

# GUARD ARCHAEOLOGY



**The Forge, Canonbie  
Data Structure Report  
Project 3581**

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## **The Forge, Canonbie**

### **Data Structure Report**

**On behalf of:** Lapwing Builders Ltd

**NGR:** 339456 576606 (centred)

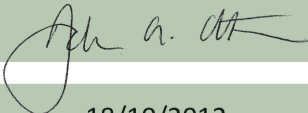
**Project Number:** 3581

**Report by:** Maureen C. Kilpatrick

**Illustrations:** Fiona Jackson

**Project Manager:** Dr John Atkinson

**Approved by:**

  
18/10/2012

**Date:**

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

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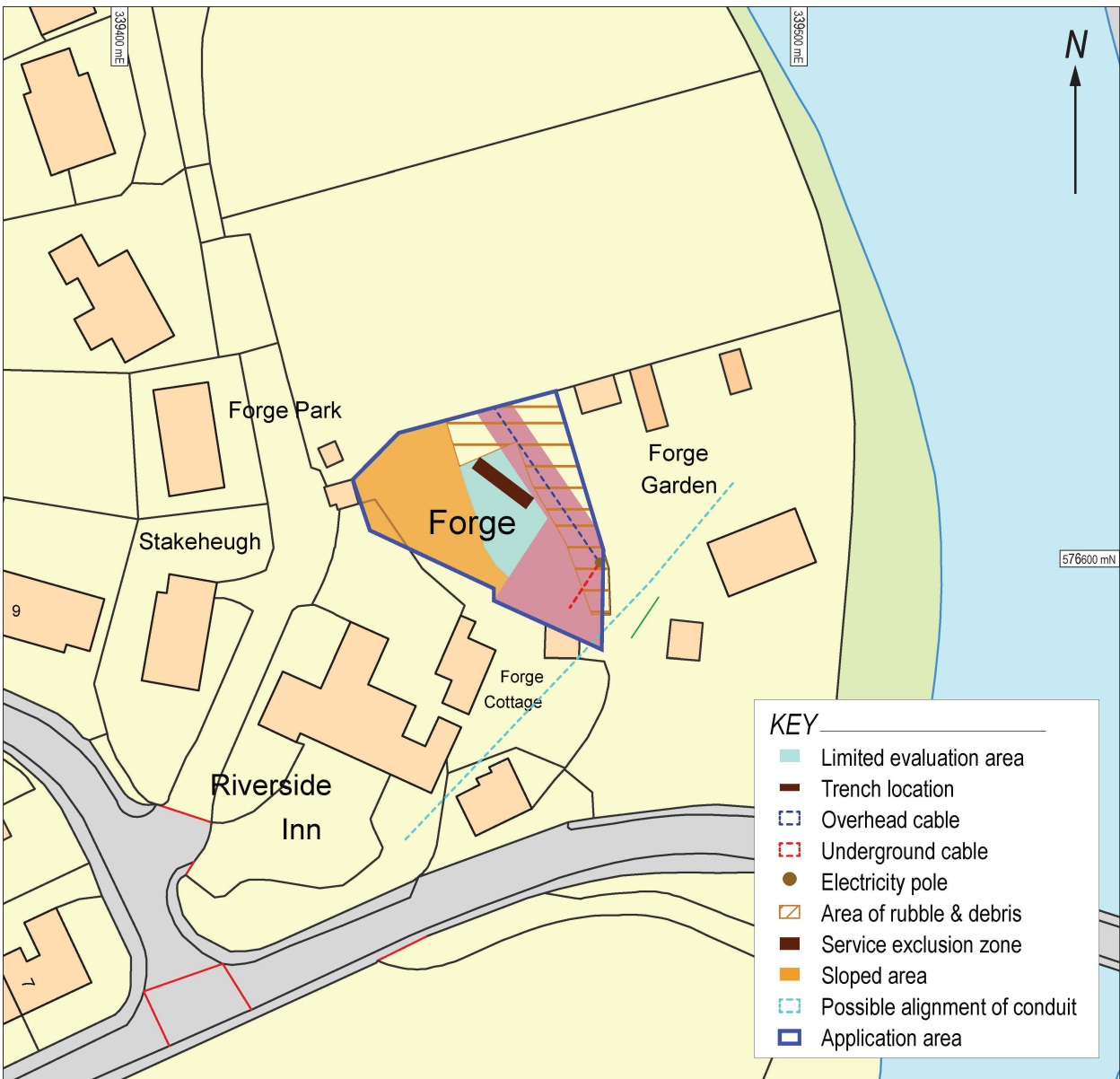
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## Executive Summary

- 1.1 An archaeological evaluation was carried out by GUARD Archaeology Limited, on behalf of Lapwing Builders Ltd, on an area proposed for development at the Forge, Canonbie, Dumfries and Galloway. A trial trench evaluation was conducted of the western area and no features or finds of archaeological significance were encountered. The work was undertaken on 10<sup>th</sup> October 2012.

## Introduction

- 2.1 This report sets out the results of an archaeological evaluation undertaken by GUARD Archaeology, on behalf of Lapwing Builders Ltd on a site proposed for the construction of housing to the rear of the former Riverside Inn at Canonbie, Dumfries and Galloway. During the course of the evaluation a total of 20 square metres of trenching was undertaken with only made ground encountered and no deposits or find of archaeological significance.

## Site Location, Topography and Geology

- 3.1 The proposed development location lies within the village of Canonbie, to the west of the River Esk (NGR 339456 576606)
- 3.2 The site is located to the rear of the former Riverside Inn, Canonbie and comprises an irregularly shaped plot of land measuring 840 square metres. It lies significantly lower than the former Inn to the south-west and is bounded on the west side by a steep slope. To the north it is bounded by flat fields and to the east by housing and associated garden. Both the housing and fields are similar in height to the building plot. To the south it is bounded by a small lane and the B357 road. The site is currently vacant ground and covered with hardcore which has raised the level of the ground slightly. Its northern and eastern boundaries are covered with stone building debris, with two steel containers located in the north-eastern corner with trees also along the eastern side. An underground electric cable is located in the southern area and roughly orientated east/west across the site, while an overhead electric cable is found orientated roughly north/south in the eastern half of the site (plate 1).



*Plate 1: Pre-excitation of site.*

- 3.3 The underlying drift geology consists of alluvial sand, silt and clay deposits, while the solid geology consists of Penine Coal Measure Group – mudstone, siltstone and sandstone (British Geological Survey 1:50,000, <http://www.bgs.ac.uk>).

## Archaeological Background

- 4.1 A review of desk-based sources undertaken in advance of the trenching revealed that the area resided within an area of archaeological interest associated with an early eighteenth century iron smelting works and associated water powered forges of Canonbie (HER No. MDG11766). A water conduit system (HER No.12925) may also reside within the development area although its exact route is unknown.

## Aims and Objectives

5.1 The aims and objectives of the archaeological work were to:

- establish the presence or absence of archaeological resources within the area of development under targeted archaeological evaluation conditions
- determine the character, extent and significance of any archaeological deposits encountered;
- excavate and record any significant archaeological remains should they be encountered;
- undertake funded post-excavation analysis and publication of the results on the archaeological works should they be warranted.

## Methodology

- 6.1 The overburden deposits were stripped using a mechanical excavator, fitted with a flat-bladed ditching bucket, under close archaeological supervision. The overburden was removed to the surface of the subsoil or the first significant archaeological horizon
- 6.2 All on-site recording, written, drawn and photographic, was to the standards normally pertaining in archaeological fieldwork. Trenches were surveyed and located within the National Grid using a sub-metre DGPS Magellan Mobilemapper CX. Weather conditions for the evaluation were good with dry, sunny weather.

## Results



*Plate 2: West facing section of trench.*



*Plate 3: Post-excavation of trench.*

- 7.1 Due to the presence of services, both overhead and underground, the area available for trenching was limited. This resulted in that only one trench, which measured 10 m in length, was excavated within the development site. This trench was orientated north/south rather than the proposed east/west due to the presence of the overhead cable line and was located along the side of the western slopes edge. The upper most deposit consisted of a grey stone hardcore deposit consisting of sub-angular stones within a clay sand matrix (001). It measured 500 mm in depth. Below was a further hardcore deposit (002) consisting of a light beige/grey sand matrix with sub-angular stones. It measured 220 mm in depth. Both of the above deposits contained stone and flag stone building debris, particularly at the southern end of the trench. Below was found a black/dark grey hardcore deposit that consisted of sub-angular stones within a sand clay matrix. It measured 200 mm in depth. This is presumed to be the make-up for a car park

which was located in the area at one time. Below was found the natural subsoil (004) which consisted of a beige/brown sand clay deposit that was very stiff in compaction and contained several sub-rounded cobble sized stones (plates 2 and 3). During the course of the evaluation no feature or finds of archaeological significance were encountered.

## Discussion

- 8.1 The evaluation trenching was limited due to the presence of overhead and underground services. However, the excavated trench revealed no features of archaeological significance with all the overburden deposits comprising of made-ground. No topsoil was evident which suggests that the area must have been previously stripped, probably before its use as a car park. The upper deposits of hardcore also contained building debris, particularly at the southern end, in keeping with its more recent use as a 'dumping' ground for waste.
- 8.2 No evidence of the iron smelting works and associated powered forge was found within the excavated trench although this does not exclude that there may be evidence elsewhere on site. However, Mr Lennie Kerr, owner of the property to the immediate east of the site has suggested that the underground water conduit system may be within his property due to visible subsidence within his garden (L. Kerr pers comm, 2012). However, this remains unproven at present.

## Recommendations

- 9.1 The evaluation work, although limited, revealed no features of archaeological interest within the stripped area of ground. However, the eastern area of the site remains unexcavated and it is recommended that an archaeological watching brief be carried out within this area to observe for any archaeological evidence of the Forge works during construction. Due to the depth of the overburden deposits it is suggested that these be partly removed prior to archaeological intervention on site.
- 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 planning authority.

## Acknowledgements

- 10.1 GUARD Archaeology would like to thank Mr Paul Cheesmond, Alistair and Gary of Lapwing Builders Ltd. Technical support was from Aileen Maule and John Kiely. A survey of trench locations was conducted by Maureen Kilpatrick. The illustrations were produced by Fiona Jackson. The report was desk top published by Gillian McSwan. The project was managed for GUARD by John Atkinson.

**The Forge, Canonbie  
Data Structure Report**

**Section 2: Appendices**



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## Appendices

### Appendix A: Bibliography

British Geological Survey, Geology Maps <http://www.bgs.ac.uk> (accessed 10<sup>th</sup> October 2012)

National Monuments Record for Scotland, [www.rcahms.gov.uk](http://www.rcahms.gov.uk)

### Appendix B: Trench Details

Tr No	Length (m)	Width (m)	Depth (m)	Topsoil/Overburden	Subsoil	Details
1	10	2	1.07 m	(001) Mid-grey hardcore deposit (depth 0.50 m) (002) light grey hardcore deposit (depth 0.22m), (003) black/brown hardcore deposit (depth 0.20m)	Beige/brown sand clay deposit, stiff compaction	Upper deposits of made ground above subsoil deposit

### Appendix C: List of Drawings

Drawing No.	Area	Sheet No.	Subject	Scale
1	-	Day Book	West facing section of trench	1:10

### Appendix D: List of Photographs

Frame	Area	Context No.	Subject	Taken From
1	-	-	Pre-excitation	S
2	-	-	Pre-excitation	S
3	-	-	Pre-excitation	S
4	-	-	Northern end with rubble	SW
5	-	-	Removal of rubble	W
6	-	004	Subsoil deposit	NW
7	-	003	Hardcore deposit	NW
8	-	003	Rubble within hardcore deposit 003	NW
9	-	004	Post-excitation	N
10	-	004	Post-excitation	S
11	-	001-004	West facing section	W
12	-	-	Trench location	NW
13	-	-	Trench location	NW
14	-	-	Trench location	NW
15	-	-	Southern area of site	N
16	-	-	Post-excitation of trench	NW
17	-	-	Fields to north of site	SW
18	-	-	Fields to north of site	W
19	-	-	Area to east of the site	W
20	-	-	Depression ground at café	SW
21	-	-	Orientation of depressed ground	SW
22	-	-	Orientation of depressed ground	NE
23	-	-	Post-excitation of site	S

## Appendix E: Discovery And Excavation Scotland Entry

LOCAL AUTHORITY:	Dumfries and Galloway
PROJECT TITLE/SITE NAME:	The Forge, Canonbie
PROJECT CODE:	3581
PARISH:	Canonbie
NAME OF CONTRIBUTOR(S):	Maureen C Kilpatrick
NAME OF ORGANISATION:	GUARD Archaeology Limited
TYPE(S) OF PROJECT:	Evaluation
NMRS NO(S):	--
SITE/MONUMENT TYPE(S):	-
SIGNIFICANT FINDS:	--
NGR (2 letters, 6 figures)	NY 39456 76606
START DATE (this season)	10th October 2012
END DATE (this season)	10th October 2012
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation was carried out by GUARD Archaeology Limited, on behalf of Lapwing Builders Ltd, on an area proposed for development at the Forge, Canonbie, Dumfries and Galloway. A trial trench evaluation was conducted of the western area and no features or finds of archaeological significance were encountered.
PROPOSED FUTURE WORK:	--
SPONSOR OR FUNDING BODY:	Lapwing Builders Ltd.
CAPTION(S) FOR ILLUSTRS:	---
ADDRESS OF MAIN CONTRIBUTOR:	52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
EMAIL ADDRESS:	Maureen.kilpatrick@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS.

Appendix F: Written Scheme of Investigation

# THE FORGE, CANONBIE

ARCHAEOLOGICAL WRITTEN SCHEME OF INVESTIGATION

PROJECT 3581

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# THE FORGE, CANONBIE

ARCHAEOLOGICAL WRITTEN SCHEME OF INVESTIGATION

PROJECT 3581

by  
John Atkinson

## Executive Summary

- 1.1 This Written Scheme of Investigation forms the archaeological method statement for the evaluation of a proposed development site the Forge, Canonbie, Dumfries and Galloway and will require to be approved by the archaeological adviser to Dumfries and Galloway Council prior to the commencement of archaeological fieldwork.

## Introduction

- 2.1 This Written Scheme of Investigation (WSI) sets out the scope and methodology for the archaeological mitigation works for the proposed development site known as the Forge, Canonbie in Dumfries and Galloway (Planning Ref: 12/P/4/0169). An archaeological evaluation of approximately 8 % of the development 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 WSI outlines the programme of archaeological works that may be needed to mitigate the effects of the 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 agreement of the archaeological adviser to Dumfries and Galloway Council, 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 to the rear of the former Riverside Inn, Canonbie adjacent to Canonbie Bridge, Dumfries and Galloway and comprises an irregularly shaped plot of land some 840 square metres in size. The site is bounded to the west by a steeply sloping bank. It has a natural north/south aspect and is secluded from the nearby public road (B357).

## Archaeological Background

- 4.1 The study of desk-based resources revealed that the site lies within an area of archaeological interest associated with the early eighteenth century iron smelting works and associated water powered forges of Canonbie (HER ref MDG11766). It is also possible that the remains of a water conduit system (HER ref 12925) may be present within the development area, although the exact route of this lade system is not apparent on any later OS map editions.

## Aims, Objectives and Scope

- 5.1 The aim of the archaeological evaluation is to identify:
  - as yet unknown archaeological features and deposits within the development area;
  - to ensure that any surviving archaeological remains within the development area are recorded to an appropriate level.
- 5.2 The objectives are therefore to:
  - Conduct an archaeological evaluation of the development area, by machine-cut trial trench excavation, 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 the planning authority on completion of the archaeological fieldwork, which includes an outline of the scope of any further archaeological 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 development area, no further archaeological fieldwork will be required.

## Evaluation Methodology

- 6.1 The programme of archaeological works will involve the evaluation of the proposed development site, excluding any buffers areas around services. Taking into account these exclusions the proposed evaluation will include three east/west aligned evaluation trenches at the south, middle and north of the site.
- 6.2 All trenches will be excavated by mechanical excavator, utilizing a c 2 m wide flat-bladed (toothless) ditching bucket under the direct supervision of a GUARD Archaeologist, down to the first archaeological horizon or to natural subsoil, whichever is encountered first. The depth of stratigraphy apparent in all trenches will be recorded.
- 6.3 Any archaeological features encountered will be cleaned by hand by the on-site GUARD Archaeologist to determine their character and extent. Should negative-cut features be encountered, a representative sample will be 25-50% excavated in order to determine their significance, date and function. All on-site recording, written, drawn and photographic, will be to the standards normally pertaining in archaeological fieldwork and to IfA standards. 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 evaluation trenches will be accurately surveyed using a sub-metre GPS and located within the National Grid.
- 6.4 All archaeological finds will be dealt with by the on-site GUARD 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 significant 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.
- 6.5 All excavated feature fills and horizons will be sampled as appropriate, using bulk soil samples, for palaeo-environmental evidence.
- 6.6 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.
- 6.7 Should human remains be revealed by the excavation, the local police, the client and the archaeological adviser to will be informed immediately. Any human remains will be accurately recorded, but left *in situ*, pending the agreement of the police, the client and the archaeological adviser to the planning authority on an appropriate mitigation strategy.
- 6.8 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 archaeological adviser to of the Planning Authority, on a WSI addenda for an appropriate scope of excavation (Stage 2) and post-excavation analysis & publication (Stage 3).
- 6.9 On completion of the recording of the evaluation trenches at the end of each day, the backfilling of trenches will be undertaken by machine, so that no trenches are left open overnight, other than those where significant archaeology is encountered. 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 the

Dumfries and Galloway Council Archaeologist. The report will take the form of a Data Structure Report and will contain an analysis of the results of the archaeological 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 WSI 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 An appropriate number of hard copies and digital pdf copies of the report will be prepared for the client and sent to the archaeological adviser for agreement.
- 7.5 The hard copy report will be presented in an ordered state and bound within a protective cover/sleeve. 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 <http://ads.ahds.ac.uk/project/oasis/> 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, the archaeological adviser to the planning authority 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: Dr. John Atkinson
  - Project Director (on-site Archaeologist): Warren Bailie
  - Finds and Environmental Support and Conservation: Ms Aileen Maule
  - Illustrator: Ms Gillian McSwan
- 12.2 The GUARD Project Manager, Dr. 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 arranged in due course. The archaeological adviser to the planning authority will be given at least one week's notice prior to the commencement of fieldwork. The archaeological adviser and the client will be informed of the site mobile phone number prior to the start date so that monitoring visits can be arranged. Given that trenches will be backfilled at the end of each day, the archaeological adviser will be informed of the start date and no of days on site in advance, so that he can arrange a site visit at a time when a reasonable number of trenches will be open. It is estimated that the evaluation of the development area will take one day 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. 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.

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