

AGRICULTURAL LAND CLASSIFICATION

LITTLE MALTBY FARM, YARM, CLEVELAND
Proposed Housing Development

ADAS
LEEDS REGIONAL OFFICE

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CONTENTS

1. AGRICULTURAL LAND CLASSIFICATION

MAP

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**AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT
LITTLE MALTBY FARM, NEAR YARM, CLEVELAND**

1.1 INTRODUCTION

The site is located around National Grid Reference NZ 454134 about 3½ km east of Yarm. It covers an area of 36.3 hectares 95% of which is in agricultural use.

Survey work was carried out in February 1989 when soils were examined by hand auger borings to a depth of one metre. Borings were made at points predetermined by the National Grid at a density of one boring per hectare. Two profile pits were dug to collect data on soil morphology and to obtain samples for laboratory analysis.

Land quality assessment was made using the revised guidelines published by MAFF in 1988.

1.2 CLIMATE AND RELIEF

Average annual rainfall is approximately 630 mm and the accumulated temperature above 0°C (January to June) is 1345 day °C. The site is at field capacity for 152 days a year. There is thus no overall climatic limitation on ALC grade. Slopes are gentle across the site except on the banks of Bassleton Beck and its tributaries where there are a few moderately steep slopes. Average altitude is 30 m a.o.d.

1.3 GEOLOGY AND SOILS

Soils are entirely derived from drift deposits, mainly of boulder clay. Solid strata do not occur within one metre of the surface. Soils formed on the boulder clay usually have a heavy clay loam topsoil although a small area west of Little Maltby Farm contains lighter soils with medium clay loam topsoils. Subsoils are all clayey and slowly permeable and most profiles fall within wetness class IV. The area with lighter topsoils however has a deeper slowly permeable layer which meets the criteria for wetness class III. None of the soils are limited by droughtiness.

1.4 LAND USE

All the agricultural land is in arable use. Alongside the Bassleton Beck some small areas of steeply sloping land are not in agricultural use. There is also a small area of woodland on the northern edge of the site.

1.5 AGRICULTURAL LAND CLASSIFICATION

Grade	Area (hectares)	% of Agricultural Land	% of Total Land Area
3a	4.7	14	13
3b	29.8	86	82
Non Agricultural	<u>1.8</u>	<u>-</u>	<u>5</u>
	<u>36.3</u>	<u>100</u>	<u>100</u>

1.5.1 Subgrade 3a

Land in this subgrade occurs only in a small area near the farm. Topsoils are of medium clay loam or medium silty clay loam. The upper subsoil is similar in texture, although faintly mottled. Below about 50 cm depth is a clayey, slowly permeable lower subsoil. These characteristics indicate that these soils fall within wetness class III. This combination of topsoil texture and soil wetness class meets the criteria for subgrade 3a in areas with more than 150 field capacity days.

1.5.2 Subgrade 3b

This subgrade covers most of the site. Topsoils are of heavy clay loam over a clayey slowly permeable subsoil which occurs at about 30 cm depth. These soils are thus in wetness class IV and limited to subgrade 3b by wetness and workability problems.

1.5.3 Non Agricultural

Along Bassleton Beck are two areas of non agricultural land. One consists of woodland and the other of slopes too steep for arable use.

Reference

MAFF 1988 Revised guidelines and criteria for grading the quality of agricultural land.

**Resource Planning Group
February 1989**