

TY-CERRIG, LLANFWROG, RUTHIN, DENBIGHSHIRE

[NPRN 27257]

Architectural Record



FINAL REPORT

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in partnership with



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TY-CERRIG

Llanfwrog, Ruthin, Denbighshire

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Architectural Record

Summary

Ty-Cerrig is located in the village of Llanfwrog on the southern side of the B5105, c.1.25km south-west of Ruthin, Denbighshire, centred on NGR SJ 11385 57678; it is a Grade II listed building and is included on the National Monuments Record of Wales. An architectural record of the building was made in March 2011 as part of the North-West Wales Dendrochronology Project, undertaken in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales. The survey followed on from a programme of dendrochronological analysis which has established a construction date of c. AD 1501 for the primary house.

Ty-Cerrig originated at the turn of the 16th century as a timber-framed, cottage farmhouse of four bays defined by full crucks. The details of the crucks as recorded indicate a primary 'peasant-hall' plan of outer room, passage, single-bay hall and inner room. At a later date, a stone-built stack with characteristic Denbighshire stack was inserted in two phases creating a classic 'lobby-entry' plan; at the same time, the timber-framed walls of the primary house were underbuilt in stone rubble, although no upper floor was ever introduced.

It is understood that the house was subsequently divided into a series of discrete units, evidence for which survives in a number of blocked doorways and window openings discernible in the western exterior elevation.

1 INTRODUCTION

1.1 Background to the Project

- 1.1.1 Ty-Cerrig, Llanfwrog, Denbighshire was recorded in March 2011 as part of the North-West Wales Dendrochronology Project,¹ undertaken in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW).
- 1.1.2 Ty-Cerrig is located in the village of Llanfwrog on the southern side of the B5105, c.1.25km south-west of Ruthin, Denbighshire and is centred on NGR SJ 11385 57678 (Figure 1). It occupies an elevated site on the slopes of a rocky outcrop to the south side of the village, at an elevation of c.87m AOD overlooking the medieval church of St. Mwrog and St Mary (NMRW PRN 165254) to the north and, further afield, commanding views over the Vale of Clwyd to the east and the Clwydian hills beyond.
- 1.1.3 Ty-Cerrig is a Grade II listed building (Cadw Listed Building ID 851)² and is included on the National Monuments Record of Wales (NMRW), ref. NPRN. 27257.³

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

² <http://www.britishlistedbuildings.co.uk/wa-851-ty-cerrig-ruthin>

³ <http://www.coflein.gov.uk/en/site/27257/details/HAFAN%3BTY+CERRIG%2C+CERRIG+STREET%2C+LLANFWROG%2C+RUTHIN/>

1.1.4 The building record follows on from a programme of dendrochronological sampling undertaken by Dr D Miles and Dr MC Bridge of the Oxford Dendrochronology Laboratory, which has been previously reported (Miles and Bridge, 2011; see section §.5).

1.2 Scope of Report

1.2.1 The Historic Building Record was undertaken in accordance with a 'Design Brief for Historic Building Recording' prepared by the project Director; a copy of the brief is included below as **Appendix A**.

1.2.2 This report outlines the results of the building survey, and has been prepared in accordance with English Heritage guidelines as published in *Understanding Historic Buildings: A Guide to Good Recording Practice* (EH, 2006), the Institute for Archaeologists' *Standard and Guidance for the Archaeological Recording of Standing Buildings or Structures* (IfA, 2008) and the Association of Local Government Archaeological Officers' *Analysis and Recording for the Conservation of Works to Historic Buildings* (ALGAO, 1997).

1.2.3 This report has been prepared based upon information current and available as of March 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 Ty-Cerrig to supplement the dendrochronological survey.

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 Documentary research into the historical background, origins and development of Ty-Cerrig is being undertaken by volunteers of the North-West Wales Dendrochronology Project. No programme of documentary research into the buildings has thus 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 house and the compilation of drawn, photographic and written records as follows:

The Drawn Record

3.2.2 A measured plan was generated on site at ground floor level, marking significant architectural and archaeological detail, 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. In addition, transverse cross-sections were prepared at each cruck frame at a scale of 1:20. 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 house buildings was made as free text; this forms the basis of the following description.

4 BUILDING DESCRIPTION⁴

4.1 The Exterior

- 4.1.1 Ty-Cerrig occupies an extended rectangular plan (Figure 3), aligned approximately north-south, of limewashed stone rubble construction (with elements of earlier timber framing exposed to the west), extending to a single storey⁵ below a pitched roof, thatched and gabled to north and south (Plates 1/2). The historic core comprised four bays of a cruck-built hall-house, subsequently extended to both north and south. A modern extension has been appended at the south end of the east elevation; this is on no historical interest and will not be addressed here in any detail.

- 4.1.2 The west elevation faces Stryty Cerrig, standing significantly taller to the north following the natural slope of the land which falls away towards the village centre. Of limewashed stone rubble construction, the elevation includes a number of features of interest in the form of straight and ragged joints evidencing blocked doorways and windows related to the former sub-division of the range into discrete cottages (blocked openings are indicated on Figure 3; see also Plate 5). Bay 2 of the historic core also displays an area of relic timber framing (Plate 3), pre-dating the underbuilding of the walls in stone. A cill and wall plate are represented together with two 5in. (0.13m) upright timbers, single pegged top and bottom, at c.3½ft centres (1.05m),⁶ and a 6in. (0.15m) wide mid-rail c.2½ ft (0.75m) above cill level; the full height of the framed wall from cill to soffit of plate is 5½ ft (1.70m). A tall, square ridge stack, of a locally distinctive Denbighshire form,⁷ rises centrally to the historic core, slightly off-centre towards the south end of the range (Plate 4). A ragged joint within the masonry at Bay 2 division may relate to the insertion of the stone stack over two phases.

- 4.1.3 The east elevation has been extensively modernised with the introduction of a number of large, 20th-century casement windows and the addition of a small projecting window seat (Plate 6). To the south, the elevation is masked by the eastern, modern extension. The north elevation (Plate 1) is partially obscured by a single storey pent-roofed extension, the gable over being brick-built above eaves level and lit by a single, small rectangular window opening while the south elevation (Plate 7) is stone-built throughout with a single window opening to the west at ground floor level and a central, square opening to first floor.

4.2 The Interior

- 4.2.1 Internally, the historic core of the house is of four bays (here numbered 1 to 4 from south to north) occupying the central part of the range, each bay being originally articulated by a full cruck-frame; the

⁴ Terminology within the following description follows Brunskill, 1985; Alcock, 1981; and Alcock et al., 1989.

⁵ First floor rooms have, however, been introduced within the northern and southern extensions [GF01] and [GF06].

⁶ The northern of the upright timbers is associated with cruck [T3].

⁷ P. Smith, notes RCAHMMW site file Denbighs Domestic, SJ15NW 1979: <http://www.coflein.gov.uk/en/site/27257/details/HAFAN%3BTY+CERRIG%2C+CERRIG+STREET%2C+LLANFWROG%2C+RUTHIN/>

- northern four crucks ([T1] to [T4] from south to north) survive though the southern end truss [T0] has been lost. In-line, stone built extensions have been appended to both north ([GF01]) and south ([GF06]), both of which are furnished with a small, utilisable roof space; the main body of the house has, however, not had an upper floor inserted, though it is ceiled below apex level.
- 4.2.2 Room [GF01] to the north end of range occupies the northern in-line extension. The floor level of the extension is set 0.5m below that of the main range, reflecting the natural fall away of ground level to the north, and allowing for a utilisable roofspace storage area. The room is lit by an inserted, three-light casement to the east only; doorways to the west end of the north wall and east end of the south give onto [GF09] within the pent roofed extension and [GF02] within the historic core respectively. No trace is visible internally of the blocked doorway and window within the west wall, evidenced within the exterior elevation. A straight-flight stair rises against the north wall giving access to an attic storage space from where the upper section of cruck [T4] may be accessed (see below).
- 4.2.3 Room [GF02] occupies Bay 4 and the northern half of Bay 3 of the historic core. The room is lit by two inserted casements and window seat projection within the east wall and a two-light casement set towards the southern end of the west wall (within the area of framing exposed externally). Two primary trusses are represented, [T4] to the north and [T3] to the centre (see Figure 5). Cruck [T4] (Figure 5b; Plate 8) constitutes the northern end truss of the primary house, the lower blades are only partly visible being covered to an extent by plaster render of the infill wall, precluding detailed discussion of the blade form. The blades are spanned by a tie, a single peg being visible within the eastern blade where the tie is lapped over the external (northern) face of the cruck. Three irregularly spaced, notched joints for uprights are visible within the lower face of the tie, while a central vertical post extends above tie level spanning between tie and collar, visible within the roofspace (Plate 9).⁸ At high level, the cruck blades have either been truncated just above the collar, or the truss was originally half-hipped; a groove to receive staves within the upper face of the collar would support the former interpretation. Both tie and collar would appear to be lapped over the northern, exterior face of the cruck blades; surviving wattle and daub infill panel survive below collar level.
- 4.2.4 To the centre of Room [GF02], the gently curving, roughly converted lower blades of cruck [T3] are exposed to east and west (Figure 5a; Plate 10). The blades were formerly connected by a tie, lapped and double pegged over the northern face of the cruck frame at a height of c.7ft (2.15m) above interior ground level, though the tie itself survives, truncated, only to the east (Plate 12); the tie projects beyond the back of the western blade, tying back to the exterior wall post, represented in the relic framing recorded externally. Opposing single peg-holes to the inner face of the blades c.3½ ft (1.10m) above ground level may relate to securing pegs associated with the raising of the frame. Room [GF02] is ceiled over above tie level restricting access to the upper cruck.
- 4.2.5 A massive stone stack has been inserted, set unusually at a slight angle to the main axis of the range, within the southern half of Bay 3 with a wide, deep fireplace recess spanned by a 20in. (0.5m) square bressummer (Plate 10); originally inserted backing onto [T2], the stack was subsequently adapted and a further fireplace added to the south (within Room [GF03]) forming a back-to-back arrangement.
- 4.2.6 Cruck [T2] (Figure 4b; Plates 13-15) survives to the east only, having been truncated by the insertion of the stone-built stack. The surviving section of eastern blade (Plate 13) retains evidence for a double pegged tie (here morticed as opposed to lapped), while a secondary (?wall-) post abutting the back of the blade (Plate 14) would appear to be secured by means of a slip tenon, single pegged to post and blade. To the south side of [T2], within Bay 2(S), a convex, curving wind-brace rises to the soffit of the lower purlin (Plate 15); wind-bracing to the lower purlin is implied elsewhere by redundant peg-holes, though no evidence for bracing of the upper purlins was noted.

⁸ Visually accessible from the attic space above [GF01].

- 4.2.7 Room [GF03] occupies the southern part of Bay 2, the northern ⅓ being taken up by the inserted stone stack. Cruck [T1] (Figure 5a; Plate 16/17) is encased within the south wall. Here, crucks can be seen to conform broadly to Alcock's 'Type T' (Alcock 1981, 97), with straight blades rising from smoothly curving lower sections. The lower cruck is infilled to the west with secondary timber-framing comprising a slender tie with central, vertical upright and raking struts over. Triple peg holes to east and west, just below ceiling level, denote the level of a former collar, mortice and tenoned, while double pegs at lower level may evidence a former tie; a discrepancy in the height of tie sockets from east to west may indicate historic movement within the structure. A long scratched 'X' on the northern face of each blade midway between tie and collar sockets, would not seem to represent carpenter's numbering marks and may alternatively represent some form of construction mark, possibly levelling marks related to the initial conversion of the timber (see for example, Harris 1995; Russell 1995). At high level, the apex of the cruck can be seen to conform to Alcock's 'Type B' detail (Alcock 1981, 96, fig. 49) with blades meeting in a vertical-faced mortice and tenon joint and supporting a square section ridge purlin (Plate 20). Smoke blackening of timbers at the south end of the range may relate to its later use as a workshop/blacksmith's shop.⁹ A section of probable primary wall plate survives to the south side of Bay 2 (Plate 18), where regularly spaced, paired peg-holes at c.3ft (0.95m) centres are suggestive of primary, large-panel framed walls.
- 4.2.8 Bay 1 of the primary house is occupied by a passage [GF04] to the east and bathroom [GF05] to the west. No significant early fabric is exposed here, though it was noted that the lower southern wall of [GF05] (ie. the original southern gable end) displayed a distinct batter to the base. Room [GF06] occupies the southern in-line extension.
- 4.2.9 The roof is carried on two tiers of through purlins (c.7in. x 4in.), visible above [GF04/05] (Plate 21), carried on the upper faces of the cruck blades, and on a square section ridge purlin, set diagonally. It would appear, from limited visual access available at the north end of the range, that the side purlins are staggered at each cruck while evidence recorded within Bay 2 indicates that the roof was originally wind-braced to the lower tier of purlins only.

5 TREE RING DATING

- 5.1 A programme of tree-ring dating was undertaken by the Oxford Dendrochronology Laboratory in January 2011 and has been previously reported (Miles and Bridge, 2011). Three purlins and four crucks were sampled, three of the dated timbers retaining complete sapwood. One cruck [T1] was found to have been felled in the spring of 1500, whilst a front lower purlin of Bay 1 was felled in the spring of 1501. The eastern upper purlin of Bay 1 dated to the winter of 1500/01, and as the rear upper purlin from the same bay was found to have originated from the same parent tree, it is possible to ascribe the same felling date. Cruck [T2] retained no sapwood, but a date range of 1483-1513 was indicated, being consistent with the 1500 and 1501 felling dates. This clustering of dated would suggest that Ty-Cerrig was most likely constructed during 1501 (Miles and Bridge 2011, 1).

6 INTERPRETATION

6.1 Origins

- 6.1.1 Ty-Cerrig originated at the beginning of the 16th century as a cruck-framed cottage farmhouse of four roughly equal bays defined by full crucks, while the evidence of surviving fabric suggests that the lateral walls would originally have comprised large panel framing, with uprights at c.3ft centres and a mid-rail, set atop a stone rubble footing. The roof was supported on two tiers of side purlins and a ridge purlin, the lower side purlins being wind-braced. Evidence is somewhat ambiguous, but it is likely that the roof has originally gable to north and south.

⁹ P Smith, 1979; site notes. See fn.7.

6.1.2 The details of the crucks as recorded, each originally with a low tie and no 'open' truss, indicate a primary 'peasant-hall' plan (see Suggett 2005, Appendix 1, 262) of outer room, passage, single-bay hall and inner room. However, the loss of the ties in all but the northern end truss and the uniformity of bay width across the range, hinders to an extent further meaningful deliberation on the primary arrangements. It is probable that the massive stone stack was inserted into the primary passage bay which would place the primary hall within Bay 2; it should be noted in this context that the carpentry of the crucks flanking each side of Bay 2 are of superior quality with mortice and tenoned joints as opposed the simple lap joints of [T3] and [T4].

6.2 Later Developments

6.2.1 At a later date, a stone-built stack was inserted in two phases into the southern side of Bay 3 and northern part of Bay 2 creating a classic 'lobby-entry' plan. At the same time, the timber-framed walls of the primary house were underbuilt in stone rubble, although no upper floor was ever introduced, a common modification of the 16th and 17th centuries. Additional accommodation was created, however, by the introduction of in-line extensions to both north and south.

6.2.2 It is understood that the house was subsequently divided into a series of discrete units, evidence for which survives only in the western exterior elevation where a number of blocked doorways and window openings are discernible.

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. Grateful thanks are also extended to Dr Tony and Mrs Patricia Lyne, owners of Ty-Cerrig, for their understanding and hospitality during the course of work.

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

8 SOURCES

a) Published Sources

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b) Unpublished Sources

Miles D and Bridge MC, 2011. 'The Tree-ring dating of Ty Cerrig, Llanfwrog, Denbighshire'. Oxford Dendrochronology Laboratory, Report No. 2011/01.

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 and/or 1:20 as appropriate.

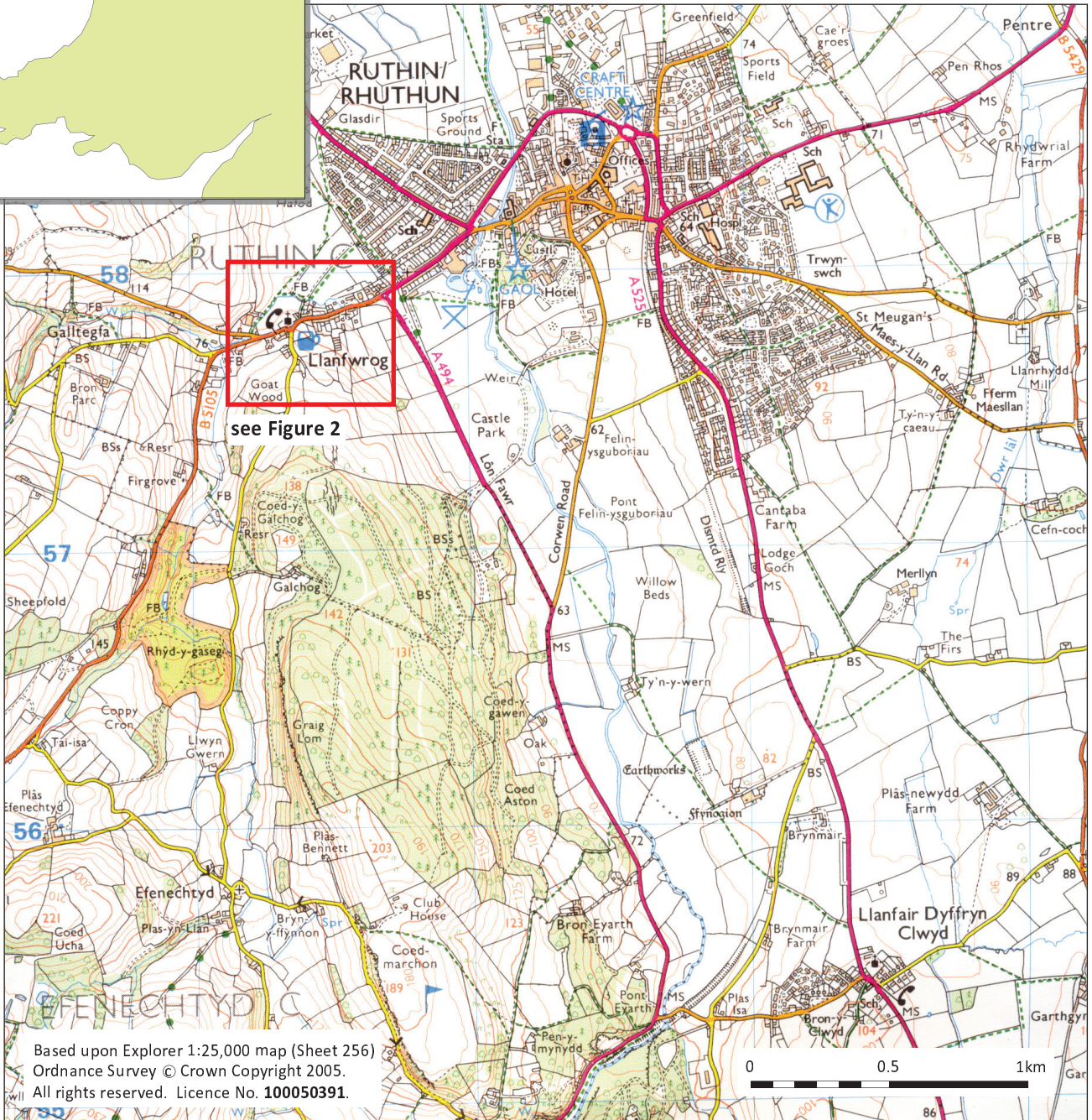
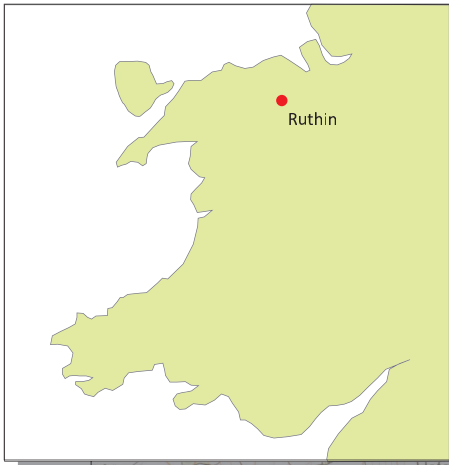
Drg. No.	Subject	Format	Scale	Date	Recorder
2011-003c/1	Ground floor plan (1); north part	A3	1:50	28.03.2011	R Tyler
2011-003c/2	Ground floor plan (2); south part	A3	1:50	28.03.2011	R Tyler
2011-003c/3	Overall plan	A3	1:100	28.03.2011	R Tyler
2011-003c/4	Transverse cross-section at Cruck T2	A3	1:20	28.03.2011	R Tyler
2011-003c/5	Transverse cross-section at Cruck T3 (east blade only)	A3	1:20	29.03.2011	R Tyler
2011-003c/6	Transverse cross-section at Cruck T4	A3	1:20	29.03.2011	R Tyler
2011-003c/7	Transverse cross-section at Cruck T5	A3	1:20	29.03.2011	R Tyler
2011-003c/8	Longitudinal section	A3	1:100	29.03.2011	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.	Subject	Orientation	Date	Photographer
DSC_0086*	West elevation looking south	→ S	29.03.2011	R Tyler
DSC_0087	West elevation looking north-east	→ NE	29.03.2011	R Tyler
DSC_0088*	West elevation looking north-east	→ NE	29.03.2011	R Tyler
DSC_0090*	Main ridge stack	↑	29.03.2011	R Tyler
DSC_0091	West elevation, blocked openings south end	→ E	29.03.2011	R Tyler
DSC_0092*	West elevation exposed framing north of stack	→ E	29.03.2011	R Tyler
DSC_0093	West elevation, blocked door/window to north end	→ E	29.03.2011	R Tyler
DSC_0094	North gable end	→ S	29.03.2011	R Tyler
DSC_0095*	East elevation, north end	→ W	29.03.2011	R Tyler
DSC_0096	South elevation	→ N	29.03.2011	R Tyler
DSC_0097*	South elevation	→ N	29.03.2011	R Tyler
DSC_0098	Cruck T5 looking north	→ N	29.03.2011	R Tyler
DSC_0099*	Cruck T5 looking north	→ N	29.03.2011	R Tyler
DSC_0100*	Cruck T4 looking south	→ S	29.03.2011	R Tyler
DSC_0101	Cruck T4 looking south	→ S	29.03.2011	R Tyler
DSC_0102	Cruck T4 , east blade	→ S	29.03.2011	R Tyler
DSC_0103*	Cruck T4 , east blade; empty lap joint	→ S	29.03.2011	R Tyler
DSC_0104	Cruck T4 , west blade	→ S	29.03.2011	R Tyler
DSC_0105	Inserted stack from room [GF--]	→ S	29.03.2011	R Tyler
DSC_0106*	Cruck T4 , west blade	→ S	29.03.2011	R Tyler
DSC_0107*	Cruck T3 , east blade	→ S	29.03.2011	R Tyler
DSC_0108	Cruck T3 , east blade; detail	→ S	29.03.2011	R Tyler
DSC_0109	Cruck T2 looking south-west	→ SW	29.03.2011	R Tyler
DSC_0110*	Cruck T2 looking south-west	→ SW	29.03.2011	R Tyler
DSC_0111*	Cruck T2 looking south-west	→ SE	29.03.2011	R Tyler
DSC_0112	Cruck T2 , west blade	→ SW	29.03.2011	R Tyler
DSC_0113*	Cruck T2 , west blade and window	→ W	29.03.2011	R Tyler
DSC_0114	Inserted stack from room [GF--]	→ NW	29.03.2011	R Tyler
DSC_0115	Inserted stack from room [GF--]	→ NW	29.03.2011	R Tyler
DSC_0116	Cruck T3 , east blade	→ N	29.03.2011	R Tyler
DSC_0117*	Cruck T3 with wind brace	↑	29.03.2011	R Tyler
DSC_0118	Cruck T3 with wind brace	↑	29.03.2011	R Tyler
DSC_0119	Inserted stack from room [GF--]	→ NW	29.03.2011	R Tyler
DSC_0120	Cruck T3 , east blade; detail	→ S	29.03.2011	R Tyler
DSC_0121*	Cruck T3 , east blade; detail	→ S	29.03.2011	R Tyler
DSC_0122	Roofspace above [GF--]	→ S	29.03.2011	R Tyler
DSC_0123*	Cruck T5 ; blades truncated at collar	→ E	29.03.2011	R Tyler
DSC_0124	Cruck T5 , blades truncated at collar	→ E	29.03.2011	R Tyler
DSC_0125	Roofspace above [GF--]	→ S	29.03.2011	R Tyler
DSC_0126	Roofspace above [GF--]	→ S	29.03.2011	R Tyler
DSC_0127	Roofspace above [GF--]; cruck T2	→ N	29.03.2011	R Tyler
DSC_0128	Roofspace above [GF--]; cruck T2	→ N	29.03.2011	R Tyler
DSC_0129*	Roofspace above [GF--]; purlins of eastern roofslope	→ SE	29.03.2011	R Tyler
DSC_0130	Cruck T2 , apex detail and ridge piece	↑	29.03.2011	R Tyler
DSC_0134	Cruck T2 , apex detail and ridge piece	↑	29.03.2011	R Tyler
DSC_0135*	Roofspace above [GF--]	→ N	29.03.2011	R Tyler
DSC_0136	Roofspace above [GF--]	→ N	29.03.2011	R Tyler

DSC_0137*	Cruck T2 , apex detail and ridge piece	↑	29.03.2011	R Tyler
DSC_0138	Cruck T2 , east blade	→ SE	29.03.2011	R Tyler
DSC_0139	Cruck T2 , east blade	→ SE	29.03.2011	R Tyler
DSC_0140*	Cruck T2 , east blade + section of primary plate	→ SE	29.03.2011	R Tyler
DSC_0141	Cruck T2 , west blade	→ SW	29.03.2011	R Tyler
DSC_0142	East wall, south end; window detail	→ E	29.03.2011	R Tyler
DSC_0143	East wall, south end; window latch detail	→ E	29.03.2011	R Tyler
DSC_0144*	West elevation, blocked door/window to north end	→ E	29.03.2011	R Tyler
DSC_0145	West elevation exposed framing north of stack	→ E	29.03.2011	R Tyler
DSC_0146	West elevation exposed framing north of stack	→ E	29.03.2011	R Tyler



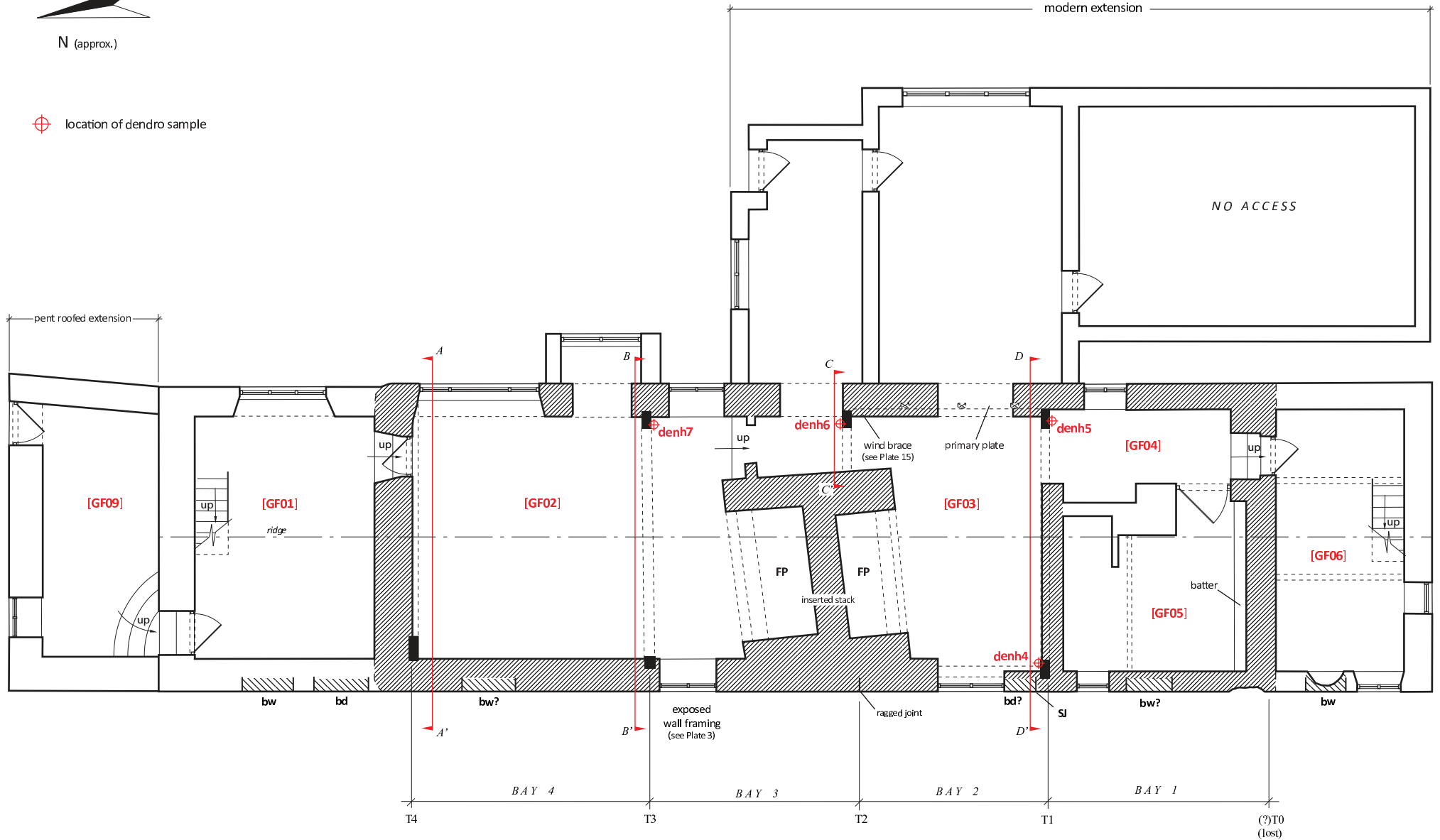


© Google Earth



N (approx.)

⊕ location of dendro sample

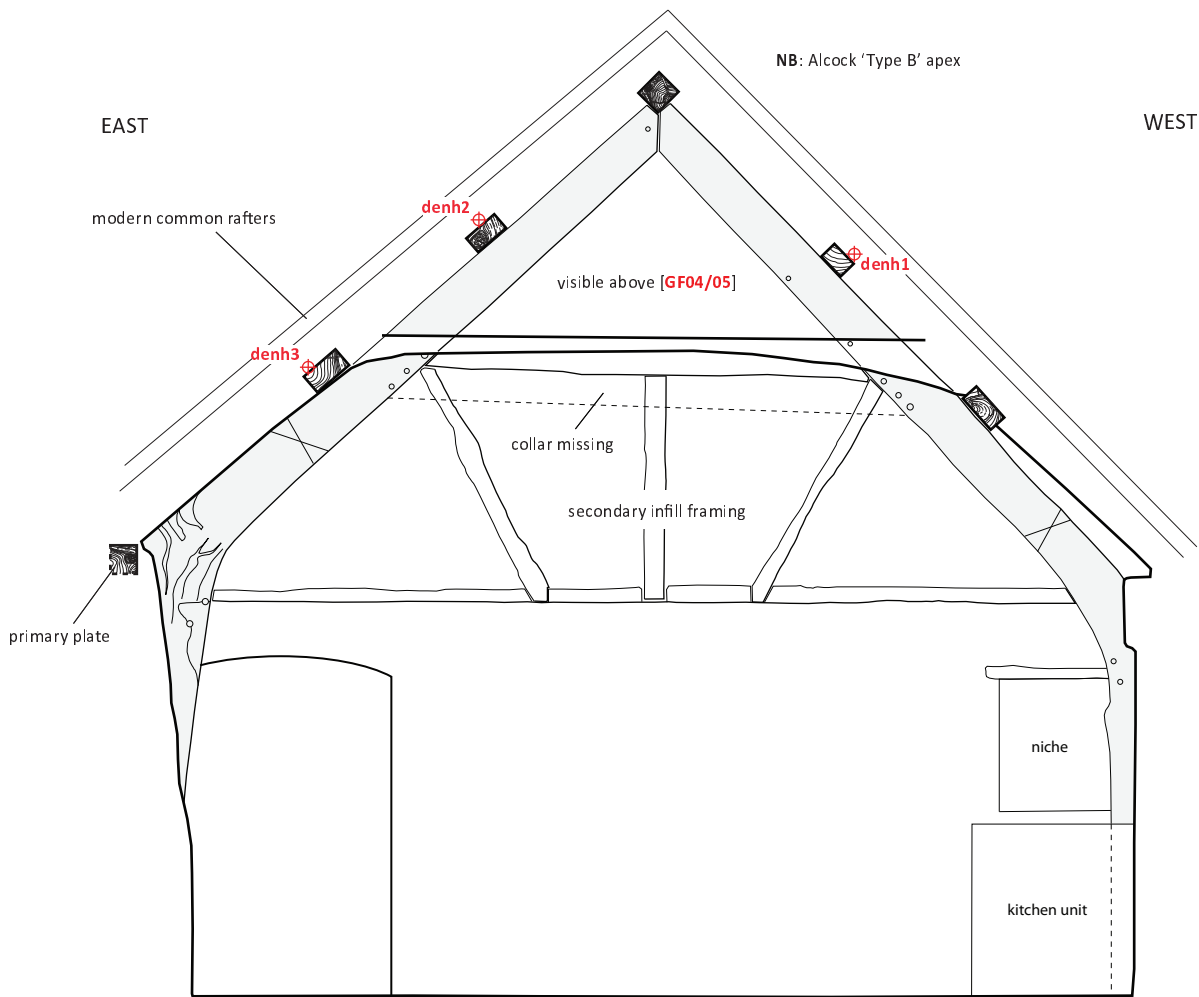


0 1 2 3 4 5 metres

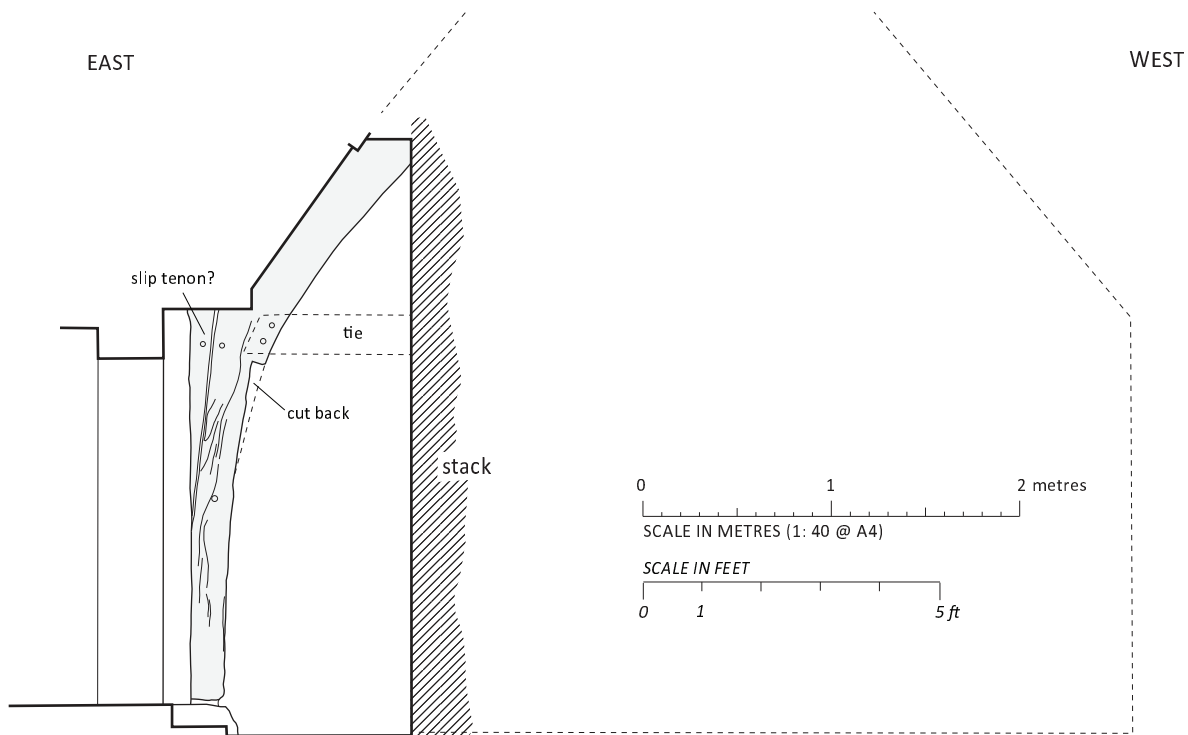
SCALE IN METRES (1: 100 @ A4)

SCALE IN FEET

0 5 10 15 ft

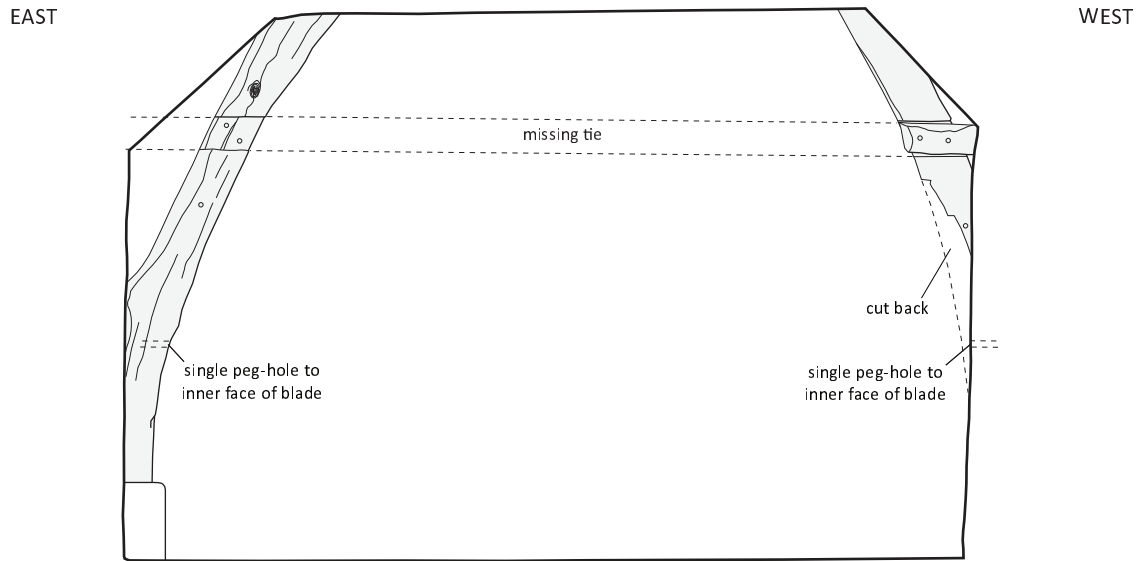


(a) Cruck T1, north face

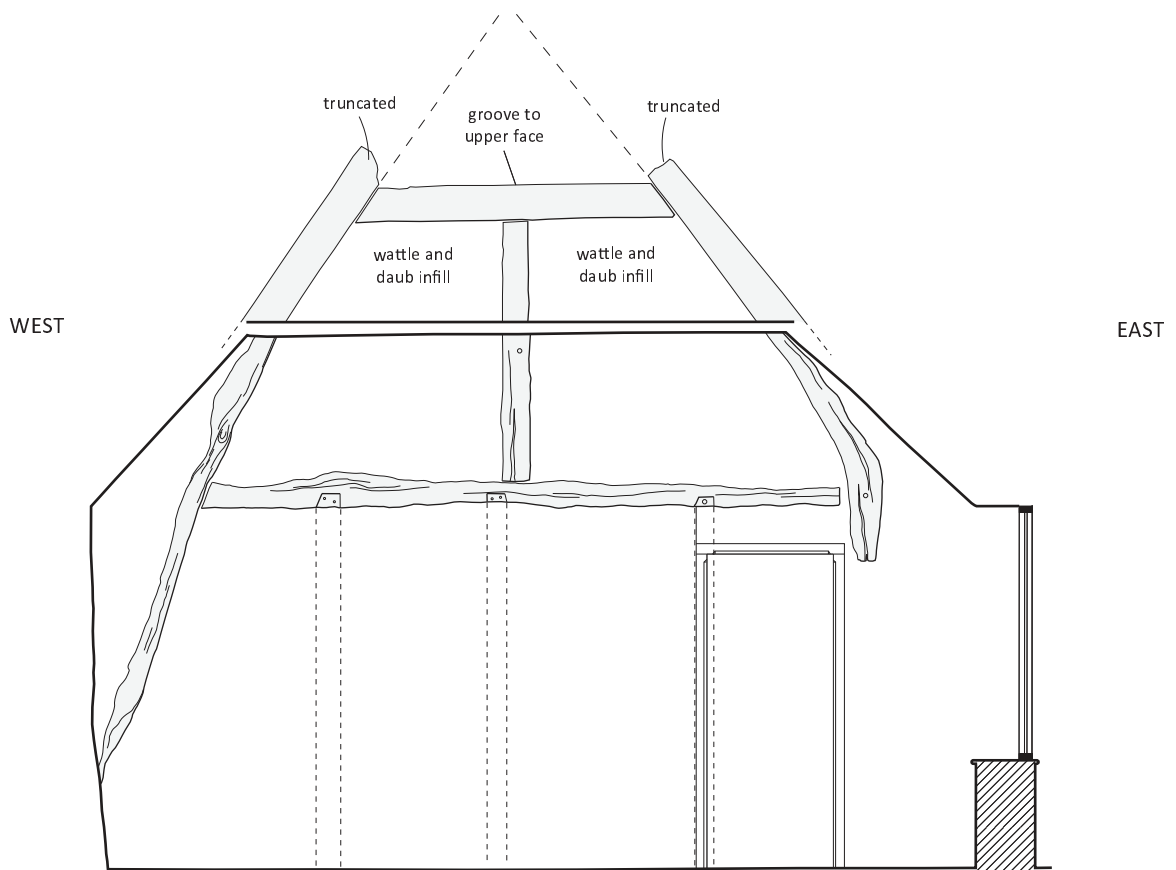


(b) Cruck T2; east blade, north face

⊕ location of dendro sample



(c) Cruck T3, north face



(d) Cruck T4, south face

0 1 2 3 4 5 metres

SCALE IN METRES (1: 40 @ A4)

SCALE IN FEET

0 5 10 15 ft



Plate 1: West elevation, oblique, looking south-east.



Plate 2: West elevation, oblique, looking north-east.



Plate 3: Section of primary wall framing visible within west elevation.

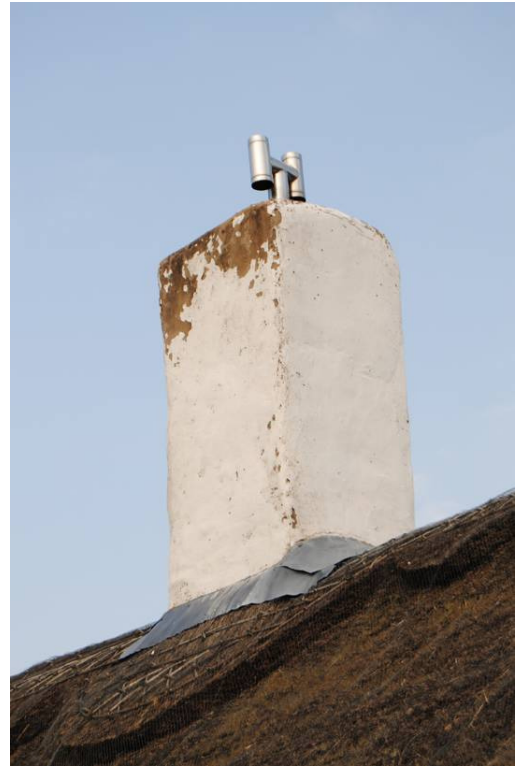


Plate 4: Principal ridge stack.



Plate 5: Blocked window (left) and doorway (right with lintel) at north end of west elevation.



Plate 6: North end of east elevation; inserted windows and window projection.



Plate 7: South elevation.



Plate 8: Cruck [T4] looking north.



Plate 9: Cruck [T4]; blade truncated above collar level. NB: wattle and daub infill below collar.



Plate 10: Cruck [T3] looking south towards inserted stack.



Plate 11: Cruck [T3] (E), redundant lap-joint for tie.



Plate 12: Cruck [T3] (W); truncated tie.



Plate 13: Cruck [T2] (E).



Plate 14: Cruck [T2] (E); detail of post.



Plate 15: Cruck [T2] (E); wind-bracing to lower purlin.



Plate 16: Cruck [T1] (E).



Plate 17: Cruck [T1] (W).



Plate 18: Cruck [T1] (E) NB: section of primary wall plate to left.



Plate 19: Roofspace over [GF03] showing upper purlin and square-section ridge piece.



Plate 20: Cruck [T1], apex detail.



Plate 21: Bay 1 western roofslope showing two tiers of purlins.