



Ministry of  
Agriculture  
Fisheries  
and Food

AGRICULTURAL LAND CLASSIFICATION  
LAND ADJACENT TO EGGBOROUGH POWER  
STATION, EGGBOROUGH, N. YORKS  
PROPOSED INDUSTRIAL DEVELOPMENT SITE  
DECEMBER 1993

ADAS  
Leeds Statutory Group

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## SUMMARY

An Agricultural Land Classification survey of 56.7 ha of land at Eggborough was carried out in July and December 1993.

54.0 ha of this is in agricultural use of which 4.2 ha falls into Subgrade 3a. Soils within this subgrade are generally moderately well drained and consist typically of medium sandy loam topsoils, over moderately stony loamy medium sand upper subsoils and gleyed sandy clay loams lower subsoils. Moderate soil droughtiness limits this land to Subgrade 3a. The remainder of the agricultural land (49.8 ha) falls within Subgrade 3b. Soil profiles are well drained, typically consisting of loamy medium sand or sand topsoils over similar subsoils. Severe soil droughtiness, particularly for shallow rooting crops, limits this land to Subgrade 3b.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND ADJOINING  
EGGBOROUGH POWER STATION. PROPOSED INDUSTRIAL DEVELOPMENT

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies to the north of the A645, approximately 7 km east of Knottingley and directly south of Eggborough power station. It is centred around National Grid Reference SE 572 238. Survey work was carried out on the southern half of the site in July 1993 when soils were examined by hand auger borings at the rate of one boring per hectare at points predetermined by the National Grid. The northern part of the site was surveyed in December 1993 on a semi-detailed basis of one boring per two hectares, also at points predetermined by the National Grid. One soil inspection pit was dug to assess subsoils structure. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land (MAFF 1988).

1.2 Land Use and Relief

At the time of the survey most of the land was in agricultural production, the remainder being urban, farm buildings, non-agricultural and farm woodland. The site is level to gently sloping (0 - 3°) and lies between 10 m AOD and 15 m AOD.

1.3 Climate

Grid Reference	:	SE 572 238
Altitude	:	15
Accumulated Temperature above 0°C	:	
(January - June)	:	1399 day °C
Average Annual Rainfall (mm)	:	610
Climatic Grade	:	1
Field Capacity Days	:	127
Moisture Deficit (mm) Wheat	:	109
Moisture Deficit (mm) Potatoes	:	101

#### 1.4 Geology, Soils and Drainage

The area is underlain by Bunter Sandstone over which there is a patchy cover of glacial sand and gravel. A narrow-band of boulder clay runs from east to west across the northern part of the site. The majority of soils are light textured with well drained (Wetness Class I) very slightly to slightly stony loamy medium sand or medium sand topsoils overlying similar but sometimes stonier subsoils. The band of boulder clay produces somewhat heavier soils running from east to west in the northern part of the site. These consist of slightly stony medium sandy loam topsoils over moderately stony, loamy medium sand and medium sandy loam upper subsoils. These in turn pass into sandy clay loam lower subsoils. Soils of this type are moderately well drained and fall into Wetness Class II.

The widespread light well drained soils are similar to those of the Newport series, 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		
3a	4.2	7.4
3b	49.8	87.9
4		
5		
(Sub total)	(54.0)	(95.3)
Urban	1.1	1.9
Non Agricultural	0.3	0.5
Woodland - Farm	0.9	1.6
- Commercial		
Agricultural Buildings	0.4	0.7
Open Water		
Land not surveyed		
(Sub total)	(2.7)	(4.7)
<b>TOTAL</b>	<b>56.7</b>	<b>100</b>

### 2.1 Subgrade 3a

A small area of land in the north west of the site is of Subgrade 3a quality. Soils consist of very slightly to slightly stony medium sandy loam topsoils over upper subsoils of slightly gleyed permeable loamy medium sand with approximately 20% of hard stones. Lower subsoils, below 75 cm, consist of gleyed permeable sandy clay loam containing approximately 2% hard stones. These soils are moderately well drained (Wetness Class II) and the land is limited to Subgrade 3a by soil droughtiness.

## 2.2 Subgrade 3b

Most of the land on the site falls within Subgrade 3b. Soils consist of very slightly to slightly stony loamy medium sand or medium sand topsoils overlying similar textured subsoils which become very stony with increasing depth. A narrow band of soils directly north of the power lines, running west to east south of the wood consist of similar topsoils and upper subsoils, but pass into heavier subsoils of gleyed sandy clay loam, between 75 and 100 cm depth. All these soils are well drained (Wetness Class I) and are limited to Subgrade 3b by droughtiness.

## 2.3 Urban

Urban land consists of a hard surfaced track running north-south through the site.

## 2.4 Farm Buildings

These consist of Tranmore Farm located at the northern edge of the site.

## 2.4 Non-Agricultural

This consists of a farm track.

## 2.5 Farm Woodland

This consists of a small area of trees in the north eastern part of the site.

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MAPS