SHROPSHIRE STRUCTURE PLAN
SHIFNAL
LAND AT NEW PARK FARM

Agricultural Land Classification
ALC Map and Report

July 1999

Resource Planning Team
Northern Region
FRCA Wolverhampton

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AGRICULTURAL LAND CLASSIFICATION REPORT

SHROPSHIRE STRUCTURE PLAN
SHIFNAL, LAND AT NEW PARK FARM

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of 39.0 ha of land at New Park Farm, to the east of Shifnal. The survey was carried out in between May and July 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). This 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.

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 site was under permanent grass, potatoes and cereals.

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 agricultural land area	% Total survey area
1	-	-	-
2	15.8	46	41
3a	17.3	51	44
3b	0.9	3	2
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	-	-
Other land	5.0	-	13
Total agricultural land area	34.0	100	-
Total survey area	39.0	-	100

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

7. The fieldwork was conducted at an average density of 1 boring per hectare of agricultural land. In total 37 borings and 3 soil pits were described.

8. The agricultural land on this site has been classified as Grade 2 (very good quality), Subgrade 3a (good quality) and Subgrade 3b (moderate quality). The principal limitations to the agricultural use of this land are soil droughtiness and soil wetness.

9. Land of very good quality (Grade 2) is found across the north-western half of the survey area. Soil wetness and droughtiness are the main limitations to the agricultural use of this land.

10. Land of good quality (Subgrade 3a) is found across the south-eastern half of the survey area. Soil wetness is the main limitation to the agricultural use of this land. A small area of Subgrade 3a land is found in the north of the site. Soil droughtiness constitutes the principal limiting factor to the agricultural use of this land.

11. A small area of land of moderate quality (Subgrade 3b) is found in the south west of the site. Soil wetness 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).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ750072
Altitude	m, AOD	85
Accumulated Temperature	day°C (Jan-June)	1389
Average Annual Rainfall	mm	723
Field Capacity Days	days	172
Moisture Deficit, Wheat	mm	94
Moisture Deficit, Potatoes	mm	82
Overall climatic grade	N/A	Grade 1

14. 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.

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 (AT0, January to June), as a measure of the relative warmth of a locality.

16. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

Site

17. The site lies at an altitude of 83-98m AOD, and slopes from south-east to north-west. The site is bordered to the north by the railway line, to the west by residential development and the A464, and to the east by Lamledge Lane and agricultural land. Areas marked as 'Other Land' include New Park Farm and associated outbuildings, a caravan storage area, an area of wood known as Revell's Rough, and several ponds.

Geology and soils

18. Lower Mottled Sandstone comprises the underlying solid geology for this area (BGS, 1958). The overlying drift comprises boulder clay, with some sand and gravel in the north of the site (BGS, 1959).

19. The most detailed published soils information for this area (SSEW, 1983 & 1984) maps the soils as being the 'typical stagnogley soils' of the Clifton association.

20. Upon detailed field examination, soil profiles broadly similar to those described for the Clifton association were found. In the north of the site however, soil profiles were not typical of those described for the Clifton association.

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 15.8 ha (41%) of the total survey area, and is found in the north-west half of the site. The principal limitations to the agricultural use of this land are soil wetness and soil droughtiness.

23. Within the Grade 2 mapping unit, two main soil profiles were found. Along the north-western boundary of the site, soils comprise a very slightly stony medium sandy loam topsoil, which overlies medium sandy loam or loamy sand upper subsoils and medium sand lower subsoils. These soils are well drained and are placed into Wetness Class I. The agricultural use of the land is limited by soil droughtiness. Over the remainder of the mapping unit soils generally consist of a very slightly stony sandy clay loam, medium clay loam or medium sandy loam topsoil. This overlies sandy clay loam upper subsoils and heavy clay loam lower subsoils. Observed depths of gleying and the slowly permeable layer in relation to the local climatic regime, place these soils into either

Wetness Classes I, II or III. The agricultural use of the land is limited by soil wetness and soil droughtiness.

Subgrade 3a

24. Land of good quality occupies 17.3 ha (44%) of the total survey area, and is found in the south east half of the site, and in the north of the site. The principal limitations to the agricultural use of this land are soil wetness and soil droughtiness.

25. Within the Subgrade 3a mapping unit, two main soil profiles are found. In the north of the site, soils comprise a very slightly stony loamy medium sand topsoil, over a medium sand or loamy medium sand upper subsoils, and a medium sand lower subsoil. These soils are well drained and are placed into Wetness Class I. The agricultural use of the land is limited by soil droughtiness. To the south east of the survey area, soils comprise a very slightly stony sandy clay loam or medium clay loam topsoil over a sandy clay loam or medium clay loam upper subsoil, and heavy clay loam (occasionally clay) lower subsoils. In several profiles a sandier horizon (sandy loam, loamy medium sand and medium sand) is found immediately below the topsoil. Observed depths of gleying and the slowly permeable layer in relation to the local climatic regime, generally places these soils into Wetness Class III, and Subgrade 3a. The agricultural use of this land is limited by soil wetness. Occasional boring of Subgrade 3b and Grade 2 quality are found throughout this mapping unit.

Subgrade 3b

26. Land of moderate quality occupies 0.9 ha (2%) of the total survey area, and is found in a small area to the south-west of the site. The principal limitation to the agricultural use of this land is soil wetness.

27. Within the Subgrade 3b mapping unit, soil consists of a very slightly stony medium clay loam topsoil, over a heavy clay loam subsoil. Gleying was recorded within the topsoil and waterlogging lower in the profile. On the basis of the estimated depth and duration of waterlogging this soil was allocated to Wetness Class IV and Subgrade 3b.

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SOURCES OF REFERENCE

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MAFF: London.

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

Soil Survey of England and Wales (1983) *Sheet 3, Soils of Midland and Western England. (1:250 000).*
SSEW: Harpenden.

Soil Survey of England and Wales (1984) *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, 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.

				----MOTTLES----			PED		----STONES----				STRUCT/	SUBS				
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC	
1	0-26	lms	75YR34 00						0	0	HR	1							
	26-60	lms	25YR34 00						0	0	HR	1		M					
	60-70	ms	25YR34 00						0	0	HR	1		M					
1P	0-31	scl	10YR42 00						2	0	HR	5							
	31-43	scl	75YR52 00	75YR56 00	C			Y	0	0	HR	3	MDCAB	FR	M				
	43-67	hcl	25YR34 52					Y	0	0	HR	1	MDCPR	FM	P				
	67-100	hcl	25YR36 54					Y	0	0	HR	1	MASS	FM	P	Y		Y	MN concretions
2	0-30	lms	75YR33 00						0	0	HR	3							
	30-65	ms	10YR56 00						0	0	HR	1		M					
	65-70	ms	10YR56 00						0	0	HR	1		M					
	70-80	scl	05YR46 00						0	0		0		M					
2P	0-31	mcl	10YR33 00						0	0	HR	2							
	31-53	scl	75YR43 00						0	0	HR	2	MDCAB	FR	M				
	53-88	lms	75YR46 00						0	0	HR	2	MDCAB	FR	G				
	88-120	hcl	05YR44 00	75YR58 00	C			Y	0	0	HR	1	WKMPL	FM	P	Y		Y	
3	0-36	msl	75YR42 00						0	0	HR	5							
	36-56	lms	05YR53 54	05YR58 00	F				0	0	HR	2		M					
	56-75	lcs	05YR44 00						0	0	HR	15		M					
	75-110	ms	05YR53 00	05YR58 00	C			Y	0	0		0		M					
3P	0-32	msl	10YR32 00						0	0	HR	5							
	32-50	msl	75YR44 43						0	0	HR	5	MDMSAB	FR	G				
	50-65	lms	75YR43 00						0	0	HR	5	MDMSAB	FR	G				
	65-120	ms	75YR56 00						0	0	HR	20	WKMSAB	VF	M				
4	0-35	lms	75YR42 00						0	0	HR	3							
	35-47	lms	10YR63 00	10YR68 00	C			Y	0	0		0		M					
	47-80	hcl	05YR54 00	10YR58 00	C			Y	0	0	HR	15		P					SPL at 67cm as in 1P
	80-110	hcl	05YR44 58	05YR58 00	C			Y	0	0	HR	5		P		Y		Y	
5	0-34	msl	75YR32 00						0	0	HR	5							
	34-65	msl	75YR44 00						0	0	HR	2		M					
	65-80	lms	10YR56 00	10YR56 00	C			Y	0	0	HR	1		M					
	80-90	scl	75YR54 00					Y	0	0	HR	1		M					

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
6	0-45	msl	10YR33 00						0	0	HR	5							
	45-90	scl	75YR44 00						0	0	HR	5		M					
	90-100	hcl	05YR46 00						0	0	HR	1		P					
7	0-30	scl	75YR32 00						0	0	HR	5							
	30-45	scl	75YR43 00				75YR54 00		0	0	HR	1		M					
	45-70	scl	05YR54 00				05YR53 00	Y	0	0	HR	1		M					
	70-100	hcl	05YR46 00	00MN00	00			Y	0	0	HR	1		P	Y		Y		
8	0-29	msl	75YR32 00						0	0	HR	1							
	29-50	lms	75YR43 00						0	0	HR	1		M					
	50-110	ms	75YR44 00						0	0		0		M					
9	0-27	scl	75YR32 00						0	0	HR	1							
	27-45	scl	75YR43 00						0	0	HR	1		M					
	45-85	hcl	05YR43 00	10YR58 00	F				0	0		0		P					
	85-100	hcl	05YR44 00	00MN00	00	C		Y	0	0		0		P	Y		Y		
10	0-23	scl	75YR43 00						0	0	HR	5							
	23-27	scl	75YR43 56						0	0	HR	2		M					
	27-48	hcl	25YR54 00	05YR58 00	C			Y	0	0		0		P					
	48-55	hcl	25YR54 00					Y	0	0		0		P					
	55-110	hcl	25YR54 00					Y	0	0		0		P					SPL at 67cm as in 1P
11	0-28	scl	75YR34 00						0	0	HR	5							
	28-58	scl	05YR44 00						0	0	HR	5		M					
	58-110	hcl	05YR44 00						0	0	HR	5		P					
11A	0-35	scl	75YR25 01						0	0	HR	5							
	35-46	scl	10YR53 00	10YR56 00	C			Y	0	0	HR	2		M					
	46-55	scl	10YR63 00	10YR56 00	C			Y	0	0	HR	1		M					
	55-90	msl	05YR46 00					Y	0	0	HR	1		M					
	90-110	ms	05YR46 00					Y	0	0	HR	1		M					
12	0-35	mcl	75YR42 00						0	0	HR	10							
	35-55	scl	75YR54 00						0	0		0		M					
	55-60	msl	75YR53 00	75YR58 00	C			Y	0	0		0		M					
	60-75	lms	75YR44 00					Y	0	0		0		M					
	75-90	hcl	75YR44 00					Y	0	0		0		P	Y		Y		SPL at 67 as in 1P

90-110	sc1	7.5YR5.4	00	Y	0	0	0	P	Y	Y	MN concretions		

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
13	0-37	scl	75YR32 00						0	0	HR	3							
	37-46	lms	10YR53 00	10YR68 00	C			Y	0	0	HR	5		M					
	46-65	hcl	05YR54 00	75YR58 00	C			Y	0	0	HR	3		P					
	65-110	hcl	05YR44 00					Y	0	0		0		P	Y		Y		SPL at 67cm as in 1P
14	0-25	scl	10YR33 00						0	0	HR	3							
	25-35	scl	10YR42 00	10YR56 00	C			Y	0	0	HR	2		M					
	35-50	scl	05YR46 00					Y	0	0	HR	2		M					
	50-80	c	05YR44 00	00MN00 00	C			Y	0	0	HR	1		P	Y		Y		
15	0-31	msl	75YR32 00						0	0	HR	1							
	31-50	msl	75YR43 00						0	0	HR	1		M					
	50-65	lms	75YR43 00						0	0	HR	1		M					
	65-105	ms	75YR44 00						0	0	HR	1		M					
	105-120	lms	75YR44 00						0	0	HR	1		M					
16	0-30	mcl	75YR32 00						0	0	HR	1							
	30-60	scl	75YR44 00						0	0	HR	1		M					
	60-75	scl	75YR44 00				00MN00 00		0	0	HR	1		M					
17	0-30	scl	75YR32 00						0	0	HR	1							
	30-50	scl	75YR43 00						0	0		0		M					
	50-75	scl	05YR43 00						0	0		0		M					
	75-100	hcl	25YR34 00						0	0	HR	1		P					
18	0-28	mcl	75YR42 00						0	0	HR	5							
	28-33	hcl	05YR54 00	05YR58 00	C			Y	0	0	HR	2		M					
	33-40	hcl	25YR54 00	25YR58 00	C			Y	0	0		0		M					
	40-65	hcl	25YR54 00	25YR58 00	C			Y	0	0		0		P					
	65-75	hcl	25YR54 00					Y	0	0		0		P					SPL at 67cm as in 1P
	75-90	hcl	25YR54 00					Y	0	0	HR	5		P	Y		Y		
20	0-25	scl	10YR32 00						0	0	HR	8							
	25-110	hcl	25YR44 00	10YR58 00	C			Y	0	0		0		P					SPL at 67cm as in 1P

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
21	0-25	scl	10YR32 00						0	0	HR	5							
	25-30	msl	10YR53 00	10YR58 00	C			Y	0	0	HR	2		M					
	30-45	ms	10YR73 00	10YR68 00	C			Y	0	0		0		M					
	45-110	hcl	25YR54 00	10YR58 00	C			Y	0	0		0		P					SPL at 67cm as in 1P
22	0-33	scl	10YR34 00						0	0	HR	5							
	33-50	msl	75YR52 00	75YR56 00	C			Y	0	0	HR	1		M					
	50-75	lms	05YR46 00					Y	0	0	HR	1		M					
	75-90	ms	05YR44 00					Y	0	0	HR	1		M					
23	0-28	mcl	75YR32 00						0	0	HR	1							
	28-70	scl	75YR44 00						0	0	HR	2		M					
	70-100	hcl	05YR44 00	75YR58 00	C			Y	0	0	HR	1		P	Y		Y		
24	0-35	mcl	75YR32 00						0	0	HR	5							
	35-45	scl	75YR43 53						0	0	HR	3		M					
	45-100	scl	05YR44 00	05YR58 00	C			Y	0	0	HR	2		M					SCL / HCL
25	0-30	mcl	75YR32 00						0	0	HR	5							
	30-60	c	05YR44 00	75YR58 00	C		00MN00 00	Y	0	0	HR	1		P	Y		Y		
26	0-28	scl	75YR42 43						5	0	HR	5							
	28-35	scl	10YR42 43						0	0	HR	3		M					
	35-88	hcl	25YR44 00						0	0	HR	2		P					
	88-110	hcl	25YR44 00						0	0	HR	2		P					
27	0-28	scl	75YR32 00						0	0	HR	5							
	28-40	scl	05YR42 00	75YR56 00	C			Y	0	0	HR	2		M					
	40-90	c	25YR46 00	10YR56 00	C			Y	0	0	HR	1		P	Y		Y		
28	0-30	scl	10YR42 00						0	0	HR	5							
	30-42	scl	75YR53 00	75YR56 00	C			Y	0	0	HR	2		M					
	42-110	hcl	25YR44 00	05YR68 00	C			Y	0	0		0		P					SPL at 67cm as in 1P
29	0-22	scl	10YR32 00						0	0	HR	5							
	22-35	scl	10YR44 00						0	0	HR	1		M					
	35-80	hcl	05YR46 00	10YR56 00	C			Y	0	0	HR	1		P					SPL at 67cm as in 1P

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	PED GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
30	0-30	scl	75YR32 00						0	0	HR	5							
	30-40	scl	75YR43 00						0	0	HR	3		M					
	40-47	lms	05YR43 00	00MN00	00	M			0	0	HR	2		M	Y				
	47-80	ms	05YR44 00	00MN00	00	F			0	0	HR	2		M	Y				
	80-95	ms	10YR53 63						0	0		0		M	Y				
	95-110	hcl	25YR34 00	75YR58	00	C	00MN00	00 Y	0	0		0		P	Y		Y		
31	0-30	mcl	10YR32 00						0	0	HR	5							
	30-55	scl	10YR53 00	10YR58	00	C		Y	0	0	HR	3		M					
	55-70	lms	05YR44 00	10YR46	00	F		Y	0	0	HR	3		M					
	70-110	ms	05YR43 00					Y	0	0	HR	1		M					
33	0-28	scl	10YR33 00						0	0	HR	5							
	28-38	scl	75YR42 00	75YR56	00	C		Y	0	0	HR	2		M					
	38-100	hcl	05YR44 00	00MN00	00	C		Y	0	0	HR	2		P					SPL at 67cm as in 1P
34	0-20	scl	10YR33 00						0	0	HR	5							
	20-30	scl	75YR56 00	10YR56	00	C		Y	0	0	HR	1		M					
	30-80	hcl	05YR46 00	00MN00	00	C		Y	0	0	HR	2		P					SPL at 67cm as in 1P
35	0-33	scl	75YR32 00						0	0	HR	4							
	33-45	scl	75YR42 53	75YR56	00	C		Y	0	0	HR	1		M					
	45-50	hcl	05YR44 00	75YR56	00	C		Y	0	0	HR	2		P					
	50-100	hcl	25YR34 00	00MN00	00	C		Y	0	0	HR	1		P	Y		Y		
36	0-10	mcl	75YR32 00						0	0	HR	3							
	10-22	mcl	75YR42 00	10YR46	00	C		Y	0	0	HR	1		M					
	22-58	hcl	25YR34 00	75YR58	00	C		Y	0	0	HR	1		P	Y		Y		SPL AT 67cm as in 1P
37	0-34	mcl	75YR43 00						0	0	HR	2							
	34-55	hcl	05YR44 00	10YR58	00	F		Y	0	0	HR	1		M					
	55-110	hcl	05YR44 00	10YR58	00	C	00MN00	00 Y	0	0	HR	1		P	Y		Y		SPL at 67m as in 1P
38	0-33	mcl	10YR41 00	10YR58	00	C		Y	0	0	HR	1							
	33-47	scl	10YR53 00	10YR58	00	C		Y	0	0	HR	1		M					
	47-110	hcl	25YR44 00	10YR58	00	C		Y	0	0	HR	1		P					SPL at 67cm as in 1P

SAMPLE NO.	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	—WETNESS— CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
1	SJ75300750	SB		01			1	2	59	-35	63	-19	3B				DR	3A	AWP recalculated
1P	SJ75400710	CER	NW	02	031	067	3	3A	111	17	100	18	2				WE	3A	Boring 26, Mn at 67
2	SJ75400750	SB		01			1	2	67	-27	60	-22	3B				DR	3A	AWP recalculated
2P	SJ75300720	PGR			088	088	1	1	133	39	103	21	1					1	Boring 17
3	SJ75200740	CER	NW	03	075		1	1	93	-1	80	-2	3A				DR	2	AWP recalculated
3P	SJ75100730	PGR			000		1	1	109	15	097	15	2				DR	2	Boring 8
4	SJ75300740	FB	NW	01	035	067	3	2	94	0	77	-5	3A				DR	2	AWP recalculated
5	SJ75400740	SB		01	065		1	1	112	18	104	22	2					1	AWP recalculated
6	SJ75500740	CER		01			1	1	125	31	109	27	1					1	AWP recalculated
7	SJ75600740	CER		01	045	070	2	2	119	25	108	26	2				WD	2	
8	SJ75100730	PGR	NW	01			1	1	88	-6	75	-7	3A				DR	2	AWP recalculated
9	SJ75200730	PGR			085	085	1	1	113	19	102	20	2				DR	2	
10	SJ75300730	CER	NW		027	067	3	3A	113	19	95	13	2				WE	3A	Mn 55cm
11	SJ75400730	SB		01			1	1	119	25	102	20	2				DR	2	
11A	SJ75400730	SB		01	035		2	2	130	36	109	27	1				WE	2	
12	SJ75500730	CER	NW		055	075	2	2	124	30	102	20	1				WE	2	Mn 90cm
13	SJ75600730	CER	NW		037	067	3	3A	114	20	95	13	2				WE	3A	
14	SJ75700730	CER		01	025	050	3	3A	99	5	104	22	2				WE	3A	
15	SJ75100720	PGR	NW				1	1	111	17	94	12	2				DR	2	
16	SJ75200720	PGR	NW				1	1	108	14	113	31	2				DR	2	Mn 60cm
17	SJ75300720	PGR					1	1	123	29	111	29	2					1	
18	SJ75400720	CER	NW	01	028	067	3	3A	107	13	103	21	2				WE	3A	
20	SJ75600720	CER	NW		025	067	3	3A	111	17	93	11	2				WE	3A	Mn 55cm
21	SJ75700720	PLO	NW		025	067	3	3A	104	10	86	4	2				WE	3A	
22	SJ75800720	POT		01	033		1	1	97	3	93	11	3A				WD	2	Sat 60, AWP recalc
23	SJ75100710	PGR	NW	01	070	070	2	2	123	29	112	30	2				WD	2	
24	SJ75200710	CER	NW	01	045		1	1	131	37	111	29	1					1	nearly Grade 2 wet
25	SJ75300710	CER	NW	01	030	030	4	3B	84	-10	90	8	3A				WE	3B	
26	SJ75400710	CER	NW	01			1	1	114	20	97	15	2				DR	2	
27	SJ75500710	CER		01	028	040	4	3B	104	10	102	20	2				WE	3B	
28	SJ75600710	CER	NW	01	030	067	3	3A	118	24	100	18	2				WE	3A	
29	SJ75700710	POT		01	035	067	3	3A	94	0	97	15	3A				WE	3A	

SAMPLE NO.	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
30	SJ75200700	CER	NW		040	095	1	1	98	4	81	-1	3A				DR	2	AWP recalculated
31	SJ75300700	CER	NW		030		2	2	108	14	98	16	2				DR	2	
33	SJ75500700	CER		01	028	067	3	3A	109	15	98	16	2				WE	3A	
34	SJ75600700	POT		01	020	067	3	3A	91	-3	94	12	3A				WE	3A	
35	SJ75200690	CER	NW	01	033	067	3	3A	112	18	101	19	2				WE	3A	
36	SJ75300690	FB	NW		010	067	3	3A	75	-19	79	-3	3A				WE	3B	
37	SJ75400690	PGR			034	067	3	3A	128	34	111	29	1				WE	3A	Gleyed at 55cm
38	SJ75400680	PGR			001	067	3	3A	125	31	107	25	1				WE	3A	SPL 67cm
999										0		0					DR	3A	

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SAMPLE NO.	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	WETNESS CLASS	WETNESS GRADE	WHEAT AP	WHEAT MB	POTS AP	POTS MB	M.REL DRT	EROSN FLOOD	FROST EXP	CHEM DIST	ALC LIMIT	ALC	COMMENTS
1	SJ75100680	PGR			042	067	2	2	107	14	113	32	2				WE	2	
1P	SJ75100680	PGR			025	057	3	3A	118	25	107	26	2				WE	3A	
2	SJ75200680	PGR			000	095	2	2	131	38	111	30	1				WE	3B	restricted drainage
3	SJ75100670	PGR			000	035	4	3B	091	-2	100	19	3A				WE	3B	restricted drainage
4	SJ75200670	PGR			000	048	3	3A	125	32	107	26	1				WE	3B	restricted drainage
5	SJ75100660	PGR			000	048	3	3A	121	28	103	22	2				WE	3B	restricted drainage
5A	SJ75050655	PGR			033	077	2	2	135	42	115	34	1				WE	2	

				----MOTTLES----			PED		----STONES----				STRUCT/	SUBS			
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0-28	mcl	10YR32 00						0	0	HR	1						
	28-42	mcl	75YR42 00						0	0	HR	1		M				
	42-54	scl	75YR53 00	75YR58 00	C			Y	0	0		0		M				
	54-67	msl	75YR51 00	75YR58 00	C			Y	0	0		0		M				
	67-74	hcl	05YR44 00	05YR46 00	M			Y	0	0		0		P	Y		Y	
1P	0-25	mcl	10YR42 00						0	0	HR	2						
	25-50	scl	10YR52 00	10YR56 00	C			Y	0	0	HR	2	MDCSAB	FR	M			
	50-57	scl	10YR64 00	10YR68 00	C			Y	0	0	HR	1	MDCPR	FR	M			
	57-100	hcl	05YR44 00	10YR62 00	C		00MN00 00	Y	0	0	HR	1	WKMASS	FM	P	Y		Y
2	0-23	mcl	10YR41 00	10YR46 00	C			Y	0	0	HR	1						
	23-55	mcl	75YR53 00	75YR58 00	C			Y	0	0	HR	5		M				
	55-70	msl	10YR53 00	10YR58 00	C			Y	0	0	HR	5		M				
	70-80	lms	10YR53 00	10YR58 00	C			Y	0	0		0		M				
	80-95	ms	10YR53 00	10YR58 00	C			Y	0	0		0		M				
	95-120	c	25YR44 00	10YR58 00	C			Y	0	0		0		P	Y		Y	
3	0-23	mcl	10YR41 00	10YR46 00	C			Y	0	0	HR	1						
	23-35	scl	10YR53 00	10YR68 00	M			Y	0	0	HR	1		M				
	35-70	hcl	25YR44 00	10YR58 00	C			Y	0	0	HR	1		P	Y		Y	
4	0-23	mcl	10YR41 00	10YR58 00	C			Y	0	0	HR	1						
	23-48	mcl	10YR52 00	10YR58 00	C			Y	0	0		0		M				
	48-110	hcl	25YR44 00	10YR58 00	C			Y	0	0		0		P	Y		Y	
5	0-23	mcl	10YR41 00	10YR58 00	C			Y	0	0	HR	5						
	23-37	scl	10YR53 00	10YR58 00	C			Y	0	0	HR	2		M				
	37-48	scl	75YR53 00	75YR58 00	C			Y	0	0	HR	1		M				
	48-100	hcl	25YR44 00	10YR58 00	C			Y	0	0		0		P	Y		Y	
	100-110	c	25YR55 00	10YR58 00	C			Y	0	0		0		P	Y		Y	
5A	0-33	mcl	10YR41 00						0	0		0						
	33-77	scl	10YR53 00	10YR58 00	C			Y	0	0		0		M				
	77-110	hcl	25YR44 00	10YR58 00	C			Y	0	0		0		P	Y		Y	

SALWICK 05.72 So
reddish fine loamy drift with siliceous stones

Old series included ABER: HAYMORE: LLANASA: MARSHFIELD: MICHAELWOOD(rare): MITCHELDEAN:

* denotes data not available

Available water (AP) - cereals 125 mm : grass 125 mm
sugar beet 155 mm : potatoes 110 mm

Depth to - gleying 60 cm : rock > 100 cm
slowly-permeable layer 50 cm :

Integrated air capacity - 92 mm/100cm

PC zones (days)	100	125	150	175	200	225	250
wetness class	II	II	II	III	III	IV	IV
workability class			b	bc	c	c	c

Brief Profile Description to follow
Enter any character (and press <RETURN>) to continue:

Salwick series

0-20 cm Ap
Dark brown, slightly stony sandy loam or sandy clay loam.

20-35 cm Bb(g)
Brown, slightly mottled, slightly stony sandy loam or clay loam; weak subangular blocky structure.

35-70 cm Bt(g)
Reddish brown, slightly mottled, slightly stony clay loam; weak coarse prismatic structure.

70-100 cm BCtg
Reddish brown, mottled, slightly stony clay loam; massive.

Soil physical properties for all representative horizons to follow
Enter any character (and press <RETURN>) to continue:

CLIFTON 07.11 Cu
reddish fine loamy drift with siliceous stones

Old series included ABER: HAYMORE: KIDDENS(rare): WILLAND(rare):
* denotes data not available

Available water (AP) - cereals 125 mm : grass 125 mm
sugar beet 155 mm : potatoes 110 mm

Depth to - gleying 25 cm : rock > 100 cm
slowly-permeable layer 47 cm :

Integrated air capacity - 62 mm/100cm

FC zones (days)	100	125	150	175	200	225	250
wetness class	III	III	III	III	IV	IV	IV
workability class			c	c	cd	d	d

Brief Profile Description to follow
Enter any character (and press <RETURN>) to continue:

Clifton series

0-25 cm Ap
Dark greyish brown slightly stony clay loam or sandy clay loam.

25-35 cm Eg
Greyish brown, mottled, slightly stony sandy loam or sandy clay loam; weak medium subangular blocky structure.

35-80 cm Btg
Reddish brown, mottled, slightly stony clay loam or sandy clay loam; moderate coarse prismatic structure.

80-100 cm BCtg
Reddish brown, mottled, slightly stony clay loam; weak coarse prismatic or massive structure; high packing density.

Soil physical properties for all representative horizons to follow
Enter any character (and press <RETURN>) to continue: