Culross Bothy Shed *Culross, Fife*

Historic Building Recording: August 2017

for

the National Trust for Scotland

September 2017



Bothy Shed exterior

Addyman Archaeology

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Job number 2291.00

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by Kenneth Macfadyen

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Culross Bothy Shed *Culross*, *Fife*

Historic Building Recording

Executive Summary

Addyman Archaeology was contracted by the National Trust for Scotland to carry out an archaeological survey of the existing roof structure at Culross Bothy Shed, Fife to inform proposals to repair the structure. The current roof displays a mixture of timber from different periods and the survey was intended to identify any original or early structure within the fabric. As the building has historically apparently been raised twice and therefore any "original" roof would have been taken down and rebuilt more than once.

The Bothy Shed structure has been recorded in detail in recent phases of building recording. However, the roof was not easily accessible during these works and was recorded from ground level with context numbers assigned to visible structural elements and features. The structure as recorded was noted to have numerous relic cut sockets in the timbers and a cut numbering system that was out of sequence indicating a lot of disturbance/rebuild of the structure.

This report contains the results of the building recording and analytical survey of the roof structure of the Bothy Shed following internal scaffold access to the roof.

The structure as recorded proved not to be an *in situ* 17th century roof and appeared to be a much later structure relating to a late reordering of the structures interior; this had recycled timber from a number of sources including floor joists and roof trusses from other roofs. In the mid-20th century the roof was again dismantled and rebuilt with much of the collars replaced with recycled roof timbers again from another roof.

1. Introduction

i. General

Addyman Archaeology was contracted by the National Trust for Scotland (NTS) to carry out an archaeological survey of the existing roof structure at Culross Bothy Shed to inform proposals to repair the structure. The current roof contains a mixture of timber of differing periods and the survey was intended to identify any original or early structure within the fabric. As the building has historically apparently been raised twice any "original" roof would have been taken down and rebuilt a few times.

The structure has been recorded in detail in recent phases of building recording (Ewart 2005; Kikdale Archaeology 2008) but the roof was not easily accessible during these works and was recorded from ground level with context numbers assigned to visible structural elements and features. The structure as recorded was noted to have numerous relic cut sockets in the timbers and a cut numbering system that was out of sequence indicating a lot of disturbance/rebuild of the structure.

The present works were undertaken by Kenny Macfadyen from $21^{st} - 25^{th}$ August 2017.

A record of the works undertaken (OASIS ID: addymana1-296570) has been deposited with the Online Access to the Index of Archaeological Investigations (OASIS) website hosted by the

Archaeological Data Service and with Discovery and Excavation in Scotland (DES), the annual publication of fieldwork by Archaeology Scotland.

ii. Site location and setting

Culross Bothy Shed sits to the immediate east of Culross Palace (NGR: NS 98552 85952; *figure 1*). It appears to have been laid out on the original rig behind Sandhaven East and close to the original harbour (Wright 2010).

2. Historical Summary

Culross Bothy Shed (Canmore ID 105139) and adjacent garage lie to the rear of Sandhaven East and are otherwise referred to as the store and garage for Robertson's House (property 1626). The Bothy Shed is Category B Listed (LB23987) and is also on the Buildings at Risk Register (BAR4882).

The bothy and adjacent garage are considered to be important elements in the historic townscape in reflecting the original rig pattern and because of their location adjacent to The Palace (Wright 2010). The structure reflects several phases of development, and the lintel carries the date 1662. A full description of the structure as detailed in the Kirkdale Archaeology report suggests at least four phases of development with the building likely to have been used for storage purposes associated with one or more of the burgh's established industries (Kirkdale Archaeology 2008). The early structure could be of 16th century date and may have been used as a 3-storey dwelling. At an early date the ground level was raised leaving the evidence of earlier openings in the base of the west wall and the wallheads were also extended in height, with the original pantiled roof associated with the raising of the building (Wright 2010).

The building has original fabric surviving including examples of harling, mortar, and early brick infill to former openings, late 18th/ early 19th century sash and case windows and internal plaster. The roof construction was considered to be of 17th century date or possibly earlier (Wright 2010).

Originally the Bothy was the northern most of three buildings; the building to the south was demolished in the 1950s along with the south gable of the Bothy, which was subsequently rebuilt. While early maps of Perthshire and Clackmannan show the palace and surrounding buildings, the first clear depiction of the buildings is on the Ordnance Survey 1st edition map of 1861 (*figure 2*).

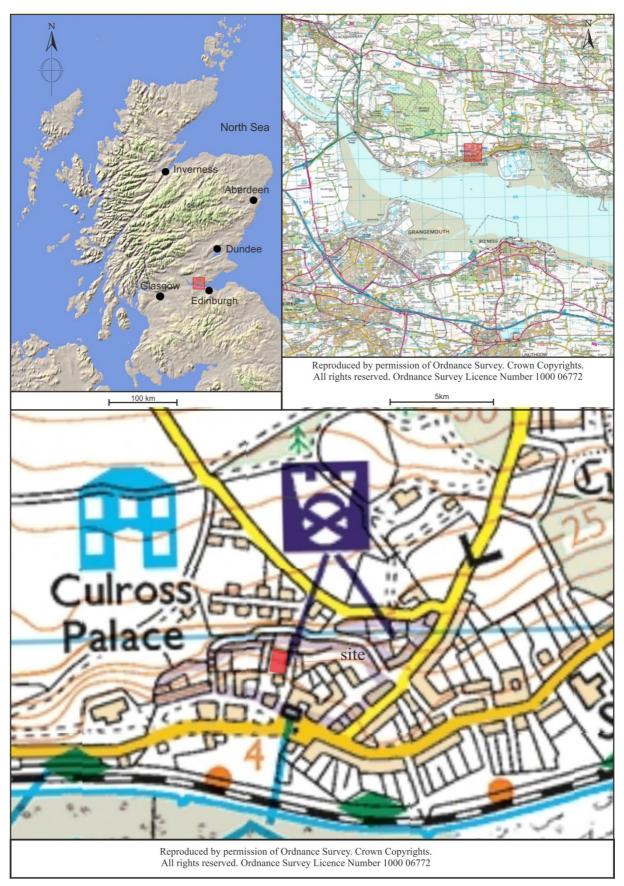


Figure 1 Site location

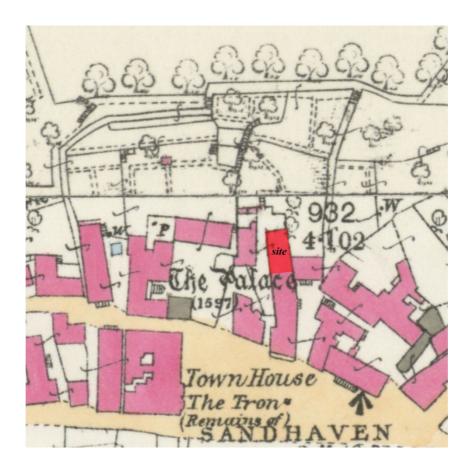


Figure 2 OS 25 inch 1st edition, surveyed 1861, site marked in red

3. Historic Building Recording

i. Methodology

The structure was made accessible with an internal scaffold allowing access to record the roof timbers. The roof elements were recorded on a hand drawn plan at 1:20 and individual trusses were recorded in elevation at 1:20 recording the face with the most detail. A general photographic record was also made of the structure with detail photographs of individual features.

The context numbering assigned in the 2008 building recording report was used to number the elements.

i. Results

Following investigation the roof appears to be of three distinct phases, with each phase mostly reusing structural elements from earlier phases or from other structures.

a. Phase A Original 17th? Century Building

The original or early roof structure of the probable 17^{th} century building following two phases of raising the wall heads is largely lost and only two surviving elements may relate to this. These are both former rafters cut down into collars. However, it it is also considered possible that these were brought in from elsewhere as part of *phase B* (see below).

Collars 031 and 034 (from trusses 11 and 12) are noticeably different to all the others in that they are much neater squared although still just squared cabers, these were formerly rafters and were numbered with saw cut numbering of "IX" (or XI) and "II" (plates 1 and 2).





Plate 1 Feature 087 Sawn "IX" on rafter 031

Plate 2 Feature 094 Sawn "II" on rafter 034

The full dimensions of the rafters has been lost as they were cut down at either end in *phase B* but one relic cut half lap dovetail joint survives on each for a collar beam. The collars were nailed.



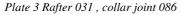




Plate 4 Rafter 034 , collar joint 091

These are likely remnants of the early roof which was probably in poor repair by *phase B*, perhaps with the rafter ends rotted and so the rafters were cut down for collars.

b. Phase B Major reordering of interior and roof

The next major phase of reordering of the structure is likely to be related to the reduction of interior floors from three to two. The vast majority of the rafters relate to this phase and these include timber from a number of sources, including two reused substantial rafter pairs (trusses 03 and 09).

Truss pair 03 (006,007) is formed from a pair of adze-squared cabers of larger dimensions than the others within the roof and of a different former arrangement. That the truss is a pair can be seen from the saw cut numbering with both trusses numbered "XIIII" (features 054 and 055). The numbering on the east truss 006 has an extra stroke upon the first "I" which was interpreted as indicating the

alignment of the pair within the original roof ie meaning left truss (or right); it is probably not distinct enough to be another X and thus from another pair (plates 5 and 6).





Plate 5 Truss 3 rafter 006, shows cut number 054

Plate 6 Truss 3 rafter 007, shows cut number 055

The truss formerly had an upper collar (112,113 sockets) and a lower collar (111,114 sockets) with half lap dovetail joints; the upper collar may have been affixed with a timber peg and the lower one was apparently nailed. Further joint evidence exists at the wall foot where a vertical mortice socket (053,115) is cut in both rafters.

Truss pair 09, 024,025 was another reused truss of larger dimensions (plates 7 and 8). This was a simple rafter pair with no collars formed from adzed square cabers; both were numbered with a saw cut "XIII" (078,079). This numbering was similar to that seen on truss 3 but didn't have the extra stroke indicating orientation, together with the completely different build this indicates that they are likely to have come from different roofs despite being sequentially numbered 13 and 14. Alternatively they may have been from an earlier roof that had itself reused a variety of even earlier roof structures.





Plate 7 Truss 9 rafter 024 cut no 078

Plate 8 Truss 9 rafter 025 cut no 079

Truss pairs 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15 and 16 are all similar and make up the bulk of the roof (plates 9-22). These are all of sawn square timber and generally 7-8 cm wide and 10 – 15cm high. These appeared to be possibly machine cut on three sides or very neatly hand sawn, but the fourth side, generally the underside, was clearly hand sawn and fairly rough in places with the cut wandering in and out. This face had been variably finished with an adze and/or a plane to remove much of the rough saw cuts, but many survive. It was considered possible these represent larger beams latterly halved to form rafters; the beams may have originally been floor joists.

These pairs are sequentially numbered from 1-12 with saw cut markings, but are now out of sequence.

Only two trusses appear to be complete in their original form, trusses 11 and 12, while all the others have had their collars replaced; this and the trusses sitting out of sequence indicates a major repair of the roof involving taking it down completely and not being too careful to put them back in order.

The two surviving full truss pairs show the original construction on these possibly cut down phase A rafters. The ends of the collars have been trimmed down with a chamfered end and were affixed onto the face of the rafter with a single large iron spike/nail. The height of the collar base on the rafter was scribed into the rafter.

On most, if not all, of the rafters with collars replaced in phase C, the scribe marking out for the collars can be seen, as well as the stub of a large iron spike (occasionally two) showing them all to be of one phase (in some cases the later collars obscure these details). This scribing and spike for the collar was also noted on trusses 3 and 9, the reused truss pairs showing these to be of the same phase as the rest rather than a later replacement.



Plate 9 Collar 031 shows original form with end chamfered and spiked



Plate 10 Truss 6 rafter 016 shows scribing and spike/s for original collar



Plate 11 Truss 10 rafter 027 cut number "I" 081



Plate 12 Truss 11 rafter 029 cut number "II" 084



Plate 13 Truss 13 rafter 036 cut number "III" 096



Plate 14 Truss 12 rafter 032 cut number "IIII" 089



Plate 15 Truss 14 rafter 039 cut number "V" 100



Plate 16 Truss 15 rafter 041 cut number "VI" 102



Plate 17 Truss 16 rafter 045 cut number "VII" 107



Plate 18 Truss 8 rafter 021 cut number "VIII" 075



Plate 19 Truss 7 rafter 018 cut number "VIIII" 070



Plate 20 Truss 6 rafter 016 cut number "X" 067



Plate 21 Truss 5 rafter 012 cut number "XI" 062



Plate 22 Truss 4 rafter 010 cut number "XII" 059

c. Phase C Major roof repairs (mid-20th century)

In the mid to later 20th century a phase of major roof repairs was undertaken and at this stage the roof was likely in a state of disrepair. These works appear to have involved the complete dismantling of the roof and its reconstruction reusing the *phase B* rafters but replacing nearly all of the collars, tile batons and rafters along the gable at either end.

The complete dismantling can be shown by the trusses being put back out of numbered sequence - that is unless they were originally out of sequence in the phase B roof construction. Photographs of mid-20th century works in the NTS archive may have the answer to this.

The collars were replaced with reused early rafters. These were roughly squared cabers with relic cut half lap dovetail joints for upper collars (plates 23 – 35). On two of these (truss 5 &14, collars 14 & 40) a second lower collar/tie joint also survives at the end of the beam. These are all very similar and likely come from the same salvaged and potentially old roof structure.

These collars were also numbered with a sequence of incomplete sawn numbering; eleven numbers were noted on the collars all cut into the face with the relic collar joint. Ten of the numbers were complete but one had been part lost to rot. Two of the numbers were duplicated: "III" and "VIIII", showing them to be former pairs; the rotten one may have been "II" which would represent a third pair. The largest number was 13 showing the salvaged roof to have had 13 or more trusses.

The collars that were formerly rafters have a series of nails along the original upper face; these sit about 30cm apart with a little variation and are likely nails for timber batons to hold a tiled roof. Some of the former rafters were trimmed back locally for these batons to pass over showing the roof to have been a bit uneven in places.

These replacement collars were simply sawn off at the ends to fit the roof and affixed with large ovalheaded wire nails.

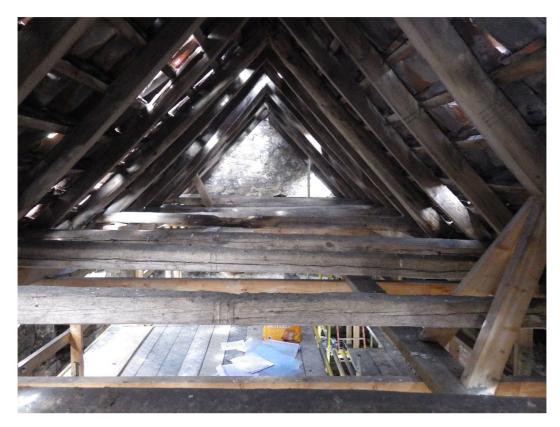


Plate 23 View along roof showing phase C collars



Plate 24 Truss 14 partial number, probably II



Plate 25 Truss 10 cut no 082



Plate 26 Truss 3 cut no 057



Plate 27 Truss 4 cut no 060



Plate 28 Truss 8 cut no 076



Plate 29 Truss 13 cut no 097



Plate 30 Truss 6 cut no 068



Plate 31 Truss 7 cut no 072



Plate 32 Truss 15 cut no 104



Plate 33 Truss 16 cut no 108



Plate 34 Truss 5 cut no 064



Plate 35 Truss 16 relic collar slot 109

ii. Discussion

The recording of the roof structure showed that the current structure is not the original 17th century roof or even composed of much original fabric, but it can also be said that the structure is not a 20th century structure as may have been suggested by viewing the sawn rafters from the ground.

The roof structure is made up from a number of reused timber elements, with the bulk of the phase B rafters appearing to possibly be floor joists halved. It therefore seems probable that the roof could relate to the later major reordering of the structures interior where the floor levels were changed and a floor removed; this would have provided the timber for the rafters and the works would have provided a reason for repairing/replacing the roof.

Alternatively the rafters could be timber salvaged from another building. Two of the trusses were clearly salvaged from two earlier substantial roofs showing the bringing in of salvaged materials from elsewhere to form the roof.

Presumably the original roof having been raised twice and potentially around 200 years old was in a poor state of repair, perhaps with rotten rafter feet etc, so the roof was stripped and reusable lengths of rafter/collar were cut down for new collars and nailed onto the new rafters.

Latterly and likely about the time the structure came into ownership of the NTS (mid 20th century) repairs were undertaken which may have involved the wholesale dismantling of the roof structure and replacement of most of the collars. The phase B collars, which were likely reused from an original/early 17th C roof, were probably in poor condition by then and needed to be replaced to get the roof structurally sound.

The replacement collars were themselves cut down salvaged rafters from another early building, most likely another derelict building in the local area, but could also have been imported from elsewhere.

This recording has shown that the roof timbers varied origins represents a long tradition of recycling of reusable timber within repairs of buildings historically.

4. References

Ewart, G 2005 Culross 'Bothy', behind Sandhaven, Fife (Culross parish), standing building recording', Discovery Excav Scot, vol. 6, 2005, 72.

Kirkdale Archaeology 2008 Culross Bothy Shed: An Archaeological Survey undertaken on behalf of the National Trust for Scotland. Kirkdale Archaeology unpublished report.

Wright, APK 2010 An evaluation of the significance of the non-visited properties in Culross. Report for the National Trust for Scotland.

Appendix A Drawings Register

Drawing No.	Scale	Туре	Date	Drawn by	Description
1	1:20	Plan	08/17	Kmacf	Roof structure plan
2	1:20	Elevation	08/17	Kmacf	Eastern elevation of roof structure
3	1:20	Elevation	08/17	Kmacf	Truss 3 N face
4	1:20	Elevation	08/17	Kmacf	Truss 4 S face
5	1:20	Elevation	08/17	Kmacf	Truss 5 S face
6	1:20	Elevation	08/17	Kmacf	Truss 6 N face
7	1:20	Elevation	08/17	Kmacf	Truss 7 N face
8	1:20	Elevation	08/17	Kmacf	Truss 8 N face
9	1:20	Elevation	08/17	Kmacf	Truss 9 N face
10	1:20	Elevation	08/17	Kmacf	Truss 10 N face
11	1:20	Elevation	08/17	Kmacf	Truss 11 N face
12	1:20	Elevation	08/17	Kmacf	Truss 12 N face
13	1:20	Elevation	08/17	Kmacf	Truss 13 N face
14	1:20	Elevation	08/17	Kmacf	Truss 14 N face
15	1:20	Elevation	08/17	Kmacf	Truss 15 N face
16	1:20	Elevation	08/17	Kmacf	Truss 16 N face
17	1:20	Plan	08/17	Kmacf	Ground floor plan
18	1:20	Plan	08/17	Kmacf	Plan of roof ridge

Appendix B Finds Register

Finds No.	Context No.	Material	Date	Initials	Quantity	Description
001		Metal		Kmacf	1	Metal plumb bob associated with previous
I						archaeological recording

Appendix C Photograph Register

* duplicates have been removed

Image No.	Direction Facing	Description
001	S	General view along roof to south
002	S	General view along roof to south
003	SW	General view along roof to south
004	SE	General view along roof to south
005	S	General view of rafter with numbering
006	Е	Detail of underside of collar showing nail holes
007	S	General view to south within roof
008	SW	General view along roof to south
009	N	Detail of collar end
010	N	Detail of collar end
011	S	Detail of relic joint and numbering
012	N	Detail of numbering sequence on rafters
013	N	Detail of collar end
014	N	Truss 1 apex joint
015	N	Truss 3 008 collar, detail of cut no 'III' 057
016	N	Truss 3 008 collar detail of collar cut 056
017	W	Truss 3 008 collar view along S face
018	S	Truss 3 006 rafter to E detail of no 'XII' and joint
019	S	Truss 3 006 rafter detail of no 'XIII'
020	S	Truss 3 006 rafter detail of no 'XIII' and upper collar joint
021	S	Truss 3 006/007 apex joint
022	S	Truss 3 006 lower collar joint
023	Е	Truss 3 006 base mortice
024	S	Truss 3 006 detail of scribing and spike
025	S	Truss 3 007 detail of 055 no 'XIIII'
026	S	Truss 3 007 detail of 055 no 'XIIII' and upper collar joint
027	S	Truss 3 007 detail of lower collar cut
028	S	Truss 3 007 detail of scribed numbering and spike
029	S	Truss 3 007 detail of scribed numbering and spike
030		Truss 4 011 collar general view along
031		Truss 4 011 collar detail of 60 no 'III'
032		Truss 4 011 collar detail of 064 cut socket for collar
033		Truss 4 011collar detail of 064 cut socket for collar
034		Truss 4 009 rafter no 056 'XII'
035		Truss 4 010 rafter no 059 'XII'
036		Truss 4 009/010 apex joint
037		Truss 4 009 scribed marking cut and spike
038	S	Truss 4 010 scribed marking cut and spike
039	S	Truss 5 014 general view along collar
040	S	Truss 5 014 detail 'XIII' 064
041	S	Truss 5 014 detail of socket 066
042	W	Truss 5 014 detail of nailed end and nails

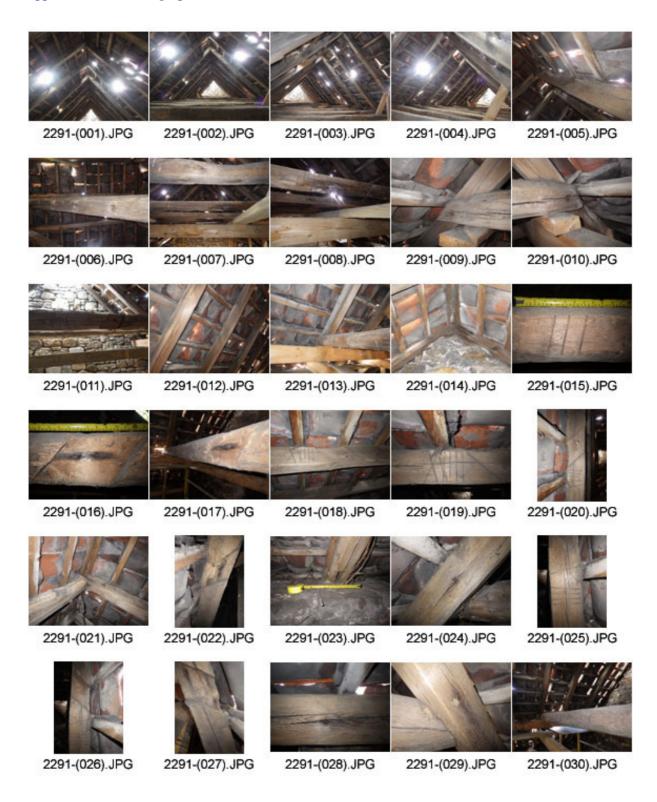
043	S	Truss 5 012 detail of no 'XI' 062
043		Truss 5 012 detail of no 'XI' 062
*	S	
045	S	Truss 5 012 detail of scribed marking and spike Truss 5 013 detail of no 'XI' 063
046	S	
047	S	Truss 5 013 detail of scribed marking and spike
048		Truss 5 014 underside and collar showing relic tile baton nail holes
049		Truss 5 014 underside and collar showing relic tile baton nail holes
050	W	Truss 6 017 general view down collar
051	S	Truss 6 017 068 no 'VIIII'
052	S	Truss 6 017 069 cut at collar slot
053	S	Truss 6 015 no 'X'
054	S	Truss 6 015 no 'X'
055	S	Truss 6 015 scribed marking and spike
056	S	Truss 6 016 067 no 'X'
057	S	Truss 6 016 scribing/spike cut lines on collar
058	W	Truss 7 020 collar general view along
059	S	Truss 7 020 no 'VIIII' 072
060	S	Truss 7 020 collar socket 073
061	S	Truss 7 018 rafter cut no 'VIIII' 070
062	S	Truss 7 018 rafter cut no 'VIIII' 070
063	S	Truss 7 018 rafter and scribed marking and spike
064	S	Truss 7 019 rafter and cut no 'VIIII' 071
065	S	Truss 7 019 rafter scribed marking and spike
066	W	Truss 8 023 collar general view
067	S	Truss 8 023 collar cut 076 no 'VII'
068	S	Truss 8 023 collar cut 076 no 'VII'
069	S	Truss 8 023 collar cut 076 no 'VII'
070	S	Truss 8 023 collar 077 collar joint
071	S	Truss 8 023 collar 077 collar joint
072	S	Truss 8 023 collar 077 collar joint
073	S	Truss 8 022 cut no 'VIII' 074
074	S	Truss 8 022 scribed marking and spike
075	S	Truss 8 022 cut no 'VIII' 075
076	S	Truss 8 021 scribed marking and spike
077	S	Truss 9 024/025 apex
078	N	Truss 9 024 025 in relation to others
079	S	Truss 9 024 cut no 'XIII' 078
080	S	Truss 9 024 scribed marking and spike
081	S	Truss 9 025 no 079 'VIII'
082	S	Truss 9 025 no 079 'VIII'
083	S	Truss 9 025 scribed marking and spike
084	W	Truss 9 025 evidence for last made collar
085	W	Truss 10 028 general view
086	S	Truss 10 028 detail of no 'II' 082
087	S	Truss 10 detail of 083 cut socket for collar
088	N	Truss 10 026 detail of no 'I' 080
089	N	Truss 10 026 detail of early spike behind 028 collar
090	N	Truss 10 027 detail of early spike behind 028 collar
091	N	Truss 10 027 detail of early spike behind 028 collar

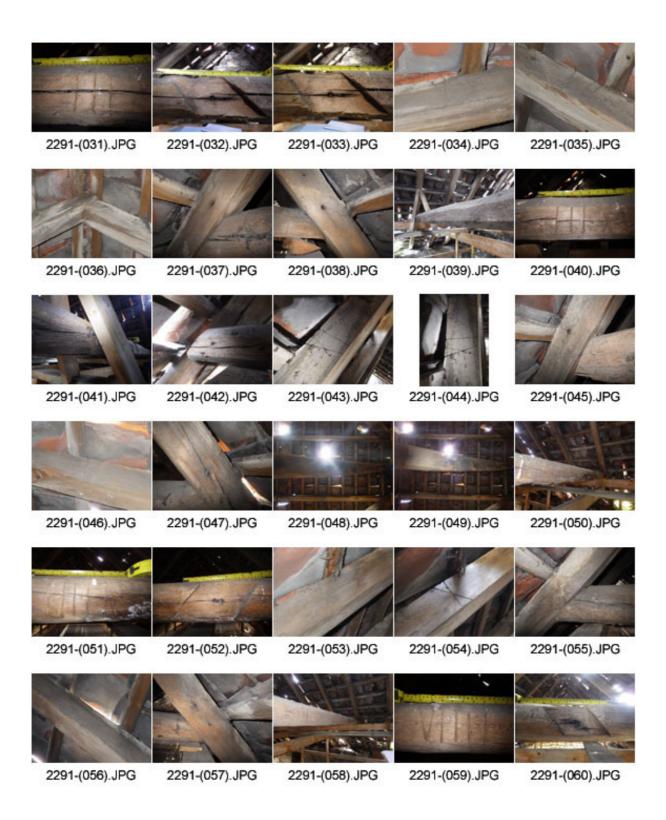
	1	T
092	N	Truss 10 027 detail of early spike behind 028 collar
093	N	Truss 10 027 shows early marking out behind 028
094	W	Truss 10 028 underside shows bottom nails
095	W	Truss 11 031 general view along collar
096	S	Truss 11 031 cut 087 no 'IX'
097	N	Truss 11 031 086 cut socket for collar
098	N	Truss 11 029 rafter 084 no. 'II'
099	N	Truss 11 031 E end shows cut detail and spike
100	N	Truss 11 031 E end shows cut detail and spike
101	N	Truss 11 030 rafter no 'II' 085
102	N	Truss 11 031 W end original cut detail and spike
103	N	Truss 11 031 W end original cut detail and spike
104	N	Truss 11 031 cut no 'II' 088
105	W	Truss 11 031 cut no 'II' 088
106	Е	Truss 12 034 general view
107	S	Truss 12 034 094 no 'II' cut N face
108	S	Truss 12 034 094 no 'II' cut N face
109	S	Truss 12 034 socket 091
110	S	Truss 12 034 socket 091
111	N	Truss 12 036 cut 092 'IIII' on S face
112	N	Truss 12 032 cut no 'IIII' 089
113	N	Truss 12 034 E end shows cut end detail and spike
114	N	Truss 12 034 E end shows cut end detail and spike and marking out below
115	N	Truss 12 033 no 'IIII' 091
116	N	Truss 12 033 no 'IIII' 091
117	N	Truss 12 034 W end shows cut detail and spike
118	N	Truss 12 034 W end shows cut detail and spike
119	W	Truss 12 034 W end shows cut detail and spike and marking out below
120	Е	Truss 13 037 collar general view
121	S	Truss 13 037 cut 097 no 'VIII'
122	S	Truss 13 037 collar socket 098
123	N	Truss 13 035 cut no 'III' 095
124	N	Truss 13 036 cut no 'III' 096
125	E	Truss 14 040 collar general view
126	N	Truss 14 040 no 'II' incomplete number
127	N	Truss 14 040 collar socket 101
128	N	Truss 14 038 sawn on 'V' 099
129 130	N N	Truss 14 040 cut collar socket at base Truss 14 039 cut no 'V' 100
131	N N	Truss 14 039 cut no 'V' 100
132	Е	Truss 15 043 general view
133	S	Truss 15 043 cut no 'IX'
134	S N	Truss 15 043 cut socket 105 Truss 15 041 cut no 'VI' 102
136	N	Truss 15 042 cut no 'VI' 103
137	N	Truss 15 043 W end shows marking out on 042 below collar
138	E	Truss 15 043 underside showing tile batons
139 140	E N	Truss 16 046 general view of collar Truss 16 046 cut no 'XII'
141	N	Truss 16 046 socket 109
142	N	Truss 16 044 cut no 'VII' 106
143	N	Truss 16 045 cut no 'VII' 107
144	S N	Truss 16 048 modern beam General view with roof
177	1.4	Ocherui view with 1001

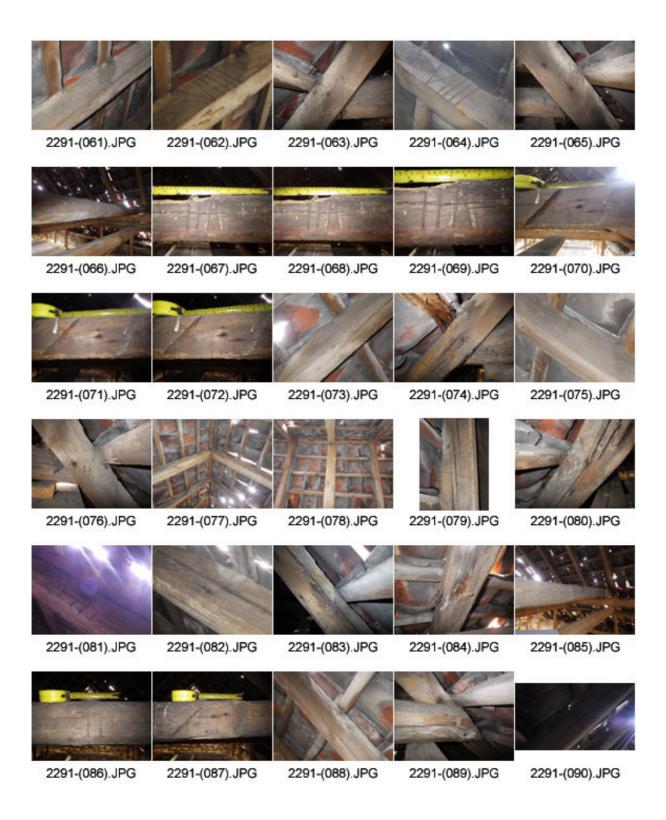
146	N	General view with roof
147	S	Roof general view
148	S	Roof general view
149	S	Roof general view
150	S	Roof general view
151	S	Roof general view
152	S	Roof general view
153	S	Roof general view
154	S	Roof general view
155	S	Roof general view
156	S	Roof general view
157	S	Roof general view
158	S	Roof general view
159	S	Roof general view
160	/	Roof general view
161	S	Roof general view
162	N	Window lintel timber 040 – attic N gable
163	V	Window lintel timber 040 – attic N gable
164	V	Window lintel timber 040 – attic N gable
165	V	Door lintel timber 035 – attic N gable
166	V	Door lintel timber 035 – attic N gable Door lintel timber 035 – attic N gable
167	V	Door lintel timber 035 – attic N gable Door lintel timber 035 – attic N gable
168	E	Timber lintel over large opening 062
169	E E	Timber lintel over large opening 062 Timber lintel over large opening 062
170	E	Timber lintel over large opening 062 Timber lintel over large opening 062
170	E E	Timber lintel over large opening 062 Timber lintel over large opening 062
		C I C
172	E	Window timber lintel 069
173	E	Window timber lintel 069
174	V V	Window timber lintel 069
175		Window timber lintel 069
176	V	Window timber lintel 069
177	V	Window timber lintel 069
178	N	Window timber lintel 028 N gable
179	V	Window timber lintel 028 N gable
180	V	Window timber lintel 028 N gable
181	V	Window timber lintel 028 N gable
182	SW	Window timber lintel 050
183	V	Window timber lintel 050
184	V	Window timber lintel 050
185	Е	Window timber lintel 080
186	Е	Window timber lintel 080
187	V	Window timber lintel 080
188	V	Window timber lintel 080
189	V	Window timber lintel 080
190	V	Window timber lintel 080
191	W	Door lintel 087
192	W	Door lintel 087
193	V	Door lintel 087
194	SE	Exterior NW corner and N and W elevation
195	S	Exterior N elevation
196	S	Exterior N elevation
197	S	Exterior N elevation
198	S	Exterior N elevation
199	S	Exterior N elevation
200	SE	Exterior NW corner and W elevation
201	SE	Exterior W elevation
202	E	Exterior remnant of range to S
203	E	Exterior SW corner
204	NE	Exterior W elevation
205	NE NE	Exterior W elevation
206	E	Exterior W elevation
207	E	Exterior W elevation
208	E	Exterior W elevation
209	E	Exterior W elevation
210	E	Exterior W elevation
210	L	Exterior w elevation

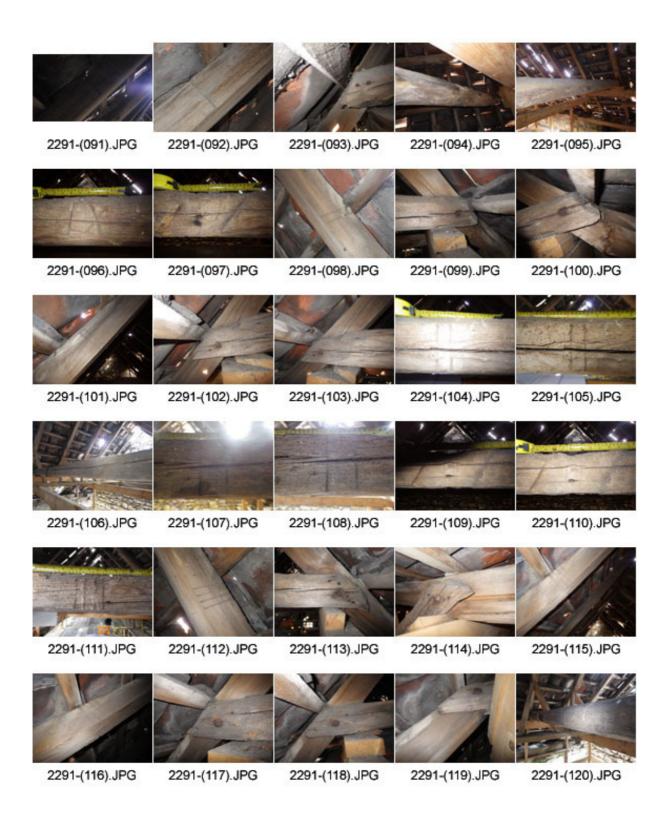
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211	Е	Exterior W elevation
212	Е	Exterior W elevation
213	E	Exterior W elevation
214	Е	Exterior W elevation
215	Е	N elevation external low door to N 004
216	Е	Large opening W external mid wall 068
217	Е	Large opening W external mid wall 068
218	E	Attic dormer 051 above 068
219	Е	W exterior large opening 068
220	Е	W exterior large opening 068
221	Е	W exterior door 013
222	Е	W exterior door 013
223	NE	W exterior door N jamb of door 013
224	SE	W exterior door S jamb of door 013
225	Е	W exterior door 013 shows masonry
226	Е	W exterior door 013 shows masonry over door
227	E	W exterior south attic window 046
228	E	W exterior relieving arch 008
229	Е	SW corner shows former openings and jamb
230	Е	SW corner shows former openings and jamb
231	Е	SW corner shows detail of raised stones in jamb
232	N	SW corner shows detail of raised stones in jamb
233	N	SW corner shows detail of raised stones in jamb
234	N	SW corner shows detail of raised stones in jamb
235	Е	Remnant of southern range
236	Е	Blocked window with date stone 030
237	Е	Blocked window with date stone 030

Appendix D Photograph Contact Sheets

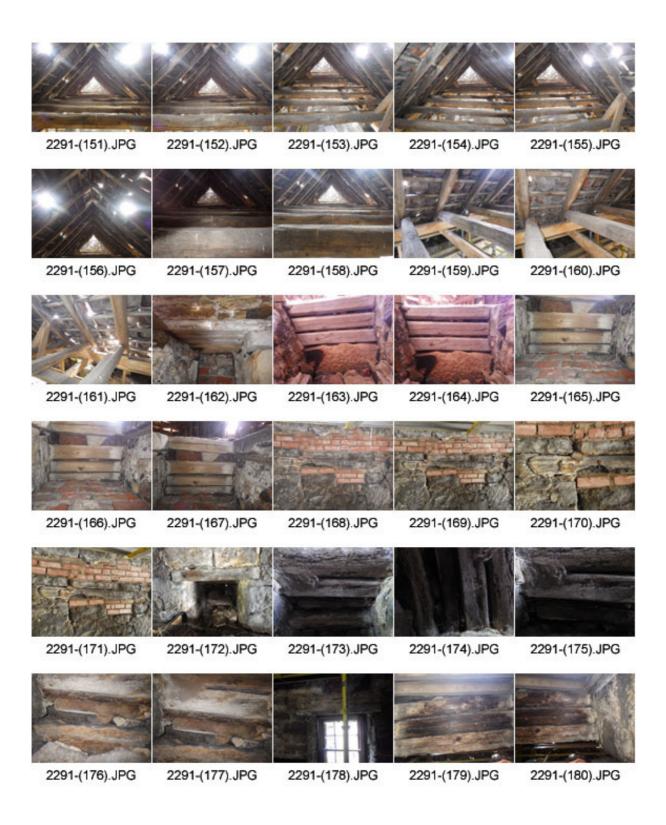


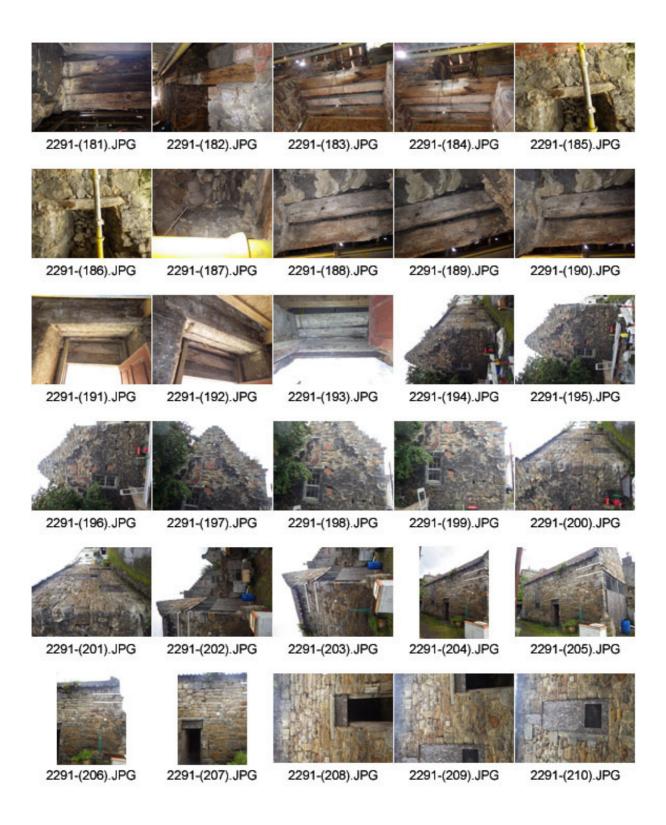








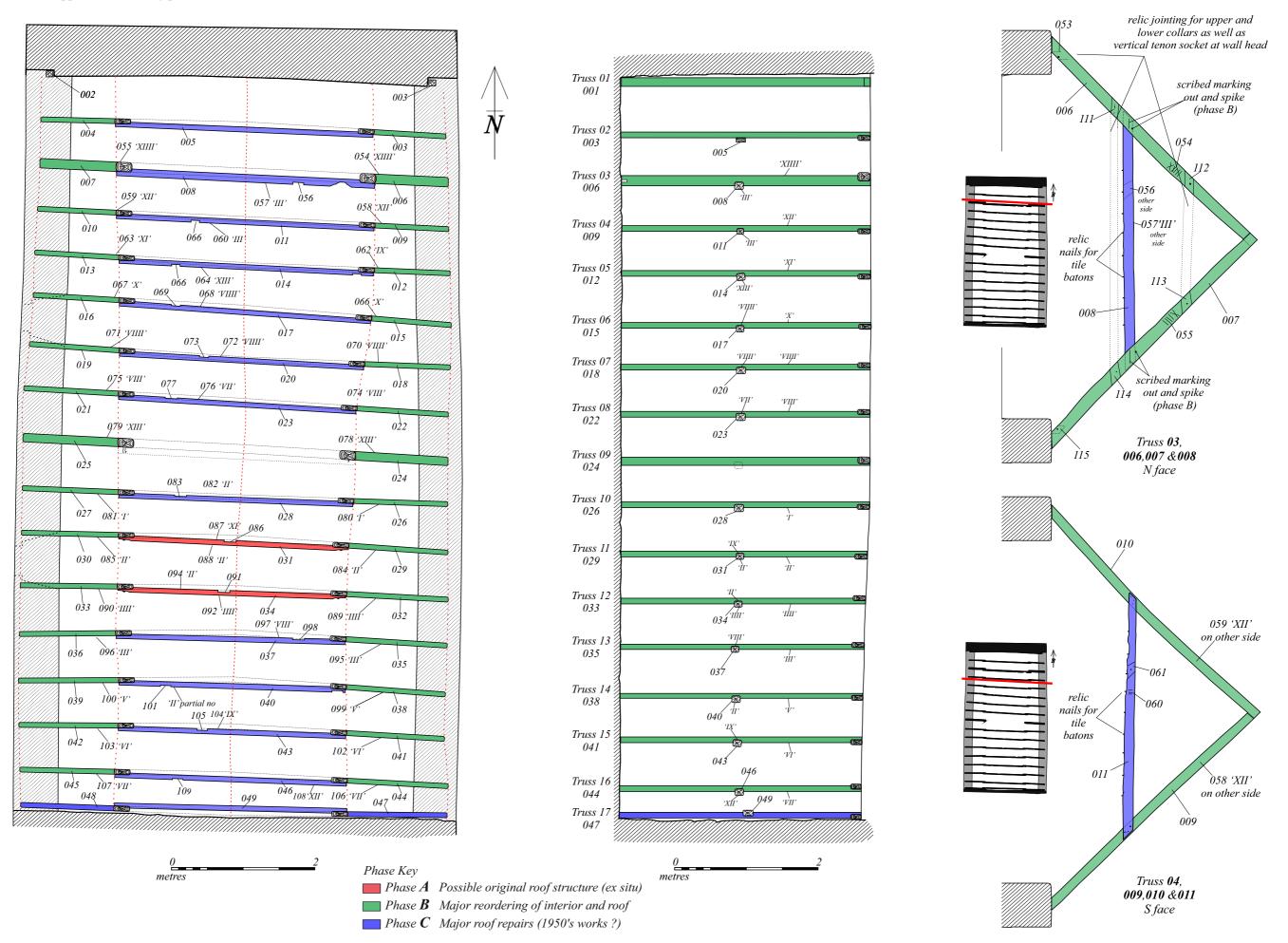






Appendix E Roof plan and truss elevations

Appendix E roof plan and truss elevations



Analytical survey of roof structure 2017

