HAFODYSBYTY, FFESTINIOG, GWYNEDD

[NPRN 28478]

Architectural Record



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Summary

Hafodysbyty occupies an isolated, rural location high in the hills above Ffestiniog, c.3.5km southeast of the town of Blaenau Ffestiniog and is centred on NGR SH 72496. Hafodysbyty is a Grade II listed building and is included on the RCAHMW on-line database Coflein, NPRN 28478. The building was recorded in November 2011 as part of the North-West Wales Dendrochronology Project, undertaken in partnership with the Royal Commission on the Ancient and Historical Monuments of Wales.

The house originated in the early years of the 16th century as a cruck-built hall house comprising two-bay open hall set between a one bay inner end and two-bay outer end, the latter an unusual feature and possibly forming a byre from its inception. Four crucks survive intact, together with a post and panel dais screen with paired doors. The carpentry of the open cruck within the original hall is of superior quality with quatrefoil apex, unusual cusped cruck-blades and double rows of pegs to blade/collar/arch-brace. Dendrochronology has established a range of 1508-33 for the timbers employed in the primary building. At some point, probably in the early years of the 17th century, the open hall was ceiled over forming an upper chamber and a stone stack with integral stone winder-stair was introduced within the passage end of the hall creating a classic 'lobby-entry' plan. The timbers employed in the inserted floor failed to date.

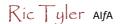
A perpendicular range appended at the north-east probably represents a kitchen extension, possibly of two phases, the earliest section reasonably being contemporary with the major alterations to the main range, reflecting a fundamental change in internal planning.

1 INTRODUCTION

1.1 Background to the Project

- 1.1.1 Hafodysbyty, Ffestiniog, Gwynedd was recorded in November 2011 as part of the North-West Wales Dendrochronology Project, undertaken in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW).
- 1.1.2 Hafodysbyty occupies an isolated, rural location high in the hills above Ffestiniog on the north bank of the Afon Gamallt which feeds into the Afon Teigl (itself a tributary of the Afon Dwyryd) c.0.8km to the west. It is centred on NGR SH 72496 43190, c.3.5km south-east of the town of Blaenau Ffestiniog and is situated at an elevation of c.290m AOD (Figure 1).

http://www.datingoldwelshhouses.co.uk/



- 1.1.3 Hafodysbyty is a Grade II listed building (CADW Listed Building ID 4696)² and, as such is accepted to be of national importance, while it is also included on the RCAHMW on-line database Coflein, NPRN 28478.³ The house was first identified by GJ Williams in *Hanes Plwyf Ffestiniog* in 1882 and entered in the RCAHMW's Merioneth Inventory of 1914; the house featured in Peter Smith's *Houses of the Welsh Countryside* (1988, 43; 64, fig. 27b) while a description and survey, also by Smith, were included in *The History of Merioneth, Vol. II: The Middle Ages* (J and LI Beverley Smith 2001, 450; 482, fig. 10.24b).
- 1.1.4 The building recording was undertaken subsequent to a programme of dendrochronological sampling, undertaken by the Oxford Dendrochronology Laboratory in August 2011 (Bridge, 2011; see Section §.5).

1.2 Scope of Report

- 1.2.1 The Historic Building Record was undertaken in accordance with a 'Design Brief for Historic Building Recording' prepared by the Project Director; a copy of the brief is included below as **Appendix A**.
- 1.2.2 This report outlines the results of the building survey, and has been prepared in accordance with English Heritage guidelines as published in *Understanding Historic Buildings: A Guide to Good Recording Practice* (EH, 2006), the Institute for Archaeologists' *Standard and Guidance for the Archaeological Recording of Standing Buildings or Structures* (IfA, 2008) and the Association of Local Government Archaeological Officers' *Analysis and Recording for the Conservation of Works to Historic Buildings* (ALGAO, 1997).
- 1.2.3 This report has been prepared based upon information current and available as of December 2011.

2 AIMS AND OBJECTIVES

- 2.1 The general objective of the architectural record, as outlined in the design brief, was to generate a drawn, photographic and written record of Hafodysbyty to complement the dendrochronological study.
- 2.2 Specific aims of the recording action are listed at Section §.5 of the project brief, reproduced at **Appendix A** below.

3 METHODOLOGY

3.1 Documentary Research

3.1.1 No programme of documentary research into the buildings has been undertaken as part of the current Historic Building Record.

3.2 Historic Building Record

3.2.1 The Historic Building Record comprised an exterior and interior examination of the structure and the compilation of drawn, photographic and written records as follows:

The Drawn Record

3.2.2 Measured plans were generated on site at principal floor levels, marking significant architectural and archaeological detail, together with a series of transverse cross sections, in particular at the cruck frames of the principal range. Drawings were prepared on site at a scale of 1:50/1:20 as appropriate, using pencil of archivally stable drafting film, measurements being captured by a combination of hand tape and hand-held laser measurement. A register of project drawings is included below as **Appendix B**.

http://www.coflein.gov.uk/en/site/28478/details/HAFOD+YSPYTY%3BHAFOD+YSBYTY%3BHAFOD+Y+YSBYTTY%3BCAUCH+Y+LLIDIART/



http://www.britishlistedbuildings.co.uk/wa-4696-hafod-y-ysbytty-also-known-as-cauch-y-llidiart

The Photographic Record

3.2.3 The photographic record comprised high resolution digital photography using a Nikon D3000 digital single lens reflex camera (10MP) and was commensurate with a 'Level 3' record as defined by English Heritage (2006, 14), extending to include both general and detail shots, contextual views and accessible exterior elevations, visible structural and decorative details (interior and exterior), and general interior views of principal rooms and circulation areas. Where possible, photographs included graded photographic scales. All photographs were recorded on *pro-forma* recording sheets detailing subject, orientation, photographer and date. A register of project photographs is included below as **Appendix C**; digital copies of photographs in *.jpg format are included on CD appended to the rear cover of the report.

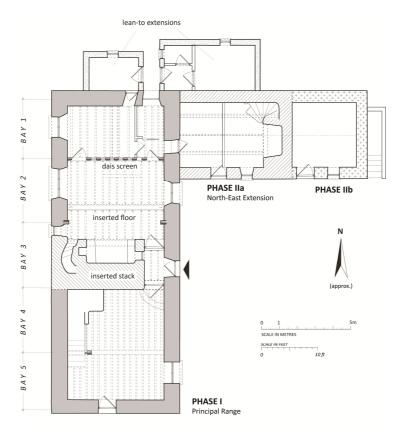
The Written Record

3.2.4 To accompany the drawn and photographic records, a written account of the house was made as free text; this forms the basis of the following description.

4 BUILDING DESCRIPTION

4.1 Overview

4.1.1 Hafodysbyty comprises two main, chronologically distinct elements; a principal range (Phase I, with modifications), aligned approximately north-south, with a secondary extension projecting eastwards from the north end of the east elevation, the latter probably of two phases (Phases IIa and IIb); two tertiary blocks are appended to the north elevation of the principal range and north-east extension (see sketch plan below).



 $\textbf{\it Hafodysbyty}: \textit{Sketch plan showing principal features described in text}$

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4.1.2 The ground level slopes gently down from north to south such that the side walls at the lower end of the main range stand slightly higher than to the north; the roof line is also slightly lower to the south (Plate 1). The north-east extension is terraced slightly into the rising ground to the east (Plate 33).

4.2 The Principal Range

Exterior

- 4.2.1 The principal range is built on a rectangular plan with external measurements of 18.25m (60ft) north-south x 7.25m (c.24ft) east-west and standing c.5.8m (19ft) to the ridge. The **east elevation** (Plate 1) is stone-built of a single storey beneath a pitched roof, slate-clad and gabled to north and south, ridge stacks rising above the north gable and to the centre of the range. Fenestration comprises modern timber casements throughout, mainly of two-lights but with a wide, three-light window towards the north of the range, lighting [**GF01**] internally with a gabled dormer over (Plate 2), breaking the eaves line and lighting the upper room inserted over the original hall.⁴ A raised, wide opening housing glazed double doors is located centrally to the southern section of the range. The masonry of the southern section of the elevation appears distinct from that to the north though no clear 'straight-joint' was visible to clearly define a building break or evidence the insertion of the main stack into a pre-existing wall, though it should be noted that access to the central section of the elevation was hindered and visually obscured by vegetation at the time of survey (Plate 1).
- 4.2.2 The **south elevation** (Plate 3) presents a plain, stone-built gable end pierced by two simple openings. A narrow, pedestrian doorway to the centre of the ground floor is understood to be a 20th-century modification of a former, wider entranceway⁵ while at first floor level, a two-light casement is clearly also a recent introduction, being absent from historic photographs of the building (Figure 3).
- 4.2.3 The **west elevation** overlooks an enclosed yard area formed in the south-east angle of the two principal ranges (Plate 4). It is stone-built of a single storey beneath a slate-clad pitched roof, gabled to north and south. Ridge stacks rise above the north gable end and above the centre of the elevation, the latter stack aligning with the main entrance doorway. The northern end of the elevation is obscured by the Phase II north-east extension which abuts. To the south of the Phase II range are a two-light casement window and a simple pedestrian doorway housing a modern, multi-pane glazed door; a four-centred timber doorhead is incorporated into the stonework of the elevation above the flat stone lintel of the modern door (Plate 5), possibly representing a re-set original feature; an inscription (?in Greek) in understood to read 'Peace be upon this house'. The southern part of the range is lit by a further two-light casement, again a modern introduction post-dating a number of historic photographs (Figure 3) and most likely contemporary with the modified/new openings within the south gable-end.
- 4.2.4 The **north elevation** (Plate 6) presents a plain, stone-built gable, capped by a tall, square ridge stack, with a small 9-pane fixed light window located centrally to the upper floor; the ground floor is for the most part obscured by a tertiary, pent-roofed extension (Plate 7), though a pedestrian doorway to the eastern side opens to the interior of the range.
- 4.2.5 Internally, the house is arranged on a five bay plan (here numbered 1 to 5 from north to south) defined by four surviving crucks (**C1** to **C4** from north to south). The internal width of the range (measured cruck to cruck at **C2**) is 5.25 m / 17% ft, the house standing c.5.8 m (19ft) tall from floor to ridge.

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Though of a non-diagnostic appearance, and masked to an extent by the renewed fenestration, the introduction of the dormer window reasonably dates to the insertion of the upper floor within the former open hall in the (?)early-17th century.

Dr. H Ford, pers. comm. See also Figure 3b (undated photograph) where what appear to be former, wide-set jambs are visible.

Dr. H Ford, pers. comm.

Interior

Ground Floor (Figure 5)

- 4.2.6 The interior of the house is accessed via a doorway within Bay 3 of the east wall, which opens onto a small lobby [GF05] formed to the east side of the inserted stone stack heating hall [GF01] and creating a classic 'lobby-entry' plan; doorways lead to north and south onto [GF01] and [GF06] respectively. To the north, principal room [GF01] (Plate 8) occupies Bay 2 and the northern part of Bay 3, representing approximately ¾ of the floor area of the primary open hall, subsequently ceiled to form an upper floor ([1F01]). The room is lit by modern casement windows within splayed reveals in the east and west walls and is heated by a wide fireplace to the south, a secondary insertion within the southern part of Bay 3. The fireplace recess is spanned by a substantial timber bresummer, plain-chamfered, and is furnished with a small window onto the entrance lobby in its eastern flanking wall and an arched alcove to the west. To the west of the fireplace, an integral stone winder-stair (Plates 9/10) rises to the inserted upper floor. The north wall of [GF01] is formed by a primary dais screen of post and panel construction (Figure 7; Plate 11) comprising seven plain-chamfered uprights of 11 x 3½ in. scantling, double-pegged to the top and single pegged to the cill. A pattern of horizontal peg alignments evident within the posts of the screen (highlighted in red on Figure 7) may relate to an original dais bench/canopy. Paired doorways with four-centred heads are located at the eastern and western ends of the screen, that to the west (A; Plate 12) being somewhat wider at 0.79m/31in. than that to the east (B; Plate 13) at 0.68m/ 27in., both opening onto Bay 1 to the north. The head beam of the dais screen is set immediately below the plain chamfered tie of cruck C1 which is decorated with a number of painted heraldic panels and associated gothic lettering (Plate 14), not recorded in detail but understood to date from c.1941 when the house was used to station German prisoners of war. The inserted floor over [GF01] is carried by a single substantial transverse beam (11in. x 13in. deep) set slightly to the north of Cruck C2, the lower blades of which are visible to both east and west (Plates 16/17). The floor structure is formed of x 13 common joists, 4-5in. wide x 4½ in. deep, plain-chamfered with stepped run-outs, which are lodged over the tie of C1 to the north (Plate 14), set into the stonework of the inserted stack to the south (Plate 8) and jointed to the central beam using bare-faced soffit tenons (Plate 15). A trimmed section of floor to the north side of Bay 2, against the dais partition, possibly represents the location of a former hatch or stair, though the latter interpretation would appear unusual given the stone winder-stair to the west of the fireplace, unless the upper room [1F01] was at some time sub-divided.
- 4.2.7 To the north of [GF01], and accessed via the paired doors A and B within the dais screen, Bay 1 is currently subdivided by inserted walls of red-brick construction to form kitchen ([GF02]), bathroom ([GF04]) and lobby ([GF03]). The floor level of Bay 1 is raised in relation to Bay 2, reflecting the natural slope of the land but also reflecting the status of the former 'upper' end of the range. [GF02] (Plate 18) is lit by a two-light casement window in the west wall, set within played reveals, while [GF04] is lit by a single light window in the north wall; doorways within the north and east walls give onto the exterior and north-east extension respectively. The south wall of [GF01]/[GF03] is formed by the rear of the dais screen, described above; above the screen, the rear face of the tie of C1 includes an unusual series of staggered sockets (Plate 19), 30 x 3cm (c.1ft x 1¼ in.), presumably related to a primary planked ceiling of a 'post and panel' form within the rooms of the inner bay. The common joists of the present floor (3 x 4in. scantling) are set somewhat higher, simply lodged over the tie of C1 to the south and set into the masonry of the exterior gable to the north; a principal axial beam displays no evidence for a former partition beneath.
- 4.2.8 To the south end of the range, [GF06] (Plate 20) occupies the full extent of Bays 4 and 5, and is accessed from lobby [GF05] via two steps down (Plate 21), the floor level of the lower end being set some 0.44m below that of the main house. The room is lit by a two-light casement (inserted) within the west wall and has a pedestrian doorway set centrally to the south wall; it is unheated and is ceiled over by an inserted floor, the upper level being accessed via a stair rising from south to north against the west wall and

⁷ RCAHMW ref. C403186.

This type of ceiling structure, though unusual, is not without parallel, evidence for a similar structure survives at Althrey Hall, Flints. (NMW NPRN 35634) of c.1540 (Suggett R, pers. comm.).

returning eastwards against the rear of the inserted principal stack. A double door opens in the west wall onto a mezzanine level landing of the stair.

First Floor (Figures 6)

- 4.2.9 The principal means of access to the upper level remains the integral stone winder-stair (Plates 9/10) located to the west of the inserted stack within Bay 3 (Room [GF01]); a secondary stair rises within [GF06] to the inserted upper floor of the southern bays. The winder stair rises to Room [1F01], occupying the upper part of the former open hall (Plate 22); the room is lit by a two-light casement dormer window in the west wall, set within splayed reveals while the south wall comprises the upper part of the inserted stack, with a small cupboard to the east. The principal feature of note is the upper section of cruck C2 (Figure 8; Plate 22) representing the central cruck of the former open hall, the status being reflected by the superior quality of the carpentry employed. The substantial blades (16 x 6in.) are connected by a high collar supported by curving arch-braces, the tenons of which engage long mortices in the soffit of the collar and inner edge of the cruck blades, all related joints here utilising unusual double, offset rows of pegs (Plate 23); pegs are driven through from the northern (upper) face and many project significantly to the south. Lower blades, arch-braces and collar are all plain chamfered to both north and south while the blades themselves display a distinctive cusp just above the level of the inserted floor (Plate 25). Above the level of the collar, double-pegged v-struts are also cusped forming a 'quatrefoil' to the apex (Plate 24), though the lower, flanking apertures do not form full trefoils, as might be expected, the collar and blades here being plain. Dendro sample [hsy01] from the western blade of C2 produced a ring sequence of 72 but failed to date (see §.5, Table 1).
- 4.2.10 A door within the north wall of [1F01] opens onto bedroom [1F02] which, together with a small cupboard to the east, occupies the full extent of Bay 1, being lit by a small fixed-light window in the north gable wall. Cruck C1 forms the south wall of [1F02] (Figure 7) though details of the carpentry are mostly obscured by applied tongue and groove cladding and a facia board over the collar; observation of the collar soffit (Plate 27) however, indicates that the cruck was formerly furnished with a single, central queen-strut extending between tie and collar and that the panels were infilled with wattle and daub applied to vertical staves. Details above collar level were not ascertained.
- 4.2.11 To the south end of the range, Room [1F03] occupies the upper part of Bays 4 and 5, accessed via an inserted stair rising against the west wall and returning eastwards across the rear of the inserted stack, flush with the north side of cruck C3 (Figure 9; Plates 28/9). The collar of C3 is mortice and tenoned to the cruck blades, secured by double rows of multiple pegs, in a manner similar to cruck C2, while lower pegs indicate that the former tie (removed) was similarly treated. Examination of the collar soffit revealed mortices for two, symmetrically opposed queen-struts, single pegged at the collar, with stave holes to carry original wattle and daub infill panels, the latter extending onto to the soffits of the cruck blades. Dendro sample [hsy03] from the western blade of C3 produced a felling date range of 1498-1528 (see §.5, Table 1).
- 4.2.12 Cruck **C4** (Plates 31/2) is of simpler form, originally (and remaining) open. The collar is again jointed by mortice and tenon joints, triple pegged and here reinforced by iron straps to counteract spreading. Timbers of **C4** display signs of weathering, in particular to the southern face.

The Roof

4.2.13 The roof of the principal range is carried on two tiers of through purlins, the upper purlin being shallowly trenched while the lower purlin simply rests on the outer face of the blade where they are supported by a principal rafter rising from the wall plate (not visible) or, in the case of **C2**, by an inserted timber cleat; where visible, scarf joints are of simple splayed form. Redundant mortices to the underside of the purlins, double-pegged, evidence original longitudinal wind-bracing, though only a single short, straight brace

A detail also recorded at Plas Mawr, Conwy, NPRN 16754, noted in I and JL Beverley Smith (eds.) 2001, 450.



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survives *in-situ* to the lower purlin within Bay 4 (E), where it can be seen rising from a principal rafter (Plate 30). The apex detail is nowhere clearly exposed though a double-pegged bridled joint is evident at **C2** (Plate 24), presumably carrying a square-section ridge piece. Dendro sample [hsy02] from the lower purlin of Bay 2 (W) produced a felling date range of 1509-1537 (see §.5, table 1).

4.3 The North-East Extension

- 4.3.1 The north-east extension (Figure 11; Plate 33) is rectangular in plan, measuring 5m (16½ ft) north-south x 10.3m (c.34ft) east-west, aligned east-west and extending eastwards from the north end of the principal range which it abuts. It is stone-built of a high, single storey with pitched, slate-clad roof standing 4.5m (c.15ft) to ridge, gabled to the east; a large, square ridge stack rises off-centre towards the eastern end of the range, possibly defining a building break (Phase IIa/b; Figure 11a). The south elevation includes two pedestrian doorways and two small square window openings, each serving an interior room; the north elevation is blind.
- 4.3.2 Internally, the range comprises two discrete elements, possibly of two phases. To the west, [GF07] is accessed from Bay 1 of the primary range; it constitutes a single, unencumbered space and, in its current state, is open to the roof (Plate 34). The east wall includes a substantial fireplace recess, spanned by a cambered timber bresummer, with an integral stone winder-stair rising to the north to the level of a former upper floor, further evidenced by a cut off joist within the north wall (Plate 35).
- 4.3.3 The roof (Figure 11b; Plate 36) is of plain collar-beam form with a lapped collar, bolted to the principal rafters which cross at the apex to carry a square section ridge piece. The roof is supported on a single tier of side purlins.
- 4.3.4 The eastern cell of the range [**GF08**] is accessed solely from the exterior via the doorway of the south elevation and via a small hatch to attic level approached via a straight-flight stair rising from south to north against the eastern gable end. The interior was not inspected.

5 TREE-RING DATING

A programme of tree-ring dating was undertaken by the Oxford Dendrochronology Laboratory in August 2011 (Bridge, 2011). A total of 4 samples were taken, three from the timbers of the primary cruck house and a single core from the inserted floor; samples are summarised in tabulated form below and locations are indicated in Figures 5 and 6.

Sample number	Timber and position	Date of series	H/S boundary date	Sapwood complement	No of rings	Felling date range	
CRUCK ROOF							
hsy01	West blade, Cruck C2				72		
*hsy02	Lower purlin, Bay 2 (W)	1425-1497	1497	H/S +11NM	73	1509-1537	
*hsy03	West blade, Cruck C3	1374-1494	1487	7 + 3NM	121	1498-1528	
INSERTED	INSERTED FLOOR						
hsy04	Principal floor beam [GF01]			18C	60		
*= included	in site master HDYSBYTY	1374-1497	1492		124	1509-1533	

Table 1:

Summary of Dendrochronological samples (from Bridge, 2011, table 1).

Key: H/S bdry = heartwood/sapwood boundary - last heartwood ring date; C = complete sapwood, winter felled; ½C = complete sapwood, felled the following summer; NM= not measured.

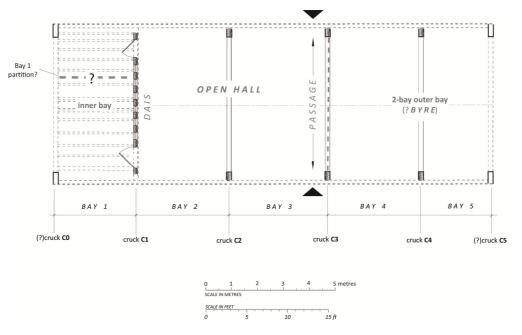
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5.2 Of the samples from the cruck frame, [hsy02] and [hsy03] matched with a combined site master spanning of 124 years (1274-1497), a mean heartwood-sapwood boundary of 1492 and a likely felling date-range of 1509-33. 10 Sample [hsy04] from the inserted floor had a short ring-sequence of 60 years and failed to date.

6 **INTERPRETATION**

Origins 6.1

Hafodysbyty originated in the early years of the 16th century as a cruck-built structure of five bays on a 6.1.1 three-unit plan comprising a two-bay hall, open to the apex, set between a single 'inner' bay (storeyed) to the north and, unusually, a two-bay 'outer room', sited downslope to the south (see sketch plan below). Four of an original (?)six crucks survive (C1-C4), no crucks surviving to the northern or southern gable end (CO/C5). Dendrochronological sampling has established a date range of 1508-33 for the construction of the original building (see §.5.2, fn.10).



Hafodysbyty: Reconstructed plan of primary cruck hall

6.1.2 The focus of the primary range was the open hall (occupying Bays 2 and 3), of two equal bays of 3.5m (111/2 ft) and standing c.5.8m (19ft) tall from floor to ridge. The carpentry of the open cruck (C2) is of superior quality with unusual cusped blades, cusped V-strutting above the arch-braced collar and the use of double rows of multiple pegs to secure the joints of cruck blade/collar/arch-brace. The north wall of the hall was defined by a fine 'post and panel' screen which survives intact, with opposing doorways serving the rooms of the 'inner' bay (Bay 1); the western doorway (A) is somewhat wider suggesting it may have served the parlour while that to the east (B) could have served a small service room. 11 Opposing doors within the long elevations would have defined a cross passage to the lower end of the hall (Bay 3), the location of the eastern door being preserved in the surviving entranceway. The inner bay (Bay 1) would have been

The potential to refine this dating by further sampling is highlighted in the dendrochronological report.

¹¹ Suggett (2005, 261), based upon work in Radnorshire, proposes the alternative interpretation of the second, subsidiary doorway serving a stair rising to the upper chamber or solar.

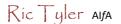
storeyed in its primary form and the pattern of staggered mortices within the northern face of the Cruck **C1** tie indicates a former elaborate ceiling of 'post and panel' type. No evidence for the subdivision of the inner bay was recorded; in particular, the central longitudinal beam of Bay 1 retained no trace of a partition as would be the case if the bay had originally been divided to form two rooms of equal size.

- 6.1.3 The form of the lower, passage partition has been partially lost with the insertion of the stone stack into the south part of Bay 3; observation from the south indicates that the upper part of Cruck **C3** was furnished with paired queen-struts between collar and tie, with wattle and daub infill panels upon vertical staves, though the tie itself has been removed with the effect that the arrangement of doorways serving the outer bays cannot be established. The lower end of the range was of two bays (Bays 4 and 5) comprising a single room, a comparatively rare arrangement (Smith 1988, 43), and may possibly have functioned originally as a byre following a 'hall house-longhouse' plan;¹² the lack of primary fenestration and the fact that the floor level of the outer bays is set significantly below the floor of the main range (thus allowing for natural drainage away from the residential part of the house) lends some weight to this interpretation.¹³
- 6.1.4 It is unclear whether the masonry walls of the house are primary or whether the building was originally furnished with timber-framed walls, being later encased in stone possibly at the time of the insertion of the principal stack. No clear evidence for primary wall framing survives, for example in the form of cruck spurs or any redundant joints/pegging related to the connection of wall framing and cruck frames, indeed the use of mortice and tenon joints for the collar and tie of a number of the crucks beyond the central arch-braced frame is of itself of note. Thus it may be that the masonry walls are original, at least in part, with the cruck blades themselves having originally been 'raised' slightly as opposed to being carried on a timber plate at ground level;¹⁴ cruck **C2** (E) in particular sits upon a projecting 'corbel' within the side wall (Plate 16).

6.2 Modifications to the Cruck-Built Structure

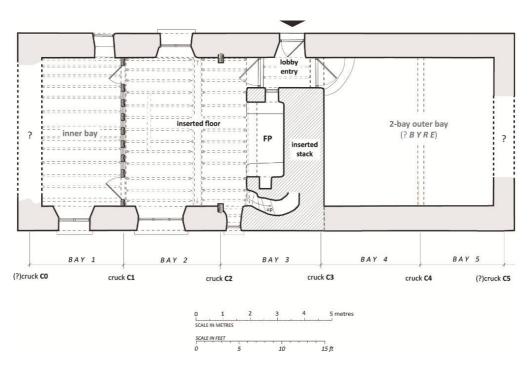
- 6.2.1 The principal modifications to the primary range comprised the introduction of the main stack within the former open hall, and the ceiling over of the hall to create ground floor hall with upper chamber, together representing a standard progressive adaption common from the mid-16th century on. Here the stack, with integral stone winder-stair, has been inserted into the southern half of Bay 3, that is within the original cross-passage, backing directly onto Cruck C3 and forming a classic 'lobby entry' plan (see plan overleaf), the principal door opening to the east of the stack between the house (Bays 1 to 3) and byre (Bays 4 and 5).
- 6.2.2 Contemporary with the introduction of the stack, the former open floor was ceiled over to create an upper chamber, accessed via the stone winder stair. The main beam of the inserted floor was sampled dendrochronologically ([hsy04]) but failed to date due to a short (60 year) ring-series, though an early-17th century date seems probable. The newly formed principal chamber was furnished with a gabled dormer to the east elevation.
- 6.2.3 The upper floor of the inner bay (Bay 1) also appears to have been renewed and it may be that this formed a contemporary modification. That the inserted stack served only the hall to the north, with no corresponding fireplace to the south, supports the interpretation of the continuing use of the 'outer' bays (4 and 5) as a byre.

This arrangement was proposed by Smith and is illustrated in survey drawings within the RCAHMW archives (ref. C441187), though published drawings (Smith 1988, 64; fig. 27b; I and JL Beverley Smith (eds.) 2001, 482; fig. 10.24b) are annotated simply with 'early masonry'



Smith (1988, 43) discusses the plan-form at some length. The description of the building in *History of Merioneth Vol. II* (2001) describes the outer bays as having had an agricultural function 'until recently'.

Smith (*ibid.*) notes that much evidence for the use of the outer bay is often to be found in the carpentry details and structural arrangements of the lower part of the partition wall between hall and outer bay; this has been lost at Hafodysbyty with the insertion of the stone stack and so the interpretation remains speculative.



 $\textbf{\it Hafodysbyty}: Reconstructed plan of modified 'lobby entry' house$

6.3 Later Additions

6.3.1 The north-east extension was not sampled dendrochronologically and thus remains undated, though it most probably represents a kitchen extension and store, possibly introduced in the early part of the 17th century, coincident with the major alterations to the main range. The pent-roofed extensions appended to the north elevation likewise remain undated.

7 ACKNOWLEDGEMENTS

- 7.1 The project was commissioned by Mrs Margaret Dunn, Project Director of the North-West Wales Dendrochronology Project, to whom thanks are given for help and cooperation throughout. Special thanks are owed to the property owner Dr Helen Ford and family for forbearance and generous hospitality during the course of survey work.
- 7.2 Site recording and assessment were undertaken by Mr Ric Tyler AlfA who also wrote, collated and illustrated the current report.

8 SOURCES

a) <u>Published Sources</u>

ALGAO, 1997. Analysis and Recording for the Conservation of Works to Historic Buildings.

Beverley Smith J and L (eds.) 2001. *History of Merioneth Volume II: The Middle Ages*. Cardiff, University of Wales Press on behalf of Merioneth Historical and Record Society.

English Heritage, 2006. Understanding Historic Buildings: A Guide to Good Recording Practice.

Institute for Archaeologists, 2008. *Standard and Guidance for the Archaeological recording of Standing Buildings and Structures*. University of Reading, IfA.

Smith P, 1988. House of the Welsh Countryside: A Study in Historical Geography. 2nd Edition. London, HMSO.

Suggett R, 2005. Houses and History in the March of Wales: Radnorshire 1400-1800. RCAHMW, Aberystwyth.

b) <u>Unpublished Sources</u>

Bridge M, 2011. 'The tree-ring dating of Hafodysbyty, Ffestiniog, Gwynedd.' Oxford Dendrochronology Laboratory Report 2011/30.

c) Online Sources

- http://www.britishlistedbuildings.co.uk
- www.coflein.gov.uk
- http://datingoldwelshhouses.co.uk

APPENDIX A: Project Brief

DATING OLD WELSH HOUSES NORTH WEST WALES DENDROCHRONOLOGY PROJECT

DESIGN BRIEF FOR HISTORIC BUILDING RECORDING.

1 Project Background

- 1.1 The North West Wales Dendrochronology Project (2009-2012) aims to identify, sample and date using dendrochronology, and record Tudor buildings with suitable original timber. Volunteers will undertake documentary research and the results will be widely disseminated and deposited in regional Historic Environment Records (HERs) and Coflein. The copyright of all project reports and materials will belong to the Project.
- 1.2 Project Phase 1 [September 2009 June 2010] will include buildings in the following areas i) parts of south Denbighshire; ii) Anglesey; iii) parts of Arfon & Dwyfor in Gwynedd. Project Phase 2 [April 2010 March 2012] will include buildings in iv) Conwy, v) parts of Merioneth in Gwynedd and vi) some possibly other buildings across the region.
- 1.4 Grants have been obtained for the Project costs from a wide range of organisations, each with their own conditions. In order to meet these conditions it was necessary as part of the grant application to identify potential buildings and obtain the owner's written permission. A long list of potential buildings has been drawn up for each area, with a short list in order of potential priority.

2 Site Locations

- 2.1 The dendrochronologists will block several days work in an area. They will visit the buildings on the short list for that area in order of priority and will determine whether or not there are sufficient suitable timbers to sample. They will move down the priority short list visiting and sampling buildings until the money allocated for dendrochronology in that area has been used.
- As it will not be certain beforehand how many building phases are contained within any particular building, it cannot be stated how many buildings will be involved. See the accompanying letter. There may be additional buildings located elsewhere.
- 2.3 Most of the buildings are scattered farmhouses, but in some areas town houses will be included.
- 2.4 Some may have already been surveyed in detail by RCAHMW or others.

3 Background of each Site

- 3.1 As part of 1.4., existing sources of information were consulted. This included the RCAHMW inventories and records, Cadw listed building schedules and local knowledge. All buildings were visited. Most but not all buildings are listed grade II or II*.
- 3.2 The teams of trained volunteers will be undertaking further documentary research whilst the professional dendrochronology and building recording work proceeds.



3.3 Some recording may take place alongside the dendrochronologists and / or the volunteers.

4 General Requirements

- 4.1 The building recording must be undertaken by an appropriately qualified individual or organisation, fully experienced in work of this character. Access to small awkward loft spaces may be necessary.
- 4.2 Contractors and sub-contractors are expected to
 - i) conform to standard professional guidelines;
 - ii) meet all Health and Safety requirements, including the Project's risk assessments;
 - iii) possess current adequate insurance cover
- 4.3 If contingencies arise, such as the need for additional work to record unexpected and important features, the Project Director should be contacted immediately and before any additional work is undertaken.
- 4.4 Many people in North Wales speak Welsh as their first language, and many of the archive and documentary references are in Welsh. Contractors should therefore give due consideration to their ability to understand and converse in Welsh.

5 Building Detail Record of each Building

- 5.1 The amount of recording required will depend on what has already been undertaken by RCAHMW or others. The aim is to provide sufficient information of the early historic features to identify their significance. Detailed recording will be reserved for components which have been dendro-dated during this Project. Because of the nature of the timber samples required (certain numbers of rings) it is likely that the timbers will be structural timbers and probably, mostly, roof trusses and ceiling/floor beams.
- 5.2 An important component of the dating programme will include a detailed, measured and drawn, record of the timbers to be dated.
- 5.3 Particular attention should be paid to diagnostic features, detail and structure, as the association of dendrochronological dates with the shape or style of the timbers has the potential to contribute to the development of a dated typology of such features.

In particular, attention should be paid to details such as:

- i) the scale and positioning of collar beams and tie beams
- ii) the detail of major joints, for example, mortice and tenon, lap-joints, scarf joints
- iii) the presence or otherwise of struts springing from collars or king-posts
- iv) the number and position of peg holes at joints and any re-pegging
- v) the presence, or indication, of panelling between the spaces of structural members of trusses (seen as grooves/dowel holes)
- vi) the presence of decorative features, such as cusping, bosses, chamfering and fancy stops; and mortices below collars, tie-beams or floor/ceiling beams to accommodate stud partitions
- vii) the presence, or indication (seen as mortices), of arched braces and wind braces;
- viii) that some collar beam trusses with arched braces exhibit an arched profile at the level of the collar some are more pointed than others and this is likely to be a chronological feature



- ix) the number of purlins (distinguish between butt purlins and through-purlins with scarfed joints); re-cutting of purlin slots and positioning and re- pegging of joists could be an indication of a reset truss or a re-vamped roof.
- 5.4 The minimum requirement for recording of dendrochronologically-dated timbers should include:

5.4.1 Contextual Information

- i) Brief description of the building from which the sample is taken.
- ii) Summary of period phases represented in the building.
- iii) Brief description of the relationship to other contemporary features and other relevant, non-contemporary features within the building. (Written description, preferably supplemented by sketch plans/elevations and/or photographs)

5.4.2 **Detailed Recording**

Structural features being dated require measured drawings, in elevation and cross section, including associated components. That is, if part of a truss is being dated, the complete truss should be recorded. Similarly, if a ceiling/floor beam is recorded, the style of chamfer/chamfer stops, cross section of beam and style and spacing of joists should be recorded.

5.4.3 Brief Written Statement of Possible Potential for Future Recording.

- 5.5.1 **Photographs** should be used not only to show the appearance of the building but also to record the evidence on which the analysis of its historic development is based. Each print should be clearly labelled with the subject, orientation and the date taken, and cross-referenced to its negative and or digital file.
- 5.5.2 If utilising digital technology, high resolution images (preferably in tiff. format) must be produced. These should be presented within the report as a hard copy and a compact disc must be included as an archive to accompany the report.

6 Time Scale

It is expected that the dates when the dendrochronologists will be in each area will be known by late January 2011. It is hoped that the building recording can take place very soon after the results of the dendrochronological sampling has been received, with further visits arranged with the owner of a building as necessary.

7 Reports

Reports will be required by the deadline (given in advance) for each block of work, usually within 3-4 weeks of site visits.

8 Monitoring

The Project will be monitored by experienced members of the Project to ensure the fulfilment of the brief and specifications.



9 Payment

- 9.1 Only a finite amount of money has been allocated to this aspect of the project.
- 9.2 Once the work has been satisfactorily completed, invoices, including VAT etc, should be sent to the Project Director.

10 Summary re. Surveys & Reports:

- 1. Follow the attached RCAHME Recording Historic Buildings Specification. It has to be adjusted to for digital survey. Copies are available from Margaret Dunn.
- 2. The emphasis should be on SURVEY & DRAWINGS and PHOTOGRAPHY. By and large others cover the history and interpretation though sometimes detailed descriptions are needed.
- 3. A ground-floor plan is always needed, simplified first-floor plan with position of roof trusses and fireplaces, cross-sections with the key historic trusses; architectural detail. Location of samples if possible.
- 4. Photography as RCAHME specification.
- 5. Each site is different and some have been recorded before. There will to be a different specification for each site.
- 6. Final report in digital format is essential with hard copies including plans at relevant scale, with summary: i) Description. ii) Ground-floor plan, roof plan, cross-section of historic trusses (= level 3); iii) Photography (= level 3.); iv)Final report in digital form and hard copy.
- 7. **Copyright**: North-west Wales Dendro Project with agreement to put the report as PDF on Coflein RCAHMW's on-line dabase as part of partnership.
- 8. **Archive.** Archive to be deposited in RCAHMW's archive (National Monuments Record for Wales) as part of partnership.
- 9. **Logos.** Partnership with RCAHMW to be noted on cover of report.



APPENDIX B: Register of Project Drawings

 ${\bf NB}$: All site drawings were prepared in pencil on archivally stable drafting film at a scale of 1:50 and/or 1:20 as appropriate.

Drg. No.	Subject	Format	Scale	Date	Recorder
2011-013c/001	Overall plan	A3	1:100	30.11.11	R Tyler
2011-013c/002	Ground floor plan	A3	1:50	29.11.11	R Tyler
2011-013c/003	First floor plan	A3	1:50	29.11.11	R Tyler
2011-013c/004	Transverse cross-section at Cruck C2	A3	1:20	30.11.11	R Tyler
2011-013c/005	Transverse cross-section at Cruck C3	A3	1:20	30.11.11	R Tyler
2011-013c/006	Transverse cross-section at Cruck C4	A3	1:20	30.11.11	R Tyler
2011-013c/007	Transverse cross-section at Cruck C1	A3	1:20	30.11.11	R Tyler
2011-013c/008	Dais screen	A3	1:20	30.11.11	R Tyler
2011-013c/009	Transverse cross-section of north-east extension	A3	1:20	30.11.11	R Tyler



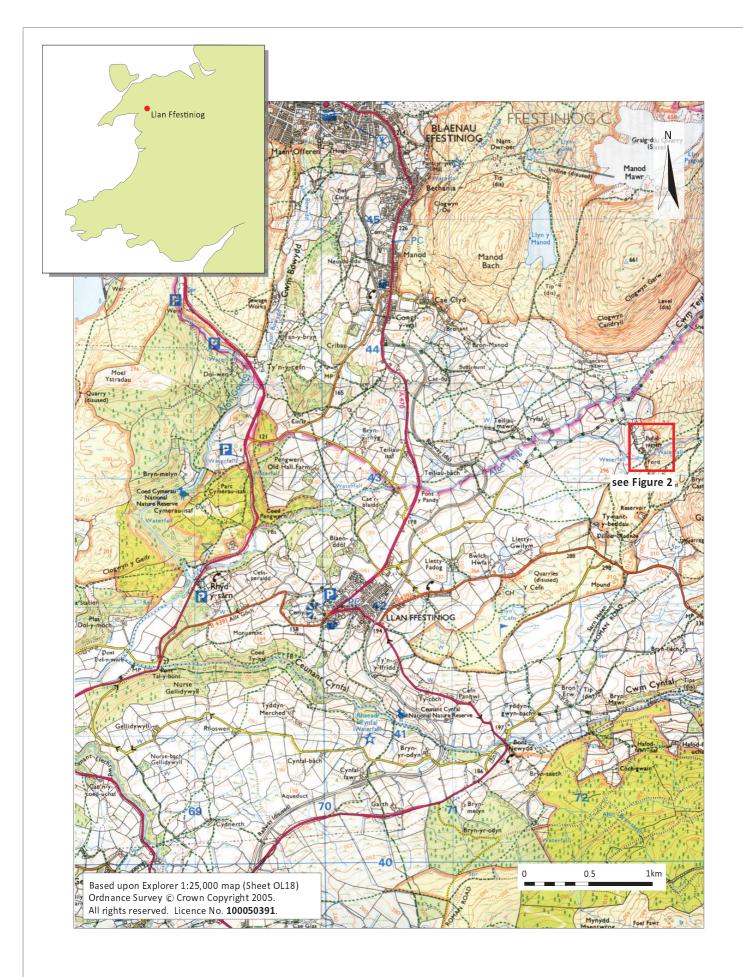
APPENDIX C: Register of Project Photographs

NB: All photographs taken with Nikon D3000 digital SLR camera, 10 mega-pixels. Files are included in *.jpg format on the CD appended at the back of this report. Photos marked with an asterix (*) are reproduced as plates within the current document.

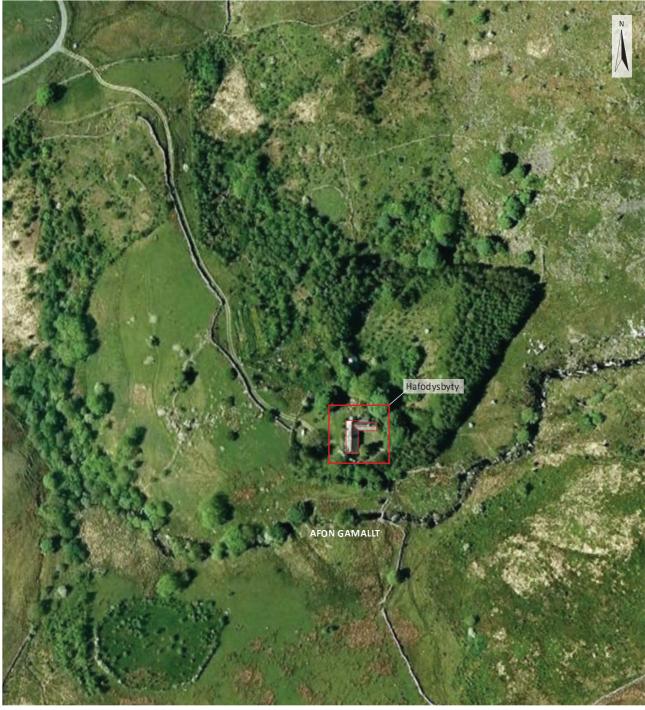
Photo No.	Plate No.	Subject	Orientation	Date	Photographer
DSC_0147		Primary range, west elevation	\rightarrow E	30.11.12	R Tyler
DSC 0148		Primary range, west elevation	\rightarrow SE	30.11.12	R Tyler
DSC 0149*	1	Primary range, west elevation	\rightarrow E	30.11.12	R Tyler
DSC_0150		Primary range, west elevation, south end	\rightarrow E	30.11.12	R Tyler
DSC 0151		Primary range, west elevation	\rightarrow SE	30.11.12	R Tyler
DSC 0152	2	Primary range, west elevation gable	\rightarrow E	30.11.12	R Tyler
DSC 0153		Primary range, inserted stack at Bay 3	1	30.11.12	R Tyler
DSC 0154		Primary range, gable stack (N)	<u> </u>	30.11.12	R Tyler
DSC 0155		Primary range, north-west angle	→ SE	30.11.12	R Tyler
DSC 0156		Primary range, north-west angle	→ SE	30.11.12	R Tyler
DSC 0157*	7	Primary range, extensions to north elevation	→ SE	30.11.12	R Tyler
DSC 0158*	6	Primary range, north gable end	→ S	30.11.12	R Tyler
DSC 0159		Primary range, west elevation, south end (store)	→ NE	30.11.12	R Tyler
DSC_0160*	3	Primary range, south gable end	\rightarrow N	30.11.12	R Tyler
DSC_0161*	4	Primary range, east elevation	\rightarrow IN \rightarrow SE	30.11.12	R Tyler
DSC_0101	-	Primary range, general view from E	\rightarrow 3L \rightarrow W	30.11.12	R Tyler
_	5	Primary range, (?) original door head above main doorway			-
DSC_0163*	3		\rightarrow W	30.11.12	R Tyler
DSC_0164	22	Primary range, main doorway at Bay 3	\rightarrow W	30.11.12	R Tyler
DSC_0165*	33	North-east extension, south elevation	\rightarrow N	30.11.12	R Tyler
DSC_0166		North-east extension, ridge stack	1	30.11.12	R Tyler
DSC_0167*	8	Room [GF01] looking south-east towards inserted stack	→ SE	30.11.12	R Tyler
DSC_0168		Room [GF01] looking south-west towards inserted stack	→ SW	30.11.12	R Tyler
DSC_0169*	9	Room [GF01]; stone winder stair to west of stack	\rightarrow S	30.11.12	R Tyler
DSC_0170		Room [GF01]; dais partition at Bay 1/2	\rightarrow NE	30.11.12	R Tyler
DSC_0171		Room [GF01]; dais partition at Bay 1/2	\rightarrow NW	30.11.12	R Tyler
DSC_0172*	11	Room [GF01]; dais partition at Bay 1/2	\rightarrow NW	30.11.12	R Tyler
DSC_0173		Room [GF01]; main beam of inserted floor	\rightarrow SW	30.11.12	R Tyler
DSC_0174*	15	Room [GF01]; common joist of inserted floor	Ť	30.11.12	R Tyler
DSC_0175*	13	Room [GF01]; eastern door B of dais partition	\rightarrow N	30.11.12	R Tyler
DSC_0176*	12	Room [GF01]; eastern door A of dais partition	\rightarrow N	30.11.12	R Tyler
DSC_0177*	16	Room [GF01]; eastern blade of C2	\rightarrow NE	30.11.12	R Tyler
DSC_0178*	17	Room [GF01]; western blade of C2	\rightarrow N	30.11.12	R Tyler
DSC_0179		Room [GF01]; western blade of C2	\rightarrow SW	30.11.12	R Tyler
DSC_0180*	14	Room [GF01]; head beam at top of dais partition	\rightarrow NW	30.11.12	R Tyler
DSC_0181		Room [GF01]; trimmed section of ceiling in Bay 2	1	30.11.12	R Tyler
DSC_0182		Room [GF02] looking south-east	\rightarrow SE	30.11.12	R Tyler
DSC_0183*	18	Room [GF02] looking south-east	\rightarrow SE	30.11.12	R Tyler
DSC_0184		Room [GF02] looking south-west	\rightarrow SW	30.11.12	R Tyler
DSC_0185		Room [GF02]; staggered mortices for ceiling structure above door A	\rightarrow S	30.11.12	R Tyler
DSC_0186		Room [GF02]; staggered mortices for ceiling structure above door A	\rightarrow S	30.11.12	R Tyler
DSC_0187		Room [GF02]; staggered mortices for ceiling structure above door A	\rightarrow S	30.11.12	R Tyler
DSC_0188*	19	Room [GF02]; staggered mortices for ceiling structure above door A	\rightarrow S	30.11.12	R Tyler
DSC_0189*	34	Room [GF07] looking east	\rightarrow E	30.11.12	R Tyler
DSC_0190*	36	Room [GF07]; roof structure	1	30.11.12	R Tyler
DSC_0191		Room [GF07]; roof structure	1	30.11.12	R Tyler
DSC_0192		Room [GF07]; fireplace	\rightarrow E	30.11.12	R Tyler
DSC_0193*	35	Room [GF07]; stone winder stair adjacent to FP	\rightarrow NE	30.11.12	R Tyler
DSC_0194		Room [GF07]; stone winder stair adjacent to FP	\rightarrow E	30.11.12	R Tyler
DSC_0195		Room [GF07]; door from main range	\rightarrow W	30.11.12	R Tyler
DSC_0196		Room [GF02] looking west	\rightarrow W	30.11.12	R Tyler
DSC 0197*	20	Room [GF03] looking south	\rightarrow S	30.11.12	R Tyler
DSC_0199*	21	Room [GF03]; door from lobby entry [GF05]	\rightarrow N	30.11.12	R Tyler
			· · ·		,



23 24 25	Room [GF03]; inserted stair Room [GF03]; inserted stair Room [1F01]; Cruck C2 Room [1F01]; Cruck C2 Room [1F01]; Cruck C2 Room [1F01]; Cruck C2 Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; double pegging at principal/collar/archbrace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; castern blade Room [1F01]; Cruck C2; cusping to eastern blade	$\begin{array}{c} \rightarrow \text{NW} \\ \rightarrow \text{NW} \\ \rightarrow \text{SW} \\ \rightarrow \text{SW} \\ \rightarrow \text{SE} \\ \rightarrow \text{SE} \\ \rightarrow \text{S} \\ \rightarrow \text{SW} \\ \rightarrow \text{SW} \\ \end{array}$	30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12	R Tyler
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24	Room [1F01]; Cruck C2 Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; double pegging at principal/collar/archbrace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade		30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12	R Tyler R Tyler R Tyler R Tyler R Tyler R Tyler
24	Room [1F01]; Cruck C2 Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; double pegging at principal/collar/archbrace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade		30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12	R Tyler R Tyler R Tyler R Tyler R Tyler
24	Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; double pegging at principal/collar/archbrace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$ \begin{array}{c} \rightarrow S \\ \rightarrow SW \end{array} $	30.11.12 30.11.12 30.11.12 30.11.12 30.11.12 30.11.12	R Tyler R Tyler R Tyler R Tyler
24	Room [1F01]; Cruck C2; double pegging at principal/collar/archbrace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade		30.11.12 30.11.12 30.11.12 30.11.12 30.11.12	R Tyler R Tyler R Tyler
24	brace Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$ \begin{array}{c} \rightarrow S \\ \rightarrow S \\ \rightarrow S \\ \rightarrow S \\ \rightarrow SW \end{array} $	30.11.12 30.11.12 30.11.12 30.11.12	R Tyler R Tyler
	Room [1F01]; Cruck C2; double pegging at principal/collar Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$ \begin{array}{c} \rightarrow S \\ \rightarrow S \\ \rightarrow S \\ \rightarrow SW \end{array} $	30.11.12 30.11.12 30.11.12	R Tyler
	Room [1F01]; Cruck C2; double pegging at arch-brace/collar Room [1F01]; Cruck C2; detail at centre of collar Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$ \begin{array}{c} \rightarrow S \\ \rightarrow S \\ \rightarrow SW \end{array} $	30.11.12 30.11.12	R Tyler
	Room [1F01]; Cruck C2; cusping to v-struts Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$\begin{array}{c} \rightarrow S \\ \rightarrow SW \end{array}$	30.11.12	R Tyler
	Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$\rightarrow SW$		
25	Room [1F01]; Cruck C2; western blade Room [1F01]; Cruck C2; eastern blade	$\rightarrow SW$	20 11 12	R Tyler
25	Room [1F01]; Cruck C2; eastern blade		30.11.12	R Tyler
25		\rightarrow SE	30.11.12	R Tyler
25		→ SE	30.11.12	R Tyler
	Room [1F01]; Cruck C2; cusping to western blade	\rightarrow NW	30.11.12	R Tyler
	Room [1F01]; Cruck C2; cusping to western blade	\rightarrow NW	30.11.12	R Tyler
	Room [1F01]; Cruck C2	<u> </u>	30.11.12	R Tyler
	• •			R Tyler
				R Tyler
26				R Tyler
27				R Tyler
		•	+	R Tyler
				R Tyler
				R Tyler
		<u></u>		R Tyler
		<u> </u>		R Tyler
10			30.11.12	R Tyler
28		\rightarrow N	30.11.12	R Tyler
29	Room [1F03]; Cruck C3; double pegging at collar/principal	\rightarrow N	30.11.12	R Tyler
	Room [1F03]; Cruck C3	\rightarrow NE	30.11.12	R Tyler
30	Room [1F03]: Cruck C3 – wind brace to Bay 4 (E)	→ NE	30.11.12	R Tyler
				R Tyler
			30.11.12	R Tyler
		<u> </u>	30.11.12	R Tyler
	Room [1F03]; Cruck C4, east blade	→ NE	30.11.12	R Tyler
32	Room [1F03]; Cruck C4, west blade	\rightarrow NW	30.11.12	R Tyler
	Room [1F03]; Cruck C4 (W) collar/principal with FE strap	\rightarrow N	30.11.12	R Tyler
	Room [1F03]; Cruck C4 (E) collar/principal with FE strap	\rightarrow N	30.11.12	R Tyler
		-	30.11.12	R Tyler
31	Room [1F03]; Cruck C4 , apex		30.11.12	R Tyler
			30.11.12	R Tyler
			30.11.12	R Tyler
				R Tyler
				R Tyler
	2 27 1	\rightarrow SE	30.11.12	R Tyler
	10 28 29 30	27 Room [1F02]; Cruck C1; mortices to collar soffit Room [1F01]; Cruck C1 Room [1F01]; Cruck C1 Room [1F01]; purlin scarf 28 Room [1F03]; Cruck C3 29 Room [1F03]; Cruck C3; double pegging at collar/principal Room [1F03]; Cruck C3 30 Room [1F03]; Cruck C3 – wind brace to Bay 4 (E) Room [1F03]; Cruck C3, western blade Room [1F03]; Cruck C3 redundant mortices to collar soffit Room [1F03]; Cruck C3 redundant mortices to collar soffit Room [1F03]; Cruck C4, east blade Room [1F03]; Cruck C4, west blade Room [1F03]; Cruck C4, west blade Room [1F03]; Cruck C4 (W) collar/principal with FE strap Room [1F03]; Cruck C4 (E) collar/principal with FE strap Room [1F03]; Cruck C4, eastern blade	Room [1F01]; roof structure (western purlins) 26 Room [1F02]; Cruck C1 Room [1F02]; Cruck C1; mortices to collar soffit Room [1F01]; Cruck C1 Room [1F01]; Cruck C1 Room [1F01]; purlin scarf Room [1F03]; Cruck C3 Room [1F03]; Cruck C3; double pegging at collar/principal Room [1F03]; Cruck C3 — wind brace to Bay 4 (E) Room [1F03]; Cruck C3 — wind brace to Bay 4 (E) Room [1F03]; Cruck C3 mestern blade Room [1F03]; Cruck C3 redundant mortices to collar soffit Room [1F03]; Cruck C3 redundant mortices to collar soffit Room [1F03]; Cruck C4, east blade 32 Room [1F03]; Cruck C4, east blade 34 Room [1F03]; Cruck C4, west blade 35 Room [1F03]; Cruck C4, east blade 36 Room [1F03]; Cruck C4, east blade 37 Room [1F03]; Cruck C4, east blade 38 Room [1F03]; Cruck C4, east blade 39 Room [1F03]; Cruck C4, east blade 30 Room [1F03]; Cruck C4, east blade 31 Room [1F03]; Cruck C4, eastern blade 32 Room [1F03]; Cruck C4, eastern blade 33 Room [1F03]; Cruck C4, eastern blade 34 Room [1F03]; Cruck C4, eastern blade 35 Room [1F03]; Cruck C4, eastern blade 36 PNE Room [1F03]; Cruck C4, eastern blade 37 Room [1F03]; Cruck C4, eastern blade 38 Room [1F03]; Cruck C4, eastern blade 39 PNE Room [1F03]; Cruck C4, eastern blade PNE Room [1F03]; Cruck C4, eastern blade PNE Room [1F03]; Cruck C4, eastern blade PNE Room [1F03]; Cruck C3, western blade PNE Room [1F03]; Cruck C3, inserted FP PSE	Room [1F01]; roof structure (western purlins) → W 30.11.12 26 Room [1F02]; Cruck C1 → SE 30.11.12 27 Room [1F02]; Cruck C1; mortices to collar soffit ↑ 30.11.12 Room [1F01]; Cruck C1 → N 30.11.12 Room [1F01]; purlin scarf ↑ 30.11.12 Room [1F03]; Cruck C3 → N 30.11.12 28 Room [1F03]; Cruck C3 → N 30.11.12 29 Room [1F03]; Cruck C3; double pegging at collar/principal → N 30.11.12 29 Room [1F03]; Cruck C3 — wind brace to Bay 4 (E) → NE 30.11.12 30 Room [1F03]; Cruck C3 — wind brace to Bay 4 (E) → NE 30.11.12 Room [1F03]; Cruck C3, western blade → NW 30.11.12 Room [1F03]; Cruck C3, redundant mortices to collar soffit ↑ 30.11.12 Room [1F03]; Cruck C4, east blade → NE 30.11.12 30 Room [1F03]; Cruck C4, east blade → NW 30.11.12







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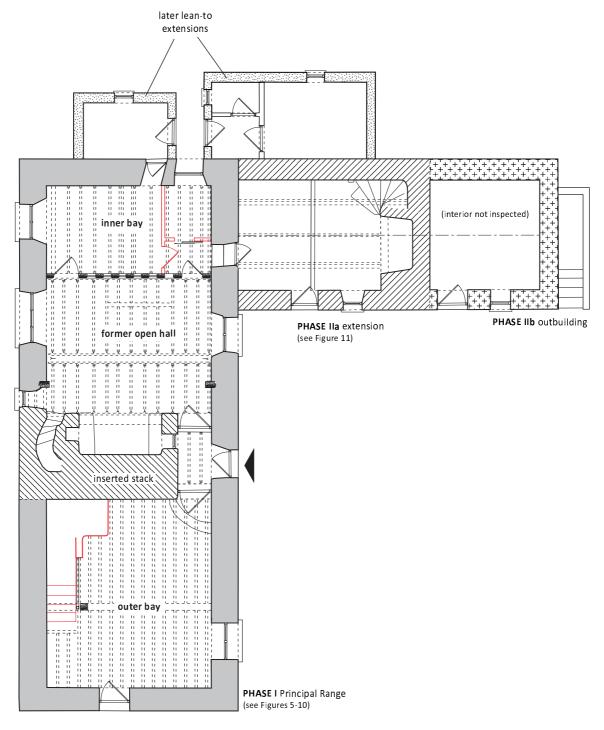
(a) View of Hafodysbyty from south (from North, Campbell and Scott, 1949. plate 34a).

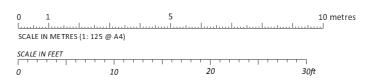


(b) View of Hafodys byty from south-east with Ffestiniog Hills of Manod Mawr and Manod Bach in the background (undated original photograph courtesy Dr. Helen Ford).

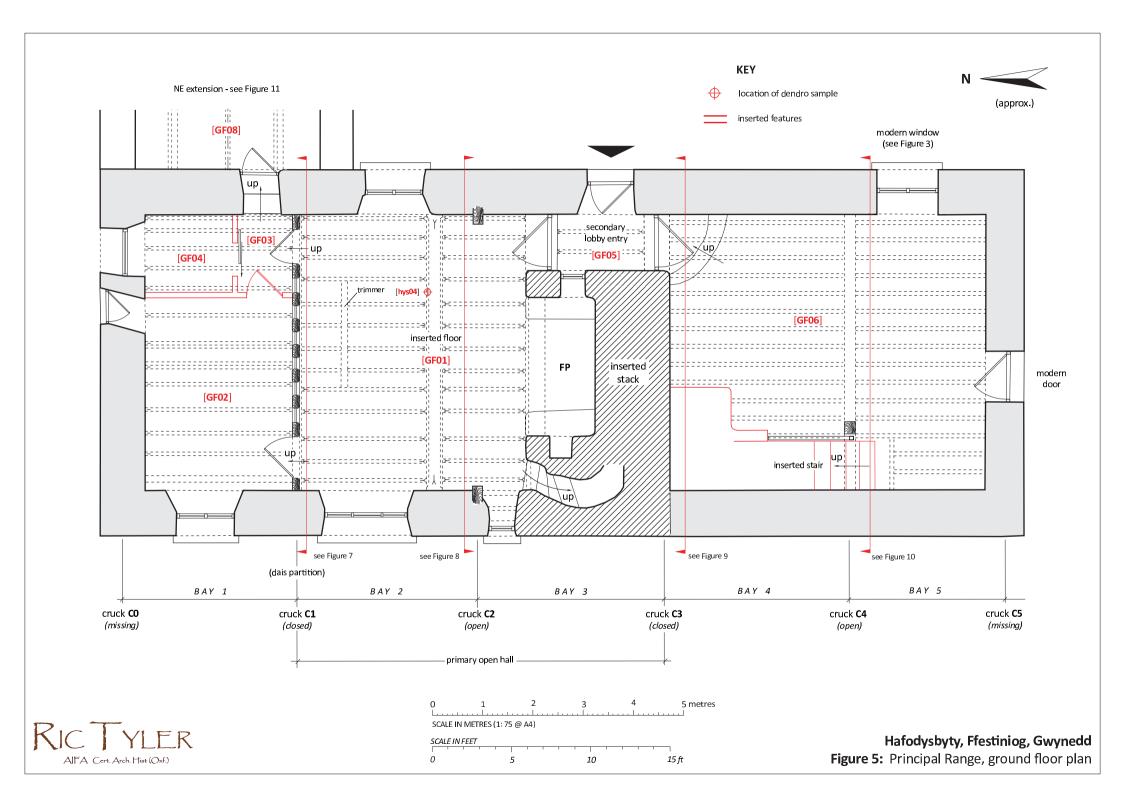


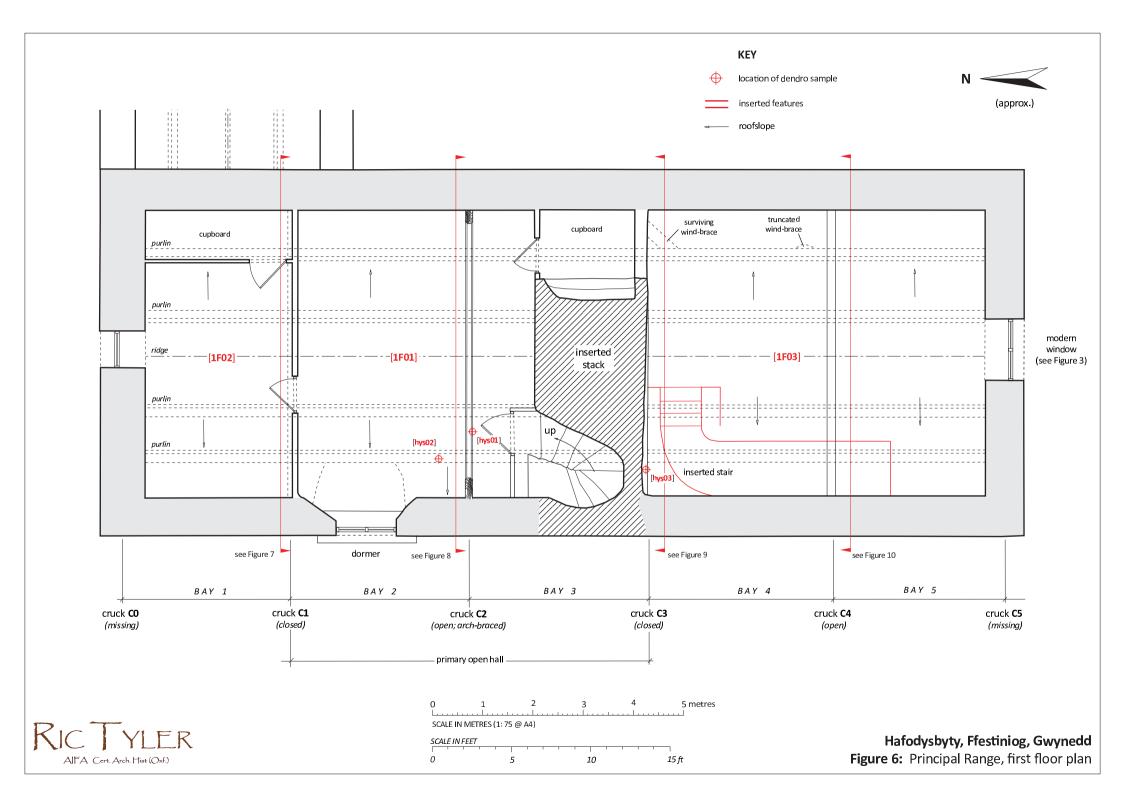


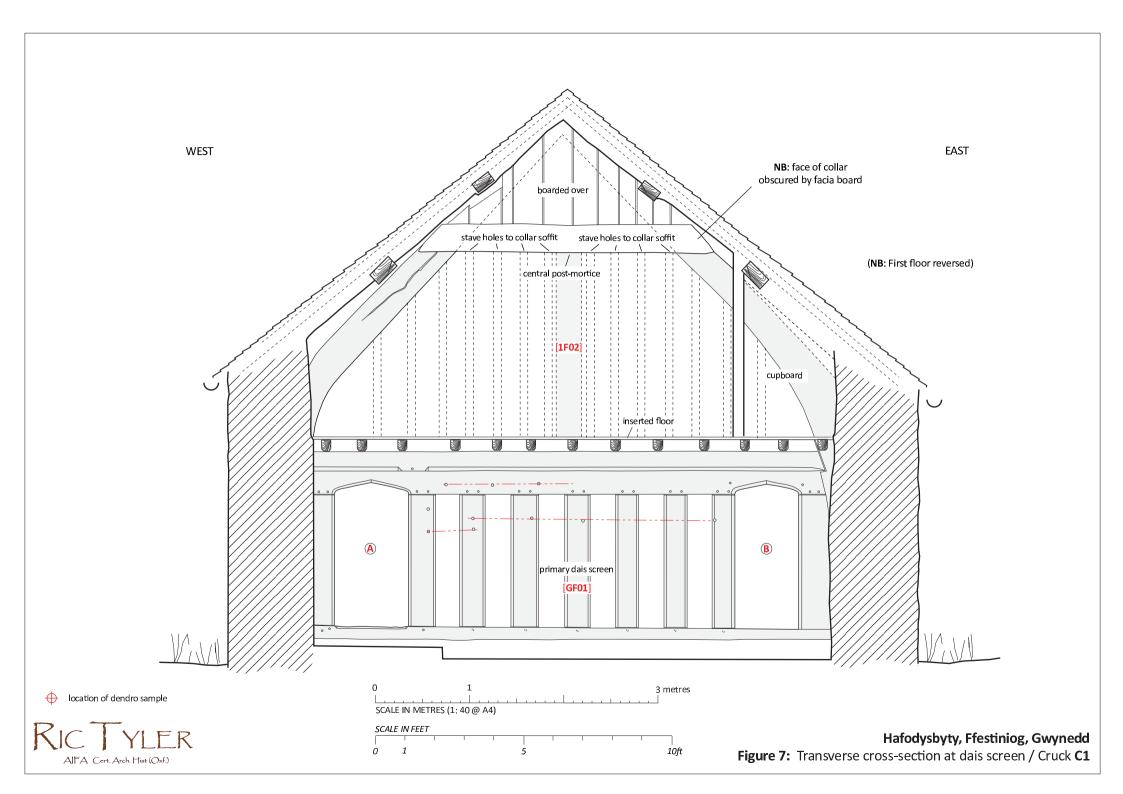


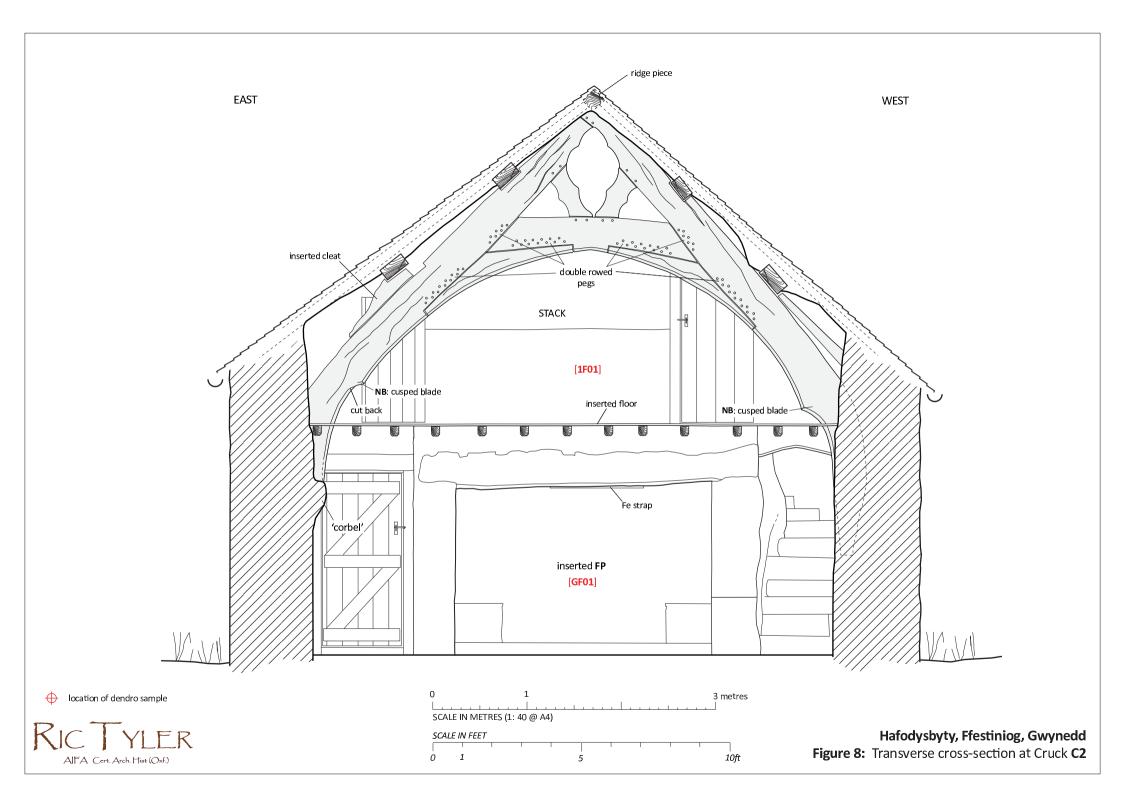


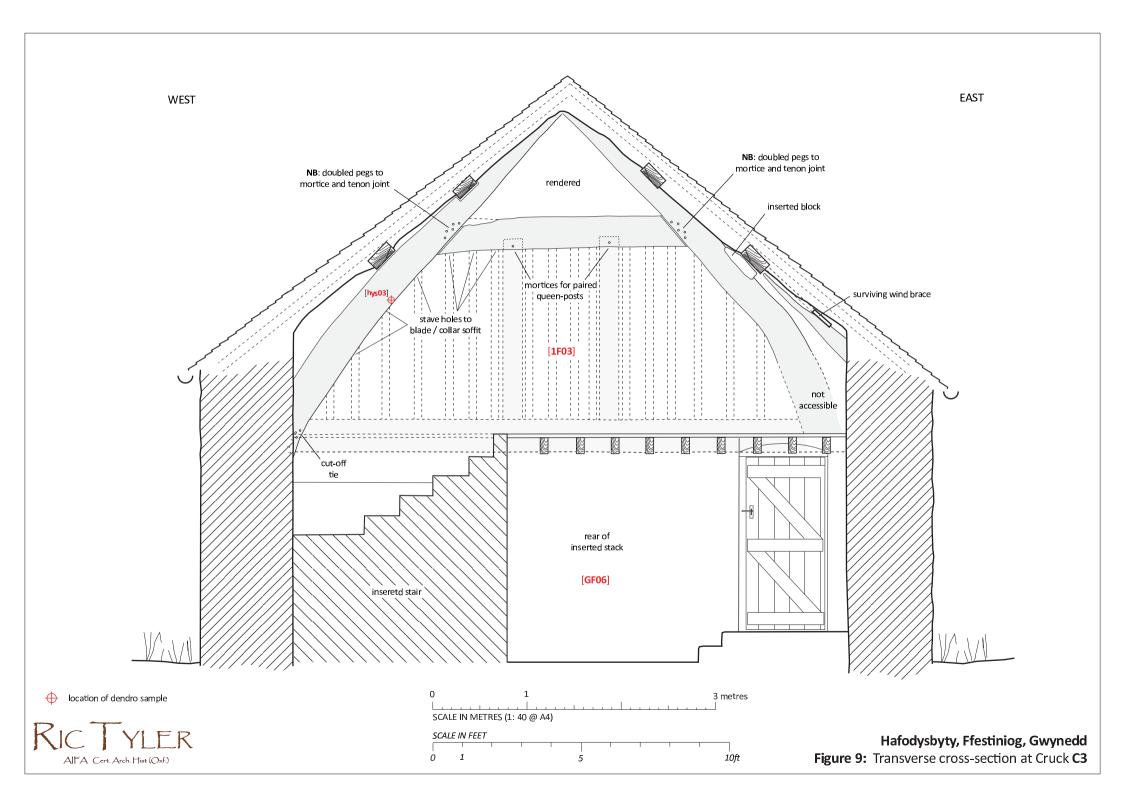


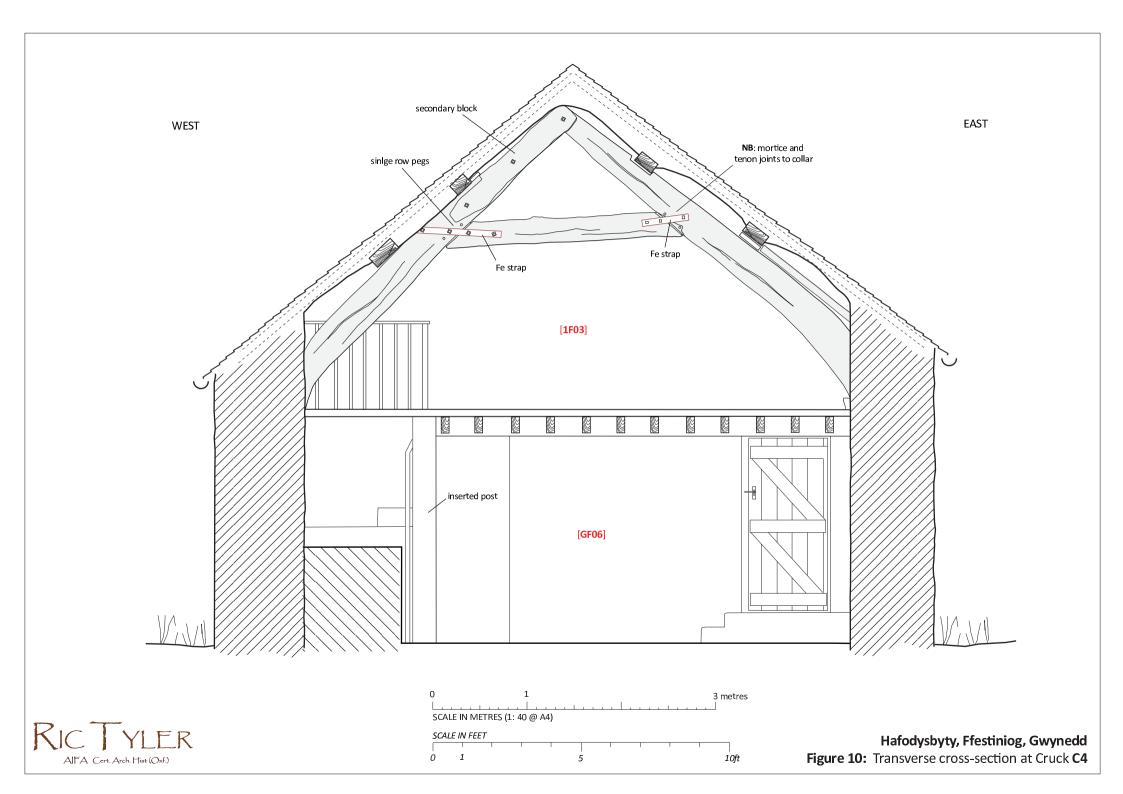












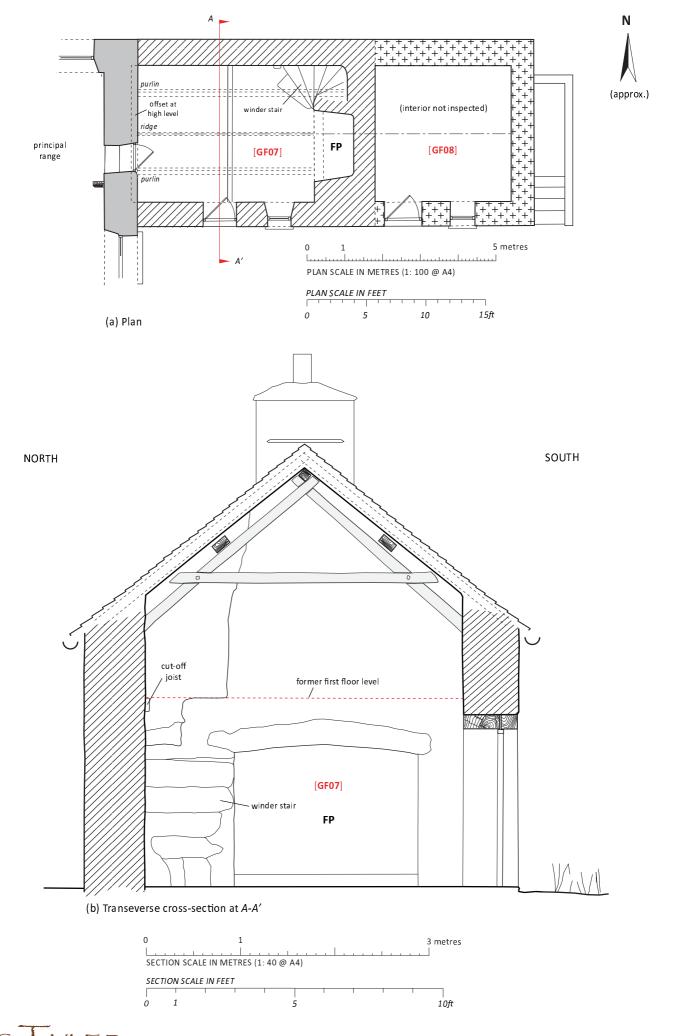






Plate 1: Primary range, east elevation.



Plate 2: East elevation, dormer.



Plate 3: Primary range, south elevation.



Plate 4: Primary range, west elevation.



Plate 5: (?)Primary doorhead reset in masonry of west wall above current door



Plate 6: Primary range, north elevation.



Plate 7: Single-storey extensions to north elevation of primary and north-east range.



Plate 8: Room [GF01] looking south-east with inserted stack within Bay 3.



Plate 9: Winder stair to west of stack.



Plate 10: : Winder stair to west of stack (\downarrow).



Plate 11: Primary dais screen to north side of [GF01] (Cruck C1)



Plate 12: Door A to east end of dais screen.



Plate 13: Door B to west end of dais screen.



Plate 14: Joists of inserted floor rest upon tie of cruck C1 (NB: heraldic panels of c.1941)



Plate 15: Common joist of inserted floor jointed to principal beam with bare-faced soffit tenon.



Plate 16: West foot of Cruck C2, note projecting



Plate 17: East foot of Cruck C2.



Plate 18: Room [GF02] looking south-east.



Plate 19: Staggered mortices for former 'post and panel' ceiling to north face of dais head-beam (= tie of C1).



Plate 20: Room [GF06] (Bays 4/5) looking south-west.



Plate 21: Steps down to Bay 4.



Plate 22: Room [1F01]; Cruck C2.



Plate 23: Cruck **C2**; detail of double-pegging of principal, collar and arch brace.



Plate 24: Cruck C2; cusping to v-struts.



Plate 26: Room [**1F02**]; Cruck **C1**.



Plate 25: Cruck C2; cusping to western blade.



Plate 27: Mortices to collar soffit of C1.



Plate 28: Room [1F03]; Cruck C3.



Plate 29: West blade of C3.



Plate 30: Surviving wind-brace at C3 (E).



Plate 31: Room [1F03]; Cruck C4.



Plate 32: East blade of C4.



Plate 33: North-east extension; south elevation.



Plate 34: Room [GF07] looking east.



Plate 35: Stone winder stair to north of **FP**; note cut off joist of former first floor.



Plate 36: North-east extension roof structure.