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AYLESBURY VALE LOCAL PLAN
LAND EAST OF BUCKINGHAM

Agricultural Land Classification

September 1996

Resource Planning Team
Guildford Statutory Group
ADAS Reading

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AGRICULTURAL LAND CLASSIFICATION REPORT

AYLESBURY VALE LOCAL PLAN LAND EAST OF BUCKINGHAM

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of approximately 62 ha of land on the eastern fringe of Buckingham. The survey was carried out during September 1996.
2. The work was commissioned by the Ministry of Agriculture, Fisheries and Food's (MAFF) Land Use Planning Unit in Reading, in connection with their statutory input to the Aylesbury Vale Local Plan. This survey supersedes any previous ALC information for this land, including a detailed survey undertaken in 1988 (ADAS Ref: 0301/23/88), which was carried out prior to MAFF's revision of its ALC guidelines.
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 permanent or ley grassland and cereals, most of which was stubble. The areas mapped as Other include farm buildings and part of a disused canal

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10,000 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)	% Total site area	% Surveyed Area
2	23.5	37.7	41.4
3a	7.1	11.4	12.5
3b	25.8	41.5	45.4
4	0.4	0.6	0.7
Other land	5.5	8.8	-
Total surveyed area	56.8	91.2	100
Total site area	62.3	100	-

7. The fieldwork was conducted at an average density of 1 boring per hectare. A total of 55 borings, 4 topsoil stone sievings and 5 soil pits were described.

8. There is a complicated pattern of land quality across the site due to the variation in soils and geology in this area. The land quality includes Grade 2 (very good quality), Subgrades 3a and 3b (good to moderate quality, respectively) and Grade 4 (poor quality).

9. The south east and north west sections of the site contain the best quality land, Grade 2. Here, soil droughtiness or soil wetness is the main limitation which causes the slight downgrading. The stony nature of many of the subsoils slightly restricts the amount of water that is available for extraction by crops. At some points, deep clay subsoils slightly restrict the drainage of the profile, causing slight wetness and workability restrictions.

10. Two areas of Subgrade 3a have been mapped. A small unit in the west picks out an area with very high subsoil stone contents that cause a significant soil droughtiness limitation. The larger unit in the east defines an area where the topsoil stone contents are high enough to cause a downgrading due to the impact that stoniness will have on the wear and tear of machinery and crop establishment and quality.

11. The central part of the site has been classified as Subgrade 3b, along the floodplain of the River Great Ouse. Most of these soils experience a soil wetness limitation related to shallow clay subsoils that significantly obstruct the drainage. In the north of the site, an area of steep gradients limits this land to Subgrade 3b. Associated with this area, some even steeper land is classified as Grade 4.

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		
		SP713333	SP711337	SP710344
Grid reference	N/A	SP713333	SP711337	SP710344
Altitude	m, AOD	80	75	90
Accumulated Temperature	day°C (Jan-June)	1405	1411	1394
Average Annual Rainfall	mm	675	675	680
Field Capacity Days	days	143	144	145
Moisture Deficit, Wheat	mm	105	106	104
Moisture Deficit, Potatoes	mm	97	97	95
Overall climatic grade	N/A	Grade 1	Grade 1	Grade 1

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 local climatic factors, such as exposure or frost risk, affecting the site. The site is climatically Grade 1.

Site

14. The majority of the site occupies the floodplain of the River Great Ouse and its associated terraces and side slopes. Gradient is a significant factor on the land in the extreme north of the site, but microrelief is not considered to be a significant factor by itself. No data on flooding were available, but this is also not considered to be a limiting factor, as the majority of the immediate floodplain already falls into poorer quality land because of soil limitations.

Geology and soils

15. The published geological information for the site (BGS, 1873) shows alluvium around the River Great Ouse, with drift clay and gravel to the north and with Cornbrash deposits to the south of Bourton Road.

16. The published soils information for the site (SSEW, 1983) shows soils of the Fladbury 1 Association along the river (stoneless, clayey soils, in places calcareous, variably affected by groundwater) with soils of the Oxpasture Association over much of the rest of the site (fine loamy over clayey, and clayey, with slowly permeable subsoils and slight seasonal waterlogging).

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, 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.

Grade 2

19. Two distinct blocks of Grade 2 occur on the site, one in the south and one in the north west. Soil Pits 4 and 5 are typical of the range of soils that occur in the southern block. Auger borings around Pit 4 were all impenetrable at shallow depths. The pit has revealed that the soil resource extends to depth and that soil droughtiness is the main limiting factor. Non-calcareous medium clay loams overlie subsoils of similar texture, which change into medium sandy loams from approximately 80 cm. The soils show no evidence of wetness and are

placed in Wetness Class I. Stone contents are in the range 10–24% hard rock throughout the profile. These stone contents, in conjunction with the textures and the moderate subsoil structural conditions, create a slight soil droughtiness limitation. This means that there is an inadequate supply of available water during key periods of the growing season; crop growth and crop yield will therefore be affected. The soil pit was dug to 80 cm, and then the soil resource was examined to 100 cm by soil auger; at 100 cm, the profile became impenetrable, and is possibly stonier beneath this depth.

20. Stone contents in the borings around Pit 5 were all less than elsewhere in this mapping unit, so the soil resource could be examined to depth. Here, soil wetness is the main limiting factor. The pit again shows non-calcareous medium clay loam topsoils, this time changing into heavy clay loam subsoils, and then into clay horizons at depth. There is evidence of gleying within 40 cm and a slowly permeable structure has been assumed from 100 cm. These soils are therefore placed in Wetness Class II and this, in combination with the topsoil texture and the field capacity day level, restricts this land to Grade 2. There is some variation in this area, as some of the soils show very little evidence of wetness.

21. The unit of Grade 2 in the north-west of the site comprises very slightly stony (2% total flint) medium clay loam topsoils over slightly to moderately stony (10–22% flint), heavy clay loam upper subsoils. At a moderate depth (50–85cm), some borings became impenetrable to the soil auger. However, Pit 1 revealed that the soil resource continues to depth with a mixture of medium and heavy clay loams or clays and a similar stone content to those horizons above (14–25% total stone). All of the horizons are moderately well structured and show no signs of soil wetness until deep within the profile (75–110cm depth). These are therefore consistent with Wetness Class I. In this slightly cool and dry local climatic regime, the combined affects of soil texture and stone contents act to reduce the amount of profile available water for crops. This leads to a minor soil droughtiness limitation.

Subgrade 3a

22. Two units of this Subgrade occur on the site, one on either side of the floodplain, on the higher land. The larger unit, on the eastern side, was often impenetrable to the auger and has been downgraded on the basis of a variable topsoil stoniness limitation.

23. The unit of Subgrade 3a in the west occupies an area of higher ground where the soils are impenetrable to the soil auger at 30cm depth. Pit 2 is typical of this area, comprising a very slightly stony (5% total flint) medium clay loam topsoil over a very stony (50% total flint) heavy clay loam upper subsoil. At 70cm depth the profile again became impenetrable due to the stony nature of the soils and the extremely dry conditions at the time of survey. However, it is assumed that the soil resource is likely to continue, with a similar stone content, to at least 120cm depth. No signs of soil wetness were visible within the profile. In this local climatic regime the combination of these soil textures with a high stone content acts to reduce the water holding capacity of the soil, thus adversely affecting the level and consistency of crop growth and yields and causing a moderate soil droughtiness limitation.

Subgrade 3b

24. One large map unit of Subgrade 3b crosses the site, mostly including the alluvial land but also incorporating some of the adjacent higher land. The alluvial soils experience a significant soil wetness limitation, related to shallow gleying which is caused by slowly permeable subsoils. Pit 3 is representative of the soils in this area and illustrates a shallow topsoil (12 cm) of medium clay loam texture, overlying an upper subsoil of heavy clay loam which changes into a slowly permeable clay at approximately 26 cm. The subsoil structures are strongly developed and coarse prismatic. This profile is placed in Wetness Class IV and this, in combination with the topsoil texture and the field capacity level, limits the land to Subgrade 3b. This degree of wetness will affect crop germination and growth, and will significantly restrict the number of days when the soil is in a suitable condition for cultivation, trafficking by machinery or grazing by livestock.

25. Some variability occurs within this soil unit where the profiles are either disturbed or occur on the levees, adjacent to the River Great Ouse. The latter are of better quality due to the slowly permeable clay occurring slightly deeper and thus reducing the affects of soil wetness. This is probably due to the additional of soil either from dredging or from flooding. The disturbed area, on the other hand, is of poorer quality due to extremely shallow soils and micro-relief. The shallow soil depth will reduce the amount of profile available water for crops while the microrelief restricts the affective use of some agricultural machinery. These profiles are, however, too limited in number and extent to map separately so have been included in the Subgrade 3b unit.

26. The Subgrade 3b land in the extreme south-west is out of the floodplain but also contains soils with shallow gleying and slowly permeable clay subsoils.

27. The Subgrade 3b land in the extreme north of the site is limited by gradient. The angle of slope ranges from 7.5-10 degrees thus restricting the safe and affective use of some agricultural machinery.

Grade 4

28. This map unit identifies a very small area where gradient is the limiting factor, with slopes in the range 11-18 degrees.

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SOURCES OF REFERENCE

British Geological Survey (1873) *Sheet No. XLV*.
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, Soils of South East England*.
SSEW: Harpenden.

Soil Survey of England and Wales (1984) *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. **GLEYS/SPL:** 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	GLEY SPL	CLASS	GRADE	AP	MB	AP	MB					
1P	SP70903420	OTH S	01		1	1	137	31	107	10	2		DR	2	BORDER 1
1S	SP71203385	CER			1	1		0		0			TS	3A	
2P	SP70903400	STU NE	02		1	1	078	-28	085	-12	38		DR	3A	At Boring 21
2S	SP71253380	CER			1	1		0		0			TS	2	
3	SP71003440	PGR SE	07		1	1	175	69	113	16	1		GR	3B	TS STONE
3P	SP71003370	PGR		012 026	4	3B	084	-22	090	-7	38	Y	WE	3B	Q FLOOD
3S	SP71203395	CER			1	1		0		0			TS	3A	
4	SP71103440	PGR			1	1	076	-30	076	-21	38		DR	3B	DISTURBD
4P	SP71303365	LEY			1	1	116	10	098	1	2		DR	2	PITBOCM
4S	SP71303395	CER			1	1		0		0			TS	3A	
5	SP71203440	PGR		018 018	4	3B		0		0			WE	3B	ALLUVIUM
5P	SP71203335	ARA		038 100	2	2	134	28	107	10	2		WE	2	
6	SP70803430	PGR SW	03		1	1	128	22	103	6	2		DR	2	Q STONE
7	SP70903430	PGR SE	06		1	1	059	-47	059	-38	38		DR	3A	Q Like 2P
8	SP71003430	PGR SE	02	110 110	1	1	159	53	109	12	1			1	Q STONES
9	SP71103430	PGR		0 025	4	3B		0		0			WE	3B	QSPL-25
10	SP71173432	PGR		018 070	2	2	134	28	112	15	2		WD	2	Levee
11	SP70803420	OTH S	01		1	1	080	-26	080	-17	38		DR	3A	150 See 1P
12	SP70903420	OTH S	01	0	2	2	091	-15	096	-1	3A		DR	2	160 See 1P
13	SP70983420	PGR			1	1	084	-22	084	-13	38		DR	2	150 See 1P
14	SP71103420	PGR		022 022	4	3B		0		0			WE	3B	
15	SP71203420	PGR			1	1	066	-40	066	-31	38		DR	3A	IX2 QDR
16	SP70803410	STU S	01	075	1	1	114	8	116	19	2		DR	2	Poss Grade 1
17	SP70903410	OTH S	01		1	1	150	44	114	17	1			1	
18	SP71003410	STB		0 028	4	3B	127	21	102	5	2		WE	3B	
19	SP71103410	STB		035 035	4	3B		0		0			WE	3B	
20	SP71203410	CER		065 065	2	2	111	5	111	14	2		WE	2	
21	SP70903400	STB E	01		1	1	049	-57	049	-48	4		DR	4	130 See 2P
22	SP71003400	STB		020 020	4	3B		0		0			WE	3B	
23	SP71103400	PGR		030 030	4	3B		0		0			WE	3B	QSPL-30
24	SP71203400	CER			1	1	088	-18	093	-4	3A		DR	2	IMP QDR
25	SP71303400	CER			1	1	045	-61	045	-52	4		DR	3B	IX3 QDR
26	SP70893390	STB E	01		1	1	151	45	114	17	1			1	
27	SP71003390	PGR		040 075	2	2	139	33	115	18	1		WE	2	Levee
28	SP71103390	PGR		030 030	4	3B		0		0			WE	3B	
29	SP71203390	CER			1	1	081	-25	081	-16	38		DR	3A	IMP QDR
30	SP71303390	CER			1	1	080	-26	080	-17	38		DR	3A	IMPX2QDR
31	SP70903380	STB		095	1	1	155	49	118	21	1			1	
32	SP71003380	PGR		025 025	4	3B		0		0			WE	3B	
33	SP71103380	PGR		030 030	4	3B	105	-1	107	10	3A		WE	3B	
34	SP71203380	LEY		090 090	1	1	136	30	111	14	2		DR	2	
35	SP71303380	LEY			1	1	061	-45	061	-36	38		DR	3A	QDR QTS

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						DRT
36	SP70893370	STB	028	028	4	38	097	-9	102	5	3A		WE	3B		
37	SP71003370	PGR	0	020	4	38		0		0			WE	3B	See 3P	
38	SP71103370	PGR	0		2	2	108	2	114	17	3A		DR	2	I75QDR	
39	SP71203370	LEY			1	1	139	33	111	14	1		TS	2	QTS	
40	SP71303370	LEY			1	1	077	-29	077	-20	3B		DR	3A	SIEVE	
41	SP70893359	STB	060	060	2	2	128	22	109	12	2		ST	2		
42	SP71003360	PGR	020	020	4	38	096	-10	096	-1	3A		WE	3B		
43	SP71103360	PGR			1	1	100	-6	108	11	3A		DR	3A	I65-QDR	
44	SP71203360	PGR			1	1	101	-5	111	14	3A		DR	3A	I70-QDR2	
45	SP71303360	LEY			1	1	078	-28	078	-19	3B		DR	3A	QDR	
46	SP70903352	PGR	NE	01	1	1	041	-65	041	-56	4		DB	4	I22 DISTURBED	
47	SP71003350	PGR	NE	01	1	1	084	-22	084	-13	3B		DR	3B	DISTURBED	
48	SP71103348	PGR			1	1	072	-34	072	-25	3B		DR	3B	I45QDR	
50	SP71303350	PGR			1	1	080	-26	080	-17	3B		DR	3A	IMPX2QDR	
51	SP71023338	PGR	E	02	1	1	087	-19	089	-8	3A		DR	3A	I55 QDR	
52	SP71103340	PGR			025	2	2	103	-3	115	18	3A	DR	3A	I70-QDR2	
54	SP71303340	ARA			1	1	092	-14	098	1	3A		DR	2	JMP	
55	SP71403340	ARA			1	1	117	11	118	21	2		DR	2	Q DR	
56	SP71003330	PGR			025	2	2	149	43	111	14	1	WE	2		
57	SP71103330	PGR	NE	03	060	1	1	156	50	118	21	1		1		
58	SP71203330	ARA			038	2	2	116	10	112	15	2	WE	2		
59	SP71303330	ARA				1	1	101	-5	114	17	3A	DR	2	IMP	
62	SP71003320	PGR			0	020	4	38	082	-24	088	-9	3B	WE	3B	
63	SP71103320	PGR			020	020	4	38	082	-24	088	-9	3B	WE	3B	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS STR POR IMP SPL	CALC			
				COL	ABUN	CONT		GLY	>2	>6					LITH	TOT
1P	0-27	mc1	10YR42 00					1	1	HR	2				Riddled	
	27-53	hc1	10YR44 00					0	0	HR	10	MDCSAB	FR	M	Y	
	53-72	hc1	10YR43 00					0	0	HR	22			M	Y	
	72-90	mc1	10YR54 44					0	0	HR	14	MDCSAB	FR	M		Non-Calc
	90-120	hc1	10YR53 00					0	0	HR	25			M	Y	
1S	0-25	msz1	10YR43 00					12	0	HR	25					
2P	0-29	mc1	10YR42 00					4	2	HR	5				Y	Riddled
	29-70	hc1	10YR43 53					0	0	HR	50			M	Y	Q HCL to depth
2S	0-25	msz1	10YR43 00					6	0	HR	15					
3	0-28	mc1	10YR42 00					0	0	SLST	10				Y	
	28-50	hc1	10YR44 00					0	0	SLST	5			M	Y	
	50-70	mzc1	10YR54 00					0	0	SLST	5			M	Y	
	70-110	fsz1	10YR54 00					0	0		0			M	Y	
	110-120	fsz1	10YR54 00					0	0		0			M	Y	
3P	0-12	mzc1	10YR42 00					0	0	HR	1				Y	Assume HCL = SPL
	12-26	hzc1	10YR53 00	75YR58 00 C			00M00 00 Y	0	0	HR	1			M	Y	but it was too thin
	26-60	c	25Y 62 00	75YR58 00 M			00M00 00 Y	0	0		0	STCPR	FM	P	Y	Y
3S	0-25	msz1	10YR43 00					11	0	HR	25					
4	0-25	mc1	10YR43 00					0	0	HR	1				Y	Q old canal route
	25-35	mc1	10YR54 00					0	0	HR	2			M	Y	
	35-45	hc1	10YR54 00					0	0	HR	5			M	Y	Imp V. stony
4P	0-25	mc1	10YR43 00					3	0	HR	10					
	25-50	mc1	75YR44 00					0	0	HR	20			M		
	50-80	mc1	75YR44 00					0	0	HR	24			M		
	80-100	ms1	75YR34 00					0	0	HR	10			M		
4S	0-25	msz1	10YR43 00					12	0	HR	25					
5	0-18	mzc1	10YR43 00	10YR58 00 F				0	0	HR	1				Y	
	18-70	c	25Y 61 00	10YR58 00 M			00M00 00 Y	0	0	SLST	1			M	Y	Includes shells
5P	0-25	mc1	10YR43 00					2	0	HR	5					
	25-38	mc1	10YR43 00					0	0	HR	5	MCSAB	FR	M		
	38-55	hc1	75YR46 00	75YR46 00 M			00M00 00 Y	0	0	HR	5	MCSAB	FR	M		
	55-78	hc1	10YR52 00	75YR56 00 M			00M00 00 Y	0	0	HR	24			M		
	78-100	c	10YR62 00	75YR56 00 M			00M00 00 Y	0	0	HR	5	MCSAB	FR	M		
	100-120	c	75YR53 00	75YR56 00 C			00M00 00 Y	0	0		0			P	Y	Y
6	0-30	mc1	10YR43 44					0	0	HR	10				Y	
	30-65	hc1	10YR44 00					0	0	HR	15			M	Y	
	65-120	hc1	10YR54 00					0	0	CH	2			P	Y	Y

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC			
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP	SPL	
7	0-25	mc1	10YR42 00						5	2	HR	7				Y			
	25-40	hc1	10YR54 00						0	0	HR	30	M			Y	I lmst/flints		
8	0-30	mc1	10YR42 00						0	0	HR	10				Y			
	30-55	hc1	10YR44 00						0	0	HR	15	M			Y	Sl. Calc		
	55-70	mzc1	10YR43 00						0	0		0	M			Y	Sl. Calc		
	70-110	z1	10YR44 00						0	0		0	M			Y	Sl. Calc		
	110-120	hc1	10YR53 54	75YR46 00 C					Y	0	0		0	P		Y	Y		
9	0-25	mzc1	10YR42 00	10YR58 00 C					Y	0	0	CH	1			Y			
	25-58	hzc1	10YR53 00	10YR58 00 M				00M00	00	Y	0	0	CH	1	P		Y	Y	Heavy
	58-80	c	10YR62 00	10YR58 00 M				00M00	00	Y	0	0	CH	1	P		Y	Y	
10	0-18	mzc1	10YR43 00							0	0	SLST	1				Y		
	18-40	c	10YR52 00	25YR48 00 C					Y	0	0	SLST	1	P			Y		
	40-70	mzc1	10YR42 00	75YR58 00 C					Y	0	0	CH	5	M			Y		
	70-120	c	25Y 62 71	75YR58 00 M				00M00	00	Y	0	0		0	P		Y	Y	
11	0-28	mc1	10YR42 00							0	0	HR	5				Y		
	28-50	hc1	10YR44 00							0	0	HR	10	M			Y	I Q lmst	
12	0-28	mc1	10YR42 00							0	0	HR	5						
	28-55	hc1	10YR44 00							0	0	HR	2	M			Y		
	55-60	hc1	10YR44 00							0	0	HR	30	M			Y	Imp Stony	
13	0-30	mc1	10YR43 00							0	0	HR	2				Y		
	30-50	mc1	10YR44 00							0	0	HR	3	M			Y	Imp Flinty	
14	0-22	mzc1	10YR53 00							0	0	SLST	1				Y		
	22-50	c	25Y 62 00	10YR58 00 M				00M00	00	Y	0	0	SLST	1	P		Y	Y	
	50-70	c	25Y 61 00	75YR58 00 M				00M00	00	Y	0	0	SLST	1	P		Y	Y	
15	0-20	mc1	10YR43 00							0	0	HR	2						
	20-40	hc1	10YR54 00							0	0	HR	5	M					
16	0-25	mc1	10YR43 00							0	0	HR	1				Y	V. Sl. Calc	
	25-65	hc1	10YR44 54							0	0	HR	1	M				Friable	
	65-75	c	10YR56 00							0	0	HR	1	M				Friable	
	75-85	c	10YR44 00	10YR46 00 C					S	0	0	HR	10	M				Imp Stony	
17	0-30	mc1	10YR42 00							0	0	HR	1				Y	Riddled	
	30-88	hc1	10YR44 00							0	0	HR	5	M			Y		
	88-120	mc1	10YR44 00							0	0	HR	8	M					
18	0-28	mzc1	10YR42 00	75YR58 00 C					Y	0	0	HR	1				Y		
	28-120	hc1	10YR72 00	75YR58 00 M					Y	0	0	HR	2	P		Y	Y	Border Clay	
19	0-35	mzc1	10YR42 00							0	0	HR	1				Y		
	35-70	c	25Y 61 00	10YR58 00 M					Y	0	0	SLST	2	P		Y	Y		
	70-85	zc	10YR61 00	25YR48 00 M					Y	0	0	SLST	5	P		Y	Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS			CALC			
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR		POR	IMP	SPL
20	0-25	mc1	10YR43 00						1	0	HR	5						
	25-55	hc1	10YR44 00						0	0	HR	5	M					
	55-65	c	10YR54 00						0	0	HR	2	M					
	65-90	c	10YR53 00	000C00	00	M			Y	0	0	0		P	Y	Y		
21	0-30	mc1	10YR43 00						6	0	HR	10				Y	Imp Lnst	
22	0-20	mzc1	10YR42 00						0	0	SLST	1				Y		
	20-70	c	25Y 61 00	75YR58	00	M			Y	0	0	SLST	1	P		Y	Y	
23	0-30	mc1	10YR42 00						0	0	HR	1				Y		
	30-40	hc1	10YR52 00	75YR58	00	C	00MN00	00	Y	0	0	SLST	2	P		Y	Y	Firm
	40-70	c	25Y 61 00	75YR58	00	M	00MN00	00	Y	0	0	SLST	4	P		Y	Y	Plastic
24	0-28	mc1	10YR43 00						2	0	HR	7						
	28-60	hc1	10YR54 00						0	0	HR	10	M					
25	0-25	msz1	10YR43 00						3	0	HR	6						
26	0-35	mc1	10YR43 00						2	0	HR	4				Y	Riddled	
	35-50	mc1	10YR44 00						0	0	HR	3	M		Y			
	50-95	hc1	75YR54 00						0	0	HR	2	M				V. Sl. Calc	
	95-120	hc1	75YR56 00						0	0	HR	2	M				V. Sl. Calc	
27	0-20	mc1	10YR42 00						0	0	HR	1				Y		
	20-40	mc1	10YR43 00						0	0	HR	1	M		Y	V dry/friable		
	40-75	hc1	10YR53 00	10YR58	00	C	00MN00	00	Y	0	0	SLST	1	M		Y	Friable	
	75-120	c	25Y 62 00	10YR58	00	M	00MN00	00	Y	0	0	SLST	2	P		Y	Y	
28	0-30	mc1	10YR42 00						0	0	HR	1				Y		
	30-70	c	25Y 61 00	75YR58	00	M	00MN00	00	Y	0	0	SLST	1	P		Y	Y	
29	0-25	msz1	10YR43 00						2	0	HR	7						
	25-50	hc1	10YR54 00						0	0	HR	10	M					
30	0-30	msz1	10YR43 00						2	0	HR	7						
	30-48	mc1	10YR44 00						0	0	HR	7	M					
31	0-35	mc1	10YR43 00						0	0	HR	1					Riddled	
	35-80	mc1	10YR54 00						0	0	HR	1	M		Y			
	80-95	hc1	10YR54 00	75YR58	00	F			0	0	SLST	2	M		Y	Friable		
	95-120	hc1	10YR53 00	75YR58	00	C			Y	0	0	SLST	3	M		Y	Friable	
32	0-25	mc1	10YR42 00	10YR58	00	F			0	0	HR	1				Y		
	25-70	c	25Y 61 00	75YR58	00	M	00MN00	00	Y	0	0	SLST	1	P		Y	Y	
33	0-30	mc1	10YR42 00						0	0	HR	1					V. Sl. Calc	
	30-60	c	25Y 52 00	75YR58	00	M	00MN00	00	Y	0	0	HR	1	P		Y	V. Sl. Calc	
	60-80	hc1	25Y 52 00	75YR58	00	M	00MN00	00	Y	0	0	HR	5	M		Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC		
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP	SPL
34	0-25	mc1	10YR43 00						2	0	HR	10						
	25-65	mc1	10YR43 00						0	0	HR	2		M				
	65-90	c	75YR54 00				00MNO0 00		0	0	HR	1		M				
	90-120	c	10YR53 00	00OC00	00	C	00MNO0 00	Y	0	0		0		P	Y		Y	
35	0-30	msz1	10YR43 00						12	0	HR	20						
	30-40	mc1	10YR54 00						0	0	HR	10		M				
36	0-28	mc1	10YR42 00						0	0	HR	1					Y	
	28-50	hzc1	10YR53 00	25Y 48	00	C	00MNO0 00	Y	0	0	SLST	1		P		Y	Y	V. Firm
	50-80	c	25Y 61 00	75YR58	00	M	00MNO0 00	Y	0	0	SLST	1		P		Y	Y	
37	0-20	mzc1	10YR42 00	75YR58	00	C		Y	0	0	HR	1					Y	
	20-30	hzc1	25Y 53 00	75YR58	00	C	00MNO0 00	Y	0	0	SLST	1		P		Y	Y	Firm
	30-70	c	25Y 52 00	75YR58	00	M	00MNO0 00	Y	0	0	SLST	1		P		Y	Y	
38	0-30	mc1	10YR42 00	75YR46	00	C		Y	0	0	HR	1						V. Sl. Calc
	30-55	hc1	10YR52 00	75YR58	00	M	00MNO0 00	Y	0	0	HR	2		M				V. Sl. Calc
	55-75	hc1	10YR53 00	75YR58	00	M	00MNO0 00	Y	0	0	HR	10		M				Imp Flinty
39	0-30	mc1	10YR43 00						6	0	HR	10						
	30-45	mc1	10YR43 00						0	0	HR	5		M				
	45-65	hc1	10YR54 00						0	0	HR	1		M				
	65-120	c	10YR54 00				00MNO0 00		0	0		0		M				
40	0-30	mc1	10YR43 00						2	0	HR	5						
	30-50	mc1	10YR44 00						0	0	HR	20		M				
41	0-30	mc1	10YR42 00						6	0	HR	8					Y	Riddled
	30-60	hc1	10YR53 00	10YR58	00	F			0	0	HR	2		M			Y	
	60-105	hzc1	10YR62 00	75YR68	00	M	00MNO0 00	Y	0	0	HR	1		P		Y	Y	Firm
	105-120	c	25Y 61 00	75YR58	00	M	00MNO0 00	Y	0	0	SLST	1		P		Y	Y	Plastic
42	0-20	mzc1	10YR42 00						0	0	HR	1					Y	
	20-70	hc1	10YR53 00	75YR58	00	C	00MNO0 00	Y	0	0	HR	3		P		Y	Y	
	70-80	hc1	10YR56 00	10YR68	00	C		S	0	0	HR	8		M		Y	Y	Sl. Friable
43	0-30	mc1	10YR42 00						0	0	HR	1						
	30-65	mc1	10YR43 00						0	0	HR	2		M				Imp Flinty
44	0-30	mc1	10YR43 00	75YR58	00	F			0	0	HR	2						
	30-50	hc1	10YR53 00	75YR58	00	F			0	0	HR	5		M				V. Friable
	50-70	hc1	10YR53 00	75YR58	00	F			0	0	HR	15		M				Friable/IFlnty
45	0-30	mc1	10YR43 00						2	0	HR	7						
	30-50	mc1	10YR54 00						0	0	HR	15		M				
46	0-22	mzc1	10YR42 00						0	0	HR	1						I Brick/Flint

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
47	0-20	mzc1	10YR42 00						0	0	HR	1						Undulating
	20-50	mc1	10YR42 00						0	0	SLST	5	M			Y		Imp V. Stony
48	0-25	mc1	10YR43 00						0	0	HR	5						
	25-45	mc1	10YR53 00						0	0	HR	10	M					Imp Flinty
50	0-30	mc1	10YR43 00						2	0	HR	5						
	30-50	mc1	10YR54 00						0	0	HR	10	M					Imp Flinty
51	0-30	mc1	10YR42 00						0	0	HR	3						
	30-55	hc1	10YR43 00						0	0	HR	8	M					Imp Flinty
52	0-25	mc1	10YR42 00						0	0	HR	1						
	25-60	hc1	10YR53 00	75YR58 00	C			Y	0	0	HR	1	M					Friable
	60-70	hc1	10YR53 00	75YR58 00	C			Y	0	0	HR	10	M					Imp Flinty
54	0-32	mc1	10YR43 00						2	0	HR	5						
	32-60	hc1	10YR43 00						0	0	HR	5	M					
55	0-30	mzc1	10YR43 00						2	0	HR	5						
	30-65	mc1	10YR43 00						0	0		0	M					
	65-85	c	75YR54 00						0	0	HR	1	M					
56	0-25	mzc1	10YR43 00						2	0	HR	5						
	25-55	hc1	10YR53 00	000C00 00	C			Y	0	0	HR	5	M					
	55-65	c	10YR53 00	000C00 00	C	00M00 00	Y	0	0	HR	2	P	Y					
	65-120	sc1	10YR56 00	000C00 00	F			Y	0	0	HR	1	M					
57	0-30	mzc1	10YR43 00						2	0	HR	5						
	30-45	mzc1	10YR44 00						0	0	HR	5	M					
	45-60	hc1	10YR54 00	00M00 00	C				0	0	HR	2	M					
	60-120	hc1	10YR56 00	000C00 00	C	00M00 00	S	0	0	HR	1	M						
58	0-30	mc1	10YR42 00						2	0	HR	5						
	30-38	hc1	10YR53 00						0	0	HR	5	M					
	38-70	hc1	10YR53 00	000C00 00	C	00M00 00	Y	0	0	HR	5	M						
	70-90	c	10YR53 00	000C00 00	M	00M00 00	Y	0	0	HR	5	M						
59	0-30	mc1	10YR43 00						2	0	HR	5						
	30-60	hc1	10YR44 00	00M00 00	C				0	0	HR	2	M					
	60-70	c	10YR54 00	00M00 00	C				0	0	HR	1	M					
62	0-20	hzc1	10YR42 00						2	0	HR	5						
	20-60	c	10YR53 00	000C00 00	C	00M00 00	Y	0	0	HR	1	P	Y			Y		
63	0-20	hzc1	10YR43 00						2	0	HR	5						
	20-60	c	10YR53 00	000C00 00	C	00M00 00	Y	0	0	HR	1	P	Y			Y		

SOIL PIT DESCRIPTION

Site Name : AYLESBURY LP E BUCKINGHAM Pit Number : 1P

Grid Reference: SP709 3415 Average Annual Rainfall : 675 mm
 Accumulated Temperature : 1411 degree days
 Field Capacity Level : 144 days
 Land Use :
 Slope and Aspect : 01 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	MCL	10YR42 00	1	2	HR					
27- 53	HCL	10YR44 00	0	10	HR		MDCSAB	FR	M	Y
53- 72	HCL	10YR43 00	0	22	HR				M	Y
72- 90	MCL	10YR54 44	0	14	HR		MDCSAB	FR	M	
90-120	HCL	10YR53 00	0	25	HR				M	Y

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : No SPL

Drought Grade : 2 APW : 137mm MBW : 31 mm
 APP : 107mm MBP : 10 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : AYLESBURY LP E BUCKINGHAM Pit Number : 2P

Grid Reference: SP70903400 Average Annual Rainfall : 675 mm
 Accumulated Temperature : 1411 degree days
 Field Capacity Level : 144 days
 Land Use :
 Slope and Aspect : 02 degrees NE

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 29	MCL	10YR42 00	4	5	HR					Y
29- 70	HCL	10YR43 53	0	50	HR				M	Y

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : No SPL

Drought Grade : 3B APW : 078mm MBW : -28 mm
 APP : 085mm MBP : -12 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : AYLESBURY LP E BUCKINGHM Pit Number : 3P

Grid Reference: SP71003365 Average Annual Rainfall : 675 mm
 Accumulated Temperature : 1411 degree days
 Field Capacity Level : 144 days
 Land Use : Permanent Grass
 Slope and Aspect : degrees NE

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 12	MZCL	10YR42 00	0	1	HR					Y
12- 26	HZCL	10YR53 00	0	1	HR	C			M	Y
26- 60	C	25Y 62 00	0	0		M	STCPR	FM	P	Y

Wetness Grade : 3B Wetness Class : IV
 Gleying : 012 cm
 SPL : 026 cm

Drought Grade : 3B APW : 084mm MBW : -22 mm
 APP : 090mm MBP : -7 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : AYLESBURY LP E BUCKINGHAM Pit Number : 4P

Grid Reference: SP71303365 Average Annual Rainfall : 675 mm
 Accumulated Temperature : 1411 degree days
 Field Capacity Level : 144 days
 Land Use : Ley
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	MCL	10YR43 00	3	10	HR					
25- 50	MCL	75YR44 00	0	20	HR				M	
50- 80	MCL	75YR44 00	0	24	HR				M	
80-100	MSL	75YR34 00	0	10	HR				M	

Wetness Grade : 1 Wetness Class : I
 Gleying : 000 cm
 SPL : No SPL

Drought Grade : 2 APW : 116mm MBW : 10 mm
 APP : 098mm MBP : 1 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : AYLESBURY LP E BUCKINGHM Pit Number : 5P

Grid Reference: SP71203335 Average Annual Rainfall : 675 mm
 Accumulated Temperature : 1411 degree days
 Field Capacity Level : 144 days
 Land Use : Arable
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	MCL	10YR43 00	2	5	HR					
25- 38	MCL	10YR43 00	0	5	HR		MCSAB	FR	M	
38- 55	HCL	75YR46 00	0	5	HR	M	MCSAB	FR	M	
55- 78	HCL	10YR52 00	0	24	HR	M			M	
78-100	C	10YR62 00	0	5	HR	M	MCSAB	FR	M	
100-120	C	75YR53 00	0	0		C			P	

Wetness Grade : 2 Wetness Class : II
 Gleying : 038 cm
 SPL : 100 cm

Drought Grade : 2 APW : 134mm MBW : 28 mm
 APP : 107mm MBP : 10 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Wetness