Discovery and Excavation in Scotland

LOCAL AUTHORITY:	Stirling
PROJECT TITLE/SITE NAME:	Stirling Castle: The King's Old Buildings
PROJECT CODE:	HSCO-90291-2017-02
PARISH:	Stirling
NAME OF CONTRIBUTOR:	Paul Fox
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Standing Building Recording
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SITE/MONUMENT TYPE(S):	Castle
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NGR (2 letters, 8 or 10 figures)	NS 7898 9407
START DATE (this season)	23 August 2017
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PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Standing building recording was undertaken on a section of the lower external eastern façade of the King's Old Buildings at Stirling Castle. The façade contained a window which was to be removed during conversion into a doorway. The King's Old Building is a complex structure which been subject to considerable modification over the last five centuries. The insertion of an additional floor required significant alteration to floor levels and subsequently to the external façades. The fire in the north quarter led to a massive rebuild and it is here that we see the introduction of the distinctive roll-moulded and chamfered surrounds with pecking. It would appear that the introduction of this style of aperture led to the replacement of the door and window surrounds at ground floor level within the portion of the building which includes the area under examination.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
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HISTORIC ENVIRONEMNT SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2016/2017

Stirling Castle • Standing Building Recording • August 2017

HES PIC Index Number: 90291 (PIC: 111)

SITE:	Stirling Castle, Stirling.		
N.G.R.:	NS 7898 9407		
DESCRIPTION:	Recording of an inserted window in the ground floor of the King's Old Building ahead of a proposed doorway conversion.		
PROJECT CODE:	HSCO-90291-2017-02		
CONTENTS:	Introduction Description Conclusions	2	
	List of Contexts	9	
	List of Drawings	9	
	List of Digital Photographs	10	



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SEPTEMBER 2017

INTRODUCTION

Under the terms of its PIC call-off contract with Historic Environment Scotland, Kirkdale Archaeology was asked to carry out a programme of standing building recording (SBR) on a section of the lower external eastern façade of the King's Old Building at Stirling Castle. The façade contained a window which was to be removed during conversion into a doorway (Fig. 1).

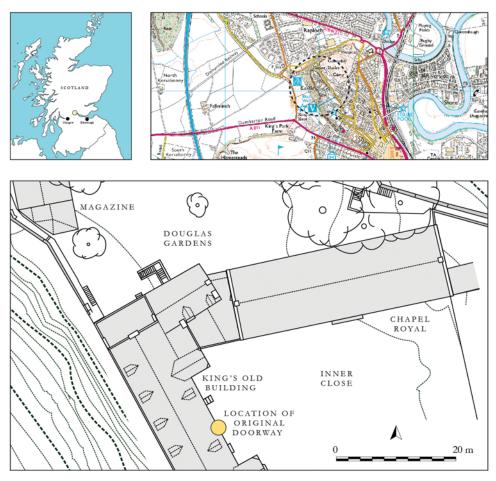


Figure 1: Plan showing the general location of the doorway. Inset No. 2 © Crown copyright. All rights reserved 2017. Licence number 100036933.

The window in question sits at ground floor level, immediately to the north of the door to the army flat meeting room, and occupies the position of a doorway which gave access (via three steps) to what was once the Storekeeper's Office. The window was inserted at some point after 1858.

The work took place on 23rd August, 2017.

DESCRIPTION

Internally, there is little of indication of the nature of the preceding doorway prior to the insertion of the window, as the parallel-sided corridor which served the door has been sheeted, although it was noted that there is a piece of angled masonry against the upper southern portion of the soffit – this is itself obscured by modern painted render (Plate 1).



Plate 1: The internal portion of the window.

The exterior eastern façade (Plate 2) by contrast is composed of exposed masonry within which it is possible to detect archaeological phasing.



Plate 2: The external eastern façade showing the inserted window (centre left).

Phase 1

Phase 1 comprises the main wall fabric **001**, the relieving arch over window **005** and the truncated south side of the relieving arch over window **019**.

The wall fabric **001** consists of a mixture of rubble build and irregularly-coursed yellowish/grey and pale grey sandstone masonry. The build is heavily weathered in places and there is no indication of tooling upon the exposed masonry faces. The build has been subject to later repointing but is presumably bonded in lime mortar.

Within this build ~ 3.10 m above the cobbles are two relieving arches comprised of irregularlysized sandstone *voussoirs* which utilise the yellowish/grey and pale grey masonry used within the main wall fabric. Arch **002** is ~ 0.95 m wide N/S x (up to) ~ 0.28 m high, and has been partially truncated by the cut **004** to insert window **005**. The arch is formed of seven *voussoirs* and springs from a large sandstone block to the north, which has again been truncated by cut **004**. It is likely that part of the southern portion of the arch has been truncated by the insertion cut for first floor window sill **022**. This relieving arch would have served the original door in this position, of which nothing remains.

Arch **003** consists of a springer to the south and two *voussoirs* in the sandstone masonry described above. It has been truncated on its northern side and underside by cut **016** to insert window **019**. This relieving arch would have served the original window in this position, of which nothing remains.

Phase 2

Phase 2 comprises the insertion of the two first-floor windows. These are both cut through the main wall fabric **001**. It may also include a fixture scar **024** located on the lower portion of wall build **001** to the south of cut **004**.

Sill **022** is formed of a horizontal single block of grey sandstone with short tight vertical tooling on the face. The margins and lintel of the window above sit flush with the wall face.

Sill **023** is formed of a horizontal single block of grey sandstone with short tight vertical tooling on the face. The margins and lintel of the window above sit flush with the wall face.

On the lower portion of wall build **001** is the scar of a wall fixture **024** with upper and lower leaded metal iron bars and a central rounded hollow. Its purpose is not clear, but it appears to be of some considerable age.

Phase 3

Phase 3 comprises the insertion of window **019** (and masonry **017** and **018** via cut **016**), the insertion of door **020** via cut **021** and the insertion of possible doorway **027** (via cut **026** and including masonry **012**, **013** and **028**). These Phase 3 apertures would have replaced doorways and windows emplaced in Phase 1, or their replacements which may have been subsequently added in Phase 2 when an additional floor was added to the building. Replacement of original apertures would have helped to regularise the façade. There is no evidence of the form of the Phase 1/Phase 2 apertures.

Window **019** sits within a wide raggled cut **016** through the main wall fabric **001**. The southern margin of the window is formed from a vertically-set sandstone block with flat vertical edges to the surrounding blocking (**017** and **018**) and a roll-mould (with a chamfer to the south) to the aperture. The roll mould has tight vertical linear tooling on its surface, while its chamfered exterior is framed by a 0.06m thick carved frame with tight horizontal linear tooling. The southern portion of the stone forming the margin has pecked tooling on its surface.

The gap between window **019** and its cut **016** to the south is filled by crudely shaped grey sandstone masonry **017** which carries a re-used architectural fragment **018**, a block of yellowish grey sandstone which appears to have a chamfer (at least 0.05m wide) on its lower horizontal edge. Masonry **017** appears to form a vertical edge on its northern side, but this is likely to be because the southern margin of the window was formed with a flat, vertically-cut margin as opposed to the more common 'in-build-out' pattern seen elsewhere.

Door **020** sits within a raggled cut **021** through the main wall fabric **001**. The door is accessed by two exterior stone steps and the northern margins are built of yellowish sandstone blocks in an 'in-build-out' pattern. The northern margins carry a roll-mould (with a chamfer to the north) to the aperture. The roll mould and its chamfered exterior are framed by a 0.06m thick carved frame polished smooth without tooling. To the north of this smooth frame, the margins have pecked tooling on their surface.

Doorway **027** is not particularly convincing as an aperture although it is possible that it represents the truncated remains of a door. It is the position of yellow sandstone blocks **012** and **013** which suggest that an aperture may have existed here. These would have been the lower portion of the south (**012**) and north margins (**013**) of the door; however the plain pecked blocks seem incongruous with the moulded and chamfered surrounds of the neighbouring apertures. For this to work as a door, these moulded and chamfered surrounds would have need to have been clawed back when the door went out of use, certainly a possibility. These blocks sit 1.25m apart, as opposed to the aperture of 0.90m width of door **020** to the south. The door sits within a raggled cut **026** through the lower portion of main wall fabric **001**.

There were known to have been three steps up to the doorway which sat in this position in the mid-19th century. These would have obscured build **028**, which is composed of blocks of yellowish and pale grey sandstone.

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Phase 4

Phase 4 comprises the insertion of window **005** via cut **004**. This phase includes the southern window margins **006**, northern window margins **007**, window lintel **008**, sloped sill **009**, sash and case window **010** and surrounding blocking **011**. It is likely that pipes **014** and **015** and grilled aperture **025** were inserted at the same time.

Window aperture **005** sits within a large raggled cut through wall fabric **001** and forms a rectangular aperture with a lightly arched top. The southern margins **006** are built of five yellowish sandstone blocks in an 'in-build-out' build pattern. The margins carry a roll-mould (with a chamfer to the south) to the aperture. The roll mould and its chamfered exterior are framed by a 0.06m thick carved frame polished smooth without tooling. To the south of this smooth frame, the margins have pecked tooling on their surface. The northern margins **007** have the same configuration (but mirrored) as **006**.

The decoration of the window margins is carried up and over the lightly-arched lintel **008** and down onto the sloping window sill **009**, which are both in yellowish sandstone. The window is separated from its cut **004** by sandstone blocking **011**, some of which (below the window and within door aperture **027**) carries horizontal tooling and may be re-used stone from elsewhere. The sash and case window **010** may be contemporary with the insertion of the window and comprise upper and lower sashes with vertical rectangular lights in a 'three columns by two rows' configuration.

There is a small black metal pipe with a perforated lid **015** within blocking **011**, possibly part of a ventilation system. The cast iron drain pipe **014**, cut through masonry **028** and protruding from the wall face could not have been present when the three exterior steps to the doorway sat here in the mid-19th century. Its insertion must therefore post-date the conversion of the door into a window. The small grilled vent aperture **025** at the base of wall build **001** immediately south of window **019** is also likely to have been installed at the same time.





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CONCLUSIONS

The King's Old Building is a complex structure which has been through considerable change over the last five centuries. The insertion of an additional floor turned the building from a two storey into a three storey structure, something that would have required significant alteration to floor levels and subsequently to the external façades. The fire in the north quarter led to a massive rebuild and it is here that we see the introduction of the distinctive roll moulded and chamfered surrounds with pecking. It would appear that the introduction of this style of aperture led to the replacement of the door and window surrounds at ground floor level within the portion of the building which is the subject of this report. It is possible that further details of apertures which previously occupied this position could be exposed during the works to convert the window back into a doorway, so it is recommended that some form of archaeological monitoring accompanies such work.

LIST OF CONTEXTS

No.	Description
001	Main masonry wall fabric.
002	Relieving arch within 001 over window 005.
003	Relieving arch within 001 over window 019.
004	Cut through 001 to insert window 005.
005	Window aperture within cut 004.
006	Southern margins of 005.
007	Northern margins of 005.
008	Lintel over 005.
009	Sill of window 005.
010	Sash and case window within 005.
011	Masonry blocking around window 005 within cut 004.
012	Possible southern door margin of door aperture 027.
013	Possible southern door margin of door aperture 027.
014	Cut and drain pipe within blocking 028.
015	Perforated pipe within blocking 011.
016	Cut through 001 and 003 for insertion of 017 - 109.
017	Inserted masonry within cut 016.
018	Re-used architectural fragment within cut 016.
019	Window aperture to north of window 005.
020	Door aperture within cut 021.
021	Cut for door aperture 020 through masonry build 001.
022	Projecting sill of first floor window (centre south).
023	Projecting sill of first floor window (centre north).
024	Scar of wall fixture with leaded metal bar and rounded hollow.
025	Built feature within 001.
026	Cut for insertion of door 027.
027	Truncated door aperture within cut 026.
028	Masonry within cut 026 below door 027.

LIST OF DRAWINGS

No.	Scale	Description
001	1:20	E-facing elevation of window 005 in the exterior eastern façade of the King's Old
		Building.

No.	Description	From	Date
1	Internal view of window aperture 005.		23/08/2017
2	General shot of exterior eastern façade of the King's Old Building.		23/08/2017
3	Door 020 within exterior eastern façade of the King's Old Building.	Е	23/08/2017
	Door 020, window 005, door 027 and window 019 within the exterior	Е	23/08/2017
4	eastern façade of the King's Old Building.		
	Window 019 and northern door within the exterior eastern façade of	Е	23/08/2017
5	the King's Old Building.		
	Northern end of the exterior eastern façade of the King's Old	Е	23/08/2017
6	Building.		
7	Detail of window 005.	Е	23/08/2017
8	Build 001 and window 005.	S	23/08/2017
9	Build 001 and window 005.	Ν	23/08/2017
10	Detail of northern reveal of window 005.	S	23/08/2017
11	Detail of window 005.	Е	23/08/2017
	General shot of the lower central portion of the exterior eastern	Е	23/08/2017
12	façade of the King's Old Building.		
	General shot of the lower central portion of the exterior eastern	Е	23/08/2017
13	façade of the King's Old Building.		
	General shot of the central portion of the exterior eastern façade of	Е	23/08/2017
14	the King's Old Building.		
15	Robert Billings' doorway at female toilet in the King's Old Building.	S	23/08/2017
16	Detail of window 019.	Е	23/08/2017
	Robert Billings' doorway in the exterior northern façade of the King's	Ν	23/08/2017
17	Old Building.		