
6 CASTLESTEADS STONE-PAVED AREA, *by A Rees*

6.1 Introduction

A scatter of chert and flint flakes noted during the fieldwalking component of the 1994 evaluation (Strachan & Rees 1995) led to the discovery of a stone-paved area as a result of subsequent trenching. Two further trenches excavated in 2006 increased the numbers of recorded lithics but added little to the earlier analysis. This site was located in an arable field approximately 100m west of the River Esk and 270m SSE of Castlesteads Farm on an alluvial river terrace 4m from the crest of a slope at 31m above OD (NGR: NT 3412 6931; *illus 2.1 and 6.1*).

6.2 Methods

In order to assess the artefact content of the topsoil in the area of the lithic scatter, ten 1m² test pits were hand-excavated within the limits of the site, and a further five 50m to the east on a wooded river terrace. The material excavated from the pits was passed through a 5mm mesh sieve and several chert and flint artefacts were recovered. Following this, mechanical excavation of a total area of 375m² was undertaken, and features cut into the gravel subsoil were exposed by hand-cleaning.

Dr Richard Tipping of Stirling University made a site visit and established that the top 0.2–0.3m of sand within the test pits on the terrace comprised slopewash which overlay Holocene deposits. From this it could be assumed that the material retrieved from these test pits had originated from the area of the site itself, and had thereafter been sealed by inwashed material. As a result, trial trenching was carried out and a number of negative features cut into the subsoil were located, as well as an area to the south of the site which appeared to comprise a layer of buried ploughsoil. Hand-excavation of a small sondage into this layer revealed several large stone slabs, and the excavation area was extended by 225m² using a mechanical excavator. The stone-paved area revealed was hand-cleaned, sectioned using a slot trench, and a profile was drawn at right-angles to the section.

6.3 Archaeological results

6.3.1 Paved area

A substantial irregular area of stone paving measuring 14m by 11.5m was revealed sealed below a deposit of reddish-brown, possibly wind-blown

silty loam, 0.2m to 0.4m thick. The southern extent of the paved area was not revealed as it underlay the field boundary and a track, and the western extent was cut by a later feature (see below). The paving (*illus 6.1 and 6.2*) comprised variously sized slabs and flattish boulders, measuring up to 0.6m in length by 0.5m wide by 0.3m in depth. The paving was sited within a slight hollow, defined by a gently sloping cut visible only on the northern and eastern sides of the paving. Various types of stone had been used, including large flaky sandstone slabs and what appeared to be a small, broken saddle quern. At the northern edge of the paved area, eight slabs, each approximately 0.8m by 0.3m in size, had been laid edge to edge on their long axis. These slabs sloped down into the main paved area in a fashion similar to an entrance or passageway (*illus 6.1*).

While in several places the slabs appeared to have been carefully laid and levelled as if to make a floor, no occupation deposits were located above or between the surface slabs. In other sections of the paving however, the slabs were more irregularly fitted and placed with less regard for creating a level, floor-like surface. This seems to be at odds with the insertion of many small packing stones into any small gaps between the stones, which ensured that there was an extremely secure positioning of the slabs forming the paved surface. Further evidence of the concern for a secure base was seen in the presence of a 'levelling' deposit, which comprised medium, sandy gravel, and appeared to provide a 'bed' for the paving.

A trench was hand-excavated across and through the paved area (*illus 6.1 and 6.2, A–B*) in an attempt to locate any negative features below the paving which might have been obscured by the slabs, with most of those remaining then lifted by mechanical excavator. No such features were discovered in the trench. Although no evidence was found of post-holes positioned either through or below the paving, the possibility remains that posts could have been founded directly upon the paved surface, using the stones as post-pads.

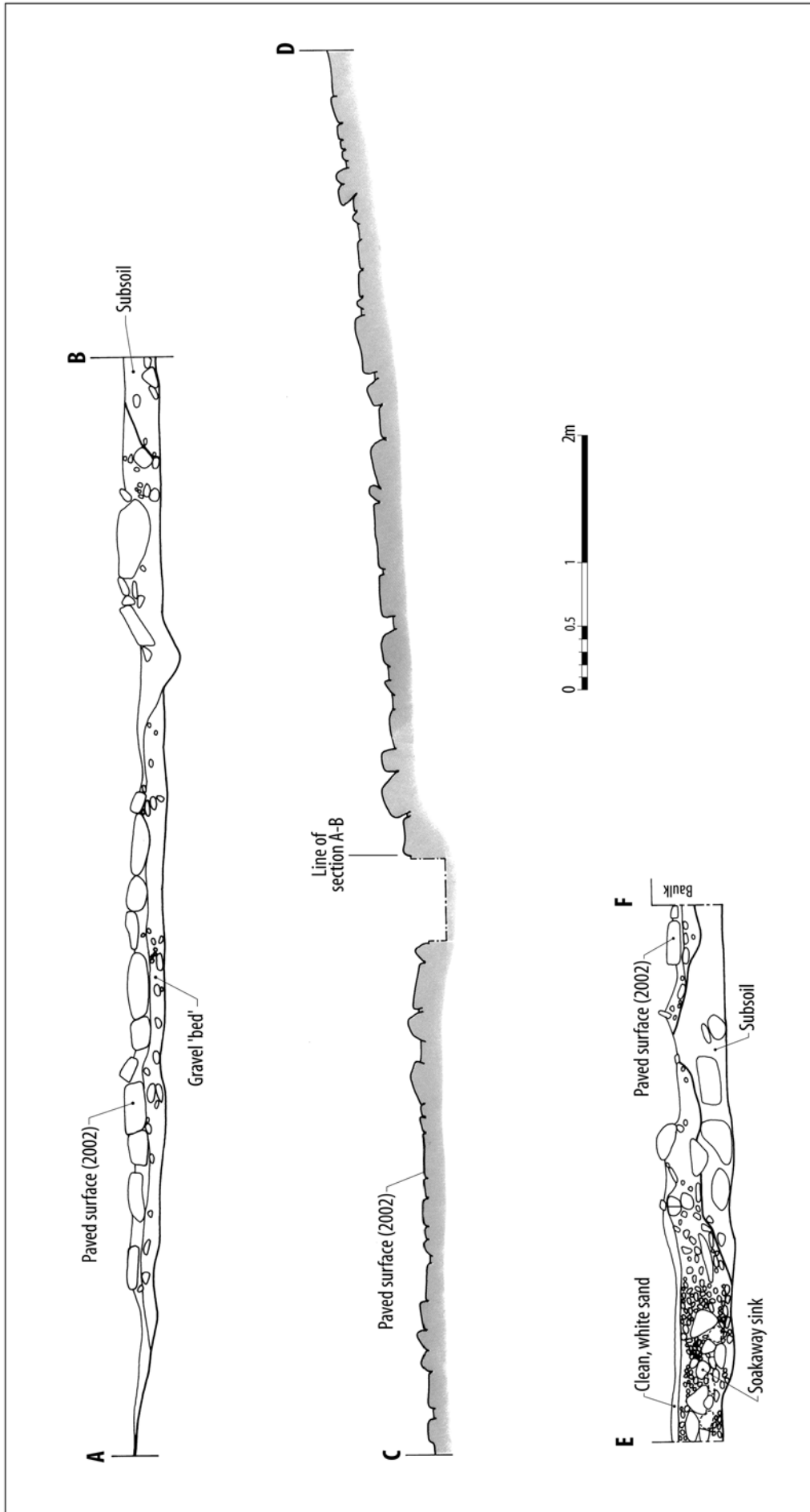
Several small flakes of flint and chert were recovered from the surface of the paved area. In addition to this, as noted above, a fragment of a well-worn saddle quern had been re-utilised within the paving but did not appear to be in situ.

6.3.2 Soakaway 'sink'

Immediately to the west of, and cutting, the paved area was a feature which is interpreted as a soakaway 'sink' (*illus 6.1 and 6.2*). The feature was a shallow



Illus 6.1 Plan of paved area and soakaway 'sink'



Illus 6.2 Sections and profiles through paved area

Table 6.1 Lithic finds from excavated contexts at the stone-paved area

Context	Quantity, Material and Diagnosis
Layer over paved surface	Broken, irregular flint flake, 15 × 13 × 2mm Quartz flake, secondary, from prepared platform core on rolled pebble, 23 × 22 × 9mm Unworked chert chunk Two chunks of unworked chalcedony Secondary, burnt flint flake, white/red
Layer over soakaway	Flint flake, inner regular, very burnt, 20 × 15 × 4mm Chert flake, inner irregular, blade like, hinge termination, 28 × 15 × 6mm Chert chunk, inner, dark grey, 18 × 13 × 11mm Secondary irregular grey flint flake, 38 × 20 × 4mm

scoop, its exposed area measuring 10m by 7m, and 0.6m in depth. Within it were 0.5m deep deposits of large rounded boulders and pebbles with frequent voids between them. These deposits were sealed by a layer of clean cream-coloured sand, 0.1m to 0.15m in depth. Roughly central to the exposed part of the sink feature, a number of sandstone slabs lay upon the sand and directly upon the rubble deposits below. It is likely that both the sand layer and the stone slabs were laid to prevent choking of the sink by the leaching of silt and topsoil. At the western side of the feature was a well-defined, straight-edged cut for a soakaway drain. This was filled with medium-sized riverborne stones, and emptied into the main 'sink' feature. The feature continued beyond the edges of the trench.

The soakaway and the associated drainage features may be fairly recent and associated with the Castlesteads formal garden shown on an estate map of 1753 ([NAS RHP93522](#)) or, more likely, related to agricultural activity.

6.4 Finds and environmental evidence

6.4.1 Lithics, by B Finlayson, with additions by T Ballin

The lithics assemblage, 193 pieces, consisted largely of chert and flint with a few pieces of quartz and chalcedony. Only 11 pieces were recovered during the excavation, the majority being from test pits (98 pieces) and surface/topsoil cleaning (84 pieces). With the exception of the excavated contexts, the samples were dominated by chert, but this included a significant proportion of unworked pebbles and angular blocks. Most of these pebbles were too small to work and were not of the same colour or texture as the worked pieces. The majority of worked pieces were flakes, but two chert blades were recovered from test pits. Nine additional unstratified lithics, including a short end-scraper and an edge-retouched piece but excluding any of diagnostic value, were recovered from Trenches 82 and 83 in 2006.

The 1994 excavated assemblage ([Table 6.1](#)) consisted of five flint flakes, a blade-like chert flake, a quartz flake, chert and chalcedony chunks and a chert pebble. Two of the flints were heavily burnt. The sample was too small and undiagnostic to suggest a date range.

6.4.2 Coarse stone, by A Jackson

Two coarse stone finds were studied, namely: a rim fragment of a saddle quern of dolerite (SF2 from layer 2001 over the paved surface) and a small perforated sandstone pebble (SF6, from 2014).

The saddle quern fragment (L 213mm, W 98mm, T 45–69mm) reveals evidence of heavy wear on one face, however there is no evidence of any attempt to deliberately modify the shape of the original natural boulder from which it was formed. Saddle querns of this type – and in general – are commonplace on Scottish prehistoric sites of Neolithic and later date. The fragment from Castlesteads was clearly broken in antiquity; it is therefore probable that it was reused as a paving stone, and its use predates the construction of the paving at the site.

Like the saddle quern fragment, the perforated pebble (57 × 39 × 32mm, perforation 5–13mm diameter) shows no evidence of modification other than a single perforation that passes at an angle through the stone. This perforation was drilled from one face as indicated by its slight V-shaped profile. The purpose of this object is uncertain but given its crude natural exterior it is probable that it served a utilitarian function as a weight of some sort (eg for net or loom).

6.4.3 Palynological assessment, by C Clarke

A series of ten soil samples was taken from above and between the slabs of the paved area. No artefactual or macrofossil remains were recovered, so attention was focused on the microfossil level, and a preliminary assessment was carried out to check

for the presence of pollen grains or other organic-walled microfossils which might provide a clue as to the use of the structure. A method statement is available in the archive.

All samples yielded some pollen, although most of it was in a very corroded and/or crumpled state. Fungal palynomorphs were also present; these too were in a state of considerable degradation. A cursory glance suggested that neither pollen nor fungal spores were particularly abundant (although absolute data were not calculated). Further, all of the samples were rich in mineralic debris despite treatment with hot hydrofluoric acid. In brief, these samples were unsuitable for further, more detailed, palynological analysis.

6.5 Discussion

Interpretation of the stone paving at Castlesteads is problematic for a number of reasons, most notably the small size of the artefact assemblage recovered from the immediate site and the lack of any close parallels for the structure. These factors, together with problems of truncation, lack of full exposure and limited dating evidence, make any proper evaluation of the site and its function very difficult. It was hoped that environmental analysis of the deposits sealed below the paving would reveal some information about possible functions for the enigmatic feature. However, the results were very disappointing and although all samples yielded pollen and fungal palynomorphs, they were in a state of considerable degradation.

The large quantity of struck flint and chert artefacts recovered from the topsoil overlying the paving and from the terrace down-slope from the paved area suggests that a certain amount of chert- and flint-working occurred in the immediate vicinity of the site during prehistory. However, the paucity of artefacts and occupation deposits recovered from the surface of the paved area itself does tend to rule out any stratigraphic connection between the two site components. The broken saddle quern reused in the construction of the paving appears simply to

reflect the reuse of an artefact present within the immediate environs, not an artefact deposited *in situ*. It thus provides only the most basic *terminus post quem*.

Documentary evidence in the form of a crude map of 1753 in the care of Dalkeith House (NAS RHP93522) has revealed that there was a formal garden to the east of Castlesteads House during the 18th century, and shows paths and flowerbeds. The features described within this report do not bear any resemblance to garden features such as these, although the possible soakaway may be part of a crude drainage scheme. However, it is located some distance from the position of the garden.

The possible soakaway probably comprised a certain amount of material robbed from the stone-paved feature, suggesting that a much more substantial structure originally existed there. However, most of the stones within the sink feature are much larger, rounded boulders which would appear to be unsuitable for wall construction so they may in fact have been brought from elsewhere.

In the absence of occupation deposits, walls, post-holes or artefacts, it remains very difficult to ascribe a function to the paved feature. Similar difficulties of interpretation beset Barclay and Russell-White (1993) in relation to a paved area set within a hollow excavated at Balfarg, Fife. Possible interpretations for the Castlesteads feature include a slightly sunken floor of a prehistoric building, but if so, the dimensions of this truncated area of paving would mark this out as a 'substantial' structure (cf Hingley 1992). A non-domestic purpose seems more likely, for example as a working hollow (as at eg Wardend of Durris, Aberdeenshire; Russell-White 1995) or a yard or hardstanding (as at eg Phantassie, East Lothian; Lelong & MacGregor 2007). The Castlesteads structure is not convincingly dated, however, and although it has affinities with prehistoric settlement-related features, a more recent origin cannot be ruled out. In conclusion, until a similar feature or features are excavated which reveal further information, the Castlesteads paved feature and the soakaway remain enigmatic.