

# Rathfarnham Castle Stone



GIACOMETTI

10-06-2016

E4468

## **SITE NAME**

Rathfarnham Castle, Phase 6 renovation works, Rathfarnham Road, Dublin 14

## **CLIENT**

Office of Public Works, 52 St. Stephen's Green Dublin 2

## **LICENCE**

Ministerial Consent E4468 (C562)

## **REPORT AUTHOR**

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## **DATE**

10 June 2016

## **RATHFARNHAM CASTLE 2014 EXCAVATIONS REPORT SERIES**

- I Rathfarnham Castle Excavations 2014: **Preliminary Stratigraphic Report**. Giacometti, A. 2014. Archaeology Plan.
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# Introduction

Antoine Giacometti

One of the highlights of the excavation was the discovery of gemstones. We found an emerald, probably from a ring, two cut clear crystals from jewellery, a fragment of a faceted carnelian ring, an amber bead and a fragment of a lignite ring. The gems were identified by John Darcy, Fellow of the Gemological Association of Great Britain. The gems are beautifully photographed by Alva Mac Gowan.

Steven McGlade examines the slate assemblage retained from the washpit. He identifies roof-

## Categories of stone artefacts

Gemstone	7
Slate	11
Flint	16
Masonry	10
<b>Total</b>	<b>44</b>





**Stone artefacts by function**

Costume	6
Fitting/furnishing/building	22
Military	16
<b>Total</b>	<b>44</b>

Context	Description	No. stone artefacts
1	rubble	8
2	washpit	1
3	washpit	0
4	washpit	6
6	washpit	22
7	washpit	1
8	washpit	0
9	washpit	3
10	southeast tower	2
12	out of context	1
<b>Total</b>		<b>44</b>

slate originating from three different quarries, of either Irish or British provenance, suggesting at least three phases of roofing or repair prior to 1720. He also describes an interesting item found in a layer of 18th century rubble: a builder's plumb-bob made from a fragment of roof-slate. This was probably manufactured on site by one of the builders working for Henry Loftus during the extensive 1770s phase of construction at the castle.

Damian Shiels describes the flint gunspalls. Significantly, Damian has identified evidence for the knapping of gunspalls on the site, which is

interesting and supports the evidence of a military occupation of the northwest flanker during the late 17th century.

Numerous fragments of worked masonry were recovered from the excavation (though none from the washpit). Samples were retained of limestone and sandstone jambs from 16th century openings, and limestone, granite and sandstone fragments of c. 18th century contexts. These are documented in the masonry report.



# Gemstones and minerals

Antoine Giacometti and Alva Mac Gowan

Photographs by Alva Mac Gowan, Archaeology Plan

## Gemstones

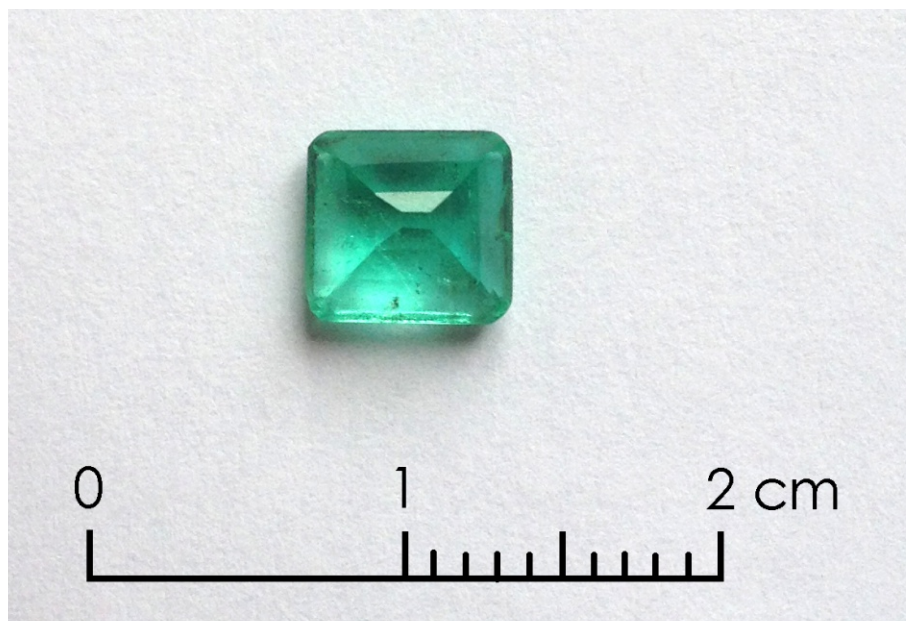
A highlight from the excavation is an emerald gemstone (E4468:7:1). The emerald (H. 6.1mm, W. 6.6mm, T. 4mm) has been identified by gemologist John Darcy (Lapis Jewellers, Dublin) as a 1.4 carat emerald mined in Colombia. Colombian emeralds are considered superior because they come from sedimentary rock. Emeralds had been mined in the New World for centuries by the Native Americans. Between 1600 and 1820 the Spanish controlled the mining, sending many to their deaths in the perilous pursuit of these prized gemstones. The emerald from Rathfarnham is an 'emerald cut', most likely it would have originally been set into a ring. This one may have been easily misplaced due to its small size.

Other jewellery-related items from the excavation include half of a faceted carnelian ring (E4468:4:179), two rock crystal gem stones (E4468:2:635 & E4468:4:180), glass beads (described in glass report), an amber bead

(E4468:6:4375), a fragment of a lignite ring (E4468:9:261) and a number of gold and brass brooch and ring fragments.



Emerald cut stone 7:1







Rock crystal cut gemstone 2:1

Rock crystal cut gemstone 4:1

**Rock crystal gemstone E4468:2:1**

'Scissors Cut' faceted quartz rock crystal gem stone.  
D 5mm, H 0.9mm

**Rock crystal gemstone E4468:4:1**

'Emerald Cut' faceted quartz rock crystal gem stone.  
W 8.4mm, H 6mm

**Emerald gemstone E4468:7:1**

'Emerald Cut' faceted emerald 1.4 ct gem stone.  
H 6.1mm, W 6.6mm, T 4mm

## Marble

This small faceted fragment of marble is probably an inlay from a piece of furniture.

**Marble inlay E4468:6:3092**

Red-brown in colour with darker marbling. Broken; probably originally had 8 sides. Highly polished surface. [for piece of furniture??]  
L 25mm Wth 25mm T 4–5mm.



Carnelian ring 4:2

Amber bead 6:4375

## Carnelian

**Carnelian Ring Fragment E4468:4:2**  
 Half of broken faceted carnelian ring.  
 Original D 20mm, H 5.4mm, T 2.9mm

## Amber

**Amber bead E4468:4:2**  
 Amber bead.

## Lignite

A small fragment of a lignite finger ring was identified.

**Lignite ring fragment E4468:6:4699**  
 Sub-rectangular in section. L 23mm With 4mm T 3.5mm.  
 (polishing grooves on flat top on bottom surfaces)





# Slate

Steven McGlade

Eleven pieces of slate were retained during the excavations. Eight were retrieved from C6 and a further two from C4, both fills of the washpit. An additional item, a slate plumb-bob, was found in C1 material, dating to the 18th century or later. Fragments that did not contain nail holes or worked edges were not kept. A similar sampling strategy was taken for the excavations at Trim Castle, where only slate with nail holes were retained (Hayden 2000, 385).

Three different types of stone are apparent: a mid-greyish purple slate (8 examples), a mid-bluish grey slate (2 examples), and a silvery grey striated slate (1 example). Slate, both local and imported, was used as a roof covering in Ireland from the 13th century onwards (Matthews, Bowen and Edden 2010, 29). A number of sources of heather-coloured slate, possibly equivalent to the mid-greyish purple slate found at Rathfarnham, are known in the Wicklow area, such as at Ashford and Blessington, though heather slate was also common as an import from Wales. Silver-grey slate is known from Durrus, Co. Cork, though Ballachulish slate, a dark or silver-grey coloured slate, was imported from the Highlands of Scotland, however this was usually in small quantities (ibid., 31). Slate from Ahenny, Co. Kilkenny is a blue-grey in colour and the quarries here were some of the most extensive in the country in the 19th century (ibid., 30). Most Irish quarries were worked as relatively small-scale con-

cerns, generally supplying local demand and in the 17th century slate would still have been limited to prestigious buildings (ibid., 7).

Most of the roof-slates appear to be hand-shaped, however three have straight-cut edges. The range in sizes and shapes is fairly typical of early slates. Only three of the slates were relatively intact, while one of the slates had been re-used as a plumb-bob (4468:1:55). Given the variation in colour of the slate and tail angles, it is possible that the slate may originally have been a design feature of the building, however it may also suggest a number of phases of roofing.

Roof slates 4:310 and 4:311







Slate plumb bob 1:55



**E4468:1:55 Slate plumb-bob**

85mm L., 5-55mm W, 3-7mm T., 37g Weight

The plumb-bob appears to be an informal tool made from a re-worked roof slate. It is roughly curved at the upper end, tapering to a blunt point at the base. The upper end is pierced with a rounded hole 7mm in diameter. The hole is off-centre, being 20mm from one edge and 22-25mm from the other edge. The upper end of the plumb-bob is also thinner than the pointed base, with the weight of the thicker base end making the artefact useful as an informal builders' tool. /One of the tapers on the side of the plumb-bob appears to be the original side of the slate as the edge along this side is more worn and smooth. The slate of the plum-bob is a mid-greyish purple in colour.

**E4468:4:310 Roof-Slate**

206mm L., 67-106mm W., 5-6mm T.; 305g Weight

Mostly complete roof-slate. An eccentrically placed nail hole survives, 42mm from one side, 21mm from the other and 24mm from the head end. It is 7mm in diameter and is sealed with a plug of mortar. The slate is roughly teardrop shaped with one rounded corner at the tail end, the other having been broken off. Some rough bevelling is apparent along all sides and the sides are bowed, with the slate looking to have been hand-shaped. Mortar paring is present in a number of places on the reverse side of the slate, possibly suggesting this slate had a full mortar bedding. The slate is a mid-greyish purple in colour with some oxide staining.

**E4468:4:311 Roof-Slate**

248mm L., 93-147mm W., 5-7mm T.; 535g Weight

Mostly complete roof-slate. An eccentrically placed nail hole survives, 67mm from one side, 28mm from the other and 12mm from the head end. It is 5mm in diameter and caused some damage to the reverse side when created. The slate is trapezoidal in shape with roughly bevelled sides, with the slate looking to have been hand-shaped. The corners at the head end are slightly rounded, as is the surviving corner on the tail end, with the other corner having been broken off. The slate is a mid-blueish grey in colour.

**E4468:6:3093 Roof-slate**

82mm L., 49mm W., 6-7mm T., 33g Weight

Broken piece of roof-slate. The remains of a nail hole survive 26mm from the top of the slate and is 7-9mm in diameter. The surviving fragment of roof-slate is roughly triangular in shape and is a silvery grey colour with striation. It is unclear whether and of the edges of the slate are original to the piece. This is a different slate type than the other surviving roof-slates.

**E4468:6:3094 Roof-Slate**

73mm L., 46mm W., 5mm T.; 33g Weight

Broken piece of roof-slate. A nail hole 5mm in diameter survives 16mm from the top end of the slate, 25mm from one side of the slate and 14mm from the other. The slate is cut with very straight line on two sides and does not look to have been hand-shaped. These two edges are not perpendicular, being at a 112-degree angle to each other. The roof-slate appears to have been broken on two sides and the edges are uneven on these sides. The slate is a mid-greyish purple in colour.

**E4468:6:3095 Roof-Slate**

100-101mm L., 86-91mm W., 6mm T.; 121g Weight

Broken piece of roof-slate. The remains of a nail hole survive along the upper side of the slate 8mm in diameter, with the slate above the top of the nail hole missing. Only one side of the slate appears to be original with the slate



Roof slates 6:3093-3100

being broken on all other sides. The surviving side does not look to have been hand-shaped. The surviving fragment of roof-slate is roughly irregular quadrilateral in shape. The slate is a mid-greyish purple in colour.

**E4468:6:3096 Roof-Slate**

175mm L., 51-73mm W., 5-6mm T.; 122mm Weight  
Broken piece of roof-slate. The slate survives to its full length and is finished on three sides but broken on the other. No nail hole survives. One corner of the slate is rounded and the side is cut straight, not looking hand-shaped. The slate has mortar adhesion along the back of the opposite end of the slate, which suggests a fillet of mortar bedding was used to prevent the slate from rocking and to improve weather tightness. The end with the mortar (head) is bevelled, as is the surviving side, while the tail end of the slate has been thinned rather than bevelled. The slate is a mid-blueish grey in colour.

**E4468:6:3097 Roof-Slate**

193mm L., 65-91mm W., 4-7mm T.; 261g Weight  
Broken piece of roof-slate. The slate is partially finished and bevelled along one side but quite eroded in general. A partial nail hole survives at the head end of the slate measuring c. 6mm diameter, though it is damaged and the upper portion of the slate is missing. The slate is roughly oval in shape and the edges appear hand-shaped. Some mortar parging survives along the central section of the slate, though it is unclear whether this is from a bedding. The slate is a mid-greyish purple in colour.

**E4468:6:3098 Roof-Slate**

217mm L., 108mm W., 4-6mm T.; 279g Weight  
Broken piece of roof-slate. The slate is finished along one side and the tail end. One nail hole is present, though partially damaged, 6-7mm in diameter and located 19mm from the surviving portion of the head end and 30mm from the surviving side. The two finished sides are

not as well cut or bevelled as seen on some of the other surviving slates suggesting the slate was hand-shaped, and both sides are relatively straight. The slate is an irregular pentangle in shape. A patch of metallic residue is to be seen 60mm from the top of the surviving side, possibly from an iron fixing, though this could also have been caused from a metallic object lying against it in the washpit. The slate is a slightly purplish-grey in colour with some oxide staining in patches.

**E4468:6:3099 Roof-Slate**

163-214mm L., 20-103mm W., 4-6mm T.; 151g Weight  
Mostly intact roof-slate. One nail hole surviving 25mm from the head end and 19mm from the surviving side and is 5mm in diameter. The slate is relatively straight-sided along one side and partially bevelled, though not perfectly cut. The tail end of the slate runs at a 115-degree angle to one side and 67-degrees to the other. It is possibly broken, however some attempt to bevel this side suggests the angle may be intentional, either as an original piece or as a repair. The opposite side also exhibits some attempt at bevelling, suggesting that this slate may be intact and hand-shaped. It is an obtuse scalene triangle in shape. The slate is a mid-greyish purple in colour.

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**E4468:6:3100 Roof-Slate**

180mm L., 94-115mm W., 3-6mm T.; 282g Weight  
Broken piece of roof-slate. One nail hole partially survives along the head end of the slate, which is broken above this point. The nail hole is c. 6mm in diameter and c. 50mm from either side. The roof-slate appears to be near-complete, with the two sides and the tail end surviving. The corners are rounded at the tail end. The sides are roughly shaped and slightly bowed suggesting the slate was hand-shaped. The overall shape of the slate a rounded rectangle. Traces of mortar parging are present at one end of the tail end of the slate and across the central portion of the reverse side of the slate, which suggests a fillet of mortar bedding was used to prevent the slate from rocking and to improve weather tightness. The slate is a mid-greyish purple in colour.

## References

Hayden, A. 2010 *Trim Castle, Co. Meath: Excavations 1995-8*. Archaeological Monograph Series: 6. The Stationary Office & Wordwell Ltd., Dublin.

Matthews, N., Bowen, L., Edden, L. 2010 *Roofs: a guide to the repair of historic roofs*. Advice series booklet produced by the Department of the Environment, Heritage and Local Government. The Stationary Office, Dublin.

# Flint

Damian Shiels

The flint gunspalls were examined by Damian Shiels, and the following is an extract from his Military Artefacts report (see Metal Artefacts Report for full report).

The fact that weapons using the flintlock technology were in use at Rathfarnham in the 17th century is evidenced by the discovery of a number of gunspalls and probable associated debitage. The discovery of these gunspalls or gunflints in association with waste product from the manufacturing process is unusual in an Irish context. A number of different methods of gunspall production are known. Among the most effective was blade production, a system whereby a single knapper could produce up to 1500 gunflints per day (White 1975, 65). The

knapper would first quarter a flint nodule, at the same time producing a striking place for splitting blades, which were then sectioned to create gunflints (ibid.). The type of process that seems to be in evidence at Rathfarnham is direct percussion, which produced gunspalls in the form of wedge-shaped flakes, each of which have a pronounced bulb of percussion at the point of impact (ibid. 65-6).

Of the sixteen pieces of flint recovered, three had been formed into gunspalls, with the remainder of the assemblage apparently representing waste pieces.

The gunspalls are catalogued in the military report.

Flint gunspalls





# Masonry

Antoine Giacometti

Worked masonry was retrieved from 18th and 19th century contexts during the 2014 excavations. Samples of the masonry were recorded and retained.

## **E4468:1:46**

Polished and molded greyish-brown sandstone, 1 dressed face and 1 side, curved corner, see notebook sketch but similar to bullnose detailed on 18th century timberwork on interior of main basement, 400mm thick.

## **E4468:1:47**

Very long sandstone dark-grey window jamb, 1 corner rounded/chamfered, 2 faces heavily polished, 100x120mm across, 700mm long broken at one end, roughly squared at other end.

## **E4468:1:48**

Polished pale grey limestone, molded, chamfered, molded a bit with curve, quite a complex shape, Fragment 140mm long broken at both ends, 110mm x 100mm across.



1:46

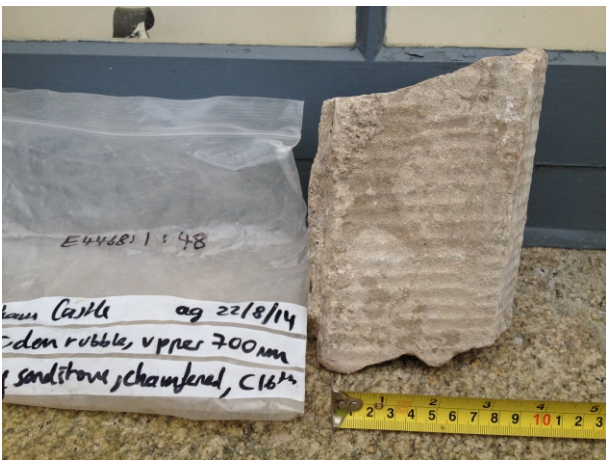
1:47 (longer piece at bottom) and 1:48 (shorter piece above)



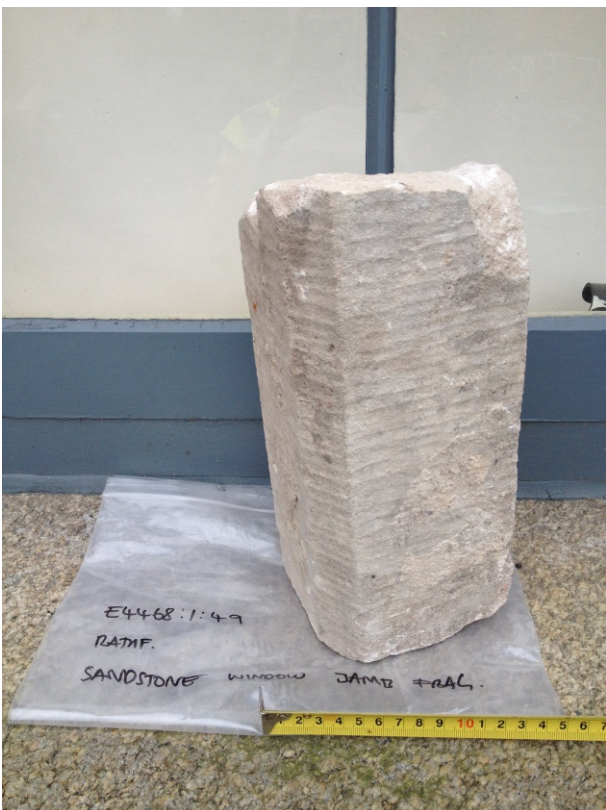




1:48, above and below



1:49



**E4468:1:49**

Pale grey sandstone window jamb, chamfered sharply on 1 corner, 1 rough face away from chamfer, 260mmx110mmx110mm, 3 worked faces with clear horizontal tool marks, 1 end worked the other end broken. Similar to 1:50 but no refit

**E4468:1:50**

Pale grey sandstone window jamb, chamfered sharply on 1 corner, 1 rough face away from chamfer, 280mmx110mmx105mm, 3 worked faces with crude horizontal and diagonal tool marks, 1 end worked the other end broken. Similar to 1:50 but no refit

**E4468:1:51**

Pale grey sandstone window jamb or fireplace piece, very finely polished with very fine tool marks on the sides, very fine grade, lime wash noted. 2 refitting frags: (i) 430x300x70 slab dressed 1 face 1 side and burnt on polished side (ii) 280x400x50 slab dressed on 1 face and all sides.

1:50



1:51





**E4468:1:52**

Fine-grained red sandstone slab, most likely C18th, dressed on upper face and edges, underside crudely hacked or heavily mortared, one unbroken piece 400mmx450mmx76mm. Very well polished on upper face.

**E4468:10:34**

Limestone door jamb, dressed, pecked crudely, very pale colour but probably a nice limestone, chamfered on one side matching in site doorways. It measures 520mm by 360mm by 120mm. Found in demolition rubble in SE flanker.

**E4468:10:35**

Limestone dressed quoin, limestone probably, 430mm by 330mm by 140mm, pecked on two sides. Not chamfered, possibly back end of doorway?

**E4468:12:16**

Sandstone (?) gunloop (?) jamb measuring 420mm x 105mm x 170mm with two faces polished smooth found ex-situ within gunloop E3 of SW flanker.



1:52

10:34 (on left) and 10:35 (right)



12:16 in situ within gunloop