



AGRICULTURAL LAND CLASSIFICATION
HAMBLETON DISTRICT LOCAL PLAN
NORTH YORKSHIRE
PROPOSED MOTORWAY SERVICE AREA
(SITE 3)
JANUARY 1994

ADAS
Leeds Statutory Group

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SUMMARY

An Agricultural Land Classification survey of 20.0ha of land at Theakston Grange, Hambleton was carried out in January 1994, of which 18.1ha was in agricultural use.

Grade 2 land covers a total of 7.9ha. Profiles are generally well or moderately well drained with sandy loam or sandy clay loam topsoils overlying similar subsoils. Slowly permeable layers consisting of heavy clay loam or clay begin below 50cm depth in places. The ALC grade of this land is limited by slight soil wetness (where slowly permeable layers occur) or slight soil droughtiness (where slowly permeable layers are absent).

Subgrade 3a land covers a total of 6.1ha. Profiles are imperfectly drained in most cases with medium-textured topsoils and upper subsoils overlying slowly permeable heavy-textured subsoils at around 55cm depth. Soil wetness is the factor which limits this land to Subgrade 3a.

Subgrade 3b land covers a total of 4.1ha. Profiles are poorly drained with medium clay loam topsoils overlying slowly permeable heavy clay loam subsoils at around 30cm depth. Soil wetness is a more serious problem than on the adjoining Subgrade 3a land and this land is thus limited to Subgrade 3b.

The remainder of the land on the site consists of Urban land (0.8ha), Non Agricultural Land (0.2ha), Farm Woodland (0.8ha) and Open Water (two farm ponds covering a total of 0.1ha).

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT THEAKSTON
GRANGE, HAMBLETON DISTRICT: PROPOSED MOTORWAY SERVICE AREA
(SITE 3)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site located about 4½Km south-east of Bedale town centre and is divided into two parts by the A1(T). It covers a total of 10.0ha and is located around Grid Reference SE309865. Survey work was carried out in January 1994 when soils were examined by hand auger borings carried out at 100m intervals predetermined by the National Grid. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land" (MAFF, 1988).

1.2 Land Use and Relief

At the time of survey, 90% of the site was in agricultural use, being either arable or ley grassland. The remainder consists of urban land and Non Agricultural land (around Theakston Grange), Farm Woodland, and two areas of open water. Site altitude varies from approximately 35m AOD in the south-east to 48m AOD in the south-west. The land is typically gently sloping (1-3°) with a north-easterly to easterly aspect.

1.3 Climate

Grid Reference	: SE 309865
Altitude (m)	: 43
Accumulated Temperature above 0°C (January-June)	: 1345 day°C
Average Annual Rainfall (mm)	: 656
Climatic Grade	: 1
Field Capacity Days	: 156
Moisture Deficit (mm) Wheat	: 103
Moisture Deficit (mm) Potatoes	: 93

1.3 Geology, Soils and Drainage

The site is underlain by Permian and Triassic sandstone over which lie deposits of boulder clay and, in places, glacial sand and gravel.

Soil type varies greatly across the site and Soil Wetness Class varies from I (well drained) to IV (poorly drained). Topsoils are light to medium-textured (sandy loam, sandy clay loam and medium clay loam) and subsoils vary from light-textured (sandy loam) to medium (sandy clay loam and medium clay loam) and heavy-textured (heavy clay loam).

2: AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2	7.9	39.5
3a	6.1	30.5
3b	4.1	20.5
4		
5		
(Sub total)	(18.1)	(90.5)
Urban	0.8	4.0
Non Agricultural	0.2	1.0
Woodland - Farm	0.8	4.0
- Commercial		
Agricultural Buildings		
Open Water.	0.1	0.5
Land not surveyed		
(Sub total)	(1.9)	(9.5)
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TOTAL	20.0	100
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2.1 Grade 2

Grade 2 land occurs in three separate areas, one to the east of the A1(T) and two to the west. Profiles are generally well or moderately well drained (falling into Wetness Classes I or II) and typically consist of sandy loam or sandy clay loam topsoils overlying similar subsoils. Slowly permeable layers consisting of heavy clay loam or clay occur in places below 50cm depth. Where these slowly permeable layers occur the ALC grade of the land is limited by slight soil wetness and elsewhere the land is limited to Grade 2 by slight soil droughtiness.

2.2 Subgrade 3a

Land in this subgrade also occurs in two separate areas, one to the east of the A1(T) and one to the west. Profiles are imperfectly drained in most cases, falling in Wetness Class III, with medium clay loam or sandy clay loam topsoils and upper subsoils overlying slowly permeable heavy clay loam lower subsoils at between 50cm and 60cm depth. The land is restricted to Subgrade 3a by soil wetness limitations.

2.3 Subgrade 3b

Subgrade 3b land occurs in one band to the west of the A1(T) and in two areas to the east. Profiles are poorly drained (Wetness Class IV) with medium clay loam topsoils overlying slowly permeable heavy clay loam subsoils at around 30cm depth. Soil wetness is more limiting than on the adjoining Subgrade 3a land and it is this factor which restricts the land to Subgrade 3b.

2.4 Urban

This category includes a minor road and embankment, and a small house, all in the east of the site.

2.5 Non Agricultural

This category includes a small area of land attached to the house in the east of the site.

2.6 Farm Woodland

A belt of farm woodland is found in the south-east of the site.

2.7 Open Water

This category includes two small ponds, one to the east of the A1(T) and one to the west.

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MAP