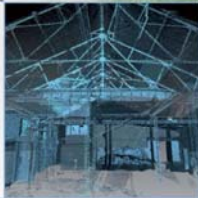


# Fort House Phase II, Leith: Archaeological Excavation Data Structure Report

AOC 22445  
2<sup>nd</sup> October 2015



**AOC**  
Archaeology  
Group



ARCHAEOLOGY

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# Fort House Phase II, Leith: Archaeological Excavation Data Structure Report

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**On Behalf of:** City of Edinburgh Council  
Chesser House  
Housing Property Services  
Level One, South Wing  
500 Gorgie Road  
EH11 3YJ

**National Grid Reference (NGR):** NT 2615 7662

**AOC Project No:** 22445

**OASIS No:** 225327

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This document has been prepared in accordance with AOC standard operating procedures.

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**Date:** 2<sup>nd</sup> October 2015

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## ABSTRACT

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This report presents the results of a second phase of archaeological excavation undertaken by AOC Archaeology Group on behalf of Edinburgh City Council prior to the redevelopment of Fort House, Leith.

Previous excavations of 6 areas within the development site revealed several phases of fort construction that coincide with the cartographic and historical evidence. Furthermore, a boundary ditch and earlier soil horizons provided earlier ceramic and other artefacts that can help provide dates for the use of the area in the medieval and post medieval period.

This latest phase of excavation focussed on two areas that were previously avoided due to live services on site. One of these areas to the NE corner of the site revealed that modern construction had removed all traces of the fort in this area. However, the other area along the SE boundary wall was stripped of modern overburden revealing several buildings that abutted the perimeter wall along most of its length.

One of these buildings contained three smaller structures that may be parts of a furnace and chimney related to a former blacksmith. A small field gun or cannon was found within the possible furnace that would relate to the earliest phase of the fort extension.

# 1 INTRODUCTION

## 1.1 Background

1.1.1 A second phase of archaeological excavation was required by Edinburgh City Council prior to a residential redevelopment at Fort House, Leith. The scope of the works was determined by the City of Edinburgh Council as advised on archaeological matters by the City of Edinburgh Council Archaeology Service (CECAS). The works were conducted according to the terms of a *Project Brief* (Halfpenny 2013) created by the City of Edinburgh Council and approved by CECAS and in accordance with *Scottish Planning Policy* (Scottish Government 2010) and *PAN 2/2011 Planning And Archaeology* (Scottish Government 2011).

## 1.2 Site Location

1.2.1 The development area lies to the north of the junction between North Fort Street and Portland Street and is situated towards the southern end of the historic 1780 fort at Leith (centred at NGR: NT 2615 7662), bounded to the SE, SW and NW by the existing outer wall of the fort (Figure 1). Prior to works commencing the site was formerly occupied by modern apartment blocks, with car parking and areas of landscaping out with the building footprint.

## 1.3 Archaeological Background

1.3.1 The development area is situated in the northern part of Leith, a town that has been the focal point for the majority of conflicts within Scotland since Edinburgh became a Royal Burgh around 1128. One threat of conflict that affected this area greatly in the 18<sup>th</sup> century came from a Scot named Paul Jones, who threatened to attack the port at Leith in 1779 in order to help the Americans in their war of independence (Old Statistical Accounts 1791-99, 573). Due to this threat it was decided that defences were required to protect the town and port, and the renowned designer of the Edinburgh New Town, James Craig, was given the task of designing a fort.

1.3.2 Built the following year, the fort consisted of an eight gun battery facing the port to the NE with barracks, officers quarters, magazines, kitchens etc. directly behind, and then a large parade ground or garden with other stores to the SW end of the garden and bastions at the corners (Fraser 1785). The fort was built on land belonging to Hillhousefield House, with the fields having previously been utilised as arable land since around the 15<sup>th</sup> century (Mowat 1994). The area to the south and west of the original fort is where the development area is situated, depicted by Fraser (1785) as belonging to a Mr Robertson.

1.3.3 A more detailed plan of the fort made by Henry Evatt and dated pre-1804 (Evatt, pre-1804a) shows a similar layout of buildings within the walls but with kitchens added to the parade ground area and the SW end stores now being used as barracks. Furthermore, Evatt refers to an area of "New Ground" to the SW of the battery and drafts a plan of proposed buildings for an extension to the fort in this area (Evatt, pre-1804b).

1.3.4 Despite the date for these plans pre dating 1804, Ainslie's Map of that date does not show an extension to the original fort battery and the development area is still labeled as belonging to Mr. Robertson. It is not until 1822 that Thomson depicts the extended fort on a map of Leith (Figure 2). The layout is similar to what Evatt (pre-1804b) had shown with the addition of one rectangular structure to the north of the gate house. Records show that the fort at this time was used to station artillery and had the capacity for 350 men and 150 horses (New Statistical Accounts 1834-45, 762).

1.3.5 Later OS maps (1852; Figure 3) show that the layout of the buildings had changed slightly towards the NW edge of the 'new ground' with the stable block being removed from next to the boundary wall. Furthermore, the rectangular building north of the gate house is now labeled as a powder magazine and is enclosed by a separate wall. The remainder of the fort buildings within the 'new

ground' are the same as the original plan up to the 1895 OS map, with the gate houses and annexes to the SW and the large stable block dominating the SE.

- 1.3.6 Significant changes are made to the buildings by the time of the OS Map in 1906 (Figure 4) with the SE stable block being removed and two smaller but similarly aligned structures taking its place. Further modifications are made to the buildings to the NW, with the enclosed building no longer present and additional buildings erected along the NW wall. The gate houses remain unchanged and the fort continues in this layout until 1955 when it is demolished and a council housing scheme is built on the site. The gate houses with annexes removed and the boundary wall are left intact and are now B-Listed buildings.

### 3 OBJECTIVES

3.1 The objectives of the archaeological excavation are:

- i. the identification, excavation, sampling and recording of all significant archaeological features within the development area;
- ii. the retrieval of a representative artefact assemblage;
- iii. upon conclusion of the excavation, the preparation and execution of a post-excavation programme compliant with *Scottish Planning Policy* (Scottish Government 2010) and *PAN 2/2011 Planning & Archaeology* (Scottish Government 2011).

### 4 METHODOLOGY

- 4.1 Three areas throughout the development area were highlighted for the Phase II excavations as they had been previously unavailable during the initial excavation works determined by the *Project Brief* due to the presence of live services. However, two of the areas still contained possible live services in the form of BT and Virgin cables. Due to the presence of the Virgin cable one area (the NW end of the Gun Shed) could not be stripped. The other area was able to have three linear trenches placed within it to search for a possible building, with the intention to strip it further if anything was revealed.
- 4.2 All available service plans were consulted and all areas available for excavation were scanned using a cable avoidance tool (CAT) prior to excavation. The main area available for excavation was stripped of modern topsoil and made ground using a 13 tonne tracked excavator with a bladed ditching bucket, monitored by an experienced field archaeologist (Figure 5). Once the first archaeological horizon was encountered, any structures or features revealed were cleaned by hand before being recorded by digital photography, written records, drawings and survey.

## 5 RESULTS

### 5.1 Introduction

5.1.1 The archaeological excavation was conducted between the 21<sup>st</sup> and 25<sup>th</sup> September 2015. Weather conditions were fair throughout the course of the work conducted making archaeological visibility good throughout the site.

5.1.2 The various data gathered from the excavations are presented as a series of appendices:

- Appendix 1: Context Register;
- Appendix 2: Photographic Register;
- Appendix 3: Drawing Register;
- Appendix 4: Finds Register;
- Appendix 5: Samples Register;
- Appendix 6: reproduces the '*Discovery and Excavation in Scotland*' entry

### 5.2 Area A

5.2.1 This area was located along the SE perimeter wall of the fort and measured 500 m<sup>2</sup> in total (Figures 5 & 6). The area was covered by modern imported topsoil [001] containing modern demolition rubble and red blaes that directly overlay the entire area and measured 0.2 m to 0.7 m thick.

#### 5.2.2 20<sup>th</sup> Century Structures

5.2.3 Along most of the NW edge of the excavation area the topsoil directly overlay a modern road formed by tarmac surface [019] and cobble surface [018], lined by a sandstone gully [017] that measured 25 m long by 4 m wide where it was fully revealed (Plate 1). This road partly truncated the top of some of the fort walls in the area and a small section of a later cement floor [041] within Structure [046]. This modern imprinted cement layer was abutted by a concrete block [042] and overlay levelling deposit [045].

5.2.4 Further SW of the road and abutting the perimeter wall was a U-shaped brick structure [020] measuring 5.06 m by 2.75 m. This structure survived to six courses of brick in height and contained a concrete floor (Plate 2).

#### 5.2.5 19<sup>th</sup> Century Stables and Courtyard

5.2.6 In the western corner of the excavation area, part of the 19<sup>th</sup> Century stable block was revealed (Plate 3). This consisted of large sandstone walls [004] and [005] that formed the SE and NE walls of the stables respectively, along with a smaller internal wall [003] that abutted the NW face of wall [004] and was aligned NW-SE. The external walls measured 0.6 m wide whereas wall [003] was only 0.44 m wide. Made ground [002] abutted the internal and external faces of the walls with the walls having been constructed into buried soil [016].

5.2.7 Out with the stables to the NE and SE was a cobbled surface [006] mainly consisting of edge set granite cobbles set at right angles to a curving line of larger and more regular cobbles [007] that may have had a particular function within the courtyard (Plate 4). These surfaces were truncated to the NE by modern road gully [017], and abutted walls [009] and [013] to the SE. The cobbles were laid on top of made ground [002] and as they respect the stable walls and other 19<sup>th</sup> century walls to the SE are most likely related to the earliest use of the fort.

#### 5.2.8 19<sup>th</sup> Century Shops

5.2.9 Along the far SE edge of the excavation area and abutting the perimeter wall were the remains of a series of structures related to the 19<sup>th</sup> century fort. The first structure to the far SW edge of the



excavation area, Structure [011] (**Shop 1**), consisted of a truncated and fragmented sandstone flagstone surface [008], a sandstone drainage gully [010] and the base of a sandstone wall [009] (Plate 5). All of these features were contained within a 2.7 m long (SW-NE) by 3 m wide (NW-SE) area and would have continued further NE if modern services and brick structure [020] had not truncated it.

- 5.2.10 To the NE of this brick structure [020], a large and long sandstone wall [013] was revealed running parallel to the perimeter wall for over 30 m. This wall formed the NW edge of the other structures abutting the perimeter wall. It had sandstone wall [012] keyed into its SW end which also abutted the perimeter wall and formed the SW wall of Structure [015] (**Shop 2**). The NE end of this structure was formed by sandstone wall [014] giving internal measurements of 7.25 m by 3.8 m (Plate 6). No internal features were present within the walls.
- 5.2.11 Wall [014] also formed the SW wall of Structure [039] (**Shop 3**) to the immediate NE of Structure [015]. This structure contained an internal wall [021], with the NE edge of the structure formed by sandstone wall [022], providing an internal space measuring 7 m by 3.8 m. This space is divided by internal wall [021] into a large room measuring 5.7 m by 3.8 m and a corridor measuring 1 m by 3.8 m to the SW. The large room contained three smaller structures [023], [027] and [028] that abutted the perimeter wall and extended 1.3 m into the internal space (Figure 7; Plate 7).
- 5.2.12 The three structures all abut one another with the central U-shaped sandstone structure [027] also forming the NE edge of Structure [023] and the SW edge of Structure [028]. This U-shaped feature measured 2.1 m by 1.3 m with the walls measuring 0.34 m wide (Plate 8). The internal space may have contained a floor surface, the remnants of which were recorded as deposit [035] that overlay made ground [002].
- 5.2.13 To the NE, Structure [023] consisted of a rubble sandstone wall [024] built into made ground [002] and overlying the SW edge of flagstone floor [025] (Plate 9). The NE edge of this floor abutted the SW edge of Structure [027] to form a rectangular space measuring 1.06 m by 1.3 m. The floor was sunken below any possible floor levels for the overall structure and was filled by ash and slag rich deposits [026] and [036], which contained several iron and copper objects as well as a small cannon or field gun (SF 25).
- 5.2.14 To the SW, Structure [028] consisted of rubble sandstone walls [030] and [031] forming the NE and NW edges of the structure respectively (Plate 10). These walls sat on top of brick surface [032] and formed an internal space measuring 1.1 m by 1 m that was filled by 0.25 m of a rubble deposit [029] overlying 0.15 m of a heat affected mortar and soot deposit [034]. The brick surface [032] measured 1.48 m by 1.2 m and overlay a levelling sand deposit [048] and layer of coarse black ash [033] that measured 1.1 m by 0.8 m.
- 5.2.15 To the NE of Structure [039] the modern levelling and floor deposits [041] and [042] were later additions to the earlier Structure [046] (**Shop 4**). This structure was a rectangular shaped room or building formed by sandstone walls [022] and [043]. The space within the structure was divided into two by internal rubble wall [040] with the floor [041] contained to the NE of wall [040] in a space measuring 7.6 m by 3.8 m (Plate 11). The space to the SW of wall [040] measured 2.2 m by 3.8 m with no floor surfaces surviving.
- 5.2.16 To the NE of this structure was another room or building, Structure [049] (**Shop 5**), formed by sandstone wall [043] to the SW and sandstone wall [044] to the NE. This structure measured 7 m by 3.8 m and contained the remnants of a brick floor [050] that only survived as five bricks measuring 0.82 m by 0.25 m (Plate 12).

5.2.17 All of the structural walls abutting the perimeter wall and wall [013] measured 0.6 m wide and were constructed into buried soils [016] and [048] and were abutted by made ground [002]. The two internal walls [021] and [040] were both 0.44 m wide and were constructed into the made ground [002].

### **5.3 Area B**

5.3.1 The archaeological work within Area B consisted of three evaluation trenches aligned at right angles to the wall of the Officers Barracks from the 19<sup>th</sup> century and the back wall of the original redoubt and battery from the 18<sup>th</sup> century.

5.3.2 The three trenches excavated revealed 0.8 m of 20<sup>th</sup> century demolition material overlying the natural sandy subsoil. Several areas within the trenches showed that modern services had been placed in the area but no significant archaeology was revealed.

## **6 DISCUSSION**

6.1 The second phase of archaeological excavation at Fort House, Leith has exceeded our expectations in terms of the level of survival of floor surfaces and features related to the earliest phases of the forts use.

6.2 Comparing the excavation results with the map evidence it is clear that the walls and structures revealed tie in to the earliest phases of the fort buildings. Furthermore, from the 1852 OS map, it is possible to determine the function of each of the structures found along the perimeter wall. Shop 1 and Shop 2 are indicated to be part of a 'Wheelwrights Shop', with Shop 1 possibly forming an external courtyard and Shop 2 being the internal work shop.

6.3 Shop 3 is labelled as a 'Smiths' providing evidence that the structures [023] and [028] may be a furnace and chimney respectively. Shop 4 and Shop 5 are then labelled as part of the Farriers shop, with the area beyond this being a small stables. Another item of note from the excavations is the courtyard revealed between the shops and the stables. The edge set cobbles are similar to those found within Edinburgh Castle and are another indication as to the investment made in the forts creation.

## **7 CONCLUSION AND RECOMENDATIONS**

7.1 The archaeological excavations revealed that the majority of 19<sup>th</sup> century foundations from the fort have survived well within this part of the development area.

7.2 Despite the best efforts of the excavations, the presence of live services within the site made it impossible to excavate and record the remainder of the 'Gun Shed'. Furthermore, it appears that the eastern edge of the fort that contained the Officer Block has been completely removed by modern construction.

7.3 It is recommended that the artefacts retrieved from these excavations, and the information gained be added to the post excavation design set out in 2014 (AOC). These recommendations will require confirmation by CECAS.



Plate 1 - View of modern road



Plate 2 - View of brick structure [020]



Plate 3 - View of stable walls [003]-[005]



Plate 4 - View of cobbles [006]-[007]



Plate 5 - View of Structure [011]: Shop 1



Plate 6 - View of Structure [015]: Shop 2



Plate 7 - View of Structure [039]: Shop 3



Plate 8 - View of Structure [027] within Shop 3



Plate 9 - View of Structure [023] with cannon in-situ



Plate 10 - View of Structure [028] showing brick floor [032]



Plate 11 - View of Structure [046] showing modern floor [041]



Plate 12 - View of Structure [049]



## 8 REFERENCES

### 8.1 Bibliographic References

Halfpenny, L. 2013 *Fort House, Leith Archaeological Works Phase 3: Excavation and Community Engagement Project Brief* Edinburgh Council Project Design

Mowat, S 1994, *The Port of Leith – Its History and its People*, Edinburgh

New Statistical Accounts 1834-45 *Account of 1834-45 vol.1 p.762 : Leith, County of Edinburgh*  
<http://stat-acc-scot.edina.ac.uk/link/1834-45/Edinburgh/Leith/1/762/>

Old Statistical Accounts 1791-99 *Account of 1791-99 vol.6 p.559 : Edinburgh, County of Edinburgh*  
<http://stat-acc-scot.edina.ac.uk/link/1791-99/Edinburgh/Edinburgh/6/573/>

Paton, K 2013 *The Military Occupation of 239 Gallowgate, Glasgow: Archive Report* forthcoming  
Excavation Archive Report

Scottish Government 2010 Scottish Planning Policy.

Scottish Government 2010 PAN 2/2011 Planning & Archaeology.

Stevenson, S., Turner Simpson, A. & Holmes, N 1981 *Historic Edinburgh, Canongate and Leith*. The Scottish Burgh Survey.

Victorian Forts and Artillery 2013  
<http://www.victorianforts.co.uk/tour1/thir.htm>

### 8.2 Cartographic References

Ainslie, J 1804 *Old and New Town of Edinburgh and Leith with the proposed docks*.

Evatt, H pre-1804a *Leith Battery; Plan of Officers Barracks, Mens Barracks, Hospital, Proposed Magazine and Kitchens and Wash Houses*

Evatt, H pre-1804b *Leith Battery; Plan of New Ground with stables, additional storehouses, guard house, new barracks and gun shed*

Frazer, A 1785 *Plan of the Inclosed Battery or Redoubt near Leith built for the Protection of the Harbour in the year 1780*

Ordnance Survey 1852 *Edinburgh 1852 Sheet 12*

Ordnance Survey 1895 *Edinburghshire Sheet 001.16*

Ordnance Survey 1906 *Edinburghshire Sheet 001.16*

Thomson, C. 1822 *Plan of town of Leith and its Environs*

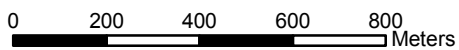
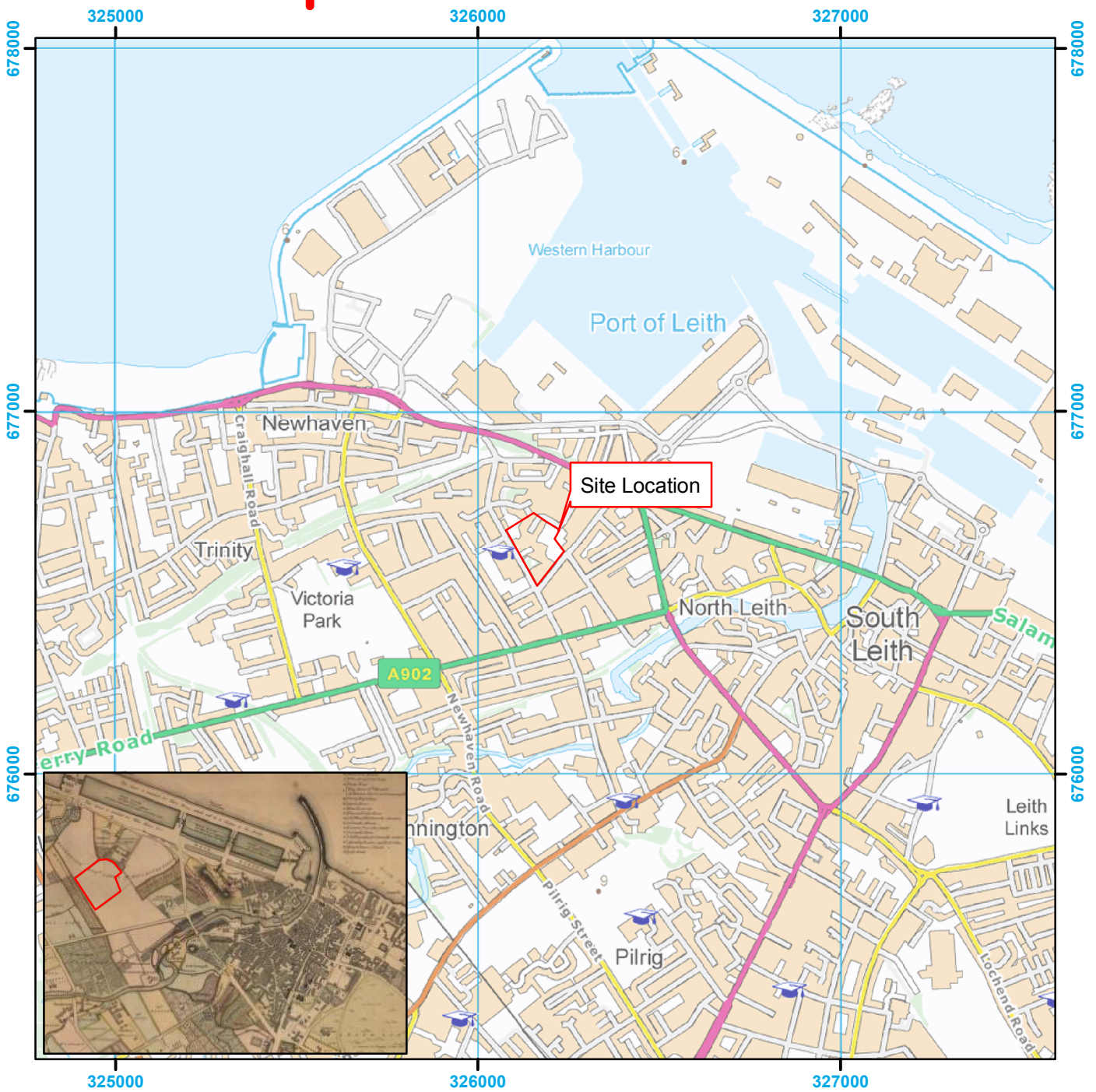
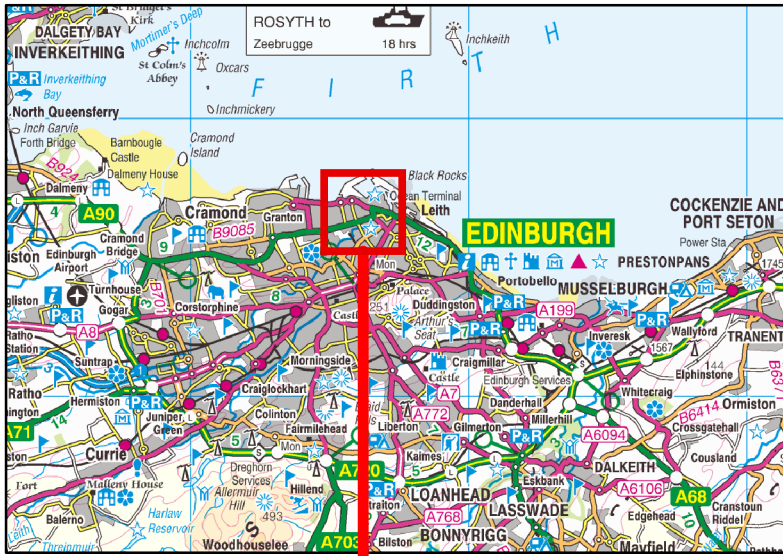
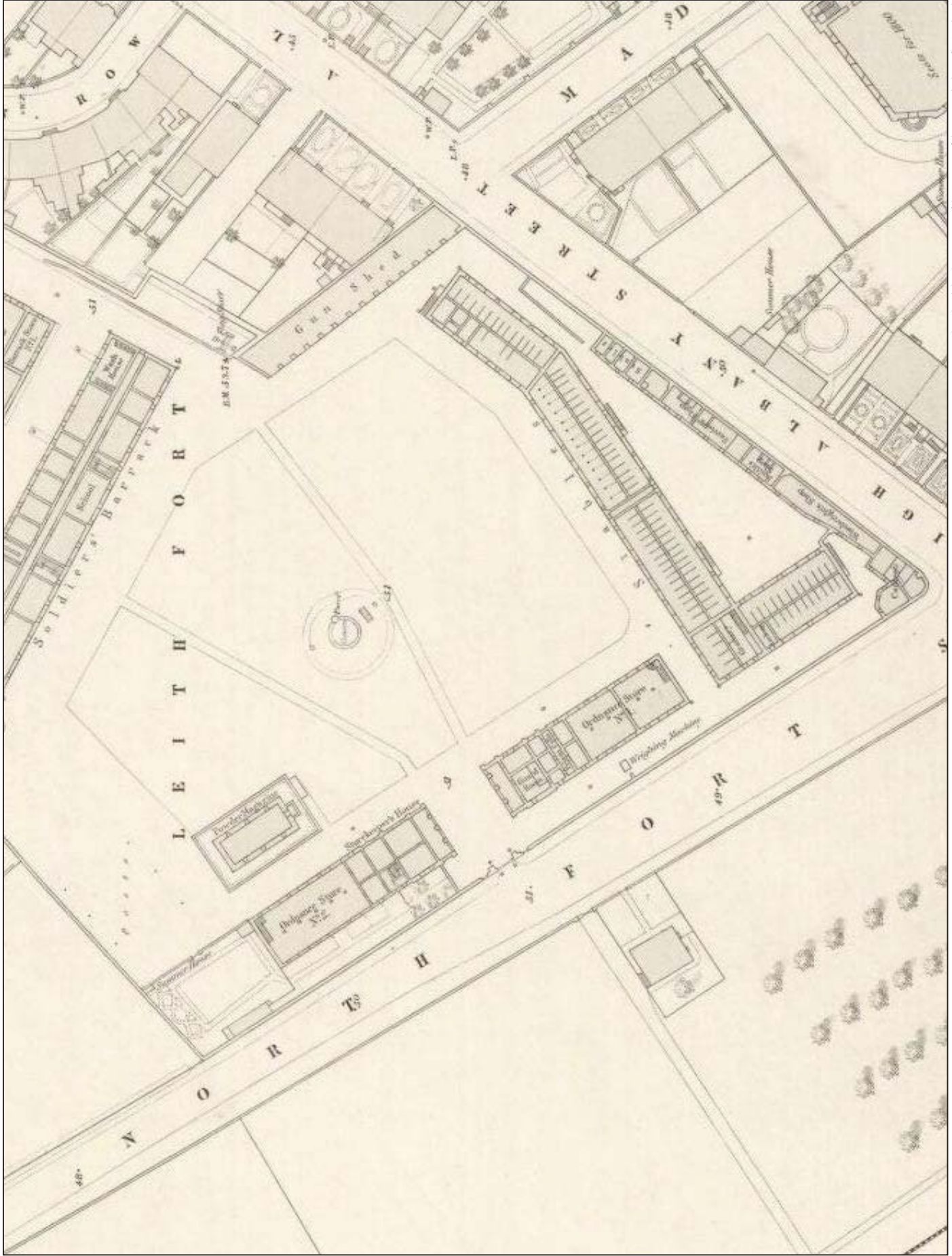


Figure 1: Site Location Plan





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Figure 3 - Extract from OS Map 1852



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Figure 4 - Extract from OS map 1906

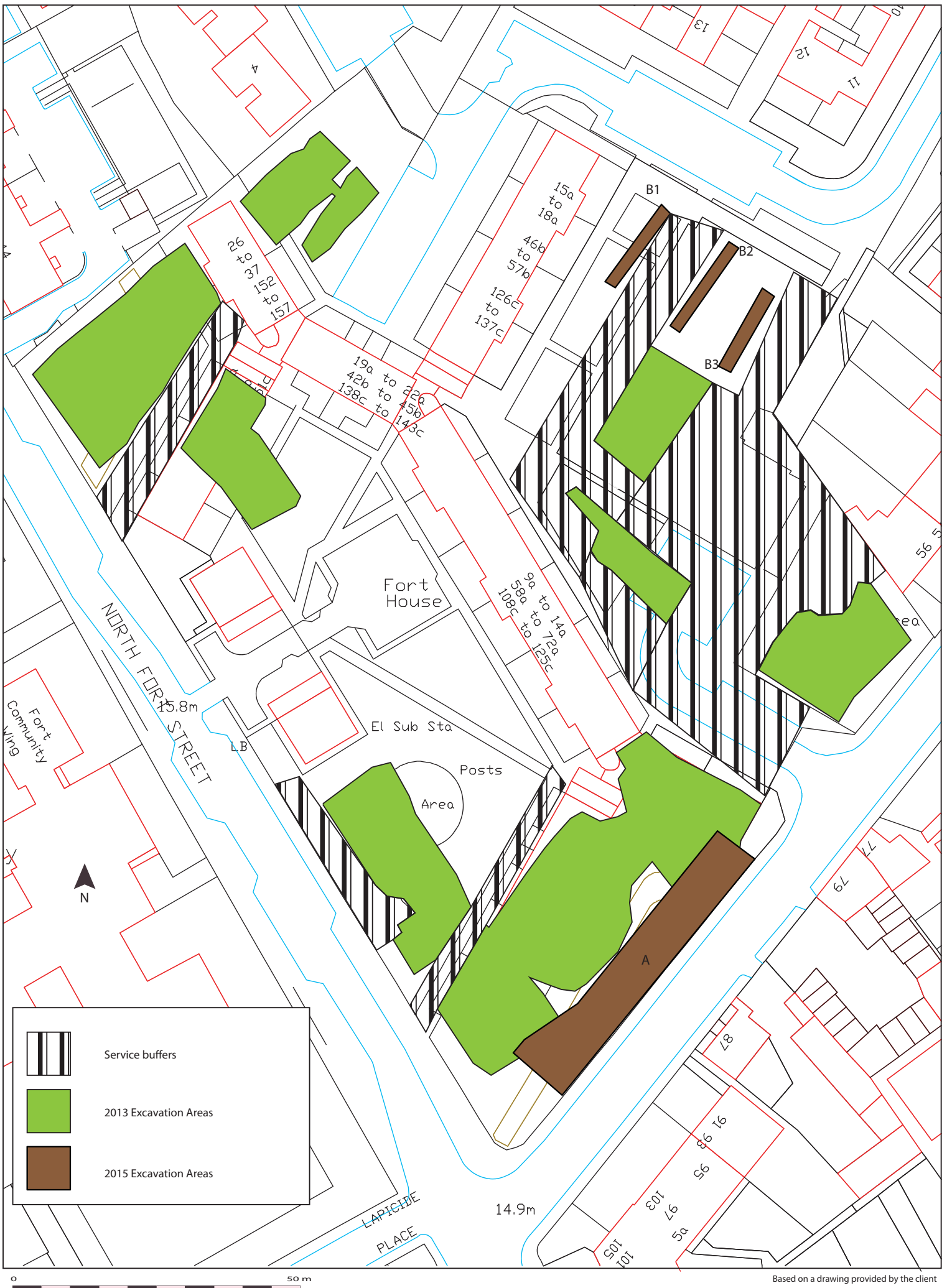


Figure 5 - Plan of excavation Areas A



Figure 6 - Plan of features in Area A

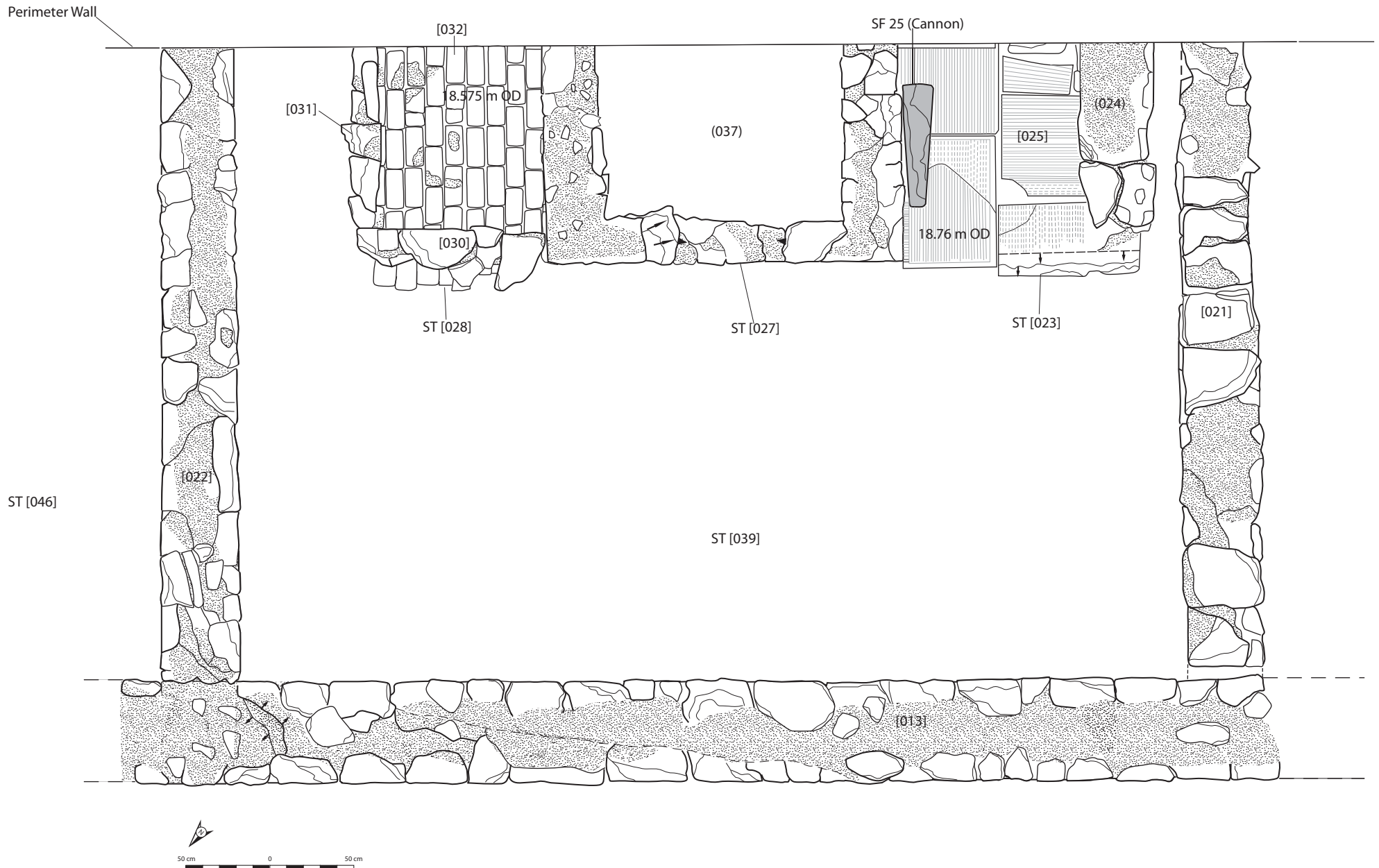


Figure 7 - Plan of features within Structure [039]



# Fort House Phase II, Leith: Archaeological Excavation Data Structure Report

## Section 2: Appendices

## APPENDIX 1: CONTEXT REGISTERS

Context No.	Description and Interpretation
001	Dark blackish brown sandy clay with abundant stone, brick, blaes and modern rubbish inclusions measuring 0.2 m over fort floor surfaces and up to 0.7 m where no floors survived. <b>Modern topsoil and made ground</b>
002	Mid brown sand with frequent clay lumps and dark silty soil inclusions. Occasional oyster shell and coal flecks also present. Abuts all faces of all walls found related to the fort and underlies some also. Overlies buried soil [016] and measures 0.55 m thick on average. <b>Made ground deposited during 19<sup>th</sup> century Fort construction</b>
003	Sandstone wall with sand and lime mortar aligned approximately NW-SE, abutting wall [004] at its SE end and truncated to NW. Survived to over 4 courses high and measures 1.7 m by 0.42 m by 0.72 m (+). <b>Internal wall of 19<sup>th</sup> century stables</b>
004	Sandstone wall with sand and lime mortar aligned approximately NE-SW with return [005] at NE end heading NW. Cobbles [006] would have abutted SE face but modern truncation had removed this relationship. Measures 5.5 m by 0.6 m by 1 m (+), continuing SW under L.O.E. <b>SE wall of 19<sup>th</sup> century stables</b>
005	Sandstone wall with sand and lime mortar aligned approximately NW-SE, keyed into wall [004] at its SE end. Abutted by cobbles [006] along its NE face and measures 2.9 m by 0.58 m by 1 m (+), continuing NW under L.O.E. <b>NE wall of 19<sup>th</sup> century stables</b>
006	Large area of roughly hewn grey granite setts, set on edge and covering the area between the stables and the shops. Truncated to NE and SE edged by modern structure [020] and drainage gully [017]. Was visible to the NE of [017] under road [019] but did not survive removal of the tarmac. Setts measured 0.06 m by 0.12 m by 0.15 m. Cobbles are set at right angles to curving line of regular cobbles [007]. Visible extents measure 14 m by 5.5 m. <b>Former courtyard of 19<sup>th</sup> century Fort</b>
007	Curving line of large rectangular cobbles with a pair of parallel lines of narrower, rectangular cobbles on either side. Large central cobbles measure 0.26 m by 0.12 m. Narrower cobbles measure 0.33 m by 0.07 m. Full extent measures 11.6 m by 0.46 m. Abutted by cobbles [006] on either side and truncated by drainage gully [017] at N end. <b>Part of courtyard of 19<sup>th</sup> century Fort</b>
008	Fractured and truncated flagstone floor abutting the SE face of drainage channel [010] within Shop 1 [011]. Flagstones measured 0.76 m by 0.54 m by 0.07 m approximately and area covered measures 2.36 m by 1.68 m. Truncated along SE edge by electric cable but would have abutted perimeter wall. <b>Flagstone surface of Shop 1</b>
009	Sandstone wall foundation surviving as bottom course of a possible wall with abundant sand and lime mortar covering it. Aligned SW-NE and truncated at both ends by modern activity, measuring 2.4 m by 0.47 m. Abutted by cobbles [006] to the NW and by drainage gully [010] to the SE. <b>Outer wall of Shop 1</b>
010	Grooved sandstone blocks forming a drainage channel aligned SW-NE along SE face of wall [009] and abutted by surface [008] to the SE. Blocks are 0.3 m wide with a 0.1 m channel measuring 0.04 m deep. Measures 2.73 m by 0.3 m by 0.06 m. <b>Drainage channel within Shop 1</b>
011	Remains of probable 19 <sup>th</sup> century shop contained by the perimeter wall to the SE, wall [009] to the NW and possible wall [012] to the NE. Flagstone floor [009] and gully [010] form the surviving internal features of the structure. Brick structure [020] appears to have removed a large part of the building to the NE. <b>Remnants of possible 19<sup>th</sup> century Fort canteen (Shop 1)</b>
012	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and keyed into wall [013] to the NW. Measures 3.78 m by 0.6 m by 0.84 m. Over 4 courses high with a narrower course visible under buried soil [016] that may have been required due to depths of former soil horizons in this area (similar to modern piling to stabilise soils). <b>SW wall of Shop 2</b>
013	Sandstone wall with sand and lime mortar aligned NE-SW, keyed into wall [012] at SW end and abutted by cobbles [006] along NW face. Also abutted by walls [014], [021], [022], [040], [043] and [044] along its SE face. Measures 30 m by 0.6 m by 1.1 m. Partly truncated and overlain by gully [017] and road [019].

**Fort House Phase II, Leith: Archaeological Excavation Data Structure Report**

	<b>External wall of 19<sup>th</sup> century shops and workshops of Fort along perimeter wall</b>
014	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. Measures 3.8 m by 0.44 m by 0.66 m (+). Angled abutment is partially visible to SE end making the wall 1.1 m wide in this area. Over 4 courses high. <b>NE wall of Shop 2, and SW wall of Shop 3</b>
015	Structure formed by perimeter wall to the SE, wall [013] to the NW and walls [012] and [014] to the SW and NE respectively. Internal space measures 7.25 m by 3.8 m with no floor surface or other features surviving modern truncation. <b>Remnants of possible 19<sup>th</sup> century Fort shop (Shop 2)</b>
016	Dark grey silty clay with occasional stone, oyster shell and charcoal inclusions. Cut by wall construction for fort and overlain by made ground [002]. Overlies deposit [039] and measures 0.67 m deep within shop structures. <b>Buried soil horizon pre-dating Fort construction</b>
017	Large rectangular granite blocks with drainage channel created through centre, aligned W to E and curving NE. Abutted by cobbles [018] at W end and the tarmac [019] further E and NE it measures 25 m by 0.37 m. Blocks measure 0.75 m by 0.37 m by 0.14 m with drainage gully measuring 0.2 m wide by 0.06 m. <b>Modern drain for 20<sup>th</sup> century road overlying Fort foundations</b>
018	Area of large rectangular granite setts abutting drain [017] to the N and NW, measuring 7 m by 2.3 m. <b>Part of 20<sup>th</sup> century road overlying Fort foundations</b>
019	Tarmac surface to immediate Ne of cobbles [018] and abutting drainage gully [017] to the NW. Measure 18 m by 4 m with a kerb line along the NW edge. <b>Part of 20<sup>th</sup> century road overlying Fort foundations</b>
020	U-shaped brick walls forming a rectangular space with concrete floor that abuts the perimeter wall to the SW of Shop 2 [015]. Long axis is aligned NE-SW and walls measure 5.06 m by 0.24 m (NE-SW) and 2.75 m by 0.24 m (NW-SE). 6 courses of brick survive above floor to 0.52 m high. <b>20<sup>th</sup> century Fort structure</b>
021	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. 2 courses high and sitting upon made ground [002]. Measures 3.8 m by 0.45 m by 0.27 m. <b>Internal wall of Shop 3</b>
022	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. Over 4 courses high measuring 3.8 m by 0.45 m by 0.6 m (+). <b>NE wall of Shop 3 and SW wall of Shop 4</b>
023	Rectangular shaped structure within Shop 3 [039] consisting of a machined flagstone floor [025] and wall [024] along SW edge. NE edge is formed by SW wall of Structure [027]. Measures 1.5 m (NE-SW) by 1.3 m (NW-SE) with internal dimensions of 1.06 m by 1.3 m. Filled by mineralised and heat affected iron and ash deposits [036] and [026], and contains a field gun or canon (SF 25). <b>Possible furnace or oven with Shop 3</b>
024	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and truncated to NW end. Sits on flagstone floor [025] with a flat internal face and a rough external face that was abutted by made ground [002]. Measures 1 m by 0.4 m by 0.22 m. Only survives to one course in height. <b>SW wall of Structure [023]</b>
025	Thick flagstone floor consisting of large squared and machined sandstone blocks measuring up to 0.78 m by 0.56 m by 0.1 m. Surface measures 1.5 m by 1.3 m and is overlain on its SW edge by wall [024]. NE edge abuts Structure [027]. Covered by deposits [036] and [026]. <b>Floor of Structure [023]</b>
026	Moderately compact coarse black ash and cinders with an abundance of slag and mineralised iron fragments throughout. Measures 1.06 m by 1.3 m by 0.23 m. <b>Upper fill of Structure [023]</b>
027	Rectangular sandstone walled structure abutting perimeter wall within Shop 3. Walls form an elongated U-shape aligned NW-SE and SW-NE. Measures 2.1 m by 0.26 m (SW-NE) and 1.3 m by 0.34 m (NW-SE). Internal dimensions are 1.4 m by 1 m and contains possible floor remnant [035]. Over 4 courses of sandstone high. <b>Central structure within Shop 3</b>
028	Small rectangular structure abutting [027] to the NE consisting of brick floor [032] with walls [030] and [031] sitting on the NE and NW edges respectively to form a squarish space 1.1 m by 1 m.

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	Full extents measure 1.4 m by 1.1 m by 0.53 m. Deposits with contain soot and ash. <b>Possible chimney within Shop 3</b>
029	Mid brown sandy clay and sandstone rubble with shattered slate, mortar and occasional brick inclusions. Overlies deposit [034] and measures 1.1 m by 1.01 m by 0.25 m. <b>Upper rubble fill of Structure [028]</b>
030	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [031] to the NW. Sits on brick floor [032] and is abutted by deposits [034] and [029] along its SW face. Internal face is flat whereas external face is uneven and abutted by made ground [002]. Measures 1.06 m by 0.18 m b y 0.24 m. <b>NE wall of Structure [028]</b>
031	Sandstone wall with sand and lime mortar aligned NE-SW, abutting Structure [027] to the SW and abutted by wall [030] to the SE. Flat internal face and uneven external face abutted by made ground [002]. Measures 1.1 m by 0.34 m by 0.33 m. Sits on brick floor [032] and abutted by deposits [029] and [034]. <b>NW wall of Structure [028]</b>
032	Red brick (0.23 m by 0.1 m by 0.06 m) floor forming a rectangular space measuring 1.48 m b y 1.2 m by 0.06 m. Abuts Structure [027] to the SW and walls [030] and [031] overlie the NE and NW edges of floor respectively. Sits on levelling deposits [048] and [033]. <b>Brick floor of Structure [028]</b>
033	Coarse black ash and slag under deposit [048] measuring 0.1 m to 0.2 m thick within made ground [002]. Measures 1.1 m by 0.8 m. <b>Levelling deposit for Structure [028]</b>
034	Compact and brittle mortar with high lime content and possibly heat affected. Directly overlies brick floor [032] with Structure [028] and measures 1.06 m by 1.06 m by 0.02 m to 0.15 m thick. <b>Possible build up within Structure [028] during use</b>
035	Truncated and disturbed sandstone rubble and sand and lime mortar surface within Structure [027]. Measures 1.4 m by 1 m by 0.15 m. <b>Remnant of floor with Structure [027]</b>
036	Fragmented and flaking iron pieces forming a deposit that underlies fill [026]. Measures 1.3 m by 1.04 m by 0.04 m and covers the floor of Structure [023]. <b>Deposit within Structure [023]</b>
037	Same as context [016]. Underlies deposit [035]. <b>Buried soil horizon pre-dating Fort construction</b>
038	Mid brown sand in small area to NNE of deposit [035] with Structure [027] measuring 0.7 m by 0.4 m by 0.2 m. <b>Truncated section of floor [035]</b>
039	Structure formed by perimeter wall to the SE, wall [013] to the NW and walls [014] and [022] to the SW and NE respectively. Internal space measures 7 m by 3.8 m and contains internal wall [021] and Structures [023], [027] and [028] along the SE edge of the room. All three structures may have had sunken floors within them but no floor surfaces survive out with the structures. Two of the three structures also provide evidence of burning, with Structure [023] interpreted as a furnace or oven and Structure [028] as a possible chimney base. <b>Remnants of possible 19<sup>th</sup> century Fort blacksmiths shop (Shop 3)</b>
040	Rubble sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. Abutted by floor surface [041] to the NE. Two courses high and is built upon made ground [002]. Measures 3.8 m by 0.38 m by 0.31 m. <b>Internal wall of Structure [046]</b>
041	Imprinted concrete floor abutting NE face of wall [040] within Structure [046]. Sits on levelling deposit [045] and is truncated along NW edge by road [019]. Imprints are brick shaped measuring 0.23 m by 0.08 m. Measures 5.3 m by 2 m by 0.03 m. <b>20<sup>th</sup> century floor surface within earlier Structure [046]</b>
042	Large concrete block filling gap between perimeter wall and surface [041] measuring 1.9 m by 0.92 m. <b>20<sup>th</sup> century addition within Structure [046]</b>
043	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. Survives to over 4 courses high and measures 3.8 m by 0.44 m b 0.7 m (+). <b>NE wall of Structure [046] and SW wall of Structure [049]</b>
044	Sandstone wall with sand and lime mortar aligned NW-SE, abutting perimeter wall to SE and wall [013] to the NW. Survives to over 3 courses high and measures 3.8 m by 0.36 m by 0.4 m. <b>NE wall of Structure [049]</b>

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045	Sand and lime mortar with brick and sandstone rubble underlying concrete layer [041]. Measures 5.3 m by 2 m by 0.15 m and overlies made ground [002]. <b>Levelling deposit for floor [041]</b>
046	Structure formed by perimeter wall to the SE, wall [013] to the NW and walls [022] and [043] to the SW and NE respectively. Internal space is divided by internal wall [040] and measures 7.6 m by 3.8 m containing modern floor [041], and 2.2 m by 3.8 m to the SW of wall [040]. <b>Remnants of possible 19<sup>th</sup> century Fort shop (Shop 4)</b>
047	Dark grey sandy clay underlying deposit [016]. Over 1 m deep in places. <b>Buried soil horizon pre-dating Fort construction</b>
048	Soft mid brown sand underlying brick surface [032] measuring 1.4 m by 1.03 m by 0.06 m. Overlies ash deposit [033]. <b>Levelling deposit for brick floor [032]</b>
049	Structure formed by perimeter wall to the SE, wall [013] to the NW and walls [043] and [044] to the SW and NE respectively. Internal space measures 7 m by 3.8 m and contains the remnant of a brick floor [050]. <b>Remnants of possible 19<sup>th</sup> century Fort shop (Shop 5)</b>
050	Five red bricks bonded by sand and lime mortar abutting SE face of wall [013] within Structure [049]. Measures 0.82 m by 0.25 m by 0.13 m. Overlies made ground [002]. <b>Remnant of former 19<sup>th</sup> century brick floor</b>

**APPENDIX 2: PHOTOGRAPHIC REGISTER**

Digital Photographs

Frame	Description	From	Date
1	Flagstone floor [008], drain [010] and wall [009] along perimeter wall	NE	22/9/15
2	Flagstone floor [008], drain [010] and wall [009] along perimeter wall	NW	22/9/15
3	Flagstone floor [008], drain [010] and wall [009] along perimeter wall	SW	22/9/15
4	Shop [011] wall and drain [010]	SW	22/9/15
5	View of cobbled courtyard [006]	S	22/9/15
6	Stable walls	NE	22/9/15
7	Stable walls	N	22/9/15
8	Stable walls	SW	22/9/15
9	Cobbles [006] abutting walls	W	22/9/15
10	Cobbles [006] and [007]	SW	22/9/15
11	Cobbles [006] and [007]	SSW	22/9/15
12	Cobbles [006] and [007]	NNE	22/9/15
13	Cobbles [006] and [007]	NE	22/9/15
14	General view of Area A features	N	22/9/15
15	General shot of brick structure [015]	SW	22/9/15
16-17	Depth of perimeter wall foundation	NW	22/9/15
18	Ne facing section through [001], [002], and [016]	NE	22/9/15
19	General view of brick structure [020]	E	23/9/15
20	General view of brick structure [020]	N	23/9/15
21	General view of Shop 2 ST [015]	SW	23/9/15
22	General view of Shop 2 ST [015]	W	23/9/15
23	Wall [012] keyed into [013]	NW	23/9/15
24	View along wall [013]	SW	23/9/15
25	Elevation view of [014]	SW	23/9/15
26	View of wall [014]	NW	23/9/15
27	General view of Structure [015] – Shop 2	NE	23/9/15
28	View of cobbles [018]	NE	23/9/15
29-30	View along drain [017]	SW	23/9/15
31-37	Views of tarmac road	Var	23/9/15
38	General views of Shop 3	SW	23/9/15
39	General views of Shop 3	W	23/9/15

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40	General views of Shop 3	N	23/9/15
41-44	Views of furnace [023]	Var	23/9/15
45-46	Views of sandstone structure [027]	Var	23/9/15
47-48	Views of chimney [028]	Var	23/9/15
49	NE facing elevation of [028]	NW	23/9/15
50	NE facing elevation of [028]	N	23/9/15
51	Rubble fill of [028]	SW	23/9/15
52-60	Views of features in Shop 3	Var	23/9/15
61	Wall [021]	NW	23/9/15
62	Wall [022]	NW	23/9/15
63-65	Views of possible cannon in [026]	Var	23/9/15
66-67	Views of deposit [034] within [028]	Var	23/9/15
68-69	Furnace [023] and floor [025] and cannon	WSW	23/9/15
70-71	Furnace [023] and floor [025] and cannon	NNW	23/9/15
72-73	Furnace [023] and floor [025] and cannon	ENE	23/9/15
74	Mortar and sand deposit [038] and stone floor [035] within Structure [027]	WSW	23/9/15
75	Mortar and sand deposit [038] and stone floor [035] within Structure [027]	ENE	23/9/15
76	Mortar and sand deposit [038] and stone floor [035] within Structure [027]	NNW	23/9/15
77	Grey clay [037] within Structure [027]	WSW	23/9/15
78	Grey clay [037] within Structure [027]	ENE	23/9/15
79	Brick floor [032] with Structure [028]	NE	24/9/15
80	Brick floor [032] with Structure [028]	SW	24/9/15
81	NE-facing elevation of wall [012]	NE	24/9/15
82	SE-facing elevation of wall [013]	SE	24/9/15
83	Post –ex of trench 1	SE	24/9/15
84	Post –ex of trench 2	SE	24/9/15
85	Post –ex of trench 3	SE	24/9/15
86	Wall [022]	NW	24/9/15
87	Brick floor [032]	NW	24/9/15
88	Brick floor [032]	NE	24/9/15
89	General view of Shop 4	W	24/9/15
90	General view of Shop 4	NW	24/9/15
91	General view of Shop 4	N	24/9/15
92	Wall [044]	NW	24/9/15
93	Wall [043]	NW	24/9/15
94	View of deposit [049] under bricks [032]	NE	25/9/15
95	View of deposit [049] under bricks [032]	NW	25/9/15
96	Floor remnant [050]	NE	25/9/15
97	Floor remnant [050]	SE	25/9/15
98	NE end of wall [014]	NE	25/9/15
99	Wall [044] and [013]	NE	25/9/15
100	Wall [044]	NW	25/9/15
101	General view of Shop 5	N	25/9/15
102	View along wall [013] at Shop 5	NE	25/9/15
103-104	View along wall [013] SW of Shop 5	NE	25/9/15
105	General view of Shop 5	W	25/9/15
106	Cannon in clingfilm	-	25/9/15
107	Ash deposit [033]	NW	25/9/15
108	Ash deposit [033]	NE	25/9/15

### APPENDIX 3: DRAWING REGISTER

Dwg No.	Details	Scale
1	Plan of cobbled surface [006] and [007] (partial)	1:20
2	Plan of cobbled surface [006] (partial)	1:20
3	Plan of structure [011]	1:20
4	Plan of cobbles [018] and drain [017] (partial)	1:20
5	Plan of structures [023], [027] and [028] in Structure [039]	1:20

### APPENDIX 4: FINDS REGISTER

Finds No.	Context No.	Description
1	026	Iron objects
2	026	Iron objects
3	026	Lead object
4	026	Copper wires and copper sheet
5	026	Ceramic fragments
6	026	Clay pipe fragments
7	026	Glass fragments
8	026	Bone handled iron object
9	026	Leather object with iron fitting
10	026	Iron objects
11	035	Ceramic fragments
12	037	SPMRW fragment with a green glaze
13	037	Shell and copper button
14	037	Iron object
15	037	Ceramic fragments
16	034	Large iron object
17	034	Iron nail
18	037	2 x ceramic fragments
19	037	Clay pipe stem fragment and bulb
20	037	Iron nail
21	037	Animal bone
22	016	Clay pipe stems
23	016	Animal bone
24	039	2 x ceramic fragments
25	026	Iron cannon/mortar

## APPENDIX 5: SAMPLES REGISTER

Context No.	Quantity (litres)
026	8
033	4
034	4
036	4
038	4

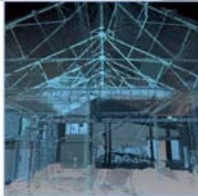


**APPENDIX 6: 'DISCOVERY AND EXCAVATION IN SCOTLAND' REPORT**

<b>LOCAL AUTHORITY:</b>	City of Edinburgh Council
<b>PROJECT TITLE/SITE NAME:</b>	Fort House Phase II, Leith
<b>PROJECT CODE:</b>	22445
<b>PARISH:</b>	North Leith
<b>NAME OF CONTRIBUTOR:</b>	Kevin Paton
<b>NAME OF ORGANISATION:</b>	AOC Archaeology Group
<b>TYPE(S) OF PROJECT:</b>	Excavation
<b>NMRS NO(S):</b>	NT27 NE 288
<b>SITE/MONUMENT TYPE(S):</b>	Fort
<b>SIGNIFICANT FINDS:</b>	Medieval and Post medieval ceramics; metal objects and cannon
<b>NGR (2 letters, 6 figures)</b>	NT 2615 7662
<b>START DATE (this season)</b>	21 <sup>st</sup> September 2015
<b>END DATE (this season)</b>	25 <sup>th</sup> September 2015
<b>PREVIOUS WORK (inc DES)</b>	Desk Based Assessment (Headland 2011); Evaluation (Headland 2011); Watching Brief (AOC 2013); Excavation (AOC 2013)
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	<p>A second phase of archaeological excavation was undertaken by AOC Archaeology Group on behalf of Edinburgh City Council prior to the redevelopment of Fort House, Leith.</p> <p>Previous excavations of 6 areas within the development site revealed several phases of fort construction that coincide with the cartographic and historical evidence. Furthermore, a boundary ditch and earlier soil horizons provided earlier ceramic and other artefacts that can help provide dates for the use of the area in the medieval and post medieval period.</p> <p>This latest phase of excavation focussed on two areas that were previously avoided due to live services on site. One of these areas to the NE corner of the site revealed that modern construction had removed all traces of the fort in this area. However, the other area along the SE boundary wall was stripped of modern overburden revealing several buildings that abutted the perimeter wall along most of its length.</p> <p>One of these buildings contained three smaller structures that may be parts of a furnace and chimney related to a former blacksmith. A small field gun or cannon was found within the possible furnace that would relate to the earliest phase of the fort extension.</p>
<b>PROPOSED FUTURE WORK:</b>	To be confirmed
<b>CAPTION(S) FOR ILLUSTRATIONS:</b>	N/A
<b>SPONSOR OR FUNDING BODY:</b>	Edinburgh City Council
<b>ADDRESS OF MAIN</b>	AOC Archaeology Group Edgefield Road Industrial Estate

## Fort House Phase II, Leith: Archaeological Excavation Data Structure Report

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<b>ARCHIVE LOCATION</b>	Archive to be deposited in NMRS



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