

AGRICULTURAL LAND CLASSIFICATION

LAND AT OLLERTON, NOTTINGHAMSHIRE

1.0 INTRODUCTION

- 1.1 The site, an area of 25.1 ha, forms part of the Newark and Sherwood District Council Local Plan. A detailed survey was carried out in April 1995 by the ADAS Statutory Resource Planning Team in order to assess the agricultural land quality. Assessment was made following the guidelines in MAFF publications "Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF, 1988).
- 1.2 Information was collected from auger borings at 100 m intervals, to a depth of 120 cm or an impenetrable layer if closer to the surface. Subsoil conditions were assessed from three inspection pits.
- 1.3 On the provisional 1:63 360 scale ALC map, sheet 112 (MAFF, 1970) the site has been mapped as grade 3. This map is of a provisional nature, therefore the survey was undertaken to provide more detailed information on land quality within the survey area.
- 1.4 At the time of the survey one field was under autumn sown cereals, the other a ryegrass ley.

2.0 PHYSICAL FACTORS AFFECTING LAND QUALITY

Climate

- 2.1 Climatic data for the site was interpolated from data published in the Agricultural Climatic Dataset (Meteorological Office, 1989). This indicated that for an average site altitude of 45 m AOD the average annual rainfall is 621

mm (24.5”), while the accumulated temperature (ATO) is 1387 days °C. The field capacity days are 125, and moisture deficits for wheat and potatoes are 108 mm and 100 mm respectively. The climatic characteristics do not impose any climatic limitation to the ALC grading of the site.

Altitude and Relief

- 2.2 The site is bounded on the western side by the Blyth Road at a height of approximately 45 m AOD. The land falls away gently in a south easterly direction to a height of approximately 42 m AOD. Altitude and slopes do not impose any limitation on the ALC grading.

Geology and Soils

- 2.3 The published 1:63 360 scale solid and drift edition geology map sheet no. 113 (Geol. Survey 1966) shows the site to comprise Permo-Triassic Bunter Pebble Beds.
- 2.4 The Soil Survey of England and Wales have mapped the soils in the area at a reconnaissance scale of 1:250 000 (Soil Survey Sheet 4, 1983). The site has been mapped as Cuckney 1 Association (*1). One soil type was encountered during the survey.
- 2.5 Soil profiles typically comprise well drained (wetness class I) slightly stony, non calcareous medium sandy loam topsoil over slightly/moderately stony non calcareous loamy medium sand upper subsoils. The lower subsoil comprises moderately stony medium sand.

(*1) Cuckney 1 Association:- well drained sandy and coarse loamy soils, often over soft sandstone. Risk of wind erosion.

3.0 AGRICULTURAL LAND CLASSIFICATION

3.1 The distribution of Agricultural Land Classification (ALC) grades is show below.

Grade	ha	%
3a	25.1	100
TOTAL	25.1	100

The definitions of the ALC grades are shown in Appendix 1.

Subgrade 3a

3.2 The well drained coarse loamy over sandy soils, as described in paragraph 2.5, are usually assessed as moderately droughty, but due to the availability of irrigation, a substantial part of the droughtiness limitation is alleviated and the land is consequently graded as subgrade 3a. A small area in the southern part of the site was also restricted to subgrade 3a due to the volume of hard surface stone (>2 cm) being between 10 and 15%.

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REFERENCES

GEOLOGICAL SURVEY OF GREAT BRITAIN, 1966. Solid and Drift Edition,
Sheet 113, Ollerton, Scale 1:63 360.

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MAFF, 1988. Agricultural Land Classification of England and Wales. Revised
Guidelines and Criteria for Grading the Quality of Land. MAFF, London.

METEOROLOGICAL OFFICE, 1989. Climatological Data for Agricultural Land
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