

**Proposed M1 Services, Northbound,
Land at Redbourn, Herts.**

**Agricultural Land Classification
December 1996**

**Resource Planning Team
Huntingdon Statutory Group
ADAS Cambridge**

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AGRICULTURAL LAND CLASSIFICATION REPORT

Proposed M1 Services, Northbound, Land at Redbourn, Herts.

Introduction

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of 25.5 ha of land to the west of Redbourn and to the west of the M1 Motorway centred on grid reference TL 093 116. The survey was carried out during December 1996.
2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) Land Use Planning Unit, Cambridge in connection with the proposal to locate a Service Area for northbound M1 traffic. This survey supersedes previous ALC surveys on this land.
3. The work was conducted by members of the Resource Planning Team in the Huntingdon Statutory Group in ADAS. 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. At the time of survey, the application area consisted of cultivated land.

Summary

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10 000 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.

Table 1: Area of grades and other land

| Grade/Other land | Area (hectares) | % Total site area |
|------------------|-----------------|-------------------|
| 3a | 2.1 | 8.2 |
| 3b | 23.1 | 90.6 |
| Other land | 0.3 | 1.2 |
| Total site area | 25.5 | 100 |

7. The fieldwork was conducted at an average density of one borings per hectare of the agricultural land. A total of twenty three auger borings and two soil pits were described.

8. Subgrade 3a (good quality agricultural land) was mapped in a small area in the south east of the site. The majority of the site consisted of Subgrade 3b (moderate quality agricultural land). A small copse in the north of the site was mapped as other land.

Subgrade 3a

9. Land of Subgrade 3a is found in the south east of the site and is associated with an area of land in which topsoil stone content is slightly lower than on the rest of the site. In this small area the volume of topsoil stones greater than 2 cm in size were found by riddling to be approximately 14%, hence limiting such land to Subgrade 3a quality. Stones act as an impediment to cultivation, harvesting and crop growth. High stone contents can increase production costs by causing extra wear and tear to implements and tyres and may also reduce crop quality by the distortion of root crops or the bruising of potatoes during harvest.

Subgrade 3b

10. The majority of the site consisted of land of Subgrade 3b quality as the volume of topsoil stones greater than 2 cm in size was assessed by riddling to be greater than 15%.

Other Land

11. A small copse in the north west of the site is mapped as other land.

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APPENDIX I

DESCRIPTIONS 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 which 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 which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.