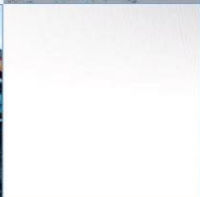
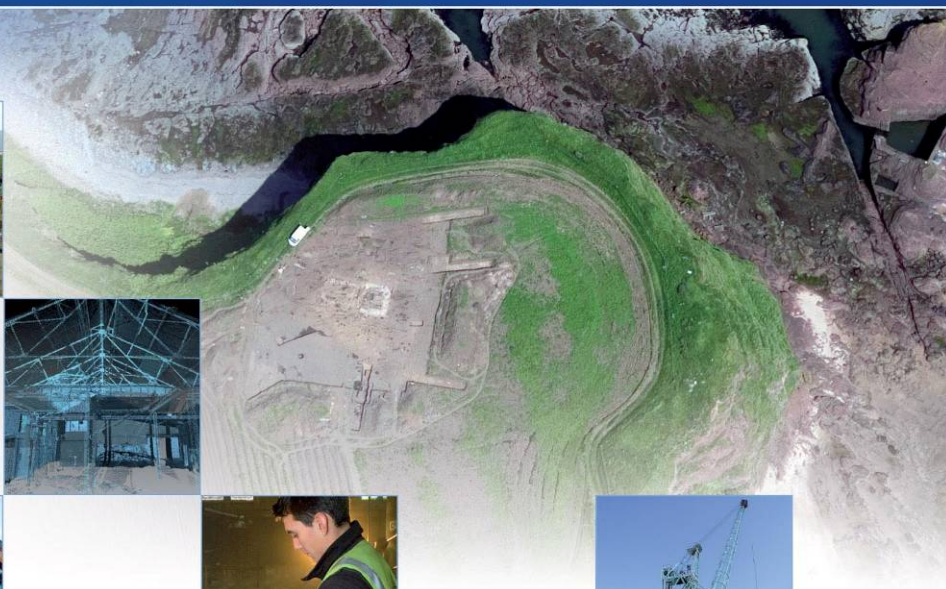


St Ninian's Way, West Lothian: Data Structure Report

AOC Project 22673
OASIS ID: aocarcha1-175405
March 2014



St Ninian's Way, Linlithgow:

Data Structure Report

On Behalf of:	West Lothian Council County Buildings Linlithgow West Lothian EH49 7EZ
National Grid Reference (NGR):	NS 9973 7717
AOC Project No:	22673
Prepared by:	Mike Roy
Illustration by:	Mike Roy
Date of Fieldwork:	17th February – 12th March 2014
Date of Report:	21st March 2014

This document has been prepared in accordance with AOC standard operating procedures.

Author: Mike Roy Date: 21/03/2014

Approved by: Martin Cook Date: 21/03/2014

Draft/Final Report Stage: Draft Date: 21/03/2014

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

Contents

	Page
List of illustrations	2
List of plates	2
List of appendices	2
Abstract.....	3
1 INTRODUCTION	4
1.1 Background	4
1.2 Location (Figure 1)	4
1.3 Archaeological Background.....	4
2 AIMS.....	5
3 METHODOLOGY	5
4 RESULTS	6
4.1 Introduction.....	6
4.2 The Watching Brief (Figure 2)	6
5 CONCLUSION.....	9
6 BIBLIOGRAPHY	10
APPENDIX 1: Context Register	13
APPENDIX 2: Sample Register.....	14
APPENDIX 3: Drawing Register	14
APPENDIX 4: Finds Register	14
APPENDIX 5: Photographic Record	15
APPENDIX 6: <i>Discovery and Excavation in Scotland</i> Report.....	18

List of illustrations

- Figure 1 Location Map
Figure 2 Location of excavations monitored under Watching Brief

List of plates

- Plate 1 Demolished wall fragment [007] within made ground [013]
Plate 2 Excavation of Filter Trench to north of car park, with Sam's Dyke [012] in distance to east

List of appendices

- Appendix 1 Context Register
Appendix 2 Sample Register
Appendix 3 Drawing Register
Appendix 4 Finds Register
Appendix 5 Photographic Registers
Appendix 6 '*Discovery and Excavation in Scotland*' Report

Abstract

This report contains the results of an archaeological Watching Brief on all ground breaking works associated with the construction of an overspill car park, on land adjacent to St Ninian's Way, Linlithgow. The development site lies to the immediate west of the medieval core of Linlithgow and south of the edge Linlithgow Loch, which is scheduled as part of the Linlithgow Palace, Peel and Royal Park Scheduled Monument (Index No. 13099). It involved the monitoring of ground-breaking works associated with the removal of trees and car park surfaces; the stripping of topsoil; the cutting of gullies, trenches and manhole areas for drainage/sewerage features and the opening of trenches for lighting cables.

The Watching Brief identified little of archaeological interest, with only occasional late post-medieval artefacts being recovered from topsoil/garden soil and made ground deposits. The only, tentative, evidence for the presence of former historic boundaries, took the form of rubble debris, including a large lump of *ex situ* former wall in the west of the site, and buried fence posts of 20th century date. The creation of the existing car park in the later 20th century clearly involved substantial disturbance of the area, with the removal of these former boundaries.

1 INTRODUCTION

1.1 Background

- 1.1.1 An archaeological watching brief was required by West Lothian Council on all ground breaking works associated with the construction of an overspill car park, on land adjacent to St Ninian's Way, Linlithgow. These works included the uprooting of trees and the stripping of areas for the construction of new car park surface; the excavation of trenches and pits for drainage, as well as lighting cable trenches. The development site lies on the western edge of the medieval core of Linlithgow and south of Linlithgow Loch, which is scheduled as part of the Linlithgow Palace, Peel and Royal Park Scheduled Monument (Index No. 13099). The need for, and scope of, the archaeological works has been determined by the West of Scotland Archaeology Service, WoSAS, on behalf of West Lothian Council.
- 1.1.2 The programme of archaeological works specified by WoSAS is in keeping with the policies outlined in *Scottish Planning Policy* (Scottish Government 2010) and *PAN 2/2011 Planning and Archaeology* (Scottish Government 2011) in order to record the extent and significance of any archaeological remains which may be present within the development area.

1.2 Location (Figure 1)

- 1.2.1 The overspill car park development is located on the site of an existing car park at the east end and on the north side of St Ninian's Way. The new car park utilises the majority of the surface of the existing car park, but also incorporates an area of lawn to the immediate west. The car park works extended to the north, in the form of a surface water Filter Trench and associated manholes and pipe works, through an area of sparse woodland to the immediate south of Linlithgow Loch. To the east of the car park is a mortared rubble wall, 'Sam's Dyke', which may follow the line of a former property boundary, running from High Street to the south. It is possible that tree and hedge lines (removed by the current works), which crossed the centre and bordered the western side of the car park, may also have marked former property boundaries (Dennison & Coleman 2000, 99).
- 1.2.2 The bedrock geology of the area generally comprises basaltic lava and basaltic tuff of the Bathgate Hills Volcanic Formation. The drift geology in this area on the south-western edge of Linlithgow Loch comprises lacustrine deposits of clay, silt and Sand; these are superficial deposits formed up to 3 million years ago in the Quaternary Period in an environment dominated by lakes (BGS website).

1.3 Archaeological Background

- 1.3.1 From about 685 AD the Anglians of Lothian occupied a small fort at Linlithgow. It was captured in 960 by King Indulf of Alba and incorporated in the Kingdom of the Scots. It was later chartered as a royal burgh by King David I sometime between 1124 and 1138. The knoll formerly occupied by the Anglian fort was used as an English fortification during the Wars of Independence (captured by the Scots in 1313) with the burgh subsequently occupied. At various times throughout the medieval and early post-medieval periods, the knoll was the site of a castle, royal residence and a number of religious establishments (Smith 1999, 604-605).

- 1.3.2 The development site (centred NGR: NS 9973 7717) lies on the western edge of the medieval core of Linlithgow, north-east of the associated West Port. It is located south of the edge of Linlithgow Loch, which is scheduled as part of the Linlithgow Palace, Peel and Royal Park Scheduled Monument (Index No. 13099). It is possible that tree and hedge lines, which crossed the centre and bordered the western side of the car park, may have marked former property boundaries (Dennison & Coleman 2000, 99). A hoard of 194 16th century coins was recovered from the garden of 354 High Street, to the south of the car park, in 1910 (Macdonald 1910), while there is a reference to human remains having been found in the area in 1902 (NMRS reference: NS97NE 11).
- 1.3.3 Archaeological works in the immediately surrounding area include a watching brief in 2009 at Water Yett on the installation of a public toilet to the south-east of the car park, which recorded a modern red brick wall (O'Connell, C 2009). Nearby possible late medieval tanning pits were recorded by Brooks (1974); an early 19th century tannery existed at 212-224 High Street (Cressey 2007). A watching brief at 212 High Street in 2004 identified three lime-mortared sandstone walls (Corney 2004). An evaluation on land to the south of St Ninian's Way in 2002 identified a likely plot boundary, though the presence of tarmac in this feature indicated a recent date (Conolly 2002).
- 1.3.4 To the south of the car park, a watching brief at 261 High Street in 2010 identified the remains of a 19th century building, perhaps a smokehouse or a washhouse, and associated internal features (MacRae & Gray 2010), while a watching brief in 2012 at 1a Union Street identified no features or deposits of archaeological interest (Farrell 2012). An evaluation at 3-4 Union Road in 2004 identified possible boundary ditches (Dutton 2004). To the east of the car park, watching briefs on the Combined Sewer Outflow in 2009 revealed a concentration of animal bones (Johnson 2009 & Williams 2009).

2 AIMS

- 2.1 The aims of the archaeological works were:
- i) to safeguard the archaeological resource from inadvertent destruction by development impacts;
 - ii) to undertake the immediate recording of isolated finds of moderately significant archaeological material that would be disturbed by construction activities;
 - iii) given the discovery of highly significant archaeological material in quantity that that would suffer an adverse impact from construction works (i.e. preservation in situ is impractical), the recording of all archaeological features by means of a mitigation strategy to be formulated with WoSAS/West Lothian Council.

3 METHODOLOGY

- 3.1 Groundworks included the removal of tree stumps and roots from the central reservation of the existing car park and the western and northern fringes of the car park, and of existing

lamp posts and associated cabling by JCB with a toothed and a ditching bucket. A JCB and a 360° excavator, generally equipped with toothed buckets that varied in size from 0.5 m to 0.9 m were used in the removal of the kerbs of the existing car park, as well as areas of the existing car park surfaces (to the east, south and north). The central reservation, a strip of lawn to the west of the existing car park and a thin strip of shrub-covered ground to the east of the car park (near Sam's Dyke) were reduced in level to c.0.45 m below the existing tarmac surface by a JCB and a 360° excavator, generally equipped with ditching buckets that varied in size from 0.45 m to 1.8 m. The JCB and 360° excavator, equipped with a variety of toothed and ditching buckets noted above, also cut a series of gullies (commonly c.1.5 – 2.0 m square and c.1.1 – 1.2 m deep), trenches (generally 0.65 m wide and commonly c.0.8 m deep) and manhole areas (commonly c. 2 m square and c. 1 m in depth) for drainage/sewerage features, both through the existing car park and in the area to the immediate north of the car park, where excavation also included an 18 m long, 3 m wide and c. 0.9 – 1.1 m deep surface water Filter Trench, and a c.3.2 m deep pit for the First Defence (Vortex Separator). Finally a JCB was used to open c.0.6-1.0 m wide and 0.6-0.9 m deep trenches for lighting cables around the periphery of the new car park area (Figure 2). Test pits were also excavated to a depth of over 1 m in the west of the site and in the central reservation, while the south-west corner of the new car park was excavated to a depth of 1.5 m.

4 RESULTS

4.1 Introduction

4.1.1 The monitoring of the ground-breaking works associated with the removal of trees and car park surfaces; the stripping of topsoil; the cutting of gullies, trenches and manhole areas for drainage/sewerage features and the opening of trenches for lighting cables took place between 17th February and 12th March 2014. The excavations were conducted in varied weather conditions, commonly with both sunny spells and rain showers. However, archaeological visibility was generally good, with the exception of areas of deep excavation, in particular the over 3 m deep pit for the First Defence (Vortex Separator), where rapid inundation by water made inspection of deep deposits impracticable. The various data gathered are presented as a series of appendices:

- i) Appendix 1 contains the Context Register;
- ii) Appendix 2 contains the Sample Register;
- iii) Appendix 3 contains the Drawing Register;
- iv) Appendix 4 contains the Finds Register;
- v) Appendix 5 contains the Photographic Register;
- vi) Appendix 6 reproduces the '*Discovery and Excavation in Scotland*' entry

4.2 The Watching Brief (Figure 2)

4.2.1 The existing car park at the east end of St Ninian's Way dates to the end of the 20th century (Dennison & Coleman 2000, 99), and was covered by a tarmac surface (003), which was between 0.1 and 0.2 m in depth, overlying concrete (005) and gravel bedding (006), commonly to a total depth of 0.5 m or more. The central reservation of the existing car park was unmetalled, being covered by fairly loose dark reddish brown sandy silt (001) topsoil or tree planting soil, also found as a surface deposit of the lawns to the west of the car park

(this material may have been imported into the central reservation). This topsoil varied in depth, but was commonly between 0.4 m and 0.7 m in depth (though locally 1.1 m in depth in the south-west of the site). This fairly loose topsoil overlay a more compact mid-dark reddish brown sandy silt soil (013), which commonly contained modern debris (including plastic and metal) and rubble and varied considerably in depth from 0.1 to 0.5 m. It was also present to the east of the existing car park, with common lenses of light-mid reddish brown sandy silt (002). Deposit (013) was interpreted as made ground or a former topsoil, likely disturbed at the time of the construction of the existing car park. The total depth of modern topsoil deposits (001) and (013) extended commonly to between 0.6 m and 0.9 m. Various services and drainage features were found to cut these deposits, including a roughly south/north-aligned drain (015), which contained a fill (014) largely made up of rounded and subrounded stones with occasional brick fragments. In the west of the site (013) was found to enclose a 1.0 m long fragment of mortared rubble wall (007), which was clearly not in situ, and likely represents the demolition of a boundary wall in this area (Plate 1).



Plate 1- Demolished wall fragment [007] within made ground [013]

- 4.2.2 The central reservation was the site of a south/north-aligned tree and hedge line, interpreted by Dennison and Coleman as a former property boundary. Similarly, the western side of the existing car park was the location of another south/north treeline, also potentially an early boundary. However, while boundaries are shown on these approximate locations on Ordnance Survey maps of 1856, 1897 and 1916 (not illustrated), these are not marked as treelines, and it is possible that the original boundaries took the form of fences or walls; wall fragment (007) was likely a relic of such a boundary, demolished either during or sometime before the construction of the existing car park. A mortared rubble wall, 'Sam's Dyke' (012), to the immediate east of the car park, appears to be a modern rebuilding of one of these boundaries; it was seen to incorporate occasional brick fragments. The Ordnance Survey map of 1856 depicts two small structures, labelled 'Ruin', 'Engine Ho[use]', 'Chimney' and 'Boiler' to the west of the north end of this approximate boundary line. No evidence for these

features was identified during the watching brief; the car park works did not extend sufficiently east in this direction.

- 4.2.3 In the north of the central reservation, and in the north and east of the site generally, where excavation within drainage gullies and trenches extended to a depth of c. 0.8 m or more, a deposit of light reddish brown and light grey gritty silt with gravel and stone (016) was commonly seen, under (013). This appears to be a demolition/made ground deposit. Much the same material (018), though clearly containing occasional brick fragments and at a shallower depth (c.0.4 m from the surface), was seen in the excavations to the north of the existing car park, in particular within the surface water Filter Trench (Plate 2), indicating extensive modern disturbance of the area around the car park and south of the loch.
- 4.2.4 The deepest excavations were undertaken within the over 3 m deep pit for the First Defence (Vortex Separator), to the north of the car park. Here, a thin, c. 0.1 m deep, topsoil deposit (001) overlay c.0.5 m of gravel (006) associated with the car park and its services, and a depth of c. 0.5 m of mixed made ground (013) and (016). At a depth of 1.1 m from the ground surface a compact dark brown slightly sandy silt (008) became visible, which was present to a depth of 2 m, where flooding occurred (thus measuring at least 0.9 m in depth). This material was also commonly seen elsewhere within the site within areas of deeper excavation (i.e. lower than 0.45 m beneath the tarmac surface), and is interpreted as the former topsoil or garden soil of the area, largely undisturbed by the construction of the existing car park. Elsewhere, it was commonly found under made ground (013) or (016), at a depth of between 0.6 and 1.1 m from the existing surface. Within an excavated pit for a surface water gully in the south-east of the site, close to 'Sam's Dyke', fragments of wooden post were seen within deposit (008) at a depth of between 0.9 m and 1.3 m from the tarmac surface (i.e. at the base of the excavations). Although this excavation was flooded, fragments of wooden post and timber were recovered (Find No. 10). Similar material was recovered from excavations to the north (Find Nos. 11 and 14). Several of these timbers were seen during excavation to have been machine-cut, and they clearly represent the remains of relatively modern (20th century) fence or post and wire boundary lines.



Plate 2- Excavation of Filter Trench to north of car park, with Sam's Dyke [012] in distance to east

- 4.2.5 Deposits underlying former topsoil/garden soil (008) included a dark reddish brown sandy silt deposit (009), with no artefacts recovered, visible at the base of two test pits to the north-west of the car park, at a depth of between c.1.1 and 1.3 m or more. Within the pit for the First Defence (Vortex Separator), excavation below the 2 m water line produced spoil indicating a dark organic silt deposit (020), likely a basal element of (008), to a depth of at least 2.8 m below the ground surface. Excavation at this depth brought up occasional lumps of light reddish brown sand (021), perhaps representing a glacially-derived subsoil, though lack of visibility makes this interpretation tentative. Within the surface water Filter Trench, which was excavated to a depth of between 0.9 m and 1.1 m, the lowest deposits visible at the base of the trench (017) and (019) were organic silts similar to (020).
- 4.2.6 Occasional sherds of late post-medieval pottery and clay pipe, as well as fragments of brick, were recovered during the watching brief, in particular from deposits (001), (008) and (013).

5 CONCLUSION

- 5.1 In summary, the Watching Brief identified little of archaeological interest, with only occasional late post-medieval artefacts being recovered from topsoil/garden soil and made ground deposits. The only, tentative, evidence for the presence of former historic boundaries, took the form of rubble, including a large lump of *ex situ* former wall (007) in the west of the site, and buried fence posts of 20th century date. The creation of the existing car park in the later 20th century clearly involved substantial disturbance of the area, with the removal of these former boundaries.
- 5.2 No further works are considered necessary, although this recommendation will need to be approved by the West of Scotland Archaeology Service, on behalf of the West Lothian Council.

6 BIBLIOGRAPHY

British Geological Survey 2014 <https://www.bgs.ac.uk/data/mapViewers/msdviewers.html> (accessed 20th March 2014)

Brooks, C 1974 'Linlithgow, medieval pits', *Discovery Excav Scot*, 67

Conolly, R 2002 'St Ninian's Way, Linlithgow, West Lothian (Linlithgow parish), evaluation', *Discovery Excav Scot*, vol. 3, 117

Corney, M 2004 *212 High Street, Linlithgow: Data Structure report on an Archaeological Watching Brief*, unpublished report by Headland Archaeology Ltd

Cressey, M 2007 *Archaeological Desk-Based Assessment and Standing Building Survey: 212-224 High Street, Linlithgow, West Lothian*, unpublished report by CFA Archaeology Ltd

Dennison, E P & Coleman, R 2000 *Historic Linlithgow: the Archaeological Implications of Development*, the Scottish Burgh Survey

Dutton, A 2004 *Archaeological Evaluation, 3-4 Union Road, Linlithgow, West Lothian*, unpublished report by Headland Archaeology Ltd

Farrell, S 2012 *Archaeological Watching Brief of a Development at 1a Union Road, Linlithgow, West Lothian*, unpublished report by Rubicon Heritage Services

Johnson, M 2009 *Linlithgow Loch Combined Sewer Outflow, Linlithgow, West Lothian. Archaeological Watching Brief Data Structure Report*, unpublished report by CFA Archaeology Ltd

Macdonald, G 1910 'Note on a hoard of Scottish coins recently found in Linlithgow', *Proc Soc Antiq Scot*, vol. 44, 352

MacRae, F & Gray, H 2010 *Westport Dental Practice, 261 High Street, Linlithgow, West Lothian: Archaeological Watching Brief*, unpublished report by CFA Archaeology Ltd

O'Connell, C 2009 'Water Yett, West Lothian (Linlithgow parish), watching brief', *Discovery Excav Scot*, New, vol. 10, 179

Ordnance Survey, 1:1056 *Linlithgow* Sheet 1 – published 1856

Ordnance Survey, 1:1056 *Linlithgow* Sheet 3 – published 1856

Ordnance Survey, 25 inch to the mile *Linlithgowshire* Sheet 005.03 – published 1897 (Revised c.1895)

Ordnance Survey, 25 inch to the mile *Linlithgowshire* Sheet n003.11 – published 1916 (Revised c.1913)

Scottish Government 2010 *Scottish Planning Policy* (February 2010)

Scottish Government 2011 *PAN 2/2011 Planning & Archaeology*

Smith, R 1999 *The Making of Scotland*, Canongate

Williams, D 2009 *Linlithgow Loch Combined Sewer Outflow, Linlithgow, West Lothian. Archaeological Watching Brief Data Structure Report*, unpublished report by CFA Archaeology Ltd

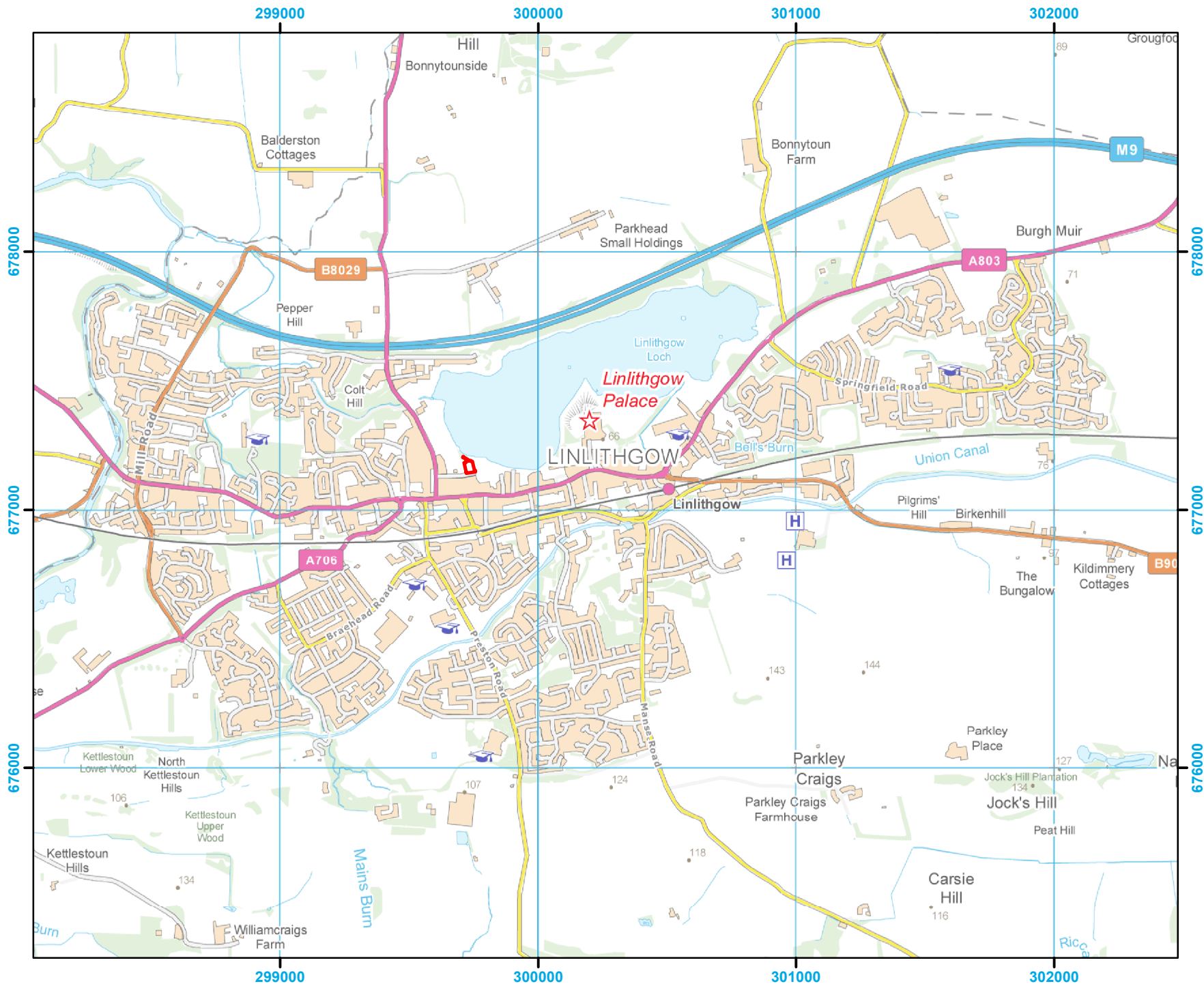


Figure 1: Location Map

Legend

Car Park and Drainage

0 150 300 450 600 Meters



Cartographic data derived from OS OpenData, Crown Copyright

Project No.: 22673

Date: 20.3.2014

Scale at A4: 1:20,000



(c) AOC Archaeology 2014

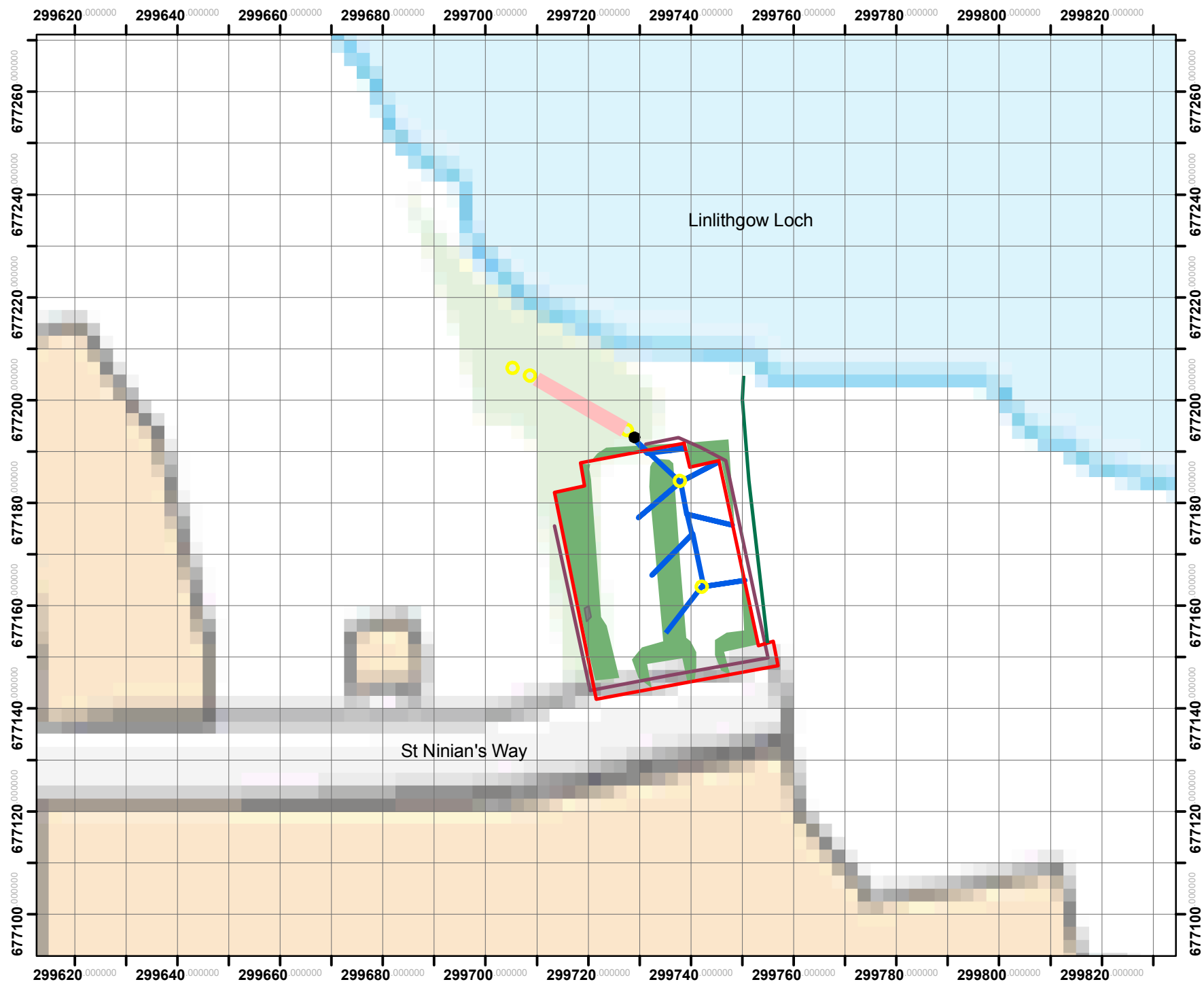


Figure 2: Location of excavations monitored under Watching Brief

Legend

- New Car Park
- Ex situ wall debris 007
- Wall 012
- First Defence Pit
- Filter Trench
- Drainage Manholes
- Sewers and Gullies
- Lighting Trench
- Stripped Areas

0 5 10 15 20 Meters



Cartographic data derived from OS OpenData, Crown Copyright

Project No.:	22673
Date:	20.3.2014
Scale at A4:	1:1,000



(c) AOC Archaeology 2014

St Ninian's Way, Linlithgow: Watching Brief Data Structure Report

Section 2: Appendices

APPENDIX 1: Context Register

Context	Description	Location
[001]	Modern topsoil/tree planting soil: Fairly loose dark reddish brown sandy silt over [013], etc	Edges of site, and central reservation
[002]	Modern imported material: Light-mid red brown sandy silt with occasional gravel; appears as lenses within [001] in various areas, and within service fill	Within services and areas disturbed by tree planting, etc
[003]	Tarmac surface: 0.1 to 0.2 m deep surface of car park, over bedding [005] and [006]	Car park surface
[004]	Concrete kerb: Concrete blocks, 0.12 m wide, 0.24 m deep and 0.9 m long, over concrete bedding [005]	Car park edges
[005]	Concrete bedding of car park surface [003] and kerb [004]: Coarse grey concrete bedding, commonly 0.15 – 0.2 m deep under kerb and car park surface. Over bedding [006].	Car park edges
[006]	Gravel bedding: Coarse grey/light red brown gravel bedding for car park, commonly c. 0.4-0.5m deep, but ranging between 0.2 m and 0.7 m. Over disturbed topsoil material [013]	Under car park surfaces and eastern and southern edges of car park.
[007]	Fragment of previously demolished rubble wall: A 0.6 m wide and 1.0 m long (SE/NW-aligned but not in situ) fragment of former rubble wall consisting of subrounded and rounded stones bonded with coarse light yellowish grey lime mortar. Surviving depth/height was 0.4 m. Under modern topsoil [001] and over disturbed topsoil [013].	West of former car park
[008]	Former topsoil/garden soil: Compact dark grey/brown slightly sandy silt with occasional small angular stones. Under [013], etc. Over [009], etc. Commonly seen to be between 0.3 m and 0.5 m deep, though seen to be deeper to north, e.g. 0.9 m deep.	Throughout site
[009]	Silt deposit, possible former topsoil: Dark reddish brown sandy silt with occasional small angular stones. Under [008]. Visible to 0.4 m + deep.	At base of test pits in west and centre of site
[010]	Gravel make up associated with road and pavement surfaces: Red gravel with lenses of [002]. Visible to a depth of 1.1 m from existing surface to south-west of car park, and to a depth of 0.4 m + to south of car park. Within a cut [011].	To south of car park
[011]	Cut for make up material [010]: Vertical-sided, up to 1.0 m + deep linear west/east-aligned cut into [001] and [008] at south side of car park. Contained fill [010].	To south of car park
[012]	Stone wall (Sam's Dyke): South/north-aligned rubble wall (with occasional brick inclusions) bonded with grey mortar. Stones of wall measure up to 0.5 m long by 0.4 m wide by 0.2 m deep. Wall measures 1.3 m high above present ground surface with an additional 0.4 m buried under topsoil and made ground.	To east of car park
[013]	Disturbed topsoil/made ground associated with car park construction: Mid-dark reddish brown sandy silt with moderate stone and brick rubble inclusions and occasional small rounded stones. Contains modern metal and plastic rubbish. Varies considerably in depth between c. 0.1 and 0.5 m. Under topsoil [001] and car park bedding.	Visible under car park and central reservation and against edges to west and south-east
[014]	Fill of land drain [015]: Dark reddish brown slightly sandy silt with common small-medium (< 0.2 m) rounded and subrounded stone and occasional brick fragments	Central reservation
[015]	Late post-medieval or modern land drain: Linear south/north-aligned cut into [013]. In total c. 25 m long. Two sections of drain visible at base of excavations, the southern element 15 m long, 0.5 m wide and 0.3 m deep, the northern element c.5 m long, 0.9 m wide and 0.2 m deep.	Central reservation

	Contained fill [014].	
[016]	Made ground. Same as [018]: Light reddish brown and light grey gritty silt with common gravel and irregular stone inclusions. Up to 0.4 m+ deep. Under [013] and over [008]	Centre and north of site
[017]	Organic silt deposit near loch side. Basal element of [008]. Perhaps same as [019]: Dark reddish brown silt with occasional small irregular stones. 0.1 m+ deep. Under [008]	Near base of manhole and Filter Trench to north-west of car park
[018]	Made ground. Same as [016]: Light reddish grey/brown gritty silt with common irregular small-medium stones and rare CBM inclusions. Under Topsoil [001] and over silt [019]. 0.35 m+ deep.	Near base of Filter Trench to north of car park
[019]	Organic silt deposit near loch side. Basal element of [008]. Perhaps the same as [020]: Mid-dark reddish brown organic silt with common wood inclusions. Under made ground [018] and compact topsoil [008]. 0.2m + deep.	North of car park and south of loch side
[020]	Organic silt deposit at loch side. May be a lower element of [008]: Dark grey silt with lenses of light reddish brown sandy silt and common dark organic matter and moderate gravel inclusions. Seen in spoil from depth of between c. 2.0 and 2.8 m from flooded First Defence pit	Near base of First Defence pit
[021]	Subsoil?: Light reddish brown sand, visible as spoil brought up from depth of 2.8 m+ below ground surface	Base of First Defence pit

APPENDIX 2: Sample Register

Context No.	Area	Quantity (litres)
[008]	West	10

APPENDIX 3: Drawing Register

Drawing No.	Area	Feature No.	Details	Scale
1	West	[007]	Plan of demolished wall fragment [007]	1:20

APPENDIX 4: Finds Register

Find No.	Description	Context No.
1	Animal Bone	[001]
2	CBM – pipe fragments	[001]
3	CBM – Brick	[001]
4	Post-medieval pottery	[001]
5	Post-medieval pottery	[001], vicinity of [007]
6	Clay pipe	[001], vicinity of [007]
7	CBM – Brick	[014]
8	Post-medieval pottery	[013]
9	Post-medieval pottery	[008]
10	Wood – fence post?	[008]

11	Wood – fence fragments	[013]
12	Post-medieval pottery	[001]
13	Clay pipe	[001]
14	Wood – base of fence post	[008]
15	CBM – Brick and tile	[018]
16	Clay pipe	[019]

APPENDIX 5: Photographic Record

Digital Film 1

Frame	Description	From
1-3	Pre-excavation view of site	SE
4-6	Pre-excavation view of site	NW
7-8	Tree root removal, working shots	W
9	Removal of tree roots in west of site	N
10	Removal of tree roots in centre of site	N
11	Removal of lamp post in north of site	S
12	Modern ceramic drain and removal of lamp post in north of car park	S
13	Removal of kerb stones from central reservation	S
14-15	Modern cobble line to north of car park	N
16	Removal of kerb stones from west of site	N
17	Central reservation following removal of tree root spoil	N
18-19	View of central reservation following removal of tree root spoil	S
20	Central reservation, working shot showing modern service	S
21	North end of central reservation following removal of tree root spoil	N
22	Demolished wall fragment [007]	SE
23-24	Demolished wall fragment [007]	NE
25	Test pit in south-west of site	S
26	Test pit in north-west of site	S
27	Test pit in north of central reservation	S
28	Demolished wall fragment [007]	W
29	Demolished wall fragment [007] showing disturbance and roots to north and south	W
30	Working shot	SW
31	Cut [011] for make-up [010] of modern surface	NW
32	Eastern wall of site [012] – north end	S
33	Eastern wall of site [012] – centre	S
34	Wall [012] on eastern edge of site – detail	SW
35	Area of deep excavation in south-west of site	SW
36	Area of deep excavation in south-west of site	SE
37	South end of western area stripped to 0.45 m lower than tarmac surface, showing modern ceramic drain	S
38	Western area stripped to 0.45 m lower than tarmac surface	S
39	View showing tarmac removed from north-east of site	S
40	North-west corner of western area, post-excavation	S
41-42	Central reservation stripped to 0.45 m lower than tarmac surface, showing land drain [015]	S

43	Slot through land drain [015]	S
44	Central reservation near end of stripping to 0.45 m depth	S
45-46	West face of wall [012] on eastern edge of site – detail	SW
47	North end of central reservation stripped to 0.45 m depth	SE

Digital Film 2

Frame	Description	From
1	Slot through drain [015]	S
2	View showing tarmac removed from north-east of site	E
3	South end of central reservation stripped to 0.45 m lower than tarmac surface	NE
4	Scrub cleared from area north of car park	W
5	Linlithgow Palace	W
6	Drainage gully pit in centre of central reservation	SE
7	Drainage gully pit in north of central reservation	E
8	Drainage gully pit in north of central reservation - flooded	E
9	Existing surface water sewer pipe to north-west of car park	NW
10	Excavation of drainage/sewer run in centre of central reservation	E
11	North-eastern drainage gully pit in north-east of car park	SW
12	South-eastern drainage gully pit in east of car park, showing remains of possible wooden fence material (Find No. 10)	E
13	South-eastern drainage gully pit in east of car park, showing remains of possible wooden fence material (Find No. 10)	E
14	South-eastern drainage/sewer run towards Surface Water manhole SW3, showing rubble/possible land drain	E
15-16	Southern drainage/sewer run towards Surface Water manhole SW3	SW
17	Excavation of south/north-aligned drainage/sewer run from Surface Water manhole SW3 towards Surface Water manhole SW2	S
18	South/north-aligned drainage/sewer run towards Surface Water manhole SW2, showing made ground [016]	SW
19	Central drainage gully pit in east of car park, showing remains of possible wooden fence material (Find No. 11)	S
20	Central drainage gully pit in east of car park, showing remains of possible wooden fence material (Find No. 11)	W
21	Drainage/sewer run from north-east of car park towards Surface Water manhole SW2	E
22	SE/NW-aligned drainage/sewer run from central drainage gully pit in east of car park	SE
23	Drainage/sewer run from north-east of car park towards Surface Water manhole SW2	NE
24	Area of Surface Water manhole SW2 - flooded	S
25-26	Made ground [016] in north-east-facing section to north of Surface Water manhole SW2	NE
27	Existing concrete pipe to north-west of Filter Trench	W
28	Filter Trench area, showing machine tracking	NW
29-31	Filter Trench during excavation	NW
32	South-east end of Filter Trench – flooded	W
33	Filter Trench near end of excavation	NW

34	Filter Trench – post-excavation	SE
35	Filter Trench – infilled	NW
36	Manhole area to south-east of Filter Trench	E
37	Post-excavation view of First Defence pit – flooded	E
38	Post-excavation view of First Defence pit – flooded	N
39	Lighting cable trench to west of car park	N
40	East-facing section of western lighting cable trench	E
41	North-eastern lighting cable trench area	E
42	Post-excavation view of north-eastern lighting cable trench	E

Digital Film 3

Frame	Description	From
1	Registration shots	N
2	General shots of wall [2004]	S
3-4	General shots of St John's road trench	N
5	Elevations of wall [2004]	W
6	Wall [2006] elevations	S
7	St John's Road WB progress shot	W

APPENDIX 6: *Discovery and Excavation in Scotland* Report

LOCAL AUTHORITY:	West Lothian
PROJECT TITLE/SITE NAME	St Ninian's Way, Linlithgow
PROJECT CODE:	22673
PARISH:	Linlithgow
NAME OF CONTRIBUTOR:	Mike Roy
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S)	NS97NE 255
SITE/MONUMENT TYPE(S):	Buried topsoil/garden soil
SIGNIFICANT FINDS:	Post-medieval pottery
NGR (2 letters, 6 figures)	NS 9973 7717
START DATE (this season)	17/02/2014
END DATE (this season)	12/03/2014
PREVIOUS WORK (incl. DES ref.)	None
MAIN DESCRIPTION: (May include information from other fields)	<p>This report contains the results of an archaeological Watching Brief on ground breaking works associated with the construction of an overspill car park on land adjacent to St Ninian's Way, Linlithgow. The development site lies to the immediate west of the medieval core of Linlithgow and south of the edge Linlithgow Loch, part of the Linlithgow Palace, Peel and Royal Park Scheduled Monument (Index No. 13099). It involved the monitoring of ground-breaking works associated with the removal of trees and car park surfaces; the stripping of topsoil; the cutting of gullies, trenches and manhole areas for drainage/sewerage features and the opening of trenches for lighting cables.</p> <p>The Watching Brief identified little of archaeological interest, with only occasional late post-medieval artefacts being recovered from topsoil/garden soil and made ground deposits. The only, tentative, evidence for the presence of former historic boundaries, took the form of rubble debris, including a large lump of <i>ex situ</i> former wall in the west of the site, and buried fence posts of 20th century date. The creation of the existing car park in the later 20th century clearly involved substantial disturbance of the area, with the removal of these former boundaries.</p>
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	West Lothian Council
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

www.aocarchaeology.com