

ETEX/01



EDINBURGH TRAM EXTENSION

WATCHING BRIEF AND EXCAVATION

commissioned by McNicholas

September 2017

EDINBURGH TRAM EXTENSION

WATCHING BRIEF AND EXCAVATION

commissioned by McNicholas

September 2017

© 2017 by Headland Archaeology (UK) Ltd

This report contains OS data © Crown copyright and database right 2017.

This report adheres to the quality standard of ISO 9001:2008

PROJECT INFO:

HA Job No. **ETEX/01** / NGR **NT 26144 74522 (London Road), NT 27206 76234 (Queen Charlotte Street)** / Parish **City of Edinburgh** / Local Authority **City of Edinburgh** / OASIS Ref. **headland1-278495** / Archive Repository **NRHE**

PROJECT TEAM:

Project Manager **Edward Bailey** / Author **Josh Gaunt** / Fieldwork **Josh Gaunt, Magnar Dalland** / Graphics **Caroline Norrman**

Approved by **Edward Bailey**



Headland Archaeology Scotland
13 Jane St | Edinburgh, EH6 5HE
t 0131 467 7705
e scotland@headlandarchaeology.com
w www.headlandarchaeology.com



CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION AND DESCRIPTION	1
3	ARCHAEOLOGICAL BACKGROUND	1
4	AIMS & OBJECTIVES	2
5	METHODOLOGY	2
5.1	Site works	2
5.2	Recording	2
5.3	Reporting and Archives	2
6	RESULTS	2
6.1	London Road: Trial Holes 1-4	2
6.2	Annandale Road: Trial Holes 5-9	3
6.3	Jane Street: Trial Holes 12&13	3
6.4	Coatfield Lane: Trial Hole 15	3
6.5	Queen Charlotte Street: Trial Holes 16-19	3
6.6	Discussion	3
7	REFERENCES	4
7.1	Bibliographic sources	4
7.2	Other sources	3
8	APPENDICES	5
8.1	Appendix 1 – Site registers	5
8.2	Appendix 2 – Discovery and Excavation in Scotland entry	10

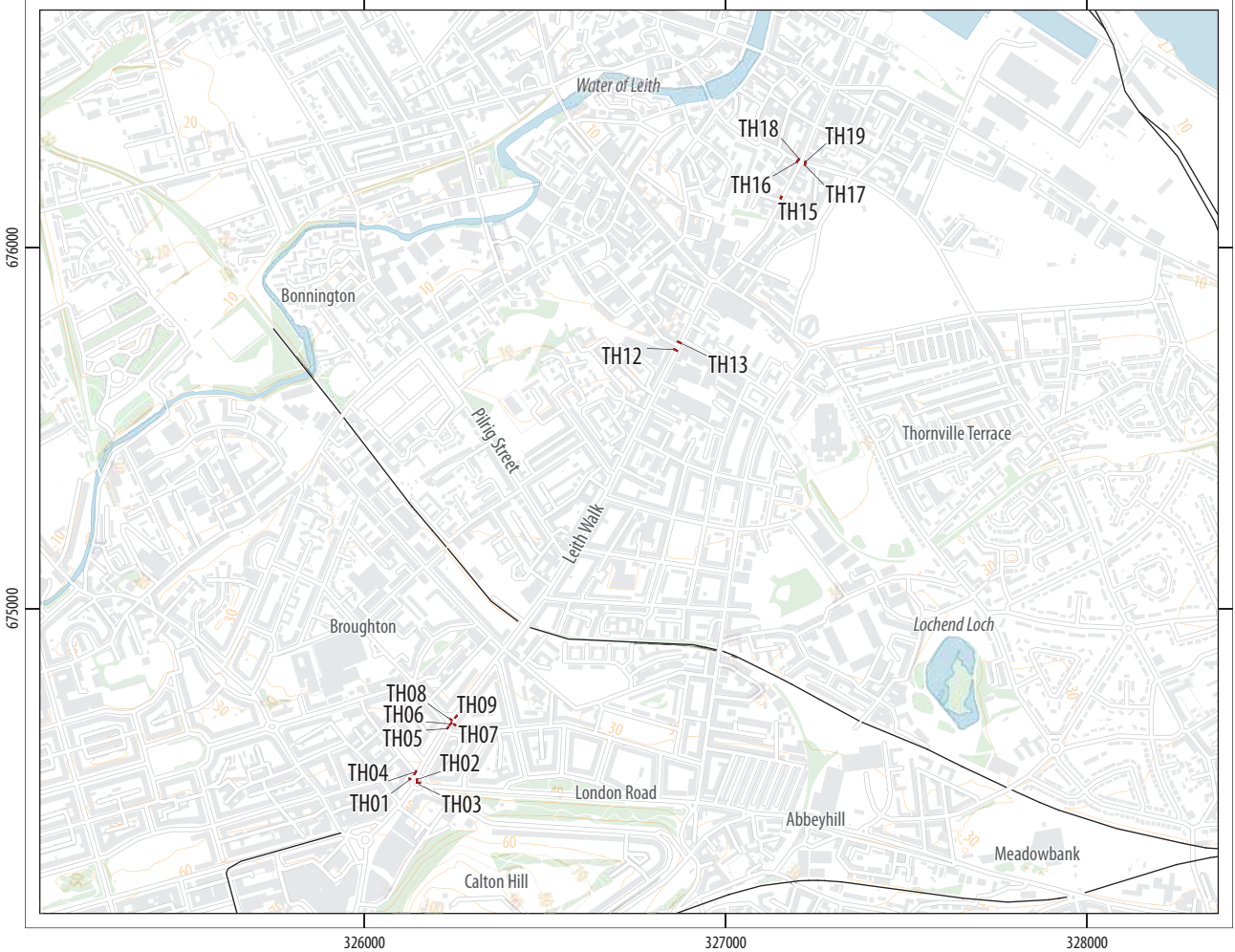
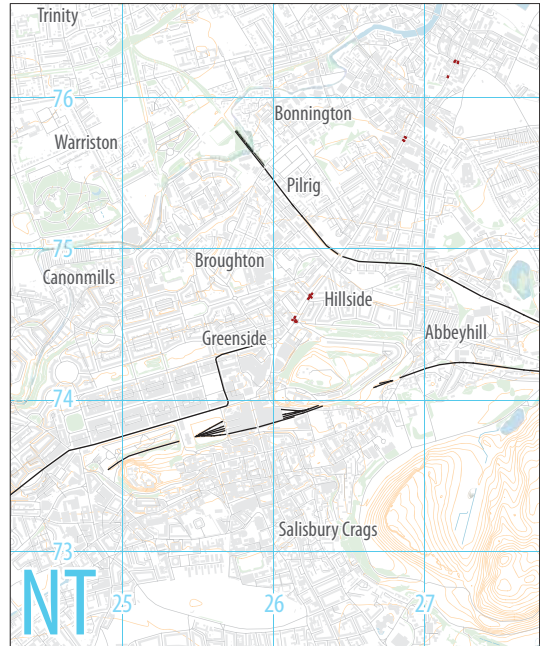
LIST OF ILLUSTRATIONS

Site location plan	Illus 1
NW-facing shot of Trial Hole 1	Illus 2
S-facing shot of Trial Hole 2	Illus 3
E-facing shot of Trial Hole 3	Illus 4
SW-facing shot of Trial Hole 4	Illus 5
Trial holes 1-4 - Comparison with previous works.....	Illus 6
NE-facing shot of Trial Hole 5.....	Illus 7
SW-facing shot of Trial Hole 6.....	Illus 8
NW-facing shot of Trial Hole 7.....	Illus 9
NW-facing shot of Trial Hole 8.....	Illus 10
SW-facing shot of Trial Hole 9.....	Illus 11
NW-facing shot of Trial Hole 12, E end	Illus 12
SE-facing shot of Trial Hole 12, W end	Illus 13
NW-facing shot of Trial Hole 13, E end	Illus 14
NW-facing shot of Trial Hole 13, W end	Illus 15
S-facing shot of Trial Hole 15	Illus 16
N-facing shot of Trial Hole 16	Illus 17
S-facing shot of Trial Hole 17	Illus 18
S-facing shot of Trial Hole 18	Illus 19
S-facing shot of Trial Hole 19	Illus 20

ETEX/01
land at Leith Walk
Edinburgh
Midlothian

0 200km
1:10,000,000 @ A4

Contains OS data © Crown copyright and database right 2017



0 400m
1:20,000 @ A4

KEY
trial holes

HEADLAND
ARCHAEOLOGY

SCOTLAND

13 Jane Street
Edinburgh EH6 5HE
0131 467 7705
www.headlandarchaeology.com

ILLUS 1 Site location

EDINBURGH TRAM EXTENSION

WATCHING BRIEF AND EXCAVATION

Headland Archaeology Ltd was commissioned by McNicholas to undertake a programme of archaeological works in connection with the potential extension of the Edinburgh Trams– from York Place to Newhaven. A series of trial holes were excavated for the purpose of identifying and locating the position of a variety of utility services. During the watching brief no remains of archaeological interest were encountered.

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by McNicholas to undertake a programme of archaeological works in connection with site investigation works associated with the possible extension of the Edinburgh Trams– running from York Place to Newhaven.

Prior to site investigations commencing a Written Scheme of Investigation (WSI) was prepared by Headland Archaeology (UK) Ltd (Jan 2017) on behalf of CECAS (City of Edinburgh Council Archaeological Service); setting out the proposed strategy for archaeological mitigation.

This included carrying out a watching brief of targeted trial holes, and where necessary, undertaking archaeological excavation. The WSI was submitted to and agreed with CECAS who advises the Local Planning Authority on archaeological matters. This report details the results of the work.

2 SITE LOCATION AND DESCRIPTION

The investigation areas (the site) span the proposed route of the tram extension from York Place to Newhaven within the eastern area of the City of Edinburgh (Illus 1). Works extend from the London Road junction of Leith Walk to the Queen Charlotte Street junction of Constitution Street.

The site overlies bedrock geology of sandstone of the Gullane Formation. The underlying superficial geology is Raised Marine Deposits of Devensian and Flandrian Age sand and gravel formed up to 2 million years ago in the Quaternary Period. The local environment was previously dominated by

shallow sea (British Geological Survey website <http://www.bgs.ac.uk>).

3 ARCHAEOLOGICAL BACKGROUND

Previous investigations including evaluation, excavation and watching brief have taken place across the proposed route; mostly in association with earlier Edinburgh Tram works, utilities works and road works.

The London Road Junction site overlays the site of a 15-17th century chapel and graveyard. During the 2008 tram works, eight adult and two infant burials were discovered and excavated, including a double inhumation. A wall running north-south was found and thought to define the extent of this previously unknown graveyard. It is thought that the graveyard related to the Greenside Leper Hospital established in the area in 1591 on the site of the earlier Carmelite Friary (NT27SE 36) (Headland Archaeology, 2013).

Leith Walk has been a historic route connecting Edinburgh with its port of Leith for centuries. In addition, it is known that during the 16th century sieges of Leith enclosing siege works were constructed running across the route of the road to the port; the modern day Leith Walk. Various investigations have taken place with an emphasis on identifying siege works. During these investigations possible walls and midden deposits containing ceramics dating to 16th/17th century were identified (CFA, 2015). However no evidence has been directly attributed to the siege works.

At Queen Charlotte Street, a trench was excavated (fronting 27 Queen Charlotte Street) during road works and identified the remains of a possible ditch at a depth of 1.2m. Archaeological deposits in excess of 2m were recorded during these investigations.

Across Constitution Street, to the east of South Leith parish church's graveyard articulated burials have been excavated. Burials were first discovered immediately underlying the pavement adjacent to the entrance to the churchyard during service renewal works. Further across the street, the graves appeared to be much more deeply buried, and there was more loose bone, indicating past disturbance of burials. It is likely the graveyard of South Leith Parish Church (which probably originated as a chapel dedicated to the Virgin Mary built in 1483) originally extended further to the east beyond the modern churchyard wall, and had been cut through when Constitution Street and its housing was built in the eighteenth century, or possibly even earlier when the fortifications of Leith were constructed.

The site as a whole, is part of the Edinburgh New Town Conservation Area and is representative of the current situation of the site with stone built terrace houses and tenements, overlooking communal private gardens. The importance of the area lies in the formal plan layout of buildings, streets, mews and gardens and in the quality of the buildings themselves (The City of Edinburgh Council Website). The London Road Junction site is part of a Garden and Designed landscape which honours James Craig's plan for the first New Town which was first adopted in July 1767 and subsequently developed over a period of about 100 years (Historic Environment Scotland Website).

4 AIMS & OBJECTIVES

In line with the WSI the main objectives of archaeological works were:

- preserving by record (and in places, in-situ) the archaeological remains on the site by establishing and recording the location, extent, nature and date of archaeological features or deposits (archaeological excavation).
- Establishing the location, extent, nature and date of archaeological features or deposits that may be present within the investigation areas (archaeological watching brief). To assess the archaeological impacts of the proposed development works.

5 METHODOLOGY

5.1 Site works

A watching brief and archaeological excavations were proposed from London Road Junction to the Queen Charlotte Street Junction (NT 27206 76234) (Drawing 5149899-ATK-ETE-SKT-UT-00001 & 00006). An archaeological watching brief also took

place at Annandale Street Junction (NT 26230 74695), Jane Street Junction (NT 26869 75729) and Coatfield Lane Junction (NT 27148 76129) (Drawing 5149899-ATK-ETE-SKT-UT-00002, 00004 & 00005).

The work was undertaken as specified in the WSI. All excavations were carried out using a mechanical excavator working with a toothless blade under direct archaeological control. It was necessary to remove tarmac using a circular saw and breaker. The excavation ended when the maximum required excavation depth was reached.

5.2 Recording

All aspects of the work were undertaken in accordance with the current relevant Standards and Guidance for watching briefs of the Chartered Institute for Archaeologists (2014).

Headland maintains a digitally-based library of guidance documents that includes information on field excavation and recording. Relevant parts can be forwarded on request.

5.3 Reporting and Archives

The results of the works are presented below. A summary report has been prepared for submission to *Discovery & Excavation in Scotland* (Appendix 2) and the OASIS database (headland1-278495).

The complete project archive will be deposited with the National Record of the Historic Environment (NRHE) within six months of the completion of the project. The records (paper and digital) will be archived according to best practice guidelines set out by the Archaeological Archiving Forum.

6 RESULTS

See Appendix 1 for trench details.

6.1 London Road Junction: Trial Holes 1-4

Trial holes 1-4 (Illus 2-5) shared a similar stratigraphy across this area. Below 0.2m of tarmac, a mid-orange brown silty sand was reached, extending to a depth of 1.5m. However in all trenches this was heavily truncated by modern service trenches containing a mixture of pea gravels and crushed limestone gravels. No archaeology was present in these trenches.

A comparison of the London Road Junction trial holes with a georeferenced map of previous excavations (Illus 6) was undertaken (Headland Archaeology 2013). A small overlap is present with

the 2009 excavations (Bailey et al 2013), intersected with the eastern end of Trial Hole 3.

6.2 Annandale Road: Trial Holes 5 – 9

Trial holes 5-9 (Illus 7-11) consisted of an upper 0.2m of tarmac and tarmac bedding gravels, underlain by a mid-brown silty sand. These trenches were heavily truncated by modern service trenches filled with red pea gravel, crushed limestone gravels, and/or concrete-covered services.

A steel beam was located in the north-eastern end of Trial Hole 9 (Illus 11). This ran north-west to south-east across the road, likely relating to the stabilising of the ground for the original tram routes.

6.3 Jane Street: Trial Hole 12 & 13

Trial holes 12 and 13 (Illus 12-15) were excavated in two halves, as the north-western end of the trial holes were located through the footpath rather than the road itself. The road sections consisted of an upper 0.2m of tarmac and tarmac bedding, underlain by a mid-brown silty sand to a depth of 1.5m. Services were much shallower under the pavement, therefore a depth of only 0.5m was reached, however the paving and bedding sands extended 0.1m in depth, under which the same mid-brown silty sand was encountered. The ground was heavily disturbed by services throughout, containing pea gravels, concrete capping and crushed limestone gravels.

A steel beam was located along the north-eastern edge of Trial Hole 13 (Illus 14) with the same north-west to south-east alignment as that found in Trial Hole 9. No other archaeology was present at the Jane Street Junction.

6.4 Coatfield Lane: Trial hole 15

Trial Hole 15 (Illus 16) consisted of an upper layer of 0.2m of tarmac and bedding material, under which mixed gravels and orange-brown silty sands were found. A service ran along the length of this trench, disturbing any possible remains within this trench. No archaeology was present.

6.5 Queen Charlotte Street: Trial Holes 16-19

Trial holes 16-19 (Illus 17-20) extended through the road at this junction, with a 0.2m layer of tarmac and bedding material across the area. Trenches varied in depth, with a mixed mid-brown silty sand extending to a depth of 1.5m where visible. A large amount of service trenches crossed this junction, filled with pea gravel, crushed limestone gravel,

and concrete capping, limiting the depth of excavation in this area.

6.6 Discussion

The steel beams found in Trial holes 9 and 13 run across the width of Leith walk at both the north-east and south-west of the road, suggesting that these appear frequently along the street. They may have acted as ground supports for the previous tram-line, as suggested in the earlier works (Bailey et al 2013) along this route.

No archaeological remains were encountered during this monitoring. The trenches targeted known services which will have truncated any remains that may have been present.

7 REFERENCES

7.1 Bibliographic sources

Archaeological Archives Forum Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (published by the ClfA 2014).

Archaeological Archives Forum Archaeological Archives: Standard and guidance for an archaeological watching brief (published by the ClfA 2014).

Archaeological Archives Forum Archaeological Archives: Standard and guidance for archaeological excavation (published by the ClfA 2014).

CfA Archaeology 2015 Watching Brief for the Leith programme, foot of the Walk junction. Unpublished Client Report.

Bailey L, Borden A, Jones E, McMeekin J, Murray R, Simonsson M 2013 Edinburgh Trams: A Data Structure Report for Watching Briefs on Utility Diversions for the Edinburgh Trams Project 2008-2010. Unpublished Client Report.

Planning Advice Note 2/2011 Planning and Archaeology. The Scottish Government 2011

Watkinson D & Neal V First aid for finds, (Third Edition 1998).

7.2 Other sources

Internet

British Geological Survey website
<http://www.bgs.ac.uk>, accessed 21.01.17

The City of Edinburgh Council Website
http://www.edinburgh.gov.uk/directory_record/377094/leith_conservation_area, accessed 21.01.17

Historic Environment Scotland Website
<http://portal.historicenvironment.scot/designation/GDL00367>, access 21.01.17

8 APPENDICES

8.1 Appendix 1 – Site Registers

Trench Data

Trench no.	Length (m)	Width (m)	Depth (m)	Direction
T1	4	0.75	1.5	E-W
T2	10	0.75	1.5	N-S
T3	10	0.75	1.5	E-W
T4	10	0.75	1.5	NE-SW
T5	6	0.75	1.5	NE-SW
T6	8	0.75	1.5	NE-SW
T7	5	0.75	1.5	NW-SE
T8	5	0.75	1.5	NW-SE
T9	8	0.75	1.5	NE-SW
T12	10	0.75	1.5	NW-SE
T13	10	0.75	1.5	NW-SE
T15	4.5	0.75	0.75	NE-SW
T16	6	0.75	1	N-S
T17	6	0.75	1.5	N-S
T18	6	0.75	1.5	N-S
T19	6	0.75	1.5	N-S

Photographic register

Frame no.	Direction	Trial hole	Description
001	SW	T15	Manhole
002	SW	T15	Working shot
003	N	T15	Working shot
004	S	T15	Record shot of trial hole
005	W	T15	Section
006	S	T2	Brick capped service
007	S	T2	Brick capped service
008	S	T2	Record shot of trial hole
009	S	T2	Record shot of trial hole
010	S	T2	Record shot of trial hole
011	N	T2	Record shot of trial hole
012	N	T2	Record shot of trial hole
013	W	T3	Record shot of trial hole
014	W	T3	Mid-ex record shot of trial hole
015	W	T3	Record shot of trial hole
016	W	T3	Record shot of trial hole
017	E	T3	Record shot of trial hole
018	E	T3	Record shot of trial hole
019	NE	T4	Record shot of trial hole
020	NE	T4	Record shot of trial hole
021	NE	T4	Record shot of trial hole
022	NE	T4	Record shot of trial hole
023	SW	T4	Record shot of trial hole
024	SW	T4	Record shot of trial hole
025	SE	T2+3	Reinstated
026	NW	T1	Burst pipe in trial hole

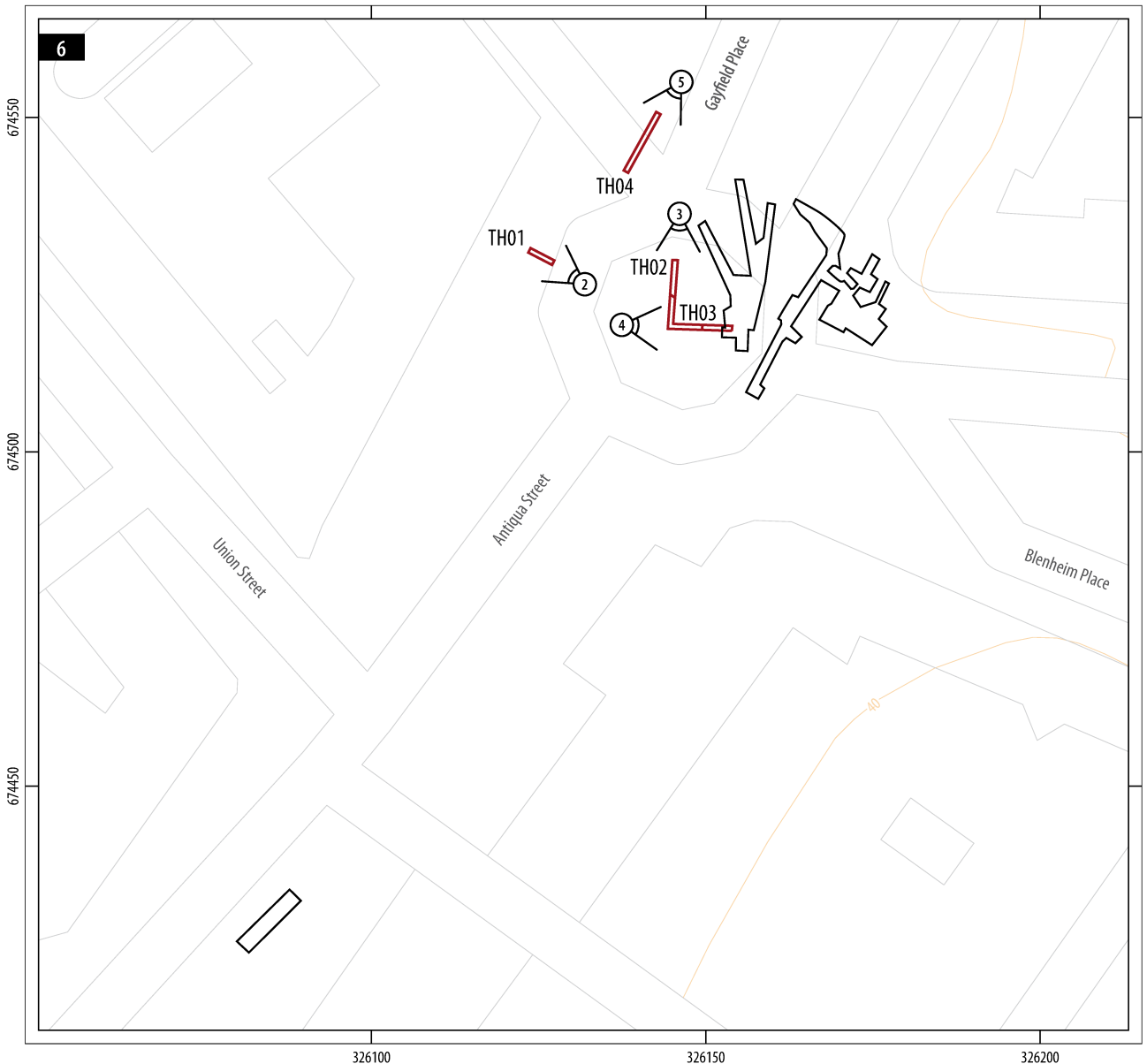
Frame no.	Direction	Trial hole	Description
027	SE	T1	Burst pipe in trial hole
028	NW	T1	Record shot of trial hole
029	SE	T1	Record shot, inc service tunnel
030	NW	T1	Record shot of trial hole
031	NW	T12	Record shot, road section
032	NW	T12	Record shot, road section
033	SE	T12	Record shot, road section
034	SE	T12	Record shot, pavement section
035	SE	T12	Record shot, pavement section
036	SE	T12	Record shot, pavement section
037	SE	T12	Record shot, pavement section
038	NW	T13	Steel Beam
039	NE	T13	Steel Beam
040	SE	T13	Steel Beam
041	SE	T13	Steel Beam
042	NE	T13	Record shot, road section
043	SE	T13	Record shot, road section
044	SE	T13	Record shot, road section
045	NW	T13	Record shot, road section
046	NW	T13	Record shot, road section
047	NW	T13	Record shot, road section
048	NW	T13	Record shot, pavement section
049	NW	T13	Record shot, pavement section
050	NE	T14	Record shot of trial hole
051	SE	T13	Record shot, pavement section
052	SE	T13	Record shot, pavement section
053	SE	T13	Record shot, pavement section

Frame no.	Direction	Trial hole	Description
054	SE	T13	Record shot, pavement section
055	NE	T5	Record shot up to concrete
056	NE	T5	Record shot showing concrete
057	NE	T5	Record shot of services
058	SW	T5	Record shot of excavation under concrete
059	NE	T5	Shot of ground under services
060	NE	T5	Record shot of services
061	NE	T5	Concrete removed
062	NE	T5	Concrete removed
063	NE	T5	Concrete removed
064	NE	T5	Concrete removed
065	NE	T6	Shot of services
066	SW	T6	Limited excavation due to services
067	SW	T6	Empty ducts removed
068	SW	T6	Empty ducts removed
069	SW	T6	Empty ducts removed
070	NE	T6	Working shot
071	SW	T9	NE facing section showing darker demo/levelling deposits for the road
072	SW	T9	Record shot
073	SW	T9	Record shot, NE end
074	SW	T9	Record shot, including steel beam
075	NW	T7	Record shot of SE end of trial hole
076	NW	T7	Record shot of NW of trial hole
077	NW	T7	Record shot
078	SE	T8	Shot of services from manhole
079	NW	T8	Services in NW of trial hole

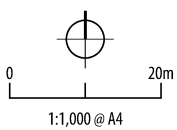
Frame no.	Direction	Trial hole	Description
080	NW	T8	Central section of trial hole
081	NW	T8	Working shot
082	NW	T8	Record shot, NW of trial hole
083	NE	T8	Record shot, southern section of trial hole
084	N	T17	Record shot, southern section of trial hole
085	N	T17	Record shot, northern section of trial hole
086	S	T17	Services in trial hole - including concrete around gas main valve
087	S	T17	Services in trial hole - including concrete around gas main valve
088	S	T18	Services in trial hole
089	S	T18	Record shot, northern section of trial hole
090	S	T18	Record shot, central section of trial hole
091	N	T18	Record shot, northern section of trial hole
092	S	T18	Services in trial hole
093	N	T16	Record shot, southern section of trial hole
094	N	T16	Record shot, southern section of trial hole
095	N	T16	Record shot, central section of trial hole
096	N	T16	Record shot, central section of trial hole
097	S	T16	Record shot, central section of trial hole
098	N	T16	Record shot, northern section of trial hole
099	N	T16	Record shot, northern section of trial hole
100	N	T16	Record shot, central section of trial hole
101	N	T16	Record shot, services in trial hole
102	N	T19	Record shot, southern section of trial hole
103	S	T19	Record shot, services in trial hole
104	S	T19	Record shot, northern section of trial hole
105	S	T19	Record shot, services in trial hole

8.2 Appendix 3 – Discovery and Excavation in Scotland entry

LOCAL AUTHORITY:	City of Edinburgh Council
PROJECT TITLE/SITE NAME:	Edinburgh Tram Extension
PROJECT CODE:	ETEX-17
PARISH:	Edinburgh
NAME OF CONTRIBUTOR:	Josh Gaunt
NAME OF ORGANISATION:	Headland Archaeology
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	-
SITE/MONUMENT TYPE(S):	-
SIGNIFICANT FINDS:	-
NGR (2 letters, 8 or 10 figures)	NT 26144 74522 (London Road), NT 27206 76234 (Queen Charlotte Street)
START DATE (this season)	06/02/2017
END DATE (this season)	02/03/2017
PREVIOUS WORK (incl. DES ref.)	ETD07 – Edinburgh Trams Depot, Gogar
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Headland Archaeology Ltd was commissioned by McNicholas to undertake a programme of archaeological works in connection with the extension of the Edinburgh Trams– from York Place to Newhaven. A series of trial holes were excavated for the purpose of locating services and establishing the archaeological potential of the proposed works. During the watching brief no archaeological remains were discovered due to the large amount of previous utilities works in the areas targeted.
PROPOSED FUTURE WORK:	-
CAPTION(S) FOR ILLUSTRS:	-
SPONSOR OR FUNDING BODY:	McNicholas
ADDRESS OF MAIN CONTRIBUTOR:	13 Jane Street, Edinburgh, EH6 5HE
EMAIL ADDRESS:	josh.gaunt@headlandarchaeology.com
ARCHIVE LOCATION (intended/deposited)	NHRE



Contains OS data © Crown copyright and database right 2017



- KEY
- trial holes
 - previous work
 - 1 photo direction

ILLUS 2 NW facing shot of Trial Hole 1 **ILLUS 3** S facing shot of Trial Hole 2 **ILLUS 4** E facing shot of Trial Hole 3 **ILLUS 5** SW facing shot of Trial Hole 4
ILLUS 6 Trial Holes 1-4 - Comparison with previous works



ILLUS 7 NE facing shot of Trial Hole 5 **ILLUS 8** SW facing shot of Trial Hole 6 **ILLUS 9** NW facing shot of Trial Hole 7 **ILLUS 10** NW facing shot of Trial Hole 8



ILLUS 11 SW facing shot of Trial Hole 9 **ILLUS 12** NW facing shot of Trial Hole 12, E end **ILLUS 13** SE facing shot of Trial Hole 12, W end **ILLUS 14** NW facing shot of Trial Hole 13, E end



ILLUS 15 NW facing shot of Trial Hole 13, W end **ILLUS 16** S facing shot of Trial Hole 15 **ILLUS 17** N facing shot of Trial Hole 16 **ILLUS 18** S facing shot of Trial Hole 17



ILLUS 19 S facing shot of Trial Hole 18 ILLUS 20 S facing shot of Trial Hole 19