LOCAL AUTHORITY:	Stirling
PROJECT TITLE/SITE NAME:	Stirling Castle: Douglas Gardens
PROJECT CODE:	HSCO-90291-2014-02
PARISH:	Stirling
NAME OF CONTRIBUTOR:	Paul Fox
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Watching brief
NMRS NO(S):	NS79SE 6
SITE/MONUMENT TYPE(S):	Castle
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 7894 9409 & NS 7898 9411
START DATE (this season)	10 November 2014
END DATE (this season)	2 December 2014
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was maintained during the excavation of two trenches to install footings for handrail uprights serving the wall walk stairs to the northeast and southwest of the Douglas Gardens. Surfaces and stone slabs of unknown date revealed in the trenches were left undisturbed and not investigated, while the areas of excavation were adjusted to avoid any further disturbance.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Historic Environment Scotland
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ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with Historic Environment Scotland

HISTORIC SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2014/2015

Stirling Castle • Monitoring • November/December 2014

HS PIC Index Number: 90291

SITE:	Stirling Castle, Stirling.
N.G.R.:	NS 7894 9409 & NS 7898 9411
DESCRIPTION:	Archaeological watching brief during the excavation of two trenches to install footings for handrail uprights serving the wall walk stairs to the northeast and southwest of the Douglas Gardens.
PROJECT CODE:	HSCO-90291-2015-01
CONTENTS:	Introduction 1 Description 2 Conclusions 5 List of Contexts 6 List of Drawings 6 List of Digital Photographs 6



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JANUARY 2015

INTRODUCTION

Under the terms of its PIC call-off contract with Historic Scotland, Kirkdale Archaeology was asked to undertake an archaeological watching brief at Stirling Castle during the excavation of two trenches to house concrete footings for handrail uprights in the Douglas Gardens (Fig.1). A wall walk runs over the bastion wall around the Douglas Gardens and there are two stair accesses to the southwest (next to the King's Old Building) and northeast (opposite the north wall of the Chapel Royal). These stairs were to be fitted with new handrails in order to make them safer for usage by the general public.

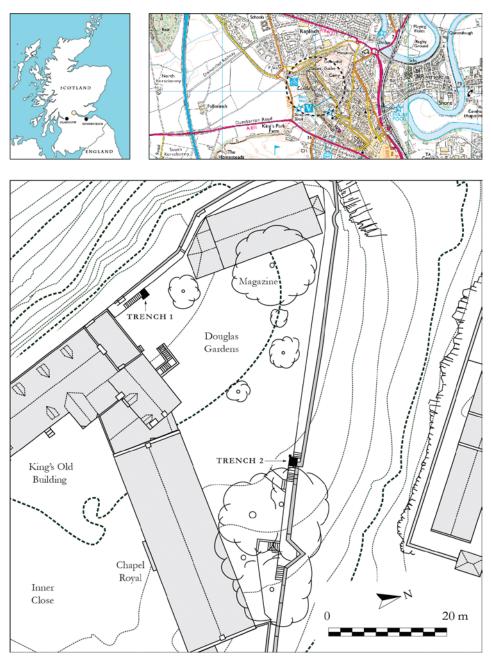


Figure 1: Plan showing the general location of the two trenches (for detailed location plans, see Figures 2 and 3). Inset No. 2 © Crown copyright. All rights reserved 2015. Licence number 100036933.

The area of the Douglas Gardens has been subject to historic levelling over the undulating bedrock summit on which it is situated. From the west, the rampart wall can be seen to be built directly onto the bedrock. To the north it is likely that a natural bedrock terrace has been 'faced up' with a rampart wall separating it from the falling ground to the Nether Bailey. To the south, the extent of the garden is demarcated by the King's Old Building and Chapel Royal. The Powder Magazine occupies the northwest portion of the gardens which currently consist of grass lawns and trees with paths formed by grass bars. This is the latest configuration of a layout which can be seen to have changed many times since the early 18th century (and doubtless prior to that). It was therefore possible that the trenches could reveal features relating to these previous configurations.

The trenches were excavated manually by the MCU under archaeological supervision, and the work was carried out on the 10th and 14th November, and the 2nd December, 2014.

DESCRIPTION

Trench 1 was located at the foot of the stairs leading to the wall walk in the southwest angle of the Douglas Gardens. Trench 2 was located at the foot of the stairs leading to the wall walk at the change in angle of the north rampart wall opposite the Chapel Royal.

Trench 1

Concrete slabs were lifted and grass bars were removed in preparation for the excavation. Below the slabs was a compacted layer **101** of blaes and whin dust which had been used to bed the slabs. The layer was 8 -10cm thick. Below this bedding material, a black plastic pipe **102** was encountered but was determined by the MCU not to be a live service. It was decided to leave it *in-situ* and work around it. The plastic pipe had been partially cut into a mixed mottled layer of levelling/infill **103** composed of silt, gravel, ash and coal fragments. Having exposed this layer and the plastic pipe, the footprint of the handrail base trench was marked out and partially excavated. An undulating layer of compact sandstone **104** was encountered after removal of 2 - 6cm of the levelling layer **103**. The tight confines of the trench meant that this layer could not be identified, but the possibility had to be considered that it could have been part of a built surface/feature. In consultation with Historic Scotland's Cultural Resources team, it was decided that it would not be appropriate to penetrate this surface and thus there would be a requirement to return when new SMC could be issued which would allow the trench to be expanded enough to identify the nature and extent of the surface. Trench 1 was therefore halted and recorded at this point.

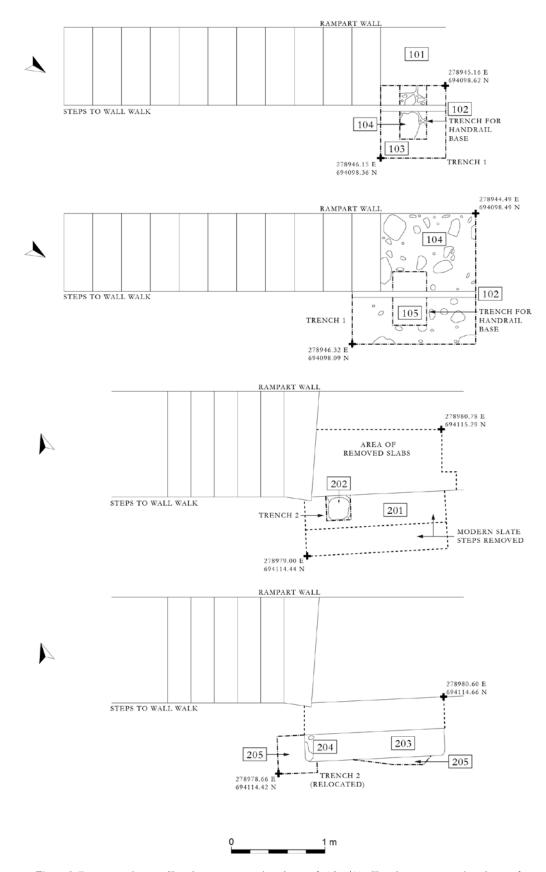


Figure 2: From top to bottom: Trench 1, post-excavation plan as of 10/11/204, Trench 1 post-excavation plan as of 14/11/2014; Trench 2, post-excavation plan as of 10/11/2014, and Trench 2, post-excavation plan as of 14/11/2014.

On returning (14th November, 2014), it was decided that a larger area would have to be opened in order to expose the top of layer **104** – the undulating layer of compact sandstone encountered during the previous visit. The trench was expanded to the south by 30cm where the turf and topsoil **105** was removed exposing **106**, a concrete base with the cut-back remains of a brass tube situated centrally. These would have been part of a previous handrail arrangement, which was clearly modern. Context **106** had been partially cut through the mixed mottled layer of levelling/infill **103** composed of silt, gravel, ash and coal fragments encountered previously. Apart from the 30cm wide (N/S) southern extension, an area 1m N/S x 1.4m E/W was opened, exposing the top of layer **104**. It became apparent during the exposure and cleaning of **104** that it was another undulating levelling layer composed of sand and sandstone rubble. This allowed the handrail base trench to be excavated through this levelling. Context **104** varied in depth from 4 – 15cm deep. It cleared onto a compact layer of greyish brown silty soil **107** flecked with charcoal. The appropriate depth was achieved for the handrail base at Trench 1 so this layer was only partially excavated, to a depth of *c*.10cm; its full extent could not be ascertained.

Trench 2

Concrete slabs were lifted from the wall walk and the modern slate steps leading to the wall walk were removed. The modern steps had been bedded on a layer **201** of mixed silt and gravel containing pieces of sandstone rubble. The trench for the handrail base was laid out by the MCU and layer **201** was excavated to a depth of *c*.10cm before a layer of compact sandstone **202** was encountered, which again could not be identified within the tight confines of the trench. In consultation with Historic Scotland's Cultural Resources team, it was decided that it would not be appropriate to penetrate this surface and the decision was made to temporarily stand down. The situation would be considered during a subsequent site by a member of the Cultural Resources team and the Historic Scotland architect.

On returning (14th November, 2014), the hand rail trench was relocated to the SE by *c*.40cm, and a sandstone slab **203** was immediately encountered. This lay beneath layer **201**, a mixed silt and gravel containing pieces of sandstone rubble used to partially bed the modern slate threshold slabs removed previously. There was also concrete **204** applied to the upper surface of the slab. There was immediate concern that the sandstone slab **203** (which was blocking the intended position of the handrail base trench) was part of a previous arrangement of steps/wall walk and therefore part of the built fabric of the monument. The threshold slab **203** was made of yellow sandstone, was at least 15cm high and measured 28cm N/S by 1.5m E/W. The front corners of the slab (to the east and west) were moulded with a plain curve. They were therefore different from the modern steps both in terms of material and form. In addition, having cleared a little of the modern gravel and silt **204** from the front of the step (material backfilled around the modern grass bars), a layer of compact pinkish grey gravelly gritty soil **205** flecked with charcoal was shown to be lapping up and over the base of the slab **203**, indicating that it was likely that this step represented part of a historic configuration of access to the wall walk. Having spoken with

Historic Scotland's Cultural Resources team, it was decided to avoid the *in-situ* historic masonry and the hand rail trench was relocated a further *c*.20cm until it lay against the southeast corner of **203**.



Plate 1: Trench 2, showing the historic masonry step 203.

CONCLUSIONS

The relatively small sizes of the trenches made formal identification of potential archaeological features difficult. However, despite their small size, the trenches managed to reveal a glimpse of the complexities of the archaeology of Stirling Castle an, in the form of the historic step **203**, something of its earlier history. It is thus recommended that all future ground-breaking works be similarly monitored.

LIST OF CONTEXTS

Trench	Context	Description
1	101	Bedding layer of blaes and whin dust for concrete slabs.
1	102	Black plastic pipe below 101, cut into 103.
1	103	Levelling layer of silt, gravel, ash and coal fragments.
1	104	Layer of sandstone rubble capped by 103.
1	105	Turf and topsoil to the south of the original trench.
1	106	Concrete base with cutback brass tube below 105.
1	107	Compact greyish brown silty soil flecked with charcoal.
2	201	Mixed silt, gravel and sandstone rubble bedding for modern concrete slabs.
2	202	Layer of sandstone rubble below 201.
2	203	Sandstone threshold slab.
2	204	Concrete patches on 203.
2	205	Layer of compact pinkish grey gravelly gritty soil flecked with charcoal lapping up against 203.

LIST OF DRAWINGS

No.	Trench	Туре	Description	Scale
1	1	Plan	Post-excavation, as of 10/11/2014	1:20
2	1	Plan	Post-excavation, as of 14/11/2014	1:20
3	2	Plan	Post-excavation, as of 10/11/2014	1:20
4	2	Plan	Post-excavation, as of 14/11/2014	1:20

LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Pre-excavation shot of Trench 2.	SW	10/11/2014
2	Trench 2, slab removal in progress.	Е	10/11/2014
3	Trench 2, slab removal in progress.	S	10/11/2014
4	Trench 2, location shot.	S	10/11/2014
5	Stair to wall walk at Trench 2.	SE	10/11/2014
6	Stair to wall walk at Trench 1.	NE	10/11/2014
7	Stair to wall walk at Trench 1.	N	10/11/2014
8	Pre-excavation shot of Trench 1.	NE	10/11/2014
9	Stair to wall walk at Trench 2.	W	10/11/2014
10	Pipe 102 uncovered in Trench 1.	SE	10/11/2014
11	Pipe 102 uncovered in Trench 1.	NE	10/11/2014
12	Pipe 102 uncovered in Trench 1.	NE	10/11/2014
13	Trench 1, showing rubble surface 104.	NE	10/11/2014
14	Trench 2, slab removal in progress.	SW	10/11/2014
15	Trench 2, slab removal in progress.	S	10/11/2014
16	Trench 1, showing rubble surface 104.	NW	10/11/2014
18	Trench 1, showing rubble surface 104.	NE	10/11/2014
17	Trench 2 emplaced, showing rubble surface 202.	SW	10/11/2014
19	Trench 2 emplaced, showing rubble surface 202.	SE	10/11/2014
20	Trench 2 emplaced, showing rubble surface 202.	SE	10/11/2014
21	Trench 2 emplaced, showing rubble surface 202.	Ν	10/11/2014
22	Bastion Wall at Trench 2, taken from the Nether Bailey.	NE	10/11/2014
23	Concrete pad and brass upright 106 at Trench 1.	NE	14/11/2014
24	Concrete pad and brass upright 106 at Trench 1.	NW	14/11/2014
25	Trench 1, rubble surface 104 exposed.	NE	14/11/2014
26	Trench 1, rubble surface 104 exposed.	NW	14/11/2014
27	Trench 1, rubble surface 104 exposed.	SE	14/11/2014
28	Post-excavation shot of Trench 1.	NE	14/11/2014
29	Post-excavation shot of Trench 1.	NE	14/11/2014
30	Post-excavation shot of Trench 1.	NW	14/11/2014
31	Trench 2, with historic masonry step 203 exposed.	SW	14/11/2014

No.	Description	From	Date
32	Trench 2, with historic masonry step 203 exposed.	SW	14/11/2014
33	Trench 2, with historic masonry step 203 exposed.	NW	14/11/2014
34	Trench 2, with historic masonry step 203 exposed.	SW	14/11/2014