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PLAS-YM-MHENRHOS, LLANNOR, PWLLHELI, GWYNEDD

[NPRN 16762]

Architectural Record



DRAFT REPORT
December 2011



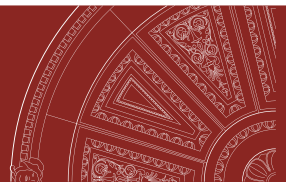
A report commissioned by
The North West Wales Dendrochronology Project
in partnership with
The Royal Commission on the Ancient and Historic Monuments of Wales



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PLAS-YM-MHENRHOS Llannor, Pwllheli, Gwynedd

[NPRN: 16762]

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PLAS-YM-MHENRHOS

Llannor, Pwllheli, Gwynedd

[NPRN: 16762]

Architectural Record

Summary

Plas-ym-Mhenrhos is located to the south of the A499 Pwllheli to Llanbedrog Road, c.2km south-west of the town of Pwllheli and is centred on NGR SH 3557 3425. Though not statutorily listed, the house is included on the National Monuments Record of Wales (NPRN 16762). An architectural record of the building was made in December 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 and in collaboration with, and funding from, the Llŷn Landscape Partnership Scheme.

Plas-ym-Mhenrhos originated in the early years of the 17th century as a Smith 'Type A' end-chimney house on the 'Snowdonia plan'. Although the interior of the primary house has been extensively modified, convention would dictate that it would originally have comprised a ground floor hall to the south, served by opposing doorways in the long elevations, with two small service rooms to the north, and first floor chambers accessed via a winder stair adjacent to the principal stack. This layout is confirmed in part by the evidence of the surviving fabric. The principal ground floor fireplace and associated stone stack survive to the south while evidence suggests a possible corbelled stack at first floor level to the north. Dendrochronological analysis has established a date of 1608, or within a couple of years of that date, for the construction of the first floor structure, and by implication the primary range. The roof of the range was modified, probably in the 18th century, but sampling failed to date the timbers employed in the new structure. Unified fenestration was introduced to the range in the 19th-century and three decorative semi-dormers introduced to the east elevation.

A perpendicular extension was added at the north end of the west elevation, most probably in the 18th or early 19th century (Phase II), to increase the size of the accommodation by the addition of a ground floor parlour with a fine slate fireplace surround, and additional chamber over. A tertiary (Phase III) infill block was introduced to the south-west angle presumably for provision of additional / alternative service accommodation. Neither extension was sampled dendrochronologically, and thus both remain undated, though the relative chronology is clear.

1 INTRODUCTION

1.1 Background to the Project

- 1.1.1 Plas-ym-Mhenrhos, Llannor, Pwllheli, Gwynedd was recorded in December 2011 as part of the North-West Wales Dendrochronology Project¹ undertaken in collaboration with and with funding from the Llŷn Landscape Partnership Scheme, and in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW).

¹ <http://www.datingoldwelshhouses.co.uk/>

1.1.2 Plas-ym-Mhenrhos is located to the south of the A499 Pwllheli to Llanbedrog Road, c.2km south-west of Pwllheli town and is centred on NGR SH 3557 3425 (see Figures 1 and 2). The house is not statutorily listed though it is included on the National Monuments Record of Wales (NMRW), NPRN 16762.²

1.1.3 The recording was undertaken subsequent to a programme of dendrochronological sampling, undertaken by the Oxford Dendrochronology Laboratory in July 2011 (Miles and Bridge, 2011; see Section §.5 below).

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 Plas-ym-Mhenrhos.

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 of the main house of Plas-ym-Mhenrhos 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 representative, transverse cross section. Drawings were prepared on site at a scale of 1:50, 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**.

² <http://www.coflein.gov.uk/en/site/16676/details/PENLAN+FAWR+PUBLIC+HOUSE%2C+PENLAN+STREET/>

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.

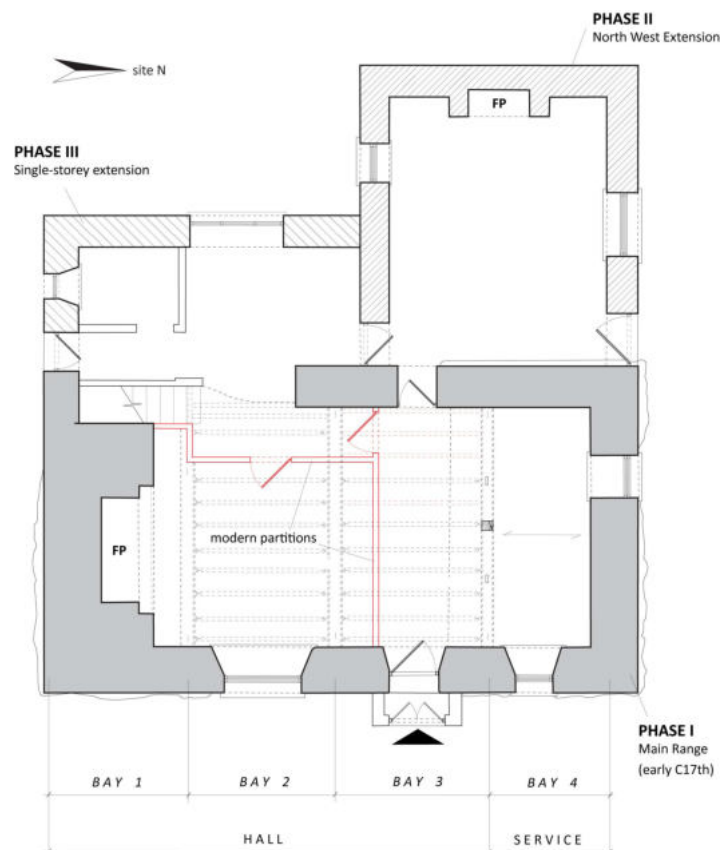
The Written Record

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 The house at Plas-ym-Mhenrhos (Plate 1) comprises three principal, chronologically distinct elements (see sketch plan below).



Plas-ym-Mhenrhos: Sketch plan showing principal features described in text

- 4.1.2 The earliest part (Phase I) is that lying to the east, a stone-built range of 1½ storeys aligned approximately north-south with pitched and gabled roof with gable stacks to north and south; this range has been significantly modified in particular in the 19th century when three distinctive gabled dormers with perforated bargeboards and trefoil ridge tiles were introduced. Appended to the north end of the west elevation a two-storey perpendicular range, gabled to the west, represents an addition probably of 18th-century date (Phase II) while a further infill block, of a single-storey with cat-slide roof, has subsequently been inserted into the south-west angle between the main ranges (Phase III).
- 4.1.3 A range of agricultural buildings comprising stables and barn,³ located to the south of the main house, are most probably of 19th-century date, with certain modifications contemporary with those of the main house. The range nearest the house included servants' accommodation and retains a round-headed sash window at first floor level matching those of the modified dormers of the main house (visible in Plate 1).

4.2 The Main Range (Phase I)

Exterior

- 4.2.1 The main range is built on a rectangular plan with external measurements of 10.9m (c.36ft) north-south x 6m (c.20ft) east-west. The principal **east elevation** (Plate 2) is of stone construction, rendered and scored in imitation of ashlar, rising through 1½ storeys above an offset boulder plinth to a slate-clad roof, pitched and gabled to north and south. Ridge stacks rise above the northern and southern gables. The principal doorway is offset towards the north of the elevation, currently enclosed within a secondary porch, formed from a former open canopy of 19th-century date, gabled and enhanced by pierced timber barge-boards and ornamental framing. Ground floor fenestration is of unequal, double-hung horned sashes to north and south of the doorway; in the southern window, lighting [GF01] internally, each sash is formed of four vertically set panes, in the northern window, sashes are formed of 2 panes. At first floor level, the eaves line is broken by three dormers, stylistically late 19th-century, with steeply pitched gables and pierced, decorative barge boards matching those of the porch (Plate 3). Each dormer houses a 2/2 horned sash, the upper sash being furnished with a semi-circular head,⁴ while the projecting cills are enhanced by a low, decorative iron railing.
- 4.2.2 The **north elevation** (Plate 4) is of exposed, random stone-rubble construction above an offset boulder plinth. At ground floor level, a single inserted 2/2 horned sash with brick jambs is located to the west side of the elevation while at first floor level a small, single-light casement, again with brick jambs, is located beneath the eastern roof slope. The gable is topped by a rendered stack, flush with the masonry of the wall, though an area of apparent patching at first floor level (Plate 5), combined with two projecting stones, may possibly indicate a former arrangement of a corbelled stack. To the east, the gable end meets the north elevation of the north-west extension in an indistinct ragged joint, though the evidence of the projecting boulder plinth indicates that the eastern jamb of the extension doorway (Plate 8) represents the former north-west angle of the primary range.
- 4.2.3 The **south elevation** (Plate 6) is again of exposed stone rubble construction above an offset boulder plinth (Plate 7), rising to a rendered ridge stack. A single 2/2 horned sash is located to the west side of the elevation at first floor level, the jambs of which extend some way below the window opening as clear straight joints. To the west, the gable end meets the south-west extension in an indistinct ragged joint. The **west elevation** is obscured by the Phase II and Phase III extensions.

³ These buildings are beyond the scope of the current study.

⁴ A window of similar form is included within the agricultural range to the south of the main house (see Plate 1).

Interior

- 4.2.4 Internally, it would appear that the main range originally comprised a classic two-unit plan of hall (S) and service rooms (N) at ground floor level with chambers over, though details of these primary arrangements have been lost to a great extent to later modifications.

Ground Floor (Figure 3)

- 4.2.5 The **ground floor** is arranged on a four bay plan, here numbered 1 to 4 from south to north, Bay 1 being taken up for the most part by the principal southern fireplace/stack. The range is subdivided by a series of modern studwork partition walls to form two rooms ([GF01] and [GF02]), with a lateral passageway to the west, though it is understood to have formerly comprised, until comparatively recently, a single space.⁵ To the south, room [GF01] is lit by a 4/4 sash window with splayed reveals within the east wall of Bay 2 and heated by the principal fireplace within the south wall (Plate 9), exposed during recent work, the recess of which is spanned by a substantial, flat timber bresummer, chamfered though un-stopped. To the west of [GF01], the southern section of the primary west wall has been removed (see Plate 13), forming a wide access into [GF04] within the south-west extension, and a new timber dog-leg stair (Plate 14) inserted in the location of the assumed original stone winder. Room [GF02] (Plate 15) is located to the north end of the range, occupying Bay 4 and most of Bay 3. It is lit by 2/2 sashes within Bay 4 of the east wall (splayed reveals) and at the west end of the north wall (perpendicular reveals). The principal doorway to the range is within the east wall of Bay 3 (Plate 16), with a corresponding doorway piercing the west wall directly opposite, opening onto [GF03] within the north-west extension.
- 4.2.6 The range is spanned by three principal transverse floor beams (A-C from south to north), all finished with plain 1¼ in. chamfers; the two southern beams, A and B, are substantial, measuring 8 and 11 in. wide x 1ft deep, while beam C at Bay 3/4 (Room [GF02]) is slighter at 6½ in. wide. Beam C displays redundant mortices to its soffit suggestive of a former partition at Bay 3/4. The ceiling structure (Plates 10/11) comprises x 11 square-section common joists per bay, of 4 x 4in. scantling with slight chamfers and plain run-out stops, jointed to the principal beams using bare-faced soffit tenons (Plate 12). The ceiling of Bay 4 is boarded over, though a description of the house in 1964⁶ confirms that a longitudinal beam forming the head of a partition wall was formerly exposed here. A number of common joists within Bay 3 (W) have been renewed (Plate 17), possibly related to a former stair, while a scar in the ceiling plaster/joists immediately south of Beam C denotes the location of a former (secondary) transverse partition.
- 4.2.7 A dated timber plaque within Room [GF02] is inscribed 'IHS 1678' (Plate 18), though this feature is *ex-situ* and does not relate to the house, being understood to derive from a font cover from Penrhos church (see RCHAMW, 1964)

First Floor (Figure 4)

- 4.2.8 **First floor** of the primary range is accessed via the new, timber dog-leg stair inserted to the west of the principal stack within Bay 1 (Plate 14) and presumably replacing an original stone winder at the same location. The head of the stair (Plate 19) opens at the southern end of a lateral passage [1F01] which extends along the western side of the range (Plate 20), with a series of doors serving a suite of three bedrooms ([1F02-04]) to the east and a small WC [1F05] at the north-west corner. A single doorway towards the north end of the west wall serves the upper level of the Phase II range, while an opening to the south opens onto a small area beneath the roofslope of the single-storey south-west extension (Plate 21).
- 4.2.9 Bedroom [1F02] is located to the south end of the range within Bays 1/2; it is dominated to the south by the stepped mass of the principal stack (Plate 22) and is lit to the east by the southern of the three 19th-century dormers (Plate 23); the northern dormers light rooms [1F03] and [1F04] respectively. No evidence for an

⁵ Mrs. Sturkey (owner), *pers. comm.*

⁶ RCAHMW Survey and Inventory of the Ancient Monuments of Caernarvonshire Vol III, (1964, 89).

original fireplace was recorded within the north gable wall in [1F04], though the masonry of the external gable indicates that significant modification of this feature has been undertaken.

Roof (Figures 4 and 5)

- 4.2.10 The **roof structure** of the principal range (Plate 24) is of four bays (1 to 4 from south to north) defined by three collar beam trusses (**T1** to **T3** from south to north); all first floor rooms being ceiled at collar level (Figure 5).⁷ The lower principals (6½ x 4 in. scantling) of **T1-T3** are exposed at first floor level, where they were noted to be plain chamfered to their lower arises, though the upper principals visible at roof level would appear to be only roughly converted and simply halved/lapped to the apex, secured by double-pegs (Plate 25). Collars are simply lapped onto the north face of the principals at each truss. The roof itself is carried on two tiers of through purlins and a plank section ridge piece. A stud partition with horizontal boarding applied to its northern side, extending to the level of the upper side-purlin and set slightly to the south of Truss **T1** (assumed to be on the line of the partition between [1F02/03]) is visible on photographs of the roof (see Plate 24), suggesting that the first floor may formerly have been ceiled, at least in part, at a somewhat higher level.

4.3 The North-West Extension (Phase II)

Exterior

- 4.3.1 The north-west extension projects perpendicularly from the northern end west elevation of the principal range (Plate 8); it is stone-built (roughly coursed) with red-brick detailing (window/door jambs, angles etc.), of two full storeys beneath a pitched, slate-clad roof, gabled to the west and abutting the roof of the principal range to the east. A narrow, rendered two-pot stack rises above the western gable. The range occupies a rectangular plan with overall dimensions of 5.5m (18ft) east-west x 5m (16½ ft) north-south. The **north elevation** (Plate 26) includes a ground-floor doorway to the east, the western jamb only of which is in brick; the eastern, stone jamb of this door constitutes the north-west angle of the primary range, clearly evidenced by the southern return of offset boulder footing of the latter range, a feature also visible internally (see §.4.3.3; Plate 31). Set approximately central to the range, superimposed sashes, stylistically matching those of the north elevation, are set within red-brick jambs lighting ground floor (4/4) and first floor (3/3); the north-western angle is also in red brick.
- 4.3.2 The **west elevation** (Plate 27) is of roughly coursed stone-rubble with red-brick angles and a vertical, red-brick fireback/ flue lining to the centre of the elevation beneath the rendered gable stack, laid predominantly to stretcher bond with the occasional header course. A single 3/3 sash is located at first floor level beneath the southern roof slope. The **south elevation** (Plate 28) includes a single 2/2 sash towards the western end of the ground floor, the eastern part of the elevation being abutted by the Phase III south-west extension (Plate 33).

Interior

Ground Floor (Figure 3)

- 4.3.3 **Ground floor** level comprises a single room [**GF03**] (Plate 29), accessed from the exterior via a door at the east end of the north wall and from the principal range via a doorway at the south end of the east wall. A further door opens to the south onto the Phase III south-west extension [**GF04**]. The room is lit by a 4/4 sash in the north wall and a 2/2 sash to the south and is heated by an imposing slate-clad fireplace with decorated lintel projecting centrally from the west wall (Plate 30). At the base of the east wall, an offset represents the relic boulder footing of the principal range (Plate 31). The ceiling of [**GF03**] is plastered with

⁷ Physical access to the upper roofspace was highly restricted, being limited to a very small hatch within the ceiling of [1F02]. The following description and drawings/plates included in this report are based upon a visual inspection from this location only and upon very limited measurement.

no visible evidence for an independent stair access to the upper floor, which is thus accessed solely via the primary range.

First Floor (Figure 4)

- 4.3.4 **First floor** level is subdivided by modern stud partitions to form two rooms, bedroom [1F07] to the west and bathroom [1F06] to the north-east, both served by a passageway running along the south side of the range, opening off corridor [1F01] within the primary range. Both rooms are ceiled at the level of the side purlin of the roof; no trace of a first floor fireplace survives within the western gable wall.

Roof (Figures 4 and 5)

- 4.3.5 The **roof structure** of the north-west extension (Plate 32) is of common rafter form supported on a single tier of side purlins (9 x 4 in. scantling) and a plank section ridge piece.⁸

4.4 The Single-Storey Extension (Phase III)

Exterior

- 4.4.1 The phase III extension comprises a stone-built, single-storey block with cat-slide roof occupying the south-western angle of the principal and north-west ranges (Plate 33). The block clearly abuts the Phase II extension to the north while it meets flush with the south gable of the principal range in an indistinct ragged joint.

Interior

- 4.4.2 A doorway within the **south elevation** opens onto kitchen [GF04], lit by a wide, 3-light casement within the west wall. The east side of the room is open to the principal range, effected by the removal of the southern part of the primary west wall. At first floor level, a small seating area [1F08] is formed in beneath the mono-pitch roofslope (Plate 21) with storage cupboards to north and south, the latter accessed from the ½ landing of the dog-leg stair.

5 TREE-RING DATING

- 5.1 A programme of tree-ring dating was undertaken by the Oxford Dendrochronology Laboratory in July 2011 (Miles and Bridge, 2011). A total of 11 samples were taken from the ground floor ceiling structure and from the trusses of the main range roof; samples are summarised in tabulated form below and locations are indicated in Figures 3 and 4.

Sample number	Timber and position	Date of series	H/S boundary date	Sapwood complement	No of rings	Felling date range
GROUND FLOOR						
pym01	South floor beam	1473-1599	1564	35	127	after 1600
pym02	Joist, 4 th from west	1415-1553	c.1569	c.17	139+33NM	after c.1586
pym03	Joist, 5 th from west	1413-1507	---	---	95	after 1518
pym04	Joist, 8 th from west	1457-1570	---	---	114	after 1581
pym05	Joist, 7 th from west	1457-1573	1573	H/S +19NM	117	after 1593
pym06a	Joist, 9 th from west	1498-1580	1581	+1 to H/S	83	---
pym06b	ditto	1566-1607	1582	25½ C	42	---

⁸ Physical access to the upper roofspace was again highly restricted, being limited to a very small hatch within the ceiling of [1F07]; see fn. 7 above.

pym06	Mean of 06a and 06b	1498-1607	1582	25½ C	110	Summer 1608
pym07	North beam	1429-1591	1572	19¼ C	163	Spring 1592
FIRST FLOOR						
Pym08	East principal rafter, truss T1	---	---	25½ C	62	---
Pym09	West principal rafter, truss T1	---	---	27½ C	69	---
pym10	West principal rafter, truss T3	---	---	33¼ C	73	---
Pym8910	Mean of 08, 09 and 10	---	---	33¼ C	73	---

Table 1:

Summary of Dendrochronological samples (from Miles and 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.

- 5.2 The cores from the ceiling structure all matched to create a site chronology spanning 195 years (1413-1607); of these, the northern floor beam [**pym07**] derived from a tree felled in 1592 while the southern beam [**pym01**] was from a tree felled after 1600 with one joist [**pym06**] from a tree felled in summer 1608. This makes the most likely date for the construction of the first floor 1608 or within a year or two of that date, utilising at least some stock-piled timber. The cores from the roof trusses would appear to derive from a single same tree, though with a relatively short sequence of 73 years, they failed to date.

6 INTERPRETATION

6.1 Origins

- 6.1.1 Plas-ym-Mhenrhos originated in the early years of the 17th century as a Smith Type 'A' end-chimney house on the Snowdonia plan (Smith 1988, 157-8; Map 27), stone-built of 1½-storeys above a projecting boulder footing. Although the interior of the primary house has been extensively modified, convention would dictate that it originally comprised a ground floor hall to the south, occupying Bays 1 to 3 and served by opposing doorways at Bay 3 (reflected by extant openings), and heated by the principal stack in the south gable end, with two small service rooms located within Bay 4 to the north. Cut-off mortices within the soffit of the northern ceiling beam (C) are suggestive of an original transverse partition at Bay 3/4 while a description of the house in 1964⁹ confirms that Bay 4 was formerly sub-divided by an axial partition. First floor level would have been accessed via a primary winder stair to the west of the main fireplace within Bay 1 (lost to subsequent phases of alteration) and would likewise have comprised two rooms with a fireplace heating the northern room; no trace of a fireplace survives internally within the north wall, though a (now redundant) gable chimney survives while an area of patching and opposed projecting stones visible within the exterior masonry of the gable end suggest that any original first floor fireplace may have been furnished with a corbelled stack.

6.2 Phases of Extension

- 6.2.1 The house was extended in two phases and modified during the (?)18th and 19th centuries, firstly with the addition of a two-storeyed western extension at the north end of the west elevation (Phase II) and the subsequent introduction of a single-storey block with cat-slide roof (Phase III) within the south-west angle formed by the two ranges. The Phase II extension was beyond the scope of the dendrochronological study, though its form and extensive use of red-brick detailing suggest a late-18th or early-19th century date. The range has no independent vertical communication and was thus presumably always linked to the main range, probably functioning as an additional parlour with chamber over. The introduction of the Phase III block, presumably creating additional/alternative service accommodation evidently entailed the removal of the south end of the west wall of the primary block and the renewal of the original winder stair.

⁹

RCAHMW Survey and Inventory of the Ancient Monuments of Caernarvonshire Vol III, (1964, 89).

6.2.2 The roof over the main range did not date dendrochronologically, though its form would seem to indicate that it represents a secondary modification, perhaps of 18th-century date. Examination of the junction between the main range and Phase II roof was not feasible due to restricted access and it has not proved possible to establish whether the re-roofing of the primary range was contemporary with the addition of the Phase II north-west range. The current pattern of sub-division of the first floor level may date to this period.

6.3 Later Modifications

6.3.1 The decorative, steeply-pitched gables of the dormers and porch of the east elevation are suggestive of a phase of modification in the later 19th century; fenestration throughout, with the exception of the Phase III block, is stylistically consistent with the east front and presumably relates to a coherent programme of modification/refurbishment.¹⁰

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 owners Mr and Mrs Sturkey and family for forbearance and generous hospitality during the course of survey work.

7.2 The project was undertaken in collaboration with, and with funding from, the Llŷn Landscape Partnership Scheme.

7.3 Site recording and assessment were undertaken by Mr Ric Tyler AlFA who also wrote, collated and illustrated the current report.

¹⁰ Documentary/archival research has the potential to illuminate the later phases of development of the house.

8 SOURCES

a) Published Sources

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

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.

RCAHMW, 1964. *Survey and Inventory of the Ancient Monuments of Caernarvonshire, Volume III'*

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

b) Unpublished Sources

Miles D and Bridge M, 2011. 'The Tree-Ring Dating of Plas-ym-Mhenrhos, Phenrhos, Pwllheli, Gwynedd.' Oxford Dendrochronology Laboratory report No. **2011/33**.

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.
- 2.2 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 RCAHME's on-line database as part of partnership.
8. **Archive.** Archive to be deposited in RCAHME's archive (National Monuments Record for Wales) as part of partnership.
9. **Logos.** Partnership with RCAHME to be noted on cover of report.

APPENDIX B: Register of Project Drawings

NB: All site drawings were prepared in pencil on archivally stable drafting film at a scale of 1:50.

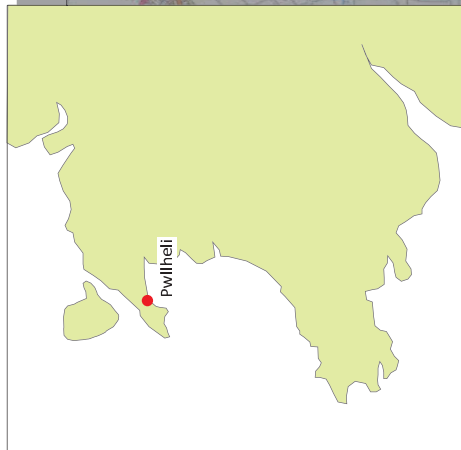
Drg. No.	Subject	Format	Scale	Date	Recorder
2011-013b/001	Ground Floor Plan	A3	1:50	01.12.11	R Tyler
2011-013b/002	First Floor Plan	A3	1:50	01.12.11	R Tyler
2011-013b/003	Transverse cross section	A3	1:50	01.12.11	R Tyler

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 asterisk (*) are reproduced as plates within the current document.

Photo No.	Plate No.	Subject	Orientation	Date	Photographer
DSC_0246*	1	General view from south-east	→ NW	02.12.11	R Tyler
DSC_0247*	2	Principal range, east elevation	→ W	02.12.11	R Tyler
DSC_0248*	(cover)	General view from north-east	→ SW	02.12.11	R Tyler
DSC_0249		East elevation; porch	→ SW	02.12.11	R Tyler
DSC_0250		East elevation, porch	→ W	02.12.11	R Tyler
DSC_0251		East elevation, porch	→ W	02.12.11	R Tyler
DSC_0252		East elevation; 4/4 sash to [GF01]	→ W	02.12.11	R Tyler
DSC_0253		East elevation; dormer window to [1F02]	→ W	02.12.11	R Tyler
DSC_0254*	3	East elevation, detail of porch and dormers	↑	02.12.11	R Tyler
DSC_0255		East elevation; detail of porch finial	→ NW	02.12.11	R Tyler
DSC_0256*	4	Principal range, north elevation	→ S	02.12.11	R Tyler
DSC_0257		Principal range, north elevation	→ SE	02.12.11	R Tyler
DSC_0258*	26	NW extension, north elevation	→ S	02.12.11	R Tyler
DSC_0259*	8	General view of north elevation	→ SW	02.12.11	R Tyler
DSC_0260*	5	Principal range, north elevation; ?blocking – possible former corbelled stack at 1F level	↑	02.12.11	R Tyler
DSC_0261		North elevation; SJ between principal range and NW extension	→ S	02.12.11	R Tyler
DSC_0262		North elevation; SJ between principal range and NW extension	→ S	02.12.11	R Tyler
DSC_0263		North elevation; offset boulder footings	↓	02.12.11	R Tyler
DSC_0264*	27	NW extension, west gable end	→ NE	02.12.11	R Tyler
DSC_0265		NW extension, west gable end	→ E	02.12.11	R Tyler
DSC_0266		NW extension, south elevation (oblique)	→ NE	02.12.11	R Tyler
DSC_0267*	33	SW block with cat-slide roof	→ SE	02.12.11	R Tyler
DSC_0268*	28	NW extension, south elevation	→ N	02.12.11	R Tyler
DSC_0269*	6	Principal range, south elevation (oblique)	→ E	02.12.11	R Tyler
DSC_0270*	7	Principal range, south elevation; offset boulder footings	→ E	02.12.11	R Tyler
DSC_0271		Principal range, south elevation; offset boulder footings (detail)	→ E	02.12.11	R Tyler
DSC_0272		NW extension roof structure	→ E	02.12.11	R Tyler
DSC_0273*	32	NW extension roof structure	→ E	02.12.11	R Tyler
DSC_0274*	24	Principal range, roof structure	→ N	02.12.11	R Tyler
DSC_0275		Principal range, roof structure, apex detail	↑	02.12.11	R Tyler
DSC_0276		Principal range, roof structure, purlin	→ NE	02.12.11	R Tyler
DSC_0277*	25	Principal range, roof structure, apex detail	↑	02.12.11	R Tyler
DSC_0278		Principal range, roof structure	→ N	02.12.11	R Tyler
DSC_0279		Room [GF01]; fireplace in south wall	→ SW	02.12.11	R Tyler
DSC_0280		Room [GF01]; fireplace in south wall	→ SW	02.12.11	R Tyler
DSC_0281*	9	Room [GF01]; fireplace in south wall	→ SW	02.12.11	R Tyler
DSC_0282		Room [GF01]; fireplace in south wall	→ SE	02.12.11	R Tyler
DSC_0283		Room [GF01]; fireplace in south wall	→ SE	02.12.11	R Tyler
DSC_0284		Room [GF01]; east wall	→ E	02.12.11	R Tyler
DSC_0285		Room [GF01]; ceiling structure	↑	02.12.11	R Tyler
DSC_0286*	10	Room [GF01]; ceiling structure	↑	02.12.11	R Tyler
DSC_0287*	11	Room [GF01]; ceiling structure	↑	02.12.11	R Tyler
DSC_0288		Room [GF01]; ceiling structure	↑	02.12.11	R Tyler
DSC_0289*	12	Room [GF01]; ceiling structure (joint detail)	↑	02.12.11	R Tyler
DSC_0290		Room [GF01]; ceiling structure	↑	02.12.11	R Tyler
DSC_0291		Room [GF04]; inserted stair	→ S	02.12.11	R Tyler
DSC_0292*	14	Room [GF04]; inserted stair	→ SE	02.12.11	R Tyler
DSC_0293*	13	Room [GF04]; truncated west wall of primary range	→ N	02.12.11	R Tyler
DSC_0294		Room [GF04]; passage towards [GF02]	→ N	02.12.11	R Tyler
DSC_0295*	15	Room [GF02]; looking east	→ E	02.12.11	R Tyler
DSC_0296*	16	Room [GF02]; door in east wall	→ E	02.12.11	R Tyler

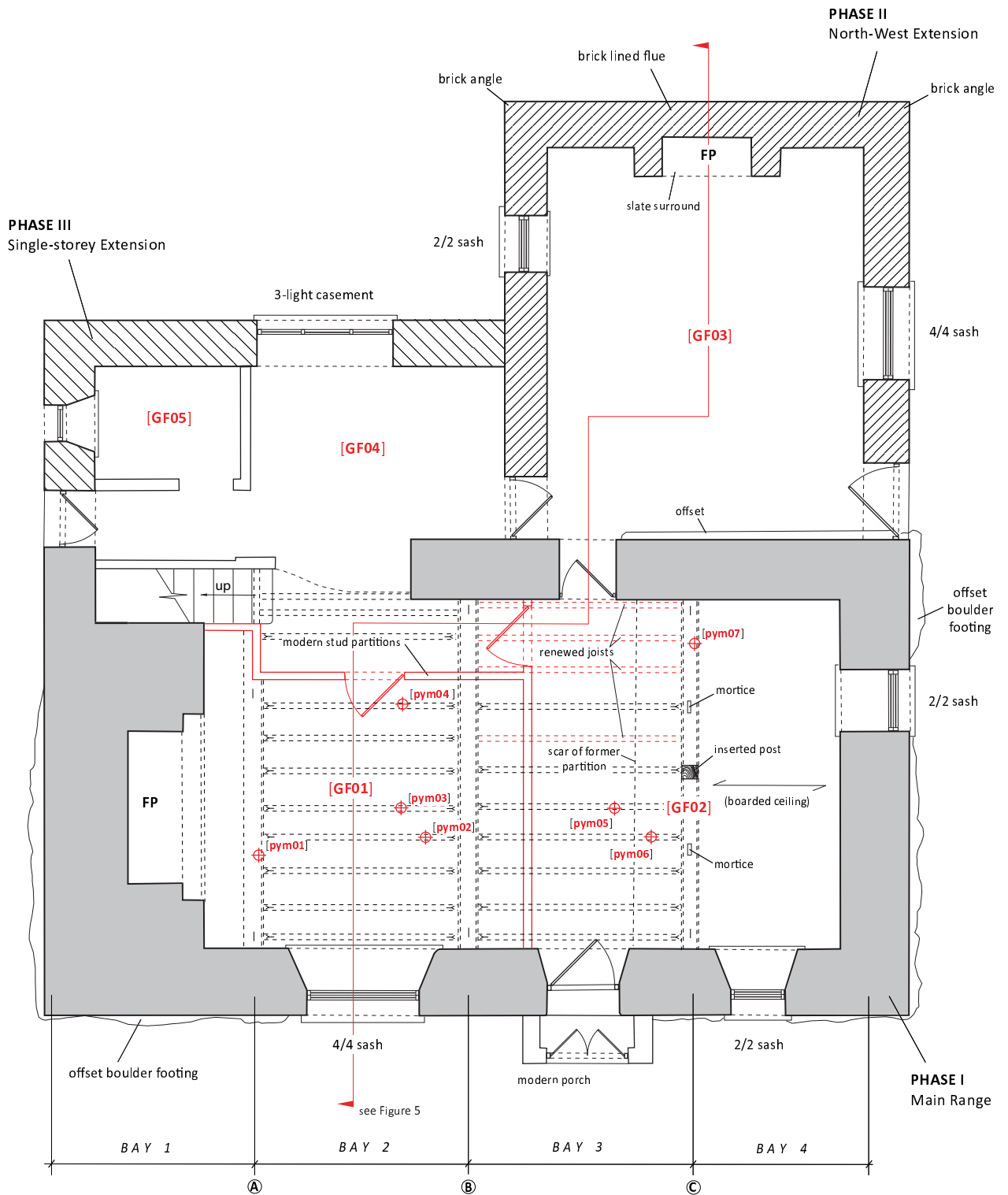
DSC_0297*	18	Room [GF02]; dated plaque 'IHS 1678'	→ E	02.12.11	R Tyler
DSC_0298		Room [GF02]; looking north-west	→ NW	02.12.11	R Tyler
DSC_0299		Room [GF02]; ceiling structure	↑	02.12.11	R Tyler
DSC_0300*	17	Room [GF02]; ceiling structure	↑	02.12.11	R Tyler
DSC_0301		Room [GF02]; ceiling structure	↑	02.12.11	R Tyler
DSC_0302		Room [GF02]; ceiling structure	↑	02.12.11	R Tyler
DSC_0303*	29	Room [GF03] looking west	→ NW	02.12.11	R Tyler
DSC_0304		Room [GF03]; FP in west wall	→ W	02.12.11	R Tyler
DSC_0305		Room [GF03]; detail of slate FP mantel	→ W	02.12.11	R Tyler
DSC_0306*	30	Room [GF03]; detail of FP.	→ SW	02.12.11	R Tyler
DSC_0307		Room [GF03] looking south-west	→ SW	02.12.11	R Tyler
DSC_0308*	31	Room [GF03] east wall – offset at base of principal range W wall	→ N	02.12.11	R Tyler
DSC_0309		Room [1F01]; head of inserted stair	↓	02.12.11	R Tyler
DSC_0310		Room [1F01]; head of inserted stair	→ S	02.12.11	R Tyler
DSC_0311*	21	Room [1F01]; passage to west side of primary range	→ N	02.12.11	R Tyler
DSC_0312		Room [1F02]; stack in south wall	→ SW	02.12.11	R Tyler
DSC_0313*	20	Room [1F02]; stack in south wall	→ SW	02.12.11	R Tyler
DSC_0314*	23	Room [1F02]; principal rafter foot and dormer window	→ SE	02.12.11	R Tyler
DSC_0315		Room [1F02]; principal rafter foot and dormer window	→ SE	02.12.11	R Tyler
DSC_0316		Room [1F02]; principal rafter foot	→ S	02.12.11	R Tyler
DSC_0317		Room [1F02]; principal rafter foot and collar	→ S	02.12.11	R Tyler
DSC_0318		Room [1F03]; dormer	→ E	02.12.11	R Tyler
DSC_0319		Room [1F03]; principal rafter foot and collar	→ SE	02.12.11	R Tyler
DSC_0320		Room [1F03]; principal rafter foot and collar	→ SE	02.12.11	R Tyler
DSC_0321		Passage within NW extension	→ W	02.12.11	R Tyler
DSC_0322		Room [1F07] looking NE	→ NE	02.12.11	R Tyler
DSC_0323*	19	Room [1F01]; head of stair and projecting stack	→ SE	02.12.11	R Tyler
DSC_0324*	22	[1F08]; space beneath catslide roof	→ W	02.12.11	R Tyler
DSC_0325		Room [GF04]; inserted stair	→ S	02.12.11	R Tyler
DSC_0326		Room [GF04]; renewed rafters to north of inserted stair	↑	02.12.11	R Tyler
DSC_0327		Room [GF01]; ceiling structure	↑	02.12.11	R Tyler






Based upon Explorer 1:25,000 map (Sheets 253)
 Ordnance Survey © Crown Copyright 2005.
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© Google Earth



KEY

-  location of dendro sample
-  blocking
-  inserted features

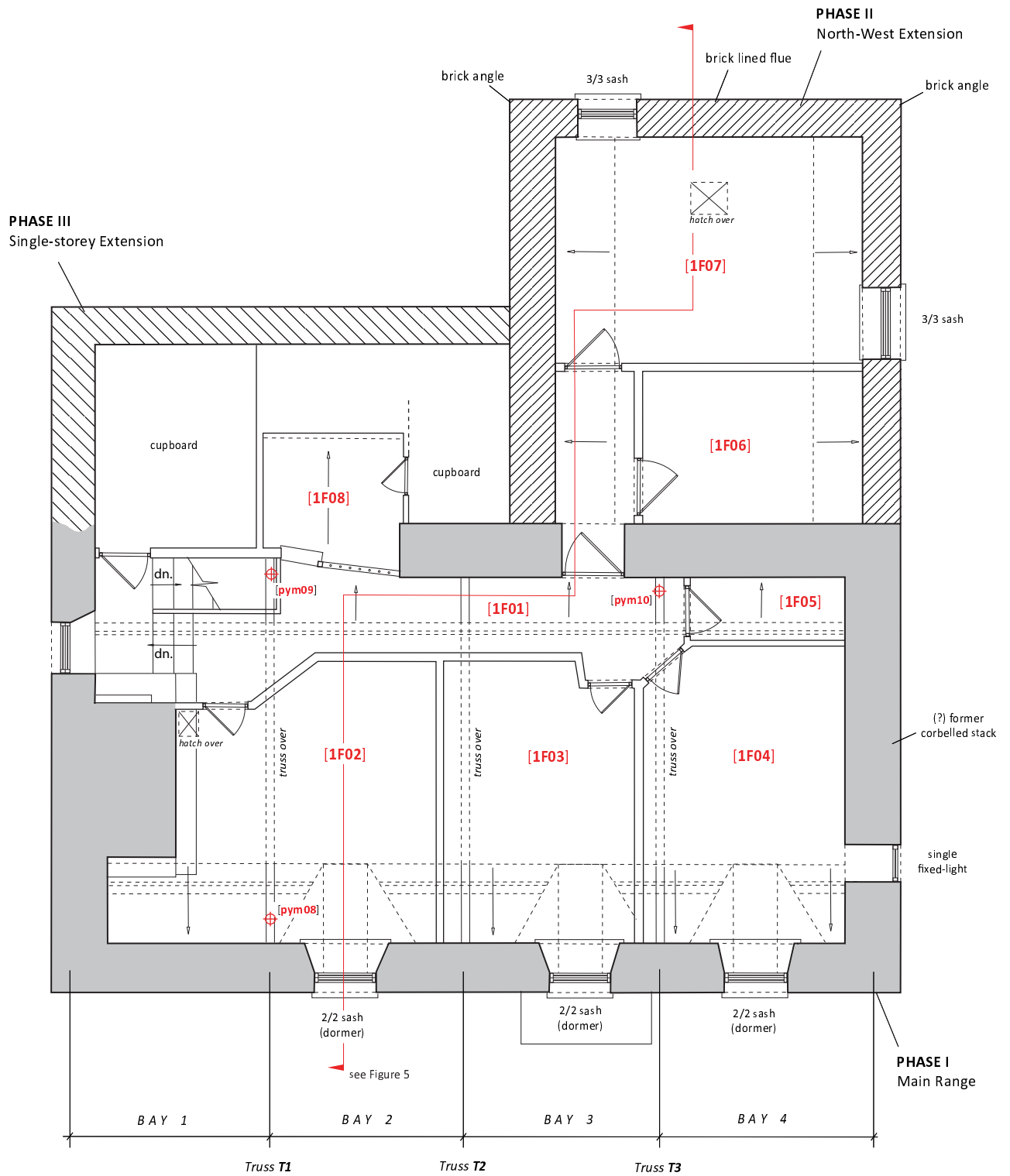
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


SCALE IN FEET

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KEY

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-  blocking
-  inserted features
-  roof slope

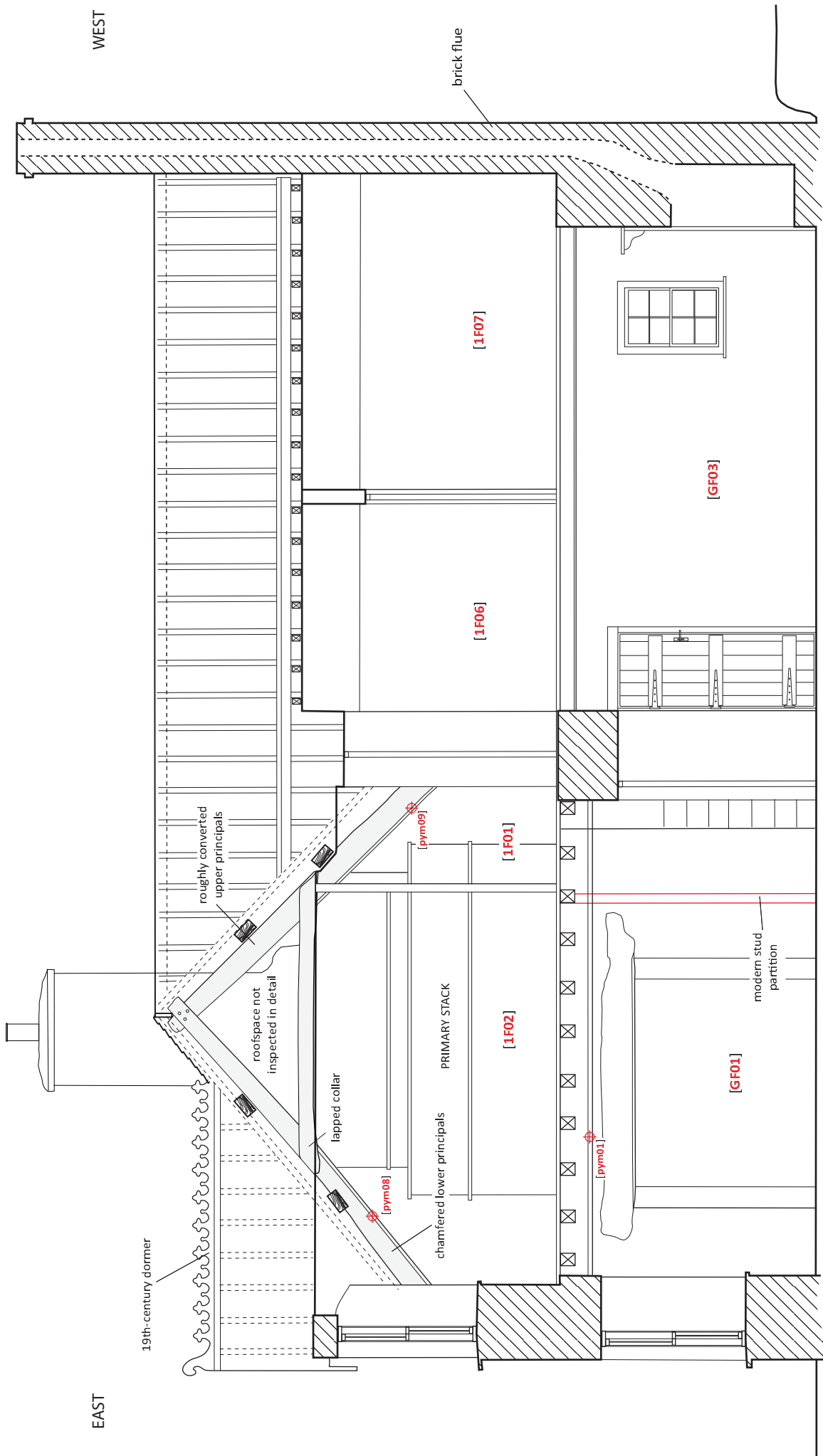
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SCALE IN METRES (1: 75 @ A4)

SCALE IN FEET

0 5 10 15 ft





Plas-ym-Mhenrhos, Llanor, Pwllheli, Gwynedd
Figure 5: Composite cross-section



Plate 1: General view looking north-west, principal range of Plas-ym-Mhenrhos to right.



Plate 2: Principal range, east elevation.



Plate 3: Principal range; detail of porch gable and dormers.



Plate 4: Principal range; north elevation.



Plate 5: Evidence for possible former corbelled stack to north gable.



Plate 6: Principal range, south elevation (oblique).



Plate 7: Offset boulder footings to south elevation (also present to east and north elevations and evidenced to west).



Plate 8: General view of north elevation; principal range (left) and north-west extension (right).



Plate 9: Room [GF01]; principal FP to south wall.



Plate 10: [GF01] ceiling structure, looking east.



Plate 11: [GF01]; southern beam before FP.



Plate 12: [GF01]; detail of main beam / common joist. NB; fine chamfer, stop and bare-faced soffit tenon joint.



Plate 13: [GF04] truncated west wall.



Plate 14: Inserted stair at SW angle of principal range.



Plate 15: Room [GF02] looking north-east.



Plate 16: Room [GF02]; door in east wall.



Plate 17: Room [GF02]; renewed ceiling joists to west.



Plate 18: Dated plaque 'IHS 1678', commonly held to represent former font cover from Penrhos church.



Plate 19: Head of inserted stair (note stack).



Plate 20: Lateral corridor [1F01] to west side of principal block, note principal rafters.



Plate 21: [1F08] within roofspace of SW block



Plate 22: Principal stack within Room [1F02].



Plate 23: Principal rafter of Truss T1 within Room [1F02] with C19th dormer to left.



Plate 24: Roof of principal range observed from hatch within [1F02].



Plate 25: Principal range roof; apex detail



Plate 26: North-west extension; north elevation.



Plate 27: NW extension, west gable end.



Plate 28: NW extension, south elevation.



Plate 29: NW extension, room [GF03] looking north-west.



Plate 30: [GF03]; detail of slate FP surround.



Plate 31: [GF03]; offset at base of east wall (ie. western exterior wall of primary range).



Plate 32: Common rafter roof over NW extension.



Plate 33: Phase II extension with cat-slide roof.