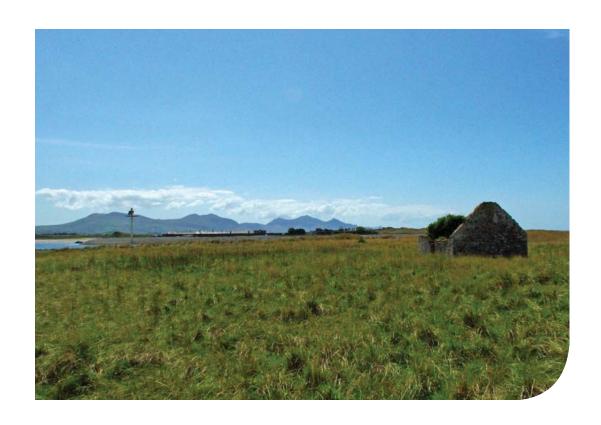
MEDIEVAL AND POST-MEDIEVAL SCHEDULING ENHANCEMENT

MEDIEVAL AND POST-MEDIEVAL ROADS

Southern Anglesey









MEDIEVAL AND POST-MEDIEVAL SCHEDULING ENHANCEMENT

MEDIEVAL AND POST-MEDIEVAL ROADS

Southern Anglesey

Project No. G2366

Report No. 1315

Prepared for: Cadw

May 2016

Written by: David Hopewell

Illustration by: David Hopewell

Cover Photograph: Abermenai point

Cyhoeddwyd gan Ymddiriedolaeth Achaeolegol Gwynedd Ymddiriedolaeth Archaeolegol Gwynedd Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT

Published by Gwynedd Archaeological Trust Gwynedd Archaeological Trust Craig Beuno, Garth Road, Bangor, Gwynedd, LL57 2RT

Copyright

The copyright of this report is held by Cadw and Gwynedd Archaeological Trust Ltd. The maps are based on Ordnance Survey mapping provided by the National Assembly for Wales with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 100017916 (2015).

Historic Mapping, reproduced here, is covered under Crown Copyright and Landmark Information Group. All rights reserved. Gwynedd Archaeological Trust Ltd., on behalf of Welsh Government 2015.

CONTENTS

Summary	1
1. INTRODUCTION	1
2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	1
3. METHODOLOGY	6
3.1 Desktop and digitisation	6
3.2 Fieldwork	7
3.3 Outreach	7
4. RESULTS	7
4.1 Digitisation	7
4.2 Fieldwork and targeted documentary research	9
4.2.1 Lon Bwbach (PRN 17839/2679)	11
4.2.2 Newborough to Aber Menai point (PRN 60325)	12
4.2.3 The Afon Cefni and the Malltraeth marshes	18
5. CONCLUSIONS	27
6. REFERENCES	28

G2306 MEDIEVAL AND POST-MEDIEVAL SCHEDULING ENHANCEMENT:

MEDIEVAL AND POST-MEDIEVAL ROADS PROJECT PT. 2 - SOUTHERN ANGLESEY

Summary

The project assessed the survival medieval and post-medieval roads of southern Anglesey with particular reference to John Evans' map of 1795. The map was digitised allowing it to be viewed in relation modern mapping. This dates from before the building of the Bridges across the Menai Strait and the building of the Malltraeth embankment when the roads were focussed on the Menai ferries. Fieldwork examined several lengths of unmodernised roads revealed by this process along with the former crossing points of Malltraeth marsh. The medieval road to Abermenai point and the remains of the Abermenai ferry-houses were found to be of particular importance.

1. INTRODUCTION

It was recognised that the post-Roman road network was under-represented on both the HER and the schedule of ancient monuments. The road network includes a diverse range of sites including medieval roads and trackways, drovers' roads, packhorse trails, estate roads, coach roads and turnpike roads.

The first phase of the project comprised a review of the main secondary sources of information and the digitisation of the main turnpike routes. It was recognised that many of these sources were primarily studies of documentary material and could not easily be related to surviving archaeology. A pilot area of fieldwork examining the early roads and turnpikes between Bethesda and Betws-y-coed revealed very well-preserved lengths of turnpike road and showed that the secondary sources of information did not include sufficient data to allow all turnpike routes to be digitised in detail (Davidson *et al* 2014).

The pilot project demonstrated that the road network of north-west Wales requires further archaeological and historical research. It was recommended that this should be carried out in several stages.

The area selected for the 2015-16 project was the southern half of Anglesey. The most complete record of the early road system in north-west Wales and Anglesey is the John Evans map of 1795. This shows the major routes in this period including many of the pre-turnpike routes that survived as packhorse trails and were still in regular use in the late 18th century. The first part of the project comprised the digitisation of the relevant area of Evans' map allowing the information to be related to the current road network along with a desktop study examining the secondary sources of information for southern Anglesey. This was followed by targeted fieldwork examining any significant routes that had been identified in the digitisation and desktop study. Scheduling recommendations were made based on the results of the fieldwork.

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Historic England draws an important distinction between trackways and roads

As here defined, the term 'trackway' refers to a linear route which has been marked on the ground surface over time by the passage of traffic. Trackways are usually relatively short routes for local use. A 'road', on the other hand, is a route which has been deliberately engineered. Roads tend to be major routes running for longer distances than trackways, often between towns. There are a few exceptions to these general rules. They include deliberately constructed prehistoric timber trackways and 5th- to 17th-century unmade roads (English Heritage 2011, 2)

The Romans built at least 10,000 miles of roads in England (ibid) and in the region of 1000 miles in Wales (estimated from Fig. 4.3 in Burnham and Davies 2011). In the post-Roman period many of the roads stayed in use and formed the basis of parts of the subsequent road system. Several well-known examples in England, such as Watling Street, are still in use and several turnpikes were built on the

line of Roman roads in north Wales (Hopewell 2013,15-16).

Few major roads were built in Wales between the end of the Roman occupation and the 18th century. Most roads in this period were merely trackways established by the action of the feet of man and beast. Prior to the 18th century the roads of Wales were well known for being in very poor condition. A limited amount of information regarding the road network in the medieval period can be gleaned from historical sources such as Gerald of Wales' journeys around Wales in 1188, the Brut y Tywysogion and surviving royal family itineraries for both English and Welsh royalty. These record occasional details but can provide little more than a broad idea of possible journey routes within certain timeframes and cannot usually be linked to any archaeological remains. Some editions of the Welsh Law Books provided detailed information on the road network that was required within each township, and that there should be a clearly defined route to the church and to the watering place. In addition, guidelines were provided for the width of the King's Highway, which was to be 12ft wide.



Fig. 1 The Gough Map

Metalled roads within settlements are sometimes encountered in archaeological excavations, but cross country roads from this period have yet to identified, and may have been simple unimproved trackways.

The first cartographic evidence is the fourteenth century 'Gough Map', showing routes between Conwy, Bangor and Caernarfon and between Caernarfon and Cricieth (Fig. 1). It has been suggested that the 'Gough Map' is based on an earlier map which was used as part of planning of the Edwardian Conquest of Wales at the end of the thirteenth century, and there is documentary evidence for the construction of an 'invasion roadway' (Morriss 2005, 36). Carr's examination of late medieval deeds for land on the island of Anglesey has provided some historical evidence for the road network at that time, such as the highway from the cross in Newborough to the ferry at Abermenai . These general descriptions and inaccurate maps however provide only approximate routes and most have not been linked to any extant archaeology.

Little is known about the form of roads in the medieval period. The statute of Winchester of 1285 places the responsibility for some of the upkeep of the roads at a manorial level.

It is likewise commanded that the highways from market towns to other market towns be widened where there are woods or hedges or ditches, so that there may be no ditch, underwood or bushes where one could hide with evil intent within two hundred feet of the road on one side or the other, provided that this statute extends not to oaks or to large trees so long as it is clear underneath. And if by the default of a lord, who will not fill up a ditch or

level underwood or bushes in the manner afore-said, robberies are committed, the lord shall be answerable: and if murder is committed, the lord shall be condemned to make fine at the king's pleasure. And if the lord is unable to cut down the underwood, the district shall help him to do it.

The Highways Act of 1555 (and extended by the Highways Act 1562) transferred the responsibility for maintaining the main roads to individual parishes.

The Act stipulated that each year, in the Easter week, every parish was to elect "two honest persons" of the parish to serve as the Surveyor of Highways, who would be responsible for the upkeep of those highways within the parish boundaries which ran to market towns. The Surveyors would announce, on the first Sunday after Easter, four days before June 24 on which the maintenance work was to be carried out, and for these four days the whole parish was to work on the highways. Every person, for every ploughland they held in the parish, and every other person keeping a draught (horse) or plough there, was to provide a cart or wain equipped for the work, and two able-bodied men, on a penalty of 10s per draught; the Surveyors could, at their discretion, require a further two men instead of the cart. Every other householder, as well as every other cottager and labourer free to labour, was to send themselves or a substitute able-bodied labourer to work for the four days, on a penalty of 12d per day apiece. All labourers were to provide their own equipment, and bound to work for eight hours each day upon the roads.

The majority of transportation of goods in Wales was either by water or by packhorse. Wheeled transport was relatively rare in the medieval period. Packhorse routes are typically narrow hollowways with sporadic constructed features such as metalling or low causeways in boggy areas and simple bridges. Many are still visible in the uplands, a good example runs up Llanberis pass and then to Capel Curig (Hopewell 2013, 58-9).



Fig. 2 An 18th Century engraving of The Great North Road near Highgate on the approach to London before turnpiking

In general roads tended to be a right of way as opposed to a fixed entity. In unenclosed land the line of the road would tend to shift; as one part became eroded a new line would be taken forming picturesquely termed "braided hollow ways" or sometimes parallel divergences. In enclosed land if a road became blocked or impassable the traveller was permitted to trespass onto surrounding fields (Fig. 2)and to break down hedges to do so (Morriss 2005, 37).

The 18th and 19th century enclosure acts produced many

new minor roads to serve the new field systems. These typically incorporate long straight stretches with occasional sharp bends and may include wide verges for grazing animals. Many minor country lanes and unsurfaced green roads date from this process (ibid, 46). Their incorporation into the field systems and respect of the line of later field boundaries as opposed to following a more direct or topographically determined route is a diagnostic feature of roads of this period.

The most regular long distance travellers from medieval times onwards were the drovers. "The Welshmen who come from all parts of Wales to sell their cattle" are mentioned in a document relating to the granting of a fair in Gloucestershire in 1253 demonstrating that the practice was well established by this time (Moore Colyer 2001, 106). The drovers used an established network of roads

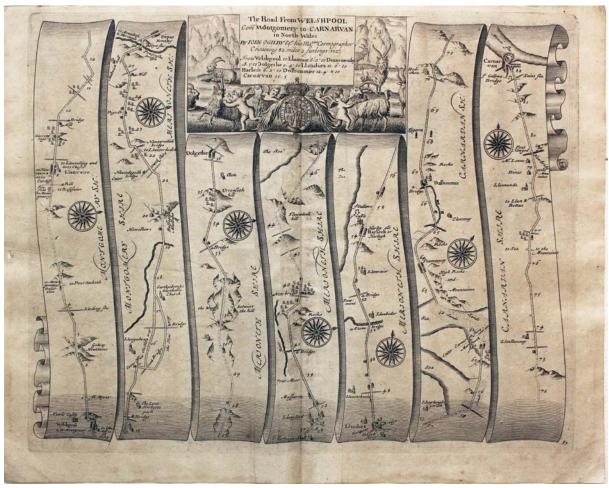


Fig. 3 Ogilby 1675 - Welshpool to Caernarfon

to transport livestock, typically green roads in the unenclosed uplands and wide (up to 20m) enclosed tracks now often visible as lanes with very wide verges. The wide lanes were able to provide grazing and were sometimes termed as a "long acre". The lines of drover's routes are marked by inns, smithies and paddocks that serviced the drovers and thousands of animals that passed along these routes. The drovers in addition to their function in the Welsh livestock trade were also an important source of news and information about events in distant England. They were generally literate and numerate and well-respected; some became wealthy and even established local banking houses (ibid ch.4).

The first reasonably accurate road maps, showing the line of roads in strip form with identifiable landmarks, were produced by John Ogilby in 1675 (Fig. 3). These were produced in response to economic change and development that was leading to a greater use of the road system. Wheeled carts and wagons were also becoming more common. This led to a need for greater levels of maintenance on the major routes that was often beyond the means of the parochial system. This inevitably led to a deterioration in the condition of many roads.

The undeveloped and poorly maintained state of the road network in Wales was bad for trade and development. By 1750 serious attempts were being made to co-ordinate improvements along major routes and there was some initial road building by private subscription and landed gentry. The problem was being addressed in England by the formation of turnpike trusts, leading to the construction of toll roads and a more co-ordinated long distance transport system. Each Turnpike Trust was set up by an act of Parliament. They were usually a local initiative with local landowners and prominent figures acing as trustees. The trustees would coordinate the statute duties from the parishes that the road ran through, raise loans for construction works and fund the road with tolls levied on users. A clerk, treasurer and surveyor would be appointed and paid and tolls would be collected at turnpike gates with associated houses at the ends of the road. Fixed tolls were charged

for different classes of vehicles and animals. In some cases vehicles with narrow wheels which damaged the surface of the road were banned or charged a higher toll. From 1767, mileposts were compulsory on all turnpikes, not only to inform travellers of direction and distances, but to help coaches keep to schedule and for charging for changes of horses at the coaching inns (milestone society.co.uk). In practice his may have not always have been adhered to. The milestone society maintains a database of milestones and tollhouses that can be mapped in Google Earth; a few turnpikes in north—west wales are defined by tollhouses but have no milestones. The length between Bethesda and Betws-y-coed that was that was examined in the pilot fieldwork for this project in 2014-15 retains no milestones despite being a late turnpike (1802).

The first Turnpike act was passed in 1663 and in the 18th century the road system developed quickly with 341 roads being turnpiked between 1750 and 1769. The system was enthusiastically adopted in Wales and there were 14 principal acts relating to roads in north and mid-Wales alone between 1752 and 1782. The roads improved as a result of this but the increased cost of travelling caused unrest, most famously in the Rebecca Riots in South Wales. The income from tolls was sometimes low and there were many complaints about poorly maintained roads. There was, however, general progress and by the early 19th century stage coaches were travelling on many of the major routes. Thomas Telford's Holyhead road broke with the turnpike tradition and received major Parliamentary investment for its construction although it still continued to collect tolls in order to raise revenue for its upkeep. Many of the trusts survived well into the Victorian era but by the 1870s most were closing; the last turnpike gate in Britain was removed in 1895. Many of these roads continued to be used and form the backbone of the modern road system. Though a high proportion of turnpike roads were adopted as modern roads, in Gwynedd a significant proportion survive only as minor routes or trackways.

At the beginning of the project only 12 short lengths of turnpike were recorded in the HER, mostly referring to short stretches that had been assessed as a result of development. Only one, a length of road in the Ogwen Valley was scheduled. The first phase of the project plotted the major routes of turnpikes identified in secondary literature (e.g. The roads of North Wales, Dodd 1925). The lines of many turnpikes were found to follow current roads with their routes being confirmed by milestones either extant or marked on 25" Ordnance survey maps. Several significant lengths of disused turnpike were recorded during an earlier project examining Roman roads (Hopewell 2013). These could not all be traced using the secondary and documentary source materials alone. In addition several lengths of early road that appeared to be constructed in the style of turnpikes but were not identified in the literature were recorded, most notably in Coed y Brenin north of Dolgellau (PRN 17735), the "Brithdir Triangle" (PRN 17779) and the Ffordd Ddu (PRN 17769) running across the uplands to the south-west of Dolgellau (complete with milestones). These seem to be earlier incarnations of turnpikes that were subsequently rerouted or alternatively might have been early coach roads.

Threat levels are generally high. Damage has been recorded to at least 14 sites mostly during road improvements and other infrastructure projects. Other unregulated and unrecorded damage and destruction is occurring and this is more difficult to assess. Many lengths of turnpike and early roads exist as unadopted tracks, and these are under threat from a variety of sources. Specific examples noticed during the Roman Roads Project include erosion, by both water and vehicles to the pitched stone surface of the Trawsfynydd to Dolgellau road, improvements to the cycle track that runs along the turnpike near Llyn Ogwen and unregulated 4 wheel drive access on many roads including the turnpike near Brithdir and the Ffordd Ddu in Merioneth.

The project aims to identify the range of sites of potential national importance. There have been several studies of both Drovers roads and the works of the turnpike trusts but little attempt to relate this to the surviving archaeology of the roads, with the exception of Thomas Telford's Holyhead Road (Quartermaine, Trinder and Turner 2003), the only systematic study of a road from this era). The first phase of the current project was a pilot study that provided an overview of the secondary literature, produced an outline digitisation of the turnpike road network, carried out an initial fieldwork study and produced recommendations for further work. The pilot project confirmed that previous studies had mostly been limited to documentary research and their findings could not easily be related to the extant archaeological resource. The current phase of the project aims to assess the roads of south-

west Anglesey using a combination of documentary and cartographic evidence along with targeted fieldwork.

3. METHODOLOGY

3.1 Desktop and digitisation

The first accurate map of the roads in north-Wales is by John Evans (1723 - 1795). His *Map of the Counties of North-Wales* was published in nine sheets in 1795 on the scale of nearly one inch to the mile. It was dedicated to Sir Watkin Williams Wynn and engraved by Robert Baugh of Llandysilio. This predates the more detailed first edition Ordnance Survey drawings (1816-22 for north-Wales). This makes it of particular importance in relation to Anglesey because it predates a major change in the

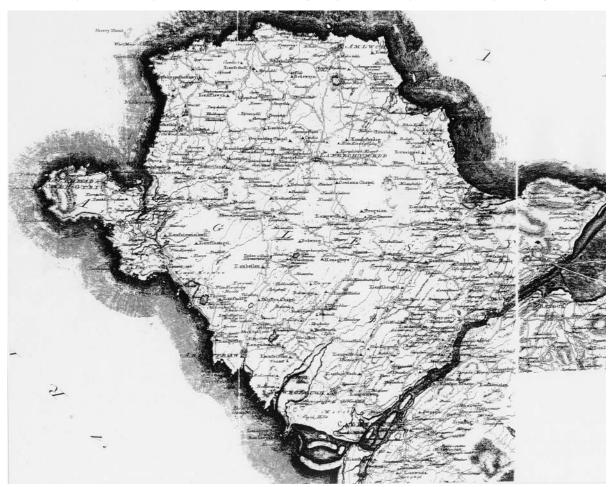


Fig. 4 Map of Anglesey - John Evans 1795

topography with the draining of Malltraeth marshes. By the time of the first OS drawings the road system was beginning to change as a result of the ongoing construction of the Menai Bridge; the bridge was not completed until 1826, four years after the 1822 Conway OS drawing.

Evans' map (Fig. 4) shows the area on the cusp of modernisation and change, just after the main phase of turnpike building. The map shows many identifiable features but it cannot easily be related to the modern road system particularly where there have been significant changes. The first part of the current phase of the project entailed the digitisation of this map allowing it to be seen in MapInfo GIS system in relation to modern roads and known archaeological sites.

A copy of the one inch to the mile edition is held in Bangor University Archives but had already been scanned into the HER for use for an earlier project. Digitisation of small parts had been attempted (e.g. Hopewell 2008) and had shown that although the map is drawn to a relatively small scale,

correlation to extant roads and landmarks can be achieved even in relatively featureless areas. There is usually enough detail to allow routes to be related to features on 25"OS County Series maps if they are examined in tandem during the digitisation process. The Evans map was imported into a MapInfo workspace and scaled, registered and made partially transparent. This was overlaid onto a registered set of 25" 1889 1st edition OS maps along with modern mapping. The generalised registration of Evans' map for the whole of Anglesey was not, however, sufficiently accurate to allow it to be digitised. Greater accuracy was achieved by re-registering the map using key elements of the road system such as cross-roads every few kilometres. The line of the roads on the map could then be manually traced and fitted to the 19th century/modern road system. The Evans map does not show minor access roads but does indicate where these leave the main routes. This allowed the roads to be matched with a high degree of accuracy. This process was time-consuming and took a little more of the resources of the project than originally estimated. The entire road system was assigned a single PRN (60366) and submitted to the HER. Roads that had not been adopted by the modern road system and were therefore likely to retain early features were digitised separately and assigned individual PRNs.

The major change to the road system on the western side of the study area that post-dated Evans' map was the building of an embankment across the mouth of the Afon Cefni and the subsequent draining of Malltraeth marsh. An outline digitisation of a map by Gwilym T. Jones (1990) showing the traditional fords across the Cefni before drainage was carried out. Other sources were consulted as the project progressed and are noted in relation to specific features.

3.2 Fieldwork

The major routes that were not incorporated into the modern road system were visited during the fieldwork. The roads were recorded photographically, written descriptions were made and they were assessed for the survival of early features. The sites were submitted to the HER following the methodology adopted in the Roman Roads project (GAT G1632). The roads were presented as linear entities in MapInfo. New PRNS were allocated to each recorded length of road and a new record was produced when there was a significant change in the form or preservation of a road. Extant infrastructure was recorded if not already included in the HER or Milestone Society database.

3.3 Outreach

A group of local historians (principally members of the Talwrn Archaeology Group and the Friends of Gwynedd Archaeological Trust) formed a group examining roads on Anglesey during GAT's Roman Roads project. This initially aimed to identify Roman roads but has subsequently expanded to try and trace early roads of all periods on the Island. A training session in the use of lidar was held for the group. They have several investigations into early roads on Anglesey under way and it is hoped that when completed that the results will be added to the HER.

A lecture about the current project was given to the Friends of Gwynedd Archaeological Trust.

4. RESULTS

The surviving archaeology of Anglesey is different in character to that of Caernarfonshire and Meirionnydd in that most of the area has been intensively cultivated and there are no extensive tracts of upland so the levels of survival of some classes of archaeological monuments are relatively low. Previous work by the Early Roads Group identified several early routes fossilised in the unimproved lanes and byways of the island, of particular note was Lon Bwbach in Llanddyfnan, a metalled road of possible medieval origin preserved as a wide grassed-over lane. This demonstrates the potential for survival of extant roads on Anglesey. The level of published research in to medieval Anglesey is also relatively high, principally in Medieval Anglesey by Tony Carr (2011).

4.1 Digitisation

Figure 5 shows the roads and the edge of Malltraeth marsh digitised from Evans' map overlaid onto a

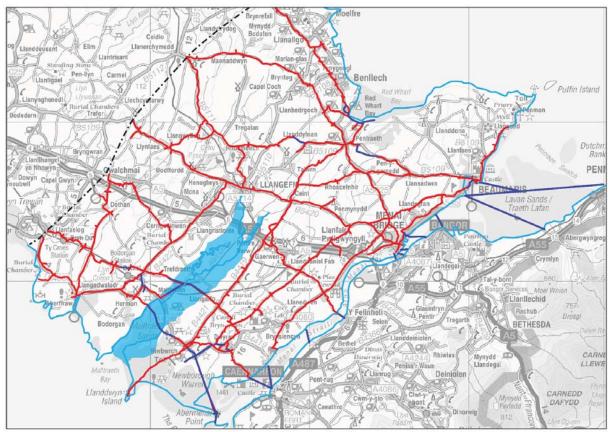


Fig. 5 Roads (digitised from Evans 1795) and the Menai Ferries

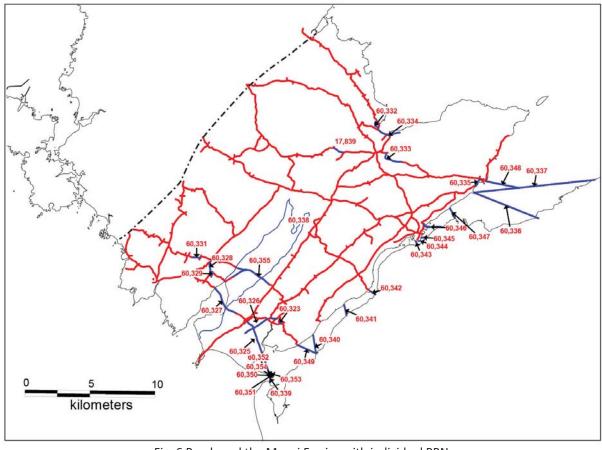


Fig. 6 Roads and the Menai Ferries with individual PRNs

modern 1:250,000 OS map. Also shown are the various ferry crossing points taken from Longley 2006, *Crossing the Straits*.

The topographic influence of two geological faults is particularly noticeable. The first is the Menai Strait which at this time was crossed by a series of local ferries that produced focal points for the road network along the south-east coast of Anglesey. The group of ferries crossing to Bangor were soon to be replaced by the Menai Bridge and the roads in this area continued to develop at the expense of those leading to the other crossing points. Most of the other roads leading to the ferry points became redundant as important routes and currently survive as minor roads or tracks. The Berw fault runs across Anglesey from Malltraeth to Red Wharf Bay. When Evans' map was surveyed the marsh at Malltraeth was tidal as far as Llangefni presenting a major obstacle to travel. Anglesey was divided into two regions by the Berw fault, Sir Fôn Fach in the south and Sir Fôn Fawr in the north. Malltraeth marsh was enclosed by a series of acts between 1788 and 1859 and is currently crossed by road and rail links.

The road system, prior to the draining of the marsh, included strong south-west to north-east elements. The routes running along the ridges to either side of the marsh are very direct and may represent early routes from the medieval centres at Aberffraw and Rhosyr. Two main routes across the marsh are shown on Evans' map leading to Menai ferries at Abermenai and Tal y Foel.

A traditionally significant early route Lon Bwbach (PRN 17839/2679) at Llanddyfnan is shown on Evans' map indicating that it was in use at this time.

4.2 Fieldwork and targeted documentary research

Almost all of the roads on Evans' map are still in use and form elements of the current road system. There are however several lengths of road that are apparently no longer used. These have the potential to retain features that could provide information about the form of early roads and were therefore assigned separate PRNs. These varied from short lengths of road that had been orphaned by subsequent improvements to fairly substantial lengths of road that had fallen out of use due to the route becoming obsolete. Some shorter lengths may have been a product of inaccuracies in Evans' map that could not be matched to roads on the 1889 OS 25". The former fords of the Malltraeth marshes were also digitised, using Map 1 in The Fords of Anglesey (Jones 1992) as a reference and were allocated PRNs as were the routes of ferries. The latter had been recorded by D. Longley (2006) but had not been allocated PRNs. The results are summarised in Table 1; further work was undertaken on several routes (see below)

Table 1 Summary of sites

PRN	NGR	Description	Source
60323	SH45006551	Former road shown on Evans 1795 map. Orphaned stretch of road	John Evans Map of North- Wales 1795
60324	SH44446583	Former road shown on Evans 1795 map. Crossing of the Afon Braint NW of Llangeinwen	John Evans Map of North- Wales 1795
60325	SH43466350	Medieval road from Newborough to Abermenai Point	John Evans Map of North- Wales 1795
60326	SH43296533	Former road shown on Evans 1795 map. Possible realignment of road from Llangeinwen running to the N of Llyn Rhos-ddu	John Evans Map of North- Wales 1795
60327	SH40526727	Former road shown on Evans 1795 map. Aber Hocwn (ford) crossing of Malltraeth Sands, Gwilym T Jones no.2	John Evans Map of North- Wales 1795, Gwilym T Jones 1992, The fords of Anglesey, map 1.
60328	SH39556995	Former road shown on Evans 1795 map. Realignment	John Evans Map of North- Wales 1795

60329	SH39746939	Poss. realignment of crossroads: Evans 1795 unclear	John Evans Map of North- Wales 1795
60331	SH38537070	Former road shown on Evans 1795 map. Line of road no longer survives	John Evans Map of North- Wales 1795
60332	SH52288055	Former road shown on Evans 1795 map. Loop of road no longer joins. Now partly farm track	John Evans Map of North- Wales 1795
60333	SH53197795	Former road shown on Evans 1795 map. Earlier line of road not shown on 1889	John Evans Map of North- Wales 1795
60334	SH53337976	Former road shown on Evans 1795 map. Line of road across saltmarsh	John Evans Map of North- Wales 1795
60335	SH60197603	Former road shown on Evans 1795 map. Line of road into Beaumaris from west. Speed's map shows a different street layout, around what became New Street on 1889 map	John Evans Map of North- Wales 1795
60336	SH62377415	Gallows Point, post-late17th century route of Beaumaris ferry. Crossing only across channel at low tide the rest across the Lavan sands on foot Aber	John Evans Map of North- Wales 1795
60337	SH64537558	Gallows Point, post-late17th century route of Beaumaris ferry. Crossing only across channel at low tide the rest across the Lavan sands on foot to E of Llanfairfechan or Conwy	Longley, D., 2006. Crossing the Straits
60338	SH43707060	Edge of Malltraeth Marsh 1795	Longley, D., 2006. Crossing the Straits
60339	SH44236119	Aber-Menai Point (Southcrook) to Dinlle Marsh Ferry	Longley, D., 2006. Crossing the Straits
60340	SH47666355	Talyfoel to Caernarfon Ferry - post 1850 route from Y Foel	Longley, D., 2006. Crossing the Straits
60341	SH50006636	Llanidan church to Llanfairisgaer Ferry	Longley, D., 2006. Crossing the Straits
60342	SH52086766	Moel-y-don Ferry	Longley, D., 2006. Crossing the Straits
60343	SH55477139	Porthaethwy Ferry, Carreg y Halen to Treborth Mill	Longley, D., 2006. Crossing the Straits
60344	SH55817154	Porthaethwy Ferry, Porthaethwy to Borth	Longley, D., 2006. Crossing the Straits
60345	SH56077182	Porthaethwy Ferry/Bangor Ferry Porth y Wrach to George Hotel - post 1760	Longley, D., 2006. Crossing the Straits
60346	SH56597262	Porthesgob ferry had landing places at Gorad y Git and Garth Point on the mainland and at Cadnant, Porth Philip Ddu, and Borthwen. This route Cadnant to Gorad y Git	Longley, D., 2006. Crossing the Straits
60347	SH58237369	Garth Ferry, Borthwen to Garth point, 16th Century onwards	Longley, D., 2006. Crossing the Straits
60348	SH62077576	Llanfaes and Beaumaris Ferry early departure point	Longley, D., 2006. Crossing the Straits
60349	SH47036341	Talyfoel to Caernarfon Ferry	Longley, D., 2006. Crossing the Straits
60350	SH44276146	Former ferry-house 2	Field-work G2306 2015-16
60351	SH44296143	Former ferry-house converted to white powder magazine	Field-work G2306 2015-16
60352	SH44306147	Site of flagstaff	Field-work G2306 2015-16
60353	SH44326158	Admiralty powder magazine	Field-work G2306 2015-16

60354	SH44276146	Well, cistern or store	Field-work G2306 2015-16
60355	SH43146924	Former road shown on Evans 1795 map. Crossing of Malltraeth Marsh Llangaffo to Trefdraeth	John Evans Map of North- Wales 1795
60330	SH41966951	Former road shown on Evans 1795 map. Link road along edge of Malltraeth Marsh	John Evans Map of North- Wales 1795
60356	SH40086676	Plas Bodorgan - Carreg Wladnus. Gwilym T Jones ford no. 1. Ford and possible bridge Lewis Morris 1801 edition	Gwilym T Jones 1992, The fords of Anglesey, map 1. Lewis Morris 1801
60357	SH41116773	Rhyd-y-Maen Du. Gwilym T Jones ford no. 3. Ford preserved as place name and on Owen's survey of Malltraeth marsh. Marked by a black boulder	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60358	SH42136932	Rhyd-y-Ledi Wen / Rhyd-y-Garreg Wen. Gwilym T Jones ford no.4. The most important Malltraeth ford and ferry. Incorporates early paved route Lon Dugoed	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60359	SH42176981	Rhyd-y-fflat - Gwilym T Jones ford no. 5, probably followed a ridge of higher land SE of Rhyd-y-fflat before crossing a meander and joining Lon Dugoed	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60360	SH42467015	Rhyd-y-Trwyn Brwyn - Gwilym T Jones ford no 6 - Tan Lan to Paradwys	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60361	SH42717050	Rhyd Pen-y-Crug. Gwilym T Jones ford no 7. The crossing over a meander is still preserved in a straight lane, N of the Pont Marquis road	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60362	SH43367169	Cryw - Gwilym T Jones ford no 8. Meandering footpaths at N and S probably early	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60363	SH44927199	Rhyd Lydan - Gwilym T Jones ford no 9. Brynfedwen to Melin Fach and Llangristiolus. The southern part appears to be early, the rest -post enclosure	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60364	SH45767217	Rhyd Felen - Gwilym T Jones ford no. 10 line Digitised following post-enclosure roads	Gwilym T Jones 1992, The fords of Anglesey, map 1.
60365	SH42026494	Direct route of road running S from Llys Rhosyr could indicate medieval route to Abermenai Point	Field-work G2306 2015-16

The following roads or areas were found to be significant and were investigated in further detail.



Fig. 7 Lôn Bwbach

4.2.1 Lôn Bwbach (PRN 17839/2679)

Lôn Bwbach (Fig. 7) currently survives as a wide (5m or more) grassy lane running between hedge banks and is marked as a Roman road on some editions of Ordnance survey maps. The first reference to this is in Longueville Jones 1855 (27) which states "It has been supposed by some to be part of a Roman road running from Beaumaris to Holyhead". An unpublished excavation by the Talwrn Archaeological Group identified a 2m wide metalled surface in the centre of the road. This does not appear to be of Roman origin and probably dates from the later use of the road. The roads inclusion on Evans' map indicates it was still in use as a major route at the

end of the 18th century. Research by the Ancient Roads Group have uncovered a continuation of the road but have so far not uncovered any evidence to prove or disprove a Roman origin. Its width is in excess of 5m which could be significant in this respect but could alternatively indicate an origin as a drove-road.

4.2.2 Newborough to Abermenai point (PRN 60325)

Gruffydd ap Cynan (1055-1137) made use of the port or harbour at Abermenai when landing with an army from Ireland in 1075 and eventually left "the harbour of Abermenai" to his wife Queen Angharad. A ferry is first recorded in an account of 1296-1300 when a rent of £4 was received annually. (Davies 1966, 76-8) making it the earliest recorded ferry on the Menai Strait. It continued in use until 1855 although by this time it had been in decline for some time. The various editions of road guides and linear maps by Daniel Paterson in the late 18th century give an indication of its declining fortunes as the Bangor ferry became more important. The first eleven editions published between 1771 and 1796 include a route from Abermenai to Newborough, Aberffraw, Bodedern and finally to Holyhead. This probably indicates the same route that is shown on Evans' map which also includes a crossing of the Malltraeth sands via Aber Hocwn ford (PRN 60327). This route is not included in later editions which direct travellers to Bangor or Moel y Don. There was a major disaster in 1785 when 55 of the 56 passengers on the ferry were drowned when the boat went aground on a sandbank. An engraving by W. Crane from c.1840 shows a small ferry boat leaving Abermenai (Fig. 8).

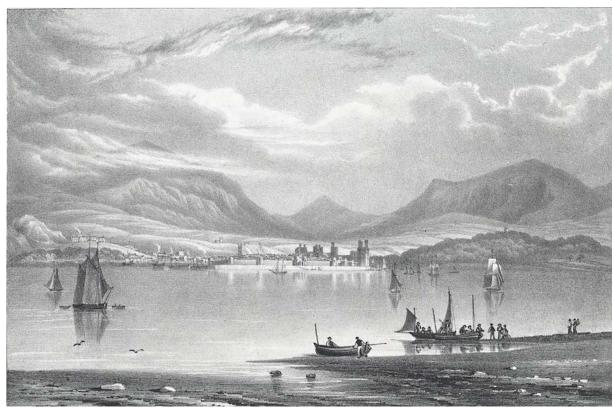


Fig. 8 Caernarfon from Aber-Menai Ferry by W. Crane c.1840

It finally fell out of use c. 1855 (Davies 1966, 314).

A deed of 1339 refers to the highway leading from the cross in the centre of Newborough to Abermenai point. (Carr 2011, 9). This road is shown on Evans' map (Fig. 10) and being a very direct route has probably changed little since medieval times. The transcribed line of the road from Evans' map follows the modern Chapel Street and the A4080 for 0.9 km to Pen Lôn roundabout. Evans shows this intersection as a crossroads but the line of the SW to NE road is shown running further to the NW (see PRN 60326). The road continues in a straight line from Pen Lôn along a narrow asphalt road for a further 0.65 km.

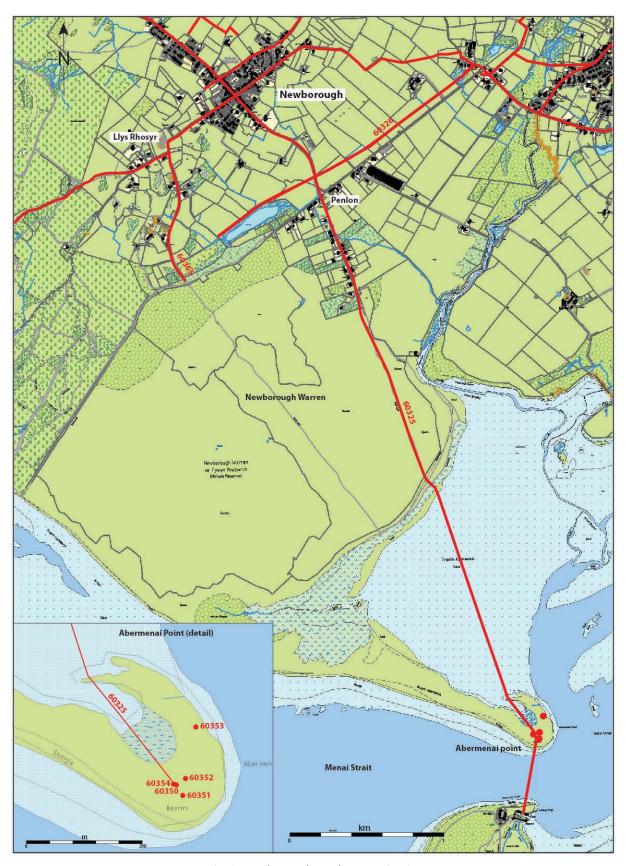


Fig. 9 Newborough to Abermenai point

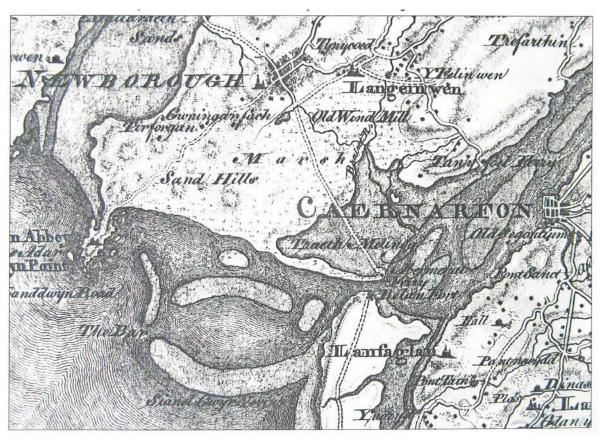


Fig. 10 Evans' map 1795, the road to Abermenai point



Fig. 11 Road to Abermenai point, hollow way through the dunes

The road then continues through the dunes of Newborough Warren, initially as a well-defined hollow way for 0.25 km running to the west of the modern footpath (Fig. 11). This line is shown on the 1889 OS 25" map. A line of low marker-stones runs along the western side of the road. Many of these are overgrown or almost buried in sand. The stones are rough and unshaped and are similar to stones that can be seen elsewhere in the dunes that appear to be former boundary markers. These are probably associated with post-medieval use of the warren by the Newborough estate. The remainder of the route as far as the shoreline (1km) comprises a somewhat meandering path, currently in use, and a series of overgrown disused fragments of paths forming a braided hollow way. This follows the line shown on Evans' map although it is likely that much of the road has been covered or destroyed by dune movements. The current dune system is mostly consolidated by vegetation. This is, however, a recent situation; aerial photographs and surveys show much greater levels of unconsolidated and mobile sand as recently as the 1950s (Robinson 1980, 57). The hollow way on the northern side of the dunes appears to be of some antiquity and has presumably been in an area of consolidated sand for a long time. The southern part appears to have been in an area of shifting dunes hence the fragmentary survival; the preservation of the route suggests continued use, possibly since the medieval period, as an access to the ferry at Abermenai point and the coast.

The final part of the route crosses 1.6km of mud-flats/sand that is only accessible at low tide. There are no water channels, apart from very minor streams draining the beach, on the crossing. At the time of writing the crossing is firm with nothing worse than a few centimetres of surface water to negotiate. The point could also be accessed by a more circuitous 2.5 to 3km route around the edge of the dunes at high tide.

The road led to the ferry-house on the tip of Abermenai point, currently opposite the 18thcentury Fort Belan. The ferry-house is shown on a succession of maps. Collins map of 1693 (Fig. 12) shows a single ferry house on either side of the crossing. A single building is also shown at Abermenai on Evans' map but Lewis Morris (1720 and 1748, Fig. 13) shows two buildings and the 1815 enclosure award map (ARO W/Maps 5, Fig. 14) shows three structures. The 1889 OS 25" map (Fig. 15) shows the same structures, one is marked "White Powder Magazine" and a second "Flagstaff". A second magazine is marked 145m to the north ("Admiralty Magazine"). All four structures are still visible. The southernmost ferry house/magazine (PRN 60351 Fig. 16) still stands as a roofless ruin. The walls are of mortared sandstone and stand to close to their original height with the exception of the upper part of the south-western gable which has collapsed. There are blocked windows and a doorway in

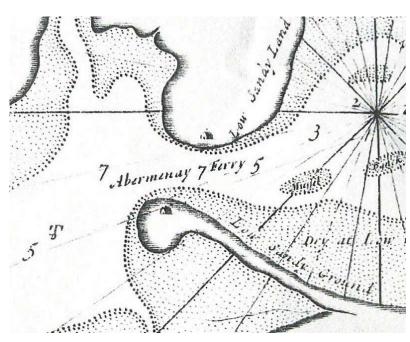


Fig. 12 Abermenai point (Collins 1693)

the south-eastern side. A second rectangular building slightly to the north of this (PRN 60350) survives as stony but heavily overgrown foundations only. An iron grating covers a slightly corbelled chamber now partly filled with sand and rubbish (PRN 60354). An account describing the ferry in c. 1832 records "a small house and *libart* (yard)" along with a *pydew* (pit or well) by the house containing excellent water and a horse block (Davies, 311). The covered chamber is presumably the *pydew* referred to in the text. The site of the flagstaff is now a simple mound. The Admiralty Magazine (PRN 60353) survives as partly collapsed, rectangular, brick structure with thick walls and single doorway in the southern end.

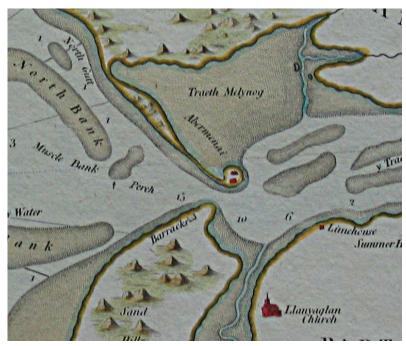


Fig. 13 Abermenai point, Lewis Morris 1748

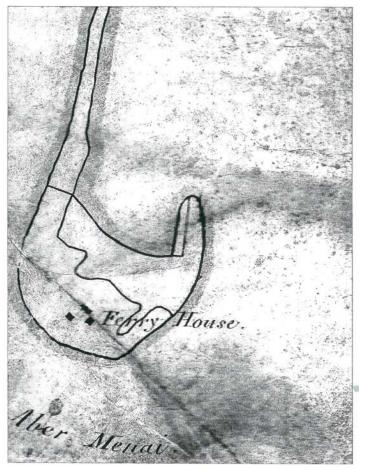


Fig. 14 Abermenai point, enclosure award map 1815

H.R. Davies (1966, 314) maintains that the materials of the latest phase of the ferryhouse were utilised for "other erections", presumably the White Powder House. Longley (2006, 51) argues that the powder house and latest ferry building are the same structure. This is borne out by examination of the surviving structure. The 9m x 6m sandstone building includes blocked windows and a door in its southeastern wall. A purpose built powder house would not have included windows. The windows are blocked with bricks that are similar to those used in the Admiralty Magazine suggesting that the disused ferry-house was converted into the White Powder Magazine probably in the late 19th century. The building is therefore a rare survival of one of the Menai ferry-houses and is in relatively good condition and is presumably one of the buildings shown on Lewis Morris' map of 1748. There were clearly two buildings at Abermenai in the 19th century although the function of the second is not known. It could be interpreted as an earlier version of the ferry-house or, alternatively, it may have been a shelter, stable or store. It is now visible as a long rectangular foundation (18m x 6m, PRN 60350) with some protruding stones that is very overgrown by marram grass. This cluster of buildings and associated features clearly marks the focus of the Abermenai ferry and the potential for the survival of other structures beneath the windblown sand is high.

An earlier route to the ferry may run from Rhosyr just to the west of Newborough. This was the site of the medieval llys (PRN 899) and lies on the line of one of the direct south-west to north-east routes

on Evans' map. A direct minor road/track running south from the llys may be an early route to the ferry at Abermenai point (PRN 60365).

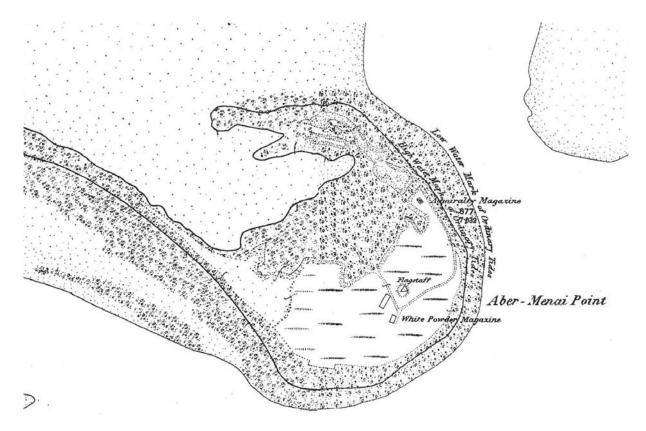


Fig. 15 Abermenai point, (OS 25"1889)



Fig. 16 The Abermenai ferry-house, converted into white powder magazine

4.2.3 The Afon Cefni and the Malltraeth marshes

The Afon Cefni is the longest river on Anglesey and before the reclamation of the marshes was tidal for 14km; over half the width of the Island and as such presented a major natural barrier to travel. The river meandered along a flat 2km wide saltmarsh. The line of the meanders is preserved in fields on the north-west side of the marsh. It should be noted that the line of the river channel has changed over time, often as a result of it being dammed to form lakes (Jones 1989, 54-57). Evans' map shows the main river channel to be further south of than the currently visible relic meanders (Fig. 17). Natural Resources Wales lidar data (Fig. 18) shows numerous river channels but does not show any of the former routes across the marsh.



Fig. 17 Malltraeth, Evans 1795

The marsh varies in height between 1.25m and 2.5m AOD (Williams 1997, 7) meaning it was frequently inundated by the sea. The marsh was crossed by a series of local fords with at least one including a ferry crossing of the main river channel. The draining of the 1,366 hectares of marsh was initiated by an act of parliament in 1788. Attempts to build an embankment across the mouth of the estuary were foiled by storms but in 1811 engineers Thomas Telford and John Rennie directed the completion of the embankment and the canalisation of the river Cefni. The Cob was completed in 1812, the Ordnance Survey drawing of 1818 shows the finished works (Fig 19).

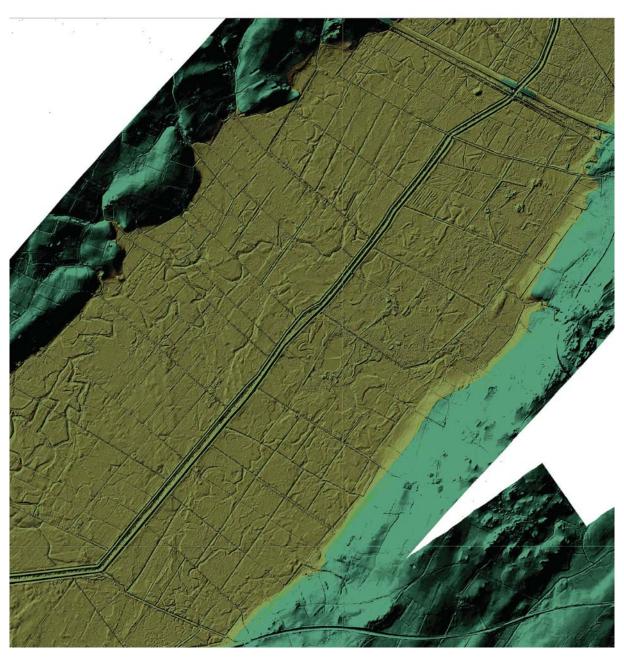


Fig. 18 Malltraeth marshes: Lidar survey (Natural Resources Wales)

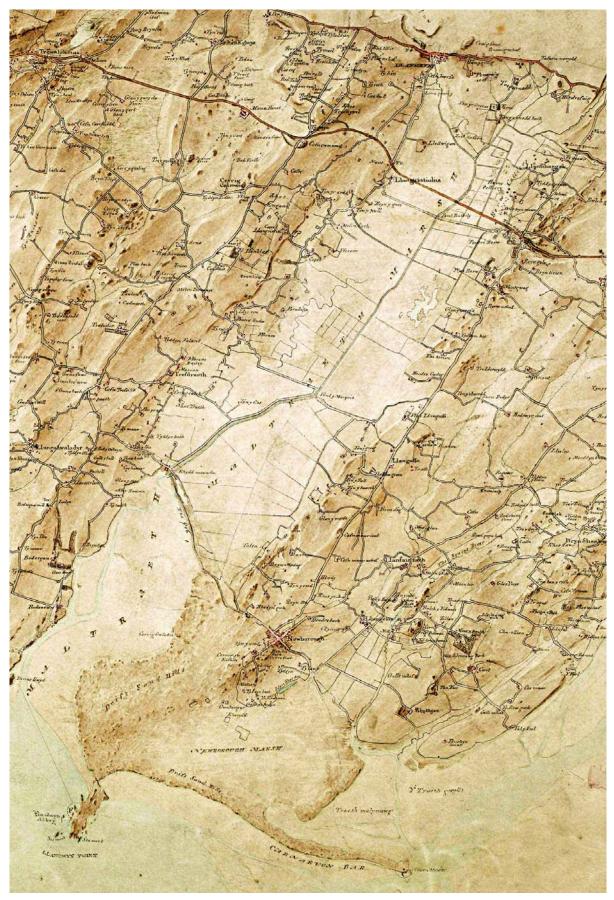


Fig. 19 Malltraeth OS drawing 1818 by Robert Dawson

The current post-reclamation crossings consist of 8 routes:

- 1. A road just inland of the embankment at Malltraeth.
- 2. A rail crossing across a viaduct 0.7m to the north-east of Malltraeth.
- 3. A minor road crossing at Pont Marquis 2.8km inland from Malltraeth
- 4. A footbridge at Rhyd Lydan about half way along the marsh
- 5. A track crossing at Pont Bulkeley close to the north-eastern end of the marsh 2km south of Llangefni
- 6. Telford's A5 1.5 km south of Llangefni
- 7. The modern A55 1.5km south of Llangefni
- 8. A rail crossing 1.2km south of Llangefni

The pre-reclamation crossings are listed as a series of fords in *The Fords of Anglesey* (Jones 1992). A series of ten fords are shown on a map (Fig. 20), largely based on 'The Survey of Malltraeth', a Map drafted by R. Owen in 1787 to accompany 'Proposals for draining Malltraeth Marsh'. Both maps are semi- diagrammatic but were digitised as accurately as possible using existing place-names and features for reference (Fig. 22). The crossings and their approach-roads were examined on the ground and the results are described below. One of the two crossings shown on Evans' map was not included in Jones' list. This runs from Llangaffo to Trefdraeth (PRN 60355) and is discussed alongside the other

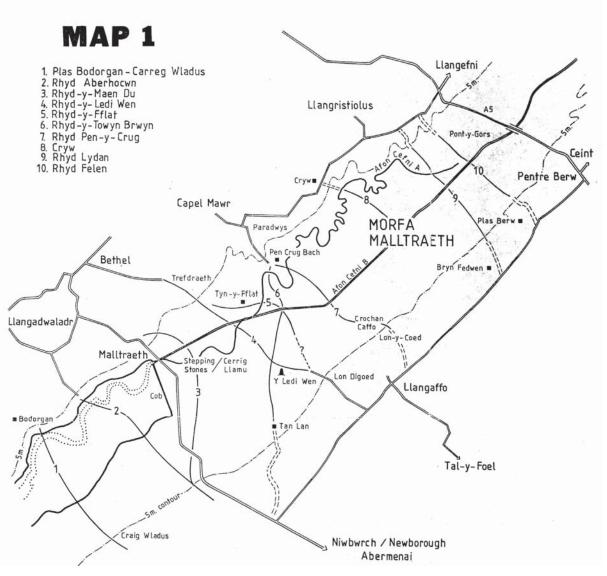


Fig. 20 The Malltraeth fords from Jones 1992

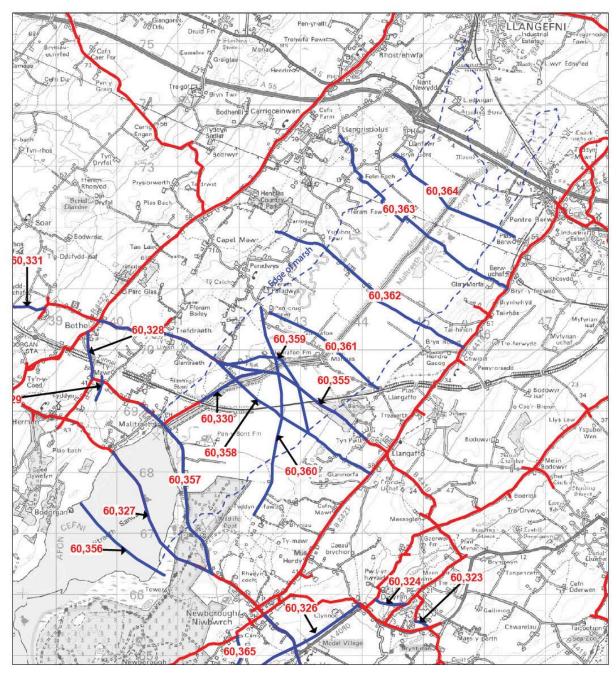


Fig. 21 Outline digitisation of the Malltraeth fords

crossings. Jones notes that "some of the fords were minor ones and merely functioned as links in local networks of paths and trackways, but two of the crossings, Rhyd-y-Maen Du and Rhyd-y-Ledi

Wen, formed integral parts of comparatively important routes which ran north-westwards across the Island from the Menai Ferries". The numbering follows Jones 1992. None of these routes are shown on the OS drawing of 1818 by Robert Dawson.

1. Plas Bodorgan - Carreg Wladus. PRN 60356

This crossing is shown on posthumous late edition of Lewis Morris' chart of "Malldraeth and the Aberffraw creeks" published by his son William Morris in 1801. It is not shown on the original 1748 edition. The map shows a bridge, just to the north of Plas Bodorgan and a slightly meandering embankment running across the sands. This predates the current embankment by at least 10

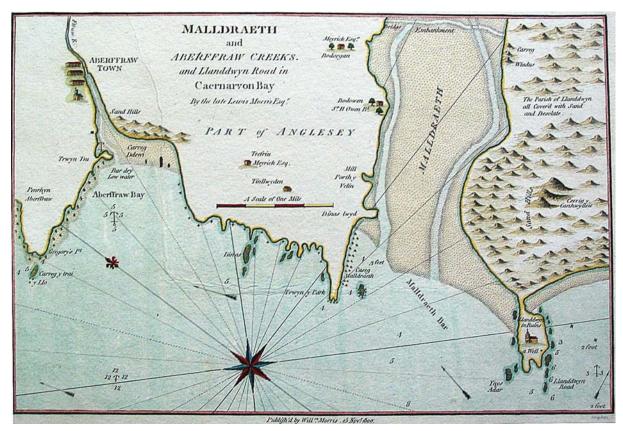


Fig. 22 Malltraeth (Morris 1801)

years and may have been an early attempt at draining the marshes. Fieldwork showed that the embankment no longer exists. A natural rocky spur c. 400m north-east of Plas Bodorgan shows signs of quarrying and stones can be seen in the river channel at this point. It seems likely that this marks one end of the embankment. No structure was visible at low tide but the stones in the river channel were not accessible and could not be examined in detail. It seems likely that his route crossed the sands and joined the road to Newborough. There was no trace of the embankment on the south eastern shore. Jones (1992, 32) records a local tradition of a crossing at this point.



Fig. 23 Rhyd Aberhocwn, north-west approach

2. Rhyd Aberhocwn. PRN 60327

This crossing is shown on both John Evans' map and Owens map of 1787. This seems to have been the main crossing point between Aberffraw and Llangadwaladr on the north-west and Newborough on the south-east. Jones notes that Thomas Pennant recorded a crossing at this point (1992, 32).

On the north-west side the road shown on Evans' map survives as a minor road from Llangadwaladr and then an unmetalled track that run to the edge of the sands (Fig. 23). The south-eastern side of the crossing cannot be traced amidst the marsh and a

forestry plantation but probably joined the current road to Newborough about 800m from the coast at Rhed yn-coch-Bach.

3. Rhyd-y-maen Du. PRN 60357

This ford crossed close to the current road and embankment. A dwelling called Rhyd-y-Maen Ddu beside the current road on the north-east side of the crossing marks the line of the crossing. The ford was marked by a large black stone (now lost). Jones recorded stepping stones across the Cefni at SH413687 (ibid, 33) that were being covered by "organic deposition". These could not be located at the time of survey.

4. Rhyd-y-Ledi Wen and Evans. PRN 60358

Jones identifies Rhyd-y-Ledi Wen also known as Rhyd-y-Garreg Wen or Rhyd-y-Glo as being the most important of all the Malltraeth fords being part of the route from Tal-y-foel ferry to Holyhead via Llangaffo and Trefdraeth. It was traditionally marked by a white (possibly whitewashed) stone although the exact location of the stone is debatable (ibid 34-6).

The southern approach was along a lane known as Lôn Dugoed (sometimes Digoed). This is one of the few roads named in Rowlands' early 18th century *Antiquitates Parochiales* (1847, 11). This is a wide road with traces of paving and well-built bridges leading to some speculation that it has Roman origins (Pritchard 1871, 55). This was visited during GAT's Roman Roads project; "A metalled road leads down to marshes, clearly of some antiquity but no specifically Roman features (PRN 17846)". The north-western end of the lane appears to be a post-enclosure road.

Evans shows a different approach to the crossing in this area. The road leads from the crossroads at Llangaffo and continues in a fairly direct line across the marsh to a ferry close to the north-west side of the marsh close to Trefdraeth. A lane currently runs as far as Tyn y Coed where it is cut by Hengae granite quarry. It does not, however, continue in a direct line beyond this point on the 1889 25" OS map. The line of the road is therefore unclear; the post-reclamation OS drawing of 1818 by Robert Dawson shows a slightly more circuitous route onto the marsh via Tan y Graig and it seems likely that Evans' depicted route is a slight simplification. A branch also runs from the north-west side of the ferry across the sands in a south-westerly direction towards present-day Malltraeth where only a single building is shown (perhaps Rhyd-y-Maen Du, see above).

It is probable that there were either alternative contemporary routes or that the line of the crossing changed over time, which may explain the discrepancy between the two routes. Fig. 17 shows a close up of Evans map for this area; the ford and ferry point are at the end of the Malltraeth sands and the route runs across the beginning of the saltmarsh which presumably allowed a more permanent way to be established compared to the long routes across the sands to the south-west. This explains the importance of this crossing point it being the most south-westerly crossing on consolidated land.

5. Rhyd-y-Fflat. PRN 60359

This appears to be a ford a little to the east of Rhyd-y-Ledi Wen and is probably a minor variation on this route and is shown on Owen's map of 1787 (Jones 1992 36-37). Nothing could be identified on the ground.

6. Rhyd-y-Tywyn Brwyn. PRN 60360

This is a ford also recorded on Owens map of 1787. Jones identifies it as part of a route running diagonally across the marshes from Tan Lan at the south to cross the Cefni 3.3km to the north to the west of Parc Mawr. The southern 1.8km is shown as a footpath on the 1889 25" OS map; it does not continue beyond the railway embankment (map not shown due to scale and page size). Parts of this path survive within the pasture but most has been lost due to agricultural improvements.

7. Rhyd Pen-y-Crug. PRN 60361

Jones describes the route as follows; "The crossing (427705) carried a trackway from Paradwys across a tidal meander of the Cefni. The trackway, lying parallel and slightly to the north of the postenclosure road which crosses the re-aligned Cefni at Pont Marquis, continued to Crochan Caffo. At that location, it forked, with one branch running southwards to Treaserth and the other running eastwards along Lon-y-Coed to Hen Siop".



Fig. 24 Rhyd Pen-y-Crug, line of track crossing former meander

The winding road from Capel Mawr currently leads to a crossing at Pont Marquis. A short length of the earlier route is preserved at the start of the driveway to Pen Crug Mawr and then continues across improved pasture as a grass-grown track. There appears to be some light metalling visible in eroded areas. Intermittent parallel lengths of field boundaries mark the line of the track on the 1889 25"OS map. The field boundaries have now been removed but the road is preserved as a farm track that extends to within 300m of the canalised Afon Cefni. The original line of the river is still preserved in the fields in this area and is typically 2-3m wide. The ford has been replaced by a modern concrete pipe bridge at SH42717050. The line on the southeast side of the marsh cannot be traced.

8. Cryw. PRN 60362

The old river channel is in the form of a meander at the northern edge of the marsh. A track from Criw, shown on the 1889 25"OS map but now lost, runs to a long, straight minor road across the marsh. The water-filled meander is still clearly visible in fields to either side of the river and this is currently crossed by a small bridge SH43367169. The channel is unusually wide at this point suggesting that it was a shallow fording point.



Fig. 25 Former meanders preserved in fields at Cryw

9. Rhyd Lydan. PRN60363

Tracks that follow the post-enclosure fields run to the former line of the Cefni adjacent to a house called Rhyd Lydan. The meander is currently crossed by a footbridge at SH44927199. The canalised Cefni is also crossed by a footbridge and the track continues past Morfa Mawr Colliery (PRN5791) to



Fig. 24 Rhyd Lydan from current bridge over the Cefni

join the main south-west to north-east route shown on Evans' map at Bryn-y-Fedw. Water-filled meanders on the south side of the marsh suggest that at least two channels would have been forded on this crossing.

10. Rhyd Felin. PRN60364

Jones (39) recognises this as an early crossing that is recorded in the Baron Hill papers in 1692. It appears to be marked by a now-overgrown track across the south-eastern side of the marshes from Plas Berw and by a lane from Bryn Gors at the north. The ford was probably close to the current line of the Afon Cefni.

5. CONCLUSIONS

There were not sufficient resources in this phase of the project to carry out extensive fieldwork but most of the major routes shown on Evans' map that have not been integrated into the modern road system have been examined along with a more detailed study of Malltraeth marsh based on secondary sources. It was noted that there are many "green lanes" on Anglesey but most seem to be associated with 18th or 19th century field systems.

The majority of the 18th Century routes shown on Evans' map remain in use although many on the south-western and south eastern side of the island are no longer major routes due to the change in focus of the road system after the building of the Menai and Britannia bridges and the draining of Malltraeth marsh. The settlements of Anglesey are moderately dispersed but the majority of the island is intensively farmed and access is needed to most areas. This accounts for the continuation of use of most early routes. These probably include medieval and possibly Roman routes but continued use makes it very difficult to recognise early features and therefore confirm the date of such routes. Detailed study of primary documentary sources may provide useful evidence. The current lidar surveys of Anglesey have been examined by John Burman at GAT but unlike those on the mainland have no produced any evidence of early roads, possibly as a result of low earthworks having been removed by centuries of agricultural use.

The level of survival of unimproved early roads on Anglesey can be contrasted with more marginal areas such as much of Meirionnydd where many kilometres of early routes ranging from the Roman period to post-medieval early coach roads and turnpikes have been noted but not adequately recorded. It is hoped that a continuation of the current project will be able to apply the same methodology to a more marginal area.

It should be emphasised that the post-Roman road system in north-west Wales is one of the most neglected aspects of the archaeological resource both in terms of research and statutory protection. It is also of great importance to the material and cultural development of Wales. Gwyn states in *A Research Framework for the Archaeology of Wales Northwest Wales – Post Medieval 22/12/2003*

Roads have been almost entirely neglected by archaeologists. Within North-west Wales the one exception is the study carried out by the Lancaster Unit on the Telford lon bôst, the old A5, publication of which is eagerly awaited. Otherwise, the rich archaeological inheritance of the turnpike system, its predecessors and successors, is almost entirely ignored. As well as details such as mileposts and structures such as tollhouses, the whole question of the archaeology of civil engineering of roads themselves and of bridges, should be investigated. This would involve detailed research in the quarter sessions papers and in bridging bonds, but it would confirm building dates for many surviving features and possibly the identification of different engineers.

The current Research Framework review document for Industrial and Modern Wales (1750 - present) identifies slightly broader priorities including the assessment of:

The significance, form and archaeological survival of transport corridors – turnpikes, government-

sponsored roads, canals, railways – in terms of their engineering, the industries they served and the settlements they sustained; their context and significance in terms of similar sites elsewhere in the world. (Gwyn D., Alfrey J., and Hughes, S. 2011)

The medieval period review document recognises transport as a priority and recognises how little is known (Davidson and Silvester 2011) but transport is barely mentioned in the early-medieval document (Author unknown, 2011).

Despite its inclusion in some of the above period-specific research framework documents, little progress has been made on the assessment of the multi-period post-Roman road system in Wales beyond the current project (see also Schlee 2014 for Dyfed) and there is a paucity of the primary data necessary for both monument protection and research. Secondary studies, unlike the extensive literature on Roman roads, tend to concentrate on documentary evidence and often ignore archaeological aspects entirely. Dr Barrie Trinder stated, in a seminar relating to the West Midlands Regional Research Framework for Archaeology on Issues relating to transport, that some common factors in transport history and archaeology are:

- a) Extensive literature but of uneven quality
- b) The major monuments identified and for the most part designated
- c) Much remains to be learned; many assumptions are untested and prove wrong on close examination.
- d) Archaeological investigation almost always reveals issues that do not arise from documentary study

In north-west Wales the first two observations are probably not applicable; the published literature on medieval roads, drovers' roads, post-medieval roads and turnpike roads with, a few notable exceptions is either non-existent, geographically limited, generalised or short on archaeological detail. Quartermaine, Trinder and Turner's study of the A5 remains the benchmark work in this field (2003). Roads are an essential part of the framework of Wales and their protection via both records in the regional HERs and on the Schedule of Ancient Monuments is currently inadequate.

There is ongoing research and data collection by the Milestone Society and an online hub examining turnpikes in England and Wales (http://www.turnpikes.org.uk). Data from Wales is currently not as comprehensive as that from England but this is a significant resource that is rarely consulted in the assessment of planning proposals despite being readily searchable via map data in Google Earth (http://www.msocrepository.co.uk).

There are currently major research projects examining transport systems in England; e.g. the Leverhulme-funded *Travel and communication in Anglo-Saxon England* (UCL Institute of Archaeology). Transport in its wider context in the form of the study of archaeology of mobility and movement is a major contemporary research topic (e.g. Beaudry M.C. and Parno T.G. 2013 *Archaeologies of Mobility and Movement*).

Clearly this level of research is beyond the remit of Cadw grant-aided projects but the collection and recording of basic data is essential for the protection of this often ignored monument type.

6. REFERENCES

Author unknown, 2011 *Post Medieval Wales (1539-1750)* A Research Framework for the Archaeology of Wales Version 02, Final Paper February 2011

Beaudry M.C. and Parno T.G., 2013 *Archaeologies of Mobility and Movement* Contributions to Global Historical Archaeology Volume 35

Burnham B. C. and Davies J. L. (Editors), 2010 Roman Frontiers in Wales and the Marches RCAHMW

Carr, A. D. 2011 Medieval Anglesey Anglesey Antiquarian Society & Field Club

Collins, G., 1693 Great Britain's coasting-pilot Freeman Collins London

Davidson, A., Hopewell, D., McGuinness, N., and Smith S.G. 2014 *Medieval and Post-medieval Roads in North-West Wales* GAT Report No. 1171

Davidson, A. and Silvester, B., 2011 A Research Framework for the Archaeology of Wales: Medieval. A Research Framework for the Archaeology of Wales Version 02, Final Paper February 2011

Davies, H. R., 1966 *The Conway and Menai Ferries* Board of Celtic Studies, History and Law Series No. VIII.

Dodd, A. H., 1925 The Roads of North Wales, 1750-1850, *Archaeologia Cambrensis* 80 Part 1 Seventh Series Vol 5, 121-148.

English Heritage 2011, Introductions to Heritage Assets: Pre-industrial Roads, Trackways and Canals

Evans, J. 1795 Map of the Six Counties of North Wales (9 sheets)

Gwyn D., Alfrey J., and Hughes, S. 2011 Wales in the Industrial & Modern Period (post 1750) Research Framework for the Archaeology of Wales Version 02, Final Paper February 2011

Hopewell, D. 2008 A470 Blaenau Ffestiniog to Cancoed Road improvements: Archaeological recording. *Archaeology in Wales* Vol. 48 57-61

Hopewell, D. 2013 Roman Roads in North-West Wales GAT Bangor

Jones, G. T. 1989 The Rivers of Anglesey Research Centre Wales UCNW Bangor

Jones, G. T. 1992 The Fords of Anglesey Research Centre Wales UCNW Bangor

Longley, D. 2006 Crossing the Straits (GAT report No. 645)

Longueville Jones, H., 1855 List of Early British Remains in Wales No. III *Archaeologia Cambrensis*: Vol.1: p.18-27

Moore-Colyer, R. 2001 Roads & Trackways of Wales. Tempus Publishing

Morriss, R. 2005 *Roads: Archaeology and Architecture* Stroud:Tempus

Morris, L., 1748 Plans of harbours, bars, bays and roads in St. George's Channel

Morris, L. and Morris, W., 1801 Plans of harbours, bars, bays and roads in St. George's Channel ..with Additional Observations, from Surveys lately made by William Morris

Paterson, D. (various editions 1771, 1799) A New and Accurate Description of all the Direct and Principal Cross Roads in Great Britain Longman and Rees, London

Paterson, D. 1785 Paterson's British itinerary: being a new and accurate delineation and description of the direct and principal cross roads of Great Britain Bowles and Carver, London

Pritchard H., 1871 Copper Cakes etc. Castellor, Anglesey. Archaeologia Cambrensis Vol II 4th Series

Quartermaine, J., Trinder, B., and Turner, R. 2003 *Thomas Telford's Holyhead Road: The A5 in north Wales* CBA Research Report No 135

Robinson, A.H.W. 1980 The sandy coast of south-west Anglesey. *Transactions of the Anglesey Antiquarian and Field Club* 37–66

Rowlands H. 1847, Antiquitates Parochiales No. IV Archaeologia Cambrensis II

Schlee, D. 2014 *Turnpike and Pre-turnpike Roads - Medieval and Early Post-Medieval Sites Scheduling Enhancement Project -* Dyfed Archaeological Trust report no. 2015/17

Trinder, B. 2003 West Midlands Regional Research Framework for Archaeology, Seminar 7 - Issues Relating to Transport

Williams, F. 1997. *An investigation of the former creeks and channels of the Afon Cefni, at Morfa-Mawr, Malltraeth Marsh, Anglesey* MSc Thesis, University of Wales, Bangor



