

4. RESULTS OF THE EXCAVATION

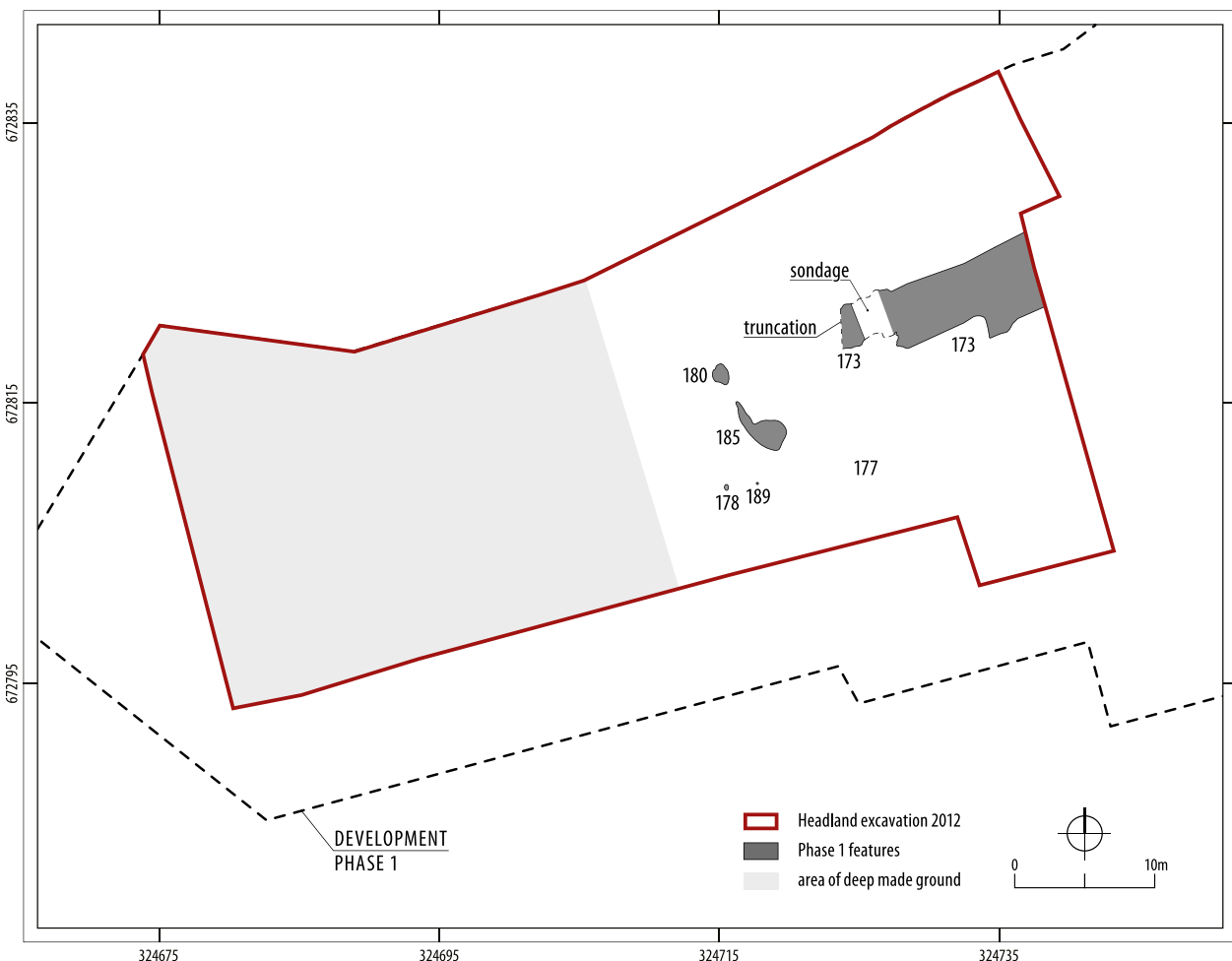
A detailed description of the excavation methods, as well as full descriptions of all excavated contexts and lists of photos and drawings, is given in the Data Structure Report which has been deposited within the archive in the National Record of the Historic Environment (NRHE) (NT27SW 64) (Bailey 2013).

The excavation indicated variable levels of archaeological preservation within the site. The central area was disturbed by trenches from previous archaeological excavations (Wilson 2005), where parts of Lochrin Basin wall, building walls and pitch pine piles, used to stabilise landfill before the construction of the Cold Storage Company, were uncovered. The excavated remains have been grouped into six phases: Phase 1 relates to activity from the 12th to the 15th century, Phase 2 relates to Lochrin Distillery in the 19th century, Phase 3 relates to activity on site after

1838. Phase 4 relates to the Slaughterhouse extension, Phase 5 relates to the infilling of the area and the construction of the Ice and Cold Storage Company's unit. Phasing is based on stratigraphic relationships supplemented with documentary and map evidence. Given the distribution of the remains in two separate areas, exact contemporaneity between structures could only tentatively be established. Therefore, similarities in construction technique and materials were used to identify contemporary horizons within the site and finds evidence was used to support this where possible.

4.1 General stratigraphy

In the north-western area of the site sloping bands of ash, mudstone and crushed brick were encountered some 3.55m beneath present ground level. The deposits probably represent material dumped to raise the ground level prior to the construction of



Illus 4 Phase 1 medieval features © Headland Archaeology

the Union Canal and Lochrin Basin. Due to the deep stratigraphy and volume of this made ground deposit, a series of test trenches were excavated to establish whether any archaeology was present beneath this. A deposit of dark brown homogeneous loam existed beneath the made ground deposit described above. It was interpreted as a former ground surface though was devoid of features and dating evidence.

4.2 Phase 1: Pits and ditch – 12th–15th century

A possible ditch, post holes and pits dated to the 12th–15th century, by pottery within them, were located in the eastern area of the site (Illus 4). The features were cut through a thick loam deposit (177), also containing pottery dating from the 12th to 15th century, to the sandy clay geological subsoil. Many of the features were partially truncated by features associated with the distillery and slaughterhouse. As the pottery sherds were small and residual they do not provide firm dating evidence for the deposits in which they were found (Franklin 2013) and it is possible that some of the features such as the pits and post holes might relate to later activity that disturbed the loam deposit (177).

Ditch [173] extended east beyond the excavation area and was truncated on the western side by a later cut containing wood-lined drains (see 4.3 ‘Phase 2: Lochrin Distillery 19th century’ below). It contained two fills, the basal fill comprised a sterile sandy clay and the upper fill contained burnt bone fragments and pottery. The pottery assemblage comprised a few sooted sherds of Scottish White Gritty Ware which derive from cooking pots that disappear from the ceramic record during the 14th century, suggesting that there was activity in the area from at least this date (Franklin 2013). Pottery and glass fragments dating from the 17th or 18th centuries were also present but are likely to be intrusive and incorporated into the fill during the later activity in the area. A rubble land-drain was cut through the upper ditch fill, suggesting that it must have been an open, muddy channel. The presence of related rubble drains and upwelling, pooling water during the excavation indicates that drainage in the area has always been problematic. If the ditch was a drainage feature, it was not clear in which direction the feature drained.

Two post holes, [178] and [189] (Illus 4), of unknown function were also located in the eastern area of the site. A handful of pottery sherds suggest that these date to the 12th or 13th centuries.

Four pits, [180], [185], [196] and [199] were also located in the eastern area. Pit [180] contained mixed finds dating between the 12th and 14th centuries, bottle glass dating to the 20th century and a black bead of uncertain date. The bead was made from either jet or cannel coal, however, given the mixed date of the material recovered from the pit, it was unclear whether the bead is from 19th-century mourning jewellery or part of a medieval rosary (Franklin 2013). It is likely that bottle glass was introduced into the features during later activity. Pits [185], [196] and [199] contained no datable finds and have been tentatively dated to the medieval period as they were cut from the same level as the other medieval features in the area.

No further evidence for activity dating to the medieval period was present. However, a deep deposit of homogeneous loam, containing pottery dating from the 17th to 18th centuries, covered the area. Whether these soils were introduced to the site or a result of natural soil development reworked on site is unclear, although the paucity of finds suggests that it is not the result of manuring. Cultivation and associated activities would have mixed these deposits and broken down any distinct stratigraphic relationships. The gardens shown on early 19th-century maps of the site could have given rise to these conditions.

4.3 Phase 2: Lochrin Distillery – 19th century

A deposit of compact silty clay (165) directly overlay the loam. A similar deposit of silty clay was identified during the excavation of the eastern extent of Lochrin Distillery (Heawood 2009). The deposit was stratified below the distillery structures and was interpreted as a levelling deposit. This suggests that a ‘raft’ of levelling material had been dumped over the entire area prior to the construction of the distillery. Wood-lined drains were cut through the silty clay. The drains lay beneath the fragmentary remains of a wooden floor [140/164], which comprised six timber planks nailed to an underlying joist. It is likely that this may have been the ‘Wright’s shop’



Illus 5 Phase 2 and 3 features overlain on 1853 Ordnance Survey 1st edition map (reproduced by kind permission of the National Library of Scotland)

floor depicted on the 1838 plan of Lochrin Distillery (Illus 2). Fragments of the degraded wooden floor [164] also survived on the eastern side of the site (Illus 5).

Fragmentary remains of a wall [142], which correspond closely with the wall of the Wright's shop depicted on the 1838 Plan of Lochrin Distillery (Illus 2), were uncovered, and are superimposed on the 1853 Ordnance Survey map in order to show the relationship with later Phase 3 features (Illus 5). The Wall [142] was constructed from large sandstone blocks bonded with lime mortar. A doorway, possibly the south-western entrance to the Wright's shop, depicted on the 1838 plan of Lochrin Distillery, was apparent. The doorway was blocked in and a 0.50m-thick lime mortar floor layer (141) overlay

the wooden floor, indicating later modifications to the building.

The corner [101] of the 'pig-shade and court' depicted on the 1838 plan of Lochrin Distillery was also uncovered (Illus 5 and 6). It comprised several large stone foundation blocks, up to 0.90m wide and 0.45m deep [101], overlain by a course of smaller stone blocks, up to 0.50m wide and bonded with lime mortar. No 'court' or original ground surface remained, the interior being filled with crushed stone and rubble.

4.3.1 Structure [109]

A square structure [109] was located directly to the east of the pig-shade and court [101] (Illus 6), however, its orientation was at slight variance to the wall, perhaps hinting at an earlier origin. It



Illus 6 Building [101] and Structure [109], from north © Headland Archaeology

was constructed from handmade red bricks, triple-bonded with lime mortar. The structure was sealed with clay externally, possibly in order to make it watertight. A partially vitrified brick covered in industrial waste was recovered from the wall of the structure. The floor of the structure was constructed from 0.05m thick sandstone slabs. Finds recovered from the fill included a creamware transfer-printed handle sherd dating from the late 18th to mid-19th century. Extensive disturbance precludes detailed interpretation.

4.4 Phase 3: Post-1838 activity

Many of the walls ([195], [151], [126] and [136]) located in the eastern area align well with buildings depicted on the first edition Ordnance Survey map (1853) (Illus 5). The buildings relate to the construction and expansion of the Edinburgh Slaughter-House.

4.4.1 External boundary walls

Remains of the western and southern boundary walls [136], [126] and [169], constructed in 1850 from stone blocks bonded with mortar in order to 'shield the activities of the abattoir from the view of the Gilmore Place windows', and depicted on the 1853 OS map, survived.

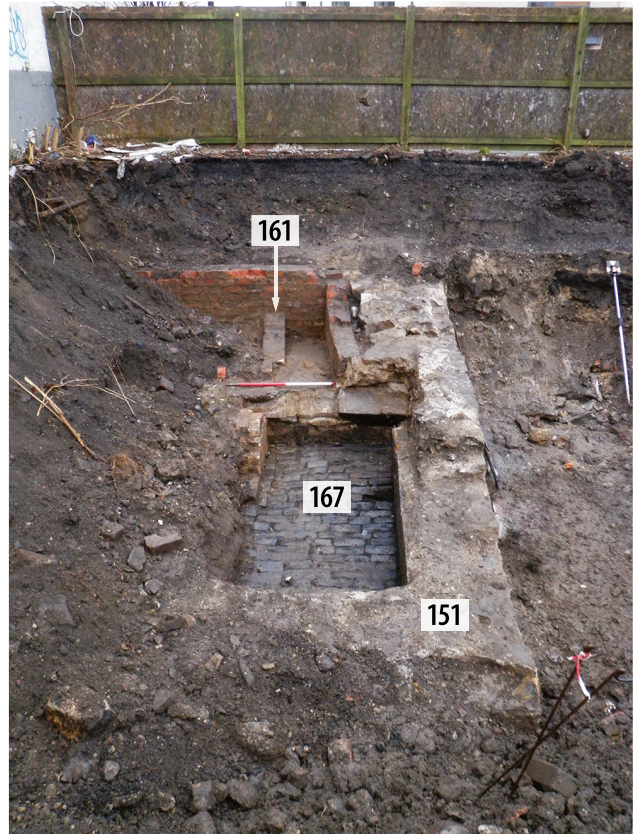
The walls of the north-eastern group of buildings [151] and [197] stood to heights of 1.65m in places. Although the upper portions of the buildings had been modified during later phases of activity, the lower portions largely remained intact.

4.4.2 Building [195]

Building [195] (Illus 5) was constructed from large, faced sandstone blocks bonded with lime mortar. Two rooms were identified, one of which contained remnants of a wooden floor. The rooms had been backfilled with clay and clinker material and capped with a 0.30m-thick concrete floor.

4.4.3 Building [151]

Building [151] was located to the west of Building [195]. Like Building [195], it was constructed



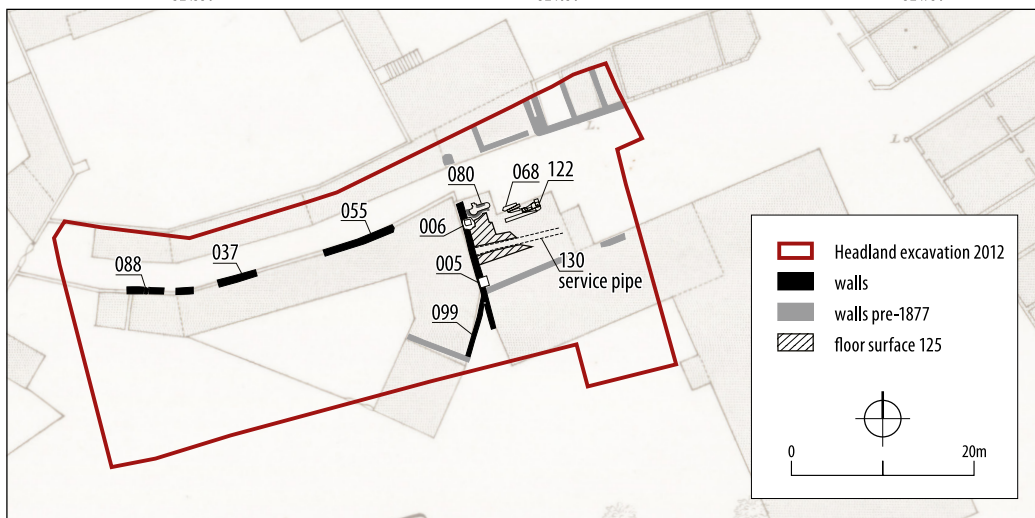
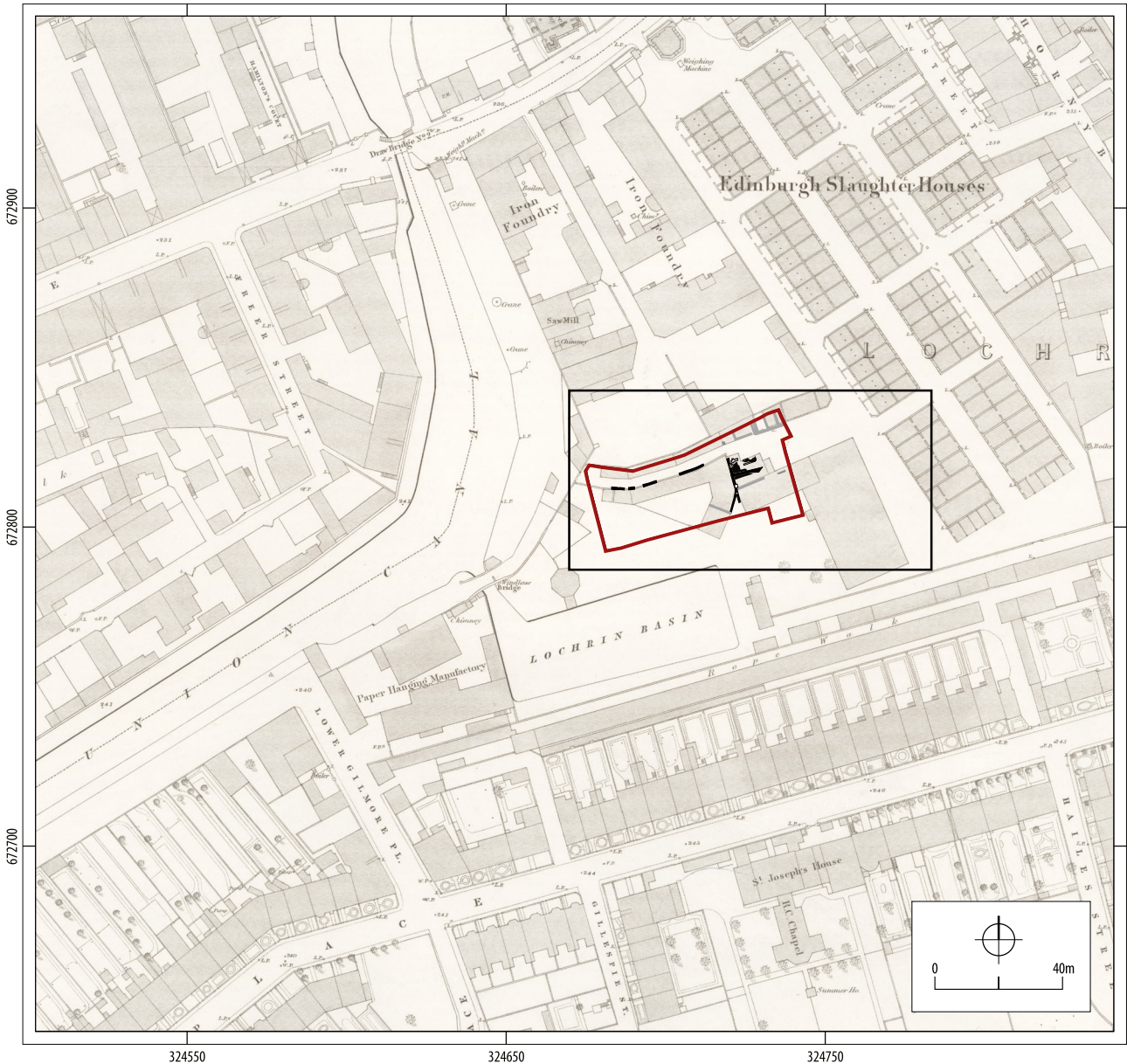
Illus 7 Building [151], Floor [167] and Structure [161], from west © Headland Archaeology

from large, faced sandstone blocks, and had a flagstone floor (Illus 5 and 7). The spring base of a vaulted roof was apparent on the eastern and western walls of the structure. This building was subject to at least three phases of modification. The cellar was backfilled with clay and a deposit of ash and clinker-rich material prior to the construction of a stone sett floor surface; presumably some time in the 19th or early 20th century, as a fragment of clay pipe stem was recovered from the floor surface. The entire structure was backfilled with clay and capped with a concrete floor prior to the construction of Structure [161], which is discussed further below.

A large culvert [135], 1.15m wide, constructed from sandstone and containing a large ceramic pipe, ran along the western side of Wall [126].

4.5 Phase 4: Slaughterhouse extension

Prior to the extension of the slaughterhouse the ground level in the eastern area had been substantially raised with the dumping of rubble



Illus 8 Phase 4 features overlain on 1877 Ordnance Survey map (reproduced by kind permission of the National Library of Scotland)

and loam (139) over the wooden floor surfaces associated with Lochrin Distillery.

Many structural remains [055], [037], [088] and [099] correspond well with the buildings shown on the 1877 Ordnance Survey map (Illus 8), following the expansion of the slaughterhouse during 1875 and 1876, when the cooling ponds were infilled, and slaughter-booths constructed. Fragmentary foundations of the external wall ([055], [037] and [088]) of the northern building remained, together with interior features from the eastern building, including possible machine bases and floor surfaces.

4.5.1 Structure [080]

Structure [080] was a 'key-hole'-shaped feature with a possible flue and a rounded terminus (Illus 9). Its base was constructed from stone slabs and its walls from red brick. The interior was lined with clay. The fragmented nature of the feature precludes any detailed interpretation.

4.5.2 Stone structure [068]

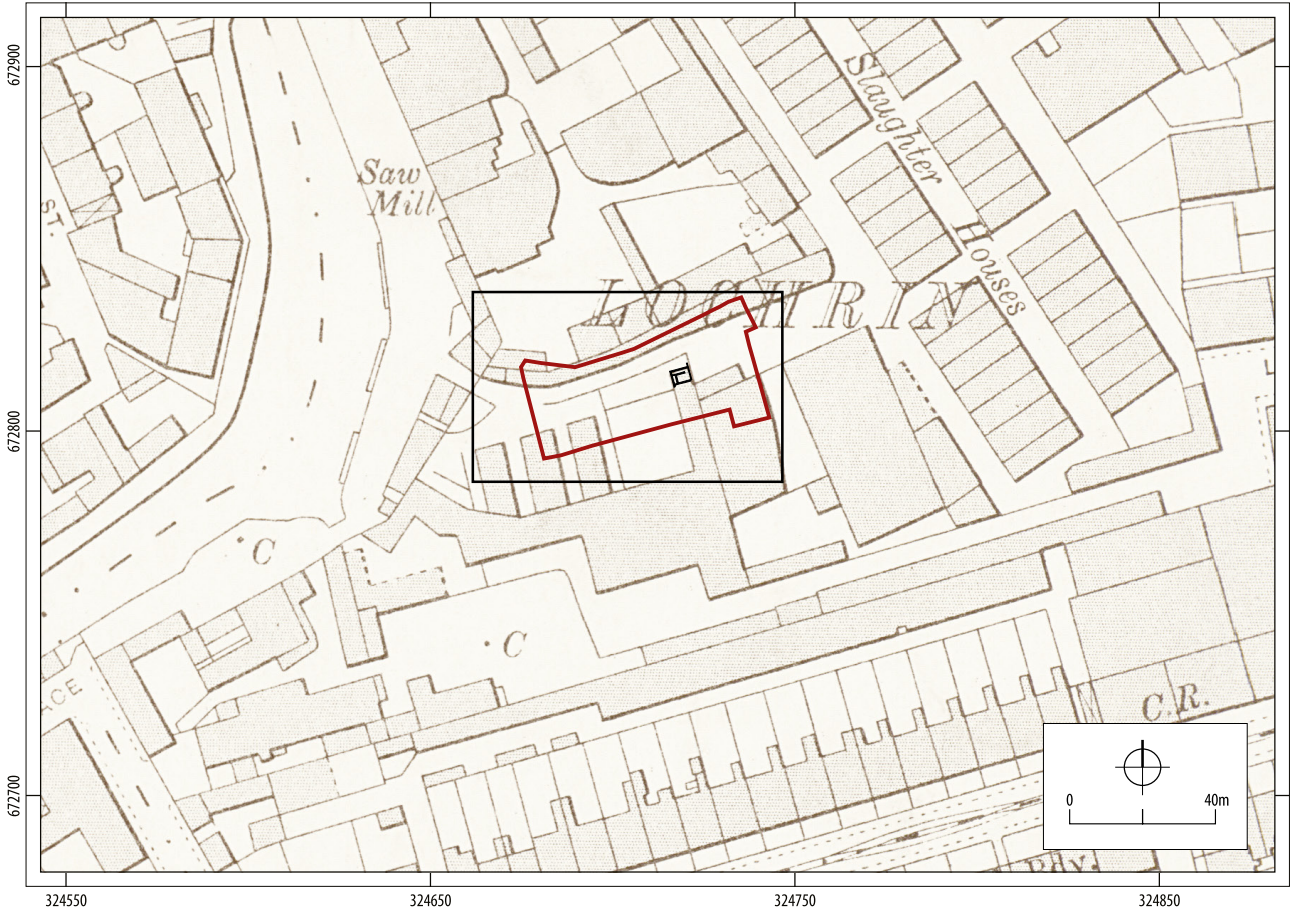
The fragmentary remains of a stone structure [068] of two parallel sandstone walls with a flagstone base and curved terminus were located to the east of Structure [080] (Illus 9). It was backfilled with brick and slag fragments, none of which gave any indication as to the function of the feature.

Three square concrete and brick surfaces with protruding bars [122], [005] and [006], were also located in the area, all were heavily truncated. It is possible that they could have functioned as the base for heavy machinery, however, it is not known what the machinery may have been.

Remains of a possible flue/culvert [120], constructed from machine-made bricks, were located on the eastern side of the site. Although the feature is outwith the extents of the northern building depicted on the 1877 Ordnance Survey map, it is possible that it may have been an external, underground or unmapped feature.



Illus 9 Features [005], [080], [068], [122] and floor surface (125), from north-west © Headland Archaeology



Illus 10 Phase 5 features overlain on 1908 Ordnance Survey map (reproduced by kind permission of the National Library of Scotland)

4.6 Phase 5: Infilling of area and construction of Edinburgh Ice and Cold Storage Company's unit

Map and documentary evidence indicate that there was a great deal of change in the late 19th century with the redevelopment of the area, the infilling of Lochrin Basin and the construction of the Edinburgh Ice and Cold Storage Company's unit (Illus 10). This change was evidenced archaeologically, with the presence of several dumped deposits, visible as tip lines, in the eastern area of the site. This suggests that the ground level was substantially raised, probably with rubble and material generated from the demolition of buildings in the area, prior to the construction of the cold storage unit. Several bottle fragments were present in the dumped material. These included 22 green bottle bases, five marked '6 to the gallon' and one marked 'J & C Cockburn, Edinburgh'. The bottles date between 1820 and the early 20th century (Franklin 2013).

Dumped clay and rubble material was also present, in the western portion of the site, overlying the corner of Building [101] and beneath the 'cobbled' surface (082). Finds recovered from the deposit included general domestic refuse dating from the late 18th to early 20th century, including bottle glass and part of a glass funnel or alembic used for distilling (Illus 11). If the latter, the part might represent the tube part of the cap which would fit over the cucurbit containing the heated liquid. Its purpose was to catch the heated vapours and allow them to cool and drip down the tube into a receiving container. While used for distillation of liquids, its small size means it is unlikely that it was part of the whisky distilling apparatus on site, which would have been on a much larger industrial scale. Nevertheless, it is possible that it, and indeed the bottle glass from the same deposit, had some function relating to the distillery.

A structure [011] first shown on the 1908 map overlay the dumped deposits. It was keyed into Culvert [135] and overlay the northern portion of Wall [126]. It consisted of a central room, measuring 2.60m long and 2.13m wide with three narrow cells on the northern, eastern and western sides, each measuring 0.80m wide. The northern, southern and western walls of the central cell were all whitewashed in the interior. The only surviving



Illus 11 Possible alembic stem © Headland Archaeology

floor surface was a compact clay surface (090) in the western chamber, truncated by a pipe cut on the northern side.

The building was backfilled with a deposit of compact greyish brown loamy material (012) containing several finds including various sherds of moulded bottle glass dating from the late 19th to early 20th century, a stoneware bottle rim and willow pattern plate sherd, iron nails, two leather straps, fragments of coke and slag, metal strips and bricks frogged 'Niddrie'.

No archaeological remains could definitively be associated with Lochrin Ice Pond. However, it is possible that a rough 'cobbled' surface (082), located in the western part of the site may relate to levelling prior to the construction of the ice rink.

4.7 Phase 6: Structures relating to the garage

The site was latterly occupied by a garage. It is likely that Structures [033] and [161], and Walls [018] and [052] relate to the garage. Although they were not depicted on the 1931, 1951 or 1974 Ordnance Survey maps (not illustrated), it is likely that Structures [161] and [033] were unmapped underground fuel storage tanks.

Structure [161] was located in the north-eastern corner of the site. It directly overlay Building [151] and comprised a red brick structure (Illus 7), with curved internal walls, probable housing to support a tank. It was filled with yellow building sand (160) soaked with petrochemicals.

Structure [152] directly abutted the northern boundary wall and overlay Structure [151]. It comprised a red-brick structure with two small rooms, evidenced by protruding wall stubs. The

floor was constructed from a 0.12m-thick deposit of concrete.

Foundations of the garage building remained [018] and [052]. Walls [018] and [052] were truncated by Brick Structure [033], suggesting later modification to the garage building. The Structure [033] was constructed from bricks stamped 'Niddrie', therefore post-dating 1924,

and bonded with coarse grey cement and filled with sand (032) saturated with petrochemicals. It is likely that the structure was the remains of a fuel tank surround and that the sand fill was bedding for a fuel tank.

Various dumped deposits relating to the recent demolition and levelling of the site overlay the structures.