# GUARD ARCHAEOLOGY





Temple Quarry: Phase 2, North Middleton, Midlothian Data Structure Report Project 3380



# Temple Quarry: Phase 2, North Middleton, Midlothian

#### **Data Structure Report**

On behalf of:	Cemex UK Operations Ltd.
NGR:	NT351 583
Project Number:	3380
Project Manager:	John Atkinson
Report by:	Warren Bailie
Illustrations:	Gillian McSwan
Approved by:	
Date:	26/08/2011

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

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



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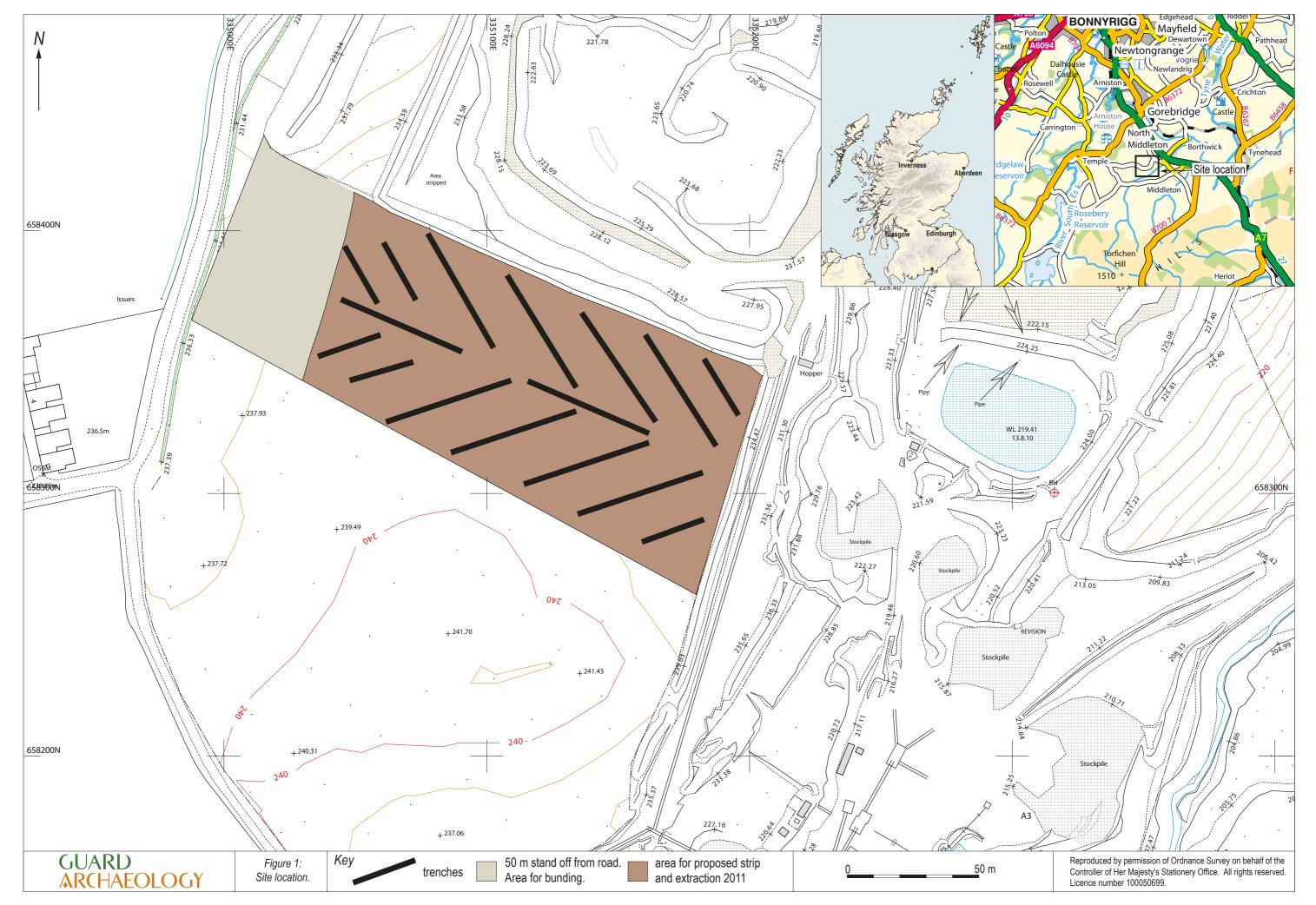


Figure 1: Site location

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#### **Executive Summary**

1.1 An archaeological evaluation was carried out by GUARD Archaeology Limited on behalf of Cemex UK Operations Ltd. on an area proposed for a quarry extension (Figure 1). The trial trench evaluation involved the machine excavation of sixteen trenches, the total area investigated measured 1300 m². This evaluation was carried out in accordance with the appended Scope of Works (Bailie, 2011). There were no significant archaeological deposits encountered during the evaluation. The work was undertaken on 24th and 25th August 2011.

#### Introduction

2.1 This report sets out the results of the archaeological evaluation undertaken by GUARD Archaeology Limited. on behalf of Cemex UK Operations Ltd. on the site proposed for quarry extension at Temple Quarry, North Middleton, Midlothian. During the course of the evaluation a total of 1300 m² of trenching was undertaken, spread over sixteen individual trenches, which were positioned in a herring-bone pattern to enable the investigation of the whole site area including any areas of topographic change.

#### Site Location, Topography and Geology

- 3.1 The site of the proposed development is located 750 m south-west of North Middleton and 10 km south-east of the Sheriffhall Roundabout on the A720 ring road around Edinburgh and is centred on NGR: NT351 583. The 1.3 hectare site comprises a roughly rectangular shaped area, with an area designated for bunding to the north-west (Figure 1). The topography varies with a slight slope towards the centre of the site and gentle undulations to the south-east and north-west, the height ranges from 216 m to 232 m AOD. The site was used for arable farming and was in crop immediately prior to this evaluation.
- 3.2 The underlying drift geology consists of mixed seams of sands, gravels and clays; he solid geology consists of Cambrian and Ordivician shallow sea-bed sedimentary rocks. (www.scottishgeology. com, accessed August 2011).

#### **Archaeological Background**

- 4.1 Several archaeological sites or find spots are known from the surrounding area proposed for topsoil stripping and quarry extraction in 2011 (Figure 1). One of these, a track-way (NMRS NT 35 NE 47) known as 'Halkerston', crosses the north-west area of the site. At the south-east of the site a possible Bronze Age stone axe measuring 146 mm in length was previously recovered (NMRS NT 35 NW.20). To the south of the site, 'Middleton Quarry' a group of linear crop-marks and a rectangular enclosure have been recorded (NMRS NT 35 NE.25) and further to the southwest 'Halkerston Glen' a limekiln and wagon way (NMRS NT35 NW 39) are present.
- 4.2 An archaeological evaluation was previously conducted by GUARD (Arabaolaza 2009) in advance of the phase 1 quarry extension. This phase was represented by an area measuring 2.7 hectares and 10 % of the area was evaluated. The 21 trenches excavated uncovered no significant archaeological deposits .

#### Aims, Objectives and Scope

- 5.1 The aim of this archaeological evaluation were to identify:
  - the presence, nature, extent and character of the 19<sup>th</sup> century track (NMRS NT 35 NE 47);
  - the presence of previously unknown archaeological deposits within the proposed development area;



- any surviving archaeological remains encountered during the evaluation and ensure they are recorded to an appropriate level.
- 5.2 The objectives were therefore to:
  - conduct an archaeological evaluation within the proposed topsoil strip and extraction area to establish the presence or absence of any archaeological remains, and their character, date and extent if surviving;
  - submit a report to data structure level for approval to East Lothian Archaeology Service, on completion of the archaeological fieldwork, which includes an outline of the scope of any further excavation works should any significant archaeology be encountered.
- 5.3 The scope of the archaeological works will establish:
  - that if the archaeological evaluation encounters no significant archaeological remains within the proposed topsoil strip and extraction area, no further archaeological investigations will be required within the evaluated area.

#### Methodology

- 6.1 The evaluation will comprise the machine excavation of trenches amounting to 10% (i.e. 1300 m²) of the 1.3 hectare (13,000 m²) area, in order to evaluate the presence, nature, significance and extent of any archaeological features within the proposed topsoil strip and extraction area (Figure 1).
- 6.2 The evaluation trenches across the development area will comprise 16 trenches (ten of 50 m length, six of 25 m length and all 2 m wide), amounting to 1300 m² in total or 10% of the total area (Figure 1). Evaluation trenches will be located in order to best investigate the whole site area. A number of trenches in the north-west of the development will be placed to encounter the 19<sup>th</sup> century track (NMRS 35 NE 47).
- 6.3 All machine excavation of trenches will be supervised by a GUARD archaeologist. The machine excavator will be fitted with a 2 m wide flat-bladed (toothless) ditching bucket.
- 6.4 The topsoil at each trench location will be removed in spits to the first archaeological horizon or, where none was found, to the natural subsoil. Any archaeological features encountered will be cleaned by hand by the on-site archaeologist to determine their character and extent.
- Any significant archaeological features encountered will be dealt with by the on-site archaeologist. Should negative-cut features be encountered, a representative sample will be 25-50% excavated in order to determine significance, date and function. A full record of excavated features will be made using a single context recording system using proforma sheets, drawings and photographs. All archaeological features will be photographed and recorded at an appropriate scale. Sections will be drawn at 1:10, and plans at 1:20. All trenches will be accurately surveyed using a submetre GPS and located within the National Grid.
- All archaeological finds will be dealt with by the on-site archaeologist. Finds and animal bone will be collected as bulk samples by context. Significant small finds will be three dimensionally located prior to collection. All finds will be processed to MAP2 type standards and subject to appropriate specialist assessment. If necessary, conservation of finds will be appraised to allow for specialist study.
- 6.7 All excavated feature fills and horizons will be sampled as appropriate, using bulk soil samples, for palaeo-environmental evidence.
- 6.8 A representative section will be recorded denoting depth of topsoil, any stratigraphy present and the nature of the soil. This information will be logged in the day book together with a sketch drawn to scale and a photographic record of deposits.



- 6.9 Should human remains be revealed by the excavation, the local police, the client and East Lothian Archaeology Service will be informed immediately. Any human remains will be accurately recorded, but left *in situ*, pending the agreement of the police, the client and East Lothian Archaeology Service on an appropriate mitigation strategy.
- 6.10 Should significant archaeological remains be encountered by the evaluation, requiring more than the limited evaluation outlined above, the remains will be largely left *in situ* pending the agreement of the client and the East Lothian Archaeology Service on an appropriate scope of excavation and Post-excavation analysis and publication.
- 6.11 On completion of the recording of the evaluation trenches, the backfilling of trenches will be undertaken by machine. No specialist backfilling is proposed, nor will the backfilling of trenches be supervised by the on-site archaeologist.

#### Results

- 7.1 There were sixteen evaluation trenches excavated, totalling an area of 1300 m² (Figure 1). The following text should be read in conjunction with the full trench descriptions in Appendix B and the context descriptions presented in Appendix C.
- 7.2 The trenches in each case were excavated in spits until undisturbed subsoil was reached. The trenches varied widely in depth from 0.3 m to 1.0 m. There were no significant archaeological deposits uncovered. The evaluation revealed the presence of five different layers across the site, including topsoil (001).
- 7.3 The subsoil consisted of firm sandy gravelly clay (002) with many variations in colour including brownish orange, brownish grey and greyish orange. These colour variations are reflective of the different seams of sands, gravels and clay which make up this natural subsoil. This subsoil lay at between 0.3 m and 1.0 m below surface with the depth varying with the undulations across the area. In the south-eastern end of the site there were two localised layers/ deposits. The first of these (004) was found across two trenches (11 & 12). This material consisted of firm mid-grey sandy clay with moderate amounts of sub-angular stones measuring between 0.15 m and 0.4 m across. This layer measured between 50 mm and 0.32 m thick, in plan this layer measured 15 m to 21 m north-west to south-east and at least 25 m north-east to south-west (between the two trenches). This material lay in a particularly deep hollow and was deposited through silting and the accumulation of stones over time. In Trench 1 there was another localised layer (005) which lay above the subsoil at the extreme north-east end of the trench. This consisted of firm dark grey sandy clay measuring 50 mm to 0.1 m thick and 7 m in plan with the trench limits, extending north-east, north-west and south-east beyond the limits of the trench. There was a ubiquitous layer (003) which underlay the topsoil throughout the area, encountered in every trench with the exception of Trench 10. This layer (003) consisted of loosely compacted orangey brown sandy gravelly clay with occasional rounded stones measuring approximately 50 mm to 0.15 m across. This transitional layer between topsoil (001) and the underlying subsoil (002) measured between 40 mm and 0.52 m thick, varying with undulations across the area. The topsoil (001) consisted of firm silty clay, ranging in colour from dark greyish brown to dark brown, with occasional small rounded stones, occasional roots and very occasional pockets of sand and gravel. The topsoil thickness varied between 0.22 m and 0.5 m, again varying with topography.

#### **Discussion**

8.1 The evaluation revealed no significant archaeological deposits and the area is therefore likely to be archaeologically sterile. Despite a number of trenches crossing the putative position of the 19<sup>th</sup> century track-way (NMRS NT 35 NE 47) at the north-west end of the site, there was no evidence of its existence. This may be due to the fact that the track was quite ephemeral and was not constructed of any substantial materials, but merely marked a common route-way across this hillside. If the track had no substantive construct it is also likely that ploughing will have removed any surface traces.



8.2 8Although a Bronze Age stone-axe (NMRS NT 35 NW.20) was previously recovered from the environs of the site and despite the presence of the nearby rectangular enclosure (NMRS NT 35 NE.25), there was no evidence for any prehistoric activity within the proposed quarry extension area.

#### Recommendations

- 9.1 As the evaluation revealed no significant archaeological deposits within the area of the proposed phase 2 extension at Temple Quarry, no further archaeological works are required and the phase 2 area should now be released to the client for further ground-works.
- 9.2 GUARD Archaeology Limited would stress that these recommendations are intended for guidance only. While the recommended mitigation strategy was developed following consultation with East Lothian Archaeology Service final decisions on the nature and extent of any future archaeological work rest with the planning authority.

#### **Acknowledgements**

10.1 GUARD would like to thank Cemex UK Operation Ltd, in particular Linzi Mcdade and Michael Harte for their assistance. Plant and drivers were supplied by AB 2000. Technical support was from Aileen Maule, John Kiely and Jen Cochrane. The evaluation and survey of trench locations was conducted by Warren Bailie The illustrations were produced and the report was desk top published by Gillian McSwan. The project was managed for GUARD by John Atkinson.



Temple Quarry: Phase 2, North Middleton, Midlothian

Data Structure Report

**Section 2: Appendices** 



www.guard-archaeology.co.uk



# **Appendices**

#### **Appendix A: References**

Bailie, W 2011 Temple Quarry, North Middleton, Midlothian- Scope of Works- Project 3380 GUARD Archaeology Ltd., Glasgow. (Appendix G)

#### **Appendix B: Trench Summaries**

Trench 1											
Dimensions	Length (m)	25	Width (m)	2	Depth (m)	Approx 0.4-0.6					
Total Area (m²)				50							
Orientation				NE-SW							
Top layer (001)	Dark greyish b	rown silty	y clay, occ. grave	freq. roots	Depth (m)	0.3-0.5					
Layer (003)	Orange	ey brown :	sandy gravelly cl	ay, occas. Smal	II rounded stones, 0.1-	0.2m thick					
Layer (005)			Firm dark grey	sandy clay, 0.0	5 to 0.1m thick.						
Natural subsoil (002)	v. fi	rm seams	of sands, gravel	s and clay, fou	nd at 0.4-0.6m below	surface					
Finds				None							
Trench 2											
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	Approx 0.32- 0.					
Total Area (m²)				100							
Orientation				NE-SW							
Topsoil (001)	Dark grey brown	n silty clay	, occas. Small ro	unded stones	Depth (m)	0.05-0.3m					
Layer (003)		Loose d	ark orangey brow	vn sandy grave	elly clay, 0.05-0.3m thi	ck					
Natural subsoil (002)	Firm sand and	l gravel m	ix, occas. Small r	ounded stones	s, bright orange brown	to brownish grey					
Finds				None							
Trench 3											
Dimensions	Length (m)	50	Width (r	n) 2	Depth (m)	0.41-0.65					
Total Area (m²)				100							
Orientation				NE-SW							
Topsoil (001)	Firm dark gre	•	silty clay, occas. ses, freq. roots	Small rounded	Depth (m)	0.3-0.35					
Layer (003)	Loose ora	nge brow	n snady gravelly	clay, occas. Sm	nall rounded stones, 0.	.08-0.2m thick					
Natural subsoil (002)		Firm s	andy gravelly cla	y, brownish or	ange to greyish orange	e					
Finds				None							
Trench 4											
Dimensions	Length (m)	50	Width (r	n) 2	Depth (m)	0.34-0.44					
Total Area (m²)			'	100		'					
Orientation				NE-SW							
Topsoil (001)	Firm dark bro	wn silty c	lav. occas. Small								
Layer (003)	Loose orangey brown sandy gravelly clay, occas. Rounded stones, 0.04-0.14m thick										
	Loose or	rangey bro	•			0.3-0.4 -0.14m thick					
Natural subsoil (002)	+		own sandy grave	lly clay, occas.	Rounded stones, 0.04	-0.14m thick					
Natural subsoil (002) Finds	+		own sandy grave	lly clay, occas.		-0.14m thick					
Finds	+		own sandy grave	lly clay, occas. unded stones,	Rounded stones, 0.04	-0.14m thick					
Finds Trench 5	Firm san		own sandy grave y clay, occas. Ro	lly clay, occas. unded stones, None	Rounded stones, 0.04 greyish orange to brow	-0.14m thick wnish orange					
Finds  Trench 5  Dimensions	+	dy gravell	own sandy grave	lly clay, occas. unded stones, None	Rounded stones, 0.04	-0.14m thick					
Finds  Trench 5  Dimensions  Total Area (m²)	Firm san	dy gravell	own sandy grave y clay, occas. Ro	lly clay, occas. unded stones, None ) 2 100	Rounded stones, 0.04 greyish orange to brow	-0.14m thick wnish orange					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation	Firm san	dy gravell	own sandy grave y clay, occas. Rot Width (m	None  100  NE-SW	Rounded stones, 0.04 greyish orange to brown Depth (m)	-0.14m thick wnish orange 0.3-0.38					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation  Topsoil (001)	Firm san  Length (m)  Firm dark brov	dy gravell 50 wn silty cl	width (may, occas. Small r	lly clay, occas. unded stones, None ) 2 100 NE-SW ounded stones	Rounded stones, 0.04 greyish orange to brow  Depth (m)	-0.14m thick wnish orange 0.3-0.38					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation  Topsoil (001)  Layer (003)	Length (m)  Firm dark brow	50 wn silty clarangey bro	width (may, occas. Small rown sandy grave	None  100  NE-SW Ounded stones	Rounded stones, 0.04 greyish orange to brow  Depth (m)  S Depth (m)  Rounded stones, 0.02	-0.14m thick wnish orange 0.3-0.38 0.28-0.35 -0.08m thick					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation  Topsoil (001)	Length (m)  Firm dark brow	50 wn silty clarangey bro	width (may, occas. Small rown sandy grave	None  100  NE-SW Ounded stones	Rounded stones, 0.04 greyish orange to brow  Depth (m)	-0.14m thick wnish orange  0.3-0.38  0.28-0.35 -0.08m thick					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation  Topsoil (001)  Layer (003)  Natural subsoil (002)  Finds	Length (m)  Firm dark brow	50 wn silty clarangey bro	width (may, occas. Small rown sandy grave	lly clay, occas. unded stones, None  100 NE-SW ounded stones lly clay, occas. ounded stones	Rounded stones, 0.04 greyish orange to brow  Depth (m)  S Depth (m)  Rounded stones, 0.02	-0.14m thick wnish orange 0.3-0.38 0.28-0.35 -0.08m thick					
Finds  Trench 5  Dimensions  Total Area (m²)  Orientation  Topsoil (001)  Layer (003)  Natural subsoil (002)	Length (m)  Firm dark brow	50 wn silty clarangey bro	width (may, occas. Small rown sandy grave	lly clay, occas. unded stones, None  100 NE-SW ounded stones lly clay, occas. ounded stones None	Rounded stones, 0.04 greyish orange to brow  Depth (m)  S Depth (m)  Rounded stones, 0.02	-0.14m thick wnish orange 0.3-0.38 0.28-0.35 -0.08m thick					



Orientation				NE-SW								
Topsoil (001)	Firm dark brow	n silty clay,	occas. Small roun		Depth (m)	0.35-0.3						
Layer (003)	+				inded stones, 0.05-0.1	5m thick						
Natural subsoil (002)				-	eyish orange to browr							
Finds		, , ,	-	None								
T l 7												
Trench 7		25	14.5 Int. ( )	2	D 11 ( )	0.42						
Dimensions	Length (m)	Length (m)         25         Width (m)         2         Depth (m)         0.42										
Total Area (m²)				50								
Orientation		NE-SW										
Topsoil (001)			occas. Small round		Depth (m)	0.22-0.25						
Layer (003)		•			Rounded stones, 0.07							
Natural subsoil (002)	Firm, San	dy gravelly	ciay, occas. Round		eyish orange to browr	iish grey						
Finds				None								
Trench 8												
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	0.32-0.35						
Total Area (m²)				100								
Orientation			W	NW-ESE								
Topsoil (001)	Firm dark brown	n silty clay, o	occas. Small round	ded stones	Depth (m)	0.28-0.3						
Layer (003)	Loose ora	angey brow	n sandy gravelly o	lay, occas. rou	unded stones, 0.04-0.7	m thick						
Natural subsoil (002)	Firm, sandy	gravelly cla	y, occas. Large rou	unded stones,	greyish orange to bro	wnish grey						
Finds				None								
Transle O												
Trench 9	Lawath (wa)	F0	\\\(\frac{1}{2} \rightarrow \(\frac{1}{2} \rightarrow \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2	Double (se)	0.2.0.55						
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	0.3-0.55						
Total Area (m²)				100								
Orientation	=			NW-ESE	5 / )							
Topsoil (001)			occas. Small roun		Depth (m)	0.25-0.35						
Layer (003)					nded stones, 0.05-0.1							
Natural subsoil (002)	Firm, san	dy gravelly			eyish orange to brown	ish grey						
Finds				None								
Trench 10												
Dimensions	Length (m)	25	Width (m)	2	Depth (m)	0.3-0.45						
Total Area (m²)				50								
Orientation			1	NW-SE								
Topsoil (001)	Firm dark brown	silty clay, o	ccas. Small round	ed stones	Depth (m)	0.32						
Natural subsoil (002)	Firm, sandy grave				veen yellowish orange	, greyish orange,						
		light bro			rags of sandstone							
Finds				None								
Trench 11												
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	0.3-1.0						
Total Area (m²)	5 ( )	· · · · · · · · · · · · · · · · · · ·	, , , ,	100	, , ,							
Orientation				NW-SE								
Topsoil (001)	Firm dark brow	n silty clav.	occas. Small roun		Depth (m)	0.25-0.4						
Layer (003)					nded stones, 0.05-0.5							
Layer (004)	+				angular stones, 0.2m t							
Natural subsoil (002)	+				eyish orange to brown							
Finds	, 501	, 3.276	-	None	,	<u> </u>						
	1			-								
Trench 12												
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	Approx 0.3- 1.0						
Total Area (m²)				100								
Orientation				NW-SE								
Topsoil (001)	Firm dark brow	n silty clay,	occas. Small roun	ded stones	Depth (m)	0.32-0.4						
Layer (003)	Loose ora	ingey browi	n sandy gravelly c	lay, occas. rou	nded stones, 0.05-0.3	5m thick						



Layer (004)	Firm mi	Firm mid-grey sandy clay, moderate large sub-angular stones, 0.05-0.32m thick									
Natural subsoil (002)	Firm, sandy gravelly clay, occas. rounded stones, greyish orange to brownish grey										
Finds	None										
Trench 13											
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	0.3-0.6					
Total Area (m²)		100									
Orientation		NW-SE									
Topsoil (001)			dy gravelly clay, o , 0.05-0.35m thio		Depth (m)	0.25-0.35					
Layer (003)	Loose ora	angey browr	n sandy gravelly o	lay, occas. roui	nded stones, 0.05-0.2	8m thick					
Natural subsoil (002)	Firm, sar	ndy gravelly	clay, occas. roun	ded stones, gre	yish orange to brown	ish grey					
Finds				None							
Trench 14											
Dimensions	Length (m)	50	Width (m)	2	Depth (m)	0.35-0.48					
Total Area (m²)				100							
Orientation				NW-SE							
Topsoil (001)	Firm dark brow	vn silty clay,	occas. Small rou	nded stones	Depth (m)	0.3-0.4					
Layer (003)	Loose orange	and grey bi	own sandy grave	lly clay, occas.	rounded stones, 0.05	-0.12m thick					
Natural subsoil (002)	Firm b	rownish and	greyish orange s	andy gravelly	clay, occas. Rounded s	stones					
Finds				None							
Trench 15											
Dimensions	Length (m)	25	Width (m)	2	Depth (m)	0.4-0.8					
Total Area (m²)				50							
Orientation				NW-SE							
Topsoil (001)		Compacte	ed tarmac		Depth (m)	0.3-0.45					
Layer (003)	Loose orange	e and grey b	rown sandy grave	elly clay, occas.	rounded stones, 0.05	5-0.5m thick					
Natural subsoil (002)	Firm bi	rownish and	greyish orange s	andy gravelly o	clay, occas. Rounded s	tones					
Finds				None							
Transla 10											
Trench 16	Longth (no)	25	\A/: al±la /a \	2	Double (m)	0.45.0.03					
Dimensions	Length (m)	25	Width (m)	2	Depth (m)	0.45-0.82					
Total Area (m²)				50 NW-SE							
Orientation Topsoil (001)	Firm dark brow	n cilty clay	occas. Small rour		Depth (m)	0.35-0.45					
Layer (003)					rounded stones, 0.05						
Natural subsoil (002)				• • • • • • • • • • • • • • • • • • • •	ay, occas. Rounded sto						
Finds	FII III (	orange and	DIOMINSH BIER SO		ay, occas. Nounded St	JIICS					
FIIIUS		None									

# **Appendix C: Context Descriptions**

				Din				
	Area Description		Height (m) Length (m)		Width (m)	Depth (m)	Above	Below
001	All	Topsoil layer, dark greyish brown silty clay, occas. Small rounded stones, v. occas. Small rounded stones, v. occas. Pockets of gravel and sand, occas. roots	N/A	throughout	throughout	0.22- 0.5 (thickness)	3	N/A
002	All	Natural subsoil, firm sandy gravelly clay, occas. Rounded stones. Varies widely in colour from brownish orange to brownish grey and greyish orange reflecting different seams of sands, gravels and clay across the area	N/A	throughout	throughout	At 0.3- 1.0m below	N/A	(003), (004), (005)



				Din				
	Area Description	Height (m)	Length (m)	Width (m)	Depth (m)	Above	Below	
003	All but TR 10	Loose orangish brown sandy gravelly clay, occas. Rounded stones (0.05-0.15m across), transitional layer between topsoil and subsoil.	N/A	throughout	throughout	0.04 -0.52 (thickness)	004	001
004	T11 & 12	Firm mid-grey sandy clay, moderate sub-angular stones (0.15-0.4m across), silting layer in hollow	N/A	25	21	0.05-0.32 (thickness)	002	003
005	T1	Firm dark grey sandy clay, variation in natural suubsoil	N/A	7m NE-SW (within trench)	Extends NW+SE?m	0.05-0.1 (thickness)	002	003

#### **Appendix D: Photographic Record**

# Digital Film No 1

No.	Trench	Description	From
1	-	ID shot	-
2	10	General	SE
3	11	Stratigraphy at NE end (001, 003 & 004)	SW
4	11	Deepens at NE end	SE
5	11	Towards NE end (003 & 004)	SE
6	11	General	NW
7	12	Stratigraphy	N
8	12	General	NW
9	12	General	SE
10	13	General	SE
11	14	General	SE
12	15	General	NW
13	16	General	NW
14	8	General	WNW
15	9	General	ESE
16	1	General	NE
17	2	General	NE
18	3	General	NE
19	4	General	SW
20	5	General	SW
21	7	General	NE
22	6	General	SW



# Appendix E: Selection Of Photographs From Evaluation

Plate 1: Plate 2:



# **Appendix F: Discovery And Excavation Scotland Entry**

LOCAL AUTHORITY:	Midlothian Council
PROJECT TITLE/SITE NAME:	Temple Quarry, North Middleton, Midlothian
PROJECT CODE:	3380
PARISH:	Borthwick
NAME OF CONTRIBUTOR(S):	Warren Bailie
NAME OF ORGANISATION:	GUARD Archaeology Ltd
TYPE(S) OF PROJECT:	Evaluation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	N/A
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 6 figures)	NT 351 583
START DATE (this season)	24/08/11
END DATE (this season)	25/08/11
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	The trial trench evaluation revealed no significant archaeological deposits. There was no evidence for the 19 <sup>th</sup> century track-way ( NMRS NT 35 NE 47) shown crossing the north-west end of the site. This may have been ploughed out, alternatively the track may be so ephemeral that it has left no significant physical impact on sub-surface layers.
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	Cemex UK Operations Ltd.
CAPTION(S) FOR ILLUSTRS:	N/A
ADDRESS OF MAIN CONTRIBUTOR:	52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
EMAIL ADDRESS:	warren.bailie@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS



**Appendix G: Scope Of Works** 

# TEMPLE QUARRY, PHASE 2 NORTH MIDDLETON, MIDLOTHIAN

ARCHAEOLOGICAL SCOPE OF WORKS PROJECT 3380







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#### GUARD ARCHAEOLOGY

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# TEMPLE QUARRY, PHASE 2 NORTH MIDDLETON, MIDLOTHIAN

ARCHAEOLOGICAL SCOPE OF WORKS PROJECT 3380

by Warren Bailie





# **Executive Summary**

1.1 This Scope of Works forms the archaeological method statement for the evaluation of an area proposed for a quarry extension at Temple Quarry, North Middleton, Midlothian.

#### Introduction

- 2.1 This Scope of Works sets out the methodology for the archaeological mitigation works required for the area proposed for topsoil stripping and extraction (Figure 1) in accordance with the relevant condition of the outline planning consent. An archaeological evaluation of the area will be undertaken to establish the presence, extent and nature of any significant archaeological remains. Should significant remains be identified and it is not possible to preserve them *in situ* a further requirement for archaeological works to ensure their preservation through record is likely to be required.
- 2.2 This report outlines the programme of archaeological works that may be needed to mitigate the effects of the proposed development. It details the methodology to be employed in implementing the Stage 1 archaeological works. The mitigation methodology to be employed during Stage 2 excavation and Stage 3 post excavation analysis and publication, will be specified in *addenda* to this document. These *addenda*, if required, will be submitted for the approval of East Lothian Archaeology Service, prior to the commencement of any archaeological work. All phases of work will be funded by the developer as required by the Planning Authority.

#### Site Location

3.1 The development area is located approximately 750 m south-west of North Middleton and 10km south-east of the Sheriffhall Roundabout on the A720 ring road around Edinburgh and is centred around NGR: NT 351 583 (Figure 1) The area measures 1.3 hectares and the land use is currently in crop about to be harvested.

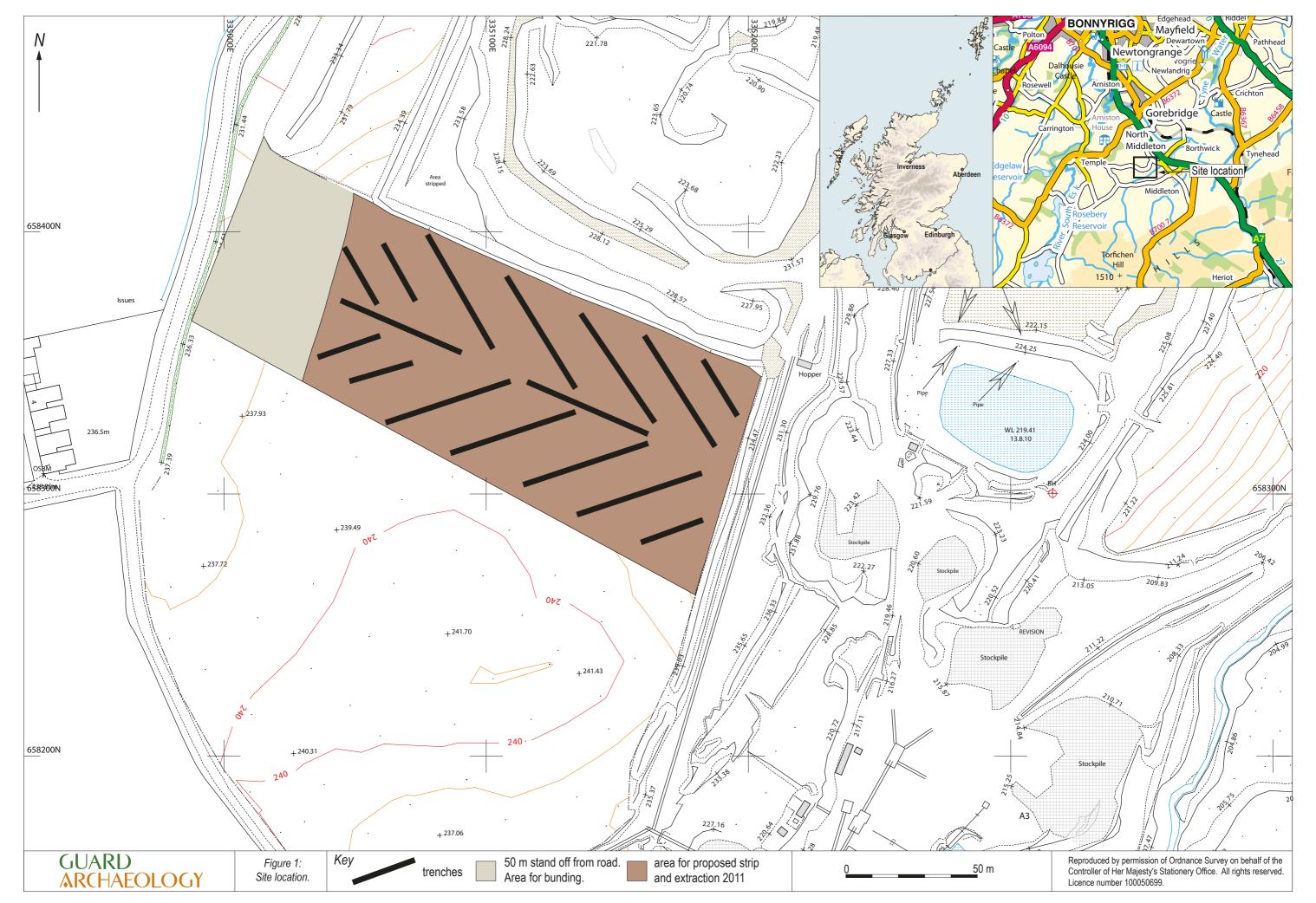
# Archaeological Background

- 4.1 Several archaeological sites or find spots are known from the surrounding area proposed for topsoil stripping and quarry extraction in 2011 (Figure 1). One of these, a track-way (NMRS NT 35 NE 47) known as 'Halkerston, crosses the north-west area of the site. At the south-east of the site a possible Bronze Age stone axe measuring 146 mm in length was previously recovered (NMRS NT 35 NW.20). To the south of the site, 'Middleton Quarry' a group of linear crop-marks and a rectangular enclosure have been recorded (NMRS NT 35 NE.25) and further to the south-west 'Halkerston Glen' a limekiln and wagon way (NMRS NT35 NW 39) are present.
- 4.2 An archaeological evaluation was conducted by GUARD (Arabaolaza 2009) in advance of a quarry extension proposed at that time (Phase 1). This area measured 2.7 hectares and 10 % of the area was evaluated. The 21 trenches excavated uncovered no significant archaeological deposits.

# Aims, Objectives and Scope

- 5.1 The aim of the archaeological evaluation is to identify:
  - the presence, nature, extent and character of the 19<sup>th</sup> century track (NMRS NT 35 NE 47);
  - the presence of previously unknown archaeological deposits within the proposed development area;
  - any surviving archaeological remains encountered during the evaluation and ensure they are recorded to an appropriate level.
- 5.2 The objectives are therefore to:







- conduct an archaeological evaluation within the proposed topsoil strip and extraction area to establish the presence or absence of any archaeological remains, and their character, date and extent if surviving;
- submit a report to data structure level for approval to East Lothian Archaeology Service, on completion of the archaeological fieldwork, which includes an outline of the scope of any further excavation works should any significant archaeology be encountered.
- 5.3 The scope of the archaeological works will establish:
  - that if the archaeological evaluation encounters no significant archaeological remains within the proposed topsoil strip and extraction area, no further archaeological investigations will be required within the evaluated area.

# Fieldwork Methodology

- 6.1 The evaluation will comprise the machine excavation of trenches amounting to 10% (ie 1300 m²) of the 1.3 hectare (13000 m²) area, in order to evaluate the presence, nature, significance and extent of any archaeological features within the proposed topsoil strip and extraction area (Figure 1)
- 6.2 The evaluation trenches across the development area will comprise 16 trenches (ten of 50 m length, six of 25 m length and all 2 m wide), amounting to 1300 m² in total (Figure 1). Evaluation trenches will be located in order to best investigate the whole site area. A number of trenches in the northwest of the development are likely to encounter the 19<sup>th</sup> century track (NMRS 35 NE 47).
- 6.3 All machine excavation of trenches will be supervised by a GUARD Archaeologist. The machine excavator will be fitted with a 2 m wide flat-bladed (toothless) ditching bucket.
- 6.4 The topsoil at each trench location will be removed in spits to the first archaeological horizon or, where none was found, to the natural subsoil. Any archaeological features encountered will be cleaned by hand by the on-site Archaeologist to determine their character and extent.
- 6.5 Any significant archaeological features encountered will be dealt with by the on-site Archaeologist. Should negative-cut features be encountered, a representative sample will be 25-50% excavated in order to determine their significance, date and function. A full record of excavated features will be made using a single context recording system using pro forma sheets, drawings and photographs. All archaeological features will be photographed and recorded at an appropriate scale. Sections will be drawn at 1:10, and plans at 1:20. All trenches will be accurately surveyed using a sub-metre GPS and located within the National Grid.
- 6.6 All archaeological finds will be dealt with by the on-site Archaeologist. Finds and animal bone will be collected as bulk samples by context. Significant small finds will be three dimensionally located prior to collection. All finds will be processed to MAP2 type standards and subject to appropriate specialist assessment. If necessary, conservation of finds will be appraised to allow for specialist study.
- 6.7 All excavated feature fills and horizons will be sampled as appropriate, using bulk soil samples, for palaeo-environmental evidence.
- 6.8 A representative section will be recorded denoting depth of topsoil, any stratigraphy present and the nature of the soil. This information will be logged in the day book together with a sketch drawn to scale and a photographic record of deposits.
- 6.9 Should human remains be revealed by the excavation, the local police, the client and East Lothian Archaeology Service will be informed immediately. Any human remains will be accurately recorded, but left *in situ*, pending the agreement of the police, the client and East Lothian Archaeology Service on an appropriate mitigation strategy.
- 6.10 Should significant archaeological remains be encountered by the evaluation, requiring more than the limited evaluation outlined above, the remains will be largely left *in situ* pending the agreement of the client and the East Lothian Archaeology Service on an addenda for an appropriate scope of excavation (Stage 2) and Post-excavation design including scope of finds analysis, conservation & publication (Stage 3).



6.11 On completion of the recording of the evaluation trenches, the backfilling of trenches will be undertaken by machine. No specialist backfilling is proposed, nor will the backfilling of trenches be supervised by the on-site archaeologist.

# Report Preparation and Contents

- 7.1 A report detailing the results of the archaeological fieldwork will be submitted to the client within two weeks of completion of fieldwork and, subject to client approval, then submitted to East Lothian Archaeology Service. The report will take the form of a Data Structure Report and will contain an analysis of the results of the evaluation. The report will include a full descriptive text that will characterise the date and extent of any archaeological deposits. It will also include plans at an appropriate scale showing the area subjected to ground-breaking works, evaluation trenches, archaeological features and archiving lists of all finds, samples, field drawings and photographs.
- 7.2 If appropriate, the report will also include an addendum to this Scope of Works for further archaeological fieldwork, should significant archaeology have been encountered.
- 7.3 The report will include the following:
  - executive summary;
  - a site location plan to at least 1:10,000 scale with at least an 8 figure central grid reference;
  - OASIS reference number; unique site code;
  - Planning application number;
  - contractor's details including date work carried out;
  - nature and extent of the proposed development, including developer/client details;
  - description of the site history, location and geology;
  - a site plan to a suitable scale and tied into the national grid so that features can be correctly orientated;
  - discussion of the results of field work;
  - context & feature descriptions;
  - features, number and class of artefacts, spot dating & scientific dating of significant finds presented in tabular format;
  - plans and section drawings of the features drawn at a suitable scale;
  - initial assessment of relevant finds/samples if appropriate;
  - recommendations regarding the need for, and scope of, any further archaeological work such as excavation (Stage 2) and Post-excavation finds analysis, conservation & publication (Stage 3); bibliography.
- 7.4 At least two copies of the report will be prepared for the client and a further one including a digital PDF copy sent to East Lothian Archaeology Service.
- 7.5 The report will be presented in an ordered state and contained within a protective cover/sleeve or bound in some fashion. The report will be page numbered and supplemented with section numbering for ease of reference.

# Copyright

8.1 Unless otherwise agreed copyright for any report resulting from the archaeological work undertaken as part of the project will be deemed the intellectual property of GUARD Archaeology Ltd.



#### **Publication**

9.1 A summary of the project results will be submitted to *Discovery and Excavation in Scotland*. In the event of minor archaeological remains being encountered during the archaeological fieldwork, it is proposed that a comprehensive report submitted to *Discovery and Excavation in Scotland*, will form the final publication of the site. A copy of this will be included in the Data Structure Report.

#### **Archive**

- 10.1 The archive for the project, including a copy of the report, will be submitted to the National Monuments Records for Scotland within three months of completion of all relevant work.
- 10.2 The online OASIS form at <a href="http://ads.ahds.ac.uk/project/oasis/">http://ads.ahds.ac.uk/project/oasis/</a> will be completed within 3 months of completion of the work. Once the Data Structure Report has become a public document by submission to or incorporation into the SMR, East Lothian Archaeology Service will validate the OASIS form thus placing the information into the public domain on the OASIS website.

# **Finds Disposal**

11.1 The arrangement for the final disposal of any finds made in connection with the archaeological work, will be deposited in keeping with Scottish legal requirements as set out in the Treasure Trove Code of Practice published by the Scottish Government in December 2008. The laws relating to Treasure Trove and *Bona Vacantia* in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer which museum should be allocated the finds. All artefacts will be temporarily stored by GUARD until a decision has been made by the panel.

#### Personnel and Liaison

- 12.1 The GUARD team will comprise the following qualified and experienced GUARD archaeologists:
  - Project Manager: Mr John Atkinson
  - Project Director (on-site Archaeologist): Mr Warren Bailie
  - Finds and Environmental Support and Conservation: Ms Aileen Maule
  - Illustrator: Ms Gillian McSwan
  - Quality Assurance: Mr John Atkinson
- 12.2 The GUARD Project Manager, Mr John Atkinson, will be the point of contact for the archaeological works. A full CV for individuals concerned can be made available on request.

# Monitoring

13.1 The proposed start date for the archaeological fieldwork will be 24<sup>th</sup> to 25th August 2011. East Lothian Archaeology Service will be informed of the site mobile phone number prior to the start date so that monitoring visits can be arranged. It is estimated that the evaluation of 10% of the Development Area will take two days to complete.



# Health & Safety and Insurance

- 14.1 GUARD Archaeology Ltd adheres to the guidelines and standards prescribed for archaeological fieldwork set down in the Institute for Archaeologists approved Health and Safety in Field Archaeology document, prepared under the aegis of the Standing Conference of Archaeological Unit Managers (SCAUM). It is standard GUARD policy, prior to any fieldwork project commencing, to conduct a risk assessment and to prepare a project safety plan, the prescriptions of which will be strictly followed for the duration of all archaeological fieldwork. Copies of the resultant project safety plan and of GUARD's Fieldwork Safety Policy Statement may be viewed upon request.
- 14.2 GUARD Archaeology Ltd also possesses all necessary insurance cover, proofs of which may be supplied upon request.

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