

CYNFAL-FAWR, MAENTWROG, GWYNEDD

[NPRN 28334]

Architectural Record



FINAL REPORT

January 2012



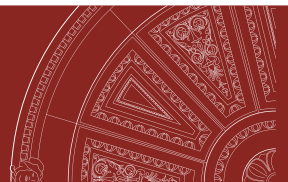
A report commissioned by
The North West Wales Dendrochronology Project
in partnership with
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CYNFAL-FAWR

Maentwrog, Gwynedd

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Architectural Record

Summary

Cynfal-fawr occupies a relatively isolated site on the south side of the Ceunant Cynfal, set back from the south-west side of a country road leading west off the A470 at Bont Newydd c.1.25km south-east of Llan Ffestiniog, centred on NGR SH 70294 40662 and lying at an elevation of c.175m AOD. The building is Grade II listed and is included on the RCAHMW on-line database Coflein, NPRN 28334. The building was recorded in January 2012 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 farmhouse complex comprises two chronologically distinct ranges, abutting and set at right angles to one another with a further, attached agricultural range to the south. The earlier, eastern range incorporates the fragmentary remains of a cruck-built hall house; only a single cruck-couple survives, though the open, arch-braced form of the cross-frame indicates that it formerly defined the centre of a two-bay open hall. Convention would dictate that a house of such status would have been arranged on a three-unit plan with in-line 'outer' and 'inner' rooms flanking the two-bay hall. Surviving details indicate that the 'upper' end of the hall would have lain to the south (up-slope) and any original 'outer' room would thus have been located to the north, beyond the ground plan of the extant building. The cross-passage would have been located to the lower bay of the hall. The primary range has been dated by dendrochronology to 1515 or a year or two after that date. Major modifications to the primary cruck hall comprised the replacement of original external timber-framed walls with stone and the removal of the primary outer bay, the insertion of a large, enclosed stone stack and the introduction of a first floor to the former open hall to create an upper chamber. These alterations may be contemporary or may alternatively form three separate phases of modification.

Extending westwards from the north end of the early range is a two-storey house with attic of c.1700, built on a single-pile, three-bay plan with central stair-hall, the northern elevation of which was refaced in the c.1800. The early house latterly functioned as a service range to the new block.

1 INTRODUCTION

1.1 Background to the Project

- 1.1.1 Cynfal-fawr, Maentwrog, Gwynedd was recorded in January 2012 as part of the North-West Wales Dendrochronology Project¹ undertaken in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW).

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

- 1.1.2 The house occupies a relatively isolated site on the south side of the Ceunant Cynfal, set back from the south-west side of a country road leading west off the A470 at Bont Newydd (Plate 1) c.1.25km south-east of Llan Ffestiniog, centred on NGR SH 70294 40662 and lying at an elevation of c.175m AOD (Figure 1). The house is sited on gently rising ground, bordered to the south by the steep embankment of the former GWR Blaenau Ffestiniog-Bala branch line (Figure 2).
- 1.1.3 Cynfal-fawr is a Grade II listed building (CADW Listed Building ID 4775)² and, as such, is accepted as being of national significance, while it is also included on the RCAHMMW on-line database Coflein, NPRN 28334.³ Particular significance is imparted by its historical associations with the noted poet Huw Llwyd o Gynfal, professional soldier and bard (c.1569 -c.1630)⁴ and the preacher and poet Morgan Llwyd o Wynedd (1619-59),⁵ who was born at the house. The house is mentioned in passing in Peter Smith's *Houses of the Welsh Countryside* (1988, map 12, p.397) while a brief description is included in *The History of Merioneth, Vol.II: The Middle Ages* (J and L Beverley Smith 2001, 453).
- 1.1.4 The recording was undertaken subsequent to a programme of dendrochronological sampling, undertaken by the Oxford Dendrochronology Laboratory in August 2011 (see section §.5; Bridge 2011).

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 January 2012.

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 Cynfal-fawr to complement the dendrochronological study, previously undertaken. At the instruction of the project director, recording was focussed upon the earlier, eastern range of the house, with a summary record only being prepared for the later, western range.
- 2.2 Specific aims of the recording action are listed at Section §.5 of the project brief, reproduced at **Appendix A** below.

² <http://www.britishlistedbuildings.co.uk/wa-4775-cynfal-fawr-maentwrog>

³ <http://www.coflein.gov.uk/en/site/28334/details/CYNFAL+FAWR+FARMHOUSE%3BINDEPENDENT+MEETING+HOUSE%2C+MAENTWROG/>

⁴ <http://yba.llgc.org.uk/en/s-LLWY-HUW-1568.html>

⁵ <http://yba.llgc.org.uk/en/s-LLWY-MOR-1619.html>

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.

3.1.2 The Cadw listed building report of 1952 (updated 2005) notes that a residence is first recorded at the site in 1480, owned by one Rhys ap Ifan and passing to his son Hwyl ap Rhys who in turn had three sons – Owen, Rhys and Dafydd. Cynfal-fawr is recorded as the birthplace of Morgan Llwyd o Wynedd (b.1619) and Morgan's son Caleb is commemorated in an inscribed stone, dated 1660, incorporated in the north gable of the older part of the house (see §.4.2.3). The house was licensed as an Independent meeting house in 1669 and was passed to Morgan's second son Samuel whose grandsons, Christopher and Joseph Bushman,⁶ were the last of the family to live at the house.

3.2 Historic Building Record

3.2.1 The Historic Building Record comprised an exterior and interior examination of the house and the compilation of drawn, photographic and written records⁷ of the same 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 of the early 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**.

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 farmhouse buildings was made as free text; this forms the basis of the following description.

⁶ Joseph Bushman is commemorated in a stone plaque, dated 1794, incorporated into the inserted stack of the primary range (see §.4.2.7), though formerly attached to the nearby stable block (Cadw Listed Buildings Report).

⁷ Though see §.2.1.

4 BUILDING DESCRIPTION

4.1 Overview

- 4.1.1 The residential part of the farmhouse complex at Cynfal-fawr comprises two chronologically distinct ranges, abutting and set at right angles to one another (Figure 3; Plate 2), with a further, attached agricultural range to the south.
- 4.1.2 The primary, east range is aligned approximately north-south, of a single storey and incorporating the fragmentary remains of a cruck-built hall house, dated by dendrochronology to c.1515. Extending westwards from the north end of this range is a two-storey house with attic of c.1700 (the west range), the northern elevation of which was refaced in the c.1800.⁸
- 4.1.3 The lofted agricultural range⁹ is aligned east-west with an added outshut with cat-slide roof built against the east end of the north lateral wall; the entrance to the range is in the eastern gable end, with a pitching door over.

4.2 The East Range

Exterior

- 4.2.1 The **east range** comprises a rectangular house aligned north-south with exterior measurements of 11m (36ft) N/S x 7.5m (24½ ft) E/W, of a single storey standing c.5.5m (18ft) from interior floor level to ridge, beneath a pitched, slate-clad roof, gabled to the north and abutting a perpendicular agricultural outbuilding to the south.
- 4.2.2 The **east elevation** (Plate 3) is stone-built of a single-storey, rising above a partly surviving offset stone footing, beneath a pitched, slate-clad roof, gabled to the north and extending over the northern roofslope of the adjacent, east-west aligned agricultural range to the south. A single ridge stack is offset towards the southern end of the range. The principal doorway is located to the north end of the range with two windows to the south, arranged to either side of the stack; the northern window opening houses a two-light timber casement while that to the south houses a 9-pane fixed-light, the latter opening having been reduced in width to the north (Plate 4). An indistinct ragged joint within the masonry of the elevation may indicate that the walls were built in more than one campaign. A plaque adjacent to the main doorway, introduced in 1949, commemorates Morgan Llwyd (1619-1659), who is recorded as having been born at the house (Plate 5).
- 4.2.3 The **north elevation** (Plate 6) presents an asymmetrical gable of stone rubble construction with a small 4-pane fixed-light window to the apex lighting the interior first floor beneath a series of inserted pigeon-holes, lined in red-brick with projecting slate ledges and canopy (Plate 8). A westward return of the offset footing is obscured by the raised level of the garden to the north of the house, but its presence implies that the north and east walls are contemporary. A stone within the eastern part of the wall at ground floor level includes the graffiti 'CALEB LLOYD 1660' (Plate 7). To the west, the gable end meets the refaced north elevation of the west range in an uneven straight joint, while a clear raising of the eastern wall and related alteration to the eastern roofslope is evidenced by a sloping scar (Plate 6).
- 4.2.4 The southern section only of the **west elevation** is exposed (Plate 9), of stone rubble construction with an inserted two-light timber casement lighting the kitchen [GF03] internally, the northern section being abutted by the western range (see Plate 30). The **south elevation** is obscured by the adjoining agricultural range.

⁸ NB: dates are approximate as the west range failed to date dendrochronologically.

⁹ Not illustrated here, though see record photographs DSC_0010-12, 0029-30 and 0035 (see Appendix C).

Interior

Ground Floor (Figure 4)

- 4.2.5 The principal access to the interior of the east range is via the doorway in the north end of the east elevation which opens onto a small enclosed lobby [GF01], formed by modern, ephemeral stud-partition walls. Opening off the north side of [GF01], a straight-flight stair with lower quarter-turn rises from east to west against the north gable, the lower treads being in stone with the upper stair being of timber. A further door opens to the west onto the main living room of the house [GF02] (Plate 10), lit by a two-light timber casement window in the east wall, set within splayed reveals, and heated by a fireplace within a stone stack set centrally to the south side of the room (Plate 11). The fireplace recess is spanned by a substantial timber bresummer (18 x 17 in.), very slightly cambered, with a 1¼ in. plain chamfer to the lower arris.¹⁰ Lateral passages to east and west of the stack serve room [GF03] to the south, while a doorway at the north end of the west wall (opposite the main door) connects through to the west range. To the lateral walls, the lower eastern and western blades of cruck C1 are exposed (Figure 6; Plates 12/13), partly embedded within the rubble masonry; both extend to floor level, the eastern blade including a notched joint formerly engaging with a longitudinal cill beam, though the cruck is now supported on a stone pad (Plate 14); the width of the range, measured between cruck blades is 5.4m (17ft 9in.). The upper section of the western blade has been cut back at the level of the inserted ceiling (Plate 15).
- 4.2.6 The (inserted) ceiling of [GF02] is carried on a substantial central transverse beam (10 ½ x 14in. deep; Plate 16) moulded with run-out stops (Figure 4 inset profile A; Plate 17) and by a transverse beam, moulded to the north only (13 x 5in.; Figure 4 inset profile B), aligned immediately north of the inserted stack. The upper floor is carried by a total of 14 north-south aligned common joists, 4 x 5in. scantling at 16in. centres, unchamfered but with the arrises shaved off; the common joists to the north-east quadrant of the ceiling have been renewed with 6 x 3in. timbers, presumably related to alterations to the main stair.
- 4.2.7 Room [GF03] (Plate 19), accessed via lateral passages to the east and west of the inserted stack, is lit by a small 9-pane fixed light window to the east and by a modern two-light timber casement to the west, the eastern opening having been narrowed to the north (visible externally - see Plate 4). The north wall of [GF03] is formed by the rear of the inserted stack (Plate 18), which includes a small fireplace offset to the east with monolithic, arched lintel (Plate 20) above which is set a plaque commemorating 'Joseph Bushman 1794'.¹¹ At the head of the north wall, a transverse beam may represent a relic tie for the cruck forming the upper end of the primary two-bay hall (Plate 18), though too little is exposed to allow a definitive identification as such; the western end of the beam has had a new section of timber spliced on while to the east the beam is boxed in over the eastern passage.
- 4.2.8 A doorway at the west end of the south wall opens onto a small lobby [GF04] and WC [GF05] housed within the area of the adjacent agricultural range.

First Floor (Figure 5)

- 4.2.9 First floor is accessed via the straight-flight stair rising against the north gable end which opens onto a single room [1F01], occupying that section of the range to the north of the inserted stone stack¹² and dominated by the upper section of the open cruck C1 (Figure 6; Plates 21/2). The cruck blades (6in. deep), smoothly curved to the lower section, straighten above the level of the inserted floor, rising as straight members to a vertical joint at the apex (Alcock's 'Type B'; Alcock 1981 95, fig. 49), joined by a slightly cambered, arch-braced collar (Plate 23), triple-pegged to the blades, and a high 'yoke' (Plate 25), the latter single-pegged.

¹⁰ Straight joints within the eastern and western jambs of the fireplace indicate that it has been reduced in width.

¹¹ See §.3.1.2. This plaque was formerly located in the stables (Cadw Listed Buildings Report) and thus its location within the fabric of the stack is incidental.

¹² The area to the south of the stack (ie. over [GF03]) was not accessed.

Arch-braces are engaged by long mortices to the inner face of the blades and soffit of the collar, secured by multiple pegs (x 4 to blade/brace; x 5 to brace/collar). Redundant mortices to the lower face of the upper blades (Plate 25) and upper face of collar (both unpegged) evidence former angled struts above collar level. Collar, yoke and arch-braces are all set flush to the southern face of the cruck blades, from where the pegs of the respective joints are driven through, indicating that the 'upper' end of the former two-bay hall was located to the south; likewise the empty strut mortices above collar level are offset towards the southern side of the blades. Overall, the carpentry of the cruck frame is good, if unremarkable in quality, well finished to the upper (south) face though lacking the decorative augmentation (in the form of chamfering/cusping etc.) often found in this context.

4.2.10 The **roof** was originally carried on two tiers of through purlins though these have for the most part been renewed when the roof pitch was amended; a short section of primary, lower purlin survives to the south-east (Plate 24), this is of 10 x 4½ in. scantling and retains a redundant mortice, double-pegged, for primary longitudinal wind bracing. The purlin was scarfed at the bay division with a stop-splayed joint, single-pegged to the back face of the blade (Figure 6 inset detail **A**; Plate 26). The common rafters of the roof have been replaced throughout though peg-holes within the surviving section of primary purlin suggest original rafters at 16 in. centres.

4.2.11 The full height of the cruck frame, measured from interior ground floor level to underside of roof is 5.5m (18ft) which matches closely with the width of the range, measured cruck to cruck (5.4m/17ft 9in.).

4.3 The West Range¹³

Exterior

4.3.1 The **west range** is of a single-pile, rectangular plan aligned east-west, with overall exterior dimensions of 11m (36ft) E/W x 7.25m (23ft 9in.) N/S, extending westwards from the north end of the west elevation of the primary east range.

4.3.2 The **north elevation** (Plate 27) is stone-built of narrow, roughly coursed rubble, strap-pointed, with some longer stones incorporated as quoins and lintels, of two full storeys with attic beneath a pitched, slate-clad roof, gabled to east and west with ridge stacks rising above each gable end. To the east, the elevation is continuous with the north gable of the east range, the junction of the two ranges being marked by an irregular straight joint. The fenestration is of three regular, closely spaced window bays grouped together and slightly off-centre to the east. At ground level, a central 6-panel door is flanked by square window openings housing distinctive three-light casements with transoms and 'gothic' two-centred lower lights beneath three small, square panes. Similar windows light the first floor and attic storeys, the latter within closely set gabled dormers. Straight joints extend beneath the jambs of the eastern ground floor window indicating a former door (Plate 28).

4.3.3 The **south elevation** (Plate 30) is of stone rubble construction rising to two full storeys beneath a pitched, slate-clad roof with ridge stacks to east and west. Two, widely spaced window openings housing two-light casements light the ground floor, repeated at first floor level, though here the western (left hand) opening is blocked. To the east, the range abuts the earlier east range.

4.3.4 The **west elevation** (Plate 29) presents a tall, wide gable of stone rubble construction, capped by a ridge stack and with simple square window openings housing two-light timber casements, two each to ground and first floor level to either side of the central stack. The **east elevation** is effectively obscured by the eastern range.

¹³ The description of the west range is in summary form only; see §.2.1.

Interior

- 4.3.5 The **west range** is accessed via the principal doorway set slightly off centre to the west of the north elevation and, internally, via a doorway opening off the west side of the eastern range. The interior has been much altered and the primary layout is difficult to ascertain. **Ground floor** level (Figure 7) is subdivided by modern stud walls to form two principal spaces ([GF06] and [GF07] to east and west respectively), though a three-bay plan is indicated by two substantial (10 x 10in.) primary transverse ceiling beams, 1½ in. plain chamfered, unstopped; both ceiling beams display signs of fire damage, particularly the western beam visible within [GF07]. All windows are set within splayed reveals with integral window seats (Plate 32), except the north-east opening within [GF06] where perpendicular jambs extend to ground level; external straight joints beneath cill level indicate that this opening was formerly a door (Plate 31). Gable fireplaces heat the ground floor rooms, that to the west being furnished with a flat arched, stone voussoired head (Plate 34).
- 4.3.6 A dog-leg stair rises from north to south against the eastern side of central bay (Plate 33); the carcass of the stair appears modern, though the lower flanking wall facing onto room [GF07] is framed and includes a five-panel door with raised and fielded panels (Plate 35), serving an understair cupboard and hung on L-hinges (Plate 36) of a form popular from the early 18th century (Hall 2005, 53; fig. 2.74a).
- 4.3.7 **First floor** level (Figure 8) has been subdivided by the insertion of a series of ephemeral stud walls to form a number of utilitarian bedrooms (Plate 37) and a bathroom and retains little of note. The two principal transverse beams have here been mostly boxed-in, though an exposed section within corridor [1F02] (Plate 38) displays plain chamfers matching the details recorded at ground floor level.
- 4.3.8 The **attic level** was not accessible at the time of survey.

5 TREE-RING DATING

- 5.1 A programme of tree-ring dating was undertaken by the Oxford Dendrochronology Laboratory in July 2011 (Bridge, 2011). A total of 7 samples were taken from the east range (cruck blades and purlin of primary range plus main beam and common joist of inserted floor) together with the later west range (x 2 principal floor beams); samples are summarised in tabulated form below and locations are indicated in Figures 4-7.

Sample number	Timber and position	Date of Series	H/S boundary date	Sapwood complement	No of rings	Felling date range
CRUCK ROOF						
cyf01*	East cruck blade	1407-1514	1480	34C	108	Winter 1524/15
cyf02*	East purlin	1384-1458	---	---	75	after 1469
cyf03*	West cruck blade	1405-1473	1473	38NM	69	c. 1511-14
INSERTED FLOOR						
cyf04	Principal transverse beam	---	---	H/S	133	N/K
cyf05	3 rd joist from west, Bay 2	---	---	35	94	N/K
WEST WING						
cyf06	GF, East ceiling beam	---	---	17C	69	N/K
cyf07	GF, West ceiling beam	----	---	H/S	83	N/K
* Constituent of site master CYNFALFR		1384-1514		--	131	

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

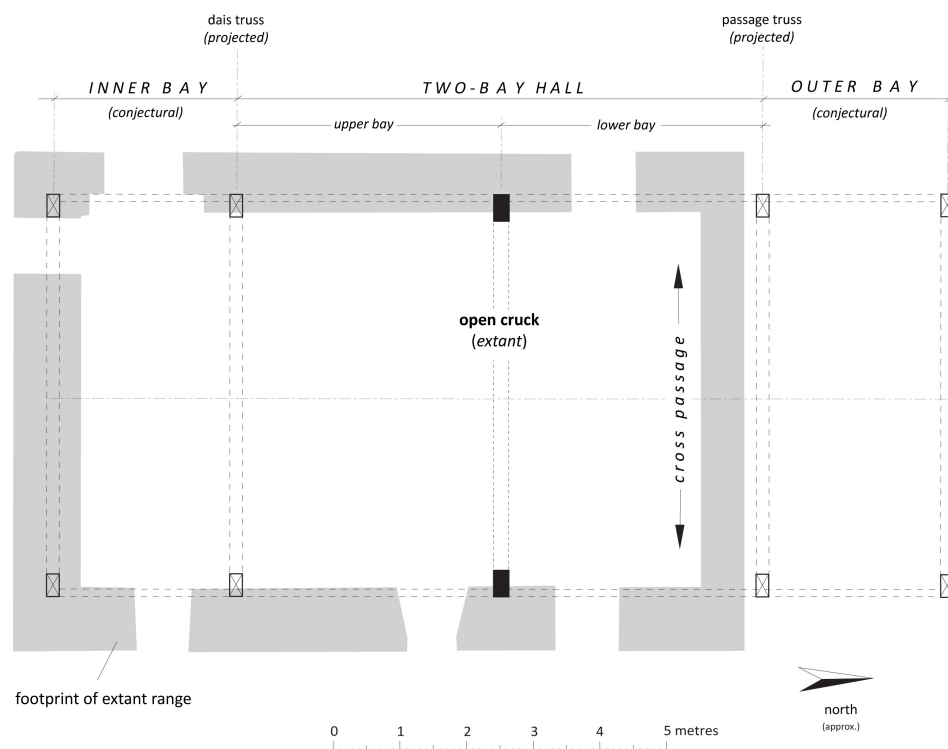
- 5.2 The three samples from the primary range (cyf01-03) combined to form a site series spanning 131 years (1384-1514); one cruck retained full sapwood and, allowing for the loss of some rings at the beginning of the sapwood, provided a felling-date range of 1511-14. It therefore appears likely that the primary cruck

house was erected in **1515** or within a year or two of this date. Neither the inserted floor of the primary range nor the principal floor beams of the west range were firmly datable.

6 INTERPRETATION

6.1 Origins: a Cruck-built Hall House

6.1.1 The east range of Cynfal-fawr originated in the early years of the 16th century as a hall house of cruck construction built on a downslope site. Only a single cruck of this structure survives, making the identification of the primary arrangements of the house somewhat problematical, though the open, arch-braced form of the cruck indicates that it formerly defined the centre of an original two-bay open hall. The ground plan and arrangements of cruck houses of this period were however remarkably consistent and convention would dictate that a house of such status would have been arranged on a three-unit plan with in-line 'outer' and 'inner' rooms flanking the two-bay hall (Smith 1988, 41; Suggett 2005, 58).



Cynfal-fawr: hypothetical reconstruction of primary hall house

6.1.2 Details of the surviving cruck-couple indicate that the 'upper' (dais) end of the two-bay hall lay to the south (up-slope) with the 'inner' room, by implication, located within the area of the current room [GF03], while any original 'outer' room would thus have been located downslope to the north, extending beyond the ground plan of the extant building (see sketch plan above). The cross-passage would have been located to the lower bay of the hall and thus the extant principal door and doorway between east and west ranges reflect, at least in general terms, the original layout. If it is accepted that the head beam embedded in the rear of the inserted stack represents the relic tie from the upper end cruck, a bay length of 4.75m (15½ ft) would be implied for the primary hall. Bay length was not traditionally consistent within the three-unit hall

house (Smith 1988, 42), however, and it is not possible to extrapolate the size of the original inner and outer rooms.

6.1.3 The presence of transverse peg holes within the lower blades of both cruck blades suggests that they were originally tied back to timber wall posts and that the structure was originally fully framed in timber, being only later underbuilt in stone. The roof was carried on two tiers of through purlins and a ridge piece.

6.1.4 Dendrochronological analysis has established a construction date of 1515, or within a year or two of that date, for the primary house.

6.2 Modifications to Cruck House

6.2.1 Major modifications to the primary cruck hall comprise three principal elements as follows:

- The replacement of external timber framings with stone walls (reduction in length to north)
- The insertion of a large, enclosed stone stack
- The introduction of a first floor to the open hall and creation of an upper chamber

These alterations may be contemporary or may alternatively form three separate phases of modification, in particular the introduction of enclosed stack and upper floor, though related, do not necessarily need to have taken place simultaneously (Suggett 2005, 163).

6.2.2 The replacement of the timber-framed walls in stone represents a common improvement in houses of this type, and was often prompted by the introduction of a stone stack (Suggett 2005, 163). Here, it would appear that the rebuilding of the walls was accompanied by the truncation of the original range to the north with the loss of the 'outer' bay to the north of the hall. The westward return of the offset footing suggests that the eastern and northern masonry walls are contemporary while the incorporation of a stone bearing the inscription 'CALEB LLOYD 1660' within the masonry of the north gable may suggest a date for this phase of work. This said, an indistinct change in the quality of the stonework evident within the eastern elevation may indicate that the renewal of the exterior walls was undertaken over a number of phases or campaigns of improvement.

6.2.3 The insertion of an enclosed stack into a former open hall, together with the insertion of a first floor to create an upper chamber, represent standard and widespread modifications, normally of early-mid 17th-century date, of what was by that time becoming something of an archaic plan form. Interestingly, the stack at Cynfal-fawr was inserted into the upper end of the hall, as opposed to within the outer bay to form a 'lobby entry' plan as was the more usual development, though this is reasonably the result of the loss of the outer bay noted above. The stack, which included a wide fireplace to the north and a smaller fireplace to the south, was located centrally to the range with passageways to east and west serving the rooms of the upper end.

6.2.4 The third main improvement to the range was the insertion of a floor over the former open hall to form an upper chamber. Such upper chambers were often formed contemporaneously with the insertion of enclosed stacks and this may be the case here, though it should be noted that the structure of the floor is fully independent of the stack and so the two are not necessarily chronologically linked. The timbers of the inserted floor were sampled but unfortunately failed to date. Though the present stair is partly remade, it reasonably occupies the site of the contemporary access.

6.2.5 The most simple explanation would be for these three principal modifications to form part of one phase of improvement, though this cannot be stated categorically. The combined effect was, however, to lower the status of the accommodation provided by the former hall house and it may be that these modifications were in some way related to the creation of the new range to the west, when the east range became subsidiary to the main house.

6.3 The West Range

- 6.3.1 The west range was originally built, most probably in the late 17th century, on a single-pile, three-bay plan with central stair-hall, though the primary arrangements of the house have not been established in any detail. The former doorway to the east side of the north elevation, in particular is of interest. The north elevation was refaced in c.1800, when a series of 'gothic' windows were introduced together with the dormer windows lighting the attic level.
- 6.3.2 Both ground floor ceiling beams of the west range were sampled but failed to date dendrochronologically.

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. Thanks also to the Revd. Anita Ephraim for allowing and arranging access to the property for the purposes of survey.
- 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) Published Sources

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b) Unpublished Sources

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c) Online Sources

- <http://www.britishlistedbuildings.co.uk>
- www.coflein.gov.uk
- <http://datinggoldwelshhouses.co.uk>

APPENDIX A: Project Brief

DATEING 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 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

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
2011-013f/001	Overall site plan	A3	1:50	04.01.12	R Tyler
2011-013f/002	East Range; ground floor plan	A3	1:50	04.01.12	R Tyler
2011-013f/003	East Range; first floor plan	A3	1:50	04.01.12	R Tyler
2011-013f/004	East Range; transverse cross-section (GF)	A3	1:20	04.01.12	R Tyler
2011-013f/005	East Range; transverse cross-section (1F)	A3	1:20	04.01.12	R Tyler
2011-013f/006	West Range; ground floor plan	A3	1:50	04.01.12	R Tyler
2011-013f/007	West Range; first floor plan	A3	1:50	04.01.12	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_0001	2	General view from NE	→ SW	05.01.12	R Tyler
DSC_0002		General view from NW	→ SE	05.01.12	R Tyler
*DSC_0003	3	East Range; east elevation	→ W	05.01.12	R Tyler
DSC_0004		East Range; window in east elevation	→ W	05.01.12	R Tyler
*DSC_0005	4	East Range; reduced window at north end of east elevation	→ SW	05.01.12	R Tyler
DSC_0006		East Range; reduced window at north end of east elevation	→ SW	05.01.12	R Tyler
DSC_0007		East Range; offset boulder footing	→ SW	05.01.12	R Tyler
DSC_0008		East Range, east elevation; change in stonework	→ W	05.01.12	R Tyler
DSC_0009		East Range; stack	↑	05.01.12	R Tyler
DSC_0010		Agricultural Range to south	→ SW	05.01.12	R Tyler
DSC_0011		Agricultural Range to south	→ SW	05.01.12	R Tyler
DSC_0012		General view from east	→ W	05.01.12	R Tyler
*DSC_0013	6	East Range; North elevation	→ SW	05.01.12	R Tyler
*DSC_0014	8	East Range; North elevation; gable with pigeon holes	↑	05.01.12	R Tyler
DSC_0015		North elevation; SJ between east and west ranges	→ S	05.01.12	R Tyler
*DSC_0016	27	West Range; North elevation	→ S	05.01.12	R Tyler
DSC_0017		West Range; main door	→ S	05.01.12	R Tyler
DSC_0018		West Range, east window – former door	→ S	05.01.12	R Tyler
DSC_0019		West Range; attic dormer window	↑	05.01.12	R Tyler
DSC_0020		North elevation; junction between east and west ranges	→ SW	05.01.12	R Tyler
*DSC_0021	28	West Range, east window – former door	→ SW	05.01.12	R Tyler
*DSC_0022	29	West Range; west elevation	→ E	05.01.12	R Tyler
DSC_0023		West Range, west elevation; 1F window	↑	05.01.12	R Tyler
*DSC_0024	30	West Range; south elevation	→ N	05.01.12	R Tyler
DSC_0025		West Range; south elevation – blocked window to 1F level	→ N	05.01.12	R Tyler
DSC_0026		West Range, south elevation oblique	→ NE	05.01.12	R Tyler
DSC_0027		Junction of west and east ranges (S)	→ NE	05.01.12	R Tyler
*DSC_0028	9	East Range, north-east elevation	→ E	05.01.12	R Tyler
DSC_0029		Agricultural Range, west elevation	→ E	05.01.12	R Tyler
DSC_0030		Agricultural Range, west elevation	→ SE	05.01.12	R Tyler
DSC_0031		West Range, south elevation	→ N	05.01.12	R Tyler
DSC_0032		West Range roof of slate to diminishing courses	→ N	05.01.12	R Tyler
DSC_0033		Agricultural Range, west elevation; door opening onto [GF04]	→ E	05.01.12	R Tyler
DSC_0034		West Range, 1F window (E)	↑	05.01.12	R Tyler
DSC_0035		Agricultural Range, west elevation	→ E	05.01.12	R Tyler
DSC_0036		Roof junction of east and west ranges, note tabling	→ W	05.01.12	R Tyler
*DSC_0037	5	Plaque commemorating Morgan Llwyd o Wynedd	→ W	05.01.12	R Tyler
DSC_0038		Room [GF02] – entrance lobby at NE corner	→ NE	05.01.12	R Tyler
DSC_0039		Room [GF02] looking south-west	→ SW	05.01.12	R Tyler
*DSC_0040	10	Room [GF02] looking south-east	→ SE	05.01.12	R Tyler
DSC_0041		Room [GF02] – entrance lobby at NE corner	→ NE	05.01.12	R Tyler
*DSC_0042	11	Room [GF02]; inserted fireplace/stack	→ SW	05.01.12	R Tyler
DSC_0043		Room [GF02]; inserted fireplace/stack	→ SW	05.01.12	R Tyler
DSC_0044		Room [GF02]; passage to west of stack	→ SW	05.01.12	R Tyler
DSC_0045		Room [GF02]; passage to east of stack	→ SE	05.01.12	R Tyler
*DSC_0046	12	Room [GF02]; eastern cruck blade	→ NE	05.01.12	R Tyler
*DSC_0047	14	Room [GF02]; foot of eastern cruck blade	↓	05.01.12	R Tyler
DSC_0048		Room [GF02]; eastern cruck blade passing through ceiling	↑	05.01.12	R Tyler
DSC_0049		Room [GF02]; lower eastern cruck blade (chamfered)	→ NE	05.01.12	R Tyler
DSC_0050		Room [GF02]; eastern cruck blade	→ E	05.01.12	R Tyler
DSC_0051		Room [GF02]; eastern cruck blade with transverse peg holes	→ E	05.01.12	R Tyler
*DSC_0052	13	Room [GF02]; western cruck blade	→ SW	05.01.12	R Tyler

DSC_0053		Room [GF02]; western cruck blade cut back at ceiling level	↑	05.01.12	R Tyler
*DSC_0054	15	Room [GF02]; western cruck blade cut back at ceiling level	↑	05.01.12	R Tyler
DSC_0055		Room [GF02]; reduced FP opening to east	→ S	05.01.12	R Tyler
DSC_0056		Room [GF02]; chamfer run-out to main ceiling beam (E)	↑	05.01.12	R Tyler
DSC_0057		Room [GF02]; chamfered main ceiling beam	↑	05.01.12	R Tyler
DSC_0058		Room [GF02]; chamfered main ceiling beam	↑	05.01.12	R Tyler
*DSC_0059	17	Room [GF02]; chamfer run-out to main ceiling beam (W)	↑	05.01.12	R Tyler
DSC_0060		Room [GF02]; ceiling beam over fireplace	→ SE	05.01.12	R Tyler
*DSC_0061	16	Room [GF02]; inserted ceiling	↑	05.01.12	R Tyler
DSC_0062		Room [GF02]; inserted ceiling	↑	05.01.12	R Tyler
DSC_0063		Room [GF02]; inserted ceiling	↑	05.01.12	R Tyler
DSC_0064		Room [GF02]; inserted ceiling	↑	05.01.12	R Tyler
*DSC_0065	19	Room [GF03] looking west	→ W	05.01.12	R Tyler
DSC_0066		Room [GF03]; rear of inserted stack	→ NW	05.01.12	R Tyler
DSC_0067		Room [GF03]; FP in rear of stack	→ NW	05.01.12	R Tyler
DSC_0068		Room [GF03]; plaque over FP commemorating 'Joseph Bushman 1794'	→ N	05.01.12	R Tyler
DSC_0069		Room [GF03]; head beam above inserted stack	↑	05.01.12	R Tyler
DSC_0070		Room [GF03]; head beam above inserted stack (spliced)	↑	05.01.12	R Tyler
*DSC_0071	18	Room [GF03]; rear of inserted stack	→ NE	05.01.12	R Tyler
DSC_0072		Room [GF03]; rear of inserted stack – boxed in head beam to E	↑	05.01.12	R Tyler
*DSC_0073	20	Room [GF03]; FP in rear of stack	→ NW	05.01.12	R Tyler
DSC_0075		Room [GF01]; chamfer run-out to main ceiling beam	↑	05.01.12	R Tyler
DSC_0076		Room [GF01]; stair rising at NE corner	→ NE	05.01.12	R Tyler
DSC_0077		Room [GF01]; stair rising at NE corner	→ NW	05.01.12	R Tyler
DSC_0078		Room [GF01]; stair rising at NE corner	→ W	05.01.12	R Tyler
DSC_0079		Room [1F01]; arch-braced cruck	→ SE	05.01.12	R Tyler
*DSC_0080	21	Room [1F01]; arch-braced cruck	→ SW	05.01.12	R Tyler
DSC_0081		Room [1F01]; arch-braced cruck; detail of arch brace (E)	→ SE	05.01.12	R Tyler
*DSC_0082	23	Room [1F01]; arch-braced cruck; detail of cranked collar	→ SW	05.01.12	R Tyler
DSC_0083		Room [1F01]; arch-braced cruck; detail of cranked collar (centre)	→ S	05.01.12	R Tyler
DSC_0084		Room [1F01]; arch-braced cruck; detail of arch brace (E)	→ SE	05.01.12	R Tyler
DSC_0085		Room [1F01]; arch-braced cruck; detail of upper yoke	↑	05.01.12	R Tyler
DSC_0086		Room [1F01]; detail of upper yoke + mortices for struts	↑	05.01.12	R Tyler
DSC_0087		Room [1F01]; detail of upper yoke + mortices for struts	↑	05.01.12	R Tyler
DSC_0088		Room [1F01]; arch-braced cruck; detail of cranked collar	→ E	05.01.12	R Tyler
DSC_0089		Room [1F01]; arch-braced cruck; detail of cranked collar	→ W	05.01.12	R Tyler
DSC_0090		Room [1F01]; arch-braced cruck; detail of arch brace pegging	→ NW	05.01.12	R Tyler
DSC_0091		Room [1F01]; arch-braced cruck; detail of purlin housing (W)	→ NE	05.01.12	R Tyler
*DSC_0092	22	Room [1F01]; arch-braced cruck	→ NW	05.01.12	R Tyler
DSC_0093		Room [1F01]; arch-braced cruck	→ NW	05.01.12	R Tyler
*DSC_0094	25	Room [1F01]; detail of upper yoke + mortices for struts	↑	05.01.12	R Tyler
DSC_0095		Room [1F01]; arch-braced cruck (south face = flush timbers)	↑	05.01.12	R Tyler
DSC_0096		Room [1F01]; primary purlin at SE quadrant	→ NE	05.01.12	R Tyler
DSC_0097		Room [1F01]; primary purlin at SE quadrant	→ SE	05.01.12	R Tyler
DSC_0098		Room [1F01]; primary purlin scarf at SE quadrant	→ SE	05.01.12	R Tyler
*DSC_0099	26	Room [1F01]; primary purlin scarf at SE quadrant	→ SE	05.01.12	R Tyler
DSC_0100		Room [1F01]; arch-braced cruck (north face)	→ S	05.01.12	R Tyler
DSC_0101		Room [1F01]; arch-braced cruck (south face)	→ N	05.01.12	R Tyler
DSC_0102		Room [1F01]; renewed purlin to NW	→ NW	05.01.12	R Tyler
DSC_0103		Room [1F01]; arch-braced cruck – west blade	→ SW	05.01.12	R Tyler
DSC_0104		Room [1F01]; arch-braced cruck – west blade	→ SW	05.01.12	R Tyler
DSC_0105		Room [1F01]; arch-braced cruck	→ SE	05.01.12	R Tyler
DSC_0106		Room [1F01]; arch-braced cruck – east blade	↓	05.01.12	R Tyler
DSC_0107		Room [1F01]; detail of wind-brace mortice to primary purlin	↑	05.01.12	R Tyler
DSC_0108		Room [1F01]; detail of wind-brace mortice to primary purlin	↑	05.01.12	R Tyler
DSC_0109		Room [1F01]; detail of wind-brace mortice to primary purlin	↑	05.01.12	R Tyler
DSC_0110		Room [1F01]; primary purlin at SE quadrant	→	05.01.12	R Tyler
*DSC_0111	24	Room [1F01]; primary purlin at SE quadrant	→	05.01.12	R Tyler
DSC_0112		Room [1F01]; detail of upper yoke + mortices for struts	↑	05.01.12	R Tyler
DSC_0113		Room [1F01]; arch-braced cruck, west blade	→ SW	05.01.12	R Tyler

DSC_0114		Room [1F01]; arch-braced cruck, east blade and arch brace	→ SE	05.01.12	R Tyler
DSC_0115		Room [1F01]; window to north gable	→ N	05.01.12	R Tyler
DSC_0116		Room [1F01]; window to north gable	→ N	05.01.12	R Tyler
DSC_0117		Room [GF02]; door to west range	→ W	05.01.12	R Tyler
DSC_0118		West Range, Room [GF06]; door to east range	→ E	05.01.12	R Tyler
DSC_0119		West Range, Room [GF06] looking south	→ S	05.01.12	R Tyler
DSC_0120		West Range, Room [GF06]; main transverse ceiling beam	↑	05.01.12	R Tyler
*DSC_0121	31	West Range, Room [GF06] looking north	→ N	05.01.12	R Tyler
*DSC_0122	32	West Range, Room [GF06] – ‘gothic’ window to north elevation	→ N	05.01.12	R Tyler
*DSC_0123	33	West Range, Room [GF07] looking east	→ E	05.01.12	R Tyler
DSC_0124		West Range, Room [GF07] – ‘gothic’ window to north elevation	→ N	05.01.12	R Tyler
DSC_0125		West Range, Room [GF07] main door within splayed reveals	→ N	05.01.12	R Tyler
DSC_0126		West Range, Room [GF07], panelling and understair cupboard	→ SE	05.01.12	R Tyler
DSC_0127		West Range, Room [GF07]; 5-panel understair door	→ E	05.01.12	R Tyler
*DSC_0128	35	West Range, Room [GF07]; 5-panel understair door	→ E	05.01.12	R Tyler
*DSC_0129	36	West Range, Room [GF07]; L-hinge to understair door	→ E	05.01.12	R Tyler
DSC_0130		West Range, Room [GF07]; L-hinge to understair door	→ E	05.01.12	R Tyler
*DSC_0131	34	West Range, Room [GF07]; FP to west wall	→ SW	05.01.12	R Tyler
DSC_0132		West Range, Room [GF07]; FP to west wall	→ SW	05.01.12	R Tyler
DSC_0133		West Range, Room [GF07]; FP to west wall	→ NW	05.01.12	R Tyler
DSC_0134		West Range, Room [GF07]; stair to 1F	→ S	05.01.12	R Tyler
*DSC_0135	38	West Range, Room [1F04] looking east	→ E	05.01.12	R Tyler
DSC_0136		West Range, Room [1F02] (landing); transverse beam	↑	05.01.12	R Tyler
*DSC_0138	37	West Range, Room [1F02] (landing)	→ W	05.01.12	R Tyler
DSC_0139		West Range, fire damaged beam at stair	→ SW	05.01.12	R Tyler
*DSC_0140	7	East Range; inscribed stone ‘CALEB LLOYD 1660’ to north gable	→ S	05.01.12	R Tyler
DSC_0141		East Range; inscribed stone ‘CALEB LLOYD 1660’ to north gable	→ SE	05.01.12	R Tyler
DSC_0143		Long view of complex from north	→ S	05.01.12	R Tyler
DSC_0144		Long view of complex from north	→ S	05.01.12	R Tyler
DSC_0145		General view from NE	→ SW	05.01.12	R Tyler
DSC_0146		General view from NW	→ SE	05.01.12	R Tyler
DSC_0147		General view from NW	→ SE	05.01.12	R Tyler
DSC_0148		East Range, north elevation	→ SE	05.01.12	R Tyler
DSC_0149		East Range oblique	→ SW	05.01.12	R Tyler
*DSC_0150	1	Long view of complex from north	→ S	05.01.12	R Tyler

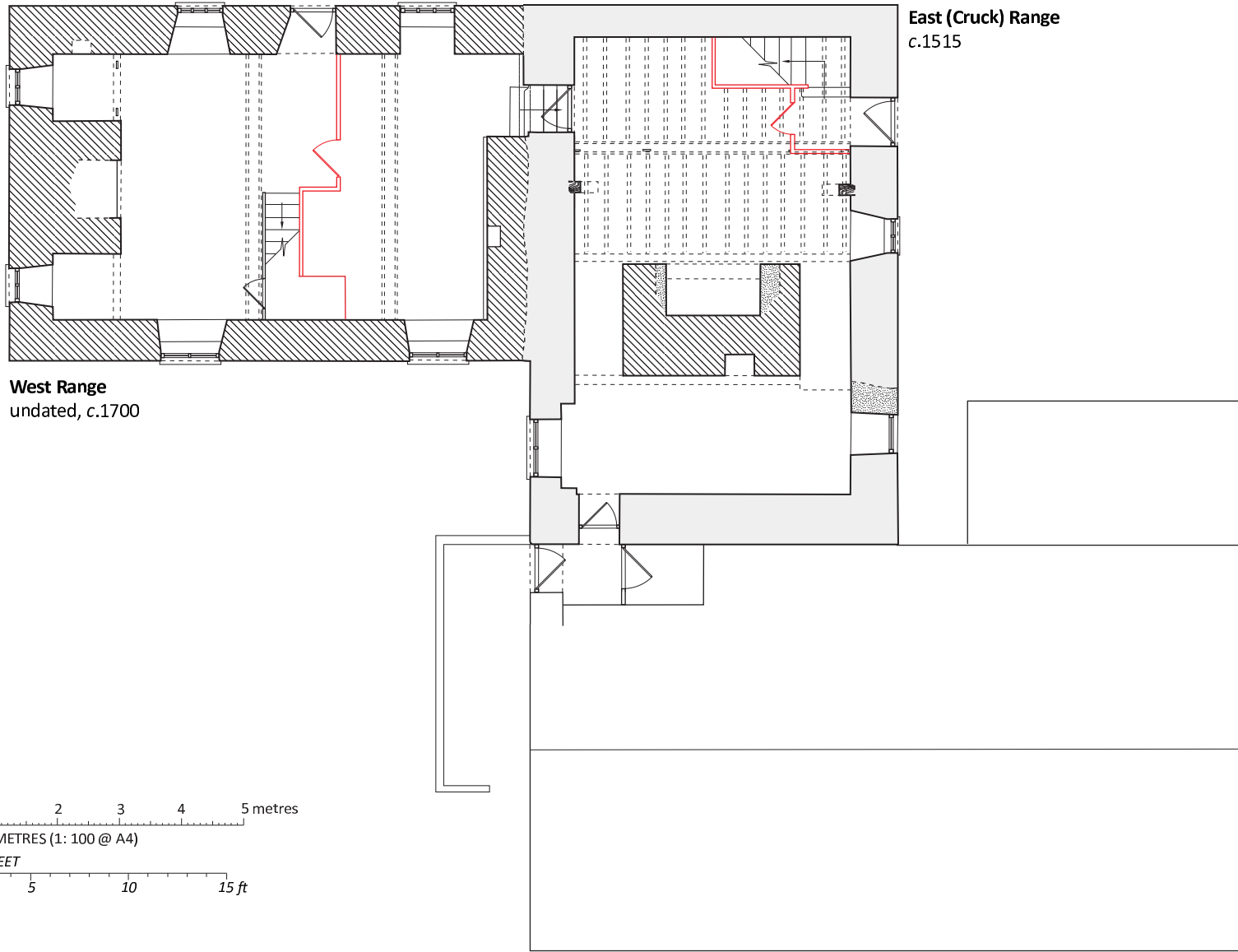


Based upon Explorer 1:25,000 map (Sheet OL18)
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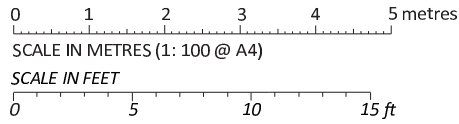
north
(approx.)



East (Cruck) Range
c.1515

West Range
undated, c.1700

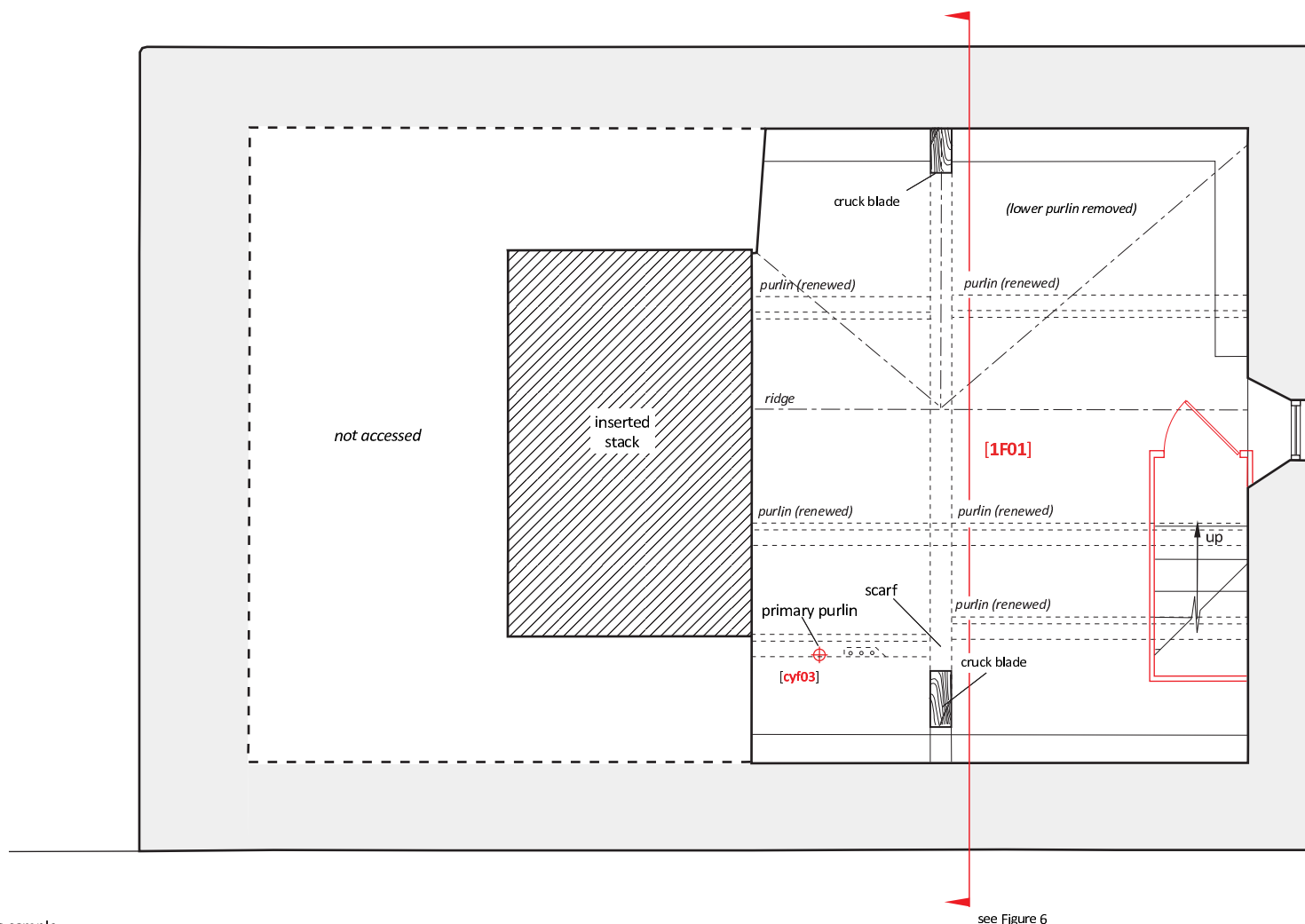
Agricultural Range
(not inspected)





north
(approx.)

WEST RANGE (see Figure 8)



KEY

 location of dendro sample

 blocking

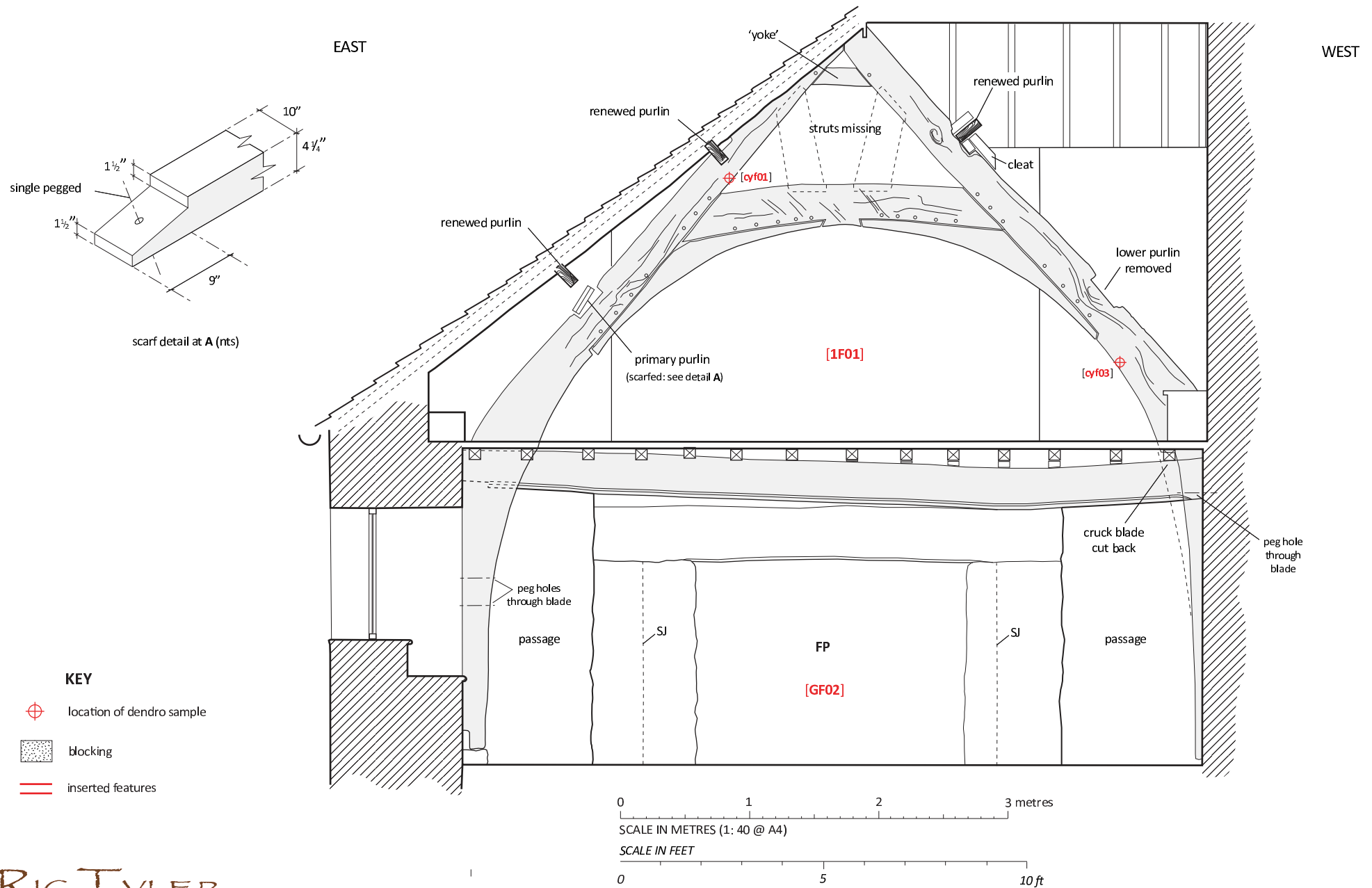
 inserted features

0 1 2 3 4 5 metres

SCALE IN METRES (1: 75 @ A4)

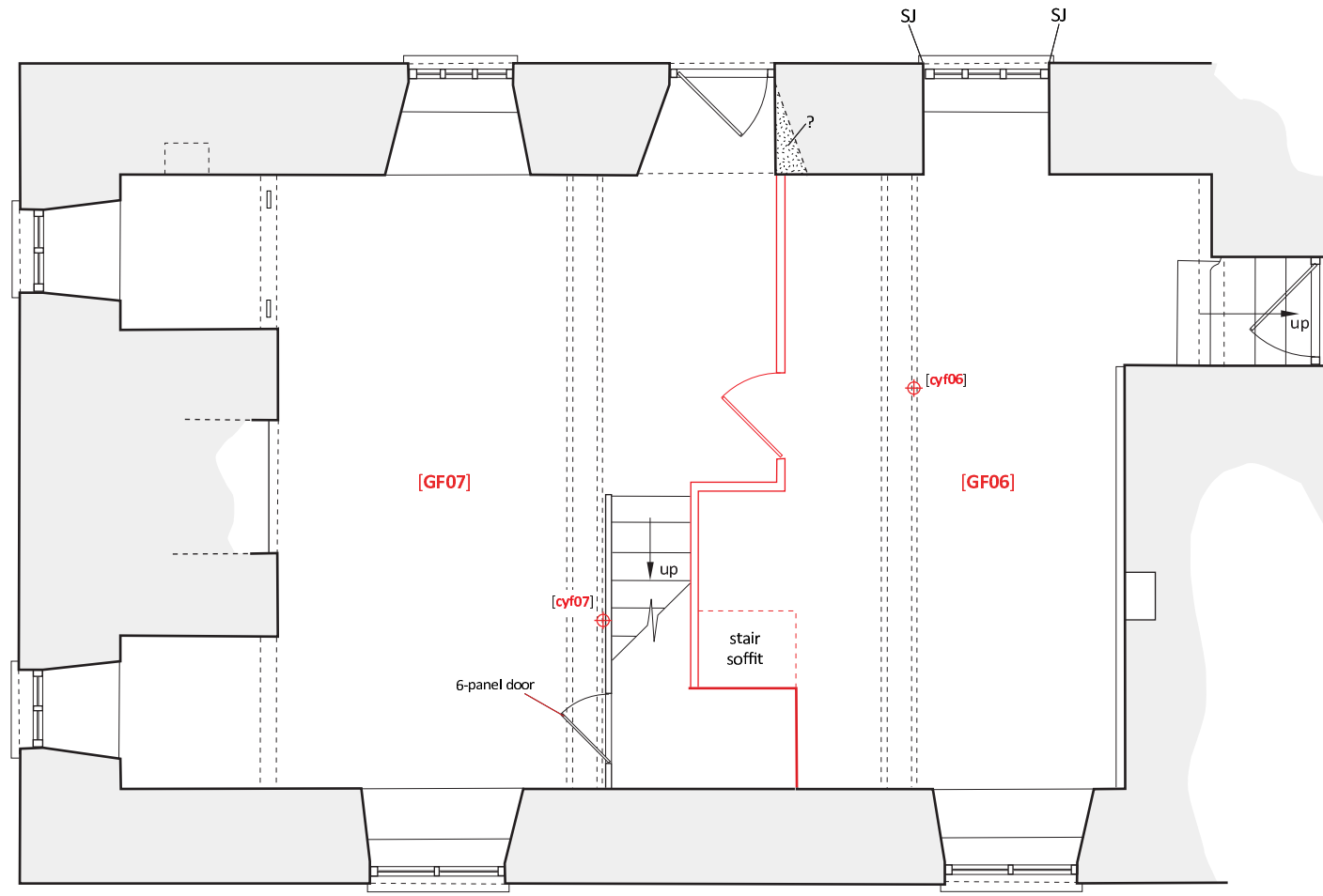
SCALE IN FEET

0 5 10 15 ft








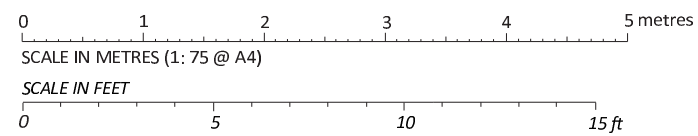
north
(approx.)



EAST RANGE
(see Figure 4)

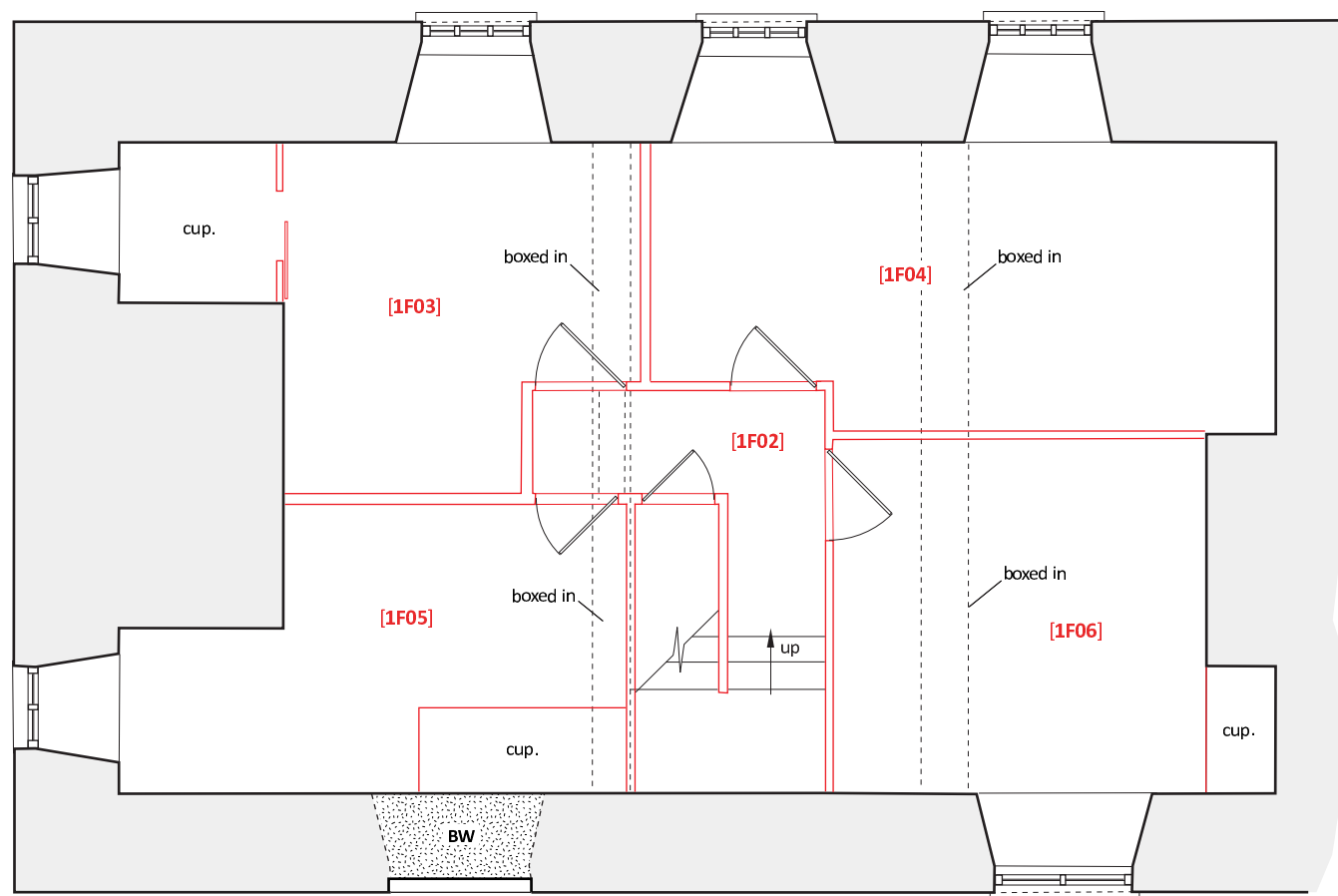
KEY

-  location of dendro sample
-  blocking
-  inserted features








north
(approx.)



EAST RANGE
(see Figure 6)

KEY

-  location of dendro sample
-  blocking
-  inserted features

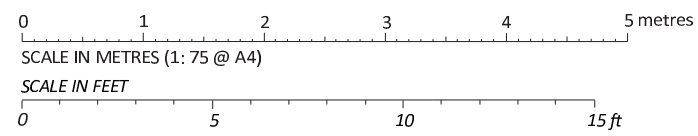




Plate 1: Long view of farmhouse complex from the north-east.



Plate 2: General view from north-east; East Range (1531) to left, West Range (nd.) to right.



Plate 3: East Range, east elevation.



Plate 4: Reduced window opening.



Plate 5: Inscription commemorating Morgan Llwyd o Wynedd located adjacent to main door.



Plate 6: East range, north elevation.



Plate 7: Inscribed stone 'CALEB LLOYD 1660'.



Plate 8: North gable; pigeon holes to apex.



Plate 9: South-west elevation.



Plate 10: Room [GF02] looking south-east.



Plate 11: Inserted stack to south side of [GF02].



Plate 12: Eastern cruck blade visible in [GF02].



Plate 13: Western cruck blade visible in [GF02].



Plate 14: Foot of eastern cruck blade.



Plate 15: Western cruck blade cut back at level of inserted floor.



Plate 16: [GF02], inserted floor structure over former open hall.



Plate 17: Decorated chamfer run-out to west end of main transverse beam of inserted floor.



Plate 18: Rear (south) face of inserted stack; note FP (see Plate 19) and spliced head beam (Room [GF03]).



Plate 19: Room [GF03] looking west.



Plate 20: Small FP in rear of inserted stack.



Plate 21: Room [1F01]; upper cruck looking SW.



Plate 22: Room [1F01]; upper cruck looking NW.



Plate 23: Cranked collar of open cruck truss.



Plate 24: Surviving section of primary lower purlin to SE quadrant of roof structure.



Plate 25: Redundant mortices (unpegged) for v-strutting above collar; note upper yoke.



Plate 26: Detail of purlin scarf; splayed with squared abutments, single pegged.



Plate 27: West Range; north elevation.



Plate 28: Eastern window with SJs beneath cill.



Plate 29: West Range; west elevation



Plate 30: West Range; south elevation.



Plate 31: West Range; Room [GF06] looking north.



Plate 32: West Range; 'gothic' window of front elevation.



Plate 33: West Range; Room [GF07] looking south-east.



Plate 34: West Range; Room [GF07] looking west.



Plate 35: 5-panel door to understair cupboard.



Plate 36: L-hinge to understair door.



Plate 37: Room [1F04] looking east.

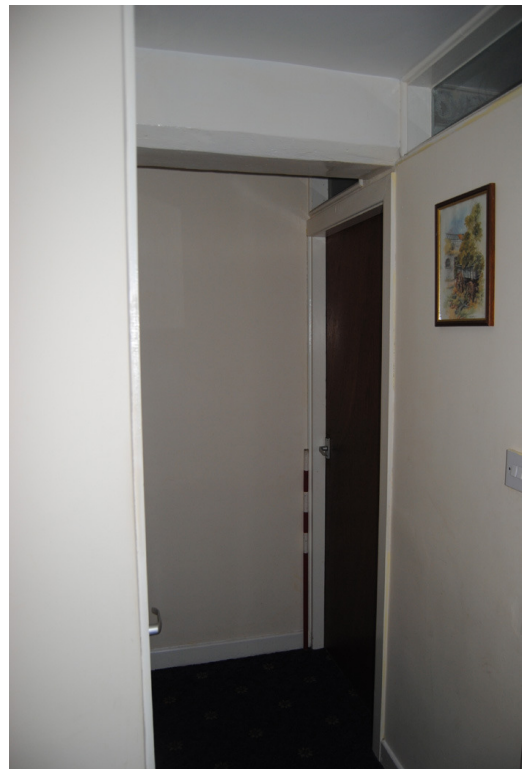


Plate 38: Landing [1F02].