

GSRT13/001

DEMOLITION OF FORMER SAUSAGE FACTORY, GLEN
SHIRVA ROAD, TWECHAR

*Watching Brief
for Cooper Cromar*

July 2013

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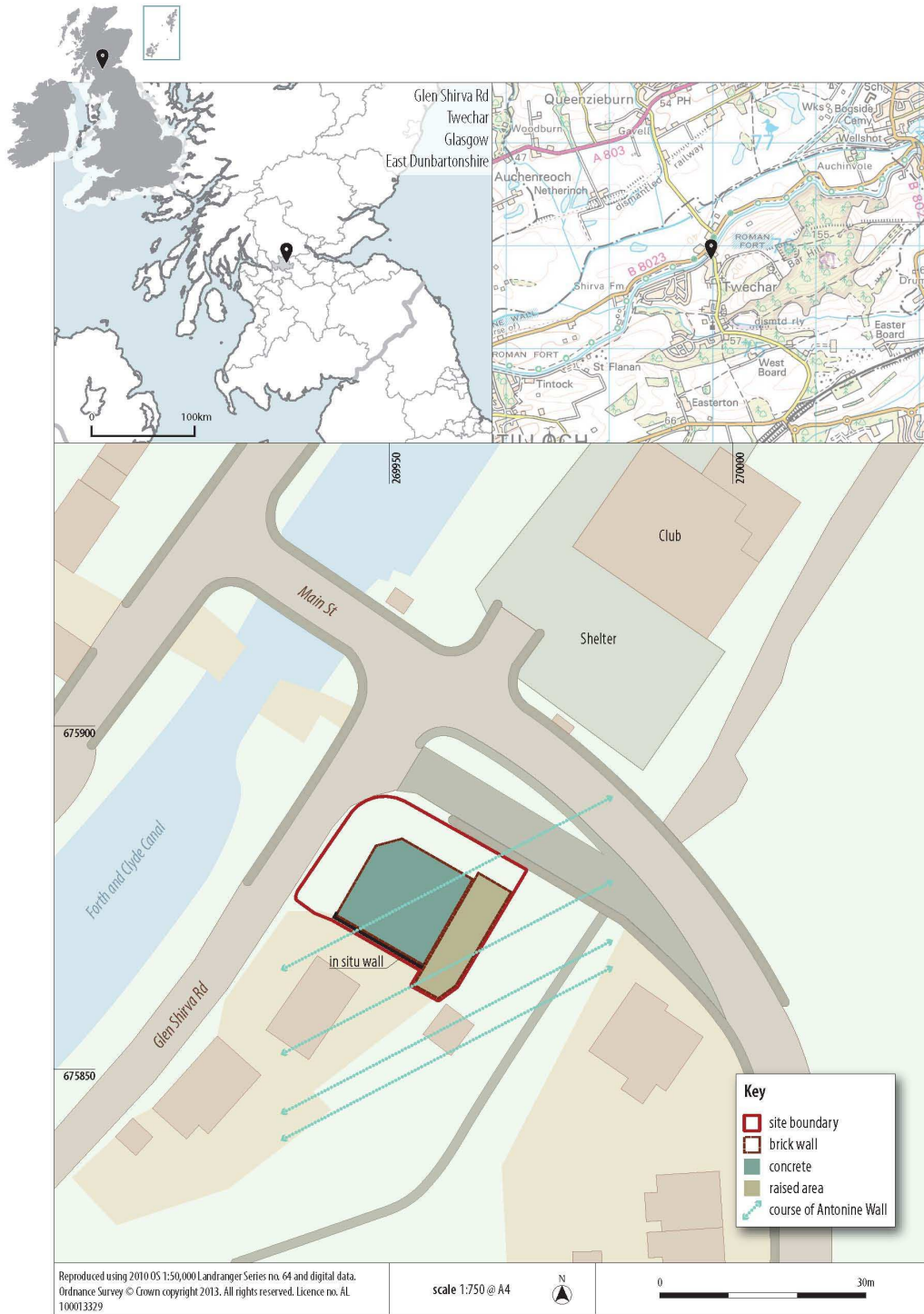
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Illus 1
Site location

Illus1
Site location plan

DEMOLITION OF FORMER SAUSAGE FACTORY, GLEN SHIRVA ROAD, TWECHAR

Watching Brief

Summary – A watching brief was carried out on demolition works associated with the removal of floor surfaces and wall foundations at a former sausage factory located at the junction of Glen Shirva Road and Main Street, Twechar, East Dumbartonshire. The southern part of the building lies on the projected line of the Antonine Wall. No evidence of the wall was revealed during this work and it was considered that the construction of the factory had truncated any archaeological remains associated with the wall. The geological subsoil was only exposed in small areas of the site and it is possible that remains still survive below the brick debris left on site, particularly across the higher areas of the site to the south of the demolished building.

1 INTRODUCTION

A building warrant was obtained for the demolition of the former sausage factory located at the junction between Glen Shirva Road and Main Street, Twechar, East Dumbartonshire. The southern part of the building including the wall to the south lies upon the projected line of the Frontiers of the Roman Empire (Antonine Wall) (Illus 1), a World Heritage Site (WHS), with some sections of the Wall protected under legislation as a Scheduled Monument. To the west of the proposed development, there is a scheduled section of the Wall (SM No. 7054) and other sites of the Roman period. Archaeological Monitoring was required in order to safeguard and prevent adverse impact on any surviving remains of this monument

Headland Archaeology was commissioned by Cooper Cromar, on behalf of Places for People, to agree a programme of archaeological work with East Dumbartonshire Council Archaeologist and to encapsulate that programme within a written scheme of investigation (WSI)..

As the site lies within an inscribed WHS all works were cognisant of, and compliant with, Historic Scotland Frontiers of the Roman Empire (Antonine Wall) World Heritage Site Supplementary Planning Guidance.

The work comprised a programme of archaeological monitoring in outline. The WSI was submitted to and agreed with Rathmell Archaeology Ltd who advises the East

Dumbartonshire Council on archaeological matters. This report details the results of this work.

2 SITE LOCATION AND DESCRIPTION

The site is located at the junction of Glen Shirva Road and Main Street, Twechar (NGR: NS 6995 7587; Illus 1). It had been occupied by a former sausage factory constructed in the 1930's. The main structure of the building had been demolished prior to archaeological intervention. Only the floor surfaces, west and south wall and all wall foundations had been left in-situ.

The site was bounded by Glen Shirva Road to the north and Main Street to the east. Residential properties and gardens were located to the south and west.

The site lies around 55m OD and is underlain by this Clackmannan Group, Sedimentary Bedrock formed approximately 314 to 330 million years ago in the Carboniferous Period. The superficial deposits are defined as Alluvium - Clay, Silt And Sand - formed up to 2 million years ago in the Quaternary Period. The Local environment was previously dominated by rivers. The bedrock formed from rivers depositing mainly sand and gravel material in channels to form river terrace deposits, with fine silt and clay from overbank floods forming floodplain alluvium, and some bogs depositing peat; includes estuarine and coastal plain deposits mapped as alluvium (<http://www.bgs.ac.uk>).

The site lies upon the projected line of the Antonine Wall. This monument was constructed around AD 140 on the orders of the Emperor Antonius Pius and represents the north-western frontier of the Roman Empire. It runs for c 60 km from Old Kilpatrick on the north side of the River Clyde to Bo'ness on the Firth of Forth. The Wall is a Scheduled Monument, and inscribed by UNESCO with World Heritage Site status in 2008 as the Frontiers of the Roman Empire (Antonine Wall) WHS.

A scheduled section of the wall (NMRS: NS67NE 21.01, SM No. 7054), lies to the east of the site. The scheduled area runs from the main road close to the crossing of the Forth and Clyde Canal in Twechar, to Bar Hill fort (NMRS: NS77NW 8, SM No. 90008). The scheduled area includes the wall, rampart, berm, ditch and upcast mound, and an area to the north and south where traces of activities associated with the construction and use of the monument may survive.

The surrounding area has also seen a significant amount of industrial activity. The Canal immediately north of the site, part of the scheduled Forth and Clyde Canal (NMRS: NS67NE20, SM No. 6769), was opened in the 1770's. By the mid 19th century Twechar Colliery was established (1865-1965; NMRS: NS77NW 57) along with a series of railway lines and associated sheds (NMRS: NS67NE 33). The cartographic evidence indicates that no buildings occupied the site until the construction of the factory in the 1930's, although the colliery railway line ran close to the south side of the site (Illus 2).



Illus 2 Extract from the 1898 Ordnance Survey

3 AIMS & OBJECTIVES

The Archaeological Monitoring was designed to mitigate any adverse impacts on sub-surface remains of archaeological interest during the demolition of the former factory. Works requiring archaeological monitoring comprised breaking up of the concrete floor slab, removal of old strip foundations, drainage and old tarmac.

The resulting archive will be organised and deposited in the NMRS; to facilitate access for future research and interpretation for public benefit.

4 METHODOLOGY

4.1 Site works

The work was undertaken as specified in the WSI. This primarily involved the demolition of the former sausage factory. It was agreed that the demolition of above ground structures could be undertaken without archaeological monitoring. Archaeological monitoring was required for all below ground works such as the removal of the floor slab, grubbing up of old foundations, drainage and removal of old tarmac.

Where the works involved ground reduction, they were monitored by an archaeologist. The monitoring strategy was in order to provide information on any previously unrecorded features of archaeological interest in a relatively unobtrusive manner.

4.2 Recording

All aspects of the work were undertaken in accordance with the current relevant Standards and Guidance for Watching Briefs of the Institute for Archaeologists (2008).

All recording was undertaken on *pro forma* record cards. 35mm colour transparencies and digital photographs were taken; a graduated metric scale clearly visible. A full list of the photographic record can be found in Appendix 1

4.3 Reporting and Archives

The results of the works are presented below. A summary report has been prepared for submission to *Discovery & Excavation in Scotland* (Appendix 2) and the OASIS database (headland1-155576).

The complete project archive will be deposited with the National Monuments Record of Scotland (NMRS) within six months of completion of the project. The records (paper and digital) will be archived according to best practice guidelines set out by the Archaeological Archiving Forum (Brown 2007).

5 RESULTS

The work was carried out between 17th and 22nd July 2013 in dry and clear weather conditions. The programme of archaeological works comprised the monitoring of all ground works associated with removal of floor surfaces and wall foundations of the former sausage factory. The site measured approximately 200m² and stood at approximately 55m OD.

The majority of the building had been demolished prior to the archaeological watching brief. The only surviving remains of the factory beyond the concrete floor surface were the ground floor levels of the west and south brick walls. It was noted that the surrounding landscape had a noticeable slope leading down from the south end of site towards the canal to the north. Due to this the floor level of the building had cut into this slope so that the ground level to the south of the building was approximately 2m above the level of the floor surface (Illus 3). This implied that the original ground surface had been heavily truncated by the factory construction.



Illus 3 View of site showing the rising ground to the south

The removal of the concrete floor surface was undertaken using a tracked excavator with a toothed bucket under archaeological supervision.

This revealed a deposit of brick rubble forming a foundation layer for the floor. This material was mainly left in-situ as its removal was not necessary. Due to this the underlying deposits were not exposed. A number of small discrete areas were cleaned by hand in order to expose the underlying deposits. In all cases reddish brown sandy clay (001) was recorded (Illus 4). This was thought to represent the underlying geological subsoil.



Illus 4 Detail of the clay subsoil (001) below the floor foundations

The sandy clay deposit (001) was also revealed during the removal of the brick foundations of the north wall. As the surrounding land increased in height towards the south end of the site substantial sections were exposed following removal of the east and south walls and foundations. The west facing section at the north end of the east wall revealed the same reddish brown sandy clay (001) recorded below the floor surface. To the south side of the same section a 1m high deposit of orange sand (002) was exposed. It was considered that this was the original underlying geological subsoil. This sand had been truncated by a modern cut to the north that had been in-filled with dark grey brown sand with occasional brick and glass inclusions (Illus 5). The orange sand (002) had also been truncated by the cut of the brick wall close to the south end of the exposed section. The removal of the south wall also exposed the deposit of orange sand (002), surviving to a height of over 1m. This was overlain by dark brown silty sand topsoil (003) with heavy root bioturbation and frequent brick and stone inclusions. This in turn had been overlain by a concrete ground surface approximately 2m above the floor level of the factory building and forming a 5m wide raised area to the south of the building.



Illus 5 Detail of the north side of the west facing section showing the geological sand and modern cut (to the left side)

The concrete surface on the raised area to the south of the building was removed revealing dark brown silty sand (003) recorded in section (Illus 6). This material was left in-situ with no geological subsoil revealed. A small area to the west end of this raised area was investigated by hand to reveal the top of the orange sand. No features of archaeological significance were identified in this area. An east facing section at the west end of this area indicated at least 0.7m of topsoil (003) above the orange sand (002) (Illus 7).



Illus 6 General view of the north facing section showing the geological sand layer (003) below the topsoil

The west wall of the building was left in-situ and no further ground works were required as the area was to be landscaped with additional topsoil being deposited over the layer of brick rubble.

No evidence for the survival of the Antonine wall was recorded during this work.



Illus 7 Detail of the east facing section showing the topsoil bank to the SW corner of the site

5.1 Discussion

The inferred line of the Antonine Wall puts the ditch through the centre of the site and through the wall and bank to the south. The work revealed that the factory building had been cut into an existing bank that sloped down towards the canal. This implied that any remains of the Antonine Wall would have been truncated by the factory's construction. A small area of raised ground immediately south of the building was also investigated as part of this work although no archaeological features were identified in this area. This is not to say that there was no archaeology present as the majority of this area was not cleaned of topsoil therefore unexposed remains of the wall may still survive below this layer.

The 1898 Ordnance Survey depicts a railway line (associated with Twechar Colliery) running immediately south of the site. This may also have impacted upon the remains of the Antonine Wall in this location, although to what extent if any was not discovered.

6 REFERENCES

6.1 Bibliographic sources

Brown, D H 2007 *Archaeological Archives Forum Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation*, AAF.

6.2 Cartographic sources

1859 Ordnance Survey Dumbarton Sheet
XXV.2

1898 Ordnance Survey Stirlingshire
Sheet 028.16

1918 Ordnance Survey Dumbartonshire
Sheet 028.15

1948 Ordnance Survey Stirlingshire
Sheet XXVIII.SE

6.3 Other sources

Internet

British Geological Survey website;
<http://www.bgs.ac.uk> (accessed
24/07/2013)

IfA 'Standards and Guidance for an
archaeological watching briefs' [online
article], (28/10/2008)
<http://www.archaeologists.net/sites/default/files/nodefiles/ifa_standards_watching.pdf
> accessed 24/07/2013.

National Map Library of Scotland website
<http://maps.nls.uk/> accessed 24/07/2013

7 APPENDICES

7.1 Appendix 1 – Site registers

Photographic register

Frame no.	Direction	Description
GSRT-001	S	Pre-excavation site shot
GSRT-002	SW	Pre-excavation site shot showing W wall
GSRT-003	S	Pre-excavation site shot showing S wall
GSRT-004	W	Pre-excavation site shot showing floor slab
GSRT-005	SW	Pre-excavation site shot showing floor slab
GSRT-006	E	Working shot of floor slab removal
GSRT-007	SE	Working shot of floor slab removal
GSRT-008	S	Working shot of floor slab removal
GSRT-009	S	Working shot of floor slab removal
GSRT-010	SW	Working shot
GSRT-011	S	View of natural below brick foundation in NW corner
GSRT-012	S	View of natural below brick foundation in NW corner
GSRT-013	S	View of natural below brick foundation in NW corner
GSRT-014	S	View of natural below brick foundation in SE corner
GSRT-015	E	W facing section showing natural behind the removed E wall foundation
GSRT-016	E	W facing section showing natural behind the removed E wall foundation
GSRT-017	S	Partial removal of E wall foundation
GSRT-018	W	Working shot
GSRT-019	W	Working shot of S wall removal
GSRT-020	E	W facing section showing natural behind the removed E wall foundation close to the S end
GSRT-021	E	W facing section showing natural behind the removed E wall foundation close to the S end
GSRT-022	E	W facing section showing natural behind the removed E wall foundation close to the S end
GSRT-023	SE	W facing section showing natural behind the removed E wall foundation close to the S end
GSRT-024	SW	View of natural sand behind the S wall
GSRT-025	S	View of natural sand behind the S wall
GSRT-026	S	View of natural sand behind the S wall
GSRT-027	SW	View of natural sand behind the S wall

Frame no.	Direction	Description
GSRT-028	E	working shot of concrete removal at S end of site
GSRT-029	S	Detail of cleaned area at W end of raised area to south of site
GSRT-030	S	Detail of cleaned area at W end of raised area to south of site
GSRT-031	W	View of topsoil section at the W end of raised area to south of site
GSRT-032	E	Working shot of concrete removal at S end of site
GSRT-033	W	Post ex view of raised area to S end of site
GSRT-034	W	Post ex view of raised area to S end of site
GSRT-035	E	Post ex view of raised area to S end of site
GSRT-036	W	Detail of E facing section of bank to SW corner of site
GSRT-037	W	Detail of E facing section of bank to SW corner of site
GSRT-038	SW	General view of site at end of works
GSRT-039	NW	General view of site at end of works

7.2 Appendix 2 – Discovery and Excavation in Scotland entry

Please delete this section if you are not working in Scotland or if for other reasons not applicable.

LOCAL AUTHORITY:	East Dumbartonshire
PROJECT TITLE/SITE NAME:	Demolition of former sausage factory Glen Shirva Road, Twechar
PROJECT CODE:	GSRT13
PARISH:	Kirkintilloch
NAME OF CONTRIBUTOR:	Donald Wilson
NAME OF ORGANISATION:	Headland Archaeology
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	NS 67NE 21.01
SITE/MONUMENT TYPE(S):	Frontier Wall
SIGNIFICANT FINDS:	none
NGR (2 letters, 8 or 10 figures)	NS 6995 7587
START DATE (this season)	17/07/2013
END DATE (this season)	22/07/2013
PREVIOUS WORK (incl. DES ref.)	none
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was carried out on demolition works associated with the removal of floor surfaces and wall foundations at a former sausage factory located at the junction of Glen Shirva Road and Main Street, Twechar, East Dumbartonshire. The southern part of the building was thought to lie on the projected line of the Antonine Wall. No evidence of the wall was revealed during this work and it was considered that the construction of the factory had truncated any archaeological remains associated with the wall. The geological subsoil was only exposed in small areas of the site and it is possible that remains still survive below the brick debris left on site, particularly across the higher areas of the site to the south of the demolished building.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	
ADDRESS OF MAIN CONTRIBUTOR:	13 Jane Steet, Edinburgh, EH6 5HE
EMAIL ADDRESS:	don.wilson@headlandarchaeology.com
ARCHIVE LOCATION (intended/deposited)	RCAHMS