

A1
Oxfordshire Structure Plan
Land to the North of Didcot

Agricultural Land Classification
Reconnaissance Survey
February 1996

Resource Planning Team
Guildford Statutory Group
ADAS Reading

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LUPU Commission 2390

AGRICULTURAL LAND CLASSIFICATION REPORT

OXFORDSHIRE STRUCTURE PLAN LAND TO THE NORTH OF DIDCOT OXFORDSHIRE

INTRODUCTION

1 This report presents the findings of a reconnaissance Agricultural Land Classification (ALC) survey of approximately 142 hectares of land at Ladygrove Farm, north of Didcot in Oxfordshire. The survey was carried out in February 1996.

2 The survey was commissioned by the Ministry of Agriculture Fisheries and Food (MAFF) Land Use Planning Unit Reading in connection with the preparation of the Oxfordshire Structure Plan. This survey supersedes previous ALC surveys on this land.

3 The work was conducted by members of the Resource Planning Team in the Guildford Statutory Group in ADAS. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF 1988). A description of the ALC grades and subgrades is given in Appendix I.

4 At the time of survey the land use on the site was a mixture of grass, cereals and oilseed rape. The area of Other Land comprises woodland.

SUMMARY

5 The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:20,000. It is accurate at this scale but any enlargement would be misleading.

6 The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1 Area of grades and other land

Grade/Other land	Area (hectares)	% of site	% of Agricultural area
3b	140.8	99.1	100
Other	1.3	0.9	N/A
Total survey area	142.1	100	N/A
Total agricultural area	140.8	N/A	100

7 The fieldwork was conducted at an average density of one boring per four hectares. A total of 34 borings and 2 soil pits was described.

8 All of the agricultural land on the site has been classified as Subgrade 3b moderate quality land. Soil wetness is the key physical limitation to land quality related to profiles of heavy calcareous clay with poorly structured subsoils which cause prolonged wetness in the soil profile and significantly restrict the number of days when the land is in a suitable condition for cultivation, trafficking by machinery or grazing by livestock.

FACTORS INFLUENCING ALC GRADE

Climate

9 Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

10 The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using the standard interpolation procedures (Met Office 1989).

Table 2 Climatic and altitude data

Factor	Units	Values	
Grid reference	N/A	SU530924	SU538912
Altitude	m AOD	50	55
Accumulated Temperature	days C	1462	1456
Average Annual Rainfall	mm	574	560
Field Capacity Days	days	121	119
Moisture Deficit, Wheat	mm	116	115
Moisture Deficit, Potatoes	mm	110	110

11 The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

12 The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR) as a measure of overall wetness and accumulated temperature (AT0 January to June) as a measure of the relative warmth of a locality.

13 The combination of rainfall and temperature at this site mean that there is no overall climatic limitation. There are also no significant local climatic factors. The site is climatically Grade 1.

Site

14 The site is level, varying between 50–55 metres, rising very slightly along the northern boundary. There are no site factors that are limiting.

Geology and soils

15 The most detailed published geological information for the site (BGS 1978) shows the majority of the survey area to be underlain by Lower Cretaceous Gault Clay with a small area of floodplain terrace deposits in the north western corner

16 The most detailed published soils information for the site (SSEW 1983) shows the majority of the survey area to comprise soils of the Denchworth association (slowly permeable seasonally waterlogged clayey soils) with a small area of soils of the Fladbury 1 association in the south (stoneless clayey soils affected by groundwater) and a small area of soils of the Sutton 1 association in the north (well drained fine and coarse loamy soils locally calcareous)

AGRICULTURAL LAND CLASSIFICATION

17 The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1 on page 1

18 The location of the auger borings and pits is shown on the attached sample location map and the details of the soils data are presented in Appendix III

Subgrade 3b

19 All of the agricultural land on the site has been placed in this grade as a result of a significant soil wetness limitation. Two soil pits have been dug and described on the site to demonstrate the slight range of characteristics that exist. Pit 1 is representative of the soils in the south west of the site which are slightly more calcareous than elsewhere. Clay topsoils overlie clay subsoils with clear evidence of shallow gleying and slowly permeable layers. The subsoil structures have been assessed as moderately developed coarse prismatic. The depth to gleying and the slowly permeable layers places these soils in Wetness Class III (see Appendix 2). The calcareous nature of the subsoils does slightly help the drainage in these profiles but the very heavy nature of the topsoil (which has been assessed as having greater than 50% clay content) confirms the significant workability/wetness limitation. Given the prevailing field capacity level (121 days) these wet and heavy soils cannot be classified higher than Subgrade 3b.

20 Pit 2 shows very similar characteristics. However the subsoil is slightly less calcareous and the structures have been assessed as moderately developed angular blocky in nature as opposed to prismatic. The same wetness class and final grade applies. This wetness limitation acts to restrict the flexibility of the land as it reduces the number of days when the soil is in a suitable condition for cultivation, trafficking by machinery or grazing by livestock.

21 A small area of better drained soils exists in the extreme north west of the site (and possibly in the extreme north east where the topography begins to rise) where one boring of stony soils without a shallow slowly permeable layer was described. This boring has been provisionally classified as Subgrade 3a but a separate map unit has not been delineated due to its limited extent. There is a geological change onto terrace deposits which has given rise to this change in soils but the very limited areal extent of these soils on the site has not made it

practicable to map them at the current reconnaissance scale A more detailed field survey may confirm a northern fringe of better land

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SOURCES OF REFERENCE

British Geological Survey (1978) *Sheet No 254 Henley-on Thames*
BGS London

Ministry of Agriculture Fisheries and Food (1988) *Agricultural Land Classification of England and Wales Revised guidelines and criteria for grading the quality of agricultural land* MAFF London

Met Office (1989) *Climatological Data for Agricultural Land Classification*
Met Office Bracknell

Soil Survey of England and Wales (1983) *Sheet 6 South East England*
SSEW Harpenden.

Soil Survey of England and Wales (1983) *Soils and their Use in South East England.*
SSEW Harpenden

APPENDIX I

DESCRIPTIONS OF THE GRADES AND SUBGRADES

Grade 1 Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3 Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

APPENDIX II

SOIL WETNESS CLASSIFICATION

Definitions of Soil Wetness Classes

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Wetness Class	Duration of waterlogging ¹
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years ²
II	The soil profile is wet within 70 cm depth for 31-90 days in most years or if there is no slowly permeable layer within 80 cm depth it is wet within 70 cm for more than 90 days but only wet within 40 cm depth for 30 days in most years
III	The soil profile is wet within 70 cm depth for 91-180 days in most years or if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days but only wet within 40 cm depth for between 31-90 days in most years
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years or if there is no slowly permeable layer present within 80 cm depth it is wet within 40 cm depth for 91-210 days in most years
V	The soil profile is wet within 40 cm depth for 211-335 days in most years
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years

Assessment of Wetness Class

Soils have been allocated to wetness classes by the interpretation of soil profile characteristics and climatic factors using the methodology described in *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land* (MAFF 1988).

¹ The number of days is not necessarily a continuous period

² In most years is defined as more than 10 out of 20 years

APPENDIX III

SOIL DATA

Contents

Sample location map

Soil abbreviations Explanatory Note

Soil Pit Descriptions

Soil boring descriptions (boring and horizon levels)

Database Printout Horizon Level Information

SOIL PROFILE DESCRIPTIONS EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a computer database. This uses notations and abbreviations as set out below.

Boring Header Information

1 **GRID REF** national 100 km grid square and 8 figure grid reference

2 **USE** Land use at the time of survey. The following abbreviations are used:

ARA Arable	WHT Wheat	BAR Barley
CER Cereals	OAT Oats	MZE Maize
OSR Oilseed rape	BEN Field Beans	BRA Brassicae
POT Potatoes	SBT Sugar Beet	FCD Fodder Crops
LIN Linseed	FRT Soft and Top Fruit	FLW Fallow
PGR Permanent Pasture	LEY Ley Grass	RGR Rough Grazing
SCR Scrub	CFW Coniferous Woodland	
DCW Deciduous Wood		
HTH Heathland	BOG Bog or Marsh	FLW Fallow
PLO Ploughed	SAS Set aside	OTH Other
HRT Horticultural Crops		

3 **GRDNT** Gradient as estimated or measured by a hand held optical clinometer

4 **GLEYSPL** Depth in centimetres (cm) to gleying and/or slowly permeable layers

5 **AP (WHEAT/POTS)** Crop adjusted available water capacity

6 **MB (WHEAT/POTS)** Moisture Balance (Crop adjusted AP - crop adjusted MD)

7 **DRT** Best grade according to soil droughtiness

8 If any of the following factors are considered significant 'Y' will be entered in the relevant column:

MREL Microrelief limitation	FLOOD Flood risk	EROSN Soil erosion risk
EXP Exposure limitation	FROST Frost prone	DIST Disturbed land
CHEM Chemical limitation		

9 **LIMIT** The main limitation to land quality. The following abbreviations are used:

OC Overall Climate	AE Aspect	EX Exposure
FR Frost Risk	GR Gradient	MR Microrelief
FL Flood Risk	TX Topsoil Texture	DP Soil Depth
CH Chemical	WE Wetness	WK Workability
DR Drought	ER Erosion Risk	WD Soil Wetness/Droughtiness
ST Topsoil Stoniness		

Soil Pits and Auger Borings

1 **TEXTURE** soil texture classes are denoted by the following abbreviations

S	Sand	LS	Loamy Sand	SL	Sandy Loam
SZL	Sandy Silt Loam	CL	Clay Loam	ZCL	Silty Clay Loam
ZL	Silt Loam	SCL	Sandy Clay Loam	C	Clay
SC	Sandy Clay	ZC	Silty Clay	OL	Organic Loam
P	Peat	SP	Sandy Peat	LP	Loamy Peat
PL	Peaty Loam	PS	Peaty Sand	MZ	Marine Light Silts

For the sand loamy sand sandy loam and sandy silt loam classes the predominant size of sand fraction will be indicated by the use of the following prefixes

F	Fine (more than 66% of the sand less than 0.2mm)
M	Medium (less than 66% fine sand and less than 33% coarse sand)
C	Coarse (more than 33% of the sand larger than 0.6mm)

The clay loam and silty clay loam classes will be sub divided according to the clay content **M** Medium (<27% clay) **H** Heavy (27-35% clay)

2 **MOTTLE COL** Mottle colour using Munsell notation

3 **MOTTLE ABUN** Mottle abundance expressed as a percentage of the matrix or surface described

F few <2% **C** common 2-20% **M** many 20-40% **VM** very many 40% +

4 **MOTTLE CONT** Mottle contrast

F faint indistinct mottles evident only on close inspection
D distinct mottles are readily seen
P prominent mottling is conspicuous and one of the outstanding features of the horizon

5 **PED COL** Ped face colour using Munsell notation

6 **GLEYS** If the soil horizon is gleyed a **Y** will appear in this column If slightly gleyed an **S** will appear

7 **STONE LITH** Stone Lithology One of the following is used

HR	all hard rocks and stones	SLST	soft oolitic or dolimitic limestone
CH	chalk	FSST	soft fine grained sandstone
ZR	soft argillaceous or silty rocks	GH	gravel with non porous (hard) stones
MSST	soft medium grained sandstone	GS	gravel with porous (soft) stones
SI	soft weathered igneous/metamorphic rock		

Stone contents (>2cm >6cm and total) are given in percentages (by volume)

8 **STRUCT** the degree of development size and shape of soil peds are described using the following notation

degree of development **WK** weakly developed **MD** moderately developed
 ST strongly developed

ped size **F** fine **M** medium
 C coarse **VC** very coarse

ped shape **S** single grain **M** massive
 GR granular **AB** angular blocky
 SAB sub angular blocky **PR** prismatic
 PL platy

9 **CONSIST** Soil consistence is described using the following notation

L loose **VF** very friable **FR** friable **FM** firm **VM** very firm
EM extremely firm **EH** extremely hard

10 **SUBS STR** Subsoil structural condition recorded for the purpose of calculating profile droughtiness **G** good **M** moderate **P** poor

11 **POR** Soil porosity If a soil horizon has less than 0.5% biopores >0.5 mm a Y will appear in this column

12 **IMP** If the profile is impenetrable to rooting a Y' will appear in this column at the appropriate horizon

13 **SPL** Slowly permeable layer If the soil horizon is slowly permeable a Y will appear in this column

14 **CALC** If the soil horizon is calcareous a Y' will appear in this column

15 Other notations

APW available water capacity (in mm) adjusted for wheat
APP available water capacity (in mm) adjusted for potatoes
MBW moisture balance wheat
MBP moisture balance potatoes

SAMPLE NO	GRID REF	ASPECT USE	WETNESS		WHEAT		POTS		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB				
1	s 528 918	PGR		035 035	3	3B	086	30 092	18	3B			WE	3B SPL
1P	s 527 918	ARA		030 030	3	3B	091	25 099	11	3B			WE	3B CPLUS50
2	s 527 920	ARA		042 042	2	3A	088	28 094	16	3B			WE	3A SPL
2P	s 538 916	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B CPLUS50
3	SU529 921	ARA		030 030	3	3B	000	0 000	0				WE	3B
4	s 529 923	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
5	SU530 925	ARA		030 030	3	3B	000	0 000	0				WE	3B
6	SU532 925	ARA		030 030	2	3A	000	0 000	0	3A			WD	3A
7	s 533 924	ARA		035 035	3	3B	084	32 090	20	3B			WE	3B
8	s 533 922	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
9	s 531 922	ARA		025 025	3	3B	082	34 088	22	3B			WE	3B SPL
10	532 919	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
11	s 531 918	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
12	s 531 916	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
13	529 919	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
14	s 538 912	ARA		025 025	3	3B	082	34 088	22	3B			WE	3B SPL
15	536 913	ARA		025 025	3	3B	082	34 088	22	3B			WE	3B SPL
16	s 533 913	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
17	s 533 915	ARA		032 032	3	3B	085	31 091	19	3B			WE	3B SPL
18	s 533 917	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
19	534 919	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
20	535 921	ARA		028 028	3	3B	083	33 089	21	3B			WE	3B SPL
21	s 536 923	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
22	s 539 925	ARA		032 032	3	3B	083	33 089	21	3B			WE	3B SPL
23	s 538 921	ARA		032 032	3	3B	081	35 084	26	3B			WE	3B SPL
24	s 538 915	ARA		032 032	3	3B	081	35 084	26	3B			WE	3B SPL
25	536 916	ARA		028 028	3	3B	080	36 083	27	3B			WE	3B SPL
26	s 536 918	ARA		032 032	3	3B	081	35 084	26	3B			WE	3B SPL
27	s 538 920	ARA		032 032	3	3B	081	35 084	26	3B			WE	3B SPL
28	s 538 918	ARA		025 025	3	3B	079	37 082	28	3B			WE	3B SPL
29	s 526 918	ARA		028 028	3	3B	083	33 089	21	3B			WE	3B SPL
30	s 527 919	ARB		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
31	s 539 913	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL
32	535 914	ARA		025 025	3	3B	079	37 082	28	3B			WE	3B SPL
33	s 538 916	ARA		028 028	3	3B	094	22 103	7	3B			WE	3B
34	539 917	ARA		030 030	3	3B	084	32 090	20	3B			WE	3B SPL

SAMPLE	DEPTH	TEXTURE	COLOUR	-MOTTLES			PED		STONES			STRUCT/	SUBS					
				COL	ABUN	CONT	COL	GLE	2	6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0 35	c	10YR41 00						0	0	0							
	35 60	c	10YR51 00	000C00	00	C		Y	0	0	0			P	Y		Y	
1P	0 30	c	10YR41 00						0	0	0							
	30 60	c	25Y 52 00	25Y 68	00	C		Y	0	0	0	MDCOPR	FR	M			Y	Y
2	0 30	c	10YR41 00						0	0	0							
	30 42	c	10YR51 00						0	0	0			M				
	42 60	c	10YR52 00	000C00	00	M		Y	0	0	0			P	Y		Y	
2P	0 30	c	10YR41 00						0	0	0							
	30 60	c	25Y 52 00	10YR58	00	C		Y	0	0	0	MOCOAB	FM	P	Y		Y	Y
3	0 30	c	10yr41 00						0	0	0							
	30 60	c	25y 52 00	00oc00	00	C		Y	0	0	0			P	Y		Y	
4	0 30	c	10y 42 00						0	0	0							
	30 60	c	25y 52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
5	0 30	c	10yr41 00						0	0	0							
	30 60	c	25y 52 00	000C00		C		Y	0	0	00	0		P	Y		Y	
6	0 30	c	10y 42 00						0	0	h	2						
	30 42	c	10yr53 00	000C00	00	C		Y	0	0	h	2			M			
	42 60	hc1	10y 54 00						0	0	h	25			M			Imp Stones
7	0 35	c	10YR42 00						0	0	HR	2						
	35 60	c	10YR53 00	000C00	00	M		Y	0	0	HR	2			P	Y		Y
8	0 30	c	10YR41 00						0	0	0							
	30 60	c	25Y 52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
9	0 25	c	10YR42 00						0	0	0							
	25 60	c	10YR52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
10	0 30	c	10YR41 00						0	0	0							
	30 60	c	10YR52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
11	0 30	c	10YR41 00						0	0	0							
	30 60		10YR51 00	000C00	00	C		Y	0	0	0			P	Y		Y	
12	0 30	c	10YR41 00						0	0	0							
	30 60	c	25Y 52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
13	0 30	c	10YR41 00						0	0	0							
	30 60	c	25Y 52 00	000C00	00	C		Y	0	0	0			P	Y		Y	
14	0 25	c	10YR41 00						0	0	0							
	25 60	c	25Y 52 00	000C00	00	C		Y	0	0	0			P	Y		Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES			PED		STONES			STRUCT/	SUBS				
				COL	ABUN	CONT	COL	GLE	2	6	LITH	TOT	CONSIST	STR	POR	IMP	SPL
15	0 25	c	10YR41 00						0	0	0						
	25 60	c	10YR52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
16	0 30	c	10YR41 00						0	0	0						
	30 60	c	10YR52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
17	0 32	c	10YR42 00						0	0	0						
	32 60	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
18	0 30	c	10YR42 00						0	0	0						
	30 60		10YR52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
19	0 30	c	10YR42 00						0	0	0						
	30 60		25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
20	0 28	c	10YR42 00						0	0	0						
	28 60	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
21	0 30	c	10YR42 00						0	0	0						
	30 60	c	25Y 62 00	000C00	00	C		Y	0	0	0		P	Y		Y	
22	0 32		10YR42 00						0	0	HR	2					
	32 60	c	25Y 62 00	000C00	00	C		Y	0	0	HR	2		P	Y		Y
23	0 32	c	10YR42 00						0	0	0						
	32 55	c	25Y 62 00	000C00	00	C		Y	0	0	0		P	Y		Y	
24	0 32		10YR41 00						0	0	0						
	32 55	c	10YR52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
25	0 28	c	10YR52 00						0	0	0						
	28 55	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
26	0 32	c	10YR52 00						0	0	0						
	32 55	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
27	0 32		10YR52 00						0	0	0						
	32 55	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
28	0 25		10YR52 00						0	0	0						
	25 55	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
29	0 28	c	10YR41 00						0	0	0						
	28 60	c	25Y 52 00	000C00	00	C		Y	0	0	0		P	Y		Y	
30	0 30	c	10YR41 00						0	0	0						
	30 60		25Y 52 00					Y	0	0	0		P	P		Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES			PED		STONES			STRUCT/	SUBS				
				COL	ABUN	CONT	COL	GLE	2	6	LITH	TOT	CONSIST	STR	POR	IMP	SPL
31	0 30	c	10YR41 00						0	0	0						
	30 60	c	25Y 52 00	000C00	00 C				Y	0	0	0		P	Y		Y
32	0 25	c	10YR41 00						0	0	0						
	25 55	c	25Y 52 00	000C00	00 M				Y	0	0	0		P	Y		Y
33	0 28	c	10YR41 00						0	0	0						
	28 50	c	25Y 52 00	000C00	00 C				Y	0	0	0		P	Y		Y
	50 60	c	25Y 52 00	000C00	00 C				Y	0	0	HR 15		M			Y Y
	60 75	c	25Y 52 00	000C00	00 C				Y	0	0	0		P	Y		Y
34	0 30	c	10YR41 00						0	0	0						
	30 60	c	25Y 52 00	000C00	00 C				Y	0	0	0		P	Y		Y

SOIL PIT DESCRIPTION

Site Name OXFORDSHIRE SP N DIDCOT Pit N mbe 1P

Grid Reference s 527 918 Average Annual Rainfall 574 mm
 Accumulated Temperature 1462 degree days
 Field Capacity Level 121 days
 Land Use Arable
 Slope and Aspect degrees

HORIZON	TEXTURE	COLOUR	STONES	2	TOT STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0 30	C	10YR41 00	0		0						
30 60	C	25Y 52 00	0		0		C	MCP	FR	M	Y

Wetness Grade 3B
 Wetness Class III
 Gleying 030 cm
 SPL 030 cm

Drought Grade 3B
 APW 091mm MBW 25 mm
 APP 099mm MBP 11 mm

FINAL ALC GRADE 3B
 MAIN LIMITATION Wetne

SOIL PIT DESCRIPTION

Site Name OXFORDSHIRE SP N DIDCOT P t N mbe 2P

Grid Reference s 538 916 Average Annual Rainfall 574 mm
 Accumulated Temperature 1462 degree d ys
 Field Capacity Limit 121 d ys
 Land Use Arable
 Slope and Aspect degrees

HORIZON	TEXTURE	COLOUR	STONES	2	TOT STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0 30	C	10YR4/1 00	0		0						
30 60	C	25Y 5/2 00	0		0		C	MCAB	FM	P	Y

Wetness Grade 3B
 Wetness Class III
 Gleying 030 cm
 SPL 030 cm

Drought Grade 3B
 APW 084mm MBW 32 mm
 APP 090mm MBP 20 mm

FINAL ALC GRADE 3B
 MAIN LIMITATION Wetness