## AGRICULTURAL LAND CLASSIFICATION SUNDERLAND UDP SITE HA 5.1 SHINEY ROW TYNE AND WEAR

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#### **SUMMARY**

A detailed Agricultural Land Classification survey of 16.1 ha of land at Shiney Row (Sunderland UDP Site HA5.1) was carried out in November 1995. At the time of the survey, 14.5 ha was in agricultural use and all of this falls in Subgrade 3b. The soils are typically poorly drained, with medium clay loam topsoils overlying sometimes gleyed medium clay loam or heavy clay loam upper subsoils and, at between 30cm and 40cm depth, gleyed and slowly permeable clay lower subsoils. Soil wetness is the factor restricting this land to Subgrade 3b.

Other land on the site covers 1.6 ha and consists of a disused railway and a narrow band of recently planted trees adjoining it.

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1. AGRICULTURAL LAND CLASSIFICATION

# AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT SHINEY ROW, TYNE AND WEAR (SUNDERLAND UDP SITE HA5.1)

#### 1. INTRODUCTION AND SITE CHARACTERISTICS

#### 1.1 Location and Survey Methods

The site lies 9½ km south-west of Sunderland city centre, on the west side of the village of Shiney Row, and covers 16.1 ha. Survey work was carried out in November 1995 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid and one soil pit was dug to allow a full profile description to be made. 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 <u>Land Use and Relief</u>

At the time of the survey 90% of the site was in agricultural use (winter cereals or set-aside) while 10% consisted of a disused mineral railway and a belt of recently planted trees adjoining it to the west.

Site altitude varies from 46m AOD in the north-west to 52m AOD in the north-east and the land is level to gently sloping (0-3°) with variable aspect.

#### 1.3 Climate

Grid Reference : NZ319 525

Altitude (m) : 50

Accumulated Temperature above 0°C

(January - June) : 1308 day °C

Average Annual Rainfall (mm) : 651
Climatic Grade : 2
Field Capacity Days : 163
Moisture Deficit (mm) Wheat : 94
Moisture Deficit (mm) Potatoes : 82

# 1.4 Geology, Soils and Drainage

The area is underlain by Middle Coal Measures over which lie thick deposits of glacial Pelaw Clay. In recent times, colliery waste and/or nightsoil has been spread over the land, thus artificially deepening the topsoil in places.

The soils are imperfectly or, more often, poorly drained, falling in Wetness Classes III and IV. Medium clay loam topsoils overlie medium clay loam or heavy clay loam upper subsoils and clay lower subsoils in most cases.

In their undisturbed state, the soils on this site correspond to the Dunkeswick Associaion as mapped by the Soil Survey and Land Research Centre.

#### 2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	<u>Hectares</u>	Percentage of Total Area
1		
2		
3a		
3b	14.5	90.0
4		
5		
(Sub total)	(14.5)	(90.0)
Other land	1.6	10.0
TOTAL	16.1	100

# 2.1 Subgrade 3b

All of the agricultural land on the site has been mapped as Subgrade 3b. The soils are typically poorly drained (Wetness Class IV) with medium clay loam topsoils overlying sometimes gleyed medium clay loam or heavy clay loam upper subsoils and gleyed and slowly permeable clay lower subsoils which begin at between 30cm and 45cm depth. Although some of the soils are imperfectly drained (Wetness Class III) - apparently as a result of the topsoil being artificially deepened by the spreading of colliery spoil - these profiles are too few and too scattered to be mapped as a separate unit. Soil wetness, is, thus, the principal grade limiting factor.

#### 2.2 Other Land

This category includes a disused railway and a narrow belt of recently planted trees adjoning it.

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