

## AGRICULTURAL LAND CLASSIFICATION

GREEN LODGE FARM, SUDBOROUGH, NORTHAMPTONSHIRE

### SET-ASIDE SURVEY

#### 1. Cropping

Oilseed Rape and Cereals.

#### 2. PHYSICAL FACTORS AFFECTING LAND QUALITY

##### Climate

##### 2.1 Met Office 1989

Mid range Altitude	:	70m
Annual Average Rainfall	:	614mm
Field Capacity days	:	121
Moisture Deficit - wheat	:	112mm
Moisture Deficit - potatoes	:	105mm

These climatic characteristics do not impose any climatic limitations on the ALC grading of the survey site.

##### Altitude and Relief

2.2 Central level plateau falling to the west and south east. Altitude ranges from 53 to 84m AOD. Gradient is limiting adjacent to Sudborough Green Lodge (No.2) where slopes are 8°. Elsewhere slopes typically range from 5 to 7°.

##### Geology and Soils

2.3 Published 1:50,000 Solid and Drift edition Geology sheet 171 (Kettering) 1974.

Mainly glacial till (boulder clay) with smaller areas of sand and gravel and Oxford Clay deposits at the lower elevations to the west and south east.

2.4 The current reconnaissance survey identified two main soil types over the site.

2.4.1 The majority of the soils are derived from the chalky glacial till deposits and comprise clay (or occasionally heavy clay loam) topsoils over clay subsoils. Profiles are calcareous throughout and chalky at depth.

2.4.2 Downslope to the west and south east non calcareous Oxford Clay derived soils outcrop. These soils typically comprise clay topsoils over clay subsoils which variably become calcareous at depth due to the presence of carbonate nodules.

3. AGRICULTURAL LAND CLASSIFICATION

3.1 The tables below show the breakdown of ALC grades in hectares and % terms for the survey area as a whole, for the set-aside land and the non set-aside land.

TABLE 1: SURVEY AREA (excludes permanent grass)

AGRICULTURAL LAND CLASSIFICATION		
Grade	ha	%
2	4.5	7.0
3a	30.8	49.0
3b	26.4	42.0
Non Agricultural	0.4	0.5
Urban	1.0	1.5
TOTAL	<u>63.1</u>	<u>100</u>

TABLE 2: SET ASIDE LAND

AGRICULTURAL LAND CLASSIFICATION		
Grade	ha	%
3a	8.5	65
3b	4.6	35
TOTAL	<u>13.1</u>	<u>100</u>

TABLE 3: NON SET ASIDE LAND

AGRICULTURAL LAND CLASSIFICATION		
Grade	ha	%
2	4.5	9.0
3a	22.3	45.0
3b	21.8	44.0
Non Agricultural	0.4	0.8
Urban	1.0	1.2
TOTAL	<u>50.0</u>	<u>100</u>

3.2 Mr Chamberlin (the landowner) set aside areas of land for his convenience rather than on his poorer land. He recognises the areas of 3b as his poorer land but he has only set aside some of this land.

### Grade 2

- 3.3 The level plateau area adjacent to Green Lodge is graded 2. This land is associated with the better drained variant of the glacial till derived soils described in paragraph 2.4.1. Soil profile pit observations indicate that the subsoils are gleyed and slowly permeable at depth (ie. Wetness Class II). Consequently slight wetness and workability limitations restrict the land to grade 2.

### Subgrade 3a

- 3.4 Land graded 3a is mapped on the plateau and upper slopes of the valley features. This land is associated with the less well drained variants of the calcareous soils described in paragraph 2.4.1. Subsoils are slowly permeable directly below the topsoil and as a result the drainage status is assessed as wetness class III. Consequently moderate wetness and workability imperfections exclude this land from a higher grade.

### Subgrade 3b

- 3.5 Land graded 3b occurs in association with the clayey soils described in paragraph 2.4.2. Profiles are decalcified in the upper horizons, clayey and slowly permeable directly below the topsoil (ie Wetness Class III). Consequently significant wetness and workability imperfections restrict this land to subgrade 3b. Adjacent to Sudborough Green Lodge (No.2) steep slopes also restrict this land to subgrade 3b.

### Non Agricultural/Urban

- 3.6 Woodland and ponds are mapped as Non Agricultural and farm buildings and houses appear as Urban.

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S ESCOTT  
Resource Planning Group  
Cambridge RO