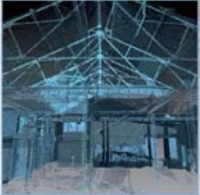
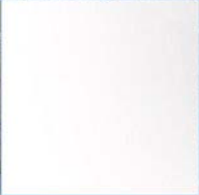


Lochrin Basin, Edinburgh: Archaeological Excavation Data Structure Report

AOC Project 22769
22nd May 2015



Lochrin Basin, Edinburgh: Archaeological Excavation

Data Structure Report

On Behalf of: Knightsbridge Student Housing Ltd
4th Floor, 100 Gray's Inn Road
London
WC1X 8AL

National Grid Reference (NGR): NT 24699 72767

AOC Project No: 22769

Planning Application No: 11/03094/FUL

OASIS Entry No: 211232

Prepared by: Kevin Paton

Date of Fieldwork: 13th April to 13th May 2015

Date of Report: 15th May 2015

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

Author: Kevin Paton **Date:** 15th May 2015
Approved by: Diana Sproat **Date:** 22nd May 2015
Draft/Final Report Stage: Draft **Date:** 22nd May 2015

Enquiries to: AOC Archaeology Group
Edgefield Industrial Estate
Edgefield Road
Loanhead
EH20 9SY

Tel. 0131 440 3593
Fax. 0131 440 3422
e-mail. admin@aocarchaeology.com



Contents

Page

List of illustrations	3
List of plates	3
List of appendices	3
Abstract	4
1 INTRODUCTION	5
1.1 Background	5
1.2 Location.....	5
1.3 Historical Background	5
1.4 Archaeological Background.....	7
2 OBJECTIVES	8
3 METHODOLOGY	8
4 RESULTS	9
5 DISCUSSION	12
6 CONCLUSIONS AND RECOMMENDATIONS	19
7 BIBLIOGRAPHY	20
APPENDIX 1: Context Register	23
APPENDIX 2: Photographic Register	26
APPENDIX 3: Drawing Register	30
APPENDIX 4: Finds Register	30
APPENDIX 5: Sample Register	33
APPENDIX 6: <i>Discovery and Excavation in Scotland</i> Report	34

List of Figures

Figure 1	Site location map
Figure 2	Extract from Ainslie's <i>Old and New Town of Edinburgh</i> 1804
Figure 3	Extract from Kirkwood's <i>An ancient plan of the City of Edinburgh</i> 1819
Figure 4	Extract from Wood's <i>Plan of the city of Edinburgh</i> 1823
Figure 5	Extract from Kay's <i>Plan of Edinburgh</i> 1836
Figure 6	Plan of Lochrin Distillery in 1838
Figure 7	Extract from Ordnance Survey 1853
Figure 8	Extract from Ordnance Survey 1895
Figure 9	Extract from Ordnance Survey 1908
Figure 10	Plan of features within excavation area
Figure 11	W-facing section of canal basin deposits derived from level information
Figure 12	Detail plan of Engine House
Figure 13	S-facing section showing deposits within Engine House

List of Plates

Plate 1	Concrete piles within basin fill
Plate 2	Modern structure [025]
Plate 3	Wall [003] in Area B
Plate 4	Wall [003] in Area A
Plate 5	Buttress [005] at bend in wall [003]
Plate 6	Basin clay [023] in Area B
Plate 7	Timber structure [038]
Plate 8	W-facing section through Area B with full height post
Plate 9	Industrial bellows (SF 22) in-situ
Plate 10	Cobbles [036] to N of wall [003] in Area B
Plate 11	Surfaces [006] to [009]
Plate 12	Distillery pond wall [047]
Plate 13	General view of Engine House [010]
Plate 14	View of excavations showing made ground [017] depth

List of Appendices

Appendix 1	Context Register
Appendix 2	Photographic Register
Appendix 3	Drawing Register
Appendix 4	Finds Register
Appendix 5	Samples Register
Appendix 6	' <i>Discovery and Excavation in Scotland</i> ' Report

Abstract

This report presents the results of an archaeological excavation on the site of a proposed re-development at Lochrin Basin (Lochrin Place), Edinburgh. The proposed new building footprint was fully excavated in order to record the remains of the former canal basin walls and deposits.

The northern wall and entrance to the basin were revealed within the excavation area along with several metres of early 20th century and modern backfill, which overlay the original basin silts and clay floor. The basin silt contained numerous ceramic artefacts such as teapots, plates, bottles and jars, several glass and metal objects, and several well-worn leather shoes. All the items would have related to discarded objects from people on the barges or by the distillery.

A series of 24 timber posts were also revealed to the E end of the basin excavations, representing the former wharf or quay location. Finally, out with the basin, the remains of an 18th century engine house, thought to relate to the brewery and early distillery was also revealed.

1 INTRODUCTION

1.1 Background

- 1.1.1 An archaeological excavation was undertaken by AOC Archaeology Group on behalf of Knightsbridge Student Housing Ltd as part of a programme of archaeological works related to a proposed re-development at Lochrin Basin (Lochrin Place), Edinburgh. The works were required as part of a planning condition on the development (Planning Ref: 11/03094/FUL) and included the excavation of the footprint for the intended new construction.
- 1.1.2 The site lies within the administrative area of the City of Edinburgh Council, which is advised on archaeological matters by the City of Edinburgh Council Archaeology Service (CECAS). The archaeological works were conducted in accordance with the principles set out in *Scottish Planning Policy (2014)* and *Planning and Archaeology 2/2011 (2011)*.

1.2 Location

- 1.2.1 The site is located at the W end of Lochrin Place, approximately 200 m SW of Tollcross, Edinburgh and is centred on NGR: NT 24699 72767 (Figure 1). The site lies to the immediate SE of the Union Canal terminus now known as Lochrin Basin, and is surrounded by Lochrin Place to the E, newly constructed residential buildings to the N and W, and the back gardens of Gilmour Place to the S.

1.3 Historical Background

- 1.3.1 A Desk-Based Assessment undertaken by AOC Archaeology Group (2014) describes the historical background of the development area and its immediate surroundings. The following is a summary of this assessment.
- 1.3.2 The development area is situated within the Tollcross region of Edinburgh, and the earliest historical references to Tollcross date to the 15th century, although its origins can be traced to the mid 12th century in the reign of David I, when the area was probably occupied by orchards or used for cultivation. The first depiction of the area from 1784 (Kincaid 1784) records the site as open ground bordered to the north by the 'Common Sewer' (the Dalry Burn).
- 1.3.3 Historical evidence suggests that the gradual expansion of Edinburgh began to encroach on the area surrounding the site from the 18th century onwards. The city's brewing industry expanded rapidly after the Union of 1707 when the 'Auld Alliance' with France was severed and tastes moved from wine, port and brandy to beer. Brewers were attracted to the Fountainbridge/Tollcross area by the large quantities of pure water trapped within a geological fault underlying the district, and the first references to the establishment of breweries within the area was Robert Gray's built in 1731.
- 1.3.4 Gray's Brewery was purchased by Haig's Whisky Distillery in 1798 and renamed the Lochrin Distillery. Although short lived, the distillery prospered to become the largest distillery in Scotland. Both the development area and the distillery are first recorded in detail on Ainslie's map of 1804 (Figure 2), which shows distillery buildings immediately northeast of the proposed development, lining both banks of the Dalry Burn. The development area is depicted mainly as open ground, although a round structure marked 'steam engine' is shown

in the northern part of the site, immediately south of the burn, and a rectangular building is recorded in or near the southwest corner. The purpose of the steam engine is unknown, although it was presumably associated with the distillery.

- 1.3.5 The continued expansion of the distillery into the 19th century is recorded on Kirkwood's map of 1817 (Figure 3), which shows various new buildings and three artificial ponds within the distillery complex. The largest of these ponds occupied the southern part of the development area, within the footprint of the later canal basin. The steam engine is still present in the same position, although whether it has a direct correlation or function relating to the new pond is unclear.
- 1.3.6 A year after Kirkwood's map the Union Canal construction commenced, which was completed by 1822. Designed by the engineer Hugh Baird, the Union Canal was the last of Scotland's major canals and is the only contour canal, a continuous lock-free watercourse, to survive in Scotland. In recognition of this, the watercourse, its banks, towpath, sluices, kicking stones and other associated features are a Scheduled Monument (Findlater 2011).
- 1.3.7 The Lochrin Distillery was quick to capitalise on its proximity to the canal, excavating its own private basin (Lindsay 1968; 76), the Lochrin Basin within the development area. Wood's map of 1823 (Figure 4) records the basin as a large rectangular body of water connected to the canal via a channel cut from its northwest corner; this channel is shown passing under a bridge which presumably maintained the towpath for the canal. The basin occupies the same position as the larger pond recorded by Kirkwood in 1817. The area is also recorded in detail on Kay's 1836 plan of Edinburgh (Figure 5) which is almost identical to Wood's map in its depiction of the basin and the area surrounding, except for a small circular structure recorded immediately north of the Lochrin Basin, which is likely to be the same as the '*steam engine*' earlier depicted on Ainslie's map.
- 1.3.8 The distillery is recorded in detail on a '*Plan of Lochrin Distillery, the property of James Haig and Son Esq., 1838*' (Figure 6), which shows the Lochrin Basin towards the western end of the site with extensive distillery buildings, courts and yards focused to the east. The plan also depicts a crane on the basin's northern quay, suggesting barges were loaded and unloaded from this point. Behind the crane an unusual octagonal structure is shown in the approximate position of the '*steam engine*' and the circular structures drawn by Kay in 1836. The plan identifies this structure as a '*pigeon house*'; and most likely represents a reuse of the old '*steam engine*' building. An enclosure to its rear is documented as a '*pig shade*' and '*court*'.
- 1.3.9 Despite the investment represented by the basin, the evidence suggests that the success of the distillery was short lived, its buildings being recorded intact but disused on the Ordnance Survey First Edition map of 1853 (Figure 7). The date of its closure is unknown although Moss & Hume (2000) have suggested that the last owners of the distillery were C&D Gray in 1860. The 1853 Ordnance Survey shows both the pigeon house and the pig sty, and also suggests that the basin was surrounded by hard standing, presumably representative of a quay side.
- 1.3.10 Ordnance Survey mapping indicates that the infilling of the Lochrin Basin commenced some time after 1877 and had been completed by 1908. The 1895 Survey (Figure 8) shows the

basin partially backfilled, suggesting that the abandonment of the basin may have occurred gradually rather than as a single event. It is clear that the application site underwent a considerable amount of redevelopment between the 1853 and 1895 Ordnance Surveys, for while the octagonal building recorded in 1853 remained, the 1895 map shows it set within an extensive complex of new buildings extending north and east of the basin. North of the basin, these new buildings extend to and overlie the basin wall, suggesting that the northern quay had been abandoned by this stage. The purpose of these buildings is unknown although their size and layout suggests that they served either industrial or commercial functions.

- 1.3.11 The 1908 Ordnance Survey (Figure 9) shows that the basin had been completely infilled by that date, and the pigeon house and pig sty have been removed also, with the site being occupied by a levelled but vacant space. Further development occurred by the time of the 1933 Ordnance Survey which shows the area around the basin was occupied by two large structures; a garage and the '*Edinburgh Larder Cold Storage Depot*'. The site of the former basin remained vacant until around 1974, when the garage is extended southwards over the infilled basin.

1.4 Archaeological Background

- 1.4.1 Since 2002 AOC Archaeology has undertaken a range of desk-based and field-based projects in connection with development proposals for the development area and other sites surrounding it. A desk-based assessment (Barber *et al* 2002) and an Environmental Impact Assessment (Trickett & Toolis 2005), both revealed the chronology of the site and its potential archaeological significance.
- 1.4.2 Since then, trial trenching in 2003 (Connolly, 2003) located the eastern canal wall and a stone structure, thought to be a crane base. A watching brief carried out by AOC in August and September 2005 during the removal of the garage and slab across the original development site also revealed partial remains of a bridge across the channel in the north-west corner of the site together with part of the surviving basin quay walls (Trickett 2005). A measured survey of the bridge was also carried out as part of the watching brief.
- 1.4.3 Another archaeological evaluation was undertaken at the development site in October 2005 (Wilson 2005). These investigations encountered sections of the Lochrin Basin quay wall along with foundations relating to buildings contemporary with the basin quay, all sealed by approximately 1 m of modern overburden. This work also included an historic building survey of an upstanding length of perimeter wall, located in the northern portion of the original development area, thought to be contemporary with the canal basin.
- 1.4.4 An archaeological evaluation, excavation and watching brief to the E of the earlier works mentioned above, was undertaken at 20-22 Lochrin Place in 2005 and 2006, recording evidence of structures pre-dating the late 19th century southward expansion of the Edinburgh Slaughter Houses. Stone wall foundations associated with the Lochrin Distillery were found and included what were probably seven circular still bases and the possible base of a timber washback (spirit vat). It is possible that some of the structural remains may have related to the earlier, 18th century, Gray's brewery (Heawood 2006, 13).
- 1.4.4 A further archaeological excavation of a 1540 m² area extending southwards from the southern wall of the Lochrin Basin was undertaken by AOC in March 2009 (Hunter-Blair

2009). Extending beyond the southern edge of the current development area, the excavation revealed 19th century structural features. The earliest surviving feature recorded was the remains of a wall, which appears to represent the original property boundary wall dividing the land owned by Mr. Haig, the notable distiller, to the north and Mr. Gilmour's to the south, as depicted on Ainslie's map of 1804. This later became the distillery's southern boundary bordering the rope works (see Figure 2). The subsequent excavations revealed 42 m of the southern wall of Lochrin Basin.

- 1.4.5 Finally, prior to the construction of the student accommodation to the north of the development area an excavation was carried out by Headland Archaeology between November 2012 and January 2013. These excavations found wall foundations, floor surfaces and machine bases associated with 19th century and later structures associated with a distillery, brewery and iron foundry, though the central area of the student accommodation site had been heavily truncated. A considerable depth of garden soil was recorded at 3.7 m below the current ground surface, which may have been associated with gardens apparent on early 19th century maps of the site. Two deposits of buried horticultural soil were also identified: the upper deposit contained pottery dating to the 17th to early 18th century with the lower deposits containing pottery dating from the 12th to 15th century. A large ditch, pits and postholes were cut also identified cut through the earlier garden soils (Bailey 2013).

2 OBJECTIVES

- 2.1 The objectives of the archaeological works were:
- i. to safeguard the archaeological resource from any adverse impacts associated with the development;
 - ii. to excavate and record any features found within the excavation area and to liaise with CECAS and the client as to any further response in safeguarding these features;
 - iii. to report on the results of the excavation.

3 METHODOLOGY

- 3.1 Prior to any ground breaking on site the excavation area was demarcated with road pins and then checked for unknown services using a Cable Avoidance Tool (CAT). No possible services were indicated and the excavation was undertaken by a 22-tonne excavator with a 2 m wide bladed ditching bucket. The excavations were undertaken in shallow units/spits until the first significant archaeological horizon was reached. All machine excavation was supervised by an experienced field archaeologist and according to AOC Archaeology Group's standard operating procedures, and as per the methodology within the *Written Scheme of Investigation* (AOC 2015).
- 3.2 Due to the large amounts of spoil required to be excavated to depths of over 4 m, the excavations were split into 5 areas (A to E), with only Area A being left open throughout the excavation (Figure 10). The other areas B to E were opened, features and deposits recorded, the area surveyed and spot heights taken on each significant deposit or feature

and then the area backfilled before moving onto the next. Terram was used to cover the top of the basin wall before backfilling of Areas A & B.

4 RESULTS

- 4.1 The weather during the excavation was mainly fair allowing for good archaeological visibility, and the total area excavated measured 1850 m². The current ground level on site is 74.25 m OD with the natural subsoil only revealed at 70.98 m OD within the basin and 71.22 m OD to the immediate N of the basin. The entire site was covered with modern demolition material [001] that relates to the removal of the former garage in 2013. This deposit covered everything on site including the modern garage foundations and the three significant features: Lochrin Basin; the earlier distillery pond; and the 18th century engine house.
- 4.2 Within Areas A and E, the remains of large concrete piles for the garage construction were revealed that truncated the basin deposits. Furthermore, several drainage and other service pipes had also impacted upon the original basin deposits, removing the basin silt completely in parts of Area C, D & E (Plate 1). Finally, two walls [002] and [035] with concrete foundations, and a clay lined structure [025] (Plate 2) were recorded within the basin or truncating the basin wall (Figure 10). These all related to the modern disturbance of the site after the basin had been backfilled. The remainder of the report will detail the findings related to the basin and the 18th century engine house.
- 4.3 *Lochrin Basin*
- 4.3.1 The partially truncated basin wall [003] was revealed to the N edge of the site boundary (Areas A & B) and was aligned E to W, before curving to the NW where it would have connected to the Union Canal. Over 45 m of the wall was revealed, measuring 0.85 m wide and, where it survived to its full height, 2.6 m high (Plates 3 & 4). Where it survived to its full height, the S face of the wall consisted of 13 courses of dressed sandstone blocks overlying three courses of undressed sandstone, all capped with very large, rounded sandstone coping stones (73.521 m OD) measuring 1.12 m by 0.82 m by 0.26 m. The N face of the wall was only revealed in plan and consisted of medium and large, undressed sandstone with an abundance of sand and lime mortar.
- 4.3.2 Where the wall curved to the NW a possible buttress [005] was noted, abutting the NE face and covered by the clay lining deposit [004] (Plate 5). This clay was present along the entire N edge of the wall and measured 1.3 m wide. The other main deposit of the basin was the clay floor [023], a pale grey clay with an abundance of small stone inclusions (Plate 6). This clay would have been the primary deposit within the basins construction cut, and formed the watertight lining of the basin.
- 4.3.3 In the top 0.1 m of this deposit, where the water within the basin had gleyed the deposit, some ceramic fragments and a bucket handle were found. The clay was typically 0.45 m thick, overlying the natural geology [024], and was revealed to be up to 1 m thick in parts of Area B and 0.8 m in Area E. From the levels taken throughout the excavations, the clay deposit indicates that the basin was slightly concave in shape and also sloped from W to E (Figure 11).

- 4.3.4 The final structural element to the basin was the timber structure [038] revealed in Areas B, C & D, to the E edge of the excavation area. It consisted of 24 square, timber posts that were driven into the clay [023] (Plate 7). The posts mainly formed a series of six rows and three columns, with further posts to the S (Figure 10). Most of the posts had the top 0.5 to 1 m truncated by modern developments, but the few that had survived to the height of wall [003] indicated they were over 3 m long (Plate 8).
- 4.3.5 Throughout the basin, the excavations revealed a thick black silty clay deposit [022] that overlay the clay floor [023]. It contained numerous artefacts including: leather shoes; ceramic bowls, plates, bottles, jars and tea pots; glass fragments; metal objects such as a large iron file, a bucket, and several shovel heads; and fragments of timber along with timber planks and one half of a large industrial bellows (Plate 9). This deposit was 0.55 m in depth towards the N edge of the basin although became much shallower towards the S edge of the site, where it was only 0.1 m in depth. As previously mentioned, the service trenches of the modern garage had also truncated this deposit in places.
- 4.3.6 Overlying the basin silt [022] and abutting the wall [003] was an ash deposit [032] that had built up against the wall and thinned to nothing at 1.9 m from the wall face. This deposit and the remainder of the basin silt [022] was overlain by the late 19th and early 20th century backfill deposit [020]. The backfill material consisted of layers of clay and other soils, as well as brick and sandstone demolition rubble, and a dumped deposit of ginger beer bottles within pit [033]. The tip lines seen during the excavations revealed that the basin was backfilled from the S edge.
- 4.3.7 Just outside the N edge of the basin and contemporary with its use were several areas of cobbled surface and flagstones that are the last surviving remains of the quayside. Cobbles [036] consisted of regular, angular setts abutting the basin wall in Area B (Plate 10) next to where timber structure [038] was revealed. However, a mixture of cobbles [007], flagstones [006] and [009], and a concreted surface [008] in Area A (Plate 11) indicates that the quayside may not have been completely uniform with some areas being used for different purposes. The cobbles sat on an ashy bedding layer [016], which in turn overlay a made ground [017] that was present on site prior to construction of the basin. A possible drainage cut [029], with clay lining [030] was present in Area A to the immediate N of the clay lining [004] that would have been underneath the surfaces [006] – [009] (Plate 12).
- 4.4 *Distillery pond*
- 4.4.1 A sandstone wall [047], 5.79 m in length was revealed beneath the clay floor of Lochrin Basin [023], approximately 5 m S of basin wall [003] (Figure 10). The wall was aligned ENE-WSW and only survived to one course in height and had been removed by the basin construction as it sloped W to E. It was set within construction cut [046] and, as with wall [003], had a clay lining [048] on its external face. The wall was 0.6 m in width and the clay was approximately 1 m in width. No evidence of the wall survived further E, with the most eastern 2 m of the wall only visible as a robber trench.
- 4.5 *18th Century Engine House*
- 4.5.1 At the NE edge of Area A was the remains of the Engine House [010], which extended further N out with the excavation area (Figures 10 & 12). This structure consisted of angled walls [012] and [014] to the W and E respectively of a blocked entrance [013] (Plate 13). The

walls were of sandstone construction measuring 0.9 m thick and surviving to a height of 2.1 m, all of which survives below the level of the basin and cobbled surfaces. The structure appears to be octagonal in plan (as suggested by the historical mapping) and is approximately 6 m in diameter. The brick wall within the entrance to the building indicates it had been blocked up prior to the made ground [017] being deposited.

- 4.5.2 Excavation of the deposits within the structure indicate that a rudimentary floor level [019], consisting of a compact, dark grey and black stony silty clay, may have been partly floored by timber [018]. This possible floor deposit had been partly truncated by a modern pipe [011] sitting on a slate base [040], relating to the use of the site as a garage. Within the other deposits contained by the structure, some Scottish Post-medieval Reduced Ware (SPMRW) was found. Under the floor surface several thin deposits [049], [043] and [050] overlay the main fill of the structure [044] (same as [039]) (Figure 13).
- 4.5.3 Excavations of the interior had to stop at 1.5 m due to health and safety concerns. However, excavations by machine to the immediate S of wall [012] revealed that the made ground [017] was 2 m deep and that the engine house walls survived to 2.1 m high (Plate 14).



Plate 1 - Concrete piles within basin fill



Plate 2 - Modern structure [025]



Plate 3 - Wall [003] in Area B



Plate 4 - Wall [003] in Area A



Plate 5 - Buttress [005] at bend in wall [003]



Plate 6 - Basin clay [023] in Area B



Plate 7 - Timber structure [038]



Plate 8 - W-facing section through Area B with full height post



Plate 9 - Industrial bellows (SF 22) in-situ



Plate 10 - Cobbles [036] to N of wall [003] in Area B



Plate 11 - Surfaces [006] to [009]



Plate 12 - Distillery pond wall [047]



Plate 13 – General view of Engine house [010]



Plate 14 - View of excavations showing made ground [017] depth

5 DISCUSSION

- 5.1 Despite the modern truncations to the top of the basin wall it has been possible to determine the sequence of construction used to create the basin, with the entire basin extent excavated before clay lining was imported for the base. The walls surrounding the site would then have been constructed into the clay base material in order to provide stability, and the clay lining added to fill the space between the construction cut and the wall. This sequence was evidenced by the fact that the clay floor material [023] was underneath and abutting the base of wall [003]. Prior to the basin construction, it is most likely that the earlier distillery pond was drained and demolished as evidence from the excavation shows that the basin floor [023] covered the earlier wall [047].
- 5.2 As for the timber structure [038], it is suggested that this was created in order to allow several barges to be loaded and unloaded at the E end of the basin at any one time. Traditionally barges are moored parallel to the canal or quay walls, but by creating a series of bays it would have been possible to moor the barges alongside floating pontoons or each other allowing several barges to be loaded and off loaded at one time by the crane depicted in the 1838 plan of the distillery, or by moving items from one barge to the next until they reached the quayside. The width of the bays measured between 2.35 m and 3.8 m E-W, and 3.4 m to 3.6 m N-S, providing space for five or six barges or narrow boats that were typically 2.1 m in width.
- 5.3 The deposits within the basin have provided evidence of the material culture of the people who worked and lived on the canal. The barges that were used to distribute goods along its length were typically homes for the owners as well as working boats so it is not surprising to have found numerous ceramic plates, bowls and other domestic wares within the basin silt that may have been lost over the side of the barge or discarded due to being damaged. Furthermore, some industrial items such as the bellows (SF 22), an iron file (SF 99) and an iron bowl (SF 75) are indications that the basin may have been utilised by the nearby iron foundry in the late 1860's and 1870's once the distillery was no longer functioning.
- 5.4 Looking at the earlier engine house, the depth of the structure could suggest that the building was subterranean, and may have acted as an engine house with an internal well, being used by the early brewery and distillery for pumping water from the local geological fault. However, when you take into consideration the blocked doorway [013] being abutted by made ground [017], it is more probable that the engine house was formerly above ground and the surrounding area was later built up as part of the distillery expansion and or the nearby canal construction. The ashy made ground deposits [017] were present prior to the basin construction, as evidenced by the construction cut [037] and the earlier excavations of the distillery, which also suggest a large amount of material being brought into and spread throughout the area (Bailey 2013). It is most likely that when the area was built up that the engine house was also backfilled and then used as a pigeon house attached to a pig sty, and that the water required by the distillery was obtained from another source.

6 CONCLUSIONS AND RECOMMENDATIONS

- 6.1 The results of the excavations have shown that the northern extent of Lochrin Basin has survived modern redevelopments in generally fair condition with several areas of fully extant

wall with original coping stones still in place. However, the 20th century developments have truncated the top courses of the wall in several places, with service pipes and foundations removing parts of it. The excavations were also able to reveal part of the 18th century engine house but could not fully determine the interior make up of the structure due to safety concerns and the limits of the excavation area. As for the basin deposits, these were all fully excavated and recorded down to the level of the natural subsoil.

- 6.2 Given the archaeological features revealed in the northern edge of Area A it is possible that a mitigation strategy for further archaeological work in this area may be required compliant with *Scottish Planning Policy* (2014) and *Planning and Archaeology 2/2011* (2011). After discussions with CECAS, the preferred option for the basin wall is that it is preserved *in situ*. However, if this is not possible, then the recording of the removal of the wall will be required.
- 6.3 Furthermore, in relation to the materials found during the excavation a programme of post-excavation works may be required. The full scope and scale of these works will be set out in a Post Excavation Research Design, to be agreed with the City of Edinburgh Council, on advisement by CECAS.

7 BIBLIOGRAPHY

7.1 Bibliographic References

AOC Archaeology Group 2015 *Lochrin Basin, Edinburgh: Archaeological Excavation Written Scheme of Investigation*, Unpublished Client Report

Bailey, L 2013 'West Tollcross, Edinburgh Excavation', *Discovery and Excavation in Scotland*, Vol. 14 (2013), 83.

Barber, J, Thompson, L & Rankin, D, 2002, *10-12 West Tollcross*, AOC Archaeology Group, Unpublished Desk Based Assessment

Conolly, R 2003 'Lochrin Basin (City parish of Edinburgh), evaluation; standing building recording', *Discovery Excav Scot*, vol.4, 71.

Findlater, G, 2011, Email to Elaine Robertson, City of Edinburgh Council from Historic Scotland, ref. 11/00823/PAN

Heawood, R., 20-22 Lochrin Place, Edinburgh; Archaeological Excavation and Watching Brief, Unpublished client report by Abercorn Archaeology LLP

Hunter Blair, A., 2009, *Lochrin Basin Edinburgh Excavation: Data Structure Report* AOC Archaeology Group, Unpublished.

Lindsay, J., 1968, *The Canals of Scotland*, Newton Abbot

Moss, MS & Hume, JR 1981, 2000 *The Making of Scotch Whiskey: A History of the Scotch Whiskey Distilling Industry* Edinburgh

Scottish Government 2014 *Scottish Planning Policy* (2014)

Scottish Government 2011 PAN 2/2011 Planning & Archaeology

Trickett, P. & Toolis, R., 2005, *Lochrin Basin Tollcross, Edinburgh: Environmental Impact Assessment*, AOC Archaeology Group, Unpublished. (Included as Appendix B in Environ EIA)

Trickett, P. 2005 *Lochrin Basin Evaluation, Tollcross, Edinburgh, Archaeological Watching Brief Data Structure Report*, AOC Archaeology Group, Unpublished.

7.2 Cartographic References

Kincaid, A 1784 *A plan of the city and suburbs of Edinburgh*.

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

Kirkwood, R 1817 *An ancient plan of the City of Edinburgh*.

Wood, J 1823 *Plan of the city of Edinburgh*.

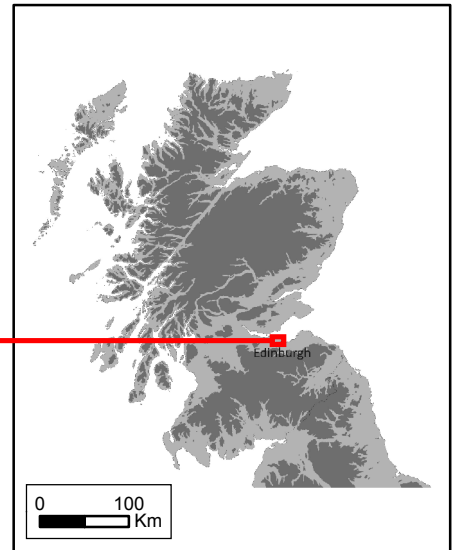
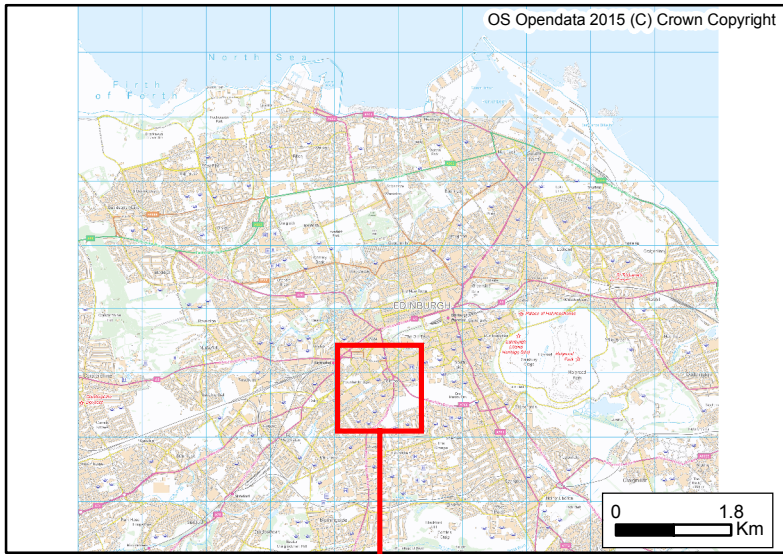
Kay, J 1836 *Kay's plan of Edinburgh*.

Anon 1838, Plan of the Lochrin Distillery the property of James Haig and Son Esq.

Ordnance Survey 1853 *Edinburgh and its Environs*, Sheet 38, 1:1056.

Ordnance Survey 1895 *Edinburgh and its Environs [New Series]*, Sheet III.II.3, 1:500.

Ordnance Survey 1908 *Edinburghshire*, Sheet III.II, 1:2500.



325000



Figure 1: Site Location Plan



Figure 2 - Extract from Ainslie's Old and New Town of Edinburgh 1804

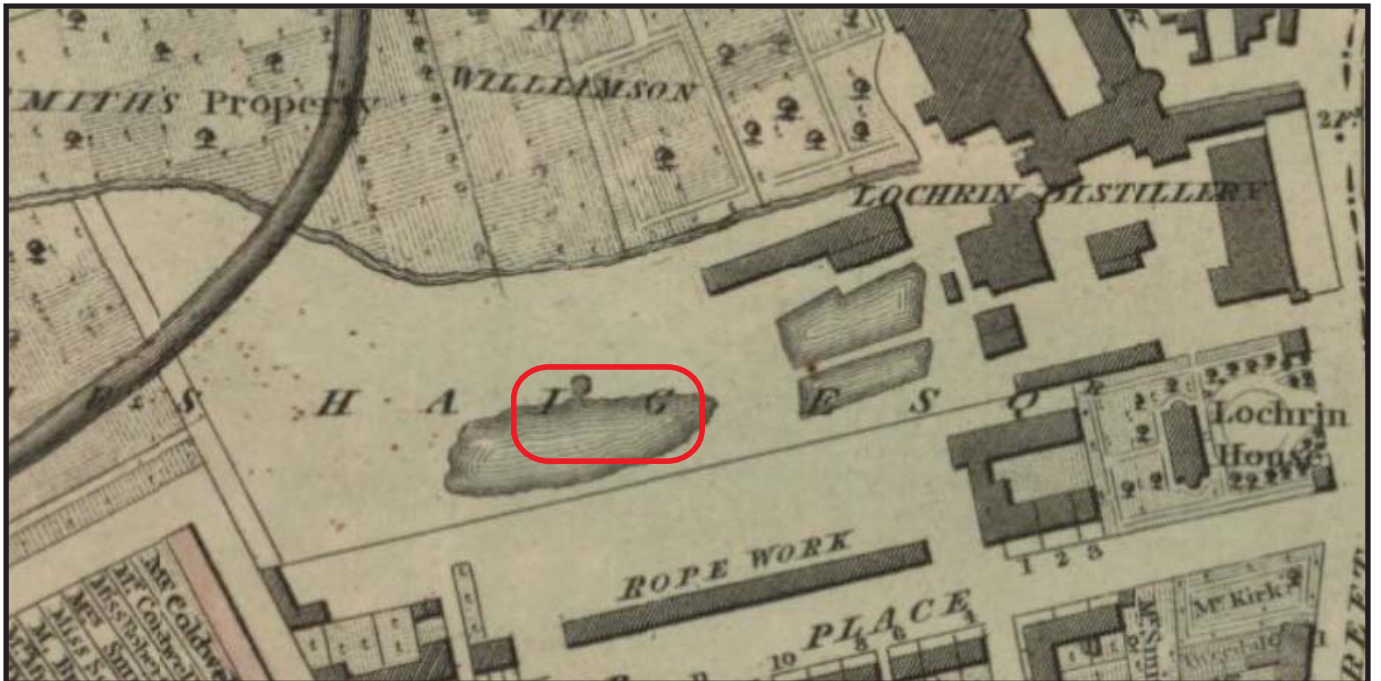


Figure 3 - Extract from Kirkwood's An ancient plan of the City of Edinburgh 1819



Development area

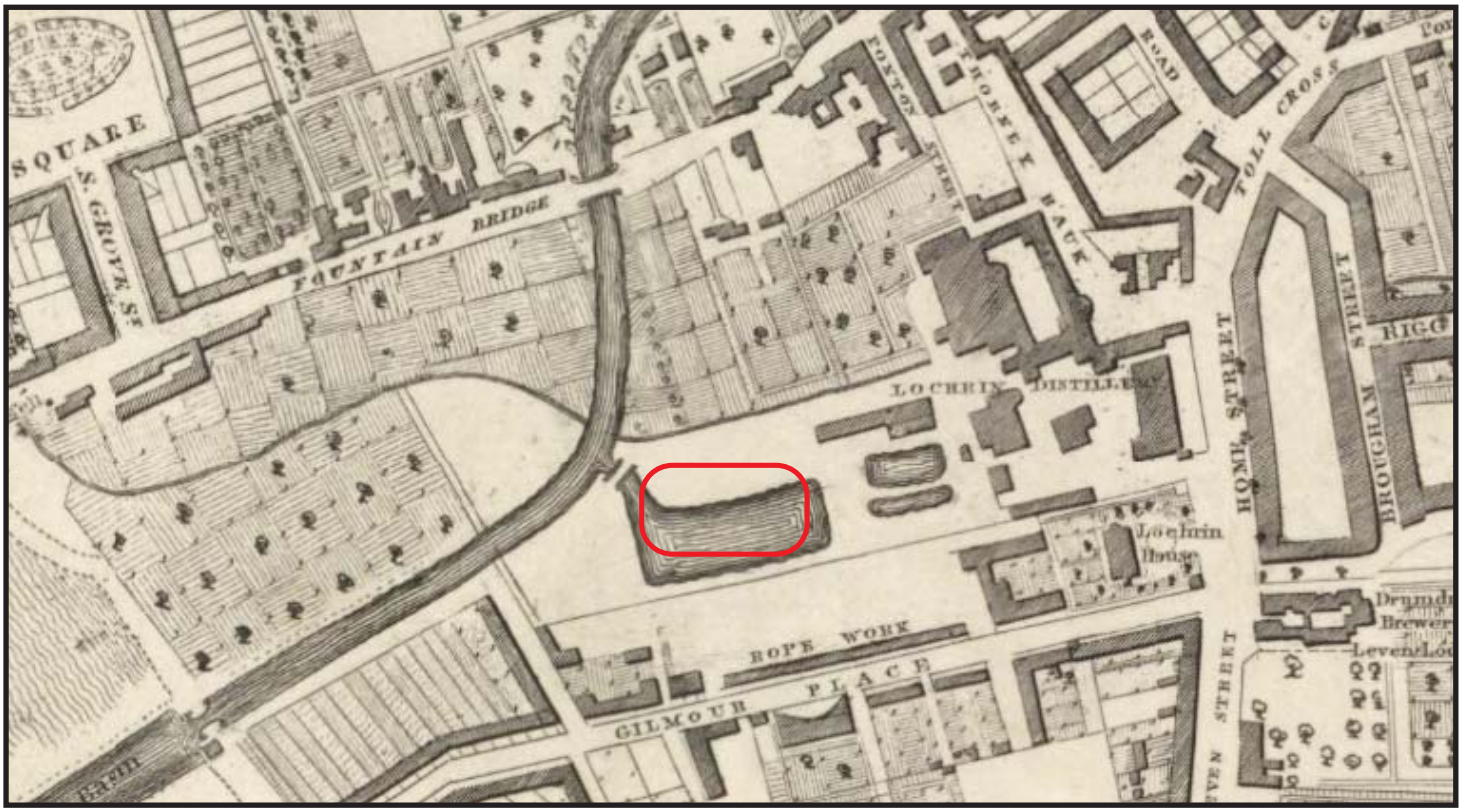


Figure 4 - Extract from Wood's Plan of the city of Edinburgh 1823



Figure 5 - Extract from Kay's Plan of Edinburgh 1836



Development area

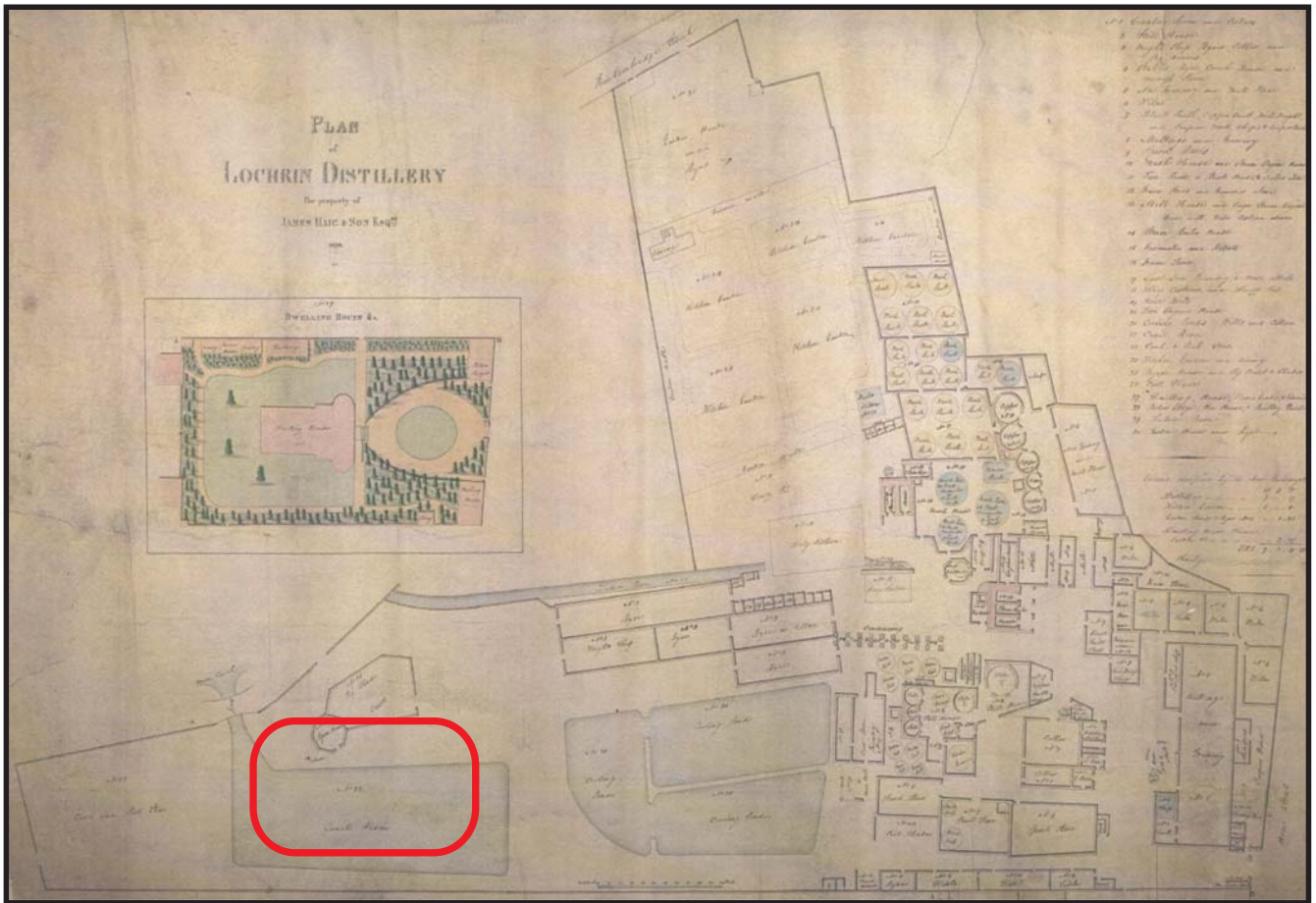


Figure 6 - Plan of Lochrin Distillery in 1838

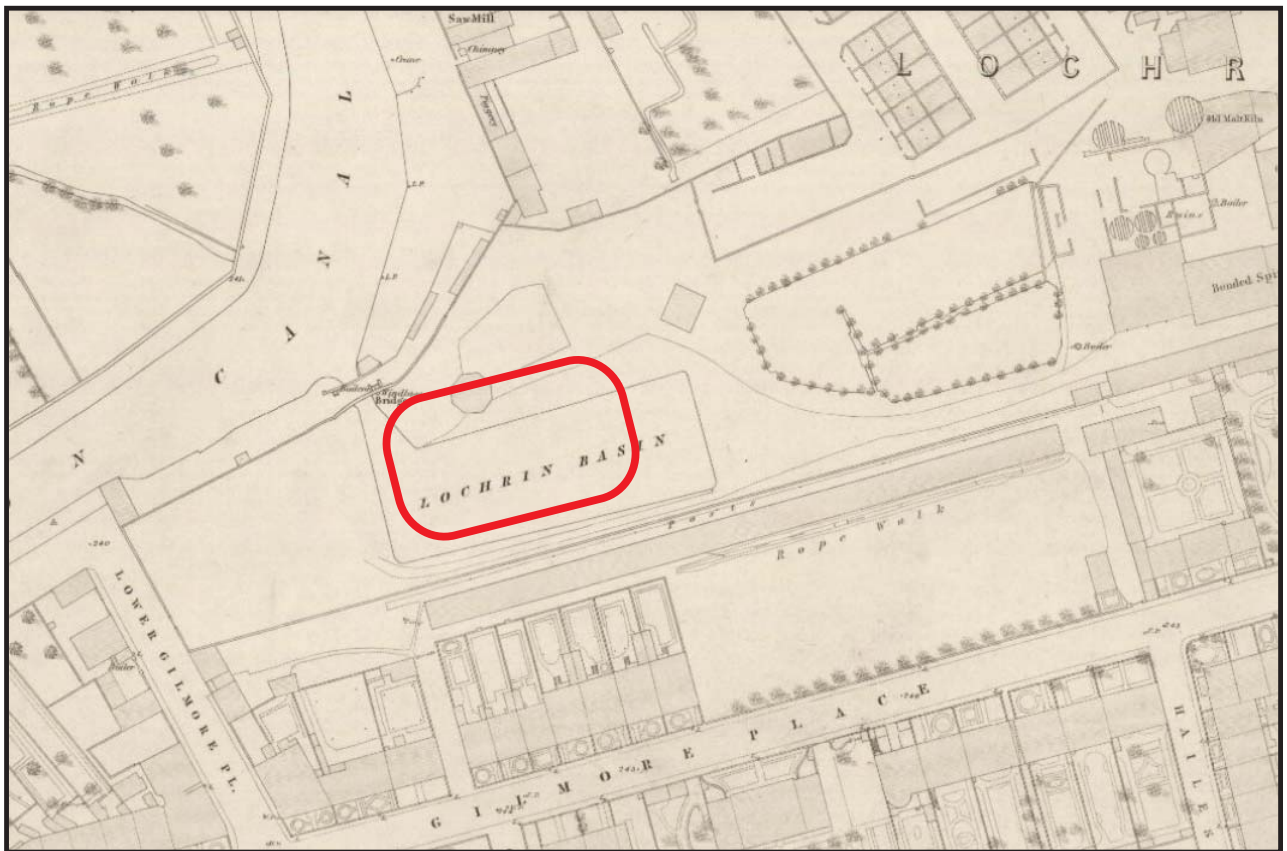


Figure 7 - Extract from Ordnance Survey 1853



Development area



Figure 8 - Extract from Ordnance Survey 1895

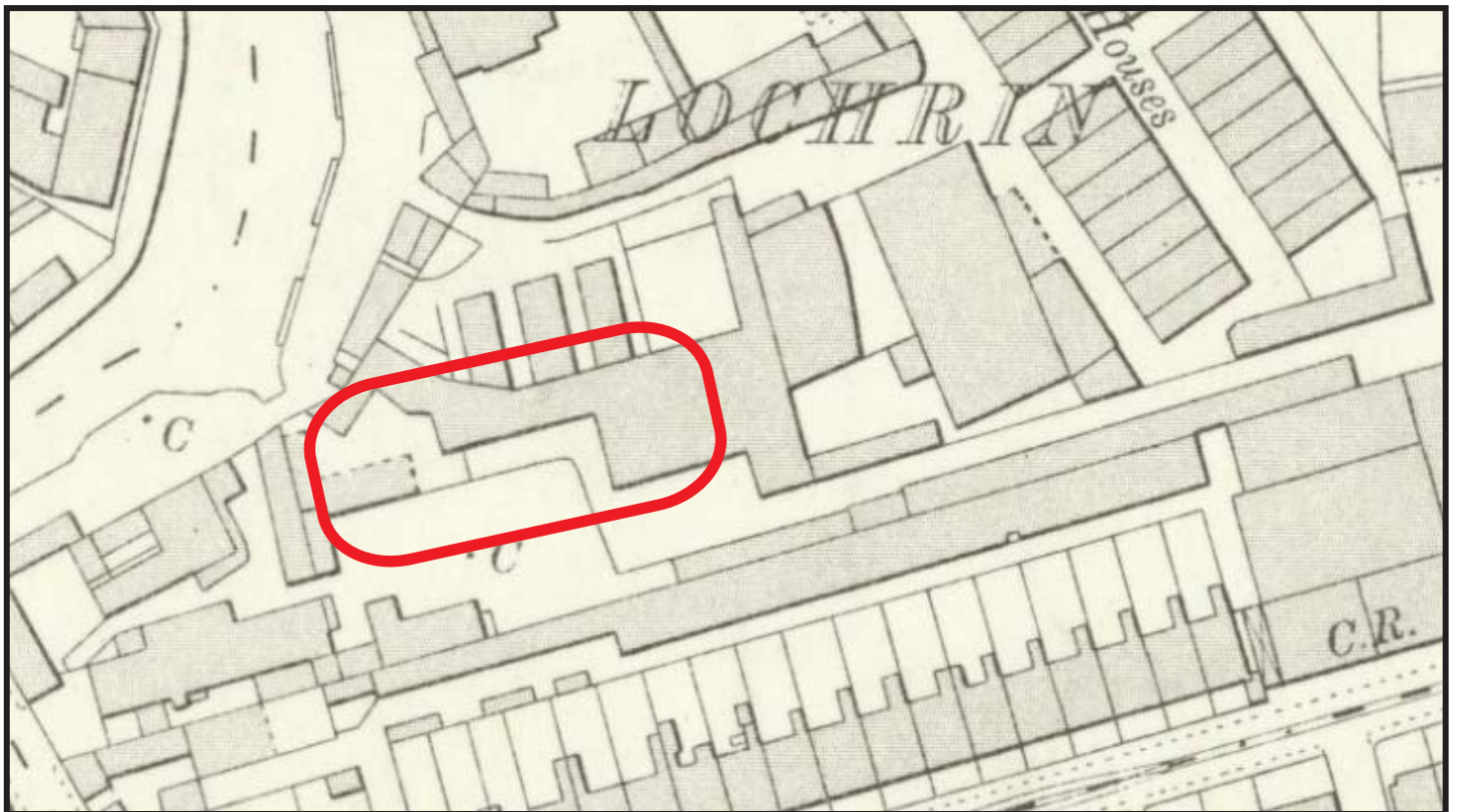
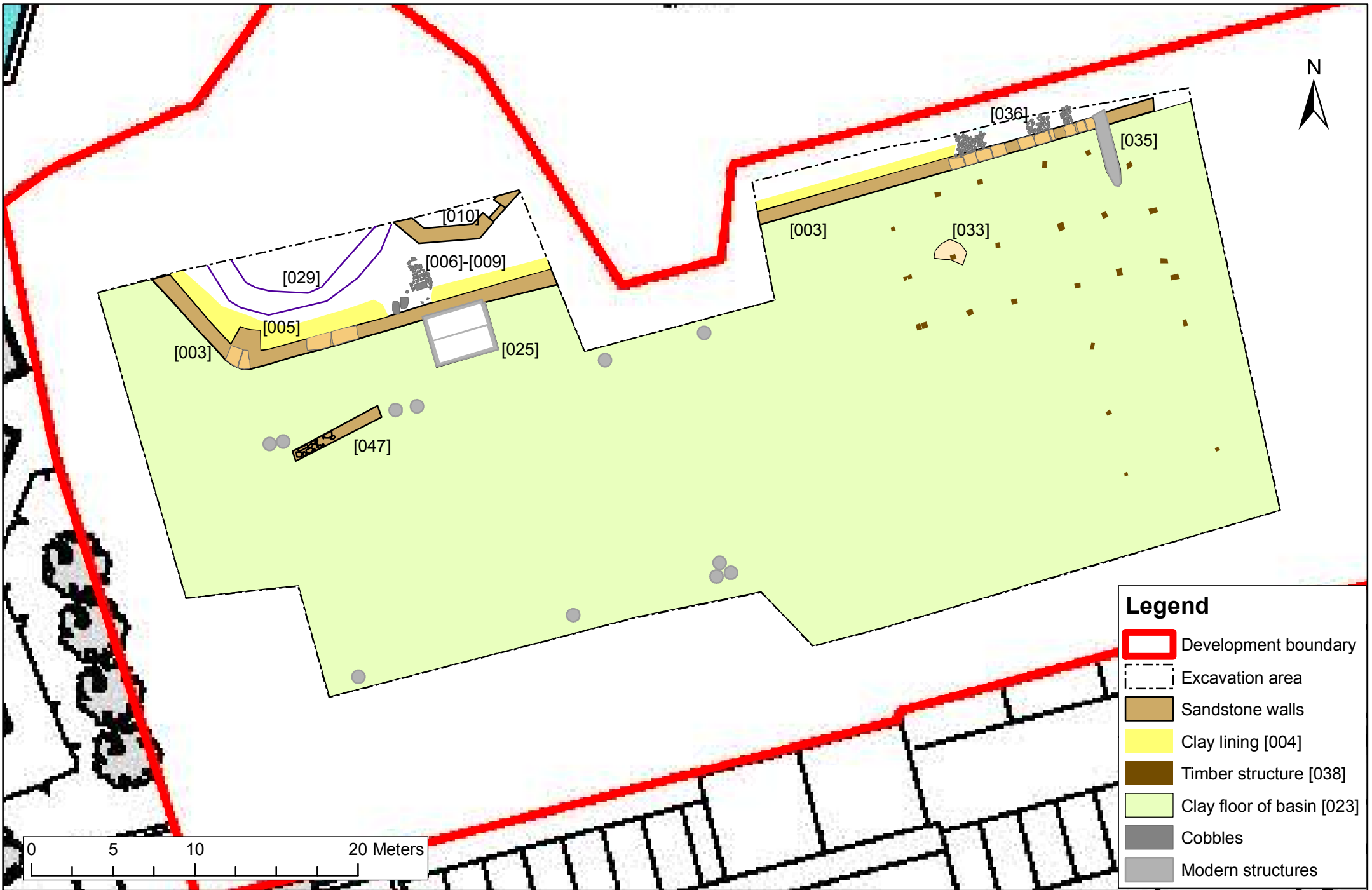


Figure 9 - Extract from Ordnance Survey 1908



Development area



Based on a drawing provided by the client

Figure 10 - Plan of features within excavation area

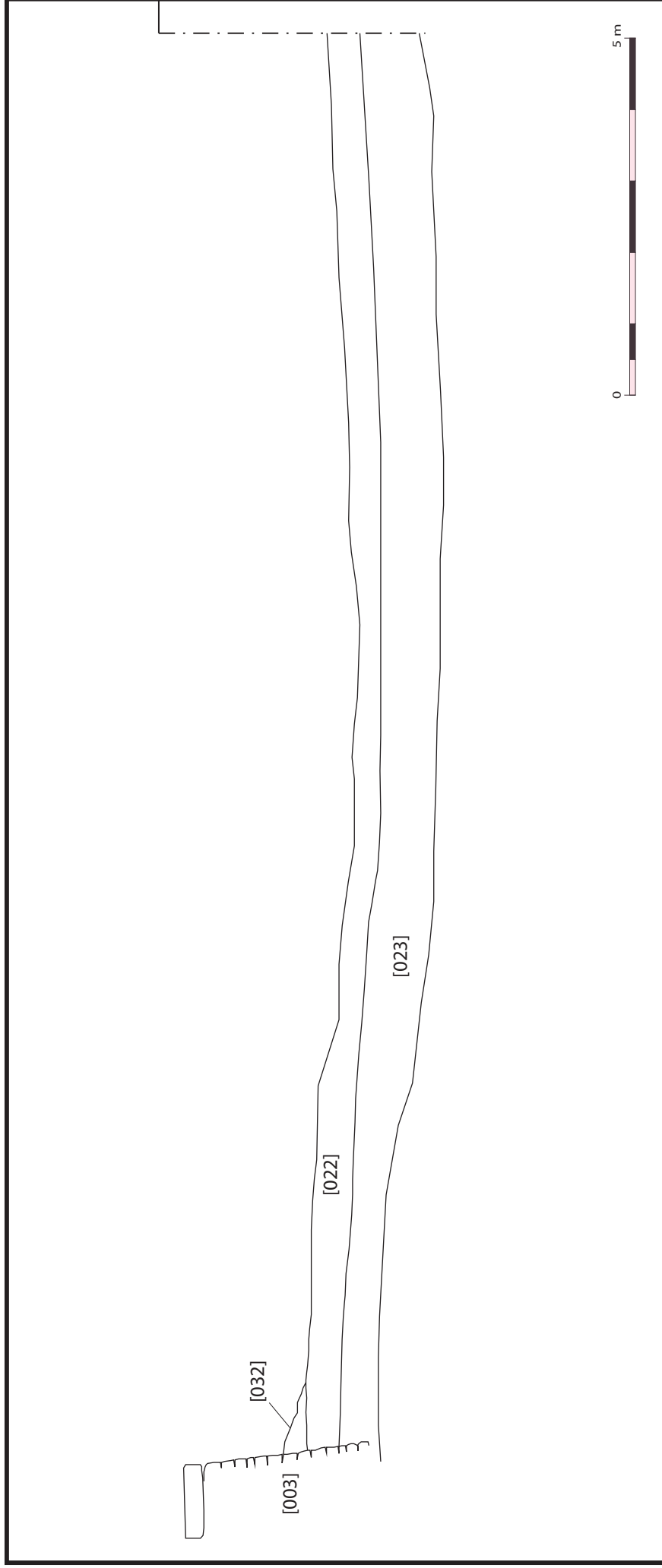


Figure 11 - W-facing section of canal basin deposits derived from level information

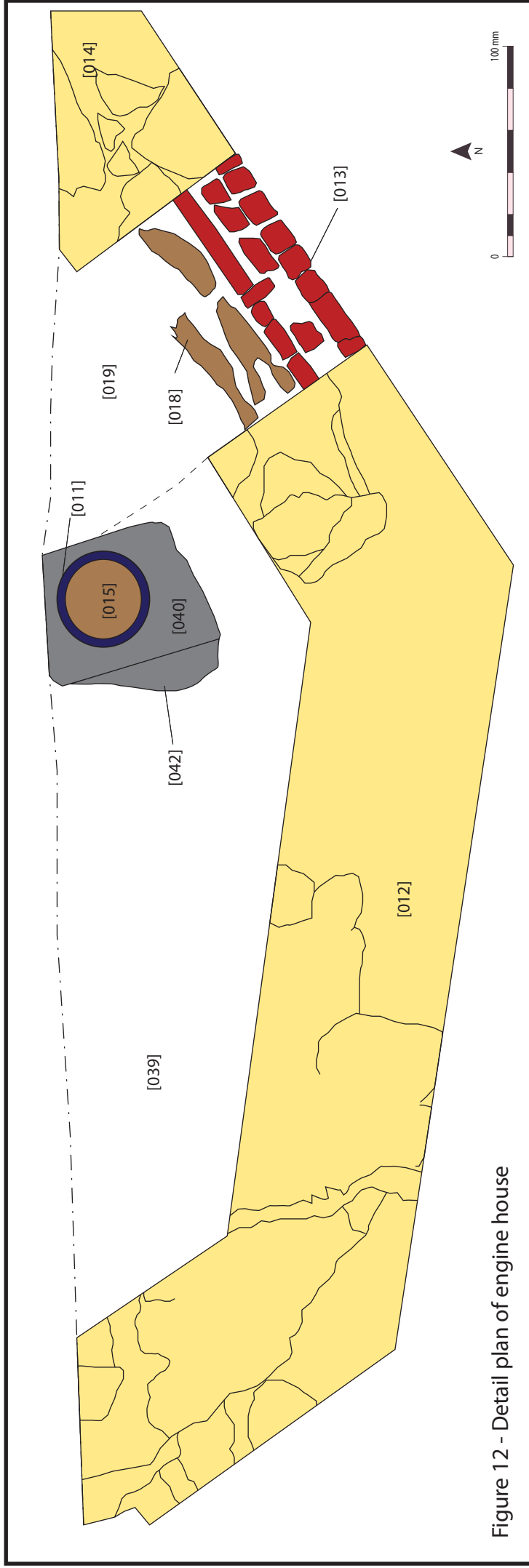


Figure 12 - Detail plan of engine house



Figure 13 - S-facing section showing deposits within engine house

Lochrin Basin, Edinburgh: Archaeological Excavation Data Structure Report

Section 2: Appendices

APPENDIX 1: Context Register

Context No.	Area	Description and Interpretation
001	N/A	Mixture of gravel, brick and sandstone rubble, concrete and various clay and sandy soils overlying modern building foundations, former garage floor and basin backfill [020]. Between 1 -1.2 m thick throughout the site. Modern made ground
002	A	Concrete foundation aligned E-W with three courses of red, frogged brick visible in section along E L.O.E. Continues E under L.O.E. and measures 1 m by 0.67 m. Modern concrete and brick wall
003	A & B	Very large sandstone wall surviving to original height in places consisting of dressed sandstone blocks (0.66 m by 0.16 m) on its S face and large undressed sandstone and medium blocks behind S face with an abundance of sand and lime mortar. Upper course of wall consist of very large dressed sandstone slabs with rounded corners measuring 1.12 m by 0.82 m by 0.26 m. Wall is aligned E-W and bends NW at W end. N face is abutted by clay deposit [004] and it sits within basin cut [037]. Foundation courses sit on basin clay [023]. Wall is angled at approximately 80 degrees, sloping N-S. Wall measures 26.26 m by 0.86 m by 2.6 m in Area A and 26 m by 0.84 m by 2.54 m in Area B. Northern wall of Lochrin Basin
004	A & B	Compact greenish brown clay with occasional sandstone and brick inclusions abutting the N face of wall [003]. Aligned E-W and sits within construction cut [037]. Abutted by deposit [031] to the N and is expected to sit on clay [023] at base of cut [037]. Buttress [005] sits within clay and surrounded and capped by it. Clay seal behind basin wall
005	A	Very large sandstone blocks abutting the NE face of basin wall [003] where it bends to the NW. Abutted by and covered by clay deposit [004]. Measures 1.5 m by 0.94m (not fully revealed). Northern basin wall buttress
006	A	Two large sandstone flagstones immediately N of wall [003] and to the SW of cobbles [007]. Stones measure 0.65 m by 0.38 m and 0.58 m by 0.41 m. Sit over clay [004] with partial bedding from [016], and within concreted surface [008]. Truncated flagstone surface
007	A	Partial remains of truncated cobbled surface to N of basin wall [003] consisting of rounded stones (0.33 m by 0.14 m by 0.1 m) covering an area 1.7 m by 1.3 m. Sits on bedding layer [016] and abuts flagstone [009] to the N and form part of walkway or rough surface with [006], [008] and [009]. Cobbled surface remains – possible towpath
008	A	Very compact, possibly concreted surface along S edge of cobbles [006] and partially surrounding [006] and [009]. Consists of small gravels, ash, stone and some silty sand. Sits on bedding layer [016]. Probable repairs to cobbled surface
009	A	Single large sandstone flagstone sitting to N edge of cobbles [007] and surrounded by surface [008]. Measures 0.65 m by 0.35 m. Possible threshold between cobbles and now removed flagstone surface.
010	A	Southern edge of octagonal structure consisting of sandstone walls [012] and [014] with brick entrance [013]. Structure is filled by deposit [039] throughout the majority of internal space with deposits [018], [019], [043]-[045], [049] and [050] within entrance area. Modern pipe [011] and slate base [040] placed on top of made up deposits. Remains of 18th century Engine House
011	A	Circular ceramic pipe (??) or large vessel sitting within structure [010] on top of slate [040] measuring 0.44 m diameter by 0.26 m. Internal diameter of 0.36 m and filled by modern made ground [015]. Deposit [041] surrounds lowest parts of pipe and strong smell of oil contamination. Modern sump base – not related to Engine House
012	A	Sandstone wall consisting of undressed sandstone blocks with an abundance of sand and lime mortar covering all stone faces as well as between stones. Angled walls to W of entrance [013] measuring 6.65 m by 0.9 m by 2.1 m. Aligned E-W from entrance then angled NW, continuing under L.O.E. S & SW wall of Engine House

013	A	Red brick wall within entrance way of engine house, consisting of 3 course of brick in width, two courses to N edge laid flat and third forming S face on edge. An abundance of sand and lime mortar covers the internal face. Aligned NE-SW between walls [012] and [014]. Measures 1.1 m by 0.37 m by 2 m. Bricked up entrance of Engine House
014	A	Sandstone wall consisting of undressed sandstone blocks with an abundance of sand and lime mortar covering all stone faces as well as between stones. Situated to NE of entrance [013] and aligned SW-NE measuring 0.85 m by 0.88 m by 2.1 m. Continues NE under L.O.E. SE wall of Engine House
015	A	Compact greyish brown silty, sandy clay with frequent brick and sandstone rubble inclusions and occasional modern material. Similar to deposit [001] and measures 0.3 m thick within structure [010]. Upper modern fill of structure [010]
016	A	Very compact dark grey and black ash immediately under surfaces [006]-[009]. Measures 3 m by 1.8 m by 0.2 m. Bedding layer for cobbles
017	A	Mixed deposit of ash, mortar, brick, stone and clay to the N of clay [004]. Cut by basin construction cut [037] and drainage cut [029]. Underlies bedding [016] and surrounds engine house [010]. Measures 19 m by 4 m by 2 m. Early 19th century or late 18th century made ground
018	A	Timber to immediate N of wall [013] within entrance to engine house. Overlain by modern made ground [015] and sits on early made ground [019]. Consist of badly decayed timber spread over 1.5 m by 0.37 m area aligned parallel to entrance [013]. Arts of timber may suggest a gate post was present amongst it. Remains of timber floor threshold or old door frame within entrance
019	A	Dark greyish brown silty, sandy clay with frequent ash, coal and small stone inclusions. Similar to deposit [039] but appears more compact as if trampled. Measures 0.4 m thick to N of entrance [013]. Overlies deposit [049]. Made ground or trampled floor deposit
020	A	Mixture of clay, gravels, demolition material and rubble tipped into the canal basin once abandoned from the S. Measures over 3 m thick in places. 19th century and early 20th century backfill
021	N/A	Same as [020] - VOID
022	A-E	Thick, black silty clay with occasional stone, coal and brick inclusions overlying basin floor deposit [023]. Contains an abundance of ceramics, glass, metal, wood and leather artefacts that have been deliberately discarded or lost within the basin. Covers entire basin floor and ranges in depth from 0.1 m within Areas C, D & E to 0.6 m in Areas A & B. Truncated by modern services in Areas C and E related to 20 th century garage. Ash deposit [032] overlies deposit along N edge next to wall [003]. Silt build up within basin while in use and full of water
023	A-E	Very compact pale grey speckled clay with occasional coal and stone rubble in top gleyed layer (Approx 0.15 m) and abundant small stone inclusions. Under basin silt [022] and wall [003]. Overlies natural subsoil [024]. Measures between 0.4 m and 1 m thick. Covers original lochrin wall [047]. Basin floor deposit
024	A-E	Greenish brown clayey sand and stone underlying basin construction and floor [023]. Cut by construction cut [046] as well as by cut [037]. Natural subsoil
025	A	Square brick walled structure with a concrete foundation aligned N-S and E-W with N wall using the Basin wall [003] as a foundation. Internal wall [028] splits the structure into two rooms aligned E-W and internal faces of all walls are abutted by clay lining [026]. Structure is 3.94 m by 3.5 m by 0.92 m and survives to 0.66 m high. Walls are 0.24 m wide. Internal dimensions are 2.68 m by 3.44 m. Modern structure related to garage
026	A	Thick purple clay lining the internal faces of structure [025] and both faces of internal wall [028] Averages 0.06 m thick throughout. Clay lining of structure [025]
027	A	Yellowish brown sand and stone within structure [025]. Infill of structure [025] after abandonment
028	A	Brick wall aligned E-W within structure [025] with sealant [026] abutting either face. Measures 3.5 m by 0.24 m. Internal wall of structure [025]

029	A	Curvilinear cut aligned approximately E-W to N of basin wall [003]. Moderate to gently sloping sides containing deposits [030] and [031]. Only N edge visible as stops at clay deposit [004]. Measures 9 m by 1.8 m by 0.38 m Possible drainage cut under former towpath surfaces
030	A	Compact reddish brown clay and sandstone, brick and tile inclusions. Sits within cut [029] to N edge and lines the base at S edge, abutting clay [004]. Is overlain at S edge by deposit [031]. Measures 9 m by 1.3 m by 0.29 m. Clay lining within drainage cut [029]
031	A	Dark grey and brown ash, sand and clay overlying [030] at S edge of cut [029]. Abutts clay [004] and measures 9 m by 0.66 m by 0.2 m. Infill of former drain or gully
032	A & B	Dark grey and black ash build up against S face of basin wall [003], tapering in thickness from N to S. Measures 1.09 m wide from N-S and varies in thickness from 0.8 m (N), to 0.4 m (centre) to 0 m at S edge. Overlies silt [022]. Ash build up from towpath use
033	B	Sub-circular cut with steep sides surrounding one of the timber posts [038] within Area B. Measures approximately 1 m in diameter and is up to 1 m deep. Cuts through backfill deposit [020] and filled by deposit [034]. Cut for bottle dump
034	B	Orangey brown clayey stone and sand with an abundance of ceramic bottles. Measures 1 m diameter and 1 m thick around one of the timber posts [038] in Area B. Fill of cut [037]
035	B	Concrete and brick wall truncating part of wall [003] and aligned N-S. Measures 3.7 m long within Area B but also seen further S in Areas C & D. 0.76 m wide by 0.37 m. 2 courses of brick on top of concrete foundation. Foundation covers a ceramic pipe. Modern wall related to garage
036	B	Three areas of truncated cobbled surface abutting the N face of wall [003]. Cobbles are sub-angular and typically 0.24 m by 0.23 m by 0.1 m. Modern service pipes have truncated and removed cobbles in places. Former towpath or loading area floor next to basin
037	A	Curvilinear cut aligned NW-SE before curving E. Parallel with basin wall and filled by clay deposit [004], wall [003], clay [023], silt [022], ash [032] and backfill [020]. Assumed vertical sides with concave base measuring up to 3 m deep at centre, and up to 2.12 m wider than internal basin dimensions. Construction cut for Lochrin Basin
038	B-D	Remains of a large wooden wharf or mooring structure within the basin. Consist of 24 large timber posts (squared) that have been hammered into the natural subsoil [024] before being surrounded by clay [023]. The posts are on average 0.29 m squared and survive up to 3.27 m high. They originally would have been level with the top of the basin wall but most have been cut down by up to 1 m. They form 6 columns and 3 rows with some outlier posts to the S. Most are parallel and perpendicular to each other but 3 are offset from grid pattern indicating possible replacements (??). Remains of quay or wharf within basin
039	A	Dark grey and black silty clay with abundant small stone, coal, brick and sandstone rubble inclusions. Underlies deposit [015] and is contained within structure [010]. Over 1.3 m thick. Backfill of structure [010]
040	A	Rectangular piece of slate sitting directly under pipe/vessel [011] and covered by deposit [041]. Sits on and within deposit [039] measuring 0.83 m by 0.69 m by 0.02 m. Modern slate base for pipe
041	A	Dark grey ashy clay and stone covering slate [040] around pipe [011]. Strong smell of oil from deposit suggesting it relates to garage use. Measures 0.8 m wide and 0.06 m thick. Modern deposits around pipe [011]
042	A	Concreted dark grey clay and small stones underlying slate [040]. Measures 0.86 m by 0.77 m by 0.03 m. Bedding for slate [040]
043	A	Reddish brown silty clay measuring 0.08 m thick between [049 and [050], within entrance to structure [010]. A number of iron nails and Fe objects within it. Deposit within engine house
044	A	Light grey ashy silt within entrance to structure [010] measuring over 0.4 m thick. Underlies deposit [050]. Deposit within engine house
045	A	Compact grey clay with lenses of yellow sand and frequent small angular stones. 0.07 m

		from N faces of walls [012], [013] and [014]. Deposit within engine house
046	A	Linear cut with vertical sides and probable flat base. Filled by clay deposit [048 and wall [047]. Measures 4 m long Construction cut for original Lochrin
047	A	Single course of sandstone foundation aligned WSW-ENE measuring 5.79 m by 0.6 m by 0.2 m. ENE end truncated by basin construction as basin slopes W to E and wall did not. Excavated in very wet conditions with ground water covering the area once it was opened. 18th Century Lochrin wall
048	A	Compact pale grey clay and dark grey sandy clay with frequent small to medium stone inclusions. Fill of construction cut [046] to immediate N of wall [047] forming clay lining outside Lochrin. Measures 5.7 m by up to 1 m wide. Clay lining around Lochrin
049	A	Dark grey silty clay with inclusions of coal, tile, brick and stone. Measures 0.12 m thick. Overlies deposit [043]. Deposit within engine house
050	A	Dark grey silty clay. Measures 0.1 m thick and overlies deposit [044]. Deposit within engine house
051	A	Mid brown sandy clay with occasional stone inclusions. Natural subsoil

APPENDIX 2: Photographic Register

Digital Images – Camera 1

Frame	Area	Description	From	Date
1-2		General view of site from East	Var	14/4/15
3-9		Views of W end of site	Var	14/4/15
10-12		General view from SW corner facing E	Var	14/4/15
13	A	Lochrin Basin wall first exposed	NW	15/4/15
14	A	Cast Iron pipe in canal backfill	NW	15/4/15
15	A	Detail view of basin wall cleaning	NW	15/4/15
16	A	Sandstone wall in E edge of Area A	N	15/4/15
17	A	Location view of foundation [002]	NW	15/4/15
18	A	Concrete foundation [002]	N	15/4/15
19	A	W-facing section of [002]	W	15/4/15
20	A	Cobbles (pre-ex)	W	15/4/15
21	A	Brick structure over basin wall	N	15/4/15
22	A	Truncated basin wall	W	15/4/15
23	A	Bend in basin wall	E	15/4/15
24	A	Possible clay filled cut	E	15/4/15
25	A	Engine house walls	W	15/4/15
26-27	A	General view of clay within possible cut	E	16/4/15
28	A	Cobbles and flagstones N of basin	SE	16/4/15
29	A	Cobbles and flagstones N of basin	S	16/4/15
30	A	Cobbles and flagstones N of basin	NE	16/4/15
31	A	View of cobbles and edge of [010]	NNE	16/4/15
32	A	View of cobbles and basin wall	S	16/4/15
33	A	General view of structure [010]	W	16/4/15
34	A	Entrance [013] of structure [010]	SSE	16/4/15
35	A	General view of structure [010]	ENE	16/4/15
36	A	Pipe [011] within deposit [015]	ENE	16/4/15
37	A	Working shot	SW	16/4/15
38	A	Black layer – original basin fill	N	16/4/15

39	A	Modern pile in basin	W	17/4/15
40	A	E-facing section showing ash deposit	E	17/4/15
41-42	A	General shot of portion of basin wall [003]	SW	17/4/15
43-44	A	Detail of entrance of engine house	NNW	17/4/15
45-46	A	Detail of timber [018] and entrance [013]	E	17/4/15
47-48	A	Detail of timber [018] and entrance [013]	E	17/4/15
49-50	A	Detail of timber [018]	N	17/4/15
51-52	A	Detail of entrance [013]	W	17/4/15
53	A	E-facing section through ditch [029]	NE	17/4/15
54	A	E-facing section through ditch [029]	E	17/4/15
55	A	View of cut for clay behind [003]	N	17/4/15
56	A	General view of excavation area	SW	17/4/15
57	A	Concrete piles within basin	W	17/4/15
58	A	Possible wall or culvert at basins base	W	17/4/15
59-60	A	Possible wall or culvert at basins base	W	17/4/15
61	A	Location shot showing basin wall and culvert	S	17/4/15
62-68	A	General shots of wooden object in-situ	Var	17/4/15
69	A	Modern structure [025]	NW	17/4/15
70	A	Modern structure [025]	W	17/4/15
71	A	General shot of Area A	SE	20/4/15
72	A	Waterlogged area at base	NW	20/4/15
73	A	Waterlogged area at base	W	20/4/15
74-76	A	Working shots of wooden object	Var	20/4/15
77-78	B	N wall of basin and posts	W	20/4/15
79	B	Cobbles next to N basin wall	W	20/4/15
80	B	Posts adjacent to wall [003]	ENE	20/4/15
81	B	Brick, concrete and mortar wall and post NE end of site	S	20/4/15
82-83	B	N wall of basin and brick wall and posts	E	20/4/15
84-86	B	Post and ginger beer bottles dump	W	20/4/15
87-88	B	General shot of Area B	WSW	20/4/15
89	B	Detail of posts next to N basin wall	WSW	20/4/15
90-93	B	W-facing section through deposits [021], [022] and [023] and pile	WSW	21/4/15
94-95	B	S-face of the wall [003] and piles	SSE	21/4/15
96-97	B	S-face of the wall [003] and piles	S	21/4/15
98-99	B	S-face of the wall [003] and piles	SSW	21/4/15
100-101	B	S-face of the wall [003] and piles – detail	SSW	21/4/15
102-103	B	W-end of the N basin wall [003]	W	21/4/15
104-105	B	Cobbled surface [036]	N	21/4/15
106-107	B	Cobbled surface [036]	NNW	21/4/15
108-109	B	Cobbled surface [036]	W	21/4/15
110-112	B	Cobbled surface [036]	E	21/4/15
113-114	B	Timber posts next to wall [035]	E	21/4/15
115-116	B	Wall [035]	N	21/4/15
117-118	B	Continuation of basin [003] beyond wall [035]	W	21/4/15
119	B	Timber posts (E end)	N	21/4/15
120	B	Timber posts protruding through made ground	N	21/4/15
121-122	B	General shot of timber posts in Area B	W	21/4/15
123	B	Working shot	-	21/4/15
124	B	Basin wall [003] and timber posts	W	21/4/15
125	B	Basin deposit [022]	W	21/4/15

126	B	Clay deposit [023] under [022]	W	21/4/15
127	B	W-facing section of basin deposits	W	21/4/15
128	B	Working shot of machine stripping	W	21/4/15
129-130	B	General shot of Area B	W	21/4/15
131	C	More timber piles to S of Area B	SW	23/4/15
132	C	Deposit [022] with timber posts	S	23/4/15
133	C	Two more posts exposed and clay [023]	SW	23/4/15
134	C	Made ground over [022] and [023]	S	23/4/15
135	C	Marks in post	W	23/4/15
136-137	C	Location shot of marks in post	Var	23/4/15
138	C	Another post revealed	S	23/4/15
139	C	Grey clay in Area C	SW	23/4/15
140-141	C	Progress shot of Area C	SW	23/4/15
142	C	Two more posts in Area C (E end)	W	24/4/15
143	C	Deposit [022] in section	S	24/4/15
144-145	C	Deposit [022] in section	S	24/4/15
146	C	Posts in-situ	SW	24/4/15
147	C	Posts in-situ	SW	24/4/15
148	C	Close up of two E end posts	W	24/4/15
149	C	Working shot of survey	S	24/4/15
150	C	Modern pipe above clay [023]	E	24/4/15
151	C	Modern disturbance to basin floor	E	24/4/15
152-153	A	Wall [003] – E end	E	24/4/15
154	A	Truncation of wall [003]	E	24/4/15
155-156	A	Truncation of wall [003]	E	24/4/15
157	A	Coping stones of [003] in-situ	N	24/4/15
158	A	Coping stones of [003] in-situ	W	24/4/15
159-160	A	Buttress [005]	E	24/4/15
161	A	Buttress [005]	NE	24/4/15
162	A	Coping stones of [003] at bend	NE	24/4/15
163	A	NW end of wall [003]	NW	24/4/15
164-167	A	View of wall bend [003]	Var	24/4/15
168	A	S-facing elevation of wall [003] – W end	S	24/4/15
169	A	S-facing elevation of wall [003] – centre	S	24/4/15
170	A	Detail of wall face [003]	S	24/4/15
171	A	Truncated area of all [003]	S	24/4/15
172	A	Tip lines in deposit [020]	E	24/4/15
173	A	Slate base [040] and pipe [011]	SW	27/4/15
174	A	Slate base [040] and pipe [011]	SW	27/4/15
175-176	A	Slate base [040] and pipe [011]	SE	27/4/15
177	A	W-facing section showing deposit [041]	W	27/4/15
178	A	Shot showing slate [040] and bedding [042]	SW	27/4/15
179-180	A	Slate base [040]	SW	27/4/15
181-182	A	More wood in entrance [013]	W	28/4/15
183	D	Area D initial strip	NW	28/4/15
184	D	Made ground in Area D	W	28/4/15
185	D	Possible Evaluation trench cut	S	28/4/15
186-189	D	Wall damage	Var	28/4/15
190	D	Waterlogged trench overnight	N	29/4/15
191	D	Tip lines in W-facing section	W	29/4/15

192	D	S-facing section	S	29/4/15
193	D	Basin silt [022]	S	29/4/15
194-195	D	Clay base [023]	S	29/4/15
196-197	D	S-facing section of Area D	S	29/4/15
198	D	Top of another post revealed	S	30/4/15
199	D	Deposit [022] under made ground	E	30/4/15
200	D	Timber post used as base for modern concrete block	NE	30/4/15
201	D	Timber post general shot and tip lines	E	30/4/15
202	D	S-facing section in Area D	S	30/4/15
203-204	D	General shot of Area D	E	30/4/15
205	A	Wall [047]	ENE	5/5/15
206	A	WSW end of wall [047]	NNW	5/5/15
207	A	Wall [047]	WSW	5/5/15
208-209	A	S-facing section through [039]	S	6/5/15
210-213	A	S-facing section through [039]	SE	6/5/15
214-215	A	S-facing section through [039]	SW	6/5/15
216-217	A	S-facing section at engine house entrance	SW	6/5/15
218-219	A	S-facing section at engine house entrance	S	6/5/15
220-221	A	Detail view of entrance deposits	S	6/5/15
222-223	E	S-facing section through Area E	S	6/5/15
224	E	Clay [023] in Area E	W	6/5/15
225	E	General shot of Area E	SW	6/5/15
226	E	W-facing section of Area E	W	6/5/15
227	E	Modern piles at S edge of Area E	S	6/5/15
228	E	Clay [023] in Area E	S	6/5/15
229-230	E	W-facing section	SW	6/5/15
231	E	Base of excavations in Area E	S	6/5/15
232-233	B	Terram covering basin wall	E	11/5/15
234-236	-	View of areas B, C and D backfilled and levelled	E	11/5/15
237	A	Depth of made ground [017] – N facing	N	12/5/15
238	A	Depth of made ground [017] – N facing	NE	12/5/15
239	A	S-face of wall [012]	SE	12/5/15
240-241	-	Backfilled Areas A & E	Var	13/5/15
242	-	New manhole cover over burst water pipe	-	13/5/15

Digital Images – Camera 2

Frame	Area	Description	From	Date
1-3	B	Deep excavation with natural [024]	W	22/04/15
4	B	General shot of deep excavation and piles	W	22/04/15
5-6	B	General shot of w-facing section with pile	W	22/04/15
7-9	B	Detail of 2 piles and [023]	N	22/04/15
10	B	General shot of deep excavation	NNW	22/04/15
11	B	W-facing section with [023] and [024] flooded	W	22/04/15
12-14	B	General shots of deep excavation with [022], [023] and [024]	N	22/04/15
15	B	Detail of [023]	N	22/04/15
16	B	W-facing section with piles	W	22/04/15
17-18	B	Wall [035] and pile	S	22/04/15
19-21	B	General shots of deep excavation and piles at NE end of Area B	NNW	22/04/15
22-23	B	General shots of deep excavation and piles at NE end of Area B	N	22/04/15

24	B	Piles abutting each other	N	22/04/15
25-26	B	Southern wall face at the NE edge of Area B	S	22/04/15
27-28	B	Southern wall face at the NE edge of Area B	SSW	22/04/15
29-30	A	Post ex of structure [025]	S	22/04/15
31-32	A	W-facing elevation of structure [025]	WSW	22/04/15
33-34	A	W-facing section through basin infill and structure [025]	W	22/04/15
35-36	A	Structure [025] and fill [027] – post ex	W	22/04/15
37-38	B	Post backfill of Area B	W	22/04/15
39	A	General shot after removal of [025]	E	22/04/15
40-43	B	General, lots of clay in Area B	Var	23/04/15
44-45	B	Cut and fill of service pipe	E	23/04/15
46-47	B	Deep excavation in Area B with service pipe cut	ESE	23/04/15
48	B	Pile in deep excavation	W	23/04/15
49-50	B	General shots of [022] and [023] in deep excavation	S	23/04/15
51-52	B	Piles and deposits	S	23/04/15
53-54	B	Piles and deposits	ESE	23/04/15
55-56	B	Detail of post	S	23/04/15
57-58	B	General shot of deep excavation with piles, [022], [023] and flooding	E	23/04/15
59	B	General shot of deep excavation with piles, [022], [023] and flooding	W	23/04/15

APPENDIX 3: Drawing Register

Drawing No.	Area	Details	Scale
1	B	W-facing section of deposits adjacent to wall [003]	1:20
2	B	Plan of cobbled surface [036] and wall [003]	1:20
3	A	W-facing section through deposits inside basin	1:20
4	A	Plan of Area A	1:50
5	A	Plan of structure [010]	1:20
6	A	S-facing section of deposits within structure [010]	1:20

APPENDIX 4: Finds Register

Finds No.	Context No.	Area	Description
1	020	A	Ceramic fragments
2	020	A	Glass fragments
3	020	A	Iron object
4	030	A	Ce tile fragments
5	021	A	Glass bottle labelled "Edinburgh Royal Infirmary"
6	032	A	Tea cup fragment
7	023	A	Ce fragments
8	019	A	Ce fragments
9	015	A	Glass fragments
10	015	A	Ce fragments

11	015	A	Iron nail
12	022	A	Iron shovel head
13	022	B	Leather pieces
14	022	B	Glass shard
15	022	B	Metal object
16	033	B	Ginger bottles and fragments of bottles
17	033	B	2 glass bottles and fragments of bottle
18	021	B	Timber object
19	021	B	Glass bottle and fragment
20	021	B	Glass bottle cork
21	022	A	Wooden fragment – next to bellows
22	022	A	Part of Industrial bellows
23	022	A	Metal wire object
24	022	A	Animal bone with butchery marks
25	022	A	Ce fragments
26	022	A	Metal object
27	022	A	Wood – next to bellows
28	022	A	Leather next to bellows
29	023	A	Bucket handle
30	022	B	Wooden planks
31	022	B	Wooden object
32	003	B	Iron nails and iron object in mortar gaps
33	022	B	Bowl and other ceramic fragments
34	022	B	Animal bone
35	022	B	Ceramic pot
36	022	A	Leather pieces
37	022	B	Ceramic bottle and tile fragments
38	022	B	Ceramic jar
39	022	B	Glass bottle and base fragment
40	021	B	Leather belt
41	022	B	Iron objects
42	022	A	Wooden objects
43	022	A	Metal objects
44	022	C	Ceramic teapot
45	021	B	Ceramic fragments
46	021	B	Clay pipe stem
47	021	B	Iron knife fragment
48	021	B	Iron object
49	021	B	Glass fragment
50	021	C	Glass bottle base
51	022	C	Ceramic tile and plate fragments

52	022	C	Lead strip
53	022	C	Coal shovel head
54	022	C	Metal object
55	015	A	Ceramic fragments
56	015	A	Glass fragments
57	015	A	Bone fragment
58	022	A	Timber pieces under bellows
59	022	A	Ceramic fragments
60	022	A	Glass fragment
61	022	A	Wood and metal object
62	019	A	Ceramic fragment – post-medieval reduced ware
63	019	A	Ceramic fragments
64	019	A	Iron object
65	019	A	Glass fragments
66	019	A	Iron slag
67	021	A	Ceramic fragments
68	039	A	Iron nail
69	039	A	Ceramic fragments including post med reduced ware
70	039	A	Clay pipe stem
71	039	A	Glass fragments
72	039	A	Iron slag
73	039	A	Animal bone fragment
74	022	D	Ceramic fragments
75	022	D	Iron bowl
76	022	D	Leather shoe
77	022	D	Glass fragment
78	039	A	Iron nails and knife
79	039	A	Clay pipe stem
80	044	A	Ceramic fragments
81	044	A	Copper wire
82	044	A	Glass fragments
83	044	A	Iron nails and object
84	039	A	Slag
85	039	A	Ceramic fragments
86	039	A	Glass fragment
87	039	A	Iron object and nails
88	043	A	Ceramic fragments
89	043	A	Glass slag
90	043	A	Iron objects
91	043	A	Glass fragments
92	043	A	Animal bone fragment

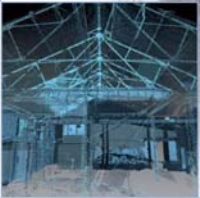
93	043	A	Slag
94	045	A	Iron nails
95	045	A	Glass fragment
96	022	A	Iron object
97	022	A	Ceramic fragments
98	022	E	Iron object – vent or drain cover
99	022	E	Iron file

APPENDIX 5: Sample Register

Context No	Quantity
022	20 l
018	Timber
038	Timber

APPENDIX 6: *Discovery and Excavation in Scotland Report*

LOCAL AUTHORITY:	City of Edinburgh
PROJECT TITLE/SITE NAME	Lochrin Basin, Edinburgh
PROJECT CODE:	22769
PARISH:	Edinburgh
NAME OF CONTRIBUTOR:	Kevin Paton
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Archaeological Excavation
NMRS NO(S)	NT27SW 64
SITE/MONUMENT TYPE(S):	Canal Basin
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 24699 72767
START DATE (this season)	13 th April 2015
END DATE (this season)	13 th May 2015
PREVIOUS WORK (incl. DES ref.)	Archaeological Evaluation (AOC 2005); Archaeological Excavation (AOC 2009)
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>An archaeological excavation was undertaken by AOC Archaeology Group on the site of a proposed re-development at Lochrin Basin (Lochrin Place), Edinburgh. The proposed new building footprint was fully excavated in order to record the remains of the former canal basin walls and deposits.</p> <p>The northern wall and entrance to the basin were revealed within the excavation area along with several metres of early 20th century and modern backfill, which overlay the original basin silts and clay floor. The basin silt contained numerous ceramic artefacts such as teapots, plates, bottles and jars, several glass and metal objects, and several well-worn leather shoes. All the items would have related to discarded objects from people on the barges or by the distillery.</p> <p>A series of 24 timber posts were also revealed to the E end of the basin excavations, representing the former wharf or quay location. Finally, out with the basin, the remains of an 18th century engine house, thought to relate to the brewery and early distillery was also revealed.</p>
PROPOSED FUTURE WORK:	To be confirmed
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	The City of Edinburgh Council
ADDRESS OF MAIN CONTRIBUTOR:	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS



AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY
tel: 0131 440 3593 | fax: 0131 440 3422 | e-mail: admin@aocarchaeology.com

www.aocarchaeology.com