



# ADAS

FOOD, FARMING, LAND & LEISURE

To: Alistair Helliwell

From: Roger Orpin

Date: 7th August 1992

Subject: Chalk Quarry/Ivinghoe Aston, Buckinghamshire

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As requested, detailed below is the physical characteristics statement for the above site of approximately 3ha of agricultural land. 4 auger borings were undertaken together with an examination of an exposed soil profile. The barley crop had recently been removed.

The whole of the site is covered by a grey (10YR 5/2), calcareous, medium (silty) clay loam topsoil with a depth varying between 15-25cm. This horizon contains approximately 10% (occasionally 15%) stone of which 75% is chalk fragments and 25% flints.

Below this is a thin (sometimes absent) subsoil horizon of medium clay loam/heavy clay loam. Again grey in colour and calcareous and containing a large proportion of weathered chalk fragments. The depth of this horizon is 5cm.

Underneath, the Cretaceous Lower Chalk is evident. From the exposed face, the chalk has horizontal bedding <sup>at</sup> ~~pleds~~ approximately 2-3 cm thick. The chalk is generally quite soft, but there are harder bands which occur below 35cm. These bands are approximately 5cm thick. Roots are few, fine and very fine and tend to run horizontally along the bedded chalk. The maximum depth of roots noted was 55cm.

The overall agricultural land classification is 3b.

The major consideration is the lack of soil making material. It may be that the chalk rubble could be used as a subsoil material to make up sufficient depth or less stony material may have to be imported; is such a source available?

If you wish to discuss further with Sarah, please do not hesitate to telephone.