

# CRATHES CASTLE ABERDEENSHIRE DRAINAGE



**- Archaeological Watching Brief -**  
Carried out 24<sup>th</sup> July 2013  
by  
**Murray Archaeological Services Ltd**



**Report No: MAS 2013-23**

by  
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DRAINAGE  
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**1. Background**

- 1.1 Work was being undertaken below the path alongside the S and W facades of the Crathes tower to alleviate drainage problems that were causing damp within the castle. As a result an archaeological watching brief was carried out to record any archaeological features that might be revealed.
- 1.2 The watching brief was undertaken in the context of the 1798 estate map which shows a range extending W from the SW corner of the mid 16<sup>th</sup> century tower.
- 1.3 Murray Archaeological Services Ltd was commissioned by the National Trust for Scotland to undertake the watching brief on the drainage works; the field element of which was carried out on 24<sup>th</sup> July 2013.

**2. The Site**

- 2.1 Parish: Banchory-Ternan.  
NGR: NO 7341 9680  
NMRS No: NO79NW 8
- 2.2 The area under investigation was the c 1.5m wide gravel path around the S and W sides of the tower. Within the memory of one of the gardeners this area had formerly been grass up to the castle wall.

**3 Methodology**

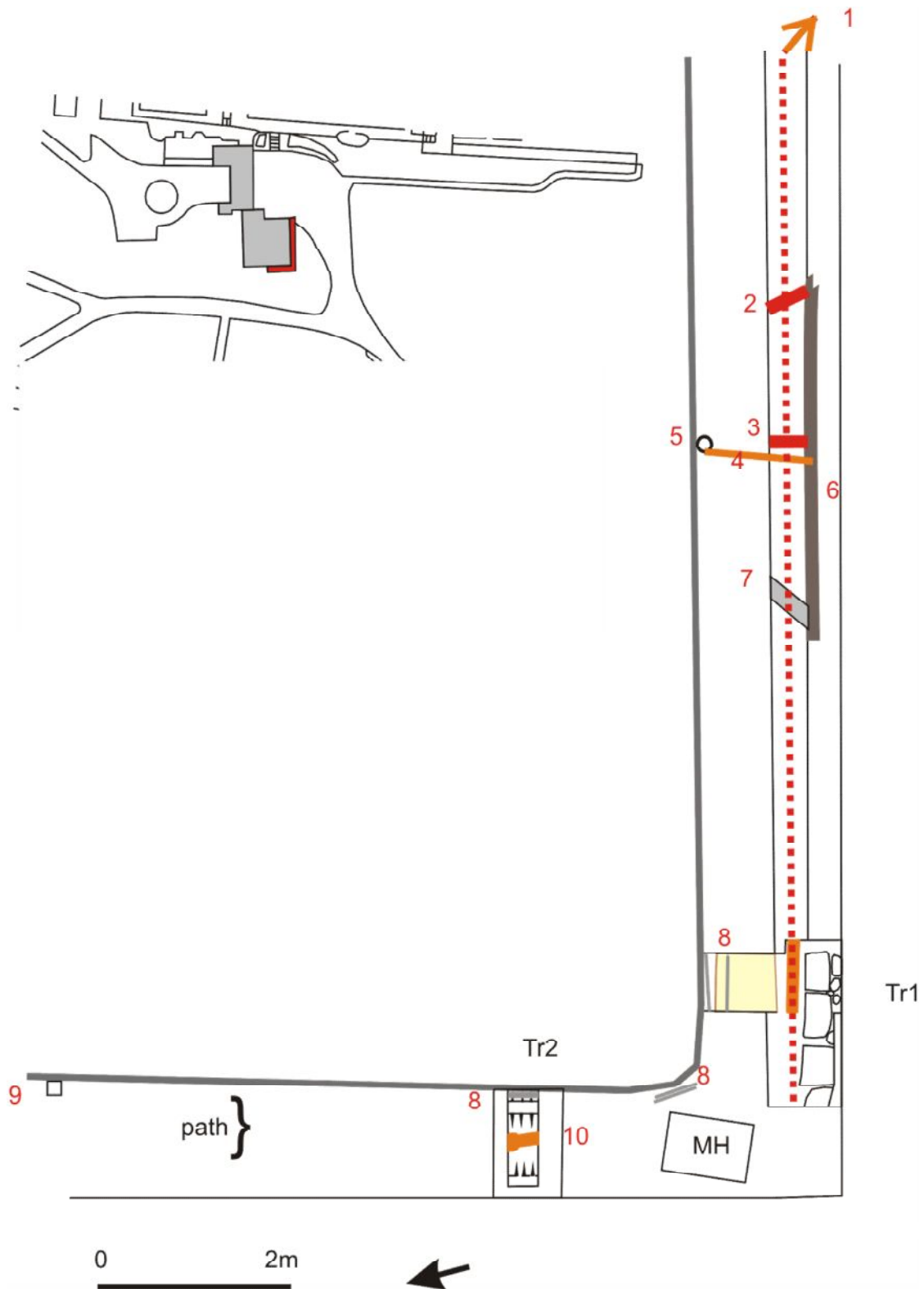
- 3.1 The intention of the drainage contractor was to expose a sectional clay field drain that ran parallel to the S wall of the tower and to replace it with a new drainage pipe, joining to existing Wavin and plastic piping draining SE away from the castle below the path towards the garden. It was also intended to investigate to determine if the same clay drain ran along the W face of the castle.

The gravel was scraped off by mini- digger along both facades. Two sections were then cut across the line of the path (Illus 2: Trenches 1 and 2) to determine the presence or position of the sectional clay pipe and that pipe was then removed and replaced along the S façade.

3.2 All features were observed, planned and photographed by MAS Ltd.



**Illus 1 SW corner of tower showing position of the works.**



**Illus 2 Location of trenches and services. Details of numbering of services see below. Reproduced from Ordnance Survey digital map data, © Crown Copyright, All rights reserved. 2012. License No 100041040**

## 4. The Results

### 4.1 Trench 1.

Trench 1 was initially cut N/S across the path to locate the sectional clay pipe drain. It revealed that the clay pipe had been put in the trench originally cut for the far deeper ceramic pipe (Illus 2:10). The pipe trench had been filled with gravel and archaeologically this was all disturbed ground. The old sectional clay pipe and its replacement drain only extended along the S façade as far W as the man hole (Illus 2: red dotted line).

When a stone built feature was revealed along the S edge of the trench, the trench was widened slightly to reveal its full extent.

#### Stone feature

Four slabs (< 450 x 280mm) formed an E/W line c 1.70m long as revealed. It clearly did not extend to the E, but may have extended to the W. The N edge appeared straight (except for the W, possibly disturbed, stone), with far smaller stones set in on the S side. As the grass could not be cut back it is unclear if this (330mm) is the full width of the feature or if the smaller stones were infill between two wall faces. The upper surface of the stones was quite level and projected slightly above the level of the cobbled surface to the N and which was probably contemporary.



**Illus 3 Full extent of stone feature as revealed.**

The stones were only a maximum of 100-170mm in height and appeared to be set on a brown earth with mortar fragments, which also seemed to be between the stones. The stones were not however mortared together.

Whilst this feature pre-dates the cutting of the deep ceramic drain (? Early 20<sup>th</sup> C), there is no precise evidence to indicate its construction date.

#### Cobbled surface

A layer of small water worn cobbles set in a yellow mortary base, with some angular stones in the make-up, was on a level with the stone feature. It was set on clean natural boulder clay. The top was very slightly below the level of the top of the stones and it appeared to have been an associated surface or path. It had been cut by the trench for the deep ceramic pipe (Illus 2:10). A layer of garden earth c 100mm deep lay over the cobbling, below the gravel of the present path. It contained some midden material (see Finds below).



**Illus 4 Trench 1 as first excavated showing stone feature (RHS) and the cobbled surface (to LHS of pipe cut).**

#### Castle foundation

In Trench 1, the base of the tower wall appeared to be on a level with the existing path, set on clean natural boulder clay. This was probed and a small section excavated

back by 100mm but no lower stone foundations were found. This appears odd as it is in variance with the foundations revealed in Trench 2.



**Illus 5 Detail of base of tower wall in Tr 1**

#### *4.2 Trench 2*

Trench 2 was cut E/W across the path beside the W façade of the tower. It revealed the trench originally cut for the deep ceramic pipe (Illus 2:10). The pipe trench had been filled with redeposited and mixed brown garden earth and stones; a few bone fragments, a clay pipe stem and a rim sherd of an E 20<sup>th</sup> C stoneware jar suggest that this may have originally been made up ground containing some midden material. Archaeologically this was all disturbed ground. On the outer (W) side, towards the grass it appeared as if the pipe trench had cut through the similar material which may be undisturbed below the grass. The E side of the pipe trench was cut through very hard undisturbed natural.

#### Castle foundation

The natural was also cut by what appeared to be the foundation for the castle wall – or possibly a later cut made to examine the wall. This was c 100mm wide from the wall face and surface indications suggest it extended the width of the façade. On this side the castle wall goes down at least 650mm deeper than the present surface of the

path/base of the harling. The infill between the castle wall and the hard natural was filled with small rounded pebbles and is retaining water.



**Illus 6 Trench 2 showing depth of wall foundation**

#### *4.3 V- shaped drain (Illus 2: 7, Illus 7, 8)*

A V shaped stone drain was crossed by the pipe trench on the S side of the tower. It had been cut by the earlier sectional clay drain and one side repaired with two bricks. It is not clear where the deeper ceramic drain is at this point.

The V shaped drain was of stones set at an angle forming a 'V' 250mm wide internally at the top and 250mm deep. Some slate had been used at the base.

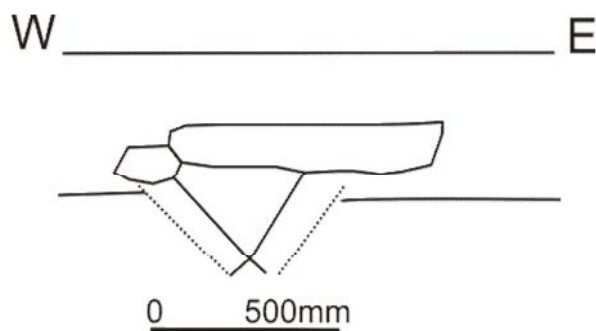
The drain was clear and drained quite steeply down away from the castle. It was recovered and the new drain runs over the top of it.

V- shaped stone drains of this type have been found for example at Castle Fraser (Murray & Murray 2010, 10-11) and may be of L 18<sup>th</sup> or E 19<sup>th</sup> century date. A good example was also found in the courtyard of the farm buildings at Crathes (Murray & Murray 2005, 10, drain 2)





**Illus 7 V shaped stone drain below new pipe trench**



**Illus 8 Section of V shaped drain**

#### *4.4 Iron grating (Illus 2: 9)*

A cast iron grating over a vertical drain was found at the base of the W wall of the tower, to the S of the window. A sketch of the castle dated 1891 (RCAHMS DP149046: A N Paterson sketchbook) shows two down pipes running from the gutters down either side of a projecting chimney flue and joining to a single pipe which ran into a drain to the RHS of the window. The grating and drain are a remnant of this system. The rather odd cast iron grating is therefore likely to be of late 19<sup>th</sup> century date.

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#### 4.5 Services (For position see Illus 2)

- 1 Clay pipe drain at E end of trench. New pipe was linked into this to run away to SW
- 2 NW/SE clay drain pipe extant below new drain
- 3 N/S clay drain pipe extant below new drain
- 4 Lightening conductor strip
- 5 Down pipe on wall
- 6 Iron water pipe running along S side of pipe trench
- 7 NE/SW V- shaped stone drain draining away from castle. Extant below new drain. (Detail see above)
- 8 BT and other grey cable beside wall in Trenches 1 and 2 and at corner. At corner there was also a black and silver cable.
- 9 Iron grating over small down drain. Associated with former down pipe (not now extant). Very wet. (Detail see above)
- 10 Deep ceramic drain pipe. The cut for this was shown in Trenches 1 and 2. The pipe was exposed in Trench 2 and partially in Trench 1. It runs through the manhole. Along the S façade of castle the cut for this drain had been re-used for the sectional clay pipe drain that was being replaced. It was not clear if it had been dug below the V shaped drain or if at this point it lay further S.

## 5 Finds

Trench 1. Garden earth over cobbled path and below present gravelled path.

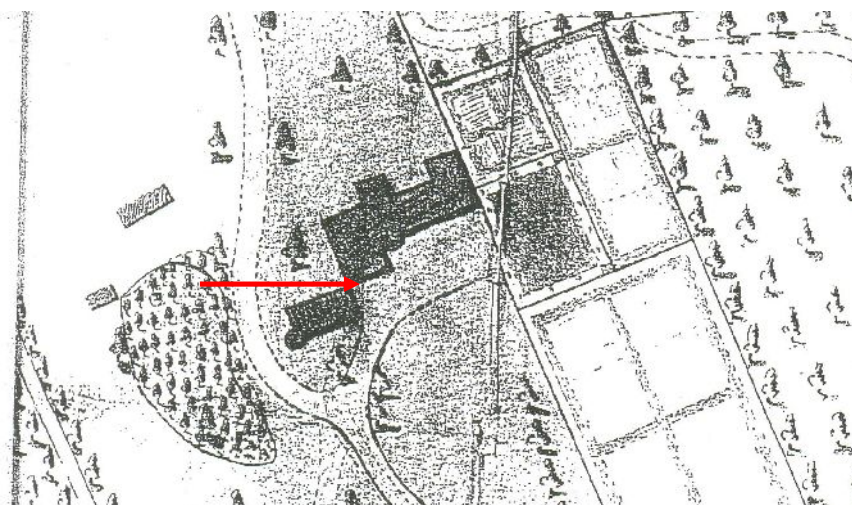
- 1 base wine bottle
- 3 sherds wine bottle
- 1 base of white glass vessel
- 1 clay pipe stem fragment

Trench 2. Mixed garden earth in backfill into pipe trench of deep ceramic pipe

- a few bone fragments,
- 1 clay pipe stem fragment
- 1 rim sherd of an E 20<sup>th</sup> C stoneware jar

All of the finds appear to be of 19<sup>th</sup>/20<sup>th</sup> century date and originate in what may be imported garden earth. In Trench 1 this overlay the earlier cobbled surface but was directly below the present gravelled path. One of the gardeners (Peter pers.comm.) remembers grass being in this position up to the castle wall and this is probably the remnant of the garden earth used for the grass. The finds in Trench 2 originate from similar earth that had been cut by the trench for the deep ceramic pipe and redeposited in the backfill. Similar undisturbed garden earth of this nature can be seen below the grass alongside the path. It would appear that this material is midden incorporated in soil used to re-landscape this side of the castle environs. The finds in their present context have no direct relevance to any of the excavated features.

## 6 Discussion



Illus 9 Detail of 1798 plan (by courtesy of NTS)

- The stone feature

The position of the stone feature is near to the position of the building shown as a W range of the castle on the 1798 estate plan (Illus 9).

However, the very light construction and the lack of any sign of it continuing across to meet the tower wall, suggests that this is not a structural wall. In relation to the cobbled surface, it may have been a kerb to a path at this point- which may relate to the W range or may be much

later. While no path is shown at this point on the OS maps or estate plans, it could have been a relatively short-lived feature. The only factor mitigating against this interpretation is the lack of any sign of it continuing to the E.

The resistivity survey done of this area in 2012 (Ovenden 2012, 3.1.3 and fig 7: 4) shows an area of high resistance to the W and N of the SW corner of the tower, but it is hard to link this to the excavated feature and it appears to be both c 3m further W and several metres further N.

- Castle foundation. While the difference in the depths of the tower foundations between the S and W walls of the tower is puzzling, the very shallow foundations on the S wall are similar to those found at Craigievar (Murray, 2003, 5-6).

## References

- Murray J C 2003 *Craigievar Castle, Leochel-Cushnie, Aberdeenshire*. CRA/02/2.  
Unpublished client report for NTS.
- Murray H K & Murray J C 2005 *Courtyard Development, Crathes Castle, Aberdeenshire*. Unpublished client report for NTS.
- Murray H K & Murray J C 2010 *Castle Environs Project 2010. Castle Fraser, Aberdeenshire*. Unpublished client report for NTS.
- Ovenden, S 2012 *Geophysical Survey report: Crathes Castle*. RGC 1258/CRT.  
Unpublished client report for NTS.

Photographs supplied to archive on CD

Photographic catalogue Crathes Castle drainage	
Digital frame no	Content
Crathes drain	
01	Manhole at SW corner of tower showing deep ceramic pipe. Tr 1 in background
02	Tr 1 looking from SW corner of tower
03	Tr 1 looking E
04-06	Tr 1 looking N
07	Tr 1 detail of cut for clay pipe
08-09	Tr 1 detail of base of castle wall at present ground level, set on yellow natural clay
10-12	Tr 2 looking E
13-15	General views of work
16-19	Looking E along pipe trench showing stone wall/revetment
20-22	V-shaped drain, looking across it, W along pipe trench
23-24	V-shaped drain in N section of pipe trench
25-26	Looking E along final length of pipe trench