PART 3



The archaeological evidence from the Parliament site

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Part 3 is Chapter 3, reprinted from Scotland's Parliament and the Canongate: archaeology and history (HAPT 2008)

3.1 Introduction

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This chapter describes the main archaeological features encountered during the excavation, and the artefactual and environmental evidence where appropriate. The results are prefaced by a summary of the main archaeological findings. At the end of the chapter is a brief discussion of how the archaeological results shed light on the main research questions posed at the beginning of the project.

A recurring issue for archaeologists working in historic towns is how to deal with 'dark earth' or 'garden soils'. These are deep accumulations of wellmixed homogeneous loams often containing isolated stone features such as walls, stone-lined wells, drains and kilns which appear to be 'floating' within the soils. This phenomenon is common to many of Scotland's historic towns and Canongate was no exception. There were two distinct spreads of these soils at the Parliament site: one of medieval date and the other post-medieval. During initial post-excavation work, features were grouped together into nine stratigraphic phases based on whether archaeological features were sealed beneath, contained within, or cut into these deposits from above. With subsequent analysis of the structure and content of the soils it became clear that the dating provided by pottery and other artefacts did not support chronological separation of the phases beyond a broad association with the medieval or post-medieval horizons. The phases, however, conveniently fitted within the wider chronological periods (Periods 1–5) used to structure the narrative of the report (Chapter 1), which weaves together the history, archaeology and architecture of the site and its environs. It was decided, therefore, to work with these same periods in order to provide continuity. The original phases have been expressed as sub-periods where more than one were subsumed within a period. Each period description is preceded by a summary of its stratigraphic background related to sub-periods.

In each period, the text and the drawings have been structured around the identification of burgage plots (properties established in the medieval period) and vennels (paths between plots). Where there was some physical evidence for the boundaries that marked these plots (fence lines, ditches and gullies), the properties they defined have been labelled according to period and plot. Through historic processes such as amalgamation, and the archaeological bias of preservation, the plot boundaries were not static. To avoid confusion the plot numbers are prefaced by their period, for example Period 2, Plot 1 is referred to as Plot 2.1. All the evidence for plot boundaries was found in the southern half of the site, but these properties would originally have extended the whole distance from the Canongate street frontage to the end of these plots on what is now Holyrood Road. Property boundaries, where visible, have therefore been projected northwards and southwards.

Fig 1.3 shows all of the areas which were investigated during both the main excavation and earlier phases of evaluation, except areas inside, or immediately outside, Queensberry House (for example, Trenches 9–15, 20, 30) for reasons of scale. In each of the period plans that follow (Periods 1–5; figs 3.1, 3.4, 3.9, 3.14, 3.19) there is an inset showing the area of archaeological interest (shaded) in relation to Queensberry House (a useful reference point on an extensive site such as this), a large-scale plan showing features attributed to that period, and additional insets showing individual features enlarged to provide more detail. Photographs and section drawings of key features support the information contained in the period plans.

3.2 Summary of the archaeological evidence

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It appears that the site was the location for prehistoric human activity, perhaps from the earliest period of habitation in Scotland. Several features, such as a hearth, that may have derived from this activity were preserved, although the only certain evidence came from a residual assemblage of struck stone scattered around the site. Whether this ephemeral evidence reflects the transient nature of prehistoric use or the removal of more substantial remains by later activity is difficult to say.

A substantial ditch was cut at the south end of the site at an unknown date. Sometime after the 13th century it was left to silt up for a while and then deliberately filled. No other features could be attributed to this period and it is presumed that the ditch was defining an area that lay to the north, since marshes lay to the south. For reasons that are explored fully in Chapter 3.11 this feature seemed more likely to have acted as a boundary within the precinct of Holyrood Abbey than within the burgh. Given a paucity of finds and features associated with the ditch, it may have defined an area used for cultivation or horticulture.

After the ditch was filled in, the land was reorganised by cutting a series of gullies running at right angles to Canongate. These divided the site into characteristic medieval properties or burgage plots. The pattern was not wholly regular and it seems that amalgamation of some plots may have occurred immediately. The backlands of some plots contained simple stone tanks and drains, probably associated with flimsy structures constructed of wood, turf or thatch, which have not left visible traces. The features are likely to have been the focus for craft activities. In other plots there were no features of this kind and perhaps these areas were used as gardens or stockyards. Buildings lined

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Figure 3.2
Some of the flaked stone recovered from the site (scale 1:1)

the Canongate and these comprised clay-bonded stone wall footings, presumably supporting timber superstructures.

During the later medieval and post-medieval periods most of the site was given over to decorative gardens. Tightly-packed tall tenements lined the Canongate until such time as many were cleared to make way for grand townhouses. A complicated system of underground culverts was used to provide drainage. By the Early Modern period, the numerous narrow medieval properties had been replaced by two large properties: Queensberry House and grounds occupied the western half of the site, and Lothian Hut, another grand townhouse, occupied the eastern half before this area was progressively developed as a brewery.

3.3 Early features

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With the possible exception of one feature (890) all contexts in this period were truncated and survived below the level of subsoil (fig 3.1). The topsoil, which must have originally covered the area, had since been incorporated into a thick loam that was sealed in the late medieval period.

The homogeneity of the loam indicated that it had been thoroughly mixed by both human and natural processes. In these circumstances it is not surprising

> that the earliest archaeological deposits survived at and below the level of subsoil. The fact that later medieval activity may have destroyed traces of earlier settlement was highlighted by the recovery of a small lithic assemblage, although all of this should probably be regarded as residual (fig 3.2). These waste flakes from the making of stone tools and some finished tools came from two technological traditions and indicate that the site saw sporadic activity from the Mesolithic to the Bronze Age. In the earlier period the site would have been covered by a mixed forest of oak, hazel and elm, occupied by communities who survived by hunting and gathering. Later, it would have been suitable to develop as farmland. Several features that may have been prehistoric were discovered on the Parliament site, such as clusters of stakeholes that may have formed small windbreaks. These were not

in a concentration that might suggest that an early settlement was located here, but there may have been a settlement nearby, perhaps on top of the ridge where more level ground and better drainage would have contributed to a more attractive location.

It is currently impossible to be sure where the settlements inhabited by the prehistoric people who occupied the area were located, but the foot of the Canongate ridge, with lower, wetter ground on either side, would have been a suitable spot. Although no conclusive evidence for prehistoric remains was identified during the excavation, several isolated features could be described as prehistoric rather than medieval in character. An apparently natural patch of gravel (889) in the subsoil was associated with stone working and was close to a simple hearth (891) located in a shallow scoop. Elsewhere were undated groups of stakeholes, which are more easily interpreted as relating to small shelters or windbreaks rather than fence lines. One group was clustered around a smooth, rounded metre-long stone in the subsoil (890), the only stone of this size noted during the excavation. A section excavated against the stone showed that it might have been set within a cut. The stone was not flat and had a shallow groove running from east to west along its length. If this was not a natural feature, then it was designed for rubbing or grinding rather than supporting something above ground. Both this feature and the hearth could only have functioned if the topsoil around them was very thin, and it could be argued that this supports a prehistoric association.

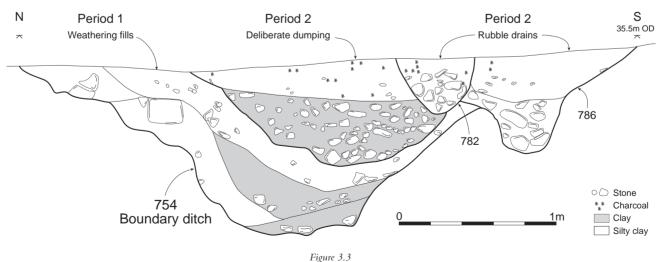
3.4 Period 1: 12th-14th-century ditch

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The most substantial feature in this period was a large ditch (754) cut into subsoil and running from northeast to south-west close to Holyrood Road (fig 3.1). Over 1m of fill survived and the ditch had a wide and irregular profile (fig 3.3), which should probably be viewed as the product of erosion and weathering of the sides of an originally much narrower boundary. Certainly the primary fills in the ditch were silts and clays derived from the surrounding natural soil, which suggested that it had been substantially eroded.

Anthropogenic material was rare in the primary weathering accumulations, but some sherds of White Gritty pottery (Pot no. 58), as well as a type of ware used up to the 13th century, and some charred grain seeds were present. One of the sherds of White Gritty (Pot no. 13) was thought to be from a vessel that imitated Yorkshire wares imported in the 13th and 14th centuries. It is difficult to estimate how quickly the weathering fills accumulated, but assuming that the Canongate ridge had been cleared of trees, this amount of material could have washed into the ditch in a very short time and the date of the pottery can be assumed to relate closely to that of disuse.

Further east a deposit of malodorous clay (1646) was noted to lie along the southern edge of excavation, possibly within a cut into subsoil. Unfortunately not enough was exposed on plan to establish that this was a fill within the same ditch, and it could only be excavated to a depth of 0.4m. However, low amounts



Section through the town boundary ditch

of anthropogenic material (bone, shell, coal/cinders and charred wheat grain) were recovered from samples, and it did run on exactly the same line as the feature further west.

Two further areas (fig 1.3, Trenches 32 & 33) were excavated roughly on the line of the ditch between the two larger areas of excavation. This was undertaken at a late stage in the project following demolition of Queensberry Lodge, and their positioning was very much constrained by construction work. The southern end of one, which would have been expected to cross the line of the ditch, had been subject to modern disturbance, which extended below the level of subsoil. Although speculative, the location of this disturbance suggested that it may have been occasioned by the need to remove the soft fills of the ditch during construction of Queensberry Lodge to avoid later subsidence. Trench 32 needed to be stepped for safety reasons and consequently the exposed area of subsoil probably did not extend far enough south to encounter the ditch.

3.5 Period 2: 14th-15th-century burgage plots

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Stratigraphically this period comprised three separate sub-periods (fig 3.4). Sub-period 2.1 exclusively comprised features sealed beneath the loam deposit (612) (fig 3.5). Sub-period 2.2 comprised some features beneath the loam, but also some which had been cut from within it, and some cut through it, but thought to be earlier due to stratigraphic relationships to other features. Sub-period 2.3 exclusively comprised features cut into the surface of the loam. The associated artefacts suggested that all should be interpreted as relating to late medieval use of the site.

3.5.1 Medieval accumulation

Up to 0.5m of homogeneous loam (612, fig 3.5) spread across all of Trench 22 (fig 1.3), except where truncated by later activity. It was evident that this deposit had partly derived from the dumping or accumulation of domestic, building and industrial waste, which had been combined into a homogeneous loam by mixing over a period of time. The soil contained a variety of artefacts including English and German pottery. Other items that suggested a relatively prosperous medieval community in this part of the Canongate were: a copper alloy lace tag (no. 10); a cruciform copper alloy mount (no. 16) possibly originally attached to a waist or sword belt; and a medieval horseshoe (no. 53). There

was also evidence for leisure activities with the find of a possible game counter (no. 136); another feature (1506, Period 2, Plot 4) from this period contained a bone die (no. 189).

During excavations in the basement of Queensberry House it became apparent that the exterior loam deposit had formerly spread beneath it (410 = 7154, 7130, not illustrated). However, in the east this contained postmedieval artefacts and is likely to have been disturbed during later construction activity, which seemed to have been more intensive here. As ground level rose toward the Canongate it was found that the basement of Queensberry House had been cut into the subsoil, and this must have removed all earlier deposits.

In Period 2, Plots 5 and 6, two equivalent deposits (1634 & 1684, not illustrated) were identified. These were similar in colour and composition to deposit 612, but were thinner and contained far fewer artefacts, perhaps reflecting much less activity in these plots. In the north of the site, beyond the later (Period 4) terrace wall, three later medieval loams (652, 667 & 671, fig 3.5) were preserved. It is thought that these survived here because they were outside the area cultivated in Period 3 and therefore had not been mixed into a homogeneous deposit.

3.5.2 Boundaries and backlands

Despite some filling with weathered soil, the large Period 1 ditch (754) must still have been an open and muddy channel by the beginning of Period 2. Around this time it was filled with a dump of rubble, probably quarried from a local rock outcrop, which was then sealed with silty clay (fig 3.3). This would have functioned as a rubble land-drain and for a while probably helped keep the surrounding area dry. Elsewhere the site was divided into long narrow plots, typical of a medieval town, by the cutting of ditches. The alignment expressed by these was not at right angles to the Period 1 ditch, and the end of one (759), between Period 2, Plots 1 and 2, cut its upper fills (fig 3.4). For these reasons this division of the site is interpreted as part of a reorganisation.

The minimum width of the plots did not vary significantly within the site and appeared to be around 13m (Period 2, Plots 1, 2 and 5); as discussed below, a yet thinner strip (between Plots 2.2 and 2.3) may have been a vennel. It would seem that Plots 2.3 and 2.4 had both been amalgamated into double-sized ones, albeit with one (Plot 2.3) generously sized at the expense of the other. The larger plots may merely reflect use

of a different type of boundary, which has not been identified archaeologically, such as a hedge. However, boundary ditches would have been a sensible option here, given the poor drainage and there are some historical references that have suggested that ditching was common practice (Chapter 4).

Period 2, Plot 1 (Plot 2.1)

The eastern side of Plot 2.1 was defined by a ditch in the southern part (759), and more formally, toward the frontage, by a drystone wall (004). The western side of the plot was not encountered within the area of excavation but may have been roughly below the eastern side of Reid's Close. The property contained a couple of pits (336, 323) dug into subsoil, which was very clayey here. They may have been intended to extract some clay for building or waterproofing, rather than being primarily for rubbish disposal. A rectangular cut (333) was preserved within the plot. It contained stakeholes in its base and impressions of planks in its sides. If the cut originally held a wooden lining, it could have functioned as a trough or something similar. Its backfill was indistinguishable from the surrounding loam and contained an array of artefacts that did not help in any diagnosis of function. A very regular cut (680) was found to have neatly held the base of a barrel (fig 3.6). Presumably this would have held water, perhaps for supplying animals or some craft activity. The wood was in such poor condition that its species could not be identified. The backfill (681) contained many iron nails and fragments, one designed for a horseshoe (no. 57), and a flax seed.



Figure 3.6
Pit containing the base of a barrel

At the south end of Plot 2.1 a rubble drain (786, fig 3.4) was cut on the same alignment as Holyrood Road, perpendicular to the plot boundaries. It contained a red and white clay floor tile (no. 122), which suggests that at least one building of high status had been constructed in the vicinity. The drain suggested that the area remained poorly drained and it fed a sump (767) to the east. The sump had a secondary channel sloping from the south, suggesting that this area was also in need of drainage, although perhaps outside the property. A later rubble drain (782) replaced 786 (fig 3.4) after it had ceased to be effective.

There was a concentration of later rubbish pits (669, 728, 722–4 & 720) close to the southern edge of the site beside Holyrood Road, on the boundary between Period 2, Plots 1 and 2. Mainly these appeared to contain domestic refuse such as a whetstone (no. 141), pottery and animal bones, but also fragments of Dutch and Maiolica floor tile (nos 127 & 131), which confirmed the nearby presence of high-status buildings. One of the fills (694) contained grape seeds. Grapes must have been transported to the Canongate dried, and their presence indicated that the inhabitants were wealthy enough to import foreign food as well as building materials.

Period 2, Plot 2 (Plot 2.2)

Plot 2.2 contained a stone-lined circular feature interpreted as a cistern (764, figs 3.4 & 3.7), which extended 1.4m into subsoil. A stone drain (768) was built into its lip and ran downslope to the south-east toward Holyrood Road, where it extended outside the trench (figs 3.4 & 3.5B). A shallow post setting (884) lay to the immediate west. Both this feature and the ditch (759), which formed the western boundary of the plot, contained a concentration of metalworking debris, and the ditch also contained a significant amount of magnetic residue (hammerscale). This suggested that part of the plot might have been used for ironworking. The stone-lined cut did not hold water during the excavation, but it would have done so if it had been waterproofed in some way. It is hard to interpret it as anything other than a cistern, since a drain seems to have been designed to carry liquid away from it to the south. As the base had filled with loose rubble, it seems likely that it had some sort of stone structure above the level to which it survived. Above the rubble was a loam, which contained much White Gritty Ware pottery, a stone gaming counter (no. 137) and an iron horseshoe (no. 54). The last is perhaps suggestive of the type of smithing activities that could have been undertaken in this rear area of the plot which was safely removed from frontage buildings.

In the south of Plot 2.2, was a large pit (746). The first layers within it contained much midden material. This material had been dumped into the feature from the north and again indicated that metalworking



Figure 3.7
Cistern (764) and drain (768), seen from the north (located on fig 3.4)

activity had been undertaken here. The pit was not filled to its brim and the soil that subsequently washed in from the north did not contain metalworking waste, but it included a dog bone with cut marks, which might indicate skinning. It may be that this large disposal pit was excavated to clear the plot following a change in ownership and consequent change of use. A small pit (753) to the north also contained metalworking debris and also seemed to have been for disposal of waste.

POSSIBLE TANNING TANKS

Plot 2.2 contained two features, which were interpreted as having been designed to hold liquid. One formed a double tank made of roughly shaped slabs bonded with watertight clay in a rectangular cut (775, 775, figs 3.4, 3.5, 3.35). The base was formed from large flagstones. The fills contained a copper alloy thimble (no. 21), dog bones with cut marks, probably the result of skinning, and an iron knife blade (no. 61). A couple of postholes in the vicinity (817 & 827) suggested that there may have been some sort of above-ground structure associated with the tank, although this would seem to have been very flimsy and perhaps was just a lean-to shelter.

To the south was a circular double cut (843), of which the northern cut was stone-lined. The southern cut contained a stake thrust hard against its side, and this may indicate the original presence of a wooden lining. The presence of clay at the point at which the two pits were connected confirmed the impression that these tanks were associated with two, presumably different, liquids. The backfilled material in the cuts contained horse bones with skinning marks and the head of a large fork (no. 60). Other domestic refuse was found in the backfill, notably a fragment of rare French Sgraffitto pottery, possibly from a drug jar (Pot no. 58).

These two features have most in common with tanning pits, especially some twinned examples found at Northampton and dated to the 16th century (Shaw 1984). The location of the tanks could be used to argue against an association with tanning, since it was an antisocial activity and they are not located at the very rear of the plot. However, they are at least some distance from the frontage and located in a plot close to the edge of the burgh. In view of the use of alkalis in the tanning process it is probably relevant that a pit (815) neighbouring the rectangular stone tank contained mostly lime. Elsewhere in Plot 2.2 were three pits (702, 706 & 796), all of which contained a mixture of domestic midden and building material.

POSSIBLE VENNEL

A ditch (810) defined the east side of Plot 2.2. It was post-dated in the middle part of the site by a sandstone culvert (703), leading away from the frontage. It was also earlier than another ditch (772). The fill of ditch 810 (809) was rich in artefacts and included ceramic roof tiles, another indicator of high-status buildings existing on the Canongate frontage, together with pottery that suggests a later medieval date for disuse

of this boundary. The fill of the later ditch (772) was comparatively very clean. Also located in the vicinity of this boundary were several pits (411, 428, 808, 851), two of which were discovered beneath the basement of Queensberry House. The west side of Plot 2.3 was defined by a drystone wall (figs 3.4 & 3.8; 845 & 653), which had been reduced by subsequent robbing, and at another time a ditch (913 & 805). The ditch fill (912) contained a copper alloy buckle and two lace tags, which have been dated to the 15th/16th century (nos 4, 11 & 12).

The gap left between the boundaries appeared too small to have accommodated another plot and it may have functioned as a vennel. It did contain a feature (673) which, because of its form, was interpreted as the former location of a tree. This was post-dated by a large pit (fig 3.4; 854), which seemed to have filled gradually with weathered material. The apparent closing of the vennel at this point might suggest that it was designed to provide access to the rear of the plots from Holyrood Road, or as it then was 'The Strand', rather than from the Canongate frontage.

Period 2, Plot 3 (Plot 2.3)

Plot 2.3 contained a few truncated features (847, 858 & 959). They had been backfilled with domestic refuse, namely fishbone, shell and some building material such as plaster. Two pits (975 & 994) containing clay and lime mortar were identified below the remnants of a claybonded wall foundation (965). The foundation seemed to represent the south-east corner of a building, which would have extended beyond the northern limit of the excavation trench. This is taken to be the southernmost extent of buildings lining the Canongate.

Within Plot 2.3 a north/south-orientated wall (7060) was discovered around a metre beneath the floor of a room in the east of the Queensberry House basement. At the time of excavation the wall was noted as unusual because it was the only example seen in the basement that did not contain any lime mortar bonding; it predated the large tenement foundations, which had been constructed here during the next period. The wall had been sealed by the dumping of a deposit (7046) containing 15th/16th-century pottery fragments.

Period 2, Plot 4 (Plot 2.4)

Plot 2.4 contained, at its northern end, the only preserved area of Canongate frontage exposed during the excavation. Although several remnants of claybonded walls survived (195, 1084, 1099 & 1105),



Figure 3.8
Drystone wall defining the western side of Plot 2.3

they were very poorly preserved because of later building activity and probably did not relate to a single structure. Clay (1104 & 1108) and gravel (1106) surfaces were also preserved; the former contained a complete horseshoe (no. 56) and fragments of 16th-century jars from Seville, probably used to import olive oil (not illustrated). The surfaces were dominated by a high concentration of metalworking debris, coal and cinders. This and the horseshoe suggested that ironworking was undertaken here, and perhaps even more specifically that it was a farriery. Several other features including hearths (206, 1110 & 1115) were also recorded.

Further south in Plot 2.4 was a group of channels and backfilled pits to the east of the boundary ditch between Plots 2.3 and 2.4 (1555) and the later drain (983). These were interpreted as a single group of industrial features, which had been replaced or renewed on at least one occasion. They included two stone-lined wells (1567 & 1571); finds from the backfill of 1567 included a rare sherd of green-glazed Siegburg stoneware (Pot no. 86), dated to the 14th/15th century and one of only three sherds yet found in Scotland, and a decorated stone spindle whorl (no. 140). The

group was bounded to the north by a badly preserved lime mortar-bonded stone building (1510) containing a cobbled floor (1509), which had been extended (1515) to the west; it is presumed the building and pits were related. The features consisted of three large subrectangular cuts with depths of around 0.4m (1522, 1537 & 1539) and several subcircular features with a similar depth (997, 1518, 1527, 1531, 1545 & 1565). Among them ran at least four linear features (1506, 1520, 1541 & 1574), which may originally have been gullies designed to connect some of the larger features, as was certainly the case between cuts 1518 and 1527. The backfills within them all appeared to contain midden material, which was not particularly diagnostic as to function. The most common inclusions in samples retrieved from these were hammerscale, small fragments of bone, and coal and cinders. However, none was particularly concentrated and, given the presence of probable metalworking at the front of this plot, could have derived from elsewhere. One of the pits contained impressions that suggested it might have held a stone lining. Both the gullies connecting the features and the nearby presence of the well suggested that, whatever the function of the features, water was involved. If all these features had at one time been lined, they would perhaps fit the bill of the 'steipstanes' mentioned in the documentary sources. These were hollowed stone troughs, possibly used for soaking flax or malt. This can be no more than speculation, however, in the absence of further evidence.

Period 2, Plots 5 and 6 (Plots 2.5 and 2.6)

The eastern Plots 2.5 and 2.6 were defined not only by boundary ditches (1631, 1695 & 1698), but possibly also by fences (1692 & 1712). These slight features may have been preserved here because the loam accumulations were thinner and shallower cuts consequently extended into subsoil. On the boundary was a well (1727), which contained a horse bone that may indicate that skinning had been carried out here. The most varied assemblage of waterlogged plant remains recovered from the excavations was found in the backfill of the well. It contained hazelnut shells, the remains of edible fruits such as pear or apple, blackberry or raspberry, and strawberry. These could have been homegrown, but other species such as fig and grape must have been imported as dried fruits. A poppy seed was also present and may reflect use for flavouring food. The seeds are likely to have found their way into the well as part of faecal material and imply that the well was used as a

cesspit toward the end of its life. Also present were considerable numbers of seeds of plants that inhabit damp waste ground.

Several features had been dug within the plots; one was truncated but appeared very regular (1755) and, along with a stone-lined example (1778), seemed likely to have been more than a mere disposal pit. The large cut (1691), resembled the large cut in Plot 2.4 (1522) and might have served the same purpose. Other features may simply have been excavated for waste (1633, 1639, 1686, 1716, 1762 & 1775). Two sections of rubble drain (1655 & 1759) separated by modern disturbance seem likely to have been part of the same feature. This, taken with a ditch (1725) leading to a couple of sumps (1756 & 1736), suggests that drainage was a problem, a situation confirmed by two separate finds of amphibian bone from the fills of the rubble drain and sump, as well as the plant remains mentioned above.

The number of artefacts and the quantity of anthropogenic material recovered from samples taken from these features was low. The type of material was typical for medieval midden deposits, including coal, charcoal, metalworking debris, pottery, bone, shell, and charred cereal grains. None was in a concentration to suggest what the plots were predominantly used for; and at least in this part of the site the ground may have been damp and therefore relatively undeveloped.

3.6 Period 3: 16th-17th-century tenements and gardens

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At this point in the site's history (fig 3.9) there appeared to have been a major change in the way the backlands were treated. Dark loams rich in artefacts built up across the area (fig 3.5B, 563), although in the eastern part of the site they were both lighter and less substantial (1620 & 1670, not illustrated). The difference in colour from the lower medieval loam is probably best explained as being a result of manuring with nightsoil and domestic rubbish including coal and ash, and it seems likely that most of the area was turned over to horticulture as depicted on Gordon of Rothiemay's perspective of 1647 (fig 6.1). This period comprises the dark loams and several late features that were sealed below them; it has no sub-periods.

The extensive spread of dark loam (563) contained a large assemblage of artefacts including a post-medieval bone die (no. 188), 17th-century glass and fragments



Figure 3.10
Termination of culvert 692

of clay tobacco pipes (nos 73, 268 & 324), bones from a wide variety of animals, and a range of pottery.

Period 3, Plots 1-3 (Plots 3.1-3) and possible vennel

A rubble drain (665) ran along the boundary between Plots 3.1 and 3.2 (fig 3.9). A large sandstone slab culvert (692, fig 3.11) probably ran along the eastern boundary of Plot 3.2. It might have provided drainage for a frontage building, although there was no evidence that it carried effluent. The culvert appeared designed to drain into the possible vennel established in the previous period, as did a stone culvert (757) on the eastern side. This boundary (between the vennel and Plot 3.3) was also defined by a drystone wall (750 = 849, fig 3.11). These culverts ended midway down the plot, and presumably drainage to the south was left to less formal means, such as open ditches and natural drainage. The possible vennel contained a large pit close to its

western boundary at the southern end (804), which seemed primarily designed to bury a large tree stump. This would have been very awkward to move and was probably just disposed of in the hole left when the tree was uprooted. The wood was identified as rowan, which is often used as an ornamental tree, but the fruits and bark also have practical uses. The bark can be used in tanning and for dyeing fabrics black, the berries can be made into jelly and both bark and berries are used in herbal medicine (Grieve 1992, 70). Superstition also held that the rowan provided protection from witches. The location of the tree suggested that the vennel was no longer needed to provide access to the rear of the plots after they were converted into gardens.

The southern part of Plot 3.3 contained no archaeological features that were assigned to this period; however, within the Queensberry House basement several substantial wall foundations that ran under the standing building were preserved beneath the modern



Early wall 849 forming the boundary between the vennel and Plot 3.3, preserved under later wall 635



 $\label{eq:Figure 3.12} \textit{Wall of a tenement building surviving under Queensberry House}$

floor. The east wall of the south-west corner tower (7134) had been built on an earlier foundation, which contained an arch below ground level. A corner (7155) was revealed beneath the doorway of the neighbouring room.

Wall foundations revealed elsewhere indicated the edges of tenement buildings (1230, 7038, 7040 & 7071–5; figs 3.9 & 3.12). All these walls had been very disturbed by later construction and demolition, but several observations could be made. Foundation 7071/7106 appeared to be part of the same building, separated by later construction. Otherwise, the foundations were not all built at the same time, but where relations could be identified it was clear that they had functioned together for a spell. The walls usually had faces on the parts exposed above contemporary ground level and their substantial nature suggested that they had supported multi-storey tenements. They frequently used earlier walls for support, and it would

seem that construction was something of an *ad hoc* process, with different sides of buildings often reusing different walls. Little more can be said on the form of the buildings given the limited evidence. Overall they are consistent with the crowded terraces of tenements lining the Canongate on Rothiemay's plan of 1647 (fig 6.1).

Period 3, Plots 4-6 (Plots 3.4-6)

There were no identified plot boundaries further east than the west side of Plot 3.4 during this period. However, given that the boundary between Plots 2.4 and 2.5 was replicated in Period 5, it seems likely that this represents a lack of visibility rather than a temporary amalgamation. Similarly, it seems logical that the amalgamation of Plots 2.5 and 2.6 should be attributed to the documented purchasing of neighbouring properties during the development of the townhouse of Lothian Hut (Chapter 13.2.5) during

Period 5 rather than this period. Therefore, Plots 3.5 and 3.6 are assumed to have existed and are shown on fig 3.9 using dashed lines.

In Plot 3.4, the drain, which ran along its western boundary in the previous period, was robbed out (1507) and replaced, although much of this structure (1524) had also been robbed later. Several pits, of different form from those of the previous period, were located within this plot (1512, 1534, 1553, 1561 & 1562). They appeared to have been used to dispose of waste, in particular pit 1512, which contained a horse carcass. The bones did not exhibit any butchery marks and it would seem that the horse was a natural casualty. Metal objects and metalworking debris were common in the fills of several of these features and it may be that the association of this plot with metalworking of some description continued into this period. The structure 1510 continued in use and an accumulation of burnt material was preserved over the cobbling and within a niche in the wall. This contained one of the few concentrations of chaff found during the excavation, consisting of barley and oat chaff dominated by culm fragments, which probably originated as straw.

POSSIBLE TANNING PIT

In the area assumed to have lain within Plot 3.6 one feature extended into the east baulk of the excavated area and consisted of two interconnected subcircular cuts (fig 3.13, 1637 & 1664). Both were stone-lined. The eastern cut (1664) contained remnants of an inner wood lining and was larger and deeper than 1637. Superficially this feature has much in common with the possible tanning pit 843 (Plot 2.2). No bones with skinning marks were found within either tank but there was a complete small unglazed bowl with a spout on the rim (Pot no. 99). The form of this vessel suggested that it may have been used for measuring out liquid, and its disposal without any evident damage



Figure 3.13
Possible tanning pit within Plot 3.6

may imply that this liquid was unpleasant, rendering the vessel useless after its primary function ceased. Measuring quantities of unpleasant liquids would certainly have been necessary as part of the tanning process. The location of the twin cuts in the backlands, as far away from the frontage as possible and at the edge of the burgh, would also be consistent with use for a noxious process. The stone lining in one of the cuts showed signs of mineralisation, which might have occurred if the pit had held tanning liquor.

Elsewhere in Plots 3.5 and 3.6 only four truncated features (not illustrated) were assigned to this period. Most appeared to be small disposal pits; one (1683) produced a glazed fragment of 16th-century stove tile (no. 74), a very rare find in a Scottish context that indicates the presence of high-status buildings in the vicinity.

3.7 Period 4: 17th-18th-century townhouses and formal gardens

SIMON STRONACH

Haddington House

The previous Plot 3.1 appears to have been subdivided into two properties by the building of a lime-mortared stone wall running north-west/south-east (218, figs 3.14 & 3.15). During the earlier part of this period the new subdivision (Plot 4.1) contained a series of north-east/south-west-aligned slots, each around 2m wide and up to 0.4m deep. The slots were quite closely



Figure 3.15

Excavation of the surviving walls of Haddington House and garden wall, looking north-west

spaced and had steep sides reaching flat bases. All had apparently been backfilled immediately with a mixture of rubble and loam. Their fills contained a variety of finds which suggested that they had been created in the 17th century. Above the slots was a dark loam (222, not illustrated) which also contained a variety of finds, including a fragment from a small bell (no. 1) and a decorative gilded buckle (no. 2). The lack of disturbance within these slots suggested that they were not used directly as planting beds. It seems more likely that they were intended to provide drainage below the loam, in which were planted formal floral beds and designs.

Later in this period the western subdivision was developed at its southern end, and the first building within the site to be located at the Holyrood Road end of the plots was constructed. This was not apparent on Edgar's plan of 1742 but was by the time of Lizars' survey of 1778 (fig 3.16). Within the excavated area the exterior wall (286, figs 3.14 & 3.17) was built on a deep, clay-filled foundation trench; an internal wall (284) was also identified. Pottery associated with the foundation trenches confirmed a construction date in the 17th or 18th century, which was consistent with an identification of the building as the documented Haddington House. The west and south walls had been incorporated into the perimeter wall of Queensberry House Hospital and survived to a height of around 2m. Originally the structure had been set back from Holyrood Road and was located between Reid's Close to the west and Haddington's Entry to the east. Its Holyrood Road façade was 8m wide (fig 3.17) and contained at least two windows at either end. This side did not appear to have contained the main doorway, and it is more likely that the building was accessed through Haddington's Entry. Later the building was extended to the south, the former façade became an internal wall, a fireplace was inserted, one former window was converted into a door and the other blocked.

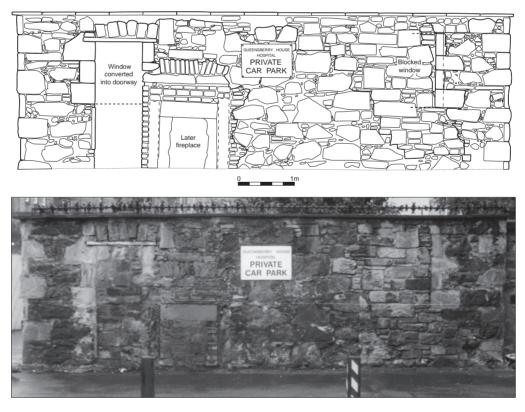
To the north of the building was a large well (231, fig 3.18). Historical records relating to 12 Haddington's Entry, built before 1860, mention rights of access to a pump well, which was associated with a nearby malt works. A couple of disposal pits (281 & 290) were located between the well and the building.

Balmakellie and Queensberry House

Plot 4.2 was formed from the amalgamation of Period 3, Plots 1 (eastern part), 2, the vennel, 3 and 4.



 ${\it Figure~3.16}$ Lizars' survey of 1778, showing the presence of Haddington House (© NLS)



 ${\it Figure~3.17}$ The Holyrood Road elevation of Haddington House wall

In it was a further series of drainage slots, similar to those in the plot containing Haddington House, but distinguished by running from north-west/south-east (fig 3.14). These also contained 17th-century artefacts, many of which indicated an increase in wealth, such as fragments of a decorated glass bottle (no. 85) which was probably Venetian and designed to carry a luxury such as perfume, and an ornate French ceramic bowl (Pot no. 65). A larger cut (618, fig 3.14) on the same orientation and holding more rubble, may have been hardstanding for a path. The very dark loam (540, not illustrated), which sealed these features and functioned as a cultivation soil, contained a variety of finds including an initialled wig curler (no. 121), iron shears (no. 62) and an early 18th-century medicine phial fragment (no. 84).

In the north these garden features appeared to respect a south-west/north-east-aligned wall (635, fig 3.14); the wall returned to the north along the line of

the presumed property boundaries associated with the Balmakellie phase of building. The wall had later been extended east and west (629 & 988). The wall was likely to have formed a raised terrace overlooking the formal gardens. The extensions clearly reflected the expansion of the Canongate property, such as was carried out from the Balmakellie phase to that of the 2nd Duke of Queensberry. A gap in the centre of the wall accommodated a set of steps leading down from the terrace.

Layers of loam were dumped to raise the ground level within the terrace (643, 888, 974 & 992). One of these sealed a large pit (935), which appeared to have been created to dispose of surplus construction or demolition material such as rubble. both sandstone and true roof slates, glazed tiles and mortar. One of the fills contained a coin (no. 199) dating to the reign of James II or III (1437-88). Due to the underlying topography of the site the terrace did not need to be created in the west. as the ground level was already high enough. Here the retaining wall had been cut into the underlying loams. A small regular gully (650) filled

with stone in this area may represent the base of a garden feature.

Immediately to the south of the terrace wall in its western extension was a very large, shallow scoop (717), filled with crushed sandstone, which may have been mason's debris from the construction of the extension. Adjacent to the wall to the east were two pits (674 & 922) filled mainly with lime mortar, and these may also have been related to construction.

Some irregular features (916, 923 & 927) were present to the south of these pits. All were fairly irregular and had fills similar to the neighbouring drainage features. For this reason they are interpreted as features within the formal gardens. A linear spread of lime mortar (708) was located close by, and seems likely to have represented another feature within the gardens. To the east were several irregular features (943, 950 & 960). These were not very well preserved but exhibited a similar fill and alignment to those in



Figure 3.18
Excavation of a well behind Haddington House

the west, and are also interpreted as garden features. Later in this period two simple rubble-filled land-drains (666 & 670) were created to the immediate south of the terrace wall.

The terrace was remodelled towards the end of this period. A robber trench (644) removed part of the original wall 635, and several layers of rubble and earth (623–5) were dumped to raise the level of the terrace by around 0.5m. A wall (610 = 127, not illustrated) was then built on an east/west alignment within the raised terrace. This was a very crude structure built from roughly dressed stones loosely bonded with lime mortar. It suggested a much less formal garden, perhaps as a result of the decline in the Canongate's prestige toward the end of this period.

Close to the southern boundary with Holyrood Road was a truncated drain (601) leading to a sump (633), which must have drained the area to the south of a possible boundary ditch (661).

Sunken-floored kitchen and culverts

Two culverts discovered within the basement of Queensberry House may have related to two interconnected culverts outside. In a sunken-floored room identified as the kitchen a capped sandstone drain (7096) was of the same build as culvert 919 outside to the south and one seen between the two in an evaluation trench (132); these have all been interpreted as part of the same drainage system, which was joined by culvert 928, which was of the same build and seemed to be heading toward culvert 7017, discovered beneath the floor of a room in the east of the basement. Culvert 7096 ran beneath the south wall of the standing building, while 7017 had been cut by the construction of the wall. It is assumed that this wall was constructed during development of the site in the later half of the 17th century by Dame Balmakellie, and culvert 7096 must have functioned as part of this. Culvert 7017 must relate to a late phase of tenement use. However, both appear to have functioned within the same drainage system. Adaptation and retention of an existing system fits in well with the way in which Balmakellie's construction work reused existing foundations rather than clearing them and starting afresh.

A brass jeton from Nuremberg dated to 1490–1550 (no. 215) was retrieved from the backfill around culvert 919, while some silt (921) within it contained four copper pins (nos 24 & 25). Additionally, two pins came from a levelling deposit into which this

drain was cut, and another from the deposit overlying its stone capping. The entire excavation only yielded a total of 11 pins, which makes this concentration appear very significant. It was recorded that one of the properties in the area acquired as part of development by Lord Hatton (around 1680) was that of a tailor (Hume & Boyd c 1984, 57) and the pins may have derived from his premises. Culvert 919 had been constructed to pass through the terrace wall 635, while in the west culvert 628 was truncated by the wall's extension (629).

The level of the old tenement foundations immediately below the floor of Queensberry House Hospital indicated that the floor level of Balmakellie's building could not have been very different. Between and around the foundations were dumps of rubble and loam, deliberately used for levelling and composed of waste from the demolition process. Clay pipe fragments from these deposits fell within the date range 1630 to 1660, immediately prior to Dame Balmakellie's development.

The room identified as the kitchen had been created with a sunken floor lower than the rest of the basement. and later levelling had led to the preservation of early surfaces and features. The room was originally larger and incorporated what had later become part of a corridor to the immediate north. Here one of the capstones of culvert 7096 was a stone basin set within a cobbled surface 7138 (fig 3.14). The basin sloped northward, where it had a spout that extended beneath the north standing wall of the room. On the other side of the wall, on what was the exterior of the early building, the top of a culvert could be seen some half a metre higher, and this may have fed the kitchen culvert. Practical reasons for making this room sunken-floored would include having a ready supply of water flowing through its culvert. Silt within the culvert (7105) contained the waterlogged remains of apple or pear and some grape pips, which probably arrived as sewage and suggested that, at least latterly, the culvert was probably not used for supplying fresh

A socket discovered set into the cobbling in the east of the room might have been connected to a stairway or entrance. Further south in the room, beyond the later wall used to create a corridor and at the same level, a handmade brick and flagstone surface (7088) was used instead of cobbling. Presumably the cobbling or brick had originally stretched over the rest of the room. The bricks had also been used to form two rectangular features (7097 & 7092). Analysis of some

metalworking waste, which had accumulated in the base of 7097 and in the culvert in the same room, has indicated that precious metals were being assayed or refined in the room. The brick features may have been the foundation of a rectangular assaying furnace. The likely historical implications of this are explored in Chapter 9.4, but it would appear that the furnace is most likely to have been built during Lord Hatton's period of ownership.

Later in this period the brick, flagstone and cobble surfaces were partially robbed out and the room was decreased in size by building a wall to form a corridor in the northern part. This must indicate that the building had now been extended to the west. Within the room, demolition debris (7087), containing pottery dated to the 18th or 19th century, was dumped to raise the floor level, although it remained below that elsewhere in the basement. The floor was surfaced with flagstones set in lime mortar (7080, not illustrated), most of which had been robbed later. In the north-east corner some of the bricks robbed from the earlier surface were used to make a small structure (7079, not illustrated). A corresponding gap in the newly built wall confirmed an impression that this had been the base of a short staircase providing access to the room. In several other rooms flagged surfaces survived and it appears that this surface was used throughout the basement.

Several other culverts were identified during watching briefs in the basement (7158, 7162, 7167 & 7168). These frequently used handmade brick alongside sandstone. They seem likely to have all functioned together, flowing generally from north to south. Probably later in this period an exterior sandstone culvert (954) and an interior one (7004) were added. The interior culvert contained some strawberry seeds and probably carried cess.

Canongate frontage

The Canongate frontage to the north-east of Queensberry House remained occupied by tenements and associated vennels. It appears that the street had a kerb (188) formed from large rounded stones set into a cut. To the south was a remnant of a clay surface (1081), which contained a simple scoop (1057) used as a hearth at least once. To the south was a cobbled surface (1017) overlain by a compact trampled deposit (1087, not illustrated), which contained material common in domestic waste such as pottery, clay pipe fragments and oyster shell. Several substantial wall foundations were

also discovered. Wall 1075 was likely to have been the foundation for the back wall of a tenement fronting the street. To the rear (south) was a foundation at right angles (1205). Further north a small fragment of wall (1032) had survived redevelopment. Several post or stakeholes were located, although no real pattern could be discerned.

Lothian Hut

The property to the east, Plot 4.3, was formed from the amalgamation of Plots 3.5 and 3.6. There were no surviving features in the northern half of the property. In the south there were two different kinds of features. To the west was a set of drainage slots which, like those farther to the west in Plot 4.2, were filled with rubble and midden. They contained finds such as pieces of diamond-shaped lead window cames (nos 39 & 40) and fragments of glass vessels, which again suggested that the features were created in the 17th century. A circular stone-lined well (1715) was also present in this property. Clay pipes recovered from its backfill suggested the well was disused after 1630–50. It may have provided water for use within these formal gardens or it may have been backfilled when they were created.

All of these features were located to the west of the line of a north-west/south-east-aligned ditch (1627). An amphibian bone was recovered from the fill, which suggested that it had provided drainage. On the other side were two more features (1601 & 1603), which were on a similar alignment, and were filled with lime mortar. These may also have provided drainage.

A number of features (1737, 1776, 1781, 1785 & 1786) were interpreted as relating to a townhouse called Lothian Hut, built in the middle of the 18th century (Chapter 13.2.5). The building is shown on Lizars' plan of 1778 (fig 3.16), although it possibly had a genesis earlier in the century as some buildings shown in the same area on Edgar's plan of 1742 may have been reused. The features all contained material relating to construction or demolition such as rubble and lime mortar. A north/southaligned cut feature (1781) was interpreted as a robber trench for an earlier wall. A regular subrectangular feature (1776) contained mortar, sandstone fragments and oyster shell and was interpreted as a lime mortar preparation pit. The former position of Lothian Hut was believed to be immediately to the east of the excavated area.

3.8 Period 5: 19th-century military barracks and modern features

SIMON STRONACH

Haddington House

In the building identified as Haddington House a very disturbed brick feature (282) appeared to have formed the base of a rectangular structure. A drain (265, fig 3.19) with a pronounced bend sloped away from this and exited the building through a gap in wall 222, which was the only place where any fill was preserved in the drain. This contained many fish bones, which suggested that the building might have been domestic. However, the next most common inclusion was metalworking debris and fragments of slag. This contrast may represent a change in use from a domestic building into an industrial one, perhaps when taken over by the military early in the 19th century (Chapter 14.3). Further north along Reid's Close a structure (213) was constructed, and then extended to the south (212), up to Haddington House.

Quartermaster's store and military features

Further east was a rectangular building with dividing walls, which corresponded to the location of a quartermaster's store (figs 3.19 & 3.20) constructed during military use of the site and planned by Kirkwood in 1817 (fig 3.21) but not by Lizars in 1778. The quartermaster's store was converted into a canteen late in its history. A number of internal walls, surfaces, drains and an extension were added in order to achieve this. Also as part of military use, rubble and hard standing (622, not illustrated) were dumped over the terraced gardens to create a parade ground, and two large conduits (952 & 957) were constructed to service barracks. The excavation revealed foundations likely to have been for the western gatehouse depicted on Kirkwood's plan adjacent to Holyrood Road.

Tenement and Queensberry House

The tenement immediately to the east of Queensberry House, still standing as no. 60 Canongate at the start of the project, was built around this time (fig 3.19, inset). To the rear were foundations (1097 & 1098), which were interpreted as relating to a slightly later building. Several features associated with these were preserved, including a stone cesspit (1094), several flagged surfaces (1026, 1046, 1096 & 1210) and a well-laid cobble floor (1006). Less substantial internal walls (1013 & 1068) were also recorded.

Within Queensberry House, material was dumped within the sunken-floored kitchen in the 19th century to bring the floor level into conformity with the rest of the basement. A range of crockery fragments from this make-up is thought to have related to the building's

use as a House of Refuge from 1853 (Chapter 14.4). They have provided a valuable insight into conditions within the institution.

3.9 Conclusions

SIMON STRONACH

This section considers how the archaeological excavations have contributed to answering the research questions set out at the beginning of the project (Chapter 1).

Pre-burghal settlement, pre-1128

The area was exploited from the earliest times; did pre-burghal settlement remains survive below medieval accumulations?

Some possible prehistoric features were recorded and a small assemblage of lithics recovered. The remains are not really substantial enough to suggest that a long-lived prehistoric settlement once existed on the site. However, their presence implies that the site was perhaps peripheral to a settlement, located on the level surface of the ridge, which would have remained well drained all year.

The medieval period, 1128-1580

Was there continuity of settlement from the pre-burghal to the medieval period?

Some early features were discovered during the excavations but cannot be securely dated to any period. It is possible that they are pre-burghal, but they could date to many centuries earlier. In any event, the activity they represent would seem to be transient rather than settled. The cutting of the Period 1 ditch represented the earliest division of the site. This matched the alignment of Holyrood Road in the eastern part of the site, but not in the west because of a kink in the road. This can be readily seen on an aerial photograph of the area (fig 1.5). The ditch did not form a right-angled end to the property boundaries identified in Period 2. Nor did it line up with a ditch discovered during excavations to the west (Gooder 1999), which was likely to have defined the southern limits of medieval burgage plots extending back from the Canongate. The ditch seems to have returned, presumably to the north, somewhere on the line of Reid's Close, and reflected a layout at odds with the extant plots. The excavations suggested that this layout pre-dated the medieval division of this part of the Canongate into plots.

The alignment of the ditch is closer to that expressed by gardens within the abbey, or as it then was palace, grounds as shown on Lizars' plan (1778; fig 3.16) and Kirkwood's plan (1817; fig 3.21). On balance, the feature is probably best interpreted as defining an abbey enclosure and, moreover, the edge of the monastic precinct itself, which was later divided into individual properties. The ditch should probably not be thought of as truly defensive, although it would have made an impressive boundary, especially when combined with a bank, as well as helping to drain higher ground to the north. Given the absence of archaeological features that would have suggested more intensive use, it seems likely that the putative enclosure defined a cultivated area. The limited number of artefacts within the ditch's primary fills offered some support for this interpretation.

It is likely that the ditch had been maintained by cleaning for many years before it became redundant in the 13th or 14th century. Unfortunately, the archaeological deposits were only relevant to abandonment and did not suggest when the feature was first created. However, the earliest pottery from the loam that covered the site was made in the 12th century. The pottery recovered from the soil probably reflected use of waste from the abbey for manuring and, significantly, a fragment of inlaid floor tile (no. 122) from the ditch fill was of a type that might have come from a religious building. In all probability the enclosure was created around the time of David I's foundation of the Augustinian priory in 1128. To conclude, the excavations did not recover any evidence for continuity of settlement from pre-burghal to medieval times. It should be noted however, that although no supporting evidence was found in this part of the medieval precinct, this does nothing to challenge suggestions that the priory occupied the site of an earlier church.

What was the relationship between the abbey and the burgh?

From the abbey's point of view, the conversion of ecclesiastical land into plots for sale or rent must have represented one of the quickest and easiest ways to obtain funds. Urban encroachment onto former abbey grounds has been noted in Coupar Angus (O'Sullivan 1995, 1056), where the demand for space must have been much less.

To judge by the date of pottery fragments in the infilled early ditch, the conversion into plots occurred during the 13th or 14th century. A similar date was suggested for the infilling of a ditch within the abbey precinct discovered during earlier excavations (Bain 1998, 1074). This was interpreted as reflecting a major reordering of the abbey as a result of increasing royal patronage in the 14th century. The presence of the

monarch in the abbey would have created a need for nearby townhouses of suitable rank for the attendant court and perhaps a demand for new plots.

It is possible that conversion into plots was a piecemeal process. The possibility that the abbey precinct may once have extended onto the site has been suggested previously (Dennison & Ewart 1998, 44) because of the position of the girth cross as marked on Rothiemay's plan (fig 6.1). This marked the edge of the Abbey Sanctuary and implied that the boundary was some distance further west than Horse Wynd and within the Parliament site. There was no evidence from the relative plot widths to suggest that those on the east were created later than those in the west. However, a contrast becomes apparent between east and west of the vennel in Period 2 when considering the number of finds that the plots contained: the plots to the west (Plots 2.1 & 2.2) contained more artefactual material and may have been created first. This conclusion is supported by the presence of the vennel itself, as a thoroughfare can often mark a temporary edge of plot development.

A second contrast becomes apparent when considering the depth of deposits across the site, and this may suggest another temporary edge of plot development between Plots 2.4 and 2.5, corresponding to a marked drop in the amount of accumulated material. This conclusion is also supported by a decrease in the amount of artefactual material to the east, within Plots 2.5 and 2.6. If we assume that Plots 2.3 and 2.4 were created with a double width, as would seem to be the case, then the abbey may have been responding to quite specific demands. Given that the plots were being laid out on land that the abbey was in all probability already using, this approach is understandable.

What did the early burgh look like and how did the natural topography of the surrounding area influence the layout?

As noted in Chapter 4.2, it is likely that the abbey created the first burgage plots next to the Holyrood precinct. If the interpretation offered above is correct, the earliest plots are likely to be those immediately west of the excavated area. As shown by Spearman (1988a) in Perth, corroboration of different dates of plot creation can be sought by examining their relative widths, which should be standardised within each contemporary block. Measurements taken from the 1st Edition (1854) Ordnance Survey plan of the area suggested a plot width of around 7m to the west and further upslope in the Canongate. The later

plots on the Parliament site would seem to have been almost twice as wide, at around 13m. Presumably the area remained as a cultivated part of the abbey precinct until plots occupied all the available space on the ridge between it and the burgh boundary with Edinburgh. The evidence from the excavations suggested that this part of the precinct began to be developed into plots around the 14th century and it would seem that the Canongate's main period of growth, from the precinct to the Netherbow Port, was completed by this time.

With regard to topography, the tail of the Canongate ridge becomes rather constricted as it descends toward the abbey and the area may not have been ripe for plot development until demand led to exploitation of the growing town's margins. The conversion of an area of abbey grounds into plots suggests pressure on, or at least demand for, land. However, the archaeological evidence from within the properties on the site did not suggest that they were subdivided. On the contrary, the backlands of some of the plots appeared to have been amalgamated from the earliest period of division (Plots 2.3 & 2.4). The lack of buildings in the backlands is apparent on Rothiemay's plan of 1647 (fig 6.1) and contrasts starkly with the burgh of Edinburgh. Excavations within Edinburgh have shown the presence of substantial stone buildings in the backlands from at least the 14th century (Schofield

This apparent contradiction is not readily explained by any intensive industrial use of the backlands, which would have precluded building. On the contrary, the archaeological evidence suggested that these backlands might only have seen small-scale craft or subsistence activities (a reconstruction of the site during the medieval period is shown in fig 4.2). Certainly, considering that the time span expressed by the features and deposits in Period 2 may have lasted 200 years, it is the lack of features in comparison to other burghs, such as Perth and Aberdeen, that is surprising.

There is some evidence to suggest that the amalgamation of backlands may not necessarily have meant that the corresponding frontages were a single property. Certainly, the tenement wall foundations discovered below Queensberry House (Period 3) suggested divisions where none was evident outside, to the south, in the backlands. It was perhaps the nature of these properties, and the special status of the Canongate, which led to a lack of development in the backlands. They may have been a rather peripheral

concern in comparison with the social status to be gained by owning a highly visible frontage, or near-frontage, property. Keeping the backlands as gardens rather than selling them for development may also have been part of expressing status. The artefacts recovered from the plots complement this interpretation, suggesting an increasing level of wealth and conspicuous consumption.

Although in general there was a lack of backland activity within the site, there were significant variations between the plots that should not be ignored. In Period 2 two plots (2 & 4) were much 'busier' in terms of archaeological features than the others. With Period 2, Plot 2, this distinction was reinforced by a concentration of artefactual remains. This seems likely to have reflected the occupation of the owners. It seems that craftworking was concentrated in these plots, with much less evidence of activity in the others, which also tended to be wider, presumably as a result of amalgamation.

Ironworking waste was concentrated at one time during Period 2 in Plot 2 and suggested that both smithing and smelting were undertaken here. Perhaps this activity was the impetus behind the creation of the vennel providing access from the rear, although an alternative explanation is offered above. There may also have been another craft undertaken in this plot, with some evidence for small-scale skinning. Two twin-tank features located within the plot have been interpreted as tanning tanks (fig 3.35). The tanning process involves both the long-term soaking of hides in a solution of water and vegetable matter (for example, bark) and their daily agitation in an acid or alkaline solution (for example, water with urine, stale beer, lime or dung). The twin tanks could have been used for both. As noted above, the tanks could also have been used to steep barley or flax; neither of these uses is preferred as an interpretation because it is difficult to see why either would require twinned tanks. Dyeing is not considered likely because it usually seems to require some kind of heating.

A medieval tannery has been identified in St Andrews where a series of pits was identified side by side (Lewis 1996). Several tanning pits discovered in Aberdeen had similar dimensions to those identified on the Parliament site and were also rectangular or circular (Cameron & Stones 2001, 108). However, in contrast to these examples, the small number of tanks on the Parliament site suggested that only a small number of hides could have been processed at any one time. The remains are difficult to interpret

as any kind of commercial tannery and they may represent tanning to meet specific needs. The animal bones with cut marks indicative of skinning were consistent with this idea, for they came from foxes, dogs, cats and horses, rather than animals commonly used in commercial ventures. Also the presence of bones with cut marks suggested that the animals were skinned here, rather than at the professional skinners of the medieval burgh. Whether these were being processed as part of some kind of specialised leatherworking or for household requirements is difficult to say.

In general, Plot 2.4/Plot 3.4 was the most intensively used for industrial processes throughout the medieval period. Ironworking waste was found toward the front of Plot 2.4. The nature of the metalworking seems to have involved primary smelting and smithing, a surprising discovery given its location on the crowded frontage. Part of this activity may have involved farriery. Horses were probably more common than usual because of the high concentration of nobles in the area. The burial of a horse and also the presence of burnt straw in a structure within Plot 3.4 could even suggest the presence of a stable.

Further to the south, to the rear of the frontage buildings in Plot 2.4, were several large, probably lined, pits joined by channels whose function was not elucidated by any artefactual or environmental remains. The process appeared to have required a nearby source of water. It is possible that the pits were used to steep barley or flax, although it is not clear why this would require more than one pit joined by channels.

The contrast between the plots emphasised the mixed nature of land use in the medieval burgh. Canongate may have contained high-status dwellings, with open back gardens, but these were scattered amongst the workshops and yards of craftworkers. However, as royal patronage of Holyrood continued to rise, the tendency toward high-status properties with gardens became more pronounced.

This leaves an impression of the Canongate as a rather unusual burgh, with a very crowded and grand frontage with relatively open uncluttered space to the rear. Comparison with the width of plots in other towns, from 5m in Perth to 10m in St Andrews, bears this out, for those excavated on the Parliament site were significantly wider. It is also worth noting that the earlier plots outside the excavated area to the west are comfortably within the expected range. This difference suggests that

transformation of the Canongate into an atypical burgh can be traced to around the 14th century, when the site was divided into plots. The process seems likely to reflect increasing royal patronage of Holyrood. It should, of course, be remembered that the Canongate did not operate in isolation, and what became greater Edinburgh evolved out of the growth of three separate settlements (Edinburgh, Canongate and Leith). It was thus possible for Canongate to become the burgh of choice for the wealthy, with the other settlements serving complementary roles: Edinburgh as the commercial centre and Leith as a busy port.

The post-medieval period, 1580-1707

What was the nature of the buildings and gardens associated with the urban precinct that developed around the Palace of Holyroodhouse?

Canongate's prestige reached its zenith in the early 16th century with the construction of Holyrood Palace. The archaeological remains suggest that this had a rapid and radical impact on the surrounding townscape. Neighbouring properties were purchased and tenements on the frontage were cleared to make space for the grand townhouse that evolved into Queensberry House. The Holyrood Road frontage was developed for the first time with the construction of Haddington House.

What was to become Queensberry House had its genesis in 1667 as Dame Margaret Balmakellie began to buy up neighbouring properties in order to create her 'great lodging'. Although obscured by later alterations, this structure still survives in remarkably wellpreserved form within the later house. This T-shaped building was cleverly designed to maximise the impact both of the Canongate façade and the open views to Holyrood Park at the rear. Expressing aristocratic status amongst the crowded buildings that sprang up around Holyroodhouse was a competitive business and prompted major renovations and extensions of the structure carried out by Lord Hatton from 1679 and the second Duke of Queensberry from 1695. Hatton's most notable addition was the viewing tower or belvedere, the remains of which were discovered in the attic of the building. Queensberry gave the building much of its current appearance, notably the addition of closet towers.

To the rear, archaeological remains of the formal gardens that accompanied these buildings were discovered. A large raised terrace with central



 $\label{eq:Figure 3.35} Figure \ 3.35$ Twin tanks that may have been tanning pits

staircase was constructed to the rear of Balmakellie/Queensberry House. This would have afforded the owners and their guests a fine panorama over the patterned hedges and plants in the garden, and would have elevated them above neighbouring properties. The artefacts found within the garden included items that reflected importation of luxury items such as wine and perfume, as well as personal items associated with the nobility, especially a wig curler.

Even though the townscape had been dramatically altered, it still retained some medieval character. In particular, it is worth noting the line of a garden path on the route of a vennel during Periods 2 and 3, and the location of Balmakellie House within what had been Plots 2.3 and 3.3, a seemingly amalgamated area of backlands from the earliest phase of plot division.

The remains from Period 4 included a remarkable discovery that allowed a glimpse beyond the nature of the buildings to that of one of the owners. Within the basement of the predecessor of Queensberry House were the surviving remnants of a floor, made somewhat eclectically from handmade brick, sandstone flags and cobbles. It is rare to be able to associate any group of archaeological finds with a particular individual, but it is known from documents that Lord Hatton, the owner from 1679, paid for a cobbled floor to be laid in the kitchen. The excavation revealed metalworking remains likely to relate to the assaying and refining of silver and other precious metals and what appeared to have been the base of an assaying forge associated with this cobbled floor. Lord Hatton was a Master of the Scottish Mint (Chapter 9.4) and refining the quality of silver and other metals would have been relevant to such a position. Given that the room was recorded as a kitchen during Hatton's tenure, it can be questioned whether this was a bona fide workshop. The evidence might be interpreted to suggest that Hatton, on purchasing the house, converted the erstwhile kitchen into a workshop illegally to cream off money from the Royal Mint. The dumps of levelling material that sealed these remarkable remains contained pottery consistent with the date of Queensberry's acquisition of the house following Hatton's disgrace.

The early modern period, 1707-1825

Did the archaeological evidence reflect the decline in status of the Canongate during this period?

The opening of the New Town, and consequently the availability of more fashionable places to live, seems to have caused an exodus of the wealthy and a decline in the Canongate's prestige. During this period, Queensberry House ceased to be the principal residence of the dukes and became rented accommodation, albeit initially for the upper echelons of society. Very little below-ground archaeology from this period was identified, presumably because very little disturbance or development was carried out. Queensberry House did not undergo major renovations and the most significant, and somewhat poignant, event was the stripping of the interior by William Aitchison after he bought it in 1801. In this sense the absence of all the interior fittings, such as wooden panelling and fine fireplaces, provided the most marked reflection of this decline.

The modern period, 1825-present day

What remains relating to the site's early development as a brewery survived, and was there any continuity in the use of wells from the medieval period?

The eastern half of the site became a brewery in the second half of the 19th century. The archaeological remains showed, for the first time, extensive development of the old medieval backlands in the form of large structural plinths and foundations. These related to 19th- and 20th-century buildings, but no surfaces or other above-ground elements survived. The medieval and post-medieval wells that survived on the site had not been used in the modern period. The modern brewery wells were large and must have removed completely any medieval predecessors that might have existed. Therefore there was no evidence for any continuity in the use of wells.

In the western part of the site the transformation of the Canongate was typified by the conversion of Queensberry House to a barracks and later to a House of Refuge. Analysis of the finds from the House of Refuge allowed a glimpse into the impoverished lives of the inhabitants, in stark contrast to their privileged post-medieval antecedents.