

St Andrew Place, Leith

Archaeological Excavation and Monitoring

For City of Edinburgh Council

July 2013

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Archive will be deposited with RCAHMS

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Jürgen van Wessel

A pit containing disarticulated human bone was uncovered during a small excavation on St Andrew Place, Leith. The bones represented at least two adults and three juveniles which were dated to between the early 15th and early 17th centuries AD. It is suggested that the remains could relate to one of several plague epidemics that struck Leith in the late 15th and early 16th centuries.

It is likely that these bones had been removed from their original burial place during the construction of adjacent roads in the 19th century. Fragments of human bone were also found throughout the made ground deposits of the excavation area and two adjacent monitored trenches. This is likely the result of ground disturbance by modern service trenches.

Introduction

A short programme of hand excavation and archaeological monitoring was undertaken by Headland Archaeology at the corner of St Andrew Place and Academy Street, Leith in response to the discovery of human bone during the installation of new street lighting ducts. The work was commissioned and funded by the City of Edinburgh Council and carried out in accordance with a Written Scheme of Investigation (Headland Archaeology 2013) agreed with the City of Edinburgh Council Archaeology Service (CECAS). CECAS also managed the work, which took place on the 8th and 9th of July, 2013.

Background

The site is located on the corner of St Andrew Place and Academy Street, Leith, Edinburgh (Illus 1), at the western edge of Leith Links. The ground level is around 9.5m OD and is underlain by Devensian sand and gravel overlying sandstone bedrock (British Geological Survey website).

The site lies around 75m east of Constitution Street, which itself follows the outer edge of the 16th century fortifications of Leith (Turner Simpson *et al* 1981, 70). The north-facing frontage onto the Links had been defined by a walkway providing access to the Leith Academy Primary School (1804-6, possibly by Robert Burn, rebuilt 1895-8 by George Craig), and the St Andrew's United Presbyterian Church (1826, architect uncertain; now the Edinburgh Hindu Mandir Community and Cultural Centre) (Gifford *et al* 1991, 454 and 463-4). St Andrew Place itself was formalised between 1876 and 1894 (Ordnance Survey Town Plans).

The western corner with Academy Street (formerly Morton Street) was occupied by a timber yard with several small buildings in the middle of the 19th century but the present substantial sandstone structure had been constructed some time between 1865 (Bartholomew 1865) and 1876 (Ordnance Survey Town Plan 1876). Originally a mission hall, it is currently used as a boxing club.

It is known that plague victims have been buried in Leith Links (Turner Simpson *et al* 1981, 79 and Canmore record for NMRS site no NT27NE 77), with large numbers of bodies possibly relating to a 1645 epidemic found during the construction of Wellington Place, immediately to the north of the present excavation area (Canmore record for NMRS site no NT27NE 44).

Human bone was encountered during machine excavation of cable ducts for new street lighting on this corner. Work was stopped pending discussion with the police and CECAS. The remains related to an adult and a juvenile and were thought to be of archaeological origin. The excavated parts of the trench were backfilled with loose sand.

Objectives

The archaeological work was designed to fully understand and recover any human remains impacted by the works.

The present report and corresponding archive will be organised and deposited in the NMRS in order to facilitate access for future research and interpretation for public benefit.

Methodology

An area of 9m² around the location of the bodies discovered by the workmen was excavated by hand. Overburden was removed in spits until the first archaeological horizon or natural subsoil was reached. If necessary the excavation area was to be enlarged to expose the full extent of any human remains uncovered.

Two adjacent areas of machine excavation were monitored by an archaeologist due to their proximity to the existing finds. These were an area of ground reduction for a connection box immediately east of the excavation and a further service trench that ran north across St Andrew Place.

Recording

All recording followed IfA Standards and Guidance for conducting archaeological excavations. All contexts, small finds and environmental samples were given unique numbers. All recording was undertaken on pro forma record cards. Both digital and 35mm colour print photographs were taken; a graduated metric scale was clearly visible on all record shots. Further digital images were taken for illustrative purposes.

A site plan including all identified features, areas of excavation and other pertinent information was recorded digitally using differential GPS. The site plan was accurately linked to the National Grid and heights to OD.

Finds were recorded by context and surveyed where appropriate. Artefacts and human remains retrieved during the works were cleaned using appropriate techniques and packaged and stored in accordance with First Aid for Finds (Watkinson & Neal 1998). All artefacts recovered during the works were cleaned, marked and catalogued.

Radiocarbon dates were obtained for two bones in order to confirm an archaeological origin for the burials. The two samples were from a left femur found in pit [001] and a right tibia from the fifth spit through the made ground to the north of the pit.

Results

Seven spits were hand excavated up to a depth of around 0.8m below pavement level (Illus 2). The material removed consisted of made ground deposits, heavily truncated by a number of service trenches. Relatively undisturbed beach sand was encountered in places from around 0.65m below pavement level. Disarticulated human bone was encountered sporadically throughout the made ground and service trenches.

A single irregular pit [001] was encountered, cut up to 0.25m into the natural sand (Illus 3 and 4). Around 0.7m of the pit was visible, the rest extending southwards underneath the foundations for the adjacent boxing hall building. This pit contained a number of disarticulated human bones which, again, continued underneath the foundations of the building. This implies a date for the pit contemporary with, or earlier than the construction of this building *circa* 1870. The bones represent five or more individuals, and are discussed in the bone assessment below. Amongst these human remains were one coffin nail and a piece of butchered animal bone.

Two bone samples were submitted to the Scottish Universities Environmental Research Centre (SUERC) for radiocarbon dating. Both samples produced dates consistent with each other of 1411-1615 AD (GU31823) and 1416-1618 AD (GU31822). For further details, please see Appendix 3.

A further cable duct was excavated north across St Andrew Place, as well as an area for connecting to a new distributor box immediately east of the excavation area. These were excavated by machine and monitored by an archaeologist. A small number of disarticulated bones were discovered in a series of made ground deposits; natural beach sand was encountered in patches at around 0.6m below street level.

The radiocarbon dates obtained from bone both in and near the pit were closely comparable, placing the death of the individuals to between the early 15th and early 17th centuries.

Bone Assessment

David Henderson

Introduction: The assemblage was recovered from two contexts: the backfill of an excavation carried out by contractors (which was re-excavated professionally in spits) and the underlying material (Context (002)) which was undisturbed. It appears that there was no essential difference between the two contexts, both contained non-articulated remains, a mixture of adult and immature bones with variable preservation. It was therefore recognised that the material was a single assemblage, itself redeposited, at some point in the past, from disturbed inhumations.

Demographics: The assemblage comprises bones from a minimum of two adults, at least one male and one female, based on pelvic morphology. Where ageing criteria were available (a pelvis and a left innominate from context (002)) the male was estimated as having been approximately 35 -40 years old at death, the female was estimated to be over 55 years. Bones from several areas of the skeletons of at least three immature individuals were also recorded: a child (2 - 6 years old) a young juvenile (6 - 12 years) and an adolescent/sub-adult of between around 16 and 22 years of age.

These are minimum numbers, bones from several individuals may, in fact, be present.

Skeletal elements represented: The bones recovered were almost all from areas of the skeleton from the middle of the humerus to the feet; only two fragments of a child's skull and a small portion of an adult upper jaw were recovered. Likewise, no cervical vertebrae and very few rib or scapula fragments were present. It is probable that the material therefore represents bones redeposited from the disturbance of the lower (probably eastern) half of a short row of graves. Although not articulated when found, a male pelvis, with articulating sacrum and the lowest three lumbar vertebrae, was reconstructed from the assemblage, as was the right arm of a sub-adult individual, two tibiae matched very closely for size, shape and colouration, all suggesting that the graves had been disturbed only once, before redeposition where found.

Pathology: Two pathological findings were made. The old-adult female ilium showed bone-loss consistent with osteoporosis. A left adult tibia had a healed fracture of the medial epicondyle, the injury was likely the result of a twisted ankle.

Discussion

The concentration of bone in pit [001] represents the disturbed and redeposited remains of at least five individuals dated to between the early 15th and early 17th centuries. It is tempting to connect these remains to those excavated during the construction of Wellington Place in the 19th century. These are thought to relate to the major plague epidemic of 1645, which was clearly too late to have caused the death of the individuals discussed in this report. However, the 1645 epidemic is only the most recent and best documented of several episodes of 'the pest'. There were also severe outbreaks in Leith in 1475 and 1504 (Russel, 1922). It is plausible that the victims of these events would also have been buried in or around the Links. A paper by W. J. MacLennan (2001) describes eleven such plagues in Edinburgh, beginning in the mid-14th century. Though these may not all have spread to Leith, there was a particularly serious outbreak lasting some 16 years from 1498 to 1514.

The bodies found in pit [001] may have been relocated during the construction of Wellington Place or St. Andrew Place in the 19th century, and sealed under the mission hall, which was constructed sometime between 1865 and 1876. The remaining human bone found during the works can be accounted for by the considerable truncation of this pit (and potentially others that do not survive) by later service trenches.

Bibliographic Sources

Gifford J, McWilliam C and Walker D 1991 *The Buildings of Scotland: Edinburgh*, London: Penguin Books.

Headland Archaeology 2013 *Written Scheme of Investigation for an Archaeological Excavation: Corner of Academy Street and St Andrews Place, Leith*, Unpublished specification.

MacLennan, W J 2001 'The Eleven Plagues of Edinburgh', *Proceedings of the Royal College of Physicians of Edinburgh*, 31, pp. 256-261

Russel, J 1922 *The Story of Leith*, Leith

Turner Simpson A, Holmes N and Stevenson S 1981 *Historic Leith – The Archaeological Implications of Development*, Glasgow.

Watkinson D and Neal V 1998 *First Aid for Finds: Practical Guide for Archaeologists*, United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section

Cartographical Sources

Bartholomew, J 1865 *Hislop's new plan of Edinburgh & Leith with suburbs ... constructed for the Post Office Directory*

Ordnance Survey 1852, *Town Plan of Edinburgh (North-east Part), Sheet 17*

Ordnance Survey 1876, *Town Plan of Edinburgh (North-east Part), Sheet 17*

Ordnance Survey 1894, *Town Plan of Edinburgh (North-east Part), Sheet III.4.3*

Online Sources

British Geological Survey website, <http://www.bgs.ac.uk>, accessed 5th July 2013

Canmore Site Record for NMRS no NT27NE 44 - Edinburgh, Leith, Wellington Place, <http://canmore.rcahms.gov.uk/en/site/51961/details/edinburgh+leith+wellington+place/>, accessed 21st November, 2013

Canmore Site Record for NMRS no NT27SE 77 - Edinburgh, Leith Links, <http://canmore.rcahms.gov.uk/en/site/52004/details/edinburgh+leith+links/>, accessed 20th November, 2013

Appendix 1 – Context Register

Context	Area	Description	Initials & Date
001	-	Cut of pit; shallow and irregular in shape. Appears to disappear under the building.	10/07/2013
002	-	Fill of pit [001]; sandy fill containing disarticulated human bone, a piece of animal bone, a coffin nail and a frequent quantity of oyster shell.	10/07/2013

Appendix 2 – Photo Register

Photo	C/P	Digital	Facing	Description
001	36/1	WLSA-01-P01.jpg	-	Registration shot of Film 1.
002	35/1	WLSA-01-P02.jpg	SW	Pre-excavation clean of backfilled area.
003	34/1	WLSA-01-P03.jpg	SW	Location shot.
004	33/1	WLSA-01-P04.jpg	SW	Excavation area post Spit 1.
005	32/1	WLSA-01-P05.jpg	SW	Excavation area post Spit 2.
006	31/1	WLSA-01-P06.jpg	SE	Excavation area post Spit 3.
007	30/1	WLSA-01-P07.jpg	SW	Excavation shot Spit 3.
008	29/1	WLSA-01-P08.jpg	SE	Excavation shot Spit 3.
009	28/1	WLSA-01-P09.jpg	SW	Excavation shot Spit 4.
010	27/1	WLSA-01-P10.jpg	SE	Excavation shot Spit 4.
011	26/1	WLSA-01-P11.jpg	SW	Excavation shot Spit 5.
012	25/1	WLSA-01-P12.jpg	SE	Excavation shot Spit 5.
013	24/1	WLSA-01-P13.jpg	SW	Excavation shot Spit 6.
014	23/1	WLSA-01-P14.jpg	SE	Excavation shot Spit 6.

Appendix 3 – Radiocarbon dates

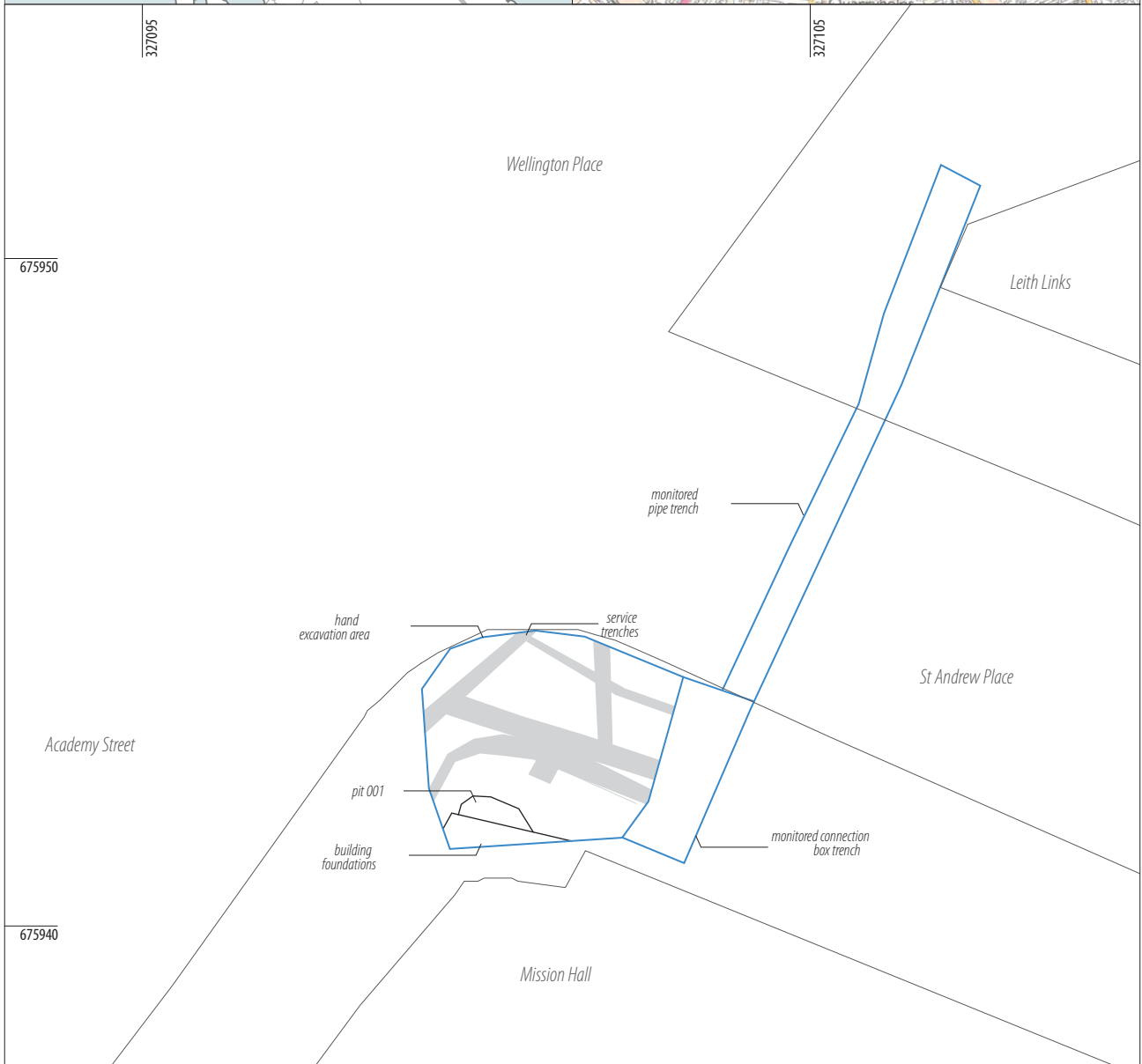
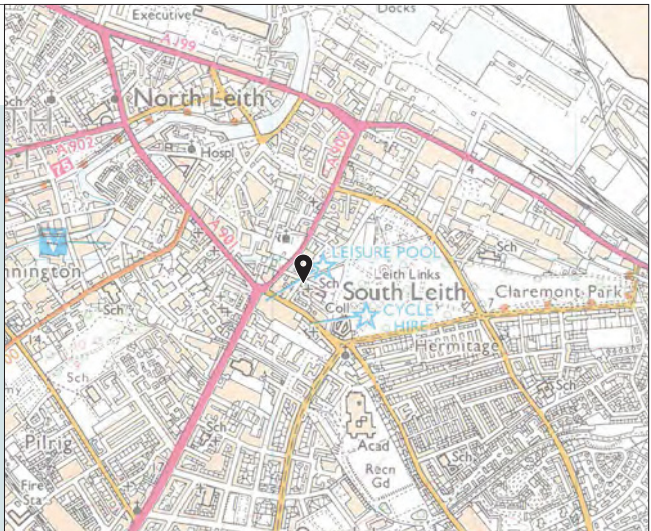
Context	Lab sample no	Material	Radio-carbon age bp	$\delta^{13}\text{C}$ ‰	Calibrated age ranges 1 σ	Calibrated age ranges 2 σ
002	SUERC-49161 (GU 31822)	Human Bone: Left Femur	434 \pm 34	-18.8	AD 1430-1472	AD 1416-1514 AD1600-1618
Spit 5	SUERC-49162 (GU31823)	Human Bone – Right Tibia	445 \pm 34	-20	AD 1426-1463	AD1411-1496 AD 1601-1615

Appendix 4 – DES Entry

LOCAL AUTHORITY:	City of Edinburgh
PROJECT TITLE/SITE NAME:	St. Andrew Place in Leith - Archaeological Excavation and Monitoring
PROJECT CODE:	WSAL13-001
PARISH:	Leith
NAME OF CONTRIBUTOR(S):	Jürgen van Wessel
NAME OF ORGANISATION:	Headland Archaeology (UK) Ltd
TYPE(S) OF PROJECT:	Monitoring, Excavation
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	Human remains
NGR (2 letters, 8 or 10 Figures)	NT 27099 75927
START DATE (this season)	July 2013
END DATE (this season)	July 2013
PREVIOUS WORK (incl. DES ref.)	none
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>A pit containing disarticulated human bone was uncovered during a small excavation on St Andrew Place, Leith. The bones represented at least two adults and three juveniles which were dated to between the early 15th and early 17th centuries AD. It is suggested that the remains could relate to one of several plague epidemics that struck Leith in the late 15th and early 16th centuries.</p> <p>It is likely that these bones had been removed from their original burial place during the construction of adjacent roads in the 19th century. Fragments of human bone were also found throughout the made ground deposits of the excavation area and two adjacent monitored trenches. This is likely the result of ground disturbance by modern service trenches.</p>
PROPOSED FUTURE WORK:	none
ARCHIVE LOCATION (intended/deposited)	Report to be lodged with NMRS.
SPONSOR OR FUNDING BODY:	City of Edinburgh Council
CAPTION(S) FOR ILLUSTRS:	
ADDRESS OF MAIN CONTRIBUTOR:	Headland Archaeology Ltd, 13 Jane St, Edinburgh. EH6 5HE
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St Andrew Place
Leith
City of Edinburgh



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scale 1:100 @ A4



Illus 1
Site location



Illus 2
*Beach sand deposits within
excavation area*



Illus 3
*Disarticulated human remains
within pit [001]*



Illus 4
Pit [001] fully excavated