



AGRICULTURAL LAND CLASSIFICATION
NORTH YORKS MINERALS LOCAL PLAN
NEWBRIDGE
NORTH YORKSHIRE
MARCH 1995

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification survey of 31.6 ha of land at Newbridge ("North Yorks Minerals Local Plan") was carried out in March 1995. At the time of survey 30.9 ha of this was in agricultural use and 0.7 ha consisted of Agricultural Buildings.

1.6 ha of the agricultural land falls in Grade 2. The soils are well drained, with medium-textured topsoils overlying medium to heavy-textured subsoils. Limestone bedrock occurs at between 50cm and 70cm depth. Soil droughtiness, topsoil workability restrictions and overall climate all limit this land to Grade 2.

8.1 ha falls in Subgrade 3a. The soils are well drained, with very slightly to slightly stony medium to heavy-textured topsoils over heavy-textured subsoils. Limestone bedrock begins at between 40cm and 50cm depth and the ALC grade is limited by soil droughtiness and, where heavy-textured topsoils occur, workability restrictions.

19.5 ha falls in Subgrade 3b. Again well drained, the soils consist of medium to heavy-textured topsoils overlying thin heavy-textured subsoils. Limestone bedrock occurs at between 25cm and 35cm depth and soil droughtiness (as well as soil depth in some places) limits the land to Subgrade 3b.

1.7 ha of Grade 4 land occurs in the north-east of the site. Moderately stony medium-textured topsoils overlie limestone at between 20 and 30cm depth. Severe soil droughtiness limits this land to Grade 4.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT NEWBRIDGE,
PICKERING (NORTH YORKS MINERALS LOCAL PLAN)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies 3km north of Pickering town centre, around Grid Reference SE 799 866, and covers 31.6 ha. Survey work was carried out in March 1995 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Three soil pits were dug to allow full profile descriptions to be made and to confirm depth to bedrock. The 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 98% of the site was in agricultural use, consisting of winter cereals and recently ploughed land, and a small area of ley grass in the east. The remainder of the site consists of the buildings at New Hambleton Farm.

Site altitude varies from 105 m AOD in the north to 85m AOD in the south and the land is level to gently sloping (0-3°) with a southerly aspect.

1.3 Climate

Grid Reference	: SE 799 866
Altitude (m)	: 95
Accumulated Temperature above 0°C (January - June)	: 1275 day °C
Average Annual Rainfall (mm)	: 745
Climatic Grade	: 2
Field Capacity Days	: 189
Moisture Deficit (mm) Wheat	: 90
Moisture Deficit (mm) Potatoes	: 76

1.4 Geology, Soils and Drainage

This site is mostly underlain by Upper Limestone deposits but there is a small area in the north-west which is underlain by Middle Calcareous Grit. With the exception of locally derived Head deposits there is no drift cover.

The soils are well drained (Wetness Class I) and typically consist of medium clay loam, medium silty clay loam or heavy clay loam topsoils overlying medium silty clay loam, heavy clay loam or clay subsoils. Limestone bedrock occurs at between 20cm and 70cm depth over most of the area.

In the small area underlain by Calcareous Grit the soils are also well drained (Wetness Class I) but in this case medium sandy loam topsoils overlie medium sandy loam or loamy medium sand subsoils. Weathering bedrock begins at about 45cm depth in this area.

The soils on this site correspond to the Elmtton 2 and Rivington 1 Associations as mapped by the Soil Survey and Land Research Centre.

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	1.6	5.1
3a	8.1	25.6
3b	19.5	61.7
4	1.7	5.4
5		
(Sub total)	(30.9)	(97.8)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.7	2.2
Open Water		
Land not surveyed		
(Sub total)	(0.7)	(2.2)
TOTAL	<u>31.6</u>	<u>100</u>

2.1 Grade 2

A small area of Grade 2 land occurs in the east of the site. The soils are well drained, falling in Wetness Class I, and consist of medium silty clay loam topsoils overlying medium silty clay loam, heavy silty clay loam, heavy clay loam or clay. Limestone bedrock begins at between 50cm and 70cm depth and this land is limited to Grade 2 by slight soil droughtiness, a slight topsoil workability limitation, and the overall climate of the area.

2.2 Subgrade 3a

Two separate areas of Subgrade 3a have been mapped, one in the north and one in the south. The soils are well drained (Wetness Class I) and consist of medium clay loam, medium silty clay loam or heavy clay loam topsoils overlying heavy clay loam or clay subsoils. The topsoils are typically very slightly to slightly stony, containing up to 6% limestones (of which up to 4% are greater than 2cm in size). Limestone bedrock begins at between 40cm and 50cm depth and the ALC grade is limited by soil droughtiness and, where heavy clay loam topsoils occurs, a topsoil workability restriction.

2.3 Subgrade 3b

Much of the site falls within Subgrade 3b. Again, the soils are well drained (Wetness Class I) and consist of medium clay loam, medium silty clay loam or heavy clay loam topsoils overlying, in most cases, thin heavy clay loam or clay subsoils. Limestone bedrock begins at between 25cm and 35cm depth. The topsoil stone content is similar to that on the Subgrade 3a land but these thinner soils have a lower water-holding capacity and crops will be more prone to drought stress. A more severe soil droughtiness limitation (as well as a soil depth limitation where bedrock occurs within 30cm of the surface) is, therefore, the factor limiting the ALC grade in this case.

2.4 Grade 4

A small area of Grade 4 land occurs in the north-east of the site. The topsoils are moderately stony medium silty clay loams, and they typically contain around 30% total limestones. Limestone bedrock begins at between 20cm and 30cm depth. Severe soil droughtiness restricts this land to Grade 4.

2.5 Agricultural Buildings

This category includes the farmhouse and outbuildings at New Hambleton Farm, in the south of the site.

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MAP