. . . .



## AGRICULTURAL LAND CLASSIFICATION EAST YORKSHIRE BOROUGH LOCAL PLAN (SITES AROUND DRIFFIELD) FEBRUARY 1995

ADAS Leeds Statutory Group

Job No:- 47-54/95 MAFF Ref:- EL 51/78 Commission No:- 1630 SUMMARY

Detailed Agricultural Land Classification surveys of eight sites around Driffield were carried out in February 1995 in connection with the East Yorkshire Borough Local Plan. The following table summarises the grades for each site.

Site		de Areas (ha)	Other Land (ha)	Total (ha)
	2	3a		
885	7.7	-	-	7.7
889	8.9	-	-	8.9
896	5.8	-	-	5.8
905	7.1	1.8	0.2	9.1
909	3.7	-	1,6	5.3
910	2.9	0.4		3.3
1066	-	7.8	-	7.8
1288	3.7	4.8	_ ·	8.5

The areas given for Sites 885, 889, 896 and 909 include some additional areas which were surveyed at the request of the Land Use Planning Unit.

## CONTENTS

1.	INTRODUCTION AND SURVEY METHODS
2.	AGRICULTURAL LAND CLASSIFICATION GRADES AND MAPS
2.1	SITE 885 AND ADDITIONAL LAND, DRIFFIELD
2.2	SITE 889 AND ADDITIONAL LAND, DRIFFIELD
2.3	SITE 896 AND ADDITIONAL LAND, DRIFFIELD
2.4	SITE 905, DRIFFIELD
2.5	SITE 909 AND ADDITIONAL LAND, DRIFFIELD
2.6	SITE 910, DRIFFIELD
2.7	SITE 1066, DRIFFIELD
2.8	SITE 1288, DRIFFIELD

.

# AGRICULTURAL LAND CLASSIFICATION REPORT ON EAST YORKSHIRE BOROUGH WIDE LOCAL PLAN, LAND AT DRIFFIELD

#### 1. INTRODUCTION

#### 1.1 Location and Survey Methods

Eight sites around Driffield were surveyed in detail in February 1995. Soil were examined by hand auger borings at 100m intervals predetermined by the National Grid. Soil profile pits were dug to examine the soil in greater detail. All land quality assessments were made 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).

# 2.1 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 885, AND ADDITIONAL LAND

#### 2.1.1 Location

This site lies around Grid Reference TA 020 586 on the north-west side of Driffield, and covers a total area of 7.7 ha, including an area of additional land to the south-west.

#### 2.1.2 Land Use and Relief

At the time of survey all of this land was in agricultural use, being under winter cereals or permanent grass or in Set-aside.

Site altitude varies from approximately 23m AOD in the centre to 30m AOD in the east and west and the land is gently sloping (typically 3°) with a south-westerly or northeasterly aspect.

## 2.1.3 Climate

Grid Reference	: TA 020 586
Altitude (m)	: 28
Accumulated Temperature above 0	°C
(January - June)	: 1359 day °C
Average Annual Rainfall (mm)	: 688
Climatic Grade	: 1
Field Capacity Days	: 170
Moisture Deficit (mm) Wheat	: 101
Moisture Deficit (mm) Potatoes	: 91

# 2.1.4 Geology, Soils and Drainage

This site is underlain by Cretaceous Chalk over which lies a covering of chalky boulder clay.

The soils are generally well drained, falling in Wetness Class I, and consist of medium clay loam topsoils overlying medium silty clay loam, medium clay loam or heavy clay loam subsoils in most cases.

The soils on this site correspond to the Burlingham 2 Association as mapped by the Soil Survey and Land Research Centre.

# 2.1.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 885 AND ADDITIONAL LAND

#### The ALC grades occurring on this site are as follows:

Grade/Subgrade	<u>Hectares</u>	Percentage of Total Area
1		
2	7.7	100.0
3a		
3b		
4		
5		
(Sub total)	(7.7)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	7.7	100

#### 2.1.6 Grade 2

All of this site falls in Grade 2. The soils are generally well drained, falling in Wetness Class I, and consist of medium clay loam topsoils overlying medium clay loam, medium silty clay loam or heavy clay loam subsoils in most cases. Layers of chalky gravel occur at depth in places and slight soil droughtiness is the factor which limits this land to Grade 2.

# 2.2 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 889, AND ADDITIONAL LAND

## 2.2.1 Location

This site lies around Grid Reference TA 024 568, on the south-west side of Driffield. It covers a total area of 8.9 ha, including an area of additional land to the north-east.

#### 2.2.2 Land Use and Relief

At the time of survey most of the site was under winter cereals and the remainder was under permanent grass.

Site altitude varies from 15m AOD in the south to 18m AOD in the north and the land is level to gently sloping  $(0-2^\circ)$  with a southerly aspect.

#### 2.2.3 Climate

Grid Reference	: TA 024 568
Altitude (m)	: 15
Accumulated Temperature above	0°C
(January - June)	: 1374 day °C
Average Annual Rainfall (mm)	: 672
Climatic Grade	: 1
Field Capacity Days	: 164
Moisture Deficit (mm) Wheat	: 103
Moisture Deficit (mm) Potatoes	: 94

# 2.2.4 Geology, Soils and Drainage

This site is underlain by Cretaceous Chalk over which lie thick deposits of chalky drift.

The soils are well or, in places, moderately well drained, falling in Wetness Classes I or II. Typically medium clay loam or medium silty clay loam topsoils overlie similar subsoils. Slowly permeable heavy clay loam subsoils occur at about 65cm depth in places but many subsoils are moderately to extremely stony, containing between 30% and 80% rounded chalk stones.

These soils correspond to the Coombe 1 Association as mapped by the Soil Survey and Land Research Centre

# 2.2.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 889 AND ADDITIONAL LAND

#### The ALC grades occurring on this site are as follows:

Grade/Subgrade	<u>Hectares</u>	Percentage of Total Area
1		
2	8.9	100.0
3a		
3b		
4		
5		
(Sub total)	(8.9)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	8.9	100

#### 2.2.6 Grade 2

All of this site has been mapped as Grade 2. The soils are well or, in places, moderately well drained, falling in Wetness Classes I and II. Typically medium clay loam or medium silty clay loam topsoils overlie similar subsoils, although slowly permeable heavy clay loam subsoils occur in places at about 65cm depth. Topsoils are very slightly to slightly stony, containing 4-7% very small to medium chalk stones and flints while subsoils are slightly to extremely stony, with between 10% and 80% very small to medium rounded chalk stones. Slight soil droughtiness or, in places, slight soil wetness limit this land to Grade 2.

# 2.3 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 896 AND ADDITIONAL LAND

#### 2.3.1 Location

This land lies around Grid Reference TA 014 578, on the west side of Driffield. it covers a total of 5.8 ha, including an area of additional land to the south-west.

### 2.3.2 Land Use and Relief

At the time of survey, all of the land was in agricultural use, being either arable land or grassland.

Site altitude varies from 19m AOD in the south-west to 22m AOD in the north and the land is level to gently sloping  $(1-2^\circ)$  with a south-westerly aspect.

#### 2.3.3 <u>Climate</u>

Grid Reference	: TA 014 578
Altitude (m)	: 20
Accumulated Temperature above 0	°C
(January - June)	: 1368 day °C
Average Annual Rainfall (mm)	: 683
Climatic Grade	: 1
Field Capacity Days	: 169
Moisture Deficit (mm) Wheat	: 102
Moisture Deficit (mm) Potatoes	: 93

## 2.3.4 Geology, Soils and Drainage

This land is underlain by Cretaceous Chalk over which lie deposits of loamy drift.

The soils are generally well drained (Wetness Class I) although some moderately well drained (Wetness Class II) profiles occur in places. Typically medium clay loam topsoils overlie medium clay loam or medium silty clay loam subsoils, with heavy clay loam occurring at depth in places.

The soils correspond to the Hunstanton Association as mapped by the Soil Survey and Land Research Centre

# 2.3.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 896 AND ADDITIONAL LAND

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2	5.8	100.0
3a		
3Ъ		·
4		
5		
(Sub total)	(5.8)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	5.8	100

#### 2.3.6 Grade 2

All of this site has been mapped as Grade 2. The soils are generally well drained (Wetness Class I) although a few profiles are only moderately well drained (Wetness Class II). Typically medium clay loam topsoils overlie medium clay loam or medium silty clay loam subsoils, although slowly permeable heavy clay loam lower subsoils, occur around 60cm depth in places. Topsoils and subsoils are generally very slightly stony, containing around 5% small and medium hard stones and chalks but gravelly horizons containing over 70% small and medium rounded chalk stones are found below 60cm depth in places.

Slight soil droughtiness or slight soil wetness are the factors which limit this land to Grade 2.

# 2.4 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 905

## 2.4.1 Location

This land lies around Grid Reference TA 031 571 on the south side of Driffield. It covers a total area of 9.1 ha.

#### 2.4.2 Land Use and Relief

At the time of survey all of this site was under permanent grass, with the exception of a small area of woodland in the north.

Site altitude varies from 12m AOD in the west to 15m AOD in the north and the land is level.

## 2.4.3 <u>Climate</u>

Grid Reference	: TA 031 571
Altitude (m)	: 14
Accumulated Temperature above 0	°C .
(January - June)	: 1374 day °C
Average Annual Rainfall (mm)	: 670
Climatic Grade	: 1
Field Capacity Days	: 163
Moisture Deficit (mm) Wheat	: 103
Moisture Deficit (mm) Potatoes	: 94

# 2.4.4 Geology, Soils and Drainage

This site is underlain by Cretaceous Chalk over which lie thick deposits of chalky drift (in the north) and gravel terrace deposits (in the south).

The soils are generally well drained (Wetness Class I) but some imperfectly drained profiles (Wetness Class III) occur in the north. Generally medium clay loam or medium silty clay loam topsoils overlie medium clay loam, medium silty clay loam, sandy clay loam or sandy loam subsoils. Heavy clay loam subsoils occur in parts of the north of the site.

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

# 2.4.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 905

Grade/Subgrade	<u>Hectares</u>	Percentage of Total Area
1		
2	7.1	78.0
3a	1.8	19.8
3Ъ		
4		
5		
(Sub total)	(8.9)	(97.8)
Urban		
Non Agricultural		
Woodland	0.2	2.2
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(0.2)	(2.2)
TOTAL	9.1	100

The ALC grades occurring on this site are as follows:

/

#### 2.4.6 <u>Grade 2</u>

The centre and south of this site fall in Grade 2. The soils are well drained, falling in Wetness Class I, and consist of medium clay loam or medium silty clay loam topsoils and subsoils. The subsoils are moderately to extremely stony, containing between 20% and 80% small and medium rounded chalk stones, and slight soil droughtiness is the factor restricting this land to Grade 2.

#### 2.4.7 Subgrade 3a

The north of Site 905 falls in Subgrade 3a. The soils are imperfectly drained, falling in Wetness Class III, and consist of medium silty clay loam topsoils and upper subsoils overlying gleyed and slowly permeable heavy clay loam lower subsoils at around 45cm depth. In this case soil wetness is the factor limiting the ALC grade.

#### 2.4.8 Woodland

A belt of woodland occurs in the north of the site.

# 2.5 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 909 AND ADDITIONAL LAND

#### 2.5.1 Location

This site lies around Grid Reference TA 033 570, on the south side of Driffield, and covers a total area of 5.3 ha, including an additional area in the north-west.

## 2.5.2 Land Use and Relief

At the time of survey 70 % of the site was under winter cereals or permanent grass while 30% consisted of Urban land, Non Agricultural Land and Agricultural Buildings.

The site lies at approximately 14m AOD and the land is level.

#### 2.5.3 <u>Climate</u>

Grid Reference	: TA	033 570
Altitude (m)	: 14	
Accumulated Temperature above 0	°C	
<u>(</u> January - June)	: 13'	74 day °C
Average Annual Rainfall (mm)	: 66'	7
Climatic Grade	: 1	
Field Capacity Days	: 16	1
Moisture Deficit (mm) Wheat	: 103	3
Moisture Deficit (mm) Potatoes	: 94	

#### 2.5.4 Geology, Soils and Drainage

The land is underlain by Cretaceous Chalk over which lie gravel terrace deposits.

The soils are well drained (Wetness Class I) and consist of medium textured topsoils and subsoils, typically medium clay loams or medium silty clay loams. Layers of chalky gravel occur at depth in places.

These soils correspond to the Frome Association as mapped by the Soil Survey and Land Research Centre

# 2.5.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 909 AND ADDITIONAL LAND

# The ALC grades occurring on this site are as follows:

Grade/Subgrade	<u>Hectares</u>	Percentage of Total Area
1		
2	3.7	69.8
3a		
3b		
4		
5		
(Sub total)	(3.7)	(69.8)
Urban	0.5	9.4
Non Agricultural	0.5	9.4
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.6	11.4
Open Water		
Land not surveyed		
(Sub total)	(1.6)	(30.2)
TOTAL	5.3	100
		<u> </u>

## 2.5.6 <u>Grade 2</u>

All of the agricultural land on this site falls in Grade 2. The soils are well drained (Wetness Class I) and consist of medium clay loam or medium silty clay loam topsoils and subsoils. Moderately to very stony subsoils, containing up to 70% small and medium rounded chalk stones occur below 40cm depth in places and the land is limited to Grade 2 by slight soil droughtiness and a pattern restriction.

## 2.5.7 <u>Urban</u>

This category includes two houses and associated land in the north of the site.

#### 2.5.8 Non Agricultural

An area of Non Agricultural land adjoining Chesney Farm has been mapped where the land is used for storing bales of straw, old agricultural machinery etc.

### 2.5.9 Agricultural Buildings

This category includes Chesney Farm, in the east of the site.

#### 2.6 AGRICULTURAL LAND CLASSIFICATION REPORT ON DRIFFIELD SITE 910

#### 2.6.1 Location

This site lies around Grid Reference TA 035 572 and covers a total area of 3.3 ha. It is located on the south side of Driffield.

#### 2.6.2 Land Use and Relief

At the time of survey all of this land was under winter cereals.

The site lies at an altitude of 14m AOD and the land is level.

#### 2.6.3 <u>Climate</u>

Grid Reference	:	TA 035 572
Altitude (m)	:	14
Accumulated Temperature above 0°C	2	
(January - June)	:	1374 day °C
Average Annual Rainfall (mm)	:	667
Climatic Grade	:	1
Field Capacity Days	:	161
Moisture Deficit (mm) Wheat	:	104
Moisture Deficit (mm) Potatoes	:	94

#### 2.6.4 Geology, Soils and Drainage

Again, the site is underlain by Cretaceous Chalk and overlain by gravel terrace deposits.

The soils are well drained (Wetness Class I) and consist of medium clay loam topsoils and upper subsoils overlying heavy clay loam or medium silty clay loam lower subsoils in most cases.

The soils on this site correspond to the Frome Association as mapped by the Soil Survey Land Research Centre.

# 2.6.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 910

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
1	• •	27.0
2	2.9	87.9
3a	0.4	12.1
3b		
4		
5		
(Sub total)	(3.3)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	3.3	100
TOTAL	3.3	100

### 2.6.6 <u>Grade 2</u>

The centre and south of this site fall in Grade 2. The soils are well drained, falling in Wetness Class I, and consist of medium clay loam topsoils and upper subsoils over medium silty clay loam or heavy clay loam lower subsoils. Moderately to very stony subsoils occur in places, containing up to 50% small and medium rounded chalk stones. Slight soil droughtiness and a pattern restriction limit this land to Grade 2.

## 2.6.7 Subgrade 3a

A small area of Subgrade 3a land is found in the north of this site. The soils are well drained falling in Wetness Class I, and consist of very slightly stony medium clay loam topsoils overlying very stony (containing around 50% chalk stones) loamy medium sand subsoils. A more severe soil droughtiness limitation restricts this land to Subgrade 3a.

#### 2.7 AGRICULTURAL LAND CLASSIFICATION REPORT: DRIFFIELD 1066

#### 2.7.1 Location

This site lies to the north and east of East Riding General Hospital, on the east side of Driffield. It lies around Grid Reference TA 034 587 and it covers 7.8 ha. Part of the west of this site had already been surveyed in March 1994 ("East Yorkshire Borough Wide Local Plan, Additional Land East of General Hospital").

#### 2.7.2 Land Use and Relief

At the time of the most recent survey all of this site was under winter cereals.

The land is gently sloping (around 2°) with a south-easterly aspect and site altitude varies from 35m AOD in the north-west to 30m AOD in the south-east.

#### 2.7.3 <u>Climate</u>

Grid Reference	:	TA 034 587
Altitude (m)	:	30
Accumulated Temperature above 0°C	2	
(January - June)	:	1356 day °C
Average Annual Rainfall (mm)	:	683
Climatic Grade	:	1
Field Capacity Days	:	166
Moisture Deficit (mm) Wheat	:	102
Moisture Deficit (mm) Potatoes	:	92

#### 2.7.4 Geology, Soils and Drainage

Deposits of boulder clay overlie Cretaceous Chalk on this site.

The soils are typically imperfectly drained, falling in Wetness Class III, and consist of medium clay loam topsoils over medium or heavy clay loam upper subsoils and slowly permeable heavy clay loam lower subsoils.

The soils correspond to the Burlingham 2 Association as mapped by the Soil Survey and Land Research Centre.

# 2.7.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 1066

The ALC	grades	occurring	on this	site	are as follows	:
	0					

Grade/Subgrade	Hectares	Percentage of Total Area
1		
1		
2		
3a	7.8	100.0
3b		
4		
5		
(Sub total)	(7.8)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	7.8	100

# 2.7.6 Subgrade 3a

All of this site falls in Subgrade 3a. The soils are typically imperfectly drained, falling in Wetness Class III, and consist of medium clay loam topsoils over medium or heavy clay loam upper subsoils and, at about 50cm depth, slowly permeable heavy clay loam lower subsoils. Soil wetness limitations restrict this land to Subgrade 3a.

## 2.8 AGRICULTURAL LAND CLASSIFICATION REPORT: DRIFFIELD SITE 1288

#### 2.8.1 Location

Site 1288 lies on the north side of Driffield, around Grid Reference TA 025 589. It covers a total area of 8.5 ha.

#### 2.8.2 Land Use and Relief

At the time of survey all of the land was under winter cereals.

The site is level to gently sloping  $(0-2^\circ)$  with a south-westerly aspect and its altitude varies from 43m AOD in the centre to 35m AOD in the west.

#### 2.8.3 Climate

Grid Reference	:	TA 025 589
Altitude (m)	:	40
Accumulated Temperature above 0°	С	
(January - June)	:	1345 day °C
Average Annual Rainfall (mm)	:	694
Climatic Grade	:	1
Field Capacity Days	:	170
Moisture Deficit (mm) Wheat	:	100
Moisture Deficit (mm) Potatoes	:	89

#### 2.8.4 Geology, Soils and Drainage

Cretaceous Chalk underlies chalky boulder clay on this site. The soils are moderately well to imperfectly drained, falling in Wetness Classes II and II, and typically consist of medium clay loam or sandy clay loam topsoils overlying heavy clay loam or sandy clay loam subsoils.

The soils correspond to the Burlingham 2 Association as mapped by the Soil Survey and Land Research Centre.

# 2.8.5 AGRICULTURAL LAND CLASSIFICATION - DRIFFIELD SITE 1288

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2	3.7	43.5
3a	4.8	56.5
3Ь		
4		
5		
(Sub total)	(8.5)	(100.0)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		<b>b</b> -
Land not surveyed		
(Sub total)		
TOTAL	8.5	100

## 2.8.6 <u>Grade 2</u>

The west of the site falls in Grade 2. The soils are moderately well drained, falling in Wetness Class II, and typically consist of medium clay loam topsoils overlying gleyed but permeable heavy clay loam subsoils. A slight soil wetness problem limits this land to Grade 2.

#### 2.8.7 Subgrade 3a

The east of this site falls in Subgrade 3a. Profiles are imperfectly drained, falling in Wetness Class III, and consist of sandy clay loam topsoils and subsoils which typically become gleyed and slowly permeable at around 50cm depth. A more severe soil wetness restriction than on the adjoining Grade 2 land further limits this area to Subgrade 3a.

RPT File: 2 FCS 10667-75 Leeds Statutory Group