

Ty Hen Parc, Parc Llanfrothen, Croesor, Meirionnydd. January 2014

Archaeological Desk-Based Assessment

Project Code: A0031.1

Report no. 0031





Ty Hen Parc, Parc Llanfrothen, Croesor, Meirionnydd. January 2014

Report no. 0031 v1.0

Archaeological Desk-Based Assessment Aeon Archaeology 17 Cecil Street Chester CH3 5DP

> Project Code: A0031.1 Date: 16/01/2014 Client: Balfours LLP

Written by: Richard Cooke BA MA MIfA richard.cooke@aeonarchaeology.co.uk

Figures

- Figure 01: Location of Ty Hen Parc (outlined red). Scale 1:10,000 at A4.
- Figure 02: Location of existing buildings, proposed extension, new drains and site boundary. Scale 1:500 at A4.
- Figure 03: Location of known Monument points from the Gwynedd Historic Environment Record (HER). Scale 1:2,500 at A4.
- Figure 04: Location of known Monument points from the National Monuments Record (NMR). Scale 1:2,500 at A4.
- Figure 05: Location of Listed Buildings. Scale 1:2,500 at A4.
- Figure 06: Location of Scheduled Ancient Monuments, Historic Park boundary, historic setting, and Kitchen Garden. Scale 1:10,000 at A4.
- Figure 07: Location of Historic Landscape Character Areas (HLCAs). Scale 1:10,000 at A4.
- Figure 08: Mostyn Estate map of Park demesne 1802 (MSS 8603).
- Figure 09: Sale Catalogue map 1832 (Z/DJ/246).
- Figure 10: Llanfrothen parish tithe map 1840.
- Figure 11: Sale Catalogue map 1875 (Mer.153).
- Figure 12: First Edition 25" County Series Ordnance Survey map of 1888.
- Figure 13: Sale Catalogue map 1892 (Mer.196).
- Figure 14: Second Edition 25" County Series Ordnance Survey map of 1900.
- Figure 15: Suggested building phases at Parc Llanfrothen. Scale 1:500 at A4.
- Figure 16: Location of existing buildings, proposed extension, and footprint of house 1 and house 2 as depicted on the Mostyn Estate map of Park demesne 1802. Scale 1:500 at A4.
- Figure 17: Location of archaeological features and location/orientation of photographs. Scale 1:500 at A4.

Plates

- Plate 01: Parc 3 and Parc 2 extension from the northwest. Scale 1.0m.
- Plate 02: Square pool 1 from the southwest. Scale 1.0m.
- Plate 03: Parc 2 gable wall and 20th Century lean-to extension, from the northeast. Scale 1.0m.
- Plate 04: Parc 3 and 20th Century lean-to extension, from the northeast. Scale 1.0m.
- Plate 05: Parc 3 from the southwest. Scale 1.0m.
- Plate 06: Courtyard wall feature 2, from the northwest. Scale 1.0m.
- Plate 07: Revetment wall feature 3, from the southeast. Scale 1.0m.
- Plate 08: Run-off from Pool 1 to Pool 2 (feature 4), from the southeast. Scale 1.0m.
- Plate 09: Square pool 2 feature 5, from the southwest. Scale 1.0m.
- Plate 10: Trackway feature 6, from the northwest. Scale 1.0m.
- Plate 11: Parc 1 footprint feature 7, from the southwest. Scale 1.0m.
- Plate 12: Garage feature 8, from the northwest. Scale 1.0m.

1.0 NON-TECHNICAL SUMMARY	
2.0 INTRODUCTION, AIMS AND PROJECT DESIGN	2
3.0 METHODS AND TECHNIQUES	
3.1 Archival research	4
3.2 Site walkover	4
3.3 Desk-based assessment report	4
3.4 Project archive	5
4.0 ARCHAEOLOGICAL AND TOPOGRAPHICAL BACKGROUND	6
4.1 Topographic Description	6
4.2 Statutory and non-statutory designations	6
4.2.1 Non-designated monument points from the Gwynedd Historic Environment Re	ecord
(figure 3)	6
4.2.2 National Monuments Record (figure 4)	7
4.2.3 Listed Buildings (figure 5)	
4.2.4 Scheduled Ancient Monuments (figure 6)	8
4.2.5 Historic Parks and Gardens (figure 6)	8
4.2.6 Historic Landscape Character Areas (HLCAs) (figure 7)	8
4.2.7 Events	
5.0 THE HISTORICAL CONTEXT	10
5.1 Prehistoric and Roman Period	10
5.2 Early Medieval, Medieval and Post-Medieval Periods	11
5.3 The Historical Ownership of Parc Llanfrothen from the 16 th Century	11
5.4 Parc Llanfrothen	12
5.5 Aerial Photographs	16
6.0 ASSESSMENT OF HISTORICAL ASSETS	17
6.1 Definitions	17
7.0 SITE GAZETTEER – PHYSICAL IMPACTS	20
8.0 IMPACT AND RECOMMENDATIONS	30
8.1 Direct physical impact	30
8.2 Site Specific Recommendations	
8.3 General recommendations	30
9.0 SOURCES	
APPENDIX 1: SCHEDULED AND NON-SCHEDULED SITES WITHIN 1.0KM	34
APPENDIX 2: DEFINITIONS OF FURTHER ASSESSMENT AND MITIGATORY	
MEASURES	39



1.0 Non Technical Summary

1.0 NON-TECHNICAL SUMMARY

Aeon Archaeology was commissioned by Balfours LLP to undertake an archaeological desk-based assessment of the grade II* Listed Building of Ty Hen Parc, Parc Llanfrothen, Croesor, Meirionnydd. The property, which is also known as Middle Parc (Parc 2 and 3), forms part of a complex of sub- medieval domestic and agricultural buildings on the southern slope of a rocky ridge running east-west above the Afon Maesgwm.

The archaeological desk-based assessment identified eight archaeological sites within the development area. Of these it is expected that the proposed works will have a *low adverse direct physical* impact upon the courtyard wall and the trackway, and a *high adverse direct physical* impact upon the buried remains of the footprint of Parc 2. All of these features are considered to be of national importance due to their group value as part of a grade II* registered historic park and garden.

Site specific recommendations have been made for the reinstatement of the courtyard wall upon the completion of works, as well as targeted archaeological excavation of the footprint of the new extension prior to the commencement of works. This will enable the preservation by record of the buried remains of Parc 2 within the development area. In addition it has been recommended that a level 4 historic building record be undertaken prior to the commencement of works to include a return visit to record the revealed historic fabric once the 20th Century lean-to extensions have been demolished. Recommendations have also been made for a watching brief to be maintained during the demolition of the extensions, during the removal of the internal fabric of Parc 3, and during the excavation of trenches for the installation of new drains at the site.



2.0 Introduction, Aims and Project Design

2.0 INTRODUCTION, AIMS AND PROJECT DESIGN

Aeon Archaeology was commissioned by Balfours LLP to undertake an archaeological deskbased assessment of the grade II* Listed Building (ref: 4817) of Ty Hen Parc, Parc Llanfrothen, Croesor, Meirionnydd (centred on NGR SH 62713 43964) (figure 1). The property, which is also known as Middle Parc (Parc 2 and 3), forms part of a complex of submedieval domestic and agricultural buildings on the southern slope of a rocky ridge running east-west above the Afon Maesgwm. The archaeological desk-based assessment has been undertaken to partially fulfil an archaeological condition of full planning permission (Planning ref: NP5/68/LB46E and NP5/68/LB46F).

The submitted application entails demolishing the existing porch and kitchen extension of Parc 2 and 3, as well as the erection of an extension to form living room, bedrooms and bathroom as approved in 2009. The further remodelling proposed seeks to subdivide the property to form two separate dwelling units by means of enlarging a window on the northwest elevation to form a new doorway into the original building (Parc 2) and by the insertion of a new staircase and kitchen within the approved extension. In addition new drains will be added to provide an outflow to the existing septic tank and the interior of the buildings will be renovated.

The historic structure of the building remains of special interest as emphasised by the Listed Building designation and the site itself is of historic importance including potential underground archaeological features. In addition the Park is included on the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales with a Grading of II* (PGW (Gd) 35 (GWY).

A mitigation brief has not been prepared for this scheme by the Snowdonia National Park Authority (SNPA) archaeologist, but recommendations have been made for a staged approach of archaeological assessment and mitigation to begin with an initial desk-based assessment of the site in order to partially discharge the following planning condition:

No development shall take place until the applicant or their agents or successors in title have secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and agreed in writing by the LPA.

This archaeological desk-based assessment is for the proposed development site, which includes the property of Parc 3 as well as the standing remains of Parc 2. The assessment area also included the footprint of the proposed extension and the area immediately surrounding the property encompassing approximately 820.0m² (figure 2).

As part of the archaeological desk-based assessment a 1.0km search area centred on the site was utilised for a search of the Gwynedd Historic Environment Record (HER). This provided a background historical narrative of the area and included source material from the Gwynedd Archives and Record Office, as well as the Royal Commission on the Ancient and Historic Monuments in Wales (RCAHMW), and the National Library of Wales. Information on Scheduled Ancient Monuments and Listed Buildings was obtained from Cadw.

The following report conforms to the guidelines specified in Standard and Guidance for Archaeological Desk-based Assessment (Institute of Field Archaeologists, 1994, rev. 2007).

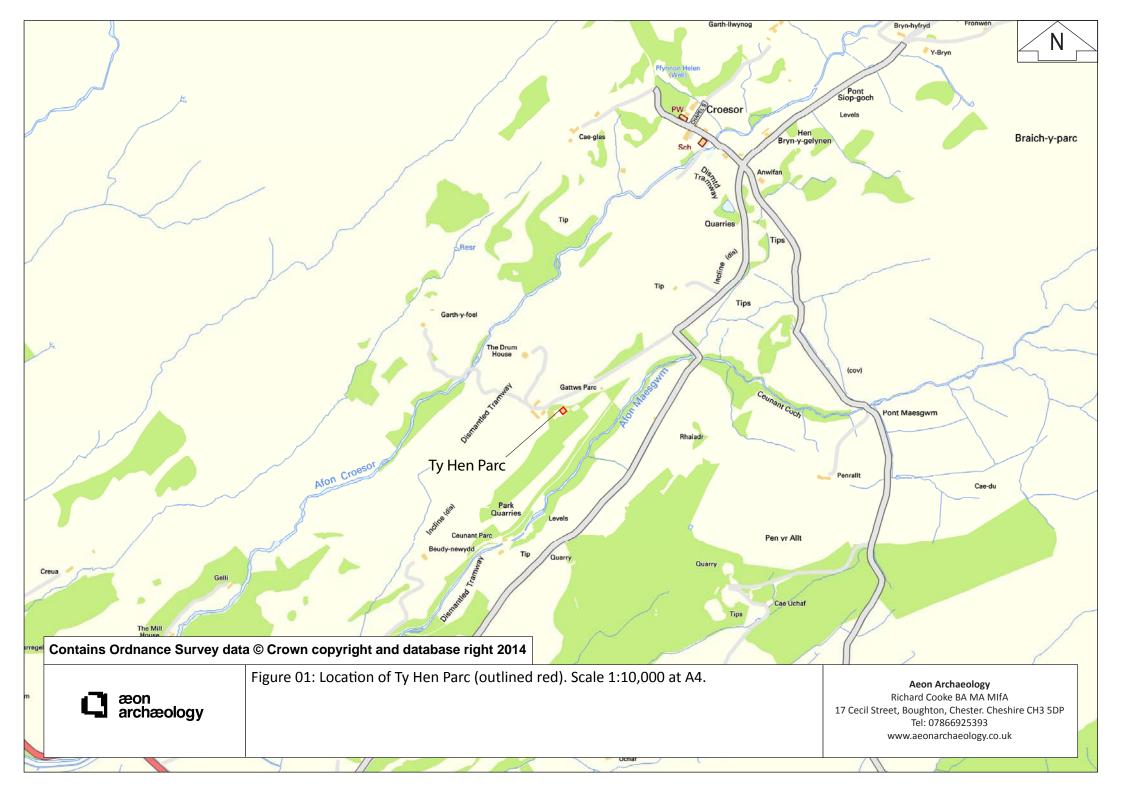
The archaeological desk-based assessment considered the following:

(i) The history of the site;

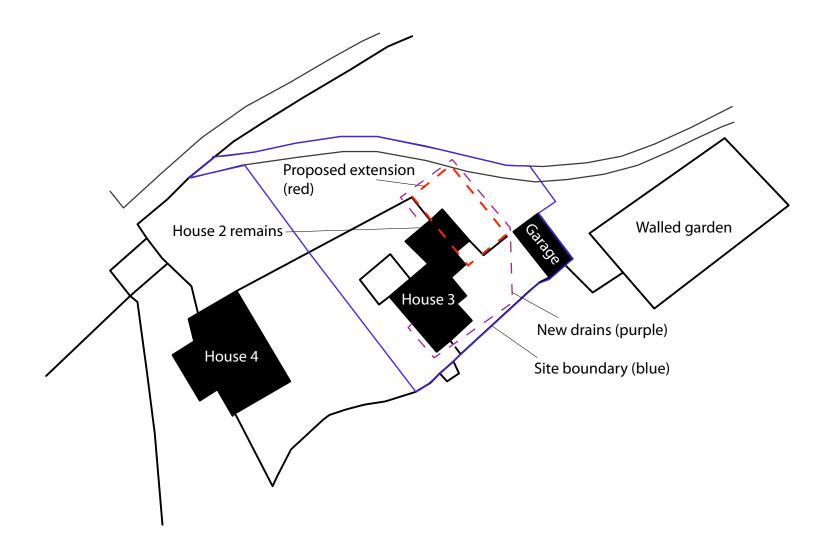
- (ii) The significance of any remains in their context both regionally and nationally;
- (iii) The potential impact of the proposed development on known sites of archaeological importance.

The archaeological desk-based assessment was undertaken in four stages:

- (i) Archival research
- (ii) Field visit/site walkover of all accessible areas
- (iii) Written report
- (iv) Project archive







Contains Ordnance Survey data © Crown copyright and database right 2014



Figure 02: Location of existing buildings (shaded black), proposed extension (dashed red), new drains (purple) and site boundary (outlined blue). Scale 1:500 at A4.

Aeon Archaeology

Richard Cooke BA MA MIfA 17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP Tel: 07866925393 www.aeonarchaeology.co.uk



3.0 Methods and Techniques

3.0 METHODS AND TECHNIQUES

3.1 Archival research

The archaeological desk-based assessment involved the study of the following records:

- The regional Historic Environment Record (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, LL57 2RT) was examined for information concerning the study area. This included an examination of the core HER, and secondary information held within the record which included unpublished reports, the 1:2500 County Series Ordnance Survey maps, and the National Archaeological Record index cards and aerial photography.
- The National Monuments Record (NMR RCAHMW, National Monuments Record of Wales, Plas Crug, Aberystwyth, SY23 1NJ) was checked for sites additional to the
- Information about Listed Buildings and Scheduled Ancient Monuments from Cadw were examined in the regional HER. The Register of Outstanding and Special Historic Landscapes and the Register of Parks and Gardens was checked, and also the location of World Heritage Sites.
- Secondary sources were examined, including the Inventories of the Royal Commission on Ancient and Historical Monuments for Wales, and works held within the regional libraries.
- Evidence from aerial photographs was collated. Vertical and oblique collections held by the NMR, CCW and Welsh Government were examination.
- Archive maps were consulted in the National Library of Wales at Aberystwyth, and at the Gwynedd archives. This included the relevant estate maps and tithe maps and information from Land Tax Assessments.
- Results from previous archaeological work within the area was also reviewed.

3.2 Site walkover

The site walkover was carried out on 8th January 2013 by Richard Cooke BA MA MIfA, archaeological contractor and consultant at Aeon Archaeology. The weather conditions were ideal for the site visit being both bright and clear. All archaeological sites and view points were photographed using a digital SLR (Canon 550D) set to maximum resolution (72 dpi).

3.3 Desk-based assessment report

All features identified from the archival research and site walkover were assessed and allocated to categories of international, national, regional/county, local and none/unknown importance as listed in section 6.0. These are intended to place the archaeological feature within a geographical context of importance and thus help inform the most suitable level of mitigatory response. The criteria used for allocating features to categories of importance are based on existing statutory designations and, for non-designated assets, the Secretary of State's non-statutory criteria for Scheduling Ancient Monuments; these are set out in National Planning Policy Framework (NPPF) and Welsh Office Circular 60/96.

3.4 Project archive

A full archive including plans, photographs and written material was prepared. All plans, photographs and written descriptions were labelled and cross-referenced using Aeon Archaeology pro-formas. A draft copy of the report was sent to the client and upon written approval from them copies of the report will be sent to the regional HER (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, LL57 2RT), the Snowdonia National Park Authority (SNPA), and the Royal Commission on the Ancient and Historic Monuments in Wales (RCAHMW). All notes, plans, and photographs arising from the deskbased assessment are stored at Aeon Archaeology under the project code A0031.1.



4.0 Archaeological and Topographical Background

4.0 ARCHAEOLOGICAL AND TOPOGRAPHICAL BACKGROUND

4.1 Topographic Description

Parc Llanfrothen occupies the foothills to the northeast of the Traeth Mawr plain, approximately 820.0m southwest of the village of Croesor, Meirionnydd. The houses and farm lie roughly in the centre of the registered Park, which occupies a more or less rectangular area between two parallel streams, the Afon Maesgwm and the Afon Croesor, with the long-axis running southwest to northeast. It is likely that the original park was smaller than at present, the house site being near the north-eastern boundary and the gatehouse on the boundary. This is suggested by the presence of a massive wall of a different character from other walls within the park, which runs northwest from the gatehouse, and also by the route of the old drive, which crosses the river and curves back to the east to meet the road, thus cutting off a corner both of the road and the new drive.

Apart from the small walled garden, steeply terraced out over the top of the slope, which probably belonged to the earliest house, the garden areas are now neglected. There are three impressive terraces retained by massively-built stone walls to the south of the old drive and further earthen terraces to the north of it. These appear very likely to be contemporary with the later houses (Parc 3 and 4) and may have been an attempt by William Lewis Anwyl to recreate an Italian renaissance style garden. In addition, a later small kitchen garden was added to the immediate southwest of Parc 4.

The site lies within the parish of Llanfrothen, within the historic county of Meirionnydd and unitary authority of Gwynedd and is also within the Snowdonia National Park. The bedrock geology is of the Nant Ffrancon subgroup, a sedimentary siltstone bedrock that formed approximately 451 to 479 million years ago in the Ordovician Period when the local environment was dominated by shallow seas. The superficial deposits are of Devensian – Diamicton till, that formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by Ice Age conditions (British Geological Survey).

4.2 Statutory and non-statutory designations

4.2.1 Non-designated monument points from the Gwynedd Historic Environment Record (figure 3)

The Gwynedd Historic Environment Record (HER) maintains a register of archaeological sites represented as single point data or as polygons. These are identified through their Primary Reference Number (PRN). These include sites which are of archaeological/historical interest, artefact find spots, documentary evidence, and locations of past events such as archaeological projects.

There are 39 monuments within 1.0km of the site (see appendix I) with the following monuments located within the site boundary:

- (i) The post-medieval *Parc* (PRN: 12427);
- (ii) The post-medieval Parc, Cottages South West of (PRN: 12428).

The site lies within 100.0m of the following:

- (i) Approximately 14.0m northeast of the post-medieval *House*, *Parc* (PRN: 4737);
- (ii) Approximately 28.0m southwest of the medieval *Platform House, Parc* (PRN: 5881);

- (iii) Approximately 54.0m northeast of the post-medieval *Parc* (*s.w.*) *Barn* (PRN: 11878);
- (iv) Approximately 55.0m north of the multi-period *Parc Landscape* (PRN: 18222);
- (i) Approximately 74.0m northeast of the post-medieval Stone Barn, Parc (PRN: 5884).

4.2.2 National Monuments Record (figure 4)

The Royal Commission on the Ancient and Historic Monuments in Wales (RCAHMW) maintains the National Monuments Record (NMR) for Wales. This is a register of archaeological sites represented as single point data or as polygons. These are identified through their National Primary Reference Number (NPRN) and include sites which are of archaeological/historical interest, artefact find spots, documentary evidence, and locations of past events such as archaeological projects.

There are 26 monument points within 1.0km of the site (see appendix I) with the following monuments located within the site boundary:

- (i) The post-medieval Parc (NPRN: 28622);
- (ii) The post-medieval Parc, cottages south west of (NPRN: 28623);
- (iii) The post-medieval Park; y parc, croesor, llanfrothen (NPRN: 404989).

The site lies within 100.0m of the following:

- (i) Approximately 29.0m north of the post-medieval *Parc, garden, croesor* (NPRN: 265122);
- (ii) Approximately 55.0m northeast of the post-medieval *Parc* (*s.w.*) *barn* (NPRN: 41715).

4.2.3 Listed Buildings (figure 5)

The Secretary of State for Culture, Media and Sport holds a List of Buildings of Special Architectural or Historic Interest, considered to be of national importance. Compiled under the Planning (Listed Buildings and Conservation Areas) Act 1990, the List includes structures from boundary walls and telephone boxes to cathedrals. Listing gives statutory protection and restrictions apply. Consent may be required for works to, or that affect the setting of, a Listed Building and the Local Planning Authority conservation officer should be consulted if in doubt.

There are 16 Listed Buildings within 1.0km of the site (see appendix I) with the following located within the site boundary:

(i) The post-medieval grade II* *Middle Parc including Fountain Basin adjoining to W* (LB ref: 4817).

The site lies within 100.0m of the following:

- (i) Approximately 6.0m west of the post-medieval grade II *Walls and Revetments to Upper Terrace Garden at Parc* (LB ref: 19843);
- (ii) Approximately 12.0m northeast of the post-medieval grade II* Parc (LB ref: 4773);
- (iii) Approximately 67.0m east of the post-medieval grade II* *L-shaped Agricultural Range at Parc* (LB ref: 4816);
- (iv) Approximately 44.0m southeast of the post-medieval grade II *Barn at Parc* (LB ref: 19842);
- (v) Approximately 71.0m west of the post-medieval grade II Revetment Walls to Terracing at Parc including Walls and Revetments to Enclosure adjoining to SE (LB ref: 19844);
- (vi) Approximately 78.0m northeast of the post-medieval grade II *Walls to Enclosure adjoining L-shaped Agricultural Range at Parc* (LB ref: 19847).

4.2.4 Scheduled Ancient Monuments (figure 6)

Scheduled monuments are those considered to be monuments of national importance. The Ancient Monuments and Archaeological Areas Act 1979 supports a formal system of Scheduled Monument Consent (SMC) for any work to a designated monument. Any works within a Scheduled area will require SMC; this includes non-invasive techniques such as geophysics or field-walking.

There are 2 Scheduled Ancient Monuments within 1.0km of the site (see appendix I) but none lie within the site boundary or within 100.0m of the site.

4.2.5 Historic Parks and Gardens (figure 6)

Cadw holds a Register of Historic Parks and Gardens of Special Historic Interest. These Registered landscapes are graded I, II* or II, and include private gardens, public parks and other green spaces. They are valued for their design, diversity and historical importance. Inclusion on the Register brings no additional statutory controls, but there is a presumption in favour of conservation of the designated site. Local authorities are required to consult Cadw on applications affecting sites Registered as grade I or II* and the Garden History Society on sites of all grades.

The site lies within the following historic park and garden:

(i) Within the grade II* historic park and garden of *Parc* (PGW (Gd) 35 (GWY)/

4.2.6 Historic Landscape Character Areas (HLCAs) (figure 7)

Cadw, National Resource Wales (formerly the Countryside Council for Wales), and the International Council of Monuments and Sites (ICOMOS UK) compiled the two volume Register of Landscapes of Historic Interest in Wales. This includes 58 landscapes of outstanding or special historic interest, which are considered to be the best examples of different types of historic landscapes in Wales. The Register provides information to decision makers and landscape managers, to help ensure that the historic character of the landscape is sustained, and that where change is contemplated, it is well-informed.

The proposed development site lies within the following Historic Landscape Area (HLA):

(i) The Vale of Ffestiniog Landscape of Outstanding Historic Interest (HLW (Gw) 3).

Historic Landscape Characterisation takes a closer look at the historic landscape by showing the processes that have shaped the landscape over centuries of human activity, contributing to its present character. Detailed characterisation studies have been compiled by the four Welsh Archaeological Trusts for all 58 areas on the Register. They are used by local government and developers to help assess the impact of development proposals on the historic landscape.

The proposed development area lies within the following Historic Landscape Character Areas (HLCAs):

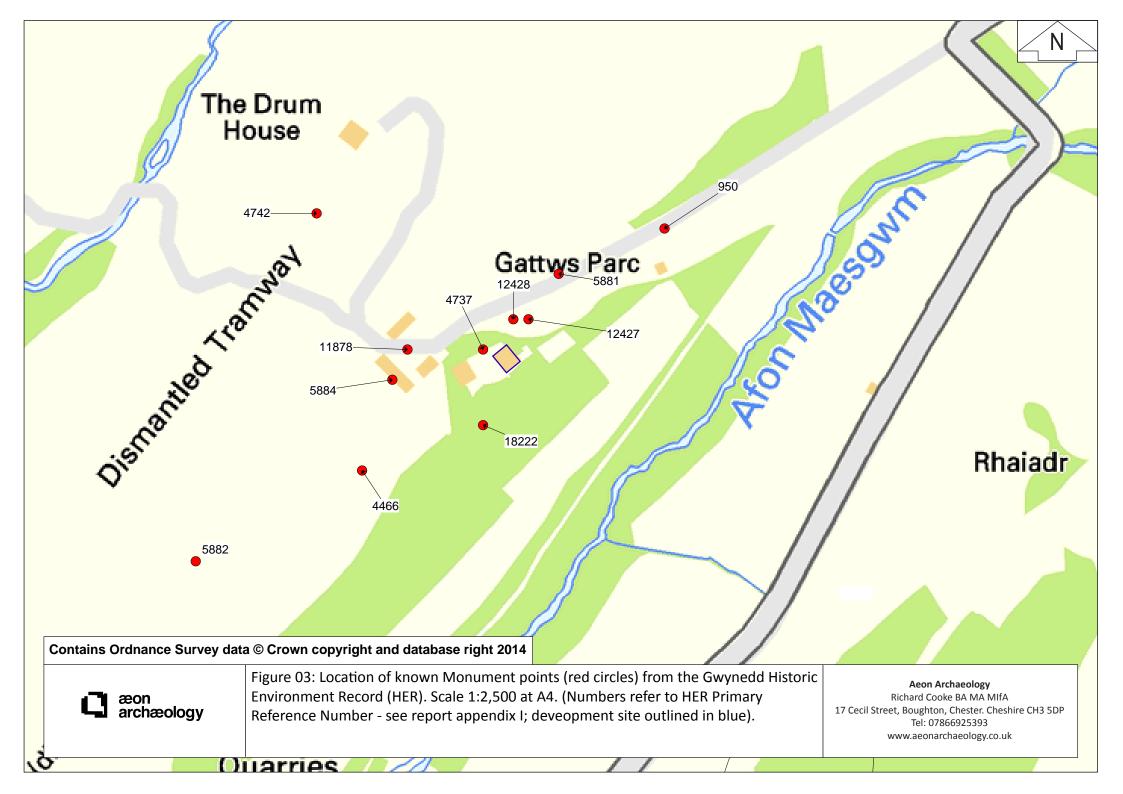
(i) The Parc Historic Landscape Character area (HLCA: 22).

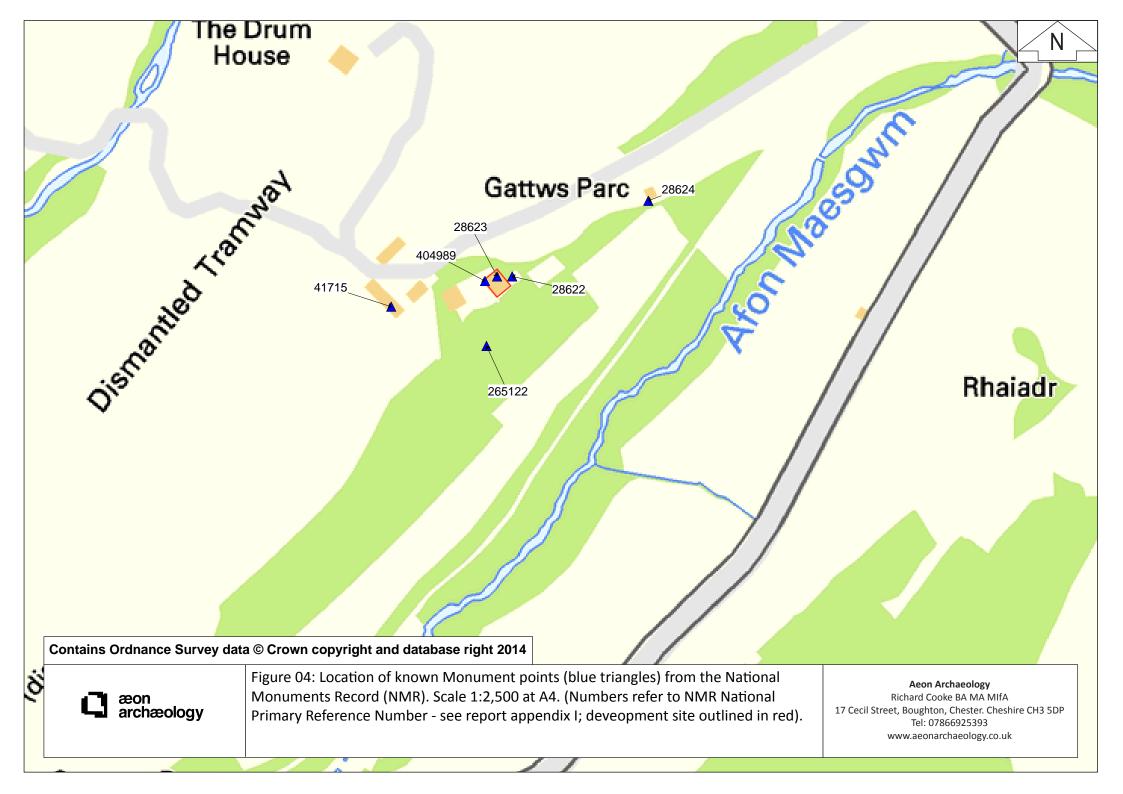
4.2.7 Events

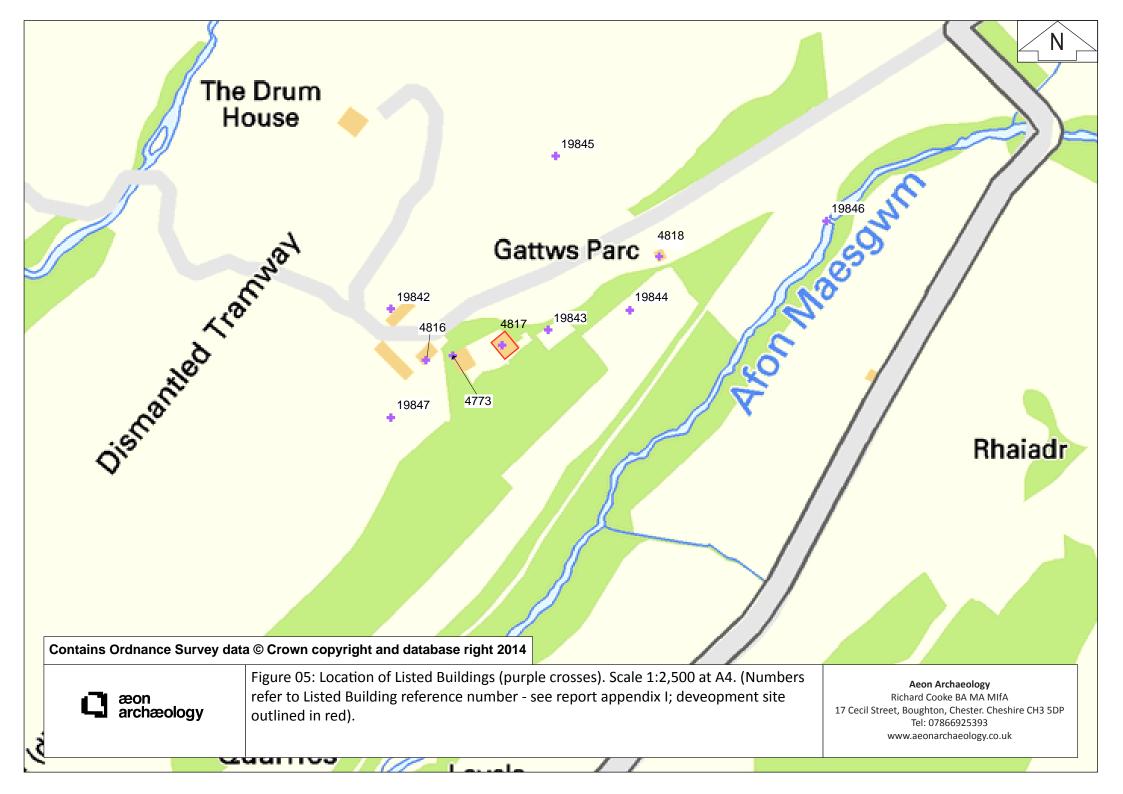
Parc Llanfrothen was studied in some detail by Hemp and Gresham in 1942 (Archaeologia Cambrensis) who produced plan drawings and descriptions of the foundation remains of Parc 1-3, as well as elevation drawings of Parc 3 and Parc 4. It was in fact Hemp and Gresham who identified four dwellings at Parc, and used this as a basis for their 'unit system'. The term describes rather than explains a striking arrangement of dual domestic planning where two dwellings are sited in close proximity, the secondary house sometimes set corner to corner with the principal house. Dual domestic planning should be understood in relation to the developmental cycle of the family, especially the residential problems posed by succession and inheritance. Provision for widows varied socially and geographically in England and Wales, but the most generous entitlement included separate housing (Suggett, R. 2007). Indeed, Hemp and Gresham drew parallels between the unit system seen at Gwydir and Plas Newydd and with the ancestral links between the Anwyl's of Parc Llanfrothen and the Clenney and Gwydir families.

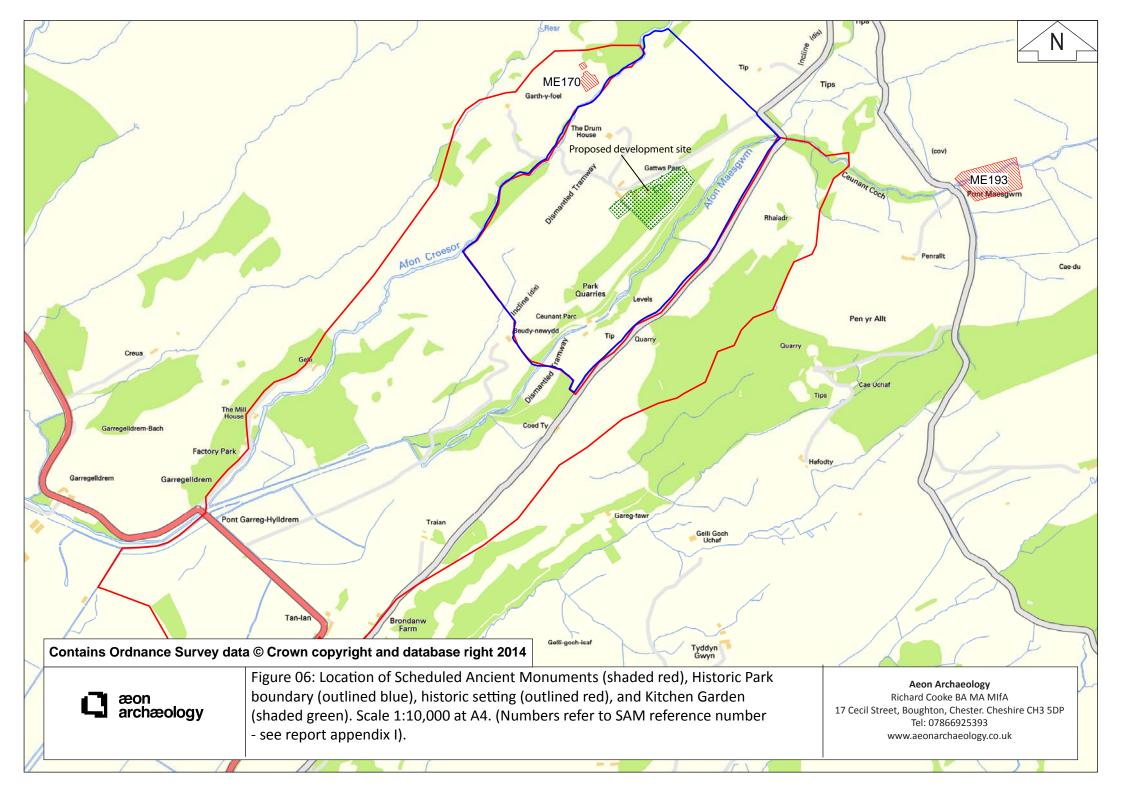
The development site was included within the historic landscape characterisation project for the Vale of Ffestiniog in 2003 by the Gwynedd Archaeological Trust (GAT report 422). This provided some limited historic background material as well as key historic landscape characteristics for the Parc HLCA. In addition, the Gwynedd Archaeological Trust undertook a desk-based assessment of a micro hydro-electric scheme located to the east on the Afon Maesgwm in 1994 (GAT report 109) as well as a survey of the Segontium – Tomen y Mur Roman road in 2007 (GAT report 668). However, while these did result in new information, fieldwork was limited. Both projects appear to have skirted the site and the reports contain no specific detail relevant to it.

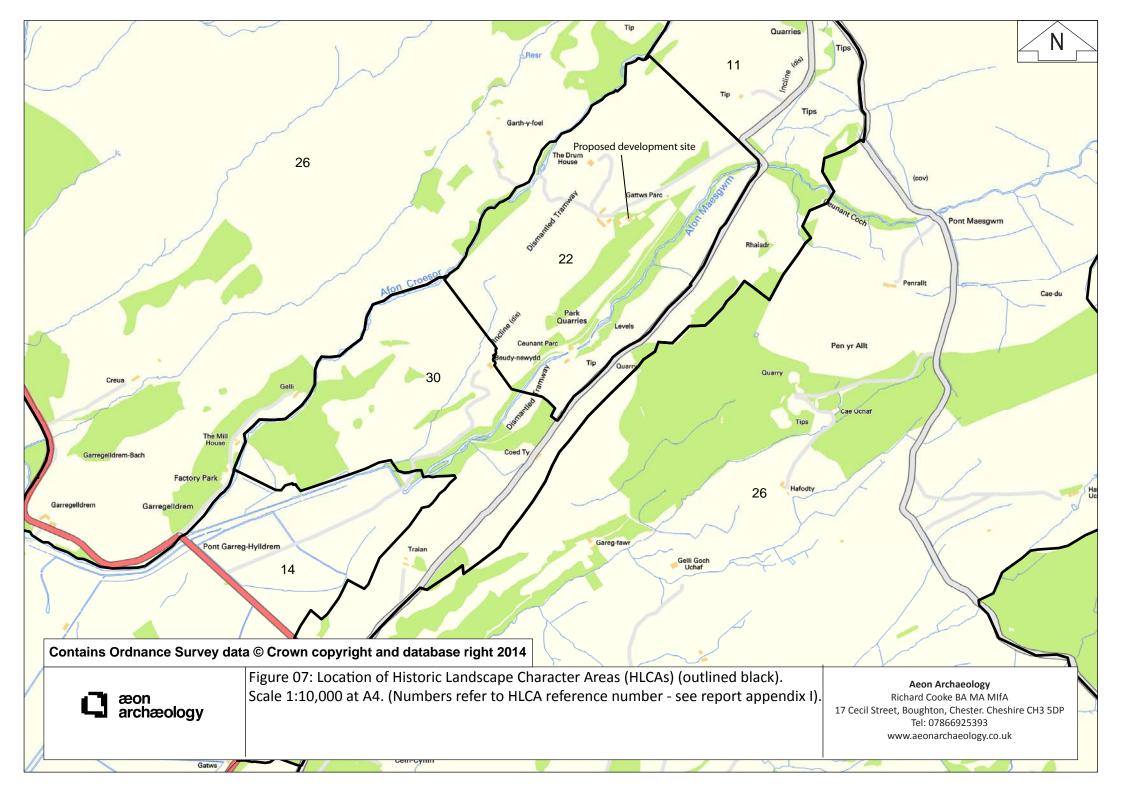
Detailed information regarding the property has also been included within the Cadw Listed Building descriptions as well as in the Register of Parks and Gardens in Wales. In addition further study of the standing buildings at Parc was undertaken in 2008 by the Snowdonia Dendrochronolgy Project and included Middle Parc. This work dated the transverse beam in the ground floor southern room as well as the upper lintel over the stairs in Parc 3, returning felling dates of 1654/5 and after 1594 respectively.













5.0 The Historical Context

5.0 THE HISTORICAL CONTEXT

The following sections describe the known archaeological record within the general area of the proposed development. Sites are identified by their Primary Reference Number (PRN) which is the number by which they are identified in the Gwynedd Historic Environment Record (HER), or by their Scheduled Ancient Monument reference, Listed Building reference and/or there National Primary Reference Number (NPRN) if applicable. The intention of this section is to provide a historic and archaeological context to the site. This aids in establishing the relative importance of an archaeological feature within its landscape, as well as assessing the potential for unknown buried archaeological remains on the proposed development site.

The beginning and end of certain periods is a contentious issue. In the Gwynedd Historic Environment Record (HER) the following dates are used. This is a standard convention across all of the Welsh HERs.

Table 1. Historic periods

Tuble 1: Historie periods			
Palaeolithic (prehistoric)	500,000 BC – 10,001 BC		
Mesolithic (prehistoric)	10,000 BC – 4,001 BC		
Neolithic (prehistoric)	4,000 BC – 2,351 BC		
Bronze Age (prehistoric)	2,350 BC – 801 BC		
Iron Age (prehistoric)	800 BC – 47 AD		
Romano-British	48 AD – 409 AD		
Post-Roman (Early Medieval)	410 AD – 1065 AD		
Medieval	1066 AD – 1539 AD		
Post-Medieval	1540 AD – 1900 AD		
Modern	1901 AD – 2050 AD		

5.1 Prehistoric and Roman Period

Evidence of the prehistoric and Roman periods is surprisingly limited within this particular part of Meirionnydd. However, approximately 290.0m north of the site lies the prehistoric Scheduled Ancient Monument of the *Unenclosed Hut Circle Settlement East of Garth-y-Foel* (ME 170). The site is a well preserved example of an unenclosed round hut settlement of the Iron Age or Romano British period. The settlement comprises three closely grouped huts set near the banks of the Afon Croesor, with a fourth isolated hut above the main group on a higher shelf. Also present are a number of associated enclosures or yards. A second prehistoric site lies further to the north and approximately 840.0m from the development site, where two poorly preserved round huts are located on a shelf above a trackway (PRN: 5168).

In closer proximity to the development site a possible prehistoric round barrow (PRN: 5882) has been identified approximately 248.0m to the southwest. This feature exists as a very distinct mound on top of a natural spur. The precise origin of this feature is however unknown as there is the possibility that it is in fact a Victorian garden feature and as such the mound was not included within the Survey of Prehistoric Funerary and Ritual Monuments in Wales carried out by the Gwynedd Archaeological Trust in 2001 (GAT report 415).

Evidence of the Romano-British period within 1.0km of the development site is limited to the line of the Segontium – Tomen y Mur Roman road which lies approximately 720.0m to the east and connects the eastern edge of Croesor with Maentwrog.

5.2 Early Medieval, Medieval and Post-Medieval Periods

The Early Medieval period is also poorly represented within this part of northwest Wales and there are no known sites within 1.0km of the development site.

By the 12th and 13th centuries the kingdom of Gwynedd was divided into administrative *commotes*, administered through a network of local centres governed by a royal court or *Llys*. This area of Meirionnydd lay within the commote of *Ardudwy Uwch Artro* and comprised parts of the parishes of Llanfrothen, Penrhyndeudraeth, Llandecwyn, Maentwrog and Ffestiniog. According to the Merioneth Lay Subsidy Roll (1292-93) the parish of Penrhyndeudraeth was by far the most affluent of these (and indeed was, along with Llanegryn, the richest parish in the then-new Meirionnydd), followed by Llanfrothen (rated at less than half the value of Penrhyndeudraeth at 30-40 shillings per 1000 acres), Maentwrog (20-30 shillings), Llandecwyn (10-20 shillings) and then Ffestiniog which was the poorest parish in the whole of Meirionnydd (at less than 10 shillings). When one sees the different landscapes in these areas, this comes as no surprise. There are no population figures in the Roll for this area. There is no surviving evidence, beyond modern place-names, of the precise location and extent of these settlements (GAT report 422).

Archaeological evidence of the medieval period can be seen only 27.0m northeast of the development boundary where a platform house (PRN: 5881) is situated on top of an outcrop at Parc, Llanfrothen. The outcrop was cut away to build Parc 1 in the 16th Century and may have been incorporated into the northwest elevation, although no physical evidence of this, such as beam slots, survives. The hut is grassed over but the facing stones of the bottom course are clearly visible. Further evidence of the medieval era can be seen 830.0m to the east with the Scheduled Ancient Monument of Pont Maesgwm Deserted Rural Settlement (ME 193) which comprises the remains of four buildings, three of which were probably occupied as houses, and one which could have been a mill building. The three long huts average 13.0m in length by 7.0m in width and were all built upon artificial terraces beside the stream, set at varying angles to both the stream and the natural slope of the ground. Two of the huts appear to have been a single building but the third on the southern side of the stream could have been more elaborate with some suggestion of a chimney. It is possible that this could have been a later addition, or indicates that the settlement may have developed through time. The fourth building is L-shaped and its proximity to a channel or leat has been taken to suggest that it could have been a watered powered mill (HER).

The site is located within the Vale of Ffestiniog Registered Landscape of Outstanding Historic Interest (HLW (Gw) 3), designated primarily for the range and quality of its extensive combination of slate quarries and mines in Wales, and a vast and significant amount of important industrial archaeological material. Indeed, the nearby surrounding landscape includes part of the non-statutory Croesor tramway as well as a high stone revetted embankment which carried a level railway, including the upper Park incline and the top part of the lower Park incline, a rake of two counterbalanced planes which took the tramway down to the level of the Glaslyn estuary. The upper drumhouse, though constructed c.1863 was rebuilt by Clough Williams Ellis as a banqueting house for Lady Aberconway on the lines of the Marchogion drumhouse on the Penrhyn Quarry railway of 1798-1801 (GAT report. 422).

5.3 The Historical Ownership of Parc Llanfrothen from the 16th Century

Robert ap Morris

Lewis Anwyl (died 1605)

William Lewis Anwyl (died 1642) married Elizabeth daughter of Edward Herbert ap John ap Sr Richard Herbert Kt of Cemmaes, succeeded by:

- 1642 Robert Anwyl (died 1653) married Catherine daughter of Sr John Owen of Clenenney, succeeded by:
- 1653 Lewis Anwyl (died 1669) married Catherine eldest daughter of William Griffith of Llyne, Caernarvonshire, succeeded by:
- C1680 William Lewis Anwyl (c1670-1699) married Elizabeth daughter of Sr Hugh Owen of Bodcon
- 1699 Catherine Anwyl (died 1726) who married:
- C1715 Sr Griffith Williams (died 1734), 6th Bart of Marle near Conway, succeeded by:
- 1734 Sr Robert Williams, succeeded by his sister Ann (died 1770), Maid of Honour to Queen Caroline, who first married (1739):
- C1740 Sr Thomas Prendergast (died 1760), 2nd Bart, MP, Postmaster General of Ireland, who sold part of the estate. Ann later married Captain Terence Prendergast who sold another part of the estate to:
- 1746 Sr Thomas Mostyn (1705-1758), 4th Bart, succeeded by:
- the 5th Bart upon the death of whose son Sr Thomas (died 1831) the Baronetcy became extinct, the estates descending to his daughter Elizabeth (died 1842) who had married in 1794:
- 1831 Sr Edward Pryce Lloyd (1768-1854) Bart, cr. Baron Mostyn 1831, who sold Parc to:
- Hugh John Reveley and Jane Reveley, whose descendants sold to:
- 1942 Clough Williams-Ellis of Plas Brondanw

(Jaques, D. 2000).

5.4 Parc Llanfrothen

The houses at Parc are an example of the 'unit system' first identified by Hemp and Gresham in their study of Parc Llanfrothen in 1942 (Archaeologia Cambrensis), in which they identified a range of four domestic dwellings (Parc 1-4). From this study it has long since been believed that of the four dwellings Parc 1 (now demolished) was the earliest and principal house with Parc 2, of which only the southwest gable remains, being constructed at right angles to it but unconnected, at a later date. It is then believed that the extension to Parc 2 was constructed at a later date and around the same time as Parc 3, thus conjoining Parc 2 and Parc 3 but with no internal access between the two. Parc 4 is believed to be the latest of the dwellings and a date stone incorporated into the house reads 1671.

All of the surviving houses (Parc 2 extension, Parc 3 and Parc 4) are of slate-stone with slate roofs. The stone is not dressed except at the corners and around the windows and doors, and there are some large boulders in some of the lowest courses. Both the Parc 2 extension and Parc 3 have elegant cylindrical chimneys which, if original (late 16th -17th Century) would be unparalleled in north Wales vernacular. It is however possible that these are additions of the second-quarter or mid 19th Century and are 'Tudorbethan' cosmetic alterations (Cadw). Several elaborately moulded blocks of fine sandstone, apparently of mid 16th Century date, are the only remaining physical evidence of the once grand architecture that adorned either

Parc 1 or Parc 2. These include the four base stones of a pair of similar doorways and some of the side blocks which carried up the mouldings.

The houses were built by the Anwyl family, who were related to the Wynns of Gwydir and more closely to the Clenennau family. The surname was first adopted by Lewis Anwyl who died in 1605, but it is probable that the earliest house was constructed by his father Robert ap Morris (died 1576), as well as the small walled garden to the southeast (LB ref: 19844). It is also probable that Lewis Anwyl, or perhaps his son William Lewis Anwyl, were responsible for the construction of the Parc 2 extension and Parc 3. Indeed, dendrochronological dating carried out at Parc 3 in 2008 suggests that the dwelling was built after 1594 and may have been modernised in 1655, possibly by Katherine Anwyl the wife of the late Robert Anwyl, grandson of Lewis Anwyl, who died young in 1653.

The upstanding remains of Parc 2 did not contain any timbers to be included within the dendrochronology project, however it is clear from the surviving gable wall that it predates Parc 3 and was extended at approximately the same time as the construction of Parc 3 to become two conjoined but self-contained dwellings. To the immediate northwest of Parc 3 is a square pool which is supplied by a spring on the northwest side. This has a shallow square basin with slate steps to the northeast and slate seating around it. Latterly the well was known as the 'laundry', and it may be that the current arrangement of slab seating was constructed with this use in mind. Indeed, the pool is set at a slightly different alignment to Parc 3 and appears to predate it. This theory is supported by the fact that through the current arrangement of buildings the steps into the pool face the blank wall of the Parc 2 extension southwest gable, suggesting that it was built when there was an open courtyard to Parc 2 dwelling.

It has been suggested that despite the date of 1671 on the latest house (Parc 4), it is possible that William Lewis Anwyl, who died in 1642, may have also built this house as upon his death a *cywydd* (panegyric) by the bard Huw Machno mentions his 'new house of immense construction' as well as gardens, orchards, parks and fair towers. However, the dendrochronolgy project also dated three timbers from Parc 4, the latest of which was felled in the winter of 1669/70, suggesting that the 1671 date stone is in fact correct, and that the house was at least completed by Catherine Anwyl, the eldest daughter of William Griffith of Llyne, Caernarvonshire. This in turn raises the unlikely possibility that construction of Parc 4 had begun at least by the time of William Lewis Anwyl's death in 1642, or that the 'new house' referred to in Huw Machno's cywydd was in fact the modernisation or extension of an existing dwelling, perhaps Parc 1 or Parc 2, thus creating a 'new house'.

After the construction of Parc 4 in 1671 the property belonged to William Lewis Anwyl (1670-1699) who married Elizabeth, daughter of Sr Hugh Owen of Bodcon and also died young. The Parc estate left the Anwyl family when Catherine, niece of William Lewis Anwyl, married Sr Griffith Williams 6th Bart of Marle near Conway in the early 18th Century. Sr Griffith Williams held Parc Llanfrothen until his death in 1734 when it passed to his son Sr Robert Williams, who died childless. The Parc then went to his sister Ann who married Sr Thomas Prendergast 2nd Bart, MP and Postmaster General of Ireland in 1739. The estate was then sold to Sr Thomas Mostyn 4th Bart in 1746 and remained in their family until it was sold to Hugh John Reveley in 1834 and whose descendants sold the property to Clough Williams Ellis in 1942.

The name of 'parc' clearly relates to the enclosed parkland of the estate although it is unclear whether there were any fair towers at the estate or whether this was embellishment on the part of the bard. Although, the information provided in the Cadw listing schedule as well as the work carried out by David Jacques in 2000 does suggest potential locations for the fair towers, none of which lie within the study area.

The estate is first depicted on the Mostyn Estate map of the Park Demesne in 1802 (figure 8). Parc 1 is shown quite clearly as being a long rectangular dwelling, orientated east to west and occupying the flat terrace to the east of Middle Parc. The map also clearly shows the extent of Parc 2, which appears to have been a smaller rectangular dwelling which was orientated from north to south and formed a western wing to Parc 1. Although conjoined, it is not clear whether Parc 1 and Parc 2 formed a single dwelling or whether they were self-contained, as is the case with Parc 2/Parc 2 extension and Parc 3. The map also clearly shows the dwellings of Parc 3 and Parc 4, the former of which is depicted alongside the square pool which is included within its grade II* listing (LB ref: 4817). Also shown is the later extension of Parc 2 which is conjoined with Parc 3 but which would have been inaccessible from it until the construction of a link-block by Sir Clough Williams Ellis in the mid 20th Century. The map depicts Parc 1 and Parc 2 as an outline, suggesting that by this point in time both dwellings were roofless and presumably uninhabited.

The dwellings at Parc are again depicted on the Sale Catalogue map of 1832 (figure 9). The map, although of less detail, does appear to show the buildings of Parc 1-4 in the same arrangement as the 1802 estate map (figure 8) with Parc 1 being a long rectangular building conjoined with Parc 2 at right angles to it. The map appears to show the Parc 2 extension as well as the Parc 3 dwelling conjoining it. The depiction of Parc 1 and Parc 2 as an L-shaped conjoined range is in opposition to the recording work carried out by Hemp and Gresham in 1942, in which they depict Parc 1 as being removed from Parc 2.

The site is later depicted on the 1840 tithe map for the parish of Llanfrothen (figure 10). This map is of poor detail and merely depicts a single rectangular building, most likely Parc 4 and as was common for tithe maps of this period, depicts land ownership and natural boundaries rather than individual field plots. The tithe apportionment for the 1840 tithe map of the parish of Llanfrothen confirms that the estate was owned by Hugh Reveley Esq and tenanted by John Edmunds at this time.

Table 2. Apportionment to the 1840 Tithe Apportionment for the Parish of Llanfrothen

Field Number	Field Name	Landowner	Occupier	A/R/P
1A	Park and Gelli	Hugh Reveley Esq.	John Edmunds	1600/0/0

The site is next depicted on the Sale Catalogue map of 1875 (figure 11) where Parc 1, Parc 2 and the Parc 2 extension are all shown as outlines, suggesting all three buildings were roofless by this point in time. When the first edition 25" County Series Ordnance Survey map is produced in 1888 (figure 12) Parc 1 and Parc 2 are not shown at all, suggesting that they had become so ruinous by this point in time to as not be included by the cartographer. The first edition map also appears to show a square conjoined extension on the south-eastern elevation of the Parc 2 extension. This building does not appear to be the garage structure which currently exists further to the northeast and separated from the Parc 2 extension and Parc 3 and believed to have been built by Clough Williams-Ellis in the mid 20th Century. This building is again depicted on the later Sale Catalogue map of 1892 (figure 13) as well as quite clearly on the 2nd edition 25" County Series Ordnance Survey map of 1900 (figure 14). The latter of these maps shows two small but distinct square enclosures on the south-eastern side of this structure, possibly being livestock pens.

This structure is most likely an extension to the existing Parc 2 extension and survives today as a single stone-built wall that has been incorporated into a later lean-to on the south-eastern elevation. It appears to have been the work of the Reveley family who were also responsible for the construction of a second square pool in the 1930s to store some of the outflow from

the older square pool located further to the north. The buildings of the Parc 2 extension and Parc 3 were further altered under Clough Williams-Ellis who constructed the current lean-to extensions on the north-eastern and south-eastern elevations, thus creating a link-block and making a single dwelling for the first time. He also created the trackway down from the farmyard to the existing garage, as well as cleverly reversing the newel stair to provide access into the second storey of the Parc 2 extension, and converting the interior of the buildings for modern use.

In conclusion, it appears that the unit system created by Hemp and Gresham in 1942, although useful, has created some confusion in the historical narrative of Parc over the ensuing years. The historical mapping depicts Parc 1 and Parc 2 as an L-shaped conjoined range, and it is entirely possible that these formed one large dwelling. Hemp and Gresham recorded that the foundation remains of these two buildings were separated from one another, which explains their interpretation of two dwellings. It is likely that the historical mapping is correct and that the confusion arose due to the poor preservation of the visible remains. Furthermore, there are some limited areas at the location of Parc 1 where in-situ stone can be observed which appears to suggest an internal division within Parc 1. This may suggest that Parc 1 was in fact sub-divided, perhaps into two or three self-contained dwellings. Moreover, the traditional belief that Parc 1 was the oldest dwelling and principal house may be incorrect. There is no historical, cartographic or physical evidence to suggest that this was the case and if it can be surmised that Parc 1 was in fact several conjoined dwellings then this could suggest that Parc 2 was the original principal house, with Parc 1 being developed later alongside it as dowager houses.

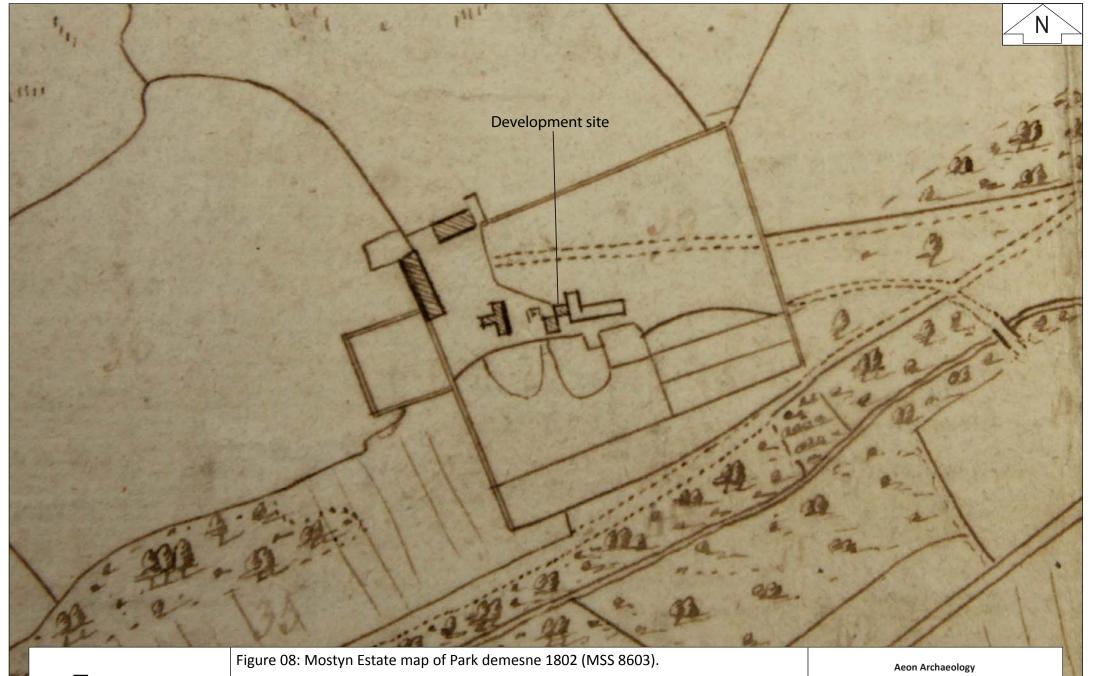
The lack of demolition stone and foundation remains of Parc 1 and Parc 2 can be partially explained by the reuse of stone to construct the garage building and second pool in the late 19^{th} – mid 20^{th} Centuries, as well as repairs to the existing buildings. However, this does not account for the large quantity of demolition stone that would be expected, suggesting that Parc 1 may have been constructed from timber upon stone foundations. The current resident of Parc 4, Mr Richard Haslem, has suggested that Parc 1 and Parc 2 may have burnt down in a fire thus accounting for them both falling out of use. This is a plausible theory and future excavation work may help resolve this as well as determining a chronological relationship between Parc 1 and Parc 2 (figure 15 and 16).

Table 3. Suggested building phases at Parc Llanfrothen (figure 15)

Feature	Probable period	Probable landowner
Parc 1	1a: Mid 16 th Century	Robert ap Morris
Parc 2	1b: Mid 16 th Century	Robert ap Morris
Square pool 1	1c: Mid 16 th Century	Robert ap Morris
Walled garden	1d: Mid 16 th Century	Robert ap Morris
Parc 2 extn	2: Late 16 th -early 17 th Century	Lewis Anwyl (died 1605) or William Lewis
		Anwyl (died 1642)
Parc 3	2: Late 16 th -early 17 th Century	Lewis Anwyl (died 1605) or William Lewis
		Anwyl (died 1642)
Terraces	2: Late 16 th -early 17 th Century	Lewis Anwyl (died 1605) or William Lewis
		Anwyl (died 1642)
Parc 4	3: Late 17 th Century (dated 1671)	Catherine Anwyl (died 1726)
Square extn on	4: Late 19 th Century	Reveley family
1888 map		
Square pool 2	5: Early 20 th Century (1930s)	Reveley family
Trackway, lean-	6: Mid 20 th Century (1951)	Clough Williams-Ellis
to extensions,		
garage and refurb		
of Parc 2 extn		
and Parc 3		

5.5 Aerial Photographs

As part of the archaeological desk-based assessment the RCAHMW was visited to examine available historic aerial photographs of the proposed development area. Aerial coverage from the Royal Air Force and dating to 1946 was examined, as was modern Ordnance Survey coverage. Both sets of photographs showed Parc 4 clearly but the area of Parc 1-3 was obscured by tree cover, and as such no additional information was gained.





Richard Cooke BA MA MIfA
17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP
Tel: 07866925393
www.aeonarchaeology.co.uk

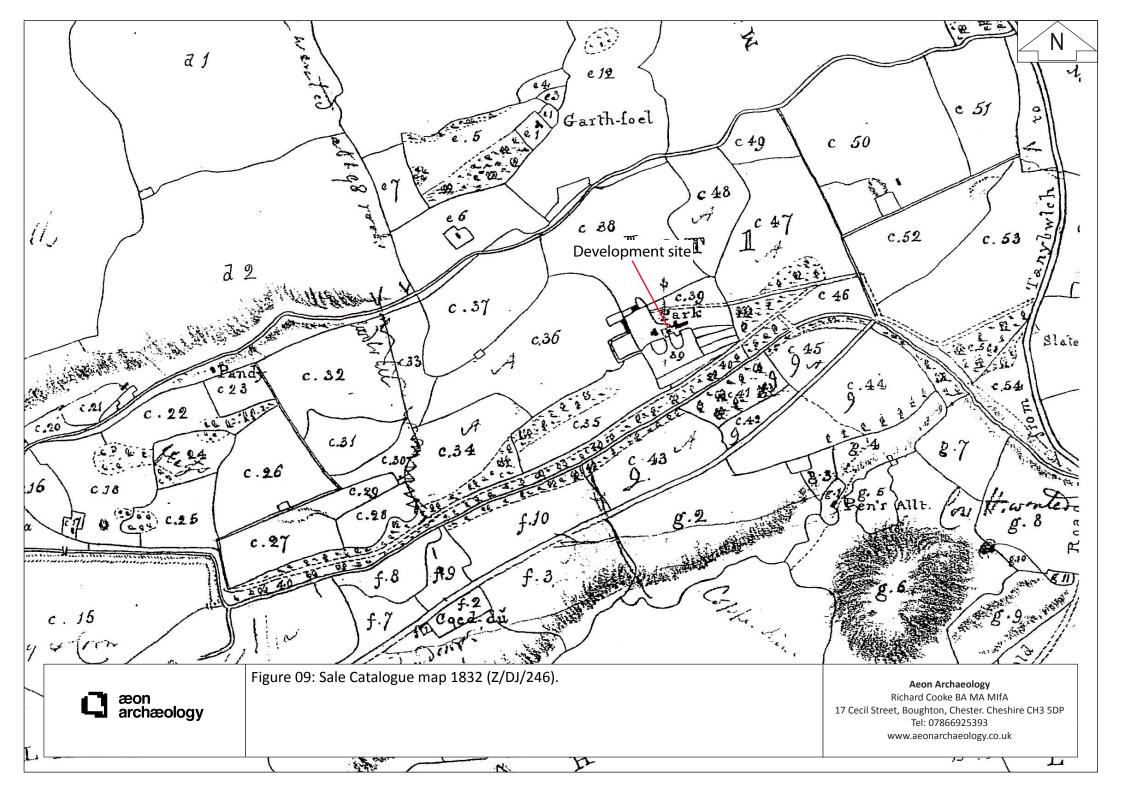


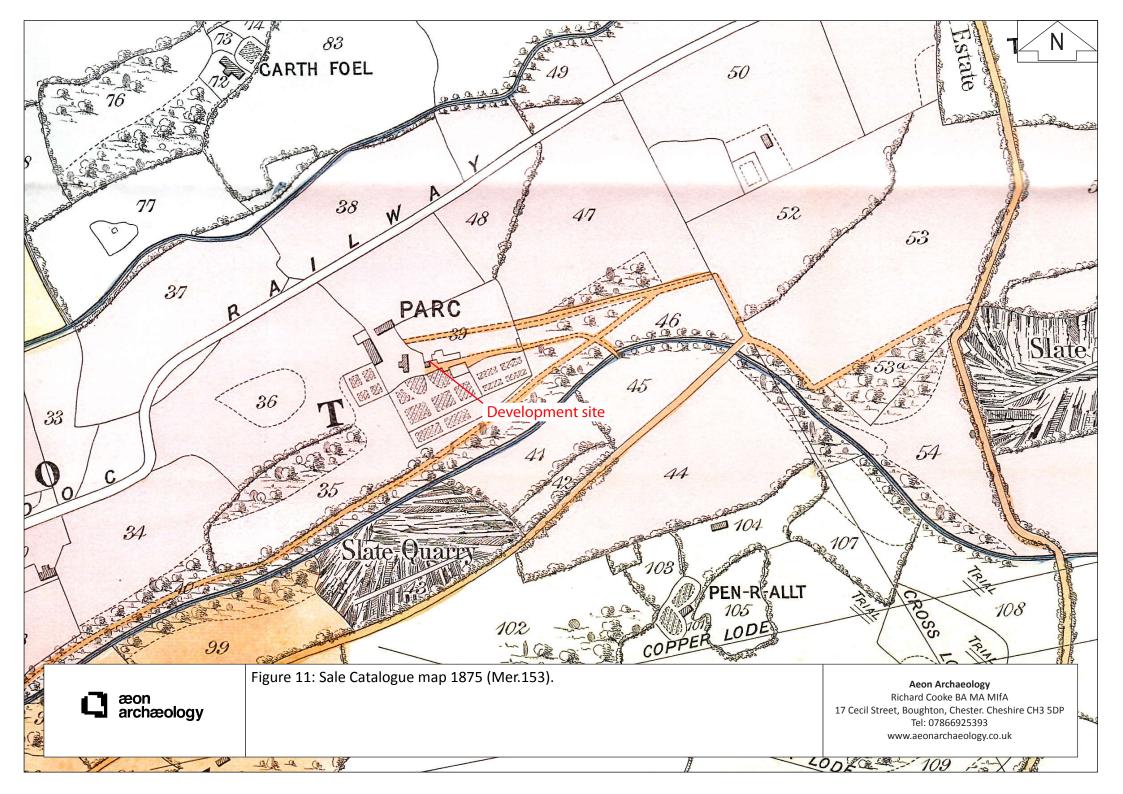


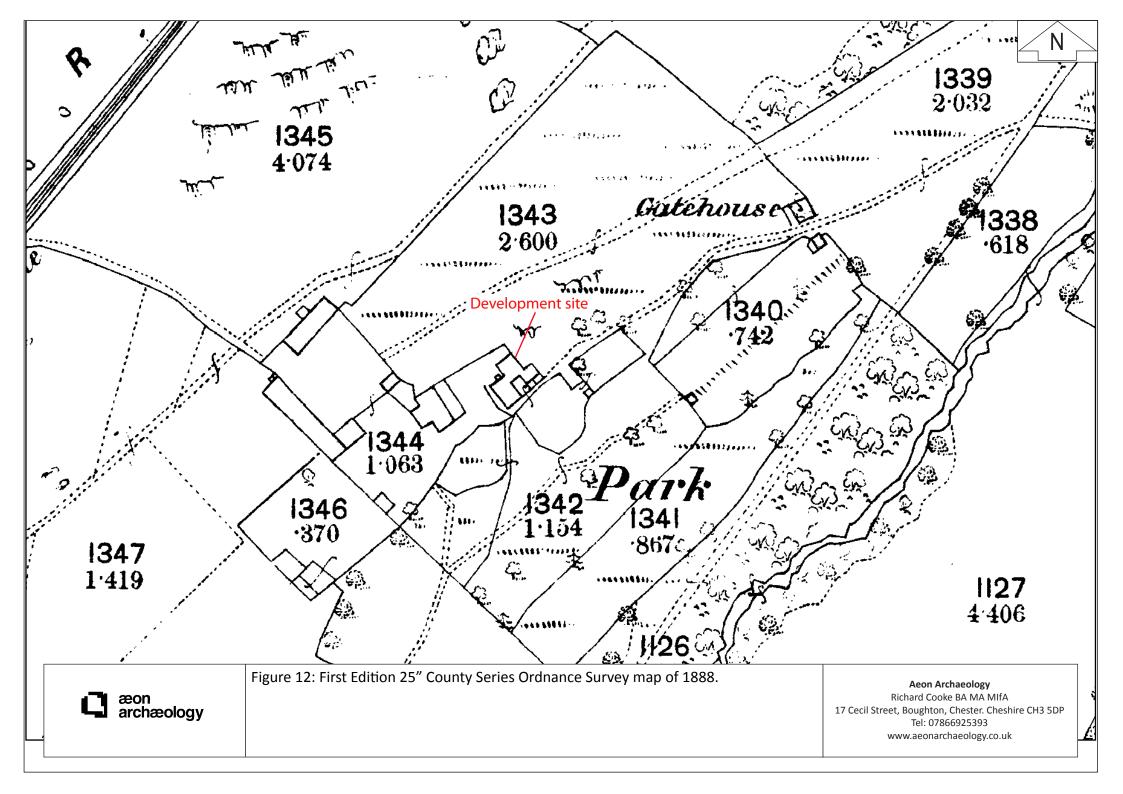


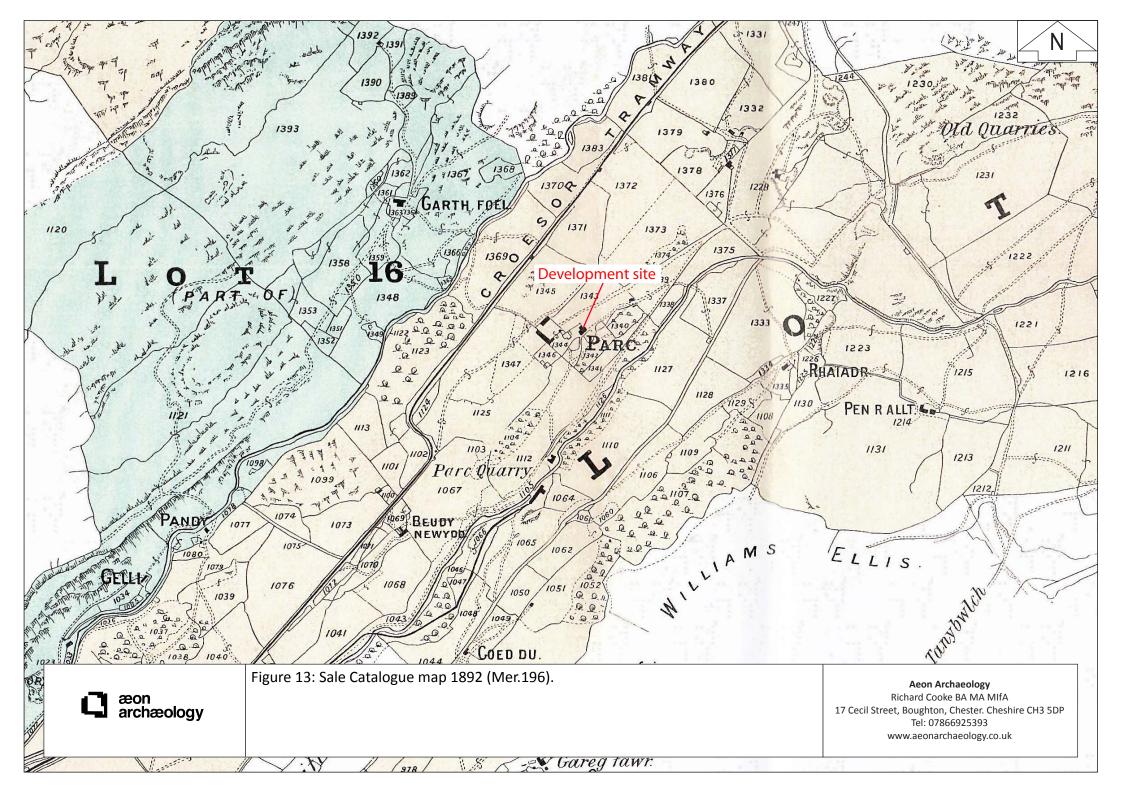


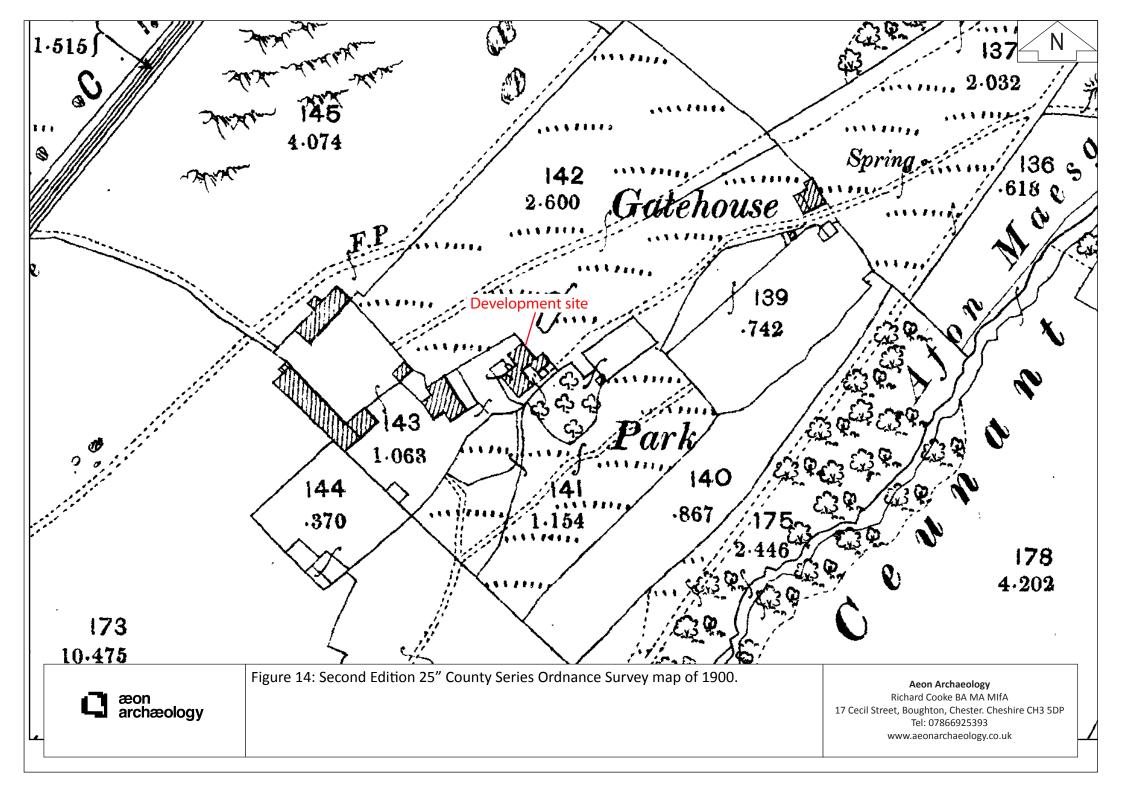
Figure 10: Llanfrothen parish tithe map 1840.

Aeon Archaeology

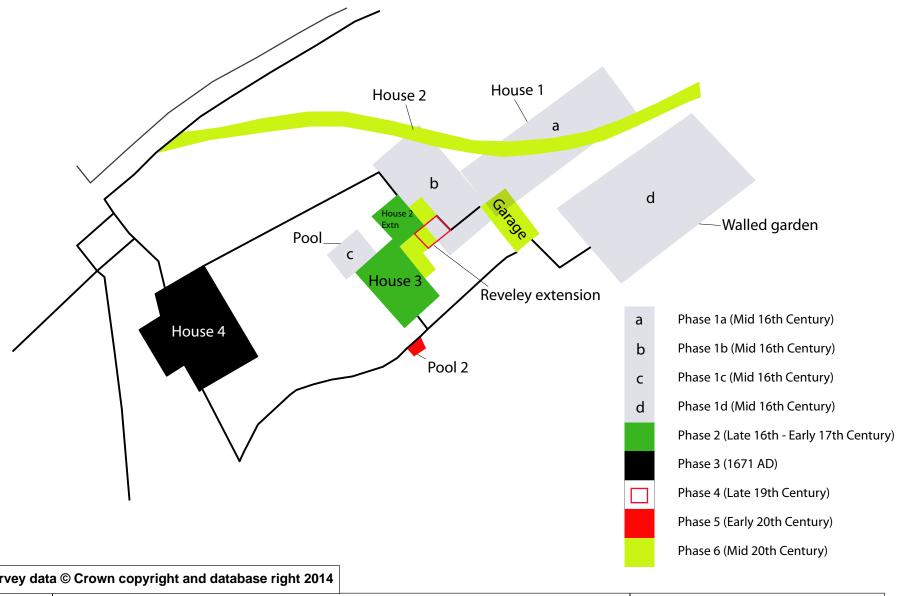












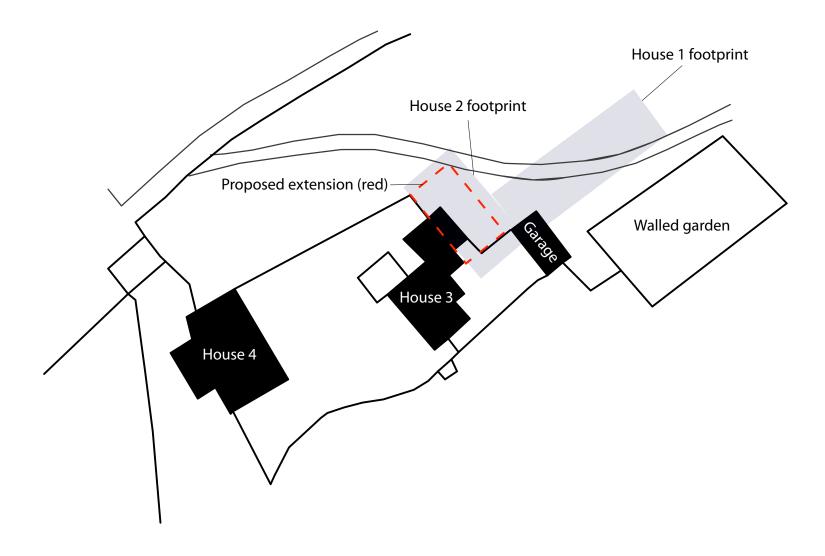
Contains Ordnance Survey data © Crown copyright and database right 2014



Figure 15: Suggested building phases at Parc Llanfrothen. Scale 1:500 at A4.

Aeon Archaeology





Contains Ordnance Survey data © Crown copyright and database right 2014



Figure 16: Location of existing buildings (shaded black), proposed extension (dashed red), and footprint of house 1 and house 2 as depicted on the Mostyn Estate map of Park demesne 1802. Scale 1:500 at A4.

Aeon Archaeology



6.0 Assessment of Historical Assets

6.0 ASSESSMENT OF HISTORICAL ASSETS

6.1 Definitions

Definitions of importance, impact, and significance of effect as used in the gazetteer (section 6.2) are listed below. Definitions of assessment and mitigation techniques as used in the gazetteer are listed in appendix II.

1. Definition of Categories of importance

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

Significance	Description
International (Very High)	Archaeological sites or monuments of international importance, including World Heritage Sites. Structures and buildings inscribed as of universal importance as World Heritage Sites. Other buildings or structures of recognised international importance.
National (High)	Ancient monuments scheduled under the Ancient Monuments and Archaeological Areas Act 1979, or archaeological sites and remains of comparable quality, assessed with reference to the Secretary of State's non-statutory criteria. Listed Buildings. Undesignated structures of national importance.
Regional/ County (Medium)	Conservation Areas Archaeological sites and remains which, while not of national importance, score well against most of the Secretary of State's criteria.
Local (Low) Negligible/None	Archaeological sites that score less well against the Secretary of State's criteria. Historic buildings on a 'local list'. Areas in which investigative techniques have produced no or only minimal evidence for archaeological remains, or where previous large-
Unknown	Archaeological sites whose importance cannot be determined with the information currently at hand. This can include sites where the extent of buried remains is unknown.

2. Definition of Impact

The direct impact of the proposed development on each site was estimated. The impact is defined as follows:

Magnitude	Direct Impacts	Indirect Impacts
High Adverse	Complete removal of an	Radical transformation of the setting of
	archaeological site.	an archaeological monument. A
	Complete destruction of a	fundamental change in the setting of a
	designated building or structure.	building.
Medium Adverse	Removal of a major part of an	Partial transformation of the setting of an
	archaeological site and loss of	archaeological site (e.g. the introduction
	research potential.	of significant noise or vibration levels to
		an archaeological monument leading to
	Extensive alteration (but not	changes to amenity use, accessibility or
	demolition) of a historic building or	appreciation of an archaeological site).
	feature, resulting in an appreciable	Partial adverse transformation of the
	adverse change.	setting of a designated building.
Low Adverse	Removal of an archaeological site	Minor change to the setting of an
	where a minor part of its total area	archaeological monument or historic
	is removed but the site retains a	building.
	significant future research potential.	
	Change to a historic building or	
	feature resulting in a small change	
	in the resource and its historical	
NT 1: '11 /	context and setting.	N (11 1 ' 1 4' C
Negligible/	No impact from changes in use,	No perceptible change in the setting of a
Neutral	amenity or access.	building or feature.
	No change in the ability to	
	understand and appreciate the resource and its historical context	
	and setting.	
Low Beneficial	Land use change resulting in	Decrease in visual or noise intrusion on
Low Deliciticial	improved conditions for the	the setting of a building, archaeological
	protection of archaeological	site or monument.
	remains or understanding/	Improvement of the wider landscape
	appreciation of a historic building	setting of a building, archaeological site
	or place	or monument.
Medium	Land use change resulting in	Significant reduction or removal of
Beneficial	improved conditions for the	visual or noise intrusion on the setting of
	protection of archaeological	a building, archaeological site or
	remains, or understanding/	monument; and
	appreciation of a historic building	Improvement of the wider landscape
	or place, including through	setting of a building, archaeological site
	interpretation measures (heritage	or monument
	trails, etc).	Improvement of the cultural heritage
	Removal of harmful alterations to	amenity, access or use of a building,
	better reveal the significance of a	archaeological site or monument.
	building or structure, with no loss	
	of significant fabric.	
High	Arrest of physical damage or decay	Exceptional enhancement of a building
Beneficial	to a building or structure;	or archaeological site, its cultural
		heritage amenity and access or use

3. The significance of effect

The significance of effect is derived from the importance of the resource and the magnitude of the impact upon it.

Very large - A serious impact on a site of international or national importance with little or no scope for mitigation. These effects represent key factors in the decision making process.

Large - Lesser impacts on sites of national importance and serious impacts on sites of regional importance, with some scope for mitigation. These factors should be seen as being very important considerations in the decision making process.

Moderate - Moderate or minor impacts on sites of regional importance and minor to major impacts on sites of local or minor importance. A range of mitigatory measures should be available.

Slight - Negligible impacts on sites of regional, local or minor importance and minor and moderate impacts on minor or damaged sites. A range of basic mitigatory measures should be available.

Neutral - No perceptible effect or change to sites of all categories.

The significance of effect will be determined using the table below, a basic matrix combining archaeological value and magnitude of impact.

Determination of Significance of Effect

	International	Neutral	Moderate or Large	Large or	Very Large
	International	Neutrai	Wioderate of Large	_	very Large
				Very Large	
	National	Neutral	Moderate or Slight	Moderate or	Large or Very
				Large	Large
				Large	Darge
4.	Regional	Neutral	Slight	Moderate	Moderate or
ne					Large
<u>[a</u>					
Archaeological Value	Local	Neutral	Neutral or Slight	Slight	Moderate or
<u>:</u> 2	Bocar	1 (Carar	Treatitut of Stight	Siigiit	Slight
80					Slight
loa	Negligible	Neutral	Neutral or Slight	Neutral or	Slight
136	Negligible	Neutrai	Neutral of Stight		Slight
<u> 5</u>				Slight	
Ā					
		None	Low	Medium	High
		Magnitude of imp	act		
		g			



7.0 Site Gazetteer - Physical Impacts

7.0 SITE GAZETTEER – PHYSICAL IMPACTS

The field walkover discovered 8 sites of archaeological and historic interest within the assessment area, as listed below.

In accordance with Paragraph 128 of the National Planning Policy Framework and Welsh Office Circular 60/96 each heritage asset has been assigned a level of importance ranked from International through to National, Regional/County, Local, and None. If it is not possible to assess the importance of the site from the visible remains, then it is ranked Unknown with the suspected importance level placed in brackets if possible. Identified sites were also assigned a level of impact ranked from High through to Medium, and Low. Levels of impact can be considered as both adverse or beneficial, and can be direct (physically impacting upon a site) or indirect (indirectly physically impacting upon a site). The significance of effect is determined from the importance level of the resource and the magnitude of the impact upon it. Where it is expected that a site will be impacted upon by the proposed works then mitigation/assessment recommendations are provided. All archaeological/historical sites identified are depicted on figure 17 along with the location/orientation of photographs.

1. Middle Parc (including pool 1 and Parc 2 footprint)	PRN: 12428 LB: 4817 grade II*	
Figure: 3-5, 17	Plate: 1-5	
NGR: SH 62719 43965	Period: Post-Medieval	

The Parc 2 extension and Parc 3 structures which comprise 'Middle Parc' are of slate-stone construction with slate roofs. The stone is not dressed except at the corners and around the windows and doors, and there are some large boulders in some of the lowest courses. Both have elegant cylindrical chimneys which, if original (late 16th -17th Century) would be unparalleled in north Wales vernacular. It is however possible that these are additions of the second-quarter or mid 19th Century and are 'Tudorbethan' cosmetic alterations (Cadw).

The southwest gable end of the now demolished Parc 2 is incorporated into the north-eastern elevation of the Parc 2 extension, and the proposed works will include excavations for a new extension within the historic footprint of Parc 2. In addition the permitted works will involve the renovation of Parc 3, the demolition of the 20^{th} century lean-to extensions, and the excavation of new drains. As such it is recommended that a level 4 historic building record is undertaken of the Parc 2 extension, Parc 3, and Parc 2 gable wall prior to the commencement of works. Furthermore, it is essential that the square 'laundry' pool is avoided and as such preserved in-situ. Moreover, a watching brief should be maintained during the removal of the internal fabric of Parc 2 extension and Parc 3, during the demolition of the leant-to extensions, and during the excavation of the new drains.

Due to the high potential for preserved buried remains at foundation level of Parc 2 it is recommended that a targeted excavation is undertaken prior to the commencement of groundworks in this area in order to fully record archaeological remains.

Category of importance: National

Level of impact: High adverse direct physical upon Parc 2 footprint

Significance of effect: Large adverse

Recommendations for further assessment: None

Recommendations for further mitigatory measures: Level 4 historic building record, targeted excavation, watching brief, avoidance of pool 1.

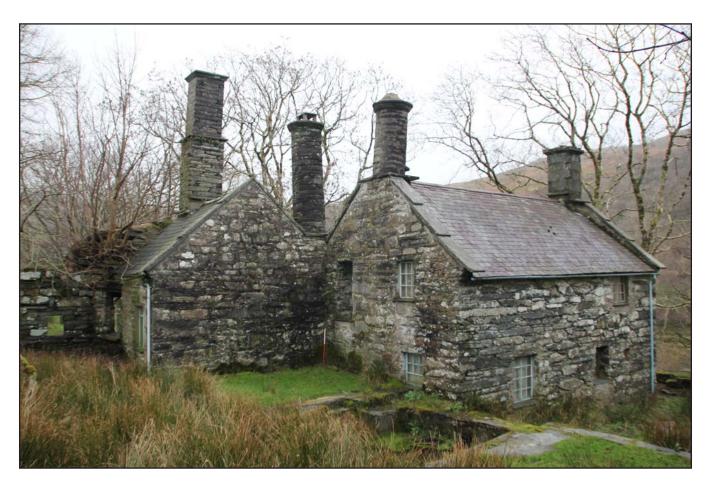


Plate 01: Parc 3 and Parc 2 extension from the northwest. Scale 1.0m.





Plate 02: Square pool 1 from the southwest. Scale 1.0m.





Plate 03: Parc 2 gable wall and 20th Century lean-to extension, from the northeast. Scale 1.0m.





Plate 04: Parc 3 and 20th Century lean-to extension, from the northeast. Scale 1.0m.





Plate 05: Parc 3 from the southwest. Scale 1.0m.



2. Courtyard wall	PRN: 55930	
Figure: 17	Plate: 6	
NGR: SH 62692 43964 – SH 62715 43975	Period: Post-Medieval	

A dry-stone wall measuring approximately 0.9m in height runs from southwest to northeast for approximately 26.0m and marks the northern boundary of the Parc courtyard. The wall is constructed from medium and large sized angular slate stone blocks, with around a dozen pieces of carved moulded stone placed on top of the wall in places. The wall buts up against the gable wall of Parc 2 and the north-eastern elevation of Parc 4, clearly post-dating both dwellings. The form of the stone used in the construction as well as the moulded stone blocks strongly suggests that it was constructed from the demolition stone of either or both Parc 1 and Parc 2.

The wall forms an important feature of the grade II* registered park and garden of Parc, and as such should be considered to be of national importance. The wall will require breaching to excavate the new drain connecting to Parc 3, as such it is recommended that a basic record be taken of the wall prior to the commencement of works. However, the record presented here should be seen as being commensurate with a basic record level and as such no further assessment or mitigatory measures are proposed aside from the reconstruction of the wall upon the completion of works.

Category of importance: National

Level of impact: Low adverse direct physical

Significance of effect: Moderate or slight adverse

Recommendations for further assessment: None

Recommendations for further mitigatory measures: Reinstatement upon completion of works



Plate 06: Courtyard wall feature 2, from the northwest. Scale 1.0m.



3. Terrace revetment wall	PRN: 55931
Figure: 17	Plate: 7
NGR: SH 62697 43939 – SH 62733 43964	Period: Post-Medieval

A terrace revetment wall measuring approximately 0.6m in height runs from northeast to southwest for approximately 46.0m and marks the southern boundary of the Parc courtyard. The wall is constructed from medium and large sized angular and sub-angular slate-stone blocks and cobbles. The wall buts up against Parc 3 clearly post-dating it at this point, although this may be part of a later rebuild and it should not be ruled out that the revetment predates all but the earliest buildings at the site.

The wall forms an important feature of the grade II* registered park and garden of Parc, and as such should be considered to be of national importance. There are no proposals by the client to breach or in any way alter the revetment wall and as such no further assessment or mitigatory measures are proposed aside from avoidance.

Category of importance: National

Level of impact: None

Significance of effect: Neutral

Recommendations for further assessment: None



Plate 07: Revetment wall feature 3, from the southeast. Scale 1.0m.



4. Run-off between pool 1 and pool 2	PRN: 55932
Figure: 17	Plate: 8
NGR: SH 62713 43960	Period: Post-Medieval

A small gulley measuring approximately 0.3m in width and 0.25m in depth runs from northwest to southeast for approximately 16.0m to connect square pool 1 (feature 1) with square pool 2 (feature 5). The gulley has no structure and is maintained by the current resident of Parc 4 in order to stop it from silting. The second square pool was constructed in the 1930s however it is almost certain that the first square pool, which is likely to be mid 16th Century, has always drained via this route.

The run-off gulley, although not incredibly important by itself, constitutes a feature of the grade II* registered park and as such should considered to be of national importance through its group value. There are no proposals by the client to breach or in any way alter the run-off gulley and as such no further assessment or mitigatory measures are proposed aside from avoidance.

Category of importance: National

Level of impact: None

Significance of effect: Neutral

Recommendations for further assessment: None



Plate 08: Run-off from Pool 1 to Pool 2 (feature 4), from the southeast. Scale 1.0m.



5. Pool 2	PRN: 55933
Figure: 17	Plate: 9
NGR: SH 62720 43952	Period: Post-Medieval

A pool measuring 2.0m square is located immediately south of the terrace revetment wall (feature 3) at this point. It is constructed from slate slabs with an overflow run-off carrying water down the hillside towards the Afon Maesgwm. The pool receives water via a gulley (feature 4) which acts as a run-off from a larger and older square pool (feature 1) located to the northwest. The pool was constructed by the Reveley family in the 1930s and through its group value as part of the grade II* registered park should be seen as being of national importance.

There are no proposals by the client to breach or in any way alter the pool and as such no further assessment or mitigatory measures are proposed aside from avoidance.

Category of importance: National

Level of impact: None

Significance of effect: Neutral

Recommendations for further assessment: None



Plate 09: Square pool 2 feature 5, from the southwest. Scale 1.0m.



6. Trackway	PRN: 55934
Figure: 17	Plate: 10
NGR: SH 62690 43980 – SH 62735 43975	Period: Post-Medieval

A trackway measuring 1.5m in width runs from northwest to southeast for approximately 47.0m to connect the old drive with the garage (feature 8). The trackway was most likely added by Clough Williams-Ellis in the mid 20th Century to provide access to the garage. The track is of minimum construction, existing more as a compacted surface with a scattering of loose pebbles. It is however likely that some of the foundation remains of Parc 2 were removed to permit access. Through its group value as part of the grade II* registered park the trackway should be seen as being of national importance.

The proposed extension to Middle Parc will require a small section of the trackway to be excavated to lay foundations. It is therefore recommended that a basic record be taken of the trackway prior to alteration, however the record presented here should be seen as being commensurate with a basic record and as such no further work is recommended. Furthermore, the section of trackway lies above the footprint of Parc 2 and as such will be included with the targeted excavation area mitigatory measure recommended for that feature.

Category of importance: National

Level of impact: Low adverse physical

Significance of effect: Slight adverse

Recommendations for further assessment: None

Recommendations for further mitigatory measures: None – basic record completed



Plate 10: Trackway feature 6, from the northwest. Scale 1.0m.



7. Parc 1 footprint	PRN: 55935
Figure: 17	Plate: 11
NGR: SH 62737 43979	Period: Post-Medieval

A flat terrace to the immediate northeast of Parc 2 and Parc 3 (feature 1) measuring approximately 25.0m in length by 15.0m in width and orientated northeast to southwest marks the location of the now demolished Parc 1 house. There are no upstanding remains although there is a reasonably high potential for preserved buried remains at foundation level.

The dwelling has long been supposed to have been the oldest and original principal house at Parc, although there is no historical or physical evidence to confirm or deny these suppositions currently. Indeed, a further possibility has been presented by the author that Parc 2 was the oldest and principal house and that Parc 1 was subdivided into separate self-contained units. Either way, the dwelling is likely to be of mid 16th Century date.

A small part of the supposed footprint of Parc 1 lies within the development boundary but not within the proposed area of construction. As such no further assessment or mitigatory measures are proposed, aside from avoidance, for this feature although it is worth noting that the targeted excavation of the Parc 2 footprint (feature 1) may uncover remains of Parc 1.

Category of importance: National

Level of impact: None

Significance of effect: Neutral

Recommendations for further assessment: None



Plate 11: Parc 1 footprint feature 7, from the southwest. Scale 1.0m.



8. Garage	PRN: 55936
Figure: 17	Plate: 12
NGR: SH 62733 43970	Period: Post-Medieval

A slate-stone built garage or fuel store measuring approximately 3.0m in width by 7.0m in length and orientated from northwest to southeast is located at this point. It is accessed from the northwest via a trackway (feature 6) that connects it with the old drive. The garage is constructed from medium sized angular slate blocks bonded by mortar with a corrugated metal roof, and appears to have been constructed by Clough Williams-Ellis in the mid 20th Century. The rear of the garage has recently suffered damage through the collapse of a large tree.

There are no proposals by the client to breach or in any way alter the garage and as such no further assessment or mitigatory measures are proposed aside from avoidance.

Category of importance: National

Level of impact: None

Significance of effect: Neutral

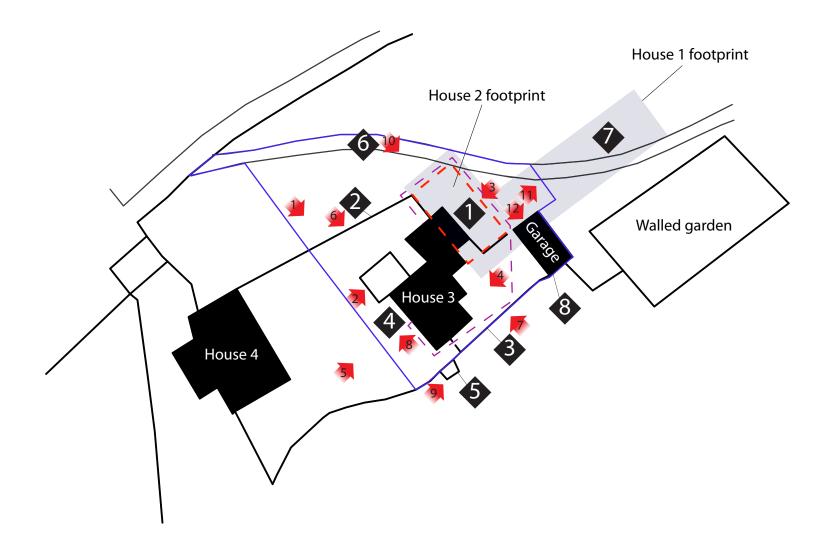
Recommendations for further assessment: None



Plate 12: Garage feature 8, from the northwest. Scale 1.0m.







Contains Ordnance Survey data © Crown copyright and database right 2014



Figure 17: Location of archaeological features (black diamonds) and location/orientation of photographs (numbered arrows). Scale 1:500 at A4. (Numbered diamonds refer to feature number; numbered arrows refer to plate number)

Aeon Archaeology

	Table 4: Summary of archaeolog		GREEN = \underline{no} action required; RED = Action required			
Nu mb	Name	Importance	Impact	Significance of effect	Further Assessme	Mitigation Recommendations
er					nt	
PHY	SICAL DIRECT AND INDIREC	T IMPACTS				
1	Middle Parc (including Pool 1 and Parc 2 footprint)	National	High adverse direct physical	Large adverse	None	Level 4 historic building record, targeted excavation, watching brief, avoidance of Pool 1.
2	Courtyard wall	National	Low adverse direct physical	Moderate or slight adverse	None	Reinstatement upon completion of works.
3	Terrace revetment wall	National	None	Neutral	None	None (avoidance)
4	Run-off between Pool 1 and Pool 2	National	None	Neutral	None	None (avoidance)
5	Pool 2	National	None	Neutral	None	None (avoidance)
6	Trackway	National	Low adverse direct physical	Slight adverse	None	None (basic record completed)
7	Parc 1 footprint	National	None	Neutral	None	None (avoidance)
8	Garage	National	None	Neutral	None	None (avoidance)



8.0 Impact and Recommendations

8.0 IMPACT AND RECOMMENDATIONS

8.1 Direct physical impact

Construction phase

The proposed development scheme is expected to have a *low adverse direct physical* impact upon the courtyard wall (feature 2) and the trackway (feature 6) during the construction phase. In addition it is expected that the scheme will have a *high adverse direct physical* impact upon the Parc 2 footprint during the construction of the new house extension. All of these features are considered to be of *national* importance, primarily through their group value as part of a grade II* historic registered park and garden.

Completion phase

The proposed development scheme is not expected to have any direct physical impact upon any known sites of archaeological and historical significance upon completion.

8.2 Site Specific Recommendations

It is recommended that the courtyard wall (feature 2) be reinstated upon the completion of works. Furthermore, due to the high potential for preserved buried remains at foundation level of Parc 2 within the footprint of the new extension, it is recommended that a targeted excavation is undertaken of the new extension footprint in order to fully record the archaeological deposits prior to the commencement of works. In addition, a historic building record commensurate with English Heritage's level 4 record should be undertaken prior to the commencement of works to fully record the Parc 2 extension, Parc 3, and the gable wall of Parc 2. Allowance should be made for a return visit so that the historic fabric of the buildings can be recorded once the 20th Century lean-to extensions have been demolished.

It is also recommended that a watching brief be maintained during the removal of the internal fabric of the buildings, during the demolition of the lean-to extensions, and during the excavation of trenches for the installation of new drains.

8.3 General recommendations

The grade II* registered park and garden of *Parc* is important partly as a well preserved post-medieval estate but also as a contained landscape which exhibits an immense amount of continuity from the mid 16th – mid 20th Centuries. The estate would benefit from a detailed management plan which would record all of the upstanding features and pull together all of the available historic sources to provide a more complete historical narrative than is currently possible within the limits of this desk-based assessment. This would also aid in the interpretation of the estate as well as providing management priorities for the conservation and retention of the plethora of historic features whose group value make Parc of national importance. This recommendation lies outside of the mitigatory responsibilities of the client for this particular project, but should be considered by the current owners (the Brondanw trustees) as part of a future programme of works.



9.0 Sources

9.0 SOURCES

OS Maps

1st edition 25 inch Ordnance Survey Map of 1888.

2nd edition 25 inch Ordnance Survey Map of 1900.

OS 1:10 000 Series sheet SH 64NE, SH 64SE, SH 64SW and SH 64NW.

Aerial Photographs

RAF Aerial Photographs

106G/UK/1469 frames 3280 – 3281, 4285-4287. Dated 4th May 1946

OS Aerial Photographs

2013 Google mapping

Primary Sources

Bangor University Archives – MSS 8603. Sketch map of Park Demesne 1802

Dolgellau Archives and Record Office – Z/DJ/197. Marriage settlement 1669

Dolgellau Archives and Record Office - Z/DM/9. Will (Anwyl) 1698

Dolgellau Archives and Record Office – Z/DJ/198. Marriage settlement 1718

Dolgellau Archives and Record Office – IR/23/118. Land tax assessment 1798

Dolgellau Archives and Record Office - Z/DJ/246. Catalogue of Sale of Park Estate 1832

Dolgellau Archives and Record Office - Z/DJ/192. Valuation of Parc Estate 1875

Dolgellau Archives and Record Office – Z/F/60. Park Estate Sale Catalogue 1932

Dolgellau Archives and Record Office – Z/F/62 and 63. Lot 2 Parc Farm

Dolgellau Archives and Record Office - 'Llanfrothen file'

National Library of Wales, Aberystwyth – Mer.153. *A map of the Parc Estate in the parish of Llanfrothen 1875*

National Library of Wales, Aberystwyth - Mer.196. Plan of the Parc Estate 1892

Tithe Map and Apportionment of the Parish of Llanfrothen 1840.

Secondary sources

British Geological Survey website. www.bgs.ac.uk.

Chisholm, H. 1911. Encyclopaedia Britannica

Cadw. Listed Building details of Parc (ref: 4817)

Cadw. Parks and Gardens register

Dodd, C. R. 1844. The Peerage, Baronetage, and Knightage of Great Britain and Ireland

Dolgellau Archives and Record Office

Dunn, M. 2008. Dating Old Welsh Houses, Middle Parc

English Heritage, 1991. Management of Archaeological Projects (MAP2)

English Heritage, 2006. Management of Research Projects in the Historic Environment (MORPHE)

English Heritage, 2011. The Settings of Heritage Assets

GAT report 109. Proposed hydro-electric scheme, Afon Maesgwm – archaeological assessment 1994

GAT report 415. Survey of Prehistoric Funerary and Ritual Monuments in Wales 2001

GAT report 422. Vale of Ffestiniog historic landscape characterisation 2003

GAT report 668. Roman Roads in northwest Wales 2007

Gwynedd Historic Environment Record (HER)

Hemp and Gresham, 1942. Park, Llanfrothen, and the Unit System, Archaeologia Cambrensis Vol XCVII part 1, p98-112

Hughes, H & Hookham, T. 1830. *The Cambrian Quarterly Magazine and Celtic Repertory. Vol II.*

Information from Mr. Richard Haslem (pers comm..)

Jaques, Dr. D, 2000. Parc Demesne in Llanfrothen Parish, Merionethshire: A landscape and garden history

Morgan, P.B. Richard Hughes and Living in Wales

NMR Site Record Cards

RCAHMW – Balfour survey of Parc Llanfrothen 1990

RCAHMW – Inventory of the County of Merioneth p121

Smith, P. 1988. Houses of the Welsh Countryside

Sugget, R. 2007. The Unit System Revisited: Dual Domestic Planning and the Developmental Cycle of the Family

The Institute for Archaeologists, 1994 (revised 2009) Standard and Guidance for

Archaeological Desk-Based Assessment



Appendix I: Scheduled and Non-Scheduled Sites within 1km

APPENDIX 1: SCHEDULED AND NON-SCHEDULED SITES WITHIN 1.0KM

Undesignated monuments within 1.0km of the proposed development site as listed on the Gwynedd HER (figure 1)

PRN	Name	Type	Broadclass	Period
950	Gatws (Gatehouse), Parc	Gate	Unassigned	Post-Medieval
994	Powder House, Coed Cae Fali	Powder magazine	Defence	Modern
1492	Hut Group, Garth y Foel	Hut circle settlement	Domestic	Unknown
1493	Hut Circle, Garth y Foel	Hut circle	Domestic	Unknown
1494	Long Huts, Pont Maesgwm	Deserted rural settlement	Domestic	Unknown
1495	Long Hut, Pont Maesgwm	Long hut	Domestic	Unknown
4466	Parc Gardens, Llanfrothen	Garden	Recreational	Post-Medieval
4737	House, Parc	House	Domestic	Post-Medieval
4741	Holy Well, Ffynnon Helen	Holy well	Religious, Ritual and Funerary	Unknown
4742	Platform Houses, Site of, Llanfrothen	House platform	Domestic	Medieval
5168	Hut Group, Remains of, Cae Glas	Hut circle settlement	Domestic	Prehistoric
5874	Possible Orthostatic Wall and Trackway, N Pont Maesgwm	Enclosure	Unassigned	Unknown
5881	Platform House, Parc	House platform	Domestic	Medieval
5882	Possible Round Barrow, Parc	Mound	Unassigned	Unknown
5883	Stone Barn, Parc	Barn	Agriculture and Subsistence	Post-Medieval
5884	Stone Barn, Parc	Barn	Agriculture and Subsistence	Post-Medieval
6399	Gelli Mill, Afon Croesor	Mill	Industrial	Post-Medieval
7488	?Mill, Pont Maesgwm	Water mill	Industrial	Unknown
11878	Parc (s.w.) - Barn	Building	Agriculture and Subsistence	Post-Medieval
12301	Beudy Newydd	Building	Domestic	Post-Medieval
12382	Hafodty; Hafotty	Building	Domestic	Post-Medieval
12427	Parc	Building	Domestic	Post-Medieval
12428	Parc, Cottages South West of	Building	Domestic	Post-Medieval
15614	DRS, Pont Maesgwm	Deserted rural settlement	Domestic	Medieval
15615	DRS, Pont Maesgwm	Deserted rural settlement	Domestic	Medieval
15617	DRS, Pont Maesgwm	Deserted rural settlement	Domestic	Medieval

17541	Part of Roman Road, Segontium - Tomen y Mur	Road	TRANSPORT	Roman
18211	Croesor Landscape	Landscape	Unassigned	Multi-Period
18222	Parc Landscape	Landscape	Unassigned	Multi-Period
18226	Intermediate Slopes of the Moelwyn Range Landscape	Landscape	Unassigned	Multi-Period
18230	Brandanw Slopes Landscape	Landscape	Unassigned	Multi-Period
20259	Slate Quarry, Parc	Slate quarry	Industrial	Post-Medieval
20262	Slate Quarry, Hafoty	Slate quarry	Industrial	Post-Medieval
20263	Slate Quarry, Garreg Uchaf	Slate quarry	Industrial	Post-Medieval
20264	Slate Quarry, Parc Slab	Slate quarry	Industrial	Post-Medieval
20267	Slate Quarry, Bryn Y Gelynen	Slate quarry	Industrial	Post-Medieval
20268	Slate Quarry, Llidiart Yr Arian	Slate quarry	Industrial	Post-Medieval
21893	Rhaiadr Mine	Copper mine	Industrial	Post-Medieval
34658	Outdoor Swimming Pool, Croesor	Swimming pool	Civil	Post-Medieval

NMR Monument Points within 1.0km of the proposed development site (figure 2)

NPRN	Name	Broadclass	Туре	Period
	Croesor chapel (welsh calvinistic methodist), trem meollwyn,	Religious, Ritual and		
8501	croesor	Funerary	Chapel	Post Medieval
28170	Beudy newydd	Domestic	House	Post Medieval
28289	Coed ty;coetty	Domestic	House	Post Medieval?
28469	Hafodty; hafotty;hafoty	Domestic	Dwelling	Post Medieval?;Post Medieval
28622	Parc	Domestic	Dwelling	Post Medieval?
28623	Parc, cottages south west of	Domestic	House	Post Medieval?
28624	Parc gatehouse, (the);gatws parc	Domestic	Gatehouse	Post Medieval?
32377	Ffynnon elen	Water Supply and Drainage	Well	Medieval?
40008	Gelli mill	Agriculture and Subsistence	Corn mill	Post Medieval
40980	Pandy'r parc (b)	Industrial	Fulling mill	Post Medieval
41715	Parc (s.w.) - barn	Agriculture and Subsistence	Barn	Post Medieval?
96462	Pandy'r parc	Industrial	Woollen mill	Post Medieval
265122	Parc, garden, croesor	Gardens, Parks and Urban Spaces	Country house garden	Post Medieval
275921	Pont maesgwm deserted rural settlement	Domestic	Deserted rural settlement	Medieval
300246	Hut circle settlement, garth-y-foel	Domestic	Settlement	Prehistoric
308290	Croesor bridge	Transport	Bridge	Post Medieval
308293	Park bridge, llanfrothen	Transport	Bridge	Post Medieval
404889	Bwthyn cae-glas	Domestic; Agriculture and Subsistence	Cottage	Post Medieval
404890	Beudy cae-glas; cae-glas cowhouse	Agriculture and Subsistence	Cow shed	Post Medieval
404989	Park; y parc, croesor, llanfrothen	Domestic	House; building complex	Post Medieval
406470	Gelli;gelli-cornwydydd	Domestic	Farmhouse	Post Medieval
406471	Garreg-fawr	Domestic	Farmhouse	Post Medieval

406487	Cae-glas (former house); bwthyn cae-glas	Domestic	Cottage; outbuilding	Post Medieval
412605	Gelli iago, croesor, clearance cairns	Agriculture and Subsistence	Clearance cairn	Post Medieval
412606	Gelli iago, croesor, sheepfold	Agriculture and Subsistence	Sheep fold	Post Medieval
415935	Footbridge leading to croesor tramway	Transport	Footbridge	19th Century

Listed Buildings within 1.0km of the proposed development site (figure 3)

Number	Name	Locality	Grade
4773	Parc	Parc	II*
4815	Beudy Newydd	Parc	II
4816	L-shaped Agricultural Range at Parc	Parc	II*
4817	Middle Parc including Fountain Basin adjoining to W	Parc	II*
4818	Gattws Parc including Boulder Wall adjoining to NW	Parc	II*
5246	Hafodty	Hafodty	II
19837	Cae Glas	Croesor	II
19838	Barn 25m SE of Cae Glas	Croesor	II
19839	Barn 100m NE of Cae Glas	Croesor	II
19842	Barn at Parc	Parc	II
19843	Walls and Revettments to Upper Terrace Garden at Parc	Parc	II
19844	Revettment Walls to Terracing at Parc including Walls and Revettments to Enclosure adjoining to SE	Parc	II
19845	Boulder-built Boundary Walls above the Upper Drive at Parc	Parc	II
19846	Bridge at Parc	Parc	II

Scheduled Ancient Monuments within 1.0km of the proposed development site (figure 4)

SAM no.	Name	Type	General	Broadclass
ME170	Unenclosed Hut Circle Settlement East of Garth-y-Foel	Unenclosed hut circle	Prehistoric	Domestic
ME193	Pont Maesgwm Deserted Rural Settlement	Deserted Rural Settlement	Medieval	Domestic

Historic Landscape Character areas (HLCAs) within 1.0km of the proposed development site (figure 5)

HLCA	HLCA name	Landscape
11	Croesor	GW3
14	Glaslyn estuary	GW3 & GW7
22	Parc	GW3
26	Intermediate slopes of the moelwyn range	GW3 & GW7
30	Brandanw slopes	GW3 & GW7



Appendix II:

Definitions of further assessment and mitigatory measures

APPENDIX 2: DEFINITIONS OF FURTHER ASSESSMENT AND MITIGATORY MEASURES

1. Definition of field evaluation techniques

Field evaluation is sometimes necessary when the importance of an identified archaeological feature cannot be ascertained via an archaeological desk based assessment alone. There are several different techniques but the three most common are geophysical survey, trial trenching, and supervised metal detector survey:

Geophysical survey

This technique is a non-intrusive form of archaeological field evaluation. It utilises a magnetometer which detects differences within the earth's magnetic field caused by the presence of iron in the soil. This iron often takes the form of magnetised iron oxides in the topsoil which have been re-deposited into lower archaeological features through cutting and backfill. A magnetometer can also detect iron artefacts within the soil and the presence of burnt stone material such as on hearths, kilns, and burnt mounds.

Trial trenching

Where a site is suspected to contain more subtle archaeological features such as pits, a geophysical survey may not be appropriate due to its lack on sensitivity in detecting these features. Indeed, trial trenching can also be utilised when anomalies have been identified during the geophysical survey and clarification is required in order to identify them. Trial trenches usually measure 20m by 2m although can vary ion size if targeting geophysical anomalies. Trenches are excavated using a mechanical tracked excavator and supervised by an archaeologist. The topsoil and subsoil are removed onto buried features or if absent, on to the natural glacial substrata. Any archaeological remains found are usually evaluated and recorded prior to backfilling of the trench, so that further site specific mitigatory recommendations can be made.

Supervised Metal Detector Survey

Some types of underlying substrata and bedrock can mask the results of investigation techniques such as geophysical survey. In such instances an archaeologically supervised metal detector survey can be undertaken. This involves the supervision of metal detectorists by a suitably qualified archaeologist and the spatial mapping of artefacts as they are discovered. This technique can give a geographical spread of metal finds and thus be indicative of 'hotspot' areas which may require further investigation by trial trenching for example.

2. Definition of Mitigatory Recommendations

None:

No further action is required.

Detailed recording:

A photographic and concise descriptive record is required, along with a digital survey.

Basic recording:

A photographic and basic descriptive record is required.

Watching brief:

Monitoring is required by a suitably qualified archaeologist during the proposed development. An archaeological watching brief is divided in to four categories according the IFA. 2001.

Institute for Archaeologists 2001 Standard and Guidance for an archaeological watching brief:

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

Avoidance:

These features should be avoided by the proposed development and any ancillary works including the establishment of compound and material lay-down areas. It may be necessary to surround the feature with a barrier and/or signage to avoid accidental damage.

Reinstatement:

These features should be reinstated to their original location and condition. Supervision by an archaeologist is required.

