

PROPOSED EXTENSION TO PARC MENAI, BANGOR

ARCHAEOLOGICAL ASSESSMENT

Report No. 427



Prepared for

TACP

October, 2001

By

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CONTENTS

Summary	1
Introduction	1
Specification and project design	1
Methods and techniques	2
Baseline survey	6
Archaeological findings and recommendations	8
Summary of impacts and recommendations for mitigatory measures	17
Statement of significance	19
Bibliography	20
Figures 1-10	
Plates 1-16	
Appendix I	
Map for Vaynol Park in the Register of Parks and Gardens of Historic Interest (Cadw 1998a)	
Appendix II	
Entry for Dinorwig in the Register of Landscapes of Outstanding Historical Interest (Cadw 1998b)	
Appendix III	
Historic Characterisation Area No. 48 (GAT 2000)	
Appendix IV	
Advice note on the Register of Landscapes of Historic Interest in Wales and the planning process	
Appendix V	
Full list of Listed Buildings in Vaynol Park	

PROPOSED PARC MENAI EXTENSION, BANGOR (G1704)

ARCHAEOLOGICAL ASSESSMENT

SUMMARY

A desktop assessment and field search was carried out in and around the proposed development area. This revealed 18 features, the importance of which was assessed, and for which mitigatory measures were recommended. The boundary wall to the Park was allocated to category A (national importance), and Vaynol Old Hall and surrounding complex of buildings have also been included due to the likely impact of the development on their setting. Capel y Graig Lodge was allocated to category B (regional importance). Ten features were allocated to category C (local importance), and four to category D (minor sites). A fragment of the pre-18th century field system has been allocated to category E (sites needing further investigation), as the date of its original layout cannot be established by documentary research alone.

No further assessment is required for these features, with the exception of the pre-18th field system. This is the most interesting of the features in the area, and may be medieval in origin. Trial trenching of these field boundaries is recommended prior to development of the area. The results of the field evaluation will determine what mitigatory measures are necessary for this site. A representative sample of the whole area should be investigated by geophysical survey and trial trenching, to detect any buried archaeological deposits. This may also lead to further mitigatory recommendations.

The recommended mitigatory measures for the category D features involve basic recording. The category C features require detailed recording, particularly involving the production of a measured survey, using a total station theodolite. Capel y Graig Lodge and the boundary wall should not be directly affected by the development, although their setting will be significantly altered. Cadw must be consulted in relation to developments impacting on listed buildings. It is recommended that no building should be visible from outside the boundary wall, so that the view from outside is not compromised.

The impact of the development on the historic landscape was also assessed. While much of the proposed development was found to have relatively low impact, with only a small loss of parkland, and minimal visual impact, development close to the hall complex was considered to have a severe visual impact. The visual impact can be reduced by use of screening woodlands, but the setting of the Old Hall, in particular, would be significantly changed.

1 INTRODUCTION

Gwynedd Archaeological Trust has been asked, by TACP, to carry out an archaeological assessment of the area of a proposed extension to Parc Menai, Bangor. The assessment will form the Cultural Heritage chapter of the Environmental Statement to accompany the planning application. Parc Menai is situated near the junction between the A487 and the A55, to the west of Bangor. It is proposed to expand the business park to the west, north and south of its present limits. The extension falls within Vaynol Park, which is listed as a grade I park within the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales (Cadw 1998).

2 SPECIFICATION AND PROJECT DESIGN

The basic requirement is for a desktop survey and field search of the proposed area, in order to assess the impact of the proposals on the archaeological features within the area concerned. The importance and condition of known archaeological remains were to be assessed, and areas of archaeological potential and new sites to be identified. Measures to mitigate the effects of any future development on the archaeological resource were to be suggested.

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were, briefly, as follows:

- a) *to identify and record the cultural heritage of the area to be affected;*
- b) *to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape); and*
- c) *to recommend ways in which damage to the cultural heritage can be avoided or minimised.*

A full archaeological assessment usually comprises 6 phases:

- 1) *Desk-top study*
- 2) *Field Search*
- 3) *Interim Draft Report*
- 4) *Detailed Field Evaluation*
- 5) *Final Draft Report*
- 6) *Final Report*

This assessment has covered the work required under 1, 2 and 3. It is sometimes necessary to undertake a programme of field evaluation following the desktop assessment. This is because some sites cannot be assessed by desktop or field visit alone, and additional fieldwork is required. This typically takes the form of geophysical survey and trial excavation, although a measured survey is also an option. The present report makes recommendations for any field evaluation required.

3 METHODS AND TECHNIQUES

3.1 Desk-top Study

This involved consultation of maps, computer records, written records and reference works, which make up the Sites and Monuments Record (SMR), located at Gwynedd Archaeological Trust, Bangor. The archives held by the Gwynedd County Record Office, Caernarfon, were also consulted. Aerial photographs were examined at the office of the Countryside Council for Wales, Bangor. Information about Listed Buildings and Scheduled Ancient Monuments was obtained from Cadw: Welsh Historic Monuments. (For a full list of sources consulted see the bibliography)

3.2 Field Search

All of the proposed development area, including Britannia Park, was inspected on the ground by an archaeologist to note the present state of the site, and to identify any archaeological features visible as earthworks. The field search of Britannia Park was undertaken on 10th October, and that of the rest of the area on 12th, 18th and 19th October 2001. Over most of the area conditions were good for fieldwork, with many of the fields being covered in short grass, but some areas were obscured, and the field search could reveal little about their archaeological potential. The northern part of Britannia Park (field 1, fig 1) was over grown with weeds, and seems to have been disturbed during the construction of the present business park. Little could be seen in this area. The small area of woodland at the southern end of this field had relatively little undergrowth, and so could be inspected effectively. The field containing the ruined sawmill (field 2, fig 1) had been used extensively for dumping, and any earlier features would have been completely obscured. The northern-most field in the proposed development area (field 6, fig 3) also had extensive areas covered by dumped material, which had been levelled over the field.

Features identified were marked on copies of the first edition OS 25" map, as accurately as possible without surveying. Each feature was described and assessed. Detail notes, sketch plans and photographs were made of the more important features. These records are archived in Gwynedd Archaeological Trust under project number 1704.

3.3 Landscape assessment

The development area is included within a registered landscape of outstanding historic interest as defined in the Register of Landscapes of Historic Interest in Wales, part 2 (Cadw 1998b, 88-91). It lies within the north-eastern side of Vaynol Park, which is also listed as a grade I historic park (Cadw 1998a, 301). It is now generally recognised that assessment of the archaeological landscape needs to be undertaken to allow a full understanding of the impact of any proposed development. Many of the areas in Wales have already been characterised as part of the Countryside Council for Wales LANDMAP programme or as part of the Cadw grant-aided Landscape Characterisation Project. The work undertaken for this project builds upon the existing characterisation, and, using the Countryside Council for Wales's draft guidelines (CCW *et al* 2001, see appendix IV), assesses the impact of the proposed development on the historic landscape.

3.4 Report

All available information was collated, and the features were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the feature and the level of response likely to be required; descriptions of the features and specific recommendations for further assessment or mitigatory measures, as appropriate, are given in the relevant sections of this report.

The criteria used for allocating features to categories are based on those used by the Secretary of State when considering ancient monuments for scheduling; these are set out in the Welsh Office Circular 60/96.

3.4.1 Categories

The following categories were used to define the importance of the archaeological resource.

Category A - Sites of National Importance.

This category includes Scheduled Ancient Monuments and Listed Buildings as well as those sites that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of Regional Importance

These sites are those which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region. Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of District or Local Importance

These sites are not of sufficient importance to justify a recommendation for preservation if threatened, but nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and Damaged Sites

These are sites, which are of minor importance, or are so badly damaged that too little remains to justify their inclusion in a higher category. For these sites rapid recording either in advance or during destruction, should be sufficient.

Category E - Sites needing further investigation

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A-D, are temporarily placed in this category, with specific recommendations for further evaluation. By the end of the assessment there should be no sites remaining in this category.

3.4.2 Definition of Impact

Direct impact

The direct impact of the proposed development on each site was estimated. The impact is defined as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

None:

There is no construction impact on this particular site.

Slight:

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, *e.g.* part of a trackway or field bank.

Unlikely:

This category indicates sites that fall on the margins of the study area, but are unlikely to be directly affected.

Likely:

Sites towards the edges of the study area, which may not be directly build on, but which are likely to be damaged in some way by the construction activity.

Significant:

The partial removal of a site affecting its overall integrity. Sites falling into this category may be linear features such as roads or field boundaries where the removal of part of the feature could make overall interpretation problematic.

Considerable:

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

Unknown:

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed development.

Indirect impact

The indirect impact, in this case, is related mainly to the setting of historic buildings around the development area. There are no waterlogged archaeological deposits in the study area, so changes in water-table will not have an archaeological impact. The affect of the development on the setting of each relevant site has been defined as follows:

Minimal:

Development cannot be seen from the historic building, nor does it impact on views to the historic building.

Moderate:

Development can be seen from the historic building or impacts on views to the historic building, but either the setting has already been comprised by earlier development, or the impact of the present development can be easily mitigated.

Severe:

Development can be seen from the historic building or impacts on views to the historic building. There are no simple solutions that will reduce this impact.

3.4.3 Definition of field evaluation techniques

Field evaluation is necessary to allow the reclassification of the category E sites, and to allow the evaluation are areas of land where there are no visible features, but for which there is potential for sites to exist. Two principal techniques can be used for carrying out the evaluation: geophysical survey and trial trenching.

Geophysical survey

This technique involves the use of a magnetometer, which detects variation in the earth's magnetic field caused by the presence of iron in the soil. This is usually in the form of weakly magnetised iron oxides, which tend to be concentrated in the topsoil. Features cut into the subsoil and back-filled or silted with topsoil contain greater amounts of iron and can therefore be detected with the gradiometer. Strong readings can be produced by the presence of iron objects, and also hearths or kilns.

Other forms of geophysical survey are available, of which resistivity survey is the other most commonly used. However, for rapid coverage of large areas, the magnetometer is usually considered the most cost-effective method. It is also possible to scan a large area very rapidly by walking with the magnetometer, and marking the location of any high or low readings, but not actually logging the readings for processing.

Trial trenching

Buried archaeological deposits cannot always be detected from the surface, even with geophysics, and trial trenching allows a representative sample of the development area to be investigated. Trenches of an appropriate size can also be excavated to evaluate category E sites. These trenches typically measure between 20m and 30m long by 2m wide. The turf and topsoil is removed by mechanical excavator, and the resulting surface cleaned by hand and examined for features. Anything noted is further examined, so that the nature of any remains can be understood, and mitigation measures can be recommended.

3.4.4 Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology.

None:

No impact so no requirement for mitigatory measures.

Detailed recording:

Requiring a photographic record, surveying and the production of a measure drawing prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Watching brief:

Requiring observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers or structures.

Avoidance:

Features, which may be affected directly by the scheme, or during the construction, should be avoided. Occasionally a minor change to the proposed plan is recommended, but more usually it refers to the need for care to be taken during construction to avoid accidental damage to a feature. This is often best achieved by clearly marking features prior to the start of work.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision.

4 BASELINE SURVEY

4.1 Topographic Description

The study area is located on the relatively level ground immediately south of the Menai Straits. In this hilly, and often exposed region, this low lying, sheltered area must have been desirable for settlement and agriculture throughout history. The underlying bedrock is carboniferous limestone (Geological survey 1930), which is obscured by glacial drift, but still supports fertile brown earths of the Pentraeth group, with gleyed soils closer to the Straits (Soil Survey 1958).

4.2 Archaeological and Historical Background

The specific area of the development includes no previously recorded sites, but the remainder of Pentir parish contains sites of various periods. The earliest is the standing stone at Cadair Elwa (PRN 631, SH 5419 6827), presumably of a Bronze Age date (RCAHMW 1960, 246). A little to the north-east of this, between Fodol Ganol (SH 5505 6855) and Gors y Brithdir (SH 5565 6905), there are extensive Romano-British field systems incorporating round hut settlements (PRN 4, 34, 792, 3178) (Kelly 1975). In addition this area has produced a scatter of casual finds of stone implements (PRN 24, 25, 82, 1543, 3737). The Roman period is also represented by a hoard of 73 silver coins found in 1819 near the Vaynol Estate lime kiln (PRN 793, SH 5263 6836) (Latham & Plunkett Dillon 1988,11). There remain few traces of the medieval settlement of the area, although documentary sources suggest that the medieval township of Aberpwll was located on the north-eastern outskirts of Felinheli (PRN 6816, SH 5330 6820).

The parish is particularly rich in monuments of the post-medieval period. At the northern limit of the parish is the Britannia Tubular Bridge (PRN 4012) designed by Robert Stephenson, and completed in 1850 (RCAHMW 1960, 246). The bridge is registered as a grade II listed building, despite being seriously damaged by a fire in 1970 (listed building record no. 3674). It was built to carry the Chester to Holyhead Railway, a branchline from which was constructed to Caernarfon. This was the Bangor and Caernarvon Railway, the line is now disused, and runs, within a tunnel, under the south-eastern edge of the development area. The single track line was constructed as far as Port Dinorwig by March 1852, and was open to passengers as far as Caernarfon in July of that year. The one major work on the line was the Vaynol tunnel, which is 455m long, and took the line under a corner of Vaynol Park. In 1855 a station was open at Treborth, situated just to the north-east of where the sewage works is now

located. In 1871 the track was converted from single to double, involving a reboring of the Vaynol Tunnel (Baughan 1991, 92-95).

To the east of the study area are Treborth Hall and its estate. The mansion house, now known as Ysgol Treborth, was built for Richard Davies round 1860-70. It is a grade II listed building due to it being a “fine example of a mid Victorian shipowner’s mansion” (Listed building record no. 18918).

Of greater significance, both historically, and to the proposed development, is Vaynol Park, in which the development land lies. Vaynol Old Hall was at the centre of the *maenol* (manor), around which the larger park developed. The land was originally owned by the Bishops of Bangor. The Old Hall was built in the 16th century by the Williams family, who owned the estate until 1696, when the last Williams died without issue. After reverting to the Crown the estate was granted to John Smith, a Member of Parliament and Chancellor of the Exchequer. Thomas Assheton Smith of South Tedworth inherited the estate from the Smith family, and it later passed to the Duffs, who owned it until 1984, when the house and park were sold (Cadw 1998a, 301).

Most of the structure of the Old Hall is 16th century, with two later 17th century phases of alteration. It remains well preserved because subsequent alterations were minimal, due to the new hall being constructed to the south-west of the old one. The New Hall, constructed in the late 18th century, has been continually remodelled throughout its history. Within the garden of the Old Hall is a small chapel dedicated to St Mary. It has a date stone in its porch with the date of 1596, but this may be an addition, and the chapel could be older. This too was replaced by a larger new building in the 19th century. The new chapel seems to have been built between 1840 and 1855. A large barn was built to the north of the Old Hall by William Williams in 1605, but most of the other buildings around the two halls date to the late 19th or early 20th centuries (Cadw 1998a, 301-2).

The small, terraced formal garden associated with the Old Hall is contemporary with the hall’s use in the 17th century, if not with its construction in the 16th. The garden is well preserved with many original features surviving. The formal gardens round the main house were not laid out until the start of the 20th century; previously there were only lawns (Cadw 1998a, 304).

The conversion of the Park to its present layout was started in the 1820s by the first Thomas Assheton Smith. The new park was larger than the 18th century one, hedges and boundaries were removed and the woodlands were restricted to copses and coverts, partially to improve it for foxhunting. In the 1860s the park was surrounded by a high stone wall, and the road was re-routed to run outside this wall. The lodges were built at this time (Cadw 1998a, 302). For most of the study area this involved only minor changes, mainly the creation of the coverts, and the formalisation of the field layout. The southern end of the study area was outside the earlier limits of the Park, and was only incorporated fairly late in the process of redesign. It was still a landscape of small fields and farmhouses in the 1840s, when the tithe map was drawn up (Tithe map for Bangor parish, 1840s). In 1832 most of the study area was included in the farm of Llwyn Dedwydd, the farmhouse of which was located where the Cow Pasture Covert now is (1832 Estate map). Earlier it was part of Ty Isaf and Tros y Weirglodd, these farmhouses being situated next to each other just north of what is now the rear drive to the hall (1777 Estate map). By 1866 the land to the south of this drive had been converted to parkland and the present coverts were laid out, though the small farms remained to the north (1866 Estate map) (see figures 7,8 and 9).

The main drive runs up to the house from the south-east, but there is also a rear drive, which borders the development area. The drive entrance was originally to the south of the lodge, though a new stretch of drive, constructed after 1914, now takes around the northern side. The lodge is a single storey, stone building, with a slate roof and veranda, built in 1863-4. The original gates have gone, but the tall, stone-built piers remain (Cadw 1998a, 303). Until the 1860s the rear drive ran to the south of the study area, cutting through the southern part of Porthwell Covert. By 1866 the drive followed its present line (1866 Estate map), presumably the change took place around the time the lodge and the gateway were constructed. The boundary wall along the eastern edge of the study area was not constructed until after 1866, although sections to the north and south had been completed by this date.

The woodland in the northern corner of the park, known as Parkiau or Vaynol Wood, is the largest area of woodland and is shown on the 1777 estate map. The woodland is, at present, commercially managed for timber (Cadw 1998a, 303). Sealpond Wood contained a pond, as shown on the 1889 OS map. The name suggests that it was used by George William Duff in the mid 19th century to house part of his

menagerie, which in addition to seals, included bears, monkeys and bison (Cadw 1998a, 303). This woodland and the others north of the rear drive were only created after 1866 (1866 Estate map).

4.3 The Existing Archaeological Record

There are no individual sites recorded in the Sites and Monuments Record for the development area, but it does fall within a registered landscape of considerable importance. The site of the proposed development is located along the north-eastern side of Vaynol Park. The Park forms the northern end of a Registered Landscape of Outstanding Historic Interest (HLW (Gw) 6, Dinorwig), which also includes Nant Peris; a valley cutting deep into the Snowdonia Massif. Although including important evidence for prehistoric and medieval settlement, this area is dominated by the extensive remains of 19th and 20th century slate quarries. Vaynol Park forms an integral part of this landscape as the quarries were a valuable part of the Vaynol Estate, described as “one of the most significant and powerful post-medieval landholdings in North West Wales (Cadw 1998b, 88). The decline of the slate industry in the late 19th and early 20th centuries was an important factor in the demise of the Vaynol Estate.

Vaynol Park has been evaluated as a grade I historic park (Cadw 1998, 301). The main buildings of the Park are grouped together just beyond the south-western limit of the development area. Vaynol Hall, Old Hall and St Mary’s Chapel are all grade I listed buildings (Listed Building Record numbers 4173, 4166, 4172, respectively), and the impact of the development on their setting must be taken into consideration. Numerous other buildings with the Park and other park features are also listed (see appendix V). There are no buildings or significant park features actually within the development area, although traces of the earlier field system would be expected to survive. The Capel y Graig Lodge is located just north of the development area, and was built in 1863-4. It is a grade II listed building (record no. 4201). This record also includes the gate piers at the entrance to the rear drive to the Hall. The boundary wall round the Park is grade II listed (record no. 18910), on the eastern side of the Park, it runs down the side of the A487, and also survives along the northern edge of the development area.

The part of the Park bordering the Menai Straits is now owned by the National Trust and is known as Glan Faenol. Studies of this area have been carried out for the National Trust (Latham & Plunkett Dillon 1988, Snow 1993).

Vaynol Park and the area to the east, including Treborth Hall, have been characterised as comprising high status dwellings and associated demesnes (HLCA No. 48, GAT 2000, 82). It is noted that, despite the development of Parc Menai, “most of the Vaynol demesne has been little touched since the estate’s demise in the 1960s”. Conservation priorities include the “preservation of setting and of the character of an estate demesne”.

The Vaynol Railway Tunnel, which passes under the development area, also forms part of the archaeological record, though the present development is unlikely to have any impact upon it.

5 ARCHAEOLOGICAL FINDINGS AND RECOMMENDATIONS

5.1 The Archaeological Survey

(See figures 1, 2 and 3)

Eighteen features were identified within and around the survey area. These are listed below along with recommendations for further assessment and mitigatory measures. The impact of the development, both direct, and, where relevant, indirect impact on setting, have been given on the assumption that any part of the development land could be built on. In practice the design of the development could be altered to avoid direct impact on some of the archaeological features.

Feature 1 Borrow pit/quarry and related feature

Category D

Direct impact: Considerable

Indirect impact: Not relevant

At the western end of a small, unnamed copse, south of field 1, is a horseshoe-shaped hollow, opening to the west. This feature is c.11m across, and the scarp reaches 2m in height at its eastern arc. Immediately east of this is a linear hollow resembling a shallow, artificial valley. This is 8m wide across its floor and c.18m long. The scarps defining it are up to 1.8m in height. The feature is aligned roughly east-west, parallel to the copse's boundaries, and its eastern end is roughly squared off. The horseshoe-shaped hollow resembles a small quarry or borrow pit. As no stone could be seen the latter interpretation seems most likely. The function of the linear hollow was not clear. It may be related to the borrow pit, but seemed rather regular to be merely the result of quarrying or digging for material. The material from these features could have been used in constructing level foundations for the rear drive.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording

Feature 2 Trackway

Category D

Direct impact: Considerable

Indirect impact: Not relevant

A trackway runs up the eastern side of Warren Covert, set some 3m below the level of field 1, to the east. The 25' map (figure 4) suggests that this merely provided field access.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording

Feature 3 Drive and walls

Category C

Direct impact: Significant

Indirect impact: Moderate

The rear drive leading to the Hall runs through Britannia Park, and along the northern and western sides of field 4. It is still in use for access to the Hall and to the National Trust land of Glan Faenol. The drive's surface is tarmaced, but in poor repair. Where it passes through Warren Covert the drive has walls on either side; there is also a wall on its northern side where it runs along the southern edge of field 1. The walls are up to 1.5m in height and constructed of limestone, apparently originally in drystone, but with mortar added in places. The tops of the walls have decorative crenolated-effect coping stones. Much of the rest of the drive is fenced, but a low wall also survives on the south-eastern edge of Silage Stack Wood, merging, at its southern end, into the higher wall along the north-western side of the drive as it approaches the Hall complex. This latter is a substantial mortared wall, constructed of squared limestone.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording, walls should be reinstated retaining their original character.

Feature 4 Capel y Graig Lodge

Category B

Direct impact: None

Indirect impact: Moderate

The Capel y Graig Lodge, built in 1863-4, is located just north of field 2 (plate 1). It is a grade II listed building (record no. 4201). This building will not be directly affected by the development, but its setting will be significantly altered. However, the setting has already been compromised by the dumping on field 2.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Minimise impact on setting, consultation with Cadw necessary.

Feature 5 Boundary wall to Vaynol Park

Category A

Direct impact: Unlikely

Indirect impact: Moderate

The stone boundary wall encloses the entire park. On the eastern side it runs along the side of the A487 (Plate 2). It also bounds the N edge of the development area. Its construction was begun in 1863, but the section beside field 2 was not built until after 1866 (1866 Estate map). In this area the wall measures c.2.2m high, with another 0.4m of coping stones on top. On the northern side of field 6 the wall is c.3m high. It is constructed in irregular courses of limestone blocks knapped square, and topped with slate coping stones of various sizes and shapes, producing a jagged effect. The boundary wall is grade II listed (record no. 18910) and described as “one of the finest of its kind in Wales”. The development should not impact on the wall, and care should be taken that no damage is done to it. It is also recommended that buildings should not be visible over the wall, especially next to the A487, so that the view from outside is not compromised. The existence of remains of Lodge Covert immediately west of the wall will assist in the screening of the eastern end of the development.

The gate piers at the eastern end of the rear drive are grade II listed structures (listed building record no. 4201). It is recommended that these are not altered, but any alterations necessary will require consultation with, and permission from, Cadw.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoid and ensure the wall is unaffected by the building works.

Feature 6 Sawmill and related features

Category C

Direct impact: Considerable

Indirect impact: Not relevant

The sawmill existed when the 1:10,000 OS map was surveyed in 1969 (figure 10), at which time Lodge Covert was still intact. By the time that the aerial photographs were taken in 1993 the trees were only present as a narrow band beside the road, and much of the area had been levelled and concreted over. At this date the sawmill buildings were still standing. Since then stone chippings and other rubbish have been deposited in heaps over the area (plate 3). The western end of the building remains standing, though lacking a roof, but the rest of the sawmill buildings and associated features have been demolished and overgrown. The upstanding building (plate 4) is constructed of modern blue-grey bricks, and there is nothing to suggest that any part of this site is earlier than mid 20th century. Before the construction of the sawmill the field was levelled by dumping clay and rubble, so that the level at its western end is about 3m above that of the neighbouring field (field 3). This levelling has obscured any possible surviving earlier features in the area. A prisoner of war camp was located in this field during the Second World War (Chambers Jones 1995, 52). Research should be carried out to discover whether any documentary evidence of this survives. A full survey of the field should be carried out to establish whether any of the concrete surfaces or other features might relate to the prisoner of war camp rather than the sawmill.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Measured survey

Feature 7 Reservoir

Category D

Direct impact: Considerable

Indirect impact: Not relevant

A small reservoir built above the line of the tunnel (plate 5). This is defined by a scarp, up to 1.4m high with a low brick structure on top. The structure, providing access to the reservoir, has two parts both measuring 2.3 by 1.9m, but the western half set 0.35m below the eastern half. The later has a concrete roof with a small access hole in it, covered by a slate slab. The whole of the western part is covered by slate slabs. A linear hollow between this structure and the fence may indicate the location of pipes running from or to the reservoir. The similarity of the bricks to those used in the construction of the air shaft tower and its location above the tunnel suggests that the reservoir is related to the railway.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording

Feature 8 Railway tunnel

Category C

Direct impact: None

Indirect impact: Not relevant

The tunnel was constructed by boring, rather than by cut and cover techniques, so there are few traces of it on the surface where it passes under the development area. Its presence is indicated by the brick tower of an air shaft (plate 7), just beyond the development area to the south.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *None*

Feature 9 Bank round Porthwell Covert

Category C

Direct impact: Considerable

Indirect impact: Not relevant

The curving northern boundary of Porthwell Covert is defined by a low bank, 0.4m high, with a trace of a ditch on its northern side (plate 8). At the eastern, uphill end, the ditch appears to curve outwards, away from the bank to join the track, feature 10a.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Detailed recording including measured survey*

Feature 10 Pre-18th century field system

Category E

Direct impact: Considerable

Indirect impact: Not relevant

(See plate 9 and figure 7)

When the area was converted to parkland in the early 1860s walls and hedges were removed, but the earthwork elements of the field boundaries remained untouched. These can still be clearly seen on the ground, and are also faintly visible on the aerial photographs, especially frame 223. Taking into account slight errors in the estate maps each earthwork can be identified with a specific boundary on the maps.

Feature 10a runs between the south-western corner of field 2 and the north-eastern corner of Porthwell Covert. On the ground it appears as a ledge defined by scarps up to 0.4m high on its uphill and downhill sides, and it resembles a trackway. The earthwork continues along the eastern edge of the Covert, just inside its boundary. On both the 1777 and 1832 Estate maps a field boundary runs along this line (figure 7 (a)). There is no track shown on the maps, but it may have been used only for field access, and not considered worth representing.

Feature 10b is a low scarp (c. 0.3m high), running north from Porthwell Covert. The 1832 map shows the western boundary to a small rectangular field in this location (figure 7 (b)). The northern boundary of this field is probably represented on the ground by one of the poorly defined gullies running downslope across the present field. This field does not appear on the 1777 map, and the slightness of the scarp corresponds to the short time that it had to form.

Feature 10c is a much more substantial scarp, up to 1.4m in height, aligned south-west to north-east across field 3. It has stones protruding from it, suggesting the remains of a stone wall or revetment. 10d is a similar, nearly parallel scarp, just east of Cow Pasture Covert. It also reaches a height of 1.4m. These scarps form two sides of a narrow field shown on both the 1777 and 1832 maps (figure 7 (c) and (d)). The earlier map shows a track running along the western side of 10d.

Feature 10e is a narrow ditch running from the north-western side of Porthwell Covert to the southern tip of Cow Pasture Covert. The feature is c.3m wide and up to 0.5m deep. It can be seen on the aerial photographs, where the odd double curve of its route can be clearly recognised. This marks the south-western end of two narrow fields as shown on the 1832 map (figure 7 (e)). The eastern field is the one also defined by features 10c and d.

In the south-western corner of field 3 is a curved scarp (feature 10f), 1m high, with the traces of a hollow-way trackway on its southern side. This appears to be the southern end of the western narrow field, before it was shortened to 10e. The 1777 map shows this boundary (figure 7 (f)), but not the trackway. However a track is shown running along the eastern side of this field, and it seems likely that it continued round the southern end.

Feature 10b was probably caused by the movement of soil down the slope as a result of ploughing, making it what is known as a lynchet. 10c lies at the base of this slope and may have been caused in the

same way, but the other scarps are on relatively level land, and some deliberate earth moving would seem necessary to create them. However, the apparent levelness of the terrain is largely due to fields themselves. The natural topography would have been gently sloping, and perhaps the dramatic remodelling is due to the gradual downslope movement of soil over a long time.

The long, narrow fields were successively subdivided into smaller, squarer fields, so that by the 1840s their original form can barely be discerned. The 1777 map shows the field relatively undivided and shows the land to the north to also be part of the same field layout. Long, narrow, gently curving strips are typical of medieval open fields, and it seems certain that these are the enclosed remnants of the open field system, which must have covered the whole area in the medieval period. This would explain the build-up of substantial lynchets on gently sloping land, as ploughing would have continued over centuries. As lynchets develop they preserve within themselves layers of soil which, under the right conditions, can contain artefacts and palaeoenvironmental evidence. It is possible that dating evidence to confirm the origin of these fields, and other information on the nature of the agriculture, may be preserved within these features. Excavation is the only way to recover this information, and trial trenching of these features is recommended.

Recommendations for further assessment: *Detailed recording including measured survey, followed by field evaluation involving trial trenching.*

Recommendations for mitigatory measures: *Dependant on results of field evaluation*

Feature 11 Cow Pasture Covert

Category C

Direct impact: Unlikely

Indirect impact: Not relevant

This small area of woodland is one of the coverts forming part of the mid 19th century layout of the park, designed largely to encourage foxes and other game. Within it is a long mound with two peaks, up to 4.4m high. The material for these mounds has not originated from the neighbouring fields, and seems most likely to be the deposits dug out when the fish ponds to the south were created.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Detailed recording including measured survey*

Feature 12 18th century field system

Category C

Direct impact: Considerable

Indirect impact: Not relevant

The land drops significantly in level between fields 3 and 4, between Cow Pasture Covert and Warren Covert this drop is visible as a steep escarpment (feature 12a), facing west, and 3m high. It is aligned south-west to north-east, and continues into Warren Covert as far as the drive, increasing in height to the north. This is probably largely natural, though soil has been dumped along its crest in Warren Covert, and a low bank, 0.3m high, can be seen on the stretch between the woods. The tithe map (figure 8 (a)) suggests that a track ran along this escarpment in the 1840s.

To the west of the escarpment are earthwork traces of fields, most of which can be identified on the early maps. Immediately west of Cow Pasture Covert is a rectangular, earthen platform (feature 12b) (plate 10), up to 2.9m in height. Its top is level, and there is a large boulder at the top of the western side. The northern end is confused by ridges and hummocks, which appear to join the main scarp, and may be suggestions of other field boundaries. This rectangular platform is indicated on maps from 1777 onwards (figure 7 (g)), and by 1832 formed the garden to the farmhouse of Llwyn Dedwydd. The house itself seems to have been located under Cow Pasture Covert, but nothing can now be seen of it.

North-east of 12b, projecting from the edge of Warren Covert, is a roughly triangular platform (feature 12c), 0.3m high, with faint traces of a ditch to the north. This is in the correct place and at the right orientation to be the corner of a rectangular field shown on the 1832 map (figure 7 (h)) and the tithe map. A field junction (figure 7 (i)) to the north of this feature is probably represented on the ground by a curving bank, up to 0.4m high, surrounded by a curved ditch (feature 12d). There are other slight scarps and gullies, which are not easily explained by the maps, some of these may be the result of recent drainage, but others may relate to the field system preceding the 1777 estate map. A detailed measured survey is necessary to clarify the earthworks in this area.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Detailed recording including measured survey*

Feature 13 18th century field system

Category C

Direct impact: Considerable

Indirect impact: Not relevant

Field 4 has numerous scarps running across it, although the maps suggest that this area was covered by only two large fields from 1777. Some of the earthworks are probably traces of field drains, but others are clearly field boundaries. Feature 13a is a scarp, up to 0.6m in height, running nearly north-south (plate 11). Its northern end is hidden in Warren Covert, but its southern end curves round towards the east. The 1777 estate map shows a dotted line (figure 7 (j)), curving at its southern end in exactly the same location. Presumably the dotted line indicates that there was no permanent fence or wall along this boundary at that date, and it had gone out of use altogether by 1832, but this is clearly a pre-18th century field boundary, possibly another fragment of the medieval field system.

Further west is a slate trough (feature 13b) with a stone-lined drain running into and out from it (plate 12). The trough is neatly constructed and measures 3 x 1.9m. The drain is lined with limestone blocks and covered with slate slabs. Where it continues under ground there is no surface trace of its presence. The trough is marked on the 1900 edition of the 25" map (Caernarvonshire XI.3), but not on the 1889 edition, dating its construction relatively accurately to the end of the 19th century.

Leading south-west from the trough is a boggy linear hollow, which meanders across the field to an area where surface water currently collects. This probably represents a stream, which the covered drain replaced.

The maps from 1777 to the 1840s show a boundary crossing field 4, running south-west from somewhere near Sealpond Wood (figure 5 (a), figure 6 (a)). The tithe map shows a track running parallel to the boundary on its eastern side (figure 8 (b)). In roughly the correct location there are various scarps (feature 13c) running across the field. The northern end of these is particularly confused, and the field search was inadequate to determine which scarp represented the field boundary, and which the track, and whether other features were also present. A detailed measured survey is necessary to clarify the area.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Detailed recording including measured survey

Feature 14 Late 18th/ early 19th century field boundaries

Category C

Direct impact: Considerable

Indirect impact: Not relevant

The layout out of the fields covering the area of field 5 changed considerably between 1777 and 1832, as the boundaries were regularised, and Silage Stack Wood was created. Some of those late 18th or early 19th century boundaries have now gone, and are visible only as shallow gullies (feature 14a, figure 6 (b) and (c)), barely 0.1m deep, running across the pasture. The most prominent earthworks in field 5 are heaps of soil from the digging of a drainage ditch and laying of a covered drain (feature 14b), but these are all clearly modern.

The 25" map shows a stream running through Vaynol Wood, and this passes under field 5 in a covered drain (feature 14c). Against the eastern boundary of the wood the drain has been exposed by digging, revealing its construction, which is identical to 13b. Where the drain runs under the field its line can be detected as a slight hollow. This feature is presumably of the same date as 13b.

Across the northern part of field 5, between the gate just north of Silage Stack Wood and the gate into field 6, is the earthwork remains of a track (14d) (plate 13). This is c.3m wide and up to 0.2m high. It is not shown on any of the maps, and was probably just for field access. It is unlikely to pre-date the formalised laying out of this area at the start of the 19th century, and may be much more recent.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Detailed recording including measured survey

Feature 15 18th century field boundary

Category C

Direct impact: Considerable

Indirect impact: Not relevant

Over much of the eastern end of field 6 are spreads of clayey subsoil, clearly dumped from elsewhere, which obscure the original surface of the field and any earthworks. However, much of the northern side remains untouched by dumping, and here a boggy, linear hollow, defined by scarps no more than 0.2m high can be seen running south-west from the belt of woodland. This western side of this hollow curves towards the west at its southern end, but the main feature probably continued straight on. This is the boundary shown on the maps from 1777 to 1866 forming the eastern side of the field (figure 5 (b), 6 (d), 8 (c), 9 (a)), which seems to have been extended after 1866 to its present size. The 1777 map shows further subdivisions of the field, as suggested by the westward curving scarp.

It should be noted that the Marquis of Anglesey's Column (PRN ??, listed building no. ??) can be seen from parts of this field. Any construction on this site will have a small impact on the view from the top of the column, which the public can ascend.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Detailed recording including measured survey

Feature 16 Woodland belt

Category C

Direct impact: Unlikely

Indirect impact: Not relevant

By the end of the 19th century a belt of woodland had been planted just inside the boundary wall along the northern edge of field 6. The scots pines which were part of this planting still stand. The belt originally joined to the woodland to the east, but a gap has been made at its eastern end, revealing the boundary wall. Recently the woodland belt has been widened by the addition of shrub species planted on top of an earth bank. This bank is related to the recent planting, and not to the original belt. The whole woodland belt would be an asset to the new development and should not be altered.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoid

Feature 17 Vaynol Hall complex

Category A

Direct impact: None

Indirect impact: Severe

Although the development will not directly impact on the hall complex it will significantly impact on its setting. This will have no effect on Vaynol Hall itself, which faces south-east, and is screened from the development by woodland. The Old Hall faces north, but its eastern gable end looks out over field 4 (plate 14). The present view from the Old Hall is of parkland, as laid out in the early 19th century. Even if a woodland belt is built to screen the new development from the Old Hall, the sense of space in that view would be greatly reduced. Ideally it would be recommended that the development of field 4 should be avoided, but if this is not possible the use of a woodland belt to screen the development would seem to be the only solution.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoid, or minimise visual impact

Feature 18 Slate fences and iron fences

Category D

Direct impact: Likely

Indirect impact: Not relevant

Field 6 and part of field 5 are bounded by traditional slate fences (plate 15). These are composed of long, narrow slate slabs, usually about 1m high, driven into the ground and held together by strong wire. The eastern side of field 5 has a more unusual style of fencing. This is made of iron, with horizontal bars between the uprights, up to 1.8m tall (plate 16). The spacing between the bars decreases towards the bottom of the fence, making it stock proof. This fencing is constructed in sections that are bolted together. Both these types of fencing are likely to be of late 19th century date. While it is probably impractical to preserve the iron fencing, it is recommended that the slate fencing is preserved, or reconstructed to maintain the character of the area.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording, reconstruction of slate fencing.

5.2 Landscape assessment

Registered historic areas into which development falls:

Dinorwig Registered Landscape of Outstanding Historic Interest (Gw) 6 (Cadw 1998b, 88-91), see appendix II

Vaynol Park, grade I historic park (Cadw 1998a, 301), see appendix I

Historic Landscape Characterisation

Area No. 48, Vaynol Park and Treborth Hall (GAT 2000, 82), see appendix III.

The present development is within the boundaries of Vaynol Park, classed as a grade I historic park. The Park also forms part of the Dinorwig registered landscape area, its specific characterisation area being a demesne to a high status dwelling.

The importance of Vaynol Park as a whole, both as a setting to the Hall, and as part of a landscape dramatically recording economic and social relationships in the 18th, 19th and 20th centuries cannot be doubted. The preservation of such a complete landscape as that included in the Dinorwig landscape area is of national importance in illuminating post-medieval history. It provides archaeological and architectural evidence to complement and expand on documentary records for this period, and enables a comprehension of historical perspectives through the experience of the physical landscape.

The impact of the development on the park as a whole must be considered, especially in relation to the setting of the listed buildings in the park. The planning legislation does, to some extent, address the problem of the setting of historic monuments. The Welsh Office Circular 60/96 stresses the 'desirability of preserving an ancient monument and its setting...whether that monument is scheduled or unscheduled' (p3). Colcutt (1999) has studied this issue in relation to planning regulations and guidances, mainly from England, but also from the rest of the UK. He concluded that the setting of a monument was considered of importance, even though the term was not strictly defined. The view from and to a monument should be considered in planning applications, as should the relationship of neighbouring monuments to the understanding of the monument in question. The regulations, however, leave the exact definition of setting open to be decided on a case by case basis, with the application of common sense. Four main points should be considered:

'(a) Intrinsic Visual Interest - the visual qualities of the archaeological features themselves as seen from other points;

(b) Topographic Setting - the visual relationship of the archaeological features to surrounding topography (including local slope angles) and to such major elements as hills, river valleys, etc.;

(c) Landuse Setting - the visual relationship of the archaeological features to the landuse and particularly to those elements of the current landuse which had remained unchanged or were similar to those which existed at the time the features were occupied; and

(d) Group Setting - the visual relationship of the features to other visible archaeological sites in the vicinity, in terms of both contemporary and diachronic ("palimpsest") groupings or patterning' (Colcutt 1999, p504).

The present development area covers c. 20.6 hectares, which is 5.6% of the maximum extent of Vaynol Park as shown on the 1920 6" map (c. 370 hectares). The surviving area of the Park covers c.332 hectares, so the present site is around 6.2% of this area. The development area is located at the edge of the surviving area of the Park, and does not directly impact on any listed buildings or other park features of importance. However the setting of the lodge and gateway to the rear drive have to be considered, and, most importantly, the setting for the hall complex.

The development area can be evaluated in relation to Historic Characterisation Area No. 48, as summarised below (for definition of terms see appendix IV).

Criterion/value	High/ good	Moderate /average	Low/fair
Rarity			√
Representativeness	√		
Documentation	√		
Group value	√		
Survival	√		
Condition	√		
Coherence	√		
Integrity	√		
Diversity		√	
Potential		√	
Amenity			√
Associations		√	

The development area is a representative area of Vaynol Park, and therefore is not a rare landscape type in this characterisation area. However, field 3 has traces of medieval strip fields, which continued in use into the 19th century. Field survey may reveal other traces of the open fields elsewhere in the Park, but until this is demonstrated this field is unique in preserving a medieval field system.

The documentation is particularly good because of the existence of the estate surveys in addition to the tithe map. Group value is also high as several elements of the park layout survive. Dumping in fields 2 and 6 have obscured some of the earlier landscape, but generally the post-medieval landscape is well preserved in the development area. Coherence of the area is good as much of the area is still used as pastureland and retains the park layout. Similarly its integrity is good, as the landscape elements are easily understood. The area preserves evidence from both the post-medieval expansion of the Park and from the medieval use of the area, but no evidence from earlier periods, so the diversity of archaeological information is assessed as medium.

There is potential for the survival of evidence on medieval agriculture in field 3, but the preservation of extensive and complex archaeological deposits are unlikely. The area has little specific amenity value at present as it is not open to the public, and cannot be easily seen from any public routeways. The historical associations of the Park with the successive families owning the Vaynol Estate are well recorded, but there are associations particular to this area of the Park.

Vaynol Park is of high value, and the development area is a representative section of the park, containing a unique fragment of the medieval field system. Overall the development area can be considered of high value, especially due to its proximity to the hall complex.

6 SUMMARY OF IMPACTS AND RECOMMENDATIONS FOR MITIGATORY MEASURES

6.1 Summary of impacts

6.1.1 Individual sites

Table summarising archaeological features in the survey area, the impact of the development on these, and recommended mitigatory measures.

Feature	Category of importance	Direct impact	Indirect impact	Further assessment	Mitigatory measures
1	D	Considerable	Not relevant	None	Basic recording
2	D	Considerable	Not relevant	None	Basic recording
3	C	Significant	Moderate	None	Basic recording, reinstate walls
4	B	None	Moderate	None	Minimise impact on setting
5	A	Unlikely	Moderate	None	Avoid, minimise impact on setting
6	C	Considerable	Not relevant	None	Detailed recording including measured survey
7	D	Considerable	Not relevant	None	Basic recording
8	C	None	Not relevant	None	None
9	C	Considerable	Not relevant	None	Detailed recording including measured survey
10	E	Considerable	Not relevant	Detailed recording including measured survey, followed by field evaluation involving trial trenching.	Dependant on results of field evaluation
11	C	Unlikely	Not relevant	None	Detailed recording including measured survey
12	C	Considerable	Not relevant	None	Detailed recording including measured survey
13	C	Considerable	Not relevant	None	Detailed recording including measured survey
14	C	Considerable	Not relevant	None	Detailed recording including measured survey
15	C	Considerable	Not relevant	None	Detailed recording including measured survey
16	C	Unlikely	Not relevant	None	Avoid
17	A	None	Severe	None	Avoid, or minimise visual impact
18	D	Likely	Not relevant	None	Basic recording, reconstruction of slate fencing.

In assigning features to categories of importance their place in the plan of the Park as a whole has been considered, causing features of apparently low significance individually to be assigned a higher significance if they are park features. The boundary wall to the Park was allocated to category A, and Vaynol Old Hall and surrounding complex of buildings have also been included due to the likely impact of the development on their setting. Capel y Graig Lodge (feature 4) was allocated to category B. Ten features were allocated to category C (features 3, 6, 8, 9, 11, 12, 13, 14, 15 and 16), and four to category D (features 1, 2, 7, and 18). The pre-18th century field system (feature 10) has been allocated to category E, as the date of its original layout cannot be established by documentary research alone.

The development is likely to have considerable or significant direct impact on 11 of these features (1, 2, 3, 6, 7, 9, 10, 12, 13, 14, and 15). It will also have moderate impact on the setting of 3 structures (features 3, 4, and 5), and severe impact on the hall complex (feature 17).

6.1.2 Impact on the landscape

The development area, including Britannia Park, covers c. 20.6 hectares, which is 5.6% of the maximum extent of Vaynol Park as shown on the 1920 6" map (c. 370 hectares). The surviving area of the Park covers c.332 hectares, so the present site is around 6.2% of this area. While this is a fairly small percentage it does represent a significant loss of parkland along the north-eastern edge of the park. The direct impact of the development on Vaynol Park as a whole should be considered as **significant**.

The impact on setting has been covered in reference to the individual sites, but the development will also effect the setting of the whole Park. As the Park is already bordered on this side by Parc Menai the impact might be considered to be moderate, but extension of the business park would dramatically reduce the openness of the eastern end of the Park. The effect would be particularly significant when viewed from the Old Hall. To the north-east of the hall complex, where the development comes closest the impact on the more important buildings is less, as the complex is not orientated to look in this direction, and the view is already disrupted by several large modern barns. However, the setting of Penlan Cottage, the nursery and the ice house will be compromised. The development would also alter the experience of the Park for visitors to the National Trust property of Glan Faenol. As these problems are not easily solved, the development, especially that closest to the hall complex, must be considered to have a severe impact on the setting of the Park as a whole.

6.2 Further assessment by field evaluation

No further assessment is required for these features, with the exception of feature 10, which is the most interesting, and could provide information on the medieval use of this area. Evidence for medieval settlement or agriculture in Pentir parish is very slight, although the favourable nature of the soil and topography ensure that the area must have been occupied in that period. Trial trenching of these boundaries is, therefore, recommended prior to development of the area. The results of the field evaluation will determine what mitigatory measures are necessary for this site.

The presence of prehistoric and Romano-British sites within Pentir parish suggests the possibility that buried remains from these periods may survive within the development area. The fact that Vaynol Park lies on the best land in the parish makes it highly likely to have been occupied and farmed in early periods. Medieval and later farming has removed any upstanding monuments, but may not have damaged buried archaeological deposits. It may be possible to locate buried features using geophysical survey, especially if they are large ditches or burnt features. Not all deposits can be detected in this way, and those that are detected cannot be interpreted without excavation. Trial trenching is therefore complementary to geophysical survey, and both techniques must be used together to fully evaluate an area. A representative sample of the whole development area should be investigated in this way.

Features identified during field evaluation would be added to the list given above, and mitigation measures would be recommended.

6.3 Recommendations for mitigatory measures

6.3.1 Individual features

The recommended mitigatory measures for the category D features involve only basic recording. The category C features require detailed recording, particularly involving the production of a measured survey using a total station theodolite. The exception to this is the railway tunnel, which will not be affected by the development and, therefore, will require no mitigatory measures.

Capel y Graig Lodge and the boundary wall should not be directly affected by the development, although their setting will be significantly altered. Cadw must be consulted in relation to developments impacting on listed buildings. It is recommended that no building should be seen from beyond the boundary wall, so that the view from outside is not compromised.

As stated above, field evaluation may lead to further mitigatory measures being recommended.

6.3.2 The landscape

Although the loss of parkland involved would be relatively small, the impact of the proposed development on the landscape setting can be classed as severe, although this applies only to fields 4 and 5. Developments in fields 1, 2, 3 and 6 would have only minimal visual impact on the rest of the park.

The importance of the various woodlands and covert in screening the development should be stressed. The visual impact of fields 1, 2, 3 and 6 are low because any development in these would be screened by trees from the hall complex and the rest of the park. By preserving the remains of Lodge Covert behind the eastern wall the development would be screened from outside the park, and the setting of Capel y Graig Lodge and the gateway would be, to some extent, maintained. Similarly the woodland belt (feature 16) will screen the view into the development from the north. The addition of new woodlands might be used to minimise the visual impact of the development on the hall complex and the Park as a whole. Trees lining the rear drive might preserve the rural experience for visitors to Glan Faenol, though denying them a view of the Park as it was intended to be seen.

The draft Advice Note relating to the Register of landscapes of Historic Interest emphasises the nature of landscapes as dynamic, and stresses that the aim is not to fossilise historic landscapes, but to “manage them in ways that will allow the best elements from the past to be retained as they evolve to meet modern needs” (CCW *et al*, 2). The use of screening woodland would allow the development of some of the proposed area with minimal visual impact on the park as a whole. However, such a compromise is not so easily reached in the fields closest to the Old Hall. Woodland between the hall complex and the development would help preserve the isolated rural setting, but would destroy the current sense of space. The pasture fields fringed with woods retain the original impact of the parkland as it was intended when the Park was laid out in the early 19th century. Any development in fields 4 and 5 would remove that, however well screened they were.

The proximity of the development area to listed buildings including the lodge, gateway and boundary wall, requires consultation with Cadw about the proposed development. They will also have an interest in the impact of the work on the Park as a whole. Failure to consult with Cadw early in the planning process may lead to problems later.

7 STATEMENT OF SIGNIFICANCE

The importance of Vaynol Park as a whole, both as a setting to the Hall, and as part of a landscape dramatically recording economic and social relationships from the 18th to the 20th centuries, cannot be doubted. The preservation of such a complete landscape as that included in the Dinorwig landscape area is of national importance in illuminating post-medieval history. It provides archaeological and architectural evidence to complement and expand on documentary records for this period, and enables a comprehension of historical perspectives through the experience of the physical landscape.

The development of field 3 would have a considerable direct impact on the remains of a medieval field system, but field evaluation leading to the recommendation of appropriate mitigatory measures can reduce the impact by recovering archaeological information from this area. Similarly archaeological remains elsewhere in the study area can be at least partially preserved by recording. The development of fields 1, 2, 3 and 6 would have minimal visual impact on the setting of Vaynol Hall, but development in fields 4 or 5 would have a severe visual impact. As Vaynol is a grade I historic park and part of a Registered Landscape of Outstanding Historic Interest the necessity of developing these high impact areas should be seriously considered. Avoidance would be the preferred mitigatory measure for the whole of fields 4 and 5, field 4, perhaps, being the most important of the two.

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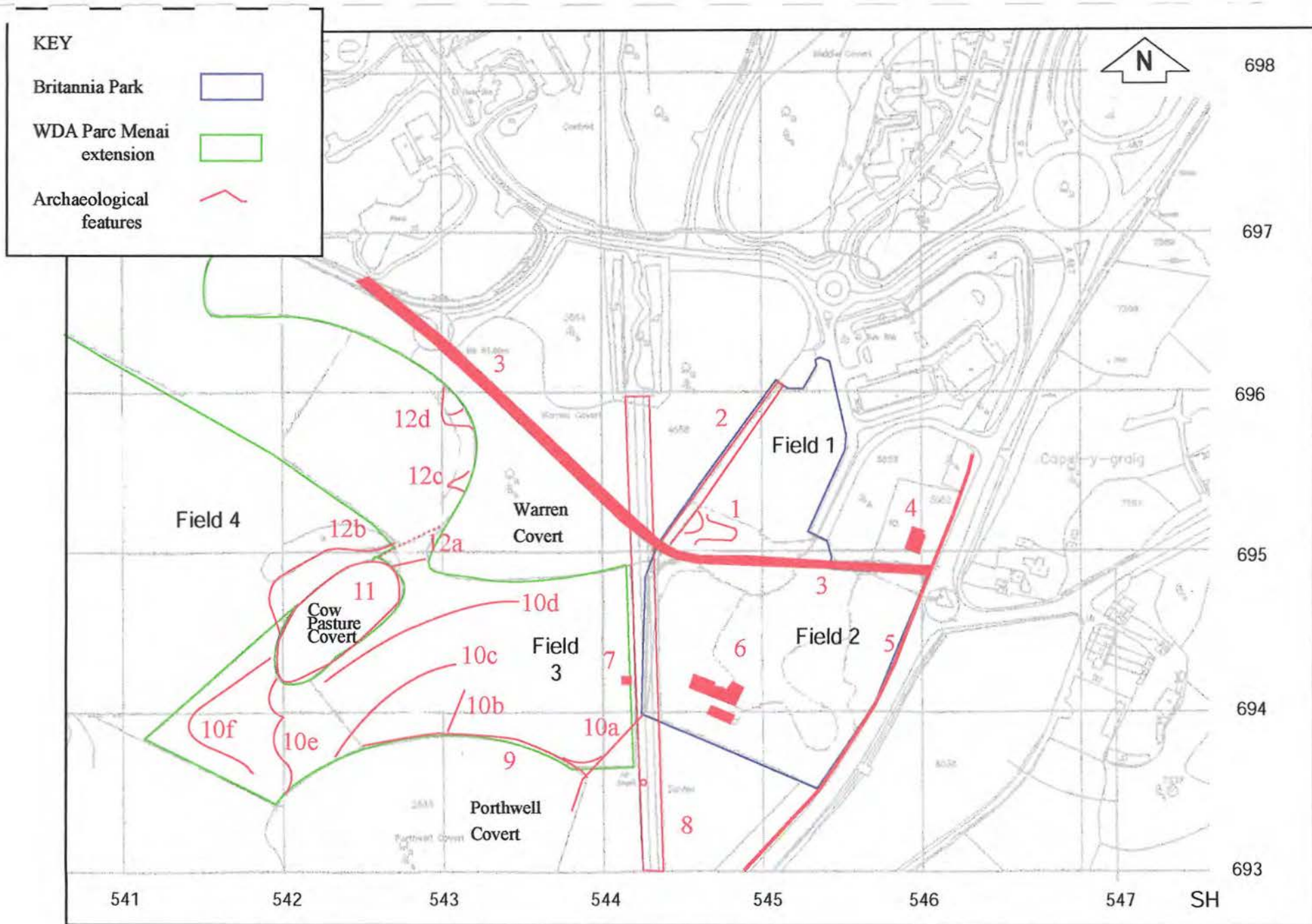


Figure 1: location of features

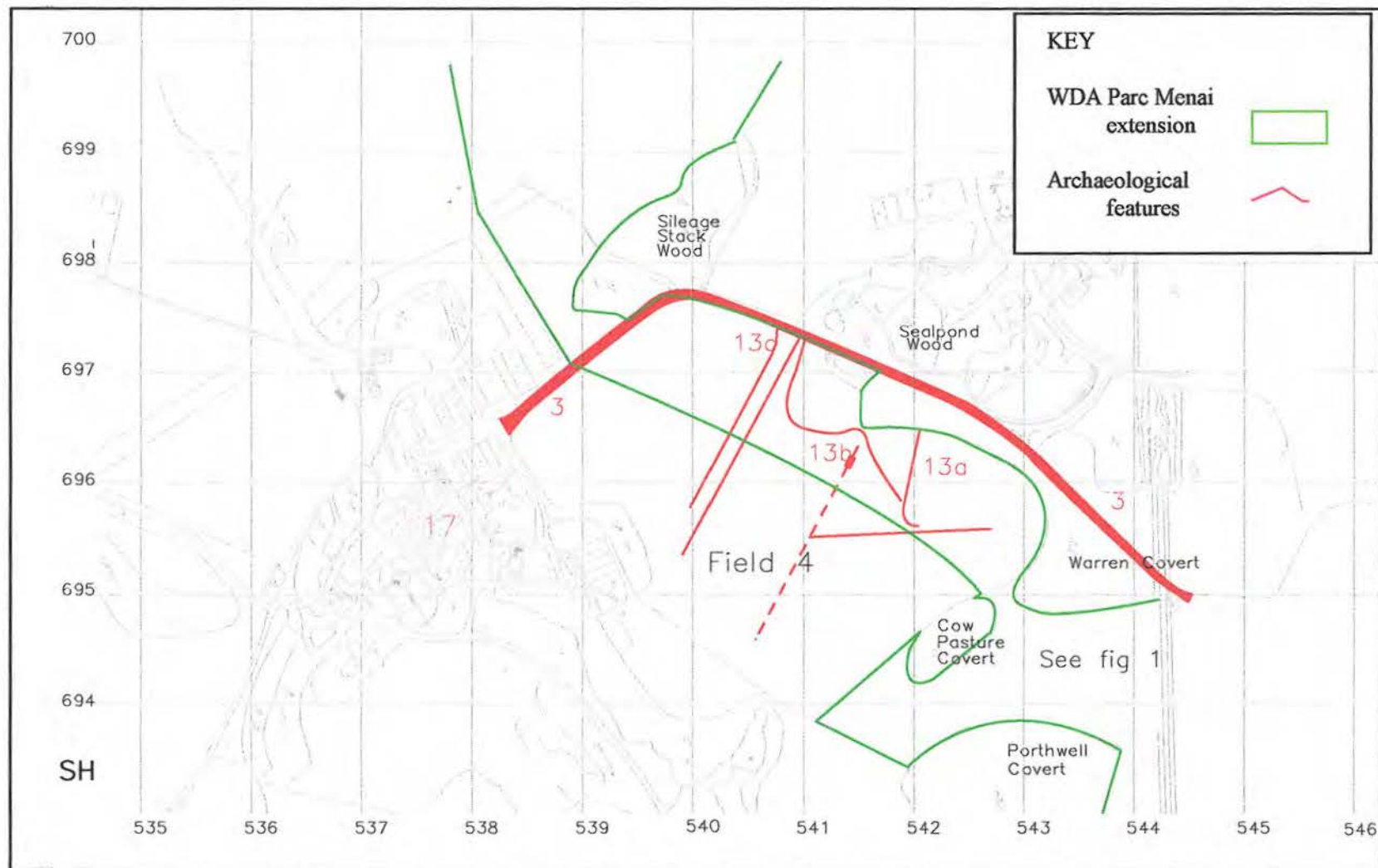


Figure 2: location of features in field 4

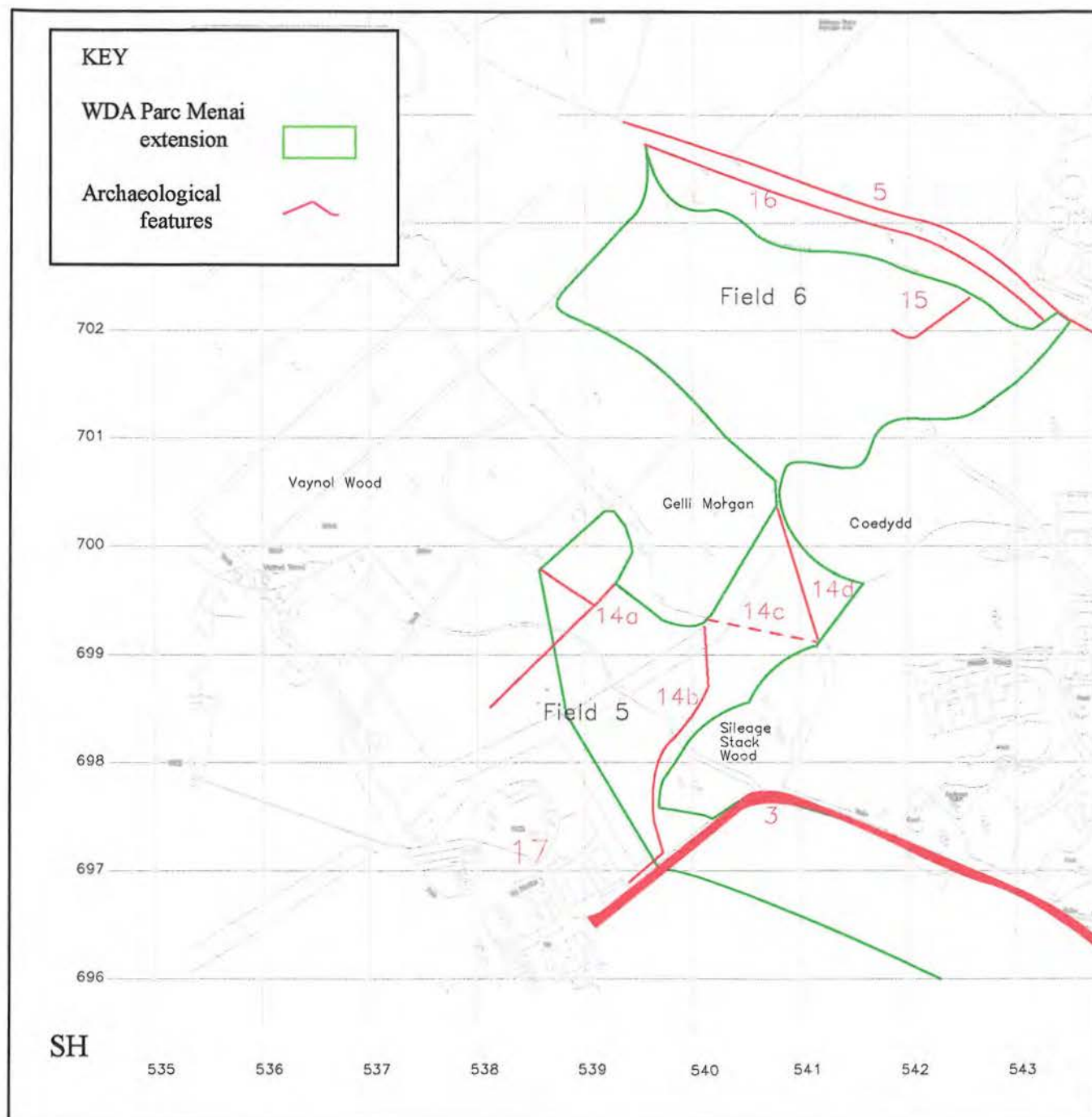


Figure 3: location of features in fields 5 and 6



Figure 4: OS 25: map, 1889 edition

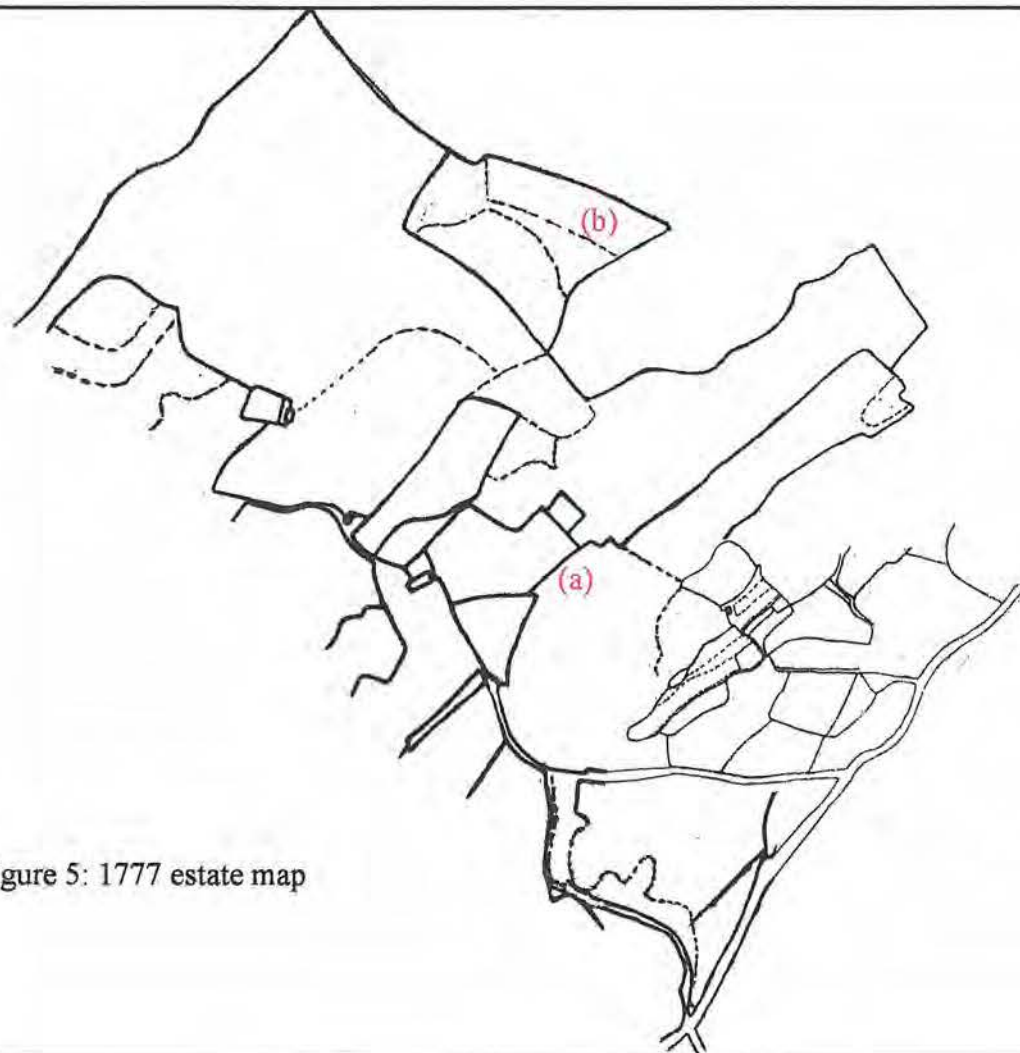


Figure 5: 1777 estate map

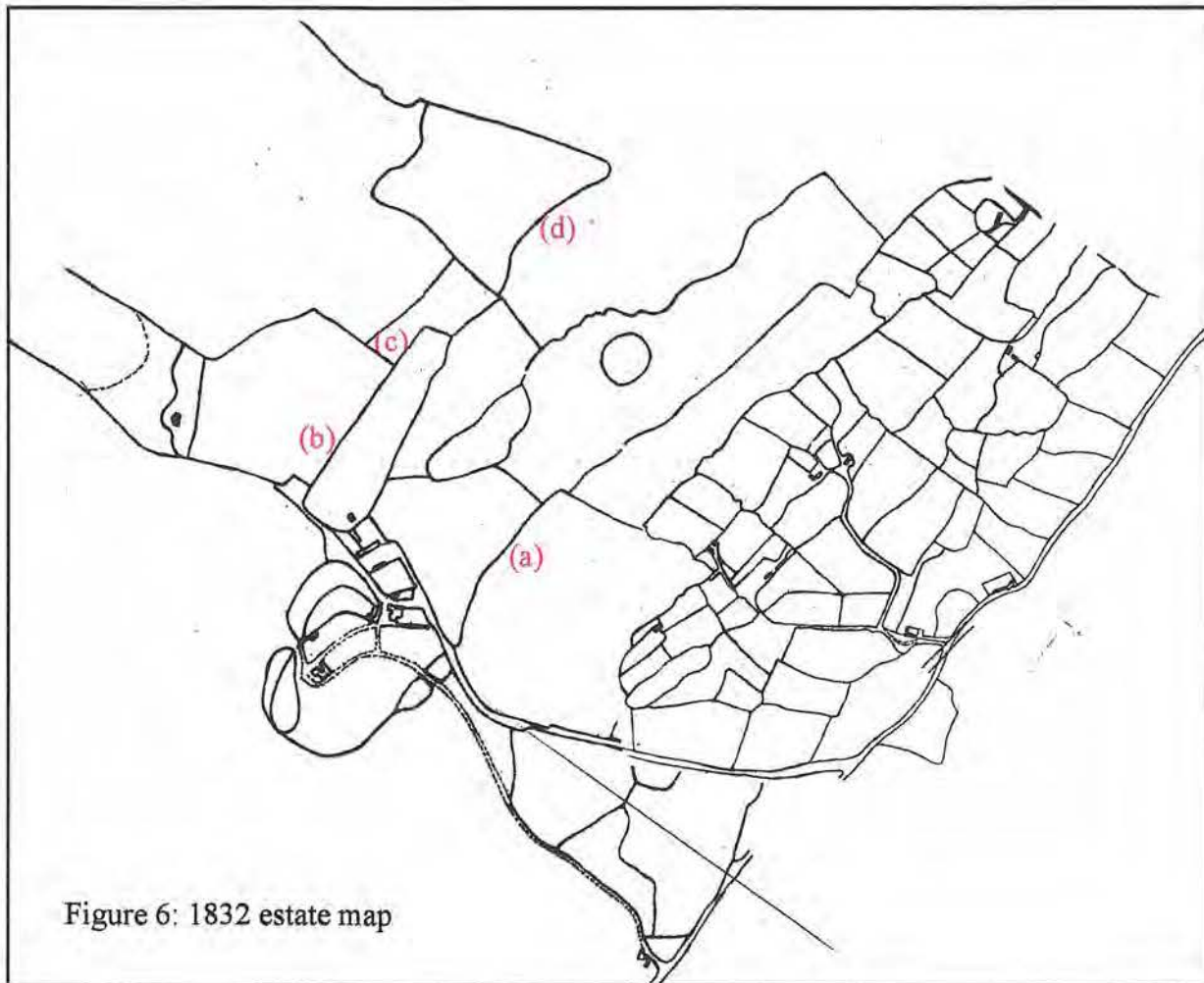


Figure 6: 1832 estate map

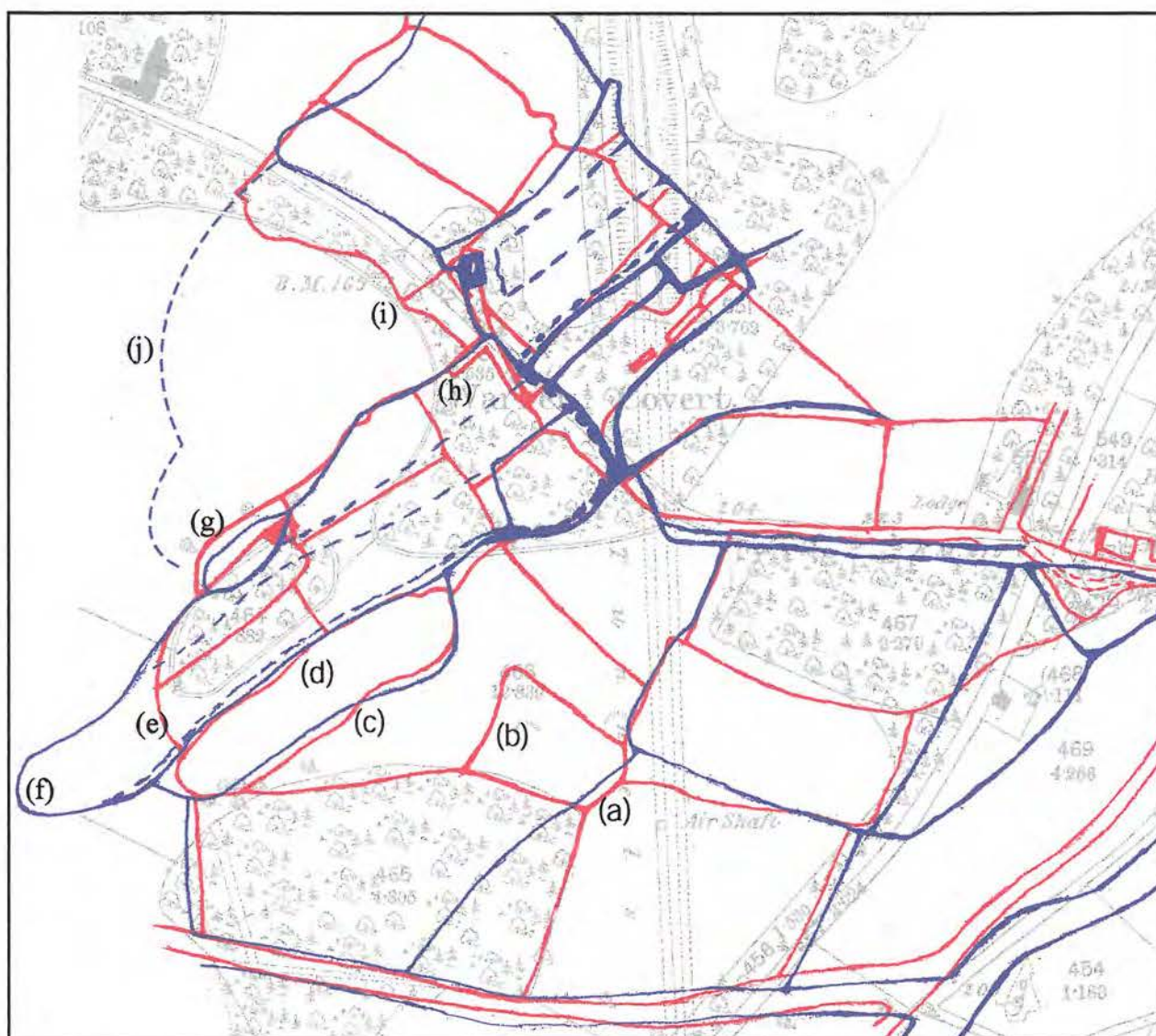


Figure 7: 1777 (blue) and 1832 (red) estate maps superimposed on the 25" OS map



Figure 8: Tithe map, 1840s

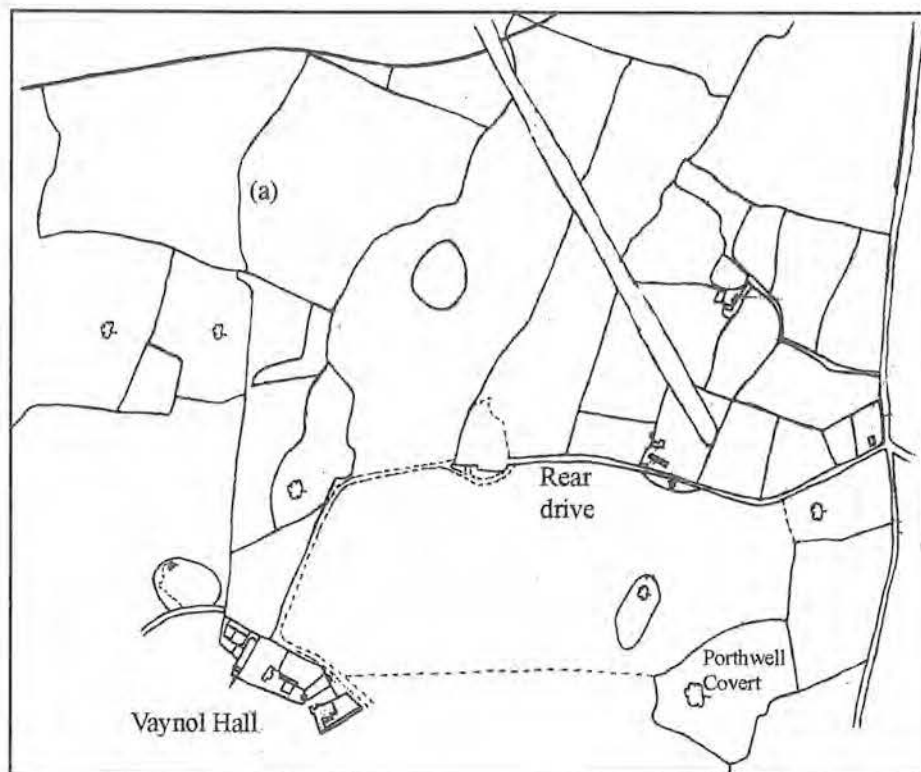


Figure 9: 1866 estate map

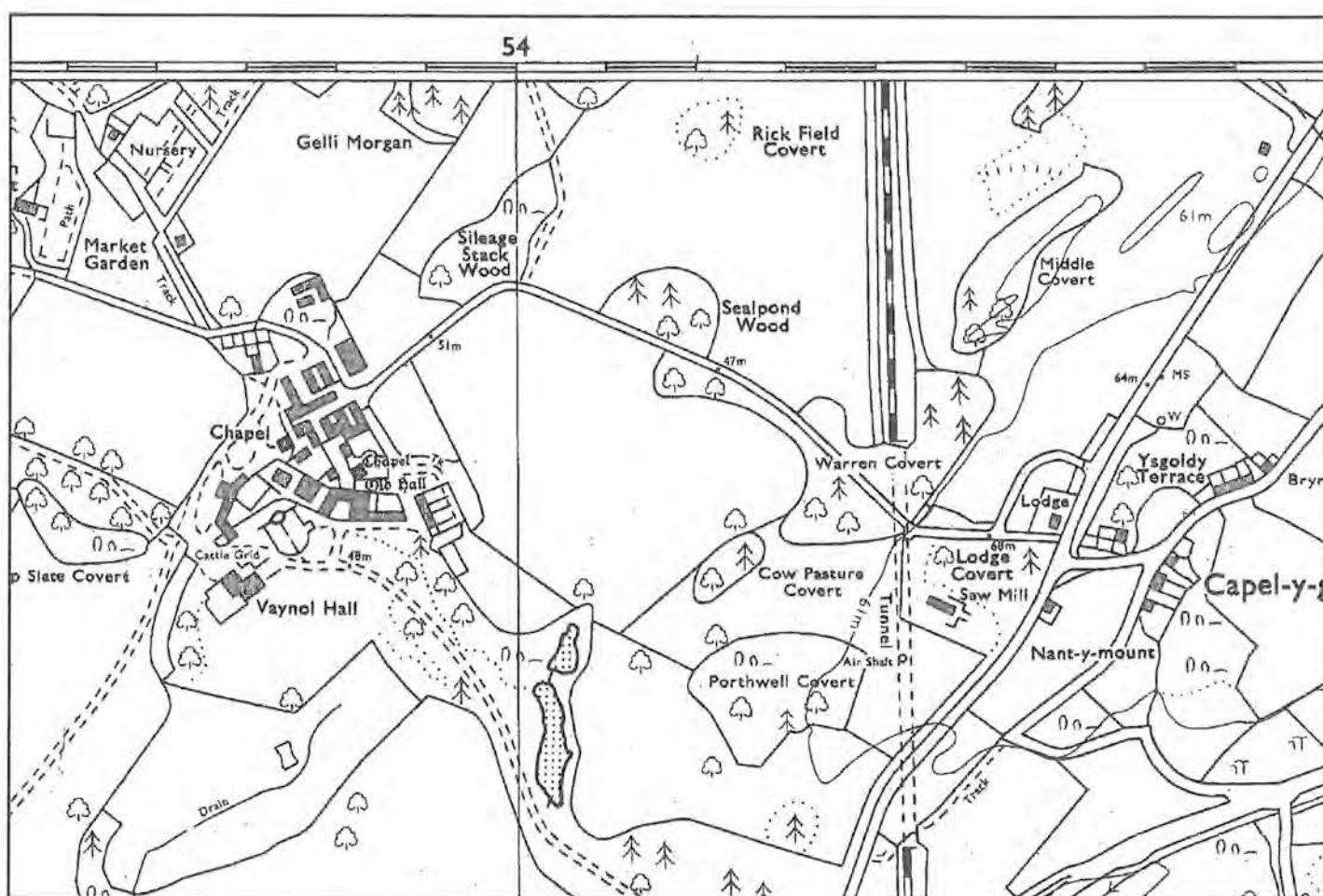


Figure 10: OS 1:10,000 map, 1973 (surveyed 1969)



Plate 1: Capel y Graig Lodge, feature 4

Plate 2: Estate wall and gateway, feature 5



Plate 3: A view of the field containing the sawmill

Plate 4: The sawmill, feature 6





Plate 5: Reservoir, feature 7



Plate 6: Trackway, feature 10a



Plate 7: Air shaft for tunnel



Plate 8: Covert bank, feature 9



Plate 9: Field 3 showing scarps, representing field boundaries (feature 10), and the view towards the hall complex



Plate 10: Rectangular platform, feature 12b



Plate 11: Field boundary, feature 13a



Plate 12: Trough, feature 13b



Plate 13: Track, feature 14d



Plate 14: View of Old Hall from development area



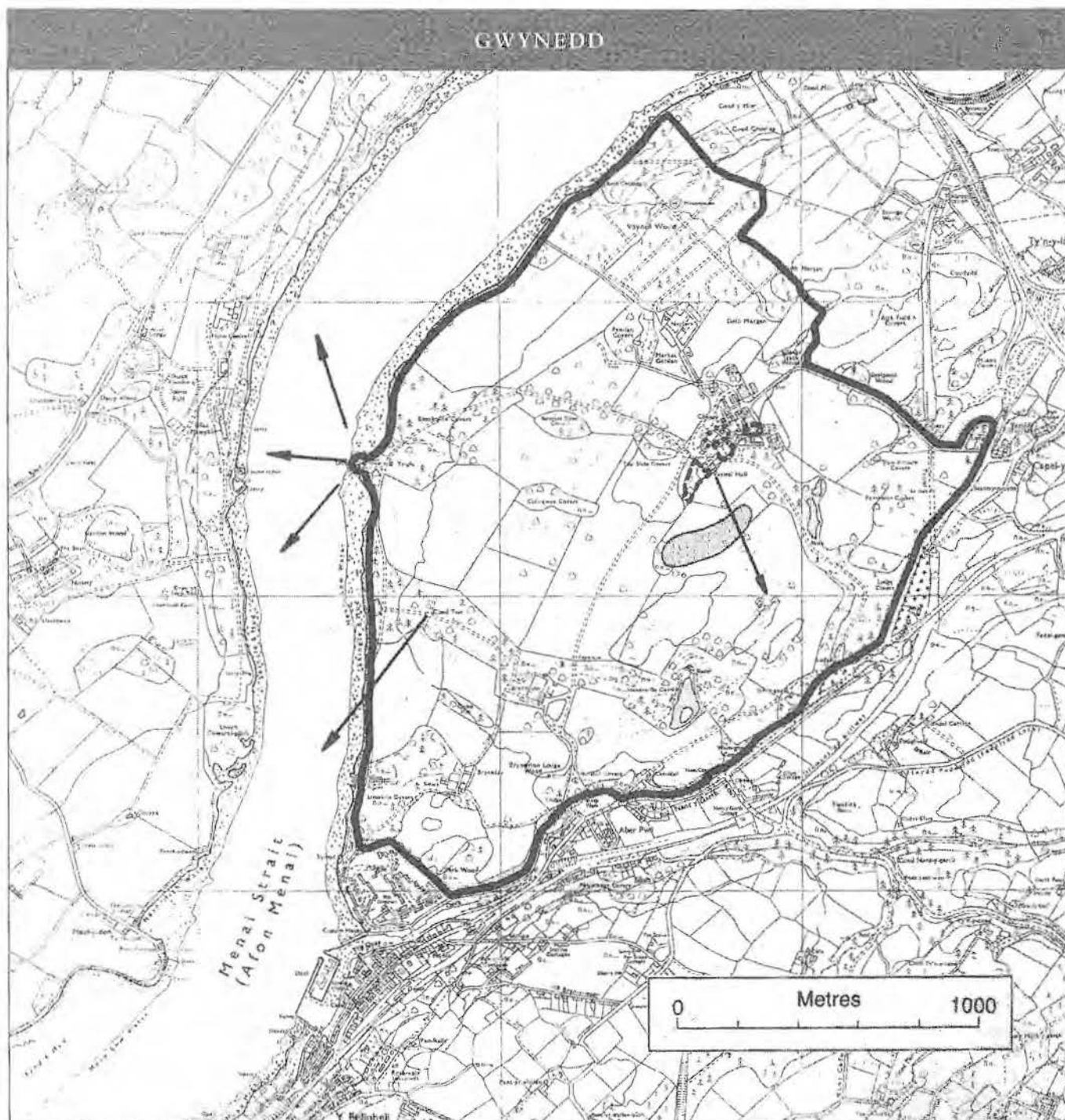
Plate 15: Slate fencing, feature 18








Plate 16: Iron fencing, feature 18

Appendix I

Map for Vaynol Park in the Register of Parks and Gardens of Historic Interest (Cadw 1998a)



Park Boundary	
Garden	
Kitchen Garden	
Essential Setting	
Significant View	

Register Number	PGW (Gd) 52 (GWY)
Former Register Number	
O.S. Sheet Number	SH 56 NW, SH 57 SW
Community	PENTIR

Appendix II

Entry for Dinorwig in the Register of Landscapes of Outstanding Historical Interest (Cadw 1998b)

DINORWIG



*Chwareli Dinorwig.
Dinorwig quarries.*

© CCW Richard Kelly / © CCW Richard Kelly

Disgrifiad o'r tirwedd

Mae Dyffryn Dinorwig neu Nant Peris yn ochr ogledd orllewinol masiff Eryri. Gwelir effaith rhewlifiad yn gryf ar y dyffryn, sydd â'i ymylon clegyrrog yn codi'n serth ar y ddwy ochr. Yr Wyddfa yw'r copa uchaf yng Nghymru, yn 1085m uwchben SO ac yn sefyll yn uchel uwchben y dyffryn gan ddynodi terfyn deheuol yr ardal hon. Mae'r dyffryn, â'i ddau lyn Padarn a Pheris, yn agor tua'r gogledd orllewin i lwyfandir Arfon, sy'n ymdonni'n ysgafn ac yn sefyll tua 100m uwchben SO. Nid yw'n syndod fod y mwyafrif o'r twristiaid ac arlunwyr hynafiaethol a ymwelodd â'r ardal yn y 18fed a'r 19edd ganrifoedd wedi clodfori harddwch golygfeydd yr ardal.

Parhaodd tystiolaeth sylweddol yn yr ardal o'r defnydd tir ac aneddiadau yn y cyfnod cynhanesyddol diweddar ac o ddaliadaeth tir yn y Canol Oesoedd, ond ar ben y patrymau cynharach ac yn goruchafu'r tirwedd presennol, mae gweddillion helaeth chwareli llechi o'r 19edd a'r 20fed ganrifoedd a'r aneddiadau ac isadeilaeth cludiant yn gysylltiedig â hwy. Digwyddodd y datblygiadau hyn oherwydd, ac yn gysylltiedig ag, Stad y Faenol, un o'r deiliaid tir pwysicaf a chryfaf yng Ngogledd Orllewin Cymru yn ystod y cyfnod ôl-ganoloedd.

Nid yw'r dystiolaeth o drefn y tirwedd yn ystod y cyfnod cynhanesyddol diweddar wedi cael ei chadw cystal ag mewn mannau eraill oherwydd gwelliannau amaethyddol a wnaed yma'n ddiweddarach. Bu tuedd i ddim ond y safleoedd aneddiadau mwyaf, cryfaf, lwyddo i oroesi. Er hynny, mae modd yn aml canfod ble bu aneddiadau a chyfundrefnau caeau a ddinistriwyd erbyn hyn trwy edrych ar y rhannau bach a

Landscape description

The Dinorwig valley, or Nant Peris, is situated on the north west side of the Snowdonian massif. The valley has been heavily glaciated with its craggy edges rising steeply on both sides. The summit of Snowdon, the highest peak in Wales at 1085m above OD, towers above the valley and defines the southern extent of this area. The valley, with its twin lakes Padarn and Pheris, opens north westwards onto the gently undulating Arfonian plateau at about 100m OD. Not unexpectedly, the scenic grandeur of the area was celebrated by most of the antiquarian tourists and artists who visited the area in the late 18th and the 19th centuries.

The area has retained considerable evidence for late prehistoric land use and settlement, and for medieval land holdings, but superimposed over these earlier patterns, and dominating the present landscape, are the extensive remains of 19th and 20th centuries slate quarries, their associated settlements and transport infrastructure. These developments were made possible by, and were linked to, the Vaynol Estate, one of the most significant and powerful post-medieval landholdings in North West Wales.

The evidence for late prehistoric landscape organisation is not as well-preserved as in other areas because of later agricultural improvements. Only the more massive, robust settlement sites have tended to survive. However, it is often possible to trace the former extents of destroyed settlements and field systems where surviving fragments have been incorporated into later features. The multivallate Iron Age

oroesodd ac a gynhwysyd mewn nodweddion diweddarach. Yr enghraifft orau efallai o hyn yw bryngaer amlgloddio Oes yr Haearn Dinas Dinorwig, a saif ar wahân ar fryn gan oruchafu'r golygfeydd dros lwyfandir Arfon i bob cyfeiriad, ac o'i chwmpas olion tameidiog aneddiadau cytiau ac amgaeadau a mân olion cyfundrefnau a chloddiau caeau cysylltiol o'r un cyfnod, llawer ohonynt wedi'u cofnodi fel rhai a ddilewyd wrth glirio a gwella tir yn y 19edd ganrif. Goroedd oedd gweiddillion mwy cyflawn mewn rhai mannau ar y tir ymylol gwaeth na chafodd ei wella ar gyfer amaethyddiaeth, fel ar lethrau Moel Rhiwen i'r de ddwyrain o Ddinas Dinorwig.

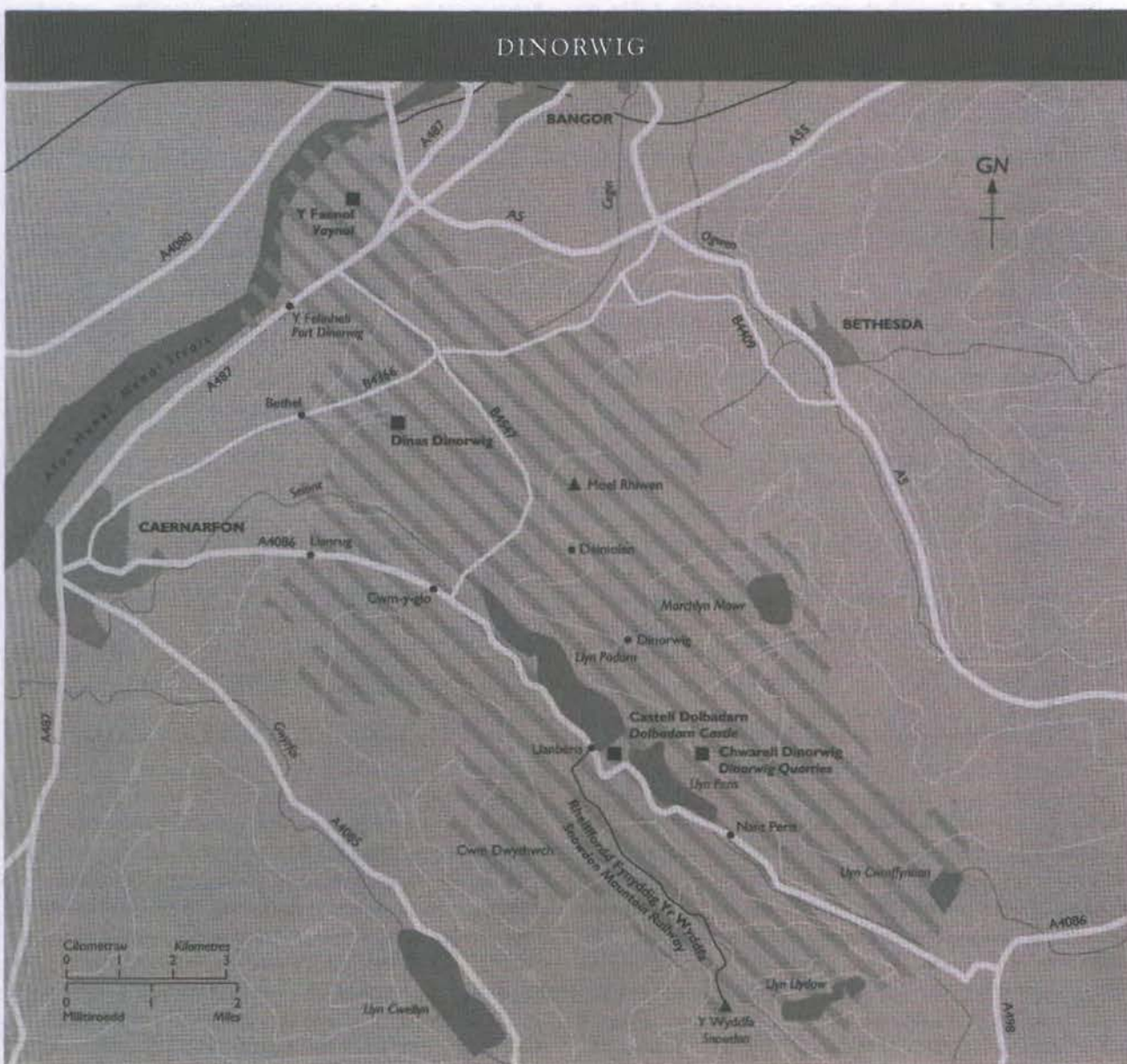
Adeiladwyd Castell Dolbadarn yn y 13edd ganrif, gan Llywelyn ab Iorwerth mae'n debyg, a saif ar gefn isel uwchben y culdir sy'n gwahanu Llynnoedd Padarn a Pheris. Cyfeirir mewn dogfennau o'r 14edd ganrif at hafodau yn Nolbadarn oedd yn perthyn i'r Tywysog, sydd bron yn sicr yn cydfynd â safleoedd archeolegol ac enwau lleoedd oddi amgylch Cwm Dwythych ar lethrau isaf yr Wyddfa.

Tua diwedd y 18fed a dechrau'r 19edd ganrif oedd, daeth Castell Dolbadarn a'i gefndir yn destun poblogaidd i artistiaid oedd yn dymuno adlewyrchu syniadau esthetig yr oes o'r Prydferth, yr Aruchel neu'r Darlunaidwy. Mae darlun enwog

hillfort of Dinas Dinorwig is perhaps the best example, sitting on an isolated hill with dominant views of the the Arfonian plateau in all directions, but surrounded by a fragmentary complex of contemporary hut settlements and enclosures with traces of associated field systems and field banks, many of which are recorded as having been obliterated by land clearance and improvements in the 19th century. More complete remains do occasionally survive on the poorer, unimproved margins, such as on the slopes of Moel Rhiwen to the south east of Dinas Dinorwig.

Dolbadarn Castle, built in the 13th century, probably by Llywelyn ab Iorwerth, stands on a low ridge above the isthmus separating Lakes Padarn and Peris. Documentary evidence of the 14th century refer to Prince's 'havotries' or summer dwellings in Dolbadarn, which almost certainly correspond with surviving archaeological sites and placenames around Cwm Dwythych on the lower slopes of Snowdon.

In the late 18th and early 19th centuries, Dolbadarn Castle and its setting became a popular subject for artists wishing to reflect the contemporary aesthetic notions of the Beautiful, the Sublime or the Picturesque. Turner's famous work, which was exhibited at the Royal Academy in 1802, captures the





Llanberis, dyfrlliw gan Anthony Vandyke Copley Fielding (1787–1855), tua 1810. Llyfrgell Genedlaethol Cymru.

Llanberis, watercolour by Anthony Vandyke Copley Fielding (1787–1855), about 1810. National Library of Wales.

Turner, a arddangoswyd yn yr Academi Brenhinol ym 1802, yn mynegi i'r dim y syniad o'r Aruchel, gan y dangosir y castell fel tŵr tywyll, unig yn nhirlun llwm, gwyntog y mynyddoedd, ond yn y modd llai dramatig, Prydferth neu Ddarlunaidwy, y gwnaed y mwyafrif o ddarluniau o'r safle yr adeg honno, fel y nodweddir gan yr olygfa uchod. Parhaodd poblogrwydd golygfaol yr ardal drwy y 19edd ganrif, ac ym 1896, adeiladwyd Rheilffordd Fynyddig Yr Wyddfa sy'n 7.6km o hyd, a ystyrir fel un o lwyddiannau peirianeg hanesyddol gwychaf Prydain, o Lanberis i gludo teithwyr i ben yr Wyddfa.

Yn ystod yr un cyfnod, yr oedd yr ardal wedi'i chysylltu â thwf, datblygiad ac ymhen amser, goruchafiaeth Stad y Faenol, proses a gofnodwyd yn fanwl. Nid yw'r stad yn bodoli mwyach ond mae Plas y Faenol a'r parc mawr â'r wal o'i amgylch wedi goroesi yng ngogledd orllewin yr ardal ar lannau'r Fenai. Erbyn tua diwedd yr 16fed ganrif, y stad oedd y prif dirfeddiannwr a bu'n cryfhau ei gafael ar dir yn ddiostur trwy gael meddiant ar yr aneddiadau tir cyfri canoloesol oedd yn bodoli yn yr ardal, a'u dileu. O ganol y 18fed ganrif ymlaen, yn dilyn cyfnod pan oedd y tenantiaethau mewn cyflwr gwael, cawsant eu hail-lunio wrth iddynt ddod yn wag a chafodd y stad ei gwella a'i ehangu trwy amgáu tir comin. O'r 1850au ymlaen, gwariwyd cyfalaf ar welliannau a phlanhigfeydd, a dyma hefyd adeg adeiladau'r wal fawr o amgylch Parc y Faenol.

Wrth i botensial economaidd chwarela llechi ddod yn amlwg, datblygwyd adnoddau diwydiannol y stad yn ogystal. Ym 1809, dilynodd Stad y Faenol arweiniad Stad y Penrhyn yn nyffryn Ogwen (tt. 105–108) a datblygwyd chwareli Dinorwig yn Nant Peris. Y Felinheli ar y Fenai oedd y prif fan ar gyfer gyrru'r llechi allan, ac yr oedd yno harbwr wedi'i greu ers 1793. Adeiladwyd ffordd at yr arfordir ym 1790 er mwyn hwyluso allforio llechi, wedyn tramffordd geffylau na fu'n llwyddiant ac y daeth lein newydd yn ei lle yn ddiweddarach, ac yn derfynol, ym 1848, reilffordd newydd ar lwybr gwahanol ar hyd glannau Llyn Padarn i'r Felinheli. Daeth cyfnod gweithredu honno i ben ym 1962, ychydig cyn i chwareli Dinorwig gau yn derfynol ym 1969.

Mae'r chwareli a'u haneddiadau cysylltiedig wedi gadael olion parhaol ar y tirwedd yma. Yn y prif gasgliad o weithfeydd ar ddwy ochr dyffryn Peris, yr amlycaf ohonynt oll yw chwareli Dinorwig ar yr ochr ogleddol, gyda'u tomennydd rwbel anferth a'r ponciau fel grisiau mawr. Mae cyfoeth o weddillion archeolegol diwydiannol wedi goroesi, gyda rhai ohonynt, yn cynnwys ysbty chwarel, wedi'u cadw neu eu symud i'w cadw'n ddiogel yn chwarel Vivian a chymlethfa gweithdai chwarel Dinorwig. Gellir gweld hefyd y clytwaith o dyddynod chwarelwyr ar dir fu gynt yn gomin ar y llethrau oddi amgylch, a'r diwydiant

notion of the Sublime perfectly, with the castle depicted as a gloomy, isolated tower set within a stark, windswept, mountain landscape, although most contemporary studies of the site were executed in less dramatic, Beautiful or Picturesque modes, typified by the scene opposite. The scenic popularity of the area continued throughout the 19th century, and in 1896, the 7.6km long Snowdon Mountain Railway, which is regarded as one of Britain's finest historic engineering achievements, was constructed from Llanberis to carry passengers to the summit of Snowdon.

During the same period, the area is linked with the growth, development and eventual domination of the Vaynol Estate, a process which has been charted in some detail. The estate no longer exists, but Vaynol Hall and its great walled park survive in the north west of the area on the banks of the Menai Strait. By the late 16th century, the estate was the principal landowner and ruthlessly consolidated its interest by the acquisition and extinction of any remaining medieval bond hamlets within the area. From the mid-18th century, following a period when they were in poor condition, tenancies were remodelled as they fell vacant, and the estate was improved and expanded by the enclosure of common land. From the 1850s onwards, capital was spent on improvements and plantations, and the great wall around Vaynol Park dates from this time.

As the economic potential of slate quarrying became evident, the industrial resources of the estate were also developed. In 1809, the Vaynol Estate followed the lead set by the Penrhyn Estate in the Ogwen valley (pp. 105–108) and developed the Dinorwig quarries of Nant Peris. Here, the main outlet for the slate was Port Dinorwig on the Menai Strait, which had had an artificial harbour since 1793. A road was built to the coast in 1790 for the easier export of slate, followed by an unsuccessful horse tramway which had to be later replaced by a new line, and finally, in 1848, by a new railway on a different route along the shores of Lake Padarn to Port Dinorwig. This ceased operating in 1962, just before the final closure of the Dinorwig quarries in 1969.

The quarries and their attendant settlements have left an indelible mark on this landscape. The main complex of workings on either side of the Peris valley is dominated by the Dinorwig quarries on the north side, with their massive waste tips and stepped working floors. There is a wealth of industrial archaeological remains, some of which, including a quarry hospital, have been preserved, or moved for safe-keeping, at the Vivian quarry and at the Dinorwig quarry workshop complex. The patchwork of quarrymen's tyddynod or smallholdings can also be seen on former common land on the surrounding slopes, while the settlements of Llanberis, Dinorwig, Deiniolen, Cwm-y-glo Llanrug, Bethel and Port Dinorwig owe their development and present character to the industry. Social and economic conditions in Bethel in the early 20th century were graphically described by the Welsh litterateur W.J. Gruffydd in his autobiography, *Hen Atgofion*.

During the late 19th and early 20th centuries, the slate industry gradually declined which, partly as a consequence,

llechi fu'n gyfrifol am ddatblygiad a chymeriad presennol aneddiadau Llanberis, Dinorwig, Deiniolen, Cwm-y-glo, Llanrug, Bethel a'r Felinheli. Ceir darlun byw o'r amgylchiadau cymdeithasol ac economaidd ym Methel yn gynnar yn yr 20fed ganrif yn hunangofiant y llenor Cymraeg, W.J. Gruffydd, Hen Atgofion.

Yn rhan olaf y 19edd a rhan gyntaf yr 20fed ganrifoedd, bu dirywiad graddol yn y diwydiant llechi a fu'n rhannol gyfrifol am ddiwedd Stad y Faenol. Yr oedd yn broses hir a bu sawl anghydfod blin rhwng chwarelwyr a'r perchennog, rhwng tîrfeddiannwr a thenant, a adawodd olion cymdeithasol parhaol yn ogystal ag achosi newidiadau materol yn y tirwedd. Yn ystod yr 1960au, bu ad-drefnu amaethyddol helaeth mewn beth oedd mewn gwirionedd yn ymdrech olaf y stad i greu unedau llawn-amser hyfyw, ond ymddatodwyd y stad yn derfynol ym 1967, pan ddaeth 8,600 ha o dir ar yr Wyddfa ac o'i hamgylch ar y farchnad. Caodd y chwareli yn fuan wedyn ym 1969.

Tua diwedd y 1970au a dechrau'r 1980au, daeth rhan o safleoedd chwareli Dinorwig yn safle cynllun trydan-dŵr cronfa bwmp Dinorwig, y mwyaf yn Ewrop a'r trydydd mwyaf yn y byd. Crëwyd y gronfa uchaf ym Marchlyn Mawr, i ddyfrhau'r gronfa isaf yn Llyn Peris trwy bibellau a gorsaf gynhyrchu a leolwyd mewn siambr anferth a gloddiwyd o dan y ddaear, er mwyn cael cyn lleied ag y bo modd o effaith ffisegol ar y tirwedd.

eventually led to the Vaynol Estate's demise. It was a long process, and embittered disputes between quarrymen and owner, and landlord and tenant, left indelible social scars as well the material changes in the landscape. During the 1960s, there was widespread agricultural reorganisation in what turned out to be a final attempt by the estate to create viable full-time units, but the estate was finally dissolved in 1967, when 8600ha of land in and around Snowdon came onto the market. The quarries closed shortly afterwards in 1969.

In the late 1970s and early 1980s, part of the Dinorwig complex became the site of the vast Dinorwig hydro-electric pumped storage power scheme, the largest in Europe and the third largest in the world. The upper reservoir was created in Marchlyn Mawr which feeds the lower reservoir in Lake Peris, through pipelines and a generating station located in a colossal chamber excavated underground, so that the physical impact on the landscape was minimised.

CRYNODEB

Rhif cyf	HLW (Gw) 6
Rhif map mynegai	24
Map AO	Landranger 115
Sir flaenorol	Gwynedd
Awdurdod unedol	Gwynedd
Prif ddymodiadau belaelth	Mae hamner ddeheuol yr ardal o fewn Parc Cenedlaethol Eryri. Mae'r ardal yn cynnwys rhan o Warchodfeydd Natur Cenedlaethol a Safleoedd o Ddiddordeb Gwyddonol Arbennig y Gludeiriau a Chwm Idwal a'r Wyddfa. Cynhwysir hefyd: Safleoedd o Ddiddordeb Gwyddonol Arbennig Coed Dinorwig, Cwm Dwythwch a Llyn Padarn; Safle Gwarchodaeth Castell Dolbadarn; Henebion Cofrestredig gweithdai chwarel Dinorwig a chwarel lechi Vivian; Ardaloedd Cadwraeth Aberpwll (Y Felinheli) a Nant Peris. Dosbarthwyd Plas y Faenol yn Adeiladau Rhedredig Graddfeydd I a II*.
Meini prawf	2, 3, 5
Cynnwys ac arwyddocâd	Llwyfandir arfordirol isel a dyffryn rhewlifol gerllaw ar ochr ogledd orllewinol yr Wyddfa, yn cynnwys tystiolaeth o ddefnydd tir ac anheddiad o'r cyfnod cynhanesyddol ymlaen, ac ar ben hynny weddillion helaeth ac amlwg y diwydiant llechi yn ystod y 19edd a'r 20fed ganrifoedd. Mae'r ardal yn cynnwys: bryngaerau, aneddiadau a chaeau o Oes yr Haearn; Castell Dolbadarn; aneddiadau canoloesol; chwareli, tomenydd rhobel, aneddiadau, cyfundrefnau cludiant a phorthladd diweddar, Plas a Pharc y Faenol; cynllun trydan-dŵr cronfa bwmp tanddaearol pumpio a chronni Dinorwig; cysylltiadau llenyddol ac artistig hanesyddol.

SUMMARY

Ref number	HLW (Gw) 6
Index map no.	24
OS map	Landranger 115
Former county	Gwynedd
Unitary authority	Gwynedd
Principal area designations	The southern half of the area is within the Snowdonia National Park. The area includes parts of Gludeiriau and Cwm Idwal, and Yr Wyddfa (Snowdon) National Nature Reserves and Sites of Special Scientific Interest. It also includes: Coed Dinorwig, Cwm Dwythwch and Llyn Padarn Sites of Special Scientific Interest; Dolbadarn Castle Guardianship Site; Dinorwig quarry workshop complex and Vivian slate quarry Scheduled Ancient Monuments; Aberpwll (Port Dinorwig) and Nant Peris Conservation Areas. Vaynol Hall is categorised as Grades I and II* Listed Buildings.
Criteria	2, 3, 5
Contents and significance	A low coastal plateau and adjoining glaciated valley situated on the north west side of Snowdon, containing evidence of land use and settlement from the prehistoric period onwards, superimposed by recent extensive and outstanding remains of the 19th and 20th centuries slate industry. The area includes: Iron Age hillforts, settlements and fields; Dolbadarn Castle; medieval settlements; recent quarries, waste tips, settlements, transport systems and port, Vaynol Hall and Park; the underground, Dinorwig hydro-electric pumped storage scheme; historic literary and artistic associations.

Ffynonellau detholedig / Selected sources

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Appendix III

Historic Characterisation Area No. 48 (GAT 2000)



Historic Landscape Characterisation - Arfon

Historic Landscape Character Area:
48 - Vaynol

Scale: 1/30,000

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48 Vaynol

Historic background

A high-status site since Medieval times, when the land here formed part of Maenol Bangor, but the estate increasingly fell into secular hands. Much of it became the demesne of the Vaynol estate, granted by William of Orange to Smith, the speaker of the House of Commons. This became by the nineteenth century the second largest estate in Caemarvonshire, enclosed from the 1830s by one of the characteristic stone walls which surround the homes of the local nobility and wealthier gentry, and which also took in other local gentry houses which Vaynol brought up, such as Bryntirion. Treborth is a development of the railway period.

Key historic landscape characteristics

High-status dwelling and associated demesnes

As well as Vaynol Old Hall, in origin a late Medieval building, and the later Vaynol, an undistinguished structure of 1842 in which earlier work may be incorporated, the grounds include some very well preserved outbuildings dating from *c. 1605* to the nineteenth centuries. The demesne grounds have been partly developed as a business park and office space; however, most of the Vaynol demesne has been little touched since the estate's demise in the 1960s. Y Faenol Cyf is currently in the process of establishing an architectural conservation school in the outbuildings with inward investment from the Slate Valleys Initiative/Menter Ardal y Lechen and the present owners of the site. Work is currently (January 2000) well advanced on conversion of some of the nineteenth century dairy buildings.

Conservation priorities and management

Encouragement to appropriate heritage and conservation initiatives at the Vaynol; preservation of setting and of the character of an estate demesne; restoration of historic garden and parkland features.

Appendix IV

Advice note on the Register of Landscapes of Historic Interest in Wales and the planning process

CADW: WELSH HISTORIC MONUMENTS

COUNTRYSIDE COUNCIL FOR WALES

WELSH ARCHAEOLOGICAL TRUSTS

3rd DRAFT 12/01/01

ADVICE NOTE

THE REGISTER OF LANDSCAPES OF HISTORIC INTEREST IN WALES AND THE PLANNING PROCESS

This advice note provides information on the background, purpose and use of the *Register of Landscapes of Historic Interest in Wales*. It has been jointly prepared by Cadw: Welsh Historic Monuments, the Countryside Council for Wales and the Welsh Archaeological Trusts. It is intended to assist local planning authorities and others to assess whether a development is likely to have a significant impact on historic landscape areas identified on the Register.

1.0 Introduction

1.1 The whole of the Welsh landscape can be said to be historic, with human activity often having been at the heart of its creation. The nature of its terrain, the stewardship exercised over the centuries by generations of landowners and farmers, along with only limited intensive cultivation and urbanisation, have produced ideal conditions that have favoured the survival of much of the historic character of the Welsh landscape. However, the historic character of the landscape is increasingly under pressure from a variety of new changes as, often very different, physical characteristics have to be introduced to meet modern needs.

1.2 Against this background and to be better informed about how to accommodate necessary change in a way that is sensitive to the historic character of landscape, Cadw: Welsh Historic Monuments, the Countryside Council for Wales (CCW) and the International Council on Monuments and Sites (ICOMOS UK) decided to collaborate to produce the *Register of Landscapes of Historic Interest in Wales* as a means of identifying and to provide information on the most important historic landscapes in Wales. The Royal Commission on the Ancient and Historical Monuments of Wales, the four Welsh Archaeological Trusts and the Welsh local authorities also collaborated in the project.

1.3 This Register has been issued in two parts, covering thirty-six "outstanding" and twenty-two "special" historic landscape areas, and forms Part 2 of the a wider exercise to compile an overall *Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales*. For the purpose of this advice note, therefore, the term "historic landscape" refers to an area identified in the *Register of Landscapes of Outstanding Historic Interest in Wales*, (Cadw: Welsh Historic Monuments, 1998, Part 2.1) or in the *Register of Landscapes of Special Historic Interest in Wales* (Cadw: Welsh Historic Monuments, 2001, Part 2.2).

1.4 By identifying areas considered to be of national importance in Wales on the Register, it is to be encouraged that greater account should be taken of historic landscapes generally, in landscape planning, management, conservation, enhancement and interpretation, and in providing opportunities for access and recreation. In raising awareness of the historic significance and importance of the Welsh environment generally, the Register should also encourage historic landscape issues to be given greater weight alongside more traditional and long-established conservation issues.

1.5 At the same time, the Register recognises that landscapes are dynamic, living systems fashioned to meet current, mainly economic, needs and that what exists today is largely a created landscape, produced through human endeavour since the beginning of farming in this country. Landscapes, therefore, will continue to change, so the aim is not to fossilise them, or to prevent them from being altered, but rather to manage them in ways that will allow the best elements from the past to be retained as they evolve to meet modern needs.

1.6 All landscape areas identified on the Register are of national importance. The difference between the landscapes of outstanding historic interest featured in Part 2.1 and the landscapes of special historic interest featured in Part 2.2, therefore, is one of degree, and not quality of historic interest. Landscapes of special historic interest tend to be generally smaller in size and have fewer, and less diverse, historic interests than those of outstanding historic interest. This distinction should not cause the former to be considered of less value than the latter, and so far as the advice on the use of the Register is concerned, both categories should be treated in the same way.

1.7 Further information on the background to the creation of the Register and its role can be found in the introduction to Part 2.1, with a supplement of additional, updated information included in the introduction to Part 2.2.

2.0 Historic Landscape Characterisation

2.1 In parallel with the creation of the Register, Cadw and the Welsh Archaeological Trusts are undertaking a programme of 'historic landscape characterisation' to provide more detailed information about each area on the Register, to enable the significance of the impacts of development and conservation and management needs to be assessed.

2.2 The characterisation process divides each landscape area on the Register into a number of smaller, more discreet, geographical (and mappable) areas of consistent historic character. These areas are defined according to their key historic characteristics or elements, for example, an area might be characterised by a particular form of historic settlement or land use pattern, it might have distinctive historic buildings, archaeological sites or traditional field boundaries, or it might contain important ancient habitats or have significant historic associations etc. These characteristics or elements can occur either singly or in combination, and the areas identified on these bases are called 'historic character areas'.

2.3 The significance of the impact of development should be assessed in relation to every historic character area that is affected, either directly or indirectly, and in terms of the effect that altering the historic character area(s) concerned has on the whole historic landscape area on the Register.

2.4 The results of the characterisation programme are compiled into paper volumes covering single, or a number of adjoining historic landscape areas on the Register. The volumes are available for inspection at the offices of the Welsh Archaeological Trusts, where advice may be sought on the availability of the latest volumes which are being produced as the characterisation programme progresses, initially with coverage of outstanding, followed by 'special' historic landscape areas. Over the next few years this information will also be placed on the Welsh Archaeological Trusts' websites (Appendix 2).

2.5 In historic landscape areas on the Register where characterisation reports are not yet available, an assessment of significance of impact of development should be undertaken in relation to 'provisional historic character areas'. Provisional historic character areas are identified during the preparation of characterisation reports and the Welsh Archaeological Trusts can supply details of these. Where provisional historic character areas have not yet been identified, the Trusts can advise on a suitable methodology, or can be contracted to identify provisional historic character areas as a pre-requisite for an assessment of the significance of impact of development.

3.0 General principles underpinning this advice

3.1 The advice in this note needs to be considered in the context of general principles that underpin the identification of historic landscape areas, namely:

3.1.1 The Register promotes the conservation of the key characteristics of historic landscapes as those landscapes evolve. In this context, 'characteristics' include not only the physical elements of the past that survive, but also any related evidence for the historical processes and patterns that created those elements as, for instance, information in historical documents and so on. 'Characteristics' here would also include our ability to understand and appreciate the historical meaning, amenity and value of the landscape.

3.1.2 The conservation of historic landscapes is about ensuring the transfer of maximum historic meaning and value when contemplating landscape change. Therefore, the significance of impact of development should be assessed in relation to, not only the historic elements that are directly affected, but also to the whole historic landscape area on the Register, in terms of any lasting alterations to its historic character.

3.1.3 Historic landscapes, like historic buildings or archaeological sites, are irreplaceable, therefore, the outright removal, loss, degradation, fragmentation, or dislocation of key elements or characteristics cannot be mitigated in the same way as a habitat or a natural feature might be restored or recreated. The effects of direct, physical impacts are irreversible, but equally damaging, indirect impacts can occur through the severance or disruption of the functional or visual connections between elements, or through the consequential degradation of the visual or other amenity of elements, or through a combination of these factors.

4.0 Suggested use of the Register within the planning process

4.1 Advice on the role of archaeology within the planning process is given in Welsh Office Circular 60/96. *Planning and the Historic Environment: Archaeology* Archaeological sites often form integral elements, or sometimes key characteristics, in historic landscapes. However, the advice in this note does not affect or alter the provisions of Circular 60/90 which should continue to be applied to archaeological sites within historic landscapes areas on the Register.

4.2 Information on how the Register may be used is set out, in detail, in its introduction, with a supplement of additional, updated information included in the introduction to Part 2.2. It is important, however, to emphasise that the Register does not impose statutory controls and areas on it are not 'designated'. The latest guidance given to planning authorities on the use of the Register is set out in Welsh Office *Planning Guidance (Wales): First Revision (April 1999)*, paragraph 5.6.10:

"Information on the landscapes on the second part of the Register should also be taken into account by local planning authorities in preparing development plans, and in considering the implications of developments which are of such a scale that they would have more than local impact on an area on the Register."

4.3 Such developments may be defined as, but are not confined to:

- major communications schemes (road, rail, sea, air or inland waterway); quarrying and open cast mining;
- major settlement;
- major leisure developments;
- large-scale commercial or industrial expansion;
- large-scale landfill and reclamation;
- major coastal defence works;
- power generation and distribution projects;
- major water supply schemes;
- other similar large-scale infrastructure projects.

4.4 Information on the Register should also be taken into account when considering afforestation or other extensive land use changes, the cumulative effects of secondary or piecemeal changes over time, or changes that are not in themselves large-scale or extensive, but are of a radical nature and sufficient to have more than local impact on an area on the Register.

4.5 Generally, the nature and scale of developments referred to will require an Environmental Impacts Assessment to be undertaken, and the methodology suggested at Annex I may be used to satisfy the requirements of EIA regulations in respect of assessing impacts on historic landscapes.

4.6 It is a matter for the discretion of the planning authority to determine the level of assessment it considers desirable when considering a development proposal which is of such scale, or of a radical nature, that it is likely to have more than local impact on an area on the *Register of Landscapes of Historic Interest in Wales*. A particular development may be considered to require the full assessment outlined in the methodology suggested at Annex I or, alternatively, the nature of the development may require the application of only part of the assessment process. Detailed advice can be obtained from the Development Control sections of the Welsh Archaeological Trusts.

4.7 Whilst it is acknowledged that mitigation, enhancement or restoration of historic elements can be offered as part of development plans, this advice note and the following Annex does not consider any of these options which should be subject to separate assessment, preferably utilizing the results of an assessment of the significance of impact of development.

ANNEX 1

Methodology for assessment of significance of impact of development on historic landscape areas on the *Register of Landscapes of Historic Interest in Wales*

The methodology suggested here for assessment of the significance of impact of development on historic landscape areas on the Register should be primarily based on a desk-top study and analysis of all the relevant information, supported by site visit(s) (including, where necessary, field work to establish the 'provisional historic character areas' noted in section 2.5) and the production of a written report.

Taking historic character areas as the 'building blocks' of the historic landscape areas on the Register and the characterization process, it is suggested that the assessment process and report should be structured into five main stages:

Stage 1 Compilation of an introduction of essential, contextual information.

Stage 2 Description and quantification of the direct, physical impacts of development on the historic character area(s) affected.

Stage 3 Description and quantification of the indirect impacts of development on the historic character area(s) affected.

Stage 4 Evaluation of the relative importance of the historic character area(s) (or part(s) thereof) directly affected by development in relation to:

- (a) the whole of the historic character area(s) concerned;
- (b) the whole of the historic landscape area on the Register;

followed by:

- (c) an evaluation of the relative importance of the historic character area(s) concerned in the national context.

Stage 5 Assessment of the overall significance of impact of development, and the effects that altering the historic character area(s) concerned has on the whole of the historic landscape area on the Register.

Stage 1 Contextual information

The first stage of the assessment process is to gather essential contextual information that should provide an introduction to the assessment report. This should include:

- (a) A brief summary description of the development, with a map at the appropriate scale showing its location in relation to the historic landscape area on the Register.
- (b) A statement about the context in which the assessment is being done, for example as part of an

Environmental Impacts Assessment, feasibility study for as part of evidence to be presented at a Public Enquiry etc.

- (c) If relevant, a brief summary of the planning history of the site (details of any previous permissions, appeals etc.).
- (d) References to any related assessments, for example, an archaeological assessment under the provisions of Welsh Office Circular 60/96, an Environmental Impacts Assessment, or a previous assessment etc.
- (e) In the relevant cases, an indication of the provisional status of any historic character areas (see section 2.5).
- (f) An indication of the limits of the data upon which the assessment is based and any resulting contingent, or other, liabilities, issues of confidentiality, copyright etc.
- (g) A statement on the qualifications and relevant experience of the person(s) undertaking the assessment and a full declaration of the nature of any contractor-client relationships.
- (h) A description of the methodology used.

Copies of the historic landscape citation on the Register, the descriptions of the historic character area(s) affected and any other relevant supporting information, maps, photographs etc. should normally be included as Appendices to the assessment report.

Stage 2 Assessment of direct, physical impacts of development

The second stage of the assessment process and report should describe and, as far as possible, quantify the direct, physical impacts of the development on the historic character area(s) affected using the following framework.

A map should be provided at the appropriate scale showing the precise location and extent of the development, including any preliminary site works or supporting infrastructure necessary, in relation the historic character area(s) directly affected.

Where there are large amounts of information or clarity is an issue, supplementary map(s) can be provided to show the location of Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, Parks and Gardens of Special Historic Interest, and any other coincident statutory, nature conservation or landscape designations; the location of any known, non-scheduled archaeological sites and monuments, non-listed historic buildings or structures; traditional boundaries, or any other key historic characteristics or elements identified in the characterisation report (see section 2.2).

(a) In absolute terms with a statement indicating the actual percentage or proportion of the historic character area that is directly affected, for example, 'Fifty five percent (or just over half) of the area of historic character area X will be permanently lost or removed by development.' (In some cases, the proportion affected could be greater than the physical extent of the development if, for example, extensive preliminary site works, ancillary developments or supporting infrastructures are required.)

(b) In relative terms with statements indicating the percentages or proportions of the known resource (i.e. the key characteristics or elements identified by characterisation) that will be permanently lost or removed by development, for example, 'In historic character area X, 25% (or a quarter) of, for example, ...the number of known archaeological sites; ...the extent of historic land use or pattern in area A; ...the length of linear feature B, ... and so on, will be permanently lost or removed by development.'

Each characteristic or element affected would be briefly described, together with a statement of intrinsic importance or status using the Welsh Archaeological Trusts categories, namely:

Category A Sites and Monuments of National Importance

This includes SAMs, Grade I and II* (and some Grade II) Listed Buildings and sites of similar quality.

i.e. those which would meet the requirements for scheduling or listing at the top two grades. There is a presumption in favour of preservation of all such sites and their settings should they come under threat. Such sites might include those that survive principally as buried remains.

Category B Sites and Monuments of Regional Importance

This includes sites that would fulfill the criteria for listing at Grade II (if a building), but not for scheduling (if a relict archaeological site). Nevertheless, such sites are of particular importance within a regional context and, if threatened, should ideally be preserved *in situ*, although complete excavation and/or recording may be an acceptable alternative. Most sites of archaeological and/or historical interest will fall within this category.

Category C Sites / Features of Local Importance

This category includes components of the historic environment (such as walls, gateposts, tracks etc.) that help define local distinctiveness and character. They may not be of sufficient importance to justify a recommendation for preservation if threatened, but they nevertheless have an interest and importance in their local context.

Category D Minor and Damaged Sites / Features

This category includes sites / features which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category. Rapid recording, either in advance of, or during destruction is usually sufficient for this category of site.

Category E Sites / Features Needing Further Investigation

Sites / features whose character, importance or location is undetermined are placed in this category. They include buried sites and known underground features identified from archival evidence and retrospective map analysis, sites with no defined physical presence such as find spots, sites noted but not accurately located in antiquarian references, sites known only from place-name evidence and other sites reported at the specified location, but cannot be verified by archaeological fieldwork. They will require further work before they can be allocated to Categories A-C.

The magnitude of direct, physical impacts should be expressed as:

50%+ / more than a half permanently lost or removed — Very Severe;

25-49% / quarter to half permanently lost or removed - Moderately Severe;

10-24% / tenth to a quarter permanently lost or removed - Fairly Severe;

Less than 10% / less than a tenth permanently lost or removed - Low Impact.

The results for each historic character area affected could be summarized in a table, for example.

ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA X		
ABSOLUTE IMPACT (LOSS OF AREA)		MAGNITUDE
48 ha, 55% area		Moderately severe
RELATIVE IMPACT (LOSS OF KNOWN CHARACTERISTICS OR ELEMENTS)	STATUS	
Tramway R - 0.3km length, 15% loss	B	Fairly severe
Field System Y - 2.3 ha, 70% loss	C	Very severe
Hut platforms A - 4 sites, 30% loss	A	Moderately severe
Cropmark complex B - 10 ha, 65% loss	A (SAM)	Very severe
Ancient Woodland C - 0.3 ha, 5% loss	B	Slight impact

Stage 3 Assessment of indirect impacts of development

Clearly, a finite area of land will be directly and physically affected by a development, but a much greater area will be indirectly affected through the fragmentation of historic character areas, visual

intrusion and encroachment which could devalue the historic landscape area on the Register as a whole. The importance of 'setting' is a well-established criterion in the assessment of the significance of impact of development on Scheduled Ancient Monuments and Listed Buildings, and the same criterion should be applied to historic character areas and historic landscapes.

There is no statutory definition of setting, but it could be considered as having two principal dimensions. Firstly, there are the immediate settings which, in the case of a building, would be the ancillary land used with it or the curtilage. Secondly, there are the wider settings that, in the case of a building, may or may not be legally attached to it, may or may not be used with it, and is often part of the built environment or part of the countryside. Settings may not be as easily defined for field monuments, but it may be possible to make reasonable assumptions on the basis of what is known archaeologically about how certain types of monuments originally functioned or were regarded. Setting should not be interpreted too narrowly, and for the purposes of these guidelines, impacts on settings will be categorised as 'indirect' impacts.

The third part of the assessment report should, therefore, describe and quantify as objectively as possible the indirect impacts of the development on all historic character areas affected.

Indirect impacts can be categorised as being mainly physical or visual in nature.

Indirect, physical impacts can occur to physical elements in a historic character area as a result of one, or a combination, of the following factors:

- (a) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements, consequent to development.
- (b) Related to (a), the likelihood of increased management needs to maintain physical elements as, for example, through altered habitats, water levels, increased erosion, new access provision etc., consequent to development.
- (c) The severance, fragmentation, dislocation or alteration of the functional connections between related physical elements, for example, a held system becomes 'severed' from its parent farmstead by an intervening development.
- (d) The frustration or cessation of historic land use practices, for example, it becomes more difficult or impossible to manage an area in a traditional manner as a result of development.
- (e) Decreased opportunities for understanding or enjoying the amenity of physical elements, consequent to development.

Each category of indirect, physical impact identified should be described and an assessment made of its severity based on professional judgement, with its magnitude expressed as 'High' / 'Severe': 'Moderate': or 'Low'.

The results for each historic character area affected could be summarized in a table, for example:

ASSESSMENT OF INDIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 'Y'		
IMPACTS	STATUS	MAGNITUDE
Increased risk of erosion to element J	B	Moderate
Increased management needs for element K	C	Low
Functional connection between elements J & K disrupted	A(SAM)	Severe
Traditional land use of area L ceased	A	Severe
Amenity value of element M reduced	C	Moderate

Indirect (non-physical) visual impacts can occur to elements as, a result of one, or a combination of the following factors:

(a) Visual impact on physical elements from which a development can be seen (considered up to its maximum height). Impacts can be on 'views to' or 'views from' elements, and should be assessed with particular reference to key' historic viewpoints and essential settings. In some cases, key' historic viewpoints may no longer be identifiable, but it may be possible to make reasonable assumptions on the basis of historical or archaeological information. Key' viewpoints should also include those that have subsequently become acknowledged as such, for example, as depicted in artists' drawings and paintings, or as features on popular routes or trails.

(b) Impact on the visual connections between related physical elements, by occlusion, obstruction, etc., for example, what might have been an essential line of sight between historically linked defensive sites becomes blocked or impaired by an intervening development.

(c) Conversely, the creation of inappropriate visual connections between physical elements not intended to be inter-visible originally, by the removal of intervening barriers, shelters, screening or ground.

(d) Visual impact of the development itself considering:

(i) its form - the scale, number, density, massing, distribution etc. of its constituent features;

(ii) its appearance - the size, shape, colour, fabric etc. of its constituent features, in relation to the existing historic character of the area.

This section is aimed at assessing to what extent the development constitutes a visual intrusion or an encroachment, and to what extent that affects the historic character of the area.

NOTE: The Institute of Environmental Assessment and The Landscape Institute have jointly published *Guidelines for Landscape and Visual Impacts Assessment* (E & F N Spon, London: 1995 - new edition pending). This may be usefully consulted, however, there are software packages now available that can make use of 05 digital data to produce 360 degree viewshed analysis, 3-D virtual representations and soon (e.g. Vertical Mapper for Map Info; Erdas Imagine etc.). in complicated cases, or where the development is on a very large scale, it may be necessary to use the services of a professional landscape architect to undertake a full visual impacts assessment.

Each type of indirect, visual impact identified should be described using maps, figures, diagrams, elevations and photographs (photo-montages may be particularly useful) as necessary. Assessment should be generally confined to the key' elements within the affected area(s), i.e. category A and B sites (as defined in Stage 2 above), with an assessment of the severity of impact based on professional judgement, and its magnitude expressed as 'High' / 'Severe'; 'Moderate'; or 'Low'.

The results for each historic character area affected could be summarised in a table. for example.

ASSESSMENT OF INDIRECT, VISUAL IMPACTS ON HISTORIC CHARACTER AREA 'Y'	
IMPACT	SEVERITY
Views to element N partially blocked	Moderate
Views from element N disrupted	Severe
Change to essential settings of element N	Moderate
Visual connection between elements N and P occluded	Moderate
Development form	Severe
Development appearance	Moderate

The types of indirect impacts described above are by no means exhaustive, and there may be others specific to particular kinds of development that should also be taken into account and assessed. Each impact identified should be described and quantified as objectively as possible, with written descriptions supported by diagrams or photographs, particularly for visual impacts. Where accurate quantification is impossible, a professional judgement should be given.

Stage 4 Evaluation of relative importance

The fourth stage of the assessment process and report should evaluate the relative importance of the historic character area(s) (or part(s) thereof) directly affected by development in relation to:

- (a) the whole of the historic character area(s);
- (b) the whole of the historic landscape area on the Register;

followed by,

- (c) an evaluation of the relative importance of the historic character area(s) concerned in the national context.

Which evaluation steps have to be done and how much input will be required will depend on the scale of the development in relation to the nature and extent of the affected historic character area(s) and historic landscape area on the Register. For example, if a development directly affects an entire historic character area, then only evaluation steps (b) and (c) need to be done. The complexity of the historic landscape character area(s) in terms of the variety of characteristics and numbers of elements affected will also influence the amount of input required.

As an illustration of why evaluation steps (a) and (b) may have to be done, there may very well be circumstances where the relative importance of an element within the historic character area in which it occurs differs to its relative importance within the overall historic landscape area on the Register. For example, a particular element could be abundant and fairly representative of the historic character area as a whole, but might be quite rare in relation to the whole of the historic landscape area on the Register etc.

In relation to evaluation step (c) although all historic landscapes on the Register are of national importance, some historic character areas may be of even greater significance, because of the range or the quality of the elements they contain, the presence of designated elements within them, their relationship with other historic character areas, their status as a key component in the historic landscape area on the Register, or because of a combination of these factors.

Evaluation step (c) should not be regarded as downgrading of certain areas: it is simply acknowledging that within a landscape that is all of national importance, some areas, characteristics or elements may well be of greater value than others.

Guidance on Evaluation

With some modification and additions, the criteria for the selection of Scheduled Ancient Monuments can be used for evaluation steps (a) — (c) (Welsh Office Circular 60/96, *Planning and the Historic Environment: Archaeology*, p.15, Annex 3, 'Secretary of State's Criteria for Scheduling Ancient Monuments'). However, because some SAM criteria are more relevant to sites than to landscapes, not all SAM criteria will be applicable to all the evaluation steps. For the same reason, not all SAM criteria will be applicable to all the historic characteristics, or historic character areas affected. There are no hard and fast rules it will be a matter of professional judgement as to which criteria to select and apply. Further advice may be sought from the Welsh Archaeological Trusts.

With respect to the evaluation of individual criteria, in most cases, the different grades of values will have to be qualitative as few, if any, national data sets exist to enable quantitative grades of values to be determined. This will be particularly true for evaluation step (c). There may also be cases where the ranges of the individual grades of value will need to be adjusted to reflect local conditions of historic element numbers etc. Although numerical measures could be used to a certain extent, in most cases, the value ranges and the grades of values selected will have to be based on professional judgement.

More work will be required to refine this stage of the assessment process by developing the evaluation criteria and by enhancing the ways in which they are applied. In the interim, the SAM-based evaluation criteria set out below are derived from criteria applied in a recent historic landscape assessment of part of the Gwent Levels landscape of outstanding historic interest (*Welsh Office. M4 Relief Road Magor to Castleton - Stage 2 Assessment, Draft Report for Consultation by Ove Arup and Partners, April 1998 / Amended October 1998. Appendix 2 – The Historic Landscape by S. Rippon*), and work by the Gwynedd Archaeological Trust.

N.B. Depending on which evaluation step is being undertaken, 'elements' include 'characteristics', and 'landscape' includes 'historic character area'

Criteria for determining relative importance or value in Stage 4, steps (a), (b) and (c)

Rarity in terms of period or date, and as a component of the landscape. This should be assessed in relation to what survives today, since elements of a once common type of landscape may now be rare.

- High – no broadly historic elements in the landscape.
- Moderate – fewer than 5 broadly similar elements in the landscape
- Low – more than 5 broadly similar elements in the landscape.

Representativeness should also be considered, in that an example of a landscape that is common can still be of national importance if, in the light of other criteria, it contains a particularly representative range of elements.

- High - contains most of the elements that characterise the landscape:
- Moderate - contains about half of the elements that characterise the landscape:
- Low - contains some of the elements that characterise the landscape.

Documentation The survival of archival material that increases our understanding of a landscape will raise its importance, though this is difficult to quantify owing to the extremely varied nature of documentary material. Therefore, a professional judgement is given based on the actual amount of material and its academic value.

- High - a considerable quantity of relevant material is available:
- Moderate - some relevant material is available:
- Low - little relevant material is available.

Group Value relates to the diversity (or similarity) of elements including their structural and functional coherence. The value of the individual elements can be enhanced by their association with other contemporary and linked elements, for example a group of contemporary settlements, fields and trackways. Clearly, there will be instances within historic character areas in which elements are linked to others not directly affected by development.

- High - contains four or more elements:
- Moderate - contains three elements:
- Low - contains one or two elements.

Survival relates to the degree of survival of elements in the landscape. In instances where the original extent or numbers are known (for example, traditional field boundaries for which there may be detailed mapped evidence), it may be possible to measure this quantitatively.

- Good - more than 75% of elements surviving:
- Moderate - Between 50 and 74% of elements surviving:
- Fair — Fewer than 50% of elements surviving.

Condition relates to the condition of elements in the landscape.

- Good - elements surviving in good or better than average condition for their class;
- Moderate - elements surviving in moderate condition for their class;
- Fair - elements surviving in fair or poor condition for their class.

Coherence relates to how well the historic meaning and significance of the landscape is articulated by us the historic themes, that is the historical processes and patterns that have created the individual elements within it. It may well that historical processes and patterns have been maintained, or continue, so that the landscape retains much of its original function, thus enhancing its coherence. Clearly discernible or dominant themes can increase the coherence and importance of a landscape.

High - dominant historic theme(s) present — landscape of high articulation:

Moderate - historic theme(s) present. — landscape of moderate articulation:

Low - historic theme(s) present, but weak or suppressed — landscape of low articulation.

Potential relates to the potential within the landscape for future landscape study and analysis:

Moderate - some scope for future historic landscape study and analysis;

Low - little scope for future historic landscape study and analysis.

Integrity The importance of a landscape may be enhanced by its integrity that relates to the survival of its original character or form. The resulting visibility and legibility of the landscape's component elements will enhance its amenity value. Greater visibility and legibility generally increase the potential for the historic landscape to be easily understood by the non-specialist.

High integrity - elements highly visible and easily understood;

Moderate integrity - elements visible but not easily understood;

Low integrity - elements not readily visible and difficult to understand.

Associations A landscape or an area or element within it might have important historic associations with, for example, particular institutions, cultural figures, movements or events etc. Often, however, there are no physical remains, or it may be difficult to tie an association to a particular place or feature, with only documentary or oral material surviving. Owing to the complex nature of associations, therefore, they are impossible to quantify, so an assessment is made based upon professional judgement.

High - a significant, authentic and nationally well-known association (s);

Moderate - an authentic, but less significant, perhaps regionally well-known association(s);

Low - unauthenticated or a little or locally known association (s).

The evaluation of steps (a) and (b) should comprise written statements and justifications for the values ascribed to each criterion, followed by a concluding statement for either step (a) or (b). The statement should reflect the general level of values across all criteria, and note any particularly significant 'Highs' or 'Lows'. Evaluation results for steps (a) and (b) could be summarized in a table, for example:

EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF HISTORIC CHARACTER AREA Z DIRECTLY AFFECTED BY DEVELOPMENT						
CRITERION \ VALUE	HIGH/GOOD	MODERATE/ AVERAGE	LOW/FAIR	HIGH/GOOD	MODERATE/ AVERAGE	LOW/FAIR
In relation to:	(a) WHOLE OF HISTORIC CHARACTER AREA			(b) WHOLE OF HISTORIC LANDSCAPE AREA		
RARITY		X				X
REPRESENTATIVENESS	X				X	
DOCUMENTATION	X				X	
GROUP VALUE		X			X	
SURVIVAL	X			X		
CONDITION	X				X	
DIVERSITY			X			X
POTENTIAL		X			X	
AMENITY	X				X	
ASSOCIATIONS		X				X

The evaluation of step (c) should comprise written statements and justifications for the values ascribed to each criterion, followed by a concluding statement. The statement should reflect the general level of values across all criteria, and note any particularly significant 'Highs' or 'Lows'. Evaluation results for steps (c) could be summarized in a table, for example:

EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF HISTORIC CHARACTER AREAS AFFECTED IN THE NATIONAL CONTEXT						
CRITERION \ VALUE	HIGH/GOOD	MODERATE	LOW/FAIR	HIGH/GOOD	MODERATE	LOW/FAIR
In relation to:	HISTORIC CHARACTER AREA 'X'			HISTORIC CHARACTER AREA 'Y'		
RARITY	X				X	
REPRESENTATIVENESS		X			X	
DOCUMENTATION	X					X
GROUP VALUE			X			X
SURVIVAL		X			X	
CONDITION		X		X		
DIVERSITY	X				X	
POTENTIAL		X		X		
AMENITY	X			X		
ASSOCIATIONS		X				X

Stage 5 Assessment of overall significance of impact

Once the direct and indirect impacts of development have been described and, as far as possible, quantified, in Stages 2 and 3, and the relative values of the area(s) affected established in Stage 4, the fifth and final stage of the assessment can be undertaken. This stage assesses the overall significance of impact of development and the effects that altering the historic character area(s) concerned has on the whole of the historic landscape area on the Register.

Assessing the overall significance of impact of development can be accomplished by combining the results of Stages 2 to 4 so that the level of damage or loss to the landscape by development is balanced with the relative values of the area(s) affected. Professional judgement is then used to produce a description that qualifies and quantifies the overall significance of impact of development as accurately and as objectively as possible.

The effects that altering the historic character area(s) concerned has on the whole of the historic landscape area on the Register should be categorised according to the degrees of severity set out in the following section.

Since all historic landscape areas on the Register are of national importance, development above the scale and parameters in sections 4.3 and 4.4 will *defacto* have a severe impact. However, within each landscape that is all of national importance and consistent with the determination of relative values in Stage 4, certain areas are of particular significance. Therefore, within the 'severe' category of impact, three grades may be distinguished, namely:

Very severe

- a landscape of national value that is of very special significance owing to its inherent importance (e.g. rarity, group value, condition etc.)
 - the development will lead to a critical reduction of value in terms of land loss, fragmentation and /or visual intrusion.
- the effect of the development will be to significantly reduce the value of the historic character area as a whole, thereby diminishing the overall value of the historic landscape area on the Register.

Moderately severe

- a landscape of national importance, with good preservation.
- the development will lead to a significant reduction in value in terms of land loss, fragmentation and / or visual intrusion.
- the effect of the development will be to damage key elements of the historic character area, with appreciable lowering of the area as a whole.

Fairly severe

- a landscape of national importance, but is perhaps one for which there are other examples, and there has already been loss of some elements due to modern development.
- the development will cause a loss in value, though this is not necessarily critical in terms of land loss, fragmentation and / or visual intrusion. The development may lead to the further encroachment of development into the historic landscape area.

Below these levels of impact, two further levels may be distinguished, namely:

Low impact

- the historic character area is not directly affected by land loss or fragmentation, but the development will have a visual impact and would be likely to encourage encroachment towards it, subsequently resulting in the value of the whole area being diminished.

None

- no effects.

The assessment report should be completed with a concluding statement that draws all the salient points together. This is likely to be a key part of the assessment, to which most reference will be made, particularly in a Public Enquiry. It is essential, therefore, to write the concluding statement in a clear and concise style that can be easily understood by the non-specialist and the Public Enquiry Inspector alike. Brevity will be the essence with, succinct statements summarising the overall results of the assessment, for example

"Given the 55% loss of surface area of key historic character area A and removal of the exceptionally well-preserved, early industrial remains, of which seven elements are category A sites (3 = SAMs) and for which there are no parallels elsewhere in Wales, the impact of development is severe."

"The 12% loss of surface area of historic character area B, with the consequent severance of its northern from its southern half, and the 30% loss of a distinctive but fairly common type of medieval field system in Wales, the impact of development is low."

"Although development X causes a loss of only 3% surface area of historic character area W and only three category C historic elements are removed, nevertheless, the development is of such a form and appearance as to have a significant adverse visual impact on the surviving, and in Wales, rare, medieval settlement and land use pattern to the south of the development site, therefore, the impact of development is moderate." etc.

In the relevant cases, the concluding statement would indicate the appropriateness, or otherwise, of the proposed development, and whether a refusal of planning permission should be recommended on the basis that the severity of impact on the historic landscape area on the Register is unacceptable.

Appendix V

Full list of Listed Buildings in Vaynol Park

Name	Record No	Grid ref
Grade I		
Vaynol Old Hall	4166	SH 5383 6957
Chapel of St Mary to N of Vaynol Old Hall	4172	SH 5383 6957
Vaynol Hall	4173	SH 5370 6943
Grade II*		
The Best Stables on S side of Vaynol Old Hall and courtyard walls	4167	SH 53815 69515
Terraced garden to N of Vaynol Old Hall	4169	SH 5383 6955
Gateway with inscription set in N boundary wall of terrace garden opposite Vaynol Old Hall	4170	SH 5383 6957
Long Barn at Vaynol Farm	4184	SH 5376 6963
Arched wall to forecourt of Vaynol Old Hall	18927	SH 53819 69550
Grade II		
L-shaped courtyard range to rear of Vaynol Old Hall with enclosing yard wall at S end	4168	SH 5380 6953
Stone bench seat on W side of terraced garden at Vaynol Old Hall	4171	SH 5382 6955
Terrace walls and fountain to formal garden to NE of Vaynol Hall	4174	SH 5374 6950
Urn and pedestal in formal garden NE of Vaynol Hall	4175	SH 53758 65490
Putti and pedestal in formal garden NE of Vaynol Hall	4176	SH 53709 69508
Putti and pedestal in formal garden NE of Vaynol Hall	4177	SH 53708 69510
Gateway with bellcage at head of formal garden NE of Vaynol Hall	4178	SH 53725 69528
Classical statue to SW of Vaynol Hall	4179	SH 5365 6939
Well head to SW of Vaynol Hall	4180	SH 5363 6939
Coach house to N of Vaynol Hall	4181	SH 5367 6949
Chapel to SW of Vaynol Farm	4182	SH 5374 6959
Y Bwthyn	4183	SH 5371 6968
Stable range to NW farmyard	4185	SH 5378 6968
Cart shed to NW farmyard	4186	SH 5375 6965
Hammel and haystore to NE farmyard	4187	SH 5379 6967
Farmyard range to SE of Long Barn	4188	SH 5383 6962
Central farmyard range to S of Long Barn	4189	SH 5381 6961
Farmyard range to S of Long Barn	4190	SH 5374 6964
Range attached to W end of Long Barn	4191	SH 5375 6963
Detached small range to SW of Long Barn	4192	SH 53765 69618
Detached small range to NW of Dairy Cottage	4193	SH 5378 6959
Dairy Cottage	4194	SH 5381 6959
Walled garden opposite Dairy Cottage, with 2 sets of gates	4195	SH 5379 6958
Butler's House within walled garden	4196	SH 5379 6957
Stables and brood mares' yard	4197	SH 5390 6951
Main entrance to Vaynol Park, Including flanking approach walls	4199	SH 5413 6878
Grand Lodge at Main Entrance to Vaynol Park	4200	SH 5412 6877
Capel-y-graig Lodge and adjoining gatepiers	4201	SH 5460 6950

Wern Gogas	4202	SH 5395 6866
Folly tower at Coed Twr	4204	SH 5276 6894
Ty Glo	4205	SH 5264 6945
Dock at NW edge of Vaynol Park	4206	SH 5255 6947
Mausoleum	4207	SH 5359 7033
Pen-lan Cottage	4208	SH 5345 6986
Bryntirion	14924	SH 5313 6867
Boundary wall to Vaynol Park, including railings along Menai Strait shore	18910	SH 54 70
Garden seat in SW garden of Vaynol Hall	18911	SH 5365 6943
Kennels	18912	SH 5371 6971
Classical bust on stele in niche of garden wall at Vaynol Old Hall	18917	SH 53868 69540
Walls to inner and outer gardens on E side of Vaynol Old Hall	18924	SH 5386 6955
Gate piers in boundary wall by Wern Gogas	18925	SH 5339 6830
Gate piers on Bryntirion Drive	18926	SH 5320 6830