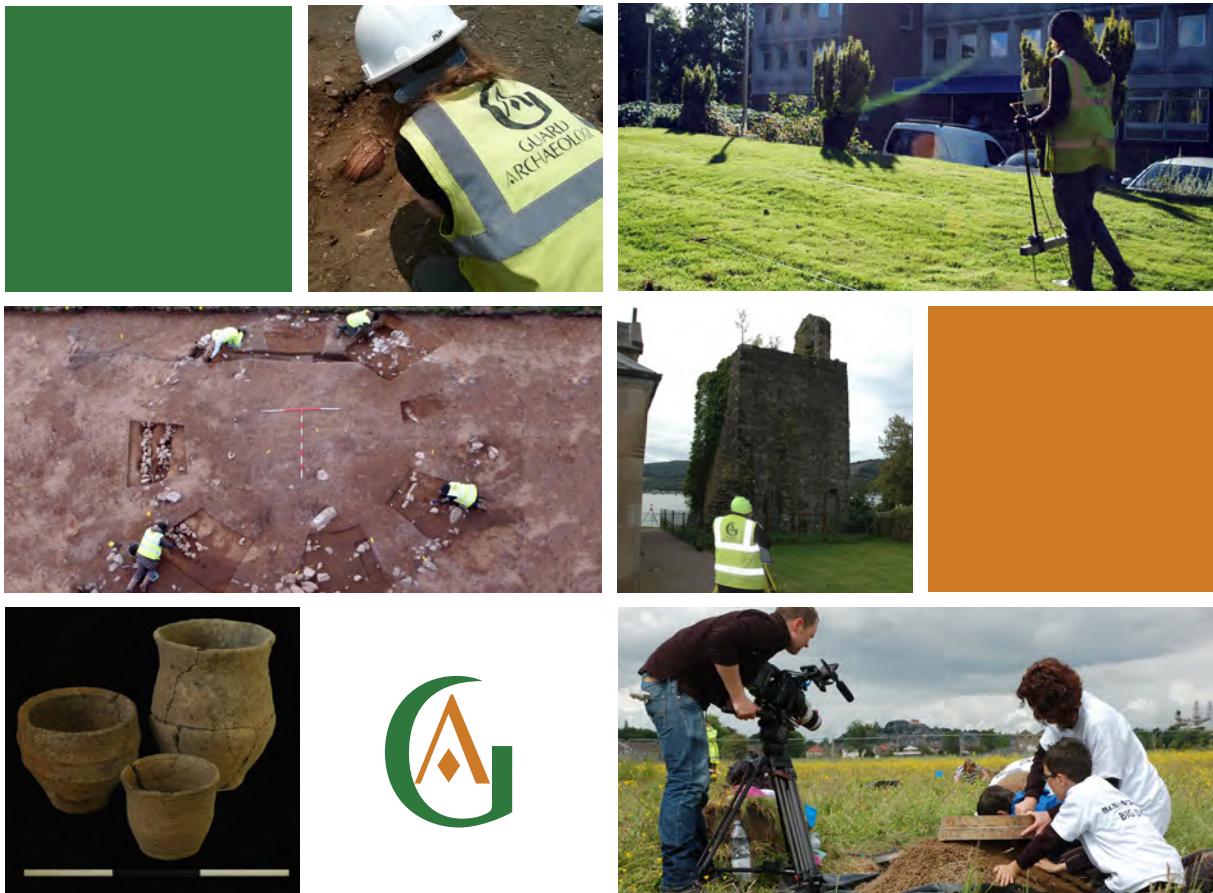


GUARD ARCHAEOLOGY



**North Berwick Water Main, North Berwick Law,
East Lothian
Archaeological Watching Brief
Data Structure Report
Project 3979**

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**North Berwick Water Main, North Berwick Law, East Lothian
Archaeological Watching Brief
Data Structure Report**

On behalf of: Scottish Water Horizons

NGR: NT 55335 83988

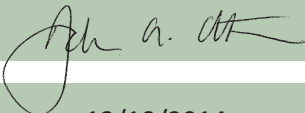
Project Number: 3979

Report by: Alan Hunter Blair

Illustrations: Alan Hunter Blair

Project Manager: John Atkinson

Approved by:


13/10/2014

Date:

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

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Contents

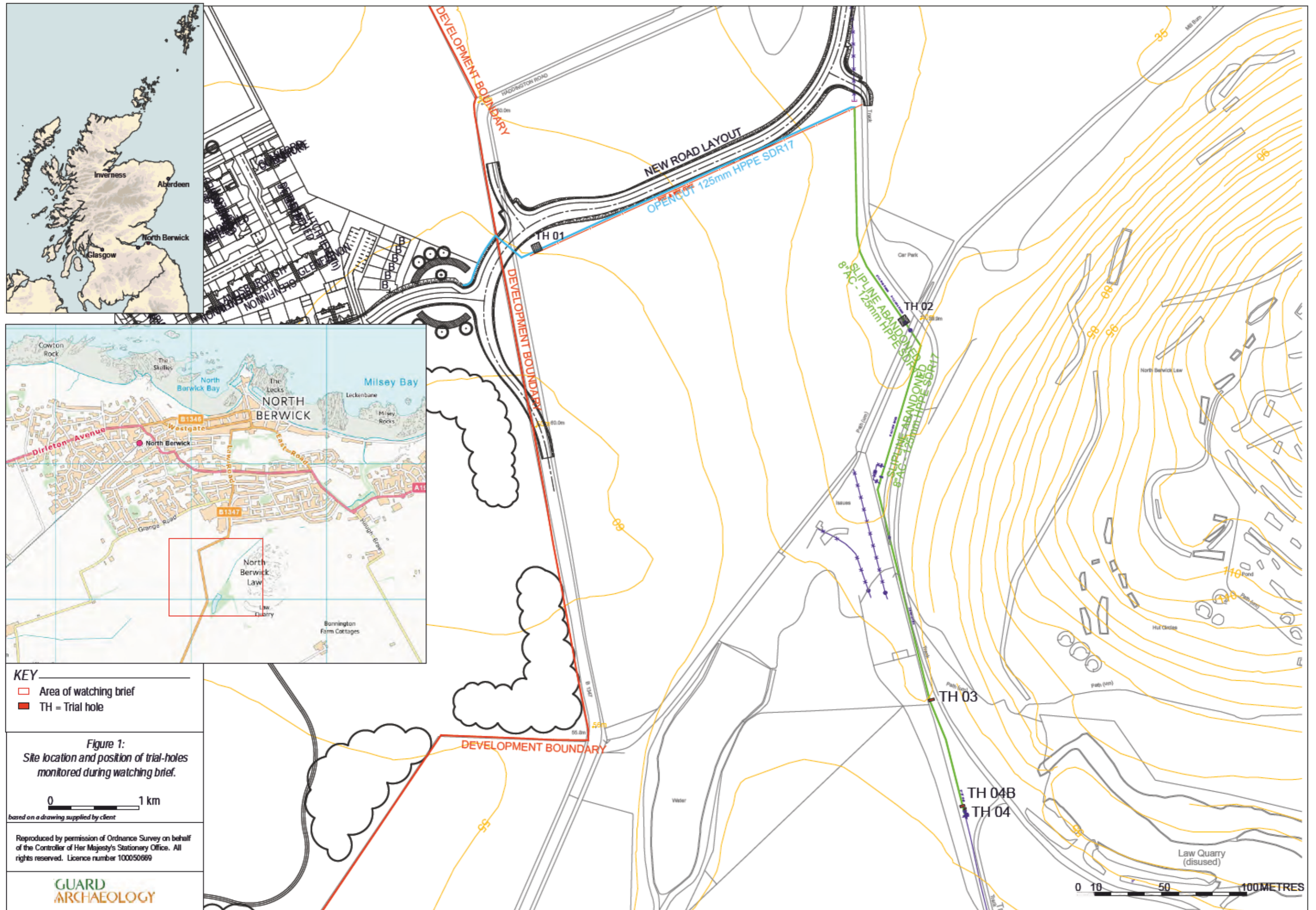
Non-technical Summary	6
Introduction	6
Site Location	6
Archaeological Background	6
Aims and Objectives	6
Fieldwork Methodology	7
Results	7
Discussion	8
Acknowledgements	8
Appendices	10
Appendix A: Trench Details	10
Appendix B: List of Contexts	10
Appendix C: List of Photographs	10
Appendix D: Discovery And Excavation Scotland Entry	11
Appendix E: Written Scheme of Investigation	12

List of Figures

Figure 1: Site location and positions of trial-holes monitored during watching brief	5
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List of Plates

Plate 1: View immediately west of TH03 showing build up of road make-up layer 003 on the west side of field boundary wall, from the north	7
Plate 2: View of concrete beam in TH03 bracing field boundary wall, from the east-north-east	7
Plate 3: General view of TH04, from the north	8
Plate 4: General view of TH04B, relict water main visible at base of trench, from the north	8



Non-technical Summary

- 1.1 In September 2014 GUARD Archaeology Limited (GAL) were commissioned by Scottish Water Horizons to undertake an archaeological watching brief during groundbreaking works prior to installing a new water main along the west side of North Berwick Law, by North Berwick in accordance with Scheduled Monument Consent (Case ID 201402389). The work was carried out in response to a condition placed on the development by Historic Scotland. Three trial holes were excavated along part of the route of the new water main on the west side of North Berwick Law hillfort. No archaeological features were noted.

Introduction

- 2.1 This data structure report sets out the results for the archaeological watching brief, carried out to satisfy a planning condition placed on the North Berwick Law water main pipeline development by Historic Scotland. The work was undertaken over two days in September 2014.

Site Location

- 3.1 The proposed development area lies at the western end of the Scheduled Monument known as North Berwick Law fort, hut circles and enclosures, on the lower slopes of the law itself. The landscape surrounding the monument is one of gently rolling pasture to the west and south with steeper slopes to the north and east and built-up aspects of the village covering the northern views from the top of the law. The site is located *circa* 500 m south of North Berwick, East Lothian (centred around NGR: NT 55335 83988; Figure 1).

Archaeological Background

- 4.1 The water main runs in a NNW to SSE direction along the lower slopes of the scheduled area for North Berwick Law hillfort and associated hut circles and enclosures. The fort itself is scantily defined by a drystone wall enclosing a relatively even terrace of around 150 m by 90 m in extent around 15 m from the summit. This area of the site also contains remains of observation posts (Canmore ID 73937) and other military structures associated with the Napoleonic Wars (Canmore ID 73938). Further down slope groups of hut circles and enclosures are evident particularly on the western side of the monument. Other records also show the discovery of bronze socketed axes (Canmore IDs 56679 and 56700), roman coins (Canmore ID 56680), cists (Canmore ID 56677) and a greenstone axehead (Canmore ID 56701) implying multi-functional use of this location through time.
- 4.2 Given this rich history, there was a moderate to high likelihood of encountering buried archaeology during the development.

Aims and Objectives

- 5.1 The aim of the archaeological works was to identify:
- as yet unknown archaeological artefacts, features and deposits within the specific development area;
 - to ensure that any surviving archaeological remains encountered within this specific area was recorded to an appropriate level;
- 5.2 The objectives were therefore to:
- Conduct an archaeological watching brief during ground breaking work of the areas marked in Figure 1, in order to identify and record any archaeological features encountered in the development area and to establish their character, date and extent if surviving;
 - Submit a report to data structure level for agreement to Historic Scotland and East Lothian Council Archaeology Service on completion of the archaeological fieldwork.

Fieldwork Methodology

- 6.1 The proposed development area was photographed and a brief written description made prior to the commencement of ground-breaking works.
- 6.2 The archaeological works involved the excavation of three trial holes to determine the depth and diameter of the relict water main, the idea being to use the pipe of the relict main as a duct through which to route the new pipeline.
- 6.3 The first trial hole TH04 was excavated by hand, the second (TH04B) and third (TH03) using a 1.5 tonne mechanical mini-digger fitted with a flat-bladed (toothless) bucket.
- 6.4 The topsoil was removed in spits to the first archaeological horizon or, where none was found, to the top of the relict water main.

Results

- 7.1 These results should be read in conjunction with the fuller context descriptions found in appendix B.

TH03 (Figure 1, Plates 1 and 2)

- 7.2 Trial-hole 03 measured 2.1 m long by 1.4 m wide by 2.04 m deep and was excavated through a shallow topsoil/turf horizon (001) measuring 0.12 m deep. This overlay an extensive, deep deposit of sandstone fragments (003) which had been built up to a height of at least 2.04 m to form a track around the base of North Berwick Law leading to a quarry (disused) located at the south-west side of the Law. Prehistoric midden deposits have been recorded eroding down from the top of the quarry edge. The depth of this road make-up deposit (003) was not fully determined, excavation of the trial-hole ceased at a depth of 2.04 m still within the make-up layer where the relict water main was encountered. A concrete beam not fully exposed but measuring 0.6 m deep was visible along the west edge of the trench and appeared to have been placed to help alleviate pressure on the adjacent field boundary wall from road make-up deposit 003. Despite this the field boundary wall was heaving slightly to the west.



Plate 1: View immediately west of TH03 showing build up of road make-up layer 003 on the west side of field boundary wall, from the north.



Plate 2: View of concrete beam in TH03 bracing field boundary wall, from the east-north-east.

TH04 (Figure 1, Plate 3)

- 7.3 Trial-hole 04 was hand excavated, S-shaped in plan and measured 1.5 m long north/south by 1.25 m long east/west, the trench measured 0.5 m wide and was excavated around the area of a valve chamber, associated with a manhole and water main bypass pipes, to a depth of 0.85 m

where concrete capping over a water main bypass pipe was encountered aligned east to west towards the location of the water main. In this trench topsoil/turf horizon (001) measured 0.12 m deep this overlay a sterile re-deposited subsoil/ subsoil horizon (002) which was excavated to a depth of 0.73 m. No evidence of construction cuts associated with installation trenches for the valve chamber or concrete capped pipe were visible.

TH04B (Figure 1, Plate 4)

- 7.4 Trial-hole 04B was aligned east to west, excavated by machine and positioned 1 m north of TH04. This measured 1.6 m long by 1.1 m wide and was excavated through topsoil (001) and subsoil/re-deposited subsoil horizon (002) to a depth of 0.95 m where the relict water main pipe was encountered. No archaeological features were seen.



Plate 3: General view of TH04, from the north.



Plate 4: General view of TH04B, relict water main visible at base of trench, from the north.

Discussion

- 8.1 The watching brief recorded the remains of a track leading to a disused quarry, no further features of interest were encountered.
- 8.2 A summary of the project results will be submitted to Discovery and Excavation in Scotland. A copy of this is included in Appendix D. The archive for the project, including a copy of the report, will be submitted to the National Monuments Records for Scotland within six months.
- 8.3 The online OASIS form at <http://ads.ahds.ac.uk/project/oasis/> (OASIS Reference: guardarc1-191699 will be completed within 3 months. Once the Data Structure Report has become a public document by submission to or incorporation into the SMR, the East Lothian Council archaeologist will validate the OASIS form thus placing the information into the public domain on the OASIS website.

Acknowledgements

- 9.1 GUARD would like to thank Simon Brassey of Scottish Water and Drew Mackie of Morrisons Construction for their assistance. Plant and driver were supplied via Morrisons Construction Ltd. Technical support was from Aileen Maule and John Kiely. The illustrations were produced by Alan Hunter Blair. The project was managed for GUARD Archaeology by John Atkinson.

**North Berwick Water Main, North
Berwick Law, East Lothian
Archaeological Watching Brief
Data Structure Report**

Section 2: Appendices



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Appendices

Appendix A: Trench Details

Tr No	Length (m)	Width (m)	Depth (m)	Topsoil/Overburden	Subsoil	Details
TH03	2.1	1.4	2.04	001	003	Water main at 2.04 m
TH04	1.5 N-S X 1.25 m E-W	0.5	0.85	001	002	Concrete cap at 0.85 m
TH04B	1.6	1.1	0.95	001	002	Water main at 0.95 m

Appendix B: List of Contexts

Context No.	Area	Description	Interpretation
001	TH03/ TH04	Deposit: A dry, firm dark brown sandy loam with occasional small sub-angular stones 60 mm<. Measured 0.12 m deep	Turf and topsoil horizon.
002	TH04	Deposit: A dry, firm mid-brown sandy clay with moderate inclusions of small angular sandstone fragments 40 mm< and frequent tree roots. Measured 0.73 m deep	Redeposited subsoil/Backfill of water pipe trench
003	TH03	Deposit: A dry, firm mid-brown sand with frequent small and medium sized sandstone fragments. Measured 1.3 m deep	Extensive, deep landscaping deposit forming track to quarry

Appendix C: List of Photographs

Shot No.	Area	Description	Taken from
1	-	Registration	-
2	TH04	General view during hand excavation of TH04	NW
3	TH04	General view during hand excavation of TH04	NW
4	TH04	General view of TH04 showing excavated area around valve chamber	N
5	TH04B	General view from TH04B towards the quarry excavated through prehistoric midden deposits	SW
6	TH04B	General view of TH04B during excavation	SW
7	TH04B	General view from TH04B towards the quarry excavated through prehistoric midden deposits	SW
8	TH04B	South facing section through deposits in TH04B, water main visible at base of trench	S
9	TH03	General view towards TH03 from TH04 showing scarp of track to quarry	S
10	TH03	General view of TH03 pre-excavation	N
11	TH03	General view showing difference in ground level on east and west sides of field boundary wall	N
12	TH03	West facing section showing depth of road make-up deposit 003, water main visible at base of trench	W
13	TH03	Concrete beam on west edge of trench alleviating pressure on field boundary wall from landscaping/road make-up deposit 003	ENE

Appendix D: Discovery And Excavation Scotland Entry

LOCAL AUTHORITY:	East Lothian Council
PROJECT TITLE/SITE NAME:	North Berwick Water Main, North Berwick Law
PROJECT CODE:	3979
PARISH:	North Berwick
NAME OF CONTRIBUTOR(S):	Alan Hunter Blair
NAME OF ORGANISATION:	GUARD
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	NT58SE 66, NT58SE 32, NT58SE 93, NT58SE 65, NT58SE 130
SITE/MONUMENT TYPE(S):	Fort, hut circles and enclosures, Napoleonic Military structures, 1 st and 2 nd World War installations, Bronze-Age greenstone axe head
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 55335 83988
START DATE (this season)	18 th September 2014
END DATE (this season)	19 th September 2014
PREVIOUS WORK (incl. DES ref.)	Lowe C, Morrison J DES 2001 p36
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was carried out during groundbreaking works prior to installing a new water main along the west side of North Berwick Law. This was undertaken in accordance with scheduled monument consent (Case ID201402389). Three trial holes were excavated along part of the route of a new water main on the West side of North Berwick Law hillfort. No archaeological features were encountered.
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	Scottish water Horizons
CAPTION(S) FOR ILLUSTRS:	---
ADDRESS OF MAIN CONTRIBUTOR:	GUARD Archaeology Limited, 52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
EMAIL ADDRESS:	bob.will@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS.

Appendix E: Written Scheme of Investigation

NORTH BERWICK WATER MAIN, NORTH BERWICK LAW, EAST LOTHIAN

ARCHAEOLOGICAL WATCHING BRIEF

WRITTEN SCHEME OF INVESTIGATION

PROJECT 3979

Executive Summary

- 1.1 This Written Scheme of Investigation (WSI) forms the archaeological method statement for the proposed excavation of two trial pits within the scheduled area at North Berwick Law, East Lothian (scheduled monument Index No M3863). This document will require to be approved by Historic Scotland before any work with the scheduled area can commence.

Introduction

- 2.1 This WSI sets out the methodology for the archaeological mitigation works required for the excavation of two trial pits within the scheduled area at North Berwick Law, East Lothian in accordance with the scheduled monument consent granted by Historic Scotland on 29 August 2014. The agreed scope of work is for an archaeological watching brief during all groundbreaking works within test pits 3 and 4 within the scheduled area associated with North Berwick Law fort, hut circles and enclosures.
- 2.2 This document 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 Stage 1 archaeological watching brief. Stage 2 post-excavation analysis and publication, if required, will be specified in an addendum to the WSI. This addendum, if required, will be submitted for the agreement of Historic Scotland, prior to the commencement of any post-excavation work. All phases of work will be funded by the developer, in this case Scottish Water.

Site Location

- 3.1 The proposed development area lies at the western end of the scheduled monument known as North Berwick Law fort, hut circles and enclosures. on the lower slopes of the law itself. The landscape surrounding the two test pits is one of gently rolling pasture to the west and south with steeper slopes to the north and east and built-up aspects of the village covering the northern views from the top of the law.

Archaeological Background

- 4.1 The water main runs in a NNW to SSE direction along the lower slopes of the scheduled area for North Berwick Law hillfort and associated hut circles and enclosures. The fort itself is scantily defined by a drystone wall enclosing a relatively even terrace of around 150 m by 90 m in extent around 15 m from the summit. This area of the site also contains remains of observation posts (Canmore ID 73937) and other military structures associated with the Napoleonic Wars (Canmore ID 73938). Further down slope groups of hut circles and enclosures are evident particularly in the western side of the monument. Other records also show the discovery of bronze socketed axes (Canmore IDs 56679 and 56700), roman coins (Canmore ID 56680), cists (Canmore ID 56677) and a greenstone axehead (Canmore ID 56701) implying multi-functional use of this location through time.

Aims and Objectives

- 5.1 The aim of the archaeological works is to:
 - record the excavation of two test pits within the scheduled area and ensure preservation by record can be achieved.
- 5.2 The objectives are therefore to:
 - Conduct an archaeological watching brief to record any archaeological remains that are revealed within the development area;
 - Submit a report to data structure level for agreement to Historic Scotland, on completion of the investigations;

- Submit, if post-excavation work is required, an accompanying project design and costing alongside the data structure report, which will outline arrangements for further post-excavation and publication works.

Methodology

- 6.1 The GUARD Archaeologists will photograph the test pit areas and make a brief written description prior to the commencement of ground-breaking works.
- 6.2 Overburden and any modern infill material will be removed from the development under supervision at all times by an experienced GUARD Archaeologist. Back-acting excavators will be fitted with flat-bladed (toothless) ditching buckets.
- 6.3 Any archaeological features encountered will be cleaned by hand and mapped by the Archaeologist to determine their character and extent.
- 6.4 All potential archaeological features will be investigated and recorded by the on-site Archaeologist.
- 6.5 In the event that groups of significant features or complex remains are revealed, further archaeological staff may be deployed in order to assist in the recording of these features.
- 6.6 A full record of all features or structures will be made using a single context planning 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 levels will be tied into Ordnance Datum and accurately located with the National Grid.
- 6.7 All archaeological finds will be dealt with by the on-site Archaeologist. Significant small finds will be three dimensionally located prior to collection. All finds will be processed to MAP2 type standards and subject to specialist assessment. Palaeo-environmental samples will also be taken where appropriate. If necessary, conservation of finds will be appraised to allow for specialist study.
- 6.8 A representative section will be recorded denoting depth of overburden or infill, any stratigraphy present and the nature of the infill matrix. This information will be logged in the day book together with a sketch drawn to scale and a photographic record of deposits.
- 6.9 A record of the full extent in plan of all archaeological deposits as revealed in the investigation will be made, either digitally or by hand, and related to the OS grid. Where digital planning is used, the project archaeologist will ensure that a sufficient number of points are taken on each feature to ensure an accurate representation of the site.
- 6.10 All elements of the fieldwork and any subsequent post-excavation work will be undertaken in line with the policies and guidelines of the Institute for Archaeologists (IfA) of which GUARD Archaeology Ltd is a *Registered Organisation*.
- 6.11 In the event of human burials being discovered, the archaeologist will procure and comply with all statutory consents and licences. Further guidance on the treatment of human remains can be found in Historic Scotland Operational Policy Paper 51. Where any part of a human burial is disturbed, the whole burial must be archaeologically excavated. Specialist advice and support must be provided as appropriate.

Report Preparation and Contents

- 7.1 A report detailing the results of the archaeological investigations will be submitted to the client and, subject to client approval, then submitted to Historic Scotland. The report will take the form of a Data Structure Report and will contain an analysis of the results of the archaeological investigations.

¹ *The Treatment of Human Remains in Archaeology; Historic Scotland Operational Policy Paper 5*. Available at <http://www.historic-scotland.gov.uk/human-remains.pdf#xml=http://web1:10700/tehis/webinator/pubssearch/pdfhi.txt?pr=publications&prox=page&rorder=500&rprox=500&rdfreq=500&rwfreq=500&rlead=500&rdepth=0&sufs=0&order=r&id=504fdf039>

The report will include a full descriptive text that will characterise any archaeological features or structures encountered. It will also include plans and photographs at an appropriate scale showing the archaeological features encountered and archiving lists of all drawings and photographs.

7.2 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
- Scheduled monument reference 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
- 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
- discussion of the results of the archaeological investigations
- recommendations regarding the need for, and scope of, any further archaeological work, such as post-excavation analysis and publication
- bibliography

7.3 The Data Structure Report will be completed within four weeks of the completion of the site investigations.

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 Historic Scotland.

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 Limited.

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 work, 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.

9.2 In the event that significant remains are encountered and post-excavation analysis and full publication is required this work will be wholly funded by the client and specified within a Post-Excavation Research Design agreed in advance with Historic Scotland.

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 1 month of completion of the work. Once the Data Structure Report has become a public document by submission to or incorporation into the NMRS, Historic Scotland will validate the OASIS form thus placing the information into the public domain on the OASIS website.
- 10.3 A copy of the archive contents will be included in the Data Structure Report which will be provided to Historic Scotland and East Lothian Council Archaeology Service for inclusion in the HER archive.

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 Archaeology until a decision has been made by the panel.

Personnel and Liaison

- 12.1 The GUARD Archaeology team will comprise the following qualified and experienced GUARD archaeologists:
 - Project Director (on-site Lead Archaeologist): Christine Rennie
 - Additional field staff, if required, will be drawn from our team of experienced field staff
 - Finds and Environmental Support and Conservation: Ms Aileen Maule
 - Illustrator: Ms Fiona Jackson
 - Project Manager: John Atkinson
- 12.2 The GUARD Archaeology Managing Director, 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 giving one weeks notice for the archaeological works will be notified to Historic Scotland so they can monitor the works if required. Historic Scotland will also be informed of the site mobile phone number prior to the start date so that monitoring visits can be arranged. It is envisaged that the archaeological watching brief may take approximately 1 day to complete.

Health & Safety and Insurance

- 14.1 GUARD Archaeology Limited 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 Archaeology 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 Archaeology Limited's Fieldwork Safety Policy Statement may be viewed upon request.

- 14.2 GUARD Archaeology Limited also possesses all necessary insurance cover, proofs of which may be supplied upon request.

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