

**SHROPSHIRE STRUCTURE PLAN
OSWESTRY
LAND AT OLDPORT FARM**

**Agricultural Land Classification
ALC Map and Report**

April 1999

**Resource Planning Team
Northern Region
FRCA Wolverhampton**

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Job Number: 079/98 & 080/98
MAFF Reference: EL 35/11859**

AGRICULTURAL LAND CLASSIFICATION REPORT

SHROPSHIRE STRUCTURE PLAN OSWESTRY, LAND AT OLDPORT FARM

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on land at Oldport Farm, on the northern edge of Oswestry. The land is split into two parts by the A483(T) Gobowen Road and the railway to Oswestry that runs parallel to it. The smaller, western half of the site is located just south of Oldport Farm. The larger eastern half is sandwiched between the A5 (T) and the railway. The survey area overall contains 22.3 ha of land. The survey was made during April 1999.
2. The survey was undertaken by the Farming and Rural Conservation Agency (FRCA)¹ on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF). The survey was carried out in connection with MAFF's statutory input to the Shropshire Structure Plan. This survey supersedes any previous ALC information for this land. Part of the site was surveyed previously by FRCA (then ADAS Statutory) in 1991 for the Oswestry Urban Area Local Plan.
3. The work was conducted by members of the Resource Planning Team in the Northern Region of FRCA. 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 western half of the site was divided into paddocks for horse grazing. The eastern half consisted of grassland and winter cereals. 'Other Land' consisted of a drain, land taken for industrial use and a small area of disturbed land adjacent to the railway.

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.
7. The fieldwork was conducted at an average density of 1 boring per hectare of agricultural land. In total 23 borings and 2 soil pits were described.

¹ FRCA is an executive agency of MAFF and the Welsh Office

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% surveyed area	% site area
1	-	-	-
2	16.9	81	76
3a	2.5	12	11
3b	1.2	6	6
4	0.3	1	1
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	1.4	N/A	6
Total surveyed area	20.9	100	
Total site area	22.3	-	100

8. Grade 2 (very good quality) land occurs throughout the site. Soil wetness is the main limitation to the agricultural use of this land.
9. Subgrade 3a (good quality) land occurs in the south of the site. Soil wetness is the main limitation to the agricultural use of this land.
10. Subgrade 3b (moderate quality) land occurs on higher ground in the west and centre of the site. Gradient is the main limitation to the agricultural use of this land.
11. Grade 4 (poor quality) land occurs on higher ground in the west of the site. Gradient is the main limitation to the agricultural use of this land.

FACTORS INFLUENCING ALC GRADE

Climate

12. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.
13. 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).
14. Climatic criteria are considered first when classifying land. Climate can be overriding in the sense that severe limitations will restrict land to low grades, irrespective of favourable site or soil conditions.

Table 2: Climatic and altitude data

Factor	Units	West of A483	East of A483
Grid reference	N/A	SJ 298 307	SJ 304 307
Altitude	m, AOD	120	115
Accumulated Temperature	day°C (Jan-June)	1350	1355
Average Annual Rainfall	mm	863	858
Field Capacity Days	days	201	200
Moisture Deficit, Wheat	mm	84	85
Moisture Deficit, Potatoes	mm	69	71
Overall climatic grade	N/A	Grade 2	Grade 1

15. 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 (ATO, January to June), as a measure of the relative warmth of a locality.
16. The combination of rainfall and temperature at the site means that land west of the A483 is climatically limited to Grade 2. Land east of the A483 is on the boundary between climate Grade 2 and climate Grade 1. The climate boundary roughly follows the 117m contour. Virtually all of the eastern land is below 117m and therefore has no climatic limitation.

Site

17. The topography is basically gently rolling in nature. However along the far western edge of the site and in the centre of the site adjacent to the railway, the land is more steeply sloping. Where slope angles exceed 7° this results in a gradient limitation to the agricultural use of the land.
18. Microrelief and flooding do not pose any limitation to the agricultural use of the land.

Geology and soils

19. The solid geology of both sites is composed entirely of Upper Carboniferous Coal Measures - British Geological Survey (1972). The drift geology is composed mainly of glacial and post glacial Boulder Clay, with a small area of glacial and post glacial sand and gravel underlying the higher land in the west of the site - British Geological Survey (1975).
20. The soils that have developed west of the A483 are shown by the Soil Survey of England and Wales (1983) to be Wick Series. Soils of the Wick Series have either sandy loam or sandy silt loam topsoils, over loamy sand and sand subsoils. Land in the east of the A483 is shown as Clifton Series soils. Soils of the Clifton Series have either medium clay loam or sandy clay loam topsoils and subsoils.

AGRICULTURAL LAND CLASSIFICATION

21. 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.

Grade 2

22. Land of very good quality occupies 16.9 ha (76 %) of the site and occurs in throughout the site. The soils typically comprise a medium clay loam topsoil, overlying either a medium clay loam or a sandy clay loam subsoil with common stones. No gleying was observed above 70 cm from the surface and there was no slowly permeable layer, resulting in Wetness Class I. With 200-201 field capacity days and medium clay loam topsoils, these profiles are Grade 2. The main limitation to the agricultural use of this land is soil wetness. The relatively high number of field capacity days at this location and clay loam topsoil textures will combine to adversely affect plant growth or impose restrictions on cultivations or grazing by livestock.

Subgrade 3a

23. Land of good quality occupies 2.5 ha (11 %) of the site and occurs in the south of the site. The soils typically comprise a medium clay loam topsoil, overlying either a medium clay loam or a sandy clay loam upper subsoil with common stones, going onto a heavy clay loam or clay lower subsoil at around 70 cm from the surface. Gleying was present in the subsoil between 40 cm and 70 cm of the surface and there was no slowly permeable layer. These profiles are on the boundary between Wetness Classes I and II and have been placed in Subgrade 3a. The main limitation to the agricultural use of this land is soil wetness. The relatively high number of field capacity days at this location and clay loam topsoil textures will combine to adversely affect plant growth or impose restrictions on cultivations or grazing by livestock.

Subgrade 3b

24. Land of moderate quality occupies 1.2 ha (6 %) of the site and occurs on more steeply sloping land in the west and centre. The soil profiles were similar to those described for Grade 2 but gradients of between 7° and 11° were recorded. The main limitation to the agricultural use of this land is gradient. Gradient has a significant effect on mechanical farm operations and the safe and efficient use of machinery.

Grade 4

25. Land of moderate quality occupies 0.3 ha (1 %) of the site and occurs on steeply sloping land in the far west of the site where gradients of between 11° and 18° were recorded. The main limitation to the agricultural use of this land is gradient. Gradient has a significant effect on mechanical farm operations and the safe and efficient use of machinery.

SOURCES OF REFERENCE

British Geological Survey (1972) 1:50,000 scale, *Sheet No 137, Oswestry, Solid Edition*.
BGS: London.

British Geological Survey (1975) 1:50,000 scale, *Sheet No 137, Oswestry, Drift Edition*.
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) *Soils and their Use in Midland and Western 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, cultivation 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.

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program: ALC012

LIST OF BORINGS HEADERS 28/04/99 SHROPSHIRE SP OSWESTRY B

page 1

SAMPLE NO.	GRID REF	ASPECT		GRDNT	GLEYS	—WETNESS—		-WHEAT-		-POTS-		M. REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
		USE	SE			CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD					
3P	SJ29853065	PGR	SE	07	000	1	2	181	97	127	58	1				GR	3B	G2-SOIL
23	SJ29703070	PGR	N	08	000	1	2	131	47	113	44	1				WE	2	
24	SJ29803070	PGR	S	01	000	1	2	127	43	110	41	1				WE	2	HORSES
30	SJ29763060	PGR	SE	08	000	1	2	083	-1	083	14	3A				GR	4	DA-HORSE
31	SJ29803060	PGR	S	01	045	2	3A	110	26	112	43	2				WE	3A	
31A	SJ29823055	PGR		00	029 078	3	3A	126	42	115	46	1				WE	3A	

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED COL.	-----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
3P	0-20	mc1	10YR32 00					3	0	HR	3						
	20-53	mc1	10YR44 00					0	0	HR	10	MDMSB	FR	G			
	53-120	sc1	10YR44 00					0	0	HR	10	MDFSB	VF	G			
23	0-30	mc1	10YR33 00					3	0	HR	3						
	30-100	mc1	10YR44 00					0	0	HR	5				M		
24	0-20	mc1	10YR43 00					2	0	HR	3						
	20-68	mc1	10YR44 00					0	0	HR	6				M		
	68-100	sc1	10YR53 00					0	0	HR	8				M		
30	0-25	mc1	10YR43 00					0	0	HR	3						
	25-50	mc1	10YR44 00					0	0	HR	3				M		
31	0-22	mc1	10YR43 00					0	0	HR	3						
	22-45	mc1	10YR44 00					0	0	HR	5				M		
	45-68	mc1	10YR53 00	10YR46	00	C	Y	0	0	HR	5				M		
	68-80	sc1	10YR53 00	10YR58	00	C	Y	0	0	HR	5				M		
31A	0-29	mc1	10YR32 00					0	0	HR	2						
	29-78	mc1	10YR53 00	10YR58	00	C	Y	0	0	HR	3				M		
	78-100	c	10YR53 00	10YR56	58	M	Y	0	0	HR	1				P		Y

12 DEGREE SLOPE

SAMPLE NO.	GRID REF	ASPECT USE	---WETNESS---				-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	
1P	SJ28603090	PGR SE	05	022	062	3	3A	110	32	110	48	1			WE	3A	
2A	SJ28843100	PGR N	01	022		3	3A	115	37	117	55	1			WE	3A	
2P	SJ28803080	PGR NE		000		1	2	170	92	119	57	1			WE	2	
3	SJ28603090	PGR NE	08	020		3	3A	000	0	000	0				GR	3B	
3A	SJ28803095	PGR NE		025	048	4	3B	100	22	110	48	2			WE	3B	WET
3B	SJ28853100	PGR NE		025	050	4	3B	000	0	000	0				WE	3B	WET
3P	SJ28813095	PGR NE		000	027	4	3B	000	0	000	0				WE	3B	WET
6	SJ28603090	PGR SE	03	022		3	3A	096	18	106	44	2			WE	3A	
7	SJ28703090	PGR SE		022	030	4	3B	106	28	106	44	2			WE	3B	WET
8	SJ28803090	PGR NE	02	058		2	3A	122	44	115	53	1			WE	3A	
12	SJ28803080	PGR W	01	000		3	3A	122	42	115	51	1			WE	3A	
13	SJ28703080	PGR NE		030		3	3A	099	21	110	48	2			WE	3A	GRITTY
14	SJ28803080	PGR SE	06	000		1	2	151	71	114	50	1			WE	2	
15	SJ28903080	PGR SE	06	053		2	3A	113	35	115	53	1			WE	3A	2-3A
16	SJ29003080	PGR NE	04	045		2	3A	109	31	111	49	1			WE	3A	
21	SJ28703070	PGR E		095		1	2	142	62	119	55	1			WE	2	
22	SJ28803070	PGR E	02	000		1	2	129	49	112	48	1			WE	2	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
1P	0-22	mzc1	10YR32 00					4	1	HR	5						
	22-40	mzc1	10YR53 00	10YR56 00	C	00MN00	00	Y	0	0	HR	10	MDCSAB	FR	M		
	40-62	hc1	10YR53 00	10YR58 00	M	00MN00	00	Y	0	0	HR	30	WKMSAB	FR	G		
	62-83	hc1	25 Y53 00	10YR58 00	M	00MN00	00	Y	0	0	HR	30	MDCAB	FM	M	Y	Y
2A	0-22	mzc1	10YR43 00						3	0	HR	3					
	22-56	mzc1	10YR53 00	10YR58 00	C			Y	0	0	HR	5			M		
	56-80	mc1	10YR53 00	10YR56 58	M	00MN00	00	Y	0	0	HR	5			M		
2P	0-24	mc1	10YR32 00						5	1	HR	6					
	24-77	mc1	10YR43 00						0	0	HR	20	MDMSAB	FR	G		
	77-120	mc1	10YR43 53						0	0	HR	10	MDMSAB	FR	G		
3	0-20	mc1	10YR32 00						0	0	HR	5					
	20-30	hc1	10YR53 00	10YR58 00	C			Y	0	0	HR	10			M		
3A	0-25	mzc1	10YR32 00						2	0	HR	3					
	25-48	mzc1	10YR53 00	10YR58 00	C			Y	0	0	HR	3			M		
	48-70	zc	10YR52 53	10YR56 58	M			Y	0	0	HR	1			P		Y
3B	0-25	mc1	10YR31 00	10YR46 00	F				0	0	HR	1					
	25-50	mzc1	10YR52 53	10YR46 58	C			Y	0	0	HR	1			M		
	50-70	zc	10YR51 52	10YR46 00	C			Y	0	0	HR	1			P		Y
3P	0-15	mzc1	10YR41 00	10YR46 00	C			Y	2	0	HR	2					
	15-27	mc1	10YR51 00	10YR46 00	C			Y	0	0	HR	1	MDMSAB	FR	G		
	27-56	zc	10YR52 00	10YR58 00	M			Y	0	0	HR	1	MASSIV	VM	P	Y	Y
6	0-22	mc1	10YR42 00	10YR46 00	F				3	0	HR	5					
	22-38	mc1	10YR53 00	10YR56 00	C			Y	0	0	HR	5			M		
	38-70	mc1	10YR53 00	10YR56 00	M			Y	0	0	HR	15			M		
7	0-22	omc1	10YR31 41	10YR46 00	F				0	0		0					
	22-30	sc1	10YR41 00	10YR56 00	C			Y	0	0		0			M		
	30-50	c	10YR51 00	10YR46 58	M			Y	0	0		0			M		Y

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED COL.	-----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
8	0-25	mzc1	10YR43 00					0	0	HR	5						
	25-58	mc1	10YR53 00	10YR56 00	F			0	0	HR	5			M			
	58-90	mzc1	25 Y53 00	10YR58 00	C		Y	0	0	HR	3			M			
12	0-25	mzc1	10YR42 00	10YR46 00	C		Y	0	0	HR	3						
	25-35	mzc1	10YR43 53	10YR58 00	C		Y	0	0	HR	5			M			
	35-60	mzc1	10YR52 00	10YR58 00	M		Y	0	0	HR	10			M			
	60-90	mc1	10YR53 64	10YR58 00	M		Y	0	0	HR	10			M			
13	0-30	mc1	10YR32 00					3	0	HR	5						
	30-60	mc1	10YR53 00	10YR56 00	C		Y	0	0	HR	8			M			
	60-70	mc1	10YR53 00	10YR58 00	M		Y	0	0	HR	12			M			
14	0-35	mc1	10YR32 00					3	0	HR	5						
	35-60	mc1	10YR43 00					0	0	HR	5			M			
	60-120	mc1	10YR44 54	00MNO0 00	F			0	0	HR	3			M			
15	0-30	mzc1	10YR33 00					1	0	HR	3						
	30-53	mc1	10YR53 54	10YR58 00	F			0	0	HR	5			M			
	53-80	mc1	75YR43 53	10YR58 00	C	00MNO0 00	Y	0	0	HR	10			M			
16	0-25	mc1	10YR33 00					1	0	HR	3						
	25-45	mc1	10YR54 00					0	0	HR	3			M			
	45-80	hc1	10YR43 53	10YR58 00	C		Y	0	0	HR	10			M			
21	0-28	mzc1	10YR42 00					0	0	HR	5						
	28-70	mzc1	10YR54 00	10YR58 00	F			0	0	HR	5			M			
	70-95	mc1	10YR54 00	10YR58 00	F			0	0	HR	10			M			
	95-110	mc1	10YR53 00	10YR58 00	C		Y	0	0	HR	5			M			
22	0-28	mc1	10YR32 00					0	0	HR	5						
	28-100	mc1	10YR43 00					0	0	HR	5			M			

79/98 e 80/98

SAMPLE NO.	GRID REF	ASPECT USE	---WETNESS---				-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	
1	SJ30103110	PGR NE		000	1	2	132	47	115	44	1				WE	2	
1P	SJ30103070	CER NE		000	1	2	136	51	119	48	1				WE	2	
2P	SJ30203070	LEY NW	01	045	1	2	139	54	112	41	1				WE	2	
4	SJ30103090	PGR NE	02	000	1	2	129	44	109	38	1				WE	2	
5	SJ30203090	GRA NW	01	000	1	2	114	29	112	41	2				WD	2	
9	SJ30203080	PGR E	03	000	1	2	134	49	114	43	1				WE	2	
10	SJ30303080	GRA NW	01	000	1	2	106	21	093	22	2				WD	2	
11	SJ30003070	LEY NW	03	000	1	2	145	60	109	38	1				WE	2	
17	SJ30103060	CER SE		000	1	2	097	12	107	36	2				WE	2	DA-70ST
18	SJ30203060	CER SE	02	000	1	2	094	9	102	31	2				WE	2	DA-65ST
19	SJ30203080	GRA N	02	000	1	2	122	37	122	51	1				WE	2	
20	SJ30303080	LEY NW		000	1	2	110	25	112	41	2				WE	2	
25	SJ30003070	CER SE	01	075	1	2	142	57	114	43	1				WE	2	
26	SJ30103070	CER SE	01	000	1	2	132	47	114	43	1				WE	2	
27	SJ30203070	GRA N	01	055	1	2	138	53	113	42	1				WE	2	
27A	SJ30243070	LEY S	01	000	1	2	131	46	113	42	1				WE	2	
28	SJ30303070	LEY NW	03	000	1	2	150	65	113	42	1				WE	2	
29	SJ30403070	LEY N	03	025	2	3A	112	27	114	43	2				WE	3A	SPL
32	SJ30003060	CER SE		060	1	2	133	48	115	44	1				WE	2	
33	SJ30103060	CER SE		000	1	2	129	44	112	41	1				WE	2	
34	SJ30203060	LEY S	01	070	1	2	132	47	114	43	1				WE	2	

END OF VALIDATION REPORT

PROFILE/
HORIZ
DATA

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED COL.	---STONES---			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-30	mc1	10YR33 00					0	0	HR	3						
	30-100	mc1	10YR44 00					0	0	HR	3			M			
1P	0-27	mc1	10YR33 00					2	0	HR	3						
	27-56	sc1	10YR44 00					0	0	HR	7	MDMSAB	FR	G			
	56-100	mc1	75YR44 00	10YR58	00	F		0	0	HR	10	MDCSAB	FM	M			
2P	0-30	mc1	10YR43 00					3	0	HR	5						
	30-45	mc1	10YR44 00					0	0	HR	5	MDCSAB	FR	M			
	45-75	mc1	10YR53 00	10YR58	00	C		Y	0	HR	5	MDCSAB	FR	M			
	75-110	mc1	75YR53 00	75YR56	00	C		Y	0	HR	5	MDCSAB	FR	M			
4	0-25	mc1	10YR43 00					0	0	HR	3						
	25-70	sc1	10YR44 00					0	0	HR	3			M			
	70-100	hc1	75YR44 00	00MN00	00	F		0	0	HR	1			M			
5	0-25	mzc1	10YR42 00					0	0	HR	5						
	25-60	mzc1	10YR53 00					0	0	HR	10			M			
	60-80	mc1	75YR54 00					0	0	HR	20			M			
	80-90	c	75YR43 00					0	0	HR	30			P			
9	0-42	mc1	10YR43 00					0	0	HR	3						
	42-100	sc1	75YR43 00					0	0	HR	3			M			
10	0-25	mc1	10YR43 00					0	0	HR	10						
	25-50	mc1	75YR54 56					0	0	HR	25			M			
	50-70	mc1	75YR54 00					0	0	HR	35			M			
	70-110	mc1	75YR54 00					0	0	HR	50			M			
11	0-32	mc1	10YR43 00					3	0	HR	8						
	32-50	mc1	10YR44 00					0	0	HR	8			M			
	50-70	mc1	75YR44 00					0	0	HR	8			M			
	70-120	sc1	75YR44 00					0	0	HR	8			M			
17	0-32	mc1	10YR33 00					3	0	HR	5						
	32-70	sc1	10YR44 00	10YR58	00	F		0	0	HR	10			M			

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED COL.	---STONES---			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
18	0-26	mc1	10YR33 00					0	0	HR	5						
	26-65	mc1	10YR44 00					0	0	HR	8		M				
19	0-25	mzc1	10YR43 00					0	0	HR	2						
	25-75	mzc1	10YR54 00					0	0	HR	2		M				
	75-85	sc1	75YR44 00	10YR58	00	F		0	0	HR	10		M				
20	0-28	mc1	10YR43 00					3	0	HR	5						
	28-60	mc1	10YR44 00					0	0	HR	5		M				
	60-80	mc1	75YR44 00					0	0	HR	8		M				
25	0-29	mc1	10YR33 00					2	0	HR	3						
	29-75	mc1	10YR44 46					0	0	HR	3		M				
	75-110	mc1	75YR53 00	10YR58	00	C		Y	0	HR	2		M				
26	0-29	mc1	10YR33 00					0	0	HR	3						
	29-90	mc1	10YR44 00					0	0	HR	3		M				
	90-100	hc1	10YR44 46	10YR58	00	F		0	0	HR	2		M				
27	0-28	mzc1	10YR43 00					0	0	HR	2						
	28-55	mc1	10YR54 00					0	0	HR	10		M				
	55-88	mc1	10YR53 00	10YR58	00	C		Y	0	HR	10		M				
	88-110	hc1	10YR53 00	10YR58	00	C		Y	0	HR	10		M				
27A	0-28	mc1	10YR33 43					0	0	HR	5						
	28-80	mc1	10YR44 54					0	0	HR	3		M				
	80-100	mc1	75YR44 00	00MN00	00	C		0	0	HR	3		M				
28	0-35	mc1	10YR43 00					3	0	HR	5						
	35-80	mc1	10YR44 00					0	0	HR	5		M				
	80-120	mc1	75YR44 00	00MN00	00	F		0	0	HR	3		M				
29	0-25	mc1	10YR33 00					0	0	HR	4						
	25-52	mc1	10YR53 00	10YR58	00	C		Y	0	HR	3		M				
	52-80	hc1	10YR51 52	10YR56	58	M	00MN00	00	Y	0	HR	2		M			

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED COL.	---STONES---			STRUCT/ CONSIST	SUBS						
				COL	ABUN	CONT		GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL	CALC
32	0-29	mc1	10YR33 00						3	0	HR	3						
	29-60	mc1	10YR44 00						0	0	HR	2						M
	60-100	mc1	10YR53 00	10YR56 00	M			Y	0	0	HR	2						M
33	0-25	mc1	10YR33 00						5	0	HR	5						
	25-70	mc1	10YR44 00						0	0	HR	5						M
	70-100	mc1	75YR44 46						0	0	HR	5						M
34	0-35	mc1	10YR33 43						3	0	HR	5						
	35-70	mc1	10YR44 00						0	0	HR	3						M
	70-80	mc1	75YR43 53	75YR58 00	C		00MNO0 00	Y	0	0	HR	3						M
	80-100	hc1	75YR53 43	75YR58 00	C			Y	0	0	HR	3						M