled public houses, and one which retains a substantial amount of its original plan form and fittings.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	18
Site name	Barn to east of Orford Green Farmhouse
NGR	SJ 6165 9003
HER No	DCH1940
Stat. Designation	Listed Grade II 58856
Site type	Barn
Period	Industrial
Sources	HER
Description	Barn to east of Orford Green Farmhouse (Site 16). Brick, probably early nineteenth century, slate roof, ventilation holes arranged in lozenges. Segmental-headed

	doorways to stable and shippoon. Wing at rear. Orford Green Farmhouse (Site 16), Barn to east and Nos 1 to 3 Farm Cottages (Site 13) form a group.
Assessment	The site lies outwith the proposed development area, and will not be affected.

Site number	19
Site name	Blackburne Arms Public House, Marketplace
NGR	SJ 6139 9014
HER No	DCH1915
Stat. Designation	Listed Grade II 58825
Site type	Pubic House
Period	Industrial
Sources	HER
Description	Blackburne Arms Public House. Corner of Corporation Street. Irregular plan, early nineteenth century, brick with stone dressings, three storeys. Ground floor has iron columns and Composite capitals and segmental arches, frieze and dentilled cornice. Upper floors have sash windows (five facing Market Place, three facing Corporation Street). Small wing in angle. Narrow passage through to Sankey Street between this building and No 1. All the listed buildings in the Market Place form a group with the side facade of Ye Olde Barley Mow Public House in Market Street.
Assessment	The site lies outwith the proposed development area, and will not be affected directly. However, as a listed building (statutorily protected), and positioned just over the site boundary, it must be considered for indirect effects such as noise, vibration and setting.

Site number	20
Site name	Field Boundary
NGR	SJ 60689 90105
HER No	-
Stat. Designation	-
Site type	Landscape feature
Period	Industrial
Sources	Ordnance Survey 1849; Ordnance Survey 1893; Ordnance Survey 1908; Ordnance Survey 1928; Ordnance Survey 1937-9; Ordnance Survey 1961-3.
Description	Field boundary first appearing on the Ordnance Survey 1849 map.
Assessment	The site lies on the edge of the proposed development area, and may be affected.

Site number	21
Site name	Drainage culvert
NGR	SJ 60915 90021
HER No	-
Stat. Designation	-
Site type	Landscape feature
Period	Modern
Sources	Ordnance Survey 1961-3; Site Visit
Description	Drainage culvert running east/west first appearing on the Ordnance Survey 1:1250, 1961-3
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

Site number	22
Site name	Field Boundary
NGR	SJ 61235 89900
HER No	-
Stat. Designation	-
Site type	Landscape feature
Period	Modern

Sources	Ordnance Survey 1928; Site Visit
Description	Field Boundary first appearing on the Ordnance Survey 6" 1928 map.
Assessment	The site lies within the proposed development area, and may be impacted on by construction works.

5. SIGNIFICANCE OF THE REMAINS

5.1 INTRODUCTION

- 5.1.1 Twenty-two sites have been identified within the study area, seven of which are Grade II Listed Buildings (Sites **13-19**). There are no Scheduled Monuments, Registered Parks or Gardens, or Battlefields within the study area, nor is the study area within a Conservation Area. Of the 22 sites identified, 11 are within the proposed development area (Sites **01-08, 10, 20** and **22**).

Period	No of Sites	Site Type
Neolithic	2	Prehistoric stone axes (Sites 06 and 07)
Romano-British	1	King Street Roman Road (Site 04)
Late medieval	3	Orford Hall (Site 01), Orford Park (Site 02), Decoy Pond (Site 03)
Post-medieval	4	Orford Hall (Site 01), Orford Park (Site 02), Gateposts (Site 05), Water features (Site 08)
Industrial	11	Cheshire Lines Railway (Site 09), Lake (Site 10), Longford Bridge (Site 11), Tannery (Site 12), Listed Buildings (Sites 13-19)
Modern	3	Field boundary (Site 20), a drainage ditch (Site 21), a field boundary (Site 22)

Table 2: Number of sites by period

5.2 CRITERIA

- 5.2.1 There are a number of different methodologies used to assess the archaeological significance of sites; that to be used here is the ‘Secretary of State’s criteria for scheduling ancient monuments’, which is included as Annex 4 of PPG 16 (DoE 1990). The sites previously listed (*Section 4*, above) were each considered using the criteria, i.e. period, rarity, documentation, group value, survival/condition, fragility/vulnerability, diversity and potential, and those likely to be impacted on by the proposed development are discussed below.
- 5.2.2 **Period:** the finding of the stone axes (Sites **06** and **07**) testifies to possible prehistoric activity in the area. Significantly, they were discovered within the development site boundary and the presence of axes implies a significant chance of prehistoric activity within the development area or its immediate environs. Similarly, the Roman Road, King Street (Site **04**), passes through the western part of the site and was the main route north from Wilderspool to Wigan. The potential of Roman remains along the route of the road is high and since the road passes through the site, such remains may be present within the site boundary. The medieval period is represented by the remains of Orford Hall itself (Site **01**) and its associated parkland, gardens, ponds and other areas

(Sites **02**, **03**, and **08**) established during this time. Various industrial period sites are present. Most of these are fairly common representatives of the period and are, as such, not particularly significant, although the railway (Site **09**) is a significant part of the nineteenth-century transport network. The gateposts (Site **05**), however, are a significant survival of the period, as this is all that remains upstanding of the mansion.

- 5.2.3 **Rarity:** the discovery of the two stone axes (Sites **06** and **07**) in close proximity is highly significant. The Roman road (Site **04**) is also significant, owing to the nearby location of the significant settlement at Wilderspool and its communication and transport links. Orford Hall (Site **01**), had it survived, would have indeed been a significant structure. However, the layout of the former gardens (Sites **02**, **03** and **08**) does survive to some extent. The survival of the duck decoy pond is regionally important, as these features form an integral part of the planned landscape of the hall. There are only 156 decoy ponds listed nationally on the National Monuments Record (www.pastscape.org.uk). Allied to this, the whole site boundary has remained virtually unchanged since the earliest maps and, given the urban and developed nature of the surrounding area, is a rare survival of such an open space.
- 5.2.4 **Documentation:** Orford Hall (Site **04**) is no longer standing, being demolished in the early twentieth century, therefore further documentary research into the history of the development of the hall and its owners may shed light on the nature of the layout of the buildings. The limited documentary research within the scope of this project has revealed, for instance, that John Blackburne was High Sheriff of Lancashire, and the first mayor of the municipal borough of Warrington, William Beamont, a noted historian, was a tenant. Research into the relevant family archives and deeds might provide further information.
- 5.2.5 Knowledge about the nature of the estate at Orford may also be advanced by further research into estate documents, some of which are held at the Cheshire Record Office in Chester. Similarly, further, more detailed research into the Enclosure Acts in the area might provide more information.
- 5.2.6 **Group Value:** the two Neolithic axes (Sites **06** and **07**) can be considered as being of significant group value owing to the rarity of such finds of the same period; for two to be discovered within a short distance of each other is significant. Orford Hall (Site **01**) and the associated garden features (Sites **02**, **03**, **05**, and **08**) are also of group value.
- 5.2.7 **Survival/Condition:** Orford Hall (Site **01**) was demolished in the 1930s, along with all the associated outbuildings. The site has not been subject to major redevelopment, however, and there is high probability that below-ground remains, such as cellars and foundations (i.e. the buildings' footprint), are still present. Site **03** survives (albeit in altered form), together with some undulations in the ground to the west, which may be the remains of two other linear water features observed on the maps (Figs 5, 6 and 7). The linear water features (Site **08**) were replaced by tennis courts, but may survive below ground. The gateposts (Site **05**) are the only structural remains to survive and are certainly significant. The general layout of the gardens (Site **02**) still

survives. Prehistoric remains and the Roman road may also survive below ground.

5.2.8 **Fragility/Vulnerability:** below-ground remains, such as potential prehistoric deposits and the Roman road (Site **04**), would be particularly vulnerable to development within the site boundary. Below-ground remains of the hall (Site **01**) and other associated buildings and features (Sites **02**, **03**, **05** and **08**) are particularly vulnerable to intrusive development works. Surviving field boundaries (Sites **20** and **22**) are also vulnerable to development.

5.2.9 **Diversity:** the list of sites outlined in the gazetteer is quite diverse and reflects a long period of activity within the area. Many of the features within the site, however, pertains to the late medieval period and after, and are associated with the hall and gardens (Sites **01**, **02**, **03**, **05** and **08**).

5.2.10 **Potential:** from the map regression, it would appear that the site has been undeveloped and open since at least 1786 (Fig 3), due to it being parkland, as well as the obviously wet ground conditions of parts of the site. When this is combined with the nature of some of the sites (Sites **04**, **06** and **07**), the potential for prehistoric and Roman archaeological remains is high. The potential for below-ground remains relating to the hall (Site **01**) and garden features (Sites **02**, **03** and **08**) is also high.

5.3 SIGNIFICANCE

5.3.1 Table 3 shows the sensitivity of the site scaled in accordance with its relative importance, using the following terms for archaeology issues, with guideline recommendations for a mitigation strategy.

Importance	Examples of Site Type	Negative Impact
National	Scheduled Monuments (SMs), Grade I, II* and II Listed Buildings	To be avoided
Regional/County	Conservation Areas, Registered Parks and Gardens (Statutory Designated Sites) Sites and Monuments Record/Historic Environment Record	Avoidance recommended
Local/Borough	Sites with a local or borough value or interest for cultural appreciation Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged
Low Local	Sites with a low local value or interest for cultural appreciation Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged
Negligible	Sites or features with no significant value or interest	Avoidance unnecessary

Table 3: Criteria used to determine Importance of Sites

- 5.3.2 Based on the above criteria, the listed buildings (Sites **13-19**) are of national significance. The sites listed in the HER (Sites **01-03, 04, 06** and **07**) are of at least regional or county significance. Site **08** is considered to be of regional or county significance as it forms the last remaining structural fragment of the hall (Site **01**). The general layout and open nature of the site is of local significance. The remaining sites are of low or negligible significance.
- 5.3.3 The above conclusions are based on the current state of knowledge and the subsequent discovery of additional features or evidence relating to these sites could alter their assessed levels of significance.

6. IMPACT AND RECOMMENDATIONS

6.1 IMPACT

6.1.1 In its Planning Policy Guidance *Note 16*, the Department of the Environment (DoE 1990) advises that archaeological remains are a continually diminishing resource and ‘*should be seen as [a] finite, and non-renewable resource, in many cases, highly fragile and vulnerable to destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed*’. It has been the intention of this study to identify the archaeological potential of the study area, and assess the impact of redevelopment, thus allowing the advice of the DoE to be enacted upon. Assessment of impact has been achieved by the following methods:

- assessing any potential impact and the significance of the effects arising from the proposed development;
- reviewing the evidence for past impacts that may have affected the archaeological sites;
- outlining suitable mitigation measures, where possible at this stage, to avoid, reduce or remedy adverse archaeological impacts.

6.1.2 The impact is assessed in terms of the sensitivity or importance of the site to the magnitude of change or potential scale of impact during the future redevelopment scheme. The magnitude, or scale, of an impact is often difficult to define, but will be termed as substantial, moderate, slight, or negligible, as shown in Table 4, below.

Scale of Impact	Description
Substantial	Significant change in environmental factors; Complete destruction of the site or feature; Change to the site or feature resulting in a fundamental change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Moderate	Significant change in environmental factors; Change to the site or feature resulting in an appreciable change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Slight	Change to the site or feature resulting in a small change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Negligible	Negligible change or no material changes to the site or feature. No real change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.

Table 4: Criteria used to determine Scale of Impact

- 6.1.3 The interaction of the scale of impact (Table 4) and the importance of the archaeological site (Table 3) produce the impact significance. This may be calculated by using the matrix shown in Table 5, below.

Resource Value (Importance)	Scale of Impact Upon Archaeological Site			
	Substantial	Moderate	Slight	Negligible
National	Major	Major	Intermediate/ Minor	Slight
Regional/County	Major	Major/ Intermediate	Minor	Neutral
Local/Borough	Intermediate	Intermediate	Minor	Neutral
Local (low)	Intermediate / Minor	Minor	Minor/ Neutral	Neutral
Negligible	Neutral	Neutral	Neutral	Neutral

Table 5: Impact Significance Matrix

- 6.1.4 None of the sites within the development site are statutorily protected and there are no Conservation Areas or Registered Parks or Gardens. The proposals for the development appear to respect most of the features still present on the site, particularly the area of the hall (Site **01**), and the majority of the garden features (Sites **02** and **03**). However, the decoy pond (Site **02**) may be subject to some remodelling and therefore would be impacted upon by the development, as may be Site **08**, the area of the parallel water features, which may survive below ground. The gateposts (Site **05**) may be also be impacted upon.
- 6.1.5 The most significant changes or impact from the proposed development appears to be on the west side of the site. This includes the line of the Roman road (Site **04**), which it appears will subject to a new commercial development. Similarly, any remains of prehistoric activity associated with the stone axes (Sites **06** and **07**) may be impacted upon. The amenity value of the current large open space at the west side of the site will also be significantly impacted upon. Most of the other sites lie outwith the development boundary and will not be impacted upon directly.

6.2 IMPACT ASSESSMENT

- 6.2.1 Following on from the above considerations, the significance of effects has been determined, based on an assumption that there will be earth-moving works associated with the development, and the present condition of the archaeological assets/sites. The results are summarised in Table 6, below, in the absence of mitigation.

Site Number	Nature of Impact	Significance	Scale of Impact	Impact Significance
01	Possible disturbance of below-ground remains	Regional/County	Negligible	Neutral
02	Possible disturbance of below-ground remains	Regional/County	Negligible	Neutral
03	Possible disturbance of extant pond	Regional/County	Moderate	Major/Intermediate
04	Possible disturbance of below-ground remains	Regional/County	Substantial	Major
05	Possible disturbance of extant structures	Local/Borough	Negligible	Neutral
06	Possible disturbance of below-ground remains	Regional/County	Moderate	Major/Intermediate
07	Possible disturbance of below-ground remains	Regional/County	Moderate	Major/Intermediate
08	Possible disturbance of below-ground remains	Regional/County	Moderate	Major/Intermediate
10	Possible disturbance of below-ground remains	Low/local	Substantial	Intermediate/Minor
21	Possible disturbance of extant remains	Low/local	Slight	Minor/neutral
22	Possible disturbance of extant remains	Low/local	Slight	Minor/neutral

Table 6: Assessment of the impact significance on each site during development

7. RECOMMENDATIONS FOR ARCHAEOLOGICAL MITIGATION

7.1 INTRODUCTION

- 7.1.1 In terms of the requirement for further archaeological investigation and mitigation, it is necessary to consider only those sites that will be affected by the proposed development, whether directly or indirectly. Current legislation draws a distinction between archaeological remains of national importance and other remains considered to be of lesser significance. Those perceived to be of national importance may require preservation *in situ*, whilst those of lesser significance may undergo preservation by record, where high, local or regional significance can be demonstrated.

7.2 RECOMMENDATIONS

- 7.2.1 The following recommendations are based on the current understanding of the proposed development from a plan provided by the client. Should the plans for the proposed development change, advice should be sought from the Development Control Archaeologist at Cheshire Shared Services (CSS), Mark Leah, as to any required mitigation.
- 7.2.2 Of all the sites within the development area, that most likely to be impacted upon is a Roman road (Site **04**). In addition, two prehistoric axe finds (Sites **06** and **07**) may be associated with other prehistoric remains. Therefore, due to the potential of Site **04**, **06** and **07**, combined with the undeveloped nature of the site, it is recommended that a programme of evaluation, for example geophysical survey and targeted trial trenching, be carried out prior to any groundworks to establish the presently unknown archaeological resource.
- 7.2.3 The development plans show that, for the most part, the area including the hall (Site **01**), and the gardens and associated structures (Site **02**), will not be severely impacted upon. However, the duck decoy pond (Site **03**) is to be remodelled. It is therefore recommended that a watching brief be carried out during any groundworks. Similarly, any groundworks around the area of Site **08** should be conducted under watching brief conditions. Site **05** appears not be affected by the proposed works, but as the gateposts are the last remaining structures relating to the house, they should be preserved *in situ*; although they are not listed, they are of equal status to many surviving examples of these included on the List (see Site **16**). Any further archaeological work should be carried out in consultation with CCS, who would provide a project brief.

8. BIBLIOGRAPHY

8.1 PRIMARY SOURCES

Cheshire Record Office (CRO):

Plan of Orford Hall and Park nd. ***DGR/A/3/13***

Cheshire County Council, 2006 *Township Pack No. 161 Orford*, Chester

Warrington Library:

Beamont, W, 1858 *Orford. A Page of The Past*, Reprinted from the Warrington Guardian May 15th 1858 ***P50311***

Trades Directories:

Worrall's Directory of Lancashire, 1871

Kelly's Directory of Lancashire, 1887

Kelly's Directory of Lancashire, 1892

Kelly's Directory of Lancashire, 1905

Kelly's Directory of Lancashire, 1924

OA North Library:

Hennet's Map of Lancashire, 1830

Ordnance Survey, First Edition, 6" to 1 mile, 1849, Sheet 109

Ordnance Survey, First Edition, 25" to 1 mile, 1893, Sheet 109.13

Ordnance Survey, Third Editon, 6" to 1 mile, 1908, Sheet 109 SW

Ordnance Survey, 1:2500, 1928

Ordnance Survey, 1:2500, 1937-1939

Ordnance Survey, 1:1250, 1961-1963

Yates' Map of Lancashire, 1786

8.2 SECONDARY SOURCES

- Ashmore, O, 1982 *The Industrial Archaeology of North West England*, Manchester
- Beamont, W (ed), 1997 *The History of the House of Orford*, with notes and an introduction by H Wells, Warrington
- Carter, GA, 1953 The free borough of Warrington in the thirteenth century, *Trans Hist Soc Lancashire Cheshire*, **105**, 25-44
- Cheshire County Council, 2001 *Warrington Archaeological Assessment*, *Cheshire Historic Towns Survey*, unpubl draft
- Crosby, A, 1996 *A History of Cheshire*, London
- Crosby, A, 1998 *A History of Lancashire*, London
- Department of the Environment (DoE), 1990 *Policy and Planning Guidance 16: Archaeology and Planning*, London
- Farrer, W, and Brownbill, J, 1911 *A History of the County of Lancaster: Volume 5*, London
- Gifford and Partners, 1991 *The Archaeological Redevelopment of the Greenall Whitley Brewery Site at Wilderspool*, Warrington, unpubl rep
- Gifford and Partners, 1992 *Report on an Archaeological Evaluation Work at Millbank, Greenalls Avenue, Wilderspool, Warrington*, unpubl rep
- Gifford and Partners, 2001 *The Archaeological Redevelopment of the Greenall Whitley Brewery Site at Wilderspool, Warrington*, unpubl rep
- Grealey, S, 1976 *The Archaeology of Warrington's Past*, Chester
- Hall, HT, 1826 *Plan of the Town of Warrington in the Year 1826*, London
- Heawood, R, Howard-Davis, C, Boylston, A and Weston D, 2002 Excavations at Warrington Friary, in *Journal of the Chester Archaeological Society*, **77**, 131-85
- Higham, N, 1993 *The Origins of Cheshire*, Manchester
- Institute of Field Archaeologists, 1999 *Standard and guidance for archaeological desk-Based Assessments*
- LUAU, 2000 *Friars Gate, Warrington – Assessment and Updated Project Design*, unpubl rep
- LUAU, 2001 *Barbould Street, Warrington – Archaeological Assessment*, unpubl rep
- Madeley, C, 1894 Dug-out canoes found at Warrington, *Trans Lancashire Cheshire Antiq Soc*, **10**, 105
- Margary, ID, 1957 *Roman Roads in Britain*, London

May, T, 1903 Notes on a Bronze Age Barrow, *Trans Lancashire Cheshire Antiquarian Society*, **21**, 120

Mills, AD, 1998 *Directory of English Place Names*, Oxford

Norton, P, 1984 *Railways and Waterways to Warrington*, Chester

Payne-Gallwey, R, 1886 *The Book of Duck Decoys*, Thirsk

Shotter, D, 2004 *Romans and Britons in North-West England*, Lancaster

Strickland, T, 1995 *The Romans at Wilderspool*, Chester

Wells, H, 1996 *A Short History of Orford Hall*, Warrington

Wells, H, nd *A study of the development of Warrington town plan from the 11th to the 19th centuries*, unpubl pap

Websites

www.bgs.ac.uk/geoindex/beta.html

www.naturalengland.org

<http://www.warrington.gov.uk/Leisureandculture/Localhistoryandheritage/parks/Orford.aspx>

<http://www.promap.co.uk>:

9. ILLUSTRATIONS

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Figure 3: Extract from Yates' map of Lancashire, 1786

Figure 4: Extract from Hennet's map of Lancashire, 1830

Figure 5: Extract from the First Edition Ordnance Survey 6" to 1 mile, 1849

Figure 6: Extract from the First Edition Ordnance Survey 25" to 1 mile, 1893

Figure 7: Extract from the Ordnance Survey 6" to 1 mile, 1908

Figure 8: Extract from the Ordnance Survey 6" to 1 mile, 1928

Figure 9: Extract from the Ordnance Survey 6" to 1 mile, 1937-1939

Figure 10: Extract from the Ordnance Survey 1:1250, 1961-1963

PLATES

Plate 1: Plan of Orford Park and Hall nd (DGR/A/3/13) (east)

Plate 2: Plan of Orford park and Hall nd (DGR/A/3/13) (west)

Plate 3: Grounds to the south of the former Orford Hall

Plate 4: Grounds to the west of the former Orford Hall

Plate 5: Surviving gateposts at the south entrance (Site **05**)

Plate 6: Pond located to the north of the former Orford Hall (Site **03**)

Plate 7: General view of the open fields of the western side of the site

Plate 8: Drainage ditch (Site **21**) looking east

Plate 9: View of William Beamont Community School and Playing Fields

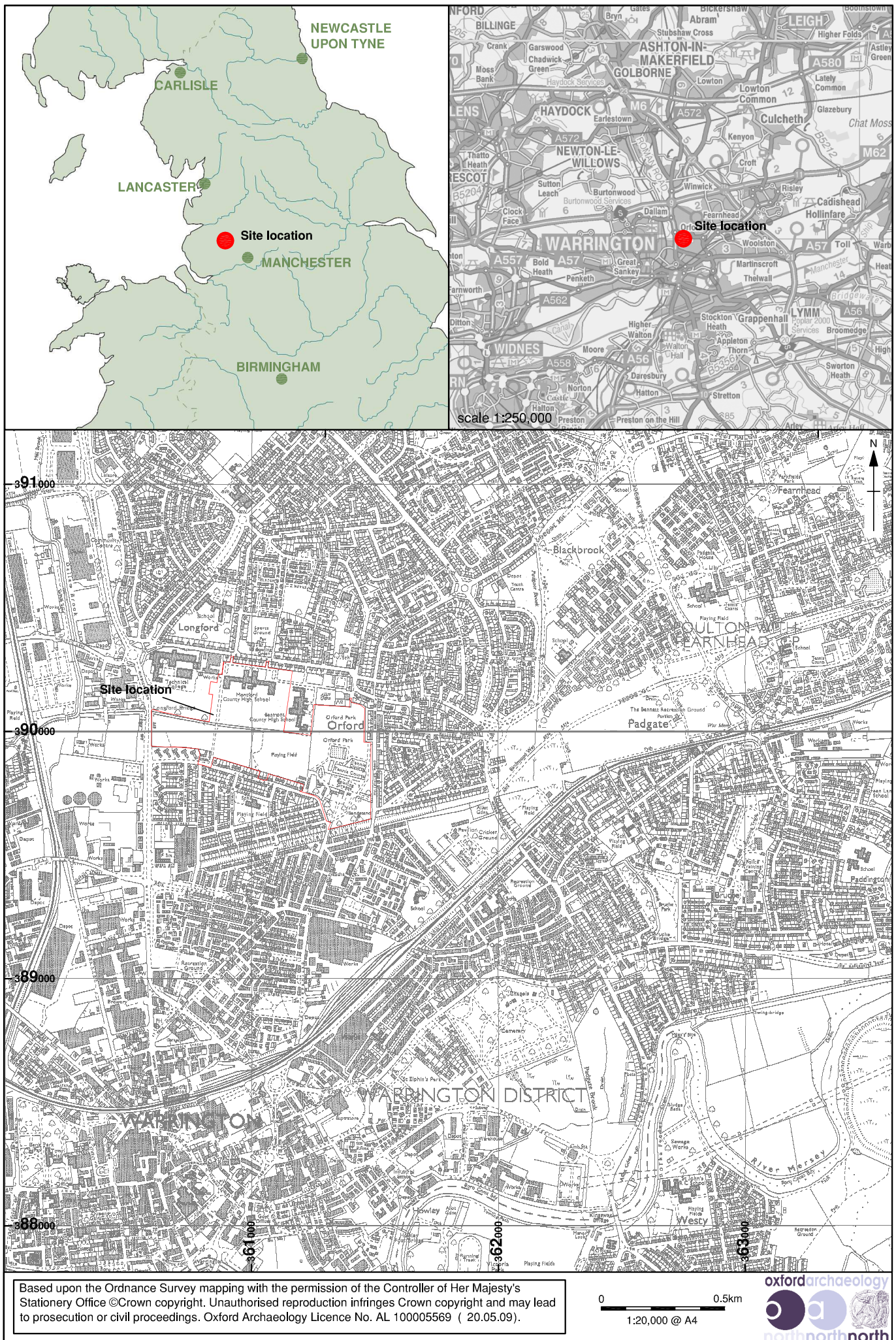
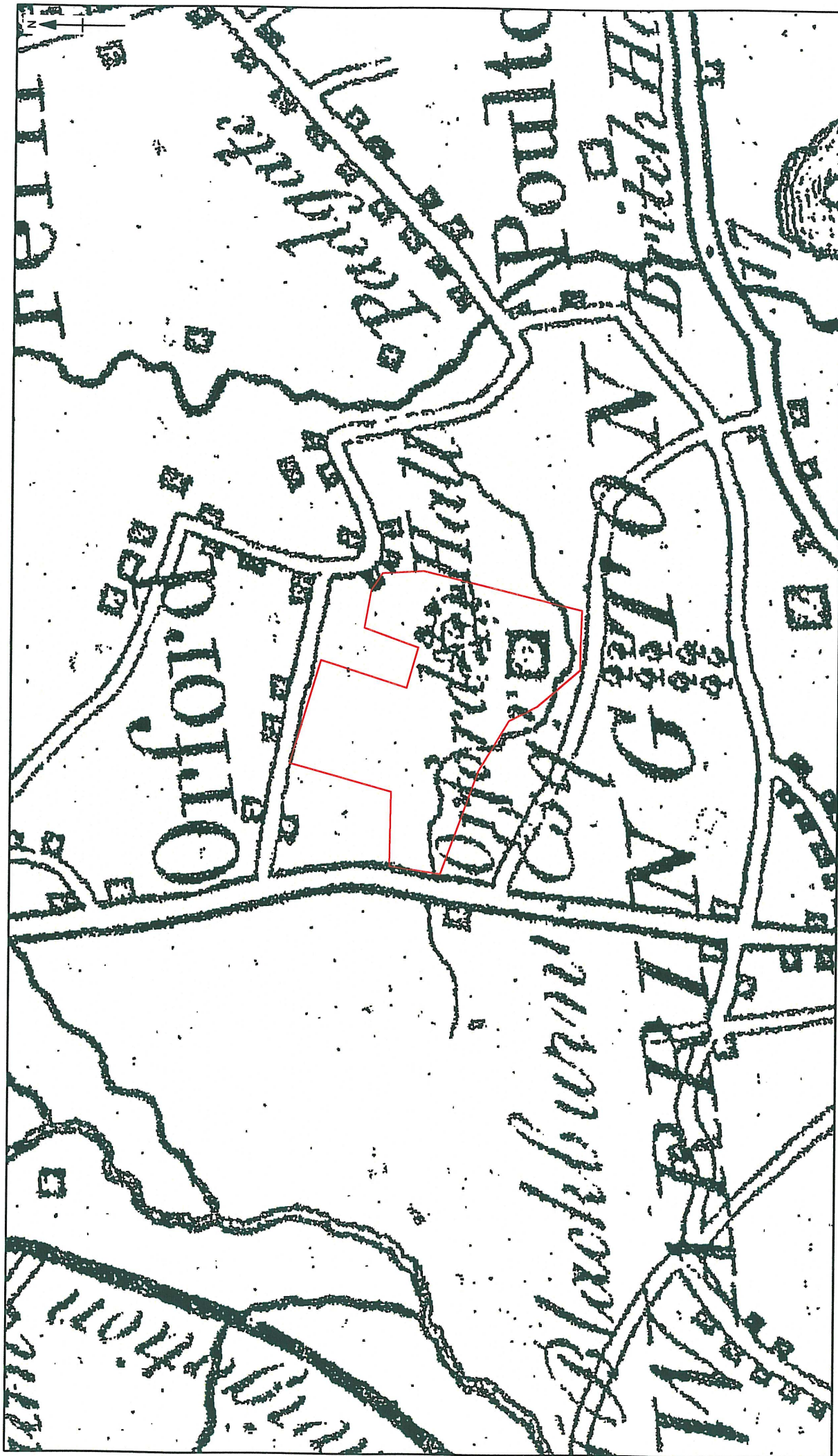


Figure 1: Site location

Figure 2: Gazetteer of sites




Approximate location of site boundary

not to scale

Figure 3: Extract from Yates' map of Lancashire, 1786



 Approximate location of site boundary

not to scale

Figure 4: Extract from Hennet's map of Lancashire, 1830

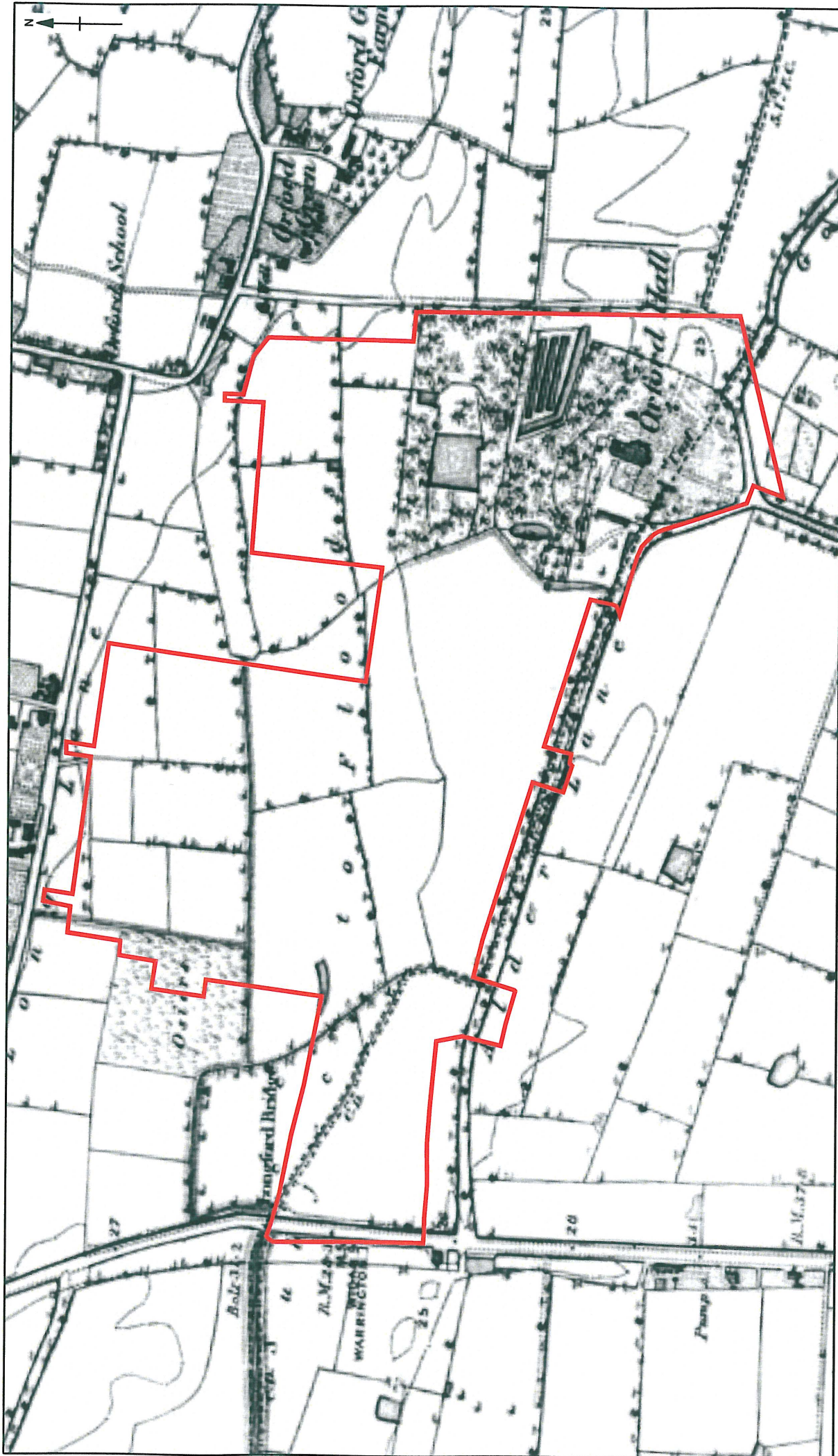
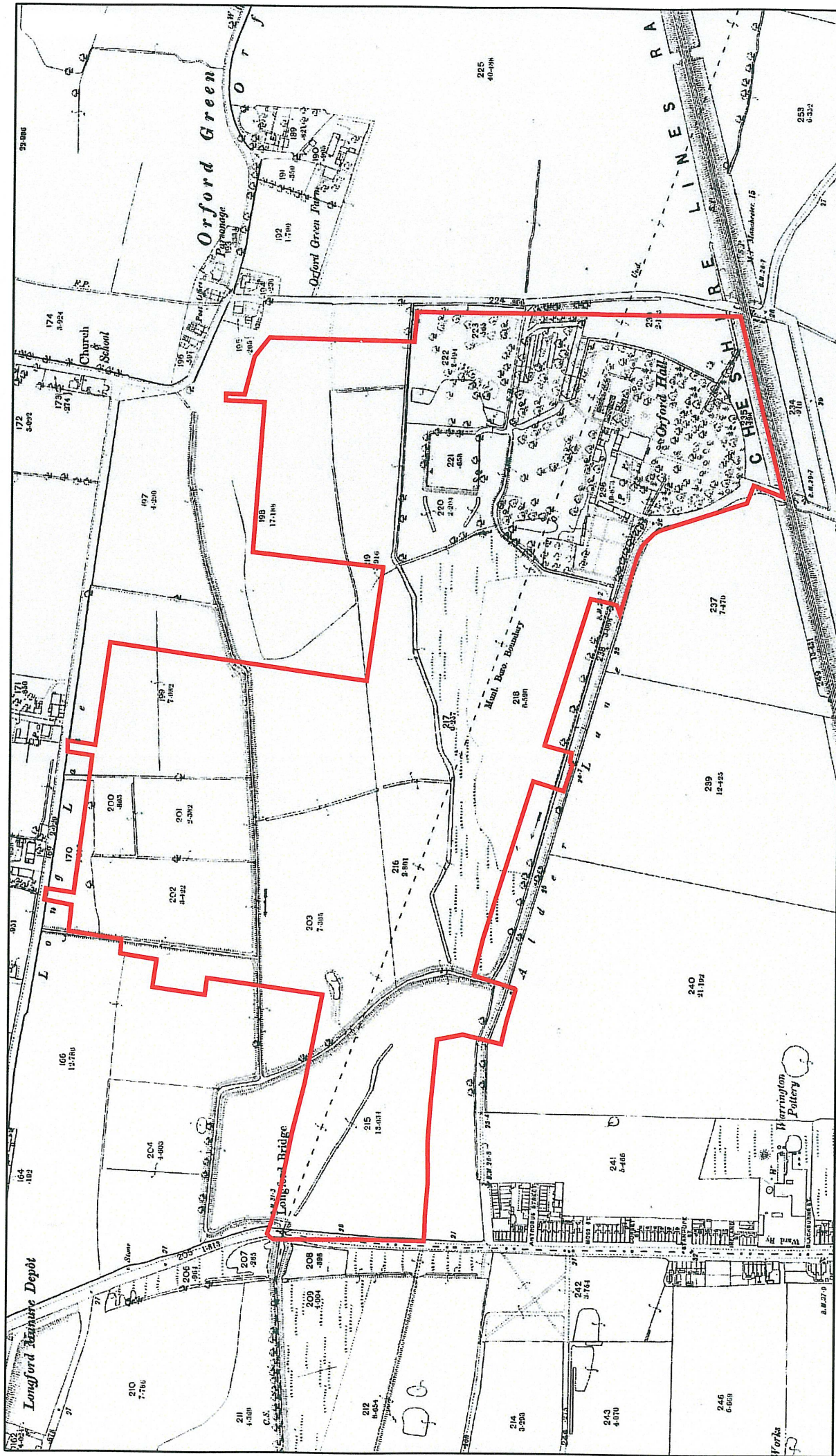


Figure 5: Extract from the First Edition Ordnance Survey 6" to 1 mile, 1849

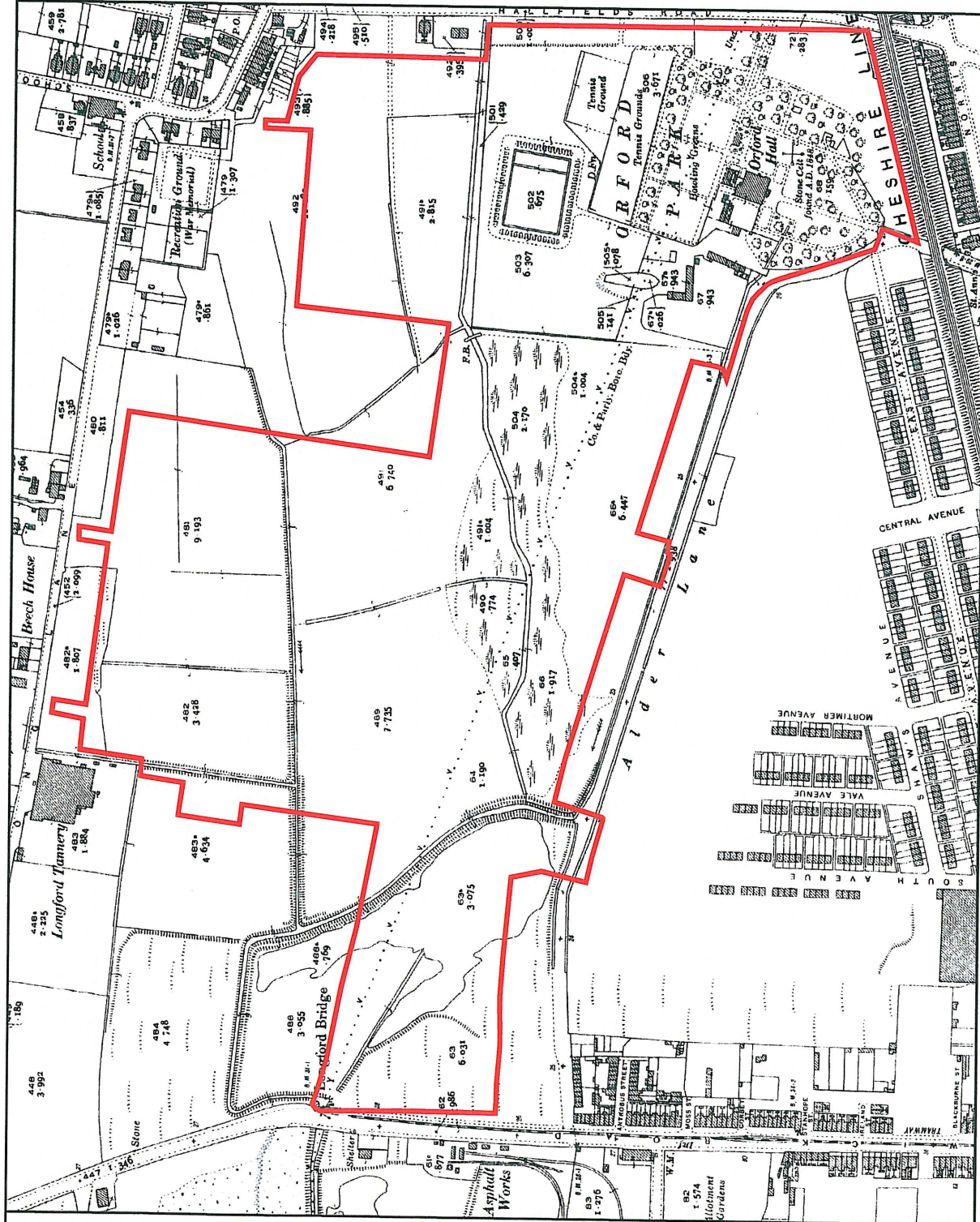


Site boundary

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1:5000 @ A4

Figure 6: Extract from the First Edition Ordnance Survey 25" to 1 mile, 1893

Figure 7: Extract from the First Edition Ordnance Survey 6" to 1 mile, 1908



Site boundary

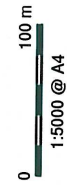
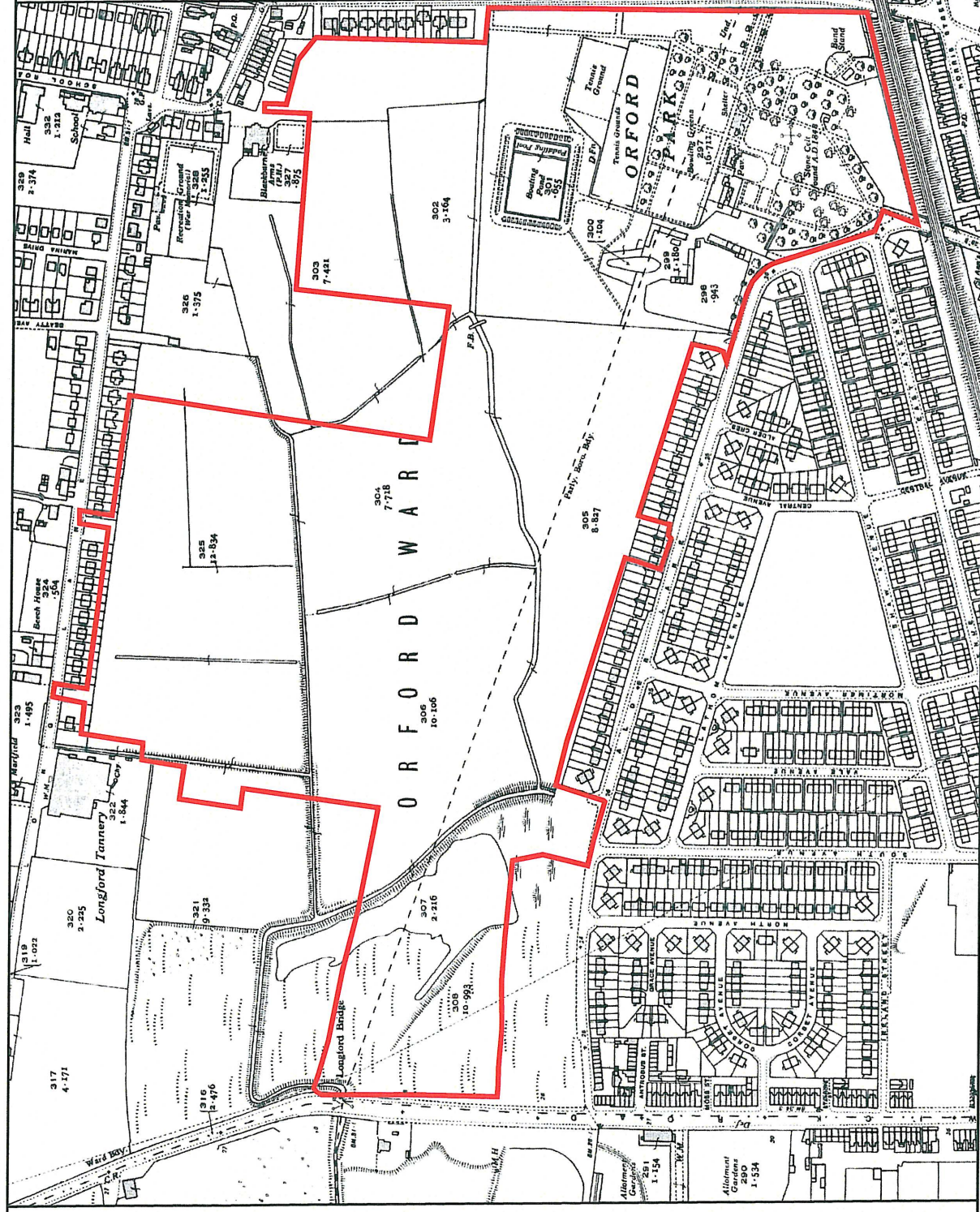


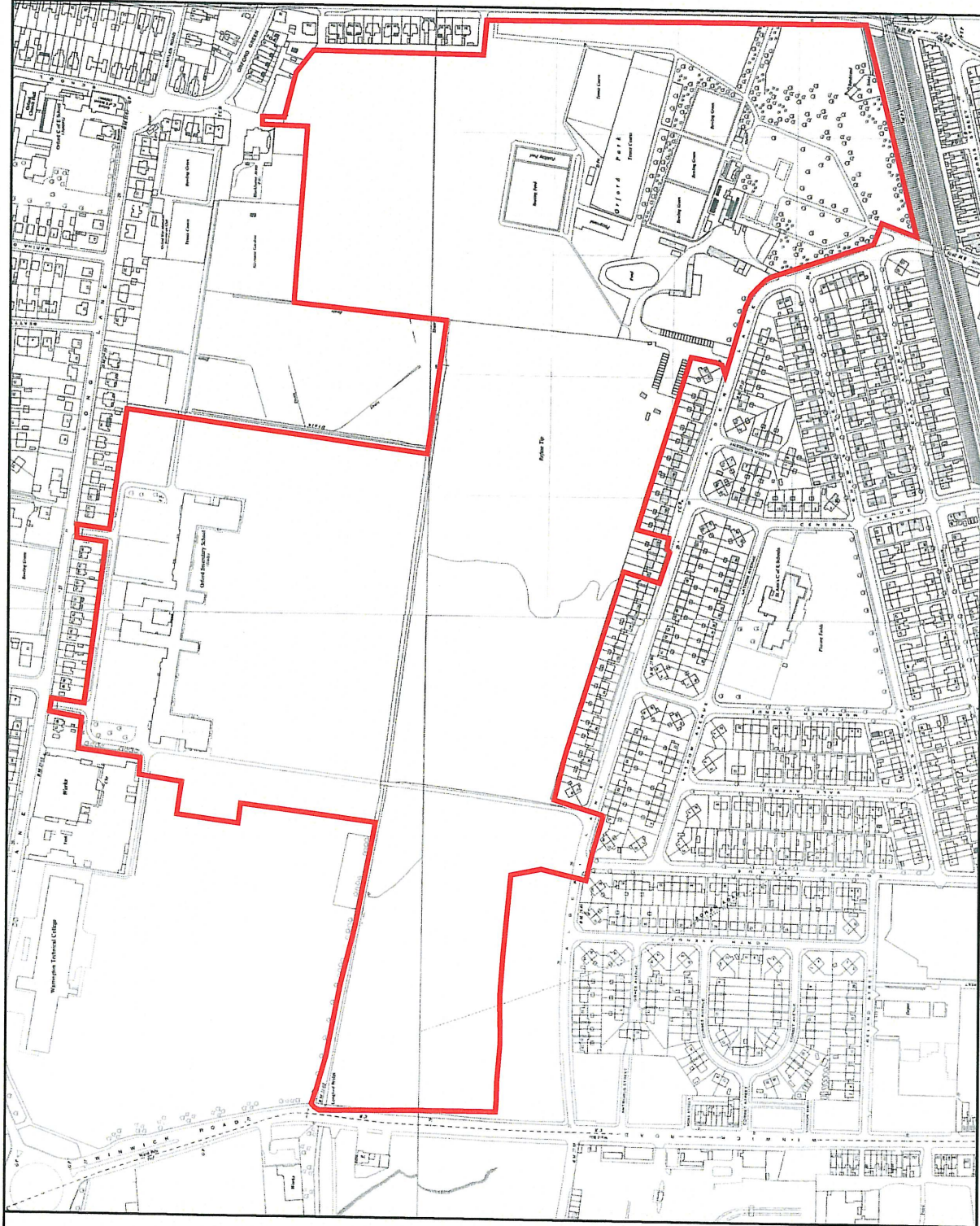
Figure 8: Extract from the Ordnance Survey 6" to 1 mile, 1928



Site boundary



Figure 9: Extract from the Ordnance Survey 6" to 1 mile, 1937-39



Site boundary

0 100 m
1:5000 @ A4

Figure 10: Extract from the Ordnance Survey 1:1250, 1961-63



Plate 1: Plan of Orford Park and Hall nd (DGR/A/3/13) (east)



Plate 2: Plan of Orford Park and Hall nd (DGR/A/3/13) (west)



Plate 3: Grounds to the south of the former Orford Hall

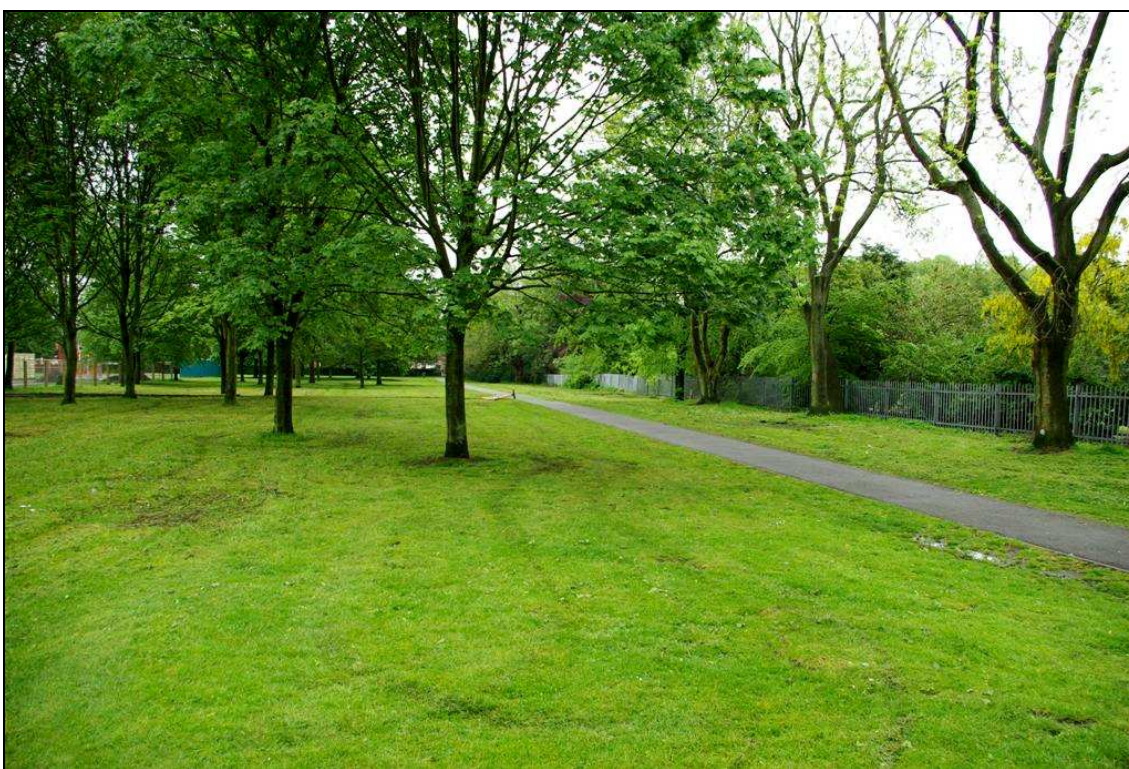


Plate 4: Grounds to the west of the former Orford Hall



Plate 5: Surviving gateposts at the south entrance (Site 05)



Plate 6: Pond located to the north of the former Orford Hall (Site 03)



Plate 7: General view of the open fields of the western side of the site



Plate 8: Drainage ditch (Site **21**) looking east



Plate 9: View of William Beamont Community School and playing fields