PAGES LANE, TWYNING

SUMMARY OF ALC INFORMATION

The site was surveyed in 1986 at a detailed level (23 borings) and a soil resources map was drawn up. The site was mapped as Grade 2. The soil resources map show that there are three soil units with soil ranging in depth from 40cm to 60cm. The boring data shows that the soils were augered deeper than this. It shows that there is a greater resource than the soil resources map suggests. Assessment of the boring details under the Revised guidelines suggests that the site would still be mapped as Grade 2 with a minor droughtiness limitation.

A site visit was made on 27 April 1999. 10 auger borings were made around the site and two soil profile pits were dug. The borings showed that there was soil (as defined by the ALC system) to a depth of at least 120cm. The soil textures found were sandy loams, loamy sand and some sand at depth. However part of this soils profile is considered mineral deposit by the applicant. The applicant states that the underlying clay is found at a depth of 2-4 metres. The topsoils observed by MAFF were all sandy loams. Under the Revised system a full soil profile is 120cm. To maintain Grade 2 with the current soil resource at least 100cm would be required and in some cases the full 120cm if there are sandier textures in the profile.

Restoration proposals

The stripping method proposed seems to be adequate to safeguard the soils that will be used in restoration. The restoration proposed allows for 45cm of topsoil and subsoil (sandy loams and loamy sands) to be placed over the parent clay. In terms of soil droughtiness, provided that the roots can exploit moisture in the clay, this profile has sufficient moisture available for the soil profile to be Grade 2, for both a MSL and MLS topsoil. It is possible that the clay may act as a slowly permeable layer, but even where the clay is slowly permeable from 45cm with a sandy loam topsoil the soils would be no worse that Grade 2 for the climatic regime. None the less it may be advisable to ensure that the clay is ripped to help the drainage and root penetration.

Water levels were observed by the applicant to generally lie within the clay layer except in the SE part of the site where they are into the sand and gravel deposit. It does not indicate whether this is within 120cm of the surface or not. As indicated above high water levels would not downgrade the restored site lower than Grade 2.

G Shaw 10/5/99

Ref 28/99