0301/60/92

AGRICULTURAL LAND CLASSIFICATION

CHURCH FARM, BIERTON, AYLESBURY, BUCKS (SP 834153)

1. BACKGROUND

1.1 The site, an area of 0.6 ha, is the subject of an application for a residential development at Church Farm, Aylesbury Road, Bierton, Aylesbury. The published MAFF ALC Map 146 shows the land as grade 2 (MAFF, 1968, 1:63360 scale). ADAS carried out a more detailed survey in July 1992 to assess the agricultural land quality and confirmed the predominance of grade 2 land.

2. PHYSICAL FACTORS AFFECTING LAND QUALITY

Climate

2.1 Climate data for the site was obtained from the published agricultural climatic dataset (Met. Office, 1989). This indicates that for the survey area the annual average rainfall is 649 mm (25.6"). Field capacity days are 137, and moisture deficits are 108 mm for wheat and 101 mm for potatoes. These climatic characteristics do not impose any climatic limitations on the ALC grading of the survey area.

Altitude and Relief

2.2 The land is level and lies at an average height of 90 m AOD. Neither gradient nor altitude constitute limitations to the ALC grade.

Geology and Soils

2.3 The published 1:63360 scale drift edition geology sheet 238 (Geological Survey of England and Wales, 1946) shows the site to comprise Portland Beds (Limestones, clays and sands).

2.4 The Soil Survey of England and Wales have mapped the soils on two occasions at two scales. Sheet 238, at 1:63360 scale, (S.S.E.W. 1961) shows the entire site as Aylesbury Series. While the more recent Map Sheet 4, at 1:250000 scale, (S.S.E.W. 1984) shows the Aberford Association (*1) to cover the whole site. During the current survey a more detailed inspection of the soils was carried out. This survey confirms the predominance of a limestone derived profile.

2.5 Profiles comprise of calcareous, stoneless, medium clay loam topsoils to a depth of 35/40 cm. The calcareous medium clay loam upper subsoils are very slightly stony and merge into fragmented Limestone rock (with large 20-40 cm diameter) Limestone fragments below 50/100 cm depth.

3. AGRICULTURAL LAND CLASSIFICATION

3.1 The definition of the Agricultural Land Classification grades are included in Appendix 1.

3.2 The whole survey area has been graded 2 (very good quality agricultural land). These soils have been assessed as wetness class I. Due to the presence of fragmented Limestone rock the soils are slightly droughty and therefore limited to grade 2.

August 1992

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(*1) ABERFORD ASSOCIATION: Shallow, locally brashy, well drained calcareous fine loamy soils over Limestone. Some deeper calcareous soils in colluvium.