

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Wrexham Industrial Estate Access Roads
ARCHAEOLOGICAL ASSESSMENT

CPAT Report No 542

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ARCHAEOLOGICAL ASSESSMENT

By W J Owen, N W Jones and R J Silvester
June 2003

Report for Symonds Group Ltd

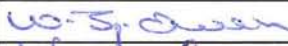




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1 INTRODUCTION

- 1.1 In April 2003 the Contracting Section of the Clwyd-Powys Archaeological Trust (CPAT) was invited by Symonds Group Ltd, to prepare a project design and fee proposal for undertaking a Stage One Archaeological Assessment for the construction of new access roads for the Wrexham Industrial Estate, in accordance with the Department of Environment, Transport and Regions' *Design Manual for Roads and Bridges* Volume 11 Section 3 Part 2, Section 8/1 (1993). The scope of the assessment was defined in a brief prepared by Ms K Kucharski of Wrexham Archaeology Service in her capacity as archaeological curator for the region.
- 1.2 The assessment area extends over about 1,220ha (12.2km²) of predominantly agricultural land to the east and south-east of Wrexham, and this report offers no more than a preliminary statement of the archaeology of that area.
- 1.3 After the Stage One Archaeological Assessment had been completed, the client identified several possible route corridors for the new access roads within the area. The potential impact of each of these corridors on the archaeological resource as it is known from the Stage One Archaeological Assessment is considered in Section 6. It should be stressed that no detailed field survey has been undertaken as part of the assessment and further unrecorded archaeological sites may well lie along the various route options so far proposed. A further stage of archaeological assessment should therefore be undertaken once the route options have been more clearly defined.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The assessment area extends in the north from the eastern tip of urban Wrexham and the site of the former Borrass Airfield and subsequently a sand and gravel quarry, narrows as it passes the Wrexham Industrial Estate around Abenbury, and widens again as it passes Marchwiell and takes in Cross Lanes, before terminating close to the River Dee. As noted above this area is a large one of approximately 12.2 km², and in view of its long history of settlement, might be expected to reveal considerable traces of past human activity.
- 2.2 The landscape of this heavily agricultural portion of Wrexham Maelor is generally one of muted topography, the ground gently undulating, except for some steeper but relatively minor slopes near the former Borrass Airfield, and again in the extreme south where the ground pitches off the river terrace and onto the flood plain of the Dee. The area is bisected by the River Clywedog, as it runs eastwards towards the Dee, and several smaller streams.
- 2.3 The underlying rocks of the area are generally sedimentary deposits of the Westphalian Series of the Carboniferous Era and undivided Triassic rocks (BGS Geological Map of Wales). The soils derived from this underlying geology are relatively complex, but include deep well-drained sandy and coarse loamy soils of the Newport 1 Association and fine loamy and clayey soils of the Salop Association which can be prone to seasonal waterlogging. Adjacent to the Clywedog are reddish river alluvium of the Compton Association, clayey soils which can be at risk of flooding (Soil Survey of England and Wales map and legend; Rudeforth *et al* 1984, 112; 204; 222).

3 THE DESK-BASED STUDY

- 3.1 The assessment involved the examination of all readily available primary and secondary records relating to the area, including documentary, cartographic and aerial photographic sources. Archives and repositories that were consulted included the County Sites and Monuments Record (SMR) maintained by CPAT at Welshpool; the National Library of Wales (NLW) in Aberystwyth and the National Monuments Record (NMR), a department of the Royal

Commission on Ancient and Historical Monuments in Wales (RCAHMW), also in Aberystwyth; the County Record Office at Hawarden (CROH) in Flintshire; and the County Record Office at Ruthin (CROR) in Denbighshire. The RCAHMW also provided access to vertical aerial photography held by themselves and by the Central Register of Air Photography for Wales, a section of the Welsh Assembly in Cardiff.

- 3.2 A search of the SMR revealed 136 known sites within, or immediately adjacent to the study area. Of these a very large proportion - 114 or 83% - were ponds or marl pits, and these figures with their emphasis on one particular site type, demonstrate just how little archaeological work has been conducted in the region in the past.

- 3.3 In addition to the recorded archaeological sites the study area also includes at least one area of recognised palaeoenvironmental potential, to the south of Borrass Farm (SJ 353524; fig. 1), related to a geological feature termed a kettle hole. Kettle holes were formed after the last glaciation, around 10,000 BC, when large blocks of ice melted, which had been buried by glacial moraine, leaving substantial depressions in the ground surface. As these depressions became infilled, they would have incorporated organic matter such as seeds, pollen and wood which, under waterlogged conditions, can be preserved, providing a significant palaeoenvironmental record.

3.4 **Prehistory** (10,000 BC- 43 AD)

There are seven recorded prehistoric sites within the vicinity of the study area: Mesolithic flints from around Borrass Farm (PRN 101653-4); two Neolithic axe heads from Bryn-Gryfydd (PRN 101692) and Darland (PRN 77791); two Bronze Age axes from the Wrexham Industrial Estate (PRN 100142) and Plas Issa (PRN 106412); and a hoard of Bronze Age metalwork (PRN 100386) found at Acton Nursery. These provide an indication that the area generally was occupied from the Mesolithic period onwards, and although no prehistoric occupation sites have yet been discovered, there can be little doubt such sites do exist.

3.5 **Roman** (43 AD to 410 AD)

Although there are no known Roman sites within the immediate area, the discovery of a Roman coin at Llwyn Knottia (PRN 106386) and recent discoveries at Plas Coch, Wrexham (Greuter *et al.* 1994 and 1995; Wait 1996), indicate the presence of Roman occupation in the surrounding area, and the likelihood of Roman settlement within the assessment area. Furthermore, the study area is also relatively close to the Roman military depot at Holt, which lay immediately to the west of the Dee Valley and served the legionary fortress of Chester, and there are undoubtedly further sites associated with the Roman army, both forts and camps and the roads that served them, yet to be identified in the region as a whole.

3.6 **Medieval** (5th century to 15th century AD)

Of the early medieval period up to the time of the Norman Conquest, virtually nothing is known. Marchwiell church may be on a site whose origins go back to this early period, and the same is probably true of Wrexham, while Bangor-on-Dee was the site of an important monastery in the 7th century. But of the secular settlement that complemented the ecclesiastical foundations there is as yet no sign.

- 3.7 The medieval landscape was almost certainly fully utilised. Open-fields consisting of large numbers of contiguous strips were commonplace, and their obvious remains, fossilised in later boundaries can be seen in several places, most clearly to the south of Cross Lanes. These strips were ploughed in such a way as to create cultivation ridges, known popularly as ridge and furrow, and many areas of ridging still survive in Wrexham Maelor, although there has been significant loss of such features since the Second World War. Cultivation ridges can be detected

from the air in the right conditions, but careful ground survey is necessary to establish a full picture of survival, and as yet we are not in a position to present a definitive map showing surviving examples. Those areas of ridge and furrow depicted in Figs 1-3 have been derived from vertical aerial photography, the sources for which are listed in Section 11.3.

- 3.8 As yet few if any of the settlements and farms whose owners and tenants created the cultivation ridges have been recognised. Occasional higher status sites of medieval origin such as Borrás Hall (PRN 102853) are known, but the more modest farms that must have existed are elusive.

3.9 **Post-medieval** (15th century to 18th century AD)

Much more is known about the post-medieval landscape. Many of the farms that still operate are likely to have had their origins in these centuries if not earlier. It is generally assumed, too, that it was during this period that much of the land was enclosed, creating the separate fields that can be seen today. Many and probably a large majority of these enclosed fields had its own marl pit to provide material for improving the quality of the soil, and perhaps, too, the quality of the pasture. Generally, these are shown on early maps, but others, long disused, appear as soilmarks on aerial photographs. The distribution of marl pits, as identified from Ordnance Survey mapping, is depicted in Fig. 1.

3.10 **Early Modern and Modern** (19th century to 20th century AD)

The modern history of the area is dominated by the development of Borrás Airfield which has been documented in detail by Pratt and Grant (2002), and it is from their volume that the following summary is derived. The origins of the airfield date back to 1917-20 when fields at Borrás Lodge were used by Nos 4 and 51 Training Squadrons/Schools of the RFC/RAF based at Shotwick (Sealand) and Hooton Park for 'circuits and bumps', to practice emergency landings and the like. The same fields were also used for regular flying by both the Lancashire Aero Club and the Liverpool and District Aero Club, and for a series of air displays during the 1930s.

- 3.11 Early in 1940 the fields at Borrás were again pressed into service for training flights. The main period of construction for the airfield was, however, between December 1940 and June 1941, and was undertaken by Alfred McAlpine. The airfield was built primarily to accommodate a night-fighter squadron for the air defence of Liverpool and Manchester and eventually came under 9 Group Fighter Command, with 96 Squadron in residence. The airfield closed after the war and was eventually sold in 1959, to the United Gravel Company, a subsidiary of Alfred McAlpine. Quarrying operations did not commence until the mid 1970s and by 1977, Borrás Quarry was the largest sand and gravel pit in the former county of Clwyd, accounting for almost one third of the county's total sand and gravel production.

- 3.12 The airfield and surrounding agricultural land was the scene of a number of aircraft crashes during the Second World War, 12 of which have been identified during the present study, although no details were readily available to suggest the type aircraft involved or the likely nature of any remains.

4 **FIELD SURVEY**

- 4.1 The field survey was undertaken on the 8-9 May 2003. As no preferred route has been adopted at this point, there was no agreement in place to allow direct access to each field within the study area. Consequently, the survey was undertaken using public rights of way to visit or view as many sites as possible. Due to the limitations of access it was generally only possible to view sites from a distance, sufficient to gain an impression of their form and significance, and for a number of sites no visit could be undertaken. Further, more detailed field survey should therefore be envisaged once a preferred route has been adopted.

5 ARCHAEOLOGICAL SUMMARY

- 5.1 Each site of archaeological interest, identified during the desktop and field surveys, has been provisionally classified according to its perceived significance. The categories are those given in the Cadw: Welsh Historic Monuments draft *Archaeology and the Trunk Road Programme in Wales: a Manual of Best Practice*. These are based in turn - with the exception of Category E - on those given in the Department of Environment, Transport and Regions' *Design Manual for Roads and Bridges* Volume 11 Section 3 Part 2 (1993).

Category A sites of national importance. It is presumed that sites in this category will be preserved and protected *in situ*.

Category B sites of regional or county importance which are of particular importance within the region. Preservation *in situ* is the preferred option for these sites, but if loss or damage is unavoidable, appropriate detailed recording should be undertaken.

Category C sites of district or local importance which are not of sufficient importance to justify preservation if threatened, but which merit adequate recording in advance of loss or damage.

Category D minor and damaged sites which do not merit inclusion in a higher category, and for which rapid recording should be sufficient.

Category E sites whose importance could not be fully determined as a result of the assessment and may warrant further evaluation.

- 5.2 The location of each archaeological site is shown in Figure 1. The distribution of marl pits and ridge and furrow is also depicted, although for the purpose of this report these features have not been listed individually in the following tables.

5.3 Category A sites

There are 6 category A sites within the study area, all of which are listed buildings of special architectural and historic interest. There are, however, no scheduled ancient monuments.

PRN	Name	Type	Period	Condition	NGR
36745	Llan y Pwll, Hugmore Lane New Holt Lodge Farm	House	Post Medieval	Intact	SJ3796151272
36746	Borras Farm	House	Post Medieval	Intact	SJ3525652505
41778	Bedwell Hall	House	17th century ?	Intact	SJ3758447312
41779	Pum-Rhyd	House	17th century ?	Intact	SJ3748048118
41783	Parkey Farmhouse	House	18th century ?	Intact	SJ3802347830
102853	Borras Hall	House	Medieval	Intact	SJ3712152593

PRN 36745 Llan y Pwll, Hugmore Lane New Holt Lodge Farm
Intact building, listed Grade II.

PRN 36746 Borras Farm
Intact building, listed Grade II

PRN 41778 Bedwell Hall
Intact 17th-century building, listed Grade II, with some more modern extensions to its north side. A new housing estate has now extended northwards right up to the hall.

PRN 41779 Pum-Rhyd

17th-century brick-built farmhouse and outbuildings in good condition. Listed Grade II.

PRN 41783 Parkey Farmhouse

Intact 18th-century 3 storey farmhouse of red brick with sandstone quoins with slate roof. Listed Grade II.

PRN102853 Borrás Hall

Early 17th-century former manor house, listed Grade II*. Two storeys. The present H-plan brick farmhouse incorporates the hall and solar wing of a substantial late-medieval timber hall house. It can be identified with Plas ym Mwrás, so named in documentary sources but assumed lost (Suggett 2001, 88-9).

5.4 Category B sites

There are 6 category B sites in the study area.

PRN	Name	Type	Period	Condition	NGR
26205	Croes Yorkin, Hugmore Lane	House	Post Medieval ?	Unknown	SJ3700051000
26254	The Five Fords	Farm	Post Medieval	Intact	SJ3660048250
26984	Burial Ground Field, Marchwiel	Inhumation	17th century ?	Damaged	SJ3749048600
86007	Bryn Estyn	House	19th Century	Intact	SJ3618251186
86020	Maes y Nant house	House	19th Century	Intact	SJ3736546949
104467	Holt Road Smithy	Smithy	Post Medieval	Damaged	SJ3668051830

PRN 26205 Croes Yorkin, Hugmore Lane

Post-medieval house, its exact location and condition unknown.

PRN 26254 The Five Fords

Complex of red brick farm buildings, the farm house for which - PRN 102868 - has been destroyed and replaced by a modern house.

PRN 26984 Burial Ground Field, Marchwiel

The burial place of Daniel Lloyd a supporter of Cromwell and dissenter who refused to be buried in consecrated ground. The grave was originally marked by a stone reading:-

"Here is asleep Daniel Lloyd, servant of Jesus Christ, interred November 19th 1655".

The stone was still legible in 1911 but the grave is now covered by Lloyd's warehouses. It was not disturbed during the building of the warehouse (Phillpotts 1996).

PRN 86007 Bryn Estyn

Bryn Estyn house and parkland. Series of buildings within wooded parkland with drives, pools, well etc. Depicted on OS 25" 1912 Denb 29.5. Subsequently a childrens home.

PRN 86020 Maes y Nant house

House depicted on OS 25" 1899 Denb 36.2. The house is now a hotel. It is probably of 19th century date and is now surrounded by landscaped grounds. The "Maes" name denotes former open fields. Ridge and furrow is visible in a field to the north-west.

PRN 104467 Holt Road Smithy

The smithy building has been much altered and renovated, but some original brickwork is still visible in the western wall.

5.5 Category C sites

There are 2 category C sites in the study area.

PRN	Name	Type	Period	Condition	NGR
44422	RAF Wrexham (Borras Airfield)	Airfield	20th century	Unknown	SJ3623052700
104466	Borras Wood boundary stone II	Boundary stone	Post Medieval	Intact	SJ3760052720

PRN 44422 RAF Wrexham (Borras Airfield)

Opened in June 1941. Used initially by an Anti-Aircraft Co-operation Flight and then a fighter squadron. Flying Training Command took over the airfield in May 1943 and it served as a satellite station for RAF Calveley. The airfield was closed sometime after June 1945 and little now remains, the area now being largely occupied by Borras Quarry.

PRN 104466 Borras Wood boundary stone II

Boundary stone situated in fenceline on the border of woodland. it is 0.45m high.

5.6 Category D sites

There are 23 category D sites in the study area.

PRN	Name	Type	Period	Condition	NGR
19377	Borras Hall seal	Findspot	Medieval	Unknown	SJ3710052590
26979	Wrexham, Fivefords Industrial Estate munitions store	Munitions store	20th century	Destroyed	SJ3757048510
77791	Darland axe find	Findspot	Neolithic	Unknown	SJ3800051800
86002	Llan y Pwll Chapel	Chapel	Post Medieval	Destroyed	SJ3764851997
86004	Holt Road Milestone	Milestone	Post Medieval	Unknown	SJ3664551866
86005	Holt Road Well	Well	Post Medieval	Damaged	SJ3629551817
86011	Ty'n y coed footbridge	Footbridge	19th Century	Destroyed	SJ3683848421
86017	Wrexham and Ellesmere Railway	Railway	19th Century	Near destroyed	SJ3678047687
86018	The Hollies Milestone	Milestone	Post Medieval	Unknown	SJ3701447342
100142	Cadbury factory axe	Findspot	Bronze Age	Unknown	SJ3858046600
100386	Acton Nursery Bronze Age hoard	Hoard (bronze)	Bronze Age	Unknown	SJ3480051800
101653	Borras Farm Flints	Find scatter	Mesolithic	Unknown	SJ3500052500
101654	Borras Flints	Findspot	Mesolithic	Unknown	SJ3475052350
101692	Bryn-gryfydd Stone Axe	Findspot	Neolithic	Unknown	SJ3503052350
102868	Five Fords Farm, site of	House	17th century ?	Destroyed	SJ3663048290
104463	Bryn Estyn Road Brickworks	Brickworks	Post Medieval	Destroyed	SJ3720051300
104464	Bryn Estyn Boundary Stone	Boundary stone	Post Medieval	Destroyed	SJ3593051220

104498	Hazel Brook Milestone	Milestone	Post Medieval	Destroyed	SJ3816052260
104511	Redwither Lane Smithy	Smithy	Post Medieval	Destroyed	SJ3746048520
104512	Five Fords Mill	Mill	Post Medieval	Destroyed	SJ3730048400
106386	Llwyn Knottia Roman Coin	Findspot	Roman	Damaged	SJ3570050700
106412	Plas Issa Axe	Findspot	Bronze Age	Damaged	SJ3640049700
106442	Erlas Lane Button	Findspot	Medieval	Damaged	SJ3700049600

PRN 19377 Borrass Hall seal

Personal seal (dated c.1300) of Madog, son of Madog found near Borrass Hall.

PRN 26979 Wrexham, Fivefords Industrial Estate munitions store

Former munitions store dating from 1940s.

PRN 77791 Darland axe find

Neolithic stone axe.

PRN 86002 Llan y Pwll Chapel

Llan y Pwll Chapel depicted on OS 25" 1887 Denb 29.6. Site of chapel which has been destroyed by road widening. There is a dilapidated corrugated iron and board buildings in a nearby garden which used to be the chapel school room.

PRN 86004 Holt Road Milestone

Milestone depicted on OS 25" 1912 Denb 29.5. Inscribed 'Holt 3 Wrexham 2'. No trace is now to be found and the site is presumed destroyed.

PRN 86005 Holt Road Well

Well depicted on OS 25" 1887 Denb 29.6. Beyond the east end of the garden of Keepers Lodge is a small pool, on S side of Holt Road, which is presumably the well.

PRN 86011 Ty'n y coed footbridge

Footbridge depicted on OS 25" 2nd ed Denb 29.13. Now no trace of the site and presumed destroyed.

PRN 86017 Wrexham and Ellesmere Railway

Railway opened 1895. Now dismantled.

PRN 86018 The Hollies Milestone

Milestone depicted on OS 25" 1899 Denb 36.2 Wrexham 3 Whitchurch 12. Now no trace and it is presumed destroyed.

PRN 100142 Cadbury factory axe

Late Bronze Age socketed axe looped with three short parallel ribs on each face. Found in 1938 on the site of the a chocolate factory.

PRN 100386 Acton Nursery Bronze Age hoard

Hoard of six unlooped palstaves and one possible chisel found c. 1875 in the garden of Acton Nursery.

PRN 101653 Borrass Farm Flints

Around 24 flints were found in 1976-7 in topsoil and in sand and gravel deposits. Also flints in an adjacent field identified as of Mesolithic date.

PRN 101654 Borrás Flints

Six flints (1 microblade of Mesolithic date, 3 flakes and 2 end scrapers) were found in the front garden of 19 Nothwood in 1977.

PRN 101692 Bryn-gryfydd Stone Axe

Polished stone axe 0.11m long found on the ground surface in 1981.

PRN 102868 Five Fords Farm, site of

Former farm dating from late 17th century and built in brick, three storeys. Demolished 1972-3.

PRN 104463 Bryn Estyn Road Brickworks

Brickworks building no longer extant but fields in this area display many bumps and hollows which presumable relate to the workings.

PRN 104464 Bryn Estyn Boundary Stone

No longer any trace of a boundary stone at this location.

PRN 104498 Hazel Brook Milestone

No longer any trace of the milestone at this location. Presumed destroyed.

PRN 104511 Hazel Brook Milestone

Former smithy shown on OS map of 1879. Buildings were known as Pen-y-bryn in 1912 but had disappeared by 1961 (Phillpotts 1996).

PRN 104512 Five Fords Mill

Former mill is shown on OS map of 1879. Site presumed destroyed.

PRN 106386 Llwyn Knottia Roman Coin

A very worn bronze coin of Hadrian was found to the north of Llwyn Knottia Farm.

PRN 106412 Plas Issa Axe

The blade of an Early Bronze Age socketed axe was found by metal detector 2--3inches below ground.

PRN 106442 Erlas Lane Button

Lead stud or button of the medieval or early post-medieval period, a surface find by metal detector.

5.7 Category E sites

There are 32 category E sites in the study area.

PRN	Name	Type	Period	Condition	NGR
72335	Sesswick Halt	Railway station	20th century	Unknown	SJ3791047200
72336	Pickhill Halt	Railway station	20th century	Unknown	SJ3864046820
72339	Bangor-is-y-coed, cropmark	Enclosure ?	Dark Age ?	Unknown	SJ3890046200
86000	Llan y Pwll Orchard	Orchard	19th Century	Unknown	SJ3792051332
86001	Holt Lodge Well	Well	Post Medieval	Unknown	SJ3767351384
86003	Holt Road Smithy Well	Well	Post Medieval	Unknown	SJ3666151817

86006	Bryn Estyn Well	Well	Post Medieval	Unknown	SJ3607551180
86008	Talwrn building	Building	Post Medieval	Unknown	SJ3858647330
86009	Maelor Abbatoir soilmark	Enclosure ?	Unknown	Unknown	SJ37634795
86010	Ty'n y coed	House	Post Medieval	Unknown	SJ3691448967
86012	Five Fords Sluice III	Sluice	19th Century	Unknown	SJ3676147927
86013	Five Fords Sluice II	Sluice	19th Century	Unknown	SJ3696248162
86016	Five Fords Sluice I	Sluice	19th Century	Unknown	SJ3651147991
86019	Cross Lanes Building	Building	Post Medieval	Unknown	SJ3828547202
86021	Twll buildings	Building	Post Medieval	Unknown	SJ3849346479
86022	Redwither aircraft wreck	Wreck	20th Century	Unknown	SJ3662650916
86023	Tyn-twll Farm aircraft wreck	Wreck	20th Century	Unknown	SJ3582051678
86024	Gourton Hall aircraft wreck	Wreck	20th Century	Unknown	SJ3723851691
86025	Holt Lodge Farm aircraft wreck	Wreck	20th Century	Unknown	SJ3776951266
86026	Spring Grove aircraft wreck	Wreck	20th Century	Unknown	SJ3796350997
86027	Francis Lane aircraft wreck	Wreck	20th Century	Unknown	SJ3833851160
86028	Cornish Hall aircraft wreck	Wreck	20th Century	Unknown	SJ3844452128
86029	Hugmore aircraft wreck I	Wreck	20th Century	Unknown	SJ3763852147
86030	Hugmore aircraft wreck II	Wreck	20th Century	Unknown	SJ3752652178
86031	Borras Airfield aircraft wreck I	Wreck	20th Century	Unknown	SJ3575852197
86032	Borras Airfield aircraft wreck II	Wreck	20th Century	Unknown	SJ3582652278
86033	Borras Farm aircraft wreck	Wreck	20th Century	Unknown	SJ3521452672
86034	Clays building	Building	Post Medieval	Destroyed ?	SJ3728051350
86035	Redwither building I	Building	Post Medieval	Unknown	SJ3639550838
86036	Redwither building II	Building	Post Medieval	Unknown	SJ3632050554
101542	Parkiau fieldnames	Rabbit warren	Post Medieval	Unknown	SJ3570051500
101856	Bromfield Castle (site of)	Castle	Medieval	Destroyed	SJ3600050000

PRN 72335 Sesswick Halt

Halt opened on the Wrexham and Ellesmere Railway in 1914.

PRN 72336 Pickhill Halt

Halt opened on the Wrexham and Ellesmere Railway in 1938.

PRN 72339 Bangor-is-y-coed, cropmark

A possible circular cropmark identified from aerial reconnaissance, although neither confirmed or well located.

PRN 86000 Llan y Pwll Orchard

Orchard depicted on OS 25" 1887 Denb 29.6. Area is now a private garden with fence and trees along roadside.

PRN 86001 Holt Lodge Well

Well depicted on OS 25" 1887 Denb 29.6.

PRN 86003 Holt Road Smithy Well

Well depicted on OS 25" 1887 Denb 29.6.

PRN 86006 Bryn Estyn Well

Well depicted on OS 25" 1912 Denb 29.5.

PRN 86008 Talwrn building

Building or house shown on Bangor Tithe map 1840 (see Fig. 4). No building survives although there is a platform with rough vegetation about 15m into field.

PRN 86009 Maelor Abbatoir soilmark

The faint cropmark of a possible trapezoidal enclosure has been identified from aerial reconnaissance. This could conceivably be moated site of medieval date.

PRN 86010 Ty'n y coed

House or farm depicted on OS 25" 2nd ed. Denb 29.13.

PRN 86012 Five Fords Sluice III

Sluice depicted on OS 25" 2nd ed Denb 29.13.

PRN 86013 Five Fords Sluice II

Sluice depicted on OS 25" 2nd ed Denb 29.13.

PRN 86016 Five Fords Sluice I

Sluice depicted on OS 25" 2nd ed. Denb 29.13.

PRN 86019 Cross Lanes Building

Building depicted on OS 25" 1899 Denb 36.2. Any remains of the building appear to have been levelled although it is possible that sub-surface remains survive.

PRN 86021 Twll buildings

Buildings depicted on OS 25" 1899 Denb 36.2. The area has been levelled and is now used for storing silage bales. There is a terraced platform above the stream which may be the site of the buildings.

PRN 86022 Redwither aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86023 Tyn-twll Farm aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86024 Gourton Hall aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86025 Holt Lodge Farm aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86026 Spring Grove aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86027 Francis Lane aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86028 Cornish Hall aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86029 Hugmore aircraft wreck I

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86030 Hugmore aircraft wreck II

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86031 Borrass Airfield aircraft wreck I

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86032 Borrass Airfield aircraft wreck II

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86033 Borrass Farm aircraft wreck

Second World War aircraft wreck site (Pratt & Grant 2002, 169). No further details.

PRN 86034 Clays building

Two adjacent buildings are shown on the Gourton Tithe Map of 1838 (see Fig. 5). The area is now a golf course and landscaping may have destroyed any remains. CPAT 03

PRN 86035 Redwither building I

Two buildings are shown on the Tithe map for Erilas Township, Gresford, 1842 (see Fig. 6). No upstanding remains survive, although there is a dense patch of nettles against the east side of hedge, c. 30m x 12m, which may indicate site of buildings.

PRN 86036 Redwither building II

Two buildings are shown on the Tithe map for Erilas Township, Gresford, 1842 (see Fig. 6). No obvious trace of the buildings survives.

PRN 101542 Parkiau fieldnames

Four fields in Bieston township depicted in a survey of 1620 as 'parke y conynge', suggesting a rabbit warren. An earlier survey of 1545-6 states that the area was a coney warren for Holt Castle park.

PRN 101856 Bromfield Castle (site of)

Bromfield Castle was, according to the Annals of Chester, burnt by the Welsh on 3rd March 1140. The exact location has never been identified.

- 5.8 There is also the possibility for further unrecorded sites to be present within the study area, either as upstanding remains, or as buried archaeological deposits.
- 5.9 The ubiquitous marl pits and the less common tracts of ridge and furrow have not been individually listed and described, at this stage. Most of the former would be classed as Category D, while the latter would generally come under Category C, though outstanding survivals might be Category B.

6 ROUTE OPTIONS AND POTENTIAL IMPACTS

- 6.1 The potential impact on the archaeological resource of each newly proposed route option (see para 1.3) is summarised below, based in each case on a 100m-wide route corridor.

Route N1

- 6.2 Three recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the sites. In addition, an area of ridge and furrow cultivation would also be affected.

PRN	Name	Type	Category	NGR	Impact
86001	Holt Lodge Well	Well	E	SJ3767351384	Potential loss
86025	Holt Lodge Farm aircraft wreck	Wreck	E	SJ3776951266	Potential loss
86026	Spring Grove aircraft wreck	Wreck	E	SJ3796350997	Potential loss

Route N2

- 6.3 Five recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of these sites. In addition, an area of ridge and furrow cultivation and a number of marl pits will also be affected.

PRN	Name	Type	Category	NGR	Impact
86001	Holt Lodge Well	Well	E	SJ3767351384	Potential loss
86003	Holt Road Smithy Well	Well	E	SJ3666151817	Potential loss
86005	Holt Road Well	Well	D	SJ3629551817	Potential loss
86025	Holt Lodge Farm aircraft wreck	Wreck	E	SJ3776951266	Potential loss
86026	Spring Grove aircraft wreck	Wreck	E	SJ3796350997	Potential loss

Route N3

- 6.4 Five recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the sites. In addition, an area of ridge and furrow cultivation will also be affected.

PRN	Name	Type	Category	NGR	Impact
86001	Holt Lodge Well	Well	E	SJ3767351384	Potential loss
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss
86024	Gourton Hall aircraft wreck	Wreck	E	SJ3723851691	Potential loss
86025	Holt Lodge Farm aircraft wreck	Wreck	E	SJ3776951266	Potential loss
86026	Spring Grove aircraft wreck	Wreck	E	SJ3796350997	Potential loss

Route N4

- 6.5 Four recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the sites.

PRN	Name	Type	Category	NGR	Impact
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss
86025	Holt Lodge Farm aircraft wreck	Wreck	E	SJ3776951266	Potential loss
86026	Spring Grove aircraft wreck	Wreck	E	SJ3796350997	Potential loss
86034	Clays building	Building	E	SJ3728051350	Potential loss

Route N5

- 6.6 Two recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the sites.

PRN	Name	Type	Category	NGR	Impact
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss
86025	Holt Lodge Farm aircraft wreck	Wreck	E	SJ3776951266	Potential loss

Route N6

- 6.7 One recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the site. In addition, a marl pit may also be affected at the south-eastern end of the route.

PRN	Name	Type	Category	NGR	Impact
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss

Route N7

- 6.8 One recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the site. In addition, an area of ridge and furrow and a number of marl pits may also be affected at the south-eastern end of the route.

PRN	Name	Type	Category	NGR	Impact
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss

Route N8

- 6.9 Two recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of the site. In addition, an area of ridge and furrow will also be affected at the south-eastern end of the route.

PRN	Name	Type	Category	NGR	Impact
86022	Redwither aircraft wreck	Wreck	E	SJ3662650916	Potential loss
86023	Tyn-twill Farm aircraft wreck	Wreck	E	SJ3582051678	Potential loss

Route C1

- 6.10 Two recorded archaeological sites may be impacted upon, although further assessment will be required to assess the nature and archaeological potential of house site PRN 86010, while PRN 106442 is only a record of a metal detector find which could be indicative of more significant remains within the area. In addition, an area of ridge and furrow will also be affected as well as a number of marl pits.

PRN	Name	Type	Category	NGR	Impact
86010	Ty'n y coed	House	E	SJ3691448967	Potential loss
106442	Erlas Lane Button	Findspot	D	SJ3700049600	Finds only

Route C2

- 6.11 There are no currently recorded archaeological sites that might be impacted upon by the route.

Route C3

- 6.12 The only recorded archaeological site which might be impacted upon is a recorded metal detector find which could be indicative of more significant remains within the area. In addition, an area of ridge and furrow will also be affected.

PRN	Name	Type	Category	NGR	Impact
106442	Erlas Lane Button	Findspot	D	SJ3700049600	Finds only

Route S1

- 6.13 The only recorded archaeological site adjacent to the route is a milestone which has already apparently been lost, although an area of ridge and furrow will also be affected as well as a number of marl pits.

PRN	Name	Type	Category	NGR	Impact
86018	The Hollies Milestone	Milestone	D	SJ3701447342	Already destroyed

Route S2

- 6.14 There are no recorded archaeological sites adjacent to the route, although an area of ridge and furrow will be affected as well as a number of marl pits.

Route S3

- 6.15 There are no recorded archaeological sites adjacent to the route, although an area of ridge and furrow will be affected as well as a number of marl pits.

Route S4

- 6.16 There are no recorded archaeological sites adjacent to the route, although an area of ridge and furrow will be affected as well as a number of marl pits.

Route (un-numbered)

- 6.17 There are no recorded archaeological sites adjacent to the route, although an area of ridge and furrow will be affected as well as a number of marl pits.

7 CONCLUSIONS AND RECOMMENDATIONS

- 7.1 The assessment area extends over a large tract of countryside, and not surprisingly a significant number of sites of archaeological interest have been identified. The potential impact of each proposed route has been considered above, based on the results from the desk-based study and limited field survey within the general study area. However, at this stage no detailed archaeological field survey has been undertaken for the proposed routes themselves and as this is likely to reveal further archaeological sites it is considered inappropriate to identify mitigation strategies at present.
- 7.2 An examination of the distribution of archaeological sites revealed to date in comparison to the proposed route corridors suggests that the majority of the currently known sites will not be affected by proposed scheme. Where a potential impact has been identified, the majority of sites are within Category E, indicating that further evaluation would be required to determine the nature, condition and significance of those sites.
- 7.3 In general terms, however, it can be assumed that the suggested mitigation for Category A and most Category B sites would be *preservation in situ* (see below for explanation). *Preservation by record* would usually be recommended for Category C and probably Category D sites, unless circumstances specific to a particular site dictated otherwise. Category E sites would require *evaluation*, as might some sites in higher categories, depending on the nature of the proposed impact. It should also be stressed at this stage that the archaeological curator might decide on his/her own recommendations.
- 7.4 **Terminology**
The following standard archaeological terms are used below as recommended mitigation measures:
- Preservation by record:* where proposals will inevitably lead to the loss of a site sufficient recording should be undertaken to provide a full, accurate and permanent record of its nature, form, significance and dating. Preservation by record can take a number of forms, depending on the nature of the site in question, and may be achieved with or without excavation and could include any or all of the following: written record; drawn record; photographic record; artefactual record; survey; and environmental sampling.
- Preservation in situ:* where a site is considered to be of sufficient significance it may be considered appropriate to preserve the site in its present form, condition and location.
- Evaluation:* where insufficient information exists regarding a site for a decision to be made regarding its future management a programme of investigative work may be proposed. Such investigation may include geophysical survey, topographical survey and trial excavation.
- Watching brief:* a watching brief may be recommended to include archaeological monitoring of all relevant groundworks, including topsoiling, in order to identify and record any previously unknown archaeological remains which may be revealed. Sufficient time must be allowed for adequate recording of any remains that are encountered.
- 7.5 A more detailed field survey must be undertaken once the preferred route corridor (or corridors) has been defined.

8 ACKNOWLEDGEMENTS

- 8.1 We would like to thank the following for their assistance and co-operation; Medwyn Parry of the NMR, RCAHMW; Jeff Spencer, SMR Officer, CPAT; and the staff of the County Record Offices at Hawarden and Ruthin, and National Library of Wales, Aberystwyth.

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9.2 Cartographic Sources

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Ordnance Survey 3rd edition 25" Denbighshire 29.5, 1912

Ordnance Survey 1st edition 6" Denbighshire 29 and 36, 1871

Ordnance Survey 2nd edition 6" Denbighshire 29 and 36, 1900

Ordnance Survey Provision edition 6" Denbighshire 29 SW, 1938

Ordnance Survey Provision edition 6" Denbighshire 29 NW, 1949

Ordnance Survey Provision edition 6" Denbighshire 36 NW, 1949

b) Manuscript Maps

b1) Held by the County Record Office, Hawarden

1767 Estate map of lands near Wrexham (D/GW/661)
 1823 Acton Hall Estate records (D/AH/24)
 Sale plan and details of Borrass airfield, 1959. (D/E/2739)
 1861 Map of Tan y Llan Farm (D/E/644)
 mid 19th century map (DD/WY/5891)
 19th century map (DD/WY/5947)
 19th century map (DD/WY/5930)

b2) Held by the National Library of Wales, Aberystwyth

Tithe Survey of Gourton Township, Wrexham 1838
 Tithe Survey of Borrass Hovah Township 1839-40
 Tithe Survey of Borrass Rifre Township 1842-3
 Tithe Survey of Abenbury, Wrexham, 1838
 Tithe Survey of Bangor, 1840
 Tithe Survey of Marchwiell, 1840
 Tithe Survey of Erlas Township, Gresford, 1842

9.3 Aerial Photographic Sources

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APPENDIX 1: SPECIFICATION

WREXHAM INDUSTRIAL ESTATE ACCESS ROADS SPECIFICATION FOR AN ARCHAEOLOGICAL ASSESSMENT BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development involves the construction of access road improvements to Wrexham Industrial Estate. The Wrexham Archaeology Service, acting as archaeological advisors to the local authority, have determined that an archaeological assessment should be undertaken to assess the potential impact of the proposals on the archaeological resource. Accordingly, a Brief has been prepared which details the works required.
- 1.2 The assessment site occupies around 1,220ha to the east and south-east of Wrexham. A preliminary enquiry of the Regional Sites and Monuments Record indicates that there are at least 00 archaeological sites currently recorded within the area and there is also the possibility that previously unrecorded archaeological sites also lie within the area.

2 Objectives

- 2.1 The objectives of the assessment are:
 - 2.1.1 to reveal by means of a combination of desk based study and field survey, the nature, condition, significance and, where possible, the chronology of the archaeology within the area of the proposed development in so far as these aims are possible;
 - 2.1.2 to record any archaeological sites identified during the field survey;
 - 2.1.3 to prepare a report outlining the results of the assessment, incorporating sufficient information on the archaeological resource for a reasonable planning decision to be taken regarding the future management of the archaeology.

3 Methods

- 3.1 Stage one of the evaluation will involve the examination of all the readily available primary and secondary documentary, cartographic, pictorial, photographic and oral sources. Repositories consulted will include the following: County SMR, CPAT, Welshpool; the National Monuments Record, RCAHMS, Aberystwyth; the National Library of Wales, Aberystwyth; County Record Office, Hawarden; County Record Office, Ruthin.
- 3.2 Stage two will take the form of a field survey which at this stage will be limited to viewing known archaeological sites, together with those revealed during stage one, from public rights of way only. At this stage route corridors have not been defined and no access agreements are in place to permit a thorough field survey. The report will, however, indicate those sites which it has not been possible to visit and make broad recommendations for any further survey which may be required.
- 3.3 The survey will aim to record the form, condition and significance of sites where ever possible, with site visit details recorded on standard pro-forma sheets. As individual access is not envisaged at this stage, it will not be possible to undertake any comprehensive photographic recording.
- 3.4 Following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Curatorial Brief. This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Evaluation; Conclusions and

Recommendations and References, together with appropriate appendices on archives and finds. A draft report will be forwarded to the curator prior to the production of the final report.

- 3.6 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991).

4 Resources and Programming

- 4.1 The evaluation will be undertaken by a small team of skilled archaeologists under the overall supervision of Mr RJ Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the evaluation.
- 4.3 It is anticipated that the desktop study will be completed within 5 days, and the field survey will be completed within 3 days. The report will be completed by 16 May 2003. A copy of the report will be deposited with the Regional SMR. The curator will be informed of the timetable in order to arrange for monitoring if required.
- 4.4 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5 CPAT is covered by appropriate Public and Employer's Liability insurance.

N.W. Jones
24 April 2003

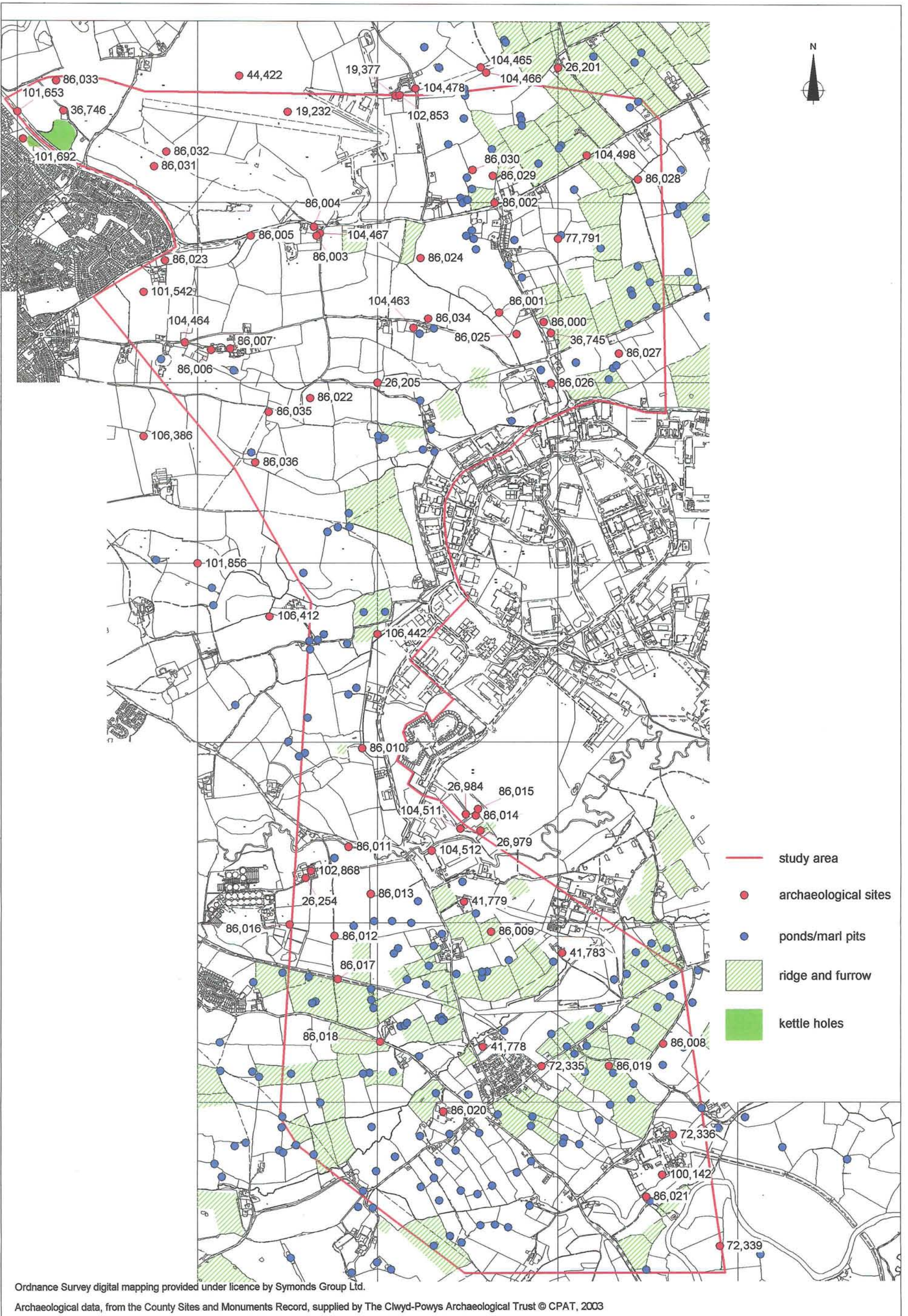
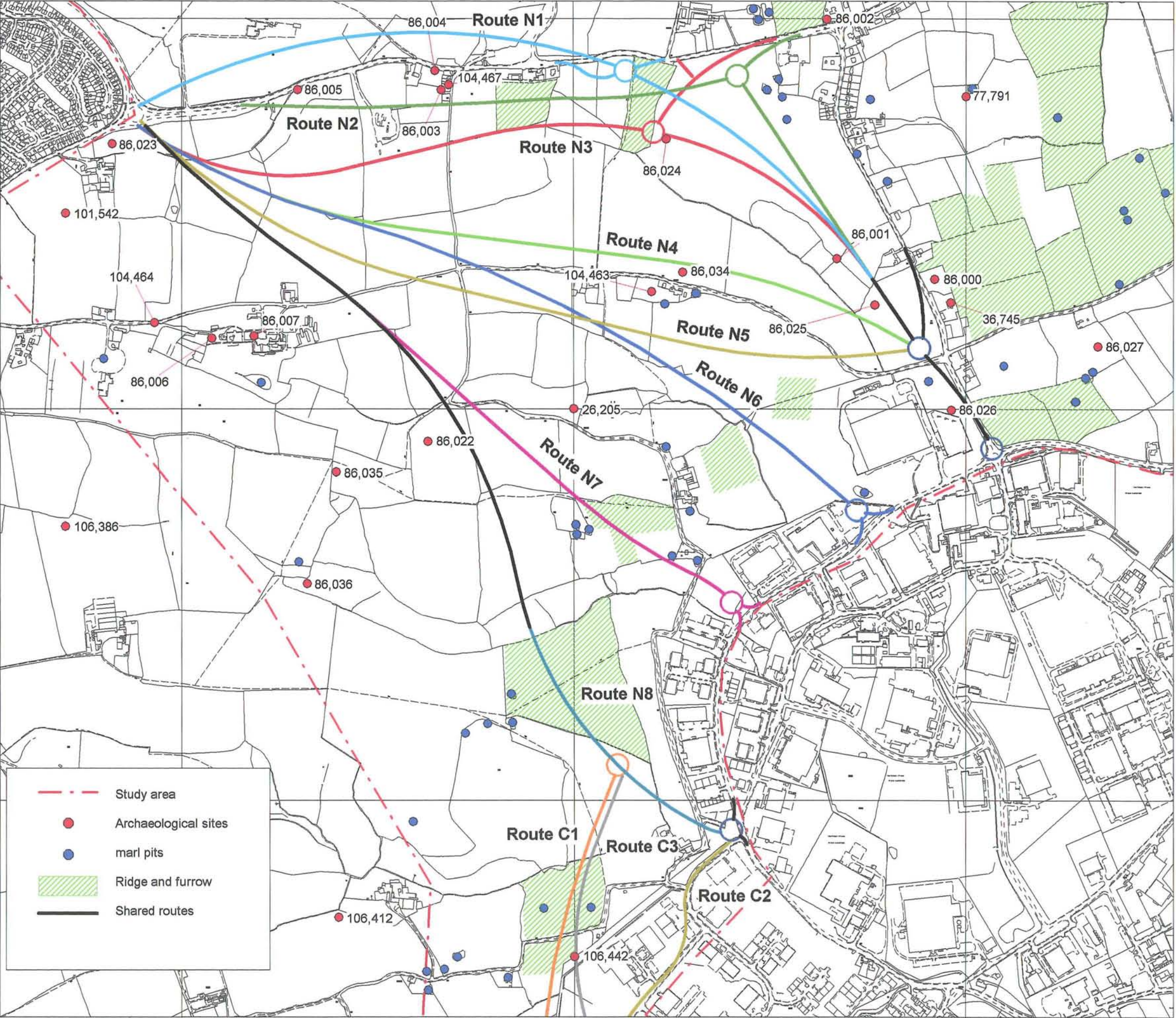
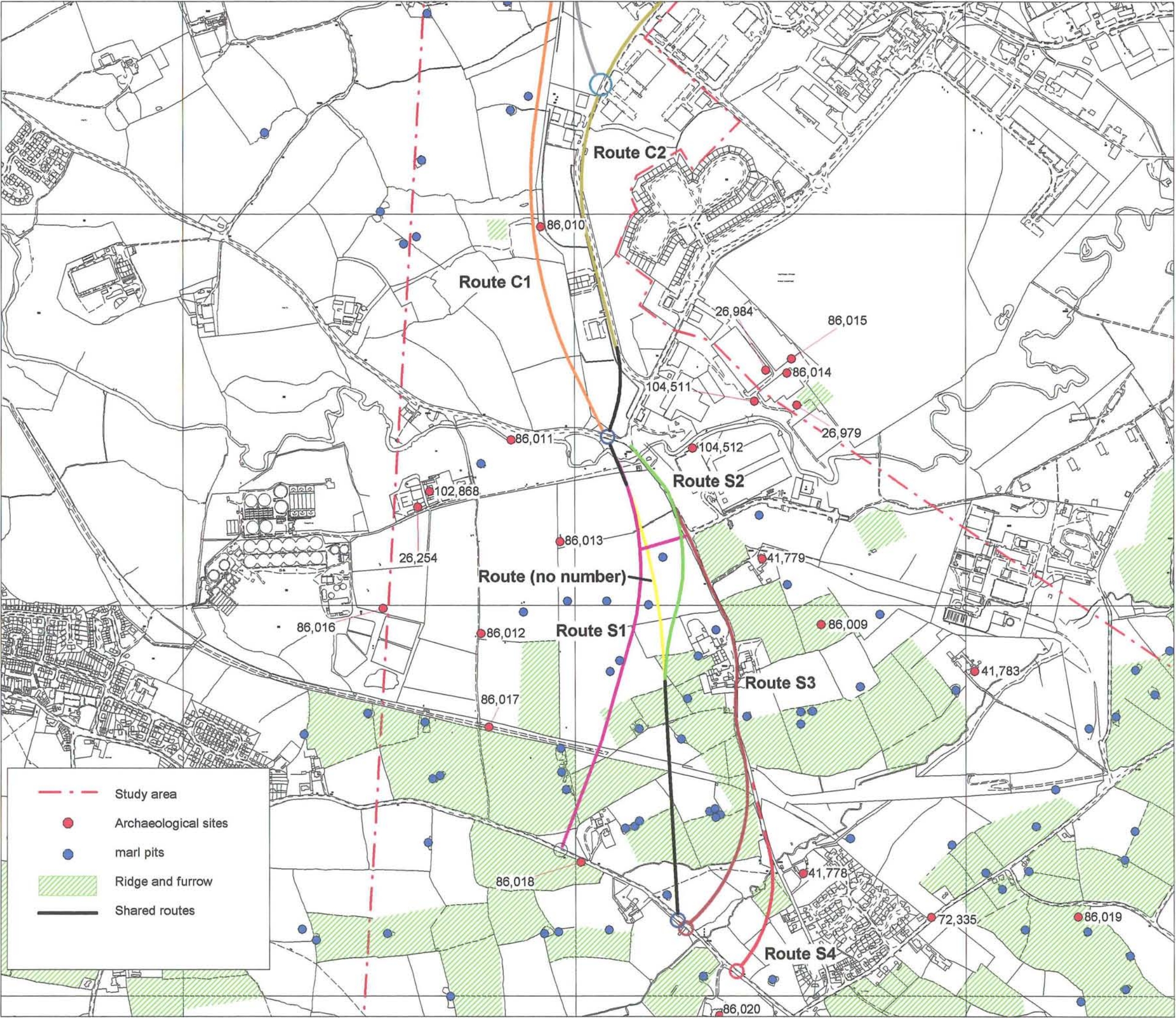


Fig. 1 Wrexham Industrial Estate Access Roads: Archaeological sites



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Fig. 2 Wrexham Industrial Estate Access Roads Northern Route Options: Archaeological sites



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Fig. 3 Wrexham Industrial Estate Access Roads Southern Route Options: Archaeological sites

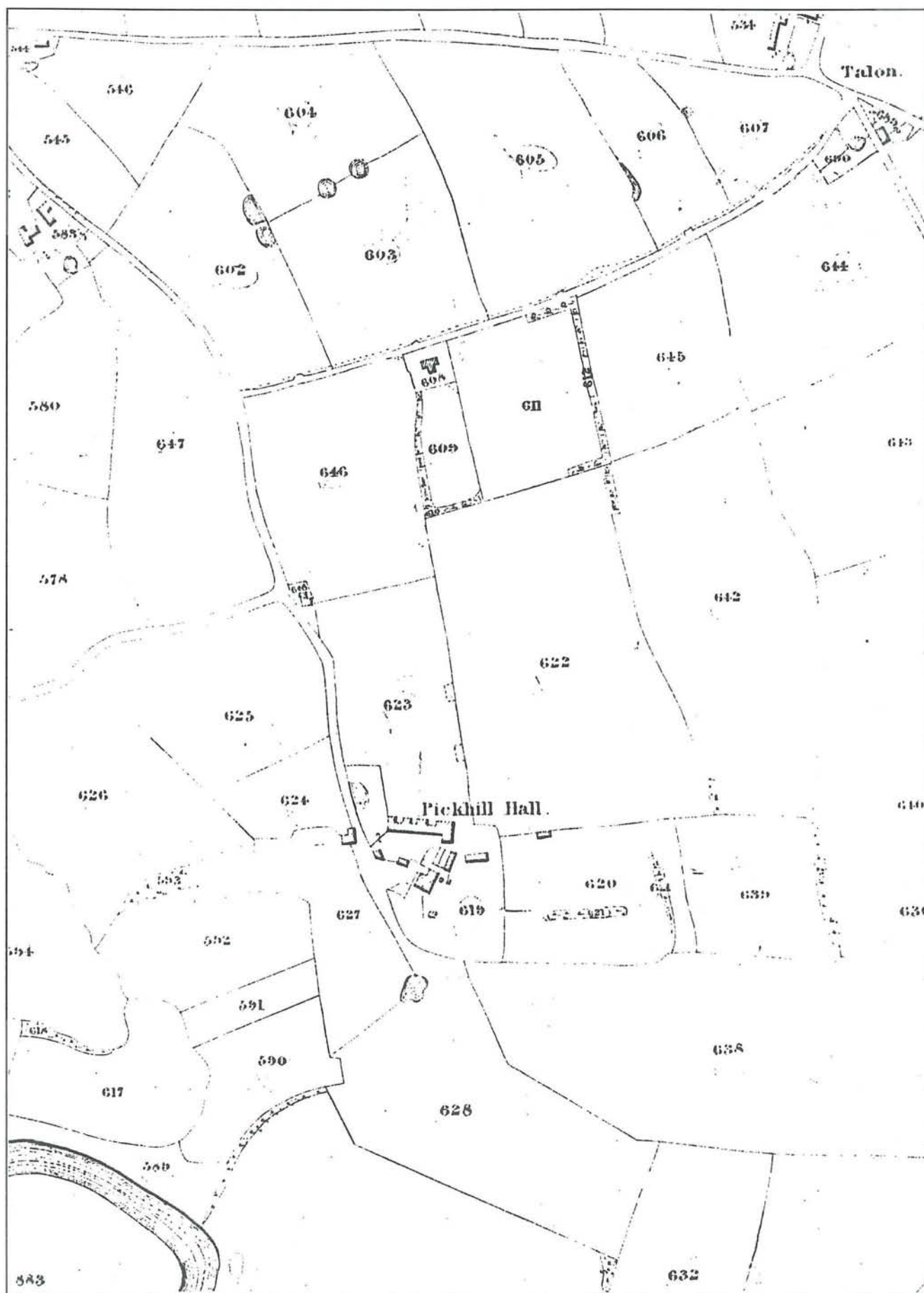


Fig. 4 Extract from Bangor Tithe Survey, 1840

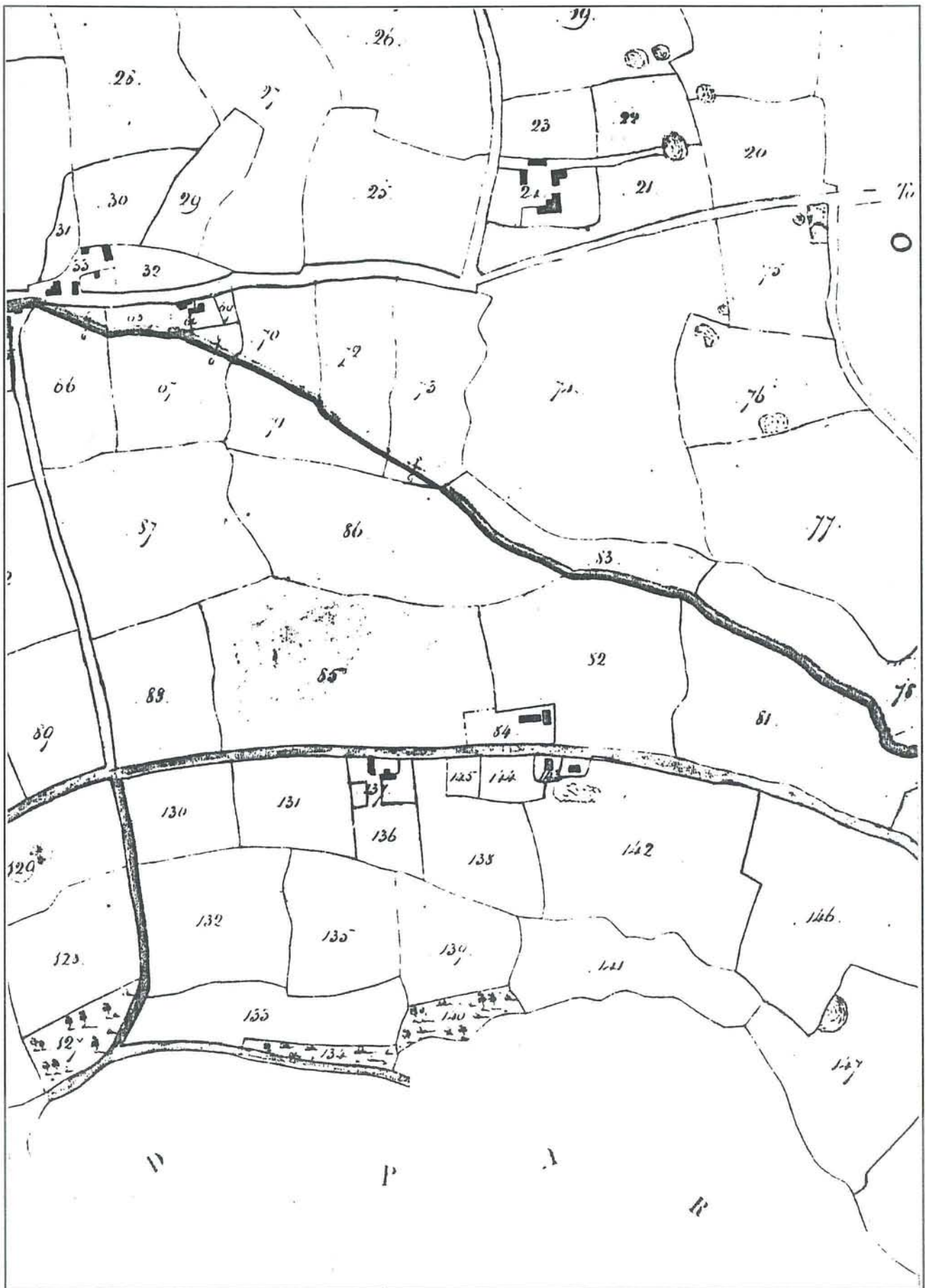


Fig. 5 Extract from Gourton (Wrexham) Tithe Survey, 1838



Fig. 6 Extract from Erlas (Gresford) Tithe Survey, 1842

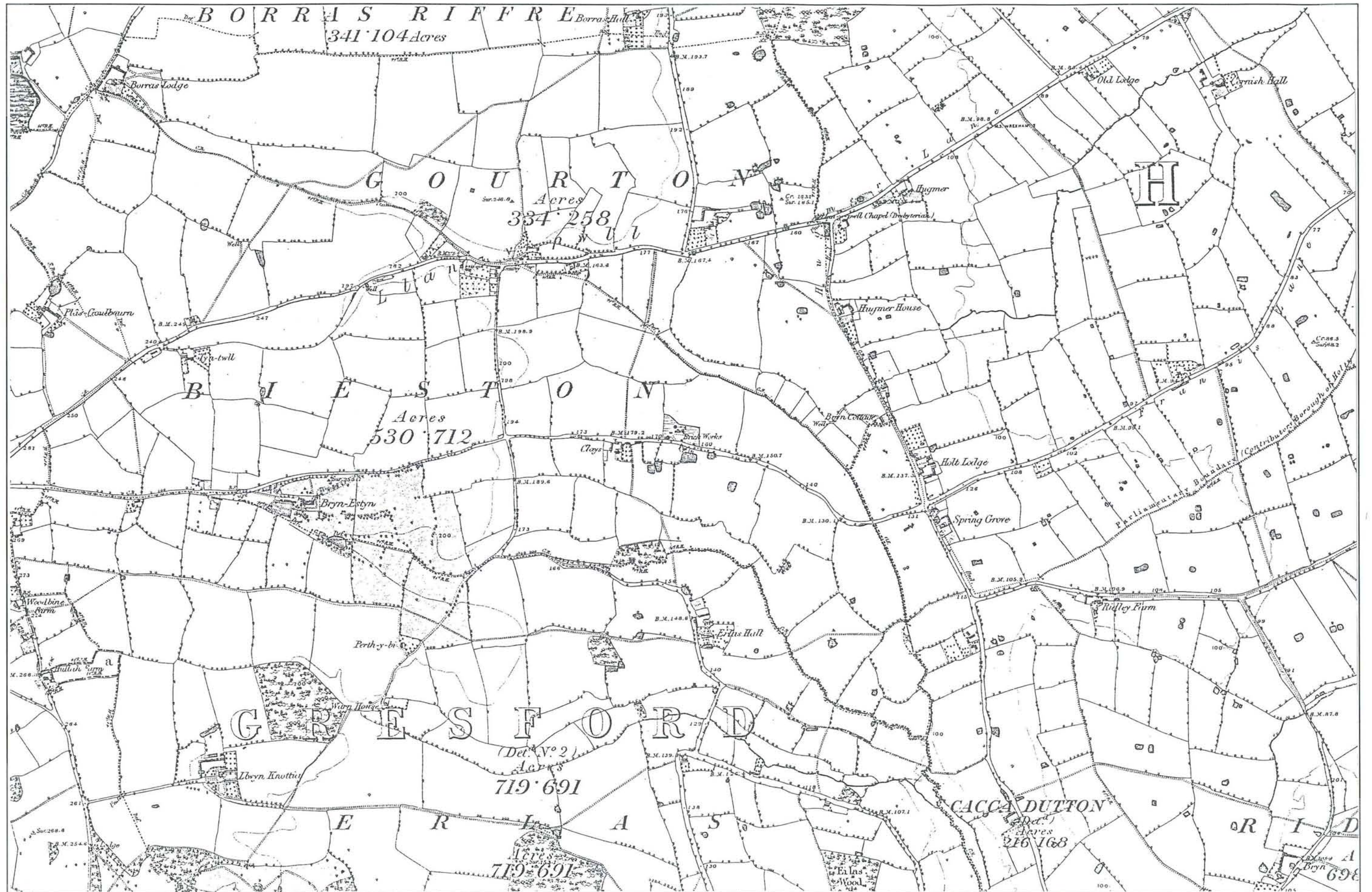


Fig. 7 Ordnance Survey 1st edition 6" Denbighshire 29NW, 1871

Fig. 8 Ordnance Survey 1st edition 6" Denbighshire 29 SW, 1871

Fig. 9 Ordnance Survey 1st edition 6" Denbighshire 36 NW, 1871