

SCED10



SUGARHOUSE CLOSE, 160 CANONGATE, EDINBURGH

Archaeological Works

for Watkin Jones Group

10/00746/LBC

10/00746/FUL

August 2012

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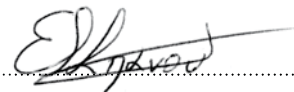
NT27SE 1767 (53 Holyrood Road, Clermiston Buildings)

NT27SE 1760 (41-49 Holyrood Road, Clermiston Buildings)

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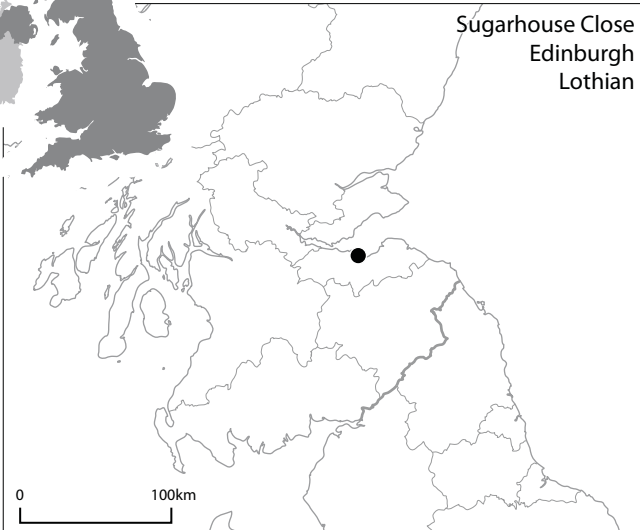
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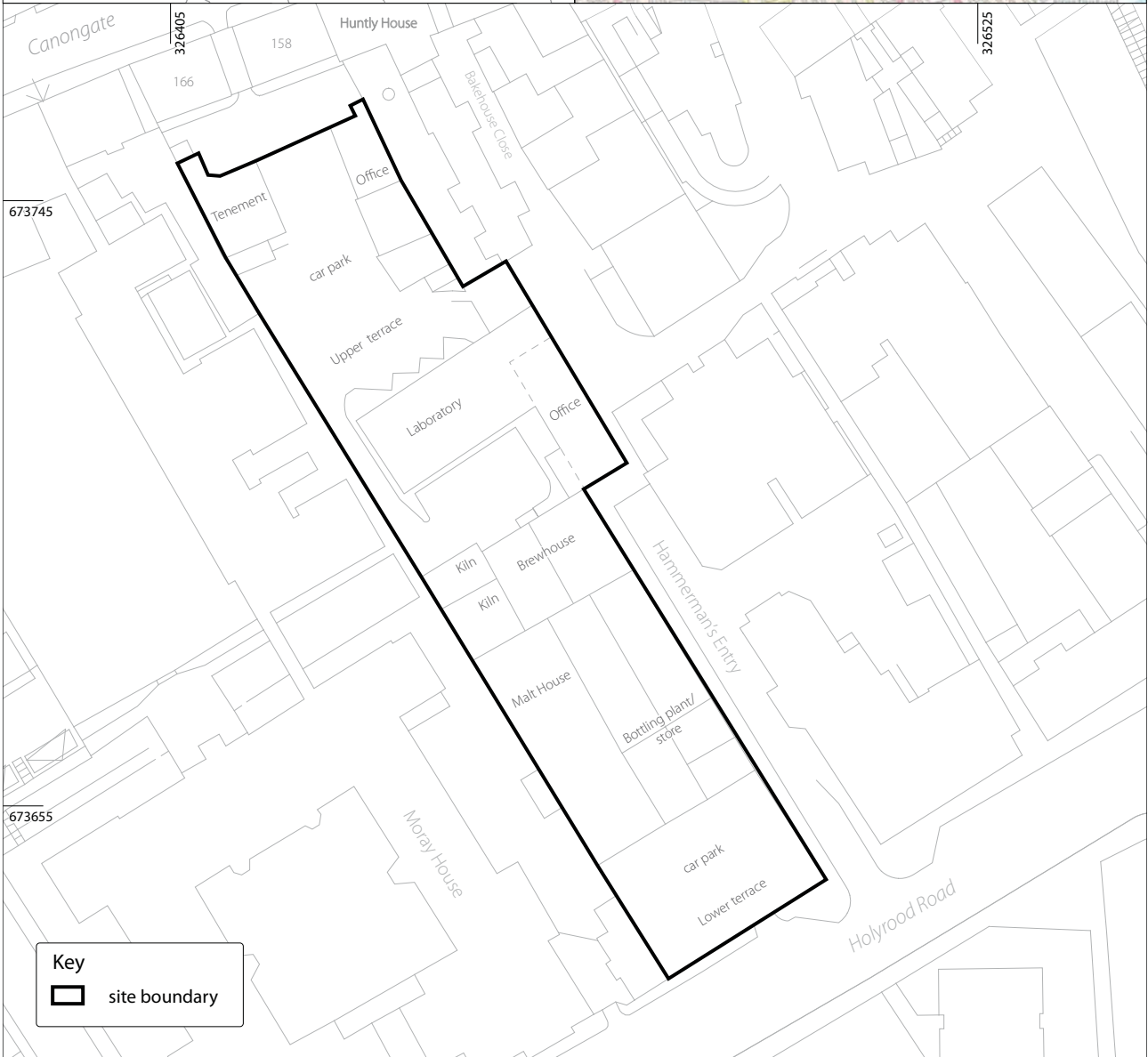
Sugarhouse Close
Edinburgh
Lothian




0 100km



xiv



Key

 site boundary

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Scale 1:1,000 @ A4



0 50m

Illus 1

Site location

SUGARHOUSE CLOSE, 160 CANONGATE, EDINBURGH

Archaeological Works

Headland Archaeology (UK) Ltd conducted a programme of archaeological works at 160 Canongate/Sugarhouse Close/41, 49, 53 Holyrood Road, Edinburgh. The work was commissioned by Watkin-Jones Group and was undertaken to provide a historic record of the site both prior to and during the redevelopment of the site for student residences. The development proposal involved retaining and re-using some of the upstanding brewery buildings to create a mixed-use development. The archaeological works comprised a multi-stage programme of trial trenching (Borden & McCarthy 2010), historic building recording, targeted excavations, test pitting and finally monitoring of ground reduction works across the site.

The historic building recording considered the twelve standing structures, many of them forming complexes of attached buildings, on the former brewery site. The targeted excavations were carried out on areas of archaeological potential across the upper terrace of the site. The monitoring of ground reduction works and the excavation of various test pits were undertaken throughout the development period.

The results of this programme of archaeological works recorded six phases of activity across the site. The earliest phase of the site related to the multiple layers of garden soils, associated with medieval and post-medieval activity pre-dating the construction of the brewery. These layers were encountered at varying depth across both the upper and lower terraces of the site. A large well, cut into the bedrock, was also recorded to the N end of the site below the remains of buildings associated with a pre-brewery phase suggesting it may relate to pre 19th century activity.

The monitoring of a service trench across the upper terrace revealed the remains of two stone walls that may represent the only upstanding features associated with the sugar refinery that was first established in 1752 and was still in use up until the 1850s. A layer of pottery-rich loam recorded overlying the garden soils included frequent sherds of sugar cones and syrup jars that were clearly attributable to the phase represented by the establishment of the sugar refinery.

Targeted excavations across the upper terrace of the site recorded various walls, floors, flues and culverts along with numerous discrete features relating to buildings first depicted on the 1852 OS map located across the courtyard of Sugarhouse Close. The location of these features suggested that they represented industrial activity associated with a post-sugar refinery phase but still pre-dating the construction of the brewery. This phase was thought to include the construction of the upstanding tenement building in the NW corner of the site.

The historic building recording revealed that although the main fabric of the original brewery survived, much of the internal workings of this site had been either modified or completely removed. The brewery was first established in 1868 and continued to more or less the same design for close to 100 years. The front entrance to the site was reconstructed in the 1940s along with a number of other superficial alterations. The 1960s saw the demolition of a number of smaller buildings to the N of the main brewery complex and the subsequent construction a laboratory in the 1980s. A number of less conspicuous changes were undertaken throughout the breweries history including the demolition of the southern half of one of the brewery buildings and its replacement with more modern structures, the alteration of a further brewery building from three floors to two and the alteration of internal features within both the brewery buildings and the tenement and offices.



1. INTRODUCTION

A programme of archaeological works was carried out on land at 160 Canongate/Sugarhouse Close/41, 49, 53 Holyrood Road (*Illus 1*) between December 2010 and June 2012. The work was undertaken in response to a planning condition (No: 10/00746/LBC and 10/00746/FUL) attached to the consent of the proposed development by CECAS (City of Edinburgh Council Archeology Service). The aim of the work was to record both the upstanding remains prior to the re-development of the site and any surviving, sub-surface archaeological remains during ground works associated with the re-development of the site.

The site is within the Old Town Conservation Area and has multiple entries in the NMRS: the tenement (Building A) and former house (Building B) on Sugarhouse Close (NMRS: NT27SE 2898.1); the maltbarn (Building K), kilns (Buildings F and G) and brewhouses (Buildings H and I) (NMRS: NT27SE 1757, NT27SE 2035 & NT27SE 2898.0) at the middle and lower part of the site; and the boundary walls on the N, S and W sides of the site are listed C (S) (HB No. 29091). The masonry office building on Bakehouse Close (part of Building E), the 20th century laboratory attached to it, the bottling plant (Building J) and store (Building L) and the E boundary wall are not included in the listing. Previous work on the site comprised an archaeological evaluation and historic building assessment undertaken by Headland Archaeology in 2010 (Borden & McCarthy 2010).

2

The works were carried out in accordance with a Project Design and subsequent Written Scheme of Investigation prepared by Headland Archaeology in advance of work commencing and agreed with CECAS, who advises the planning authority on archaeological matters. The works comprised a programme of historic building recording both prior to and after soft striping of the standing buildings, a series of targeted excavations and the monitoring of all ground reduction works and test pit excavations across the site. Watkin-Jones Group commissioned Headland Archaeology (UK) Ltd to undertake the work. Background information, floor plans and elevations were provided by Capita Symonds and Oberlanders Architects.

2. SITE DESCRIPTION

The site (*Illus 1*) is located off the Royal Mile, in what was historically referred to as the South Back of Canongate (the area between the Canongate and Holyrood Road). The site slopes down from the Canongate situated to the N side of the site. It is roughly rectangular, aligned N to S and is approximately 0.4 hectares in size. It is bounded by Sugarhouse Close to the N, the University of Edinburgh's Moray House campus to the W, Holyrood Road to the S and Hammerman's Entry, Bakehouse Close and Huntly House Museum courtyard to the E.

There are two points of entry to the site, through a gate on Sugarhouse Close (accessed through a pend across from the Old Tollbooth) and via another gate fronting on Holyrood Road at the S side of the site. The standing buildings on the site prior to the redevelopment of the site (*Illus 1*) and their most recent uses are as follows (from N to S):

Building A tenement

Building B house most recently used as an office

Building C tasting room with modern bar area

Building D storeroom

Building E office and laboratory

Building F north kiln

Building G south kiln

Building H brewhouse – now converted to office space

Building I brewhouse

Building J bottling plant

Building K maltbarn

Building L store

Building M electrical supply room

The site spans two terraces with a height difference of approximately 7m between the contemporary ground surfaces of the two terraces. The areas between the buildings were covered by tarmac, which were recently in use as car parks for the brewery. The upper car park (to the N of the site) sloped gently from its maximum elevation of 52.69m OD at Sugarhouse Close on Canongate, down towards the centre of the site at 51m OD. The lower car park (to the S of the site) was relatively flat at 44.65m OD and bounded to the S by the former ground floor outer walls of the Clermiston Tenements (now demolished) and to the E by a modern stone wall. The W wall comprised the rear wall of the gatehouse to Moray House and a mixture of stone and brick walls up to the SW corner of the maltbarn (Building K). The access to the lower car park was formed by a gap in the wall which was formerly a narrow close between the two tenements.

As noted each building was assigned an individual letter (A to M) as part of the historic building survey in order to help identify the different parts of the brewery. Subsequently Watkins-Jones assigned lettering to each of the different new development blocks being constructed (Blocks A to G). In this report the Historic Building Record uses the upstanding building identifications (Building A, B C etc.) but the subsequent excavations and monitoring are referred to by the contractor's development identifications (Block A, B, C etc.).

2.1 Site phasing

The following archaeological works revealed at least 6 phases of activity across the development site. These have been identified as follows:

Phase 1	medieval to 1750	Gardens soils + well
Phase 2	1750 – 1852	Sugar refinery; stone walls and pottery
Phase 3	1852 – 1868	Pre-brewery walls, culverts and drains
Phase 4	1868 – 1940	Early Brewery
Phase 5	1940 – 1960	Late Brewery
Phase 6	1960 – modern	Post Brewery

Brewery of William Younger were established in the area and by 1825 seven breweries existed in Canongate alone. Although the fortunes of brewers fluctuated over the following 100 years due to factors such as the Napoleonic war and the price of grain, the increased mechanisation of the industrial revolution led to improved yields of grain and more accessible materials. This increased mechanisation, along with greater urbanisation and bigger export opportunities, led to increasing trade for the breweries. The output from the breweries in Edinburgh rose from 500,000 barrels in 1850 to over 2 million by the turn of the 20th century (Donnachie 1998).

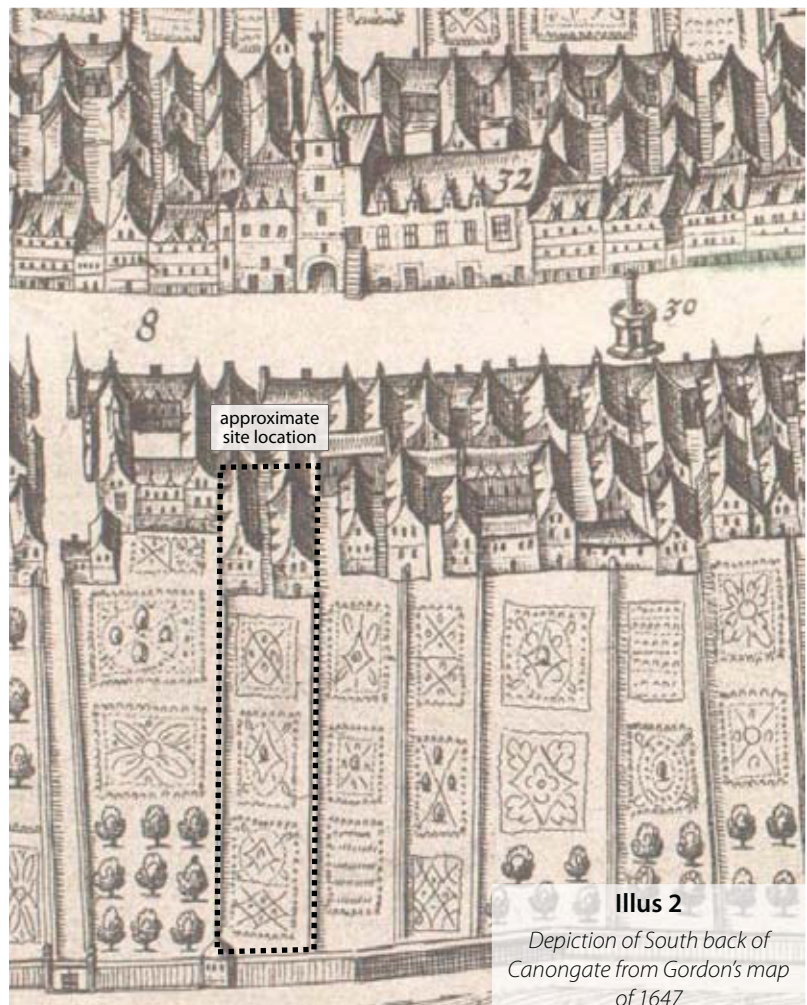
3. HISTORIC BACKGROUND

3.1 General history

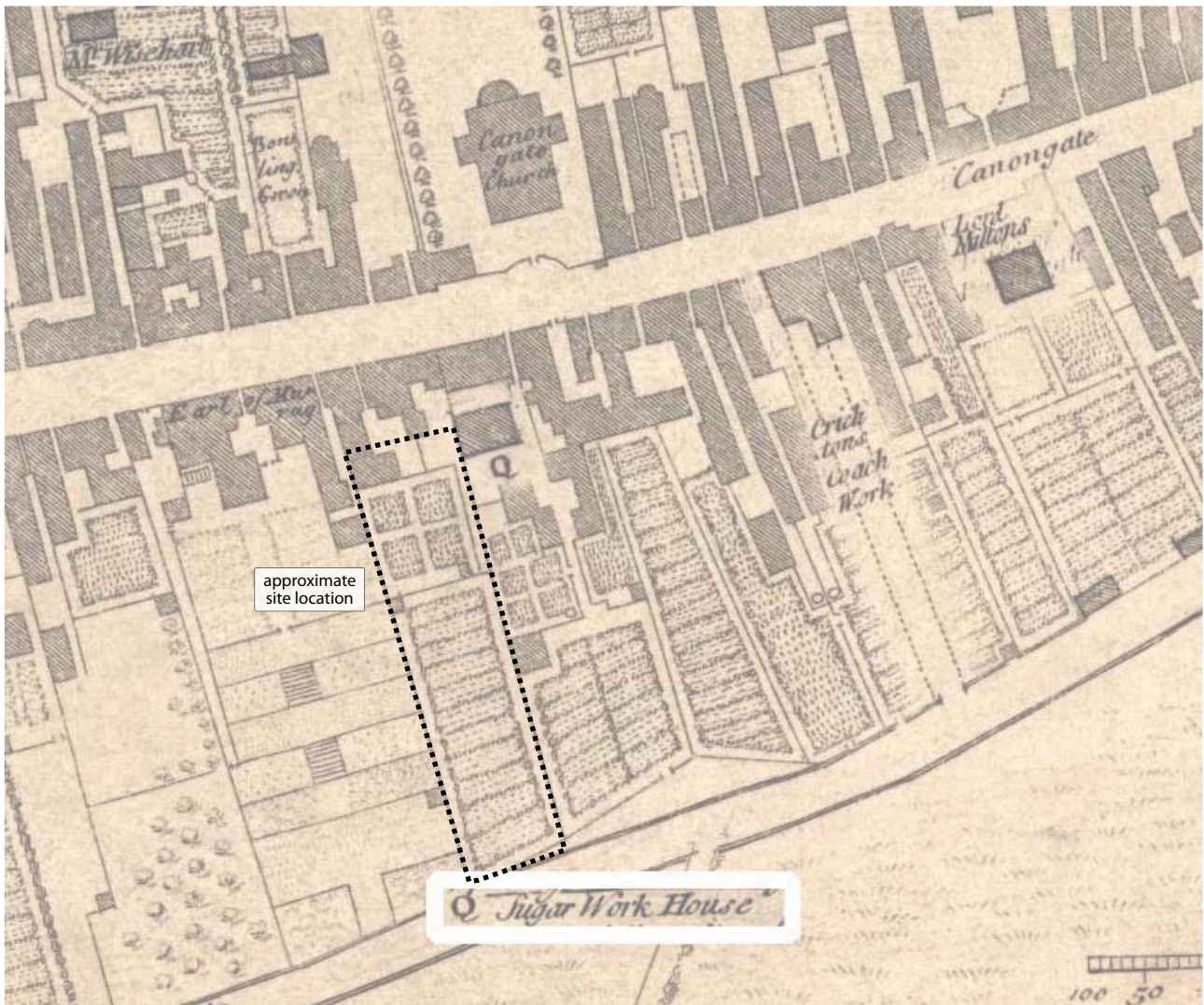
The earliest confirmed settlement of the surrounding area dates to the medieval period. However, the topography and proximity of the Canongate to prehistoric earthworks in Holyrood Park (RCAHMS 1999) make it likely that there was prehistoric activity in the area. The site is situated within the former limits of the medieval burgh of Canongate which was chartered as an ecclesiastical burgh in 1128 and remained separate from Edinburgh until the 19th century (Mackay 1900, Dennison 2005). The earliest medieval inhabitants are likely to have been trades-people attracted by the proximity to the Abbey of Holyrood. The reign of King James II (1437–1460), who built the Palace of Holyrood, saw major development within the area. In 1535 the street was paved and in 1591 the tollbooth opposite Sugarhouse Close was built. Around this date, large high status residences began to be built facing the Canongate whilst the relatively undeveloped backlands allowed for the creation of gardens for these houses. From the beginning of the 17th century, the area suffered a series of setbacks which gradually reduced its prosperity. These included the succession of James VI to the English throne in 1603 diminishing the importance of Holyrood. A further blow to the district came in the 18th century with the Union of the parliaments and the creation of Edinburgh's New Town. The area went into a slow decline and became increasingly industrialised during the 19th century (Stevenson 1981, 49). In 1856 the Municipal Extension Bill removed the independence of the Canongate, making it a part of Edinburgh.

The city became the focal point for the brewing industry in the 17th century, partially because of the supply of grain available from the rich agricultural lands of the Lothians (Donnachie 1998). Traditionally, Canongate was a popular location for brewing due to the two streams running at the foot of the plots of land on its N and S sides (roughly where the Canongate and Holyrood Road are now). By the 18th century the brewing business became more formal with more control being asserted by the local and national authorities. By the 1740s the Argyle brewery of Archibald Campbell and Abbey

Brewing was not the only growing market in the 17th and 18th centuries as the combined interests of sugar boiling and rum distilling grew to considerable importance. This was helped by the Scottish government of the time trying to encourage home-grown manufacturing in order to improve the economy (Smout 1961). Although the early years of the sugar refining industry were based in Glasgow an early refinery was set up in Leith by Robert Douglas and Partners in 1695. Interestingly, an attempt to erect a sugar boiling house in Edinburgh around 1677 was turned down due to fire risk (*ibid*). These early manufacturers were granted special privileges and tax relief to encourage growth. These tax reliefs included being able to sell 28 tons of rum a year tax free and having their import dues removed (Nichol 1864). All the early sugar refineries included rum distilleries as the molasses used in this process was a waste product of sugar refining.



Illus 2
Depiction of South back of
Canongate from Gordon's map
of 1647



4

Illus 3

Location of site as depicted on Edgar's map of 1765

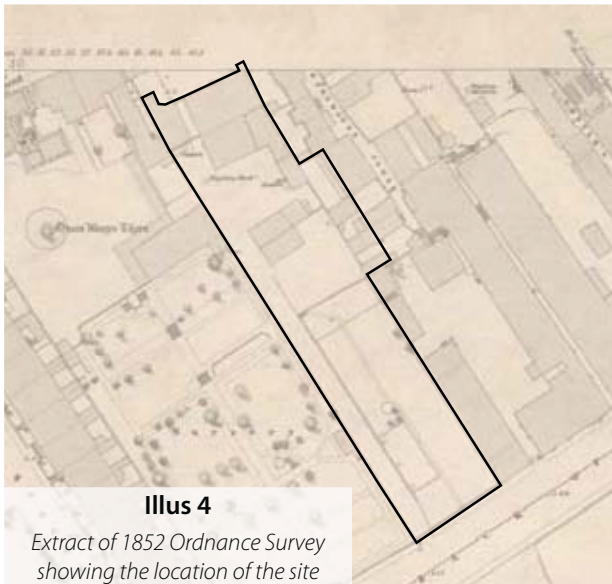
3.2 Cartographic sources

The earliest detailed map of the Canongate area, Gordon of Rothiemay's survey of 1647 (*Illus 2*), shows the area of the proposed development occupied by buildings facing onto Canongate with long gardens stretching back to a wall which ran roughly along the line of Holyrood Road (formerly known as the South Back of Canongate). It has to be noted that the accuracy of 17th and 18th century drawings and maps is variable, as they depict a bird's eye view. Therefore, they cannot be fully relied upon to give an accurate picture of the upstanding buildings at that time.

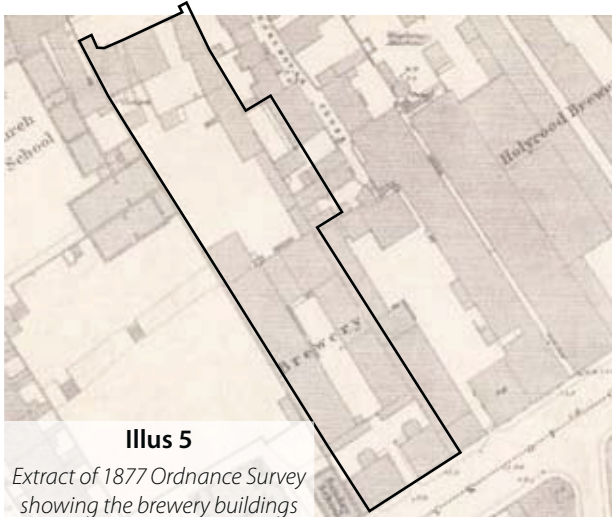
From the mid-18th century sugar refining was carried out on land close to the N end of the site. By 1765 a '*Sugar Work House*' was mapped close to the development site (*Illus 3*) (Edgar, *W City and castle of Edinburgh, 1765*) although it seems to be depicted within the courtyard of Huntley House (now occupied by the Edinburgh Museum gardens) suggesting this map may not have accurately plotted the location of the refinery.

Various historical maps throughout the late 18th and early 19th centuries depict a variety of buildings occupying the northern

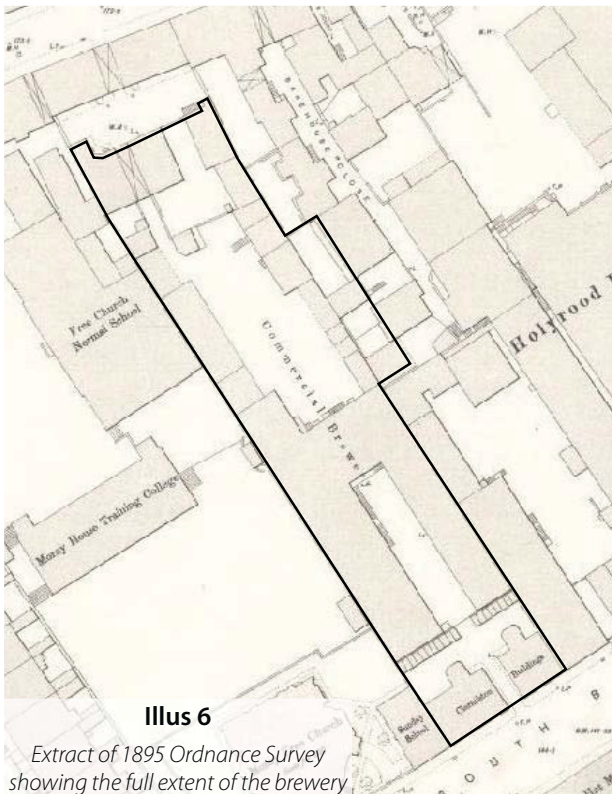
third of the site. By contrast, the southern two-thirds of the site remained largely open throughout this period and it appears to have continued in use as gardens up until the mid-19th century. Edgar's map of 1765 (*Illus 3*) is the first to clearly depict a building in the location of the tenement (Building A, *Illus 7*) although it is not clear if this represents the existing upstanding building. It is not until Lancefield's map of 1851 (not illustrated) that a continuous row of buildings is depicted across the forecourt of Sugarhouse Close representing the location of the tenement (Building A) to the W side and possibly the office (Building B) to the E side of the site. These buildings are more accurately mapped on the First Edition Ordnance Survey map (1852) (*Illus 4*) illustrating a continuous row of buildings including a lane or pend running through the ground floor of the tenement (Building A) to access the rear of the buildings. It also depicts a number of conjoined buildings to the rear of the tenement that may relate to the sugar refinery although by this time it was not clear whether the refinery was still in use. The southern half of the site at this time is depicted as having a central path running the length of the gardens with what may have been a small walled garden close to Holyrood Road.



Illus 4
Extract of 1852 Ordnance Survey showing the location of the site



Illus 5
Extract of 1877 Ordnance Survey showing the brewery buildings



Illus 6
Extract of 1895 Ordnance Survey showing the full extent of the brewery

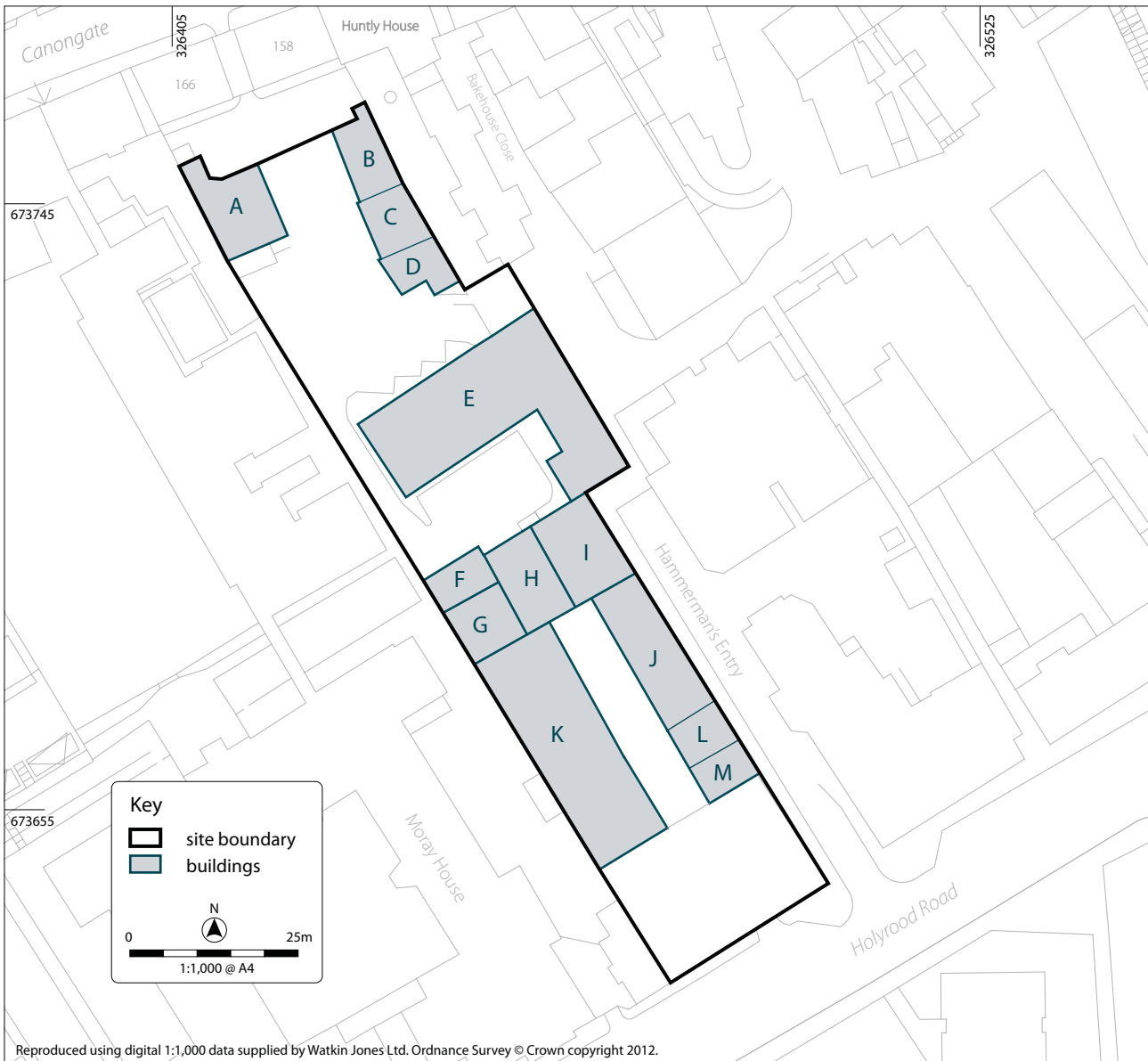
By the Second Edition Ordnance Survey (1877) (*Illus 5*) either the central section, or possibly the whole E end of the row of buildings to the N end of the site had been modified to provide a wider access to a yard to the S. The map also shows the extent of the brewery buildings and also indicates that some of the earlier buildings in the upper (northern half of the site) yard had been demolished. Some other smaller buildings were built piecemeal over the following century but the basic layout was established during this period. The 1881 (not illustrated), 1895 (*Illus 6*) and 1908 (not illustrated) Ordnance Survey maps continue to depict the original design of the brewery in the central and southern part of the site. There were two long parallel ranges against the E and W boundaries. These were connected at their N end by a series of shorter buildings including two kilns (Buildings F & G, *Illus 7*) and two brewhouses (Buildings H & I, *Illus 7*). Other buildings depicted on the maps include a number of 19th/20th century structures against the E & W boundaries. The majority of these have since been demolished.

The offices that form the eastern range of Building E (*Illus 7*) first appear on the 1908 Ordnance Survey (not illustrated) and at this time may have been part of the Youngers Brewery. By 1928 a bottling plant was installed and according to archive records an adjoining property owned by Wm Young & Co was purchased in 1946 (Scottish Brewing Archive 2001, GB1127/ JJM/15/3/2), although it also states that the building had been a firewood factory. It is not clear from the cartographic evidence exactly which building this was but it may relate to the office building (Building E) given its location immediately E of the main brewery buildings.

By the time of the 1946 Ordnance Survey (not illustrated) the pend through the tenement on the N boundary had been blocked and a further part of the same building (Building A) had been demolished to form a wider entrance into the site. In 1960, it was acquired by the breweries' neighbours, Wm Young & Co, Edinburgh and ceased to brew shortly afterwards. Later in 1960, the site was integrated with Scottish Brewers who latterly merged with Newcastle Breweries to form Scottish and Newcastle Breweries. From the 1960s onwards, the facilities on this site were used as offices, an experimental laboratory and a testing facility by Scottish and Newcastle. A building to the N side of the kilns (Buildings F & G) and the Clermiston Buildings to the S were demolished in the 1970s (Ordnance Survey 1971/1980). The final 1980s development of the brewery saw the construction of a modern laboratory (part of Building E) attached to the W side of the office building and to the N side of the brewhouse buildings (Buildings H and I).

3.3 Industrial development of Sugarhouse Close

The introduction of the sugar refinery industry gives an indication of the increased industrialisation of the area in the 18th century; the legacy of which has been preserved in the name '*Sugarhouse Close*'. The first sugar refining company in the Canongate was set up in 1752 by Robert Ballie & Co after acquiring a house from the Earl of Dunkeld (Mawer 2011 <http://www.mawer.clara.net/loc-edinleith.html#shc>). The Sugar House Company minute book



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Illus 7

Plan showing the building locations

(from 1752 and 1753) indicates that the first boiling of sugars took place on 28th April 1752 with 37 moulds filled. This quantity soon increased with close to 300 moulds being filled by July of the same year. The company was later chartered to Trustees of Edinburgh Sugarhouse on 3rd June 1767. Apparently the sugarhouse burnt down in January 1800 but was re-built by David Jardine & Co (Boog Watson 1923). This was the same sugarhouse that was later owned by Robert Macfie & Sons from 1829 until its closure in 1852 (Mawer 2011 <http://www.mawer.clara.net/loc-edinleith.html#shc>). The Macfie family had been involved in sugar refining since 1788 when Robert Macfie purchased shares in a company in Glasgow. They also established a refinery in Elbe Street, Leith in 1804 that apparently burnt down in 1829 (ibid). It was then that they purchased the building in Sugarhouse Close.

In 1868, the Commercial Brewery was founded at 160 Canongate. The entire site was extensively redeveloped with the construction

of numerous brewery buildings including many of the current buildings such as the maltbarn (Building K), two kilns (Buildings F & G) and two brewhouses (Buildings H & I). At the same time, two large tenements of matching design were built at the southern end of the site facing onto Holyrood Road. These were named on later maps as the Clermiston Buildings and were subsequently demolished in the late 1970s. The Commercial Brewery was operated by Morison & Thomson until 1877, when it was taken over by J & J Morison (Scottish brewing Archives GB1127/JJM/15/3/2). All the beers produced at the brewery during this period were typical Scottish types, Pale Ale, Mild Ale, and stout all on draught in wooden casks. The company continued up until April 1960 when they were bought by Wm Young & Co. who owned the brewery next door. The brewery was eventually closed down and subsequently integrated with Scottish and Newcastle Breweries. The site was used as a wine and sprit depot for Mackinlay and McPhearson (a subsidiary of S & N) for a short

while. Then in the 1980s a laboratory was constructed and the site became a testing center for the company.

4. OBJECTIVES

The main objectives of the archaeological works were:

- To record any archaeological and structural remains threatened and exposed by the proposed development works
- To report on the results of the work

5. OUTLINE OF SITE WORKS

The programme of archaeological works was divided into four stages as follows:

1. Historic Building Recording prior to alterations.
2. Historic Building Recording following soft strip: rapid recording where soft strip exposed historic fabric of remaining 19th century buildings.
3. Archaeological monitoring and recording during main contract excavations.
4. Post-excavation analysis and reporting: following completion of all site works.

5.1 Historic Building Recording prior to soft strip

External photographs were taken of all modern (20th century) buildings showing them in their site context prior to demolition. A photographic record was also made of the exteriors of all boundary walls and the Museum of Edinburgh courtyard. A basic description is included in the present report (Appendix 1).

A Level 2 survey (RCAHMS 2004 & EH 2006) of all historic (pre-20th century) buildings on the site was undertaken comprising a photographic survey and written record. This included the outer (eastern) wall of the 20th century office block. The photographic survey was made using colour slide film supported by digital coverage and includes general contextual shots, feature/context specific shots and detail shots where appropriate. Each photograph has been individually numbered. A full list can be found in Appendix 2. The written record included the annotation of existing digital plans, sections (provided by the client) and elevations to the standard of a Level 2 survey. Features of significance are shown and preliminary phasing discussed.

A Level 3 survey (RCAHMS 2004 & EH 2006) of the southern kiln and eastern brewhouse included elements noted above in the Level 2 survey and a more detailed photographic and descriptive record of original fixtures. These have been located by metric survey and annotation of existing digital plans (provided by the client).

Written record – The written record includes an analysis of the buildings based on the results of the fieldwork and the desk based assessment undertaken as part of the previous evaluation.

5.2 Historic Building Recording following soft strip

Rapid photographic survey was undertaken following the soft strip in 19th century buildings where historic fabric was revealed. It also included monitoring demolition works around the outer (eastern) wall of the 20th century office block. Where features of historic interest (blocked windows, fireplaces etc.) were revealed this was supplemented by written record and their location recorded on existing plans.

5.3 Archaeological monitoring and recording (Illus 44)

All main contract excavations were monitored by a team of archaeologists who guided excavation to ensure that all archaeological remains were investigated and recorded, as appropriate. Areas were demarcated into different blocks (Blocks A–G) relating to the development of the site as listed by the developer.

The excavation programme proceeded in the following stages in accordance with the contractor's programme of works and as stated in the Written Scheme of Investigation:

Stage 1 Archaeologically controlled excavation of a single trial trench in the lower terrace in order to assess the preservation of archaeological remains followed by archaeological monitoring of ground works (Blocks F and G).

Stage 2 Archaeologically controlled coring along the line of the proposed pile foundations in Block F in order to obtain a continuous profile of the underlying topography.

Stage 3 Archaeologically controlled test pitting in the eastern part of Block C in order to assess the impact of the proposed pile foundations on any archaeological remains present. Archaeologically controlled reduced level excavations in Block B and the remainder area of Block C.

Stage 4 Archaeologically controlled, reduced level excavation of Block D (D1–D3) located in the western central part of the site.

Stage 5 Archaeological monitoring of service trenches and drainage works and archaeologically controlled excavation of the attenuation tanks (Block A) located within the courtyard of the proposed development.

6. METHODOLOGY



6.1 Method of excavation

6.1.1 Block B & C

For Health & Safety and design reasons – in order to protect the boundary walls on the eastern side of site (including the listed structures around the Huntly House garden), Watkin-Jones erected a steel frame to support the wall prior to removing the concrete slab floor. Once the slab had been lifted the area was excavated in an archaeologically controlled manner.

6.1.2 Blocks C–D and attenuation tanks (part of Block A)

Overburden and/or upper rubble or homogenous deposits were removed using a mechanical excavator undertaken by a contractor appointed by the client under direct archaeological control. Where possible a flat-edged bucket was used although it was necessary to use a toothed bucket to remove compacted surfaces and deposits. Mechanical excavation stopped at the first significant archaeological remains. Once stripped of overburden the areas were hand cleaned to allow the detailed planning and recording of structures and deposits.

The depth of excavation within the areas of archaeologically controlled, reduced level excavation (Block D and part of Block C) were initially up to 1m below existing ground surface. However, as significant archaeology was discovered which lay partly below this depth, the excavation proceeded until the features had been fully recorded. This was assessed on a case by case basis dependent on the foundation design and the presence/absence of significant archaeological features and was discussed with CECAS and the client.

Subsequently all archaeologically significant structures and deposits identified were characterised and an appropriate sampling and recording strategy implemented.

The sampling level of the archaeological remains was determined after the initial site clean and varied according to the types of feature and deposits identified. The sampling strategy was determined in discussion with CECAS and adhered to the following principles:

Structures and structural features relating to industrial use of the site: these were planned to an appropriate level of detail and all stratigraphic relationships recorded. Sample hand excavation of related deposits was to a sufficient degree to determine their nature.

Discrete cut features: these were planned and half sectioned. All stratigraphic relationships, where appropriate, have been ascertained.

Linear features: these were planned and sample excavated (to a minimum of 10% of overall length). All stratigraphic relationships were ascertained.

Other archaeological deposits: excavation and sampling

strategies for other types of deposit were decided according to their nature and significance. Excavation was sufficient to establish the nature, date and extent of all deposits.

6.1.3 Blocks F & G

Prior to any ground works, two trial trenches were excavated in order to archaeologically evaluate the underlying deposits. The trenches were mechanically excavated under direct archaeological supervision.

Subsequently, a series of coring samples were obtained along the eastern footprint of Block F (Building J, L & M) on a N–S alignment. The samples were produced by means of dynamic window sampling using a terrier mini percussion sampling rig operated by a geotechnical sub contractor. A Headland archaeologist was present during the coring work in order to record the underlying deposits in an archaeological manner.

The excavation of a crane base between Blocks F and G was undertaken using a tracked excavator with a flat bladed ditching bucket under the control of an archaeologist who guided excavation to ensure that all archaeological remains were investigated and recorded, as appropriate.

All further ground works across the lower terrace were monitored by an experienced archaeologist with all archaeological remains recorded to an appropriate level.

6.2 Recording

All recording was in accordance with the codes of practice and guidance of the Institute for Archaeologists (IfA 2008). All contexts and environmental samples were given unique numbers and all recording undertaken on *pro forma* record cards that conform to accepted archaeological norms. A comprehensive list of the contexts can be found in Appendix 2.

Colour transparencies and digital photographs were taken to record archaeological contexts and to illustrate the general nature of the work. A graduated metric scale is clearly visible in record photographs of contexts. All photographs have been recorded by individual print number and include information on the context and direction taken. A full list of the photographic record can be found in Appendix 3. An additional selection of photographs relating to the internal features can also be found in Appendix 10.

A plan of the development area in relation to the National Grid has been supplied by the client. Significant archaeological features were recorded on this plan by use of hand measurements and digital survey using a total station and related to the National Grid. Where appropriate sections through individual features were drawn by hand at an appropriate scale and hand drawn plans of complex contexts, features and structures were completed where required. A full list of the hand drawn plans and sections can be found in Appendix 4

6.3 Samples and artefacts

Archaeological deposits were sampled systematically. Bulk samples, a minimum of 10 litres but up to 30 litres were taken for wet sieving and flotation. A Sample Register and an assessment of palaeo-environmental remains are included in this Data Structure Report. A full list of the samples taken can be found in Appendix 5.

Any artefacts retrieved during the works were recorded by context. All artefacts were catalogued and subject to standard Treasure Trove procedures. A catalogue and assessments by appropriate period specialists has been included in this Data Structure Report. All artifacts that were retrieved during the work have been stored in appropriate. A full list of the artifacts recovered can be found in Appendix 6.

All test pits monitored during the development work were recorded and located on a plan of the site and a written record of the stratigraphy produced on *pro forma* record sheets. A full list of the test pits monitored can be found in Appendix 7.

6.4 Post-excavation assessment and publication

If appropriate a project design for further post-excavation analysis and publication will be submitted to CECAS following production of this Data Structure Report.

6.5 Archive

A brief summary of the results has been prepared for inclusion in *Discovery and Excavation in Scotland* (Appendix 8). The project will also be reported through the online OASIS database (headland1-128478).

The project archive will be compiled in accordance with the guidelines published by the IfA on behalf of the Archaeological Archives Forum (July 2007). The documentary archive will be submitted to the National Monuments Record for Scotland within six months of completion of all work on this project. All digital archives created by Headland will be archived with RCAHMS (NMRS) via an external hard drive at the time of deposition.

All finds will be reported to the Scottish Archaeological Finds Allocation Panel, which will determine the ultimate destination of the material archive. Once this is determined, within three months, arrangements will be made with the specified museum for transfer of material and title.

7. RESULTS

7.1 Historic Building Record

7.1.1 Boundary walls (Illus 1, 7)

Northern Boundary (Illus 8) The northern boundary wall comprises a rubble stone wall with flat coping that spans the gap between Buildings A and B and



Illus 8

View of the northern boundary walls from the NW

incorporates a large sliding timber door with steel lintel. On the E side of the entrance and close to the NW corner of Building B several courses of tool-marked stonework could be discerned through the thick paint render. This could potentially represent the full extent of an earlier entrance prior to the demolition of the eastern part of the tenement (Building A) in the 1940s. A cast-iron gas lamp still sits on the lintel of the entrance.

Southern boundary (Illus 9) The S boundary runs along Holyrood Road and comprises a 3m high, sandstone rubble wall with a central entrance supporting a double swing gate. The walls themselves are formed from surviving elements of the ground floor frontage of the Clermiston buildings, two 1870s tenements, partly demolished after 1977. The wall on the W side of the gate incorporated a large stone-blocked mullioned window, a stone-blocked doorway and a simple window; although the wall may have been partially reconstructed as the features to the E side of the wall are not well defined. The wall on the E side of the gate included two stone-blocked windows with comb-dressed surround stones. These features correspond to ground floor features depicted on photographs of the tenements held at the RCAHMS (ED/10898 & 10899) that date from the 1950s.

9



Illus 9

View of the southern boundary walls from the SE



Illus 10

Detail of the change in height of the stone W boundary wall

Western Boundary (Illus 10) This boundary is formed by a mixture of free standing stone walls and the rear walls of standing buildings. The gatehouse on the Moray House campus served as the S section of wall along the W boundary of the site. The section of wall between the gatehouse and the maltbarn (Building K) was constructed of at least two types of brick and stone. To the N of the maltbarn and kilns (Buildings K, F and G), a rubble stone wall formed a further section of the W boundary to the site that continued up to the SW corner of the tenement building (Building A). The uppermost part of this wall at the junction of the northern kiln (Building G) was a later phase, as it abutted a series of quoin stones on the NW corner of the kiln. The lower part of this stone wall was keyed into the kiln building and represented the upstanding remains of one of the original brewery buildings that stood to the N of the surviving kiln (Building K) until its demolition in the 1980s. This section of stone wall comprised squared and snecked masonry similar to that of the kilns to the S. The make-up of the wall beyond this area comprised a much coarser construction of rubble stone. It was not clear if the final length of this wall represented the remains of buildings now demolished or if it had been rebuilt after the construction of the laboratories in the 1980s.

10

Eastern boundary (Illus 11, 12) The E boundary comprises a number of stone walls abutting and adjacent to the E range of the main brewery buildings. The area of stone wall facing Hammerman's entry to the S of the Bottling plant (Building J) is c. 3m high and dates from the 1990s, when the adjacent Holyrood Brewery site was redeveloped. No features of significance were noted in this stretch.

To the N of the office block (part of Building E) the site shares a boundary wall with the courtyard

of Huntly House (Museum of Edinburgh). Immediately adjacent to Building E this comprises a tall rubble stone wall but elsewhere it incorporates the E walls of Buildings B, C and D. This part of the wall included brickwork formed by Building D, an area of mixed stone and brick wall along the length of Building C (Illus 10) and finally the rubble stone wall of Building B.



Illus 11

Detail of the eastern boundary walls of Buildings C and D from Huntley House



Illus 12

Detail of the eastern boundary wall of Building B from Huntley House

7.1.2 Building A – Tenement (Illus 13)

Building A is a three-storey, three-bay tenement plus attic dating from the late 18th /early19th century and therefore pre-dating the brewery.

The tenement was built of rubble masonry with tooled margins and a slated gable roof (Illus 14). It was on an L plan, with a turnpike stair extending to the N under a piended slate roof. The structure appears to have been truncated to the E and evidently once incorporated a short arched pend that can be seen both on maps (Illus 4–6) and as a blocked up feature in the N wall (Illus 8). During ground works associated with the placing of new services within this building the original cobble stone floor of the pend was exposed.



Illus 13

Floor plans of the tenement Building (A)



12

Illus 14

Detail of the change in height of the stone W boundary wall

The chimney on the W gable included a large step on the S side and a stone buttress on the SE corner. Access to the interior was provided by entrances on the N, E and S elevations of the tenement. The main entrance, in the E façade, was a door with three part toplight at the first floor, which was accessed by a harled external brick staircase with stone treads built up against the E elevation.

The original pend had been blocked at both ends to form a narrow ground floor room (Room A1 & A2 – *Illus 13*) with modern finishes that was entered from the S side of the building. Elsewhere, some doors, windows and cornices appeared to be original. Some modern partitions were inserted in the upper floors but the original room layout and their relationship with the turnpike stair remained intact. Further original features survived behind the modern surfaces. These included a number of fireplaces on the three main floors. These had been brick-blocked with smaller fireplaces subsequently inserted. In Room A3 the large fireplace on the E wall may have originally been the location of a kitchen range.

The First Edition Ordnance Survey map (1852, *Illus 4*) indicated that the building originally formed part of a row that extended to the eastern boundary of the site (the location of Building B). This was partially demolished in the 1870s in order to provide a northern entrance to the brewery. The building was further truncated in the 1940s when another section of the row to the

E side of the pend was demolished. The pend that ran through Building A was probably blocked at this time. By 1950 all but the attic floor of the remaining building was converted into office use.

7.1.3 Building B – Office (*Illus 15*)

Building B is located at the NE corner of the site and comprises a two storey, three-bay rubble-built structure. It is sub-rectangular in plan, lime-washed with a slated gable roof and plain margins. Access is provided at ground level via a small porch on the W façade (*Illus 16*). The first floor can be accessed via an external stone/concrete staircase in Sugarhouse Close (*Illus 8*) that combines two very small 'rooms' one above the other, each inserted with a small casement window.

The W wall included windows with comb-dressed stone surrounds on the ground and first floors with further windows on the first floor of the N, E and S walls.

At the time of the survey, few original internal features were apparent, these being obscured behind the current stud and plasterboard lining. The 1877 Ordnance Survey map (*Illus 5*) seems to indicate a 19th century date for construction, although whether this was part of the tenement depicted on the earlier Ordnance Survey map (1852, *Illus 4*) is unclear. This building faces E into the brewery courtyard and not N into the courtyard of Sugarhouse Close as the surviving tenement does. This would suggest that when the tenement was partly demolished in order to make an entrance for the brewery in the 1870s the original building in this area was also demolished and a new building was constructed.

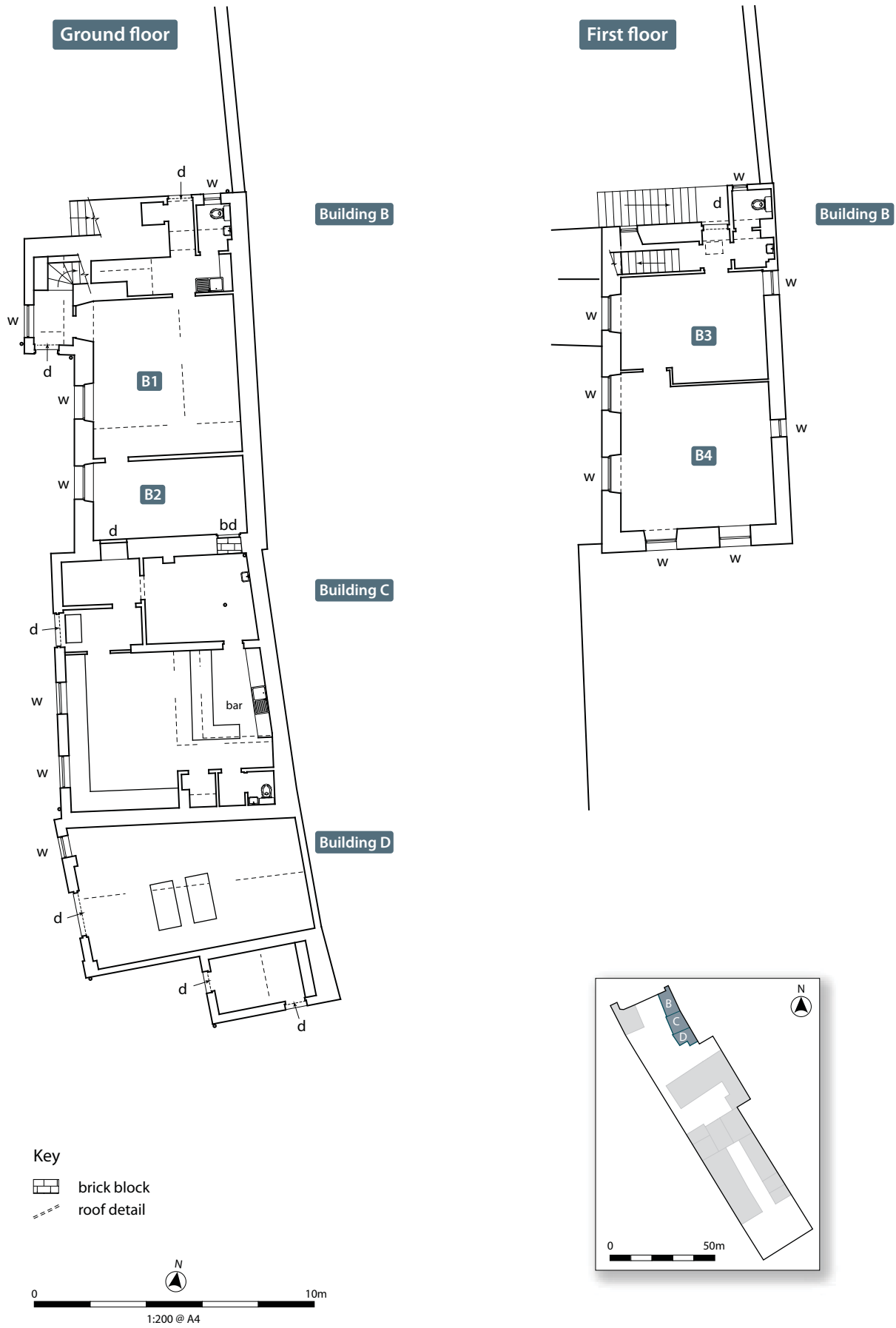
7.1.4 Building C – Tasting room (*Illus 15, 16*)

This building sits close to the NE corner of the site, between Buildings B and D. It comprised a single storey, flat-roofed structure with harling on the W brick constructed wall. A door, along with two sash-and-case windows, faced into the courtyard. The E wall (viewed from Huntly House courtyard) had a rubble stone construction topped with several courses of brickwork to the wall head (*Illus 11*). The only feature of note was the brick-blocked opening (possibly a window) close to the base of the E wall. This could potentially be associated with an earlier building as it sat too low on the wall to be associated with the current structure.

A blocked internal door on the N wall of the building may have been an original entrance into Building B. The interior of the building had modern finishes throughout, with a bar area and two smaller store rooms to the N side.

7.1.5 Building D – Store room (*Illus 15, 16*)

Building D was located against the E boundary of the site. It comprised a small brick-built, gabled store with an attached lean-to on the S side. The original double door on the W elevation had been blocked with brick and a slightly smaller opening had been inserted. Above this was a small ox-eye window with a small sash-and-case window to the N side of the door. The E gable wall,



Illus 15

Floor plans of Buildings B, C and D



Illus 16

View of the west elevations of Buildings B, C and D from the SW

seen from the courtyard of Huntly House (*Illus 11*), comprised a brick wall with a stone base and a large brick-blocked window. The room was filled with fuse boxes and electric components and was clearly of 20th century origin.

although the bonding of the stonework in the E wall indicated two possible phases. It may be that the upper part of this wall had been cleaned when the later windows were inserted as no change in bonding could be identified on the S wall.

14 **7.1.6 Building E – Office block and laboratory (*Illus 17–20*)**

Building E was a large L-shaped structure that actually comprised two conjoined buildings. The first of these buildings was a large N–S aligned rectangular three-storey gable roofed structure that was in use as an office block at the time of the survey. The second building was a modern, E–W aligned, two-storey building that was attached to the W wall of the office block and accommodated the laboratories.

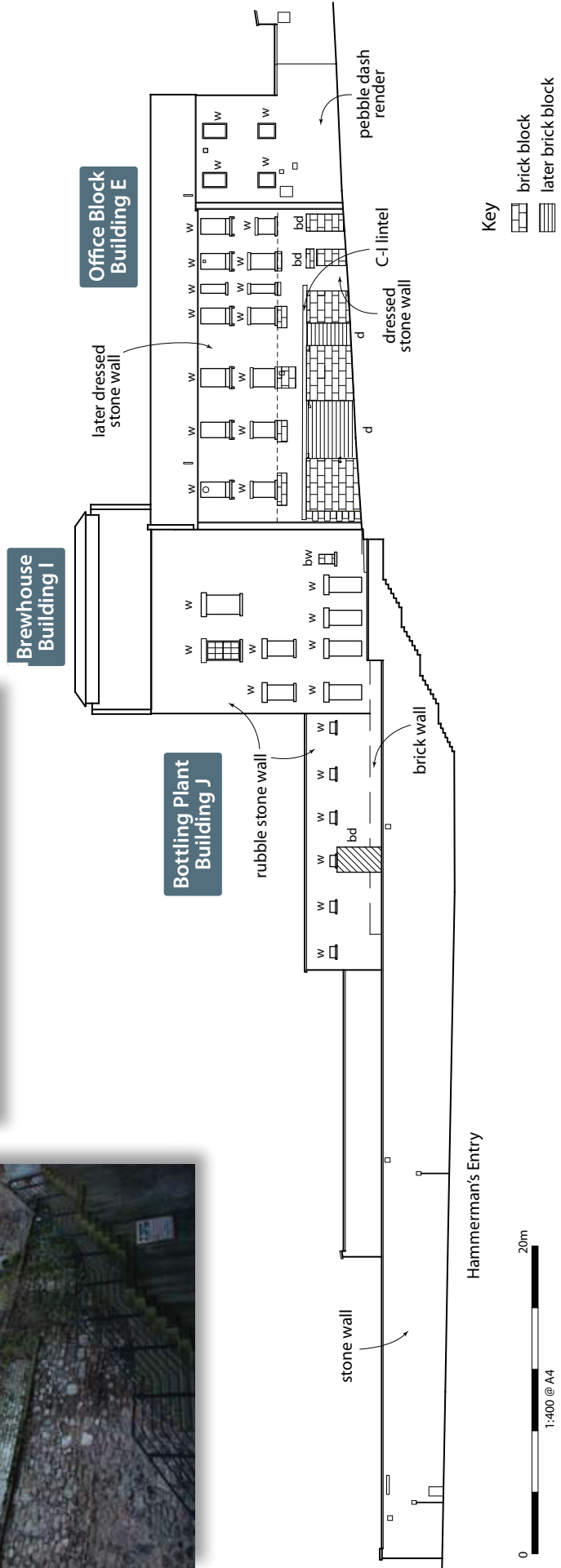
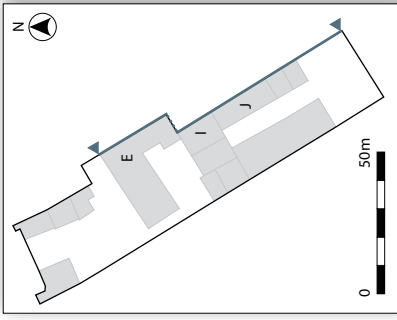
The basement level of the E elevation also had a number of inserted openings, now blocked with brickwork and incorporating a large steel lintel above (see *Illus 17, 21*). At the southern end of the E wall the steel lintel sat on what appeared to be the southern edge of an original opening formed of dressed sandstone and was also supported in the middle by a cast-iron pillar. Two brick-blocked doors were also recorded closer to the N end of this wall.

The S and E elevations of the office building were best viewed from Bakehouse Close. The E elevation comprised a three-storey, coursed stone structure with eight fixed glazed window bays on each of the upper two floors and a series of brick-blocked openings along the base of the wall (at basement level) (*Illus 21*). The northern end of the E elevation along with the N gable wall had been covered in a white painted harl to match the laboratory building to the W. This end of the building was constructed of brick and was clearly a much later phase and was probably associated with the construction of the laboratories in the 1980s. The gabled S elevation faced on to Hammerman’s Entry and comprised coursed stone to three storeys with two fixed glazed window bays to each. The S and most of the E elevation of this building suggests 19th century origins



Illus 21

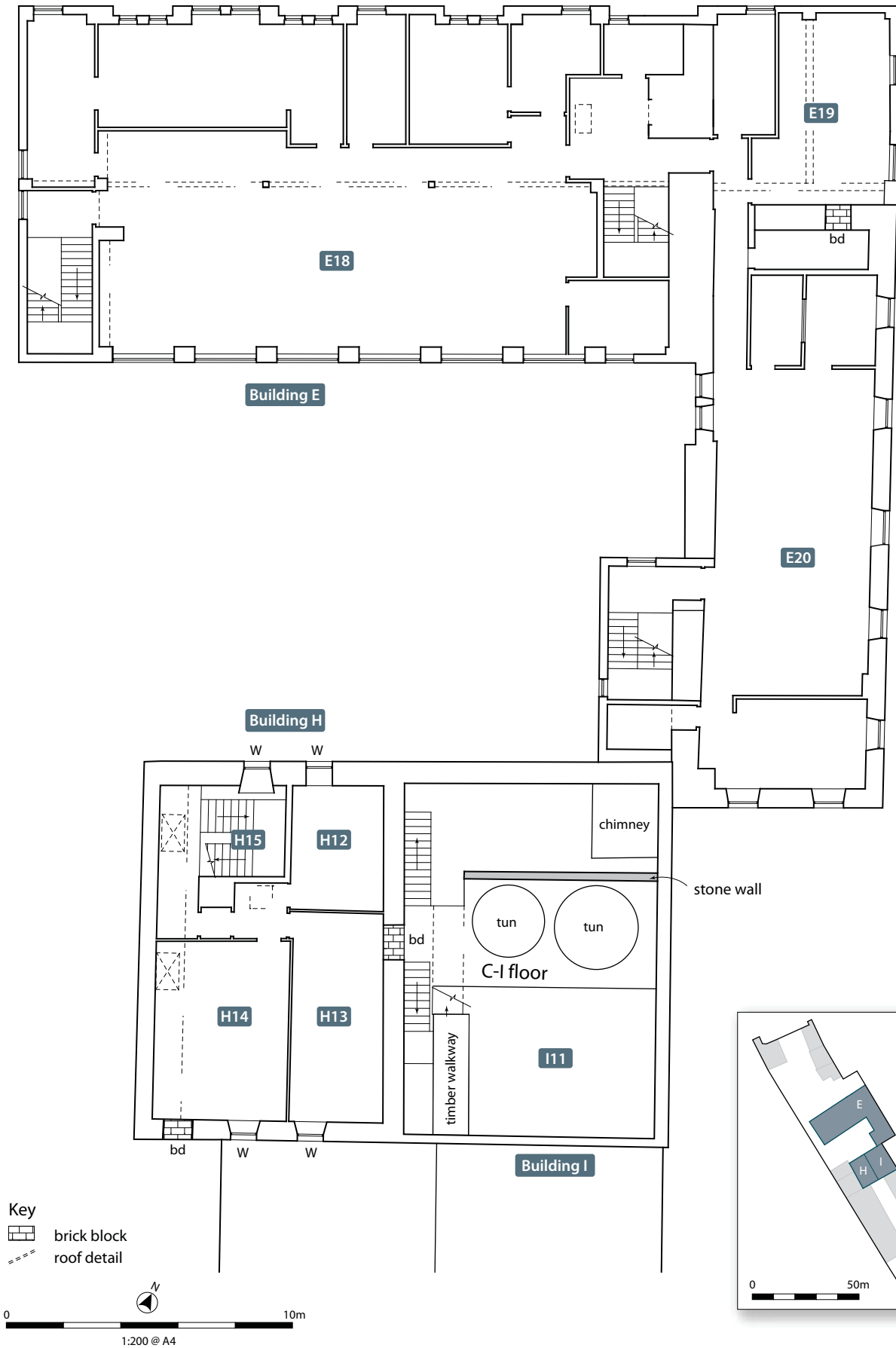
View of the east external wall of Building E from the NE



Illus 17
East elevation of Buildings E, I and J

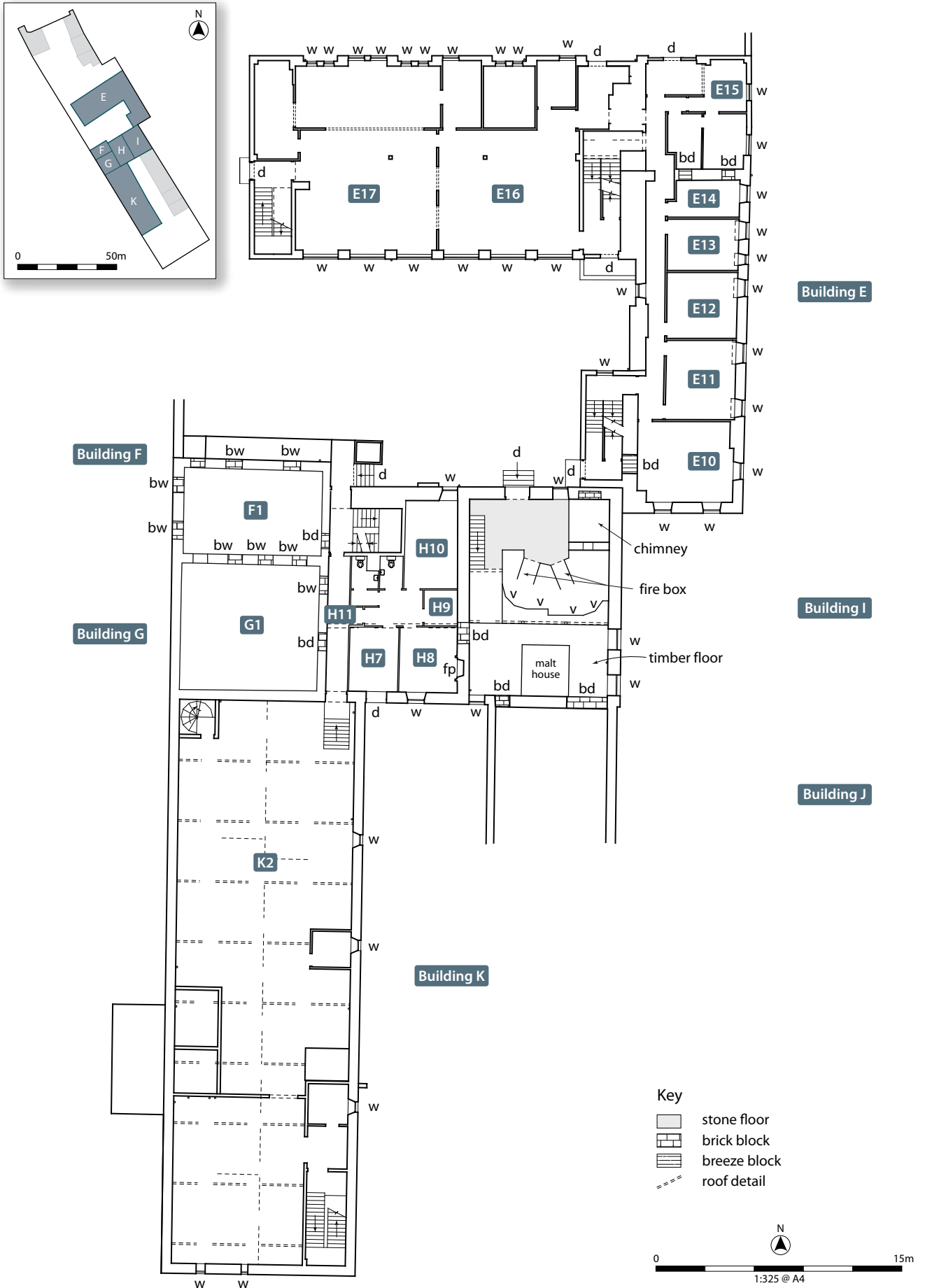


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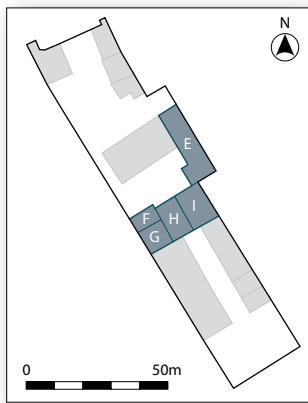
Illus 18

First floor plans of Buildings E, H and I



Illus 19

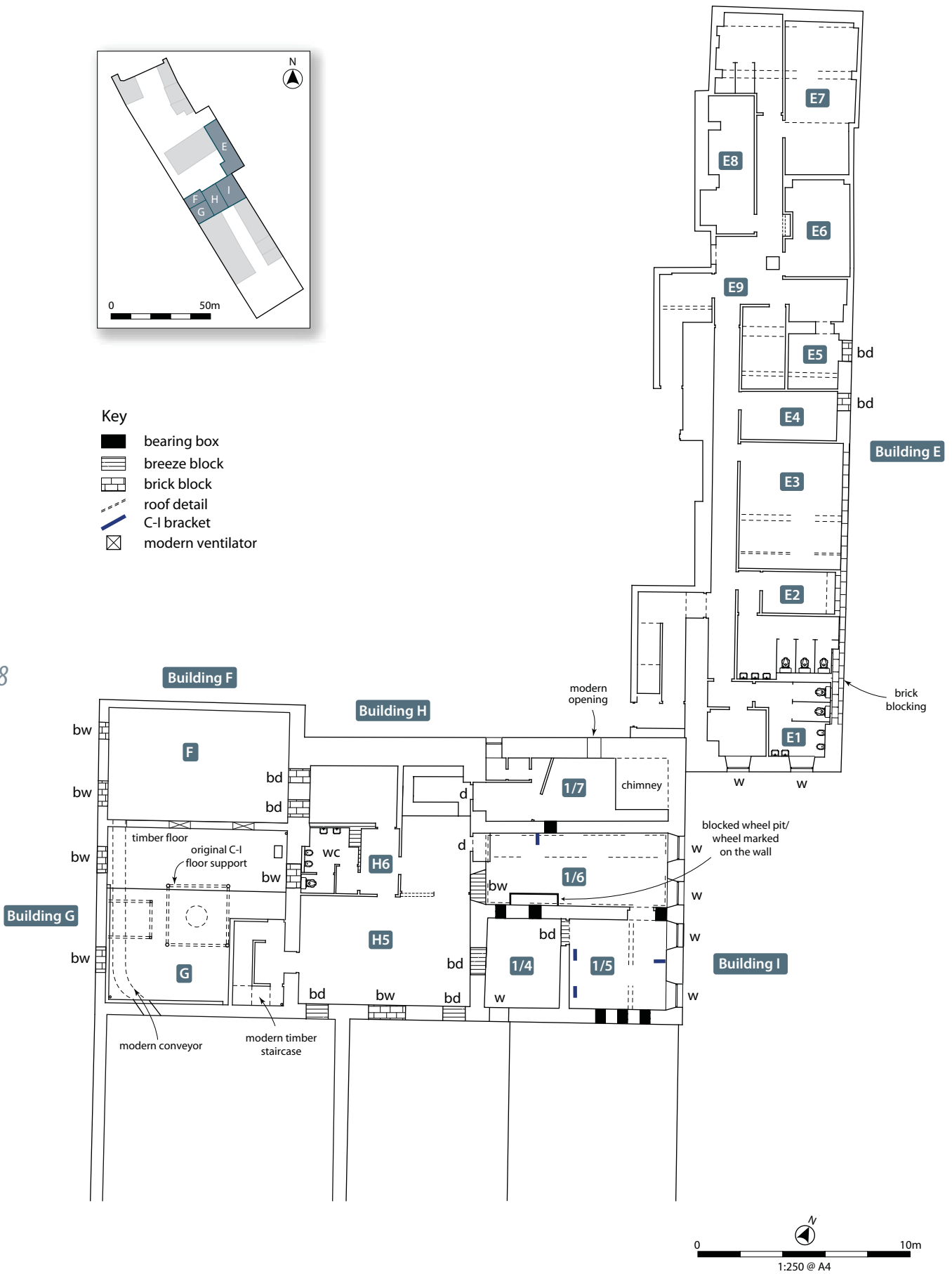
Ground floor plans of Buildings E, F, G, H, I & K



Key

- bearing box
- breeze block
- brick block
- roof detail
- C-I bracket
- modern ventilator

18



Illus 20

Lower ground floor plans of Buildings E, F, H & I

**Illus 22**

View of the north external wall of the laboratories of Building E from the N

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The elevation of the offices was mostly masked by the construction of the laboratories on the northern half of the building but a small length of the original wall remained visible. This comprised two stories with modern fixed windows to the upper floor and had been harled masking its construction. Subsequent demolition work showed this to have been constructed of stone. Any original features on the southern end the W elevation were also masked by a modern extension that formed the entrance to the office building. The demolition works also exposed the N elevation of the original building although this had been considerably altered with numerous modern openings that had subsequently been brick-blocked.

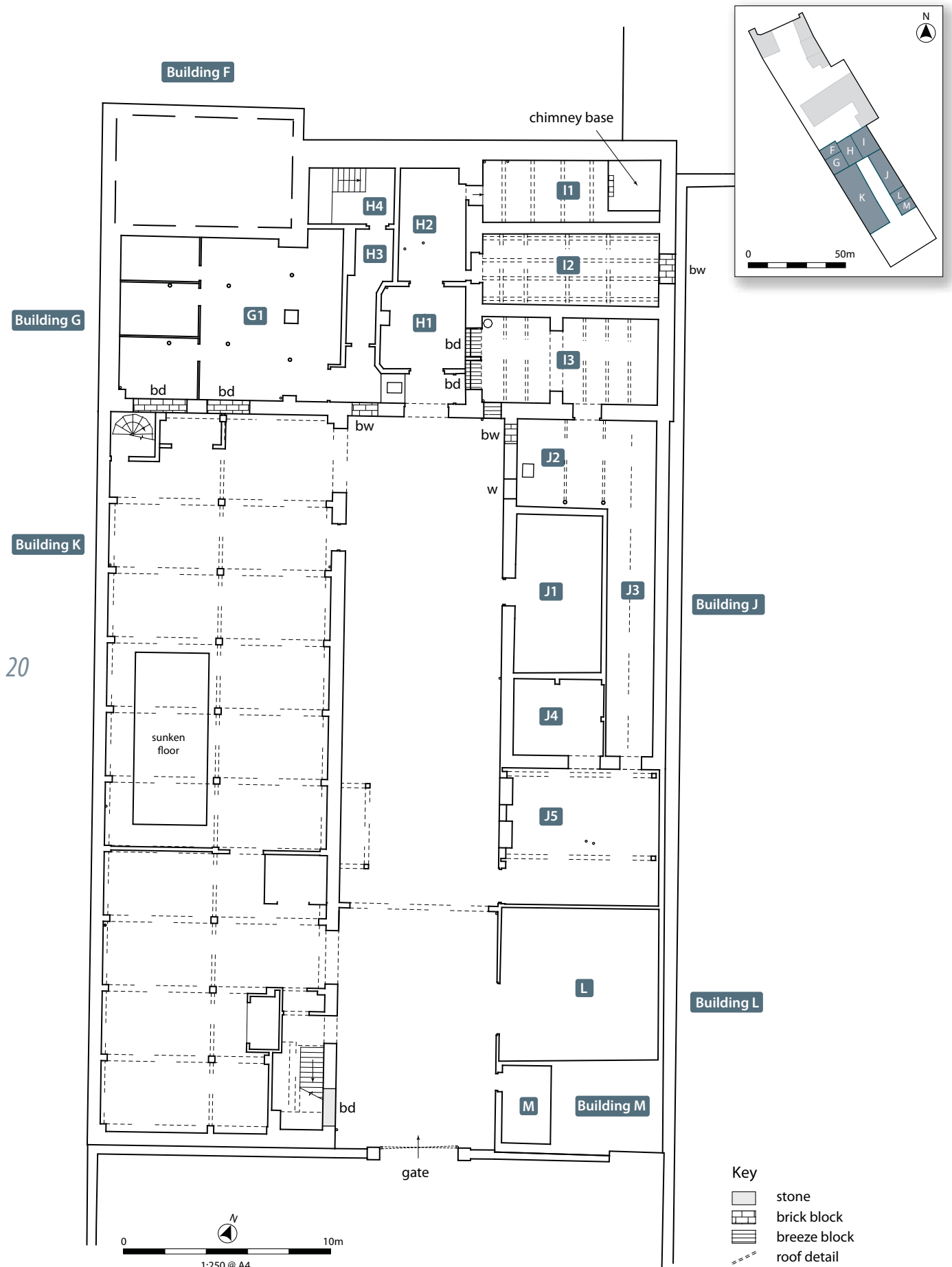
The internal features of this building were masked by modern plaster walls although during the subsequent stripping works the stone walls of the original building were recorded on the ground and first floor levels. On the ground floor the stone wall separating rooms E14 and E15 incorporated a brick-blocked door and a wider opening that had been partially blocked. A similar pattern was also recorded on the first floor. Subsequent further demolition of the laboratory indicated that this was the original gable end of the earlier stone building.

The laboratory building is known to have been constructed in the 1980s (Illus 22). This two-storey building with pitched slate roof was clearly modern in construction with a brick base and large fixed windows to both floors. This building formed the main laboratory area for the brewery site incorporating modern fixtures and fittings throughout.

7.1.7 Building F – North kiln (Illus 19, 20, 23, 24, 25)

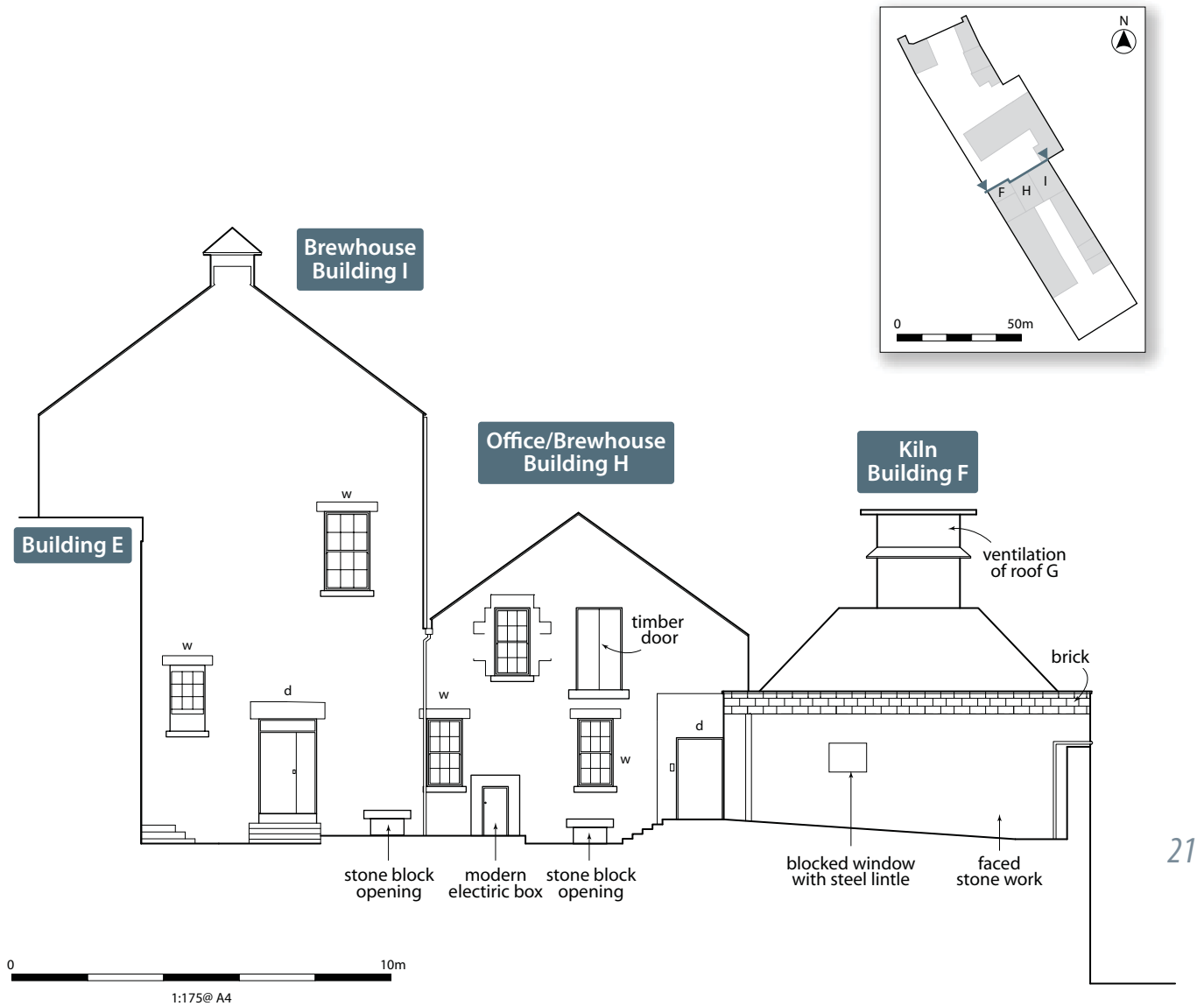
Building F was one of a pair of masonry-built kilns of the same date with hipped, slated roofs. Building F was the northernmost of these two kilns and only had two visible elevations that presented a single storey to the N and two stories to the W. Both these elevations comprised snecked stone walls, although much of the N wall was masked by a thick harl. Removal of a part of this harling revealed that the wallhead had been raised by several courses of brickwork (Illus 26). The W wall, viewed from the courtyard of Moray House, included two brick-blocked windows to each floor (Illus 27). This wall evidently continued beyond the N corner of the building, although quoins representing the original NW corner of Building F were visible on the uppermost part of the wall. This suggests that all but the upper courses of the wall further to the N beyond the kiln probably represented the remains of a further brewery building known to have originally stood to the N of the kiln (Building F). Excavations on the N side of Building F also revealed that the N wall had been buttressed below the modern ground surface by a thick concrete support. This was probably added in order to provide additional support to the upstanding remains once the building to the N was demolished.

The interior of Building F was not accessible at the time of the survey although a small breeze-blocked window with cast-iron lintel on the N wall was opened to reveal that all the internal features including the floors had been completely removed and all the openings blocked. The only evidence for the floors was the beam slots on the E and W walls. A number of blocked doors



Illus 23

Basement floor plans of Buildings F, G, H, I, J & K



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Illus 24

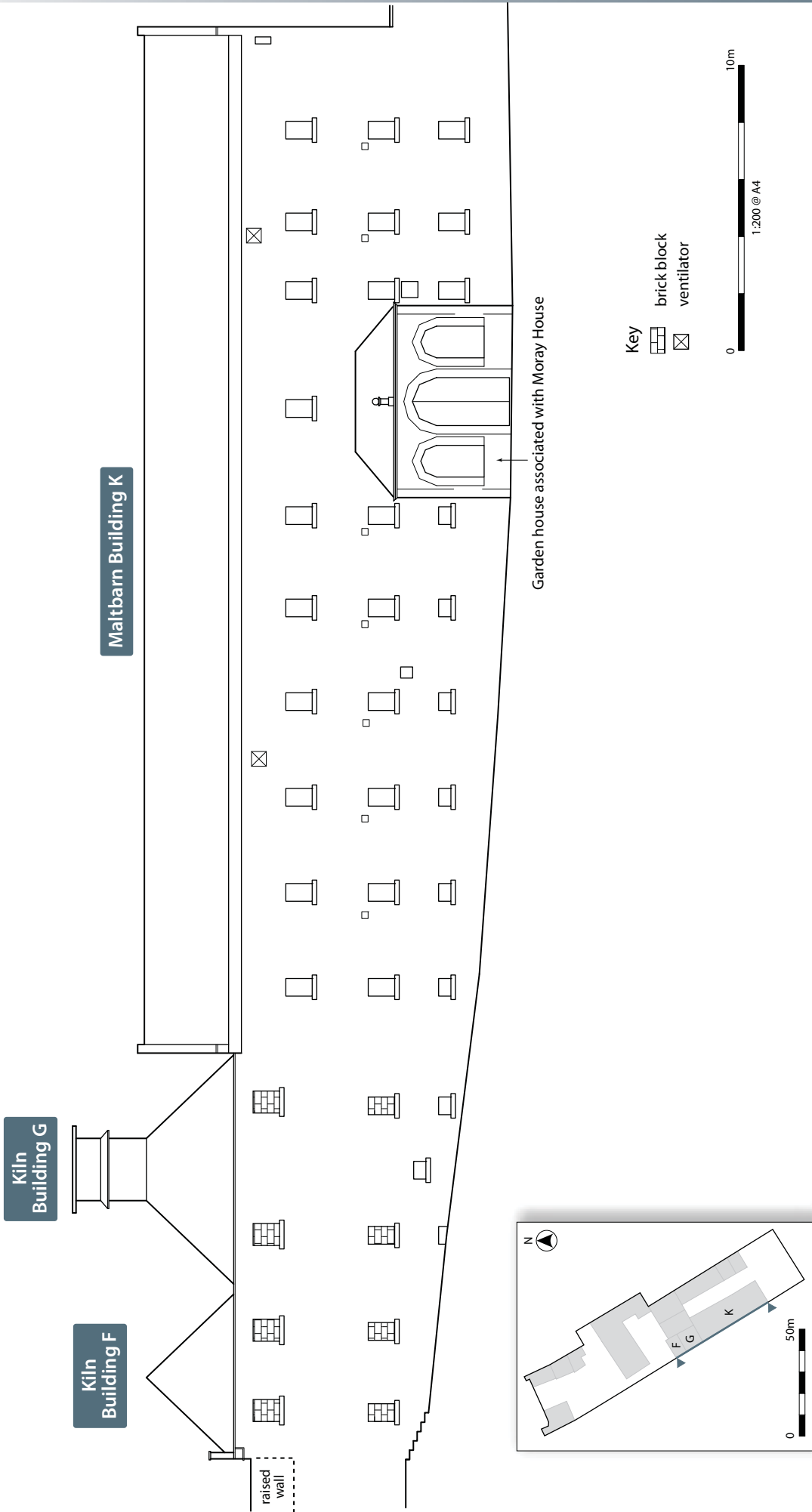
North elevation of Buildings F, H & I

and openings could be seen on the E and S walls at both ground floor and lower ground floor levels. A later inserted conveyor belt ran from N to S continuing into the southern kiln (Building G) on the lower ground floor level. It was thought that the basement level of this building had been in-filled with rubble.

7.1.8 Building G – South kiln (Illus 19, 23, 25)

Building G was the southern of two kilns and could be accessed from the lower ground floor and basement levels of the western brewhouse (Building H). The W elevation formed the only accessible external wall (Illus 27) and was formed of sneaked masonry with a number of brick-blocked windows at ground and lower ground floor levels. Three further small openings were located very close to the current external ground level and probably represent small windows to the basement level indicating that the ground level of Moray House had subsequently been raised.

The internal arrangement of this building had been severely altered with only a basement and lower ground floor level surviving. The ground floor level however, retained its cast-iron pillars and framework providing an indication of what previously existed. Although some of the original internal features survived most were either blocked or had been partially removed. A number of vents and large openings were noted on the N and S walls, mainly on the ground floor level (Illus 28). The most striking feature in the building was a relatively modern conveyor apparatus attached in the W wall that spanned the N and S walls (Illus 29). The SE corner of the basement included a later inserted timber partition wall and staircase leading to the ground floor and lower ground floor levels of the brewhouse (Building H). The floor of the basement comprised brick to the north and timber to the south.



Illus 25
West elevation of Buildings F, G & K



Illus 26 ▶

View of the N external elevation of Building F from the N



Illus 27 ▶

View of the W walls of Buildings F and G from the NW



Illus 28 ▶

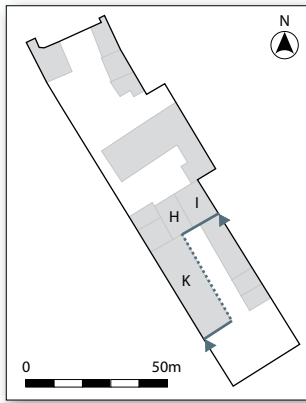
Internal N wall of Building G showing the vent openings



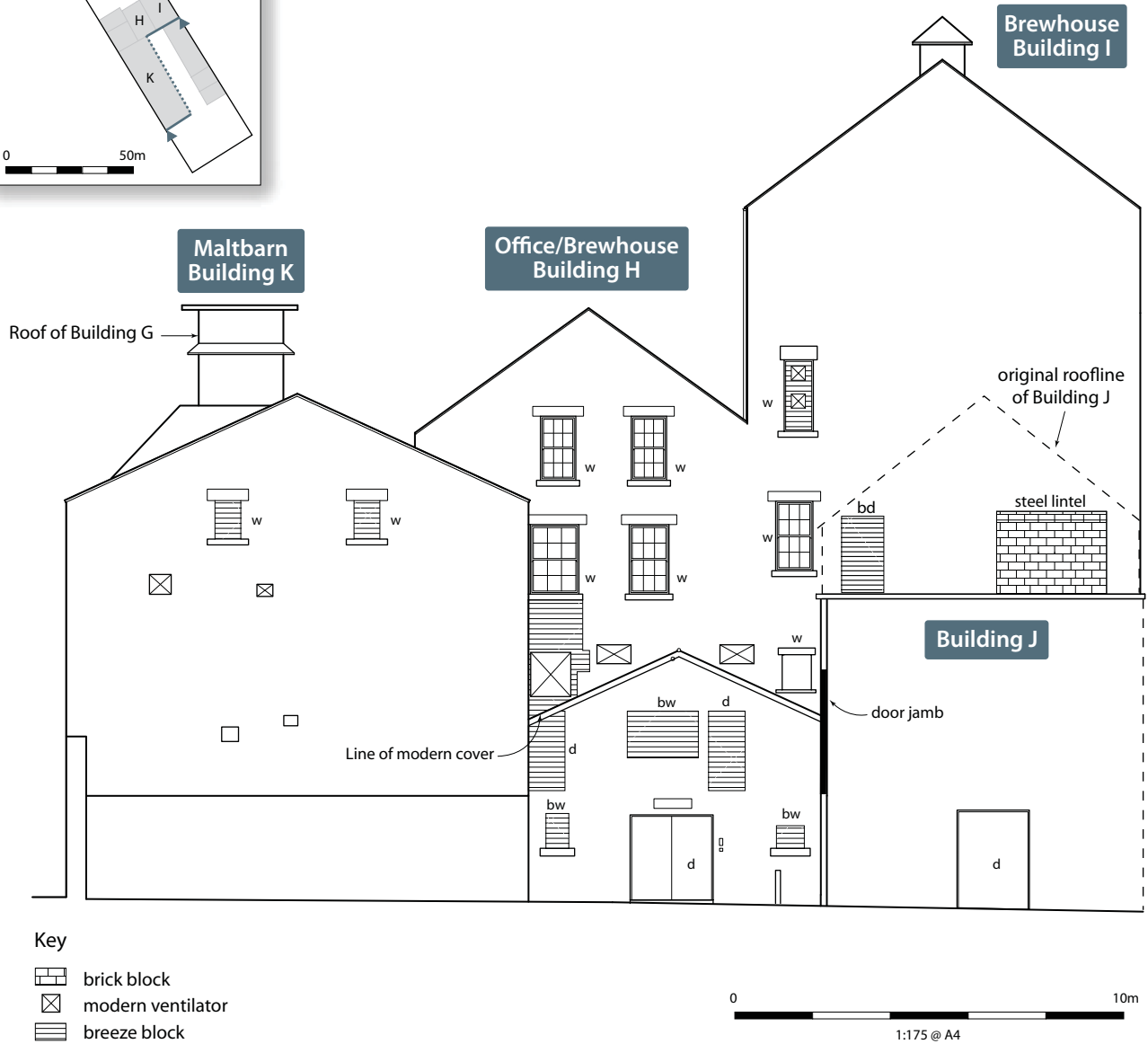
Illus 29 ▶

General view of the internal features of Building G





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Illus 30

South external elevation of Buildings K, H & I

7.1.9 Building H – Offices (formerly brewhouse) (Illus 18, 19, 20, 23, 24, 30)

Building H formed also part of the original brewery complex and comprised a large rectangular building flanked by the kilns (Buildings F and G) to the W and the main brewhouse (Building I) to the E. The N frontage, facing into the upper courtyard, had two storeys (Illus 31) but internally it comprised four floors due to the drop in ground level to the S. The N wall (see Illus 22) indicated that the structure was constructed of sneaked masonry and included a sash-and-case window and loading door to the first floor and a window and later inserted door to the ground floor. The very top of an opening (possibly a loading

door) was recorded close to the existing ground level directly below the central ground floor window. Subsequent excavations to the N of this building revealed that this opening was indeed a door and was accessed by a stone staircase from the E side. The S wall (Illus 30) included sash-and-case windows at first and ground floor levels and a series of blocked windows and doors on the lower ground floor and basement levels. The ground floor window to the W side of the S wall had originally been a door (probably leading to an external metal staircase as depicted on the ordnance surveys), the lower part of which had been breeze-blocked. A later phase double door at basement level of this elevation was the only access point on this side of the building.



Illus 31

View of the N external wall of Building H from the N

The building had been converted for use as offices on all but the basement level so masking many of the original features. A modern staircase leading to all floors had been inserted in the NW corner of the building. The removal of the modern plaster board revealed a number of features. A blocked door was recorded on the E wall of the first floor. On the ground floor a small fireplace was located on the S side of the E wall along with a further door to the N side. Further blocked doors and a single window were recorded on the W wall of this level all leading into the Kiln buildings (Buildings F & G). The lower ground floor included blocked doors on the E and W walls and a large blocked opening on the S wall. At basement level the area between Buildings G and H was open forming a single large storage area with several rows of cast-iron beams and a small number of stone

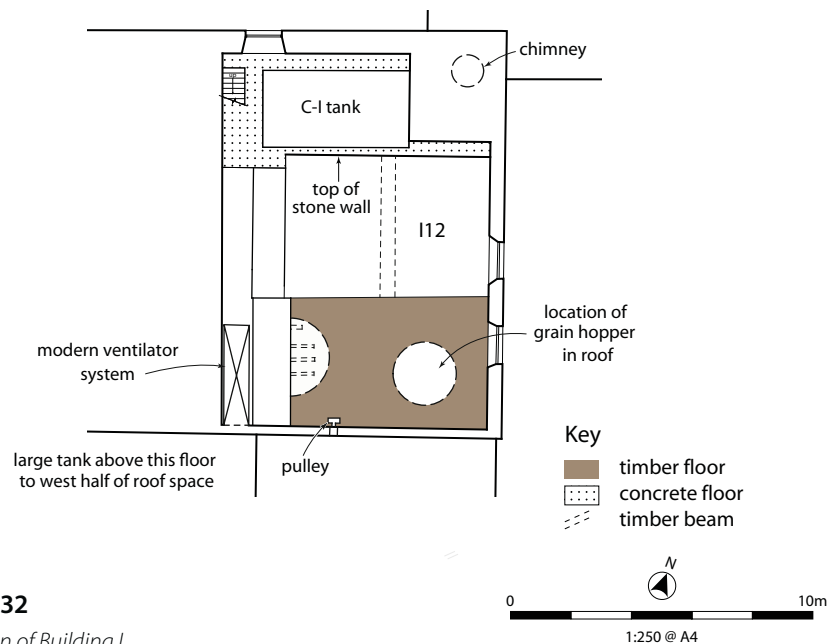
pillars supporting the ceiling. Two blocked doors were recorded on the E wall leading into Room 3 of Building I and two blocked windows were visible on the S wall.

7.1.10 Building I – Brewhouse (Illus 17, 18, 19, 20, 23, 24, 30, 32)

Building I was part of the original 1870s brewery complex and formed the eastern brewhouse. The building was rectangular in plan and aligned N–S. It was constructed of squared and snecked masonry with dressed quoins and a gable roof with a raised wooden vent running the length of the ridge.

The building consisted of over five levels but the external E elevation was the only one that gave any indication of its true height. Only the upper three levels were visible (Illus 33) on the N elevation that included windows to the ground and first floor levels along with a door to the ground level. The very top of a further opening was visible just above the modern ground level to the W of the door and may represent a delivery hatch as seen on a photograph held at RCAHMS dating to the early 1900s. This opening was also recorded as a window with a steep sloping recessed cill in Room I/7 suggesting it may originally have been coal chute.

The lower two floors of the E elevation were partially obscured by stairs leading down to Hammerman's Entry (Illus 34). Among the features that were visible were a row of boarded-up door-sized openings on the lower ground floor level, although these were more likely to have been tall windows as they all included raised cills. Two sash-and-case window bays were found at each of the ground and first floor levels. Much of the S wall had been



Illus 32

Second floor plan of Building I



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Illus 33

View of the N external wall of Building I from the N

masked by Building J but the demolition of this revealed a single central door at basement level and two blocked doors at ground floor level. The S elevation also included a series of windows up the W side along with the construction line of the original roof of Building J to the south (*Illus 35*).

The interior was split into five distinct floor levels by timber gantries, platforms and ladders. A number of features associated with the brewing process still survived in this building and many could potentially be original. Inside the entrance on the ground floor, stone flooring and iron columns supported the upper floors. The most significant features on this floor were two substantial fire boxes (*Illus 36*) fitted into a large brick constructed furnace that supported the bases of two large circular vats (mash tuns) accessed from the first floor level (*Illus 37*). The fire boxes included large iron doors hinged along the top so that they could be lifted from the base via a pulley system, the rollers of which were still located on the wall above the fireboxes. To the E of the fireboxes was a large square brick built chimney with a flue linking it to the wall of the furnace. On the S wall of the furnace

a series of four removable cast-iron covers were located at head height. These could be lifted off to reveal small vents in the wall filled with loose fitting bricks. The bricks could easily be removed in order to regulate the heat below the vats. The southern part of the ground floor included a small freestanding room constructed of timber and marked with the initials 'MH' (possibly Malt House) sitting on a timber floor along with a series of timber and steel beams supporting small electrical motors most of which looked to be fairly modern in design.

The actual vats on the first floor had been removed leaving just the brick linings visible although these had been filled with demolition material. Various features associated with the vats including a number of pulleys, vent plates (*Illus 38*) and timber beams survived.

The upper floors included a malt hopper (*Illus 39*) and two large rectangular tank constructed of cast-iron plates. One of these tanks was heavily lagged suggesting it was designed to hold heated liquid. A section of timber flooring that included a large circular cut-out on this level suggested that this once supported a large hopper or vat.

Beneath the main working area of the brewhouse the building also had two lower floors. The lower ground floor level included a series of store rooms, some of which included one or more bearing boxes high on the walls along with an occasional heavy iron bracket for supporting a driveshaft. The bearing box on the S wall of Room 1/6 (*Illus 20*) was clearly for a central bearing for a large pulley wheel as the wall was scored with a large semi-circular mark (*Illus 40*). The floor at the foot of this wall mark had been filled with cement suggesting that originally it was the location of a wheel pit. The number of bearing boxes and evidence of a wheel pit on this level together with evidence of engine mountings in room 1/5 clearly suggest that this could of been the location of the main power source for the brewery prior to there utilization as store rooms. This power source would have comprised a large steam powered pump with associated boiler and furnace.



Illus 34

View of the E walls of Buildings I and J from the SE



Illus 35

View of the S external walls of Buildings H & I



Illus 37

Detail of the remains of the mash tuns on the 1st floor of Building I



Illus 38

Detail of the lifting plates associated with the mash tuns in Building I



Illus 36

Detail of the fire box of the furnace in the ground floor of Building I



Illus 39

Detail of the grain hopper on the 2nd floor of Building I



The basement level comprised a series of small store rooms that continued into the bottling plant (Building J) to the south. A selection of additional photographs from this building can be found in Appendix 10.

7.1.11 Building J – Bottling plant (Illus 17, 23)

Building J was a double-storey, flat-roofed building constructed of rubble masonry to the S of the brewhouse (Building I). It had most recently been used as a bottling plant and store. The roof was clearly not original as the construction mark of a tall pitched roof was clearly visible on the S external wall of Building I. A modern steel and plastic canopy had covered the forecourt between Building J and Building K masking the upper half of the W external wall of Building J. Its removal revealed a row of windows present on the upper floor. The lower half of the W elevation had a heavy paint harl making the identification of features difficult although it was clear the elevation included a row of small windows with projecting cills and tooled margins. These windows were mirrored on the E elevation although only the upper row of windows were visible (see *Illus 33*) as the lower section of wall was masked by brickwork.

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The building included five separate rooms (J1 to J5) most of which were formed by modern partition walls. The wall dividing rooms J 4 and J 5 was the only internal stone wall and this was clearly associated with the original building (*Illus 41*). This wall included a number of blocked openings and a later inserted door. Room J5 was constructed of brick and was clearly a later phase construction. Later demolition works revealed that the surviving stone foundations of the original brewery building continued to the end of Building M.

7.1.12 Building K – Maltbarn (Illus 19, 23, 25, 30)

Building K was thought to have formed the maltbarn for the 1870s brewery and was a three storey rectangular building in squared rubble masonry with tooled ashlar margins and a gable roof. There have been several alterations to the original pattern of openings at the basement level on the E elevation and the majority of window openings on the building were blocked. The size of the building could be best gauged from the W elevation as viewed from the grounds of Moray House. This elevation included two rows of windows, one at ground level and one at basement level with a further set of small openings (possibly vents) close to the current road level of Moray House car park (below the basement level windows).



Illus 40

View of the bearing box and wheel mark on the S wall of Room 6 in Building I



Illus 41

View of the internal S stone wall in Building J

Close to the southern end of the W elevation the maltbarn wall abutted a small decorative stone building that predated the brewery – known as the summerhouse (NMR: NT27SE 29.3) (*Illus 42*) and associated with Moray House garden.

The S elevation included two breeze-blocked windows high up on the gable. The lower section of wall was covered by a grey cement render that was continuous with a short stretch of brick wall connecting it to a gate pier that must once have formed the S entrance to the brewery. A number of the windows on the E wall had been blocked in addition to a wide door on the S end of the wall that probably formed one of the original entrances to the building (*Illus 43*). Several later openings had been inserted



Illus 42

Detail of the summerhouse in the car park of Moray House



Illus 43

View of the S and E walls of the malt house (Building K)

floor levels although during stripping works a beam slot for an earlier floor level was recorded. This was significantly lower than the present upper floor level and suggests that originally the building probably had three floors. The upper floor space itself was open to the corrugated asbestos roof. Ground works within the building suggested that the original floor would have been timber as no earlier stone flooring was present.

7.1.13 Building L – Store (Illus 17, 23)

Building L was located to the S side of Building J, and along with Room J5 to the N and Building M to the S, was a later phase single storey rectangular building comprising simple brick walls and a flat roof. The W wall included a modern door and vents and the internal floor was concrete with a series of concrete plinths.

7.1.14 Building M – electrical supply room (Illus 17, 23)

Building M was a modern rectangular building that was part of the same phase of structures as Building L to the north, the buildings being separated by an internal breeze block wall. The structure was brick built with a flat roof and enclosed a number of electrical fuse boxes, switches and electric boxes.

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7.1.15 Standing Building Survey: Discussion

The site's local importance lies in the fact that it is one of the few remaining brewery sites in Edinburgh, illustrating a facet of social and economic history of the area. Although the majority of interior alterations to many of the original brewery buildings date from the 20th century, the arrangement of buildings on the site and their exterior appearance as a group is largely unaltered from the late 19th century.

both at the S and N ends of the E elevation changing the way this building was used.

The current internal arrangement of the building has been considerably altered and modernised. It had been divided into two storeys, each with modern concrete floors and a number of modern bays with stud and plasterboard partitions. A row of concrete and steel columns and steel beams supported the upper (ground floor) level. The main feature of the basement level was a large sunken basin with a number of raised concrete platforms with projecting pins. This was probably a 20th century machine pit. The stone walls of the interior had been covered in a thick paint masking many of the original features and earlier

The historic building survey revealed four main phases of activity across the site (related to site-wide Phases 3 to 6), although a number of smaller and less intrusive alterations have also been noted.

Phase 3 (late 18th/early 19th century)

It is clear that the earliest identifiable phase of building included the construction of the tenement (Building A). Whether this is the building depicted in this location on the historical maps is unclear although it seems more likely that the row of buildings depicted on the 1852 Ordnance Survey map, including the tenement, were all of the same period. The 1852 Ordnance Survey map in fact shows that the whole N frontage was roofed with a



pend or lane running through to the rear courtyard, although it is unclear if the tenement itself ran the full length of the row. The excavations of Block A (discussed below) suggest that at least part of this building was being used for industrial purposes.

Phase 4 (c. 1870s/1940s)

In the N part of the site the second phase saw part-demolition of the row of buildings to the E of the tenement (Building A) and the probable construction or heavy modification of Building B. Elsewhere saw the construction of the brewery buildings and the Clermiston tenement along the southern boundary. A significant sub-phase of this included the construction of the office building (the E–W range of Building E) in the early 1900s.

Phase 5 (c.1940s/1960s)

This saw the widening of the entrance to the N end in the 1940s which included the demolition of the remains of the row of buildings to the E of the tenement. Alterations were also undertaken to the malt house and bottling plant during this time. Alterations and additions to the buildings along the E and W boundary walls of the upper terrace were also noted.

Phase 6 (20th century)

The final phase saw the construction of the laboratory and northern part of the offices of Building E. The construction of the laboratories led to the demolition of some of the buildings to the N side of the site. This phase also included the demolition and reconstruction of the southern part of the bottling plant (Building J), along with the modernisation of the internal layouts of many of the remaining buildings.

Initially, three specific areas were targeted for open area excavations comprising the area of the attenuation tank (Block A) to the N end of site (between Buildings A and B); the northern part of Block C to the E side of the upper terrace (below the footprint of Building C); and Block D to the W side of the upper terrace. Block D encompassed three separate areas (D1 – D3) amounting to the footprint of three new buildings. Further excavations were also undertaken to the S of Building B (Block B) after monitoring works revealed a number of archaeological features. In addition to this work, all the test pits, bore-hole investigations and trial trenches excavated during the works were monitored and recorded by an archaeologist. A number of areas were also monitored during ground reduction works. This included the southern part of Block C to the E side of the upper terrace (the footprint of Buildings D and part of Building E); the service trench running N–S across the central part of the upper terrace; Block F (the footprint of Buildings J, L and M) to the E side of the lower terrace; and Block G (the area of the demolished tenements at the S end of the site).

7.2.2 Attenuation tank/Block A (Illus 45)

The attenuation tank excavations covered an area approximately 12m x 7m located to the N end of the upper terrace in the courtyard between Buildings A and B. The excavations revealed that the bedrock at this end of the site was very close to the surface (approximately 51.5m OD).

Probably the earliest phase of activity in this area related to a partly stone-lined well [250] cut deeply into the bedrock at 51.8m OD (Illus 46). The well was located immediately E of the tenement (Building A) below a later phase floor surface [235] and associated wall [225]. It had a diameter of approximately 2.7m and was over 20m deep. The upper 5m of the well wall were constructed of rubble stone bonded with lime mortar within a cut [251] that was approximately a further 0.6m wide, although this was not very well defined. This cut had been backfilled with stone-rich grey clay [252]. The well had been capped with a number of large square capstones supported by a large timber beam along with an additional steel support beam. The timber



Illus 46

Detail of the interior of the well [250]

7.2 Excavation Results

7.2.1 General (Illus 44)

As part of the re-development, the site was divided into a series of 'blocks' relating to the construction of new and/or redeveloped buildings (Blocks A–G). These blocks have been used in this section of the report in conjunction with the Building identifications (Illus 7) in order to describe the location of the various areas investigated.

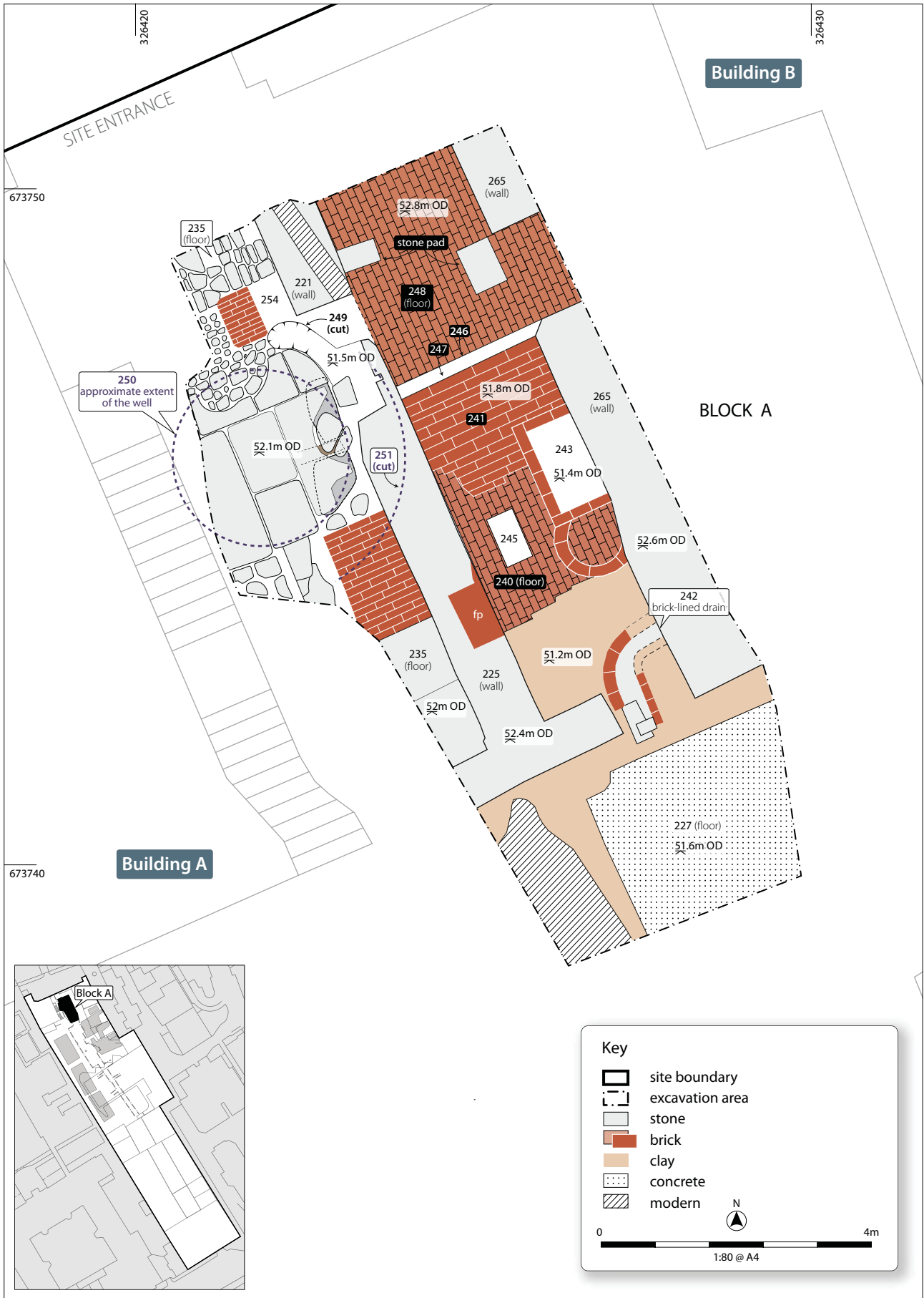
This report presents the results of the fieldwork phase by initially describing each of the main areas of excavation: Blocks A – D. These four areas, all located on the upper terrace of the site, formed the basis of much of the phasing of the site incorporating areas of garden soil, industrial activity and upstanding brewery buildings. Any ground reduction monitoring undertaken within these areas (mainly Block C) has been included within the relevant section. This is followed by a description of the monitoring works undertaken during the development. This includes the excavation of the service trench in the upper terrace and all the test pits across the site. The final section discusses the area of Block F across the lower terrace. This incorporated a series of targeted trenching, the excavation of a crane base, a series of bore holes and finally a programme of ground reduction monitoring.



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Illus 44

Plan of site showing excavation areas and test pit locations



Illus 45

Plan of Primary features recorded in Block A



Illus 47

Detail of the well cap stones from the E

beam may have been original but the steel beam was clearly a later addition. The cap stones had been incorporated into a later phase floor surface [235] that had clearly re-used some of the stones that originally surrounded the well (*Illus 47*). The central cap stone included a C-I ring that would have been used to open the well. Whether this capstone was original is doubtful, although it does suggest the well may have still been in use once the buildings were constructed in the 1850s.

The next phase of activity was represented by a number of associated features linked to buildings first depicted on the 1852 Ordnance Survey map (*Illus 4*). These buildings originally formed a continuation of the extant tenement building (Building A) and had subsequently been demolished piecemeal between the 1870s and the 1940s. The main features identified comprised foundations of a N-S aligned stone wall [225] keyed into a short span of an E-W aligned wall to the S end forming a 'T' shape (*Illus 48*). The N end of this wall had been truncated by a number of 20th century services making it difficult to interpret its relationship with a second wall [221] immediately to the N. Wall [221] was on the same alignment as wall [225] and continued into the N extent of the excavation area. The E extent of the excavation area revealed the remains of a further N-S aligned



Illus 48

View of wall [225] from the N



Illus 49

View of wall [221] from the W

wall [265] although this was in a poor condition and only the W face was exposed. These three walls were interpreted as being part of the same construction phase.

Wall [225] was constructed of rubble stone with yellow lime mortar and stood to a maximum height of 0.7m (52.4m OD) above a layer of mottled red/grey clay. An area of brick work had been inserted approximately 2m from the S end of this wall which probably represented the location of a fireplace. Wall [221] to the N was only partially exposed but it had also been truncated by modern services. The wall actually comprised two abutting walls (*Illus 49*). The S end was formed of a short E-W aligned wall constructed of stone and brick. The more substantial N-S aligned rubble stone wall was bonded with lime mortar and stood to a maximum height of 0.9m (52.5m OD), the base of which was cut into the bedrock. It was thought that the E-W aligned section of this wall was probably a later modification and that the main N-S aligned length of wall was contemporary with wall [225], the gap between them representing the location of a door.

A floor surface [235] at approximately 52m OD contemporary with and abutting the W side of stone walls [225] and [221] was recorded along the W extent of the excavation area (*Illus 50*). At the S end floor [235] comprised 2.5m of roughly set stone and brick fragments. To the N of this the floor continued as a series of large flagstones followed by a short length of brick construction. A further length of mixed irregular stone slabs and occasional flagstones formed the floor area overlying well [250] (*Illus 47*). At the N end, abutting and contemporary with wall [221], floor [235]



Illus 50

General view of wall [225] and floor [235] from the S



Illus 51

Detail of the floor [235] at the N end of Block A



Illus 52

View of the brick flooring to the N side of Block A from the W

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alternated between a further length of brick and a final stretch of poorly sorted stone slabs running into the N extent of the excavation area (*Illus 51*). The brick floor [235] at this point had been truncated by the same services that truncated wall [225]. It was unclear why the material of the floor varied from areas of irregular stone to set brick and back to stone but it probably related to the buildings original use. The curved edges to some of the stone slabs in this area seem to suggest they had originally been used to surround the well head. Besides the area above the well the floor was set over the bedrock within a bed of sand and lime mortar.

The floor to the E of wall [225] also comprised of a mixture of construction materials (*Illus 52*). To the S end the floor surface had been removed, possibly suggesting it had been timber, leaving an area of natural clay (51.2m OD). To the N of this was a lime mortar covered brick floor [240] (51.8m OD) incorporating two large brick sumps [243] (0.4m deep) and [245] (0.8m deep) along with a small circular brick base [272] (*Illus 53*). A more regular pattern of brickwork floor [241] was recorded at the N end of this area (52m OD) with the larger of the two sumps [243] continuing into the E edge of this floor, suggesting that both areas of flooring were contemporary. All three of the features built into the floors were bounded by stone wall [265] at the E extent of the excavation area. These features clearly represent the remains of some form of industrial activity with both the sump features being subsequently filled with large stone blocks and then in-filled with rubble and mortar.



Illus 53

Detail of brick floor [240] and sump 245 from the W



Illus 54

Detail of drain [242] from the S



Illus 55

View of cobble floors [218], [258], [262], [263] and [264] from the W



Illus 56

View of cobble floor [218] from the N

To the S end of this area further industrial activity was represented by a brick-lined drain that cut through the E-W aligned part of wall [225] (*Illus 54*). The feature had a stone and slate base with poorly constructed brick walls bonded with lime mortar. It was not clear if the drain ended at the junction of the wall as the area to the S of the wall was badly truncated by modern floor surfaces. The N end of the drain continued into the E edge of the excavation area.

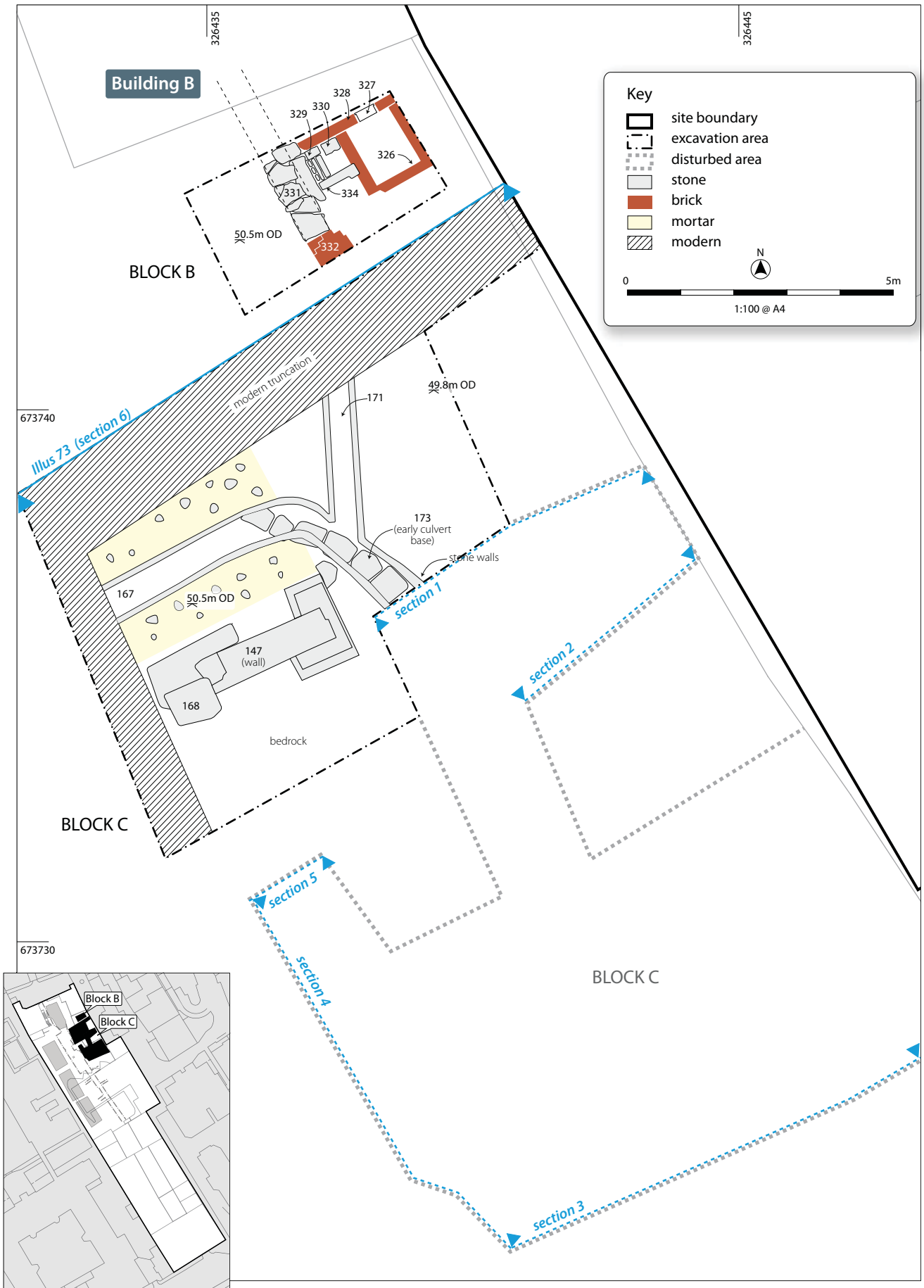
Most of the features of this phase of activity had subsequently been covered by a layer of compacted stone, lime mortar and brick demolition material [231] that formed a leveling layer below cobble stone floors [218], [258], [262], [263] and [264] and associated timber beams [259] (*Illus 55*). These cobbles formed a slightly uneven surface (approximately 52.5m OD) that was associated with the early brewery phase of the site. It was thought that the timber beams set into the cobbles may have been used as a barrel run. The top of the earlier phase wall [265] along the E extent of the excavation area seemed to have been incorporated into the floor being capped with a line of stone slabs set within the cobbles. The cobble floors had been badly truncated by later services and modern disturbance. This was particularly evident to the S of cobbles [218] (*Illus 56*) that had been truncated by a later concrete floor surface [227]. Most of these cobbles were covered in a thin layer of compacted silt and ash [219] and [266] probably representing a trample layer formed during their use. This was subsequently covered by modern made ground below a tarmac surface.

7.2.3 Block B (*Illus 57*)

The monitoring of ground reduction works in the area immediately S of Building B led to the excavation of further features possibly associated with industrial activity. These features were up to 1.2m below the modern floor slab (52m OD) and seemed to represent more than one phase of activity, although the area was too small and many of the features were only partially exposed to make any definitive conclusions as to the sequence of events. All the main features recorded were either sat above or cut into the bedrock. The area measured approximately 5.5m x 2m to a maximum depth of 1.4m.

One of the main and potentially earliest features in this area was an E-W aligned wall [328] constructed of hand-made bricks two courses thick bonded with lime mortar (*Illus 58*). The wall stood to a maximum height of 0.5m (51m OD) and incorporated a cast-iron door [327] (*Illus 59*). The door had a flanged cast-iron surround with no hinges indicating that the door would have had to have been lifted out. A rounded knob on the S side of the door indicated that it could only have been opened from the S side. Abutting the S face of wall [328] were two ends to a further (possibly secondary) brick wall [326] that, along with part of wall [328], formed a small rectangular structure 1.2m x 0.8m enclosing the cast-iron door.

Also abutting the S side of wall [328] were the remains of a short stone wall [329] that along with second short wall [334] to the S formed the two sides of an E-W aligned culvert (approximately 51m OD). Both these walls were constructed of roughly squared



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Illus 57

Plan of primary features recorded in Block B and Block C1



Illus 58

View of walls [326], [329] & [334] from the N



Illus 59

Detail of cast-iron door [328] from the S



Illus 60

View of culvert [331] from the N

brick-sized stone bonded with lime mortar. The E end of the culvert S wall [334] was constructed over the top of wall [326] suggesting it was probably a later phase than the brick wall structure to the E. Only the W end of this short length of culvert was capped and this led into the E side of a more substantial N–S aligned culvert [331] that continued under Building B to the N (*Illus 60*). The main culvert was cut into the bedrock (50.5m OD) and was lined with roughly cut rubble stone bonded with lime mortar and capped with large irregular shaped flagstones. In the N-facing section of Block B the remains of a brick platform [332] sat above the capstones of this flue. This was constructed of hand-made brick, three courses thick bonded with lime mortar. This platform may continue as [166] in Block C to the S.

All these features were covered in a lime mortar-rich demolition material overlaid by a layer of sand [323] that formed the bedding to a layer of rounded cobbles [320] (approximately 52m OD) (*Illus 61*). This layer had been truncated by later disturbance in places but was clearly associated with the early brewery phase of the site. The cobbles were covered in a thin layer of compacted cinder [319] as was seen in other areas of the site. This in turn was covered by a concrete floor slab that formed the floor to Building C.

The stratigraphy of the walls and culverts recorded in this area suggest that the earliest feature was possibly wall [328] followed by wall [326] after which culvert walls [334] and [329] were constructed, although their relationship to culvert [331] was unclear and poorly understood. The poor quality of the construction of the short E–W aligned culvert suggested that this may have been a later alteration/modification to the main culvert. These phases may represent alterations and modifications rather than significant phases of activity. Both the main N–S aligned culvert and the brick platform [332] were probably a continuation of the culvert and platform ([173 and [166]) recorded further to the S in Block C (*Illus 57 & 64*).

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7.2.4 Block C (*Illus 57, 64*)

Block C was located on the upper terrace of the development site along the eastern boundary wall separating the site from Huntley House Museum gardens and Bakehouse Close. A targeted excavation was carried out over the northern third of this area covering the footprint of Buildings C and D. The southern two thirds of the block, located below the footprint of the laboratory and the office block of Building E, included a programme of monitoring of ground reductions works and test pitting.

The northern part of Block C enclosed an area approximately 18m x 10m aligned E–W along the E boundary wall of the site. A full archaeological excavation was carried out over the N half of this available area. In the southern half of this area 6 sections (Sections 1–6) were exposed and recorded (*Illus 57*). It was clear from these sections that with the exception of the SE corner, the bedrock was only between 0.5m and 1m below the modern ground surface (approximately 50m OD). At the SW corner of the area the depth of the bedrock dropped significantly. This corresponded with results from the excavations in Block D and the monitoring of the service trench where the bedrock began to deepen approximately 25m from the N end of the development site.



Illus 61

General view of cobble surface [320]



Illus 62

Detail of the base slabs of culvert [173] from the S

In Section 3 (not illustrated) to the S end of the excavation area in Block C the remains of a culvert [127] were recorded that cut through a number of layers including a shallow layer of garden soil [130] (*Illus 72*). To the N a small brick lined drain [112] was recorded in the E end of Sections 1 and 2 (*Illus 73*) just above the bedrock.

The bedrock was also slightly lower across the N side of the area and in particular below the footprint of Building C where a significant number of archaeological features were recorded. The targeted excavations carried out across this area measured approximately 10m x 7m, the N extent being close to both the S wall of Building B and the monitored ground reduction works in Block B. The modern ground level at this point was 52.3m OD and the bedrock was recorded at a maximum depth of 1.8m below this level. The excavations revealed a number of phases of activity in this area. The earliest phase comprised a line of flagstones forming the base to a NW-SE aligned culvert [173] (*Illus 62*) cut into the bedrock (50.3m OD). Its alignment suggests it may be associated with culvert [112] recorded in Section 1 at the S end of the area. The culvert base [173] had subsequently been truncated by a later complex of features that included two brick and stone-lined culverts [167] and [171] that also sat within the bedrock (*Illus 63*).

Culvert [171] was aligned NE-SW and had been truncated by a modern cut at its NE end, although it was recorded in Section 6 (*Illus 74*) further to the N and was probably a continuation of the

**Illus 63**

View of culverts [167] and [171] from the E

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culvert recorded in Block B [331] (*Illus 64*). Bedrock formed the base of the culvert with the side walls constructed of brick-sized cut stone bonded with lime mortar. At the SW end it linked to a second E–W aligned culvert [167] that turned to the SE at its E end. The culvert was 0.54m wide and 0.52m deep (50m OD) constructed of the same materials as culvert [171] and had been truncated by modern services at both its W and SE ends. The western half of this culvert was not covered but included a 1.1m wide rubble stone and lime mortar surface to each side (*Illus 65*). This surface was sat over the bedrock and may have represented the base for a pump or some form of machinery. The eastern half of this culvert [167] along with part of culvert [171] was covered by a large brick platform [164] and brick floor [159] (*Illus 64 & 66*). It was presumed that the culverts and platform were contemporary as the length of culvert [167] below this platform included a stone cap that seemed to be bonded into the rough brickwork base of the platform and floor. The brick platform also respected the eastern edge of the wide stone surface [167] to the W half of the culvert. The culverts had subsequently been filled with lime mortar-rich rubble [163] (demolition material) that also covered much of the area above the culverts. The only area not filled with rubble was found below brick platform [164]. Here a dark grey fill of stone and silt [170] was recorded along with a large quantity of broken glass bottle fragments.

Brick platform [164] was one of two such structures (platforms [164] and [166]) that formed part of a complex suite of features

that also included three brick walls [158], [160] and [114] plus a brick floor [159] (*Illus 66*). The two large N–S aligned sub-rectangular platforms [164] & [166] (51.1m OD) mirrored each other in shape and bounded brick floor [159] (50.8m OD). Both these platforms had been truncated at the N end but were also recorded in Section 6 (*Illus 74*) further to the N suggesting they had originally been much longer. Platform [166] also probably represents a continuation of the brick platform [332] recorded in Block B (*Illus 64*). Both these platforms were constructed of unfrogged brick bonded with lime mortar. The S end of [164] was keyed into brick wall [158] that continued to the S although this had been truncated by modern disturbance (*Illus 67*). The wall also formed part of the boundary to brick floor [159] and seemed to have been modified into a drainage channel at its southern end (*Illus 68*). To the S end of platform [166] two further walls [114] and [160] were recorded. Wall [114] was keyed into the S end of the platform and was truncated to the S by modern disturbance. Wall [160] recorded further to the W abutted the S end of platform [166] and formed an L-shaped structure that bounded brick floor [159]. The fact that it was not keyed into the platform suggests it may have been a later modification rather than part of a different construction as it continues to respect the limit of brick floor [159], which is clearly part of the same feature as the platform. Once wall [160] turned to the W it continued up to and over wall [158] forming part of the modified drain (*Illus 68*). The brick floor [159] bounded by the platforms and walls comprised a single course of unfrogged brick on a rubble



Illus 64

Plan of the brick platforms [164] & [166]



Illus 65

Detail of the stone sides to culvert [167] from the W

brick base bonded with lime mortar. The SW corner of this floor incorporated a small square stone with a central small circular hole. It was unclear if this hole was an earlier drainage channel that had become blocked necessitating the modification of wall [158] into a secondary drain or if it was a slot to support a pipe or piece of machinery. The brick floor and drainage channel implied that what the brick platforms supported needed draining or produced waste that had to be drained.

In Section 6 two truncated N-S aligned stone walls [191] and [192] and an associated brick floor [190] seemed to form a 1m wide channel immediately W of the brick platforms. This channel had been partially filled with laminated fine grey silt [195] (*Illus 76*). The W wall stood to a maximum height of 0.75m but the E wall had been truncated by a modern cut with only the lower 0.4m remaining. A large stone [185] was bonded into the base of the E wall [182] and seemed to link this channel/lade to stone platform [164] to the E.

A further feature that may be part of the same phase was a length of stone wall [147] and associated stone bases [165] and [168] (*Illus 69*) recorded to the SW of the platforms (51.3m OD). The wall was aligned E-W immediately S of the stone surface at the lip of flue [167]. It was 2.6m long and 0.65m wide and had been truncated at the W end by modern services. The wall was fairly substantial being constructed of large squared masonry bonded



Illus 66

View of the brick platforms [164] and [166] from the N



Illus 67

Detail of brick platform [164] and wall [158] from the S



Illus 68

Detail of the drainage hole in brick floor [159]



Illus 69

General view of stone wall [147] from the N

with lime mortar although some bricks were recorded in the make up at the E end. The wall seemed to be supported on two large stone bases; [165] to the E and [168] to the W. Due to heavy truncation at the W end it was not clear if this base represented the end of the wall or if it had originally continued. Stone base [165] at the E end seemed to be bonded into the edge of the stone surface at the lip of flue [167] and also respected the line of brick wall [158] to the E suggesting this may represent the E end of this wall. Unfortunately much of the area to the E of wall [158] had been disturbed.

Two more stone walls [188] and [198] were recorded at the W end of Section 6. Both these walls stood over the bedrock with stone wall [188] standing to a maximum height of 0.88m and constructed of rubble stone bonded with lime mortar. This had been capped with a few courses of brickwork. At the W extent of the section the final N-S aligned rubble stone wall [198] stood 0.9m high. This wall was on the same alignment as wall [265] recorded in Block A to the N and the two may be part of the same construction. Between these two walls a brick wall and floor [199] had been inserted. The wall abutted the E face of stone wall [198] and the floor abutted the W face of stone wall [188] with the whole feature seeming to form a channel 0.68m wide that possibly explains the addition of brick work to the top of wall [188]. At the base of this channel a gravel rich silt [200] was recorded although this along with the brick wall had been truncated by a number of modern services (*Illus 77*). The stone walls probably relate to an early pre-brewery phase of the site with the brick floor and wall forming a later phase, although probably still pre-dating the construction of the brewery.

All these early features either sat above the bedrock or had been cut into the bedrock. The culverts along with much of the excavation area were subsequently covered in a layer demolition material [163] along with further layers of made ground. Several later phase features were recorded above this made ground including a section of brick and cement surface [154] (51.4m OD), a brick wall [146], a cobble surface [162] (*Illus 70*) and two areas of roughly constructed brick surfaces [152] and [149], although the final two features were possibly part of a later phase.



Illus 70

Detail of cobble surface [162]

The brick surface [154] was incorporated into the remains of a N-S aligned brick wall (part of wall [146]) and included concave brick and cement surface to the W side bounded by a chamfered brick wall with a rounded top lip to the W side (*Illus 71*). The whole feature measured 1m² although it had been truncated on the N and S sides. Both walls were bonded with cement and the whole structure was built over a poorly constructed rubble brick base. It was not clear as to the function of this feature although immediately W of the chamfered wall was a layer of ash [153] that may represent residue from this feature. The E wall of this feature was also recorded as wall [146] further to the S. This wall was constructed over brick floor [159] and abutted the N face of wall [160]. Abutting the E side of feature [154] was a cobble surface [162] of poorly sorted sub-angular stones forming a fairly uneven surface. These cobbles continued to the E extent of the excavation area and had been truncated to the N and S by modern services. Built into the E end of the cobbles was a large square stone with a centrally located 0.16m² hole. This may have been the support for a timber post or roof support.

To the W of base [154] and above the ash-rich deposit [153] were two small areas of brick surface [149] and [152] separated by two cast-iron pipes. They comprised a mixture of broken and whole re-used bricks that had been glazed on one face. They had no bonding and were very loosely packed suggesting this was more likely to be a leveling layer than a floor layer. Above this was a spread of mixed rubble forming a layer of made ground below the concrete floor slab of the demolished building (Building C).

A number of these later phase features were also recorded in Section 6 (*Illus 74*) including the continuation of brick wall [146]/[154]. This seemed to support a concrete floor [174] and leveling layer [175] and probably relating the features to an early brewery phase. All the layers above this seemed to be related to the more recent brewery buildings with various leveling layers and modern service pipes cutting through the area.

Although it was difficult to identify the functions of many of the earlier features in this section it was clear that they related to industrial processes associated with a pre-brewery phase of the site and were probably linked to the buildings first depicted on the 1852 Ordnance Survey map (*Illus 4*).

Much of the southern 2/3rds of Block C had been heavily disturbed by the construction of the laboratory in the 1980s. Although no controlled excavations were undertaken in this area the monitoring of ground reduction works and occasional test pits and foundation trenches (*Illus 78*) indicated that only limited archaeology was present. Monitoring of the foundation trenches indicated that garden soils had survived in discreet pockets across this area with similar results recorded to those found in Block D to the W. The garden soils were up to 3m below the ground surface (approximately 48.5m OD) and comprised two or three distinct layers of soil sat above the bedrock (*Illus 79*). Due to health and safety issues relating to the depths of the test pits and trenches these could not be entered limiting the accuracy of the recording of the various layers. It was clear that the 1m deep layer of made ground above the garden soils included a large quantity of red clay pottery fragments. This pottery type



Illus 71

Detail of brick base [154] from the N



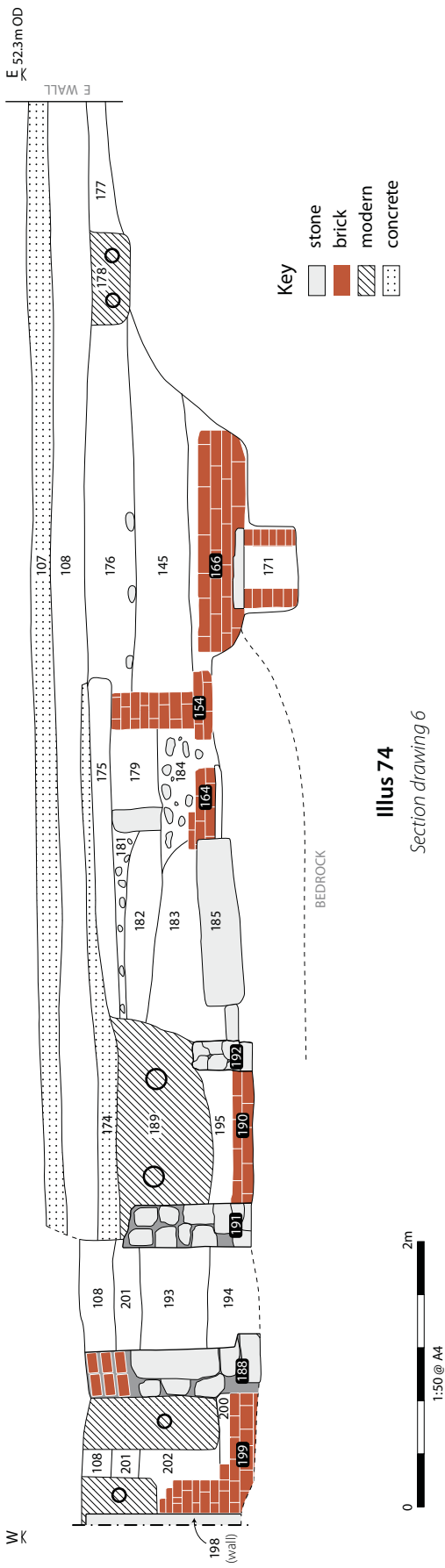
Illus 72

View of culvert [127] in Section 3



Illus 73

View of flue/drain [112] in Section 2



Illus 75
Detail of section 6

Illus 76
Detail of walls [191] and [192] in section 6

Illus 77
Detail of wall [199] in Section 6



was found across much of the site and may represent the waste material from the sugar refining industry. The layers above this were mainly modern leveling layers associated with the later brewery phase.

The office building (Building E) attached to the E side of the modern laboratory was thought to date to 1902/3 with the map evidence depicting earlier buildings on this site prior to this. The monitoring works in this area included the excavation of a number of test pits (TP33–TP38) and subsequent monitoring of the ground reduction works. The test pits were excavated to a maximum depth of 2m below the floor slab (approximately 49.3m OD). These revealed a mixture of garden soils, remains of a brick structure, layers of made ground and areas of demolition material. The subsequent ground reduction works revealed a layer of garden soil [142] 0.4m deep and 0.6m below the modern surface (approximately 50m OD) across the central part of this area. A number of animal bones along with a small fragment of glazed pottery were recovered from this layer. Sat above this garden soil was a brick and stone wall [186] (*Illus 80*) bonded with lime mortar. The wall was aligned E–W and was 0.4m wide and 0.7m tall. It was faced with rubble stone to the N and brick to the S and included a chamfered edge on the N side. The bricks were very discoloured and brittle suggesting they had been heat affected. To the S side of this wall a large quantity of stone and brick rubble [187] was recorded. This probably represented the demolished remains of this wall as both ends had been truncated by the construction of the office building. The wall is probably associated with a pre-brewery phase of the site although its function was unknown.

To the south end of the area below the office building the remains of a brick surface and associated plinth (initially revealed in TP35 & TP38) were recorded 0.8m below the modern floor surface (50.5m OD) and above the disturbed garden soil. This feature was not fully exposed and had been truncated in places but seemed to form a large rectangular E–W aligned structure 1.25m wide and up to 1.2m high constructed of brick bonded with a sandy lime mortar. Some of the bricks were stamped with 'Whitehill' and 'Newbattle' suggesting a mid to late 19th century date. This feature probably represented a support for machinery possibly associated with the original use of the office building but more likely to belong to an earlier phase building and may be associated with wall [186].

7.2.5 Block D (*Illus 81*)

The archaeological works undertaken in Block D comprised open area excavations across the footprints of three new buildings (Blocks D1, D2 & D3). Each of the three areas was machine excavated using a tracked excavator down to the first archaeological horizon. Sondages were hand excavated through many of the fills and layers in order to better understand the stratigraphy. A tracked excavator was then used to remove the recorded features down to the next archaeologically significant layer. This was repeated until the natural geology was reached. In the case of area D1 the depth of the bedrock was such that the area had to be stepped leading to a smaller area being excavated at its base.



Illus 78

View of foundation trench in Block C2



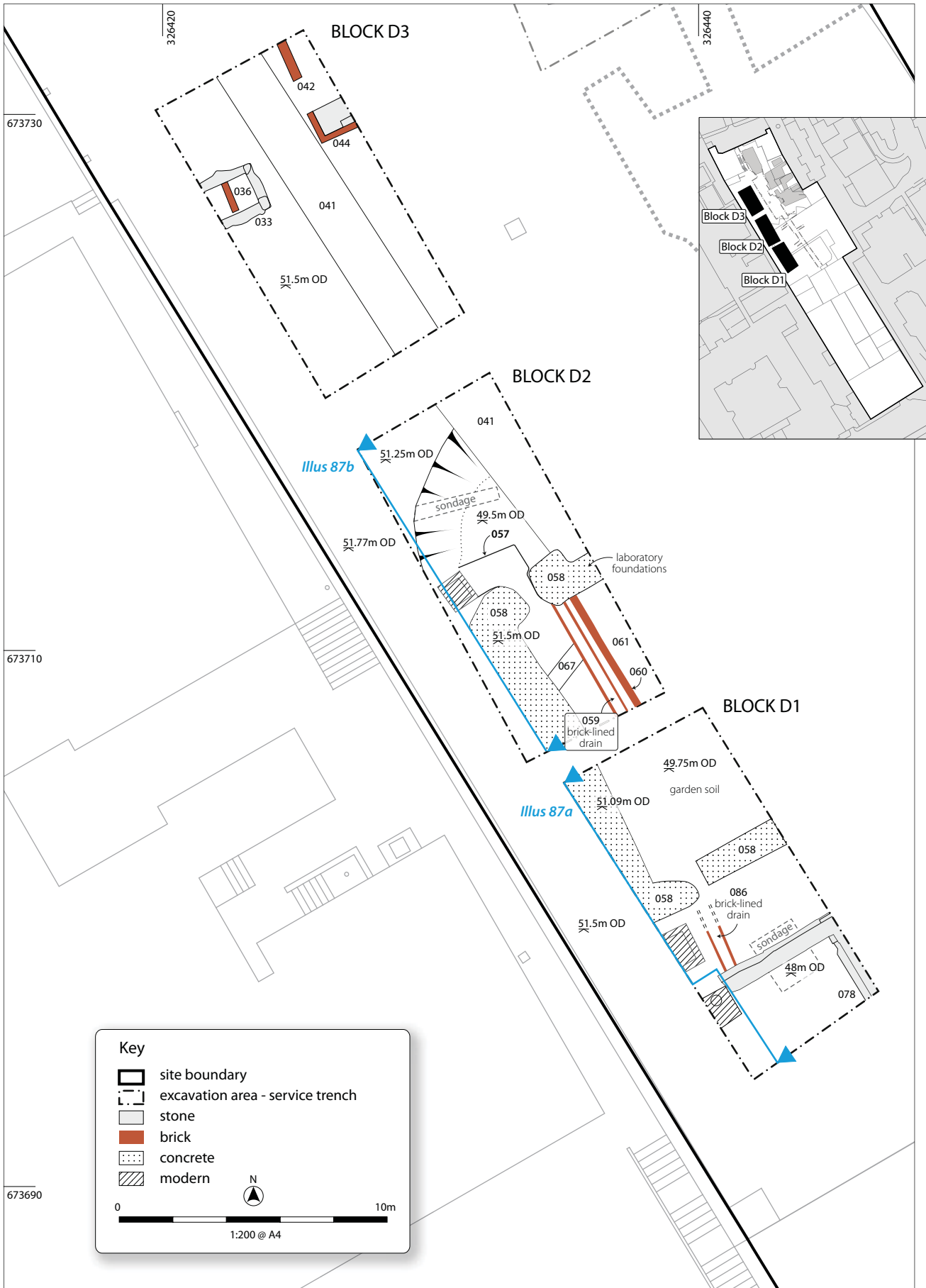
Illus 79

Detail of S facing section of Test pit 31



Illus 80

Detail of wall [186] in Block C3 from the NW



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Illus 81
Plan of Block D



Illus 82

View of sondage and section in Block D1



Illus 83

E facing section within Block D1

The three areas of Block D were aligned N–S along the W boundary wall of the upper terrace, immediately S of Building A and to the N of Building F. Each of the three areas was approximately 13m x 7m with D1 to the S and D3 to the N. Prior to the redevelopment of the site a modern laboratory building (Building E) stood over half of the footprint of both D1 and D2. The rest of the areas included a mixture of tarmac and cobble covered surfaces. The ground level of this block and the entire northern terrace sloped gradually from N to S. The ground level at D3 to the N end was 52.32m OD sloping down to 51.35m OD at D1 to the S.

Block D1

Block D1 was located close to the remaining upstanding kiln building (Building F) that formed part of the original brewery complex. The bedrock at the S end of this area was approximately 3.5m below the modern surface (48m OD). Due to the depth of the excavations in this area the sides had to be stepped. Therefore it was only possible to excavate a central sondage to the bedrock close to the southern end. This sondage revealed a number of layers of garden soils [106], [103], [102] and [100] (Illus 82). The basal layer [106] recorded above the bedrock at 48.15m OD comprised greenish brown clayey silt approximately 0.15m thick with inclusions of frequent charcoal flecks and occasional oyster shell and animal bone fragments. Although the interfaces between the garden soil layers above this [103], [102], and [100] were very diffuse they varied enough in colour and inclusion content to define them. Occasional pottery fragments were recovered from layers [102] and [100]. The upper layer of garden soil [100] was recorded at 1.9m below the modern ground surface. The upper two garden soil layers had been truncated by a sharply sloping cut filled with a layer of re-deposited laminated lumpy clay [099] at 50.5m OD that had clearly been tipped into the cut in order to build up the ground level at the S end of the area (Illus 83).

Above clay layer [099] several more bands of tipped material [105], [104], [092], [098] and [080] were recorded. These layers clearly represented a single phase of ground leveling forming a ground surface for the construction of the brewery buildings located to the N of Building F as depicted on the 1877 Ordnance Survey map. Cut into the re-deposited material [091] above these tipped layers was a short length of a N–S aligned brick-lined drain [086] (at approximately 50.5m OD) (Illus 84). This had been truncated to the N and S by later features. The drain was similar to a further length of drain [059] recorded in area D2 and was also on the same alignment suggesting it had been part of the same feature. The drain ran under the remains of an E–W aligned stone wall [078] (Illus 85) at 51m OD located close to the S end of Block D1 and cut into the same layer of made ground [091] as the drain. The W end of this wall continued into the W extent of the excavation area. At the E end the wall turned to the S forming an L-shaped structure, the corner being just visible in the eastern extent of the trench. This wall clearly represented the foundations to a demolished brewery building. A layer of demolition material [081] was bounded by the wall below which was a dark brown sandy silt layer [085] approximately 1.2m below the modern ground level (50.15m OD). This sandy silt seemed to form the foundation level to the floor for this building. It is possible that the floor may originally have been of timber construction. Further



Illus 84

Detail of brick-lined drain [086] in Block D1 from the E



Illus 85

Detail of stone wall [078] from the SW



Illus 86

Sondage through the garden soils in Block D2

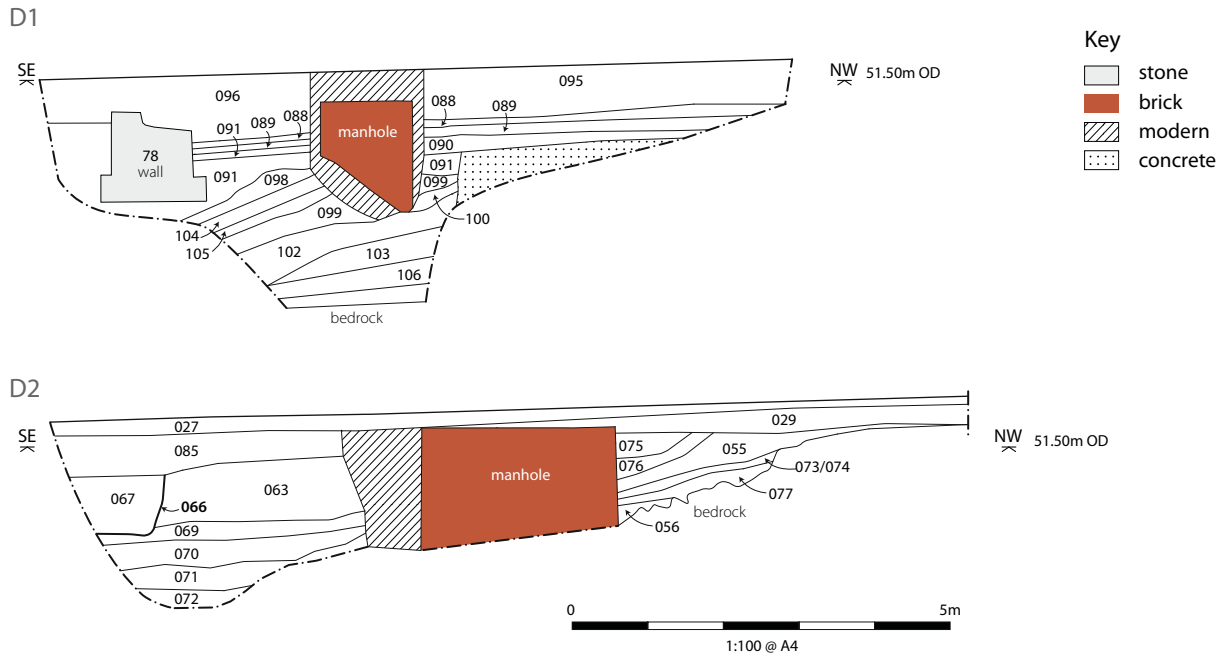
layers of made ground were recorded above these features many of which had been cut by the modern services, manholes and pipes. Further concrete foundations of the laboratory building were also recorded across the middle and to the N end of this area. The concrete foundations were substantial and deep truncating much of the remaining garden soils.

Block D2

The excavations in D2 revealed that the bedrock cut away steeply to the SE within the northern half of this area. The bedrock in the NW corner was only 0.6m below the mixed tarmac and modern cobble surface (51.1m OD). As the bedrock sloped to the SE several layers of garden soil were recorded. A sondage through these deposits revealed two definable layers of garden soil (*Illus 86*). The basal deposit [056] was formed of orangey brown silt that produced animal bone fragments and glazed pottery along with frequent charcoal fleck inclusions. This layer was approximately 0.4m deep (50.25m OD) below layer [055]. This upper layer comprised greenish brown sandy clay 0.7m deep (50.95m OD) that contained frequent oyster shell and animal bone fragments.

Further excavation of area D2 provided two further opportunities to record the multiple layers of garden soils along the E facing section (*Illus 87*). The section close to the S end of Area D2 recorded the bedrock at 2.4m below the surface (49.5m OD) with several layers of garden soils above (*Illus 88*). These included a basal layer [072] comprising material similar to deposit [056] recorded in the sondage. A number of pottery fragments were recovered from this primary garden soil. Above this were further garden soil layers [071], [070], [069] and [063]. These were generally demarcated by subtle changes in colour or frequency of inclusions. The section to the N side of the area (*Illus 89*) recorded layer [056] above the bedrock at 1.7m below the surface. Above this were further garden soil layers [077], [073], [055], [076] and [075]. These were all truncated by a modern manhole that cut all deposits through to the bedrock. Again these garden soil layers were demarcated by subtle changes in colour and inclusion frequency that may represent separate periods of manuring and constant re-use of the land.

Two further features recorded in the southern half of Block D2 included a N-S aligned brick wall [060] bonded with lime mortar and a brick-lined drainage channel [059] (*Illus 90*). The top of wall [060] was approximately 0.5m below the modern surface (51.60m OD) and probably represented the remains of one of the demolished brewery buildings. The area immediately to the E of this wall had been truncated by a N-S aligned service trench that was also recorded in Block D3. Immediately W of the wall was a brick-lined drainage channel [059] running parallel with and at the same level as the wall. These two features were thought to be contemporary, the drainage channel also being recorded further to the S in Block D1. To the N end of D2 a layer of rounded stone cobbles [051] were recorded immediately below the modern ground surface. These probably formed an early brewery phase ground surface. The cobbles had subsequently been truncated by a N-S aligned service cut and the later concrete foundations for the modern laboratory (Building E). The concrete foundations had also truncated a large area of the garden soils across the S half of Area D2.



Illus 87
E facing sections of Blocks D1 and D2



Illus 89 ▶
Detail of the E facing section to the N side of Block D2



◀ **Illus 88**
Detail of the E facing section to the S side of Block D2



◀ **Illus 90**
View of drain [059] and wall [060] from the S



Illus 91

View showing the bedrock in Block D3



Illus 92

Detail of feature [033] from the S

Block D3

The excavation of Block D3 to the N end of the site revealed the shallowest stratigraphy of the three areas with bedrock revealed between 0.5m and 0.8m below the tarmac surface (max. 51.5m OD) (Illus 91). Along the western edge of the area the remains of a roughly constructed square structure [033] were recorded (Illus 92). The brick and stone walls of this structure were bonded with a pale yellow course lime mortar forming a feature 1.85m². The external face of the wall was flush with the top of the bedrock while the internal depth was 0.4m onto a mortar rich layer covering the bedrock. Although the walls were mainly constructed of brick the upper layer included areas of rubble stone. Two large square flat stones pads were recorded on the NE and SE corners and may have represented footings. A single width brick wall [036] aligned N-S ran through the middle of this structure. This divided the feature into two small pits. A number of 19th century finds were recovered from the layer of dark silty loam [038] recorded below the demolition fill [037] within this feature. The 1852 Ordnance Survey map depicts a 'weighing machine' in this location suggesting this structure could be the remains of this feature, although little evidence of any weighing apparatus was found.

The remains of a N-S aligned brick wall [042] standing to a maximum height of 0.5m (52m OD) and bonded with a course yellow lime mortar (Illus 93) was also recorded in Area D3. The 1.8m long wall continued into the N extent of the excavation area but was truncated at the S end, although a yellow mortar layer [049] at the base of the wall suggested that it had originally turned to the E at this point, forming the corner of a demolished

50



Illus 93

Detail of brick wall [042] from the SW



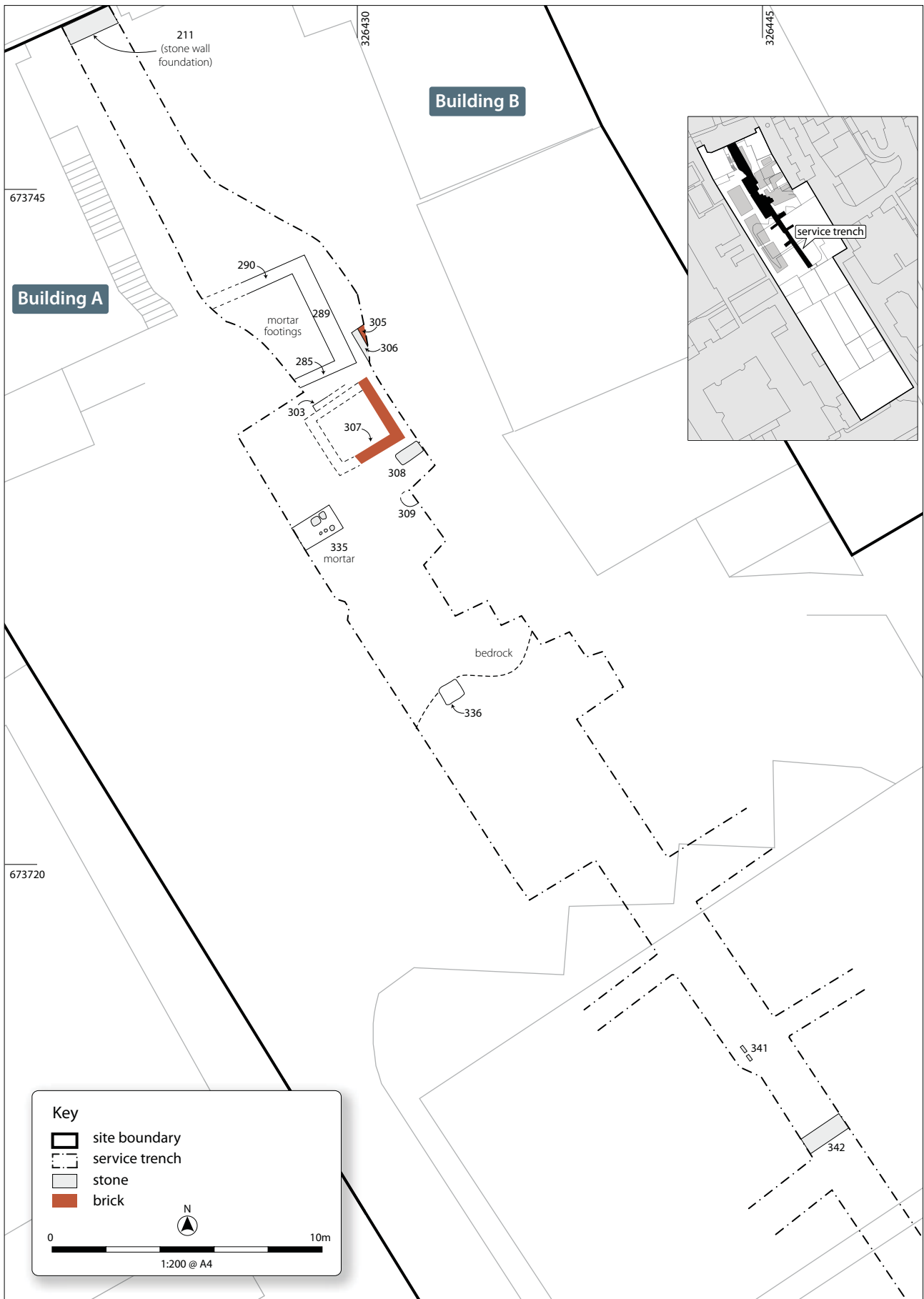
Illus 94

View of the mortar layer to the N of wall [042] from the W



Illus 95

Detail of wall [044] from the N



Illus 96

Plan of Service trench



52

Illus 97

Working shot of the service trench excavations

structure (*Illus 94*). Immediately S of this wall were the remains of a further brick structure bonded with lime mortar. This was an L-shaped wall [044] (*Illus 95*) standing to a maximum height of 0.45m forming a SW corner to a building. The N end of this wall had been truncated although the remains bounded a stone flag floor. Over the floor an internal N-S aligned brick wall abutted the N face of the main wall forming a compartment within the feature. Although the main N-S aligned section of wall [044] was on the same alignment as wall [042] to the N the walls were of slightly different thicknesses and composition. This suggests that these two features represented different phases of activity but due to the truncation by modern services it was unclear which feature was constructed first.

A 2m wide service cut [041] aligned N-S ran through the centre of Area D3 cutting the bedrock (*Illus 81*). Although this was not excavated it was thought to be of late 19th century origin and a continuation of a service cut that had been recorded at over 3m deep to the N of Building A. This cut also continued to the S through Area D2. A small number of more modern service pipes and manholes were also recorded below the tarmac surface in D3.

7.3 Results of Archaeological Monitoring during groundworks

7.3.1 Service Trench (*Illus 96*)

The excavation of a substantial service trench along the length of the upper terrace of the site was archaeologically monitored with limited targeted excavations in the northern extent. The trench was excavated to a maximum depth of 2m below the modern ground level to approximately 50.5m OD and included a number of additional shallow trenches leading to each of the new buildings.

The excavation of a manhole to the N of Building A revealed that this area had been severely disturbed by numerous modern services. As the service trench entered the N end of the site it encountered the remains of an E-W aligned rubble stone wall [211] that cut across the entrance. This wall represented the remains of the building first depicted on the 1852 OS map that had formed part of a row of buildings to the E of the extant tenement (Building A). Further remains of this building were recorded in the excavation of Block A.

**Illus 98**

Detail of the Section through the service trench close to the N end

**Illus 99**

Detail of the wall foundations [308] from the N

The service trench continued to the S of Block A, forming a 2m wide trench along the W edge of Block C (*Illus 97*). As with the results of the excavations in Blocks C and D the bedrock at the N end of this trench was close to the surface being no more than 0.5m below the tarmac. Further to the S layers of garden soil were encountered although much of this had been disturbed by recent ground works and the grubbing out of foundations associated with the modern laboratory building. In discreet areas of the trench the stratigraphy comprised a 0.4m deep layer of garden soil [337] with frequent charcoal flecks and occasional oyster shell inclusions overlain by a 0.25m deposit of broken red pottery fragments in ash rich clayey silt [336]. Above this a layer of made ground and cobbles below the modern tarmac surface made up the sequence (*Illus 98*). Similar sequences of stratigraphy were found over significant areas of the site including across the lower terrace.

The slight remains of two stone walls [341] and [342] were recorded towards the S end of the service trench. These probably represented the remains of a building first depicted on Armstrong's 1773 map and then on subsequent maps up until the 1852 Ordnance Survey map (*Illus 4*). The remains of wall [341] were only recorded in section and were in

a poor condition. Wall [342] further to the S was more substantial but had been affected by the construction of the laboratory. Both these walls were sat in a shallow cut that truncated the garden soil below. It is possible that these two walls represent the remains of the sugar refinery. Unfortunately no floor surfaces or features that could securely link these walls to the refinery survived in this area.

Other features recorded in the service trench included the remains of a N-S aligned stone wall [306] just W of Block C. This was abutted to the E side by a wall [305] constructed of handmade bricks bonded with lime mortar. These two features probably represent the same walls recorded as [198] and [199] in Section 6 (*Illus 73*) of Block C. Very little of the actual walls survived but the mortar foundation on the bedrock was clearly evident marking its original location. The remains of a second rubble stone wall [308] were recorded further to the south (*Illus 99*). Only a 0.9m long section of this wall survived 0.6m below the modern ground level and standing 0.6m high above the bedrock.

Three sides of a more substantial structure [303/307] constructed of hand-made bricks bonded with a course cement mortar along with the remains of a brick floor were recorded between stone walls [306] and [308]. This seemed to form part of a large manhole 2m long that was initially thought to be associated with the culvert system recorded to the E although this was difficult to ascertain and it may be associated with the early brewery phase of the site instead. The top of the wall was 0.8m below the surface (Approximately 52m OD) and stood 0.5m high above the bedrock. The feature had been filled with demolition material. Just to the S of this feature a shallow layer of lime mortar [335] was recorded over the bedrock that may relate to an internal feature associated with the buildings constructed in the mid 1800s.

53

7.3.2 Test Pits (*Illus 43*)

A total of 38 test pits were monitored during the development of the site. Some of these were part of preliminary works undertaken in order to inform the developers of the depth of wall foundations and the make up of floor deposits and others were to identify the depth of the bedrock. A comprehensive list of these test pits can be found in Appendix 7.

Many of the test pits excavated recorded no significant archaeology or were too shallow to reveal the underlying deposits. A significant number of these only encountered layers of demolition material above the natural allowing for little chance to form a coherent sequence of events. Of the remaining test pits six revealed garden soil layers to varying depths dependant on there location (TP18, TP22, TP26, TP30-TP32) (*Illus 100*). In some cases the garden soil was represented by more than a single layer although the significant depth of some of the test pits negated closer inspection of these layers. This was particularly the case in TP22 in the lower terrace (41.7m OD) and TP32 in the upper terrace (48.5m OD) that were excavated to depths of over 3m. Small sherds of glazed pottery were recovered from the garden soil layers in three of these test pits (TP26, TP30 & TP31). Particularly across the lower terrace of the site the garden soils were found to be at a significant depth with the upper layers of garden soils being up to 3m below the ground surface (approximately 41.7m OD).



Illus 100

Section through TP30

major programme of work was the monitoring of the excavations of a large foundation trench for the insertion of a crane base. This work was located immediately S of the Brewhouse (Building H) and was carried out concurrently with the sinking of 7 bore holes at specific points along the length of the lower terrace in order to better understand the stratigraphic sequence of the area.

Trenches – TP22 & TP25

Prior to the excavations of the crane base foundations two small trenches were excavated below the footprint of the bottling plant (Building J) to investigate the survival of below floor level deposits in order to help form a strategy for further archaeological work. The initial trench (TP22) was 4m long and 2m wide. This revealed 3.6m of deposits above the bedrock (41.1m OD). A layer of orangey brown silty clay with moderate charcoal flecks, animal bone and oyster shell was recorded above the bedrock with a 1m deep layer of dark grey clayey silt above this. Again this had frequent charcoal flecks, oyster shell and stone inclusions. This was all covered with a 1.4m layer of dark grey silt with frequent unglazed red pottery fragments and topped with 0.6m of modern made ground. A similar sequence was recorded in the second trench (TP25). This trench was located against the S wall of Building H with garden soils overlain with a layer rich in the unglazed red pottery fragments although in this trench the bedrock was reached at 2.3m (42.4m OD).



Illus 101

View of the flue recorded in TP13



Illus 102

View of a section through the crane base excavations

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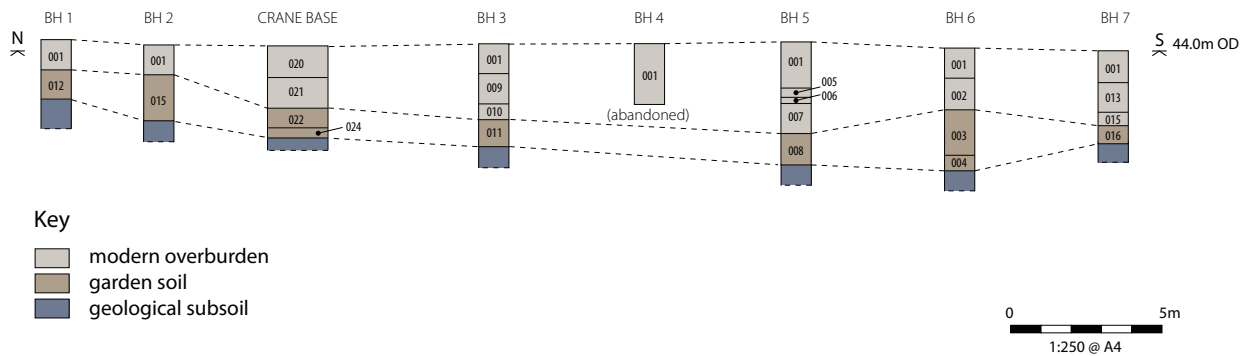
A number of these test pits also revealed layers of varying depths of unglazed red pottery rich clayey silts. These were found over both the upper and lower terraces (TP17, TP22, TP25, TP26 and TP29) of the site. On a number of occasions this layer was found above the gardens soils as in TP22 & TP26 (Approximately 43.8m OD). This sequence was also seen in areas of ground reduction such as across Blocks C2, C3 and the Service Trench across the upper terrace and Block F to the lower terrace.

The stone foundations to the demolished tenement buildings located at the S end of the site were recorded in two of the test pits (TP17 & TP18) indicating that these walls had cut through the pottery rich layers of clayey silt and underlying garden soils. A number of the test pits (TP1, TP2, TP13 & TP14) excavated to the N side of the brewhouse (Buildings H & I) and kiln (Building F) revealed remains of demolished stone walls associated with the original brewery phase along with features masked by the raised modern floor level. A brick-lined flue/drain associated with this phase was recorded in TP13 (*Illus 101*).

Further test pits and a series of trenches were excavated across the area of Building E (Block C) after it had been demolished. Many of these were foundation trenches for one of the new buildings. These recorded that much of the area had been heavily disturbed by the construction of the laboratory building in the 1980s although discreet pockets of garden soil survived.

7.3.3 Block F

A number of test pits, trenches, bore-holes and ground reduction works were carried out across the lower terrace of the site. One



Illus 103

Borehole and crane base profile

Crane base – TP23

The work comprised the excavation of an 8m² trench 3.7m to the bedrock (41m OD). Although the excavations had to be carried out in sections due to limited room a good stratigraphic sequence of layers was recorded (*Illus 102*). At the base of the trench a reddish brown clay [025] with occasional stone inclusions sat over the bedrock. Above this was a 0.2m thick layer of mid-grey clayey silt [024] with frequent charcoal fleck inclusions. A small fragment of glazed pottery was recovered from this layer. This was followed by a layer of mottled dark grey clayey silt, again with frequent charcoal fleck inclusions, above which was a slightly lighter clayey silt. Covering these garden soils was a 0.6m thick layer of re-deposited dark grey silt with frequent shards of unglazed red pottery typical of the material found across much of the site. The upper 0.75m of ground was re-deposited made ground to the modern tarmac surface (44.7m OD).

Boreholes (*Illus 44, 103*)

A total of 7 boreholes (S1–S7) were sunk along the line of Buildings J, L and M. A comprehensive list of the layers recorded can be found in Appendix 7. Boreholes S1 and S2 were located to the N of the crane base foundation trench. These both recorded bedrock at approximately 2.9m (41.8m OD) with several layers of garden soils identified below 1m of made ground. To the S of the crane base bore holes S3, S5 and S6 recorded increasingly deeper deposits of garden soils reaching over 4m below the modern surface (approximately 40.6m OD). By the final borehole S7 close to the S end of the site the bedrock was just over 3m below the surface (41.3m OD). Although the borehole samples were too small to clearly identify the changing garden soil layers the general make up was similar to that recorded in the crane foundation trench.

Ground reduction monitoring

The ground reduction works carried out across the lower terrace were predominantly below the footprint of Buildings J, L and M (Block F) and across the courtyard area to the S end of the site (Block G). The works carried out across the footprint of Block F required the ground to be reduced to varying heights dependent on design of the new development. The maximum depth of these ground reductions was 3m below the modern surface level and this was only over a small area approximately half way along the building footprint. In this area only the upper deposit of garden soil [117] was exposed. This narrow strip of garden soil comprised compact clayey silt with frequent charcoal fleck inclusions along with occasional animal bone and oyster shells. A small amount of pottery along

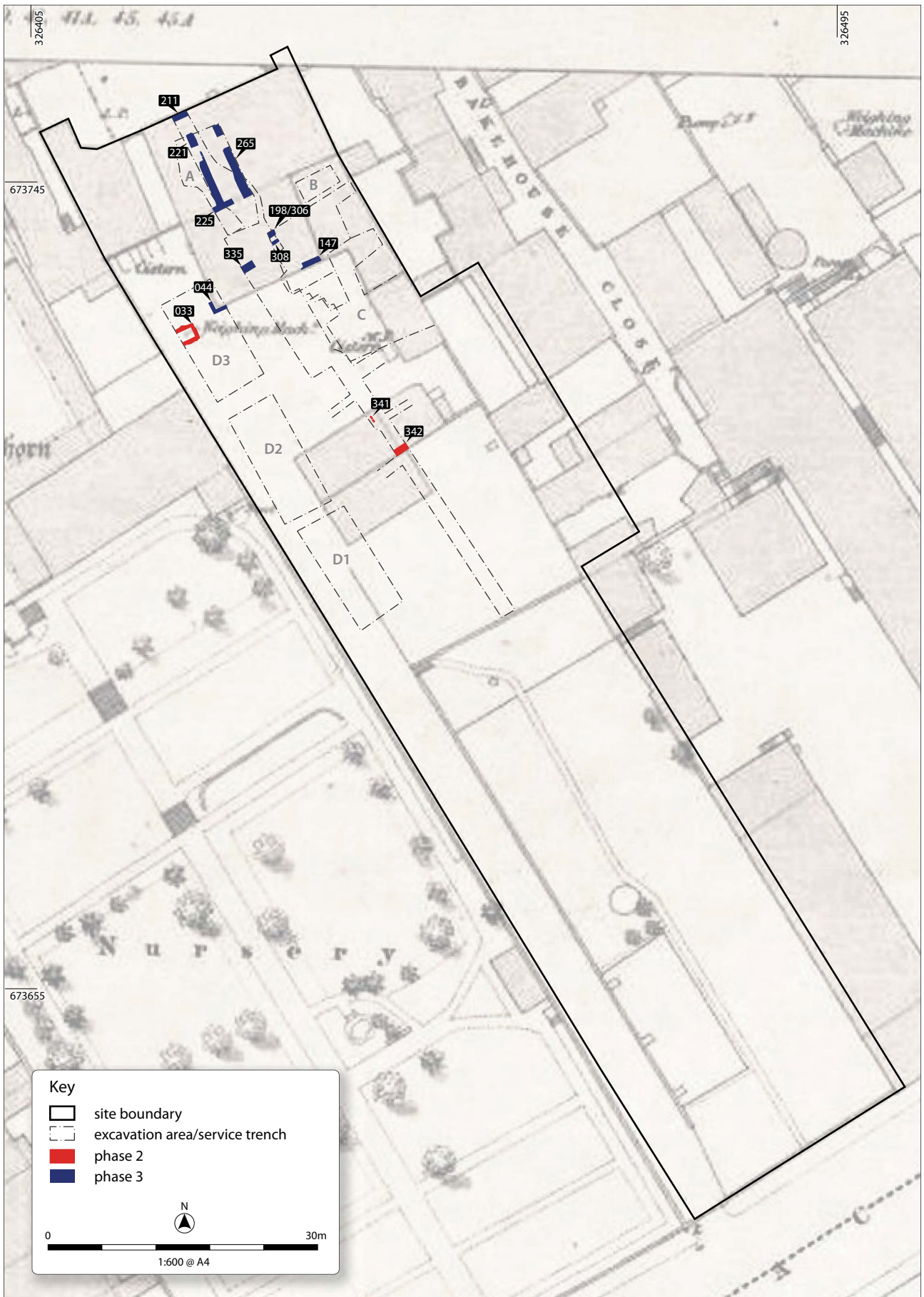
with pipe stem fragments was recovered from this layer. Above the garden soil and recorded across most of the area was a layer of re-deposited very dark brown/grey silt [197] with brick fragments and large quantities of red unglazed pottery. The layer also included quantities of ash/burnt material that may represent waste material from industrial activity, possibly associated with the sugar refinery.

The ground reduction works to the S end of the site comprised the excavation of a series of foundation trenches for the new development. These trenches revealed a number of stone foundation walls that were clearly associated with the Clermiston Buildings that were constructed in the 1870s during the same phase as the brewery was established (*Illus 44, 104*). It had been expected that these buildings included cellars but no such features were identified during this work. The walls were recorded up to 3m high sat over the bedrock cutting garden soil deposits and a layer of pottery rich clayey silts similar to that recorded further to the N. The walls were all rubble stone with lime mortar bonding and generally 0.8m wide. These walls had subsequently been covered in a layer of demolition material and modern made ground.



Illus 104

S facing section of foundation trench in Block F showing the tenement wall



Illus 105

Phase plan showing the features superimposed onto 1852 OS map



7.4 Environmental assessment

7.4.1 Introduction

This report presents the results of an assessment of the palaeoenvironmental samples taken during the course of a programme of archaeological works at Sugarhouse Close, Edinburgh. A total of 51 samples were taken ranging between 5 and 30 litres from a series of window samples (taken with a percussion corer) and bulk samples; 33 of these samples were processed for assessment.

Samples were mainly taken from garden soils spread across the site, with 31 samples from this phase processed and 2 samples processed from fills associated with early industrial activity on the site. The garden soils are thought to relate to medieval to pre-1750 activity on the site, while the later samples are probably associated with the sugar refinery, which was in existence between 1752 and 1852. The aim of the assessment is to investigate the presence of any palaeoenvironmental materials (eg charred grain), which can inform on the diet, activities and economy of people in the area during the medieval and post-medieval period, with some comment on the period associated with the dates of the sugar refinery. As part of the assessment any cultural materials (eg pottery, metal objects) recovered from the samples will also be mentioned.

7.4.2 Method

58 Samples were processed in laboratory conditions using a standard floatation method (cf. Kenward *et al*, 1980). All plant macrofossil samples were analysed using a stereo-microscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including Cappers *et al* (2006).

7.4.3 Results

The results of the sample processing are provided in Tables 1 (Retent finds) and 2 (Floatation finds). Suitable material for AMS dating is also identified within each table. Plant remains were preserved through charring with a small amount of potentially dried remains also recovered.

7.4.4 Plant remains

Charred cereal grains were recovered from 16 of the processed samples (see Table 2), all from the multiple layers of garden soils. The assemblage mainly consisted of low numbers of grain recovered from Blocks C, D1 and D2. The preservation of the grain was found to be moderate to poor in the samples, with grains frequently showing signs of wear, breakage and abrasion suggesting they were exposed and moved (rolled) around on the ground surface for some time before becoming incorporated within the garden soil deposits. Damage to the grains may also have been caused through mixing of sediment deposits, particularly through cycles of deliberate dumping of material into and disturbance to these soils. Grains were also

noted to occasionally appear as bloated, suggesting they were damp prior to becoming charred, whilst a small number of grains were also observed to be partially charred indicating the grains were partly protected by the covering glumes, when exposed to the heat source.

The moderate to poor preservation of the grains meant that a positive identification to species of all grain in the assemblage was not possible. Where grains could be identified as probably being of a particular species (eg *Avena* sp.) they have been recorded as cf. that species (eg cf. *Avena* sp.). Where identification was not possibly due to very poor preservation the grains have been recorded as indeterminate cereals (*Cerealia* indet.). Grains that have been identified show an assemblage consisting of oat (*Avena* sp.), hulled barley (*Hordeum vulgare*), rye (*Secale cereale*) and wheat sp. (*Triticum* sp.), together with club/bread wheat (*Triticum aestivo-compactum*). The presence of cereal chaff was very sparse across the samples with culm nodes (straw) and rachis fragments (spikelet) only present in one sample (32) from Area D2 (see Table 2).

A small quantity of wild taxa was present within 12 samples from both the garden soils and the fills relating to the early 1800s (see Table 2). The species present are largely representative of arable weeds and waste ground areas, such as wild radish (*Raphanus raphanistrum*), sedges (*Carex* sp.), common fumitory (*Fumaria officinalis*) and thistles (*Cirsium* sp.). A small number of samples also contained economic plants, such as hazel (*Corylus avellana*) nutshell, fig (*Ficus carica*) fruits and field peas (*Pisium sativum*).

Charcoal fragments were present in samples from both the garden soils and the fills relating to the early 1800s, mainly in small quantities and of small sizes (<1cm) (see Tables 1 and 2). The largest size and most abundant charcoal fragments were recovered from Block D2, where charcoal of up to 2.1cm was recovered in Sample 32. Observation by eye of the fragments indicated that the majority of the charcoal fragments present were oak, while non-oak fragments were also recurrent.

7.4.5 Other finds

Together with the plant remains present in the processed samples a number of other materials were also recovered; these are briefly summarised here (see Table 1). Cultural materials were found throughout the samples including: pottery sherds of medieval to post-medieval ceramics, clay pipe and brick fragments. Building materials were also present in the form of mortar, while glass and glass waste were also recovered. Objects of copper (Cu), iron (Fe) and lead (Pb) were retrieved from samples, along with industrial waste of iron slag and magnetic residue (Mag res). Metal working debris (MWD) was also recovered in the flot samples (see Table 2) where hammerscale, prill and slag fragments were observed.

Animal and fish bone, both burnt and unburnt were recovered from almost all of the samples processed (see Table 1), with the majority of the fish bone recovered being unburnt. Marine shell was also identified in significant quantities within the samples with oyster, cockle, winkle and mussel shell amongst those recovered. Evidence for fuels was also present with coal

and cinder fragments recovered from a number of samples; particularly those in Blocks C, D1 and D2 (see Tables 1 and 2). The cinder fragments present are likely to relate to the ash remains of burnt coal from domestic fires.

7.4.6 Discussion

The assemblages from the garden soils indicate that they consist of discarded domestic and probably some industrial (slag and MWD) materials that accumulated in this area of Edinburgh. The discussion below outlines some of the main lines of evidence that can be inferred from these deposits.

Economy and diet

The charred cereal grain present within the samples although in moderate to poor condition still provides some useful information on the crops that were being cultivated and formed part of peoples diets during the medieval and post-medieval period. The samples suggest that wheats and in particular club/bread wheat (club wheat and bread wheat cannot be differentiated without the presence of chaff fragments), hulled barley and oats were the main cultivars. Small quantities of rye were also recovered from two samples (25 and 38). Charred cereal grain was only recovered from Blocks C, D1 and D2, which are located in the north east and north west of the development area. The assemblage recovered from the samples is similar to that of other medieval to post medieval charred grain assemblages from Edinburgh (eg Timpany, 2006; Holden and Hastie, 2010; Timpany and Haston, 2011).

The charred cereal grains present in the assemblage from Sugarhouse Close only represent a small proportion of the cereals that would have been in use; charred grain reflecting that which has been accidentally burnt such as in domestic ovens or kilns. Holden and Hastie (2010) observe that cereals would also have been present in the form of flour and meal that could be purchased commercially. However, the presence of charred grain suggests some homes were still grinding grain to make their own flours.

Other plants of economic value were also present in the assemblage and restricted to Block D2. Here fig fruits were found, which were uncharred suggesting they might represent dried fruits that were imported into Edinburgh during the late medieval and post-medieval period. Figs have previously been recovered from other sites in the Royal Mile (Holden and Hastie, 2010) and Cowgate (Timpany, 2006) areas. Charred hazel nutshell was also recovered from Block D2, is likely to reflect the consumption of hazel nuts as part of the diet indicating a mix of the exotic and the domestic in the diets of people once living in this area of Edinburgh. Legumes are also present in the assemblage with the occurrence of field peas, which suggests a mixed farming economy, existed in the landscape. It is probable that legumes would have formed another staple to the diet along with cereals.

Together with the plant remains recovered in the assemblage there is further evidence of the diets of people with significant quantities of unburnt and burnt animal and fish bone recovered from the samples. Unfortunately none of these remains have been

identified beyond presence and abundance. However, previous faunal bone studies from this area of Edinburgh showed a range of species were consumed including: sheep/goat, cattle, pig, rabbit, poultry, cod and herring (Smith, 2010). It is probable the assemblage recovered at Sugarhouse is equally diverse. Marine shell was also present in the assemblage, consisting mainly of oyster, mussels and whelks. All of these may have been locally sourced from the Firth of Forth, which was famous for its shell fish (Carter, 2010).

Local environment

A number of the wild taxa present in the assemblage are indicative of arable/waste ground, such as wild radish, goosefoot sp. (*Chenopodium* sp.), vetches (*Vicia* sp.), knot grass (*Polygonum aviculare*) and thistles, together with sedges, hemlock (*Conium* sp.) and common fumitory (Clapham *et al*, 1962; Stace, 1997). The assemblage as a whole is likely to reflect plants harvested accidentally alongside cereals, becoming charred during the processing and drying of cereals. Despite the processing of grain in order to remove the unwanted chaff and weed seeds (eg through threshing) not all such material can be removed and thus becomes incorporated with the grain during processes such as drying (Hillman 1982). Many of the taxa present are common weeds of arable land, such as wild radish and common fumitories and give some indication to the challenges faced by farmers in cultivating and harvesting cereals during the medieval and post-medieval period.

Fuel materials

Coal and coal ash (cinders) was frequently present in the samples whereas charcoal fragments were present in smaller frequencies, suggesting that during the late medieval and post-medieval period coal was the dominant fuel type used in this area of Edinburgh. This material is likely to have been deliberately dumped across this area and was similarly noted during the Holyrood excavations (Carter, 2010). Observation by eye of the charcoal fragments indicate that oak timbers were used as fuel along with non-oak woods, which have the potential to represent a range of taxa. Amongst the charcoal identified at Holyrood were birch (*Betula* sp.), hazel, pine (*Pinus* sp.), willow (*Salix* sp.) and blackthorn (*Prunus spinosa*), providing some indication of what may be present in the Sugarhouse assemblage.

7.4.7 Conclusions

- The garden soils consisted of accumulations of domestic and industrial refuse.
- Charred cereals were present in Blocks C, D1 and D2, which provided an assemblage dominated by hulled barley, wheat sp., club/bread wheat and oats, with smaller numbers of rye.
- Field peas recovered indicate a mixed farming economy with the cultivation of legumes alongside cereals.
- Exotic plants were present in the form of figs indicating the trade of (dried) fruits into Edinburgh.
- Other dietary materials amongst the garden soils include unburnt and burnt mammal and fish bone together with shell fish.



7.5 Finds assessment

7.5.1 Introduction

The majority of the assemblage is made up of pottery related to the 18th and 19th century sugar-works. Other finds included pottery, glass, clay pipe, metalwork and ceramic building materials. The assemblage ranged from the medieval period through the 19th century. A complete catalogue of all the finds is given below.

7.5.2 Sugar-refining pottery

Sugar-refining wares made up the bulk of the finds assemblage. There were 319 sherds, weighing 32.799kg, including some very large pieces and numerous rims and bases. The sugar-works at the north end of the site was in production from 1752 to the 1850s. Large dumps of pottery waste relating to it were found in a number of areas, most notably context [197]. Only a sample of this context assemblage was retained, concentrating on rims and bases.

Sherd size in general for this pottery was large, with a number of joining sherds, indicating the material has been little disturbed since deposition. Though no vessels are completely reconstructable, there are a number of good rim and base profiles present.

The vessels came in three basic forms. A quantification of the remains of each type is shown in Table 1. The most distinctive are the sugar cones: long funnel shaped vessels, with a wide rim at one end, and narrow rim at the other. During the refining process these were placed into the top of large collecting jars. Syrup would drip into the jars, leaving the refined sugar within the cone. These cone shaped '*sugar loafs*' could then be turned out and packaged for sale. The syrup collecting jars had distinctive flanged bases, keeping the bottom of the base off the ground, and walls that curved inwards towards the top to hold the base of the cone. Both jars and cones were made in unglazed red earthenware.

There were also a number of flat based jars, also of red earthenware, but some glazed dark brown on the interior. One such glazed jar was represented by the complete base and lower walls and the presence of a tap hole at the base of the wall indicates it was a cistern. It is possible that the other brown glazed jars were also cisterns, while the unglazed were a variant of syrup jar.

The fabric is akin to other utilitarian and kitchen wares found in later 18th and 19th century Scotland and it seems likely that the vessels were locally made.

Several sherds found in deposit [205] were severely heat damaged and these might represent vessels damaged during the fire of 1800.

Fabric	Vessel	Sherds	Min. vessels	Weight (g)
Unglazed Red Earthenware	Cone	49	28	8236
Unglazed Red Earthenware	Syrup Jar	27	14	12550
Unglazed Red Earthenware	Flat-Based Jar	3	3	2832
Brown-Glazed Red Earthenware	Flat-Based Jar	14	8	1345
Brown-Glazed Red Earthenware	Cistern	7	1	4989
Unglazed Red Earthenware	Undiagnostic Forms	219	14	2847

Table 1

Sugar-works Pottery

The sugar-works pottery was widely spread over the site probably deposited as levelling material during the demolition of the sugar-works or the construction of the brewery. The distribution by context is summarised in Table 2. The most significant collection came from Block F, deposit [197] and [205] in particular, but sizable collections also came from TP18, TP22 and Area C, with further material in Area A, B, D and E. Some material in Area C, D and E has worked into the garden soils, implying these areas were still under cultivation while the sugar-works was in operation.

Area	Context	Phase	Sherds	Min. vessels	Weight (g)	Notes
–	U/S	S end of site, re-deposited	1	1	1732	flat-based jar
TP18	U/S	Pre brewery phase possible sugar cone	9	5	4399	flat-based jars, syrup jars, cone
C	U/S	Possible Sugar cone material	10	8	2324	cone, syrup jar
E	–	Re-deposited mixed garden soil 2m depth	5	3	905	cone
TP22	002	Poss Sugar cone material	4	2	1750	cone, syrup jar
BH S5	005	–	3	2	19	–
BH S5	006	–	20	2	28	–
BH S5	007	–	159	1	460	–
C3	026	Garden soil	1	1	139	syrup jar
D3	038	18th/19th C deposit – pre brewery	2	2	84	flat based jar
D3	043	18th/19th C deposit – pre brewery	2	2	26	flat-based jar
D3	046	18th/19th C deposit	1	1	219	cone
D2	055	Upper garden soil	1	1	9	–

Area	Context	Phase	Sherds	Min. vessels	Weight (g)	Notes
D1	081	Post brewery phase c1870s	5	3	90	syrup jar, flat-based jar
D1	085	Brewery phase	3	1	231	flat-based jar
D1	101	Disturbed garden soil	9	3	621	cone, flat based jar
D1	103	Mid garden soil	1	1	9	–
C1	164	18th/19th C deposit – pre brewery	4	2	762	cone
C1	173	18th/19th C deposit – pre brewery	18	1	1670	–
Block F	197	Possible Sugar cone material	22	10	11356	cones, syrup jars, flat-based jars, cistern
F	205	19th C deposit – pre brewery	14	9	4809	cones, syrup jars, flat based jar
F	206	Garden soil	3	1	99	–
A South	293	18th/19th C deposit – pre brewery	9	2	238	cone
A	299	18th/19th C deposit – pre brewery	5	1	222	–
A South	310	Possible medieval pit	1	1	77	–
B	335	18th/19th C deposit – pre brewery	4	1	128	–
B	336	Possible Sugar cone material	3	1	393	cone

Table 2

Distribution of Sugar-works Pottery

7.5.3 Other pottery

The remaining pottery assemblage numbers 271 sherds, weighing 2.988kg. They range in date from the medieval period, possibly as early as the 12th century, to the 19th century. Fabrics are varied, including a number of imported European and English wares. However, as many of the sherds derive from garden soils, context assemblages are generally mixed, with a small sherd size and no joining sherds. This limits the value of the assemblage both for establishing the dating and nature of activity on site and in terms of adding to existing knowledge of the sequence of pottery use in Edinburgh.

However, the pottery can provide broad dating evidence for the garden soils (see Table 3). The types of pottery in the soil provide a cross section of those in use in late medieval and early post-medieval Edinburgh. Local white gritty wares and post-medieval reduced and oxidised wares make up the majority of the assemblage. Imported wares include Anglo-Dutch tin-glazed earthenwares, Low Countries redwares, Rhenish stonewares, and Staffordshire-type slipware. Late sherds indicating the continued

use of the garden soils into the second half of the 18th century include two fragments of white salt-glazed stoneware [103], and two sherds from slip-lined dairy bowls [101], [206].

Pottery from the pre-brewery deposits are typically late 18th to early 19th century, including a creamware jug or jar [205], and sherds making up a complete lathe-turned slipware bowl, dating c1810–c1840 [038]. Both these can be dated to the period the sugar-works was in operation and thus might have been used within it.

7.5.4 Glass

The glass assemblage numbered 77 sherds. The majority of these, 56 sherds, were from bottles. But for a clearly intrusive fragment from the primary garden soil, the earliest of the bottle glass was of 18th century date. The earliest are stratified in garden soil deposits [063] and [103]. The large base sherd from layer [063] can be typologically dated to between c1725 and c1760. Other bottles were found in 19th century deposits, related to or pre-dating the brewery. These were either residual 18th century bottles, or later 19th century types.

Two fragments of window glass found in the primary garden soil [072] were probably of 16th century date. They are in poor condition, typical of medieval glass, and are likely to be contemporary with associated 16th century pottery. Window glass was not in common use in Edinburgh at this date and it is likely to derive from either a church or a high status secular building.

Eight sherds were from drinking vessels, including two folded foot rims from stemmed glasses. One of these is likely to be of 16th century date, from the dating of associated pottery [023]. The other is probably 18th century [103].

Lastly, of very recent origin there is a large piece of decoratively moulded glass from a lamp [237].

7.5.5 Clay pipes

There were 36 sherds of clay pipe, including two complete bowls, both probably imported from the Low Countries and England. The whole assemblage is of 17th to early 18th century date, with no 19th century material. Finds were concentrated in the garden soils.

7.5.6 Metalwork

The metal finds numbered 51 of iron, 23 of copper alloy and four of lead. Early finds, from the primary and lower garden soils ([072], [106], [056], [071]) include lace tags, wire pins and nails, all common finds in the late medieval and early post-medieval period. The lace tags are unlikely to be earlier than the 15th century. A lead find from layer [056] is potentially of some interest. It is a rough disc of plano-convex section. Its weight approximates 2oz and it may be a weight for a balance scale. However the crudeness of its manufacture might suggest it is a small ingot. Finds from overlying garden soil deposits are of a similar nature but largely unremarkable.



Finds associated with the brewery and later structures include a number of fittings, such as brackets and washers, as well as a knife (SF11D) and some machine parts, all clearly of modern date. One plate from a machine (SF68B, [219]) contains a partial maker's mark '??? (probably Kelvin) & James White Limited, Glasgow and London', together with a part or patent number which might allow the machine from which it derives to be identified.

7.5.7 Miscellaneous finds

Other finds include a gaming counter made from a late medieval pot sherd (SF05K). Two stoneware marbles and a rubber sink plug are clearly later, while a flint core is of probable prehistoric date and is clearly residual.

7.5.8 Building materials

The assemblage amounted to 62 sherds of ceramic and two of stone building material. There was also 1.630kg of lime mortar either collected from structures as samples or retrieved from soil samples.

Possibly the earliest of all these are two fragments of Flemish-type floor tile. These are particularly associated with ecclesiastical buildings between the late 14th and early 16th centuries (Norton 1994, 151–3), and a number have been found from previous excavations along the Canongate (Franklin 2010, 44–5; Franklin 2011, 53). Both were in mixed later deposits. Sherds of pan tile were also found. These can be dated back to the 17th century in Edinburgh, the earliest stratified here being from the mid garden soil [102]. Two pieces of roof slate were also found in disturbed garden soil deposit [101]. They are unlikely to predate the 18th century. Brick samples were taken from two features. Those from [284] appear to be stock-moulded and are not marked, and can only be broadly dated to the 18th or 19th centuries. That from [186/187] is stamped with the mark of the Bank Park Fire Brick Works, who were in production from 1860 to 1893.

7.5.9 Industrial waste

The industrial waste amounted to 1.184g and was all related to iron-working. The vast majority was retrieved from soil samples, in the forms of fragments of slag and hammerscale. It is spread through many deposits on site, from the primary garden soils to more recent deposits. There are no strong concentrations, with most context assemblages being less than 100g, often less than 20g. The assemblage points towards blacksmithing, in the general vicinity of the site, though this is entirely to be expected in an urban deposit of this period.

7.5.10 Discussion

In common with most garden soil assemblages, the finds from these deposits are very mixed. They provide a basic cross-section of material culture in use during the late medieval and early post-medieval periods. This area would have represented the medieval backlands area behind the Canongate frontage. The finds represent material which was discarded or deliberately turned into the soil for manuring. Similar deposits of this period have

been recovered from other excavations along the Canongate, including the Holyrood Parliament Site (HAPT 2010) and Saint Patricks Church (Franklin 2011). The finds show that cultivation continues in some areas though to at least the second half of the 18th century. A summary of the dating evidence of the garden soils is given in Table 3.

The sugar-works period is represented largely by the large pottery vessels used in the refining process. The wares are consistent with the historical dating of the works. A number of other finds such glass bottles and contemporary pottery sherds might also relate to the works.

Brewery-related finds are fewer and less revealing about the processes undertaken there. Some finds of pottery and glass are stratified within brewery deposits and confirm the late 19th century dating for this building.

Area	Context	Context notes	Date	Period	*Number of diagnostic finds
TP25	U/S	Garden soil	16th/17th	PM	1
TP30	U/S	Garden soil	17th/M18th	PM	1
TP31	U/S	Garden soil at 3m deep	17th/M18th	PM	1
TP22	004	Primary garden soil	13th/14th ?	Medi	1
BH S2	015	Garden soil	L17th/M 18th	PM	6
Crane base	024	Primary garden soil	17th/E18th	PM	1
Crane base	025	Garden soil at 2.7m	PM?	PM?	1
C3	026	Garden soil		PM?	3
D2	055	Upper garden soil	16th	PM	22
D2	056	Primary garden soil	12th/15th ?	Medi?	1
D2	063	Upper garden soil	M 18th	PM	29
D2	069	Mid garden soil	16th	PM	2
D2	070	Mid garden soil	16th	PM	22
D2	071	Lower garden soil	16th	PM	11
D2	072	Primary garden soil	16th	PM	12
D2	073	Mid garden soil	16th	PM	3
D2	074	Mid garden soil	?	?	–
D2	075	Upper garden soil	16th?	PM	5
D2	076	Upper garden soil	?	?	–
D2	077	Lower garden soil	?	?	–
D1	092	Mid garden soil	17th/E18th ?	PM?	1
D1	100	Disturbed upper garden soil	17th/18th	PM	1
D1	101	Disturbed garden soil	L18th/19th	Mod	13

Area	Context	Context notes	Date	Period	*Number of diagnostic finds
D1	102	Mid garden soil	L17th with intrusion	PM	19
D1	103	Mid garden soil	M/L18th	Mod	31
D1	106	Primary garden soil	12th/15th	Medi	1
C1	130	Garden soil	mixed	Mixed	15
C1	139	Garden soil	15th/16th	Medi	6
C	140	Mid garden soil	13th/14th	Medi	2
C	142	Upper garden soil	17th/E18th ?	PM?	1
E	142	Disturbed garden soil	16th/17th ?	PM?	1
F	206	Garden soil	18th	Mod	7
Service Trench	337	Upper garden soil	15th	Medi	2

* Diagnostic finds are those such as pottery, clay pipe and glass which provide dating information. Dating of contexts with few finds should be used with extreme caution.

Table 3

Dating Evidence for Garden Soils

7.5.11 Conclusions

The late medieval and early post-medieval garden soil assemblages provide useful dating evidence for this site. However, the excavations at nearby Holyrood Parliament site and Saint Patrick's Church were more extensive and this assemblage does not add much to the knowledge gained at those sites of the occupation of the this part of Edinburgh during that period. None of the material is worthy of illustration. The only work recommended for this material is a brief review of dating evidence and stratigraphy to firm up the sequence of deposition.

The sugar-refining pottery provides the most interesting part of the assemblage. The pottery amounts to a significant assemblage of later 18th and 19th century sugar wares. This is an industry which has received little attention in Edinburgh. The wares can be compared to those known from contemporary sites in England (Brooks 1983; Divers 2004).

Other finds contemporary with the sugar-works include a number of glass bottles and pottery sherds, most notably a complete lathe-turned slipware bowl.

Finds related to the brewery are of lesser interest. No further work is recommended for them. A full list of the finds can be found in the finds catalogue in Appendix 9.

8. DISCUSSION

8.1 Introduction

The archaeological works across both the upper and lower terrace of this site revealed a variety of interesting results. Some areas recorded multiple layers of archaeology relating to possibly hundreds of years of activity whereas other were heavily truncated by modern construction resulting in partial or sometimes complete destruction of the underlying deposits. Although it was difficult to precisely date many of the features recorded, a general phasing of the site incorporating both the excavation and monitoring results along with the historic building record resulted in 6 phases being attributed to the site:

Phase 1	medieval to 1750	Gardens soils + well
Phase 2	1750 – 1852	Sugar refinery; stone walls and pottery
Phase 3	1852 – 1868	Pre-brewery walls, culverts and drains
Phase 4	1868 – 1940	Early Brewery
Phase 5	1940 – 1960	Late Brewery
Phase 6	1960 – modern	Post Brewery

8.2 Phase 1 – medieval to 1750: Gardens soils + well

The main focus of the early phase of activity was centered on the multiple layers of garden soils recorded across both the upper and lower terrace of the site. These deposits sometimes formed multiple layers of garden soil up to 2m thick possibly indicating several centuries of land use in this area. The layers of garden soil recorded in Block C, Block D and the Service Trench across the upper terrace were all very similar although in some areas these were heavily truncated, particularly in the location of the laboratory building. The upper charcoal-rich layer of garden soil across these areas clearly represented soils that had been manured and mixed with 'night soils' (waste and ash deposits). The depth of these soils may even indicate evidence of soil being imported onto the site or at least variable rates of manuring having taken place over time.

The results of the test pits across the lower terrace along with the monitoring of ground reduction works and sinking of boreholes in this area identified further layers of garden soils. Again these layers indicated varying degrees of manuring with subtle changes to the colour and inclusion frequency. These results corresponded to the cartographic evidence as both Gordon's map of 1647 and Edgar's map of 1765 depict most of the area to the S of the tenements as gardens prior to the construction of the brewery.

A significant number of medieval and post-medieval glazed pottery fragments were recovered from these garden soil layers with some pottery sherds dating back to as early as the 12th to 15th century, although the material was on the whole quite mixed as 16th and 17th century pottery was also recovered from many of these same layers. In fact 16th and 17th century pottery predominated across the gardens soils corresponding to a period of major expansion in the Canongate.



It was clear from the cartographic evidence that much of the site was still under cultivation until the construction of the brewery in 1868 although assigning each of the different garden soil layers specific phases was not feasible. These garden soils are typical of the backland/ burgage plots found in medieval and post-medieval towns across Scotland, Edinburgh being no exception. Similar backland garden soils have been recorded across a number of sites close to the Canongate including the Edinburgh Gasworks (Wilson 2008) and Waverley Vaults (Toolis and Sproat 2004), both adjacent to New Street, as well as excavations at 22 Calton Road (Jones and Holden 2003) and the site of the new Parliament building (Holyrood Archaeology Project Team 2008). The majority of these sites failed to record the garden soils in any detail. In contrast, the Parliament site recorded two distinct layers of garden soil associated with medieval and post medieval phases of activity. The upper material on this site was a formed of a dark charcoal-fleck rich loam showing evidence of manuring with night soil (domestic rubbish plus coal and ash). This site also identified that the charred cereal grains (mainly barley, oats and wheat) were concentrated towards the earlier layers reflecting the change from backlands to later formal gardens (ibid). No such distinctions were apparent from the environmental assessment of the Sugarhouse Close site but this did reveal interesting aspects relating to the types of food being consumed prior to the 1750s.

Phasing of the stone-lined well recorded at the N end of the site was problematic as it was cut into the bedrock and not through any datable stratigraphy. It was clear that it pre-dated the row of buildings along Sugarhouse Close (Phase 3) due to the well being covered by a floor surface [235] that was contemporary with the walls of this row of buildings. Therefore it could be associated with the earlier sugar refinery (Phase 2) although given its location close to the Canongate it is possible that it was much earlier. The pottery recovered from the fill of the cut for the well was very mixed with 13th/15th century material recovered along side 17th/18th century material. Given the fill was fairly shallow many of these finds were probably residual and therefore of little help in identifying a construction date for the well. As the well was not impacted upon by the development, it was subsequently capped with concrete slabs and left *in situ*.

8.3 Phase 2 – 1750–1852: Sugar refinery; stone walls and pottery (Illus 105)

We know from both the cartographic and written records that a sugar refinery was established on this site in 1752. Unfortunately the location of this sugar refinery has been problematic even though it was named on Edgar's map of 1765 (Illus 3). It is unclear why it was so clearly marked on this map given only the larger houses and occasional businesses seemed to be marked out. At the time this map was being surveyed the sugar refinery must have been a fairly new enterprise which may account for its depiction. It is also quite possible that the map maker and the refinery owners were well acquainted and it was done as a favor. They may even have paid to have the refinery marked on the map. Unfortunately the accuracy of this map has to be called into question as it places the '*sugar work house*' in the location of Huntly House courtyard and not to the S of Sugarhouse Close

as would be expected. This seems to have been rectified on Armstrong's map of 1773 that depicts a building to the S of the close. A building then continues to be depicted in this location on all later maps up until the construction of the brewery in 1868 whereupon it was presumably demolished. In fact by the 1852 Ordnance Survey map (Illus 4) the area seems to be comprised of 3 adjoining buildings. If this was the location of the sugar refinery then very little of it survived as only the scant remains of two stone walls [341] and [342] were recorded in this area during the monitoring works of the service trench excavation. No floor surfaces, internal features or industrial activity was recorded over this area of the site.

A list of the known owners of the sugar refinery at 160 Canongate has been sourced from various records including the Post Office directory and www.mawer.clara.net/ref-edinleith.html. The following known owners of the refinery are as follows –

- 1752** Edinburgh Sugar House – Robert Baillie to 1754, William Mercer, James Murray, Thomas Sharp and Archibald Stewart.
- 1760** Alex Hunter, William Mercer, James Murray, James Hunter, Alexander Hunter and George Sandy.
- 1778–81** Francis Kemptie
- 1800–20** David Jardine and Co.
- 1829–1852** William Macfie and Co

The Post Office directory records seem to indicate that the sugar refinery went out of business by 1852/3. The directory also lists a Jas (James) Smith at 160 Canongate who seems to have been manufacturing musical glass instruments. This business is listed in the records at this address from 1843 to 1852/3. Given this business moved at the same time the refinery ceased operations suggests they may have been working in the same block of buildings.

Presuming this was the location of the refinery, the archaeological record failed to identify any significant floor levels or apparatus associated with this phase. In fact a single length of wall and the remains of a wall in section seem to be the sum total of this building. The only other remains that can be clearly associated with the sugar refining industry were the layers of pottery rich ash and clayey silt recorded across significant areas of the site. The majority of the pottery recovered from these layers, which was present in large quantities, clearly represented the remains of sugar cones and syrup jars. This material was an essential component of the sugar refining process and when the refinery was in operation this material would have been in abundant supply. Similar types of pottery have been recorded on a small number of sites across the UK including York (Brooks 1983), Southampton (Platt and Colman-Smith 1975), Woolwich (Pryor and Blockley 1978) and more recently at Depford (Divers 2004). It has also been recorded on sites across Europe and in particular Holland and Spain (Brooks 1983).

Given that the majority of the ceramic material recovered from this layer represents pottery associated with the sugar refining industry it is possible that this layer represents the re-use of on-site waste material to form a leveling layer prior to the construction of the brewery. It may even have been dumped as waste material during the sugar refinery phase of the site.

The remains of a small brick structure [033] recorded to the S of Building A probably represented the remains of the '*weighing machine*' depicted on the 1852 Ordnance Survey map. Although this feature was not depicted on any of the earlier historical maps it was thought to be associated with the sugar refinery, if only because the large amount of raw materials entering the site and the products leaving the refinery would probably have been measured by weight. Unfortunately none of the apparatus associated with this machine were recovered giving us no indication as to how it functioned.

8.3.1 Conditions of the workhouse

The conditions of a sugar refinery would have been unpleasant being a hot and smelly environment. An account of these conditions can be found in an extract from James Greenwood's visit to a refinery in 1876. Here he describes how the walls of the building had become coated with a '*thick preserve of sugar and grime*'. He continues that the '*heat was sickening and oppressive, and an unctuous steam thick and foggy filled the cellar*'.

The surviving minute books of the sugar house also give us a fleeting glimpse into the relations between the Company and its workforce. One entry ordered "a boll of malt to be got to brew a small beer for the men '*whilst another empowered the clerk to "get beds, blankets and sheets for the men's beds"*' suggesting the workmen slept at the refinery. A number of disputes with the workforce are also mentioned suggesting the workmen were not always happy with their conditions.

The basic manufacture of sugar by the mid 1800s was described in detail by both the Society for promoting Christian Knowledge (1846) and Robert Nichol (1864). The process starts with the arrival of the unrefined sugar in Hogsheads (large timber barrels), although by this time it had already undergone a phase of refining prior to being packed. From the hogshead it would be transferred to a large vat and mixed with water with a small quantity of lime water and bone black (heated bone charcoal). An early practice was also to add bullocks blood to this process. Heat was then applied through a steam cistern and the solution stirred with the resultant scum being skimmed off. The remaining syrup was then filtered through a fine mesh into a channel leading to a large pan. These processes helped to clean the sugar of impurities. The sugar was then reheated in pans and then eventually cooled to a temperature where it could be transferred to conical earthenware moulds (sugar cones). These moulds differed in size according to the quality of the sugar with the larger moulds used for inferior quality sugar. It was indicated in the minute book that various styles and sizes of pottery were used at the Sugarhouse Close refinery. The moulds included a small hole at the base from which molasses could be drained into syrup jars over a number of days. The remaining sugar

crystals were washed with water and clay, a process known as claying, before eventually being removed from the moulds as sugar loaves. These were then wrapped in paper and heated until sufficiently dry after which they were ready for sale.

8.4 Phase 3 – 1852–1868: Pre-brewery walls, culverts and drains (*Illus 106*)

By the time of the 1852 OS map the sugar refinery had ceased operating although the building thought to be the location of the refinery is still depicted on this map. The map also depicts for the first time a large block of buildings forming a continuous row across Sugarhouse Close with further buildings attached to the rear (South). It was unclear if these buildings were linked to the Tenement (Building A) at this time as the map shows a narrow lane between the two buildings. This later becomes the pend shown on the 1877 OS map.

It was also not clear if the tenement (Building A) existed prior to the construction of the new block as a building is clearly depicted in this location on all of the historical maps from 1765 (Edgar) onwards. The plain utilitarian detail recorded across this building does suggest it was probably of 19th century design suggesting that when the new buildings were constructed the entire row was re-developed incorporating the tenement.

The majority of the industrial features recorded during the archaeological excavations in Blocks A, B and C, such as the brick platforms, flues and culverts, were located within the boundaries of the new buildings depicted on the 1852 Ordnance Survey map suggesting the remains must relate to a post-sugarhouse phase. The function of these buildings is not identified on this map although the various brick floors, sumps, culverts and walls recorded across the area suggest some form of industrial activity. The exact nature of this industrial activity was unclear but they clearly pre-date the brewery as once the brewery was constructed in 1868 these features seemed to have been covered over with demolition material and then cobbled.

It is possible that these remains represented industrial activity linked to the final days of the refinery although this is unlikely given the late appearance of these buildings. The Post Office Directories at this time failed to cast any light on the matter. Between 1852 and 1863 no entries are listed in the directory for 160 Canongate. Following this from 1863 to 1869 a variety of people are listed at this address (also listed as Sugarhouse Close from 1869). These people included a bookbinder, a surgeon, a druggist and a spring-van and cart maker amongst others. From 1868/9 to 1869/70 St. Andrews Catholic School was also listed at this address. It is presumed all the people listed in the directories during this period must have resided in the row of properties along Sugarhouse Close. Although these records show a number of activities taking place in these premises none of them seem to be indicative of the level of industry suggested by the large brick platforms, floors and associated culverts identified during the excavations of Blocks A, B and C.

The corner of wall [042] recorded in the NE corner of D3 may also represent the remains of a building depicted on the 1852



Ordnance Survey map although its purpose is unclear. The map evidence seems to suggest that a wall was still upstanding in this location when the brewery was constructed in the 1870s although it seems to be a courtyard at this time and not a roofed building as depicted on the earlier map. The two stone walls [306] and [308] recorded further to the E in the Service Trench also probably represent the remains of walls associated with the buildings depicted on this map and can therefore be associated with a pre-brewery phase. Unfortunately very little of these survived and no floor levels were identified making the identification of their purpose difficult.

Wall [186] located below Building E also seems to be associated with a pre-brewery phase building first depicted on the 1852 Ordnance Survey map. It was unclear what function this building had but it seemed to front onto Bakehouse Close and may have been associated with Richard Youngers Brewery that was first established here in the early 1800s.

8.5 Phase 4 –1868–1940: Early brewery

Wholesale changes to the site were seen leading up to the opening of the brewery in 1868 by Morison and Thomson. This phase saw the construction of the main bulk of the buildings that were still upstanding prior to the redevelopment. Many of these have been incorporated into the new development keeping the integrity of the period intact. The main brewery buildings were spread across the middle and lower terrace but with access to the upper terrace gained from the upper floors of the brewhouses.

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Access to the brewery from Canongate was through an opening formed by the demolition of the E half of the row of buildings along Sugarhouse Close. To the E of this entrance a new building was constructed (Building B) along with a series of further buildings along the E boundary of the site. Alterations and further buildings were erected over the following 70 years with the 1895 Ordnance Survey map depicting further buildings along the W boundary of the upper terrace. The part demolition of the row of buildings along Sugarhouse Close to form the new entrance must have led to the demise of the industrial activity recorded in this location in Phase 3. The whole area seems to have been covered in a cobble surface as part of the brewery complex. One of the other significant changes to the brewery was the construction of the offices (part of Building E) to the E side of the site. This building first appears on the 1902 Ordnance Survey map and replaces a series of smaller buildings that existed prior to the construction of the brewery.

It seemed clear that wall [060], drain [059] and cobble surface [051] recorded in area D2 were all associated with the brewery phase of the site with both cartographic and photographic evidence indicating a number of buildings and sheds existing in this area from the late 1800s. Stone wall [078] recorded in Area D1 formed the foundation to a subsequently demolished brewery building that was depicted on the 1877 Ordnance Survey map. The building seems to have been demolished prior to the construction of the laboratory building in the 1980s. Aerial photography of the site prior to this demolition suggests that it had originally been a further kiln building. This was indicated by

the hipped roof with central vent design similar to that found on Buildings F and G. The main difference between the demolished building and the remaining upstanding buildings was that the demolished building clearly only comprised a single storey whereas the kilns to the south had at least two floors, the lower ground floor being at a much lower level due to the drop in height of the terrace at this point. The significant depth of re-deposited clay and made ground below the remains of the wall indicate that the original garden terrace must have been very steep in this area prior to the construction of the brewery.

All the areas across the upper terrace including features associated with the brewery phases although many of these were substantially truncated by modern services and later buildings. In Block B, C and D this mainly comprised areas of cobble floors. Most of these areas had subsequently been covered by later stone setts or tarmac or in the case of Block C masked by concrete floors of later brewery buildings.

The construction of the brewery in the late 1860s was at the height of the boom in brewery building following a number of technological advances that enabled the industrialisation of the brewing process. This is most clearly seen in the design of the brewery with its two long ranges (Buildings K & J) against the E and W boundaries of the lower terrace attached to the kilns (Buildings F & G) and brewhouses (Buildings H & I) to the N. This design meant the grain could be delivered at the S end of the site close to the maltbarn (Building K) with the processes continuing in a clockwise direction through the adjoining buildings – it is likely that it was malted (germinated) in Building K, dried in the kilns (Buildings F & G), brewed in the Buildings H & I and then casked in Building J.

Alteration and modernisation of the maltbarn and in particular the laying of the current concrete floor meant that any evidence for the original processes undertaken in this area had been removed. In particular, no evidence was found of a soaking (or steeping) area where the grain would have been placed prior to being spread on the malting floors above to germinate (a process known as couching and flooring). The current reinforced two storey structure with concrete floor is clearly not original and the building was probably once three storeys as suggested by the fenestration in the W elevation and the recording of the beam slot on the internal face of the E wall. Following malting the grain needed to be dried (cured) so it would have been passed into the adjacent kilns to halt germination. Unfortunately none of the mechanisms for this process had survived although the openings in the N and S walls suggest this was where the grain was passed through from one process to the next.

The malt was then milled, either in the central brewhouse or the building to the N of Building K depicted on many of the Ordnance Survey maps. Unfortunately, due to the demolition of this building and the complete modernisation of the central brewhouse in the 1980s, the structures associated with this process no longer survive. The resulting milled malt would have been roasted in a cereal cooker. This was probably located on the upper floor of the eastern brewhouse and the circular void in the second floor might have been the location of this process as it was close to both a malt hopper and a water supply (the

large cast-iron tank at the top of the building). The resulting mash would have been transferred to the mash tuns where it would be kept at a regulated temperature prior to being transferred to an underback or second mash where hops were added. This process was probably represented by the two large circular vats on the first floor of the brewhouse. It is clear, given the location of these features above two ovens/fire boxes with associated vents, that the temperatures in these vats could be easily regulated. The resulting wort produced from these processes would then have been transferred to a copper and boiled with hops before cooling and left to ferment. The copper had clearly been removed from the building and its original location is not clear. It is possible that it sat above the bottling plant or in one of the demolished buildings. What can be certain is that once the beer had been produced it was casked and after 1926 bottled in the eastern wing of the brewery buildings.

An important issue relating to the power source of the original building prior to the introduction of electricity was noted. It is clear from numerous bearing boxes, driveshaft supports and other surviving features recorded on the Lower Ground Floor of the Brewhouse (Building I) that some source of power was employed on site. It is possible that these were relatively recent (i.e. 20th century) features although they are more likely to relate to the 19th century machinery. During this period the driveshafts and wheels would have been powered by steam requiring a large boiler, furnace and engine. The early OS maps depict a large building to the E of the brewhouse that may well represent the location of these features although these buildings were probably part of the Wm Young & Co's brewery at this time. This would suggest that the features were housed within the present building. Given the propensity of bearing boxes and mounting blocks recorded across the lower ground floor of Building I this would have been the most likely location of this equipment.

The archives relating to the brewery fail to shed any light to the working conditions on the site but it was clear it must have been hard and at times hot work. Each stage of the brewing process required significant effort and technical knowledge. It was not clear how many people worked full time at the brewery as many of the more manual activities would have been seasonal due to the brewing process being reliant on the supply of large quantities of grain at specific times of the year. At its peak the brewery employed up to 60 staff and produced 450 barrels of beer in a week (Brewery Archives GB1127/ JJM/15/3/2).

8.6 Phase 5 – 1940–1960: Late brewery

It seems the pend through the tenement (Building A) still existed once the brewery had been established along with the remaining part of the row along Sugarhouse Close, although the brick floors and sumps would have been covered over with a cobble surface by this time. This building survived until the 1940s after which the site entrance was widened. It must have been at this time that the pend was blocked up and the tenement re-developed into offices.

Various other changes were seen across the site. It was clear that the bottling plant, which is shown as one long buildings

extending to the southern limit of the brewery site on all the Ordnance Survey maps, had clearly been shortened. This probably occurred in the last 30 years. The height of the original bottling plant also seems to have been altered at this time as the upper part of the E wall had originally been taller in addition to having a gable roof. This was substantiated by the brick-blocked door on the ground floor of the 'brewhouses' S wall along with the visible construction marks of the original roof line. This also suggests that this building originally had an upper floor level. Alterations to the buildings along the E and W boundaries of the upper terrace were also made along with the changes to the internal features of many of the buildings. One significant alteration seems to have been the change in the number of floor levels of the Malt House (Building K). The original building was thought of had three floors whereas the existing building only had two. The re-enforced concrete floor of the malthouse suggests this may have been a fairly recent conversion, possibly being associated with Phase 6.

8.7 Phase 6 – 1960 – modern: Post brewery

The final phase of the site saw the brewery change hands, having been taken over by Scottish and Newcastle Breweries in 1960. By this time beer production at the site had already ceased, probably due to a lack of suitable access required for a modern brewery and the cramped conditions leading to an inability to expand. It seems during this final phase many of the openings were simply blocked up leaving many of the original brewery buildings redundant. The brewery subsequently became offices and a testing centre for the company leading to the construction of a laboratory (Building E). It was the construction of this laboratory that probably led to the destruction of any surviving remains of the sugar refinery. The laboratory also led to the demolition of a number of the brewery buildings and in particular the Kiln building to the N side of Building F, the remains of which were recorded in Block D1. The construction of Buildings L and M were also probably carried out during this phase.

8.8 Summary

Significant layers of garden soil were encountered across the site relating to the medieval history of the Canongate along with a number of important and interesting later features that will add to the rich history of this site and the Canongate. The numerous layers of garden soil give an indication as to how important these parcels of land were to the people of the city. The multiple layers indicating the constant use of these gardens over a significant period of time, either for growing vegetables, keeping animals or as formal gardens. Unfortunately no dating material was recovered from the well but its location close to the Canongate suggests it could be of medieval origin and even if it is not it still provides an interesting addition to the history of the site. These results also indicate to us the ever changing character of the area, particularly during the 18th and 19th centuries. Once the more affluent people began moving to Edinburgh's New Town small industries began to appear across this part of the city. This can be seen with the introduction of the sugar refinery in 1752 followed by the small industrial buildings evidenced by the remains recorded in Blocks A, B and C in the mid 1850s. The area was



then completely subsumed by the subsequent development of the brewery from 1865.

The modern development of the site has been able to utilise a number of the surviving brewery buildings providing continuity to the site that recognises its history. In addition to the re-use of the main brewery buildings a number of new development blocks have been constructed. In an effort to link these buildings to the sites rich history the developers have assigned names to all the buildings that associate them with figures and previous uses of the site, such as Morison House, Dunkeld House, Sugar House and Brew House.

8.9 The Summerhouse

The decorative summerhouse (Historic Scotland HB Number 28449) (Illus 42) that was abutted by the W elevation of the maltbarn wall (Building K) clearly predated the brewery. It may even be the building depicted on Gordon's map of 1647 (Illus 2) located on the south wall of Moray House gardens. The exact date of the construction of the summerhouse is not known although it is clearly depicted on the later map of 1765 (Illus 3). The garden of Moray House was first established by Mary, Countess of Home after the completion of the house in 1618. The garden was well renowned and was known as '*Lady Home's Yard*' for many years after her death in 1653 (Perfect 2002, www.ed.ac.uk). The summerhouse is traditionally known as the place where the Articles of the Union of the Scottish and English parliaments were finally agreed.

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By the 19th century Moray House was owned by the Cowan family who restored the house and enhanced the garden. One of a number of prints commissioned by the family shows the summerhouse with an attached conservatory. By the mid 19th century the house and gardens were sold to the Free Church of Scotland for the Normal and Sectional School. From 1847 onwards the gardens gradually disappeared as the School expanded with only the summerhouse left as a reminder of the gardens that once existed.

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10. APPENDICES

Appendix 1 Room descriptions

Appendix 1.1 Building A

Floor	Room	Description
Ground Floor	A1	Small rectangular room to the E side of Building A. Comprised modern fittings with a plaster partition wall to the north and plastered stone walls to the S, W and E. The room included a main door leading to the outside steps on the S wall plus a small walk-in recessed sash-and-case window. Above the door and window the remains of the arch of the original stone pend was visible. A door in the partition wall to the north led to Room 2. Removal of the modern floor revealed a cobble surface.
	A2	A second small office room with modern fittings separated from A1 by a timber and plaster partition. It included a sash-and-case window on the N wall built into the stone blocked pend entrance, the arch of which was still visible above the window. The E and W stone walls had been masked with a painted plaster finish.
	A15	A N-S aligned narrow passageway running the length of the building with a door at the N end and a window at the S. The W stone wall included a single door leading into room A16 and three doors into A17, one of which had been blocked.
	A16	A large room to the NW corner of the building with a window on the angled N wall and a fireplace on the W wall. Separated from Room A17 to the south by a brick wall.
	A17	A second large room on this floor with a recessed window on the S wall and a fireplace and small recess on the W wall. The E wall included three separate doors leading into the passageway (A15).
First Floor	A3-A9	The First floor comprised 7 rooms all with modern fittings and painted and plastered walls. The whole floor had timber floorboards and had been divided into 4 quarters by a central N-S aligned stone wall and a central E-W aligned brick wall. These 4 quarters had been sub-divided up into smaller rooms by stud partition walls. Three of the rooms were large office rooms 3, 6, and 7 and two were smaller offices plus two WC's. All the sash-and-case windows on the N and S walls were recessed into the original stone wall. A small window was also located on the W wall in room 6. The soft strip of the walls revealed fireplaces on the E wall of Rooms A3 & A9 plus one on the W wall of A7. All three fireplaces had been partially brick-blocked with smaller later phase fireplaces inserted. This was particularly apparent in A3 where the original fireplace was located very close to a recess in the wall that may have been big enough for an oven range. The floor was accessed by a later inserted external staircase on the E wall and an original internal spiral staircase on the W side of the N wall.
Second Floor	A10-A14	All the rooms had modern fittings with three large office spaces, Rooms A10-A12, a smaller office to the north-west corner A13 and a corridor leading to the internal staircase A14. All the windows on the N and S walls were sash-and-case with walk-in recesses. A small window was also set in the angled NE corner of Room A13. The soft strip of this floor revealed two recesses either side of a central fireplace on the E wall of Room A10. These recesses may have originally been doors through to the now demolished building to the E. Two further fireplaces were recorded, one on the E wall of A12 and one on the W wall of A11. All the rooms were accessed from the hallway (A14) that led from the staircase in the NW corner of the building. This hallway also accessed a set of timber stairs that led up to the attic space/third floor.
Third floor	A15	A single large room forming the attic space to Building A. It had timber floorboards and painted plaster walls angled to follow the roof line on the N and S sides. The angled walls included 2 dormer windows to each side. A bricked blocked door was visible on the east gable wall.

Appendix 1.2 Building B

Floor	Room	Description
Ground Floor	B1-B2	The ground floor comprised 2 large rooms complete with modern fittings and painted plaster walls. The sash-and-case windows on the W wall were recessed to the floor. A modern external extension on the N side of the W wall included an internal staircase leading to the first floor. Access in this building was restricted due to asbestos removal although a door leading into Building C was located on the west side of the south wall. Evidence of a second door on the E side of the S wall was observed during the demolition of Building C.
First Floor	B3-B4	This floor comprised 2 large rooms both with modern fittings and painted plaster walls. A single large sash-and-case window was located on the E wall of each room whilst the W wall included two windows in B4 and one in B3. All five windows on this floor were recessed to the floor. The two small rooms were found to the N side of this floor comprising a kitchen and WC. A door on the N wall led to an external staircase.



Appendix 1.3 Building c

Floor	Room	Description
Ground Floor	C1–C3	The building comprised of three rooms with a large modern fitted bar area to the S including the remains of a timber panel bar and wall fittings. The two smaller rooms comprised a modern WC and a kitchen area. A blocked doorway was located on the north wall leading to Building B.

Appendix 1.4 Building D

Floor	Room	Description
Ground Floor	D1	A single large room with brick walls to all sides, although the lower half of the N wall was stone built, being an original wall to building C. A double door and small window were located on the W wall along with a large brick blocked window on the E wall. The building included a series of electrical switches and fuse boxes.

Appendix 1.5 Building E

Floor	Room	Description
Lower Ground Floor	E1–E9	A series of 9 small rooms all accessed from a long corridor along the west side of the building and via staircases at each end of the corridor. The rooms all had painted plaster walls and modern fittings with some plaster partition walls further reducing the size of the rooms. Access to these rooms was limited due to flooding. The E walls of Rooms E1–E3 were brick blocked with a cast-iron pillar supporting an iron lintel in Room E3, suggesting this was once a large opening. The E walls in E4 and E5 were stone, both with brick-blocked doors inserted. The N wall of E5 was also constructed of stone suggesting this was the end wall of the original stone built building. To the N end of the present building the E walls of rooms A6 and A7 were brick indicating a more modern addition.
Ground Floor	E10–E17	The rooms on this floor included a series of offices (E10–E15) along the east side of the building, all comprising small square rooms with modern fittings and painted plaster walls and modern glazed windows and all accessed by a long corridor along the west side of the floor. The east wall included a series of modern windows inserted in to the stone wall. The wall between E14 and E15 was stone built with two brick-blocked doors indicating the N end to the original stone built building. A further two rooms (E16–E17) were located in the large modern extension running to the W. These comprised two laboratory rooms with modern fixtures and fittings including large modern windows along the N and S walls. Parts of the laboratory were partitioned off with plasterboard and glass walls forming a series of smaller labs off the main area.
First Floor	E18–E20	Room E18 was formed by a large laboratory area with a few small office rooms to the north side. Again the room included large modern windows to the N and S walls. The room was accessed by a staircase to the N side of a long corridor running along the W side of the N–S aligned office building. The office building comprised a small room (E19) to the N side of the building and a large room to the S (E20). The rooms were separated by a stone wall with 2 brick-blocked doors. The E and N wall of E19 was brick built and the E and S walls of E20 was constructed of stone. The entire E wall included a series of modern glazed windows. A modern staircase extension was built on to the S side of the W wall.

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Appendix 1.6 Building F

Floor	Room	Description
Ground Floor	F1	No access to this building was possible during the initial survey as all the doors had been blocked. A view of the internal area was given through a hole broken through a blocked window on the N wall and a breeze-blocked door on the W wall. These revealed that no floors were present although beam slots in the E and W walls indicated that it originally comprised two floors. A number of later inserted north-south aligned steel beams were recorded between the two floors. A conveyor shaft between the north and south walls could be seen in the building although this was not an original fitting. The room was open to the timber roof beams. Brick blocked windows were located on the ground floor and lower ground floor levels of the N and W walls. Breeze block doors were found on the E wall on both levels and a series of brick-blocked openings leading in Building G were located on the ground floor level of the S wall.
Lower Ground Floor	F2	This was identical to Room F1 above as no floors survived. It included two blocked doors on the E wall and two blocked windows on the W wall. Again no access to this room was available.

Appendix 1.7 Building G

Floor	Room	Description
Lower Ground Floor	G1	This building was one of the original kiln buildings and comprised of a large square structure with tall stone walls to all sides. Modern timber partition walls enclosed a later phase timber staircase and small store room in the SE corner of the room. The stairs led to a breeze blocked door on the upper part of the S wall. The rest of the room was open to the timber roof beams showing the square central raised vent. The main feature of the room was the cast-iron frame and pillars that formed part of the ground floor support frame comprising a large raised square platform in the central part of the building. The floor of the kiln was mainly brick and cement with the exception of an area to the north side of the room where the brick had been removed and replaced with timber floorboards. A raised square section of brick floor was also found in the central area of the room directly below the square vent in the roof. The N wall included a series of beam slots at ground floor level that were mirrored on the S wall along with a raised ledge along the E and W walls suggesting that the building originally had three levels and not the two recorded. The N wall also included two large vents with cast-iron covers high up on the elevation and above the original ground floor level. A third slightly smaller opening with a cast-iron frame (possibly the remains of a bearing box) was located between the two vents set at a slightly lower level. A fourth opening had been inserted in the wall on the far west side for a later phase conveyor belt that ran along the W side of the room and continued through the S wall. The W wall included two sets of brick-blocked windows, one set to the lower ground floor the other to the ground floor. The lower section of the wall also included a brick inner wall (built to strengthen the main wall) that continued along the south wall. The W wall was slightly masked by the conveyor belt and associated raised steel platform. As well as the later phase conveyor belt opening on the S wall a series of brick-blocked vents were recorded close to the roof line, although their purpose was unclear as these led to the malt barn to the south. The section of the E wall not masked by the modern staircase included a brick-blocked window/opening through to Building H.
Basement	G2	The basement level of Building G was open through to Building H with no dividing wall present. The remaining upper part of the E stone wall being supported by a central stone pillar and a number of cast-iron pillars. The basement comprised a large room with painted plaster walls and concrete floor with modern plaster partition walls to the W half of the room forming 3 small store rooms. Further cast-iron pillars were spread across the room. Two large brick-blocked doors were located on the S wall leading into Building K.

Appendix 1.8 Building H

Floor	Room	Description
Basement	H1	The basement rooms of this building had been extensively modified with many of the original fixtures and fittings either removed or masked by the later construction. Room H1 was accessed through a set of modern doors on the S wall, although the opening looked as though it may be original. A second set of internal doors were clearly modern and associated with the brick and tile walls that formed the modern aspect of this room. Two breeze-blocked doors were located on the E wall that led to Room 3 of Building I. A further modern double door on the north wall opened into Room H2.
	H2	This room also comprised modern fittings and the walls were all plastered and painted masking any original features. Two single doors on the E wall led into Rooms 1 and 2 of Building I.
	H3	This corridor led from the south entrance of the basement along the west side of the building through to the staircase in Room H4 located in the north-west corner of the basement. Again the walls were mainly of brick construction with painted plaster masking any earlier features.
	H4	This was the bottom of the modern staircase that led to all floors of Building H and was a modern addition to the building.
Lower Ground Floor	H5	The lower ground floor rooms of Building H comprised a series of rooms complete with modern fittings. Room H5 included painted plaster walls and a modern paneled ceiling with a bar area to the north side of the room. A breeze-blocked door was recorded on the E wall leading into Room 4 of Building I. A further door was located on the W wall leading to the LGF of the kiln (Building G). A large brick-blocked window was present on the S wall along with a breeze-blocked door close to the W corner of the room.
	H6	This room comprised a modern toilet block and corridor leading to the modern staircase in the NW corner of the lower ground floor. All the walls were painted plaster that masked any earlier features or openings. Removal of these modern features revealed two blocked doors and a single window on the W wall. The original E wall included doors leading into rooms 6 and 7 of Building I and a large window/opening through to Room 6.



Floor	Room	Description
Ground Floor	H7	The ground floor also comprised of a number of rooms all with modern fittings. Room H7 was one of 3 main offices on this floor and comprised of a large room with a stone S wall that included a recessed window, although this was originally a door. All the other plaster partition walls were modern in design with a modern paneled ceiling and a door leading to the hallway on the north wall.
	H8	This was very similar to Room H7 with a window on the stone S wall and modern plaster partition walls to the N and W. Although it was not visible due to the painted plaster walls a breeze-blocked door existed on the E wall leading to the Brewhouse (Building I). A small fireplace was also revealed on the E wall close to the SE corner of the room.
	H9	A small storeroom at the east end of hallway H11 with plaster partition walls. Part of the modern development of this building.
	H10	A large office room to the N side of the floor with a large recessed window on the original N wall. As with the other rooms on this floor this had been completely modernised with any original features masked by the painted plaster walls and paneled ceiling. The soft strip of this room failed to reveal any further significant features.
	H11	This comprised the hallway and WC block plus the modern staircase leading to all floors. The north wall of the staircase included a later inserted door leading to the courtyard. The modern fittings masked an original window and blocked door on the W wall leading to G1 and a blocked door leading to F1.
First Floor	H12	This floor also comprised a series of modern fitted offices. Room H12 to the N side of the floor included an original large recessed window on the N wall and a modern door leading to the hallway on the W wall. The floors were carpeted and the ceiling had modern paneling. No further features were revealed following the soft strip.
	H13	A further office with an original recessed window on the stone S wall and a breeze-blocked door to the S side of the E wall leading to the 1st floor of Building I. A plaster stud partition wall separated this room from Room H14 to the west.
	H14	The largest of the three offices on this floor and again complete with modern fittings. The stone S wall included a recessed window and the top of a blocked door that led to Building K.
	H15	This comprised the hallway leading to all three offices and the modern staircase in the north-west corner of the floor. The only original feature was a window on the N wall of the staircase.

Appendix 1.9 Building I

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Floor	Room	Description
Basement	I1	The basement of the Brewhouse comprised 3 separate rooms with Room I 1 forming a large rectangular room to the N side of the floor. The room included a stone floor and painted stone walls with a series of N-S aligned cast-iron beams with several courses of brick above supporting the stone ceiling. The room was accessed by a doorway on the W wall that had been narrowed with a brick surround. This led to Room 2 of Building H. In the NE corner was the base of the brick chimney. This had a small brick-blocked opening on its west wall, although it is clear this was not the main opening of the chimney.
	I2	This second small rectangular room also had a flagstone floor, painted stone walls and cast-iron support beams with bricks above supporting the stone slab ceiling. The room was accessed through a door on the W wall leading to Room 2 of Building H. A small brick-blocked opening was recorded close to the floor of the E wall. This opening had a brick surround suggesting that it was part of a later phase to the building although why it is so close to the original floor is unclear.
	I3	The final basement room to the S of the floor was a large storage area that held a number of tools and timber crates. The room had a stone floor and stone walls. The S wall included a doorway leading to Building J and a breeze-blocked door to the far W side of the wall leading to the rear courtyard area of the brewery. The W wall had a wide breeze-blocked door leading into Room H1. In the NW corner of the room was a large diameter water pipe possibly for the waste water coming from the brewery processes taking place on the floors above.

Floor	Room	Description
Lower Ground Floor	14	The lower ground floor of the Brewhouse building comprised four separate rooms all with stone floors and walls. No access was possible to Room 14 although a hole cut into the floor above allowed a limited view of the room. All the walls were plastered and painted masking the two bearing boxes on the N wall and the window on the S wall. The two opposing doors on the E and W walls were breeze-blocked and the room was full of boxes and rubbish.
	15	This room included two sash-and-case windows on the E wall and a blocked door leading to Room 14 on the W wall. Above the blocked door was a further brick-blocked opening along with a number of recesses and supports suggesting possible engine mounts. The S wall included three bearing boxes, although these did not continue through the wall which suggests they were for powering something in the room. The easternmost box opposed a similar bearing box that ran through the N wall, the extant associated driveshaft being supported by a heavy cast-iron bracket located high on the E wall. Below the bearing box on the N wall was a large door opening leading to Room 16. A number of iron pins were located on the floor probably for holding heavy machinery.
	16	This room included two sash-and-case windows on the E wall and a blocked window to the S of a door leading to the bar area of Room H5 on the W wall. The S wall included three bearing boxes, two close to the ceiling and one at the far W side of the wall close to the floor. Below the middle bearing box was a brick-blocked opening into Room 14. The wall at this point also had a semi-circular mark on the wall suggesting it was the location of a large wheel. In conjunction with this the floor below this wall mark had been in-filled and was probably a former wheel pit. This suggests that the brick-blocked opening was probably the bearing box for a large wheel and possibly linked to the main power source for the brewery. Opposite the middle bearing box on the S wall is an opposing bearing box with a heavy cast-iron bracket to the W side. Again the floor included a number of iron fastening pins that had been cut off and indicated the location of heavy machinery.
	17	This final basement room included a timber partition wall marked 'General Store 1'. The brick chimney recorded in the basement continues to rise through this floor in the NE corner. A single bearing box was recorded on the S wall and a narrow window/opening with a steep angled recess below was found to the W side of the N wall within one of the two modern WC cubicles. This was thought to be a coal chute. A modern opening had also been inserted in the N wall for the modern power supply.
Ground Floor	18	The ground floor comprised of one large area although this can be divided into three separate areas. The area to the S included a timber floor with stone walls to the S, E and W. The E wall included two large sash-and-case windows, one of which was half masked by later inserted ceiling support beams. The S wall included a large brick-blocked double door on the E side that seemed to open into the roof space of Building J and a small brick-blocked door to the W side that originally led to an outside staircase in the rear courtyard. To the W of this door was a large sash-and-case window and to the E a small bearing box. A breeze-blocked door was located on the W wall leading to Room H8. The main feature of the southern area was a large timber shed with the initials 'M H' marked on its wall. Unfortunately the inside of the structure was full of debris although it was clear it had a steeply angled floor. Above the shed was a large metal hopper. To the N of this hopper was a heavy cast-iron beam running from the W wall up to the hopper supporting a small motor with chain and sprocket fitting. This was possibly originally powered by the drive shaft that would have sat in the bearing box on the S wall. A second electric motor had been installed close to this making the initial motor redundant. This barn was clearly associated with the timber chutes in the floor below.
	19	The central third of this floor was mostly taken up with the brick constructed furnace. The furnace included two fire boxes on the N side with the cast-iron doors set obliquely towards each other in the wall. The doors opened from the base with rollers located above the doors providing leverage for a pulley system as the doors were not only very heavy but would also have been very hot when in use. A void below the fireboxes included a series of pipes that seemed to include some kind of sprinkler system, possibly used in order to cool the furnace. Cast-iron covers to vents above the fire boxes would have been used to regulate the heat of the furnace. To the E of the fireboxes a flue linked the furnace to the chimney located in the NE corner of the room. The wall of the furnace curved round to the rear (S) side and included a number of further cast-iron vent covers that could be lifted off in order to produce a draft to the furnace. The furnace was sat on a stone floor that continued across the northern part of the room. A large 1.6m high iron shield was placed in front of the fireboxes although its purpose was unclear.
First Floor	110	The northern section of the floor comprised a flag stone floor and stone walls to the N, E and W with the continuation of the chimney in the NE corner rising through the floor. The entrance to the room was located on the N wall and comprised a large sliding timber door. A window was also recorded to the E side of the N wall. A metal staircase attached to the W wall led to the upper floors.
	111	As with the ground floor this was one large open area accessed by the metal staircase attached to the W wall. At the top of the stairs was a breeze-blocked door leading to Room H13. No access could be gained to the S side of this floor as it comprised a large void. The main features of this floor were two large circular pits placed above the furnace. These were both brick lined and at the time of the survey full of timber and debris. The pits were possibly the location of the mash tuns and were supported within a cast-iron floor with a stone wall to the N side forming a continuation of the front wall of the furnace. Within the floor were a series of brackets, plate doors and metal frames that related to the processes involved at this level. The cast-iron frames above these vats included a number of pulley wheels that were used to lever the various plates and fixtures now missing. The cast-iron pillars to the south of the pits were marked 'C & DV 1 and 2'. The next floor was accessed by further metal stairs along the W wall.



Floor	Room	Description
Second Floor	I12	The upper floor of the Brewhouse is not a floor as such as it comprises a series of timber walkways and partial floor spaces. To the N side of the floor is a section of concrete floor supporting a large cast-iron plated tank with asbestos lagging, suggesting this tank was designed to hold hot water/liquid. The central section of the floor was void with a large space for the mash tuns on the floor below. A single large timber support beam ran N-S across this void and included a number of pulley wheels. A section of timber flooring with part of a circular void cut into it was recorded to the S side of the area and was partially exposed below the timber walkway. Below the void are a series of timber beams aligned E-W that would have supported whatever was being held in the circular void, although two of these had been cut short to accommodate a modern vent system. Above the timber floor was a large malt hopper. To the W of this on the S wall was a small bearing box and pulley system running through the timber floor. The E wall at this level included two large sash-and-case windows with a further window on the N wall. A modern vent system was located in the SW corner of the room running through the S wall.
	Roof space	Within the roof space were further timber walkways and a large cast-iron plate water tank 1.2m deep and measuring 6.1m long and 3m wide supported on large cast-iron support beams. In the NE corner of the area the shape of the chimney changed from square to circular as it reached the roof, although it had been demolished beyond the line of the roof. The timber beam roof included a long vented extension along its length.

Appendix 1.10 Building J

Floor	Room	Description
Basement	J1	This room included breeze block walls to the E, N and S walls, the stone W wall being the only original elevation of the room. The floor was concrete with a shallow north/south aligned channel running through the middle leading to a drain at the S end. The W wall included two rows of small blocked window openings, one row close to floor level and the other above head height. The room was accessed by a modern inserted door in the W wall. A series of three circular cast-iron pillars supported cast-iron beams that supported the timber ceiling.
	J2	This room formed a large storage area to the N side of the building and continued into Room J 3. It contained a large number of tools and wooden bottle crates. The room had a cement/concrete floor and stone walls to the N, E & W sides, the S wall being the later breeze block partition wall to Room J 1. The timber ceiling had a trap-door in the south-west corner leading to an attic space although this could not be accessed. The large double door on the N wall accessed Room I 3 and the W wall included a number of blocked window openings.
	J3	This was formed by a long corridor to the E side of Building J that ran between Room J 5 to the S and J 2 to the N. The E wall had a painted plaster render that masked any earlier features but was probably comprised the original E wall of the building. The breeze block section of the W wall formed the modern partition wall to Room J 1 whilst the southern section of this wall was brick constructed and formed the partition wall to Room J 4. A later inserted door in the original stone constructed S wall led to room J 5.
	J4	This small store room to the S of Room J 1 had stone walls to the S and W a brick wall to the E and breeze block wall to the N. This suggested that the room was of a later phase. The room was accessed through an original double door on the south wall, this wall being an original stone wall of the building. Again the room had a modern concrete floor and timber ceiling.
	J5	This large square room was a later addition to the original brewery with a brick E wall, a breeze block W and S wall and a stone N wall formed by an original wall of the 1860's brewery building. The N wall included two blocked windows on the W side, a central double door opening with a cast-iron lintel leading to Room J 4 and a modern inserted door on the E side leading to Room J 3. A double course of brick inserts were recorded above all the features on this wall although their function is unclear. The W wall included a series of modern vents and a large sliding steel door. The floor included four various sized concrete plinths but no fastenings. The room also had a modern corrugated steel roof.

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Appendix 1.11 Building K

Floor	Room	Description
Ground floor	K1	Building K was part of the original brewery building and comprised two floors forming large open areas. This large rectangular room had a modern concrete floor and original stone walls to all sides with entrances to the N and S sides of the E wall. At the S end of this wall was a large stone-blocked double door with two later inserted doors slightly further to the N. The doors at the N end also were later phase insertions. The N wall was heavily rendered but a brick-blocked door with a brick surround was identified to the W side close to the lift shaft and spiral staircase in the NW corner. The main feature of the room was a large sunken pool that was located in the centre of the room and was probably an engine pit. A number of modern concrete plinths were located across the floor. The room had been partially divided into two rooms with the insertion of a modern breeze block wall. The room also included a series of large square concrete and steel pillars aligned N-S down the middle of the room supporting the upper floor. A series of small offices constructed of plaster board were found to the SE area of the room. This building was thought to have originally held three floors. This was confirmed with the exposure of a brick-blocked beam slot high up on the E wall, but below the level of the existing upper floor.
	K2	This upper floor to Building K was again a large open area with a number of modern office rooms to the E and S walls. The room had a concrete floor and was open to the steel framed roof. All but three of the windows on the E wall were blocked and all the windows on the W wall were blocked. A steel staircase at the N end of the room led through a later inserted door on the E side of the wall that led to Room H7. A spiral staircase was located in the NW corner of the room leading to the lower floor. This floor was a modern insertion as the building originally had three floors.

Appendix 1.12 Building L

Floor	Room	Description
Basement	L1	This modern small single storey building to the S of the bottle store had breeze block N, S & W walls with a brick wall to the E that included a brick-blocked door and window. It had a modern concrete floor and flat corrugated steel roof with a single door on the west wall.

Appendix 1.13 Building M

Floor	Room	Description
Basement	M1	As with Building L this small building had breeze block walls to the N, S & W and a brick E wall with a brick-blocked window suggesting the E wall is of a slightly earlier phase. The building held the fuse boxes and electricity generator used to power the modern brewery. The building had a flat corrugated steel roof.



Appendix 2 Context register

Context	Block	Description
027	D3	Layer of tarmac (modern surface) 0.10m(d) across whole N end of site.
028	D3	Layer of rubble & gravel levelling material below [027] 0.40m(d). Modern made-ground.
029	D3	Layer of mixed, poorly sorted rubble & stones in a dark grey silty matrix, below [028] & [027] 0.40m(d). Modern made-ground.
030	D3	Layer of light brown clay with frequent angular stone inclusions. Natural deposit.
031	D3	Mixed deposit of rubble stone, brick & tile in a mortar-rich dark grey clayey silt. Backfill of modern drain cut [032].
032	D3	Linear cut, aligned NE-SW, filled with [031]. Modern drain cut.
033	D3	Stone, brick & mortar wall structure, set on irregular coursed brick & sandstone footings. Majority of wall constructed from angular stones with occasional bricks bonded with lime mortar. NE & NW corners anchored by two larger cut stones. All bricks hand-made. Coursing a combination of header & stretcher, including header bricks set on their sides. 1.80m(l) as exposed, 1.85m(w), 0.35-0.40m(h). Potentially wall for sugar refinery 'weighing machine'.
034	D3	Intermixed deposit of mottled dark brown, orange & red sandy clay loam with large angular stones, brick fragments, yellow mortar lenses, charcoal fragments & aggregate cement. Located within interior of [033] below general rubble overburden. Artefacts include green glaze pottery sherds & 1 piece of plastic. 1.25m(l), 1.50m(w). Demolition/levelling overburden.
035	D3	Cut for wall [033], cut into natural clay/stone. 1.80m(l) as exposed, 1.85m(w).
036	D3	Brick footing, running NW-SE through centre of [033]. Bricks tapered and laid alternately, set atop a rough footing of angular and squared sandstone with occasional bricks. Whole structure bonded with yellow/cream sandy lime mortar (same as [033]). All bricks hand-made. 1.25m(l), 0.22-0.25m(w), 0.25m-0.30m(h). Internal wall footing constructed after laying of [033] wall footing.

Context	Block	Description
037	D3	Deposit of yellow/light brown sandy clay loam with frequent sandstone, mortar & limestone fragments. Also contains occasional brick fragments & lenses of pure orange sand. Located within [033] & [036], below [034]. 1.15m(l) as exposed, 0.40-0.50m(w), 0.30m(d). Deliberate fill within structure.
038	D3	Deposit of very dark grey/black clayey silt loam with occasional small coal fragments, mortar & sandstone fragments. Located within [033] & [036], below [037]. High proportion of artefacts including refined earthenware, 1 bottle-stopper ball & faunal bones. 1.15m(l) as exposed, 0.40-0.50m(w), 0.15m(d). Accumulated fill within structure.
039	D3	Deposit of light yellow sandy lime mortar located at base of [033] & [036] below [038], running under footings. 1.15m(l) as exposed, 0.10-0.20m(w), 0.05-0.08m(d). Mortar pad for footings.
040	D3	Cut of modern service trench, aligned N-S through D3, vertical sides, filled with [041]. 2.00m(w), excavated to depth of 1.50m (during evaluation feature was excavated to depth of 2.00m). Modern service cut.
041	D3	Mixed deposit of rubble including stone, brick, mortar, tile etc. Very compact at top but loose beneath initial 0.30m. Fill of [040].
042	D3	Brick wall structure (SW corner), running into N section of D3 & truncated at S end. 3 courses wide, constructed from red, hand-made brick bonded with a yellow lime mortar. 1.80m(l), 0.40m(w), 0.60m(h).
043	D3	Deposit of stone & brick in a loose mortar rich matrix. In-fill to E of wall [042] 1.80m(l) as exposed, 0.60m(w), 0.90m(d). Re-deposited demolition material?
044	D3	Brick wall structure (SW corner, running into E section of area & N towards [042]). All bricks hand-made and bonded with yellow/cream sandy lime mortar. An internal brick wall runs N-S. Internal space is floored with sandstone flags with sections below S & E walls part-paved with brick. Filled with [045], [046] & [047]. 1.00m(l) 0.90m(w), 0.53m(h).
045	D3	Deposit of mortar & hand-made brick demolition debris in a light grey loamy sand matrix; mortar fragments & pieces medium to large & very frequent, brick fragments medium to large & occasional. Located within [044] & [042]. Artefacts include early 19th century bottle glass. 3.50m(l), 1.20m(w) as exposed, 0.40m(d) Demolition debris accumulated within structure.

Context	Block	Description
046	D3	Deposit of dark grey sandy silty loam with occasional large brick fragment inclusions, occasional small to large mortar fragment inclusions & occasional charcoal flecks. Located below [045], predominantly within [044]. Artefacts include roof tile, terracotta jars & pipes, faunal bone, window glass & refined earthenware. 1.00m(l), 1.00m(w) as exposed, 0.20m(d). Demolition fill.
047	D3	Deposit of black, ultra fine silty loam with occasional small mortar & brick fragment inclusions. Located at base of [044]. 1.00m(l), 0.30(w), 0.10m(d)
048	D3	Cut for wall [044]. 1.20m(l) as exposed, 1.10m(w), 0.60m(d).
049	D3	Layer of yellow lime mortar forming base layer for wall [042] running into E side of D3; W-E return of wall [042] removed but foundation layer remaining.
050	D3	Floor level of stones in a lime mortar base. Located within structure of wall [042]; at same level as [049], below [043]. Stone rich mortar floor.
051	D2	Layer of stone cobbles set in a bed of mottled yellow & black sand. Cobbles not uniform in size or shape. Truncated to E side by sewer cut [053]. 4.00m(l), 3.00m(w), 0.45m below modern ground surface.
052	D2	Mixed layer of black & gray mottled silt, brick, stone & tile fragments. 5.50m(l), 4.20m(w). Possibly made-ground on service cut [053] backfill.
053	D2	Cut of modern service trench, aligned N-S along E side of D2, filled with [054], cuts [052] & [051]. The cut was 2.00m wide forming the same service cut as [040] in D3.
054	D2	Mixed deposit of brick & tile fragments, lime mortar, sand & silt. 2.00m wide. Fill of modern service cut [053].
055	D2	Layer of greenish brown, soft sandy clay with occasional small stones & charcoal flecks and frequent marine shell (oyster) & fauna; bones. Located below cobble surface [051], truncated by service cut [053]. Extent restricted to NW side of D2 due to higher natural bedrock. 3.70m(l), 0.50m(w)(max), 0.20-0.60m(d). Disturbed charcoal-rich garden soil.
056	D2	Layer of brownish orange silty clay with frequent small charcoal fragment & medium to large angular stone (basalt) fragment inclusions. Artefacts include faunal bone & unglazed 'gritty-ware' pottery. Located between [055] & natural bedrock. 3.70m(l) as exposed, 0.50m(w) as exposed, 0.08-0.40m(d). Primary garden soil layer.

Context	Block	Description
057	D2	Cut of modern service trench, aligned E-W with modern square brick manhole at W end. Filled with stone-rich greenish brown sand. 6.00m(l) as exposed, 1.00m(w).
058	D2	Concrete footings for 1980s lab building, forming an L shape within D2; comprised of a concrete raft (aligned N-S, 1.50m wide & 0.15m thick, overlying garden soils [063]) & 2 concrete pillars (rectangular, in excess of 2.00m in depth).
059	D2	Linear brick drain construction, aligned N-S. Hand-made un-frogged bricks (0.23m x 0.11m x 0.07m in size) bonded with light brown, coarse, lime mortar. Located to W of brick wall [060] & cut into garden soil [055]. Truncated at N end by lab footings [058]. Cuts [062] at S end. 2.60m(l), 0.15m(w) interior, 0.15m(h). Brick drain possibly associated with the brewery period.
060	D2	Brick & stone wall structure, aligned N-S. Construction a mixture of stone & brick fragments bonded with course, yellow, lime mortar. Located to the E of drain [059]. 2.60m(l), 0.44m(w), 0.40m(d). Possibly the foundation/base of a wall associated with late 1800s brewery buildings.
061	D2	Mixed deposit of loose brick, mortar & stone material. Located to E of wall [060], overlying garden soil [063]. 0.90m(w), 0.90m(d) max. Demolition material – possibly from wall [060].
062	D2	Mixed deposit of pale grey & yellow mortar, stone & brick fragments. Located to W of [059], overlying garden soil [063]. Fill of cut [068]. 1.50m(w), 1.00m(d). Demolition material seemingly cut by [059]
063	D2	Deposit of very dark greyish brown clayey silt with frequent charcoal flecks, small stones & heavy root disturbance. Artefacts include pottery fragments & very frequent faunal bone & marine shell (oyster). Extending across S half of D2. Garden soil.
064	D2	Linear cut, aligned N-S. Profile unclear as backfill [065] similar material to surrounding garden soil [063]. Truncated at N end by concrete pillar [058], filled with [065]. 0.50m(w), 0.25m(d). Cut for drain [059].
065	D2	Deposit of very dark greyish brown clayey silt with frequent charcoal flecks, mortar & pot fragments & occasional marine shell (oyster). Fill of cut [064] for drain [059]. Space between [059] & [060] filled with same material so probably part of the same deposition event. 0.50m(w), 0.25m(d). Backfill of drain cut.
066	D2	Linear cut, aligned E-W, with vertical sides, flat base & sharp breaks of slope. Cuts garden soil [063] on N side, truncated by [062] on S side. Filled with [067]. 1.60m(l), 0.60m(w), 0.62m(d). Possible drainage ditch for gardens.



Context	Block	Description
067	D2	Deposit of black, stone rich silt with frequent charcoal flecks, stone, lime mortar & tile & brick fragments. Artefacts include faunal bone & marine shell (oyster). 1.60m(l), 0.60m(w), 0.62m(d). Backfill of mixed material in a silt matrix into drainage ditch [066].
068	D2	Linear cut, aligned E-W with vertical sides, flat base & sharp breaks of slope. Cuts garden soil [063], filled with [062]. Possibly truncated by lab footings [058]. 1.65m(w), 1.00m(d).
069	D2	Deposit of light brown sandy clay with occasional charcoal flecks & frequent small stones. Artefacts include occasional faunal bone fragments & very frequent marine shell (oyster). Located below [063] & overlying [070] & [071]. 0.10m(d). Garden soil.
070	D2	Deposit of light brown clayey silt with frequent small stones & moderate charcoal flecks. Artefacts include occasional faunal bone fragments & pottery. Located below [069] & overlying [071]. 0.30m(d). Garden soil.
071	D2	Deposit of dark greyish black silt with moderate charcoal flecks. Located below [070] & overlying [072]. 0.35m(d). Garden soil.
072	D2	Deposit of greenish yellow clay with very frequent stone fragments and charcoal flecks. Artefacts include faunal bone fragments, marine shell (oyster) and pottery. 0.25m(d). Garden soil layer overlying natural bedrock.
073	D2	Deposit of dark grey silty clay loam. Artefacts include frequent marine shell (oyster) & glazed pottery. Located below [074] & overlying [056]. 0.12-0.14m(d). Garden soil.
074	D2	Deposit of orangey brown silty clay loam with frequent charcoal flecking & angular stones. Located below [055] and above [073] in slot through D2 but not in E-facing section of D2. 0.13m(d). Lens of garden soil.
075	D2	Layer of dark silt – re-deposited natural with heavy root bioturbation. 0.24m(d). Backfill for small tree/plant.
076	D2	Deposit of dark greyish brown silty clay with very frequent charcoal flecks & small to medium fragments. 0.40m(d). Garden soil.
077	D2	Layer of light greyish brown silty clay with occasional angular & sub-angular stone & rare charcoal flecking. 0.21-0.35m(d). Garden soil.

Context	Block	Description
078	D1	Stone & brick wall structure aligned E-W. Constructed of square cut masonry and occasional bricks arranged around large angular boulder stones bonded with coarse yellow lime mortar on a foundation of large flat stone blocks. Angular stones include large boulder 0.60m(h) x 0.80m(w) x 0.70m(l). NE corner foundation is a block of squared sandstone (0.50m(h) x 1.00m(w) x 1.00m(l)). Wall is linear with a return to the S at the E end, forming corner of building originally built onto the N side of the N kiln building. Truncated at W end by construction of plastic pipe drain [087]. 6.00m(l), 0.62m(w) with 0.15m(w) projection at based on N side, 0.60m(h) on N side. Stone wall associated with early phase brewery.
079	D1	Linear cut aligned E-W, with vertical sides, flat base and gradual breaks of slope. Cut into [087]. Possibly truncates [086]. 6.00m(l), 2.00m(w), 0.72m(d). Cut for stone wall [078], filled with [083].
080	D1	Deposit of dark greyish brown sandy silt with frequent small stones, tile fragments and lumps of mortar. Located below made-ground. 6.00m(w), 0.60m(d). Thin layer of re-deposited garden soil.
081	D1	Mixed deposit of light brown stone & mortar with timber fragments, pieces of metal work and tile fragments. Located to S of (& within) wall [078], below modern made-ground & overlying [085]. 5.90m(l), 0.50m(d) across interior of wall. Layer of demolition material.
082	D1	Timber beam with iron support bases to S of wall [078]. Probably a support base for scaffold used during demolition.
083	D1	Mixed deposit of firm clayey silt with frequent small stone & tile fragment inclusions. 6.00m(l), 0.9m(w) on interior of wall, 0.15m(w) on exterior of wall, 0.72m(d). Back fill of wall-cut [079].
084	D1	Modern man-hole drain with concrete & brick surround. Located in W section of D1 to the N of [078]. Drain pipe cuts section of wall.
085	D1	Mixed deposit of loose dark grey and brown mottled sandy silt with frequent inclusions of angular stone fragments, crushed mortar, charcoal, CBM (drainpipe & n tile) metal fixings. Located below [081] on S side of wall [078], partially filling wall cut [079] (up to depth of 0.20m), levelling out to 0.05m depth above [087]. 6.00m(l), 0.05-0.20m(d). Rough floor deposit – possibly below floor boards.
086	D1	Linear brick drain construction, aligned N-S. Hand-made un-frogged bricks (0.23m x 0.11m x 0.07m in size) bonded with light brown, coarse, lime mortar. Located to the N of wall [078], 0.60m from baulk. Possibly truncated at S end by wall [078], possibly continues beneath wall. 1.20m(l), 0.15m(w) interior, 0.38m(w) exterior, 0.15m(d). Brick drain possibly associated with the brewery period. Probably the same feature as [059] in D2.

Context	Block	Description
087	D1	Plastic vertical rainwater drainage/ sewerage pipe truncating W end of wall [078]. Fill of cut for pipe re-uses masonry from wall, creating erroneous impression that there is a return to the S at the W extent.
088	D1	Deposit of black, very fine sandy silt with no inclusions. 0.05m(d). Layer of made-ground, post lab building.
089	D1	Deposit of rich orange, heavily compacted broken CBM (tile & pipe) with no sediment matrix. Blaize clay. 0.13m(d). Layer of made-ground.
090	D1	Deposit of black, fine sandy silt with CBM/blaise fragment inclusions 0.22m deep. Layer of made-ground above the concrete foundations of the lab building.
091	D1	Mixed deposit of re-deposited material; greyish brown silt, sand & demo debris with frequent medium angular stones, oyster shell & CBM inclusions 0.27m(d) max. Layer of made-ground above the foundations of the lab building.
092	D1	Mixed deposit of pale grey & cream sand & mortar with frequent small-very small angular stone inclusions. Located below [091] & [098], overlying [097]. Artefacts include fragments of white clay pipe stem 0.19m(d) max.
093	D1	Deposit of grey, very slightly silt sand with frequent small to medium angular stone inclusions. Separated from [095] by uneven lenses of yellow sand, possibly from demolition. 0.26m(d) max. Layer of made-ground.
094	D1	Deposit of mid-greyish brown mixed sands with very small stone inclusions 0.25m(d). Layer of made-ground.
095	D1	Deposit of very mixed demolition material 0.50m(d). Layer of made-ground.
096	D1	Mixed deposit of mid-light yellowish brown sand & sandy silt with frequent inclusions of CBM fragments, decayed sandstone & large angular stones 0.60m(d). Layer of made-ground, post lab building.
097	D1	Deposit of mid-greyish brown mixed sand, silt & clay with small to medium angular stone & broken mortar inclusions. 0.31m(d). Layer of made-ground, post lab building.
098	D1	Deposit of dark brown mixed silts with charcoal flecking & occasional small angular stone inclusions 0.25m(d). Re-deposited garden soil.
099	D1	Deposit of grey & red laminated friable clay with frequent very small stone inclusions. Layer of re-deposited made-ground forming bands of grey-red clay-like but gritty material 1.55m(d).

Context	Block	Description
100	D1	Deposit of dark grey gritty silt with lime mortar fragments & frequent small stone inclusions. Artefacts include occasional marine shell (oyster) & pottery. Located below [099], overlying mixed garden soil [102] 0.60m(d). Disturbed upper garden soil layer.
101	D1	Deposit of dark grey, gritty silt with lime mortar fragments & frequent small stone inclusions. Located below [085], to the inner side of wall [078], overlying [104]. 0.35m(d) max, shallower to N side. Re-deposited material forming a levelling layer for wall [078] associated with the brewery.
102	D1	Deposit of mid-greyish brown clayey silt with frequent small stone inclusions. Artefacts include faunal bone, marine shell (oyster), white clay pipe fragments and pottery sherds. Located below [100], overlying [103] 0.50m deep. Mixed but probably undisturbed layer of medieval garden soil.
103	D1	Deposit of very dark grey/black clayey silt with occasional small stone & charcoal fleck inclusions. Located below [102], overlying [106] 0.48m deep Layer of undisturbed garden soil.
104	D1	Deposit of loosely packed, poorly sorted, angular stones very similar to mudstone bedrock in a medium brown loose sandy silt. Homogenous. Tipping layer below [092] & modern drain cut on E-facing section of D1. Cut by wall cut [079] 1.30m deep. Tipped material to raise ground-level for brewery building.
105	D1	Deposit of dark grey soft silt with very frequent stone inclusions. Located below [104] & above [099]. Tipping layer to raise ground level.
106	D1	Deposit of greenish brown clayey silt with frequent charcoal flecks. Artefacts include faunal bone & marine shell (oyster) 0.15m deep. Primary layer of garden soil overlying natural.
107	C	Concrete floor slab of Building C 0.30m thick
108	C	Layer of mixed brick rubble, some stamped 'NIDDRY' forming a foundation layer 0.3m thick below slab floor [107]
109	C	Section 1 – a layer of made ground comprising mixed deposits of ash and gritty sand forming a levelling layer below [108]
110	C	Section 1 – A layer of black/dark brown gritty sand with frequent small stone inclusions + occasional brick fragments. Made ground below [109] and above [111]
111	C	Section 1 – A deposit of natural firm red clay above the bedrock
112	C	Section 1 – A brick line flue/drain aligned N-S. Constructed within layer [110] and above clay [111]. Constructed of un-frogged red brick bonded with a course grey lime-mortar. Internal dimensions 0.18m x 0.15m
113	C	Section 1 – A N-S aligned linear cut for brick wall [114] cutting the natural clay.



Context	Block	Description
114	C	Section 1 – A 'L'- shaped wall below sand layer [145]. The wall was 0.45m wide and 0.50m high constructed of un-frogged red brick bonded with coarse grey lime mortar. The wall runs N-S and turns to the W at the N end. Truncated by wall [146] at the W end.
115	C	Section 1 – backfill of cut [113] recorded to the W side of brick wall [114]. A dark brown stone rich clay with ash and brick fragments.
116	C	A layer of stone and dark brown clayey silt with frequent charcoal fleck inclusions. Below [110] and cut by [113] and [112]. Possibly a disturbed garden soil
117	F	A narrow strip of garden soil comprising a compact clayey silt with frequent charcoal fleck inclusions plus animal one and oyster shell and small stones. Recovered a small amount of pottery and pipe stems from this layer. Recorded 2.83m below ground level.
118	C	Section 3 - Layer of tarmac forming the ground surface of the car park to the N side of Building E
119	C	Section 3 – layer of rubble hardcore below tarmac surface 0.15m thick above [120]
120	C	Section 3 – Layer of mixed stone and compact clayey silt forming a levelling layer below rubble [119]. Up to 0.4m thick.
121	C	Section 3 - Cut for feature [123] 0.9m deep and 0.8m wide. Possibly a linear cut for a modern service.
122	C	Section 3 – backfill of cut [121] comprising rubble stone, brick and mortar.
123	C	Section 3 – Stone and brick feature with cement bonding 0.6m wide and 0.15m high forming a base/platform for a modern service.
124	C	Section 3 – A small deposit of ash rich material truncated by modern works and cut by [121]. Recorded above garden soil [139].
125	C	Section 3 – Cut for a stone-lined culvert. A N-S aligned cut 0.9m wide and 1m deep cutting garden soil and layers above.
126	C	Section 3 – Backfill of culvert cut [125] comprising rubble stone, brick and mortar along with red tile fragments in a dark brown clayey silt matrix.
127	C	Section 3 – A N-S aligned stone-lined culvert formed of large square cut stones bonded with a coarse yellow lime mortar with a stone slab base. Internal dimensions were 0.40m wide x 0.30m high.
128	C	Section 3 – A layer of ash and red tile fragments up to 0.4m deep above layer [129] forming a modern levelling layer.
129	C	Section 3 – A layer of stone rich clayey silt below layer [128] and above [130]. Possible re-deposited layer of disturbed garden soil cut by culvert [125].
130	C	Section 3 – A layer of dark brown clayey silt garden soil with frequent charcoal flecks and small stone inclusions. Recorded below [129] and slightly cut by culvert [125], being 0.5m thick above natural clay [131].
131	C	Section 3 – A layer of red clay above the bedrock. Only a small area 0.20m thick recorded in the section 0.8m below the OGS.

Context	Block	Description
132	C	Section 3 – A layer of stone rich compact clayey silt with frequent small stones, lime mortar lumps and brick fragments below layer [120] and cut by [121]. Made ground above garden soil [139].
133	C	Section 3 – A yellow sand backfill to cut [135].
134	C	Section 3 – A mixed brown clayey silt backfill with frequent angular stone inclusions forming the back fill to pipe cut [135].
135	C	Section 3 – Linear cut for Cast-iron pipe cutting layer [137].
136	C	Section 3 - A deposit of ash rich material below layer [120] and above [137]. Possibly dump material.
137	C	Section 3 – A layer of lime mortar rich clayey silt above garden soil [139] and cut by service pipe [135] recorded below [136] and [132].
138	C	Section 3 – Bedrock recorded at the W end of Section 3 1.4m below the ground level but dropping to the SW.
139	C	Section 3 – A dark brown clayey silt with frequent charcoal fleck inclusions forming a garden soil below layers [132] and [137]. Included animal bone and oyster shell plus heavy root bioturbation. Recorded above [140] but has a very diffuse change.
140	C	Section 3 – An orange-brown clayey silt with frequent charcoal fleck inclusions forming a garden soil similar to [139] above. Base was not seen.
141	C	Section 4 – A layer of made ground comprising dark greyish brown gritty silt with frequent stone and tile/pottery fragments recorded above bedrock [138].
142	C	Building E – A layer of dark greyish brown gritty silt with occasional small stone and oyster shell inclusions. Recorded 1m below the floor slab of Building E office 0.3m deep. Below made ground/levelling layer of the floor slab.
143	C	Modern brick lined man-hole base associated with pipes [156] & [157]
144	C	Cast-iron pipe and cut aligned E-W through the middle of area C1 and truncated at the W end by pipe [156].
145	C	A layer of clean yellow sand above wall [114] and confined by wall [146] to the W 0.3m deep. Also below cobbles [162] and over platforms [164] and [166].
146	C	N-S aligned brick wall of un-frogged red brick bonded with lime mortar 4 courses high. Abuts wall [160] to the S and truncated by pipes to the N but continues beyond these. Built over brick floor [159] and later than platforms [164] & [166].
147	C	E-W aligned stone wall truncated at the W end by a modern ceramic pipe and to the E by brick feature [158]. The wall was 2.6m long and 0.65m wide standing to a maximum height of 0.6m and constructed of squared stone bonded with lime mortar. The wall overlies two stone plinths [165] & [168] – both bonded into the wall. Possibly associated with flue [167]. Forms part of the S wall to buildings shown on the 1852 OS.

Context	Block	Description
148	C	Layer of mixed stone, brick and lime mortar lumps forming a demolition layer/levelling layer. Bounded by brick wall [146] to the E and [147] to the S and truncated by pipes [144] & [156] to the N.
149	C	A layer of part-glazed red bricks being re-used to form a flat surface/levelling layer possibly associated with [152] to the N. Truncated by pipes [144] & [156] and sat over layer [150].
150	C	Layer of ash rich deposits below brick surface [149] and overlies mortar rich deposit [163].
151	C	Modern drain cut aligned E-W across Area C.
152	C	A layer of re-used and part-glazed red bricks forming a rough floor surface. Poorly constructed with no bonding and associated with [149] and sat over layer [153].
153	C	Layer of black ash rich silt forming a levelling layer below floor [152] and abutting feature [154] to the E. Truncated by modern service pipes to S. Deposit was 0.1m deep overlying [163]
154	C	Brick surface/base associated with brick wall [146] to the S. Truncated by pipes to the S and modern cut to the N. Feature comprises a concave cement surface 0.66m wide bounded to the E by a brick wall (same wall as [146] to the S) bonded with a course grey cement 0.4m high and to the W by an angled brick wall with a rounded top lip forming an open end to the surface. The Wall to the E is bounded by a cobble surface [162]. The main structure is built over roughly placed brick base.
155	C	A deposit of ash rich compact silt to the E of brick feature [154]. Only 0.05m thick over cobble surface [162]
156	C	A number of large sub-angular stones sat over a layer [155] possibly just demolition material
157	C	Modern drain cut running into the N side of brick manhole [143]. Truncated layer [155] and cobbles [162]
158	C	A brick wall/culvert located at the E end of stone wall [147] aligned N-S and curving to the SW at the S end. Unfrogged brick with lime mortar bonding 0.34m wide and 0.32m high. Forms edge to brick floor [159]. A section through the wall shows it was a small drain 0.16m wide and 0.1m high.
159	C	A single course of unfrogged red brick forming a floor surface bounded by walls [158] and [160] and floor [164] to the N. In the SW corner is a circular drainage hole cut into a stone insert.
160	C	An L shaped length of brick wall of unfrogged red brick bonded with lime mortar with occasional slate and stone fragments. Forms boundary to brick floor [159] and abuts brick platform [166] at the N end. Wall is 0.27m wide and 0.43m high. At the W end the upper courses have been removed and culvert [158] inserted.
161	C	A dark brownish grey gritty silt fill to culvert [158]
162	C	A cobble surface to the E of brick base [154] continuing into the E section. At the NE corner a square stone base with an indented square cut was inserted. Possibly a pillar support for an open sided shed. Truncated to the SE by modern service pipes.

Context	Block	Description
163	C	An uneven deposit of lime mortar with occasional small stone and brick inclusions. Recorded over floor surface of flue [167]
164	C	A large rectangular brick platform linked to wall/flue [158] at the S end. Built of several courses of unfrogged red brick bonded with lime mortar 0.85m E-W x 2.25m N-S and 0.25m high. Associated with brick platform [166] to the E. The feature is sat over the E end of stone floor/culvert [167] but may be contemporary.
165	C	Large stepped stone base supporting stone wall [147]. 1.4m x 1m x 0.4m. Bonded to the wall with lime mortar and sat over the bedrock. Same as [168]
166	C	Large rectangular brick platform similar to and associated with [164] to the W. The platform is 2.3m N-S x 1.1m E-W and 0.25m high. Associated with brick floor [159] and linked to walls [160] and [114] at the S end. The base includes a layer of broken tile and brick bonded into the base. Truncated to the N by modern services.
167	C	A part brick part stone culvert system cut into the natural bedrock. The culvert was truncated at the W end by modern services. It was aligned E-W turning to the SE at the E end (below platform [164]). To each side of the lip of the culvert a surface of roughly sorted stone with a lime mortar bond 1.1m wide was recorded. The culvert was 0.52m wide and 0.54m deep filled with [163] except where it ran under [164] where a fill of glass fragments was recorded [170]. Linked to culvert [171] at the turn. The brick and stone sides sit over the bedrock and the base is bedrock.
168	C	A large stone base slab recorded below the W end of stone wall [147]. Slightly truncated by modern services and may be a foundation for wall. 0.85m x 0.75m and 0.4m high
169	C	Lump of concrete on the E edge of flue floor [167].
170	C	A greyish black mixed stone/silt fill of flue [167] with frequent glass bottle fragments. Only recorded where the flue runs under platform [164] with most of the glass at the entrance.
171	C	N-S aligned culvert 0.74m wide x 0.5m high joining culvert [167] at the S end. Ran below platform [166] and was cut into the natural bedrock. The sides were a mix of brick and small brick sized cut stone bonded with lime mortar. Recorded further to the N as Culvert [331]
172	C	A dark brown loose silty loam fill to culvert [171]
173	C	The stone flag base of a NW-SE aligned stone culvert sat over the bedrock and below culverts [167] and [171]. The slabs measure 0.6m x 0.5m and may be associated with culvert [127] recorded in section (3) to the S. The mortar bonding included a significant quantity of red tile/pottery fragments forming a bedding layer.
174	C	Section 6 – A thin layer of concrete forming a floor layer below the modern concrete slab [107]. 0.10m thick.
175	C	Section 6 – A layer of mixed and poorly sorted brick and stones fragments forming a levelling layer below floor [174].



Context	Block	Description
176	C	Section 6 – A layer of very mixed stone, ash and silt. Possibly a dump material 0.3m thick below modern surface and above [145]. Abuts E side of wall [154]
177	C	Section 6 – layer of reddish brown clay sat above the bedrock.
178	C	Section 6 – linear cut for a cast-iron service pipe, 0.3m deep and 0.7m wide cutting layer [176] to the W and [177] to the E.
179	C	Section 6 – A dark grey/black silt fill with frequent small stone inclusions and lime mortar lumps. Enclosed by wall [146/154] to the E and stone slab [180] to the W.
180	C	Section 6 – A large stone slab set vertically in the section. The stone is 0.3m high and 0.15m wide.
181	C	Section 6 – A shallow layer of mixed deposits including stone, brick and clay forming a sealing layer above [182]. Possibly part of demolition material.
182	C	Section 6 – A layer of mixed deposits primarily lime mortar with stone fragments and bands of sand and clay. Possibly a levelling layer or demolition material.
183	C	Section 6 – A thick layer of lime mortar material plus small stone and brick fragments above stone floor/surface [185]. Up to 0.4m thick.
184	C	Section 6 – A mixed layer of reddish brown clay with frequent stone, lime mortar lumps and brick fragments forming a levelling layer of demolition material above brick platform [166].
185	C	Section 6 – A stone base/floor below mortar rich layer [183] 0.25m thick and 1.22m long sat above natural deposit of stone and greenish grey clay. Bonded into wall [192] to the W and contemporary with flue/drain [190].
186	E	An E-W aligned stone and brick constructed wall within the office basement of Building E. The wall stood 0.7m high and was 0.4m wide with a chamfered edge on the N side. The N face comprised rounded rubble masonry and the S face was very brittle heat affected brick bonded with lime mortar. The wall was truncated at the E and W ends by modern services. Possibly a pre brewery phase wall.
187	E	A large layer of brick and stone rubble to the S side of wall [186] and below the concrete floor forming a demolition layer, possibly of the wall.
188	C	Section 6 – Remains of a stone wall comprising rubble masonry bonded with lime mortar 0.6m high with a stepped foundation 0.3m below the surface. The wall sits on the natural bedrock and was cut to the S by modern services.
189	C	Section 6 – Modern cut and fill comprising a steep sided cut for 2 ceramic service pipes cutting layers [182] and [183] plus wall [192] on the E side. Fill is a mixed brown sand.
190	C	Section 6 – A brick floor surface formed of two courses of red hand made brick in a course yellow sand and lime mortar bond. The floor runs between stone walls [191] and [192] and is filled with [195] forming a flu/lade.

Context	Block	Description
191	C	Section 6 – Remains of a stone rubble wall bonded with a course yellow lime mortar. The wall is 0.75m high and 0.25m wide truncated at the top by a modern concrete surface. The E side of the wall is bonded into floor [190] and associated with wall [192] forming a single structure – possibly a drain.
192	C	Section 6 – Remains of a stone rubble wall bonded with a course yellow lime mortar. The wall is 0.40m high and 0.25m wide truncated at the top a modern service [189]. The W side of the wall is bonded into floor [190] and associated with wall [191] forming a single structure, possibly a drain.
193	C	Section 6 – A backfill of stone rich sand forming a deposit 0.6m deep to the E of stone wall [188] and W of wall [191] forming a levelling layer to the top of these two walls. Above [194] and below layer [201]
194	C	Section 6 – A layer of almost friable clay between stone walls [188] to the W and [191] to the E. Approximately 0.4m deep sat over the bedrock. Back fill to wall [188] foundation.
195	C	Section 6 – laminated layers of fine grey and black silt forming the base fill bounded by walls [191] & [192]. Up to 0.2m thick but truncated above by backfill [189]. Primary fill of flue/drain.
196	F	Layer of made ground below the foundations of Building J (Block F) comprising a deep layer of demolition material with frequent brick, stone and silt. Made ground for the brewery building.
197	F	A layer of re-deposited very dark brown/grey silt with brick fragments and large quantities of tile/pot/sugar-cone material. Recorded below [196]. Layer also includes lots of ash/burnt material. Possibly waste material from the sugar refining.
198	C	Section 6 – A rubble masonry wall aligned N-S at the W end of the S facing section of Block C1. Wall is bonded with lime mortar 0.90m high and 1m long truncated at the S end by modern service pipes. Sat over the bedrock. The wall is abutted by brick flue [199] on the E side. It is in-line with wall [265] to the N
199	C	Section 6 – A brick constructed wall and floor comprising a wall 0.25m wide and 0.6m high abutting stone wall [198] to the W. A 0.7m long section of brick floor runs to the E from the wall base up to stone wall [188]. The floor is 2 courses high of un-frogged red brick sat on a bed of sand. The bricks are all very heat affected. Possibly the remains of a flue.
200	C1	Section 6 - A gravel rich reddish brown silt with frequent small stone inclusions. Possibly residue found at the base of brick flue feature [199]. Truncated by a modern service cut.
201	C1	Section 6 – A light yellow brown gritty mortar with frequent brick and stone fragments. Forms a levelling layer above fill [193] and [202] plus sat over wall [188] and below modern made ground.
202	C1	Section 6 – A reddish brown compact mixed sand/silt layer with frequent brick/mortar/stone inclusions. Forms a demolition layer below layer [201]
203	F	Service trench – A layer of demolition material comprising silt and lime mortar with large stone blocks and occasional brick inclusions. Below modern made ground and above floor surface [204].

Context	Block	Description
204	F	Service Trench – A concrete/cement floor surface 0.10m thick and 1.2m below ground level. Below layer [203] and above layer [205]. Old floor surface.
205	F	Service trench – A layer of lime mortar rich deposit stone and brick fragment inclusions and occasional red pottery sherds. The layer was up to 0.7m thick below floor [204] and above [206] forming a levelling layer.
206	F	Service trench – A very dark brown soft silt with frequent charcoal flecks and occasional mortar lumps, oyster shell and pottery fragments. Forming a garden soil 2m below the ground surface.
207	A	Service Trench - A layer of large stone setts/cobbles 0.15m deep located in the courtyard to the N of Building A.
208	A	Service Trench - A dark brown compact gritty sand 0.10m thick with frequent small stone inclusions forming a levelling layer below [207] and above [209].
209	A	Service Trench - A layer of mixed orange/yellow clay with frequent stone and mortar lump inclusions 0.25m thick below [208] and above [210] abutting wall [211].
210	A	Service Trench - A mixed layer of re-deposited material comprising stone rich grey clayey silt 0.3m deep to the N side of wall [211] also below [209] and above [213]. Made ground.
211	A	Service Trench - An E-W aligned stone wall 0.35m wide and constructed of square-cut stones bonded with a course grey cement sitting on a wider foundation sat on the bedrock. Top of wall 0.3m below the surface and standing 1.3m tall. Foundations of pre brewery building.
212	A	Service Trench - A loosely packed demolition rubble layer with brick, stone and mortar to the S side of wall [212] and within the service trench to the N side of Building A
213	A	Service Trench - A mottled dark red/light grey compact clay 0.7m below the surface recorded below [210] and abutting wall foundation [211]. Over bedrock [214]
214	A	Natural bedrock recorded in the sections of the service trench leading to the N side of Building A
215	A	Modern tarmac floor surface between Buildings A and B
216	A	Layer of mixed deposits including lime mortar, stone and friable compact sand. Made ground for levelling below [215] and above [217].
217	A	A very thin layer of compact grey silt over cobbles [218] and below [216]. Includes glass and tile fragments forming a trample layer associated with late brewery phase.
218	A	A layer of poorly sorted rounded stone cobbles and occasional brick fragments forming a rough floor surface. Sat in a yellow sand bedding layer. Badly truncated by modern services. Floor surface for late phase brewery.
219	A	A small thin layer of burnt material, unclear as to what it represents. Forms part of trample layer [224] and [220] above [226]

Context	Block	Description
220	A	A thin layer of black compact sand with frequent glass fragment inclusions. Under demolition material [222] and above [223].
221	A	A short length of stone wall possibly associated with wall [225]. The S end forms an opening constructed of squared roughly faced stone bonded with lime mortar. Two walls the main wall aligned N-S with a short E-W aligned wall at the S end truncated by modern services. Part of pre-brewery phase
222	A	Demolition material comprising brick, stone, yellow sand and lime mortar bounded by wall [225] and was over cobbles [218] and wall [225] – [221].
223	A	Short length of stone wall poorly preserved bonded with lime mortar at the S end of wall [225] forming part of the E-W aligned end wall
224	A	A layer of heat-affected material including frequent stone. Possibly same as trample layer [219]. Above layer [226]
225	A	A large N-S aligned stone wall 0.97m wide constructed of rubble stone with a lime mortar bond. Turns to the E at the S end and truncated at the N end by modern serve pipes. Associated with floor [235] to the W and wall [221] to the N. Includes the base of a possible fireplace along its length. Part of pre-brewery phase buildings.
226	A	A thin layer of mottled red/grey re-deposited clay recorded to the E side of Block A. Below trample layers [224] and [219] and cobbles [218] and above wall [225].
227	A	A flat concrete floor below the modern concrete to the S of Block A. Possibly floor to the courtyard of late phase brewery.
228	A	A black friable but compact ash rich loam with frequent stone, glass, tile and pottery – industrial waste. Recorded to the S side of wall [225] and W of floor [227].
229	A	A small area of rounded stones covered in a thin cement layer (possibly a later addition) forming a rough floor surface to the W side of wall [225]. Only a small area survived bounded by timber blocks [230] to the N. may also be remnants of demolition phase.
230	A	The remains of two large timber beams to the N of layer [229]. Sat to the W of wall [225] and above floor [235] so possibly part of demolition material.
231	A	A layer of lime mortar, sand and crushed stone forming a compact layer bounded by stone wall [225] to the W and S and up to 0.3m thick. Over floor layer [236]. Possible levelling material.
232	A	Number for a cut that turned out to be a layer [233].
233	A	A compact yellowish brown lime mortar/sand layer with occasional slate fragments below layer [234].
234	A	Compact surface of small angular stones and occasional brick possibly vitrified, recorded above layer [233] and to the S of wall [225]



Context	Block	Description
235	A	A floor surface made up of areas of large flat stone slabs below areas [229] and [230] and abutting the W side of wall [225]. Comprises areas of stone flag, and brick floor. The floor continues over well 250 with re-used stone from the well capping evident. It is sat over a levelling layer of mortar and sand. The bricks are all hand-made laid in a bed of sand.
236	A	A yellow mortar floor below [231] and bounded by stone wall [225] to the W and S. A compact orange/yellow sandy mortar 0.1m thick over floor [240] and [241]. Possibly remains of a mortar floor.
237	A	A mixture of black silt with frequent glass, tile and pottery over a layer mixed bricks and stone. Forms a possible demolition deposit below [222] located at the N end of wall [225] and S of [221].
238	A	A stone rich backfill of a service pipe cut running through wall [225].
239	A	A stone platform abutting the E side of stone wall [225] close to the location of the fireplace and possibly associated with it. Below layer [231] and above [236] and pad [245]. Probably backfill for the sump [245] in floor [240].
240	A	A brick floor to the E side of wall [225] and abutting brick floor [241] to the N. To the S is a layer of clay. The handmade bricks are covered in a yellow lime mortar. A shallow semi-circular cut in the bricks is located in the SE corner against the trench edge – possibly a tank/boiler footprint 0.56m diameter. It had two rectangular sumps inserted [243] and [245].
241	A	A section of brick floor to the N end of Area A2 constructed of handmade bricks in a lime mortar bond. The area was not covered in a mortar surface like [240] to the S. The bricks are laid on their sides except the edges that are laid flat. Approx size 0.22m x 0.11m x 0.07m. Abuts wall [225] to the W.
242	A	A brick-lined drain located to the SE corner of Block A. The bricks were poorly constructed and unfrogged plus occasional slate fragments bonded with lime mortar. The drain had a stone and slate base. It cut through stone wall [225] with the wall forming part of the drain side. It was truncated to the south and ran into the E section of the trench. The drain cut into the purple/grey clay.
243	A	A rectangular sump area inserted into brick floors [240] and [241] filled with a large stone block/pad. Not fully excavated as it ran into the E section of the trench. The pad has a raised lip at the N end and may be re-used. The sump is associated with the semi-circular cut in the floor. It was 1.5m N-S.
244	A	Brick feature actually part of drain [242].
245	A	A rectangular sump within brick floor [240] filled with two large squared stone blocks [239], one on top of the other. The blocks are a secondary use to form a pad against the stone wall [225]. The sump was 0.44m deep and 0.77m N-S and 0.43m E-W
246	A	A possible brick-lined drainage channel aligned E-W formed to the S side by a line of raised bricks that abut the N limit of the floor [241]. The N side is formed by brick floor [248] and the drain is filled with [247]. It runs to the E side of wall [225] but not through it. It is truncated by modern disturbance to the E.

Context	Block	Description
247	A	A fill of coarse clinker like black ash 0.16m deep. Fill of channel [246].
248	A	A lime mortar covered area of brick floor to the N end of Area A2. The S side of this floor forms the N edge of channel [246]. Not fully exposed.
249	A	A ceramic pipe cut through stone wall [225] and floor [235].
250	A	A stone-lined well located to the N end of Block A and below floor surface [235]. The well was approximately 2.7m diameter with the stone floor [235] becoming part of the cap stones. A large timber beam formed the central support for the two main cap stones. A faint cut to the well [251] was visible. The well was cut into the bedrock and was over 20m deep. The upper 2.3m of the well are stone lined with a lime mortar bond. A steel beam has also been inserted to support the floor above. It has a possible outflow to the W side close to the base.
251	A	Cut for the well was not very prominent but was 0.6m beyond the wall of the well and cuts the natural red/grey clay. It had steep sides and was filled with [252]
252	A	Backfill of well cut [251]. A mixed deposit of greyish brown clay with frequent small stone inclusions and charcoal flecks and oyster shell. Pottery and animal bone also recovered. Only excavated to 0.6m, did not reach the base.
253	A	Fill of well cut comprising a deep reddish brown clay with frequent angular stone – re-deposited natural. Occasional oyster shell and animal bone recovered.
254	A	A layer of timber – possibly the remains of a timber floor abutting the W side of wall [221] being 0.5m wide and 0.10m thick above layer [255]. Also abuts the E side of brick floor [235].
255	A	A light grey compact sand rich mortar layer with frequent small stone inclusions up to 0.1m thick forming a levelling layer below brick floor [235] and timber floor [254] at the N end of Block A and above bedrock.
256	A	A levelling / demolition layer below the tarmac at the NW extension of Block A. Same as [216].
257	A	Brick base structure for support of a metal plate forming a H arrangement and abutting wall [221].
258	A	A cobble surface laying under [257] made up of roughly shaped stones 0.23m x 0.17m. The cobbles run under deposit 266 and structure [257] to the N. includes a number of timber beams [259] inserted between the cobbles. Possibly associated with kerb [267] and cobbles [263] to the E. Possibly associated with cobbles [218].
259	A	Three sets of timber beams forming a grid in NE area of Block A. 0.1m wide and 0.03m thick and 1.45m long. Two run N-S and one E-W between cobbles [258].
260	A	Deposit associated with cobbles [258]. A compact ash/clinker material filling two gaps in the timber beams [259]. Possibly levelling material or trample.
261	A	Dark brownish grey compact silt with frequent modern inclusions below [256] and 0.15m deep. Modern overburden below the tarmac.

Context	Block	Description
262	A	A small area of stones set on edge to form a surface to the E of structure [257]. Surrounded by mortar debris.
263	A	Area of cobbled surface of roughly squared flat stones 0.18m x 0.18m x 0.2m surrounded by dark grey silt material. Possibly same phase as surface [258] and kerb [267]. Abutted by surface [264]
264	A	An uneven and poorly constructed surface possibly forming a repair to cobbles [263] or later in-fill.
265	A	A large N-S aligned stone wall constructed of squared sandstone blocks with a course lime mortar bond. Possibly faced on the E side. Stood on a mottled grey clay surface. Pre brewery phase building and associated with wall [225] to the W
266	A	A deposit of ash/clinker material below brick structure [257] and over cobbles [258].
267	A	A stone kerb/step formed of large squared stone cobbles. Possibly kerb to cobbles [258] or entrance through wall [265]
268	A	Sand bedding for cobbles [258] and possibly [264] + [267]. A yellow compact sand
269	A	A layer of compact lime mortar forming a levelling layer under [268] and cobbles [258] 0.25m deep abutting wall [265]
270	A	Demolition material lying under [263] and [264] abutting wall [265] on W side. A mix of silt, mortar stone and brick.
271	A	Stone pad within general layer of foundations [273]
272	A	Foundation base for a fireplace/chimney. A sub-rectangular brick and stone foundation set into the bedrock with circular detail at the S end. Possibly same as [243].
273	A	Area of sandstone slabs and brickwork forming a floor area above the bedrock- possibly same as [240] – [241].
274	C2	A buried garden soil seen only in patches in trench excavations. A dark brown grey clayey silt very well mixed with frequent charcoal flecks. Lies above layer [275].
275	C2	A buried garden soil of slightly orange brown clayey silt with frequent charcoal flecks. Recorded below layer [274] and under [275].
276	C2	A possible robbed out wall although this was unclear as only seen in section of deep trench. A deposit of red natural clay plus stone/rubble. May have been a drain. Below garden soils [275].
277	C2	A brick wall aligned E-W within trench E. Modern in style with cement bonding. Possibly associated with the modern part of Building E
278	C2	A buried soil recorded in the section of Trench H 1.4m below the modern surface and up to 2m deep. A layer of garden soils with frequent charcoal flecks and occasional stones. Animal bone and pottery recovered.
279	C2	Possible wall recorded in trenches F and H aligned N-S comprising of rubble, sand and lime mortar. Unclear if it was sitting on a concrete slab but was above layer [278].

Context	Block	Description
280	C2	A concrete and brick feature to the W of Building E. Comprised a course concrete base/pad enclosed by a line of machined and frogged bricks. Forms a large rectangular base 1.4m x 0.6m set in [281] and approximately 1m below ground level.
281	C2	A firm dark brown silty clay with charcoal, stone and brick fragment inclusions abutting the edges of feature [280].
282	C2	Possible construction cut formed by an irregular linear cut associated with feature [280].
283	C2	Concrete and brick manhole of modern construction 1.2m x 0.9m and 1.2m deep.
284	C2	Remains of a curvilinear brick constructed feature constructed of handmade bricks bonded with cement. Truncated by modern buildings to the E
285	A	Sandstone and mortar footings to S of area A. Stone is undressed and bonded with lime mortar and laid in a slight cut [291] in the bedrock and backfilled with [286].
286	A	A firm v dark brown/grey silty clay with occasional charcoal flecks adjacent to footing [285] and within cut [291].
287	A	A very compact mortar and sandstone surface laid over the bedrock abutting footings [285] to the S
288	A	Re-deposited mottled red, yellow, brown clay over the bedrock in alignment with footing [289]
289	A	Sandstone and mortar footing of a stone wall aligned N-S to the south of Building A joining footing [290] at the N end
290	Service trench	Sandstone and mortar footing of a stone wall aligned E-W to the south of Building A joining footing [289] at the E end. In the location of wall [225].
291	Service trench	Linear cut through the bedrock aligned E-W and filled with [286]. The cut had sloping sides and a flat base 0.4m wide and 0.2m deep
292	Service trench	Linear cut through the bedrock aligned E-W and filled with [294]. The cut had sloping sides and a flat base 0.4m wide and 0.15m deep. Cut for wall footing [290].
293	Service trench	A dark brown firm silty clay with occasional charcoal flecks. A layer of demolition material.
294	Service trench	Deposit of dark grey stone rich silty clay located within cut [292]. Backfill of foundation cut.
295	C2	Modern brick manhole 1.2m x 1m and 1m deep.
296	Service trench	A possible pit feature revealed in the section of the ground reduction close to Block C. The cut is straight sided cut into the bedrock 0.52m diameter and 0.68m deep with a flat base. Filled with [297–299].
297	Service trench	A very dark grey silt with frequent charcoal and mortar fleck inclusions. Upper fill of pit cut [296].
298	Service trench	A light yellowish brown clay silt with timber fragment inclusions plus animal bone and pottery. Mid fill of pit cut [296].
299	Service trench	A brown clay silt fill with frequent timber fragments at the base of pit cut [296] plus sugar cone/pottery fragments.



Context	Block	Description
300	Service trench	Sandstone and mortar wall footing identified in W facing section of Block A ground reduction. Continuation of [285].
301	Service trench	Deposit of brick rubble filling the cut in the bedrock showing signs of heat discolouration.
302	Service trench	Section of brick wall constructed of machine cut bricks bonded with cement forming a large rectangular/square structure.
303	Service trench	Brick structure exposed in the N facing section of the service trench between Blocks C and D. Similar and possibly same as [302] and [307]. Stood to 3m high over the bedrock.
304	Service trench	Partially exposed stone wall aligned N-S immediately S of the well [250]. Constructed of angular stone with a lime mortar bond 1.1m below the ground level. Recorded below floor surface [235].
305	Service trench	Further section of brick wall recorded in the service trench constructed of hand made dbl bonded bricks abutting the remains of a stone wall on the W end. 0.6m below the surface and 0.5m high sat on the bedrock. Possibly associated with a pre-brewery phase and same as [199]
306	Service trench	Remains of a stone wall abutting the W side of wall [305]. Only a few stones of this remained. Wall was sat on bedrock and below made ground. Possibly associated pre brewery phase and same as [198] to the N.
307	Service trench	N-S aligned brick wall recorded in the service trench. constructed of hand made bricks bonded with a course cement 0.8m below the surface and 0.5m high. Possibly associated with drainage and included a brick floor and probably same as [302] and [303].
308	Service trench	Remains of an E-W aligned stone wall truncated at the E end by modern foundations. The wall was 0.9m long and 0.35m wide and 0.6m high sat on the bedrock overlain with made ground. Possibly a continuation of buildings recorded in Block C
309	Service trench	The remains of a small circular pit /posthole cut into the bedrock and filled with [310]. This was only seen in half section. 0.38m diameter and 0.7m deep
310	Service trench	A black mixed silt/stone/clay fill of cut [309] with a sherd of pottery recovered.
311	B	Several thin layer of mortar forming a surface contiguous with [324] to W. Overlies bedding deposit [318] and wall [317]. Surface formed by [311] + [324] abuts brick wall to S. Floor surface associated with [312].
312	B	Base layer of a brick wall aligned E-W bounding layer [311] to the N. The wall is truncated to the E and terminates to the W. Remains of a modern wall associated with the brewery.
313	B	Continuation of brick wall [312] on the W side and abutted by contemporary concrete floor.
314	B	A N-S aligned brick wall bonded with cement and within cut [315]. Remains of a modern brick building associated with the brewery.
315	B	Foundation cut containing wall [314] truncating concrete floor [324].

Context	Block	Description
316	B	Concreted rubble filling of foundation cut [315].
317	B	A N-S aligned brick wall 0.23m wide and 2.6m long parallel with Block C. Abutted by cobble surface [320] that extends to the E.
318	B	A levelling deposit for a mortar floor of mid-brown silty sand with small stone and mortar lump inclusions. Below layer [311] and seals layer [319].
319	B	A layer of cinder overlying cobble surface [320]. Possibly a trample/demolition layer.
320	B	Fragmentary cobble surface set in sand [323] and cut by trench [321] and abuts wall [317] to the W.
321	B	Possible machine excavated trench through cobble floor [320].
322	B	Rubble backfill of trench cut [321].
323	B	A fine sand bedding for cobbles [320].
324	B	Concrete floor abutting and contemporary with [313]. Overlies [314] at the E edge.
325	B	Concrete floor associated with modern buildings.
326	B	U – shaped brick wall forming part of a rectangular structure abutting wall [328]. Possibly later than walls [328] and [327]. Constructed of handmade brick and bonded with a light brown lime mortar. The wall is 2 courses thick and 0.52m high sat on the bedrock. It is not keyed into wall [328] at the N ends. Forms a rectangular space 1.2m x 0.8m. earlier than wall [334] to the W
327	B	A cast-iron door 0.32m wide and 0.62m high with a rounded head and flanged on the N side. The door was built into brick wall [328]. The door had a rounded knob on the inner south side and could only open to the S. It did not have hinges and would be lifted out.
328	B	An E-W aligned brick wall abutted by walls [326] and [329] on the S side. The wall had a cast-iron door [327] inserted. This wall forms the N wall to the later structure formed by [326] and originally associated with culvert [331]. The wall was constructed of handmade bricks double bonded with lime mortar.
329	B	A section of stone wall abutting the S side of wall [328] and forming the N wall of culvert [331]. Constructed of roughly squared stone blocks bonded with lime mortar sat on bedrock. The wall continued for 0.65m. Associated with stone [330] and wall [334].
330	B	A large mortar covered stone abutting wall [328] and [326]. Associated with the culvert [334] and may be a support stone.
331	B	A N-S aligned culvert 0.34m wide and 0.50m deep cut into the bedrock. Formed of roughly squared stone walls bonded with a lime mortar. It has a bedrock base with large irregular shaped stone slabs capping. Linked to culvert [334] on the E end. The culvert also continues to the N under Building B and may join up with culverts recorded in Block C [167] & [171].
332	B	Remains of a brick platform above culvert [331] at the S end constructed of handmade brick bonded with lime mortar 3 courses thick. It measured 0.8m N-S x 0.6m E-W and bonded into the capstones of the culvert. May be associated with platform [166] to the S.

Context	Block	Description
333	B	This was the top of the bedrock that had been cut into for the flues. It was covered in a thin layer of course light yellow lime mortar 1.2m below the slab floor.
334	B	A stone wall aligned E-W and associated with [329] to the N. Abutting and built over brick wall [326] at the E end forming a short culvert wall 0.5m wide and 0.6m deep and 1.1m long leading to culvert [331] at the W end. Constructed of roughly squared stones bonded with lime mortar.
335	Service trench	A layer of compact lime mortar and silt forming a possible foundation layer for an E-W aligned wall (close to alignment of wall [308] to the E. Recorded 0.17m deep over the bedrock that was close to the surface near Block D. Red sugar cone pottery and glass recovered from layer.
336	Service trench	A layer 0.25m thick of pottery rich ash and silt recorded at the S end of Block D3. It was truncated by a modern foundation cut and was also recorded to the E between Blocks C and D. Full of red pottery fragments. Possibly waste material associated with the sugar refinery.
337	Service trench	A layer of buried garden soil up to 1m deep below 0.5m of made ground and above layer [338]. Pottery was recovered from this deposit. A black compact clayey silt with frequent charcoal flecks and occasional animal bone and oyster shell inclusions.
338	Service trench	A primary buried garden soil of dark orange brown clayey sand with frequent charcoal flecks and occasional animal bone and oyster shell inclusions. Below layer [337] and above bedrock up to 1.2m below the surface.
339	Service trench	A U shaped cut was recorded in the section 0.6m deep and 1.25m wide truncated to the N and filled with [340] and [341]. Cuts the garden soils.
340	Service trench	A fill of creamy white friable lime mortar rubble within cut [339] and over wall [341]. Possibly associated with the demolition of wall [341].
341	Service Trench	Remains of a stone wall 0.3m high and 0.4m wide sitting in the garden soil [337]. Bonded with lime mortar with red tile fragments. Only seen in section. Possibly the remains of the sugar refinery.
342	Service trench	An E-W aligned rubble stone wall bonded with a course grey cement bond 0.7m high and 0.4m wide capped with a cement/concrete floor. Within cut [344] and abutted by backfill [343]. The wall was not faced. Possibly the remains of the sugar refinery.
343	Service trench	A backfill of loose/friable yellow lime mortar and brick fragments within cut [344].
344	Service trench	A linear E-W aligned cur with vertical sides and a flat base 1.3m wide and 0.7m deep cutting garden soil [337]. T was filled with wall [342] and backfill [343]
345	Service trench	Cut for steps leading to the basement of Building H (Block E) on the N side
346	Service trench	A large rectangular room/vault below ground level to the N of Block E. 1 m x 0.8m formed of rubble stone walls 0.28m thick and bonded with lime mortar originally 1.8m deep. The wall is immediately W of opening [349] in the N wall of the main brewery building

Context	Block	Description
347	Service trench	A set of stone steps leading down to the opening [349] in the N wall of the brewery building. The steps are 1.1m wide and turn from E-W to N-S at the base leading from ground level
348	Service trench	Void
349		A large opening through the N elevation of the N wall 1.1m wide and 1.9m high with stone surround and cast-iron lintel below ground level. The entrance was reached by steps [347].



Appendix 3 Photographic register

Photo	C/P	Digital	C/S	Facing	Area	Description
1	36\1	003-001		-	-	Film 1 ID Shot
2	35\1	003-002		W	TP1	Test Pit 1
3	34\1	003-003		S	TP1	Test Pit 1
4	33\1	003-004		S	TP2	Test Pit 2
5	32\1	003-005		E	TP2	Test Pit 2
6	31\1	003-006		W	TP3	Test Pit 3
7	30\1	003-007		N	TP3	Test Pit 3
8	29\1	003-008		E	TP4	Test Pit 4
9	28\1	003-009		E	TP4	Test Pit 4
10	27\1	003-010		W	TP3	Stone wall below the brick wall
11	26\1	003-011		W	TP3	Stone wall below the brick wall
12	25\1	003-012		E	TP4	After hand excavation
13	24\1	003-013		E	TP6	Test Pit 6
14	23\1	003-014		SE	TP8	Test Pit 8
15	22\1	003-015		W	TP9	Test Pit 9
16	21\1	003-016		SW	TP9	Location shot of Test Pit 9
17	-	003-017		SE	TP8	Location shot of Test Pit 8
18	-	003-018		S	TP10	View of Test Pit 10
19	-	003-019		SW	TP11	View of Test Pit 11
20	-	003-020		W	TP11	Test Pit 11
21	-	003-021		-	-	Film 2 ID Shot
22	35\2	003-023		SE	TP13	Location shot of Test Pit 13
23	34\2	003-025		W	TP13	View of Brick flue

Photo	C/P	Digital	C/S	Facing	Area	Description
24	33\2	003-026		W	TP13	Test Pit 13
25	32\2	003-027		W	TP14	Stone wall
26	31\2	003-028		W	TP14	Detail of stone wall
27	30\2	003-029		E		Stone wall below concrete plinth
28	29\2	003-030		E		General view of wall below concrete plinth
29	28\2	003-031		S	TP14	Location shot of Test Pit 14 showing bricked up window
30	27\2	003-032		SW	TP14	Test Pit 14
31	26\2	003-033		S	TP15	Test Pit 15
32	25\2	003-034		W	TP15	Test Pit 15
33	-	003-035		S	TP16	Test Pit 16
34	-	003-036		S	TP16	Detail of concrete support
35	-	003-037		S	TP16	Detail of concrete support
36	-	003-038		E	TP16	Detail of concrete support
37	-	003-039		W	TP16	Detail of concrete support
38	-	003-040		SE	TP16	Detail of concrete support
39	-	003-041	36\8	-	-	Film 8 & 9 ID shot
40	-	003-042	35\8	N	TP19	Test Pit 19
41	-	003-043	34\8	NW	TP20	Test Pit 20
42	-	003-044	33\8	N	TP21	Test Pit 21
43	-	003-045	36\7	-	-	Film 7 ID Shot
44	-	003-046	35\7	N		General views of the S wall of the brewhouse
45	-	003-047		N		General views of the S wall of the brewhouse
46	-	003-048	34\7	N		General views of the S wall of the brewhouse
47	-	003-049	33\7	N	TP17	S-facing section of Test Pit 17

Photo	C/P	Digital	C/S	Facing	Area	Description
48	-	003-050	32\7	W	TP17	Test Pit 17
49	-	003-051	31\7	NW	TP17	General location of Test Pit 17
50	-	003-052	30\7	S	TP17	View of stone wall
51	-	003-053	29\7	SE	TP17	View of stone wall
52	-	003-054	28\7	N	TP17	S-facing section of Test Pit 17
53	-	003-055	27\7	E	TP18	W-facing section of Test Pit 18
54	-	003-056	26\7	SE	TP18	Test Pit 18
55	-	003-057	25\7	SW	TP18	View of stone wall
56	-	003-058	24\7	E	TP18	Section in Test Pit 18
57	-	003-059	23\7	NE	TP18	Section in Test Pit 18
58	-	003-060	36\10	-	-	Film 10 ID shot
59	-	003-061	35\10	E	TP22	W-facing section of Test Pit 22
60	-	003-062	34\10	NE	TP23	W-facing section of Test Pit 23
61	-	003-063	33\10	E	TP24	W-facing section of Test Pit 24
62	-	003-064	32\10	S	TP22	Location shot of Test Pit 22
63	-	003-065	31\10	-	-	View of bore hole locations
64	-	003-066	30\10	-	-	Working shots of bore hole investigations
65	-	003-067	-	-	-	Working shots of bore hole investigations
66	-	003-068	-	-	-	Working shots of bore hole investigations
67	-	003-069	-	-	-	Working shots of bore hole investigations
68	-	003-070	-	-	-	Working shots of bore hole investigations
69	-	003-071	-	-	-	Working shots of bore hole investigations
70	-	003-072	-	-	-	Working shots of bore hole investigations
71	-	003-073	-	-	-	Working shots of bore hole investigations

Photo	C/P	Digital	C/S	Facing	Area	Description
72	-	003-074	-	-	-	Working shots of bore hole investigations
73	-	003-075	-	-	-	Working shots of bore hole investigations
74	-	003-076	-	-	-	Working shots of bore hole investigations
75	-	003-077	-	-	-	Working shots of bore hole investigations
76	-	003-078	-	-	-	Working shots of bore hole investigations
77	-	003-079	-	-	-	Working shots of bore hole investigations
78	-	003-080	-	-	-	Working shots of bore hole investigations
79	-	003-081	29\10	-	-	Bore Hole 2 deposits
80	-	003-082	28\10	-	-	Bore Hole 2 deposits
81	-	003-083	27\10	-	-	Bore Hole 2 deposits
82	-	003-084	26\10	-	-	Bore Hole 1 deposits
83	-	003-085	25\10	-	-	Bore Hole 1 deposits
84	-	003-086	24\10	-	-	Bore Hole 1 deposits
85	-	003-087	23\10	-	-	Working shot of test pit
86	-	003-088	22\10	-	-	Working shot of test pit
87	-	003-089	-	N	-	General views of the S side of the brewery
88	-	003-090	-	NE	-	General views of the S side of the brewery
89	-	003-091	-	NE	-	General views of the S side of the brewery
90	-	003-092	-	E	-	General views of the S side of the brewery
91	-	003-093	21\10	-	TP23	Test Pit 23
92	-	003-094	20\10	W	TP23	Test Pit 23
93	-	003-095	19\10	W	TP23	Test Pit 23
94	-	003-096	18\10	N	-	S side of the brewhouse buildings



Photo	C/P	Digital	C/S	Facing	Area	Description
95	-	003-097	17\10	NW		E elevation of the malthouse
96	-	003-098	16\10	N		S side of the brewhouse buildings
97	-	003-099	15\10	NW	TP25	Wall foundation
98	-	003-100	14\10	W	TP25	Wall foundation
99	-	003-101	13\10	N	TP25	Wall foundation
100	-	003-102	12\10	E		East wall of the site boundary
101	-	003-103	11\10	N		View of the S elevation of the brewhouse
102	-	003-104	10\10	SW		View of the E elevation of the maltbarn
103	-	003-105	09\10	N	TP26	S-facing section of Test Pit 26
104	-	003-106	08\10	N	TP26	Test Pit 26
105	-	003-107	07\10	S		N-facing section of crane base trench
106	-	003-108	06\10	NE		Crane base trench
107	-	003-109	05\10	N		Crane base trench
108	-	003-110	04\10	N		S facing section through crane base trench
109	-	003-111	03\10	E		W facing section through the crane base trench
110	-	003-112		N		Detail of door on the LGF of the brewhouse
111	-	003-113	02\10	E		W facing section of crane base at the NE corner
112	-	003-114	01\10	NE		General shot of the crane base
113	-	003-115		E		Detail of the beam slots on the E wall of the maltbarn
114	-	003-116		E		Detail of the beam slots on the E wall of the maltbarn
115	-	003-117		N		Section through the Bottle plant W wall
116	-	003-118		S		Section through the Bottle plant W wall

Photo	C/P	Digital	C/S	Facing	Area	Description
117	-	003-119				General working shots
118	-	003-120				General working shots
119	-	003-121				General working shots
120	-	003-122	11\37	-		Film 11 ID shot
121	-	003-123	11\36	S		Detail of brick wall over earlier stone wall of bottle plant
122	-	003-124	11\35	N		Detail of brick wall over earlier stone wall of bottle plant
123	-	003-125	-	E		View of office building showing lower section of stone wall
124	-	003-126	-	NE		Demolition of the lab buildings
125	-	003-127	-	S		General working shot of excavations of concrete foundations
126	-	003-128	-	S		General working shot of excavations of concrete foundations
127	-	003-129	-	S		View of E facing section at the S end of the bottle plant building
128	-	003-130	-	S		View of E facing section at the S end of the bottle plant building
129	-	003-131	11\31	E		W facing section through the S end wall of the bottle plant
130	-	003-132	11\30	E		W facing section through the S end wall of the bottle plant
131	-	003-133	-	E		W facing section through the S end wall of the bottle plant
132	-	003-134	11\29	E		View of the E stone foundation wall of Building L below brick wall
133	-	003-135	11\28	E		Top of the S stone wall foundation to the original brewery building
134	-	003-136	11\27 & 11/26	E		Top of the S stone wall foundation to the original brewery building

Photo	C/P	Digital	C/S	Facing	Area	Description
135	-	003-137	11\25	SE		Working shot of the demolition of the stone wall foundation
136	-	003-138	11\24	S		Working shot of the demolition of the stone wall foundation
137	-	003-139	11\23	SW		Section through the S foundation wall
138	-	003-140	11\22	S		View of the stone buttress walls to the S side of the S wall
139	-	003-141	11\21	SE		View of the stone buttress walls to the S side of the S wall
140	-	003-142	11\20	S		N facing section showing stone buttress and foundation over layer 026
141	-	003-143	11\17	E		Detail of DBL wall on W elevation of build E
142	-	003-144	11\16	E		General shot of ramp location to W side of build E
143	-	003-145	-	E		Working shot of ramp excavations
144	-	003-146	11\04	SW	TP28	View of TP28 within build K
145	-	003-147	-	NW	TP28	View of TP28 within build K
146	-	003-148	-			Site shots
147	-	003-149	-			Site shots
148	-	003-150	-			View of room to N of office build E
149	-	003-151	-			View of room to N of office build E
150	-	003-152	11\03			S end of area 03
151	-	003-153	11\02			S end of area 03
152	-	003-154	11\01			S end of area 03
153	-	-	12\37	-		ID shot - Film 12
154	-	003-155	12\36	E	D3	Stone wall [033] (with fill [034] in footings)
155	-	003-156	12\35	S	D3	Stone wall [033] (with fill [034] in footings)
156	-	003-157	12\34	W	D3	Stone wall [033] (with fill [034] in footings)

Photo	C/P	Digital	C/S	Facing	Area	Description
157	-	003-158	12\33	N	D3	Stone wall [033] (with fill [034] in footings)
158	-	003-159	-	E	D3	[033] footings showing (034) interior fill exposed
159	-	003-160	12\32	E	D3	[033] footings with [036] footing exposed
160	-	003-161	12\31	N	D3	[033] footings with [036] footing exposed
161	-	003-162	12\30	E	D3	Plan view of W side of [033] and fill (038)
162	-	003-163	-	N	D3	Working shot
163	-	003-164	-	SE	D3	Working shot
164	-	003-165	12\29	E	D3	Stone wall [033] after removal of (038)
165	-	003-166	12\28	N	D3	Post-ex: showing coursing of (033)/(036) & natural
166	-	003-167	12\27	S	D3	Post-ex: showing coursing of (033)/(036) & natural
167	-	003-168	12\26	S	D3	View of area D3 showing service C-T
168	-	003-169	12\25	N	D3	View of area D3 showing service C-T
169	-	003-170	12\24	N	D3	Stone wall [033]
170	-	003-171	12\23	SE	D3	Structure [044] & fills (045)/(046)
171	-	003-172		E	D3	Working shot
172	-	003-173		E	D3	Working shot
173	-	003-174	12\22	E		Test pit C-T40
174	-	003-175	12\21	NW	D3	(044) structure, base and (047) in context; also NW section
175	-	003-176	12\20	NW	D3	(044) structure, base w/ (047) removed
176	-	003-177	12\19	S	D3	(044) structure, base w/ (047) removed; also SE & SW walls
177	-	003-178	12\18	N	D3	[042] & [044] walls
178	-	003-179	12\17	S	D3	[042] & [044] walls showing base mortar



Photo	C/P	Digital	C/S	Facing	Area	Description
179	-	003-180	12\16	W	D3	Post-ex shot of [049] and base mortar
180	-	003-181	12\15	E	D3	Post-ex shot of [049] and base mortar
181	-	003-182	12\14	N	D3	Post-ex shot of [049] and base mortar
182	-	-	12\13	N	D3	Wall [042]
183	-	003-183	12\12	NE	D3	Wall [043]
184	-	003-184	12\11	N	D3	Wall [044] & S facing section
185	-	003-185	12\10	S	D3	Wall [044] & S facing section
186	-	003-186	-	E	D2	Pre-ex of area, cobbles
187	-	003-187	12\09	-	D2	Pre-ex of area
188	-	003-188	12\08	N	D2	Cobbled surface (051)
189	-	003-189	12\07	W	D2	Cobbled surface (051)
190	-	003-190	12\06	N	D2	Service cut (N-S) & evaluation on edge to N of D2
191	-	003-191	12\05	N	D2	S-facing section through (055) garden soil - E end (1/3)
192	-	003-192	12\04	N	D2	S-facing section through (055) garden soil - Middle (2/3)
193	-	003-193	12\03	N	D2	S-facing section through (055) garden soil - W end (3/3)
194	-	003-194	12\02	S	D2	N-facing section of slot through (055) garden soil - W end (1/3)
195	-	003-195	12\01	S	D2	N-facing section of slot through (055) garden soil - middle (2/3)
196	-	-	13\37	-	-	ID shot - Film 13
197	-	003-196	13\36	S	D2	N-facing section of slot through (055) garden soil - E end (3/3)
198	-	003-197	13\35	N	D2	(055) garden soil extent in N of area
199	-	003-198	13\34	S	D2	(058)-(060), area within lab footings
200	-	003-199	13\33	E	D2	(058)-(060), area within lab footings

Photo	C/P	Digital	C/S	Facing	Area	Description
201	-	003-200	13\32	N	D2	(058)-(060), area within lab footings
202	-	003-201	13\31	N	D2	(058)-(060), area within lab footings (whole)
203	-	003-202	13\30	W	D2	(058)-(060), area within lab footings (whole)
204	-	003-203	13\29	SW	D2	(058)-(060), area within lab footings, 'garden soil' ((055))
205	-	003-204	13\28	E	D2	Wall [060] & drain [059]
206	-	003-205	13\27	E	D2	Slot alongside drain [059]
207	-	003-206	13\26	SE	D2	Slot alongside drain [059] - detail of NW facing section
208	-	003-207	13\25	N	D2	Mid-ex of slot into 061 - demolition of wall 060
209	-	003-208	13\24	S	D2	Mid-ex of slot into 061 - demolition of wall 060
210	-	003-209	13\23	W	D2	E-facing section of slot through (063)&(066)&(068)
211	-	003-210	13\22	S	D2	N-facing section through rubble deposit (068)
212	-	003-211	13\21	W	D2	E-facing section through (062) (063) (069) (070)
213	-	003-212	13\20	W	D2	E-facing section through (062) (063) (069) (070)
214	-	003-213	13\19	W	D2	E-facing section through (062) (063) (069) (070) with concrete removed
215	-	003-214	13\18	W	D2	E-facing section through (062) (063) (069) (070) with concrete removed
216	-	003-215	-	W	D2	View of section where lab found removed
217	-	003-216	-	W	D2	View of section where lab found removed
218	-	003-217	-	S	D2	Working shot: Jurgen metal detecting
219	-	003-218	-	S	D2	Working shot: Jurgen metal detecting
220	-	003-219	-	W	D2	

Photo	C/P	Digital	C/S	Facing	Area	Description
221	-	003-220		W	D2	
222	-	003-221		NW	D2	
223	-	003-222	13\17	W	D2	E-facing section of slot through garden soils (055) & (056)
224	-	003-223	13\16	W	D2	Close view of E-facing section of garden soils (055) & (056)
225	-	003-224	13\15	W	D2	General shot of garden soils and bedrock in D2 (north end)
226	-	003-225	13\14	E	D2	E-facing section of slot through garden soils (D2 north end)
227	-	003-226	13\13	E	D1	General shot of garden soils and bedrock (D2 north end)
228	-	003-227	13\12	NW	D1	Central concrete foundation of lab
229	-	003-228	-	NW	D1	W facing section of hole after removal of above
230	-	003-229	-	NW	D1	Working shot
231	-	003-230a, 003-230b, 003-230c	-	NE	D1	Working shot
232	-	003-231a, 003-231b	-	N	D1	Working shot
233	-	003-232	-	E	D1	Working shot
234	-	003-233	-	E	D1	Working shot
235	-	003-234	13\11	N	D1	Wall (078) with timber beam (scaffolding?) (082)
236	-	003-235	13\10	S	D1	Wall (078) with drain (086) continuation
237	-	003-236	13\09	N	D1	Wall (078), E end with timber beam
238	-	003-236	13\08	E	D1	Wall (078), towards eastern wall with timber beam
239	-	003-237	13\07	W	D1	Drain (086) - detail

Photo	C/P	Digital	C/S	Facing	Area	Description
240	-	003-238	13\06	S	D1	Exterior detail of wall (078) foundations - E end
241	-	003-239	13\05	S	D1	Exterior detail of wall (078) foundations - Middle
242	-	003-240	13\04	S	D1	Exterior detail of wall (078) foundations - W end
243	-	003-241	13\03	NW	D1	General exterior of wall (078) and drain (086)
244	-	003-242	13\02	SE	D1	General exterior of wall (078) and drain (086)
245	-	003-244	13\01	NE	D1	General interior of wall (078) and drain (086)
246	-	003-245	14\37	-	-	ID shot - film 14
247	-	003-246	14\36	W	D1	E-facing section of test pit in corner of interior of (078) wall cut (079) (085)
248	-	003-247	14\35	E	D1	Test pit showing wall (078) and foundations
249	-	003-248	14\34	N	D1	Test pit showing wall (078) and foundations
250	-	003-249	14\33	W	D1	E-facing section of D1 (S end)
251	-	003-250	14\32	W	D1	E-facing section of D1 (N end)
252	-	003-251	14\31	W	D1	E-facing section of D1 - end of sediments
253	-	003-252	14\30	E	D1	W-facing section of slot through (101)
254	-	003-253	14\29	S	D1	N-facing section of slot through (101)
255	-	003-254	14\28	SW-NW	D1	General situation shots of D1
256	-	003-255	14\27	SW-NW	D1	General situation shots of D1
257	-	003-256	14\26	SW-NW	D1	General situation shots of D1
258	-	003-257	14\25	SW-NW	D1	General situation shots of D1
259	-	003-258	14\24	E	D1	W-facing view of lab demo showing original stone wall
260	-	003-259	14\23	W	D1	E-facing section of sondage through (102) & (103)



Photo	C/P	Digital	C/S	Facing	Area	Description
261	-	003-260	14\22	W	D1	E-facing section of sondage through (102) & (103)
262	-	003-261	14\21	W	D1	E-facing section of D1
263	-	003-262	14\20	S	D1	General view of stone wall [078]
264	-	003-263	14\19	W	D1	E-facing section of D1
265	-	003-264	14\18	E	D1	View of W-facing elevation of stone wall
266	-	003-265	14\17	W	D1	View of section of D1 - North half
267	-	003-266	14\16	W	D1	View of section of D1 - North half
268	-	003-267	14\15	SW	D1	View of section of D1 - North half
269	-	003-268	14\14	E	D1	View of stone wall of building E (west wall)
270	-	003-269	14\13	W	D1	View of section of test pit at S end of D1
271	-	003-270	14\12	SW	D1	View of section of test pit at S end of D1
272	-	003-271	14\11	S	D1	View of section of test pit at S end of D1
273	-	003-272	14\10	E	D1	View of section of test pit at S end of D1
274	-	003-273	14\09	E	D1	Section of wall (N-S) at D1
275	-	003-274	14\08	E	D1	W-facing section of test pit 2 (D1)
276	-	003-275	14\07	S	D1	N-facing section of test pit 2 (D1)
277	-	003-276	14\06	W	D1	Upper section of E-facing section at test pit 2 (D1)
278	-	003-277	14\05	W	D1	Lower section of E-facing section at test pit 2 (D1)
279	-	003-278	14\04	N	D1	S-facing section of test pit 2 (D1) - working shot
280	-	003-279	14\03	E	D1	Sections at S end of D1
281	-	003-280	14\02	E	D1	Sections at S end of D1
282	-	003-281	14\01	W	D1	Sections at S end of D1

Photo	C/P	Digital	C/S	Facing	Area	Description
283	-	003-282	-		D1	Sections at S end of D1
284	-	003-283	-		D1	Sections at S end of D1
285	-	003-284	-		D1	Sections at S end of D1
286	-	003-285	-		D1	Sections at S end of D1
287	-	003-286	-		D1	Sections at S end of D1
288	-	003-287	-		D1	Sections at S end of D1
289	-	003-288				WB at S end of building G showing original E wall.
290	-	003-289		E		Top of the original S end of the bottling building stone
291	-	003-290		SE		Part excavation of S end wall of bottle plant
292	-	003-291		SE		Part excavation of S end wall of bottle plant
293	-	003-292		SE		Work showing SE corner of original building
294	-	003-293		SE		Work showing SE corner of original building
295	-	003-294		SE		Work showing SE corner of original building
296	-	003-295		SW		Work showing SE corner of original building
297	-	003-296		S		View of buttress walls to S side of main S wall
298	-	003-297		SE		View of buttress walls to S side of main S wall
299	-	003-298		S		Detail of buttress walls to S side of main S Wall
300	-	003-299		E		Section through stone wall to S side of brewery buildings
301	-	003-300		E		Detail of section through stone wall to S side of brewery buildings
302	-	003-301				???
303	-	003-302				Film id sheet

Photo	C/P	Digital	C/S	Facing	Area	Description
304	-	003-303				Excavation of E tenement at S end of site.
305	-	003-304		SW		Excavation of E tenement at S end of site.
306	-	003-305		S		Rear E-W aligned stone wall of tenement
307	-	003-306		S		Rear E-W aligned stone wall of tenement
308	-	003-307		S		Rear E-W aligned stone wall of tenement
309	-	003-308		E		Excavation of W tenement walls (Walls 1 and 2)
310	-	003-309		W		Excavation of W tenement walls (Walls 1 and 2)
311	-	003-310		E		Excavation of W tenement walls (walls 2 & 3)
312	-	003-311		NE		Central E-W aligned stone wall (Wall 4)
313	-	003-312		NE		Detail of above
314	-	003-313		NE		Detail of above
315	-	003-314		NW		Detail of above
316	-	003-315		N		Staircase walls of tenement (walls 5 & 6)
317	-	003-316		S		Wall 8
318	-	003-317		E		TP4 - pile test pit against upstanding building
319	-	003-318		N		TP5 - Wall 9 partially exposed
320	-	003-319		E		TP5 - Wall 9 partially exposed
321	-	003-320		SW		make up deposits in TP6 SE facing section
322	-	003-321		SE		Make up deposits in TP6 NW facing section
323	-	003-322		S		Make up deposits in TP7 W facing section
324	-	003-323	15\33	S	TP29	View of N facing section of TP29

Photo	C/P	Digital	C/S	Facing	Area	Description
325	-	003-324	15\32	SE	TP29	Location of TP29
326	-	003-325	15\31	N		Cobble floor of the pend in Building A
327	-	003-326	15\30	N		Cobble floor of the pend in Building A
328	-	003-327	15\29	N		Cobble floor of the pend in Building A
329	-	003-328	15\28	N		Cobble floor of the pend in Building A
330	-	003-329	15\27	S		Cobble floor of the pend in Building A
331	-	003-330	15\26	N		Cobble floor of the pend in Building A
332	-	003-331	15\25	N		Cobble floor of the pend in Building A
333	-	003-332	15\24	SE		View of the excavation of Building E (laboratory) foundations
334	-	003-333	15\23	S		View of the excavation of Building E (laboratory) foundations
335	-	003-334	15\22	N		View of the excavation of Building E (laboratory) foundations
336	-	003-335	15\21	S		View of the excavation of Building E (laboratory) foundations
337	-	003-336	15\20	S		Excavation of the cobble floor in Building A pend
338	-	003-337	15\19	E		Excavations in N half of C2 showing concrete foundations
339	-	003-338	15\18	NE		Excavations in N half of C2 showing concrete foundations
340	-	003-339	15\17	S		N facing external elevation of the original stone built part of Building E
341	-	003-340	15\16	S		N facing external elevation of the original stone built part of Building E
342	-	003-341		S		Detail of the top part of the N gable end of Building E



Photo	C/P	Digital	C/S	Facing	Area	Description
343	-	003-342		S		Detail of the 1st floor of the N gable wall of Building E
344	-	003-343		S		Detail of the ground floor of the N gable wall of Building E
345	-	003-344	15\15	W	TP30	View of TP30
346	-	003-345	15\14	SW	TP31	View of TP31
347	-	003-346	15\13	SW	TP32	View of the section of TP32
348	-	003-347	15\12	NE	TP33	View of the section of TP33
349	-	003-348	15\11	NE	TP34	View of the section of TP34
350	-	003-349	15\10	NE	TP35	View of brick floor in TP35
351	-	003-350	15\09	NE	TP35	View of TP35
352	-	003-351	15\08	E		W facing section of trench excavated in Building A pend
353	-	003-352	15\07	N		Trench excavated in Building A pend below the cobble floor
354	-	003-353	15\06	SE		General view of the windows of the upper floor of the malt barn W wall
355	-	003-354	16\36			Film 16 ID shot
356	-	003-355	16\35	S		View of TP35 in Block C (Building E)
357	-	003-356	16\34	NW		View of TP36 in Block C (Building E)
358	-	003-357	16\33	SW		View of TP37 in Block C (Building E)
359	-	003-358	16\32	S		View of TP38 in Block C (Building E) N facing section
360	-	003-359	16\31	W		View of TP38 in Block C (Building E) E facing section
361	-	003-360		S		View of TP38 in Block C (Building E)
362	-	003-361		S		View of TP38 in Block C (Building E)

Photo	C/P	Digital	C/S	Facing	Area	Description
363	-	003-362		SW		Block C1 after the concrete slab had been removed (Building C)
364	-	003-363		W		Block C1 after the concrete slab had been removed (Building D)
365	-	003-364		W		Block C1 after the concrete slab had been removed (Building C)
366	-	003-365				General shot of excavations in Block F
367	-	003-366				General shot of excavations in Block F
368	-	003-367				General section shots in Block C1
369	-	003-368				General section shots in Block C1
370	-	003-369				General section shots in Block C1
371	-	003-370				General section shots in Block C1
372	-	003-371				General section shots in Block C1
373	-	003-372		S	C1	View of Block C with concrete pads in place
374	-	003-373		S	C1	View of Block C with concrete pads in place
375	-	003-374		S	C1	View of Block C with concrete pads in place
376	-	003-375		S	C1	View of Block C with concrete pads in place
377	-	003-376		S	C1	View of Block C with concrete pads in place
378	-	003-377		S	C1	View of Block C with concrete pads in place
379	-	003-378		N		W facing section of excavations in Block F
380	-	003-379			C1	General section shots in Block C1
381	-	003-380			C1	General section shots in Block C2
382	-	003-381		S		View of works undertaken in Block F
383	-	003-382	16\30	N	C1	View of E end of the S facing section (1) in Block C

Photo	C/P	Digital	C/S	Facing	Area	Description
384	-	003-383	16\29	N	C1	View of E end of the S facing section (1) in Block C
385	-	003-384	16\28	N	C1	Detail of the brick flue (112) in section (1)
386	-	003-385	16\27	N	C1	Detail of the brick wall (114) in the S facing section (1)
387	-	003-386	16\26	S	C1	View of Section (2) in Block C1
388	-	003-387	16\25	S	C1	View of Section (2) in Block C1
389	-	003-388	16\24	E	F	View of strip of garden soil in Block F excavations
390	-	003-389	16\23	SE	F	View of strip of garden soil in Block F excavations
391	-	003-390	16\22	SW	C1	View of Section (3) in Block C
392	-	003-391	16\21	SE	C1	View of Section (3) in Block C
393	-	003-392	16\20	S	C1	Detail of E 1/3rd of Section (3)
394	-	003-393	16\19	S	C1	Detail of middle 1/3rd of section (3)
395	-	003-394	16\18	S	C1	Detail of middle 1/3rd of section (3)
396	-	003-395	16\17	S	C1	Detail of W 1/3rd of Section (3)
397	-	003-396	16\16	SW	C1	View of Section (4) in Block C
398	-	003-397	16\15	NW	C1	View of Section (4) in Block C
399	-	003-398	16\14	N		General working shot of in Block C (Building E) ground reduction
400	-	003-399	16\13	W		Detail of the section in Block C (Building E) ground reduction
401	-	003-400	16\12	S		View of the concrete kerb at the N end of site during ground reductions
402	-	003-401		S		View of the concrete kerb at the N end of site during ground reductions

Photo	C/P	Digital	C/S	Facing	Area	Description
403	-	003-402	16\11	E		View of the concrete kerb at the N end of site during ground reductions
404	-	003-403				General working shots in Block C1
405	-	003-404				General working shots in Block C1
406	-	003-405				General working shots in Block C1
407	-	003-406				General working shots in Block C1
408	-	003-407				General working shots in Block C1
409	-	003-408	16\10	S		Working shot of excavations in Building E (office) Block C
410	-	003-409	16\09	W	C1	View of E end of area C1 showing feature (143)
411	-	003-410	16\08	W	C1	View of E end of area C1 showing feature (143)
412	-	003-411	16\07	S	C1	Detail of feature (154)
413	-	003-412	16\06	W	C1	Detail of feature (154)
414	-	003-413	16\05	S	C1	Detail of feature (152)
415	-	003-414	16\04	E	C1	Detail of feature (146)
416	-	003-415	16\03	S	C1	Wall (146) and culvert/ flue (158/159)
417	-	003-416	16\02	W	C1	Wall (146) and culvert/ flue (158/159)
418	-	003-417	16\01	N	C1	Section showing sand layer (145)
419	-	003-422	17\37	S	C1	Culvert (158) and base (159)
420	-	003-423	17\36	W	C1	Culvert (158) and base (159)
421	-	003-424	17\35	S	C1	Detail of culvert (158)
422	-	003-425	17\34	S	C1	Detail of culvert (158) close up
423	-	003-426	17\33	N	C1	Detail of culvert (158)
424	-	003-427	17\32		C1	Film 17 ID shot



Photo	C/P	Digital	C/S	Facing	Area	Description
425	-	003-428	17\31	E	C1	View of cobbles and stones (156)
426	-	003-429	17\30	E	C1	View of feature (154)
427	-	003-430	17\29	S	C1	View of feature (154)
428	-	003-431	17\28	S	C1	View of feature (154) plus wall (146) to the S
429	-	003-432	17\27	S	C1	Fully exposed cobble floor (162)
430	-	003-433	17\26	SW	C1	Working shot
431	-	003-434	17\25	S	C1	Working shot
432	-	003-435	17\24	E	C1	Working shot
433	-	003-436	17\23	W	C1	General shot of features in C1
434	-	003-437	17\22	E	C1	General shot of features in C1
435	-	003-438	17\21	S	C1	General shot of features in C1
436	-	003-439	17\20	S	C1	View of Block C1 showing cobbles (162)
437	-	003-440	17\19	NE	C1	General view of brick walls in Block C1
438	-	003-441	17\18	W	C1	General view of brick walls in Block C1
439	-	003-442	17\17	E	C1	General view of brick walls in Block C1
440	-	003-443	17\16	N	C1	S end of brick flue (158)
441	-	003-444	17\15	N	C1	Brick platform (164)
442	-	003-445	17\14	N	C1	Stone platform (165) under wall (147)
443	-	003-446		W	C1	Working shot
444	-	003-447			C1	General site shots
445	-	003-448			C1	General site shots
446	-	003-449			C1	General site shots
447	-	003-450			C1	General site shots
448	-	003-451	17\13	W	C1	View of platforms (164) & (166)

Photo	C/P	Digital	C/S	Facing	Area	Description
449	-	003-452		W	C1	View of platforms (164) & (166)
450	-	003-453	17\12	N	C1	Detail of platform (166)
451	-	003-454	17\11	N	C1	Detail of platform (164)
452	-	003-455	17\10	E	C1	Platforms (164) & (166)
453	-	003-456	17\09	S	C1	Platforms (164) & (166)
454	-	003-457	17\08	S	C1	Working shot
455	-	003-458	17\07	W	C1	Stone base (165)
456	-	003-459	17\06	E	C1	View of culvert/floor (167)
457	-	003-460	17\05	S	C1	View of culvert/floor (167)
458	-	003-461	17\04	SW	C1	General view of platforms and culvert
459	-	003-462	17\03	SW	C1	General view of platforms and culvert
460	-	003-463	17\02	S	C1	Detail of wall (147) and plinth (165)
461	-	003-464	17\01	W	C1	Detail of wall (147) and plinth (165)
462	-	003-465	18\37			Film 18 ID shot
463	-	003-466	18\36	E	C1	View of culvert (167)
464	-	003-467	18\35	S	C1	Detail of plinth (165)
465	-	003-468	18\34	NE	C1	View of wall (147) and bases (165) & (168)
466	-	003-469	18\33	N	C1	View of wall (147) and bases (165) & (168)
467	-	003-470	18\32	E	C1	View of culvert (167) showing stone base
468	-	003-471	18\31	W	C1	View of concrete block (169)
469	-	003-472		W	C1	View of S limit of C1 showing large stone
470	-	003-473		N	C1	View of S limit of C1 showing large stone
471	-	003-474	18\30	W	C1	View of culverts (171) & (167)
472	-	003-475	18\29	SW	C1	View of culverts (171) & (167)

Photo	C/P	Digital	C/S	Facing	Area	Description
473	-	003-476	18\28	SE	C1	View of culverts (171) & (167)
474	-	003-477	18\27	N	C1	View of culverts (171) & (167)
475	-	003-478	18\26	N	C1	Section through culvert (171)
476	-	003-479	18\25	SE	C1	Section through culvert (167)
477	-	003-480	18\24	W	C1	View of natural geology to S side of culvert (167)
478	-	003-481	18\23	SW	C1	View of natural geology to S side of Culvert (167)
479	-	003-482	18\22	S	C1	View of Section (5) in Block C1
480	-	003-483	18\21	S	C1	View of Section (5) in Block C1 E 1/2
481	-	003-484	18\20	S	C1	View of Section (5) in Block C1 W 1/2
482	-	003-485	18\19	SE	C1	View of top of culvert (173) within flue base
483	-	003-486	18\18	N	C1	View of culvert (173) with flue removed
484	-	003-487	18\17	NE	C1	Culvert slabs removed showing bedrock
485	-	003-488	18\16	NE	C1	Culvert slabs removed showing bedrock
486	-	003-489			C1	General site shots
487	-	003-490			C1	General site shots
488	-	003-491			C1	General site shots
489	-	003-492			C1	General site shots
490	-	003-493		SW	F	View of ground reductions in Block F (Building J)
491	-	003-494		SE	C1	View of ground reductions in Block F (Building J)
492	-	003-495				Film id sheet
493	-	003-496	18\15	N	C1	View of the E end of section (6) in Block C1
494	-	003-497	18\14	N	C1	View of the E end of section (6) in Block C1

Photo	C/P	Digital	C/S	Facing	Area	Description
495	-	003-498	18\13	NW	C1	View of the E end of section (6) in Block C1
496	-	003-499	18\12	N	C1	View of the E end of section (6) in Block C1 showing flue (171)
497	-	003-500	18\11	N	C1	View of the E end of section (6) in Block C1 showing flue (171)
498	-	003-501	18\10	E	C	General shot of ground reductions in Block C (Building E)
499	-	003-502	18\09	E	C1	General shot of ground reductions in Block C (Building E)
500	-	003-503	18\08	N	C1	View of Section (6) W 1/2
501	-	003-504	18\07	NE	C1	View of Section (6) W 1/2
502	-	003-505	18\06	NW	C1	View of Section (6) W 1/2
503	-	003-506	18\05	W	C3	View of ground reductions in Block C3 (Building E)
504	-	003-507	18\04	N	C1	Detail of central part of section (6)
505	-	003-508	18\03	SE	C3	Detail of a layer of animal bone in context (142), Building E (office)
506	-	003-509	18\02	S	C3	View of stone wall (186) in Building E (office)
507	-	003-510	18\01	SW	C1	View of stone wall (186) in Building E (office)
508	-	003-511		SW	C1	Top of stone wall (186) in Building E (office)
509	-	003-512		W	C1	Top of stone wall (186) in Building E (office)
510	-	003-513		SW	C1	View of rubble layer (187) in Building E (office)
511	-	003-514		SW	C1	View of rubble layer (187) in Building E (office)
512	-	003-515	19\36			Film 19 ID shot
513	-	003-516		N		View of the S end of the site
514	-	003-517	19\35	N	C1	Working shots of the excavations in C1 showing the S facing section



Photo	C/P	Digital	C/S	Facing	Area	Description
515	-	003-518	19\34	N	C1	Working shots of the excavations in C1 showing the S facing section
516	-	003-519	19\33	NW	C1	View of the W side of the S facing Section (6)
517	-	003-520	19\32	N	C1	View of the W side of the S facing Section (6)
518	-	003-521	19\31	N	C1	Detail of W side of the S facing Section (6)
519	-	003-522	19\30	NW	C1	Initial view of stone wall (188)
520	-	003-523	19\29	NW	C1	View of excavated trenches in Block C1
521	-	003-524	19\28	N	C1	Detail of the W end of the S facing section (6)
522	-	003-525	19\27		NW	General shot of the W end of section 6 in C1
523	-	003-526	19\26		W	View of stone wall [188]
524	-	003-527	19\25		N	Detail of W end of Section 6 in C1
525	-	003-528	19\24		W	View of E facing section in NW corner of C1
526	-	003-529	19\23		N	Detail of [190] - [192] + fill [195] in Section 6 of C1
527	-	003-530	19\22		W	E facing section of Block F
528	-	003-531	19\21		SE	General shot of excavations at Block F
529	-	003-532	19\20		N	Further view of S facing section 6 at W end
530	-	003-533	19\19		NE	General view of full section 6
531	-	003-534	19\18		W	View of flue [167] in the E facing section of C1
532	-	003-535	19\17		NW	General shot of E facing section of C1
533	-	003-536	19\16		NW	General shot of foundation trenches in C1
534	-	003-537	19\15		SW	General shot of E facing section in C1
535	-	003-538	19\14		S	Working shot of excavation in Block F
536	-	003-539	19\13		W	Wall [198] in E facing section 6 in C1

Photo	C/P	Digital	C/S	Facing	Area	Description
537	-	003-540	19\12		W	Remains of culvert [167] in E facing section 6 C1
538	-	003-541	19\11		N	Detail of the W end of the S facing section (6)
539	-	003-542	19\10		NW	General view of the W end of the S facing section (6)
540	-	003-543	19\09		N	Detail of brick flue/drain [199]
541	-	003-544	19\08		W	View of E facing section in Block F
542	-	003-545			W	View of clearance to S of Building A
543	-	003-546			E	View of clearance to S of Building A
544	-	003-547			S	General view of ground reduction works in Block F
545	-	003-548			W	General view of ground reduction works to S of Block A
546	-	003-549				View of clearance to S of Building A
547	-	003-550				Working shots
548	-	003-551				Working shots
549	-	003-552	19\07		E	General view of ground reduction works to S of Block A
550	-	003-553	19\06		SE	General view of ground reduction works in Block F
551	-	003-554	19\05		S	General view of ground reduction works in Block F
552	-	003-555			E	General view of area of services in Block F
553	-	003-556			E	General view of area of services in Block F
554	-	003-557			E	General view of area of services in Block F
555	-	003-558			E	Excavation of services in Block F
556	-	003-559				Excavation of services in Block F
557	-	003-560			N	Excavation of services in Block F

Photo	C/P	Digital	C/S	Facing	Area	Description
558	-	003-561			SE	General view of ground reduction works in Block F
559	-	003-562			SE	General view of ground reduction works in Block F
560	-	003-563				Detail of concrete cement [204] in sewer cut, Block F
561	-	003-564	19\04			Detail of the sewer cut in Block F
562	-	003-565	19\03			Detail of the sewer cut in Block F
563	-	003-566			N	Moving a digger with the crane
564	-	003-567			N	Moving a digger with the crane
565	-	003-568			N	Working shot of Block F
566	-	003-569	19\02		S	View of excavations of service trench to the N of Building A
567	-	003-570	20\37			Film 20 ID Shot
568	-	003-571				General view of upper terrace
569	-	003-572				General view of upper terrace
570	-	003-573	20\36	W		Part excavation of the service trench to the N side of Building A
571	-	003-574	20\35	N		Part excavation of the service trench to the N side of Building A
572	-	003-575	20\34	E		Part excavation of the service trench to the N side of Building A
573	-	003-576	20\33	W		E facing section of service trench
574	-	003-577	20\32	S		N facing section of service trench
575	-	003-578			S	N facing section of service trench
			20\31		E	W facing section of service trench
					E	W facing section of service trench
576	-	003-579	20\30	E		Section through Trench A1 showing wall (211)

Photo	C/P	Digital	C/S	Facing	Area	Description
577	-	003-580	20\29	E		Section through Trench A1 showing wall (211)
578	-	003-581	20\28	E		Section through Trench A1 showing wall (211)
579	-	003-582			E	SE end of Trench A1 showing wall (211)
580	-	003-583	20\27	W		Section through Trench A1 showing wall (211)
581	-	003-584	20\26	SW		Section through Trench A1 showing wall (211)
582	-	003-585	20\25	E		Section through Trench A1 showing wall (211)
583	-	003-586	20\24	W		Section through Trench A1 showing wall (211)
584	-	003-587		S	A2	General shots of the development to the N terrace
585	-	003-588		S	A2	General shots of the development to the N terrace
586	-	003-589		S	A2	General shots of the development to the N terrace
587	-	003-590	20\13	N	A2	General shot of stone cobbles in Area A2
588	-	003-591	20\12	S	A2	General shot of stone cobbles in Area A2
589	-	003-592	20\11	E	A2	General shot of stone cobbles in Area A2
590	-	003-593	20\10	N	A2	Detail of timber within cobble layer
591	-	003-594	20\09	E	A2	Detail of wall (225)
592	-	003-595	20\08	E	A2	General view of Area A2 excavations
593	-	003-596	20\07	E	A2	General view of Area A2 excavations
594	-	003-597	20\06	W	A2	General view of Area A2 excavations
595	-	003-598	20\05	N	A2	General view of Area A2 excavations
596	-	003-599	20\04	S	A2	General view of Area A2 excavations
597	-	003-600	20\03	E	A2	Detail of wall (221)
598	-	003-601	20\02	E	A2	General site shots



Photo	C/P	Digital	C/S	Facing	Area	Description
599	-	003-602	20\01	E	A2	General site shots + wall 225
600	-	003-603	21\37		A2	Film 21 Registration Shot
601	-	003-604	21\36	W	A2	General view of Area A2 excavations
602	-	003-605	21\35	N	A2	General shot of area A2
603	-	003-606	21\34	S	A2	General shot of area A2
604	-	003-607	21\33	E	A2	Detail of walls (221) and (225)
605	-	003-608	21\32	NW	A2	View of the N end of wall (225) + wall (221)
606	-	003-609	21\31		A2	View of stone from wall area
607	-	003-610	21\30	E	A2	Cobbles (229) and timber (230) abutting wall (225)
608	-	003-611	21\29	E	A2	Cobbles (229) and timber (230) abutting wall (225)
609	-	003-612	21\28	W	A2	Brick feature within wall (225) – possible fireplace
610	-	003-613	21\27	E	A2	View of cut (232)
611	-	003-614	21\26	S	A2	View of cut (232)
612	-	003-615	21\25	E	A2	General view of Area A2 excavations
613	-	003-616	21\24	N	A2	General view of Area A2 excavations
614	-	003-617		N	A2	General view of Area A2 excavations
615	-	003-618	21\23	N	A2	Detail of layer (234)
616	-	003-619	21\22	E	A2	Detail of floor (235) and walls (225) at the S end
617	-	003-620	21\21	N	A2	General view of floor (235)
618	-	003-621	21\20	E	A2	General view of floor (235)
619	-	003-622	21\19	E	A2	General view of floor (235)
620	-	003-623	21\18	S	A2	General view of floor (235)
621	-	003-624	21\17	E	A2	Detail of floor (235) at the N end

Photo	C/P	Digital	C/S	Facing	Area	Description
622	-	003-625	21\16	S	A2	General view of Area A2 excavations
623	-	003-626	21\15	E	A2	View of wall (225) and floor (235)
624	-	003-627	21\14	E	A2	View of wall (225) and floor (235)
625	-	003-628	21\13	S	A2	View of wall (225) and floor (235)
626	-	003-629	21\12	N	A2	View of wall (225) and floor (235)
627	-	003-630				
628	-	003-631				
629	-	003-632	21\11	N	A2	View of A2 from the S
630	-	003-633	21\10	E	A2	Detail of brick fireplace on wall (225)
631	-	003-634	21\09	NE	A2	General site shot
632	-	003-635	21\08	E	A2	General site shot
633	-	003-636		N	A2	General site shot
634		003-637	21\07	E	A2	Detail of N end of wall (225) and floor (235)
635		003-638	21\06	N	A2	Section thru layer (236)
636		003-639	21\05	W	A2	Detail of stone pad (239)
637		003-640	21\04	S	A2	Detail of stone pad (239)
638		003-641	21\03	NE	A2	Detail of drain (242)
639		003-642	21\02	E	A2	Detail of stone pad (243)
640		003-643	21\01	E	A2	General view of the N end of wall (225)
641		003-644		NE	A2	Working shots
642		003-645		NE	A2	Working shots
643		003-646	22\37		A2	Film 22 registration shot
644		003-647	22\36	N	A2	Detail of brick floor (241)
645		003-648	22\35	N	A2	General shot of Area A2

Photo	C/P	Digital	C/S	Facing	Area	Description
646		003-649	22\34	S	A2	General shot of Area A2
647		003-650	22\33	E	A2	General shot of Area A2
648		003-651	22\32	SE	A2	General shot of Area A2
649		003-652	22\31	E	A2	N half of stone/brick floor (235)
650		003-653	22\30	E	A2	Stone pad (245)
651		003-654	22\29	N	A2	Stone pad (245)
652		003-655	22\28	E	A2	Brick floor (240) with sump
653		003-656	22\27	N	A2	Brick floor (240) with sump
654		003-657	22\26	N	A2	Section through wall (225)
655		003-658	22\25	E	A2	Curved brick base on Floor (240)
656		003-659	22\24	E	A2	E facing section showing stones above pad (243)
657		003-660	22\23	E	A2	Detail of drain (249) and wall (225)
658		003-661	22\22	E	A2	Working shot
659		003-662	22\21	E	A2	Detail of drain (249) and wall (225/221)
660		003-663	22\20	S	A2	N end of brick floor (241)
661		003-664	22\19	E	A2	N end of brick floor (241)
662		003-665	22\18	E	A2	N end of brick floor (241)
663		003-666	22\17	N	A2	N end of stone slab (243) and floor (241)
664		003-667	22\16	N	A2	Detail of drain channel (246)
665		003-668	22\15	N	A2	Detail of drain channel (246)
666		003-669	22\14	E	A2	N end of wall (225)
667		003-670	22\13	S	A2	N end of wall (225)
668		003-671			A2	Internal view of the well
669		003-672			A2	Internal view of the well

Photo	C/P	Digital	C/S	Facing	Area	Description
670		003-673	22\12	W	A2	Top of stone-lined well (250)
671		003-674	22\11	S	A2	Top of stone-lined well (250)
672		003-675	22\10	S	A2	Well cut (251)
673		003-676	22\09	W	A2	Well cut (251)
674		003-677	22\08		A2	Slabs recorded over the top of well (250)
675		003-678	22\07		A2	Slabs recorded over the top of well (250)
676		003-679			A2	General well shots
677		003-680			A2	General well shots
678		003-681			A2	General well shots
679		003-682			A2	General well shots
680		003-683			A2	General well shots
681		003-684			A2	General well shots
682		003-685			A2	General well shots
683		003-686			A2	General well shots
684		003-687	22\06	N	A2	Cut (251) for well
685		003-688	22\05	N	A2	Cut (251) for well
686		003-689	22\04	N	A2	S facing section through cut (251)
687		003-690		N	A2	S facing section through cut (251)
688		003-691			A2	Shot of inside of the well
689		003-692			A2	Shot of inside of the well
690		003-693			A2	Shot of inside of the well
691		003-694			A2	Shot of inside of the well
692		003-695			A2	Shot of inside of the well
693		003-696			A2	Shot of inside of the well



Photo	C/P	Digital	C/S	Facing	Area	Description
694		003-697			A2	Shot of inside of the well
695		003-698			A2	Shot of inside of the well
696		003-699			A2	Shot of inside of the well
697		003-700	22\03	SW	A2	NE facing section through cut (251)
698		003-701	22\02	W	A2	View of capstones of well (250)
699		003-702	22\01	N	A2	View of capstones of well (250)
700		003-703	23\37			Film 23 ID shot
701		003-704	23\36	S	A	View of the cap stones of the well
702		003-705	23\35	E	A	View of the cap stones of the well
703		003-706	23\34	W	A	Detail of the timber beam across the well
704		003-707	23\33	W	A	Detail of the timber beam across the well
705		003-708		W	A	Detail of the timber beam across the well
706		003-709	23\32	N	A	Detail of the iron ring on the well cap stone
707		003-710		W	A	Internal well shot
708		003-711	23\31	E	A	Stone wall (221)
709		003-712	23\30	E	A	Stone wall (221)
710			23\29	S	A	S facing section to the W of wall (221)
711		003-713	23\28	N	A	Detail of the floor at the N end of Area A2
712		003-714		N	A	Detail of the floor at the N end of Area A3
713		003-715	23\27	N	A	Excavation at the N end of area A2
714		003-716	23\26	S	A	Excavation at the N end of area A3
715		003-717	23\25	E	A	Detail of the floor (235) at the N end
716		003-718	23\24	E	A	General view of the floor (235) at the N end

Photo	C/P	Digital	C/S	Facing	Area	Description
717		003-719	23\23	S	A	View of floor (235) at the N end
718		003-720	23\22	N	A	View of section through (235) at the N end
719		003-721	23\21	E	A	Detail of the W elevation of wall (221)
720		003-722	23\20	E	A	General view of the W elevation of wall (221)
721		003-723	23\19	SW	A	Working shot of lifting of the well cap
722		003-724	23\18	SW	A	Working shot of lifting of the well cap
723		003-725	23\17	SW	A	Opening at the top of the well
724		003-726	23\16	W	A	Upper part of the well
725		003-727	23\15	W	A	detail of brick and stonework of the well
726		003-728		SW	A	Timber beam at the top of the well
727		003-729		W	A	View of the water in the well
728		003-730	23\14	W	A	View of the water in the well
729		003-731	23\13	S	A	Stone pier in the S wall of the well
730		003-732	23\12	E	A	View of the well from above
731		003-733	23\11	E	A	View of the well from above
732		003-734	23\10	E	A	View of the well from above
733		003-735	23\9	E	A	View of the well from above
734		003-736				Working shots of well cap
735		003-737				Working shots of well cap
736		003-738				Working shots of well cap
737		003-739				Working shots of well cap
738		003-740	23\8	N	A	Edge of the excavation A2, NE corner
739		003-741		N	A	Edge of the excavation A2, NE corner

Photo	C/P	Digital	C/S	Facing	Area	Description
740		003-742	23/7	W	A	Edge of the excavation A2, NE corner
		003-743		W	A	Edge of the excavation A2, NE corner
741		003-743A		N	A	Truncated stone wall 221
742		003-743B		N	A	Extension of Area A excavation
743		003-743C		E	A	N end of Area A
744		003-743D			A	Detail of floor
745		003-743E			A	General view of extended excavations in Area A
746		003-743F			A	General view of extended excavations in Area A
747		003-744	23/6	N	A	Test pits excavated in area C2, TP 1 showing culvert at the base
748		003-745	23/5	NE	A	TP 1 with culvert and soil horizon
749		003-746	23/4	S	A	TP 2 showing general demolition rubble
750		003-747	23/3	SW	A	TP 2 showing general demolition rubble
751		003-748	23/2	SE		TP 2 showing rubble and concrete raft over natural
752		003-749	23/1	SW		TP2 showing depth of natural
753		003-750		E		Shot from stairs of A2 extension
754		003-751		E		Shot of A2 extension after cleaning
755		003-752		E		Shot of A2 extension after cleaning
756		003-753		E		Shot of A2 extension after cleaning
757		003-754	24\36			Film 24 ID shot
758		003-755	24\35	E		Shot of A2 extension after cleaning
759		003-756	24\34	E		Shot of A2 extension after cleaning
760		003-757	24\33	E		Shot of A2 extension after cleaning

Photo	C/P	Digital	C/S	Facing	Area	Description
761		003-758	24\32	E		Shot of A2 extension after cleaning
762		003-759	24\31	E		Shot of A2 extension after cleaning
763		003-760	24\30	E		Shot of A2 extension after cleaning
764		003-761	24\29	E		Shot of A2 extension after cleaning
765		003-762	24\28	E		Shot of A2 extension after cleaning
766		003-763	24\27	E		Shot of A2 extension after cleaning
767		003-764	24\26	NE		Mortar layer (269) after removal of (268)
768		003-765	24\25	E		Foundation base (272) with stone pad + brick detail
769		003-766	24\24	E		Detail of (272)
770		003-767	24\23	NE		General shot of NE foundation
771		003-768	24\22	E		Detail of NE foundation and pad (271)
772		003-769	24\21	E		Detail of NE foundation and pad (271)
773		003-770	24\20	NE		Shot of the reduced level in C2
774		003-771	24\19	E		Shot of the reduced level in C2
775		003-772	24\18	W		Foundation trenches in C2
776		003-773	24\17	SW		Foundation trenches in C2 showing natural depth at the base
777		003-774	24\16	NW		Foundation trenches in C2 showing natural depth at the base
778		003-775	24\15	W		Foundation trenches in C2 showing natural depth at the base
779		003-776	24\14	W		Working shot of breaking out concrete in C2
780		003-777	24\13	SW		Section of foundation trench
781		003-778	24\12	SE		Section of foundation trench



Photo	C/P	Digital	C/S	Facing	Area	Description
782		003-779	24/11	SW		N facing section showing (274) (275) (276)
783		003-780	24/10	SW		N facing section showing (274) (275) (276)
784		003-781	24/9	E		W facing section of foundation trench in area C
785		003-782	24/8	W		E facing section of foundation trench D
786		003-783	24/7	S		General view of wall (277) in trench E
787		003-784	24/6	W		E facing section of trench E, looking along Tr F
788		003-785	24/5	SE		Corner between Tr E and F showing soil and broken bedrock
789		003-786	24/4	SW		View of e facing section of Tr E showing soil and natural
790		003-787	24/3	W		E facing section of Tr G
791		003-788	24/2	E		View of Tr F continued
792		003-789	24/1	S		Wall (279) in n facing section of Tr F
793		003-790			C	Working shot
794		003-791			C	Working shot
795		003-792	24/0	E	C2	Shot of Trench H in area C2
796		003-793				General view of Area C
797		003-794			C2	General shot of Trench I in area C2
798		003-795			C	Working shot
799		003-796	25/36		C2	Film 25 ID shot
800		003-797	25/35	N	C2	General shot of Trench I in area C2
801		003-798	25/34	E	C2	W facing section of trench I
802		003-799	25/33	S	C2	General shot of area cleared at Bakehouse Close

Photo	C/P	Digital	C/S	Facing	Area	Description
803		003-800	25/32	W	C2	Pipe installation at Museum Wall
804		003-801	25/31	E	C2	Wall footing at edge of Bakehouse Close
805		003-802	25/30	N	C2	Continuation of Trench E
806		003-803	25/29	N	C2	Continuation of Trench E
807		003-804	25/28	NE	C2	View of Test Pit excavations
808		003-805	25/27	N	C2	View of Test Pit excavations
809		003-806		N		View of Test Pit excavations
810		003-807	25/26	N		View of Test Pit excavations plus extension
811		003-808		W	A	Working shot of excavations of the attenuation tank
812		003-809	25/25	N	C	Elevation of the SW corner of the museum garden wall
813		003-810	25/24	N	C	Exposed footing of the SW corner of the museum garden wall
814		003-811	25/23	E	C	Service works to E side of entrance
815		003-812		N	A	Area of Well at entrance
816		003-813		NW	A	Area of Well at entrance
817		003-814		NW	A	Area of Well at entrance
818		003-815	25/22	E	C	View of re-cut trench G
819		003-816	25/21	NE	C	View of re-cut trench G along the e side
820		003-817		NE	C2	General shot at start of excavation
821		003-818	25\20	N	C2	Detail of feature [280]
822		003-819	25\19	NE	C2	Detail of feature [280] showing cut [281] and fill [282]
823		003-820	25\18	E	C2	Detail of feature [280] showing location

Photo	C/P	Digital	C/S	Facing	Area	Description
824		003-821	25\17	NW	C2	Excavation of test pit showing E facing section
825		003-822		N	F	Service trench excavated to outer side of Block F
826		003-823		W	A	General shot of man-hole installation
827		003-824	25\16	NE		Brick footing of the demolished laboratory
828		003-825		N	C2	Excavation of foundation trenches
829		003-826		N	C2	Excavation of foundation trenches
830		003-827	25\15	SW	C2	E facing section of test pit
831		003-828	25\14	W	C2	Remains of modern man-hole
832		003-829	25\13	SW	C2	Remains of modern man-hole
833		003-830	25\12		C2	Remains of modern man-hole, plan view
834		003-831	25\11	E	C2	Trench J showing E facing section
835		003-832	25\10	E	C2	Elevation of brick structure [284]
836		003-833	25\09	NE	C2	Elevation of brick structure [284] showing truncation
837		003-834	25\08	SE	C2	Elevation of brick structure [284] showing intact abutting deposits
838		003-835	25\07	E	C2	Elevation of brick structure [284] showing detail
839		003-836	25\06	W	C2	Elevation of brick structure [284] in plan detail
840		003-837	25\05	N	A	Wall footing [285] and flat surface
841		003-838	25\04	NE	A	Wall footing [285] and flat surface
842		003-839	25\03	W	A	E facing section of ground reduction
843		003-840	25\02	S	A	N facing section of ground reduction
844		003-841	25\01	E	A	W facing section of ground reduction

Photo	C/P	Digital	C/S	Facing	Area	Description
845		003-842		S	A	South extent of Area A with pottery in-situ
846		003-843		NE	A	South extent of Area A showing bedrock
847		003-844				Void
848		003-845				Void
849			26\36			Film 26 ID shot
850		003-846	26\35	N	A	Extension to south showing footings [289]/[290] and surface [287]
851		003-847	26\34	W	A	Extension to south showing footings [289]/[290] and surface [287]
852		003-848	26\33	E	A	Extension to south showing footings [289]/[290] and surface [287]
853		003-849	26\32	N	A	Extension to south showing footings [290]
854		003-850	26\31	NE	A	Extension to south showing footings [289]/[290]
855		003-851	26\30	E	A	Extension to south showing W facing section
856		003-852	26\29	W	A	Extension to south showing E facing section
857		003-853	26\28	N	A	Extension to south showing mortar/stone surface on bedrock
858		003-854	26\27	W	A	Extension to the South showing E facing section
859		003-855	26\26	W	A	Extension to the South showing E facing section post-wall removal
860		003-856	26\25	E	A	Extension to the South showing W facing section post-wall removal
861		003-857	26\24	E	A	Extension to the South showing W facing section post-wall removal
862		003-858	26\23	NE	A	Extension to the South showing trench to bedrock



Photo	C/P	Digital	C/S	Facing	Area	Description
863		003-859		NE	A	Extension to the South showing trench to bedrock and location
864		003-860		NW	C2	Re-excavation of the foundations in Area C2
865		003-861		SE	C2	View of post demolition of area
866		003-862	26\22	NE	C2	View of manhole in area C2 excavations
867		003-863	26\21	NE	C2	Test pit for piles showing W facing section
868		003-864		N	C2	View of building during demolition
869		003-865		SE	C2	View of building during demolition
870		003-866		SW	A	Working shot of works in Area A
871		003-867	26\20		C2	General view of area
872		003-868	26\19	W	A	E facing section of Attenuation tank pit
873		003-869		W	A	E facing section of Attenuation tank pit
874		003-870	26\18	SW	C2	Spoil removal of demolished building
875		003-871	26\17	W	A	E facing section showing cut and fill into bedrock
876		003-872	26\16	SW	A	E facing section showing cut and fill into bedrock
877		003-873	26\15	S	A	General shot of Area A
878		003-874	26\14	E	A	West facing section of Area A service trench (S)
879		003-875	26\13	E	A	West facing section of Area A service trench (N)
880		003-876	26\12	W	A	E facing section of area A service trench
881		003-877	26\11	E	A	W facing section showing [300] and [301]
882		003-878	26\10	SE	A	Detail of W facing section showing [300] and [301]

Photo	C/P	Digital	C/S	Facing	Area	Description
883		003-879	26\09	W	A	Mortar/stone surface and brick footings
884		003-880	26\08	NW	A	Mortar/stone surface and brick footings
885		003-881	26\07	S	A	N facing section showing brick footings
886		003-882	26\06	S	A	Detail of N facing section showing brick footings
887			26\05	SE	A	N facing section showing brick footings
888			26\04	SE	A	Brick footings after further excavation
889			26\03	W	A	E facing section at the S end of area A
890				W	A	Detail of E facing section at the S end of area A
891			26\02	SE	A	N and W face of brick footing [303] in area A
892			26\01	SE	A	Detail of N and W face of brick footing [303] in area A
893			27\36			Film 27 ID shot
894			27\35	S	A	View of N facing elevation of Building A showing pend surround
895			27\34	S	A	View of N facing elevation of Building A showing pend surround
896		003-901		N		General view of buildings to the S end of site
897		003-902				General view of buildings to the S end of site
898		003-903				General view of buildings to the S end of site
899		003-904				General view of buildings to the S end of site
900		003-905	27\33	E	A	W facing section at the S end of Area A showing [301]
901		003-906	27\32	E	A	W facing section at the S end of Area A showing [301]

Photo	C/P	Digital	C/S	Facing	Area	Description
902		003-907	27\31	N		General view of the N elevation of the Brewhouse
903		003-908		N		General view of the N elevation of the Brewhouse
904		003-909	27\30	N		Detail of the N elevation of the brewhouse
905		003-910	27\29	SE		Remains of the office building (E)
906		003-911	27\28	S	C2	N elevation of the Brewhouse (F)
907		003-912	27\27	E	C2	View of the excavations to the N of the Brewhouse
908		003-913	27\26	S		View of the excavations to the N of the Brewhouse
909		003-914	27\25	S		View of the excavations to the N of the Brewhouse
910		003-915		W	A	View of trench to N side of the well
911		003-916		S	A	View of trench to N side of the well
912		003-917		W	A	View of capping trench to S side of the well
913		003-918		N	A	View of capping trench to S side of the well
914		003-919			A	Overhead view of capping trench to S side of the well
915		003-920		W	A	General view of capping trenches to the N and s of the well
916		003-921		W	A	Detail of possible stone wall [304] to the S of well
917		003-922		E	A	Detail of possible stone wall [304] to the S of well
918		003-923		N	A	Top of the well being capped
919		003-924		N	A	Top of the well being capped
920		003-925		N	A	Top of the well being capped
921		003-926		N	A	Top of the well being capped

Photo	C/P	Digital	C/S	Facing	Area	Description
922		003-927	28\37			Film 28 ID Shot
923		003-928	28\36	E	A2	View of section through service pipe trench to S of A2 and [305]
924		003-929	28\35	S	A2	View of section through service pipe trench to SE corner of A2 and [305]
925		003-930	28\34	SE	STr	View of service trench next to C1
926		003-931	28\33	E	STr	View of service trench next to C1 showing wall [305]
927		003-932	28\32	S	STr	Detail of wall [307]
928		003-933		S	STr	N facing section through service trench showing [307]
929		003-934				General site shots
930		003-935				General site shots
931		003-936				General site shots
932		003-937				General site shots
933		003-938				General site shots
934		003-939				General site shots
935		003-940				General site shots
936		003-941				General site shots
937		003-942	28\31	SE	STr	View of stone wall [308] in service trench
938		003-943	28\30	S	STr	Detail of stone wall [308] in service trench
939		003-944	28\29	NW	STr	E facing section of service trench to S of [307]
940		003-945	28\28	NW	STr	E facing section of service trench to S of [307]
941		003-946	28\27	NW	STr	View of extended trench showing wall [307]
942		003-947	28\26	N	STr	Detail of S facing elevation of wall [307]



Photo	C/P	Digital	C/S	Facing	Area	Description
943		003-948	28\25	N	STr	Detail of S facing elevation of wall [307]
944		003-949	28\24	E	STr	View of flue remains in W facing section
945		003-950	28\23	SW	STr	Detail of remains of post hole/pit [309]
946		003-951	28\22	S	STr	Location of post hole/pit [309]
947		003-952	28\21	SW	STr	View of bedrock + area of clay
948		003-953	28\20	S	STr	General view of service trench showing bedrock
949		003-954	28\19	SW	STr	View of manhole trench in E facing section
950		003-955	28\18	S	STr	Location of manhole trench
951		003-956	28\17			
952		003-957	28\16	E	B+C	pre-excavation of area between B and C
953		003-958	28\15	E	B+C	General view of mortar surface [311]
954		003-959	28\14	S	B+C	Wall [317] with gully to right
955		003-960	28\13	W	B+C	Gully passing between walls [312] and [313]
956		003-961	28\12	E	B+C	Cobble floor
957		003-962	28\11	E	B+C	Cobble floor
958		003-963	28\10	E	B+C	View of flues [331] and [334]
959		003-964	28\09	S	B+C	View of flues [331] and [334]
960		003-965	28\08	W	B+C	View of flues [331] and [334]
961		003-966	28\07	N	B+C	Detail of door [327]
962		003-967	28\06	N	B+C	View of flue [331] cap stones
963		003-968	28\05	W	B+C	View of flue [331] cap stones
964		003-969		N	B+C	View through flue [331] to N
965		003-970	28\04	S	B+C	View of area from above

Photo	C/P	Digital	C/S	Facing	Area	Description
966		003-971		S	B+C	View of area from above
967		003-972	28\03	N	B+C	Detail of door [327]
968		003-973	28\02	E	B+C	View of flue [334]
969		003-974	28\01	W	B+C	View of flue [334]
970		003-975	29\37			Film 29 ID Shot
971		003-976	29\36	E	B+C	View of back E wall sat on bedrock
972		003-977	29\35	E	B+C	View of back E wall sat on bedrock
973		003-978	29\34	NE	B+C	S elevation of Building B
974		003-979	29\33	S	B+C	View of section recorded 4/4/12
975		003-980	29\32	S	B+C	View of section recorded 4/4/13
976		003-981		S		General site shot
977		003-982		S		General site shot
978		003-983		S	STr	Service trench excavation
979		003-984		S	STr	Service trench excavation
980		003-985		S	STr	Service trench excavation
981		003-986		S	STr	Service trench excavation
982		003-987		E	STr	Brick wall in service trench
983		003-988		W	STr	Bedrock in service trench
984		003-989		SW	STr	Service trench excavations
985			29\31	S	STr	General shot of service trench 11/4/12
986			29\30	E	STr	General shot of service trench 11/4/12
987			29\29	W	STr	General shot of service trench 11/4/12
988			29\28	E	STr	Location of service trench excavations
989		003-990	29\27	S		Mortar layer [335] to W of service trench

Photo	C/P	Digital	C/S	Facing	Area	Description
990		003-991	29\26	N		Mortar layer [335] to W of service trench
991		003-992	29\25	W		Mortar layer [335] to W of service trench
992		003-993		W	STr	View of bedrock in service trench excavations
993		003-994		W	STr	View of bedrock in service trench excavations
994		003-995		SW	STr	Working shots of service trench excavations
995		003-996	29\24	N	STr	View of cleared area to W of service trench showing bedrock
996			29\23	N	STr	View of cleared area to W of service trench showing bedrock
997			29\22	S	STr	View of cleared area to W of service trench showing bedrock
998			29\21	S	STr	View of cleared area to W of service trench showing bedrock
999		003-997				General site shots
1000		003-998				General site shots
1001		003-999				General site shots
1002		003-1000				General site shots
1003		003-1001				View of drainage works across the lower terrace
1004		003-1002				View of drainage works across the lower terrace
1005			29\20	W	STr	View of [336] ash/pottery layer
1006			29\19	SW	STr	View of garden soils in the service trench section
1007			29\18	W	STr	E facing section of service trench showing level change in bedrock
1008			29\17	W	STr	E facing section of service trench at Drg 34
1009			29\16	W	STr	E facing section of service trench showing level change in bedrock

Photo	C/P	Digital	C/S	Facing	Area	Description
1010			29\15	E	STr	W facing section of service trench
1011			29\14	SE	STr	General view of the works showing the location of service trench
1012			29\13	W	STr	E facing section of the service trench showing cut [339]
1013			29\12	NW	STr	E facing section of the service trench showing cut [339] location
1014			29\11	W	STr	E facing section of the service trench showing wall [341]
1015			29\10	W	STr	E facing section of the service trench showing wall [341]
1016			29\09	S	STr	View of wall [342]
1017			29\08	S	STr	View of wall [342]
1018			29\07	E	STr	W facing section of service trench showing wall [342]
1019			29\06	S	STr	View of service trench excavations
1020			29\05	E	STr	Detail of wall [342] in section
1021				E	STr	W facing section of service trench opposite D2
1022				E	STr	Pipe trench off main service trench
1023				N	STr	Service trench at the n extent of area
1024				SW	STr	Service trench beside D1 with bedrock in section
1025				S	STr	General shot of service trench
1026				W	STr	Exposed stone steps at S end of service trench, leading to brewhouse
1027				S	STr	S facing section of service trench at S end
1028				W	STr	Service trench parallel with the brewhouse
1029				S	STr	S facing section of service trench at S end



Photo	C/P	Digital	C/S	Facing	Area	Description
1030				W	STr	W facing section of service trench at the S end showing construction cut
1031			29\04	S	E	Opening on Block E wall
1032				S	E	Opening on Block E wall
1033			29\03	SW	E	Wall opening on Block E
1034				S	E	Location of opening of Block E
1035				W	E	Detail of wall and flue at opening in Block E
1036			29\02	S	E	General view of wall and flue at opening in Block E
1037			29\01	S	E	Detail view of wall and flue at opening in Block E
1038				E	STr	View of works at the S end of service trench
1039				N		Working shot of site
1040				NE		View of Block C new build
1041				SW		Internal W wall in Building B

Appendix 4 Drawing register

Dwg	Scale	Description
1	1:100	Plan of foundation trenches
2	1:20	Plan of area D3 structures [042] & [044]
3	1:10	S facing section of D2 trench through [055]
4	1:20	S facing section (1) in Block C
5	1:20	N facing section (2) in Block C
6	1:20	N facing section (3) in Block C
7	1:20	E facing section (4) in Block C
8	1:20	S facing section (6) in Block C
9	1:20	E facing section (7) in Block C
10	1:20	Sections through well cut [251]
11	1:20	Plan of the n end of Area A2
12	1:20	Area C2 feature [280]
13	1:20	Area C2 location of feature [280]
14	1:20	Area C2 feature [283]
15	1:100	Area C2 location of feature [283]
16	1:10	Area C2 elevation/section of feature [284]
17	1:10	Area C2 plan of feature [284]
18	1:20	Area A, south extent of wall footing [286/287]
19	1:20	Area A, south extent N facing section
20	1:50	Area A, south extent, location plan
21	1:20	Area A south extent, plan of wall [289/290]
22	1:20	Area A south extent, section of E facing
23	1:50	Area A south extent, location plan
24	1:50	Area A revised location plan
25	1:10	Area A pit [296] E facing section
26	1:20	Area A pit [296] location plan
27	1:10	Area A, south extent, E facing section of [302]
28	1:50	Area A, south extent, location plan of [302]
29	1:20	Plan of well and wall [304]
30	1:50	Plan of area A south
31	1:20	Area C4, plan of excavations between B and C
32	1:20	Area C4, plan of excavations between B and C
33	1:20	Area C4 plan of flue feature
34	1:20	Section through service trench between C and D
35	1:50	Plan of service trench between C and D
36	1:20	E facing section of service trench between C and D
37	1:20	W facing section of service trench showing wall [342]
38	1:20	Plan of opening in Block E N wall
39	1:20	Elevation of opening in Block E N wall

Appendix 5 Sample register

Sample	Context	Qty	Description	To process	Phase
1	5	1 bag		–	–
2	6	1 bag		–	–
3	BH S6	1 bag	Deposit at 2–3.5m context 003	*	mid garden soil
4	BH S6	1 bag	Deposit at – m context 004	*	primary garden soil
5	BH S5	1 bag	Deposit at 1.5–1.75m context 005	*	made ground above GS 1800s
6	BH S5	1 bag	Deposit at 1.75–2m context 006	*	poss garden soil
7	BH S5	1 bag	Deposit at 2–3m ash/demo context 007	*	poss garden soil
8	BH S5	1 bag	Deposit at 3–4m clay loam context 008	*	primary garden soil
9	BH S3	1 bag	Deposit at 1–2m context 009	*	made ground above GS 1800s
10	BH S3	1 bag	Deposit at 2.5–3.3m context 011	*	garden soil
11	BH S2	1 bag	Deposit at 1–2.5m Context 15	*	garden soil
12	BH S1	1 bag	Deposit at 1–2m context 012	*	garden soil
13	BH S7	1 bag	Deposit at 2.4–3m context 016	*	–
14	22	2 bags	Grey clayey silt	–	–
15	23	2 bags	Mottled grey clayey silt	*	Garden soil from at 2.5m
16	24	2 bags	mid grey clayey silt with frq charcoal flecks	–	–
17	25	2 bags	deposit 3.6m below surface	–	–
18	24	2 bags	crane base mid W side at 2.6m	*	Upper garden soil
19	25	2 bags	crane base mid W side at 2.85m	*	primary garden soil
20	25	2 bags	crane base NW corner 2.6m	*	Mid garden soil at 2.6m
21	25	2 bags	crane base NW corner 2.8m	–	–
22	24	2 bags	crane base NW corner 2.5m	–	–
23	24	2 bags	crane base NE corner 2.5m	–	–
24	25	2 bags	crane base NE corner 2.7m	–	–
25	63	3 bkts	Garden soil in area D2	*	Upper garden soil
26	69	3 bkts	Garden soil in area D2	*	Mid garden soil
27	70	3 bkts	Garden soil in area D2	*	Mid garden soil
28	71	3 bkts	Garden soil in area D2	*	Mid garden soil
29	72	3 bkts	Garden soil in area D2	*	primary garden soil
30	55	3 bkts	Garden soil in area D2	*	Upper garden soil (disturbed)
31	74	2 bkts	Garden soil in area D2	*	mid garden soil below 055
32	73	3 bkts	Garden soil in area D2	*	mid garden soil below 074
33	56	3 bkts	Primary soil in area D2	*	primary garden soil
34	75	1 bkt	Garden soil in area D2	*	Disturbed garden soil/tree bowl
35	77	1 bkt	Garden soil in area D2	*	Mid garden soil
36	76	1 bkt	Garden soil in area D2	*	upper garden soil above 055
37	103	3 bkts	Garden soil in area D1	–	–
38	106	2 bkts	Garden soil in area D1	*	Primary garden soil
39	130		Garden soil in area C, section 3	*	Upper garden soil
40	139	2 bkts	Garden soil in area C, section 3	*	Upper garden soil
41	140	2 bkts	Garden soil in area C, section 3	*	Mid garden soil
42	117	2 bkts	Garden soil in area F	–	–



Sample Context	Qty	Description	To process	Phase
43 172	1 bkt	Fill of flue 171 area C1	–	–
44 197	2 bkts	Re-deposited material associated with the sugarworks, Area f	–	–
45 206	2 bags	Garden soil in area F	–	–
46 252	3 bags	Backfill of well cut in Area A	*	Poss med deposit
47 252	1 bag	Fill at 0.6m in well cut, Area A	*	Poss med deposit
48 290	1 bag	Area A, S external wall [290] mortar	–	–
49 287	1 bag	Area A, S external surface [287]	–	–
50 298	1 bag	Area A, Pit [296] mid deposit	–	–
51 299	1 bag	Area A, Pit [296] basal deposit	–	–

Appendix 6 Finds register

No.	Context	Area	Description	Phase
1	46	D3	Pottery	18th/19th C deposit
2	63	D2	CBM, 'modern' pottery, glazed pottery	Upper garden soil
3	15	D2	Glazed pottery	Garden soil
4	55	D2	Animal bone, oyster shell	Upper garden soil
5	55	D2	CBM, glazed pottery	Upper garden soil
6	56	D2	Glazed pottery	Primary garden soil
7	38	D3	Pottery	18th/19th C deposit - pre brewery
8	34	D3	Glazed pottery	18th/19th C deposit - pre brewery
9	72	D2	Glazed pottery and unglazed pottery	Primary garden soil
10	67	D2	Glass, bone, Fe (nail), pottery, glazed pottery	re-deposited deposit - pre brewery
11	43	D3	Bone, modern pottery, bottle glass	18th/19th C deposit - pre brewery
12	63	D2	Glazed pottery, glass, bone, pottery	Upper garden soil
13	69	D2	Bone, shell, glazed pottery	Mid garden soil
14	70	D2	Pottery and glazed pottery	Mid garden soil
15	67	D2	CBM, bone, pottery	backfill 18th-19th deposit
16	55	D2	Glazed pottery	Upper garden soil
17	56	D2	Pb (lead)	Primary garden soil
18	103	D1	Pottery, bone, clay pipe	Mid garden soil
19	102	D1	Clay pipe	Mid garden soil
20	92	D1	Clay pipe	Mid garden soil
21	81	D1	Bulk: wood, pottery	Post brewery phase c1870's
22	100	D1	Pottery	Disturbed upper garden soil
23	85	D1	CBM	Brewery phase
24	102	D1	CBM, pottery, clay pipe	Mid garden soil
25	101	D1	CBM, pottery	disturbed garden soil
26	293	A South	Pottery (sugar cone)	18th/19th C deposit - pre brewery
27	299	A	Pottery	18th/19th C deposit - pre brewery
28	310	A South	Pottery red glazed	Poss medieval pit

No.	Context	Area	Description	Phase
29	u/s	C	Pottery from tile layer W of Block C	Poss Sugar cone material
30	u/s	C	Pottery from tile layer W of Block C	Poss Sugar cone material
31	335	B	pottery and glass	18th/19th C deposit - pre brewery
32	336	B	Pottery frags from ash layer	Poss Sugar cone material
33	337		Pottery from service trench soil	Upper garden soil
34	284	C2	brick sample	
35	186	C	Stamped brick	
36	u/s	F	Pottery from block F	poss Sugar cone material
37	117	F	Pottery from block F	poss Sugar cone material
38	142	C	Pipe stem	Upper garden soil
39	u/s	TP30	Pottery	garden soil
40	u/s	TP31	pottery from garden soil at 3m deep	garden soil
41	u/s	TP26	pottery from garden soil at 2m deep	garden soil ? May be sugar cone
42	u/s	TP25	Pottery	garden soil
43	24	Crane base	Pottery from 3.3m deep	Primary garden soil
44	140	C	pottery from section 3	Mid garden soil
45	142	E	pottery from n 1/2 of building E	disturbed garden soil
46	u/s		pottery from the s end of site	Poss Sugar cone material
47	6	Tr 3	1 bag of bone	
48	142	E	2 bags of animal bone	re-deposited garden soil
49	197	F	3 x tubs of red ceramic (sugarcone)	Poss Sugar cone material
50	u/s	TP18	Pottery	pre brewery phase poss sugar cone
51	253	A2	mixed bag of finds	re-deposited well cut fill
52		TP26	pottery from S side of brewery wall 2m deep	sugar cone?
53	237	A2	1 bag of mixed finds	18th/19th C deposit - pre brewery
54	205	F	1 bag of pottery	19th C deposit - pre brewery
55	278	E	1 x bag of bone	Upper garden soil

No.	Context	Area	Description	Phase
56	8	Tr 3	1 bag of bone	
57	5	Tr 3	1 bag of bone/shell	
58	u/s	C/D	2 x bags of bone from top of garden soil	
59	u/s		pottery	
60	22/004	TP22	pottery	Primary garden soil
61	22/002	TP22	1 bag of pottery	Poss Sugar cone material
62	164	C1	Pottery from base of brick feature 164	18th/19th C deposit - pre brewery
63	173	C1	1 bag of pottery from base of 173	18th/19th C deposit - pre brewery
64	u/s	E	1 x bag of pottery from 2m deep	Sugar cone?
65	205	F	1 x bag of pottery	Poss Sugar cone material
66	150	C1	1 bag of mixed finds	Brewery phase c1870
67	205	F	1 bag of pottery	19th C deposit - pre brewery
68	219	A2	1 x bag of mixed finds	Brewery phase c 1870
69	101	D1	1 x bag of pottery	disturbed garden soil
70	252	A2	1 x bag of mixed finds	Back fill of well pre-19th C



Appendix 7 Test pit register

TP	Size	Depth	Description
1	1.50m x 1.20m	0.80m	Located against the W wall on the upper terrace. Comprising 0.15m tarmac over 0.30m rubble hardcore covering 0.40m of demolition material - brick (mixed incl. 'etna') and stone. This material continues below the depth of excavation. TP1 was later further excavated by hand to a depth of 1.25m. The base of the brick wall is sat on an earlier rubble stone wall with a yellowish brown course lime mortar that continues below the depth of the test pit (1.25m). The wall being 0.75m tall, 0.50m below the surface. Fill abutting the wall is large stones and lime mortar, demolition material and occasional roof tile fragments.
2	1.00m x 1.00m	0.80m	Located to the N side of the Brewhouse. On the S. edge is a brick manhole. On the E. side is the stone foundation to the cellar of one of the early brewery buildings. The TP was filled with 0.15m tarmac then rubble and ash deposits which continue below depth of TP2.
3	1.20m x 1.00m	0.80m	Situated against the W. wall of the upper courtyard. Comprising of 0.20m of tarmac over 0.10m of rubble stone on to natural red sandstone deposits/bedrock. No archaeology.
4	0.60m x 0.60m	1.00m	Inside Building C. 0.25m concrete over made ground - stone, brick, sand, cinder - to base of building wall foundation.
5	0.70m x 0.70m	0.20m	Inside Building B. Only excavated to depth of concrete floor, onto mixed stone/course sand layer.
6	0.50m x 0.50m		Situated up against a brick wall in the Basement of Building E office. 0.35m of concrete over a course dark brown sand with frequent stones. At 0.55m depth was a possible stone flag floor or pillar base as may have been open to the east with brick wall inserted. Stone turned out to be concrete.
7	0.5m x 0.5m	0.3m	Within Building E office though the concrete floor slab. Did not break through the slab.
8	1.20m x 1.00m	1.85m	Excavated against the S. wall of site. 0.10m tarmac over 0.25m red blaise over at least 1.50m of demolition material - brick, stone, timber. South wall continues below depth of trench. No archaeology found.
9	1.20m x 1.00m	0.40m	Excavated on the west wall on the south side of site. 0.10m tarmac over 0.30m of red blaise onto stone, mortar, rubble.
10	0.80m x 0.80m	0.35m	Situated in the malt barn (Building K). TP 10 had to be broken through concrete to a maximum depth of 0.35m onto a concrete base for the pillar to the immediate east of the pit.
11	1.00m x 1.00m	0.80m	Situated in the malt barn (Building K) to the south of TP10. 0.35m concrete on to a greyish brown mixed deposit of ash, silt, mortar, red tile, and stone. Very loose. No natural seen. No archaeology.
12	0.5m x 0.5m	0.30m	Situated in the basement of the brew house close to the north wall. Only the concrete floor was excavated with little to see below this as it would need cleaning out first. Concrete continued below 0.30m. Room was dark making it difficult to see.
13	2.70m (E-W) x 2.30m (N-S)	1.60m	To the N side of the Kiln building in the upper terrace. At 1.20m depth was a truncated brick flue bonded with a greyish brown course lime mortar with the base bricks sat on a stone base. Flue aligned E-W - truncated by modern services.
14	1.40m (N-S) x 2.00m (E-W)	2.20m	Situated on east side of ramp up against the north wall of the brew house. TP revealed a truncated E-W aligned stone wall bonded with a yellowish brown lime mortar truncated by a modern brick manhole with C-1 pipes. Wall seen in E facing section of TP14. The main wall of the brew house revealed a bricked up small window with the top of the window at ground level and 0.90m high. On the E facing section a section of stone wall continues to a depth of 1.3m and is approx. 0.50m wide.
15	1.50m (N-S) x 0.60m (E-W)	1.90m	Situated at the corner of brewhouse N wall and offices W wall. Fill comprised of reddish clay and mortar/stone with more sub round stones to the base close to the brew house wall. Brew house wall visible to base of TP. No archaeology and no features.
16	0.6m x 2m	3.00m	Situated against the N wall of the kiln building. Revealing a 0.60m wide concrete foundation/ support for the earlier stone wall - possibly constructed in the '50s/'60s. Probably continued below level of excavations to wall base. To the N of conc. Found made ground/demolition material - mixed brick stone etc. To E. end of the conc. found (at the corner) the kiln building had been truncated by a modern plastic draw pipe with brick side walls. This also ran parallel to the concrete foundation. No other walls or features of archaeological significance found.
17	3.50m (E-W) x 0.60m (N-S)	4.00m	Located in the courtyard of the lower terrace against the W wall. 3m of made ground below stone and silt - layers of demolition material to 1.5m then darker soils with tile and brick remains and layers of sand - very mixed. Tenement N wall on N side of trench up to 3m deep and E wall of courtyard foundations to approx 3m onto fractured shale/bedrock over 1m deep onto rock. Lowe 1.5m possibly earlier material but definatley disturbed pan tile, oyster shell, brick fragments in a dark clayey soil. Sides too dangerous to go near - probably backfill of the wall cut. Wall formed the basement N wall to the tenements.
18	6.00m x 1.00m	3.60m	Located to the N side of the S wall of the site. TP18 includes a rubble stone wall along the W side and 2 E-W aligned stone rubble walls 2m apart and 3.5m from the S boundary wall. All walls keyed in. The in fill comprised of a thin layer of tarmac over red blaise, 1.20m of demolition material (brick rubble), 1.10m of very dark brown clayey silt and stones/shell (possible re-deposited garden soil?), 0.30m layer of silt and very frequent tile/red ceramic. Below that was a brown natural clay 1m deep over bedrock.

19	4.30m x 1.50m	1.00m	Located in the lower terrace courtyard. Trench excavated through tarmac and cobbles/ concrete (0.30m) on to cellar fill of broken brick, sandstone and other building rubble (0.70m) No deposits of archaeological interest.	25	3.00m x 0.50m	2.30m	Trench excavated on the W side of demolished building (J) to expose the wall foundation which were 2m deep below the surface. The wall foundation is sat over a reddish brown stone rich clay. Could not really make out the stratigraphy in such a narrow trench as it kept collapsing. Recovered med pot fragment from the spoil.
20	3.50m x 3.00m (max)	1.00m	Located in the lower terrace courtyard. TP20 was initially going to comprise of two separate trenches, however the thin wall of earth separating them collapsed. Running through the centre of the trench on a N-S alignment is a brick wall 2 courses wide (0.3m), and regular coursing with a cement bonding. It is thought that this is an internal wall. The fill of the trench is otherwise the same as TP19 - concrete etc (0.3m) on to broken brick, sandstone and other building rubble (0.70m). Otherwise, there were no deposits of archaeological interest.	26	0.6m x 3m	2.80m	Located within Building L. Excavated within stone lined pit. Pit 0.70m of fill (demolition material) onto tile filled deposits 1.5m thick over garden soils to 2.8m depth. Did not reach natural. Same make up of ground as seen in TP22 to the N.
21	3.50m x 1.20m	1.00m	The fill is the same as TPs 19 and 20 - cement etc (0.30m) on to building rubble (0.70m). There is also a brick wall running through the centre of the trench on a N-S alignment as well as an addition wall perpendicular to the first running on a E-W alignment to the N of the trench. The brick wall is 2 courses wide (0.3m) with regular coursing, cement bonding. Up to 1m of the wall survives and it is thought to be an internal tenement wall.	27	1.50m x 0.90m	c. 1.10m	Located to the N entrance to the site. Two layers of tarmac (each layer being 0.20m deep) on to rubble (context 017) (0.7m) and finally on to flagstones [018].
22	4.00m x 2.00m	3.60m	Located to S side of site within building K. 0.60m rubble made ground; 1.40m dark grey clayey silt and red pan tile inclusions and small stone and oyster shell; 1.00m dark grey/black clayey silt and frequent charcoal flecks, oyster shell, stone; 0.60m orangey brown silty clay and moderate charcoal flecks and occasional bone, stone and ceramics over the bedrock at 3.6m.	28	3.00m x 1.00m		Located within Building K. Excavation revealed concrete foundations 0.60m below the surface (possibly foundations for ceiling pillars of malthouse) and a concrete floor at the N end of the building immediately below (0.10m) the modern floor space. Also, below the made ground (0.10m) and to the west of the concrete foundation was a fill of 1.2m of mixed re-deposited material - silt, brick, tile, and mortar - as found across the site.
23	8.00m x 6.00m	3.70m	Crane Base: Area-1 was very disturbed due to various pipes and brick fragments to about 2m. Below this is a layer of clayey silt with frequent red pottery fragments to 2.6m. 0.2m of dark grey clayey silt (022) with occasional stone on to a mottled orange/grey silt (023) with occasional stone inclusions over a slightly lighter grey silt with charcoal flecks and pottery (024) at 3.2m. Natural was at 3.5m to 3.7m below the surface. Area 4 comprised of the stone wall foundation of the bottling plant (Building J) W wall so the cut of this wall had disturbed the ground around it to at least 2m. Area 5: West half - The upper layers were disturbed below the concrete floor to 2m where a large ceramic pipe recorded N-S was positioned. Below this was more deposits of mixed ash/silt/stone/mortar to 2.5m where shallow (0.10m) layer of grey charcoal rich clayey silt (024), the reddish clay formed the slightly disturbed - evidence of charcoal flecks (natural) occurred (025). This got cleaner to a depth of 2.8m. Excavated to 3m on to stone rich clay. East half - Excavated to a maximum of 3m on to a reddish brown stone rich clay material (the same as the western half). No sign of the tile rich layers recorded further to the east - this was possibly build up for the buildings and not used in between the build. Depth of natural was higher than in TP22 to the east.	29	2.00m x 1.5m	1.4m	Located on the upper terrace to the S of Building D. Upper 0.4m comprised tarmac and sand forming a modern surface. Below this was 0.4m of black clayey silt with stone and red tile/ pottery inclusions over loose natural stone. The stone was 0.4m deep on to the bedrock
24			void	30	2.00m x 0.5m	3.25m	Located on the footprint of the lab building with 3m of made ground over a dark greyish brown charcoal fleck rich clayey silt. Pottery was recovered from this layer.
				31	2.00m x 0.5m	3.2m	Located below the lab building with 3m of made/disturbed ground over 0.2m of dark greyish brown clayey silt with charcoal fleck inclusions and pottery. Did not reach bedrock
				32	2.00m x 0.5m	2.9m	Located just N of the lab building with 0.3m of made ground over 0.3m of grey/black root rich silt with frequent stones. Below this was 1.2m of greyish brown charcoal fleck rich silt with frequent stone inclusions. At 2.6m was a stone rich orange brown sandy clay with occasional charcoal flecks. Bedrock was reached at 2.9m
				33	1.5mx 1.5m	1.4m	Located within the basement of office (Building E). Comprising 0.5m concrete floor above 0.4m of made ground. At 0.9m was 0.5m of disturbed greyish brown clayey silt with frequent small stones with a thin layer of orange brown garden soil just above the bedrock at 1.4m (approx 48.6m OD)
				34	1.5m x 0.5m	1.2m	Located within the basement of office (Building E). Comprising 0.1m concrete above 0.8m of made ground plus two brick walls both bonded with cement. At 0.9m is a mortar rich layer of disturbed garden soil 0.1m thick over 0.2m of dark grey grit rich silt with frequent charcoal flecks similar to that found in TP33. bedrock at 1.2m



35	1.25m x 1.25m	1.8m	Located at the SE corner of the office (Building E) with 0.9m of rubble over wide brick platform of heat affected un-frogged brick bonded with sand and 0.3m high. Below this was a 0.55m thick layer of mixed greyish brown silt with ash and stones. At 1.65m was a thin layer of dark greyish brown charcoal fleck rich clayey silt with oyster shell inclusions. Did not reach bedrock.
36	2m x 1.5m	0.85m	Located to the NE corner of the basement of the office (Building E). Below 0.1m of concrete was 0.2m of made ground and 0.85m of disturbed and mixed deposits over natural clay.
37	3m x 1.2m	1.8m	Located within the basement of office (Building E). Comprising 0.3m concrete 0.7m of made ground - loose rubble. At 1m was a layer of dark greyish brown clayey silt with frequent charcoal fleck inclusions. natural layer was reached at 1.8m
38	2m x 1m	2.2m	Located to the SW corner of the basement of office (Building E). Comprising 0.1m concrete 0.7m of brick foundations (bricks stamped with 'whitehill' and 'newbattle'), similar to that found in TP35. At 1.8m was a mixed deposit of re-deposited silty loam with ash, tile and shale fragments. Bedrock not reached

Appendix 8 Discovery And Excavation In Scotland entry

LOCAL AUTHORITY:	Edinburgh City Council
PROJECT TITLE/SITE NAME:	Archaeological Works at Sugarhouse Close, 160 Canongate
PROJECT CODE:	SCED10-004
PARISH:	Edinburgh City
NAME OF CONTRIBUTOR:	Donald Wilson
NAME OF ORGANISATION:	Headland Archaeology Ltd
TYPE(S) OF PROJECT:	Excavation, Monitoring and Historic Building Recording
NMRS NO(S):	NT27SE 1757 (51 Holyrood Road), NT27SE 2035 (146 Canongate) NT27SE 2898.00 (160 Canongate), NT27SE 2898.01 (Sugarhouse Close)
SITE/MONUMENT TYPE(S):	Brewery
SIGNIFICANT FINDS:	Post-medieval pottery, sugar cones and Syrup jars
NGR (2 letters, 8 or 10 figures)	NT 2657 7374
START DATE (this season)	10th December 2010
END DATE (this season)	12th June 2012
PREVIOUS WORK (incl. DES ref.)	Archaeological Evaluation and Historic Building Assessment
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>Headland Archaeology (UK) Ltd conducted a programme of archaeological works at Sugarhouse Close 160 Canongate, Edinburgh. The work was commissioned by Watkin-Jones Group and was undertaken to provide a historic record of the site both prior to and during the redevelopment of the site. The programme of archaeological works comprised a mixture of historic building recording, targeted excavations and monitoring of ground reduction works and test pits across the site. The results of this programme of works revealed 6 phases of activity. The earliest phase of the site related to the multiple layers of garden soils and a large well cut into the bedrock, possibly associated with medieval and post-medieval activity on the site.</p> <p>The archaeological works also revealed the remains of two stone walls that may represent the only upstanding features associated with Phase 2 of the site and may relate to the sugar refinery that existed on this site between 1765 and the 1850's. A layer of pottery rich loam recorded above the garden soils represented the only other clear evidence of the existence of a sugar refinery on this site. The pottery recovered from this layer included large quantities of sugar cone and syrup jar fragments. Further targeted excavation across the upper terrace of the site recorded various walls, floors, flues and culverts and discreet features associated with buildings linked to Phase 3 of the site. All these features were within buildings first depicted in the 1852 Ordnance Survey map and seemed to indicate industrial activity in this area.</p> <p>The historic building recording revealed that although the main fabric of the original brewery survived, much of the internal workings of this site had been either modified or completely removed. Four main phases (Phase 3 – 6) associated with the present buildings were identified. The first (Phase 3) saw the construction of the tenement located to the N side of the site. This was followed by the construction of the brewery (Phase 4) in the 1868 which continued to more or less the same design for close to 100 years. A third phase (Phase 5) saw a reconstruction of the front entrance to the site in the 1940's along with a number of other superficial alterations. The final phase from the 1960's saw the demolition of a number of smaller buildings to the N of the main brewery complex and the subsequent construction a laboratory in the 1980's.</p>
PROPOSED FUTURE WORK:	none
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Edinburgh City Council
ADDRESS OF MAIN CONTRIBUTOR:	13 Jane Street Edinburgh EH6 5HE Scotland
EMAIL ADDRESS:	office@headlandarchaeology.com
ARCHIVE LOCATION (intended/deposited)	NMRS



Appendix 9 Finds catalogue

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period	
	U/S		1	1732	Pottery	UGRE - Flat Based Jar	complete base and lower wall of flat based jar, walls up to 205mm, base diam 145			
C	U/S	29	1	131	Pottery	UGRE - Syrup Jar	rim, diam 165			
C	U/S	30	9	2193	Pottery	UGRE - Sugar Cone	8 upper rim sherds, 1 large lower body sherd, rim diams 410, 390, 340, 380, 390, 385, 375			
E			5	905	Pottery	UGRE - Sugar Cone	lower rim and large body sherds, rim diam 50			
F	U/S	36	1	32	Pottery	LWW	body sherd	15th/16th	Medi	
TP18	U/S	50A	2	380	Pottery	UGRE - Sugar Cone	upper and lower rim sherds, diams 450 and 64			
TP18	U/S	50B	1	265	Pottery	UGRE - Flat Based Jar	flat based jar base, base diam 160			
TP18	U/S	50C	1	199	Pottery	BGRE - Flat Based Jar	flat based jar base, thin internal brown glaze, base diam 120			
TP18	U/S	50D	5	3555	Pottery	UGRE - Syrup Jar (2 bags)	3 bases, 2 rims, typical form, base diams 190, 195, rims diams 170, 120			
TP25	U/S	42	1	13	Pottery	PMR - Pirlie Pig	body sherd	16th/17th	PM	
TP30	U/S	39	1	50	Pottery	PMR - Bowl?	handled bowl? porringer? - olive glazed inside and out handle junction near top	17th/m.18th	PM	
122 TP31	U/S	40	1	3	Pottery	PMO - Jar	small body sherd	17th/m.18th	PM	
TP31	U/S		1		Lithics	Core	Multiple platform core, worked at both opposing ends		PH	
C3	186/187	35	0		CBM	Brick	Complete brick, cream fabric. Not frogged, but stamped on one side, 'John Grieve, Bank Park Fire Brick Works'	1860/1893	Mod	
TP22	002	61A	2	929	Pottery	UGRE - Syrup Jar	large base and body sherd, base diam 180			
TP22	002	61B	2	821	Pottery	UGRE - Sugar Cone	large body sherds, straight sided, internal white wash deposit			
BH S6	003		3	1	Mortar					
BH S6	003		3	1	Industrial Waste	Mag Res				
BH S6	003		3	5	Industrial Waste	Iron Slag				
BH S6	003		3	2	1	Pottery	Post-Med	fragments	16th/17th	PM
BH S6	003		3	1		CBM	Fragment	fragment		
BH S6	004		4	1		Industrial Waste	Mag Res			
BH S6	004		4	2	3	Pottery	WGW	fragments	12th/14th	Medi
TP22	004	60	1	11	Pottery	WGW - Jug	body sherd	13th/15th	Medi	
BH S5	005		5	2		Glass	Bottle	fragments		PM/Mo
BH S5	005		5	1		Industrial Waste	Mag Res			
BH S5	005		5	15		Industrial Waste	Iron Slag			

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
BH S5	005		5 1	18	Pottery	UGRE - Cone/ Jar	small body sherd		
BH S5	005		5 2	1	Pottery	UGRE - Cone/ Jar	fragments		
BH S5	006		1		Glass	Wine Bottle	sherd, possibly hand made cylindrical	L.18th/e.19th	Mod
BH S5	006		1		Iron	Nail	large		
BH S5	006		1 12		Pottery	PMR - Jar	sooty	16th	PM
BH S5	006		1 6		Pottery	UGRE - Cone/ Jar	small sherd		
BH S5	006		6 1		Glass	Window	fragments		
BH S5	006		6 16		Mortar				
BH S5	006		6 2		Copper Alloy	Lace Tags		15th/17th	Medi/ PM
BH S5	006		6 1		Industrial Waste	Mag Res			
BH S5	006		6 40		Industrial Waste	Iron Slag			
BH S5	006		6 1 1		Pottery	WGW	fragment	12th/15th	Medi
BH S5	006		6 19 22		Pottery	UGRE - Cone/ Jar	fragments		
BH S5	007		7 3		Industrial Waste	Mag Res			
BH S5	007		7 148		Industrial Waste	Iron Slag			
BH S5	007		7 159 460		Pottery	UGRE - Cone/ Jar	fragments		
BH S5	008		8 1		Industrial Waste	Mag Res			
BH S5	008		8 15		Industrial Waste	Iron Slag			
BH S5	008		8 3		CBM	Fragments	fragments		
BH S3	009		9 2		Glass	Fragment	fragments		
BH S3	009		9 0		Mortar				
BH S3	009		9 1		Industrial Waste	Mag Res			
BH S3	009		9 10		Industrial Waste	Iron Slag			
BH S3	009		9 1 1		Pottery	WGW	fragment	12th/15th	Medi
BH S3	009		9 3		CBM	Fragments	fragments		
BH S3	011		10 1		Glass	Window	fragments		
BH S3	011		10 1		Industrial Waste	Mag Res			
BH S3	011		10 5		Industrial Waste	Iron Slag			
BH S3	011		10 1 11		Pottery	WGW	thumbed base	13th/14th	Medi



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period	
BH S3	011		10	3	CBM	Fragments	fragments			
BH S3	011		10	1	CBM	Floor Tile	Flemish type, fragment with orange/yellow glaze	L.14th/e.16th	Medi	
BH S1	012		12	1	Industrial Waste	Mag Res				
BH S1	012		12	10	Industrial Waste	Iron Slag				
BH S1	012		12	6	CBM	Fragments	fragments			
BH S2	015	03A	1	9	Pottery	STSL	pale body, yellow glaze, flat base	L.17th/e.18th	PM	
BH S2	015	03B	1	10	Pottery	LCR - CP	orange glazed interior, rim	16th/17th	PM	
BH S2	015	03C	4	44	Pottery	PMO - Jar	body sherds	17th/m.18th	PM	
BH S2	015		11	0	Mortar					
BH S2	015		11	1	Industrial Waste	Mag Res				
BH S2	015		11	14	Industrial Waste	Iron Slag				
BH S2	015		11	2	2	Pottery	STSL	white body, yellow glaze, no décor, rim fragment	L.17th/e.18th	PM
BH S7	016		13	1	Industrial Waste	Mag Res				
BH S7	016		13	10	Industrial Waste	Iron Slag				
BH S7	016		13	3	6	Pottery	Post-Med	fragments	17th/m.18th	PM
BH S7	016		13	1	1	Pottery	TGE	fragment	17th/18th	PM
Crane base	023		15	4		Glass	Vessel	foot of stemmed glass		PM/Mo
Crane base	023		15	13		Mortar				
Crane base	023		15	1		Iron	Nail			
Crane base	023		15	1		Industrial Waste	Mag Res			
Crane base	023		15	3		Industrial Waste	Iron Slag			
Crane base	023		15	26		Industrial Waste	Iron Slag			
Crane base	023		15	2	8	Pottery	Post-Med		16th	PM
Crane base	024			1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
Crane base	024		18	2		Glass	Window	fragments		
Crane base	024		18	4		Clay Pipe	Bowl & Stems	wide bore stem	17th/e.18th	PM
Crane base	024		18	1		Industrial Waste	Mag Res			
Crane base	024		18	19		Industrial Waste	Iron Slag			

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
Crane base	024		18	1	Pottery	WGW	fragment	12th/15th	Medi
Crane base	024		18	1	Pottery	TGE	fragment	17th/18th	PM
Crane base	024		18	1	CBM	Brick	fragment		PM/ Mod
Crane base	025		20	1	Glass	Fragment	fragments		
Crane base	025		19	1	Industrial Waste	Mag Res			
Crane base	025		20	1	Industrial Waste	Mag Res			
Crane base	025		19	45	Industrial Waste	Iron Slag			
Crane base	025		20	65	Industrial Waste	Iron Slag			
Area C3	026		1	139	Pottery	UGRE - Syrup Jar	rim sherd		
Area C3	026		1	11	Pottery	WGW - Jug		13th/15th	Medi
Area C3	026		1	4	Pottery	PMO - Jar		17th/m.18th	PM
D3	034	08A	1	10	Pottery	PMR - jug	body sherd	17th/m.18th	PM
D3	034	08B	13	169	Pottery	PMR - Jar	various small sherds, probably from same handled jar, incl rim, base and handle	17th/m.18th	PM
D3	038	07A	1		Ceramic	Marble	salt glazed stoneware	18th/e.20th	Mod
D3	038	07B	27	285	Pottery	Modern Slipware - Bowl	slipware bowl London shape, lathe turned grey lip decoration, sherds making up ?complete vessel	1810/1840	Mod
D3	038	07C	1	57	Pottery	UGRE - Cone/ Jar	body sherd		
D3	038	07D	1	27	Pottery	BGRE - Jar			
D3	038	07E	2	29	Pottery	STONE - Bottle	pale glaze	19th/e.20th	Mod
D3	038	07F	2	9	Pottery	WHITE	blue trans printed	L.18th/20th	Mod
D3	043	11A	21		Glass	Moulded Cylindrical Bottles	5 rims, 1 base of narrow cylindrical bottles	1850/1900	Mod
D3	043	11B	1		Iron	Nail			
D3	043	11C	2		Iron	Sheet	two sherds, one with mineralised wood and fitting at back		
D3	043	11D	1		Iron	Knife	Complete blade and whittle tan. Blade back angled and concave towards tip		
D3	043	11E	2	26	Pottery	BGRE - Jar	rim & body sherd	18th/19th	Mod
D3	043	11F	1	3	Pottery	PMO - Jar	thin sandy sooty	16th	PM
D3	043	11G	2	7	Pottery	WHITE	blue trans print	L.18th/20th	Mod
D3	046	01	1	219	Pottery	UGRE - Sugar Cone	lower rim		



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period	
D2	055	05A	3		Iron	Nails				
D2	055	16	2	37	Pottery	PMR - Jug	body sherds	16th/17th	PM	
D2	055	05B	1		Iron	Tool	spearhead-shaped point on end of broad square sectioned shaft			
D2	055	05C	1		Iron	Sheet	large sherd of sheet			
D2	055	05D	7	223	Pottery	LWW - Jug	base, handle and body sherds	15th/16th	Medi	
D2	055	05E	2	40	Pottery	PMR - Jug	handle, body sherd	16th/17th	PM	
D2	055	05F	5	41	Pottery	LCR	various CP sherds, possibly other forms?	15th/16th	Medi	
D2	055	05G	3	39	Pottery	PMO	unglazed sherds, some sooty	16th?	PM	
D2	055	05H	1	22	Pottery	WGW - Jug	poorly made, thin glaze	14th/15th	Medi	
D2	055	05J	1	9	Pottery	UGRE - Cone/Jar?	unglazed thick walled redware, possibly sugar ware			
D2	055	05K	1		Ceramic	Gaming Counter	made from LWW pot sherd	15th/16th	Medi	
D2	055		30	1	Mortar					
D2	055		30	3	Industrial Waste	Mag Res				
D2	055		30	72	Industrial Waste	Iron Slag				
D2	055		30	6	8	Pottery	Medi-PM	fragment	13th-16th	Medi
D2	056	06	1	8	Pottery	WGW	small coarse sherd	12th/15th	Medi	
D2	056	17	1	56	Lead	Ingot/Weight	round piece of lead with plano-convex section, base rough, possibly poured into hollow. Weight, 2oz			
D2	056		33	1	Industrial Waste	Mag Res				
D2	063	02A	2		CBM	Pan Tile	small sherds		PM/Mod	
D2	063	12A	1		Glass	Mallet Bottle	complete base sherd	1725/60	PM	
D2	063	12B	1		Copper Alloy	Sheet	fragment of two thicknesses of sheet, riveted together			
D2	063	02B	2	29	Pottery	PMO - Jar	base and body	17th/m.18th	PM	
D2	063	02C	1	29	Pottery	TGE - Dish	blue decoration	L.17th/18th	PM	
D2	063	12C	7	193	Pottery	PMR - Jug	including thumbled handle junction sherd	17th/e.18th	PM	
D2	063	12D	1	46	Pottery	LCR - CP	tripod foot	16th/17th	PM	
D2	063	12E	1	7	Pottery	WGW - Jug		13th/15th	Medi	
D2	063	12F	1	10	Pottery	RSW - Jug	Raeren/Aachen?	15th/16th	Medi	
D2	063	12G	1		CBM	Floor Tile	Flemish type, patchy white slip & yellow/orange glaze	L.14th/e.16th	Medi	
D2	063		25	1	Glass	Window	fragments			
D2	063		25	2	Mortar					
D2	063		25	2	Copper Alloy	Wire Pins			Medi/Mod	
D2	063		25	4	Iron	Nails				

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
D2	063		25 1		Copper Alloy	Lace Tag		15th/17th	Medi/PM
D2	063		25 3		Industrial Waste	Mag Res			
D2	063		25 6		Industrial Waste	Iron Slag			
D2	063		25 118		Industrial Waste	Iron Slag			
D2	063		25 9 31		Pottery	Medi	WGW/PMR	15th/16th	Medi
D2	067	10A	4 175		Pottery	PMR - Jug	large body and handle sherd	17th/m.18th	PM
D2	067	15A	4		CBM	Pan Tile			PM/Mod
D2	067	10B	1		Glass	Mallet Bottle	base sherd	1725/1760	PM
D2	067	10C	1		Iron	Shaft	or possibly narrow tube		
D2	067	15B	1 23		Pottery	STONE - Bottle/Jar	bottle sherd, mottled brown and grey glaze	18th/19th	Mod
D2	067	10D	1 56		Pottery	PMR - Bowl	rim, olive glazed both sides	17th/m.18th	PM
D2	067	10E	1 14		Pottery	PMR - Jar	body sherd	17th/m.18th	PM
D2	067	10F	1 17		Pottery	RSW - Jug	Frechen body sherd, tiger glaze, thick walled	17th/18th	PM
D2	069	13	2 60		Pottery	PMR - Jug	body sherds	16th	PM
D2	069		26 99		Mortar				
D2	069		26 1		Iron	Nail			
D2	069		26 2		Industrial Waste	Mag Res			
D2	069		26 1		Industrial Waste	Iron Slag			
D2	069		26 49		Industrial Waste	Iron Slag			
D2	069		26 8 13		Pottery	Medi-PM	fragment	13th-16th	Medi
D2	069		26 1 1		Pottery	TGE	fragment, orange and blue decoration	L.16th/e.17th	PM
D2	070	14A	1		Copper Alloy	Sheet	fragment		
D2	070	14B	4 127		Pottery	PMR - Jug	large body sherd	16th	PM
D2	070	14C	3 35		Pottery	PMO - Jar	spots of orange brown glaze on exterior	16th	PM
D2	070	14D	1 36		Pottery	Yorks - Jug	base sherd, thumbled, a little sooted, glazed body sherd	m.12th/ m.14th	Medi
D2	070		27 140		Mortar				
D2	070		27 3		Iron	Lump			
D2	070		27 2		Iron	Nails			
D2	070		27 2		Industrial Waste	Mag Res			
D2	070		27 21		Industrial Waste	Iron Slag			
D2	070		27 14 54		Pottery	Medi	mostly WGW, including grooved strap handle	15th/16th	Medi



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
D2	071		28	5	Mortar				
D2	071		28	1	Copper Alloy	Wire	fragment		
D2	071		28	1	Copper Alloy	Button?	small, rounded, hollow, button?		
D2	071		28	1	Copper Alloy	Lace Tag		15th/17th	Medi/PM
D2	071		28	2	Industrial Waste	Mag Res			
D2	071		28	32	Industrial Waste	Iron Slag			
D2	071		28	10	18	Pottery	Post-Med	16th	PM
D2	071		28	11	CBM	Brick	fragments		PM/Mod
D2	072	09A	1	13	Pottery	PMR - Jug	body sherd	16th	PM
D2	072	09B	1		Glass	Window	dark sherd, edge?		Medi/PM
D2	072		29	1	Glass	Window	poor condition		Medi/PM
D2	072		29	69	Mortar				
D2	072		29	4	Copper Alloy	Wire Pins			Medi/Mod
D2	072		29	1	Copper Alloy	Sheet	Perforated		
D2	072		29	2	Copper Alloy	Lace Tags		15th/17th	Medi/PM
D2	072		29	1	Iron	Nail			
D2	072		29	2	Industrial Waste	Mag Res			
D2	072		29	12	Industrial Waste	Iron Slag			
D2	072		29	3	4	Pottery	Post-Med	16th/17th	PM
D2	073		32	22	Mortar				
D2	073		32	2	Iron	Nails			
D2	073		32	1	Industrial Waste	Mag Res			
D2	073		32	17	Industrial Waste	Iron Slag			
D2	073		32	3	16	Pottery	Medi-PM	16th	PM
D2	074		31	1	Industrial Waste	Mag Res			
D2	074		31	11	Industrial Waste	Iron Slag			
D2	075		34	2	Glass	Vessel	fragments		
D2	075		34	1	Industrial Waste	Mag Res			

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
D2	075		34	7	Industrial Waste	Iron Slag			
D2	075		75	3	Pottery	Medi-PM	fragment	13th-16th	Medi
D2	076		36	1	Lead	Lump			
D2	076		36	4	Iron	Nails	wire/Pins?		
D2	076		36	2	Industrial Waste	Mag Res			
D2	076		36	1	Industrial Waste	Iron Slag			
D2	077		35	1	Industrial Waste	Mag Res			
D2	077		35	63	Industrial Waste	Iron Slag			
D1	081	21A	2		Iron	Shafts			
D1	081	21B	1		Iron	Washer	large		
D1	081	21C	1		Iron	Fitting	Large V-shaped cast iron fitting	19th/20th	Mod
D1	081	21D	1		Iron	Bracket	T-shaped bracket	19th/20th	Mod
D1	081	21E	2		Iron	Fittings	Two large square washers with loop-headed bolts screwed in to central holes	19th/20th	Mod
D1	081	21F	3	69	Pottery	UGRE - Cone/Jar	body sherds, fine fabric		
D1	081	21G	1	16	Pottery	UGRE - Syrup Jar	rim		
D1	081	21H	1	5	Pottery	BGRE - Jar	small sherd		
D1	085	23	3	231	Pottery	BGRE - Flat Based Jar	base and body sherds		
D1	092	20	1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
D1	100	22	1	7	Pottery	SLIP	unidentified slipware, pale red body, white external slip, sgraffito lines	17th/18th	PM
D1	101	25A	1		Ceramic	Marble	salt glazed stoneware	18th/19th	Mod
D1	101	25B	2		Iron	Nails			
D1	101	25C	1		Copper Alloy	Wire			
D1	101	25D	2		Stone	Slates	large sherds, iron pyrites crystals		
D1	101	25E	5	167	Industrial Waste	Iron Slag?			
D1	101	25F	5	152	Pottery	BGRE - Jar	various sherds, probably all from different vessels, internal black glaze		
D1	101	25G	1	11	Pottery	SLRE - Bowl	small sherd	L.18th/19th	Mod
D1	101	25H	4	469	Pottery	UGRE - Sugar Cone	upper rim and large body sherd		
D1	102	19	4		Clay Pipe	Bowls & Stems	2 bowls, wide bore stems. Complete spurred bowl, and part of possibly similar bowl, both well made and burnished. Possibly Newcastle, 1645-60	1645/1660	PM



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
D1	102	24A	3		Clay Pipe	Bowl & Stems	1 bowl, 2 wide bore stems. Small well made bowl, possibly Dutch, c.1620	1610-30	PM
D1	102	24B	1		Iron	Object	large rounded lump, bolt head?		
D1	102	24C	1		Iron	Object	flat round object		
D1	102	24D	1		Iron	Staple?	U-shaped object		
D1	102	24E	3		CBM	Pan Tile	sherds		PM/Mod
D1	102	24F	3	201	Pottery	PMO - Jar	jar base and body sherds	17th/m.18th	PM
D1	102	24G	3	46	Pottery	PMR - Jug	base and body sherds	17th/m.18th	PM
D1	102	24H	1	10	Pottery	STONE - Lid	lid rim, brown salt blaze	L.18th/19th	Mod
D1	102	24J	1	2	Pottery	TGE	internal blue decoration - plate/dish or bowl	L.17th/18th	PM
D1	102	24K	1	18	Pottery	TGE - Bowl	external lead glaze, internal decoration in blue and green	L.16th/e.17th	PM
D1	103	18A	1		Glass	Vessel	base of stemmed glass	18th/19th	Mod
D1	103	18B	12		Clay Pipe	Bowls & Stems	3 bowl fragments, wide bore stems. Large open ended bowl sherds	1660/1730	PM
D1	103	18C	2	22	Industrial Waste	Iron Slag			
D1	103	18D	3	20	Pottery	PMR - Jug	rim and body sherds	17th/m.18th	PM
D1	103	18E	4	26	Pottery	PMO - Jar	small sherds	17th/m.18th	PM
D1	103	18F	2	9	Pottery	WSG	small sherds, one handle, one body	m.18th-L.18th	Mod
D1	103	18G	1	9	Pottery	UGRE - Cone/Jar	small sherd		
D1	103	18H	2		CBM	Pan Tile/Brick	fragments		PM/Mod
D1	103	18J	8		Glass	Bottle	various small sherds	18th/e.19th	Mod
D1	103	18k	1		Glass	Window	fine sherd, laminating		
D1	106		38	1	Glass	Bottle	fragments		PM/Mo
D1	106		38	72	Mortar				
D1	106		38	3	Iron	Nails			
D1	106		38	1	Industrial Waste	Mag Res			
D1	106		38	20	Industrial Waste	Iron Slag			
D1	106		38	1	Pottery	WGW	fragment	12th/15th	Medi
F	117	37A	1	4	Pottery	PMR - Jug	small sandy sherd	16th	PM
F	117	37D	7		Clay Pipe	Stems	wide bore stems	17th/e.18th	PM
F	117	37B	1	18	Pottery	PMO - Jar	smooth sherd, olive brown glaze	17th/18th	PM
F	117	37C	1	6	Pottery	TGE - Bowl?	fragments of blue decoration on interior	L.17th/18th	PM
C1	130		39	1	Glass	Bottle	fragments		PM/Mo
C1	130		39	3	Mortar				

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
C1	130		39	1	Copper Alloy	Fragment			
C1	130		39	1	Industrial Waste	Mag Res			
C1	130		39	9	Industrial Waste	Iron Slag			
C1	130		39	14	25	Pottery	Medi-PM	mostly WGW, some PMR	12th-m.18th Medi-PM
C1	139		40	1	Industrial Waste	Mag Res			
C1	139		40	74	Industrial Waste	Iron Slag			
C1	139		40	6	11	Pottery	Medi	WGW/PMR	15th/16th Medi
C1	139		40	2		CBM	Fragments	fragments	
C	140	44A	1	6	Pottery	WGW - Jug	orange glaze with applied strip decoration	13th/15th	Medi
C	140	44B	1	2	Pottery	WGW - CP	small sooty sherd	12th/14th	Medi
C	140		41	1	Mortar				
C	140		41	3	Iron	Nails			
C	140		41	1	Industrial Waste	Mag Res			
C	140		41	2	Industrial Waste	Iron Slag			
C	140		41	12	24	Pottery	WGW	12th/15th	Medi
C	142	38	1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
E	142	45	1	55	Pottery	PMO - Jar	rim/handle sherd	16th/17th	PM
C1	150	66A	1	9	Pottery	ROCK - Teapot	1 bag of mixed finds	19th/20th	Mod
C1	150	66F	1		Glass	Moulded Cylindrical Bottle	shoulder sherd with mould scars	1820/1900	Mod
C1	150	66E	1		Glass	Phial	small natural coloured bottle, flat base, mould scar , crude rim	19th	Mod
C1	150	66D	1		Copper Alloy	Fitting	tube with slot along one side and flange at end		
C1	150	66C	1		Copper Alloy & Iron	Object	coil of copper wire with thick length of iron corroded onto it, probably not part of same object		Mod
C1	150	66B	8	108	Pottery	WHITE	various sherds, some blue trans printed, including three from same large bowl/dish	L.18th/20th	Mod
C1	164	62	4	762	Pottery	UGRE - Sugar Cone	large body sherds		
C1	170		16		Glass	Moulded Cylindrical Bottles (2 bags)	10 bases, 6 rims. Some narrow, some wider, some variation to string rim, , all likely to be second half of 19th century. Sample of glass retained, many smaller sherds discarded.	1850/1900	Mod
C1	173	63	18	1670	Pottery	UGRE - Cone/ Jar	body sherds, some mortar covered		



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
Block F	197	49A	7	4989	Pottery	BGRE - Cistern	7 sherds making up lower half of very large jar. Flat base, diam 230, walls sloping outwards to rounded belly, survive to height of 275. Hole made pre-firing at base of wall. Considerable wear around hole, especially on interior, presumably where a tap has been fitted. Thin internal black glaze		
Block F	197	49B	3	562	Pottery	UGRE - Sugar Cone	3 sherds from min 2 vessels. Two lower rims, one upper rim. Upper rim plain, slightly thickened. Lower rims thickened with distinct collar. Unglazed, black surface deposit on interior and exterior of upper rim. White surface deposit on interior of lower rims.		
Block F	197	49C	6	2456	Pottery	UGRE - Syrup Jar	6 sherds from min 2 jars, but possibly more, 4 bases, 2 rims. Bases all of same form, flanged rim which raised bottom of base off floor, base diam 190-210. Rims slightly everted and beaded, diam 105-120. Unglazed but white/grey deposit visible on interior of some.		
Block F	197	49D	1	705	Pottery	BGRE - Flat Based Jar	base sherd from jar (smaller than SF49A), diam 130, flat base, thin corroded black glaze on interior, no tap hole visible, but may be missing on broken side		
Block F	197	49E	2	414	Pottery	UGRE - Sugar Cone	2 lower rims, white deposit on interior and part of exterior		
Block F	197	49F	3	2230	Pottery	UGRE - Syrup Jar	3 large base sherds, of identical form to SF49C, one surviving to height of 195mm		
F	205	54	5	880	Pottery	UGRE - Sugar Cone	4 rims and large curving wall sherd, some with white wash deposit on interior		
F	205	65	8	3094	Pottery	UGRE - Syrup Jar	4 bases, 4 rims. Rim diams 175, 170, 180, 175. Base diam 200, 130. Forms typical. Several sherds severely heat damaged and covered in industrial waste (iron slag?) deposit		
F	205	67	1	835	Pottery	UGRE - Flat Based Jar	very thick flat based jar, unglazed, base diam 250		
F	205		1		Glass	Wine Bottle	base sherd from hand moulded cylindrical or squat cylindrical bottle	1740/1830	Mod
F	205		1	32	Pottery	CREAM - Jar/Jug	large jar or jug	1760/1830	Mod
F	206		1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
F	206		3	99	Pottery	UGRE - Cone/Jar	body sherds		
F	206		1	3	Pottery	PMR - Jug	small sandy sherd	15th/16th	Medi
F	206		1	5	Pottery	PMO - Skillet	small sherd	17th/m.18th	PM
F	206		1	2	Pottery	SLRE - Bowl	simple upright rim, slip lined on interior	L.18th/19th	Mod
A2	219	68A	1		Copper Alloy	Rake?	machine part?, part of rake-shaped object with widely spaced serrated teeth		Mod
A2	219	68B	1		Copper Alloy	Engraved Plate	Small oval metal tag, probably from piece of machinery. Engraved '??? KELVINS / PATENTS / ?ERE GAUGE No 3673 / ?????? & JAMES WHITE / LIMITED GLASGOW & LONDON'		
A2	219	68C	2		CBM	Wall Tile	two joining sherds of long border tile with glazed pattern of rectangular checks in alternate green and cream, probably hearth tile	L.19th/e.20th	Mod
A2	237	53B	1		Glass	Lamp?	Large moulded sherd in imitation of cut glass. Rim pierced at intervals for attachment of small copper alloy loops.	19th/20th	Mod

Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
A2	237	53A	1		Copper Alloy & Rubber	Sink Plug	Rounded piece of pale rubber, around copper alloy shaft, with loop attached		Mod
A2	252	70A	2		CBM	Pan Tile	small sherds		PM/ Mod
A2	252	70E	1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
A2	252	70B	1	8	Pottery	LMR?	thin sandy sherd, red, spots of exterior glaze	13th/15th	Medi
A2	252	70C	2	60	Pottery	PMR - Jug		17th/m.18th	PM
A2	252	70D	1	22	Pottery	PMO - Jar		17th/m.18th	PM
A2	252	47	1		Glass	Fragment	fragments		
A2	252	46	1		Glass	Vessel	fragments		
A2	252	46	150		Mortar				
A2	252	47	29		Mortar				
A2	252	47	4		Iron	Fragments			
A2	252	46	2		Lead	Fragments			
A2	252	46	1		Industrial Waste	Mag Res			
A2	252	47	1		Industrial Waste	Mag Res			
A2	252	46	1		Industrial Waste	Iron Slag			
A2	252	47	5		Industrial Waste	Iron Slag			
A2	252	46	2	1	Pottery	PMR	fragments	16th/e.18th	PM
A2	252	47	1	1	Pottery	PMR - Jug	fragment	16th	PM
A2	252	47	4		CBM	Brick	fragments		PM/ Mod
A2	252	46	23		CBM	Pan Tile	fragments		PM/ Mod
A2	253	51	1		Clay Pipe	Stem	wide bore stem	17th/e.18th	PM
C2	284	34	50	2	CBM	Brick	Two half bricks, not joining, both well mortared, including in break. Red fabric. Mortar obscured detail but appear to be, unmarked. ?x107x70, ?x111x70	18th/19th	Mod
A	287	49	310		Mortar	Mortar Sample			
A	290	48	697		Mortar	Mortar Sample			
A South	293	26	9	238	Pottery	UGRE - Sugar Cone	body sherds		
A	299	27A	5	222	Pottery	UGRE - Cone/ Jar	5 body sherds, fine fabric		
A	299	27B	1		CBM/ Pottery	Tile/Pottery	large piece of coarse red ceramic		PM/ Mod
A South	310	28A	1	77	Pottery	UGRE - Cone/ Jar	probable cone sherd		
A South	310	28B	1	8	Pottery	PMO - Skillet	internal glaze, external soot	17th/e.18th	PM



Area	Context	SF	Sample Qty	Weight (g)	Material	Object	Description	Spot date	Period
B	335	31A	1		Glass	Moulded Cylindrical Bottles	Rim sherd	19th	Mod
B	335	31B	4	128	Pottery	UGRE - Cone/Jar	unglazed body sherds		
B	336	32	3	393	Pottery	UGRE - Sugar Cone	upper rim sherds, plain rim		
Service Trench	337	33A	1	43	Pottery	WGW - CP	base sherd	12th/14th	Medi
Service Trench	337	33B	1	9	Pottery	LWW - Jug	body sherd	15th/16th	Medi

Appendix 10 Additional photographs of the brewhouse

Illus A10.1 ▶

Pulley wheel in Building I



Illus A10.2 ▶

Cast Iron tank at the top of Building I



Illus A10.3 ▶

Roof space in Building I showing the top of the grain hopper





◀ **Illus A10.4**

Detail of the top of the grain hopper



◀ **Illus A10.5**

Detail of the base of the grain hopper



◀ **Illus A10.6**

Pulley above the mash tuns

Illus A10.7 ▶
Detail of a mash tun



Illus A10.8 ▶
Detail of the lift plates of the mash tun furnace



Illus A10.9 ▶
Base of the fire box





◀ **Illus A10.10**
The timber malt house



◀ **Illus A10.11**
Detail of the store room door in the basement of Building I



◀ **Illus A10.12**
Detail of the cast-iron support in Building I

Illus A10.13 ▶

Detail of a bearing box in Building I



Illus A10.14 ▶

Detail of a bearing box in Building I



Illus A10.15 ▶

View of the framework in the south kiln building





◀ **Illus A10.16**
Detail of some of the tools



◀ **Illus A10.17**
Fireplace and door in Building H

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◀ **Illus A10.18**
View of the fireboxes in Building I

Illus A10.19 ▶

View of the fireboxes in Building I



Illus A10.20 ▶

The stone-lined well from above



Illus A10.21 ▶

The well being opened





◀ **Illus A10.22**
View of the stone-lined well



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