## Discovery and Excavation in Scotland

| LOCAL AUTHORITY: | West Lothian |
| :--- | :--- |
| PROJECT TITLE/SITE NAME: | Linlithgow Palace |
| PROJECT CODE: | HSCO-90201-2016-01 |
| PARISH: | Linlithgow |
| NAME OF CONTRIBUTOR: | Paul Fox |
| NAME OF ORGANISATION: | Kirkdale Archaeology |
| TYPE(S) OF PROJECT: | Watching brief |
| NMRS NO(S): | NT07NW 9.00 |
| SITE/MONUMENT TYPE(S): | Palace |
| SIGNIFICANT FINDS: | None |
| NGR (2 letters, 8 or 10 figures) | Centred c. NT 0021 7732 |
| START DATE (this season) | 9 February 2016 |
| END DATE (this season) | 17 March 2016 |
| PREVIOUS WORK (incl. DES ref.) |  |
| MAIN (NARRATIVE) <br> DESCRIPTION: <br> (May include information from other <br> fields) | A watching brief was maintained during the removal of existing cobbles, ground <br> preparation and the resetting of new cobbles within the courtyard of Linlithgow Palace <br> against the east range and portions of the south range. Despite the relative shallowness <br> of the excavations, this exercise was of value in furthering our understanding of the <br> development of the palace via the differences in style and alignment of the various base <br> courses encountered. |
| PROPOSED FUTURE WORK: | Archive to be deposited with Historic Environment Scotland |
| CAPTION(S) FOR ILLUSTRS: | Historic Environment Scotland |
| SPONSOR OR FUNDING BODY: | 4, Western Terrace, Edinburgh, EH12 5QF |
| ADDRESS OF MAIN <br> CONTRIBUTOR: | (intended/deposited) |

# HISTORIC ENVIRONMENT SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2015/2016 

Linlithgow Palace • Watching Brief • February/March 2016

HS PIC Index Number: 90201
S ITE: Linlithgow Palace, Linlithgow.N.G.R.: Centred c. NT 00217732
DESCRIPTION: Archaeological watching brief during the removal of existing cobbles, ground preparation and resetting of new cobbles within the palace courtyard against the east range and portions of the south range.
PROJECT CODE: HSCO-90201-2016-01
CONTENTS: Introduction ..... 1
Description ..... 2
Conclusions ..... 11
List of Contexts ..... 12
List of Drawings ..... 12
List of Digital Photographs ..... 12

## INTRODUCTION

Under the terms of its PIC contract with Historic Scotland, Kirkdale Archaeology was asked at carry out a watching brief at Linlithgow Palace during the replacement of the existing cobbles around the south and east portions of the courtyard (Fig. 1). The work involved the lifting of the extant cobbles, partial cuttingback of the bedding layer below, and the resetting of the cobbles in a new bed.


Figure 1: Plan showing the location of the four stages of excavation.
Mapping © Crown copyright. All rights reserved 2016. Licence number 100036933.

The work was undertaken by hand, by Historic Scotland staff under archaeological supervision, and was carried out in four discrete phases on the 9th, $15^{\text {th }}$ and 22 ${ }^{\text {nd }}$ February, 2016, and the $17^{\text {th }}$ March, 2016.

## DESCRIPTION

Stage 1 (9th February, 2016)
The cobbles were removed in a 5 m long $(\mathrm{E} / \mathrm{W}) \times 2.88 \mathrm{~mm}$ wide area from the east side of the lower slabs against the central portion of the south courtyard façade. The bedding 101 below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. In a couple of areas against the south courtyard wall (containing the open-window gallery of the south range internally) flat stones could be seen. When cleaned (in an area $2.10 \mathrm{~m} \mathrm{E/W} \times 0.25 \mathrm{~m} \mathrm{~N} / \mathrm{S}$ ), these were shown to be a projecting foundation course 102 of stippled sandstone blocks carrying the base course of the wall above, and projecting from it by $18 \mathrm{~cm}-20 \mathrm{~cm}$ (see Plate 1). There was one slate 'packer' between one of the slabs and the wall above.


Plate 1: Looking west towards the foundation course 102.


Figure 2: Stage 1, post-excavation plan (bottom) with location.

## Stage 2 (15 ${ }^{\text {th }}$ February, 2016)

The cobbles were removed in a 6.80 m long ( $\mathrm{E} / \mathrm{W}$ ) x (up to) 2.88 mm wide area from the east side of the Stage 1 excavation, along the eastern portion of the southern courtyard wall, around the south-east stair tower and partially along the south end of the east wall of the east range ( $c .0 .95 \mathrm{~m} \mathrm{~N} / \mathrm{S}$ ).

The bedding layer 201 below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the south courtyard wall (containing the open-window gallery of the south range internally) the foundation course 202 (seen in Stage 1 as 102) of stippled sandstone blocks carrying the base course of the wall could be seen. There were again slate packers between some of the slabs and the wall above. When seen together, the foundation courses revealed in Stages 1 and 2 are on a different alignment to the wall above. This suggests either that the foundation course is older, or that the angle of the wall was adjusted slightly after the foundation course had been set in place. Immediately north of the eastern end of the foundation course, and at the same level, a stone setting 203 with a central square recess was uncovered (see Plate 2).


Plate 2: Looking west at the foundation course 202 (left) and feature 203 (lower centre).

The stone surround measured up to $0.85 \mathrm{~m} \mathrm{E} / \mathrm{W} \times 0.80 \mathrm{~m} \mathrm{~N} / \mathrm{S}$. The central recess measured $0.25 \mathrm{~m} \mathrm{E} / \mathrm{W}$ $\times 0.25 \mathrm{~m}$ N $/ S \times 0.25 \mathrm{~m}$ deep (i.e. $10^{\prime \prime} \times 10^{\prime \prime} \times 10^{\prime \prime}$ ). There were two possible shallow troughs on the surround - one running north-east from the north-east corner of the central void, and another running north from the central portion of the void's northern edge. The function of the stone setting remains enigmatic. It could possibly be a pad for an upright related to a now-vanished building, or similarly a setting for an upright post of unknown date and function (signage etc.)

In the angle between the south wall and the south-east stair tower, the modern stone drain 204 was shown to feed a cast iron drain pipe 205 in several sections. This was partially revealed within 201 for a distance of $1.5 \mathrm{~m} \mathrm{~N} / \mathrm{S}$. The cylindrical body of the south-east stair tower was also shown to have been built upon a foundation course 206 of stippled sandstone blocks, this time with angled instead of flat faces. The course projected from the build above by $4 \mathrm{~cm}-8 \mathrm{~cm}$. Unfortunately, the relationship between the foundation courses of the south wall and the south-east stair tower was truncated by the insertion of the stone drain 204. In the angle between the south-east stair tower and the wall of the east range, another modern stone drain 207 had again obscured the relationship between the two.


Plate 3: Looking south-east at the foundation course 206 of the south-east stair tower.


Figure 3: Stage 2, post-excavation plan (bottom) with location.

## Stage 3 (22 ${ }^{\text {nd }}$ February, 2016)

The cobbles were removed in a 15.15 m long ( $\mathrm{N} / \mathrm{S}$ ) x (up to) 2.88 m wide area from the north end of the east side of the Stage 2 excavation, along the southern portion of the east courtyard wall, across the large eastern doorway and partially along the southern end of the north portion of the east wall of the east range.

The bedding 301 below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the east courtyard wall, a foundation course 302 of stippled sandstone blocks carrying the wall could be seen, on the same alignment as the wall above. There were slate packers between some of the slabs and the wall above, and the foundation projected from the wall by $c .0 .1 \mathrm{~m}$. The foundation course was interrupted for 0.5 m at the small door in the east wall near the south-east stair tower by a cut 309 in the area of which terram could be seen; this appeared to be a modern service cut.


Plate 4: Looking east at the foundation course 302 of the east wall and the cut 309 through it.

In total, the aligned foundation course ran for 6 m in Stage 3 at which point the foundation course turned to a ragged rubble course $\mathbf{3 0 3}$ which ran for 3 m up to the south side of the main east doorway (see Plate 4). This course projected by up to 0.2 m and had a totally different character from 302 . The change is difficult to interpret given that it was only observed in a discrete area. The suggestion would seem to be either that a wider foundation was required near the main eastern doorway, or that this possibly represents a feature which predates it.


Figure 4: Stage 3, post-excavation plan (right) with location.


Plate 5: Looking north-east at the ragged foundation course 303 of the east wall at the east door.

Some voided sandstone rubble $\mathbf{3 0 4}$ was partially uncovered to the north of $\mathbf{3 0 3}$ below the bedding layer 301. This may be related to voided rubble 308 on the opposite side of the east doorway and either shows the composition of the made-up ground or that services have been channelled through this portion of the courtyard and the eastern doorway. A patch of modern cement $\mathbf{3 0 5}$ (for bedding the cobbles) was left against the excavated eastern section of the cobbles. On the north side of the eastern doorway, a similar arrangement to that on the south side was noted. Against the eastern courtyard wall, a foundation course 306 of flat stippled sandstone blocks carrying the wall could be seen, on the same alignment as the wall above. The foundation projected from the wall by $c .0 .18 \mathrm{~m}$ and was only visible in a discrete area 0.70 m N/S at the northern end of the Stage 3 work. Between this course and the edge of the eastern doorway was another ragged rubble course 307 which ran for 2.4 m up to the north side of the main eastern doorway (see Plate 6), stopping 0.36 m short of the corner. This course projected by up to 0.30 m centrally while the north and south ends sloped in towards the wall. The impression is that the wall is built over something which used to project here; there is even a hint of partial rotundity to the feature on its western face, which may suggest a stair base. Alternatively it may simply be an additional strengthening of the wall at this point.


## Stage 4 (17 ${ }^{\text {th }}$ March, 2016)

The cobbles were removed in an area up to 5.65 m long x (up to) 2.88 m wide from the north end of the Stage 3 excavation, along the northern portion of the eastern courtyard wall, and around the north-east stair tower. No foundations were uncovered, and the bedding 401 below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the wall of the north-east stair tower was a sandstone setting with a central rectangular aperture $0.30 \mathrm{~m} \times 0.12 \mathrm{~m}$ in size providing air and light to the internal level below (this is normally visible and sits at the same level as the top of the cobbles). Nothing of archaeological interest was uncovered.


Figure 5: Stage 4, post-excavation plan (right) with location.

## CONCLUSIONS

Despite the relative shallowness of the excavations, this exercise has proven itself to be of value in furthering our understanding of the development of the palace via the differences in style and alignment of the various base courses encountered, along with the discovery of some other enigmatic features. As the cobbles are still to be lifted and re-laid along the north and west courtyard walls, it is highly recommended that this future exercise be accompanied by an archaeological watching brief.

## LISTOF CONTEXTS

| Trench | Context | Description |
| :---: | :---: | :--- |
| 1 | 101 | Mixed deposit of ash, sandy gravel, small pebbles and angular stones. |
| 1 | 102 | Projecting foundation course of stippled sandstone blocks carrying the south wall. |
| 2 | 201 | Mixed deposit of ash, sandy gravel, small pebbles and angular stones. |
| 2 | 202 | Projecting foundation course of stippled sandstone blocks carrying the south wall. |
| 2 | 203 | Stone setting with a central square recess. |
| 2 | 204 | Stone drain. |
| 2 | 205 | Cast iron drain pipe. |
| 2 | 206 | Projecting foundation course of stippled angled sandstone blocks carrying the wall <br> of the south-east stair tower. |
| 2 | 207 | Stone drain. |
| 3 | 301 | Mixed deposit of ash, sandy gravel, small pebbles and angular stones. |
| 3 | 302 | Projecting foundation course of stippled sandstone blocks carrying the east wall. |
| 3 | 303 | Ragged rubble foundation course carrying the east wall. |
| 3 | 304 | Voided sandstone rubble. |
| 3 | 305 | Modern cobble bedding. |
| 3 | 306 | Projecting foundation course of stippled sandstone blocks carrying the east wall. |
| 3 | 307 | Ragged rubble foundation on the northern side of the east door. |
| 3 | 308 | Voided sandstone rubble. |
| 3 | 309 | Service cut through 302. |
| 4 | 401 | Mixed deposit of ash, sandy gravel, small pebbles and angular stones. |
| 4 | 402 | Sandstone setting with a central rectangular aperture. |

## LISTOF DRAWINGS

| No. | Type | Description | Scale |
| :--- | :--- | :--- | :--- |
| 1 | Plan | Post-excavation. | $1: 20$ |

## LISTOF DIGITAL PHOTOGRAPHS

| No. | Description | From | Date |
| :---: | :--- | :---: | :---: |
| 1 | Stage 1 - foundation course 102. | N | $09 / 02 / 2016$ |
| 2 | Stage 1 - foundation course 102. | N | $09 / 02 / 2016$ |
| 3 | Stage 1 - foundation course 102. | N | $09 / 02 / 2016$ |
| 4 | Stage 1 - foundation course 102. | E | $09 / 02 / 2016$ |
| 5 | Stage 1 - foundation course 102. | NE | $09 / 02 / 2016$ |
| 6 | Stage 1 - foundation course 102. | E | $09 / 02 / 2016$ |
| 7 | Stage 1 - foundation course 102. | E | $09 / 02 / 2016$ |
| 8 | Cobble removal in progress. | SW | $09 / 02 / 2016$ |
| 9 | Stage 1 - south gallery wall. | N | $09 / 02 / 2016$ |
| 10 | Stage 1 - S gallery wall foundation. | N | $09 / 02 / 2016$ |
| 11 | Stage 1 - S gallery wall foundation. | N | $09 / 02 / 2016$ |
| 12 | Stage 1 - S gallery wall foundation. | N | $09 / 02 / 2016$ |
| 13 | Stage 1 - S gallery wall foundation. | NE | $09 / 02 / 2016$ |
| 14 | Stage 1 - S gallery wall foundation. | N | $09 / 02 / 2016$ |
| 15 | Re-laying cobbles in area to west of Stage 1 work. | NE | $09 / 02 / 2016$ |
| 16 | Stage 2 - foundation 202 and feature 203. | N | $15 / 02 / 2016$ |
| 17 | Stage 2 - foundation 202. | N | $15 / 02 / 2016$ |
| 18 | Stage 2 - foundation 202 and feature 203. | N | $15 / 02 / 2016$ |
| 19 | Stage 2 - feature 203, drain 204 and pipe 205. | N | $15 / 02 / 2016$ |
| 20 | Stage 2 - feature 203. | N | $15 / 02 / 2016$ |
| 21 | Stage 2 - feature 203. | NW | $15 / 02 / 2016$ |
| 22 | Stage 2 - feature 203 and stair tower foundation 206. | W | $15 / 02 / 2016$ |
| 23 | Stage 2 - pipe 205 and stair tower foundation 206. | NW | $15 / 02 / 2016$ |
| 24 | Stage 2 - stair tower foundation 206 and drain 207. | N | $15 / 02 / 2016$ |
| 25 | Stage 2 - general view. | NW | $15 / 02 / 2016$ |
| 26 | Stage 2 - general view. | NE | $15 / 02 / 2016$ |


| No. | Description | From | Date |
| :---: | :---: | :---: | :---: |
| 27 | Stage 2 - foundation 202 and feature 203. | E | 15/02/2016 |
| 28 | Stage 2 - feature 203 and pipe 205. | N | 15/02/2016 |
| 29 | Stage 3 - ragged south foundation 303. | SW | 22/02/2016 |
| 30 | Stage 3 - ragged south foundation 303 | W | 22/02/2016 |
| 31 | Stage 3 - ragged south foundation 303 | NW | 22/02/2016 |
| 32 | Stage 3 - ragged south foundation 303 | N | 22/02/2016 |
| 33 | Projecting masonry within the eastern gate pend. | N | 22/02/2016 |
| 34 | Projecting masonry within the eastern gate pend. | NE | 22/02/2016 |
| 35 | Stage 3 - south side of the east range. | NW | 22/02/2016 |
| 36 | Stage 3 - wall foundation 302 and ragged south foundation 303. | N | 22/02/2016 |
| 37 | Stage 3-ragged south foundation 303. | W | 22/02/2016 |
| 38 | Stage 3-wall foundation 302. | W | 22/02/2016 |
| 39 | Stage 3-wall foundation 302. | W | 22/02/2016 |
| 40 | Stage 3 - wall foundation 302, cut 303 and door in the west wall of the east range. | W | 22/02/2016 |
| 41 | Wall foundation 302 and drain 207. | W | 22/02/2016 |
| 42 | Stage 3 - wall foundation 302 \& ragged S foundation 303 | S | 22/02/2016 |
| 43 | Stage 3-wall foundation 302 \& ragged S foundation 303 | S | 22/02/2016 |
| 44 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | W | 22/02/2016 |
| 45 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | N | 22/02/2016 |
| 46 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | N | 22/02/2016 |
| 47 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | NW | 22/02/2016 |
| 48 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | S | 22/02/2016 |
| 49 | Stage 3 - wall foundation 306, ragged north foundation 307 and voided rubble 308. | N | 22/02/2016 |
| 50 | Looking west from the east gate pend. | E | 22/02/2016 |
| 51 | Stage 4 - general view. | S | 17/03/2016 |
| 52 | Stage 4- general view. | S | 17/03/2016 |
| 53 | Stage 4 - west wall of E range N/S. | W | 17/03/2016 |
| 54 | Stage 4 - west wall of E range N/S. | W | 17/03/2016 |
| 55 | Stage 4 - west wall of E range N/S. | W | 17/03/2016 |
| 56 | Stage 4 - feature 402. | S | 17/03/2016 |
| 57 | Stage 4- general view. | SW | 17/03/2016 |
| 58 | Stage 4 - general view. | N | 17/03/2016 |
| 59 | Stage 4 - feature 402. | S | 17/03/2016 |

