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THE 1976 EXCAVATION ON HAMLINS HILL (N42/137)

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Abstract

Hamlins Hill has been the scene of a number of excavations since 1969. In 1976 a further area of some ninety-five square metres was investigated. The main aim of the excavation was to gather more information on the disposition and relative age of pits and other features found on the site.

Introduction

Hamlins Hill is located on the narrow isthmus between the Manukau Harbour and the Tamaki Estuary. Some 60m high, the site has extensive surface evidence of pits and terraces, but no evidence of earthwork fortifications. Archaeological investigations have so far been confined to the lower knoll which is threatened by quarrying operations. A map of surface features done in 1964 (Davidson, 1970:105) shows twenty-two pits on the lower knoll and some of these were investigated by Davidson in 1969. Subsequently a number of other excavations have occurred and reports are available by Irwin (1975) and Pearce (1975;1977). The excavation reported here is part of a continuing programme by the Anthropology Department, University of Auckland.

The excavation

Previous excavation on the site had shown that establishing the relative age of pits and other features was a difficulty except where features actually intruded one upon another. This lack of stratigraphic evidence made it difficult to identify contemporaneous features. Houses, storage pits and remains of cooking activity could not be shown to be of similar age. Davidson (1970) found that remains of cooking activity were superimposed on evidence of houses. Nevertheless while there was some superimposition of evidence the site was relatively an uncomplicated one (Davidson, 1970:119) and it was thought further excavation would provide more information on disposition and relative ages of various features. Work was concentrated on the remaining upper area of the lower knoll, adjoining previous excavations. Two posthole alignments ('fences') and a stone-covered drain, all three uncovered in earlier excavations (Davidson, 1970; Pearce, 1977), were expected to intersect in the area chosen for excavation. These features because they extend some distance across the site, provided a means of establishing a tighter control of chronology.

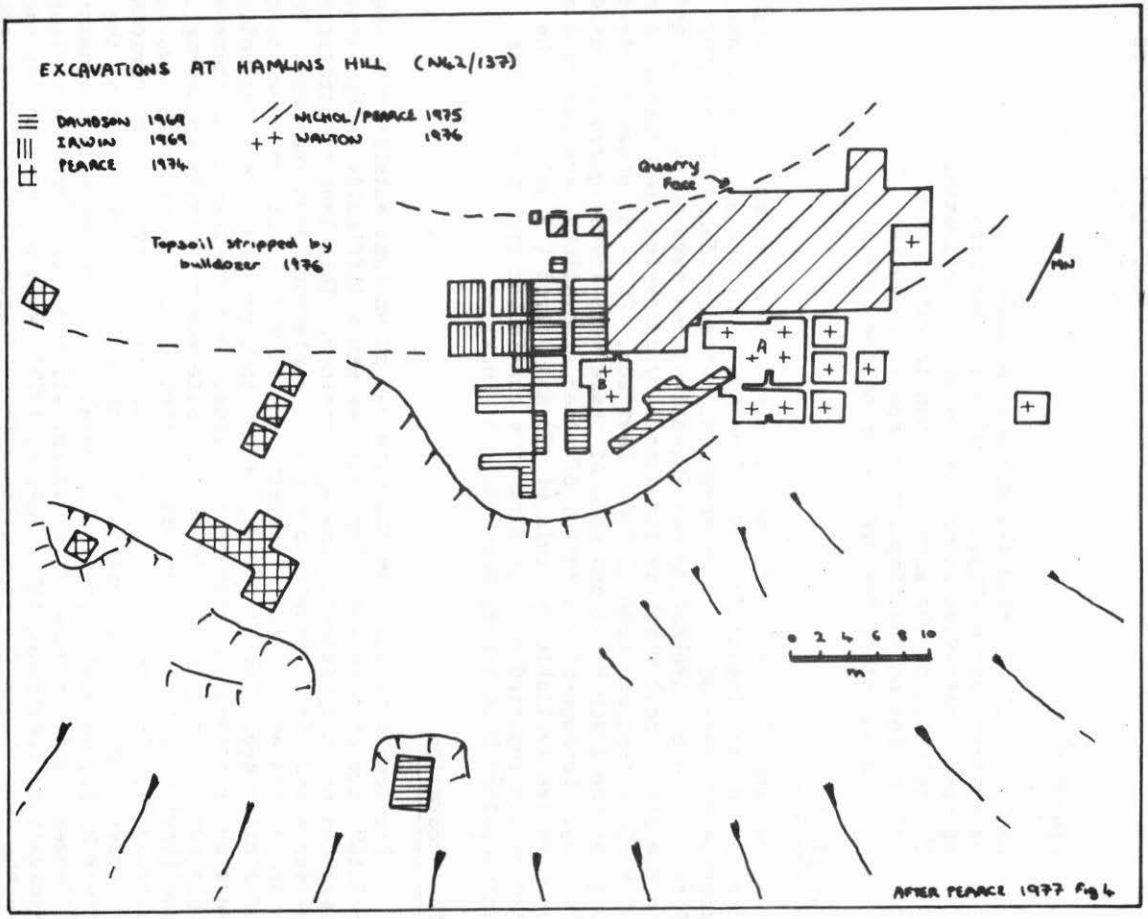

Figure 1. Plan of excavations on Hamlins Hill.

The vertical stratigraphy encountered was relatively straightforward. A dark brown topsoil, some 15 to 20cm deep overlay the substratum, a bright yellow brown clay. The boundary between these two horizons was transitional over 5 to 10cm. Immediately below the topsoil, and cut into the substratum, were the various features. Some of these penetrated ironpan layers in the substratum and could therefore be defined with considerable precision. No midden, such as had been found on other parts of the site, was encountered.

The excavations involved a small number of people, mostly students, over a fifteen day period in May 1976. Later, on weekends, five further days were used to remove baulks, extend squares and resolve problems.

The three metre square grid employed in the previous years excavation (Pearce,1977) was extended and excavation centred on four areas (Fig.1.):

(1) Main excavation area - area A (Fig. 2).
(2) Area B - an area immediately west of area A and comprising squares Q21, P21 and P22 (Fig. 3).
(3) Square O31 - on a terrace immediately east of area A.
(4) Square S29 - a continuation of the area investigated by Pearce in 1975.

Various features were encountered.

Pits. In all eight pits were excavated, at least in part. Six were uncovered in area A. Pit E which had been partly investigated in 1969 (Davidson,1970:110) was examined further. The eighth pit was uncovered in area B. Apart from pit E there was no surface indication of the presence of these pits.

Pit N: This is a slightly irregular rectangular pit. It is 4.5m long, 1.75m wide and the floor was cut about 15cm into the substratum. The pit had an internal system of drains which ran in a rectangular pattern following the perimeter of the pit floor. A sump was located near one corner. Three postholes belonging to this structure were located on a central postrow and suggest a pitched roof construction. Parts of the floor were covered by an as yet unidentified bark.

Pits O and R are two rectangular pits 2m by 1.5m and 2.6m by 1.1m respectively. Both are shallow and were cut only some 10cm into the substratum. Both had patterns of floor drains and were linked by a channel that ran the short distance between the two pits. The two pits were thus contemporary. They shared a long external channel which left pit R and extended downslope to the southwest. Another channel, a large segment of which had been destroyed by the construction of pit N, also leads into this channel. Since the second channel has its origins in pit I excavated in 1975 (Pearce,1977:Plan A) it is likely that pits I, O and R are contemporary, while pit N is later.

No postholes were uncovered with pits O and R, however, since much of R is obscured by later pit P and only part of O survived to be excavated it is difficult to be sure postholes were absent.

Pit P is 2.6m by 1.6m and 35cm deep. Discussion of the features of this pit is also necessarily concerned with the unusual stone covered drains uncovered on this site by Pearce (1977). Stone-covered drains consist of a small channel covered with scoria slabs placed at the base of a larger ditch up to 40cm deep and 30cm wide (Fig.4). The ditch was apparently backfilled since the sides are in remarkably good condition and considerable erosion would be expected had the ditch been exposed for even a short space of time. The line followed by the drain brought it into the area investigated where it was found to be contemporary with pit P. The drain ran through the pit along one wall and on emerging bifurcated. Both channels were formed at the same time but there is, as yet, no adequate explanation why two channels were considered desirable.

The floor of pit P was immediately above a thick ironpan layer and three postholes positioned on a central postrow were cut through the ironpan, as were the floor drains. The stone-covered drain ran along the NE side of the pit and was an integral part of the floor drainage pattern of the pit. The sections of the floor drain near the point where they met the stone-covered drain were also covered by scoria slabs but the remaining sections were open. Fill from the stone-covered drain had spilled onto the pit floor where the drain exits from the SE corner probably about the time it was abandoned. The pit was partially filled and then served as a repository for debris from cooking activity. This is shown by the quantity of charcoal-rich clay fill and the burnt clay base of an oven pit. Finally a 'fence' was constructed. This alignment of postholes was first uncovered by Pearce (1977) and was found in the fill of the pit thus showing it is later than the stone-covered drain.

Pit O, like pit P, is a relatively deep pit and measured 2.5m by 1.4m with some 50cm between the floor and the lip of the pit. An unusual feature of the pit are the two central, end-wall buttresses which extend the full length from pit floor to top of the wall. Three postholes are aligned, slightly off centre, and suggest the presence of a roof. As with pit P, and with pit E, the floor lies immediately above the ironpan and postholes and floor channels were clearly defined. Stone covered drains may well have been one response to this situation of an impermeable layer at the base of pits.

The displacement of the postrow just off centre is interesting in view of discussion of the position of entrances to storage pits and the purpose of buttresses (Fox,1974). It has been suggested that the entrance would need to be a little to one side in pits with central postrows to permit reasonable ease of access. The displacement of the central post-row here supports this view.

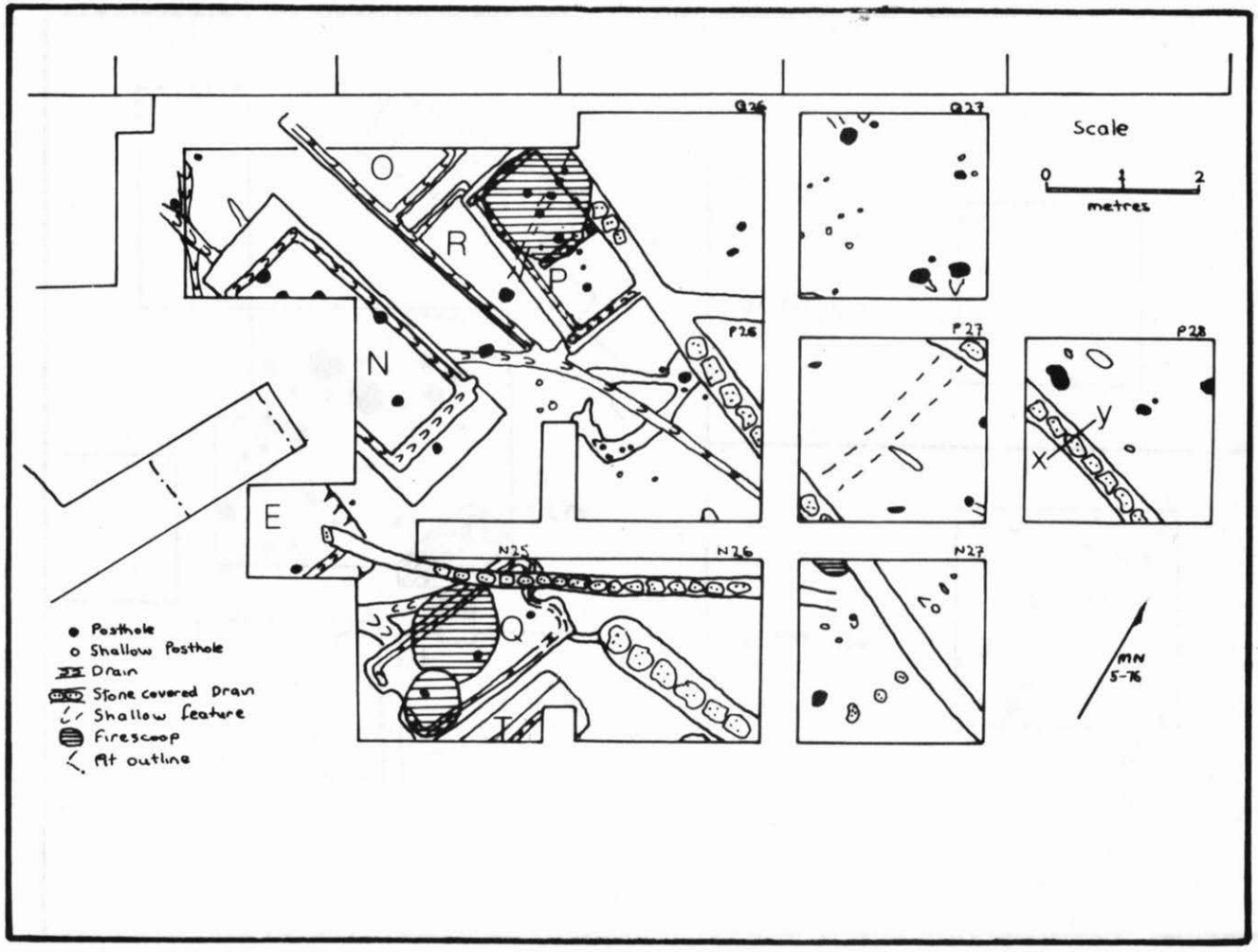

Figure 2. Main excavation area - Area A.

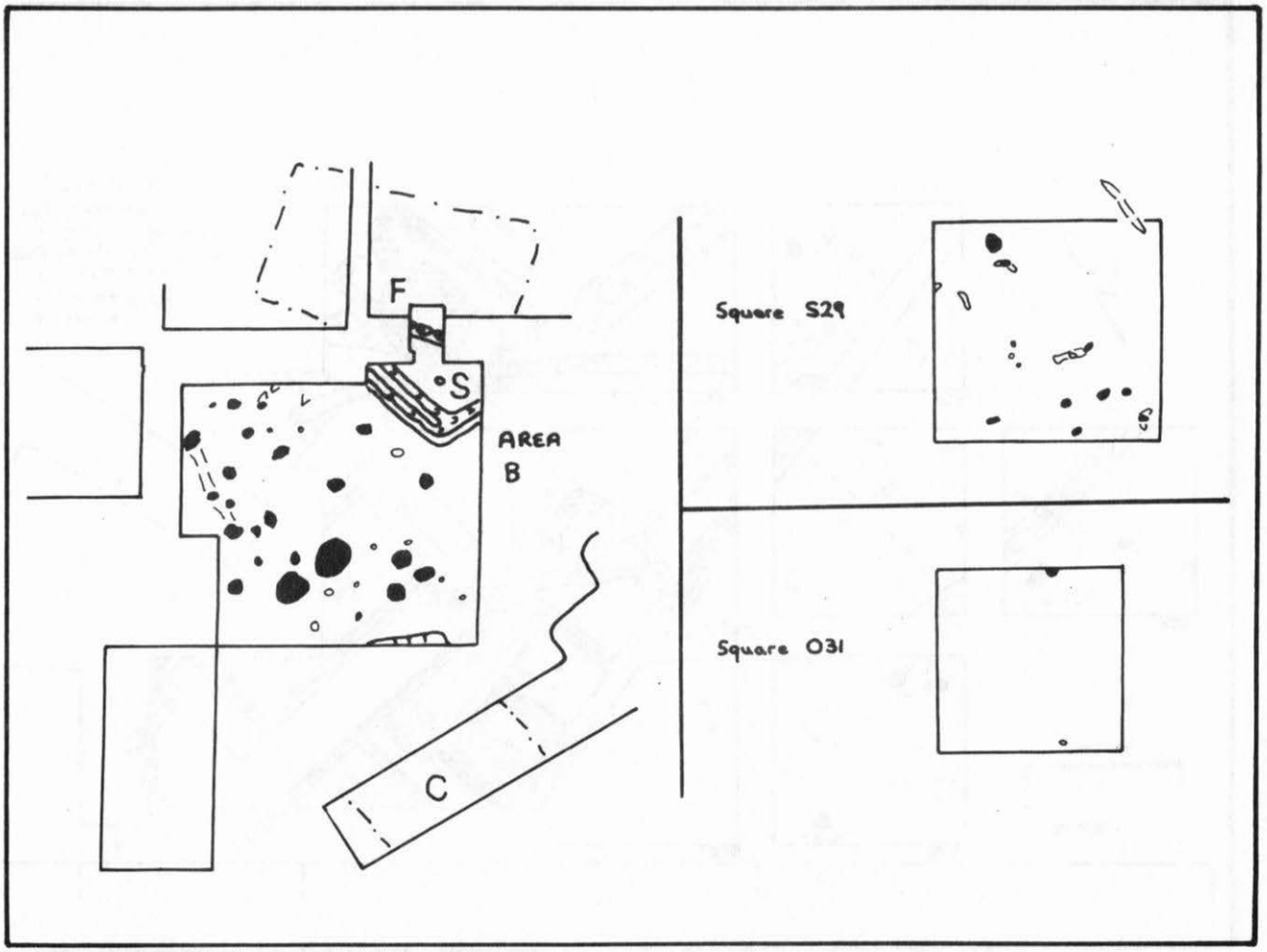

Figure 3. Other excavation areas.

The floor and lower walls of the western end of pit Q to a height of about 10cm were covered with a thin layer of bark similar to that found in pit N. An internal system of drains cut to a depth of 5-10cm were connected with a stone-covered drain by a tunnel. Tunnels of this sort are attested from a number of sites, including other examples on Hamlins Hill (Pearce,1977:74). The association of pits such as P and Q with the stone-covered drains provides good evidence of the function of the latter.

Pit Q was partially filled and, as with pit P, was then used as a convenient shelter for cooking. Further fill was added and the uppermost fill, immediately below the topsoil, a shallow firescoop was found. Passing through the fill of a corner of pit Q was a third stone covered drain which extended some 7m from pit E before petering out before it reached the main stone covered drain. The system was found to be linked to the internal floor drains of pit E but a number of puzzling aspects are apparent. Water collected from this system apparently drained into pit Q which seems to have been deliberately used as a sump. Levels indicated that water from both ends of the system would have drained into pit Q where the drain is at its lowest point. The packing of the stones seemed to indicate that this drop into the pit was intentional. It may be suggested that the use of pit Q as a sump was opportunistic. This may be a partial explanation of the form of this drain.

Pit T. This pit was only partially uncovered in the excavation. A distinct ledge was present along one wall; as was a drain in the section of floor excavated. There are indications that a buttress may be present but excavation was not pursued further.

Pit E. This pit was partially investigated by Davidson (1970). A further area was opened to trace the origin of the stone covered drain mentioned above. It was established that the floor drains linked with the stone-covered drain and one further posthole, of the central post-row, was located.

Pit S. Within square P22 a pit was uncovered. From an extension of the square it was established that pit F had been cut through the fill of pit S. The presence of pit S had been detected as a minor deviation in the wall of pit F by Davidson (1970:Fig 4) but had not been further investigated. An unusual feature of pit S is the double line of internal floor drains along the southwest side of the pit. One shallow posthole was found in the floor of the pit.

Other Structural Evidence. Fencelines: A posthole alignment crossing squares R26 and S26 (Pearce,1977) was relocated as it crossed Q25 and Q26 in the main area of excavation. The postholes clustered closely in the

loose fill of pit P and emerged to meet at right angles with another 'fenceline' originally identified in 1969 (Davidson,1970), subsequently extended (Pearce,1977), and located again in the 1976 excavation area. No further postholes were located past the point of intersection in square P25 and all considerations suggest that only one structure was being dealt with (Fig.2).

Houses. Reasonably good plans of houses have been reported by Davidson (1970) and Irwin (1977). Pearce (1977) has suggested the presence of another but on rather less satisfactory evidence. The evidence for houses in 1976 rests on the uncertain evidence in area B. Here a number of postholes in association with discontinuous slots were uncovered. One line seems to represent a substantial wall very similar in form to that noted by Davidson and Irwin. The fills were all very similar but it is possible that features of more than one structure are present. Two postholes stand out as being exceptionally large in terms of diameter and depth and one explanation is that they represent a raised storage structure (Geelen,1974).

A pattern of slotting and small shallow postholes forming a right angle was uncovered in square P26 in area A. Its interpretation is uncertain owing to the lack of evidence. It is however one of the earlier features in area A, being cut by the external channel from pit R and the stone-covered drain.

Artefacts

Artefactual evidence was limited but included a small sandstone grinder, a chert or jasper hammerstone and 52 pieces of obsidian (five of which were found in areas of the site disturbed by bulldozing). Much of the obsidian recovered by excavation was found in one square: O31. All 35 pieces recovered from the square were found in the lower topsoil and interface with the substratum. This suggested that the terrace had been a special activity area. However only seven pieces showed any signs of edge damage. Figure 5 shows a scatter diagram of size of obsidian recovered in 1976. Length is on the x axis and a ratio of breadth and width on the y axis. It can be seen that the obsidian was generally of small size; a feature expected of waste from the manufacture of obsidian tools (Morwood,1974:50-51). However soil samples have failed to reveal the presence of very small splinters which would be expected if this was the area in which the flaking occurred.

The excavation recovered 32 grey, 18 green and 2 black pieces of obsidian, making the total percentages since the 1969 excavation 68% grey and 30% green. Two grey flakes from this site have been sourced to Great Barrier Island (Reeves and Armitage,1973). The green flakes are

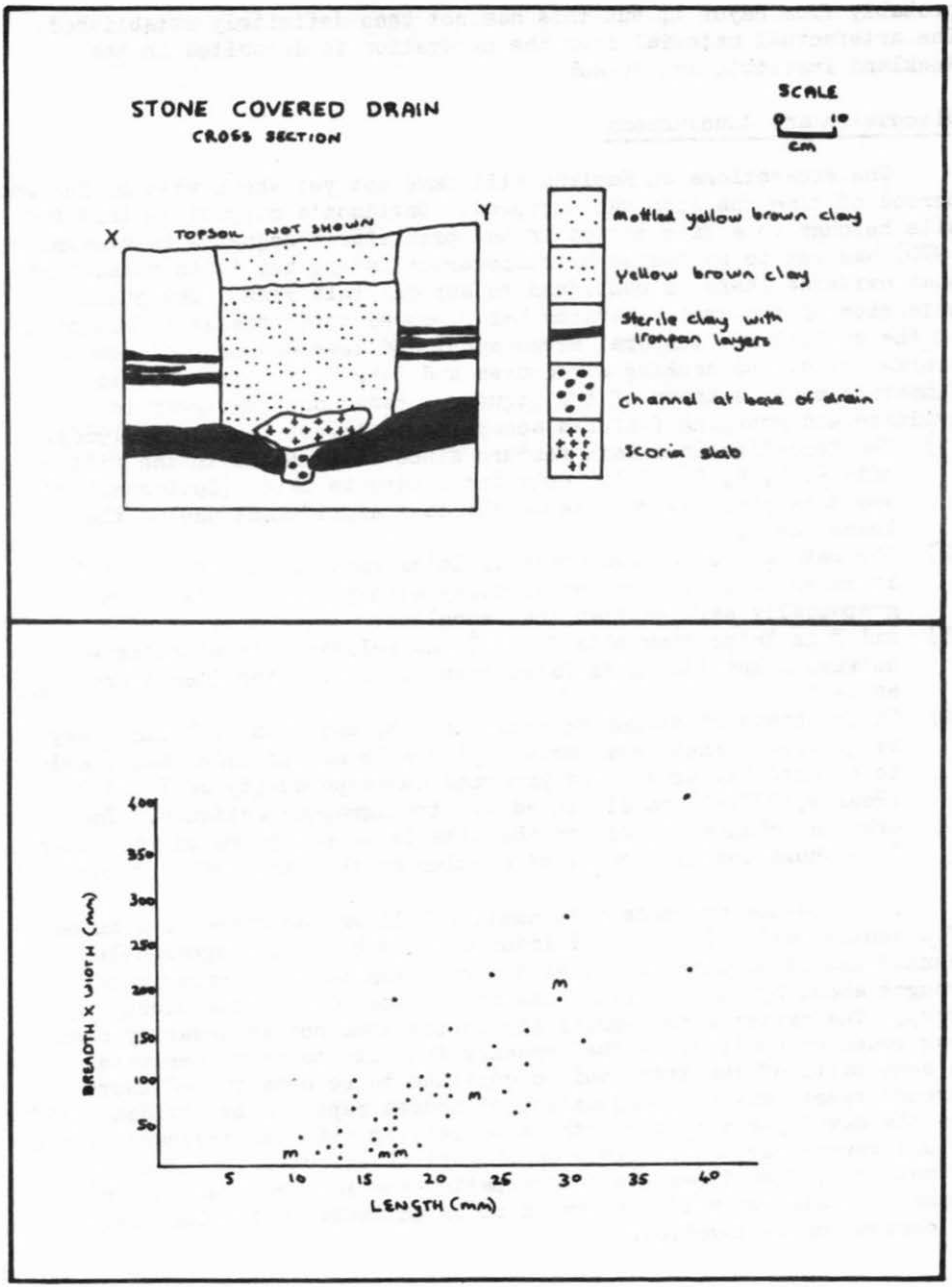

Figure 4. Cross section through stone covered drain.

Figure 5. Graph of obsidian size characteristics.

probably from Mayor I, but this has not been definitely established. The artefactual material from the excavation is deposited in the Auckland Institute and Museum.

Discussion and Conclusions

The excavations on Hamlins Hill have not yet shown when or for what period of time the site was occupied. Davidson's suggestion that the site belongs to a late period in the prehistoric sequence (Davidson, 1970) has yet to be tested by radiocarbon dating but it is noted that what evidence there is continues to support this view. The gradual extension of the area excavated has produced considerable information on the spatial and temporal arrangement and rearrangement of houses, storage pits, and cooking structures and debris. It remains to summarise what is known of the sequence, based on stratigraphic evidence and grouping features according to layout (Shawcross,1966).

(1) The fenceline is a late feature since it is found in the fill of pits K, P, R, N and I. Only the midden is later (Davidson,1970) and this probably represents the last significant use of the lower knoll.

(2) The main stone-covered drain is later than G, (and H, which G intrudes upon) and is contemporary with pit P. It is stratigraphically earlier than the fenceline.

(3) Pit F is later than pits S and I (no relationship established between S and I). E is later than Q. P is later than R and O, as is N.

(4) On the basis of alignment pits A and B, and pits C, D and E may be grouped. These are surface pits with eroded sides and likely to be late features. The presumed contemporaneity of I and J (Pearce,1977:90) is disproved by stratigraphic evidence. The external channel of one of the pits is superimposed on the other. This shows the difficulty of arguing on the basis of alignment.

The evidence suggests that Hamlins Hill was occupied by a number of domestic units (internal division of site by fence, apparently planned layout of some pits), with a changing internal arrangement brought about by the changing size and composition of the occupying group. The evidence for continuity (which does not necessarily mean year-round occupation) is the tendency for pits to be concentrated on some parts of the site, and to continue to be constructed there through time; the superimposition of houses reported by Davidson (1970) and the development of new methods of dealing with the drainage problem (stone-covered drains). Since on no part of the site is there evidence of more than 3 or 4 periods of occupation and in some areas the site plans are relatively uncomplicated it is unlikely that a long period of occupation is involved.

A variety of size and designs are apparent in the pits excavated. The excavation demonstrated the close association of stone-covered drains with pits, and in particular the pits which had floors resting just above the impermeable ironpan layers. These drains however still present a number of problems: in particular, their placement tends to confound expectation and some sections (particularly the eastern branch out of pit P) lack stones and this must have affected the efficiency of the system.

At Hamlins Hill there are extensive areas of soil formed on tephra (McFadgen:pers.comm.) which are suitable for gardening. The tephra overlies Waitemata sediments. Downslope ditches and banks, though not proven prehistoric, are present. Soils on Waitemata sediments are less suitable for gardening.

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The excavations would not have been possible without the permission of the owners: the Auckland Meat Co.

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