ADEN HOUSE MINTLAW ABERDEENSHIRE



- Structural Recording -Carried out 2nd July, 13th-15th July 2015 by Murray Archaeological Services Ltd



Report No: MAS 2015-21 by H K Murray & J C Murray

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ADEN HOUSE MINTLAW ABERDEENSHIRE RECORDING OF ENTRANCE HALL AND TEST PITS

-Archaeological Watching Brief and Structural Recording-

1. Background

- 1.1 During demolition of access steps into the ruins of Aden House, Mintlaw, an area of tiling was exposed in the 1832 entrance hall. Aberdeenshire Council's Archaeology Service determined that this should be fully recorded and further work in the area be undertaken under archaeological supervision.
- 1.2 Murray Archaeological Services Ltd was commissioned by Jack Grant on behalf of Aberdeenshire Council to undertake the work; the recording was carried out on 2nd July and 13th-15th July 2015.

2. The Site

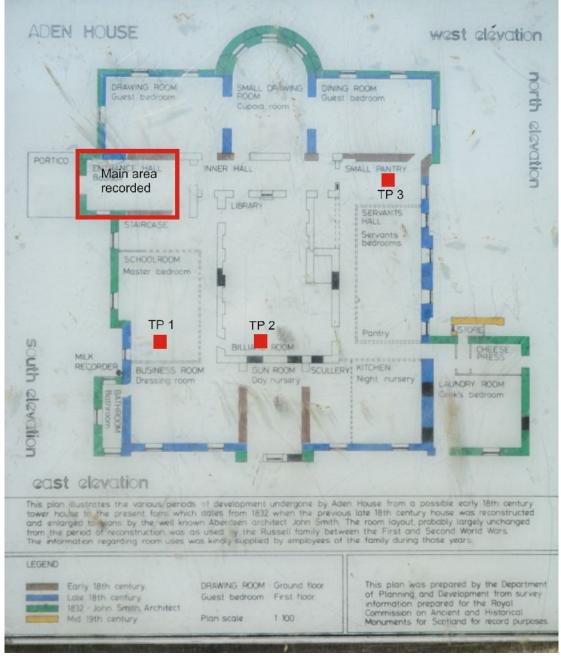
2.1

Parish: Old Deer.
NGR: NJ 9803,4783
GPS outside portico: 398034,847810
Aberdeenshire SMR: NJ94NE0077
NMRS No: NJ94NE63
Canmore ID: 77044
Historic Scotland Listed Building ref: 16093. Category B.

2.2 Aden House is the roofless shell of a mansion. The core appears to have been of 18th-century date, built after the property was acquired by the Russell family in 1758.

It was largely reconstructed in 1832-3 by John Smith and the Entrance Hall is dated to this period.

It fell into disrepair from the 1920s and was sold by the Russells in 1937. It was eventually bought by Aberdeenshire Council in 1974.



Illus 1 Plan of the mansion as displayed at Aden. Based on RCAHMS plan.

3 Methodology

3.1 When MAS Ltd were called in, the 20th century access steps had been removed, with the tiles in the central part of the Entrance Hall exposed and some of the area to the N of the inner steps disturbed by machine and backfilled. An area of undisturbed soil 500-600mm wide remained on either

side of the tiles; this had previously been supported by a revetment of vertical granite blocks.

Initially, on July 2nd, the exposed area was drawn and photographed to inform Aberdeenshire Council's Archaeology Service and allow decisions to be taken regarding further action.

Subsequently it was agreed that the full width of the Entrance Hall should be excavated by hand and recorded. The area N of the steps was to be re-excavated by hand to reveal how the steps were supported and whether there was cellarage N of the steps – and if so, how well the cellarage had been stabilised. This second stage of the work was undertaken on 13th-15th July. Claire Herbert and Bruce Mann of the Archaeology Service made a site visit on 13th July to assess the site.

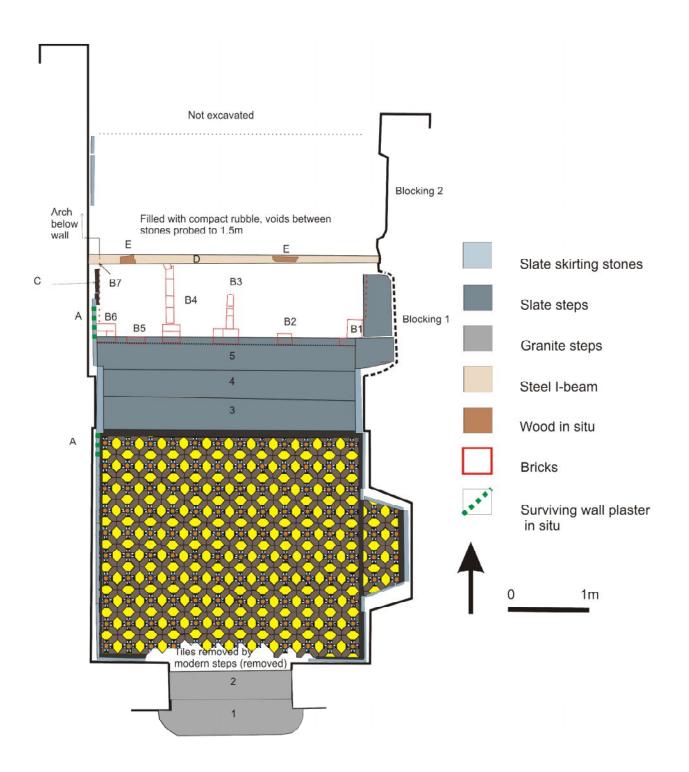
The Archaeology Service also requested that test pits should be dug by machine under archaeological supervision in the interior of the Mansion, to ensure as far as possible that any other cellared areas were fully stabilised as recommended in a Condition Report dated 1975 (Aberdeenshire Council Bibl. Ref 03370), written after Aberdeenshire purchased the property in 1974.

4 The Results

4.1 Entrance Hall (Illus 1, 2)

The Entrance Hall comprises two areas at different levels. Just inside the outer door is an outer area 3.45m wide and 2.8m long between the two outer granite steps and the inner set of three slate steps. At the top of the inner steps there is an inner area, c.430mm higher, and c.3.55m wide and c.3.6m long.

The soil dug from beside the E and W walls of the outer area consisted of c. 750-850mm of deliberate build up; comprising 350-400mm of building rubble, covered by c. 400mm imported garden soil (Illus 3). The building rubble included mortar, plaster, some slate, glass near the window and some slate. It appears to have been levelled and covered at the time of demolition.



Illus 2 Detail of the Entrance hall as recorded July 2015



Illus 3 Detail of overburden beside W wall of Entrance Hall. July 2nd 2015

The outer granite steps had rolled outer edges, with step 1 having curved outer corners fitting to the front wall of the building.

In the outer area of the Entrance Hall there was a well-preserved floor of geometric pattern tiles, extending the full width of the hall and into the window bay (Illus 2, 4-5, 21). These had only been removed just at the S end where they had been broken by the insertion of one of the access steps. There was also an area where the tiles had sunk, forming an area that puddled; the cause of the sinking was not clear. The tiles were in a pattern of small crosses formed of triangular white, blue and dark chocolate-brown tiles in 4 squares around a central ochre square. Between each set there were X patterns formed of mid-brown hexagonal tiles, with pale sandy yellow tiles filling in the gaps. The whole pattern was surrounded by a border of dark brown tiles; this was 85mm wide by the step and below the window, but elsewhere c500mm wide. Where it was possible to examine, the tiles appeared to have been set into a dark yellow/brown very fine, very hard sandy mortar c.10mm thick.



Illus 4 View of tiles in lower area of Entrance Hall, looking N



Illus 5 Tiled floor in window area of lower part of Entrance hall

A stone skirting ran around the base of the walls. This was formed of very fine light grey slate blocks set on edge and overlapping the floor tiles. The slabs were c.230mm high and varied in length between 0.60 and 1.05m. They were between 20 and 60mm thick.

The space between the skirting and the stone wall was filled with coarse sandy mortar. In a few instances the fine, smooth wall plaster of the inner wall face survived, standing approximately along the mid line of the skirting (Illus 2: A, Illus 6).

A number of moulded plaster fragments found in the demolition debris may have derived from a plaster cornice at the top of the wall (Illus 7).



Illus 6 Detail of SW corner of lower part of Entrance Hall showing stratigraphic relationship of tiles, slate skirting and wall plaster



Illus 7 Detail of moulded plaster fragments from building rubble in Entrance hall

The three slate steps (Illus 2: steps 3-5) appear to be of the same, or very similar, slate as the skirting. The difference between these and the granite steps (1 &2) may be one of date or may mark a difference between internal and external stonework.

	Rise	Depth
Step 3	140mm	355mm
Step 4	140mm	355mm
Step 5	140mm	405mm

All three extend across the full width. Only step 5 shows any damage, possibly from the later access steps or their removal. Step 3 is placed at the point where the side walls both project inwards slightly; the walling from this point was considered by RCAHMS (Illus 1) to be of early 18th-century date.

The upper step (5) is clearly supported on a stone wall c. 100mm in from N edge of the step. There is further support provided by a number of brick pillars (see below). The slate skirting is continued on either side of the lower steps 3 and 4, with slabs 70 and 85mm thick. To the E of the top step (5), two slate slabs continue the slate flooring into the recess of a former door (Illus 2: Blocking 1). To the W of the top step, the thinner slate skirting is continued.



Illus 8 Entrance Hall looking S to doorway. Detail of area below step 5

The upper part of the Entrance Hall, N of step 5, had been in-filled with compact rubble stone and mortar debris, with small voids which could be probed to c.1.5m depth. A few pieces of timber projected vertically from the infill. A number of ceramic tile pieces lay in the fill- all were of tiles that would have fitted the same pattern that was recorded S of the steps. Three edging tiles lay in situ alongside the W wall, set on a mortar base that was laid on a brick wall facing alongside the stone wall at this point (Illus 2: C, Illus 9). Part of the wall plaster was in situ on the slate skirting above the tiles.



Illus 9 W side of area N of step 5 (LHS) showing stratigraphy of wall plaster on slate skirting over border tiles laid on brickwork which is built in between flanges of I-beam (RHS)

At 0.90-1m N of the N edge of step 5, there was an E/W I-section iron or steel beam. The beam was 135mm wide (5 $\frac{1}{4}$ ") and 215mm (8 $\frac{1}{2}$ ") high with metal 20mm ($\frac{3}{4}$ ") thick. Both flanges were of equal width. On the N side of the lower flange at the W end, there was a curved notch in the beam (Illus 10). On the upper surface of the beam there were traces of a surviving horizontal timber beam; in many areas this had been destroyed during the original uncovering of the structure by machine (Illus 11). However it does appear likely to have been original as in patches the iron retains 'rusted on' wood impressions. At the E side the beam was set into a rough socket knocked into the 18th-century stone wall (Illus 12). At the W end it was supported on a stone wall from cellar level, but only abutted the main wall (Illus 10).



Illus 10 W end of I-beam supported on stone wall. Shows notched lower flange.



Illus 11 Detail of timber beam in situ along top of I-beam



Illus 12 Detail of E end of I-beam slotted into main wall. Note vertical timbers in building rubble infill.

Six brick pillars were set below the edge of step 5 (Illus 2: B1-B6, Illus 8). B1 and B6/7 extended as narrow wall facings on the E and W walls below floor level (to cellar level). Two of the intervening pillars (B3 and B4) also appear to have extended at least to the I-beam. Of particular interest is B7 which was very clearly built to the I-beam and extended between the upper and lower flanges- the bricks had to have been put in, or at least extended/repaired after the I-beam was in situ.



Illus 13 Detail of arch built into base of wall

The area N of step 5 appears to have been cellared. As noted above, probes between the fill stones extended to at least 1.5m. The infilling material was compact and was not removed. On the W side of the Entrance Hall and N of the I-beam, part of an arch

built into the base of the 18th-century wall was observed, with a void below the wall itself (Illus 13).

4.2 Test Pit 1 (Illus 14-15)

In Old School room, E side of TP1 in line with W side of E window of schoolroom and between 2 and 3m to the N of the inside of schoolroom wall.

TP 1 was 1m square. It was excavated by machine to 1.3m.

This comprised:

620mm Topsoil, some stone

360mm Rubble, stone, slate, mortar, occasional wood fragments.

150mm Hard compact yellow natural clay.

This area did not appear to have been cellared.



Illus 14 Location of TP1, looking S



 Illus 15
 Section of TP1

 4.3
 Test Pit 2 (Illus 16-17)

In Billiard Room (originally the area of open court). In line with TP 1, and lying between10 and 11m from the N face of Schoolroom wall. It lay just S of the centre of the line from the W arched entrance and 9.25m W of the W side (NW point) of arch). TP2 was 1m square. It was excavated by machine to .80m.

This comprised:

150mm Topsoil

650mm+ Building rubble. Stone, mortar, occasional brick, including a block of firebricks. Not excavated to base of rubble which was very firm and showed no evidence of voids or cellarage.



Illus 16 Location of TP2 looking E



Illus 17 Section of TP2

4.4 Test Pit 3 (Illus 18-20)

In Old Pantry. W side in line with SW internal corner of window in N wall, lying between 2 and 3m from the wall face. It was also 1.7m E of the W wall of the Old Pantry.

TP3 was 1m square. It was excavated by machine to 1.50m.

This comprised:

c.650 Topsoil

850mm+ Building rubble including stone, brick, mortar, occasional slate.

This was not bottomed as it was at the limit of the mini-digger available. The depth would suggest this area was cellared. The rubble fill was very compact. Sinkage/hollow in the grass in this area may be due to the greater depth of soft topsoil. The base as excavated was c. 1.7m below the sill level of the window in the N wall. Below this window on the outside, there is the visible top of a lower 'vent', 930mm below the sill of the upper window (Illus 20).

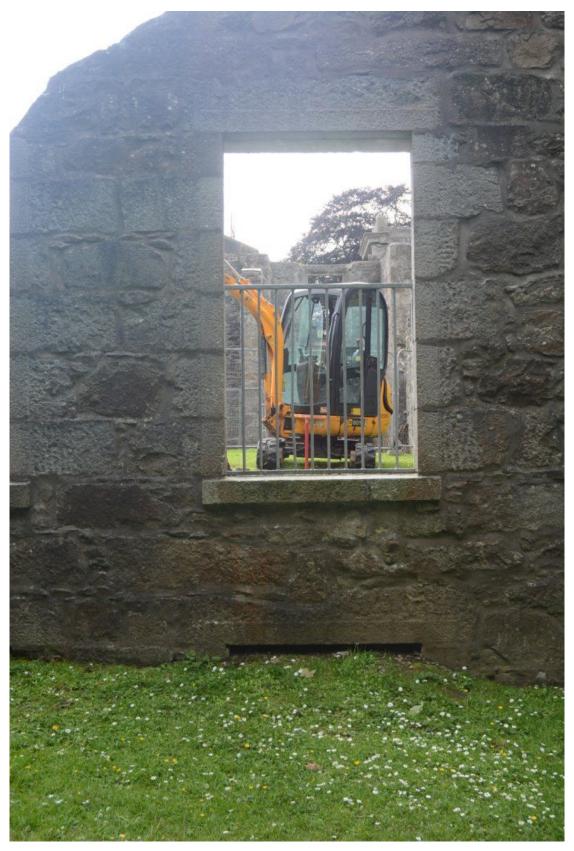


July 2015

Illus 18 Location of TP3 looking W



Illus 19 Section of TP3



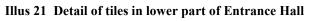
Illus 20 Location of TP3 in relation to window and vent in N wall of Small Pantry

5 Discussion

The Entrance Hall

The Entrance Hall and its outer columned portico are part of the developments of Aden House attributed to the Aberdeen architect John Smith and dated 'from 1832' (DSA: John Smith).





Historic Scotland's Guide to ceramic floor tiles (Curtis, 2007) suggests that ceramic tiles became common in Scotland from c.1840. Thompson (2004) dates the use of such floors as becoming popular in public buildings, churches and large houses from the 1860s, spreading more generally from the 1890s. The fairly plain geometric pattern, lacking any decorated (encaustic) tiles is hard to date with any precision. If these sources are accepted for the dating of the tiles it may suggest that the tiles (and, by stratigraphic sequence, the stone skirting and the plaster above it), date to the mid 19th century, possibly indicating a re-flooring that post-dated the John Smith alterations. The evidence suggests that the same tiling, with the same pattern, was in use in the upper part of the Entrance Hall, N of step 5, possibly only to the line of the I-beam.

Thompson (2004) refers to tiles laid on a timber flooring and it is possible that this was the case in the area between step 5 and the I-beam at Aden, the floor being supported by the I-beam and by the brick 'walls'.

The I-beam also suggests some changes that are later than the 1832 work. Although cast iron I-beams (with unequal flanges) were in use from the early 19th- century, wrought iron I-beams (with equal flanges), which were structurally stronger, were not invented until 1845 and not commercially available until some years later (Peterson, 1980) - and later steel was used, by the last decades of the 19th-century virtually replacing wrought iron for I-beams (Bates, 1984, 8-9). Although the present authors can not distinguish between wrought or cast iron or steel, the equal flanges suggest this beam is of wrought iron or steel.

The dating quoted for both the tiles and for the common commercial use of wrought iron or steel I-beams, suggests that the tiling and re-decoration of the hall is likely to date from at least the late 1840s and possibly later.

There was no evidence of the form of any earlier flooring and it should be noted that the slate skirtings may have been in use from 1832 but removed and replaced in order to fit the tiled floor into position.

Cellarage

There is clear indication of cellarage to at least 1.5m below the 19th-century floor level in the area N of Step 5 in the Entrance Hall. This cellarage is likely to be of 18th-century date as the arch below the W side of this area is an integral part of a wall thought to be of 18th-century date.

Test pit TP3 indicated that there had been some cellarage in the area of the Old Pantry but no evidence of cellars was found in the central area (TP2) or in the N side (TP1).

References

Bates, W 1984 *Historical structural steelwork handbook*. British Constructional Steelwork Association.

Curtis, R 2007 Ceramic Tiled Flooring. Historic Scotland Inform Guide.DSA Dictionary of Scottish Architects. www.scottisharchitects.org.uk

Peterson, C E 1980 'Inventing the I-beam: Richard Turner, Cooper & Hewitt and others', *Bulletin of the Association for Preservation technology*, Vol 12: No 4, (1980) 3-28.

Thompson, P 2004 Victorian and Edwardian Geometric and Encaustic floor tiles. www.buildingconservation.com

Acknowledgements

MAS Ltd are grateful to all staff at Aden Country Park who helped during the work on site.

Appendices

Appendix 1: Catalogue of digital photographic record

Photographic catalogue		
Digital frame no	Content	
Aden House 2015		
001-012	Tiles as exposed 2 nd July 2015, looking N from entrance	
013-015	Tile details	
016-019	Infill at W side of Entrance Hall	
020-021	Detail of slate steps 3-5	
022-027	Looking N through Entrance Hall from outside 2 nd July	
028-032	Plan of mansion as displayed at Aden	
033-036	View from outside looking N at portico outside entrance	
037-040	TP1	
041-044	TP1 section	
045	TP1 location	
046	TP1 section	
047-049	TP2	
050-051	TP2 location	
052-057	TP2 section	
058	TP2 location	
059-064	TP3 section	
065-066	TP3 location	
067-070	TP3 in relation to window and cellar 'vent' in N wall	
071	TP3 backfilling	
072-079	Entrance Hall July 14 th 2015 looking S from inside building. No ranging rods	
080-085	Entrance Hall July 14 th 2015 looking S from inside building.	
086-087	Detail below step 5 looking S	
088-089	W end of I beam on stone wall, arch to RHS	
090	Detail of arch	
091	W end of I beam on stone wall, curved notch in I-beam	
092-093	Timber on I-beam	
094-095	Brick 'wall' built between flanges of I-beam. Edge tiles visible above bricks	
096-097	N of step 5 (LHS) with wall, slate skirting and wall plaster over in situ edge tiles on brick. Fallen moulded plaster on step	
098-099	Detail of brick support to step 5	
100-101	Looking E. E end of I-beam and of step 5. Paving in base of blocking 1	
102-103	Looking E. Detail of blocking 1	
104	E end of I-beam in socket in stone wall	
105-112	Looking N. Entrance Hall from entrance	
113-114	Window in E side of Entrance Hall	

115-116	W side of lower part of Entrance Hall
117-118	W side of lower part of Entrance Hall. In situ wall plaster
119-121	Detail of slate slab on W side of steps 3 and 4
122-123	Detail of tiles in window area lower part of Entrance Hall
124-125	Detail wall plaster SE corner lower Entrance Hall
126	E side of steps 3-5 and blocking 1
127	Portico from outside
128-136	Details of arch below W wall N of I-beam
137	Detail of some pieces moulded plaster from building rubble in Entrance Hall