Holyrood Sewer Upgrade, Edinburgh: Archaeological Monitoring Data Structure Report

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Holyrood Sewer Upgrade, Edinburgh: Archaeological Monitoring Data Structure Report

On Behalf of: Scottish Water

Farmilehead

55 Buckstone Terrace

Edinburgh EH10 6XH

National Grid Reference (NGR): NT 27281 74092

AOC Project No: 24343

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Prepared by: Steven Watt

Illustration by: Sam O'Leary

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Author: Steven Watt Date: 10th January 2019

Approved by: Lindsay Dunbar Date: 20th January 2019

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Enquiries to: AOC Archaeology Group

Edgefield Industrial Estate

Edgefield Road Loanhead EH20 9SY

Tel. 0131 440 3593 Fax. 0131 440 3422

e-mail. admin@aocarchaeology.com



www.aocarchaeology.com

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Abstract

This report presents the results of an archaeologically watching brief undertaken by AOC Archaeology Group on behalf of Scottish Water in relation to a sewer upgrade in Holyrood Park. The work consisted of several test pits to test for services along the route of the new sewer and the cut for the sewer itself.

The sewer track was 40m x 5m to a maximum depth of 5m. The soil matrix consisted of a topsoil, overlying made ground deposits.

No significant archaeological finds or features were recovered. No further work is required in relation to this development.

1 INTRODUCTION

1.1 Background

- 1.1.1 A programme of archaeological works was required by Scottish Water prior to a proposed sewer upgrade in Holyrood Park, Edinburgh. The proposed upgrade has been deemed a Permitted Development by the City of Edinburgh Council (CEC) on account of providing necessary additional capacity in the sewer network following a nearby development by EDI Group at Market Street, Edinburgh. The archaeological works compromised of an archaeological watching brief on all ground breaking works following the approval of Scheduled Monument Consent (SMC) to Historic Environment Scotland (HES) (AOC 2018).
- 1.1.2 Scottish Water had been asked to design and provide necessary upgrades to the sewer network as a result of new development at Market Street, Edinburgh. This upgrade had been identified as necessary to solve the flooding caused by increased flow from the nearby development by computer modelling of the sewer network. The computer modelling determined three possible locations of this upgrade. The location of solutions identified in the modelling are very specific and moving the upgrade to another section would rarely meet the flooding need. After further investigation, only one viable location had been ascertained. The identified viable location for the sewer upgrade is in Holyrood Park close to the Waverley Park Terrace entrance (hereafter referred to as 'the Site').
- 1.1.3 The Site lies within the administrative area of the City of Edinburgh Council, which is advised on archaeological matters by the City of Edinburgh Council Archaeology Service (CECAS). Although these works are considered Permitted Works, a programme of archaeological works is considered best practice as outlined in current planning guidelines Scottish Planning Policy (2014) & Planning and Archaeology 2/2011 (2011), in order to record the extent and significance of any archaeological remains which may be present within the development area. Details of the conditions of the watching brief were detailed in the Written Scheme of Investigation (AOC 2018) approved by HES and CECAS.

1.2 Site Location

1.1.4 The proposed upgrade lies within Holyrood Park, Edinburgh running between an existing manhole chamber at the bottom of the steps at Waverley Park Terrace and an existing 1800 x 1420 mm sewer approximately 40 m within the park. It is centred on NGR: NT 27281 74092 (Figures 1, 2).

1.3 Archaeological background

1.3.1 Holyrood Park Scheduled Monument encompasses a number of highly significant archaeological sites for prehistoric activity, early historic and medieval evidence, and post-medieval activity, as well as numerous modern assets (HES 2018).

Prehistoric Evidence

1.3.2 Prehistoric activity (8000 BD-AD 410) within the Scheduled Holyrood Park is evidenced by the discovery of Mesolithic and Neolithic flint and stone tools, as well as highly significant Bronze Age

items. These include a hoard of bronze objects ritually deposited in Duddingston Loch, swords, socketed axes, flat axes, and two cinerary urns. These finds have mostly been concentrated in the southeast of the Scheduled area associated with either Duddingston Loch or three of the four prehistoric or early historic forts (Samson's Ribs, Arthur's Seat and Dunsapie Crag). The fort at Salisbury Crags has yielded no such finds. While none of the forts have been closely dated, the settlement and artefact evidence suggest that the area was a major hub of prehistoric and early historic activity. There has, however, been no evidence for prehistoric activity to the north of Queen's Drive and east of the Palace Gardens in the area where the proposed sewer pipeline development is located.

Early Historic and Medieval Evidence

- 1.3.3 Early historic and medieval activity (AD 410-1600) within the SM is evidenced by numerous archaeological features. As previously stated, enclosures and settlement evidence suggest early historic activity in several areas of Holyrood Park although little evidence has been found in the north of the park. The park has been used by Scottish and British royalty since 1128 initially as royal hunting grounds before being established as a park in 1541 by James V. In addition to the 12th century Holyrood Abbey, evidence for medieval monastic activity includes holy wells and priest's accommodations, and the area is known to have been a place of sanctuary from at least the 16th century. The precinct of Holyrood Abbey, founded by King David I in 1128 is located c. 350 m west of the Site and contains buried evidence for a possible outer precinct boundary enclosing a group of postholes and pits. These are probably medieval timber building foundations and were uncovered in the location of a former township of tenements, St Anne's Yard, to the south of Holyrood Abbey. The boundary wall for Holyrood Park dates to 1541 although it has been modified, restored and rebuilt on numerous occasions. Holyrood Park is also known for its possibly early medieval cultivation terraces and medieval rig and furrow, some of which is in the playing fields to the south of the Site.
- 1.3.4 These features highlight that there is potential for buried evidence of medieval activity in relatively close vicinity to the Site, especially as it is close to the boundary wall of the park and close to areas of known medieval cultivation.

Post Medieval Evidence

Post medieval activity (AD 1600-1900) is evidenced by several major quarries related to the 1.3.5 construction of Holyrood Palace and the park wall. Further industrial activity is present in the archaeological record by way of the 'Innocent Railway' in the west of the park. Post medieval activity is also noted close to the Site in the form of the 19th century Clockmill House and its walled garden (NMRS: NT27SE 197), and the 19th century Parade Ground (NMRS: NT27SE 4422). Clockmill House and its botanic garden first feature on Kirkwood's map in 1817 (Figure 3) and was then purchased by the crown in 1877 as an extension to the park. By 1896 there is no trace of the house and garden. Aerial photography has recorded three rectilinear lines which roughly coincide with the position of the house c. 50.0 m to the southwest of the Site. The Parade Ground has been known as such since the 1830s and is located to the south of the Site. It was purchased by the crown in 1877

and has been used as a meeting place and gathering point consistently since this time. Five rectangular areas have been terraced into the ground north of Queen's Drive, south of the Site.

Modern Evidence

1.3.6 Modern (AD post 1900) activity within Holyrood Park has mostly involved public recreational use as parkland. The Scheduled area was most recently updated in 2013 and extended north to include all land within the boundary wall including the Site. A watching brief undertaken to the east of the Site at the Holyrood Park Education Centre, revealed an area was thought to have originally been market gardens and orchards of a monastic date which had since been levelled. The Site has been annotated on maps as park grassland and trees throughout the modern period with the installation of public footpaths being depicted from at least the early 1930s (Figure 4).

Heritage Assets Beyond Scheduled Monument Boundary

1.3.7 Although not within the SM area, a Category C Listed Building known as 100 Spring Gardens, Elsie Inglis Nursing Home (Former Elsie Inglis Memorial Hospital) (LB30198) is located north of the boundary wall and the Site. Several other heritage assets are located within 100 m of the Site outwith the SM (Figure 5) including tenements at 2,4,6 Waverley Park Terrace and 6-8 Waverley Park; Listed Buildings Elsie Inglis Memorial Hospital Outpatients Clinic, and 94 And 96 Spring Gardens (Former Elsie Inglis Memorial Hospital Nurses' Home); and the Main Gateway for Edinburgh, Spring Gardens, Elsie Inglis Memorial Hospital.

2 **OBJECTIVES**

2.1 The objectives of the archaeological monitoring are to safeguard the archaeological resource that may be disturbed by groundworks; to liaise with Historic Environment Scotland, CECAS and the client in the event of significant archaeological features and /or small finds being unearthed as to the most appropriate response in safeguarding these features e.g. either by preservation in situ, if at all feasible, or by archaeological recording, and to report on the findings of the watching brief.

3 **METHODOLOGY**

3.1 The watching brief consisted of the monitoring a new service trench for the upgraded sewer (Figure 2). Ground works were conducted using an 8-tonne tracked excavator with a bladed ditching bucket as well as an initial series of test pits along the route to check for services. All ground breaking was monitored by an experienced field archaeologist and all recording carried out in accordance to AOC Archaeology Group's standard procedures as stated in the Written Scheme of Investigation (2018).

4 RESULTS

4.1 The groundworks were carried out between 12th November to 11th December 2018. Weather conditions were favourable and archaeological visibility good. The various data gathered from the watching brief are set out as a series of Appendices:

Appendix 1: Photographic Register;

Appendix 2: Context Register;

Appendix 3: Finds Register;

Appendix 4: 'Discovery and Excavation in Scotland' Report

4.2 In the first instance four hand excavated test pits were opened to gauge the depth of the topsoil deposits after which the topsoil and grass was removed across the length of the service trench.



Plate 1 View of section pipe trench during topsoil stripping

4.3 The service trench itself required the excavation of a linear cut totalling 40.0 m long by 5.0 m wide and excavated to a maximum depth of 5.0 m. The stratigraphy and deposits encountered along the length of the service track were relatively uniform in character, form and depth. The stratigraphy consisted of sandy dark brown topsoil, [001], with a depth of 0.2 m to 0.3 m lying over two layers of made ground [002] and [003]. This made ground was present to depth of between 3.0 m to 4.7 m and the lower layer [003] was seen to lie directly over natural of mid orange clay subsoil [005] which in places had remnants of a buried topsoil [004] (see Plate 2). Both made ground layers contained occasional brick, sandstone and mortar fragments. The very thin and patchy nature of the buried

topsoil deposit strongly suggests the original topsoil was partially stripped prior to the deposit of the made ground layers.

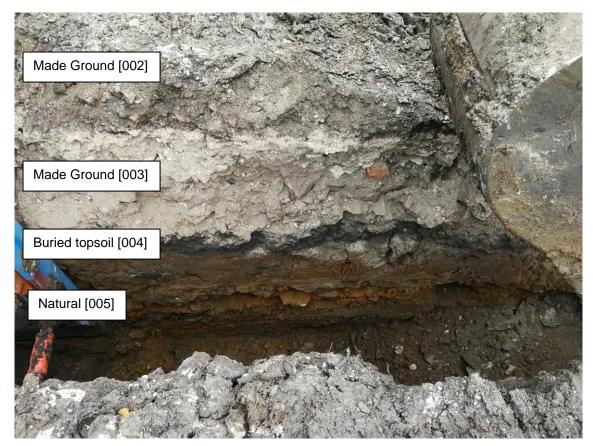


Plate 2 View of section of pipe trench with topsoil removed showing layers of made ground over remnant buried topsoil and natural

4.4 No significant archaeological finds or features were recovered throughout the excavation. Throughout various deposits modern white glazed ceramic sherds were observed, and a 1905 penny recovered from the topsoil (SF1)

5 CONCLUSION

- 5.1 The watching brief successfully monitored the upgrading of the sewer through Holyrood Park. No significant archaeological finds or features were observed.
- 5.2 No further works are required with this development.

6 **BIBLIOGRAPHY**

AOC 2018 Holyrood Sewer Upgrade, Edinburgh: SMC and Archaeological Monitoring Written Scheme of Investigation (AOC 24111) Unpublished Client Report

Historic Environment Scotland, 2018. Scheduled Monument: Holyrood Park SM13032. [Online]. Accessed: 19 April 2018. Available: http://portal.historicenvironment.scot/designation/SM13032. Kirkwood, R., 1817. This plan of the City of Edinburgh and its environs. Edinburgh: Kirkwood and Sons.

Ordnance Survey, 1933. Edinburghshire III.8 (Edinburgh). Surveyed: 1931. Published: 1933.

Scottish Government 2014 Scottish Planning Policy.

Scottish Government 2011 PAN 2/2011 Planning & Archaeology.

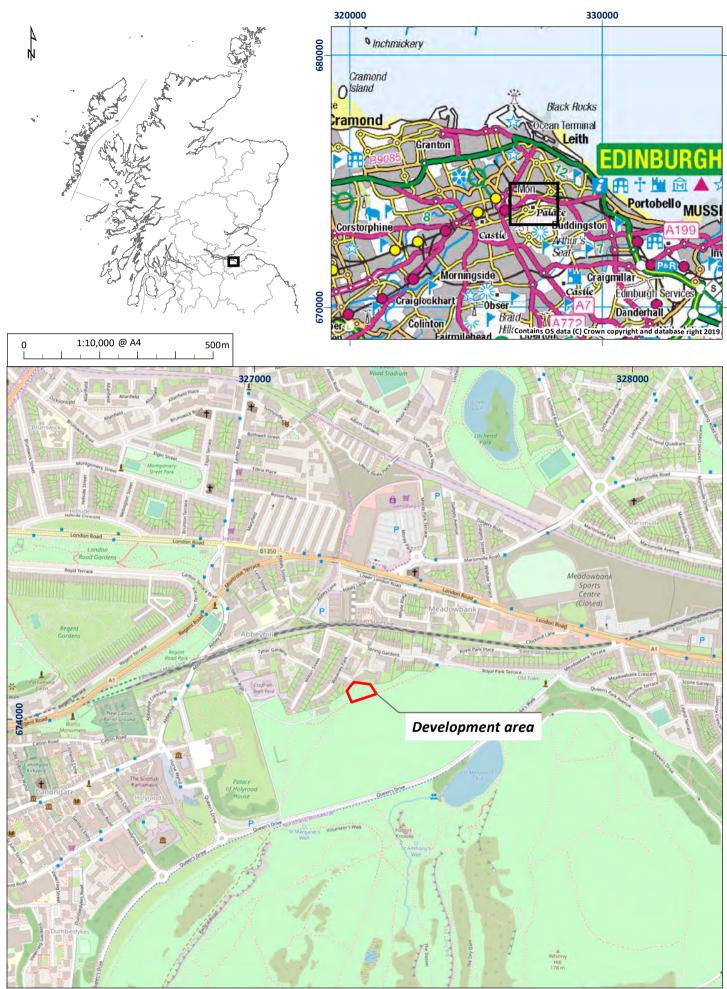


Figure 1: Site location plan



Figure 2: Test pit location plan

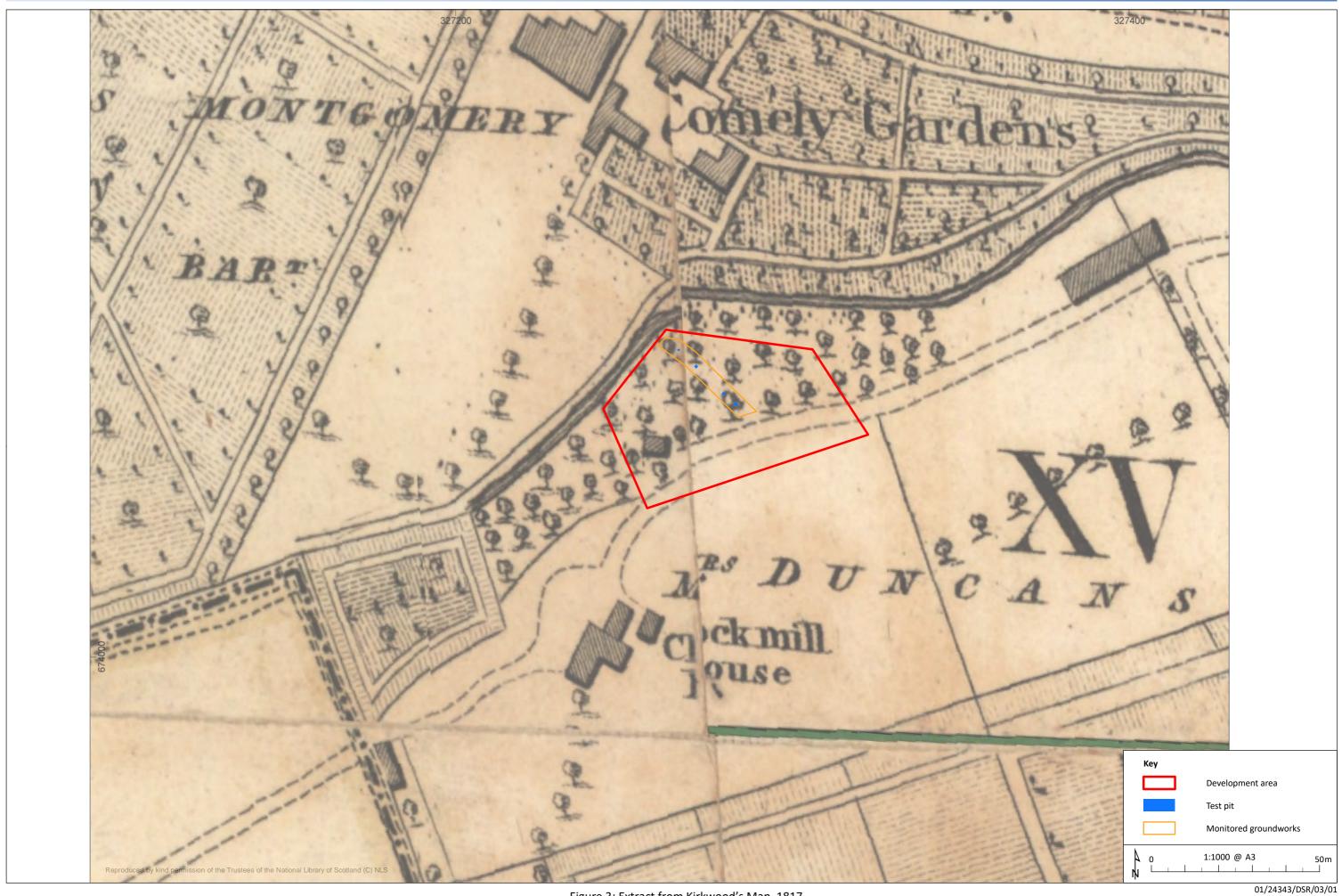
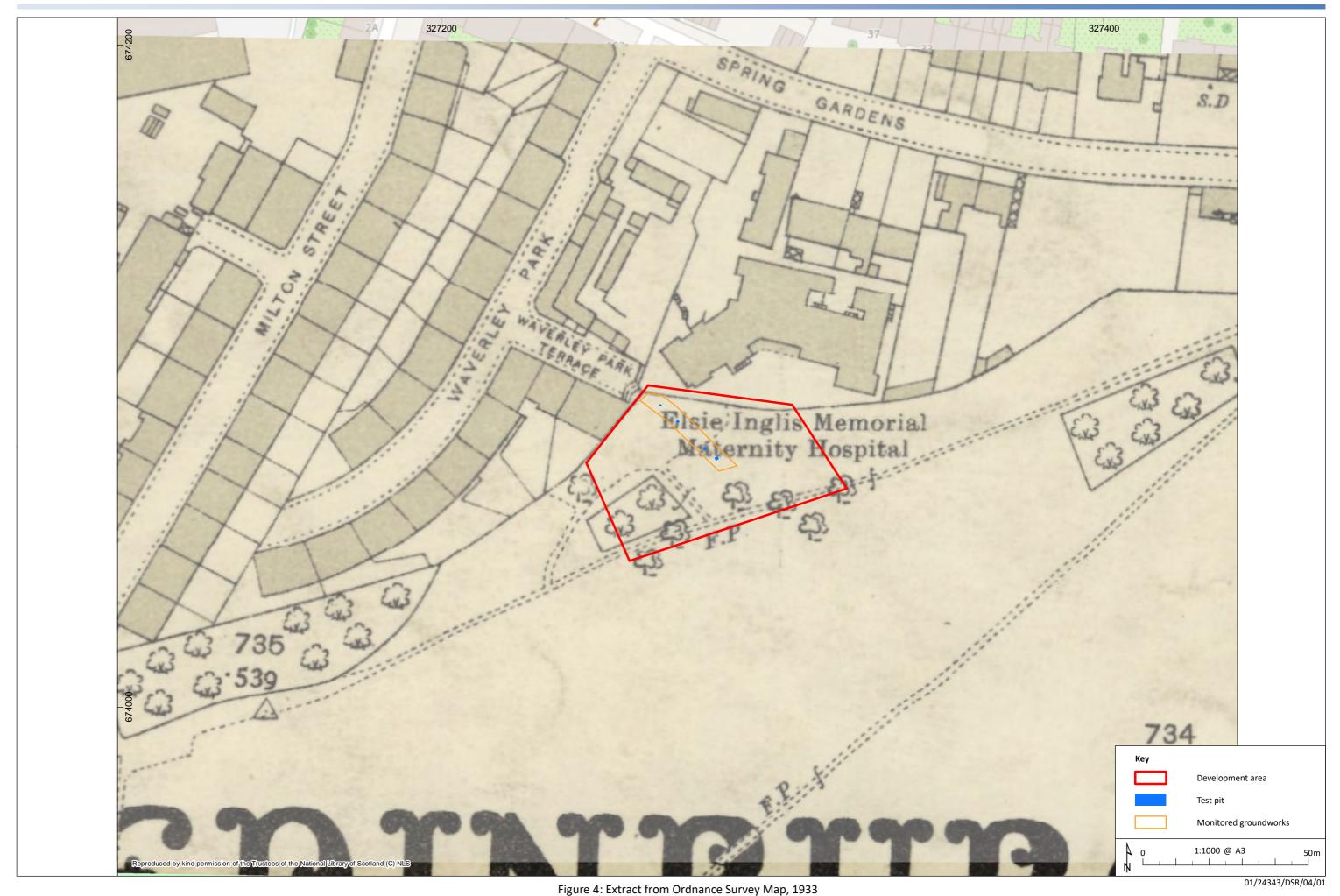
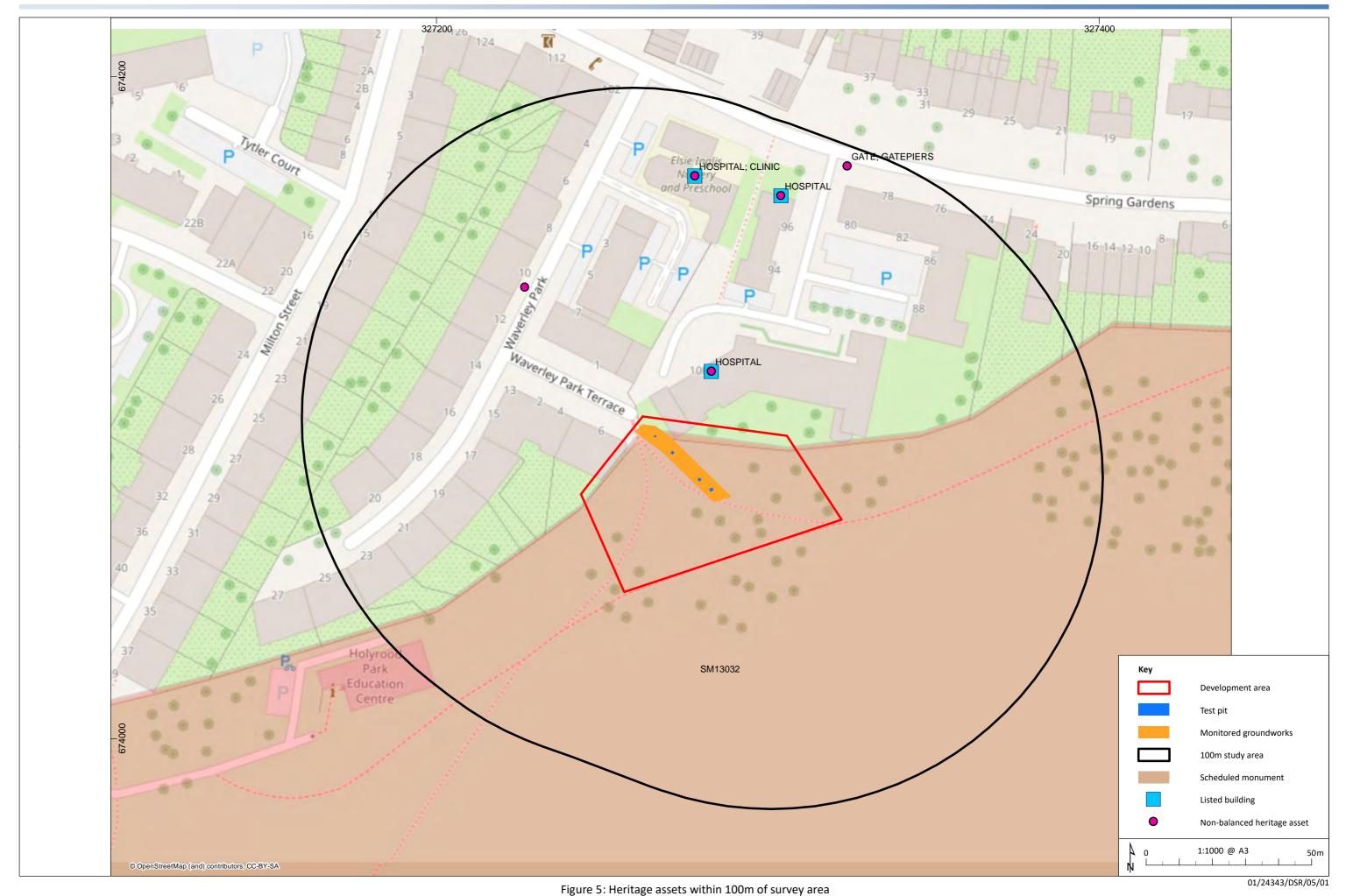


Figure 3: Extract from Kirkwood's Map, 1817





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Section 2: Appendices

Appendix 1: Context Register

Context	Description and Interpretation
No.	
[001]	Topsoil 0.2-0.3m. Dark brown silty topsoil
	Topsoil
[002]	Demolition/Made ground 0.3-1.2m. Crushed sandstone fragments and mortar present
	Made ground
[003]	Mid Brown silty made ground material – occasional brick and mortar fragments
	Made ground
[004]	Remnant buried topsoil. Thin and very patchy remains of original topsoil. Appears to have mostly
	removed prior to deposition of made ground deposits.
	Original topsoil
[005]	Mid orange silty clay
	Natural

Appendix 2: Photographic Register

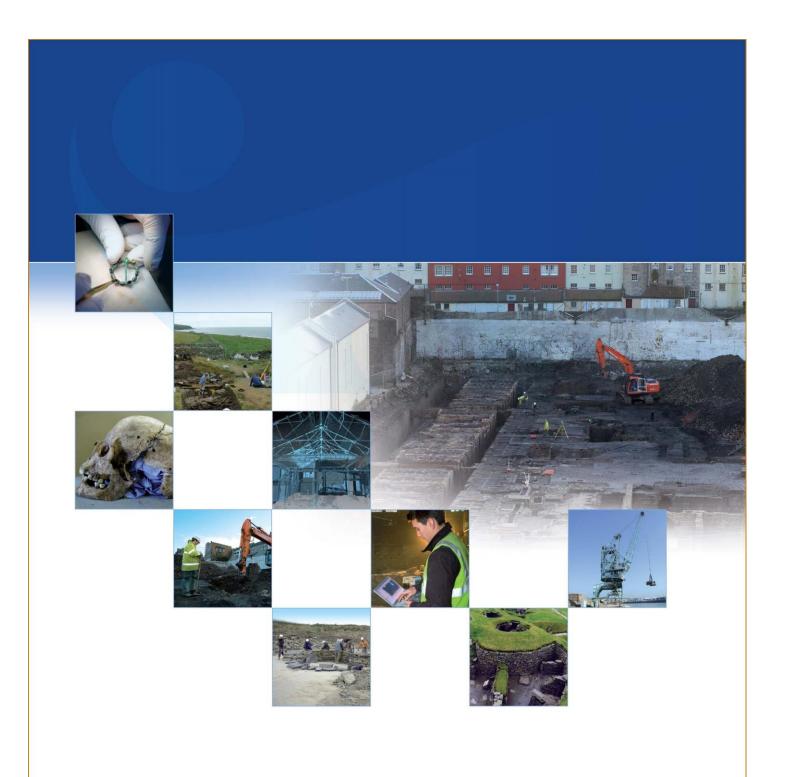
Frame	Description	From		
1-3	1-3 General view of area pre-excavation			
4-5	Test Pit digging			
6-7	Test Pit A	S		
8-9	Test Pit A			
10-11	Test Pit B	S		
12-13	Test Pit B			
14-15	Test Pit C	N		
16-17	Test Pit C			
18-19	Test Pit D			
20-21	Test Pit D	N		
22-23	Excavation to find existing main at south end	N		
24-25	General view of stripped area	N		
26	NE facing section pipe trench	NE		
27	Mid-excavation shot initial trench excavation	SE		
28	NE facing section	NE		
29	Post-excavation shot of pipe trench	SE		
30	Post-excavation shot of pipe trench	SE		
31	NE-facing section continuation of pipe trench	NE		
32	Scrape on S-side of path	N		
33	Scrape on N-side of path	S		
34	Path scrapes W part of path	Е		
35-38	Various views of path	Var		

Appendix 3: Finds Register

Finds No.	Context No.	Description
1	[001]	1905 Penny

Appendix 4: 'Discovery and Excavation in Scotland' Report

LOCAL AUTHORITY:	The City of Edinburgh Council
PROJECT TITLE/SITE NAME	Holyrood Sewer Upgrade
PROJECT CODE:	AOC 24343
PARISH:	Edinburgh
NAME OF CONTRIBUTOR:	Steven Watt
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S)	NT27SE 197
SITE/MONUMENT TYPE(S):	Park
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 729 338
START DATE (this season)	12/11/18
END DATE (this season)	11/12/18
PREVIOUS WORK (incl. DES	None
ref.)	Tions
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	This report presents the results of an archaeologically watching brief undertaken by AOC Archaeology Group on behalf of Scottish Water in relation to a sewer upgrade in Holyrood Park. The work consisted of several test pits to test for services along the route of the new sewer and the cut for the sewer itself. The sewer track was 40m x 5m to a maximum depth of 5m. The soil matrix consisted of a topsoil, overlying made ground deposits. No significant archaeological finds or features were recovered. No further work is required in relation to this development.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Scottish Water
ADDRESS OF MAIN CONTRIBUTOR:	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS





AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY tel: 0131 440 3593 fax: 0131 440 3422 e-mail: admin@aocarchaeology.com