



Moy Castle, Mull, Scheduled Ancient Monument
Archaeological Works for
Waterproofing Upper Floor Level

MY01

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LEVEL**

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Illustration 4: Plans showing Upper Deposits and Stone Slabs (1112) in W Embrasure

*Illustration 5: Plans showing Stone Slabs (1119) in E Embrasure and Trench excavated down
to top of Vault below*

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ABSTRACT

Alder Archaeology was commissioned to undertake a programme of archaeological work on the Scheduled Ancient Monument, Moy Castle, Mull (NGR NM 61678 24753). The work (Alder site code MY01) was carried out during the period 02-05 July 2012 and was the latest in a series of archaeological works undertaken in conjunction with renovations to make the castle water-tight. The location of this phase of the archaeological work was the upper floor level (kitchen chamber or archaeological area 11). The kitchen chamber is an open area below the walkway where clay waterproofing is to be applied over the floor surface and a drain is to be inserted through the outer wall of the E window embrasure. The work entailed photographic recording of the chamber floor deposits, limited excavation of high areas of floor deposits and surface deposits within the window embrasures and the excavation of a short section of pipe trench into the floor of the E window embrasure. The removal of the high areas and excavation of deposits within the embrasures revealed finds of pottery, glass, iron (mainly nails) and animal bone, all considered to be early modern or modern. Of interest was a Dutch customs lead seal of modern date found on surface deposits of the E window embrasure. Parts of the original flooring of square sandstone slabs for the chamber were exposed and some of the internal mortar bonded stonework of the castle E wall was recorded when the pipe trench was excavated. No further archaeological work is required for this phase of the renovation work.

1 Background

1.1 Introduction

Alder Archaeology was commissioned to undertake a programme of archaeological work on Moy Castle, Mull. This programme of archaeological work on the castle was the latest and possibly the last in a series of archaeological works carried out in conjunction with renovations to make the castle water-tight. The site of the present work was the upper floor level (kitchen chamber or archaeological area 11). It is an open area below the walkway where clay waterproofing is to be applied over the floor surface and a drain is to be inserted through the outer wall of the E window embrasure.

Previously in December 2006, two evaluation trenches were excavated in area 11 to assess the accumulated deposits and investigate the underlying fabric of the floor. These recorded the accumulated deposits, in situ original deposits and the underlying fabric of the floor/vault construction. The evaluation trenches were left open and lined with a breathable membrane and filled with sandbags. One of the evaluation trenches is to be used for the insertion of the drain in the present phase of work.

This programme of archaeological work was carried out so that the needs for archaeological excavation and recording were met without causing undue delay or disturbance to the conservation project.

The work was undertaken during the period 02-05 July 2012 in variable weather conditions.

1.2 Aims and Objectives

The principal objectives of the archaeological programme were as follows:

- To record photographically area 11 and the floors of the two window embrasures prior to any excavation of deposits.
- To undertake the removal of floor deposits under archaeological supervision.
- To record photographically and graphically the entire chamber surface at formation level.
- To archaeologically excavate the trench for the drain below the flooring of the E window embrasure.

With regard to the removal of the floor deposits and the cleaning the underlying stonework to the waterproofing formation level; this part of the programme was altered so that the existing floor deposits of accumulated silt were to largely remain in situ. Only surface debris (loose stone) was to be removed and high areas in the corners and along the edges of the walls were to be reduced to form a level surface. Recording of the actual floor surface stonework in plan was therefore restricted to the flooring within the window embrasures and two small areas that were revealed when high areas were reduced along the W wall and in the SE corner of the chamber. Loose stone from the floor was piled in front of the fire place for removal at a later date. Material from the high areas was deposited on a board on the E side of the loose stone. The fireplace itself had recently been used to house loose stone.

1.3 Reporting

The present document has been prepared as the final report on the archaeology required for the waterproofing of the upper floor level. Copies will be sent to the client, The Royal Commission on the Ancient and Historical Monuments of Scotland, and Historic Scotland

1.4 Planning and Curatorial Issues

Moy Castle or tower-house is a Scheduled Ancient monument (SAM number 5139). Scheduled Ancient Monument Consent is required before any works can be carried out on the Monument. The tower-house is also a category A Listed building and likewise, Listed Building Consent must be obtained before making any alterations to the structure. A method statement for the archaeological work to be undertaken on all renovations to the castle was originally prepared by SUAT Ltd and accepted by Historic Scotland in October 2006.

The method statement for the archaeological work recorded in this report was prepared by Alder Archaeology in August 2011 and approved by Historic Scotland.

The works for the waterproofing of the upper floor level form part of the larger conservation project for which Scheduled Ancient Monument Consent and Listed Building Consent have been granted.

1.5 Acknowledgements

We wish to thank Duncan Strachan, Stone Mason and Masonry Conservation Specialist, and Martin Hadlington Architect & Historic Building Consultant for their input and guidance throughout this project. We also wish thank Martin Brann of Historic Scotland for his assistance and advice with this the project.

2 Details of Work

2.1 The Site (Illus 1)

Moy Castle stands on a low rock platform at the head of Loch Buie. The castle is a modest-sized tower-house formerly incorporating a small enclosure or barmkin on the SE side. Much of the surviving fabric of the tower can be ascribed to the first half of the 15th century. Some alterations and additions, confined mainly to the upper works of the tower, were carried out about the turn of the 16th and 17th centuries, and the castle was finally abandoned as a domestic residence about 1752. In the latter part of the 19th C the roof and garret floor collapsed or were dismantled. The subsequent water ingress slowly began to erode and destabilize the structure and serious renovation work to render the castle water-tight was commenced in 2006.

The area of concern for this phase of archaeological work was the upper or second floor level, located below the parapet walkway, an open chamber of approximately 42m² in area. The large open fireplace at the S end W side (area 12) was inserted into the original build at a much later date to form a kitchen. The chamber doorway is on the E side of the fireplace. The chamber has two window embrasures with single window openings, which are also later insertions through the 2.35m thick W and E walls of the main castle block. Below the chamber is the first floor hall vault, aligned on a N-S

axis. Also below the chamber on the E side is the vault of an upper entresol which is below the E window embrasure and also aligned N-S.

At the time of this archaeological work the chamber floor was covered in silt, embedded with many large stone fragments representing accumulated debris from various works on the castle. Scaffolding that had been erected within the chamber for working on the castle had been removed just prior to the archaeological work. In the corners and along the wall bases, low mounds of debris and silt had accumulated. The floors of the window embrasures were covered in a thin layer of grey sandy silt and crushed mortar.

Two trenches for an archaeological evaluation had been excavated across the chamber floor in December 2006.

2.2 Archaeological Potential

It was hoped that the archaeological works required for the waterproofing on the upper floor level would reveal the depth and character of the makeup and accumulated deposits across the area of the floor and also reveal the stonework of the underlying floor/vaulting at the waterproofing formation level. The excavation through the stonework for the drain would also reveal the nature of the build of the castle fabric.

In December 2006 two evaluation trenches were excavated across the floor of area 11. The results of the evaluation revealed the depth of silting over the floor averaged 0.10m, while up against the N wall accumulated deposits were 0.35m thick. Below recent silting, parts of the original floor still survived in the E part of trench 11100 mainly over the upper entresol vault and core of the E wall within the window embrasure. The W end of trench 11100 and trench 11200 revealed that the original flooring slabs over the main second floor vault had been removed and none were found in-situ. Infilling around the vaulting stones was originally silt or sandy silt. In trench 11100, a layer of sand partly overlay the silt deposit between the vaulting stones. Except for shells found in trench 11200 which could not be dated, all finds appeared to be 19th or 20th century.

2.3 Archaeological Method

Deposits of accumulated silt over the main area of the chamber floor were not to be reduced. The floor was photographically recoded. Loose stonework over the floor was removed and piled in front of the fireplace. The floor was photographically recorded again and planned at 1:50 with ordnance datum levels added. Mounded deposits around the edges of the walls and in the corners of the chamber were photographically recorded and reduced to the general surface level and the underlying deposits photographically and graphically recorded.

The floors of the window embrasures were graphically and photographically recorded, accumulated deposits were removed and the floor slabs were photographically and graphically recorded.

The trench for the drainage pipe was archaeologically excavated though the flooring of the E window embrasure. The drainage pipe was to be inserted into the E-W 2006 evaluation trench (1110) and continued into the excavated window embrasure flooring, to exit below the window. Flooring slab fragments that were removed for the

excavation of the trench were numbered and temporarily stored on a wooden board in the W window embrasure, to be reinstated into their original positions after the drainage pipe had been inserted.

2.4 Results of Investigations

2.4.1 Chamber Floor (Illus 2 and 3)

The deposit (116) over the main chamber floor was not excavated; it comprised a humic black silt or silty loam, which had become saturated in the central area. This deposit had developed as a result of vegetation growth due to the chamber being open to the elements after removal of the flooring and roof above. Some stumps of bushes were removed. Deposit (116) had been impacted with large stone, some slate fragments and other building debris from various works around the castle.

Lying in the SE corner on the W side of door way into chamber is part of a door jamb of mortared ashlar which had fallen from the level above. The door jamb is 1.31m long N-S and 0.38m high and has a rebated edge on its W side. This stonework survived the fall intact and will remain in-situ.

High or mounded silty deposits were (1113) to the S of the W window embrasure, (1114) in the NW corner of the chamber; (1115) in the mid area of the N wall base; (1116) in the NE corner of the chamber and (1117) in the SE corner of the chamber adjacent to the chamber doorway.

High Area (1113)

This area comprised a deposit of dark humic silt, with fragments of slate plaster and mortar and occasional angular stone, averaging 0.17m high. Below mound (1113) was a deposit of dark silt (116) on the surface of which were slates and plaster and a large iron nail. The slates most probably indicated that the mounded silt had built up after the roof had been dismantled.

High Area (1114)

This was a mound in the NW corner of the chamber and on the W side of trial trench 11200 dug in 2006. Mound (1114) was about 0.25m high and comprised slate fragments, angular stone and mortar fragments in a matrix of black silt. Below the mound were the remains of the original tiled floor surface (1120) comprising three slab fragments tipping down in an easterly direction. These were surrounded by humic silt overlain with some fragments of slate and mortar/plaster. Finds included 9 nails.

High Area (1115)

Mound (1115) was located on the E side of trial trench 11200, mid-way along the N wall. It was 0.24m high and comprised black silt with some slate, mortar and angular stone. Below the mound were several mortared cobbles running parallel with the line of the wall and surrounded by humic silt with mortar mixed in (1124). These stones were in-situ and part of the fabric of the N wall and floor of the chamber.

High Area (1116)

Mound (1116) was located in the NE corner of the chamber and was 0.31m high. The mound comprised humic silt and flecks of mortar with some stone. When this was removed some slate and mortar fragments in black silt were revealed, as well as the

mortared scarcement or projecting stonework at the base of the E wall. Finds included 3 nails and some bottle glass.

High Area (1117)

This high area was located in the SE corner of the chamber and extended northwards to the S side of the E window embrasure. The mound was highest in the corner at 0.38m, and comprised a large number of fragmented stones mixed in with black silt. Finds included 10 small nails and six very large nails, a sherd of clear window glass and 2 sherds of bottle glass. Interestingly, below (1117), a number of mortar bonded floor slabs (1129) had survived virtually intact except for some cracking. These slabs were of the same type as those exposed in the window embrasures. The slabs extended along the base of the E wall to the S side of the window embrasure and along the S wall to the chamber doorway. The slab floor was slightly dipping down the W and NW. The slabs were rectangular (examples of size were 0.44 X 0.50m and 0.66 X 0.48m). The area of slabbing was not fully exposed. Also found here was an iron fitting 0.09m long by 0.05m wide, apparently set into or corroded into the stonework of the E wall at floor level. The fitting was not removed and its function was not ascertained.



Slab floor (1129) revealed below deposit (1117), SE corner of chamber

2.4.2 West Window Embrasure (Illus 4)

Arranged along the base of the W embrasure's S wall was a pile of stone fragments and rounded stone (115) 1.10m long and 0.26m wide. Fragments of roofing slate were found below these stones. The stones within (115) came from the wall core below the window and must have been placed there after the roof was removed. The west window embrasure upper floor deposit, (113) comprised a loose thin layer of grit and sand with some recently burnt sacking. Below (113) was a more compact deposit (118) of silt and sand with some slate fragments and debris from rubble eroded out of the wall core below the window. Finds from (118) included bottle and window glass, fish bones, and one sherd of tin glazed ware. Deposit (119) comprised rounded stones and

mortar at the E edge of the embrasure wall, and elsewhere, showing below slabs (1112). Deposit (119) was part of the fabric of the castle main W wall, exposed when the window embrasure was slapped through the W wall and not fully covered over by the subsequent slabbing of the embrasure floor.

The sandstone floor slabs (1112) of the embrasure were exposed and cleaned. The slabs were rectangular and 0.045m thick. Examples of floor slab size are 0.34 X 0.44m and 0.36 X 0.38m.



West window embrasure, pre excavation



West window embrasure, post excavation, slabs (1112)

2.4.3 East Window Embrasure (Illus 5)

The uppermost deposit (114), comprising grey gritty sandy mortar, covered the floor of the E window embrasure. This deposit produced nails, glass, and a lead seal. The lead seal was recovered from the surface of (114). Below (114) was a more compact deposit (1111) of mainly grey silt which produced some small mammal bones, glass fragments, a small amount of plaster and some slate fragments.

The embrasure's floor slabs (1119) were revealed below deposit (114). The slabs, each measuring about 0.44 X 0.40m, were of sandstone and badly cracked. The slabs of (1119) do not cover the entire embrasure floor. The easternmost part of the floor, directly below the window, comprises the mortared over core (1121) of the E wall of the castle where rectangular slabs have not been laid. The same applies to the N and S edges of the floor which also have no finished edges. There is a large gap between the slab and the wall on N side, where silty mortar (1122) had accumulated over the wall core; it appears that at this location had at least one slab is missing.



East window embrasure, recording slabs (1119)

2.4.4 Drainage pipe trench (Illus 5)

The pipe for the drainage was to be set into the E-W evaluation trench excavated in 2006. In the evaluation that took place in 2006, the E part of the trench that extended into the E window embrasure was not excavated any deeper than the slab below the accumulated floor deposits. The pipe trench was to be 0.30m wide and 0.15m deep. The requirement was to excavate the pipe trench through the slabs and the wall core below the slabs.

The easternmost part of the embrasure floor (1121) directly below the window was excavated to a depth of 0.20m and revealed cobbles and stone in a matrix of mortar, which represented the core of the E wall of the castle. This area extended up to 0.55m out from the wall below the window and had not been slabbed. The surface of (1121) was at the same level as the surface of the slabs (1119).

Fragments and pieces of slab (1119) were removed to form the pipe trench. Below the slabs was a bedding of loose greenish orangey fine sand up to 0.04m thick (1126). At the E edge of the slabs, below (1126), was a deposit of silt packing (1127). Also below (1126) was a compact mid to dark brown grit and sand (1131) which was only 0.01m thick. Another deposit below (1126) was (1128) on the N side of the trench, an infill or packing of dark silt.

Below (1131) was a thicker deposit (1132) to the W of silt packing (1127) which comprised a packing or fill of orange sand and grit, between the protruding in-situ stones (1134) of the vault forming the roof of the entresol chamber below.

Excavation of the pipe trench was halted for safety and structural reasons when a small void appeared at the base of the trench revealing the entresol chamber below. Any further excavation that may be required here would be undertaken by the mason.



Cut for drainage pipe trench showing deposit (1132) and vault stones (1134)

3 Conclusions and Recommendations

3.1 Conclusions

The removal of the high areas (1113-1117) around the edge of the chamber walls revealed finds such as bottle glass, window glass, nails some animal bone and some slate fragments. It is not entirely clear how each of these raised deposits was formed but they appear to be the result of relatively recent, unknown works or disturbances over a period of time requiring the shifting of some of the main silt deposit which had accumulated over the main chamber floor after the removal of the upper floor and roof. Some of these deposits may have been added to when the recent scaffolding was erected in 2006. Reduction of certain areas revealed the nature of the underlying slab flooring. This was especially evident in the SE corner of the chamber floor where several in-situ original slabs (1129) were revealed.

Within the window embrasures themselves, original floor slabs were revealed below a thin layer of accumulated deposits which contained finds of glass, nails and some small animal bone. A lead seal was found on surface deposits of the E embrasure. The arrangement of the slabs was such that only the central area of each embrasure floor was covered and was not finished off by fitting cut slabs around the edges against the walls.

In the E window embrasure the excavation of the drain trench enabled the recording of the floor slabs and the underlying bedding of fine sand and infill deposits of silt, gravel and mortar. The trench also revealed structural evidence of the castle build in the form of mortar bonded stone for the castle E wall where it had been slapped through to form the window embrasure, probably when the kitchen was being formed.

3.2 Recommendations for Further Work

Alder Archaeology considers that the archaeological work carried out in area 11 complied with the requirements as outlined in the Terms of Reference supplied by Historic Scotland and that no further archaeological work is required in this area.

4 Analysis of Window Glass and Iron by Tamlin Barton

4.1 The Window Glass

All the window glass recovered was clear and appeared to be denaturing with light coloured corrosion products leaving pearly-white surfaces and thin flaky laminations. This is consistent with soda glass, rather than potash glass, and suggests a post-1680 date, when the soda glass became common in Scotland. The majority of the sherds are also very thin, which points roughly to a date between the 17th and mid 19th century. The variety of sherd thicknesses suggests that the windows were altered or repaired several times, possibly even after the abandonment of the castle in mid 18th century. Some of the thicker glass, notably the 2.5mm thick sherds which have hardly denatured, may be evidence that the windows were repaired as late as the mid to late 19th century when there was no longer a tax on glass and panes became thicker. In this period the castle was still roofed (see McGibbon and Ross) and may have been used as a store / folly.

Catalogue

Context (1117), 1 sherd, 1.2mm thick, colour on edge - light bluish green.

Context (118), 1 sherd, 1mm thick, colour on edge - cannot be seen, very denatured.

Context (114), 7 sherds, 2mm thick, colour on edge – light green, slightly denatured.

Context (1111), 15 sherds, 1mm thick, colour on edge - deep green, slightly denatured.

Context (1111), 16 sherds, 1.8mm thick, colour on edge - light yellowish green, quite badly denatured.

Context (1111), 3 sherds, 2.5mm thick, colour on edge - yellowish green, hardly denatured.

Context (1111), 1 sherd, 1.5mm thick, colour on edge - mid yellowish-green, badly denatured.

4.2 The Iron

A variety of nails/spikes were recovered from the excavation; those which had retained their heads were examined. The majority of nails identified were hand forged, squared sectioned nails between 40mm and 60mm long (averaging around 55mm) with widths between 4mm and 6mm and medium sized heads (either squared, rectangular or oval), all flat. These looked very similar to the nail found lodged in a roofing slate, and so were interpreted as slate nails. Their flat wide heads would have been well suited for this purpose. The second largest group comprised spikes which were probably used for joining either floor joists, or roof rafters and collars to one another. There is also a possibility that some of the spikes are in fact door

rivets, and interestingly several of the spikes found together in layer (1117) had inverted V-shaped heads. Perhaps these are ornamental door rivets, though it is more usual for these to have pyramidal heads. A third group of nails with small heads which do not evenly overlap their shafts look similar to flooring brads, and may have been associated with flooring for the attic above.

Other nails included those which could not be interpreted (noted as general nails), a possible 19th century clout nail, and two modern round nails. Apart from the ornamental spikes noted above, little can be said about the distribution of the nails across the room.

A number of other iron finds were identified including four rivets, two iron plates joined by a rivet and a chain link. The narrowness of the rivets may possibly be a sign that they were associated with widow fittings. The plate and chain link could have been from a variety of household fittings or portable objects.

Catalogue of identifiable nails

Context	Squared/ round	Width below head (mm)	Length (mm)	Head shape	Head dia / width (mm)	Interpretation
118	Squared	5	50	Rectangular, large	10 x 8	Roof slate nail?
118	Squared	4	43	Squared, small	6	A tack / flooring nail?
116 (SFG2)	Squared	10	110	Large, obscured by corrosion	25? X 25?	Large spike for joining timber, concretion may show former gap between the timbers
1117	Round	3.5	80	small, round	8	modern
1117	Squared	5	50	Medium, oval	11	Roof slate nail?
1117	Squared	4	58	Medium, oval, head overlaps on opposing sides of shaft	10 x 6	Flooring nail?
1117	Squared	4	54	Medium to large,	10	Roof slate nail?

				squared		
1117	Squared	5	64	Small rectangular tack-like head	7.5	Long general nail possibly associated with flooring
1117	Squared	6	50	Medium, squared	12	Roof slate nail?
1117	Squared	5	54	Medium, oval	12	Roof slate nail?
1117	Squared	5	60	Medium, squared	10	Roof slate nail?
1117	Squared	10	120 (ex concretion)	Rectangular, inverted V shaped head	17 x 12	Spike for joining timbers, concretion may show former gap between the timbers
1117	Squared	11	125	Rectangular, inverted V shaped head	17 x 12	Spike for joining timbers, concretion may show former gap between the timbers
1117	Squared	10	165	Squared, pyramid	23	Spike for joining beams, (wood adhering)
1117	Squared	8	115	Rectangular, inverted V shaped head	15	Large spike for joining timber, concretion may show former gap between the timbers
1117	Squared	7	60	Rectangular, inverted V shaped head	11 x 12	Short spike
1117	Squared	10	110	Rectangular, inverted	15 x 8	Spike for joining timbers, concretion may

				V shaped head		show former gap between the timbers
114	Round	5	84	Round, small	8.5	Modern
1114	Squared	4	40	Large, oval	15mm max	True Clout, hardly corroded and may be 19 th or 20 th century
1114	Squared	4	60	Small, squared head overlaps on two sides of shaft only	10mm	Flooring nail
1114	Squared	4	60	Small, squared head overlaps on two sides of shaft only	5mm	Flooring nail
1114	Squared	4	60	Small, squared head overlaps on two sides of shaft only	7mm	Flooring nail
1114	Squared	5	74	Medium, squared	9	General long nail
1114	Squared	4 (ex corrosion)	55	Medium, rectangular	10 x 9	Roof slate nail?
1113	Squared	9	140	Squared	15	Large spike for joining roof timbers, concretion may show former

						gap between the timbers
1111(SF G04)	Squared	6	67	Medium, squared	11	General nail?
1111(SF G04)	Squared	5	55	Medium, squared	11	Roof slate nail?
1111 (SFG03)	Squared	6	83	Medium, squared	10	General long nail
1111 (SFG03)	Squared	7	65	Large squared	20	Door rivet or spike for joining timbers
1111 (SFG03)	Squared	4	53	Medium to large, oval, broken	8 (max)	Roof slate nail?
1111 (SFG03)	Squared	4	60	Medium, Oval	9 (max)	Roof slate nail?
1111 (SFG03)	Squared	6	45	Medium, squared	11	General long nail
1111 (SFG03)	Squared	8	35+	Large, rectangular	22 x 18	Door rivet or spike for joining timbers
1116	Squared	5	50	Small oval head	7	Roof slate nail?
1116	Squared	5	40	Small oval head, broken	7	Roof slate nail?

Catalogue of other identifiable Fe objects

Context (118) Possible chain link, 33mm long, 10mm wide.

Context (1117) Rivet, squared, 4mm thick, 42mm long, one head rectangular, 9mm x 7mm, the other narrow 10mm x 4mm.

Context (114) Clench bolt/rivet, 7mm thick, 42mm long, both heads similar, one 22 dia the other 10mm.

Context (118) Iron plates riveted together 65mm long, 40mm wide, 10mm thick max including corrosion. Two rivet holes.

Context (1111) SFG03 Rivet, 6mm wide, 43mm long, 1 head broken.

Context (1116) Rivet, 57mm long, 7mm wide, two heads.

Context (1114) Rivet, 43mm long, 7mm wide, 1 head large square 17mm broken, the other broken.

5 Lead Seal

The lead seal found in the upper deposit (114) of the E embrasure has a diameter of 21mm. The obverse depicts the crowned shield bearing the rampant lion of the royal coat of arms of Holland. To the right of the shield can be seen what appears to be the number 19 which may be the customs control number. To the left of the shield some markings can be seen but not deciphered these marks are most likely to be 'R & A' for Dutch customs and excise. The reverse appears to be blank. The seal is a Dutch customs seal dating from the 19th or early 20th centuries. These seals were attached to all manner of Dutch exported goods and finds are not uncommon.



Lead Seal from upper deposit of east window embrasure

6 References

Alder Archaeology 2012 *Moy Castle Mull, Scheduled Ancient Monument Method Statement Archaeological Works for Waterproofing Upper Floor Level*

SUAT 2006 *MY01 Moy Castle Archaeological Works Update 21/12/06*

Bealer, A W 1995 *The Art of Blacksmithing*. Castle Books

Murdock, K, R, 'The Glass' in Bailey, A and Barton, T, 2011 *Excavations at Alloa Tower, Clackmannanshire, 1988–1993*. Tayside and Fife Archaeological Journal. 17.

www.ukdfd.co.uk/database

Appendix 1 Context Register

No:	Description
113	Deposit, upper surface of floor in W window embrasure, grey gritty sand, mortar, plaster from wall, cleaned back to reveal a similar but less contaminated layer (118).
114	Deposit, surface of E window embrasure, grey gritty sandy, mortar, produced nail, window glass, lead seal
115	Deposit/structure, pile of stone fragments and rounded stone up against W embrasure S wall, 1.10m long and 0.26m wide, fragments of roofing slate found below this.
116	Deposit, over main chamber floor, black silt or silty loam, saturated and boggy, humic deposit developed as a result of vegetation growth due to being open to the element after removal of roof, some bush stumps removed, impacted with some large stone and building debris and some slate, large nail
117	Structure, door jamb (fallen from level above) at SE corner of chamber on W side of door way into chamber, 1.31m long N-S, 0.38m high, rebated edge on W side TBM (19.38m OD) located on N edge of Northern most upper stone
118	Deposit, compact, light grey silt and sand, flecked with fragments of plaster, surface of W embrasure, 0.10m thick. Layer probably formed through weathering of plaster from embrasure wall and ceiling, also contains debris from rubble pulled out of window sill and slate fragments; finds of bottle glass, sherds of window glass, fish bones, 1 sherd TGW
119	Deposit, rounded stones and mortar at E edge of W embrasure wall, and elsewhere showing below slabs 1112, part of fabric of castle main W wall exposed when window embrasure slapped through not covered over by slabs of embrasure floor, modern pottery on this surface
1110	Not used (evaluation trench number used in 2006)
1111	Deposit, E window embrasure, below 114, mainly grey silt produced small mammal bone, 33 sherds of window glass, small amount of plaster, some slate fragments, 8 nails, 15 pieces of animal bone with cuts, group of 4 small nails, deepest at NW corner, over slabs
1112	Structure, stone slabs for W embrasure floor, square and rectangular, 0.045m thick, examples 0.34 X 0.44m and 0.36 X 0.38m
1113	Mound of debris against W wall, S of window embrasure comprising dark humic silt, fragments of slate plaster and mortar, occasional angular stone, example 0.70 X 0.10 X 0.025m, some large plaster fragments most likely from wall, 1 very large nail, cut animal bone
1114	Mound of debris against in NW corner of chamber, mixed deposits of varying compaction, dark silty loam and coarse components such as small pieces 0.02-0.04m dia of thin laminated slate, fragments of plaster 0.10 X 0.05m, occasional angular stone, pieces of mortar and occasional animal bone (small) over 1120, fish bone spine fragment, 9 nails
1115	Mound of debris in black silt against N wall mid part, over 1124
1116	Mound of debris in NE corner of chamber and to N of E embrasure, 3 nails, 3 sherds bottle glass, 1 part bottle neck, one animal bone
1117	Mound of debris, silt and medium sized angular stone fragments, in SE corner of chamber below which were floor slabs 1129, small mammal bones found in this, 10 small nails, 6 very large nails, shotgun cartridge cap end, skeleton of small mammal, 1 sherd clear window glass, 3 sherds bottle glass

1118	Not used
1119	Structure, floor slabs in E window embrasure, most badly cracked, example size 0.44 X 0.40m, slabs over sand 1126 and below deposit 114
1120	Structure, remains of floor slabs below mound 1114, in NW corner of chamber, tipping down slightly to E not fully exposed
1121	Deposit/Structure, mortar covered small stone at E end of drain trench, abuts E wall of E embrasure, original fabric of core of E wall to E of slabs 119 where it was cut by slapping for window embrasure.
1122	Deposit, mortar and silt N side of E embrasure in area of missing slab
1123	Deposit, small gravel, E embrasure, over wall core on N side of floor slabs 1119
1124	Deposit, below mound 1115, stones set in humic silt with mortar to the N of stones, part of the fabric of the chamber floor
1125	Deposit, humic silt and mortar flecks and some roof tile fragments below mound 1116
1126	Deposit, sand bedding, loose greenish orangey fine sand up to 0.04m thick bedding for slabs 1119 E window embrasure, seen in excavation for drain pipe trench
1127	Deposit, silt packing, in drainage trench E of sand bedding 1126 and W of mortar 1121, on same level as 1126
1128	Deposit, dark silt, below slabs 119 on N side of pipe trench, below bedding sand 1126
1129	Structure, is-situ floor slabs, slope down slightly as they go out from E wall rectangular, size examples 0.66 X 0.42m, 0.50 X 0.40m many cracked partly revealed in SE corner of chamber
1130	Iron fitting 0.09 long by 0.05m wide appears to be set into stonework of E wall not removed possible fitting to hold open chamber door, below mound 1117
1131	Deposit, compact mid to dark brown grit and sand, thin layer below sand bedding 1126 over 1132, only 0.01m thick
1132	Deposit, orange sand and grit, fill between stones of E wall below packing sand 1126, in excavation for pipe trench, below 1131, 1126, and 1128. light orangey yellow compact layer of sand with frequent stones, sub angular but many large, top layer over vault of room below, stones are part of vault
1133	Deposit, in pipe trench to E of 1132 below 1127 compact dark layer of abundant angular to sub angular stones 0.10 x 0.03 x 0.05) and slightly larger
1134	Structure, vault stones, forming vault for entresol chamber below

Appendix 2 Photographic Register

<i>Image No</i>	<i>Description</i>	<i>View</i>
0033	General of chamber floor SW corner, prior to moving loose stone, taken from walkway above	E
0034	General of E side of chamber floor prior to moving loose stone, from walkway above	E
0035	General of S side of chamber floor prior to moving loose stone, from walkway above	S
0036	General of N side of chamber floor prior to moving loose stone, from walkway above	W
0037	General of S side of chamber floor prior to moving loose stone, from walkway above	W
0038-0040	Stones 115, against W embrasure S wall detail and general	SW
0041	W embrasure pre ex surface deposits	W
0042-0043	E embrasure pre ex surface deposits 113 showing taped outline of former evaluation trench	E
0044	General of chamber surface SW area, from walkway above	W
0045-0046	General of chamber surface NW area, from walkway	W
0047	General view of chamber surface SE area, from walkway	S
0048-0049	General view of chamber surface NE area, from walkway	E
0050	General view of chamber surface SE area, from walkway	E
0051	General view of chamber surface NE area, from walkway	NE
0052	General view of chamber surface SW area, from walkway	SW
0053-0054	General view of chamber surface NW area ctx 116	N
0055	General view of chamber surface NE area	N
0056	General view of chamber surface SW area	S
0057	General view of chamber surface S central area	S
0058	General view of chamber surface SE area	S
0059	General view of chamber surface NW area	W
0060	General view of chamber surface W area	W
0061	General view of chamber surface NE area	E
0062	General view of chamber surface NE area	E
0063	General view of chamber surface SE area	E

0064-0065	Detailed view of W embrasure deposit 118	W
0066-0067	Detailed view of fallen door jamb ctx 117, N end	S
0068	Detailed view of fallen door jamb ctx 117, W side	E
0069	Detailed view of fallen door jamb ctx 117, E side	W
0070-0071	E embrasure deposit 1111	E -NE
0072-0073	E embrasure deposit 1111	E
0074-0075	General working in W embrasure	W
0076-0077	Detail of W embrasure slab floor 1112	W
0078-0080	General of W embrasure cleaned slab floor 1112	W
0081-0083	Mounded deposit 1113 against W wall S end	W
0084-0087	Deposits 1116 below mound 1113	S –W
0088-0090	Slab flooring 1119 in E embrasure	E
0091	General working by E embrasure, from walkway above	E
0092-0095	General of E embrasure with cleaned slabs	E
0096-0098	E embrasure slab flooring 1119 from walkway above	W
0098	Detail of slabs 1119	E
0099	Detail of slabs 1119	E
0100	Detail of slabs 1119	E
0101	Detail of slabs 1119	E
0102	Detail of slabs 1119	E
0103-0104	Mound 1114 in NW corner of chamber	N
0105	Slabs 1120 below 1114	W
0106	Slabs 1120 below 1114	W
0107-0108	Slabs 1120	N
0109	General working by W embrasure	NW
0110	General of waterlogged deposit 116	N
0111	General working by W embrasure	NW
0112-0114	Mound against N wall 1115	N

0115-0117	Mound in NE corner 1116	E-NE
0018-0021	Mound in SE corner 1117	E
0122	Planning slabs for floor 1119 E embrasure	SE
0123	Planning slabs for floor 1119 E embrasure	NE
0124	Planning slabs for floor 1119 E embrasure	E
0125-0131	Part of stone scarcement for N wall 1124	N- NW
0132-0134	Deposit 1125 below mound 1116 in NE corner	N-NE
0135	Deposit 1125 in NE corner	NE
0136-0140	Removing stone slabs 1119 to form drainage pipe trench	NE- SE-W
0141-0142	Mound 1117 in SE corner	E-SE
0143-0147	Slabs removed to form drainage pipe trench	E
0148	Slabs 1129 in SE corner of chamber	E
0149	Slabs 1129 S of E embrasure	E
0150	Excavating for pipe trench E embrasure	NE
0151	Slabs 1130 in SE corner of chamber	S
0152-0153	Slabs 1130 in SE corner of chamber	S-SE
0154	Slabs 1130 in SE corner of chamber	SE
0155-0158	Deposit 1132 in pipe trench E embrasure	E
0159-0160	Deposit 1126 seen in N facing section	S
0161-0162	Recording pipe trench deposits in E embrasure	NE
0163-0169	Stone slab fragments removed and numbered, stored in W embrasure	Vario us
0170	General view of W embrasure with stone fragments showing	NW
0171	General view of E embrasure showing part of the open trench for the drainage pipe	N
0172-0173	General view of the stone pile and excavation spoil	S
0174	General view of excavation spoil and S end of chamber	SE
0175	General view of SE corner of chamber showing doorway and exposed floor slabs 1129	SE

Appendix 3 Drawing Register

<i>Plan No.</i>	<i>Description</i>	<i>Scale</i>
	<i>Note: plan and section numbers ongoing from previous work</i>	
50	Plan, E embrasure, ctx 1111, with context descriptions	1:20
51	Plan, W embrasure, ctx 115, 118, 119	1:20
52	Plan, floor of area 11, showing locations of 115, 1113, 1114, 1115, 1116, and 1117	1:50
53	Plan, ctx 1119, slabbed floor of E embrasure, ctx 1121-1123	1:20
54	Plan, ctx 1119, detail with slab fragments marked for reassembly	1:10
55	Plan, NW corner of area 11, ctx 1120, deposits below 1114	1:20
56	Plan, N and E edges of chamber floor, of deposit ctx 1124, below mound ctx 1115 and deposit ctx 1125,, below mound ctx 1116 and slabs ctx1129 below mound ctx 1117	1:20
57	Plan, overlay on plan 54, ctx 1119 and ctx 1126-1128, showing exposed deposits in first part of excavation for drainage pipe trench	1:10
58	Plan, overlay on plan 57, for drainage pipe trench, ctxs 1132, 1127, 1133	1:10
59	Plan, overlay on plan 57, ctxs 1121, 1127, 1132, 1134	1:10
<i>Section No</i>		
16	Section, N facing section of pipe trench, 1119, 1121, 1126, 1127, 1132, 1134,	1:10

Appendix 4 Finds Register

<i>Context</i>	<i>Material Type</i>	<i>Details</i>
114	Glass	7 sherds clear window glass
114	Fe	Nail, round shaft and head
114	Plastic	Fragment of clay pigeon
114	Animal bone	1 rib fragment
114	Pb	Lead seal with coat of arms on obverse blank on reverse
116	Fe	1 nail, large rectangular shaft
118 (location B)	Glass	2 sherds bottle glass, thick and light green, thin and green
118 (location B)	Animal bone	One small length, cut with notch
118 (location D)	Fe	One small nail, rectangular shaft
118 (location D)	Glass	2 sherds green bottle glass, 3 small sherds clear window glass
118 (location D)	Animal bone	1 small fragment
118 (location E)	Fe	One small nail
118 (location E)	Animal bone	17 complete small thin fish bones, 5 pieces cut animal bone, one tooth
118 on surface of 119	Pottery	1 sherd glazed, rim, tin glazed earthenware
1111 (group 03)	Fe	8 nails, part and whole rectangular shafts
1111 (group 03)	Animal bone	1 small
1111	Glass	33 small sherds clear thin glass; 1 sherd light green possible bottle glass
1111	Animal Bone	15 pieces animal bone some indicating cutting; 5 small bones from mammal
1111	Shell	One, small
1111	Fe	Small finds group 04 of 4 small nails, corroded
1113	Fe	1 very large rectangular shafted nail, 1 small rectangular shafted nail, one nail fragment, three corroded lumps of Fe

1113	Animal bone	3 sherds, cut
1114	Animal bone	1 fish bone spine
1114	Fe	9 nails , rectangular shafts, 1 nail head, 1 piece of corroded Fe
1116	Fe	3 nails rectangular shafts
1116	Glass	3 sherds green bottle glass, 1 part bottle neck, green
1116	Animal bone	1 cut small leg bone
1117	Fe	10 small nails, 6 very large nails
1117	Brass	Shotgun cartridge rim end
1117	Animal bone	2 fragments; skeleton of small mammal (about 18 bones)
1117	Glass	One sherd clear window glass, 2 sherds clear bottle glass, 1 sherd brown bottle glass
1117	Mortar	3 small lumps of white mortar

Appendix 5 Discovery & Excavation in Scotland Entry

LOCAL AUTHORITY:	Strathclyde
PROJECT TITLE/SITE NAME:	Moy Castle Upper Floor Level (Area 11) archaeological works
PROJECT CODE:	MY01
PARISH:	Torosay
NAME OF CONTRIBUTOR(S):	R Cachart, T Barton
NAME OF ORGANISATION:	Alder Archaeology Ltd
TYPE(S) OF PROJECT:	Recording, excavation
NMRS NO(S):	NM62SW 1; SAM number 5139
SITE/MONUMENT TYPE(S):	Medieval tower house
SIGNIFICANT FINDS:	Lead seal, window glass, nails
NGR (2 letters, 8 or 10 figures)	Site centred on NM 61678 24753
START DATE	2 July 2012
END DATE	05 July 2012
PREVIOUS WORK (incl. <i>DES</i> ref.)	-
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>Alder Archaeology was commissioned to undertake a programme of archaeological work on the Scheduled Ancient Monument, Moy Castle, Mull (NGR NM 61678 24753). The work (Alder site code MY01) was carried out during the period 02-05 July 2012 and was the latest in a series of archaeological works undertaken in conjunction with renovations to make the castle water-tight. The location of this phase of the archaeological work was the upper floor level (kitchen chamber or archaeological area 11). The kitchen chamber is an open area below the walkway where clay waterproofing is to be applied over the floor surface and a drain is to be inserted through the outer wall of the E window embrasure. The work entailed photographic recording of the chamber floor deposits, limited excavation of high areas of floor deposits and surface deposits within the window embrasures, and the excavation of a short section of pipe trench into the stone floor of the E window embrasure. The removal of the high areas and excavation of deposits within the embrasures revealed finds of pottery, glass, iron (mainly nails) and animal bone, all considered to be early modern or modern. Of interest was a lead seal of probable modern date found on surface deposits of the E window embrasure. Parts of the original flooring of square sandstone slabs for the chamber were exposed and some of the internal mortar bonded stonework of the castle E wall was recorded when the pipe trench was excavated. No further archaeological work is required for this phase of the renovation work.</p>

PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	Historic Scotland
CAPTIONS FOR ILLUSTRS	-
ADDRESS OF MAIN CONTRIBUTOR:	Alder Archaeology Ltd, 55 South Methven Street, Perth PH1 5NX
ARCHIVE LOCATION (intended)	NMRS
EMAIL ADDRESS:	Director@AlderArchaeology.co.uk

Appendix 6 Standard Terms of Reference for all Fieldwork

6.1 Recording Methodology

Alder Archaeology employs a Single Context Recording System that allows full cross-referencing of stratigraphy, finds and environmental samples, as well as site-wide phasing. All features will be planned at scale 1:20, and sections drawn at scale 1:10. Sections and profiles will be drawn and all features will be photographed with metric scale included. Environmental samples will be taken from archaeologically significant contexts, if the analysis of these samples would aid significantly in the interpretation of any features identified.

6.2 Human Remains

If human remains are encountered they will be left in situ and the local police will be informed. If removal is required this will take place in compliance with Historic Scotland's Policy Paper *The Treatment of Human Remains in Archaeology*.

6.3 Products and Reporting

A Data Structure Report will normally be prepared within a period agreed within the Written Scheme of Investigation/ Project Design, after the completion of the fieldwork. This forms the basic level of reporting. Further reporting may be required on the basis of discoveries made during excavations.

A copy of the report and the project archive will be deposited in the NMRS. Further copies will be sent to the client, LAAO and others, as appropriate.

6.4 Artefacts

Finds of objects will be subject to the Scots Laws of Treasure Trove and *Bona Vacantia*. We will report such finds, if recovered, with supporting documentation to the Secretariat of the Treasure Trove Panel for disposal to the appropriate museum.

6.5 Discovery and Excavation in Scotland

A brief summary of the results will be submitted to *Discovery and Excavation in Scotland*.

6.6 General Conditions and Health and Safety

We adhere to the Code of Conduct of the Institute for Archaeologists.

Alder Archaeology Ltd has public liability insurance of £2,000,000. Details of this can be provided on request.

We operate a strict health and safety policy and conforms to the Health and Safety at Work Act. We undertakes Risk Assessments on all fieldwork carried out.

Alder Archaeology representatives will at all times wear protective footwear, high visibility clothing and other appropriate clothing. Hard hats will be worn if there is active plant on site or at all times if the site is deemed a hard hat area.

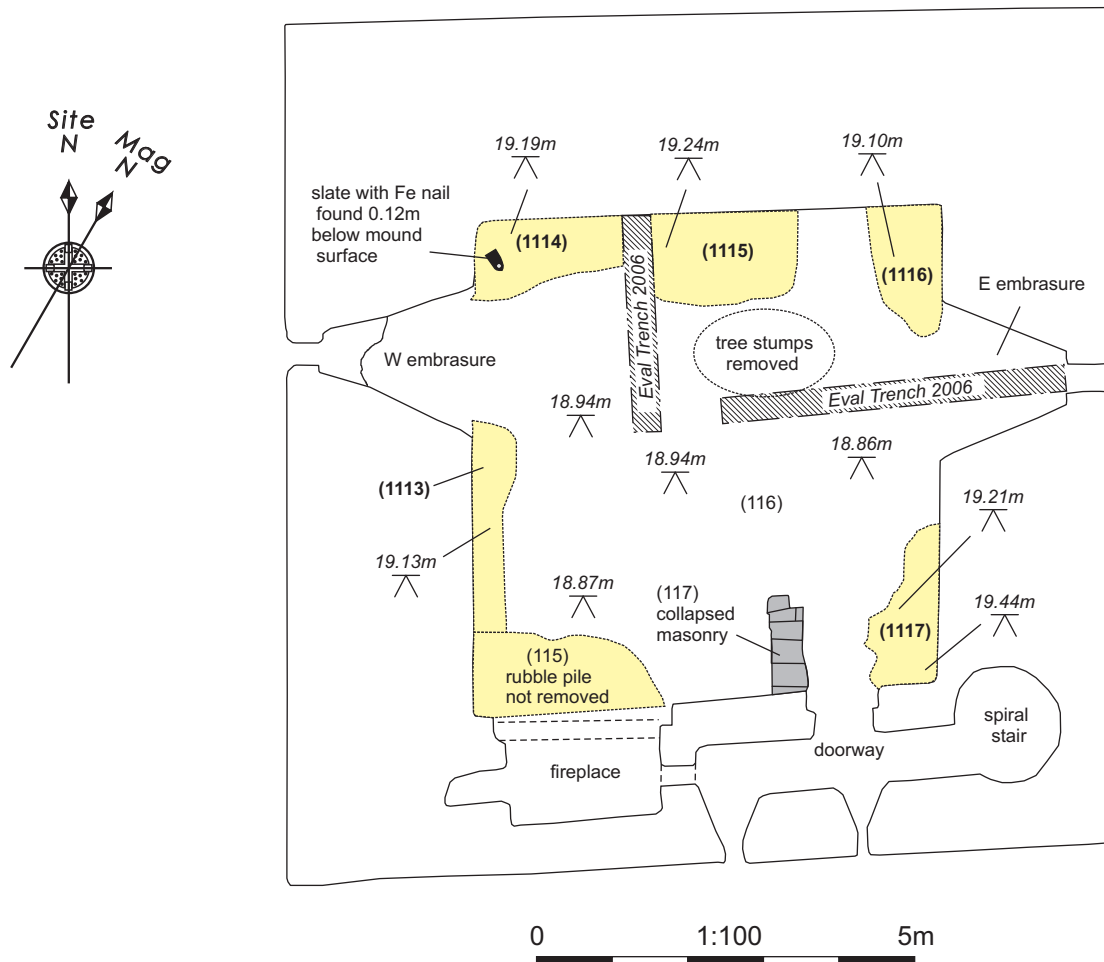
If lightly contaminated deposits are uncovered disposable boiler suits and gloves will be worn. A source of clean water will be made available for staff to clean hands with. If the health risk posed by site contamination is felt to be too high all further archaeological work will stop in that area.

Location of Moy Castle



Illus 2

Plan of Mounds Levelled in Upper Floor Level (Area 11)



Plan after Martin Hadlington

Illus 3

Detailed Plan after levelling mounds



Illus 4

Plans showing upper deposits and stone slabs (1112) in W Embrasure



Illus 5 Plans showing stone slabs (1119) in E Embrasure and trench excavated down to the top of vault below

