

Discovery and Excavation in Scotland

Updated on 15/06/2007

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PROJECT TITLE/SITE NAME:	Stirling Castle Palace
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PARISH:	Stirling
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NAME OF ORGANISATION:	Kirkdale Archaeology
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NGR (2 letters, 8 or 10 figures)	NS 7899 9403
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PREVIOUS WORK (incl. <i>DES</i> ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>Various archaeological watching briefs were carried out at Stirling Castle Palace prior to and during the commencement of restoration works in 2008.</p> <p>SCPP-2008-02: Monitoring of Slab removal prior to excavations between the 'Governor's Kitchen' and the King's Old Buildings</p> <p>SCPP-2008-03 & SCPP-2008-06: Monitoring of the excavation of a new drain along the base of the main west elevation of the palace (on the Ladies' Lookout). Most of this drain's route was through backfill from the 2004 excavation of the Ladies' Lookout. However, the south end of the drain revealed more of the foundations of the ragged angled wall at the SW corner of the Palace.</p> <p>SCPP-2008-07: Monitoring of the construction of new doorways in the Palace. The doorways were constructed by the MCU between the King and Queen's Bedchambers and also between the Queen's Inner and Outer Halls. Wall fabric and original door features revealed during dismantling were recorded.</p> <p>SCPP-2008-11: Within the Palace the re-pointing of a relieving arch in the King's closets was monitored and organic material found sealed behind it was sampled. Also, the removal of plaster from the S end of the upper corridor of the West Range was monitored and recorded as it revealed roof fabric.</p> <p>SCPP-2008-15: The removal of 20th-century service conduits from the King's Inner Hall and the Queen's Inner Hall was monitored and the residual plaster sealed behind was recorded.</p>
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Historic Scotland
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Historic Scotland
SCPP Archaeological Works
2008

Stirling Castle Palace
West Range French Drain
Extension to Trench 24

PIC Index No. 90291

Project. SCPP-2008-06

Archaeological monitoring
June & July 2008



15 December 2008
Kirkdale Archaeology

Site Stirling Castle Palace, Ladies Lookout

N.G.R NS 790 940

Project Description Archaeological monitoring of the excavation of an extension to a trench (Trench 24) against the W range of the palace for the insertion of a drain.

Summary

A re-visit to a drainage trench being cut through the previously excavated Ladies Lookout of Stirling Castle, along the foot of the West Range, revealed previously excavated features. A small addition to the W side of wall F24012 was recorded during this exercise. Monitoring was also necessary to avoid damage to previously excavated structural features.

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1 INTRODUCTION

Kirkdale Archaeology was asked to monitor the excavation of a drain along the W side of the Palace. This was designed to run along the base of the outside (W side) of the W range of the Palace, with the aim of reducing the damp conditions encountered in the Vault level of this range. The area where the drain was to be dug is open ground today, and is referred to as the 'Ladies Lookout', a reference to the spectacular views available to the W from here.

Between 2003 and 2005 extensive excavations were carried out across the Ladies Lookout, including directly against the W side of the Palace. The course of the current drain runs over the backfill of trench 14 at its N end, an area that has been landscaped into a long (15 m) grassy area, sloping down to the S. At the S end of this it involved the re-excavation of trench 18, today covered by cobbles laid as a flat surface. The terminal of the Drain was to be to the SW of the Palace, making it just within the SE corner of the old trench 21, separated from trench 18 by a live electric cable, whose course has never been excavated.

Although already excavated, the intention behind the watching brief was to ensure that the numerous walls encountered during the previous phase of work were not damaged. The unexcavated course of the electricity cable overlies some critical relationships, and it was thought that this new work offered opportunities for fresh insights into the complex results already revealed.

The trench was dug by hand, except at the S end where the setts were removed using a breaker. The intention was to dig a track 500 mm wide and up to 1 m deep, however the presence of walls and bedrock, especially at the N end, curtailed this depth. Because of these problems a shallower surface drain was felt to be sufficient, and the excavation averaged only 400-500 mm deep. It was dug in sections, starting with the 15 m long grassy slope at the N end, already excavated as trench 14. Once the cobbles were lifted work progressed through the area of trench 18, a length of some 5.5 m N-S, turning at its S end to run SW for a further 4.2 m, to terminate in a pre-existing drain within trench 21.

Descriptions of already excavated features will be kept to a minimum in this account, with the emphasis given to new observations. Where possible the numbering system from the

original excavation was retained, only at the S end of the trench, within the area of the old trench 18, were new numbers allocated.

2 EXCAVATIONS

Work started at the N end, where the bedrock is only 200-400 mm below the ground surface. This is the case for the first c 2m of the trench, until wall line **F14092** crosses the trench E-W. This wall seems to sit along a drop in bedrock, at no point to its S was bedrock seen. A little to the S of **F14092** wall **F14029** also crossed the trench E-W, and this in turn lies just to the N of further E-W wall **F14031**.

To the S of **F14031** there is a gap of just over 6 m until a further wall **F14118** crosses the trench. Between these two the footings below the Palace (**F14196** and **F14121**) project slightly into the excavated area. After **F14118** further wall footings **F14117** again project into the trench. At their S end **F14117** overlies **F14114**, the badly disturbed remains of a wall that runs E-W, while the S end of this phase of work is marked by E-w wall line **F14073**.

There was a short break in the work until the cobbles had been lifted over the area of the old trench 18. The track here averaged 700 mm wide, and dropped to the S such that at its N end it was only 300 mm deep, reaching a maximum depth of 650 mm at its S end. This meant that only at the S end was anything except the backfill of trench 18 removed. The most Northerly feature noted was **F24010**, a cast iron pipe crossing the trench at an angle close to ESE-WNW. At the S end of the area of trench 18 three further pipes were unearthed: **F24006**; **F24008** and **F24018**. All three of these were cut against **F24012**, the foundations of the angled wall with a ragged N end at the very S end of the area, numbered as **F18018** in the previous excavation. At the SW end of the trench **F24004**, the concrete channel built to take the electricity cables, crossed **F24012**. **F24012** was exposed for a maximum width of 1.65 m E-W, perhaps 100 mm wider than was previously seen. A large (500 by 250 by 200 mm) sandstone block in **F24012**, in the extreme SW corner, may represent a 'facing stone', no others were noted on the W side, these presumably lie under **F24004**. The wall was built of a mix of medium sized sandstone and dolerite chunks, bonded by copious amounts of hard pale yellow mortar, rich in small rounded inclusions.

In the event **F24004** was not removed, with the decision made instead to feed the new drain through existing pipe **F24010**, but a small area had already been opened up to the W

of **F24004**. This measured 1.15 m E-W by 1.2 m N-S, and was entirely within the backfill of trench 21. This was centred on **F24015**, the vertical pipe against the S wall of the Ladies Lookout, through which it feeds. This had been dug into the top of **F24017**, the wide curving wall forming the foundations for the Ladies Lookout S wall, and numbered as **21185** in the original excavation. No new observations were made in this area.

3 CONCLUSIONS

Although already excavated, a small addition to the W side of wall **F24012** (same as **F18018**) was recorded during this exercise. Monitoring was also necessary to avoid damage to the walls already revealed and recorded. The opportunity was also taken to re-photograph masonry within the trench.

A1. APPENDIX 1 : LIST OF CONTEXTS

Context no.	Description
24001	Cobbles and underlay
24002	Backfill of tr. 18
24003	Backfill of tr. 21
24004	Fill of F24005
24005	Cut for electricity cables
24006	Fill of F24007
24007	Cut for smashed iron drain
24008	Fill of F24009
24009	Cut for angled drain at S end of tr. 18
24010	Fill of F24011
24011	Cut for drain, removed drainpipe
24012	Wall founds at extreme S end of tr. 18 (same as F18018)
24013	Fill of F24014
24014	Cut for angled drain in tr. 21
24015	Fill of F24016
24016	Cut for drain feeding off S end of Ladies Lookout
24017	Wall at base of tr. 21
24018	Fill of F24019
24019	Cut for cast iron drainpipe over F24008

A2. APPENDIX 2 : LIST OF DRAWINGS

No.	Type	Description	Scale
001	Plan	Plan of SW end of trench	1: 20

A3. APPENDIX 3 : LIST OF PHOTOGRAPHS

Frame	Description	Taken from	Date
1	Cobbles being lifted	NW	30/ 06/ 08
2	Cobbles being lifted	NW	30/ 06/ 08
3	Trench 24, pipe F24006	NE	07/ 07/ 08
4	Trench 24, pipe F24006	NE	07/ 07/ 08
5	Trench 24, pipe F24006	N	07/ 07/ 08
6	Trench 24 SW end (over trench 21)	E	07/ 07/ 08
7	Trench 24 SW end (over trench 21)	N	07/ 07/ 08
8	Trench 24, S end as finished	N	07/ 07/ 08
9	Trench 24, S end as finished	N	07/ 07/ 08
10	Trench 24, S end as finished	NE	07/ 07/ 08
11	Trench 24, S end as finished	S	07/ 07/ 08
12	Trench 24, S end as finished	S	07/ 07/ 08
13	Trench 24, S end as finished	W	07/ 07/ 08

A4. APPENDIX 4: ILLUSTRATIONS



Figure 1: Photograph of the extension to Trench 24 (N to top)

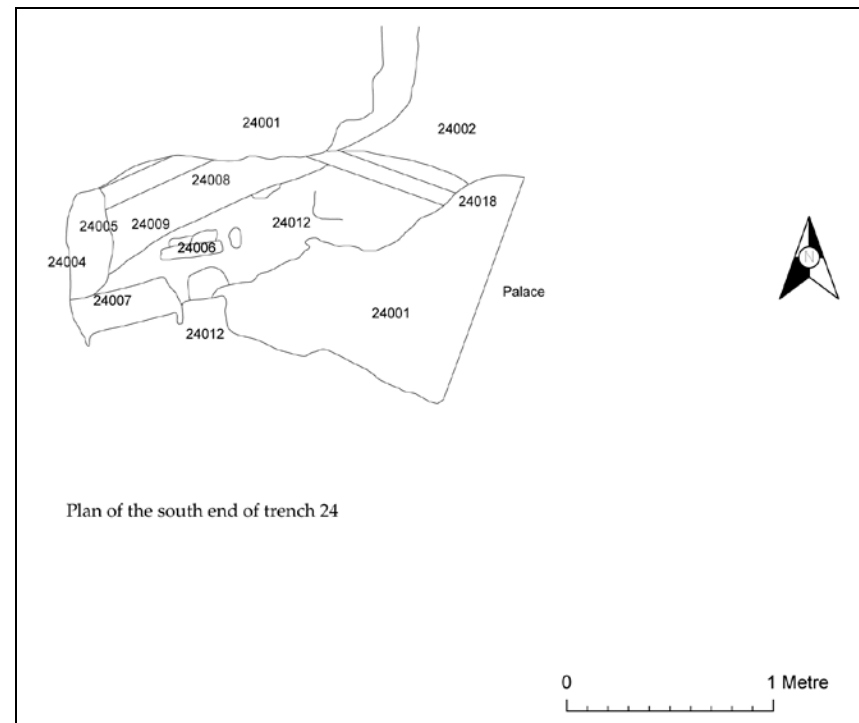


Figure 2: Plan of the extension to Trench 24

Historic Scotland
Properties in Care
Minor Archaeological Works
2008

Stirling Castle Palace
MCU Palace Door Reconstruction
HS Index No. 90291

Project. SCPP-2008-07

Standing Building Recording
September 2008



17 December 2008
Kirkdale Archaeology

Site Stirling Castle Palace

N.G.R NS 790 940

Project Description Standing building recording during the partial demolition and reconstruction of two palace doors, one between P04 and P07 and one between P09 and P11 carried out as part of the Stirling Castle Palace Project 2008.

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1.0

INTRODUCTION

Kirkdale Archaeology was invited to undertake a short period of archaeological recording at Stirling Castle Palace during the partial demolition and reconstruction of two palace doorways, one between P04 (The King's Bedchamber) and P07 (The Queen's Bedchamber), and one between P09 (The Queen's Presence Chamber) and P11 (The Queen's Guard Chamber). The reconstruction of the doorways was carried out as part of the Stirling Palace Project 2008. The purpose of the reconstruction was to create a layout as close to that of the original palace as possible reusing original doorway margins where possible and replacing missing stonework with new blocks carved to match the original style. The demolition and reconstruction of the doorways was carried out by the MCU in September 2008.

2.0

DESCRIPTION

Work actually commenced in 2006 with the partial unblocking of the original palace doorway between P09 and P11 (Doorway P09.4.020, blocking P09.4.098). This work was photographed at the time. The remaining blocking P09.4.023 was removed in September 2008. P09.4.023 contained several architectural fragments and these were photographed on site. The open aperture through the wall was propped with scaffolding. The reconstruction of the door commenced, incorporating the surviving portions of the original doorway which included much of the south margin P09.4.021/P11.2.028, and the relieving arch P09.4.022/P11.2.035. The surviving portion of lintel P11.2.029 could not be incorporated and was removed. The MCU custom cut blocks of yellow sandstone with a roll mould to match the original palace decorative scheme to create the new N margin and lintel. The gap beneath the relieving arch was blocked with red bricks and faced with sandstone rubble from the blocking. The South and the North margins of the doorway were drawn and recorded prior to the completion of the reconstruction to record the original palace features revealed during the work. The work was a continuation of SPARC 2003-2007 with amendments made to existing contexts records. The digital database was immediately updated following this work. Relevant contexts are listed in Appendix 1.

Between the reconstruction of the P09/011 door and the demolition of the P04/P07 door the opportunity arose to record a section through the SW window recess in P09 (P09.3.020) following the collapse of the sash window P09.3.014 within it. The work was a continuation of SPARC 2003-2007 with amendments made to existing contexts records. The digital database was immediately updated following this work. Relevant contexts are listed in Appendix 1.

Following the completion of the reconstruction of the doorway between P09 and P11, work began on the reconstruction of the doorway between P04 and P07. The wall between P04 and P07 was largely rebuilt in the 1970's along with a door aperture P04.3.013/P07.1.026 close to the position of the original palace doorway. Only a tiny portion of the base of the E margin of the

palace doorway was possibly preserved P07.1.045 in the edge of the original palace wall P07.1.001/P04.3.001 indicating that the original door was slightly further to the E. The margins from the 1970's were removed, the void was propped with scaffolding and newly cut margins matching the original palace. The MCU custom cut blocks of yellow sandstone with a roll mould to match the original palace decorative scheme to create the new N and S margins and lintel. The rebuilt the relieving arch and the top of the door with red bricks and sandstone rubble. Only the East margin of the doorway was drawn and recorded prior to the completion of the reconstruction since the West margin dated from the 1970's. The work was a continuation of SPARC 2003-2007 with amendments made to existing contexts records. The digital database was immediately updated following this work. Relevant contexts are listed in Appendix 1.

3.0 INTERPRETATION AND OBSERVATIONS

The sequence of the door between P09 and P11 was already well understood thanks to historical records and archaeological recording during SPARC 2003-2007. The demolition and reconstruction work revealed previously unseen margins and wall fabric/blocking and provided the opportunity for closer inspection and detailed recording of the newly revealed masonry. This doorway was the original palace route between P09 and P11. It was blocked up in Period 7 (Early – Mid 18th Century) with P09.4.098 when a new central door was inserted between P09 and P11. Then in Period 8 (Late 18th Century – 19th Century) the door was partially reopened (Cut P09.4.085) and linked to a doorway smashed through the N wall at this point giving access to the from the Lion's den while the central door between P09 and P11 was blocked up. Then in Period 9 (Early 20th Century) the door to the Lion's Den was blocked up and the total blocking of P09.4.020 was completed with P09.4.023 abutting blocking P09.4.098 and the central door between P09 and P11 was reopened.

The opportunistic recording of the East elevation of window recess P09.3.020 did not alter the existing interpretation of the sequence of the window recess which is that the recess is mainly original palace build with brick modifications possibly in the Late 17th Century to support the sash windows inserted at this time, or possibly in the Early 20th Century to hold radiators (but possibly also related to the replacement of sash windows at this time – P09.3.014 is an example of an Early 20th Century replacement).

Very little original masonry from the door between P04 and P07 was identified other than the face of the original wall fabric (P04.3.001/P07.1.001) of the palace hidden behind the 1970'sw rebuild. Unfortunately the possible block of original roll mould P07.1.045 was already hidden behind the base of the new East margin at the time of recording.

DRW#1

No	Description
P09.1.001	Main build of wall. 1540 palace build.
P09.1.020	White emulsion paint in window recess P09.1.013, uppermost paint layer. Mid 20 th Century – Present coat of paint.
P09.1.087	Sandstone blocking, dressed, blocking cut P09.1.088 at W end of wall. Early 20 th Century blocking of doorway.
P09.1.218	South edge of doorway between P09 and P11 cut back to the south face of the north wall. The current work to rebuild the original door has disturbed an area measuring 900mm E-W by 2.55m high. This feature is in the upper 1.00m of the disturbance. The stonework here is cut back to form a fairly flat face, level with the rest of the north wall. Appears to have removed material from P09.1.087. 2008 disturbance of 19th Century blocking.
P09.1.219	Howk into the wall face below P09.1.218, measures 900mm E-W and over 600mm high. It was seen to this height but below this new door build has been constructed. This cut upto 150mm deep into the wall face and shows the uncoursed, subrectangular blocks of the wall core (120mm by 80mm on average). Pointed with hard pale grey gritty mortar. 2008 howk into 19th Century/20th Century blocking of a doorway in the north wall.
P09.4.020	Doorway to N of wall P09.4.001. Has been partially smashed away and later blocked, relates to doorway which opened out to Lion's Den Walkway. Doorway is probably an original 1540 palace feature.
P11.1.001	Lower wall fabric composed largely of blonde sandstone blocks, many of which are dressed and may be reused. Also contains rougher blocks of grey bedrock in discrete patches. This fabric rises to a height of 3m 60 - 3m 90 above floor level, above which is wall fabric P11.1.144, which is much rougher random build and is mainly bedrock. Horizontal course separating the lower and upper wall. W end abutts W wall (P11.4). Original palace build. There is a break in building campaign between P11.1.001 and P11.1.044, construction post dates W wall P11.4.

DRW#2

No	Description
P09B.3.001	Door aperture between P09 and P11, recently partially unblocked. Doorway has a depth of 800mm and a height of 1.98m. Door within the aperture was hinged to the N, secured to the S and opened to the E. Circa 1538 - 1542 palace doorway.
P09B.3.002	A quoins of door aperture P09A.3.001. Roll moulded (110mm diameter) to the W with a 30mm across chamfer to the E. The margins are then flat and vertical for 210mm after which the flat E portion is rebated back by 110mm. Formed of large blocks of blonde ashlar sandstone dressed with tight vertical toolmarks. Upper portions to E and W have been clawed back - see P09A.3.004 and P09A.3.005. Cuts and scars related to door furniture can be seen on the rebated E portion with a single dook on the W portion. Part of a circa 1538 - 1542 palace doorway.
P09B.3.003	Blonde sandstone lintel over margins P09A.3.002. This originally carried the return of the roll mould running up the S Quoins but this has been clawed back - see P09A.3.004. Lintel was 310mm high by 440mm thick and carried wall build P09A.3.012 above. Sits on margins P09A.3.002. 30mm wide chamfer on lower W face and has a 60mm high rebate behind. Part of a circa 1538 - 1542 palace doorway.
P09B.3.004	Cut through the roll mould and chamfer of door quoins P09A.3.002 and lintel

No	Description
	P09A.3.003. 120mm wide x 310mm high. The reasons for this clawing are unclear, perhaps a wooden lintel was installed at a lower level when this doorway was connected to the walkway in the Lion's Den. Late 18th Century - 19th Century
P09B.3.005	Cut through upper E portion of quoins P09A.3.002, at a similar level to cut P09A.3.004. Sandstone margins have been clawed back to a depth of 190mm. Cut is 370mm across x up to 240mm high. Possibly a 19th Century alteration for recessing a wooden lintel.
P09B.3.006	Cut through quoins P09A.3.002 80mm across x 75mm high x 110mm deep. Roughly square. Cut which along with P09A.3.009 was used to hinge a metal bar to stop the lock receiver (P09A.3.007 or P09A.3.008) breaking out from the stone. Scar of metal bar is P09A.3.010. Possibly 1538 – 1542.
P09B.3.007	Cut through quoins P09A.3.002 up to 140mm high x 60mm across and crosses line of scar P09A.3.010. 800mm deep. Probably the cut for the original bolt receiver of the circa 1540 doorway. Sits behind scar P09A.3.010 as the metal bar within the scar would have helped to secure the lock receiver. Possibly 1538 – 1542.
P09B.3.008	Cut through quoins P09A.3.002 roughly vertical rectangular - sits immediately to W of scar P09A.3.010. 800mm deep. Either a drawbar hole or a different phase of lock receiver to P09A.3.007. Possibly 1538 – 1542.
P09B.3.009	Roughly square cut 130mm across x 60mm deep on quoins P09A.3.002 at lower end of scar P09A.3.010. Hole cut to hinge bottom of a metal strengthening bar represented by scar P09A.3.010. 1538 – 1542.
P09B.3.010	Scar 30mm across x 790mm high x 20mm deep running on a slight diagonal up quoins P09A.3.002 in between cuts P09A.3.006 and P09A.3.009. Scar of a recessed metal stop bar hinged by P09A.3.006 and P09A.3.009 and used to stop the locked door from breaking out of the stonework. 1538 – 1542.
P09B.3.011	Circular cut 40mm across x 55mm deep on W side of quoins P09A.3.002. Presumably relates to some form of door furniture, possibly a catch for a chain like that attached to the W face of the door between P07 and P09. 1538 – 1542.
P09B.3.012	Random rubble sandstone and bedrock wall build over aperture PD.3.001. Bonded in lime mortar. 800mm thick. Circa 1538 - 1542 palace wall build.
P09B.3.013	Sandstone sill on W side of door aperture P09A.3.001. 240mm high x 510mm thick - this does not extend through the full door thickness (800mm). Has rubble build P09A.3.014 to the E. 1538 - 1542 door element.
P09B.3.014	Sandstone rubble build forming the rear 290mm of the sill of the door aperture. Bonded in lime mortar. Unclear why the stone sill P09A.3.013 does not penetrate the full wall thickness. Perhaps the stone sill could be seen from P09 but the floor level in P11 was higher and the rubble build wasn't visible. 1538 – 1542.
P09.4.020	Doorway to N of wall P09.4.001. Has been partially smashed away and later blocked, relates to doorway which opened out to Lion's Den Walkway. Doorway is probably an original 1540 palace feature.

DRW#3

No	Description
P09.3.012	Back wall of W recess, brick rebuild of handmade bricks 2cm x 9cm and grey cement/mortar. Also contains occasional stones in build. Probably part of the conversion to house a sash window in the Late 17th Century - Early 18th Century, forming a wider base on the inside for the larger frame. The brick build wall is 60mm thick and there is 50mm of hard pale grey mortar to the south of it and to the north of it there is the original palace wall face P09.1.135. Late 17th Century - Early 20th Century

No	Description
P09.3.020	W window recess. 1540.
P09.3.135	Original wall of window back of W embrasure P09.3. Cut through by P09.3.138 and P09.3.134. Base of window back below brick blocking P09.3.012. 1540.
P09.3C.010	Roll moulded quoins at wall edge. 1540.
P09.3C.011	Quoins at window edge of wall. 1540.
P09.3C.012	Foundation platform on which main wall build sits, clawed back at reveal. Overall height 200mm. Foundation platform for walls originally built to rough size and subsequently clawed back flush with general wall face. Late 15th Century - 1540
P09.3C.013	Very rough masonry build seen over most of Reveal C, except for quoins down the edge. Mix of white and grey very roughly shaped in fixed blocks, slabs of all sizes. 4.6m high x 1.1m wide. Main wall build, general build type in this room i.e rough. 1540.
S05.1.002	Aperture of west window, 290cm high x 180cm across. 1540.
S05.1.009	East jamb of aperture S05.1.002. Ashlar in build/out build pattern in sandstone with every 2nd block also being part of the edge roll-moulding. Contains holes to house metal yetts S05.1.013. Chamfered on east edge. Sketch of profile on reverse of context sheet. 1540.
S05.1.138	East reveal of window S05.1.002 measures 470mm N-S, the south 60mm of which is chamfered out to the east at approximately 45 degrees. At the north end this reveal is rebated by approximately 60mm to meet P09.3C.011. Part of the original 1540 palace construction.
S05.1.139	L-shaped scar in S05.1.138. Emerges from the north margin 1.25m above the base, extends 270mm south (40mm wide by 15mm deep) then runs up to the top of the reveal 20mm wide by 15mm deep. Original glazing groove. 1540.
S05.1.140	Small infilled hole (up to 90mm high by 40mm N-S) immediately south of the junction between the horizontal and vertical section of glazing groove S05.1.139. Appears that this was to take a fitting at the base of the original window. Similar features, some filled and other not can be seen at either side of all the windows of S05. The hole is probably 1540. The fill may have been added when the window was converted to sash and case or at any time after.

DRW#4

No	Description
P04.2.001	Lower stretch of walling inbetween window bays P04.2.003 and P04.2.017. Generally yellow sandstone blocks but some blue/green and occasional dolorite chunks. Uncoursed but some are squared off sandstone finely dressed. Frequent use of pinnars - small stones and slates used. Lower part of E wall of kings bedchamber. Almost certainly contemporary with P04.2.002 above, just higher quality build. 1540.
P04.2.083	1 of 4 concrete filled repairs to S of window bay P04.2.017 in sets of 2 pairs arranged one above the other. Crudely infilled by dark grey cement but originally roughly 100mm square. Upper, very large type B2 filled with cement. " Dumbell Dooks". Infilled holes, function unknown. Appears in pairs- similar arrangements noted between window bays (P04.2.071 - P04.2.074) as well as in both actual window bays, the N wall and the Wwall. Likley to be some form of military fixture. Late 18 th Century – 19 th Century.
P04.2.084	1 of 4 concrete filled repairs to S of window bay P04.2.017 in sets of 2 pairs arranged one above the other. Crudely infilled by dark grey cement but originally roughly 100mm square.

No	Description
	<p>Lower, very large type A1 filled with cement.</p> <p>" Dumbell Dooks". Infilled holes, function unknown. Appears in pairs- similar arrangements noted between window bays (P04.2.071 - P04.2.074) as well as in both actual window bays, the N wall and the Wwall. Likely to be some form of military fixture. Late 18th Century – 19th Century.</p>
P04.2.096	<p>1 rectangular dook in a series of 4 vertical rows of rectangular dooks to the S of window bay P04.2.017. Generally infilled or partly infilled by pale grey mortar 20-30mm wide, 60-80mm high. Chiselled into stonework of P04.2.002. The northern 2 rows (P04.2.088-P04.2.095) are regular arrangements of 4 holes, the 2 central rows are closer together than the top and bottom. To the S there is a row of 3 holes P04.2.085-P04.2.087, while at the S end of the wall only 2, P04.2.096 and P04.2.097 were noted. 1 hole P04.2.088 cuts G1 block P04.2.067, one of a series of squared stone blocks set in to the wall.</p> <p>Type D1 filled with plaster.</p> <p>Part of dook group P04.2.176 . 4 vertical(ish) columns of rectangular holes, often cut straight into stones. Appears (where it survives) to consist of 4 holes in a row, with the central 2 close together (150mm-200mm) and the top and bottom further apart (the top row 400mm up the bottom 300mm down). This pattern is repeated to the N of window P04.2.017 (P04.2.098-P04.2.106) as well as running into the window bays and along the N and W walls. A similar pattern can be seen in the Queen's bed chamber. The regularity in shape and spacing of the dooks indicates a requirement for uniformity - likely to be either wood pannelling or shelving. One example P04.2.088 cuts square stone block P04.2.067 - a relationship mirrored in the W wall. Note P04.2.114 is a square hole at the top of one of these four lines - could be part of the series, simply a different shape. Late 18th Century – Early 20th Century.</p>
P04.2.097	<p>1 rectangular dook in a series of 4 vertical rows of rectangular dooks to the S of window bay P04.2.017. Generally infilled or partly infilled by pale grey mortar 20-30mm wide, 60-80mm high. Chiselled into stonework of P04.2.002. The northern 2 rows (P04.2.088-P04.2.095) are regular arrangements of 4 holes, the 2 central rows are closer together than the top and bottom. To the S there is a row of 3 holes P04.2.085-P04.2.087, while at the S end of the wall only 2, P04.2.096 and P04.2.097 were noted. 1 hole P04.2.088 cuts G1 block P04.2.067, one of a series of squared stone blocks set in to the wall.</p> <p>Type D1 filled with wood but covered with plaster.</p> <p>Part of dook group P04.2.176 . 4 vertical(ish) columns of rectangular holes, often cut straight into stones. Appears (where it survives) to consist of 4 holes in a row, with the central 2 close together (150mm-200mm) and the top and bottom further apart (the top row 400mm up the bottom 300mm down). This pattern is repeated to the N of window P04.2.017 (P04.2.098-P04.2.106) as well as running into the window bays and along the N and W walls. A similar pattern can be seen in the Queen's bed chamber. The regularity in shape and spacing of the dooks indicates a requirement for uniformity - likely to be either wood pannelling or shelving. One example P04.2.088 cuts square stone block P04.2.067 - a relationship mirrored in the W wall. Note P04.2.114 is a square hole at the top of one of these four lines - could be part of the series, simply a different shape. Late 18th Century – Early 20th Century.</p>
P04.2.227	<p>Scar on the east wall where historic Scotland have removed some masonry at the east side of the doorway between P04 and P07. The affected area measures 850mm N-S and up to 2.80m in height. At the time of recording 1.20m had</p>

No	Description
	already been rebuilt hiding the base of the wall. The stone work has a rough finish with many tool marks. Some stones jut out west from the stone face but these are to be cut off as part of the ongoing work. June/July 2008 disturbance of wall fabric to create a new reconstructed palace doorway.
P04.3.013	Door aperture 1970 built reflecting original 1540 layout.
P07.2.001	Original wall rubble. Random block of sandstone forming an arch around the newer repaired wall P07.1.003. 1540.
P07.2.005	Ashlar quoins up side of chimney breast. 12 courses can be seen and appear to have chamfered edge. Closer inspection indicates this is damage to the edge and is probably recent as the surface is rough and appears fresh. 1540

A2.0

APPENDIX 2: LIST OF DRAWINGS

No	Type	Description	Scale
1	Elevation	N elevation of doorway P09.4.020	1:20
2	Elevation	S elevation of doorway P09.4.020	1:20
3	Elevation/section	E elevation of window recess P09.3.020	1:20
4	Elevation	E elevation of doorway P09.3.013	1:20

A3.0

APPENDIX 3: LIST OF PHOTOGRAPHS

Frame	Description	From	Date
1	Doorway P09.4.020 with blocking P09.4.098 removed	E	20/12/2006
2	Doorway P09.4.020 during the removal of blocking P09.4.023.	SW	09/2008
3	Architectural fragment found within blocking P09.4.023.	-	09/2008
4	Architectural fragment found within blocking P09.4.023.	-	09/2008
5	Architectural fragment found within blocking P09.4.023.	-	09/2008
6	Architectural fragment found within blocking P09.4.023.	-	09/2008
7	Architectural fragment found within blocking P09.4.023.	-	09/2008
8	Architectural fragment found within blocking P09.4.023.	-	09/2008
9	Architectural fragment found within blocking P09.4.023.	-	09/2008
10	Architectural fragment found within blocking P09.4.023.	-	09/2008
11	Architectural fragment found within blocking P09.4.023.	-	09/2008
12	Architectural fragment found within blocking P09.4.023.	-	09/2008
13	Architectural fragment found within blocking P09.4.023.	-	09/2008
14	N elevation of doorway P09.4.020.	S	09/2008
15	N elevation of doorway P09.4.020.	S	09/2008
16	S elevation of doorway P09.4.020.	NW	09/2008
17	S elevation of doorway P09.4.020.	NW	09/2008
18	General shot during the reconstruction of P09/P11 doorway.	SW	09/2008
19	General shot during the reconstruction of P09/P11 doorway.	SE	09/2008
20	P09/P11 doorway reconstruction complete.	W	09/2008
21	Top of P09/P11 doorway reconstruction complete.	E	09/2008
22	General shot showing the reconstruction of the door	SW	09/2008

Frame	Description	From	Date
	between P04 and P07.		
23	General shot showing the reconstruction of the door between P04 and P07.	S	09/2008
24	General shot showing the reconstruction of the door between P04 and P07 near completion.	SW	09/2008

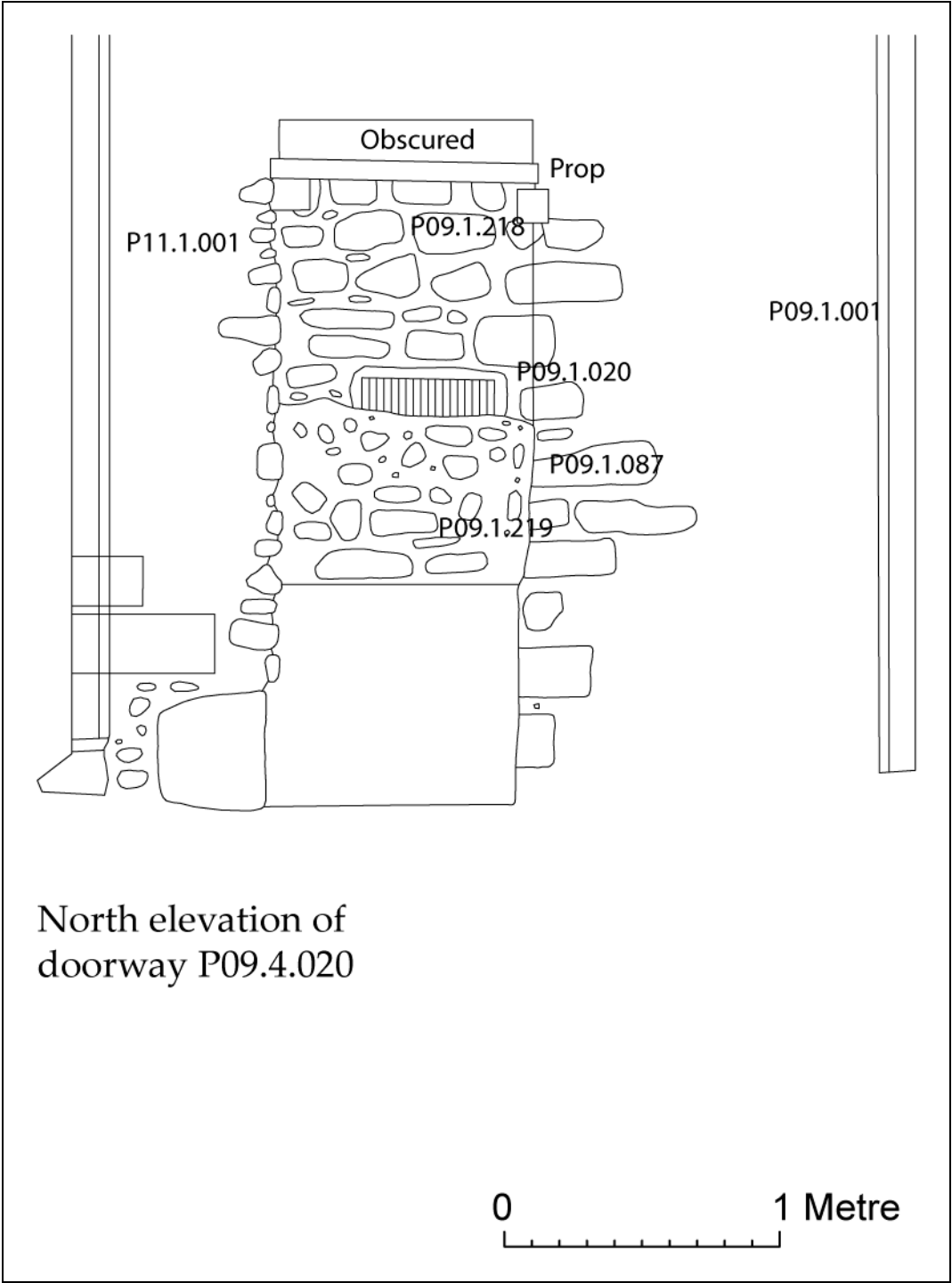


Figure 1 Drawing #1

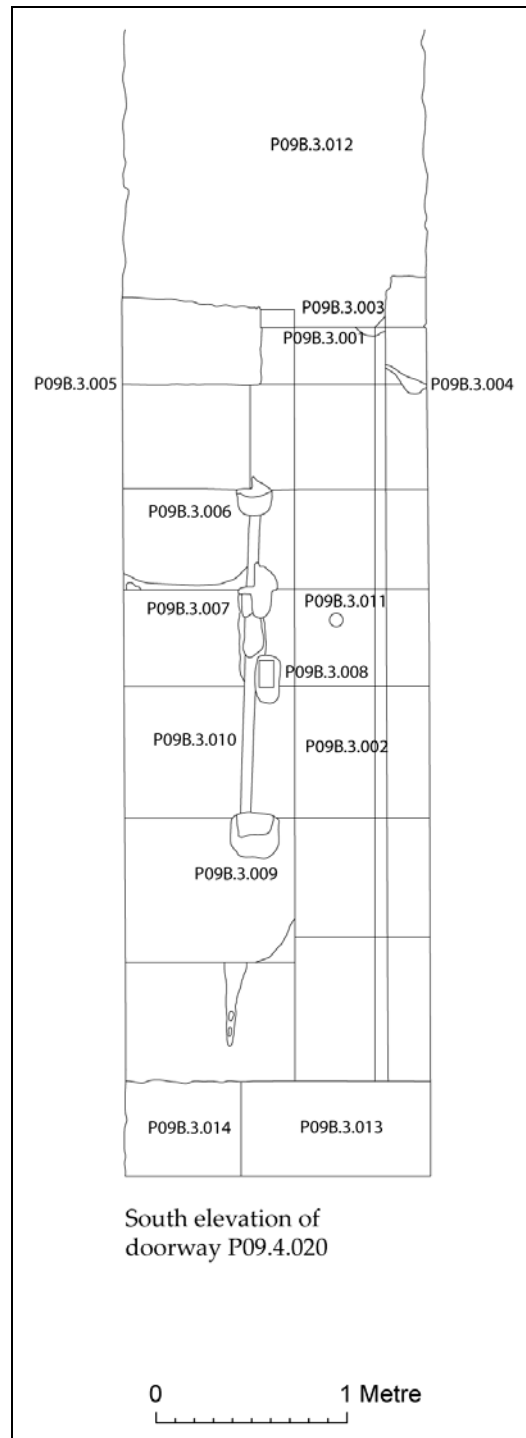


Figure 2: Drawing #2

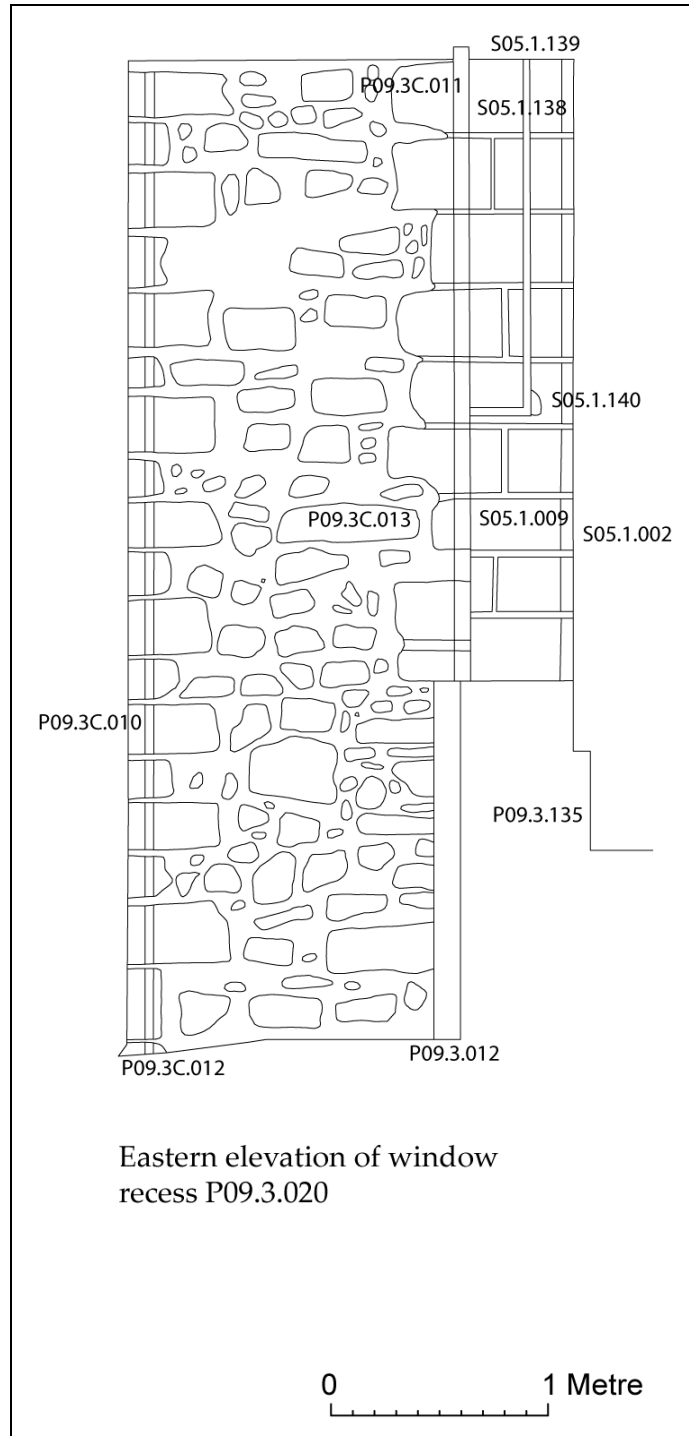


Figure 3: Drawing #3

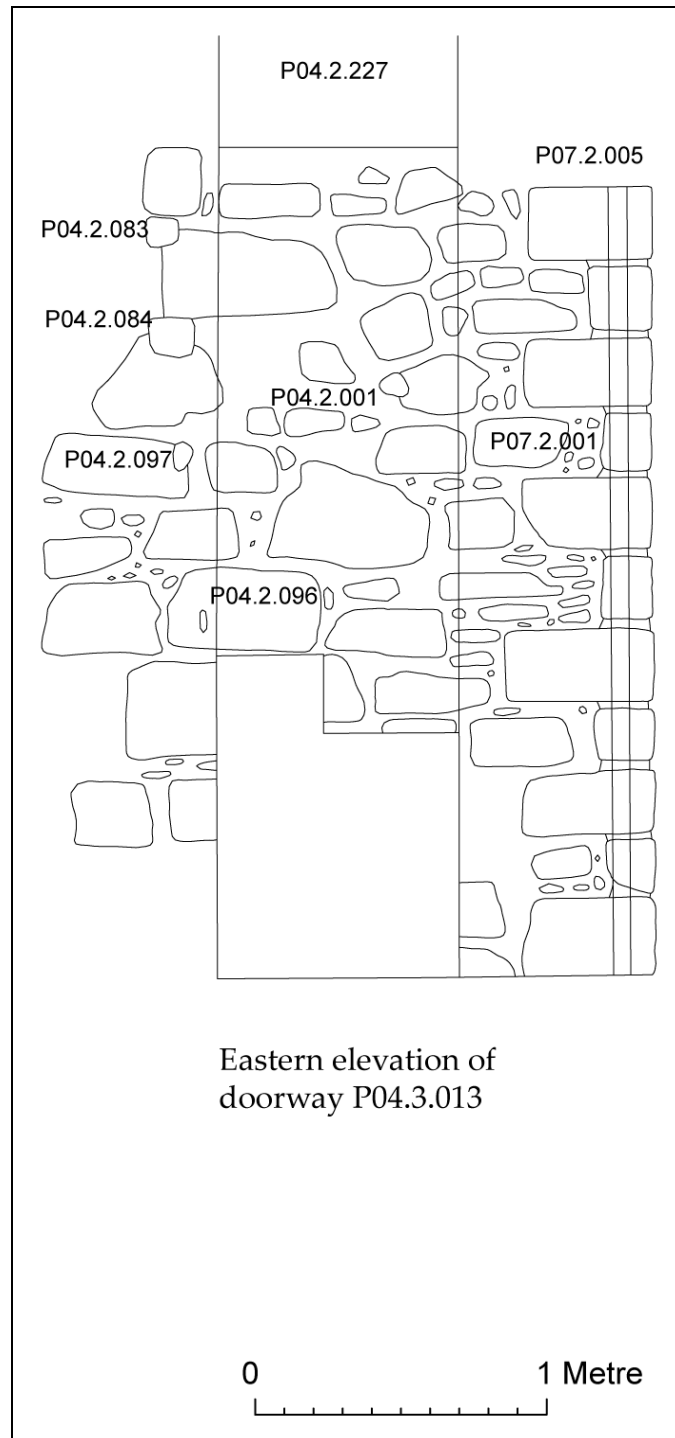


Figure 4: Drawing #4

Historic Scotland
SCPP Archaeological Works
2008

Stirling Castle Palace
P06 Consolidation Works

PIC Index No. 90291

Project. SCPP-2008-11

Standing Building Recording
September 2008



14 January 2008
Kirkdale Archaeology

Site Stirling Castle

N.G.R NS 790 940

Project Description Additional Standing Building Recording in P06 (The King's Closets) during consolidation and repointing carried out by the MCU.

Contents

1	Introduction	1
2	Description	1
3	Interpretation and Observations	1
A1.	Appendix 1: List of Amended Contexts	2
A2.	Appendix 2: List of Samples	2
A3.	Appendix 3: List of Photographs	2

1 INTRODUCTION

Kirkdale Archaeology was invited to monitor the removal of masonry from below the window relieving arches in P06 (The King's Closets) and record the archaeology revealed. The masonry was removed because it was loose and required consolidation and repointing in advance of replastering. The work was carried out by the MCU as part of the Stirling Castle Palace Project 2008 and was carried out on 12/09/08.

2 DESCRIPTION

In September 2008, the MCU removed the sandstone rubble of P06.4.008 and P06.4.016 from below window relieving arches P06.4.034 and P06.4.047 in order to consolidate and repoint the loose masonry in advance of replastering. The rubble was very loose and revealed that there was nothing structural behind the rubble veneer. Behind the N rubble P06.4.016 the MCU reported that lumps of a peaty material were found but unfortunately this was not able to be sampled *in situ*. A sample of the material was collected from the floor of P06. Behind the S rubble P06.4.008 there was also nothing structural but much loose material was observed including plant material, a sample of this material was taken by the MCU. The underside of relieving arches P06.4.034 and P06.4.047 was revealed and it showed complete single sandstone blocks spanning the wall from inside to out. The relevant records of the SPARC database have been updated.

3 INTERPRETATION AND OBSERVATIONS

The window apertures (P06.4.005 and P06.4.013) in the west elevation of P06 are original 1540 palace features (though the window frames and cases are later insertions, probably 19th Century – Early 20th Century). The rubble masonry and the relieving arches are both original features. The masonry below the arches was unbonded and little more than a skin of rubble. The rubble masonry was purely an infill to block up the gap as the relieving arches were well constructed and solid. It is not clear how any material could have accumulated in this gap at the back of the rubble masonry as they were sealed spaces. Also it is not clear why the material (by account of the MCU) was different behind each area of rubble masonry. It is possible that the material was deliberately placed in the voids, possibly to provide insulation.

A1. APPENDIX 1: LIST OF AMENDED CONTEXTS

No	Description
P06.4.008	Rubble build of P06.4.005. This was removed in September 2008 by the MCU during repointing work in P06, revealing the underside of relieving arch P06.4.034. It was an unbonded sandstone rubble skin and there was a void behind filled with detritus. Samples were taken of the material.
P06.4.016	Rubble build of P06.4.013. This was removed in September 2008 by the MCU during repointing work in P06, revealing the underside of relieving arch P06.4.034. It was an unbonded sandstone rubble skin and there was a void behind filled with detritus. Samples were taken of the material
P06.4.034	Sandstone relieving arch over lintel P06.4.033. The rubble build below this was removed in September 2008 by the MCU during repointing work in P06, revealing the underside of relieving arch P06.4.034. It showed that the relieving arch was formed from single blocks of sandstone spanning the full width of the W wall fabric from interior to exterior, so it is exactly the same relieving arch on the exterior wall.
P06.4.047	Partially visible (behind remaining plaster) sandstone relieving arch over lintel P06.4.046. The rubble build below this was removed in September 2008 by the MCU during repointing work in P06, revealing the underside of relieving arch P06.4.047. It showed that the relieving arch was formed from single blocks of sandstone spanning the full width of the W wall fabric from interior to exterior, so it is exactly the same relieving arch on the exterior wall.

A2. APPENDIX 2: LIST OF SAMPLES

Box No.	Bag No.	Site code	Date	Material(s)	Quantity	Context Nos.	Smpl no(s).
1253	1253-001	SCPP-2008-11	September 2008	Sample	1/1	Ref: P06.4.008	1
1253	1253-002	SCPP-2008-11	September 2008	Sample	1/1	Ref: P06.4.016	2

A3. APPENDIX 3: LIST OF PHOTOGRAPHS

Photo Number	Description	From	Date
1	Rubble P06.4.008 removed showing relieving arch P06.4.034.	E	12/09/08
2	Rubble P06.4.008 removed showing relieving arch P06.4.034.	E	12/09/08
3	Attempt to show interior detritus (sample number 1).	E	12/09/08

Historic Scotland
SPARC Archaeological Works
2008

Floor Surfaces in P19, P20 & S07 and Wall
Surfaces in P19:
Preparation for Trench 23

PIC Index No. 90291

Project. SPARC-2008-02

Archaeological monitoring
April 2008



16 May 2008
Kirkdale Archaeology

Site Stirling Castle Palace, P:19, P:20, and S:07

N.G.R NS 7899 9403

Project Description Monitoring of the removal of a slab surface in S:07, a concrete floor in P:19 & P:20, and some lath and plaster stripping in P19 in preparation for an excavation (Trench 23).

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A1.0 Appendix 1: List of samples	3
A2.0 Appendix 2: List of photographs	4

1.0

INTRODUCTION

Kirkdale Archaeology was asked to undertake a short period of archaeological monitoring at Stirling Castle Palace during the removal of a slab surface from S07, a concrete floor from P19 and P20 and some plaster stripping in P19 in preparation for the excavation of Trench 23. This report describes only the preparatory work carried out during the watching brief, a full record of the excavation in S07, P19 and P20 including contexts lists and plans will be reported following the completion of the excavation of Trench 23. Similarly the newly stripped walls of P19 and the masonry revealed at the base of the walls in P19, P20 and S07 will be recorded following the completion of the excavation and added to the existing SPARC database. A full list of Standing Building Recording contexts recorded to date can be found in the SPARC archive database. The work was carried out by MCU staff. The recording to date took place intermittently between 1/04/08 & 14/04/08.

2.0

DESCRIPTION

Work commenced with slab lifting in S07. The slab surface comprised close fitting grey sandstone slabs of various sizes, cut to fit the irregular shape of S07. Some weathering was evident across the surface of many of the slabs. At the W end of S07 the slabs were lipped over by render **S07.4.012** on the W wall of S07 under windows **S07.4.010** and **S07.4.011**. Several service manholes and outlets were set into and flush with the slab surface. All of these were left in situ as the slabs were removed. The removal of the slabs revealed a bedding surface of pale brown/yellow mortar across the whole of S07. This bedding was left in place to protect any underlying archaeology. It will be removed during the excavation of the area (trench 23).

Work continued with the stripping of lath and plaster **P19.3.002** and **P19.4.002** from the S and W walls of P19. Samples of the plaster were retained. The removal of the plaster revealed the rubble built masonry of the walls behind, with a series of dooks, related to the removed lath and plaster framework, cut into it. Below the window **P19.4.004** in the W wall a blocked aperture was revealed. This aperture is also visible on the exterior face of the wall, it appears to have glazing grooves indicating that is a window. Excavation within P19 should reveal more of this feature below floor level. If it is a window it suggests that the floor level in P19 may have been significantly lower at the time the window was in operation.

Following the plaster stripping, the concrete floor **P19.5.001/P20.5.001** extending from P19 into P20 was broken up and removed. The concrete formed the whole of the floor in P19, but in P20 the concrete ran up to the threshold step of door **P20.2.008** at the E edge of the room and to the top step **P20.5.003** of the steps running down to P18 at the S edge of the room. At the N

side of the room the concrete was only a skim across a flag floor. The newly revealed flags were left in place and will be considered and recorded during the excavation of trench 23. Across the middle of P20 the removal of the concrete floor revealed a mixed dark brown silt deposit. In P19 the removal of the concrete floor revealed a mixed rubble and dark brown silt deposit.

3.0 INTERPRETATION AND OBSERVATIONS

The purpose of this work was to prepare S07, P20 and P19 for the excavation of Trench 23. The removal of the slab surface in S07 revealed a mortar bedding surface for the slabs. The number of service manholes and outlets within the slab surface indicates that there will be several services beneath. It is also likely that there will be services running under the deposits revealed in P20 and P19 since there is a pipe large pipe on the W wall of P19 (**P19.4.038**). A full account of the buried archaeology and SBR will be produced following the completion of the excavation of Trench 23.

A1.0 APPENDIX 1: LIST OF SAMPLES

Box Number	Bag Number	Project	Description	Context Number	Sample Number	Date
1134	1134-001	SPARC 2008 (2) Slab lifting, concrete floor and plaster stripping.	Plaster sample	P19.3.002	001	03/04/08
1134	1134-002	SPARC 2008 (2) Slab lifting, concrete floor and plaster stripping.	Plaster sample	P19.4.002	002	03/04/08

Frame	Description	From	Date
1	General shot showing the removal of close fitting slab surface from S:07.	E	01/04/08
2	Detail showing render S07.4.012 lipping over the slab surface.	E	01/04/08
3	General shot showing the removal of the slab surface.	E	01/04/08
4	General shot showing slab removal in S07 from above.	-	02/04/08- 16/04/08
5	General shot showing the top of the E wall in P19 (P19.2)	SW	02/04/08- 16/04/08
6	General shot showing slab removal in S07.	W	02/04/08- 16/04/08
7	General shot showing the top of the S wall of P19 (P19.3).	NW	02/04/08- 16/04/08
8	General shot showing slab floor in P20 during removal of the concrete floor.	-	02/04/08- 16/04/08
9	General shot showing slab floor in P20 during removal of the concrete floor.	S	02/04/08- 16/04/08
10	General shot showing the top of the N wall of P19 (P19.1).	S	02/04/08- 16/04/08
11	Laths covering the S wall of P19 (P19.3) following plaster removal.	N	02/04/08- 16/04/08
12	Laths covering the W wall of P19 (P19.4) following plaster removal.	N	02/04/08- 16/04/08
13	Slab floor in P20 revealed under a skim of concrete.	S	02/04/08- 16/04/08
14	Slab floor in P20 revealed under a skim of concrete.	S	02/04/08- 16/04/08
15	Slab floor in P20 revealed under a skim of concrete.	S	02/04/08- 16/04/08
16	Slab floor in P20 revealed under a skim of concrete.	S	02/04/08- 16/04/08
17	Working shot showing the removal of the concrete floor in P19 (P19.5)	W	02/04/08- 16/04/08
18	S wall of P19 (P19.3) following the removal of the laths.	NE	02/04/08- 16/04/08
19	S wall of P19 (P19.3) following removal of the laths.	NW	02/04/08- 16/04/08
20	S wall of P19 (P19.3) following removal of the laths.	NW	02/04/08- 16/04/08
21	S wall of P19 (P19.3) following removal of the laths.	NE	02/04/08- 16/04/08
22	W wall of P19 (P19.4) following the removal of the laths.	E	02/04/08- 16/04/08
23	Detail of blocked void in W wall of P19 (P19.4)	E	02/04/08- 16/04/08
24	General shot of slab removal in S07 from above.	-	02/04/08- 16/04/08

Historic Scotland
SPARC Archaeological Works
2008

Stirling Castle Palace
West Range French Drain
Trench 24

PIC Index No. 90291

Project. SPARC-2008-03

Archaeological monitoring
April 2008



16 May 2008
Kirkdale Archaeology

Site Stirling Castle Palace, P:19, P:20, and S:07

N.G.R NS 7899 9403

Project Description Archaeological monitoring of the excavation of a trench (Trench 24) against the W range of the palace for the insertion of a French drain.

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1.0 INTRODUCTION

Kirkdale Archaeology was asked to undertake a short period of archaeological monitoring at Stirling Castle Palace during the excavation of a trench (Trench 24) against the W range of the palace for the insertion of a French drain. The proposed route of Trench 24 is mainly within the backfill of three trenches excavated during SPARC 2004; Trench 14, Trench 18 and Trench 20, however the new trench would also cut across an unexcavated area at the S end of the ladies lookout. Only newly identified contexts will be assigned a context number prefixed with “24”, all previously identified and recorded contexts re-revealed will be identified using original context numbers. For a full list of contexts please refer to the SPARC 2004 data structures reports for Trenches 9-21. The work was carried out by MCU staff. The recording to date took place intermittently between 1/04/08 & 14/04/08..

2.0 DESCRIPTION

Work commenced at the N end of Trench 24 in the backfill of the previously excavated Trench 14 immediately against the W wall of the Palace, approximately 500mm wide and dug to the same depth as Trench 14 (which was dug to bedrock). The backfill was removed to reveal bedrock, the buried masonry of the W range of the palace as well as a number of buried structures to the W of the W range all of which were previously identified and recorded during the excavation of Trench 14. At the N end of the trench bedrock is around 0.7m deep. Moving S along the trench walls **14092**, **14029** and **14030** were re-revealed perpendicular to the W range, walls **14196** and **14121** were re-revealed roughly parallel to the W range under the palace wall, wall **14118** perpendicular to the W range, wall **14114** roughly parallel to the W range under the palace wall and finally wall **14073** perpendicular to the W range. Excavation ceased at the southern limit of Trench 14 to consider the feasibility and practicalities of inserting a French drain along this route given the concentration of walls crossing the trench in the case of **14092**, **14029**, **14030**, **14118**, and **14073** and reducing the width of the trench in the case of **14196**, **14121** and **14114**.

3.0 INTERPRETATION AND OBSERVATIONS

At the N end the proposed depth of the trench is 1.4m deep, however bedrock is around 0.7m deep at this point. Several walls cross and reduce the width of the trench in the re-excavated section of Trench 14, these range from early pre-palace Period 1 and 2 structures to 18th century and 19th century Period 7 and Period 8 ablution house walls (Figure 1).

The proposed route of trench 24 through Trench 18 will encounter further such walls. It would also cut across a previously unexcavated section of the ladies lookout. Cutting such a narrow trench across this area is inadvisable and a larger excavation across this area may be more

appropriate to join the data from Trench 18 to Trench 20.

Another, option might be to use one of the existing historic apertures through the West Range wall and to create a route through the vaults for the drain. Further research and discussion would be required to determine the feasibility of creating such a drain through the West Range vaults.

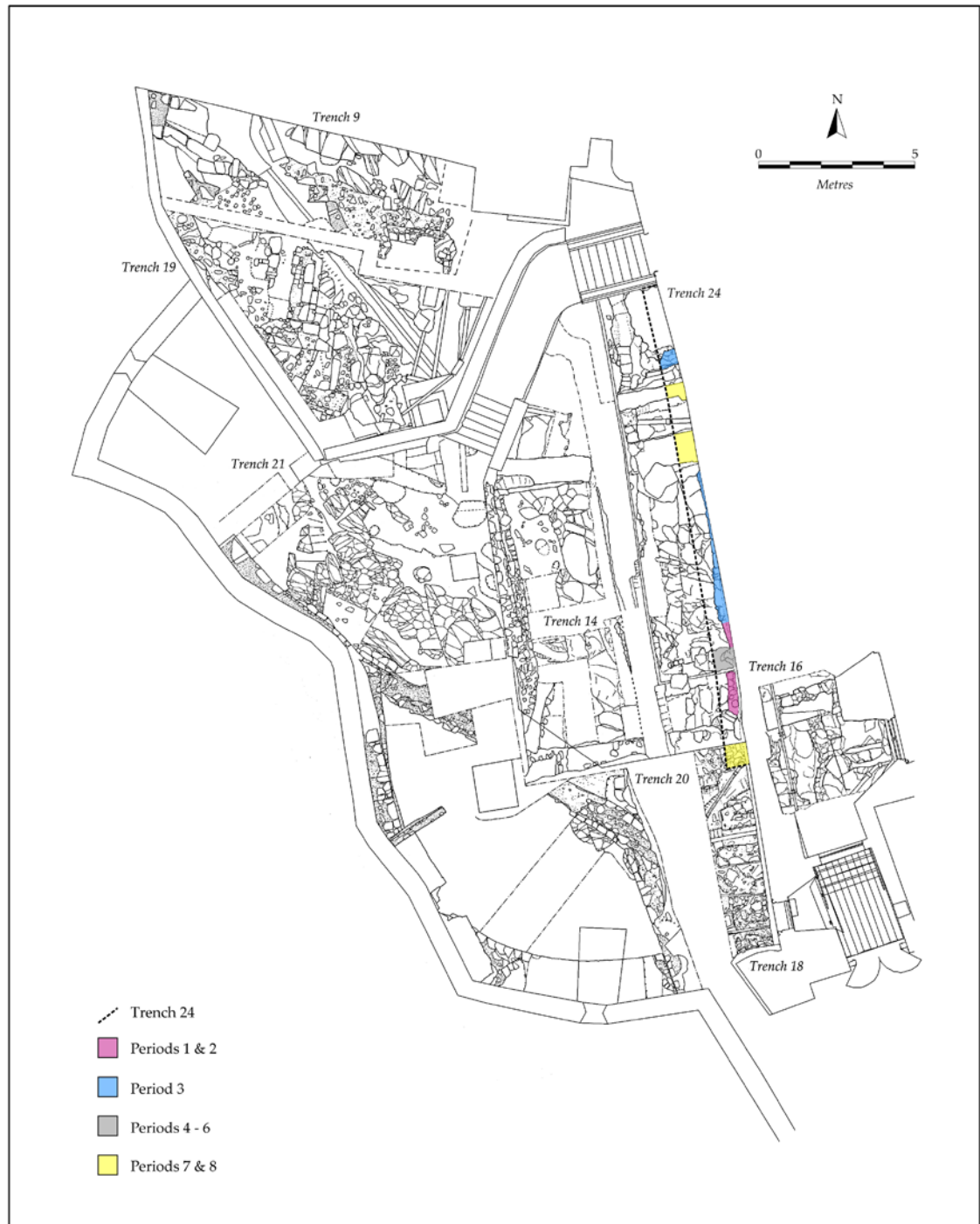


Figure 1 - Phased Plan of Walls in Trench 24

A1.0 APPENDIX 1: LIST OF FINDS

Box No.	Bag No.	Project code	Date	Material(s)	Quantity	Context Nos.
1235	1235-001	SPARC-2008-03	22/04/08	Cream ceramic wall tile	5	T14 backfill
1235	1235-002	SPARC-2008-03	22/04/08	Black and brown ceramic moulded wall tile.	1	T14 backfill
1235	1235-003	SPARC-2008-03	22/04/08	Cement render	1	T14 backfill
1235	1235-004	SPARC-2008-03	22/04/08	Cream china	4	T14 backfill
1235	1235-005	SPARC-2008-03	22/04/08	Black bottle glass	1	T14 backfill
1235	1235-006	SPARC-2008-03	22/04/08	Fe nail	1	T14 backfill
1235	1235-007	SPARC-2008-03	22/04/08	Animal bone	2	T14 backfill
1235	1235-008	SPARC-2008-03	22/04/08	Clay pipe stems	13	T14 backfill
1235	1235-009	SPARC-2008-03	22/04/08	Green glaze pottery	7	T14 backfill

Frame	Description	From	Date
1	General view of trench 24 during excavation.	N	02/04/08 – 16/04/08
2	N end of trench 24 during excavation.	-	02/04/08 – 16/04/08
3	General shot looking along trench 24 during excavation.	N	02/04/08 – 16/04/08
4	General shot looking along trench 24 showing protruding stone 14123.	S	02/04/08 – 16/04/08
5	Detail showing protruding stone 14123.	SW	02/04/08 – 16/04/08
6	Walls 14092 and 14029.	S	02/04/08 – 16/04/08
7	General shot of the W range.	NW	02/04/08 – 16/04/08
8	Bedrock at the N end of the trench	W	02/04/08 – 16/04/08
9	Bedrock at the N end of the trench	W	02/04/08 – 16/04/08
10	Bedrock at the N end of the trench	W	02/04/08 – 16/04/08
11	Bedrock at the N end of the trench	W	02/04/08 – 16/04/08
12	Bedrock at the N end of the trench	W	02/04/08 – 16/04/08
13	Bedrock at the N end of the trench	S	02/04/08 – 16/04/08
14	Wall 14092.	W	02/04/08 – 16/04/08
15	N end of the trench, showing the buried masonry of the W range.	W	02/04/08 – 16/04/08
16	N end of the trench, showing the buried masonry of the W range.	W	02/04/08 – 16/04/08
17	Walls 14092 and 14029.	W	02/04/08 – 16/04/08
18	Walls 14092 and 14029.	W	02/04/08 – 16/04/08
19	Walls 14092 and 14029.	S	02/04/08 – 16/04/08
20	S side of wall 14092.	S	02/04/08 – 16/04/08
21	N side of wall 14029.	N	02/04/08 – 16/04/08
22	Buried masonry of the W range between walls 14092 and 14029.	W	02/04/08 – 16/04/08
23	Ablution house walls 14029 and 14030.	W	02/04/08 – 16/04/08
24	Ablution house walls 14029 and 14030.	W	02/04/08 – 16/04/08
25	Ablution house wall 14030.	W	02/04/08 – 16/04/08
26	S side of ablution house wall 14029.	S	02/04/08 – 16/04/08
27	N side of ablution house wall 14030.	N	02/04/08 – 16/04/08
28	Relationship between wall 14029 and the buried masonry of the W range.	SW	02/04/08 – 16/04/08

Frame	Description	From	Date
29	Relationship between wall 14029 and the buried masonry of the W range.	SW	02/04/08 – 16/04/08
30	Buried masonry of the W range between 14029 and 14030.	W	02/04/08 – 16/04/08
31	Buried masonry of the W range between 14029 and 14030.	W	02/04/08 – 16/04/08
32	General shot showing the excavation of trench 24.	W	02/04/08 – 16/04/08
33	General shot showing the excavation of trench 24.	S	02/04/08 – 16/04/08
34	N end of trench 24 from above showing 14092, 14029 and 14030.	-	02/04/08 – 16/04/08
35	Continued excavation of trench 24 to the S from above.	-	02/04/08 – 16/04/08
36	Detail showing walls 14092, 14029 and 14030 from above.	-	02/04/08 – 16/04/08
37	General shot showing excavation of trench 24 from above.	S	02/04/08 – 16/04/08
38	General shot looking along trench 24 showing 14092, 14029, 14030 and 14196.	S	02/04/08 – 16/04/08
39	General shot during excavation of trench 24.	-	02/04/08 – 16/04/08
40	Gas pipe and wall 14114.	S	02/04/08 – 16/04/08
41	General shot looking along trench 24 showing gas pipe and walls 14121, 14118 and 14114.	S	02/04/08 – 16/04/08
42	General shot of the N end of the trench.	S	02/04/08 – 16/04/08
43	General shot of the S end of the trench.	S	02/04/08 – 16/04/08
44	Protruding stone 14123 and ablution house wall 14030.	S	02/04/08 – 16/04/08
45	Protruding stone 14123 and ablution house wall 14030.	S	02/04/08 – 16/04/08
46	Protruding stone 14123 and ablution house wall 14030.	W	02/04/08 – 16/04/08
47	Protruding stone 14123 and ablution house wall 14030.	W	02/04/08 – 16/04/08
48	Wall build between protruding stone 14123 and wall 14030.	W	02/04/08 – 16/04/08
49	Foundations of W wall to S of protruding stone 14123.	W	02/04/08 – 16/04/08
50	Buried masonry of the W range to the S of 14123.	W	02/04/08 – 16/04/08
51	Wasted shot.	-	02/04/08 – 16/04/08
52	Middle of trench 24 to S of protruding stone 14123 showing wall 14196.	S	02/04/08 – 16/04/08
53	Wall 14030 and protruding stone 14123.	S	02/04/08 – 16/04/08
54	Protruding stone 14123.	S	02/04/08 – 16/04/08
55	Protruding stone 14123, S face of wall 14030 and wall 14196.	S	02/04/08 – 16/04/08
56	Wall 14196.	W	02/04/08 – 16/04/08
57	Wall 14196.	W	02/04/08 – 16/04/08
58	Wall 14196.	W	02/04/08 –

Frame	Description	From	Date
			16/04/08
59	Wall 14196.	W	02/04/08 – 16/04/08
60	Wall 14196.	W	02/04/08 – 16/04/08
61	Wall 14121.	SW	02/04/08 – 16/04/08
62	Wall 14121.	S	02/04/08 – 16/04/08
63	Rubble buttress 14118 built into the blocking of the door.	W	02/04/08 – 16/04/08
64	Rubble buttress 14118 built into the blocking of the door.	W	02/04/08 – 16/04/08
65	Rubble buttress 14118 built into the blocking of the door and wall 14114.	W	02/04/08 – 16/04/08
66	Rubble buttress 14118 built into the blocking of the door.	W	02/04/08 – 16/04/08
67	S end of trench 24, wall 14114 and wall 14073	SW	02/04/08 – 16/04/08
68	S end of trench 24, wall 14114 and wall 14073	W	02/04/08 – 16/04/08
69	Wall 14114.	W	02/04/08 – 16/04/08
70	Walls 14114 and 14073.	W	02/04/08 – 16/04/08
71	Wall 14073.	W	02/04/08 – 16/04/08
72	General shot showing fully excavated trench.	S	02/04/08 – 16/04/08
73	Protruding block 14123.	S	02/04/08 – 16/04/08
74	Protruding block 14123.	SW	02/04/08 – 16/04/08
75	Protruding block 14123.	W	02/04/08 – 16/04/08
76	Protruding block 14123.	W	02/04/08 – 16/04/08
77	General shot of the fully excavated trench from above.	-	02/04/08 – 16/04/08
78	General shot of the fully excavated trench from above.	-	02/04/08 – 16/04/08
79	General shot of the fully excavated trench from above.	-	02/04/08 – 16/04/08
80	General shot of the fully excavated trench from above.	-	02/04/08 – 16/04/08
81	General shot of the fully excavated trench from above.	-	02/04/08 – 16/04/08