Ancient Monuments Laboratory
Report 198/88

A REPORT ON SOME SOIL SAMPLES FROM BOWHILL, EXETER, DEVON.

Helen C M Keeley

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Summary

Six soil samples were examined to answer specific questions posed by the excavator about deposits associated with this medieval site. Shallow, red loamy soils in the area are mapped with the Trusham series (Brown earths).

Author's address :-

Ancient Monuments Laboratory
English Heritage
23 Savile Row
London
W1X 2HE

01 734 6010

A Report on Some Soil Samples from Bowhill, Exeter, Devon.

By Helen C.M. Keeley

Introduction

This report concerns a small number of soil samples submitted to the Ancient Monuments Laboratory by the excavator (Stephen Dunmore) in order to answer specific questions. The medieval site of Bowhill is shown in plan in Figure 1.

The geology and soils of the Exeter area have been described in detail by Clayden (1971). Exeter itself is characterised by bright red Permian breccias and conglomerates. Associated with these are contemporaneous lavas known as 'Exeter traps', which are usually purplish and form a number of small outcrops. Superficial recent and Pleistocene deposits are widespread in the region. Around Exeter shallow, red loamy soils are mapped with the Trusham series (Brown earths).

The Soil Samples

The samples were not collected by the author and have been stored dry in polythene bags, so certain elements of the soil description, e.g. structure, cannot be ascertained. Also the site was not visited by the author and the deposits have not been seen *in situ*, so the conclusions which can be drawn are limited.

Sample 316

Yellowish red (5YR6/8) dry and wet (5YR4/6) coarse loamy sand containing 5% gravel size stones and rare charcoal fragments. This may very well be hill wash, in view of the absence of large stones and the presence of small pieces of charcoal, but it is difficult to tell without seeing the deposit *in situ*.

Sample 317

Red (2.5YR5/6) dry and wet (2.5YR4/6) stony clay loam containing 60% gravel to medium size angular and subangular stones. Black manganese oxide staining was noted on ped faces. This is most likely to be a natural deposit.

Sample 176

This material appeared to have been burnt but was otherwise similar to sample 317.

Sample 209

This was similar to sample 317 and showed little sign of burning.

Sample 257

This deposit appeared to be similar to underlying natural deposits but was very compacted and contained a lot of burnt material, as well as black manganese oxide staining. It may have formed a compacted surface on which material was dumped but it is difficult to say without seeing the layer *in situ*. The manganese staining may be the result of water movement.

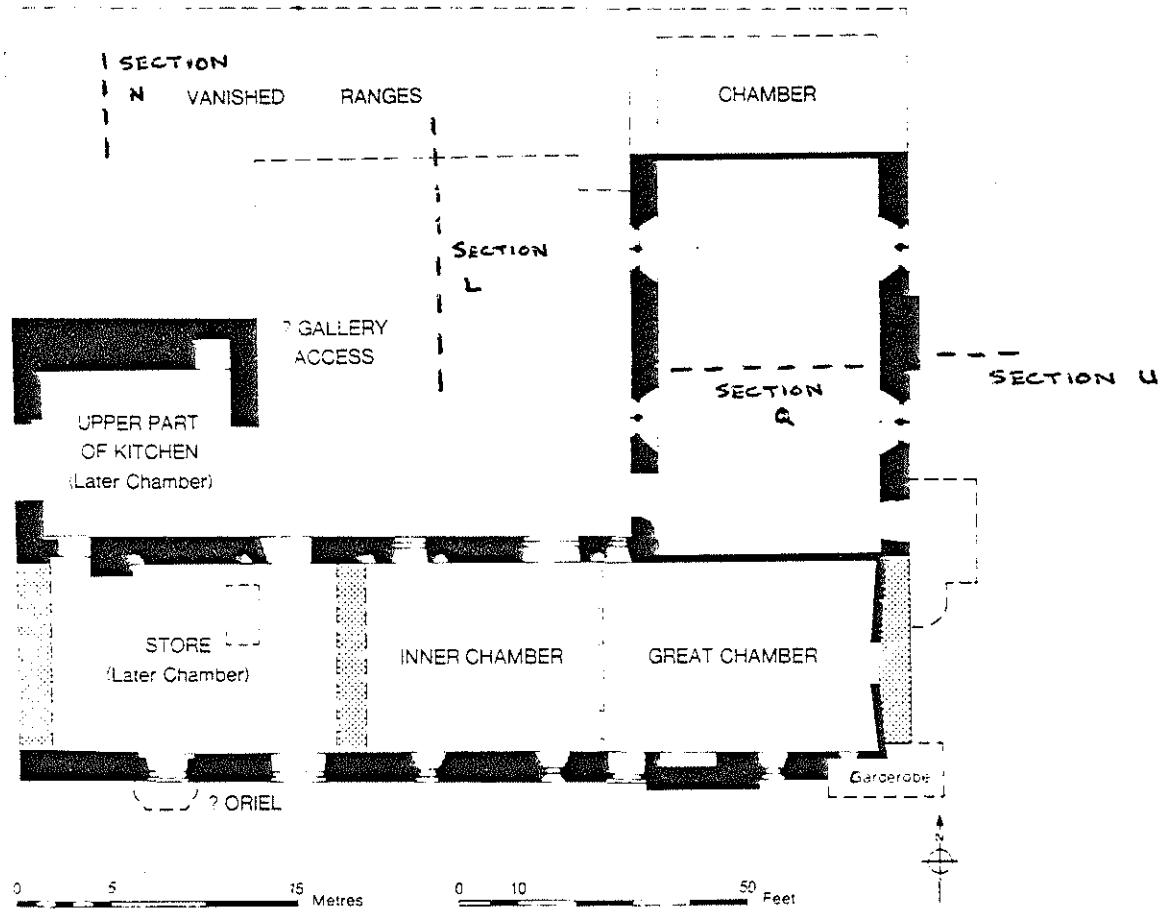

FIGURE 1.

EXETER
BOWHILL

Clay natural slopes downwards from W to E.

Sample 349

This sample from the bottom of a 15th. century cess pit is being submitted to the environmental archaeologist at the Exeter archaeological unit for examination.

Comments

Sample 316 may represent hill wash overlying the natural subsoil material of sample 317, which is typical of deposits derived from parent materials in the Exeter area, but it is difficult to tell without seeing the deposits in situ.

Although Samples 176 and 209 were similar and appeared to comprise natural deposits, only the former showed strong evidence of burning.

The nature of Sample 257 was difficult to define without seeing the deposits in situ.

Reference

Clayden, B. (1971) Soils of the Exeter District. Memoirs of the Soil Survey of England and Wales, Harpenden, Herts.