GUARD ARCHAEOLOGY





West Calder High School Archaeological Watching Brief Project 3792



West Calder High School Archaeological Watching Brief

Date:

On behalf of:

NGR:

NT 03867 64330 (centred)

Project Number:

3792

Report by:

Beth Spence

Illustrations:

Fiona Jackson

Project Manager:

John Atkinson

This document has been prepared in accordance with GUARD Archaeology Limited standard operating procedures.

25/02/2014

GUARD Archaeology Limited 52 Elderpark Workspace 100 Elderpark Street Glasgow G51 3TR

Tel: 0141 445 8800 Fax: 0141 445 3222

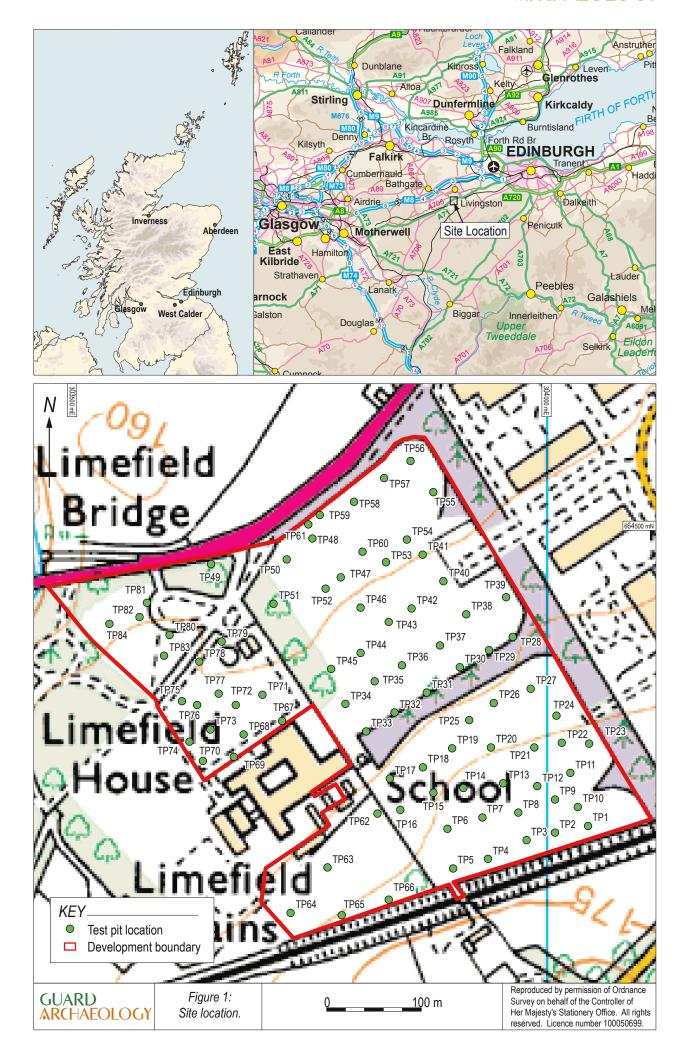
email: info@guard-archaeology.co.uk





Contents

Executive Summary	5
Introduction	5
Site Location, Topography and Geology	5
Archaeological Background	5
Aims and Objectives	5
Methodology	6
Results	6
Discussion	6
Recommendations	7
Acknowledgements	7
Appendices	9
Appendix A: Sources consulted	9
Appendix B: Test pit details	9
Appendix C: List of photographs	20
Appendix D: Discovery and Excavation in Scotland entry	26
List of Figures	
Figure 1: Site and test pit locations	4
List of Plates	
Plate 1: Test pit 33 at subsoil	6
Plate 2: North west facing section of test pit 2	6





Executive Summary

1.1 GUARD Archaeology Limited were commissioned by Mason Evans Partnership to undertake an archaeological watching brief during site investigation works on a proposed development site at West Calder High School, West Lothian. This work was undertaken between 4th - 12th February 2014 and revealed no features of archaeological significance.

Introduction

2.1 This report sets out the results of an archaeological watching brief undertaken by GUARD Archaeology, on behalf of Mason Evans Partnership on a site proposed for development at West Calder High School, West Lothian. During the course of the watching brief no features of archaeological significance were noted. GUARD Archaeology undertook this programme of work between 4th - 12th February 2014.

Site Location, Topography and Geology

- 3.1 The proposed development location lies to the south-east of Polbeth, West Lothian (NGR NT 03867 64330) and covers approximately 16 ha.
- 3.2 The site is bounded by a railway to the south, an industrial estate to the east, the A71 road to the north and the existing West Calder High School, including playing fields, to the west. The current land use of the two enclosed fields on the eastern side of the Site and the single field at the south-west of the Site is agricultural. The north-western portion of the proposed development has seen some development in the form of access roads for West Calder High School, although historical woodland occupies the extreme north-east of the Site. (Rennie, 2014; Figure 1).
- 3.3 The underlying drift geology consists of Till, Devensian Diamicton, while the solid geology consists of Dunnet Sandstone (British Geological Survey, 1:50,000 Geology of Britain Viewer).

Archaeological Background

4.1 A review of desk-based sources undertaken in advance of the watching brief revealed a total of twelve known cultural heritage sites within a kilometre of the centre of the proposed development (Rennie, 2014). Three of these sites are located within the boundary of the development site, all of which are areas of historical tree planting. Sites recorded within the study area included the estate and existing country house at Limefield, visible on Roy's 1747-55 Military Map of Scotland, as well as several farmsteads dating from the 18th/19th centuries and the tree planting visible from the first Edition Ordnance Survey (OS) map of 1853. In addition, prehistoric activity in the area is indicated by the discovery of a chert arrowhead at Limefield House and a series of cists uncovered at Chapelhall, less than 1 km from the Site, and at Harburnhead. Other prehistoric artefacts have been uncovered within the parish, and a Roman fort lies several kilometres south of the proposed development (see Rennie, 2014 for further detail)

Aims and Objectives

- 5.1 The general aim of the watching brief was to identify any archaeological features encountered and record them fully. The specific objectives were:
 - Establish the presence or absence of any archaeological remains within the development area,
 - Determine the character, extent and significance of any archaeological deposits encountered,



• Fully excavate and salvage any information possible from any significant features encountered.

Methodology

- 6.1 Topsoil was stripped using a mechanical excavator, fitted with a flat-bladed ditching bucket, under close archaeological supervision. The topsoil was removed in spits to the surface of the subsoil or the first significant archaeological horizon. All on-site recording, written, drawn and photographic, was to the standards normally pertaining in archaeological fieldwork. Test pits were surveyed to a ten figure National Grid reference by GPS so that they could be accurately placed.
- 6.2 Conditions for the watching brief were cold and frequently wet.

Results







Plate 2: North west facing section of test pit 2.

- 7.1 A total of 84 pits measuring around 2m by 0.60m covering c.100.8 sq m were stripped of topsoil to reveal a firm clay or sandy-clay upper subsoil, mostly light orange-beige-grey, with stone, shale, and dark mineral inclusions. Over the majority of the area topsoil deposits were between 0.30m to 0.40m thick, and consisted of a mid-dark grey brown silt or silty-loam. Areas of disturbed ground with built up made ground were identified in the south-east field where a thick band of modern material most likely connected to the construction of the adjacent industrial estate or road has been deposited creating a steep slope in the land, and also to the north of West Calder High School, where the ground has been landscaped at the school playing field and the road and roundabout.
- 7.2 During the course of the watching brief no features of archaeological significance were encountered.

Discussion

- 8.1 The watching brief identified no features which could be related to the use of the site, either connected to recent or historical agriculture, or any possible previous medieval, Roman or prehistoric activity which may be indicated by the desk-based research.
- 8.2 However it should be noted that the nature of the test pitting involved in these site investigation works provides only keyhole insight into the archaeological potential of the area, as test pits such as these target depth rather than topsoil stripping across a broader area of the natural subsoil in which it is likely that any archaeological remains would be visible.



Recommendations

- 9.1 The watching brief work encountered no archaeologically sensitive deposits or features within the development area. However considering the archaeological potential suggested by the desk-based research and given the targeted nature of the site investigation works and their limited potential to encounter any archaeology across the relatively small surface area they cover, it is likely that further intrusive investigation would be required to more fully establish the presence or absence or archaeology across the area.
- 9.2 GUARD Archaeology would stress that these recommendations are intended for guidance only. Final decisions on the nature and extent of any future archaeological work rest with the West of Scotland Archaeology Service and the planning authority.

Acknowledgements

10.1 GUARD Archaeology would like to thank Mason Evans Partnership for their assistance. Technical support was from Aileen Maule, John Kiely and Jen Cochrane. The illustrations were produced by Fiona Jackson. The report was desk top published by Gillian McSwan The project was managed for GUARD Archaeology Limited by John Atkinson.



West Calder High School Archaeological Desk-based Assessment

Section 2: Appendices



www.guard-archaeology.co.uk



Appendices

Appendix A: Sources consulted

Reports:

Rennie, C, 2014, West Calder High School: Archaeological Desk-based Assessment, Guard Archaeology Ltd, Glasgow

Internet Sources:

British Geological Survey, Geology of Britain Viewer; http://mapapps.bgs.ac.uk/geologyofbritain/home.html, last accessed 14th February 2014

Royal Commission on the Ancient and Historical Monuments of Scotland, Canmore database; http://www.rcahms.gov.uk/canmore.html, last accessed 14th February 2014

Appendix B: Test pit details

Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
1	-	0.60	Loose- moderately compact mid grey clay loam, with occasional stones/roots, 0.29m	-	-	Very compact orange-yellow-beige clay with occasional stones/dark mineral/shale material. Over underlying blue-grey clay.	NT 03959 64181
2	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.29m	-	-	Very compact orange-yellow-grey clay with occasional stones/dark mineral flecks. Over underlying bluegrey clay.	NT 03922 64169
3	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.30m	-	-	Mottled orange- yellow-grey clay, very compact, with occasional stones/dark mineral flecks. Over underlying blue-grey clay.	NT 03894 64166, 1x ceramic drain
4	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.31m	-	-	Very compact light brown grey clay. Over underlying blue grey clay	NT 03857 64157, 1x ceramic drain
5	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.33m	-	-	Very compact brown-beige- orange clay, with occasional stones/ dark mineral flecks. Over underlying brown- grey clay.	NT 03820 64147, 1x ceramic drain
6	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.33m	-	-	Very compact mottled grey- orange clay, with occasional stones/ coal.	NT 03814 64189



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
7	-	0.60	Loose- moderately compact mid grey brown clay loam, with occasional stones, roots, 0.30m	-	-	Very compact mottled grey orange, with occasional stones.	NT 03851 64201
8	-	0.60	Loose mid brown grey clay loam, with occasional stones/roots, 0.32m	-	-	Very compact mottled brown- grey-beige clay, with occasional stones. Over underlying brown/ blue-grey clay with shale.	NT 03889 64206
9	-	0.60	Loose claggy mid brown grey loam, with occasional stones/roots, 0.31m	-	-	Very compact brown-grey clay, with occasional stones/shale. Over underlying blue- grey clay gravel.	NT 03923 64202
10	-	0.60	Loose- moderately compact mid brown grey loam with occasional stones/roots, 0.27m	-	-	Very compact light grey clay with stones/dark mineral flecks. Over underlying orange brown mottled clay.	NT 03952 64212
11	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.35m	-	-	Very compact mottled grey orange brown clay with occasional dark mineral flecks/stones/ shale. Over underlying bluegrey clay.	NT 03944 64248, 1x ceramic drain
12	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.30m	-	-	Very compact mottled grey brown beige clay, with occasional stones/dark minerals. Over blue-grey clay with stones/dark minerals.	NT03909 64234, 2x ceramic drains
13	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.35m	-	-	Very compact beige orange brown clay, with occasional stones/ dark minerals.	NT 03873 64237, 2x ceramic drains
14	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.34m	-	-	Very compact mottled grey brown beige clay, with occasional stones/dark mineral flecks. Over underlying brown/blue-grey clay with stones/dark minerals.	NT 03831 64232, 1x rubble drain



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
15	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.28m	-	-	Very compact mottled light beige grey orange clay, with occasional stones/dark minerals/coal. Over brown grey/blue grey clay with stones/dark minerals.	NT 03799 64227, 1x rubble drain
16	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots	-	-	Very mottled beige orange grey clay, with occasional stones/dark mineral flecks. Over underlying blue-grey clay with stones/dark minerals.	NT 03764 64209
17	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.32m	-	-	Very compact mottled beige grey yellow clay, with occasional stones/dark mineral flecks. Over underlying blue-grey clay with stones/dark mineral chunks.	NT 03753 04242, 1x ceramic drain
18	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.32m	-	-	Very compact mottled beige grey yellow clay, with occasional stones/dark mineral flecks. Over underlying brown grey/blue grey clay.	NT 03788 64254
19	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.28m	-	-	Very compact mottled beige grey brown clay with occasional stones/dark coal and mineral flecks. Over underlying brown-grey clay/blue grey clay with stones/dark mineral chunks.	NT 03819 64274, 1x ceramic field drain
20	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.27m	-	-	Very compact brown beige orange clay, with occasional stones/ dark mineral flecks. Over underlying brown/ blue grey clay with stones.	NT 03860 64275, 1x tree planting pit (tree just removed prior to excavation0, 1x ceramic drain, at 0.95m was a band of grey clay which could be a former topsoil and indicate disturbance.



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
21	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.35-0.40m	Moderate-very compact mottled brown grey silt-clay with stones/gravel, 0.45-0.50m. Made ground containing wood, plastic, CBM etc – recent.	-	Very compact mottled brown grey yellow clay, with occasional stones/dark mineral flecks.	NT 03906 64275
22	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.35-0.40m	Very compact brown-grey-blue clay silt with very frequent stones, rubble, wood etc. Rubble filled made layer with fresh wood, brick, tarmac.	-	Very compact brown grey orange clay with occasional stones/ dark minerals. First undisturbed natural level.	NT 03935 64280, 1.6m of disturbed ground, appears built up over natural, 1x ceramic drain at 2m depth below built ground.
23	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.28m	Moderate-very compact brown grey mottled clay silt with occasional stones, CBM fragments etc. Thinner band of made ground, 0.20m	Moderate-very compact brown blue grey silt clay with occasional stones. Likely former topsoil, 0.18m.	Very compact mottled brown beige clay, with occasional stones/dark mineral flecks. Undisturbed subsoil below former topsoil.	NT 03964 64279, made ground to 0.50m depth.
24	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.15m	Moderately compact blue grey brown silt clay gravel rubble, with brick fragments/ stones/ rubble etc. Made ground containing modern material, c. 2m	Possible thin layer up to 0.20m depth of former topsoil (too deep to see clearly)	Very compact beige brown orange clay with occasional stones/ dark mineral flecks, at 2.2m depth.	NT 03041 64304, made ground for 2-2.20m on to natural subsoil.
25	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.25m	Moderately compact brown grey blue gravel silt clay rubble with modern material, 0.15-0.25m. Thinner made ground deposit, further up slope.	-	Very compact orange beige brown clay, with occasional stones/ dark minerals. First undisturbed topsoil.	NT 03837 64304
26	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.25m	Moderately compact grey blue brown silt clay rubble gravel, with modern material. Made ground, 0.60m.	Moderately compact blue grey silt clay. Former topsoil below made ground, 0.10m	Very compact orange beige brown sand clay with occasional stones/mineral flecks. Natural subsoil below former topsoil, containing field drain.	NT 03863 64322, 1x ceramic drain



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
27	-	0.60	Loose- moderately compact mid brown grey loam, with occasional stones/roots, 0.15-0.25m	Moderately compact brown grey orange gravel silt clay rubble. Made ground, 0.20- 0.50m	Moderately compact blue grey silt sand clay, 0.10-0.20m. Former topsoil below made ground.	Very compact orange beige brown clay sand, with occasional stones/ dark mineral flecks, 0.85m. Undisturbed natural subsoil below former topsoil.	NT 03902 64337, 1x ceramic drain
28	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.25m	-	-	Very compact mottled beige brown grey sand clay with fairly frequent stones/dark mineral flecks. Over underlying blue grey light stony clay.	NT 03883 64392
29	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.34m	-	-	Very compact light beige orange mottled grey sand clay, with frequent stones/degraded stone/dark mineral flecks. Over mid grey clay and blue-grey sand clay.	NT 03858 64378
30	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.28m	-	-	Light orange beige mottled grey sand clay with stones/ dark mineral flecks/degraded stone. Over underlying bluegrey sand clay with stones and shale bedrock.	NT 03827 64360
31	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.32m	-	-	Very compact light orange beige mottled grey sand clay with stones/ dark mineral flecks. Over underlying light grey mottled sand clay/sandstone bedrock.	NT 03792 64333
32	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.38m	-	-	Very compact light grey beige orange clay/sand clay, with occasional small stones/dark mineral flecks. Over mid grey sand clay with stones.	NT 03758 64312



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
33	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.32m	-	-	Very compact light grey beige mottled orange clay, with occasional stones/dark mineral flecks. Over brown grey sand clay with stones/dark mineral chunks.	NT 03728 64292, 1x ceramic drain
34	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.32m	-	-	Very compact light grey beige clay/sand clay, with occasional stones/dark mineral flecks. Over grey sand clay/sandstone bedrock.	NT 03706 64321
35	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ roots, 0.33m	-	-	Very compact mottled grey brown sand clay, with stones/ degraded stone. Over brown clay and blue grey bedrock.	NT 03737 64345
36	-	0.60	Loose- moderately compact mid grey brown silt loam, with frequent small stones/ roots/ gravel.	-	-	Very compact mottled brown grey gravel clay sand, with frequent stones/dark mineral chunks. Over grey clay/degraded stone and dark shale bedrock.	NT 03766 64362
37	-	0.60	Loose- moderately compact mid grey brown silt loam, with frequent small stones/ roots/ gravel, 0.30m	-	-	Very compact mottled beige orange brown sand clay with stones/dark mineral flecks. Over shale bedrock.	NT 03806 64383
38	-	0.60	Loose- moderately compact mid- dark grey brown silt loam, with frequent stones/ roots, 0.31m	-	-	Very compact mottled orange beige brown sand clay with occasional stones/ shale. Over light grey sand clay and shale bedrock.	NT 03831 64409
39	-	0.60	Loose- moderately compact mid grey-brown silt loam, with frequent small stones/roots/ gravel, 0.34m	-	-	Very compact light mottled beige orange grey clay/ sand clay, with occasional stones/ dark mineral flecks. Over blue- grey clay with stones.	NT 03876 64434



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
40	-	0.60	Loose- moderately compact grey brown silt loam, with frequent small stones/ gravel/roots, 0.29m	-	-	Very compact mottled light orange-beige-grey sand clay, with occasional stones/degraded stone. Over mid grey blue clay sand with stones.	NT 03806 64438
41	-	0.60	Loose- moderately compact mid- dark grey brown silt loam, with frequent small stones, 0.30m	-	-	Very compact light beige brown orange clay, with occasional stones. Over darker clay (abandoned at 0.90m as waterlogged)	NT 03785 64472
42	-	0.60	Loose- moderately compact dark grey brown silt loam, with frequent small stones/roots, 0.33m	-	-	Very compact light orange beige grey sand clay with occasional stones/shale/dark mineral flecks. Over brown grey blue clay and shale bedrock.	NT 03776 64422
43	-	0.60	Loose- moderately compact dark grey brown silt loam, with frequent small stones/roots, 0.30m	-	-	Very compact beige yellow grey sand clay with occasional stones/ degraded stones. Over grey brown/ blue clay/shale.	NT 03754 64400, 1x ceramic drain
44	-	0.60	Loose- moderately compact dark grey brown silt loam, with frequent small stones/roots, 0.29m	-	-	Very compact mottled beige orange light brown sand clay, with occasional stones. Over blue clay with shale.	NT 03722 64375, 1x rubble drain
45	-	0.60	Loose- moderately compact brown grey silt loam, with frequent small stones/ roots, 0.28m	-	-	Very compact light orange beige grey sand clay, with occasional stones, degraded stone. Over brown grey/ grey sand clay with stone.	NT 03691 64358, 1x ceramic drain
46	-	0.60	Loose- moderately compact dark grey brown loam, with frequent small stones/ roots, 0.26m	-	-	Very compact brown orange grey clay, with occasional stones. Over grey clay.	NT 03722 64423, 1x ceramic drain
47	-	0.60	Loose- moderately compact mid- dark brown grey loam, with frequent small stones/roots, 0.32m	-	-	Very compact mid-light grey beige orange clay, with occasional- frequent stones/ shale. Over blue- grey clay with shale bedrock.	NT 03701 64455



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
48	-	0.60	Loose- moderately compact mid- dark grey brown silt loam, with frequent small stones/roots, 0.29m	-	-	Very compact light beige orange brown sand clay, with occasional stones/dark mineral flecks. Over brown/bluegrey clay with stones/shale.	NT 03671 64496
49	-	0.60	Loose- moderately compact dark brown grey loam, with frequent small stones/ roots, 0.34m (waterlogged)	-	-	Very compact light mottled grey beige clay, with occasional stones. Over brown/blue- grey clay. Very waterlogged.	NT 03647 64485, 1x rubble drain
50	-	0.60	Loose- moderately compact mid- dark brown grey loam, with frequent small stones/roots, 0.30m	-	-	Very compact light-orange-beige clay with occasional stones/dark shale. Over brown/blue grey clay with stones/shale.	NT 03644 64474, 1x ceramic drain
51	-	0.60	Loose- moderately compact mid- dark brown grey loam, with frequent small stones/roots, 0.29m	-	-	Very compact light orange beige clay, with occasional stones/shale. Over blue grey clay with sandstone.	NT 03630 64427, 1x ceramic drain
52	-	0.60	Moderately compact mid- dark brown grey silt loam, with frequent small stones/roots, 0.28m	-	-	Very light brown beige orange sand clay, with occasional stones/ degraded stone. Over brown/blue grey clay with shale/stones.	NT 03685 64443
53	-	0.60	Loose dark grey brown silt loam, with frequent small stones/ roots, 0.28m	-	-	Very compact light mottled orange grey sand clay, with frequent stone/degraded stone/dark minerals. Over brown/grey blue clay with stones and shale bedrock.	NT 03749 64471
54	-	0.60	Loose dark grey brown silt loam with frequent small stones/ roots, 0.35m	-	-	Very compact light mottled orange brown sand clay, with occasional stones/dark minerals. Over blue grey clay with stone/shale.	NT 03771 64495, 1x ceramic drain
55	-	0.60	Loose- moderately compact dark grey brown silt loam, with frequent small stones/roots, 0.34m	-	-	Very compact light grey mottled orange clay sand with occasional mixed stones/ shale. Over grey clay sand	.NT 03799 64545



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
56	-	0.60	Loose dark rich grey brown silt with frequent small stones/ roots, 0.38m	-	-	Very compact mottled grey brown sand gravel clay with frequent mixed stones. Over darker brown stony gravel.	NT 03775 64578
57	-	0.60	Loose dark grey brown silt, with frequent small stones/roots, 0.37m	-	-	Very compact light orange brown clay sand, with quite frequent stones/ dark mineral flecks. Over mixed light grey clay with frequent mixed stones.	NT 03747 64560
58	-	0.60	Loose dark grey brown silt, with frequent small stones/roots, 0.33m	-	-	Very light beige grey orange clay sand with occasional stones/ dark mineral flecks. Over grey- brown clay gravel/ blue grey shale clay.	NT 03715 64535
59	-	0.60	Loose dark grey brown silt, with frequent small stones/roots, 0.30m	-	-	Very compact light orange beige brown sand clay with occasional stones/degraded stone. Over brown sand clay/blue grey shale clay.	NT 03679 64521
60	-	0.60	Loose dark grey brown silt loam, with frequent small stones/ roots, 0.37m	-	-	Very compact light orange brown beige sand clay, with occasional stones/degraded stone/dark mineral chunks. Over brown/blue grey shale clay.	NT 03724 64482, 1x ceramic drain
61	-	0.60	Loose dark grey brown silt loam, with frequent small stones/ roots, 0.32m	-	-	Very compact light beige grey orange sand clay, with occasional stones/ dark mineral chunks. Over brown sand clay/ blue grey shale clay.	NT 03761 64516
62	-	0.60	Loose- moderately compact dark grey brown silt loam, with frequent small stones/roots, 0.40m	-	-	Very compact orange brown grey sand clay with occasional stones/dark mineral flecks. Over dark grey clay with stone/ shale.	NT 03740 64205, 2x intersecting ceramic drains.
63	-	0.60	Loose-moderate dark grey brown silt loam, with frequent small stones/roots.	-	-	Very compact light brown yellow grey sand clay, with occasional stones/ shale. Over brown grey clay with stones/shale.	NT 03687 64148, 1x ceramic drain



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
64	-	0.60	Loose dark grey brown loam, with frequent small stones/roots, 0.38m	-	-	Very compact yellow orange grey clay, with occasional stones/dark mineral flecks. Over brown/blue grey clay with stones/shale/dark minerals.	NT 03648 64100, 1x field drain
65	-	0.60	Loose dark grey brown silt, with frequent small stones/roots, 0.40m	-	-	Very compact light grey orange clay, with occasional stones/degraded stone. Over mid grey brown stony clay/blue grey clay.	NT 03703 64090
66	-	0.60	Loose-moderate dark grey brown loam, with frequent small stones/roots, 0.32m	-	-	Very compact orange brown beige clay, with occasional stones/ dark mineral flecks. Over grey brown clay/ blue grey clay with stones/dark mineral flecks.	NT 03752 64114
67	-	0.60	Loose dark grey brown silt loam with frequent small stones, red blaes, ashy material, 0.28m	Loose, mottled red/brown/ black blaes/ ashy material/gravel. Layer of made ground. 0.13- 0.20m	Very compact blue grey brown clay with small stones/ dark mineral flecks. May be redeposited levelling.	Lighter beige brown clay with stones/dark minerals. First undisturbed natural subsoil	NT 03639 64303, on playing field
68	-	0.60	Loose dark grey brown silt with small stones/ roots/blaes, 0.19m	Loose red black blaes/shale, 0.10m. Made layer.	Compact mid brown silt clay with occasional small stones. Possible redeposited or old topsoil.	Very compact light orange beige sand clay, occasional stones/shale. Over blue-grey clay.	NT 03613 64281, 1x ceramic drain, on playing field
69	-	0.60	Loose dark grey brown silt loam, with frequent small stones/ roots, 0.35m	-	-	Very compact orange yellow brown clay sand with occasional shale/stones/ degraded stone. Over grey gravel clay with stones.	NT 03588 64265, 1x ceramic drain, on playing field
70	-	0.60	Loose dark grey brown silt, with occasional stones/blaes/ roots, 0.35m	Very compact mid grey brown silt clay with occasional stones/dark mineral flecks. Possibly former topsoil.	-	Very compact light orange grey yellow sand clay, with occasional stones/dark mineral flecks. Over mid grey sand clay with stones.	NT 03561 64250, 1x ceramic drain, on playing field
71	-	0.60	Medium compaction mid brown silty clay, 0.20m	Medium-heavy compaction mottled orange brown grey clay with cobbles, 0.30m. Made ground.	Medium compaction dark brown silt with pebbles, 0.30m. Former topsoil.	From 0.8m	not surveyed



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
72	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.25m.	Mottled orange brown grey clay with cobbles, 0.35m. Made ground.	Medium compaction dark brown silt, 0.20m. Old topsoil.	Subsoil 0.40m, over heavy grey blue clay at 1.4m	NT 03590 64320, 1x field drain
73	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.22m	Heavily compact mottled orange brown grey clay with cobbles, 0.28m. Made ground.	-	Medium-heavily compact mottled orange grey clay with cobbles, 0.9m. Over blue grey clay with gravel from 1.4m.	NT 03563 64294
74	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.22m.	Medium-heavily compact mottled orange brown grey clay with cobbles, 0.38m. Redeposited.	Medium compaction grey brown silt, 0.23m. Former topsoil.	Heavily compacted mottled orange brown grey clay with cobbles, 0.82m. Over blue grey clay from 1.65m.	NT 03541 64281, 1x field drain
75	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.22m	Loose-medium compaction mid brown blaes and silty clay with bricks and cobbles, 0.30m. Made ground.	Medium-heavily compact blue grey gravel, 0.9m. Made ground.	Medium compaction mottled clay, 0.4m. Over grey blue clay from 1.8m	NT 03533 64324
76	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.30m	Medium-heavily compact mottled orange grey clay, 0.25m. Made ground.	Medium compaction grey silty clay, 0.45m. Former topsoil.	Heavily compacted mottled orange brown grey clay with cobbles, 0.6m. Over grey blue clay from 1.5m.	NT 03549 64320
77	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.10m	Medium-firmly compact mottled orange brown grey clay with boulders and cobbles, 0.40m. Made ground.	Medium grey silty clay, 0.15m. Former topsoil.	Firm mottled orange brown grey clay with cobbles, 0.75. Over grey blue clay, from 1.5m.	NT 03572 64332
78	-	0.60	Medium compaction mid brown silty clay with pebbles, 0.17m	Firm mid brown clay with cobbles, 0.33m. Made ground.	Firm grey brown silty clay, 0.20m. Old topsoil.	Firm mottled orange grey brown clay with cobbles from 0.7m. Over blue grey clay from 1.4m.	NT 03447 64365
79	-	0.60	Medium compaction grey silt, 0.17m	Loose red grey blaes/silt, black chunks, 0.35m. Made ground	-	Firm mottled orange brown grey clay with cobbles, 0.80m. Over firm grey blue clay from 1.5m	NT 03575 64387, pit situated on a roundabout
80	-	0.60	Loose-medium compaction grey brown silt with pebbles, 0.30m	Loose dark grey brown silty clay with pebbles, 0.30m. Older topsoil.	-	Firm mottled orange brown grey clay with cobbles, 0.60m. Over firm grey clay with boulders from 1.2m.	NT 03520 64394, on landscaped ground



Tp No	Length (m)	Width (m)	Topsoil	Intermediate 1	Intermediate 2	Subsoil	Details
81	-	0.60	Loose-medium compaction grey brown silty clay with roots/ pebbles, 0.60m	-	-	Firm mottled orange grey brown clay with cobbles, 0.4m. Over grey blue clay from 1m	NT 03496 64428
82	-	0.60	Loose grey brown silty clay with pebbles, 0.40m	Mid brown firm clay, 0.75m	-	Firm mottled orange brown grey clay with boulders/cobbles, 0.55m. Over grey clay from 1.7m	NT 03488 64413
83	-	0.60	Loose grey brown silty clay with pebbles, 0.27m	-	-	Medium compaction mottled orange brown grey clay with cobbles, 1.53m. Over firm grey blue clay with cobbles from 1.8m.	NT 03514 64372
84	-	0.60	Medium compaction grey clay, 0.30m. Wet.	-	-	Firm mottled orange brown grey clay with cobbles, 0.70m. Over firm grey blue clay with cobbles from 1.4m.	not surveyed

Appendix C: List of photographs

Frame	Area	Test Pit No.	Subject	Taken from
1	-	-	ID shot	-
2	Α	-	General pre ex Field A	Е
3	Α	TP1	NW facing section	NW
4	Α	TP2	Post ex at subsoil	NE
5	Α	TP2	NW facing section	NW
6	Α	TP3	Post ex at subsoil	NE
7	Α	TP3	NW facing section	NW
8	Α	TP4	Post ex at subsoil	NE
9	Α	TP4	Post ex at subsoil, with ceramic drain after extended	NE
10	А	TP4	NW facing section	NW
11	Α	TP5	Post ex at subsoil	NE
12	Α	TP6	Post ex at subsoil	E
13	Α	TP6	N facing section	N
14	Α	TP7	Post ex at subsoil	Е
15	Α	TP7	N facing section	N
16	Α	TP8	Post ex at subsoil	Е
17	Α	TP8	N facing section	N
18	Α	TP9	Post ex at subsoil	E
19	А	TP9	N facing section	N
20	Α	TP10	Post ex at subsoil	SE
21	Α	TP10	NE facing section	NE
22	Α	TP11	Post ex at subsoil	W
23	Α	TP11	N facing section	N
24	Α	TP12	TP 12 ID	-
25	Α	TP12	Post ex at subsoil	W



Frame	Area	Test Pit No.	Subject	Taken from
26	Α	TP12	S facing section	S
27	Α	TP13	TP 13 ID	-
28	А	TP13	Post ex at subsoil, with 2x drains	W
29	Α	TP13	S facing section	S
30	Α	TP14	TP 14 ID	-
31	А	TP14	Post ex at subsoil, with rubble drain	W
32	Α	TP14	N facing section	N
33	Α	TP15	TP 15 ID	-
34	Α	TP15	Post ex at subsoil	W
35	Α	TP15	S facing section	S
36	Α	TP16	TP 16 ID	-
37	Α	TP16	Post ex at subsoil	W
38	Α	TP16	S facing section	S
39	А	TP17	TP 17 ID	-
40	Α	TP17	Post ex at subsoil	W
41	Α	TP17	N facing section	N
42	Α	TP18	TP 18 ID	-
43	Α	TP18	Post ex at subsoil	NW
44	Α	TP18	SW facing section	SW

Frame	Area	Test Pit No.	Subject	Taken from
1	-	-	ID shot	-
2	Α	TP19	TP 19 ID	-
3	Α	TP19	Post ex at subsoil	N
4	Α	TP19	W facing section	W
5	Α	TP20	TP 20 ID	-
6	Α	TP20	Post ex at subsoil, with tree pit	N
7	Α	TP20	W facing section	W
8	Α	TP21	TP 21 ID	-
9	Α	TP21	TP21 – on made ground (21003)	N
10	Α	TP21	E facing section	Е
11	Α	TP21	W facing section	W
12	Α	TP21	Post ex at subsoil	NE
13	А	TP21	Post at full depth	N
14	Α	TP22	TP 22 ID	-
15	А	TP22	Tarmac lump in situ	N
16	Α	TP22	TP22 with tarmac	NE
17	Α	TP22	TP22 with tarmac	SE
18	Α	TP22	Brick rubble, wall fragment	-
19	Α	TP22	W facing section	W
20	Α	TP22	TP 22 at made ground	N
21	А	TP22	Post ex at subsoil, with ceramic drain	N
22	А	TP23	TP 23 ID	-
23	А	TP23	TP23 at made ground	Е
24	Α	TP23	Post ex at subsoil	Е
25	Α	TP23	N facing section	N
26	Α	TP24	TP 24 ID	-
27	А	TP24	TP24 at made ground	NW
28	А	TP24	SE facing section	SE
29	А	TP25	TP 25 ID	-
30	А	TP25	TP25 on made ground	N
31	А	TP25	E facing section	E
32	А	TP26	TP 26 ID	-
33	Α	TP26	TP 26 at made ground	N



Frame	Area	Test Pit No.	Subject	Taken from
34	Α	TP26	Post ex at subsoil, with ceramic drain	N
35	А	TP26	E facing section	E
36	Α	TP27	TP 27 ID	-
37	А	TP27	TP27 at former topsoil	N
38	А	TP27	E facing section	E
39	В	TP28	TP 28 ID	-
40	В	TP28	Post ex at subsoil	SE
41	В	TP28	NE facing section	NE
42	В	TP28	Post ex at full depth	SE
43	В	TP29	TP29 ID	-
44	В	TP29	Post ex at subsoil	SE
45	В	TP29	SW facing section	SW
46	В	TP29	Post ex at full depth	SE
47	В	TP30	TP 30 ID	-
48	В	TP30	Post ex at subsoil	SE
49	В	TP30	SW facing section	SW
50	В	TP30	Post ex at full depth	SE
51	В	TP31	TP31 ID	-
52	В	TP31	Post ex at subsoil	SE
53	В	TP31	NE facing section	NE
54	В	TP31	Post ex at full depth	SE
55	В	TP32	TP 32 ID	-
56	В	TP32	Post ex at subsoil	SE
57	В	TP32	SW facing section	SW
58	В	TP32	Post ex at full depth	SE
59	В	TP33	TP 33 ID	-
60	В	TP33	Post ex at subsoil	SE
61	В	TP33	Post ex at subsoil – after extended	SE
62	В	TP33	NE facing section	NE
63	В	TP33	TP 33 post ex	SE
64	В	TP34	TP 34 ID	-
65	В	TP34	Post ex at subsoil	SE
66	В	TP34	SW facing section	SW
67	В	TP34	Post ex at full depth	SE
68	В	TP35	TP 35 ID	-
69	В	TP35	Post ex at subsoil	SW
70	В	TP35	NW facing section	NW
71	В	TP35	Post ex at full depth	SW
72	В	TP36	TP 36 ID	-
73	В	TP36	Post ex at subsoil	SW
74	В	TP36	NW facing section	NW
75	В	TP36	Post ex at full depth	SW
76	В	TP37	TP 37 ID	-
77	В	TP37	Post ex at subsoil	SW
78	В	TP37	NW facing section	NW
79	В	TP37	Post ex at full depth	SW
80	В	TP38	TP 38 ID	-
81	В	TP38	Post ex at subsoil	SW
82	В	TP38	SE facing section	SE
83	В	TP38	Post ex at full depth	SW

Frame	Area	Test Pit No.	Subject	Taken from
1	-	-	ID shot	-
2	В	TP39	TP 39 ID	-



Frame	Area	Test Pit No.	Subject	Taken from
3	В	TP39	Post ex at subsoil	E
4	В	TP39	S facing section	S
5	В	TP40	TP 40 ID	-
6	В	TP40	Post ex at subsoil	SE
7	В	TP40	SW facing section	SW
8	В	TP40	Post ex at full depth	SE
9	В	TP41	TP 41 ID	-
10	В	TP41	Post ex at subsoil (abandoned at 0.9m as waterlogged)	SE
11	В	TP42	TP 42 ID	-
12	В	TP42	Post ex at subsoil	N
13	В	TP42	W facing section	W
14	В	TP42	Post ex at full depth	N
15	В	TP43	TP 43 ID	-
16	В	TP43	Post ex at subsoil	N
17	В	TP43	E facing section	E
18	В	TP43	Post ex at full depth	N
19	В	TP44	TP 44 ID	-
20	В	TP44	Post ex at subsoil	NE
21	В	TP44	SE facing section	SE
22	В	TP44	Post ex at full depth	NE
23	В	TP45	TP 45 ID	-
24	В	TP45	Post ex at subsoil	N
25	В	TP45	E facing section	Е
26	В	TP45	Post ex at full depth	N

File 4

Frame	Area	Test Pit No.	Subject	Taken from
1	-	-	ID shot	-
2	В	TP46	TP 46 ID	-
3	В	TP46	Post ex at subsoil (waterlogged)	NW
4	В	TP46	NE facing section	NE
5	В	TP47	TP 47 ID	-
6	В	TP47	Post ex at subsoil	S
7	В	TP47	W facing section	W
8	В	-	General of Field B	W
9	В	-	General of Field B	SW
10	В	TP48	TP48 ID	-
11	В	TP48	Post ex at subsoil	NE
12	В	TP48	SE facing section	SE
13	В	TP49	TP 49 ID	-
14	В	TP49	Post ex at subsoil	N
15	В	TP49	NW facing section	NW
16	В	TP50	TP 50 ID	-
17	В	TP50	Post ex at subsoil	N
18	В	TP50	E facing section	E
19	В	TP51	TP 51 ID	-
20	В	TP51	Post ex at subsoil	NW
21	В	TP51	NE facing section	NE
22	В	TP52	TP 52 ID	-
23	В	TP52	Post ex at subsoil	N
24	В	TP52	E facing section	E
25	В	TP53	TP 53 ID	-
26	В	TP53	Post ex at subsoil	N
27	В	TP53	W facing section	W



Frame	Area	Test Pit No.	Subject	Taken from
28	В	TP54	TP 54 ID	-
29	В	TP54	Post ex at subsoil	SW
30	В	TP54	NE facing section	NE
31	В	TP55	TP 55 ID	-
32	В	TP55	Post ex at subsoil	N
33	В	TP55	W facing section	W
34	В	TP56	TP 56 ID	-
35	В	TP56	Post ex at subsoil	W
36	В	TP56	N facing section	N
37	В	TP57	TP 57 ID	-
38	В	TP57	Post ex at subsoil	SW
39	В	TP57	NW facing section	NW
40	В	TP58	TP 58 ID	-
41	В	TP58	Post ex at subsoil	NE
42	В	TP58	SE facing section	SE
43	В	TP59	TP 59 ID	-
44	В	TP59	Post ex at subsoil	NE
45	В	TP59	SE facing section	SE
46	В	TP60	TP 60 ID	-
47	В	TP60	Post ex at subsoil	SW
48	В	TP60	NW facing section	NW
49	В	TP61	TP 61 ID	-
50	В	TP61	Post ex at subsoil	W
51	В	TP61	S facing section	S
52	С	-	General of Field C	N
53	С	TP62	TP 62 ID	-
54	С	-	Old plough bits in N corner	SE
55	С	-	Old plough bits in N corner	SW
56	С	TP62	Post ex at subsoil	NE
57	С	TP62	NW facing section	NW
58	С	TP63	TP 63 ID	-
59	С	TP63	Post ex at subsoil	NE
60	С	TP63	NW facing section	NW
61	С	TP63	NW facing section, post ex	NW
62	С	TP64	TP 64 ID	-
63	С	TP64	Post ex at subsoil	W
64	С	TP64	S facing section	S
65	С	TP65	TP 65 ID	-
66	С	TP65	Post ex at subsoil	E
67	С	TP65	N facing section	N
68	С	TP66	TP 66 ID	-
69	С	TP66	Post ex at subsoil	SE
-	С	TP66	NE facing section	NE

Frame	Area	Test Pit No.	Subject	Taken from
1	-	-	ID shot	-
2	D	TP67	TP 67 ID	-
3	D	TP67	TP 67 at base of made ground	SE
4	D	TP67	SW facing section, at made ground	SW
5	D	TP67	SW facing section, post ex	SW
6	D	TP68	TP 68 ID	-
7	D	TP68	TP68 – at blaes layer	SE
8	D	TP68	TP 68 at silt clay	SE



Frame	Area	Test Pit No.	Subject	Taken from
9	D	TP68	NE facing section	NE
10	D	TP69	TP 69 ID	-
11	D	TP69	Post ex at subsoil	SE
12	D	TP69	NE facing section	NE
13	D	TP70	TP 70 ID	-
14	D	TP70	Post ex at subsoil	SE
15	D	TP70	NE facing section	NE
16	D	TP71	Post ex	SE
17	D	TP71	SW facing section	SW
18	D	TP72	Post ex	SE
19	D	TP72	NE facing section	NE
20	D	TP73	Post ex	SE
21	D	TP73	SW facing section	SW
22	D	TP74	Post ex	SE
23	D	TP74	NE facing section	NE
24	D	TP75	Post ex	SE
25	D	TP75	SW facing section	SW
26	D	TP76	Post ex	S
27	D	TP76	W facing section	W
28	D	TP77	Post ex	S
29	D	TP77	E facing section	Е
30	D	TP78	Post ex	S
31	D	TP78	W facing section	W
32	Е	TP79	Post ex	SW
33	Е	TP79	NW facing section	NW
34	Е	TP80	Post ex	W
35	Е	TP80	S facing section	S
36	Е	TP81	Post ex	NW
37	Е	TP81	NE facing section	NE
38	Е	TP82	Post ex	N
39	Е	TP82	E facing section	Е
40	Е	TP83	Post ex	NW
41	Е	TP83	SW facing section	SW
42	Е	TP84	Post ex	W
43	Е	TP84	N facing section	N



Appendix D: Discovery and Excavation in Scotland entry

LOCAL AUTHORITY:	West Lothian Council
PROJECT TITLE/SITE NAME:	West Calder High School: Archaeological Watching Brief
PROJECT CODE:	3792
PARISH:	West Calder
NAME OF CONTRIBUTOR(S):	Beth Spence
NAME OF ORGANISATION:	Guard Archaeology Ltd
TYPE(S) OF PROJECT:	Archaeological Watching Brief
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 03867 64330
START DATE (this season)	4/2/14
END DATE (this season)	12/2/14
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was carried out during site investigation works on a site proposed for development around West Calder High School, West Lothian. A total of 84 pits measuring around 2m by 0.60m covering c.100.8 sq m were stripped of topsoil. No features of archaeological significance were noted. However a preceding desk based study carried out by Guard Archaeology Ltd suggests that the site may hold some archaeological potential. Sites recorded within the study area included the estate and existing country house at Limefield, visible on Roy's 1747-55 Military Map of Scotland, as well as several farmsteads dating from the 18th/19th centuries and the tree planting visible from the first Edition Ordnance Survey (OS) map of 1853. In addition, prehistoric activity in the area is indicated by the discovery of a chert arrowhead at Limefield House and a series of cists uncovered at Chapelhall, less than 1 km from the Site, and at Harburnhead. Other prehistoric artefacts have been uncovered within the parish, and a Roman fort lies several kilometres south of the proposed development
PROPOSED FUTURE WORK:	Likely further archaeological evaluation/monitoring works will be necessary.
SPONSOR OR FUNDING BODY:	Mason Evans Partnership
CAPTION(S) FOR ILLUSTRS:	
ADDRESS OF MAIN CONTRIBUTOR:	52 Elderpark Workspace, 100 Elderpark Street,
EMAIL ADDRESS:	John.atkinson@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	NMRS

GUARD Archaeology Limited 52 Elderpark Workspace 100 Elderpark Street Glasgow G51 3TR

> Tel: 0141 445 8800 Fax: 0141 445 3222

email: info@guard-archaeology.co.uk



www.guard-archaeology.co.uk