SFC8 4151

# GOLF COURSE APPLICATION, SOUTH CERNEY, GLOUCESTERSHIRE AGRICULTURAL LAND CLASSIFICATION Report of Survey

## 1. <u>Introduction</u>

In January 1991 a reconnaissance Agricultural Land Classification (ALC) survey was carried out on approximately 104 hectares of land north of South Cerney near Cirencester in Gloucestershire. The work was carried out in response to an application to create a golf course on the site.

A total of 41 soil observations plus one soil pit were described, giving an approximate observation density of 1 per 2.5 hectares. A detailed ALC survey has a density of at least one observation per hectare; the reconnaissance nature of this survey therefore places a limitation on the accuracy of the map.

Six hectares of the site have been classified as Grade 1 (6%), 98 hectares as Sub-grade 3B (94%).

# 2. <u>Climate</u>

The table below outlines the estimation of the prevailing climate obtained by interpolation from a Met Office/MAFF 5 km grid dataset. There is no overall climatic limitation affecting the site.

#### Climatic Interpolation

Grid Reference	SU 060978
Altitude (m)	100
Average Annual Rainfall (mm)	713
Accumulated Temperature (° days)	1405
Field Capacity (days)	171
Moisture Deficit, Wheat (mm)	97
Moisture Deficit, Potatoes (mm)	87

## 3. Agricultural Land Classification

<u>Grade 1</u>: a limited area of this grade has been mapped in the north of the survey area. Clay loam topsoils overlie subsoil clays with deep evidence of soil wetness but which are calcareous and do not significantly obstruct drainage.

<u>Sub-grade 3B</u>: the bulk of the site has been placed in this grade. The southern fringe has soil wetness as the main limitation; the heavy or medium clay loam topsoils are underlain by clay horizons that are slowly permeable and significantly affect the drainage of the profile and the workability of the surface layers. The central and northern sections are downgraded either due to a soil depth limitation (ie less than 30 cm over solid limestone rock) or due to high topsoil stone contents (15-35%, 2-6 cm). The depth to the solid rock and the percentage stone content varies across the site; a more detailed survey may allow limited areas of better land to be delimited but, at the current scale of fieldwork, 3B is the most appropriate grade for the majority of the site.