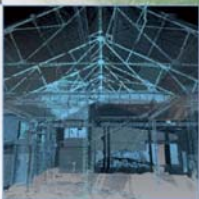


Alderstone Road West, Livingston: Evaluation & Watching Brief Data Structure Report

AOC 21709

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20th March 2013



Alderstone Road, Livingston

Evaluation & Watching Brief Data Structure Report

On Behalf of:	Lovell Partnerships Ltd., Parkway Court, 271 Springhill Parkway, Glasgow Business Park, Glasgow G69 6GA
National Grid Reference (NGR):	NT 0458 6691
AOC Project No:	21709
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Date of Fieldwork:	Evaluation: 2nd July – 9th July 2012 Watching brief: 25th September – 5th December 2012
Date of Report:	20th March 2013

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

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Abstract

This report represents the results of an archaeological evaluation and watching brief carried out by AOC Archaeology Group on land to the west of Alderstone Road, Livingstone prior to a residential development.

The archaeological works showed that the majority of the development area had been subjected to considerable recent dumping. The evaluation in the southern half of the site displayed a lack of any buried soils below the dumped material, indicating that it may have been stripped prior to this build up of modern made ground. The watching brief in the northern half of the site provided similar results where natural soils were revealed, however most of the ground breaking works did not reach the base of the made ground.

The vestigial remains of rig and furrow cultivation were found to exist in a single trench during the evaluation but no significant archaeological features or artefacts were revealed during the works.

1 INTRODUCTION

1.1 Background

- 1.1.1 AOC Archaeology Group was commissioned by Lovell Partnerships Ltd to undertake a programme of archaeological works on ground subject to a residential development. The archaeological works were designed to satisfy the requirements of the local planning authority, West Lothian Council, who are advised on cultural heritage issues by the West of Scotland Archaeological Service (WoSAS). WoSAS required a programme of archaeological works consisting of an intrusive evaluation in the southern half of the site prior to development and a watching brief during ground reduction works in the northern half. The work was conducted according to the terms of a *Written Scheme of Investigation* (AOC 2011), approved by WoSAS on behalf of West Lothian Council. The works were carried out in accord with *Scottish Planning Policy* (Scottish Government 2010) and *Planning & Archaeology 2/2011* (Scottish Government 2011) and the protocols set out in the West of Scotland Archaeology Service's 'Standard Conditions for Archaeological Fieldwork'.

1.2 Location

- 1.2.1 The proposed development area comprises a roughly triangular shaped parcel of land amounting to approximately 1.80 ha centred at NGR NT 0458 6691 (Figure 1) to the west of Alderstone Road and to the east and south of the River Almond. A residential development fronted in Kaims Grove lies to the south. The development site is currently un-cultivated open ground, previously used as a dumping area during past construction of the road.

1.3 Archaeological and Historical Background

- 1.3.1 There were no confirmed archaeological sites within the development area, however approximately half a kilometre to the south-west lies Graves Knowes. Here the *New Statistical Accounts* (NSA 1845) record four irregular mounds immediately opposite Livingston House, together with a number of cists in the vicinity. Mr Buchanan (Alderstone Mains), on whose ground they lay, stated that over 100 cists had been found. They were usually composed of seven or eight stones, hammer dressed, and arranged two on edge for each side, one at each end and one or two lain as covers. He further stated that in some of the cists, a portion of the bones was quite perfect. In others, the bodies from the abdomen downward had been burned and the ashes and remains of the body placed in the cist. An early survey by RCAHMS failed in identifying any 'tumuli' in the area (RCAHMS 1929; WoSASPIN 17983).
- 1.3.2 East of Graves Knowes and just to the south of the development area is Adam Brae (NGR: NT 0478 6670), which is described as an arable eminence consisting of a few small hillocks, which, despite having the appearance of barrows, are natural. (Presumably these are the mounds referred to by the NSA). Local informants stated that the cists allegedly found in them, actually came from a flat piece of ground near them (see NMRS NT06NW 9; Name Book 1852).
- 1.3.3 Three phases of trial work have been carried out by SUAT in advance of large scale developments on supposed cist burial grounds at Adam Brae (NMRS NT06NW 9) and Graves Knowes. Trial work was undertaken on the Wellmore Homes development site to the north-west of Graves Knowes where three trenches were excavated and recorded in an area believed to have formed part of the Graves Knowes cist cemetery. The trenches revealed ploughsoil with an average depth of 0.4 m, below which were glacial sands and gravels containing cobbles and boulders. Only one archaeological feature was identified, a hearth-like feature (formed by a flat setting of large stone slabs and cobbles) cut into natural sands and gravels. Associated with this feature was a disturbed rectangular sandstone slab which may have derived from a cist. The feature contained burnt sand

with charcoal, but no artefactual dating evidence. Much of the Wellmore Homes site had been affected by deep ploughing; however the hearth feature indicated that archaeological features could survive in the vicinity (Cachart, 1994).

- 1.3.4 The latest phase of trial work took place on the fields recently under cultivation at Adam Brae, Graves Knowes and a field to the north-east of Graves Knowes. These areas were believed to be the focus of the cist cemeteries. At Graves Knowes a further nine trenches were excavated, one of which produced the base of a medieval jug but nothing relating to cist burials was found. In the field adjacent to Graves Knowes eleven trial trenches were cut. On a knoll at the eastern end of the field below the ploughsoil and cut into the natural subsoil a rectangular feature was found and partially excavated. It was aligned north to south and measured 2 m by 0.7 m. The cut was approximately 0.08 m deep with vertical sides and a flat but even bottom. It was interpreted as the remains of a ploughed-out long cist (Cachart 1994).

2 OBJECTIVES

- 2.1 The objectives of the archaeological works were:
- i. to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area;
 - ii. to advise and implement an appropriate form of mitigation, such as excavation, post-excavation analyses and publication, given the infeasibility of preserving the archaeological material *in situ*, should significant archaeological remains be encountered.

3 METHOD

- 3.1 Borehole and geotechnical test-pitting had shown that the site has been augmented by the dumping of material to varying depths and extents across the site. These deposits are deepest in the northern portion making any evaluation in this area extremely problematic and as such the evaluation was limited to the southern portion (Figure 2). The evaluation was designed to consist of an 8% sample of the 0.7 ha southern portion amounting to 560 m² (total basal area). However on arrival at the site it was found that the area available for trenching was compromised by the presence of a high voltage cable which required a buffer zone of at least 5 m either side and also by a pond and an area of standing water. The waterlogged nature of the ground and its slope to the south also affected the area available for trenching. This resulted in only 500 m² being excavated. The trenches were of varying lengths and orientations (Appendix 1; Figure 2) and were excavated by means of a JCB type excavator fitted with a 2 m wide toothless ditching bucket. Excavation of the trenches was carried out under the direct supervision of an experienced field archaeologist.
- 3.2 The watching brief was undertaken during ground breaking works in the northern half of the development area. Two large mounds of modern dumped material had been removed from the northern half of site prior to development however there still remained a significant depth of dumped material covering the earlier ground surfaces. Most excavations for the development were not likely to impact below the made ground layers so only the excavations for the waste water pipe and a storm drain were monitored as part of the watching brief. The works were conducted using a tracked excavator utilising a bladed bucket which was under constant supervision from an experienced field archaeologist.

4 RESULTS

4.1 Evaluation

- 4.1.1 The evaluation was undertaken between the 2nd July 2012 and the 6th July 2012 in generally wet weather conditions despite which archaeological visibility remained good. The various data gathered from the evaluation is presented as a series of appendices

Appendix 1 contains trench summaries;

Appendix 2 contains the Photographic Registers;

Appendix 3 reproduces the *'Discovery and Excavation in Scotland'* entry.

- 4.1.2 Trenches 1 and 6 (Figure 2; Plate 1) situated on the southern edge of the site contained a topsoil consisting of moderately compact dark brown silty clay which varied in depth from between 0.6 to 1.10 m. This overlay a natural subsoil of brown boulder clay. All other trenches contained modern made ground which increased in depth from 0.7 m in the west to over 2 m towards the east (Plates 2 and 4). This modern deposit overlay a natural subsoil of grey clay.



Plate 1 - Trench 1 from south



Plate 2 - Trench 3 from south-east

- 4.1.3 Archaeological material was only found in Trench 4 (Figures 2 and 3; Plate 3) and consisted of rig and furrow cutting into the natural subsoil directly below modern made ground. This rig and furrow was aligned NNW to SSE and measured approximately 18 m from peak to peak (Figure 3). Due to the depth and stability of the trench all recording was taken at a distance. No unstratified artefacts were recovered.



Plate 3 - Trench 4 from south-west

4.2 Watching Brief

- 4.2.1 The watching brief was undertaken over 6 days between the 25th September 2012 and the 5th December 2012 in generally fair weather conditions making for good archaeological visibility.
- 4.2.2 The excavations of the sewage pipe trench which ran N-S through the centre of the site were taken to a depth of 3.5 m below the levelled ground surface (approximately 0.2m above Alderstone Road) and did not encounter natural subsoils.
- 4.2.3 The storm drain running N-S to the immediate west of Alderstone Road and parallel to it reached a depth of 2.8 m consisting of 2.4 m of made ground onto a mottled brown sandy boulder clay. Excavations only reached this depth in a 15.0 m stretch of the storm drain (see Figure 2) before rising back into the made ground layer.

5 CONCLUSION

- 5.1 The archaeological works undertaken show that the development area is archaeologically sterile apart from isolated rig and furrow in the south. The absence of any buried organic soils below the modern made ground indicates that these areas had been topsoil stripped in the past prior to the deposition of dumped modern soils.
- 5.2 No significant archaeological features or artefacts were recovered throughout the archaeological works.

6 REFERENCES

AOC 2011 Alderstone Road West, Livingston, West Lothian: Written Scheme of Investigation (revised) AOC Archaeology Group unpublished project design.

Cachart, R 1994 'Graves Knowes / Adam Brae, Livingston: Cist Burials', Discovery and Excavation in Scotland, 1994, 49.

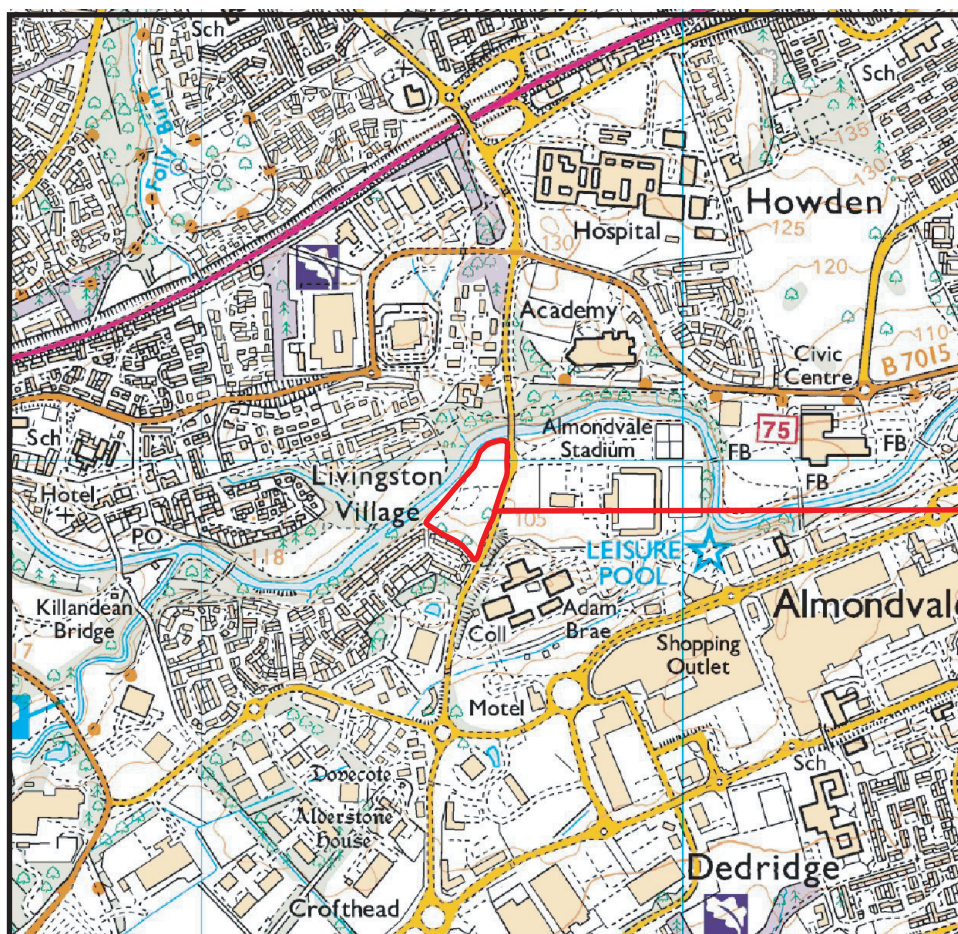
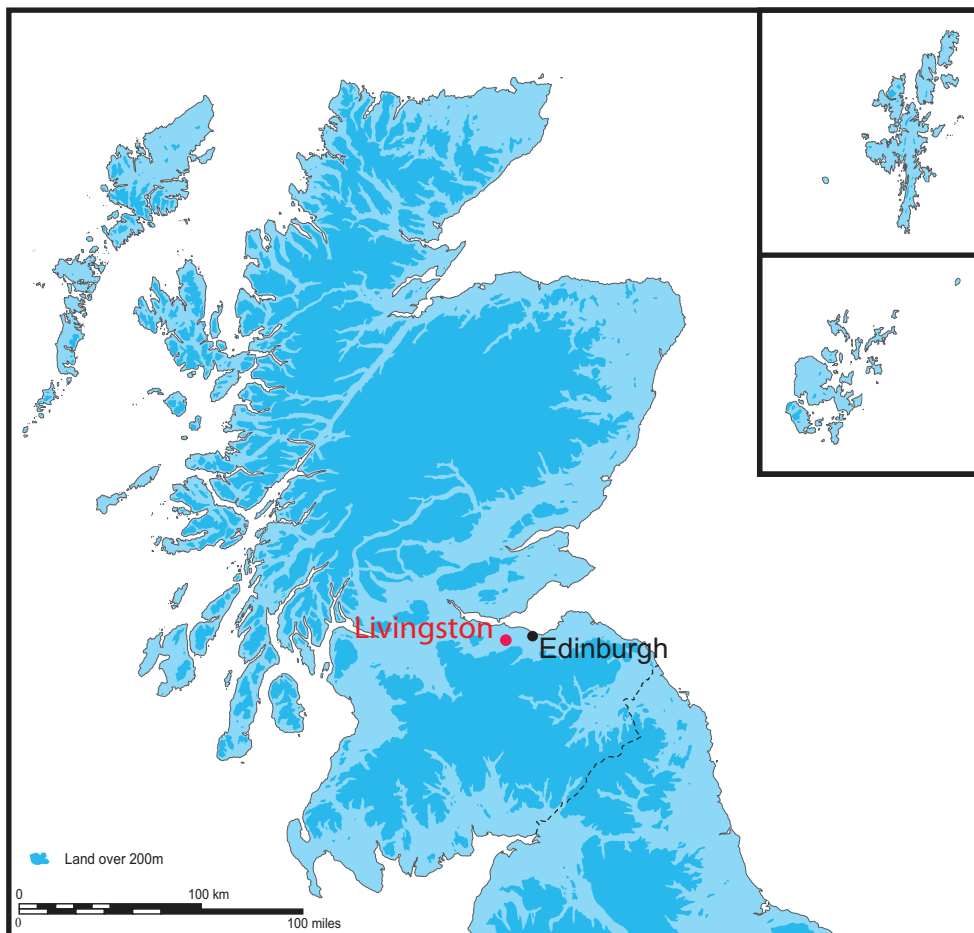
Name Book 1852 Name Book of the Ordnance Survey.

NSA 1845 The new statistical account of Scotland by the ministers of the respective parishes under the superintendence of a committee of the society for the benefit of the sons and daughters of the clergy. Edinburgh.

RCAHMS 1929 The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland. Tenth report with inventory of monuments and constructions in the counties of Midlothian and West Lothian. Edinburgh

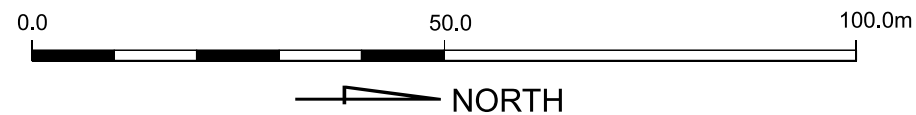
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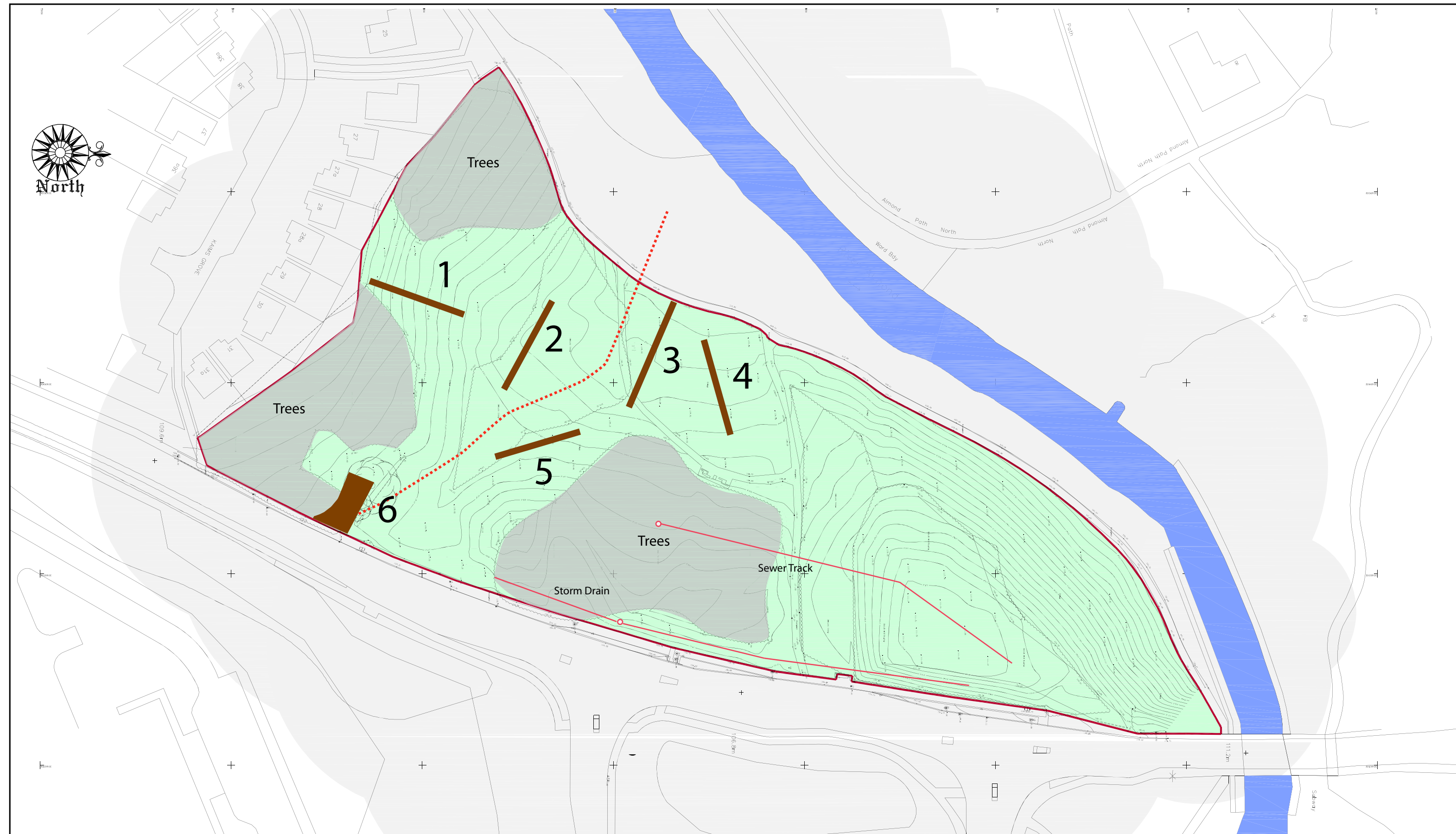
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Figure 1: Location of the site at Alderstone Road West



- Trenches
- Electrical Cable
- Watching brief Areas

Figure 2: Trench Layout and Watching Brief Areas



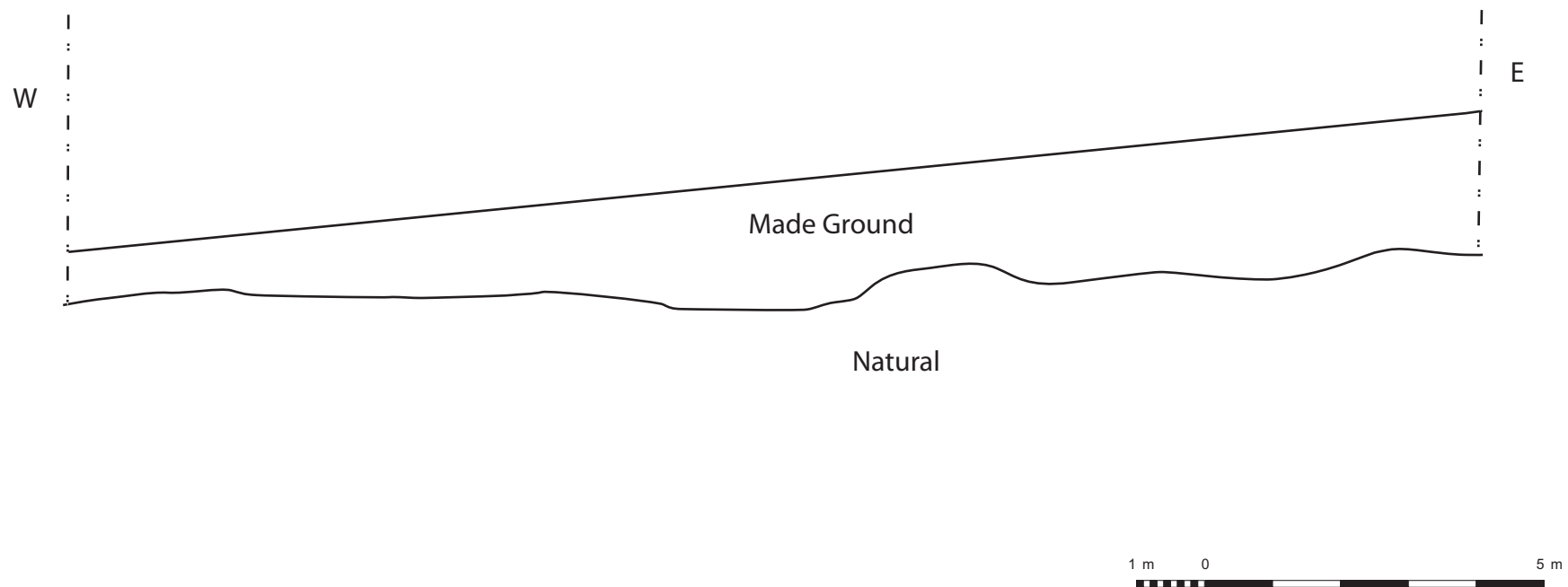


Figure 3: Schematic North Facing Section of Rig and Furrow from Trench 4

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Appendices

APPENDIX 1: TRENCH SUMMARIES

Trench 1

<i>Dimensions:</i>	20 m by 2 m
<i>Orientation:</i>	NNE – SSW
<i>Topsoil depth:</i>	0.8 m in south; 1.10 m in north
<i>Excavation depth:</i>	0.8 m in south; 1.10 m in north
<i>Modern Features:</i>	None
<i>Significant Features:</i>	None
<i>Finds:</i>	None
<i>Natural subsoil</i>	Mottled brown/grey boulder clay

Trench 2

<i>Dimensions:</i>	28 m by 2 m
<i>Orientation:</i>	NW – SE
<i>Topsoil depth:</i>	Modern made ground - 1.0 m in north-west; 1.8 m in south-east
<i>Excavation depth:</i>	1.0 m in north-west; 1.8 m in south-east
<i>Modern Features:</i>	None
<i>Significant Features:</i>	None
<i>Finds:</i>	None
<i>Natural subsoil</i>	Grey clay

Trench 3

<i>Dimensions:</i>	30 m by 2 m
<i>Orientation:</i>	NW – SE
<i>Topsoil depth:</i>	Modern made ground - 0.7 m in north-west; 2.5 m in south-east
<i>Excavation depth:</i>	0.7 m in north-west 2.5 m in south-east
<i>Modern Features:</i>	None
<i>Significant Features:</i>	None
<i>Finds:</i>	None
<i>Natural subsoil</i>	Grey clay

Trench 4

<i>Dimensions:</i>	25 m by 2 m
<i>Orientation:</i>	SW – NE
<i>Topsoil depth:</i>	Modern made ground - 0.8 m in south-west; 2.1 m in north-east
<i>Excavation depth:</i>	0.8 m in south-west; 2.1 m in north-east
<i>Modern Features:</i>	None
<i>Significant Features:</i>	Rig and furrow
<i>Finds:</i>	None
<i>Natural subsoil</i>	Grey black peaty clay

Trench 5

<i>Dimensions:</i>	25m by 2 m
<i>Orientation:</i>	NNW – SSE
<i>Topsoil depth:</i>	Modern made ground over 2 m in depth
<i>Excavation depth:</i>	2 m
<i>Modern Features:</i>	None
<i>Significant Features:</i>	None
<i>Finds:</i>	None
<i>Natural subsoil</i>	Not seen

Trench 6

<i>Dimensions:</i>	15 m by 8 m
<i>Orientation:</i>	NW – SE
<i>Topsoil depth:</i>	0.6 m – 0.8 m
<i>Excavation depth:</i>	0.8 m
<i>Modern Features:</i>	None
<i>Significant Features:</i>	None
<i>Finds:</i>	None
<i>Natural subsoil</i>	Mottled brown/grey boulder clay

APPENDIX 2: PHOTOGRAPHIC REGISTER

Black and White Film 1

Frame	Area	Description	From
1		Registration	
2	T1	General Shot	S
3	T1	General Shot	S
4	T2	General Shot	E
5	T2	General Shot	E
6	T3	General Shot	W
7	T3	General Shot	W
8	T4	General Shot	W
9	T4	General Shot	W
10	T4	General Shot	E
11	T4	General Shot	E

Digital Images

Frame	Area	Description	From
1		Registration	
2	T1	General Shot	S
3	T2	General Shot	E
4	T3	General Shot	W
5	T4	General Shot	W
6	T4	General Shot	W
7	T4	General Shot	W
8	T4	General Shot	W
9	T4	General Shot	W
10	T4	General Shot	E
11	WB	N-facing view across site	S
12	WB	N-facing view across site	S
13	WB	N-facing view across site	S
14	WB	Topsoil strip	S
15	WB	Topsoil strip	N
16	WB	Bulldozer	S
17	WB	Sample section of mound to establish depth – bulldozed on southern section	S
18	WB	Shot showing depths of sewer excavations	N
19	WB	Made ground @ 2.5m	SW
20	WB	Storm drain excavation into natural	N
21	WB	End of natural in track	NE
22	WB	View of manhole and track south	S
23	WB	Storm drain north of manhole	E
24	WB	Storm drain north of manhole	E

APPENDIX 3: 'DISCOVERY AND EXCAVATION IN SCOTLAND' REPORT

LOCAL AUTHORITY:	West Lothian Council
PROJECT TITLE/SITE NAME:	Alderstone Road West, Livingston
PROJECT CODE:	21709
PARISH:	Livingston
NAME OF CONTRIBUTOR:	Erland Hindmarch & Kevin Paton
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Evaluation & Watching Brief
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NS 0458 6691
START DATE (this season)	2 nd July 2012
END DATE (this season)	5 th December 2012
PREVIOUS WORK (inc DES)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>An archaeological evaluation and watching brief were carried out by AOC Archaeology Group on land to the west of Alderstone Road, Livingston prior to a residential development.</p> <p>The archaeological works showed that the majority of the development area had been subjected to considerable recent dumping. The evaluation in the southern half of the site displayed a lack of any buried soils below the dumped material, indicating that it may have been stripped prior to this build up of modern made ground. The watching brief in the northern half of the site provided similar results where natural soils were revealed, however most of the ground breaking works did not reach the base of the made ground.</p> <p>The vestigial remains of rig and furrow cultivation were found to exist in a single trench during the evaluation but no significant archaeological features or artefacts were revealed during the works.</p>
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRATIONS:	N/A
SPONSOR OR FUNDING BODY:	Lovell Partnerships
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