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A0 Proposed New Settlement Spencers Wood/Three Mile Cross, Berkshire.

Agricultural Land Classification ALC Map and Summary Report March/April 1997

Resource Planning Team Eastern Region FRCA Reading

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AGRICULTURAL LAND CLASSIFICATION, SUMMARY REPORT

PROPOSED NEW SETTLEMENT - SPENCERS WOOD/THREE MILE CROSS

Introduction

1. This report presents the findings of a semi-detailed Agricultural Land Classification (ALC) survey of 222 hectares of land around Spencers Wood and Three Mile Cross, south of Reading in Berkshire.

2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) from its Land Use Planning Unit in Reading in connection with a planning application for a new settlement. Much of the site is covered by existing surveys undertaken on behalf of MAFF in January and August 1996 in connection with the Wokingham Local Plan (Refs: 0206/176/95 and 0206/124/96). Additional survey work was undertaken for the current proposals during March 1997 (Ref 0206/055/97). Parts of this site were also surveyed in 1988 under ALC guidelines which have since been updated and revised (MAFF, 1988). The results of these more recent surveys supersede the previous 1988 ALC information for this land. This report describes the findings of the 1996 and 1997 survey work covering the application area.

3. Prior to 1 April 1997, the work was conducted by members of the Resource Planning Team in the Guildford Statutory Group of ADAS. After this date, the work was completed by the same team as part of the Farming and Rural Conservation Agency (FRCA), Reading. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I.

4. The majority of the agricultural land surveyed was in permanent grass. The remaining areas were under winter cereals, ley grass and Set aside. The areas shown as 'Other Land' include woodland and scrub, tracks and roads, open water, housing, farm buildings, an area of disused allotment gardens, and an area used for dumping building waste. The 'Not Surveyed' areas to the east of the site were not entered as either the owners could not be contacted within the timescale for the survey work or they did not wish the survey to be carried out.

Summary

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:15,000. It is accurate at this scale, but any enlargement would be misleading.

6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1 overleaf.

7. The fieldwork was conducted at an average density of approximately 1 boring every 1.5 hectares within the survey area, with a total of 138 borings and 8 soil pits being undertaken. Of these, 81 borings and 5 soil pits were described within the site area during the January 1996 survey work, with a further 35 borings and 2 soil pits described in August 1996. An additional 22 borings and 1 soil pit were described in March 1997

Grade/Other Land	Area (hectares)	% Total Site Area	% Surveyed Area
3a	105.5	47.6	52.8
3b	93.6	42.2	46.8
4	0.8	0.4	0.4
Agricultural Land Not Surveyed	4.1	1.8	· •
Other Land	17.7	8.0	-
Total Surveyed Area	199.9	90.2	100
Total Site Area	221.7	100	· _

Table 1: Area of grades and other land

8. Just over half of the surveyed area has been classified as Subgrade 3a (good quality) with most of the remainder as Subgrade 3b (moderate quality), on the basis of both soil wetness and soil droughtiness limitations. A small area to the north west of the site is shown as Grade 4 (poor quality) on the basis of microrelief and soil resource limitations.

9. Where Subgrade 3a and 3b has been mapped, soil wetness is the principal limitation. In these areas, the soils typically comprise medium loam (occaisionally light loam) topsoils and upper subsoils over gleyed and slowly permeable clayey horizons at shallow and moderate depths in the profile. The slowly permeable horizons cause drainage to be impeded such that land utilisation is restricted. The depth at which these horizons occur determines the severity of the soil wetness restrictions and therefore the ALC grade.

10. Where the remaining Subgrade 3a and 3b land is mapped, it is on the basis of soil droughtiness. In these areas slightly to very stony medium and light loam soils overlie gravelly horizons at shallow to moderate depths in the profile. The stones in the profile cause a reduction in available water leading to a risk of droughtiness affecting plant growth and yield. Where the amount of available water is most reduced, ie where the gravelly horizons occur at shallow depths, the land is mapped as Subgrade 3b.

11. Towards the north west of the site, Grade 4 has been mapped on the basis of microrelief and soil resource limitations. This area appears to have been a farm storage area and has become disturbed as a result, at least in the topsoil. The topsoil was the only part of the profile that could be investigated during the survey; the remainder of the profile was impenetrable to the soil auger and spade. Non soil components such as glass and brick fragments have been incorporated into the soil matrix and a certain degree of microrelief is apparent. As the majority of mechanised operations are not feasible in these areas, they can only currently be utilised agriculturally for grazing purposes and, therefore, they have been classified as being of poor quality.

APPENDIX I

DESCRIPTION OF THE GRADES AND SUBGRADES

Grade 1: Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2: Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3: Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a: Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b: Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass that can be grazed or harvested over most of the year.

Grade 4: Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5: Very Poor Quality Agricultural Land

Land with severe limitations that restricts use to permanent pasture or rough grazing, except for occasional pioneer forage crops.