

BWS 00

**Results of an Archaeological Evaluation at 31 - 33
Water Street, Leith**

Client: Zonal Retail Systems

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CONTENTS

1	Introduction
2	Site Location, Description and Background
3	Objectives
4	Methods
5	Results
6	Discussion
7	Outline Mitigation Proposals
8	Acknowledgements
Appendix 1:	Sources Consulted
Appendix 2:	Site Registers

Summary

Headland Archaeology Ltd carried out an archaeological investigation at 31-33 Water Street, Leith, on behalf of Zonal Retail Systems who propose to convert the existing warehouses into flats and office accommodation.

The work was undertaken to provide information on the extent of archaeological preservation on the site and the potential archaeological impact of the proposed development and to allow an appropriate mitigation strategy to be formulated.

The evaluation established that extensive medieval and post-medieval deposits survive within the warehouse itself and that there is potential for the survival of similar deposits under the adjacent carpark. The upper levels of these deposits will be affected directly by the proposed development, with the lower levels at risk of indirect damage.

1 INTRODUCTION

Headland Archaeology was commissioned to undertake an archaeological evaluation at 31 – 33 Water Street, Leith, by Camerons, acting on behalf of Zonal Retail Data Systems. The latter propose to convert the former bonded warehouse into flats and office space with car parking. The works associated with the proposed conversion have the potential to disturb archaeological remains; an archaeological evaluation was therefore required by the planning authority to allow the formulation of an appropriate mitigation strategy, in accordance with NPPG 5 and PAN 42.

The work was undertaken between 20th and 22nd March 2002.

2 SITE LOCATION, DESCRIPTION AND BACKGROUND (Figure 1)

The proposed development takes in 31 –33 Water Street, Leith, Edinburgh, and a gap site immediately to the south-east (NGR NT 2712 7639). The existing warehouse was built in the 19th century in two phases. The Queens Tobacco Warehouse, which forms Room 1 of the existing building, had been built by 1853, following the demolition of several buildings. By 1892 the buildings to the north had been demolished and Room 2 added, though at this stage it remained a separate building. By this time, the building was serving as a wine and spirit store, owned by Robertson and Sanderson & Co (Goad 1892).

Water Street lies in the medieval burgh of South Leith. The burgh developed from a 10th century fishing village becoming a major port by the 15th century. Water Street takes its name from a cistern built at its junction with Tolbooth Wynd in the 18th century. Before this it was known as Rotten or Ratoun Row and is first mentioned in a charter of AD 1314, though it was probably laid out in the 12th century when South Leith was first established. The charter describes it as the porta or avenue of John of Petendrech, which formed part of a larger area of land granted to Edinburgh's town council by Robert Logan of Restalrig. The name derives from 'rattin', meaning undressed timber, with a row being a thoroughfare running along the backs of a row of plots. The 'rattins' presumably relate to rough timber buildings along the row, probably serving as workshops and small warehouses (Mowat 1999, 2).

Recent years have seen a number of excavations in the immediate vicinity of the site, the most relevant being work undertaken by Headland Archaeology on the neighbouring site in 2000. Excavations here established that the area had been divided into plots by turf banks in the 13th – 14th century. The site was then used for light industry, predominantly fish processing. Following a period of disuse, probably relating to an outbreak of the plague or the Wars of Independence with England, a substantial timber building was erected in the 14th century. Again the function appears to be industrial, with the building possibly being used for metal working. Light industry, in various forms, seems to have persisted on the site into the 18th century. The medieval deposits had suffered some disturbance during the construction of a warehouse on the site in the 19th century, but were largely well preserved (Stronach forthcoming).

Excavations at nearby Burgess Street, have also identified well stratified archaeological deposits dating from the 11th century onwards (Collard & Reed 1994).

The underlying geology is sand.

3 OBJECTIVES

The evaluation was intended to determine the depth and nature of deposits within the proposed development area and the likely archaeological impact of the development and to propose an appropriate mitigation strategy to allow for the preservation of archaeology either *in situ* or by record.

4 METHODS

Five geotechnical test pits had been excavated within the warehouse. These had been dug as far as the underlying natural sand and then backfilled with the excavated material. These were re-excavated by hand, sondages dug into the sand and the sections recorded. Where possible samples were taken from the sections. Significant artefacts were retained from the backfill.

The carpark is still in use and could not be investigated in the course of the evaluation.

5 RESULTS (Figures 1, 2, 3, 4 & 5)

Extensive archaeological remains were identified in all of the test pits. The deposits encountered varied considerably between the two rooms, but were all sealed by the concrete and hardcore floor of the warehouse.

Test Pits 1, 2 and 3 were located in Room 1 and Test Pit 4 in Room 2.

5.1 Room 1

Test Pit 1 (Figure 2)

The hardcore bedding (11) for the concrete floor (10) overlay a sandy probable midden deposit (12), containing oyster shell and charcoal. This in turn sealed a much cleaner sand deposit (13), beneath which was probable midden deposit (14), again containing charcoal and oyster shell.

Several sherds of medieval pottery were recovered from the backfill.

Test Pit 2 (Figure 3)

A cut feature [22] was sealed by the concrete and hardcore floor (20). This contained lumps of yellowish sandy mortar, stone and ceramic building material (CBM) and is probably related to the demolition of earlier buildings to make way for the existing

warehouse. This was cut into a firm midden like deposit (23) containing large quantities of oyster shell, cinders and coal. This overlay deposits (24) and (25) and cobbled surface (26). The cobbles were set into midden-like deposit (27), at the base of which were concentrated large quantities of oyster shells. Deposits (28) and (29) were sealed beneath this. The former was very similar to (27) and may merely be a lens within it, while (29) contained much less anthropogenic material. Two small cut features were visible in the pit's south-east facing section, sealed below (27). Features [34] and [36] appeared to be small pits. Feature [36] truncated probable pit [32], which was filled with clean sand.

Quantities of medieval pottery were recovered from the backfill.

Test Pit 3 (Figure 4)

The concrete (53) and hardcore (54) of the warehouse floor overlay deposit (55), a rubble rich deposit, possibly associated with the construction of the warehouse. Under this was deposit (56), which contained frequent pieces of mortar and similar rubble. A probable mortar surface (57) was identified below this. Two further deposits, (58) and (59), lay between this and the natural sand. The former was quite clean, but (59) contained lenses of dark midden like material and medieval pottery.

5.2 Room 2

Test Pit 4 (Figure 5)

Concrete (40) and hardcore (41) overlay deposit (42), a firm sandy midden layer with frequent rubble inclusions, which sealed midden layers (43), (44), and (45). These latter deposits were present only in the southern section of the test pit. In the northern section of the trench the hardcore overlay a thick mortar layer (50), which sealed a cobbled surface (52). This butted up against east – west wall (51). The mortar used in this wall was indicative of a post-medieval date. The wall had been truncated at both ends of the test pit by the footings for the warehouse's columns. The construction of these had also removed the relationship between the midden deposits and the wall.

The pottery recovered from the backfill was predominantly post-medieval.

6 DISCUSSION

The evaluation established that there is considerable variation in the character of the archaeology sealed beneath the floors of the warehouse. This reflects the slightly different development of the two parts of the building and, despite the small sample size, it is possible to broadly characterise the archaeological potential of the two rooms.

During the excavation of the neighbouring site at 42-50 Water Street (Stronach forthcoming), archaeologically significant deposits were identified at approximately 5.6 mOD, broadly similar to the levels of the archaeological deposits identified on the current site.

6.1 Room 1

Extensive medieval deposits were identified in all three of the test pits excavated in this room. These deposits were encountered immediately below the hardcore bedding of the warehouse floor, at between 0.3 (5.9 mOD) and 0.55 m (5.65 mOD) below the existing ground surface. These deposits did not appear to have been extensively disturbed by the pre-warehouse buildings or their demolition.

In character the deposits were very similar to those identified on the site to the south, with a similar sequence of midden layers, and a clean disuse layer being identified in Test Pit 1. Given the presence of surfaces within the test pits, it is likely that structures survive to some extent within this part of the site.

The deposits identified in section were predominantly composed of sand making them extremely vulnerable to disturbance by heavy plant operating on the surface.

6.2 Room 2

Very limited information regarding the archaeological potential for Room 2 is available. The wall and cobbled surface identified here, 0.81 m (5.4 mOD) below the existing ground level, indicate that there is considerable scope for the survival of post-medieval structures in this area. Medieval deposits also appear to have survived in this room, with midden deposits present 0.5 m (5.7 mOD) below ground level.

6.3 Gap Site

The surface of the existing carpark in the gap site lies at 6.12 mOD. There is therefore considerable potential for the survival of archaeologically significant deposits in the region of 0.4 m below the existing ground level.

7 OUTLINE MITIGATION PROPOSALS

The nature of the development does not allow for pre-development resolution of the threatened archaeology. It is anticipated that the archaeological excavation of threatened deposits will be integrated within the overall development programme in accordance with a scheme of works agreed in advance with the local authority. The proposed development will impact on localised areas of archaeological deposits. Four main impacts need to be considered:

- 1) The overall reduction of the ground level by 450mm during construction of the new floor.
- 2) The removal and strengthening of the existing column bases.
- 3) The construction of the lift shaft.
- 4) The construction of the walls around the perimeter of the gap site.

Mitigation

1. The reduction of the ground level will have a minimal impact on the buried archaeology as, on average, significant archaeological deposits are not encountered

until 500mm below modern ground surface. However it is proposed that the breaking out and removal of the floors and the proposed ground reduction are monitored and any areas of archaeological deposits which need to be reduced are defined on the ground by the monitoring archaeologist and, subsequently excavated by the archaeological team.

2. Prior to the removal or strengthening of existing column bases it will be necessary for the archaeological team to excavate around the bases in order to expose them. With the central line of columns it may be easier to excavate a trench encompassing all of the bases to facilitate their demolition. With regard to the proposed new columns in the gap site, it will be necessary to archaeologically excavate the foundations for these.

3. It is proposed that the lift shaft is archaeologically excavated to the base of archaeological deposits prior to construction. It is anticipated that approximately 700mm of archaeological deposits survive in this area and these will be directly impacted by the construction of the lift shaft.

4. It is proposed that the foundations for the new walls around the perimeter of the gap site be archaeologically excavated in advance of construction. It is anticipated that the upper 300mm of deposits will be modern and can be machine-excavated under archaeological supervision. The remainder requires hand excavation.

The results of the archaeological work will be subject to a programme of analysis and publication to be agreed in advance with the local authority.

8 ACKNOWLEDGEMENTS

The fieldwork was undertaken by Richard Conolly, Hamish Fulford and Ross Murray. Mike Middleton and Laura Speed prepared the illustrations. Colm Moloney managed the project. John Lawson provided curatorial assistance.

APPENDIX 1: SOURCES CONSULTED

Cartographic Sources

- 1777 Wood, A. *Leith*
- 1804 Ainslie, J. *Old and New Town of Edinburgh and Leith*
- 1827 Thomson, C. *Plan of Leith and its Environs*
- 1853 Ordnance Survey *Edinburgh & Its Environs Sheet 13*, 1:1056, surveyed 1852
- 1892 Goad *Leith Plan No. 6*

Other Sources

- Collard MA & Reed D 1994 *Burgess Street/Water Street/Shore Place, Leith*, DES, 48.
- Moloney, C. An Archaeological Evaluation of the Basement of 42 to 50 Water Street, Leith. Headland Archaeology, unpublished client report.
- Mowat, S. 1999 *Water Street Documentary Report*. Unpublished report.
- Stevenson, S., Turner Simpson, A., & Holmes, 1981 *Historic Edinburgh; the archaeological implications of development*. University of Glasgow.
- Stronach, S. forthcoming *The Medieval Development Of Rotten Row: Excavations At 40-43 Water Street, Leith 1999-2000*.

APPENDIX 2: SITE REGISTERS

Context Register

Context Number	Area	Description	Depth (m)
010	TP1	Concrete floor of warehouse.	0.08
011	TP1	Deposit. Levelling deposit of warehouse floor	0.53
012	TP1	Deposit. Dark grey-brown, very compact silty sand. Contains frequent oyster/marine shell and occasional charcoal. Midden deposit.	0.08
013	TP1	Deposit. Dark yellow-brown, very compact sand. Contains rare charcoal and marine shell inclusions. Has a sharp interface with above and below contexts. Wind-blown sand.	0.17
014	TP1	Deposit. Dark grey-brown compact sand with two dark grey sand lenses. Contains occasional charcoal and marine shell inclusions. Midden deposit.	0.12
015	TP1	Deposit. Dark grey-brown compact sand. Contains frequent marine shell and charcoal inclusions. Midden deposit.	0.14
016	TP1	Deposit. Dark yellow-orange loose sand. Contains occasional small stone, rare charcoal and marine shell inclusions. Interface between natural (017) and (015).	0.05
017	TP1	Deposit. Natural. Loose yellow sand with occasional small pebble inclusions.	-
018	-	Not assigned	-
019	-	Not assigned	-
020	TP2	Concrete floor of warehouse and underlying hardcore.	0.30
021	TP2	Deposit. Fill of [020]. Yellow-grey loose sandy mortar. Contains sparse ceramic building material and common stone (less than 0.15m in size). Possible demolition deposit.	0.20
022	TP2	Cut. Filled by (021). Truncates (023) and (024). Vertical sides and a flat base. Possible cut of robbed out footing.	0.20
023	TP2	Deposit. Truncated by [022]. Dark brown-grey firm silty sand. Contains common cinder and mortar (less than 0.03m in size), and sparse oyster shell. Quite homogenous. Sub-angular stones (less than 0.15m in size) at interface with (024) suggest possible structure.	0.39
024	TP2	Deposit. Truncated by [022]. Dark grey-brown firm sandy clay with grey and mid yellow-brown lenses.	0.31

025	TP2	Deposit. Dark brown-grey firm sand with moderate coal and rare stone and oyster shell inclusions. Quite homogenous. Possible midden.	0.19
026	TP2	Structure. Stone surface. Sub-angular stones laid flat presenting even surface. Stone average 0.20 x 0.15m up to 0.3 x 0.15m.	0.30
027	TP2	Deposit. Dark brown-grey firm sand with lenses of light-mid yellow-brown sand. Contains moderate oyster shell and sparse coal/cinder inclusions. Oyster shell concentrated to base of deposit. Midden deposit.	0.13
028	TP2	Deposit. Light yellow-brown, interleaved with dark brown, firm sand. Contains sparse oyster shell and coal inclusions. Midden deposit.	0.07
029	TP2	Deposit. Light-mid yellow-brown loose coarse sand. Contains rare coal inclusions.	0.20
030	TP2	Deposit. Upper fill of [032]. Cut by [035]. Light yellow-brown loose sand. Contains moderate fine gravel and sparse fish bone.	0.19
031	TP2	Deposit. Lower fill of [032]. Light yellow-brown loose medium sand.	-
032	TP2	Cut of pit. Filled by (030) and (031). Convex break of slope to near vertical sides. Base is unexcavated.	-
033	TP2	Deposit. Fill of [034]. Dark grey brown soft silty sand with black and light grey sand lenses.	-
034	TP2	Cut of feature. Filled by (033). Near vertical sides with a concave base. Nature of feature unknown.	Depth= 0.22 Width= 0.33
035	TP2	Cut. Filled by (036). Feature has steep, slightly concave sides and concave base. Nature of feature unknown.	Depth= 0.19 Width= 0.37
036	TP2	Deposit. Fill of [035]. Light grey loose sand. Contains rare shell and small grit inclusions. Distinct iron panning occurs at interface with natural.	Depth= 0.19 Width= 0.37
037	-	Not assigned	
038	-	Not assigned	
039	-	Not assigned	
040	TP4	Concrete floor of warehouse	0.10
041	TP4	Deposit. Levelling for concrete floor	0.53
042	TP4	Deposit. Dark brown compact sand. Contains angular stone, brick fragments, mortar, charcoal and occasional oyster shell inclusions. Redeposited midden material.	0.46
043	TP4	Deposit. Black compact sand, with dark and light brown sand lenses. Contains fine gravel, brick	0.20

		fragments and mortar inclusions. Midden deposit.	
044	TP4	Deposit. Yellow soft sand. No inclusions.	0.07
045	TP4	Deposit. Dark brown compact sand. Contains gravel, charcoal and animal bone inclusions.	0.59
046	TP4	Deposit. Natural. Yellow soft sand. Contains small pebble and gravel inclusions.	-
047	TP4	Deposit. Yellow-grey very compact mortar. Has been compacted with gravel and small stones. Contains occasional small brick fragments. Mortar floor.	0.10
048	TP4	Structure. Concrete footing for warehouse pillar.	Length= 1.30 Depth= 0.89
049	TP4	Structure. Grey sandstone block. Foundation stone for 1 st floor support column.	Length= 0.76 Depth= 0.41
050	TP4	Deposit. Yellow-grey compact mortar. Contains occasional small brick fragments, oyster shell and gravel inclusions.	0.32
051	TP4	Structure. Wall. Aligned E-W. Constructed of roughly cut sandstone slabs at top and large cobbles on lower courses. Bonded with sand and lime mortar. Three courses remain.	Length= 0.79 Width= 0.30 Height= 0.60
052	TP4	Structure. Cobbled surface. Abuts [051]. Constructed of large rounded cobbles (average 0.2 x 0.15 x 0.25m). Probably associated with wall [051]. One course high.	Extent not known.
053	TP3	Concrete floor of warehouse.	0.08
054	TP3	Deposit. Rubble levelling for concrete floor.	0.43
055	TP3	Deposit. Dark grey-brown compact silty sand. Contains frequent rubble (up to 0.09m in size), and occasional charcoal and oyster shell inclusions.	0.38
056	TP3	Deposit. Loose deposit of small sandstone and brick rubble. Small pieces of wood can be seen in section. Demolition related deposit.	0.29
057	TP3	Structure. Light yellow-brown very compact lime mortar with marl and coarse large grit inclusions. Mortar floor surface.	0.03
058	TP3	Deposit. Dark yellow-brown compact sand. Contains occasional marine shell and charcoal inclusions. One piece of animal bone can be seen in section. Midden deposit.	0.22
059	TP3	Deposit. Dark yellow-brown compact sand, with occasional lenses of dark brown sand. Contains	0.27

		frequent oyster shell and charcoal inclusions. Finds include animal bone and white gritty pottery. Midden deposit.	
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Photographic Registers

Film 1

Film Type: Colour Slide and Black and White Print			
Shot no.	Area	Direction Facing	Description
1	-	-	ID shot
2	-	-	ID shot
3	TP1	S	North facing section of Test Pit 1
4	TP1	S	North facing section of Test Pit 1
5	TP1	S	North facing section of Test Pit 1
6	TP1	S	North facing section of Test Pit 1
7	TP4	S	North facing section of Test Pit 4
8	TP4	S	North facing section of Test Pit 4
9	TP4	W	Mortar floor surface within Test Pit 4
10	TP4	W	Mortar floor surface within Test Pit 4
11	TP4	N	Stone coursing within Test Pit 4
12	TP4	N	Stone coursing within Test Pit 4
13	TP2	E	West facing section of Test Pit 2
14	TP2	E	West facing section of Test Pit 2
15	TP2	N	South facing section of Test Pit 2
16	TP2	N	South facing section of Test Pit 2
17	TP4	E	Wall and cobbled surface within Test Pit 4
18	TP4	E	Wall and cobbled surface within Test Pit 4
19	TP3	N	South facing section of Test Pit 3
20	TP3	N	South facing section of Test Pit 3
21	TP3	N	South facing section of Test Pit 3
22	TP3	N	South facing section of Test Pit 3

Film 2

Film Type: Colour Print			
Shot no.	Area	Direction Facing	Description
1	-	-	ID shot
2	TP2	E	West facing section of Test Pit 2

3	TP2	E	West facing section of Test Pit 2
4	TP2	N	South facing section of Test Pit 2
5	TP2	N	South facing section of Test Pit 2
6	TP1	S	North facing section of Test Pit 1
7	TP1	S	North facing section of Test Pit 1
8	TP4	S	North facing section of Test Pit 4
9	TP4	S	North facing section of Test Pit 4
10	TP4	W	View of wall [051]

Drawing Register

Drawing no.	Scale	Description
1	1:10	North facing section of Test Pit 1
2	1:10	North facing section of Test Pit 4
3	1:10	South facing section of Test Pit 4
4	1:20	Plan of mortar floor [047] within Test Pit 4
5	1:20	Plan of E-W aligned wall [052] within Test Pit 4
6	1:10	South facing section of Test Pit 3
7	1:10	West facing section of Test Pit 2

Sample Register

Sample No.	Context	Description
1	012	Dark grey-brown midden deposit
2	013	Dark yellow-brown sand layer
3	014	Dark brown sand midden deposit
4	015	Dark grey-brown sand midden deposit
5	042	Possible midden deposit
6	043	Midden deposit
7	033	Fill of pit, Test Pit 2
8	035	Fill of pit, Test Pit 2
9	055	Dark grey-brown rubble filled sand
10	058	Dark brown sand layer
11	059	Dark yellow-brown sand layer (midden)

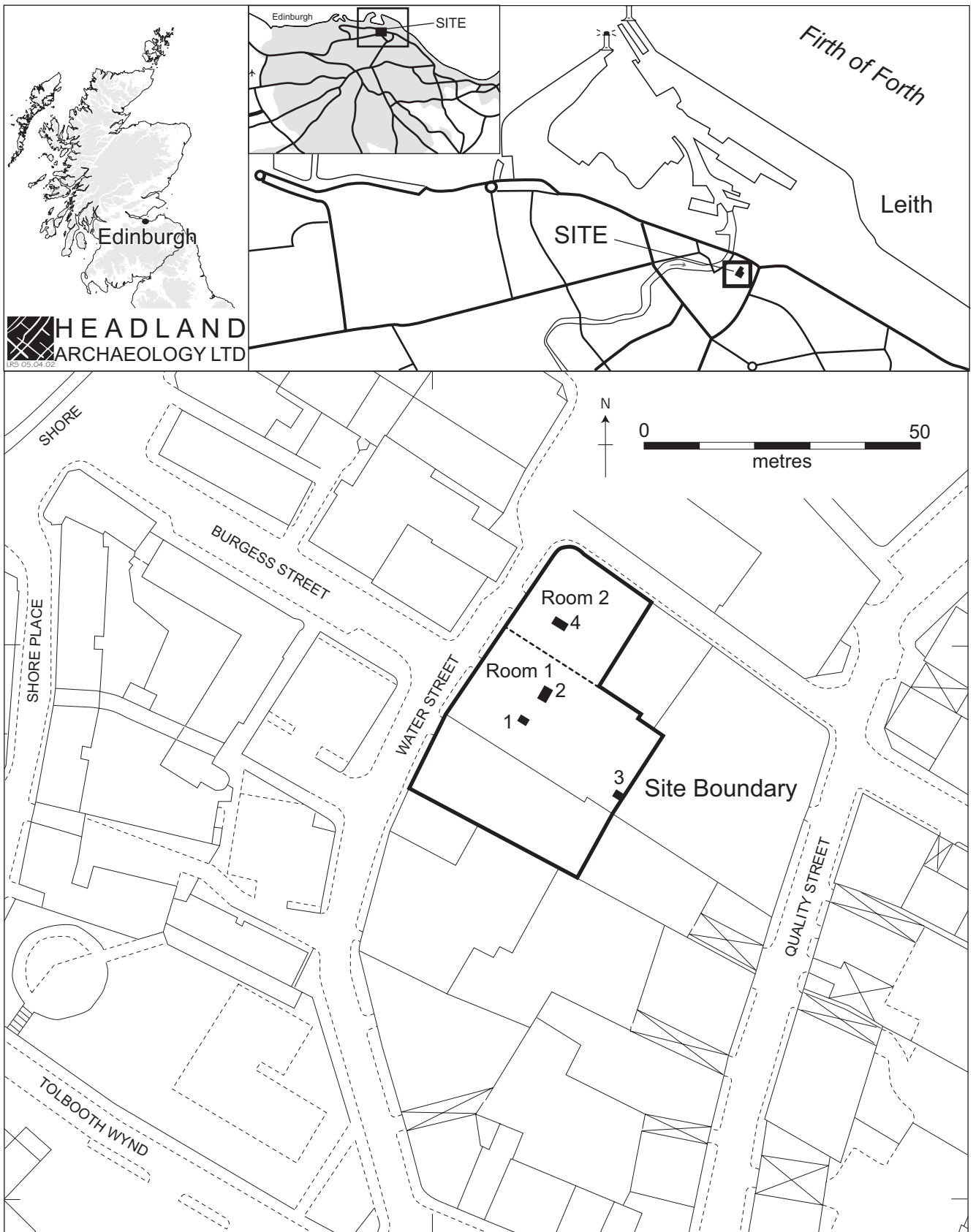


Figure 1. Beaverhall, Water Street, Leith: Site Location

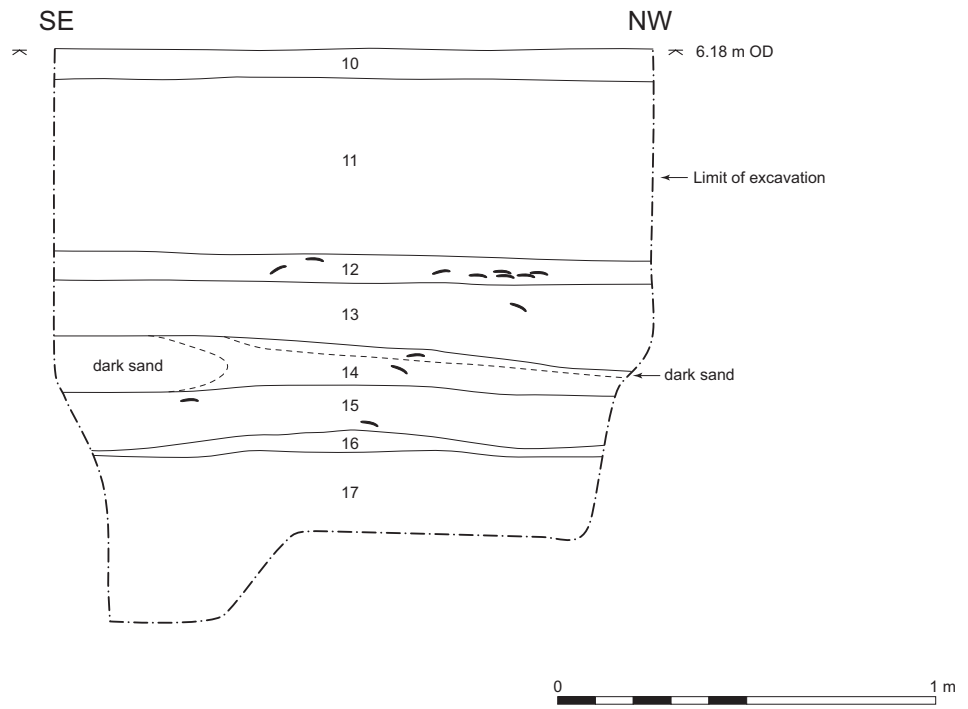


Figure 2 - NE facing section, Test Pit 1.

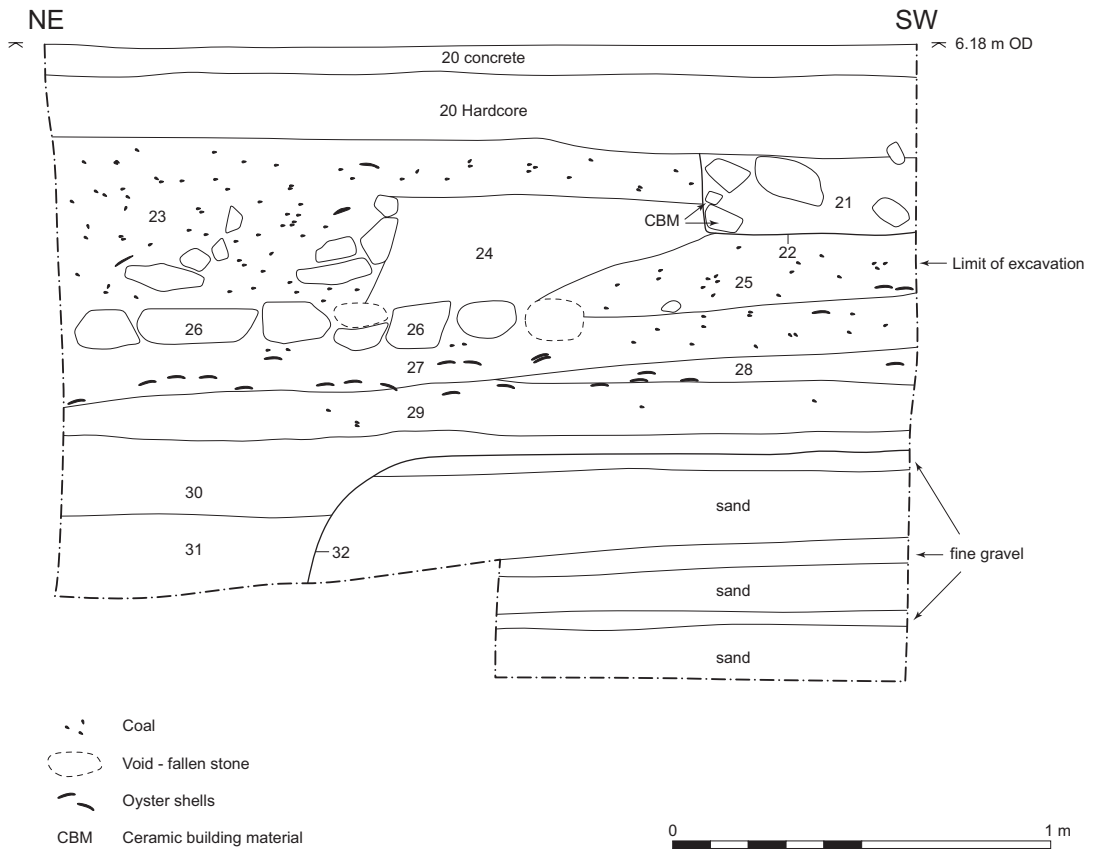


Figure 3 - NW facing section, Test Pit 2.

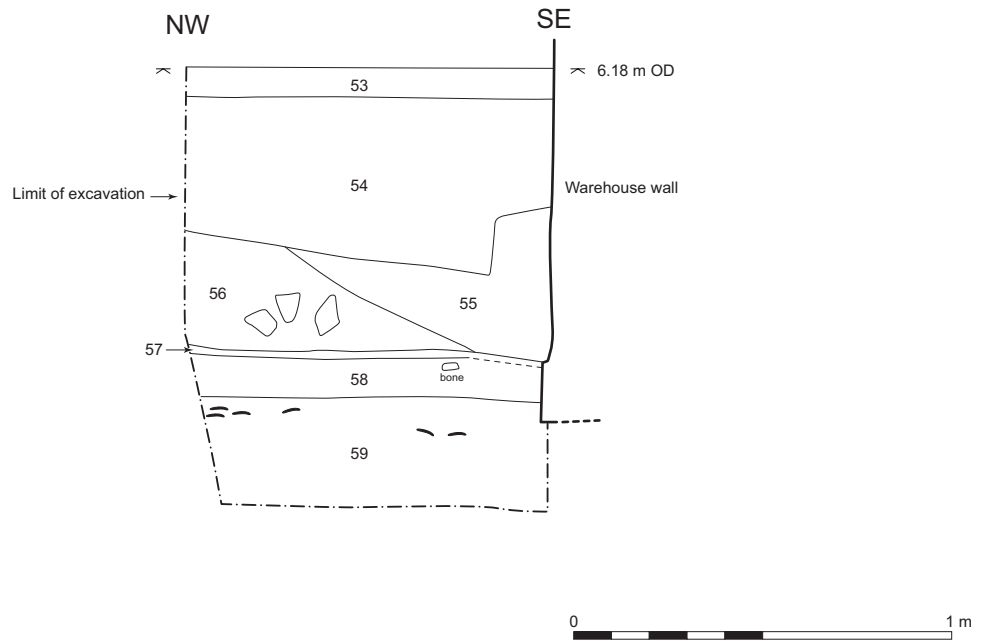


Figure 4 - SW facing section, Test Pit 3.

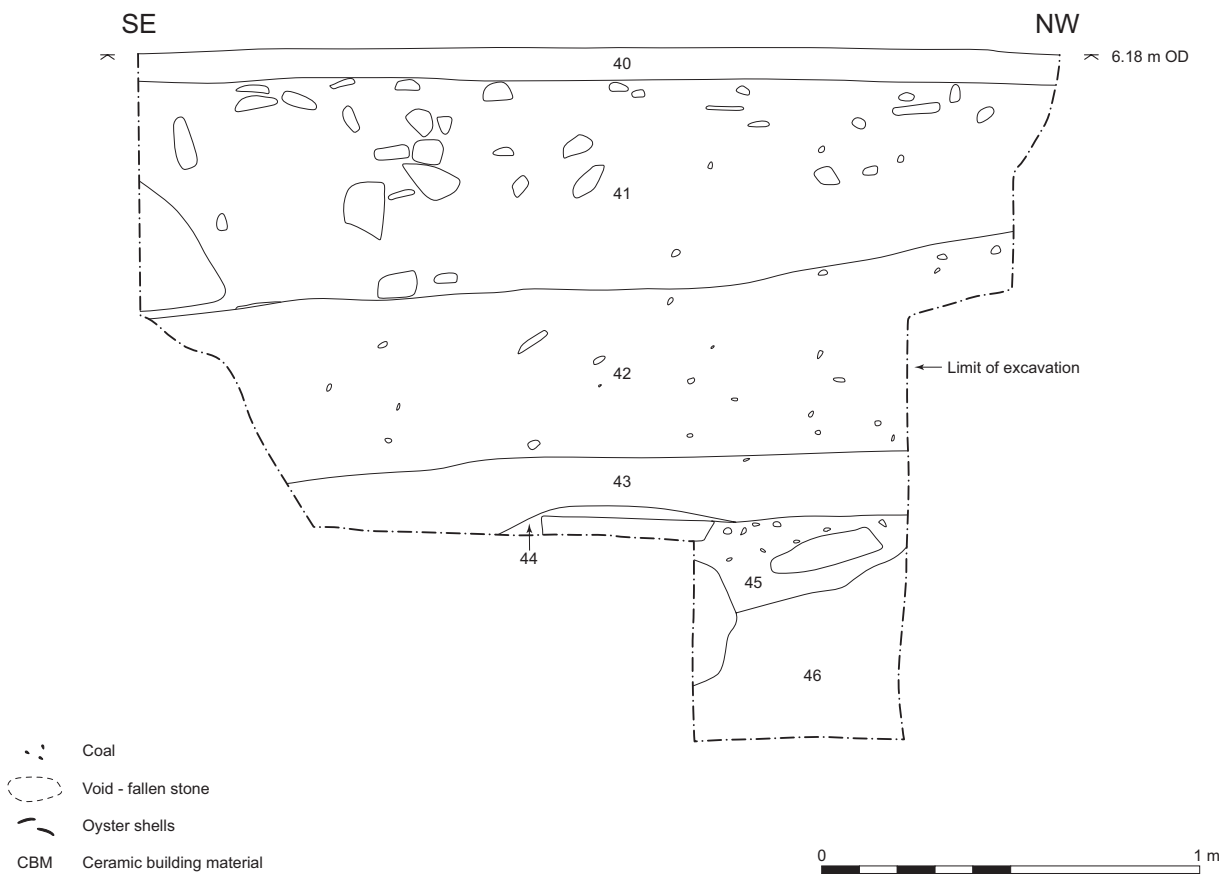


Figure 5 - NE facing section, Test Pit 4.